LAKE MANAGEMENT STATUS REPORT

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

District No.: 4 LAKE NAME: Lake Storey County: Knox
Water No.: 0026 Ownership: Public-Coop Acreage: 133

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

Large or Smallmouth Bass:

- Protected Slot Length Limit from 12 to 18 inches with 3 fish daily harvest limit.

Bluegill or Redear Sunfish:

- 25 fish Daily Harvest Limit.

Pure Muskellunge:

- 42 inch minimum length limit with 1 fish daily harvest limit. All fish:
- 2 Pole and line fishing only.

Channel Catfish or Blue Catfish:

- 6 fish daily harvest limit.

Walleye, Sauger, or Hybrid Walleye:

- 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 completed annual spring trapnet survey on 5/3/2022.

Jake Wolf Hatchery stocked 8,517 walleye at 1.5 inches on 5/31/2022.

Little Grassy stocked 3,900 channel catfish at 6.8 inches on 8/1/2022.

Jake Wolf Hatchery stocked 147 muskie at 12.5 inches on 9/28/2022.

No aquatic vegetation treatments were required on the main lake in 2022. Lincoln Park ponds were treated with 15 gallons of Aquathol K on 5/2/2022.

IDNR fisheries completed annual fall electrofishing survey on 10/18/2022.

Galesburg Park District completed the annual fall drawdown of Lake Storey from September through November 2022.

LAKE MANAGEMENT STATUS REPORT LAKE STOREY

Page 2

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
													LMP
Largemouth Bass													Objective
Stock Number		201	131	116	154	140	193	235	182	208	161	190	100
PSD		57	67	46	58	32	52	43	37	43	61	59	40-60
RSD14		24	41	27	19	15	11	13	17	18	25	25	
RSD15		20	22	22	12	13	9	8	10	13	18	17	
RSD16		10	12	15	7	6	6	3	2	7	10	11	
RSD18		2	3	6	1	2	3	2	1	2	3	4	5-10
RSD19											1	2	
Wr > 8"		105	101	105	100	100	101	101	96	100	95	97	90-110
YAR		0.3	0.5	1.5	0.6	1.4	0.9	1.2	1	0.6	0.1	0.1	
CPUE f/m	in	2.2	1.8	1.5	1.8	1.8	2.4	2	1.5	3.4	2.7	2.7	1/Min
Effort EL		90	72	80	86	80	79	120	120	61	60	70	
Effort NN											16	18	
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Bluegill													
Stock #		327	319	201	369	261	281	3214	228	96	255	441	
PSD		63	46	46	48	62	66	2	25	35	62	32	
RSD7		4	7	0	2	3	4	1	3	2	15	3	
RSD8		0	0	0	0	0	0	0	0	0	0	0	
Wr > 5"		98	95	96	97	89	94	94	88	95	88	87	
CPUE f/m	in	3	2.9	3.6	3.4	2.5	4.2	64.3	4	3.1	4.3	6.3	
CPUE f/nr	1	10.7	7.1	2.8	5.5	2.9	6	2.4	1.9		2.6	7.3	
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Redear													
Stock #		34	41	34	53	44	34	24	37	9	21	20	
PSD		62	44	97	96	86	94	46	49	100	100	40	
RSD9		38	15	0	9	34	44	33	14	11	14	10	
Wr > 5"		108	105	105	98	95	100	98	94	101	85	92	
CPUE f/m	in	0.4	0.5	0.4	0.4	0.5	0.5	0.8	0.5	0.3	0.4	0.3	
CPUE f/nr	1	0.6	0.5	0.2	1.4	0.2	0.4	0	0.4		0.3	0.5	

