Ellsworth District Fisheries

Kansas Department of Wildlife, Parks & Tourism Fisheries Division — Spring 2021

District Information

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