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	LMP Obj
Black Cra	ppie												
Stock#		407	392	403	306	233	374	94	371	5	180	50	
PSD		85	69	36	20	29	43	72	72	100	90	84	
RSD9		7	7	3	0	1	1	5	2	0	22	12	30-50
RSD10		1	0	0	0	0	1	2	0	0	3	0	20-40
RSD11		0	0	0	0	0	0.5	1	0	0	0	0	5-10
Wr > 8"		100	97	98	89	91	94	91	93	92	93	87	90-100
CPUE f/m	in	0.8	1.8	2	0.9	0.4	1.3	1.2	1.6	0.1	3	0.7	
CPUE f/nı	n	23.6	17.7	12.1	16.6	10.2	19.1	1.3	17.2		2.3	12.3	
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	LMP Obj.
White Cra	l appie	2012	2013	2014	2013	2010	2017	2018	2013	2020	2021	2022	LIVIF ODJ.
Stock #		54	34	20	14	26	24	10	77	15	33	8	
PSD		94	91	60	50	89	96	90	94	100	100	100	
RSD9		73	79	45	36	54	79	70	49	93	100	100	30-50
RSD10		37	65	45	14	23	67	70	26	72	91	100	20-40
RSD11		8	50	20	14	8	29	40	21	27	27	50	5-10
Wr		97	95	96	86	85	90	88	89	90	89	90	90-100
CPUE f/m	in	0.5	0.4	0.2	0.1	0.3	0.2	0.1	0.9	0.3	0.6	0.1	
CPUE f/nı		0.8	0.5	0.3	0.3	0.3	0.8	0.1	1.6		1.1	2.7	
		2012	2042	2014	2045	2016	2017	2040	2040	2020	2024	2022	111201:
Channel (atfish	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	LMP Obj.
Stock#		20	23	16	7	13	50	19	22	7	35	65	
PSD		90	74	81	86	100	92	84	77	29	89	79	
RSD18		90	48	75	86	100	82	74	73	29	80	63	
Wr		102	100	101	100	109	112	93	100	97	104	105	90-110
CPUE f/m	in	0.1	0.2	0.1	0.03	0.1	0.3	0.3	0.06	0.1	1	0.2	30 110
CPUE f/ni		0.9	0.7	0.3	0.3	0.3	2.1	0.2	0.9		2.2	3.6	
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	LMP Obj.
Walleye													
Stock#		68	43	71	25	46	37	47	24	12	9	5	50-60
PSD		63	91	82	84	72	87	100	100	67	100	100	20-40
RSD18		29	61	68	60	59	46	53	88	67	100	100	
		88	89	90	84	85	85	89	88	91	95	99	90-110
Wr													
	nin	0.6	0.4	0.5	0.1	0.3	0.3	0.3	0.08	0.2	0.2	0.1	

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Mue													
Stock#		5	30	59	7	23	10	31	9	0	23	7	
PSD		80	87	85	86	100	100	90	78		87	86	
RSD42		0	20	12	14	4	20	26	33		9	0	90-110
Wr		84	86	88	87	86	82	92	85		83	112	
CPUE f/nr	1	0.3	2	2.9	0.5	1.1	0.4	1.7	0.6		1.4	0.4	.3/NN

LAKE MANAGEMENT STATUS REPORT LAKE STOREY

Page 4

4. In 2022, the fish population was sampled by 18 trap net nights in the spring and 70 minutes of fall D.C. electrofishing. The largemouth bass population was evaluated by 190 stock size bass from electrofishing.

The largemouth bass population appears to be defined by a high percentage of fish from 4 to 18 inches in length with good average Relative weights. In 2017, the bass regulation for Lake Storey was changed from a 1 fish greater than or equal to 15 inches and/or 5 fish less than 12 inches daily, to a protected slot length limit from 12 to 18 inches with 3 fish daily harvest limit. The goal of the new bass regulation is to increase the density of the bass population from 14 to 18 inches.

The 5 year averages from 2012 to 2016 were RSD15 of 18, RSD16 of 10, and RSD18 of 3. And a 5 year average CPUE 1.8 fish per minute over 8 inches with pulse D.C. eletrofishing.

In 2022 the values were at a PSD of 59, RSD15 of 17, RSD16 of 11 and the RSD18 of 4. The average body condition was at a Wr of 97. The CPUE was 2.7 fish per minute over 8 inches with pulse D.C. electrofishing.

The goal of the protected slot length limit is to create a high density bass population that is composed of fish large enough to be efficient predators upon the panfish population. The benefit to bass anglers will be more fish surviving past 15 inches to catch, and for the anglers wanting to harvest bass will be the opportunity to still harvest fish under 12 inches. The current indices levels will need to be evaluated over the next 3 years

to determine if progress is being made to increase the number of fish from 15 to 18 inches in length. From 2017 to 2022 the new bass regulation has not improved this population indices. The expanding Gizzard Shad population that was first documented in the fall of 2020 maybe provide an additional forage base for the largemouth bass population.

In 2022, the bluegill population was sampled by 441 fish in fall 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 below average body condition with a Wr average of 87. The expanding Gizzard Shad population that was first documented in the fall of 2020 will continue to decrease the growth and body condition of the bluegill population.

The redear sunfish population was sampled by 22 fish in fall electrofishing survey. The current redear population is rated as average with the larger fish up to 9.5 inches in length. This population is of low density and in average body condition with a Wr average of 92.

The white and black crappie populations have been an average rating in recent years. The 5 year averages from 2012 to 2016 were an RSD10 of 37 for white crappie and an RSD10 of less than 1 for black crappie. The black crappie population has become the dominant species. The 5 year trapnet catch per unit of effort was 16 black crappie per net night and less than 1 white crappie per net night.

In 2022, the white crappie population was sampled by 8 fish in fall electrofishing survey. The black crappie population was sampled by 50 fish in fall electrofishing survey. The 15 stock size white crappie were sampled with a PSD of 100, RSD9 of 100, RSD10 of 100, and RSD11 of 50. The 50 stock size black crappie were sampled with a PSD of 84, RSD9 of 12, RSD10 of 0 and RSD11 of 0. Both species had average WR values of 90 and 87. The white crappie indices have improved over the last 5 years, while the black crappie have remained low. Anglers can continue to apply harvest pressure upon the dense black crappie population that is from 7.5 to 9 inches in length.

The walleye population was sampled by 5 fish in the spring trap nets and 9 fish in the fall electrofishing survey in 2022. The current walleye population is rated as good with the larger fish up to 27 inches in length. The CPUE for electrofishing was at .13 fish per minute by electrofishing and .3 fish per net night of trap netting in 2022. This population is of moderate density and in good body condition with a Wr average of 99. Jake Wolf hatchery stocked 6696 fish at 1.5 inches long in 2016. No walleye were stocked in 2017, 2018 and 2019. In 2020, 6,819 walleye at 1.4 inches were stocked. In 2021, 8,970 walleye at 1.5 inches were stocked. And in 2022, 8,517 walleye at 1.5 inches were stocked from Jake Wolf Hatchery. The expanding Gizzard Shad population that was first documented in the fall of 2020 maybe provide an additional forage base for the walleye population.

In 2022, 7 muskie were collected in the spring trap netting. These fish ranged from 29.6 to 38.8 inches long. The body condition of these fish was good with a Wr of 112. A moderate density of quality size muskie are present. 43 muskie have been recaptured with PIT tag data from Lake Storey since 2002. 2014 recapture growth rate for a male over 10 years old was .21 inches and .26 lbs per year. And the growth rate for 2 females over 10 years old was 1.1 inches and 1.40 lbs per year. Jake Wolf stocked 136 muskie at 10.75 inches in 2016. Jake Wolf stocked 135 at 12.5 inches in 2017, 136 fish at 12.5 inches in 2018, 142 fish at 13.5 inches in 2019, no stocking in 2020, 138 fish at 13 inches in 2021, and 147 fish at 12.5 inches in 2022. An annual stocking is now scheduled to maintain a moderate density of healthy muskie. The expanding Gizzard Shad population that was first documented in the fall of 2020 maybe provide an additional forage base for the muskie population.

The channel catfish population was sampled by 12 fish in fall electrofishing survey and 65 fish in the spring trap net survey. The current channel catfish population is rated as good with the larger fish up to 27 inches in length. This population is of moderate density and in good body condition with a Wr average of 105. Little Grassy hatchery stocked 3,900 fish at 6.8 inches in 2022. An annual stocking of non-vulnerable channel catfish has occurred in the recent past. These stockings have established a

population with anticipated high angler harvest pressure.

3 common carp, 14 green sunfish, 1 blue catfish, 1 flathead catfish, 7 golden shiners, and 196 gizzard shad were also sampled in 2022. All of these species, except for the gizzard shad, have been maintaining a low density in the recent past in Lake Storey. The gizzard shad population is now well established and maintaining a moderate density.

Recommended Lake Management Activities with Rationale for Implementation:

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

Walleye: 6700/year at 2 inches which is 50/acre.

Muskie: 136/year at 10 inches which is 1/acre.

Channel Catfish: 3500/year at 8 inches which is 25/acre.

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

Aquatic Vegetation Control - IDNR Fisheries will apply aquatic herbicides as needed to manage exotic or nuisance aquatic plants for fishing access or sportfish management.

Lake Access - Coordinate with the Galesburg Park District on the development of shoreline fishing areas, the boat dock and scheduled improvements for the boat ramp. No fishing tournaments were scheduled in 2022.

Water Level - coordinate with the Galesburg Park District on the annual fall drawdown and the documentation of the water level utilizing the installed staff gauge.

Site Map - update the site map of the water bodies as needed.

Fish stocking from 2012 to 2022 for Lake Storey.

Waterbody	Species	Size (in)	Count	Delivery Date	Source
Lake Storey (00026)	Muskellunge	12.5	147	9/28/2022	#2 Jake Wolf Hatchery (09000)
Lake Storey (00026)	Channel Catfish	6.8	3900	8/1/2022	#1 Little Grassy Hatchery (09050)
Lake Storey (00026)	Walleye	1.5	8517	5/31/2022	#2 Jake Wolf Hatchery (09000)
Lake Storey (00026)	Muskellunge	13	138	9/8/2021	#2 Jake Wolf Hatchery (09000)
Lake Storey (00026)	Channel Catfish	7.5	3900	8/9/2021	#1 Little Grassy Hatchery (09050)
Lake Storey (00026)	Walleye	1.5	8970	5/25/2021	#2 Jake Wolf Hatchery (09000)
Lake Storey (00026)	Channel Catfish	7.7	3900	8/4/2020	#1 Little Grassy Hatchery (09050)
Lake Storey (00026)	Walleye	1.4	6819	5/28/2020	#2 Jake Wolf Hatchery (09000)
Lake Storey (00026)	Muskellunge	13.5	142	9/18/2019	#2 Jake Wolf Hatchery (09000)
Lake Storey (00026)	Channel Catfish	8.7	2730	8/20/2019	#1 Little Grassy Hatchery (09050)
Lake Storey (00026)	Muskellunge	12.5	136	9/13/2018	#2 Jake Wolf Hatchery (09000)
Lake Storey (00026)	Channel Catfish	7	3990	8/15/2018	#1 Little Grassy Hatchery (09050)
Lake Storey (00026)	Muskellunge	12.5	135	8/31/2017	#2 Jake Wolf Hatchery (09000)
Lake Storey (00026)	Channel Catfish	8.6	3900	8/30/2017	#1 Little Grassy Hatchery (09050)
Lake Storey (00026)	Muskellunge	10.75	136	8/26/2016	#2 Jake Wolf Hatchery (09000)
Lake Storey (00026)	Channel Catfish	7	1500	7/21/2016	#2 Jake Wolf Hatchery (09000)
Lake Storey (00026)	Walleye	1.5	6696	5/25/2016	#2 Jake Wolf Hatchery (09000)
Lake Storey (00026)	Muskellunge	11.9	137	9/3/2015	#2 Jake Wolf Hatchery (09000)
Lake Storey (00026)	Channel Catfish	8	980	8/31/2015	#1 Little Grassy Hatchery (09050)
Lake Storey (00026)	Channel Catfish	8	3900	8/26/2014	#1 Little Grassy Hatchery (09050)
Lake Storey (00026)	Muskellunge	11	135	8/24/2012	#2 Jake Wolf Hatchery (09000)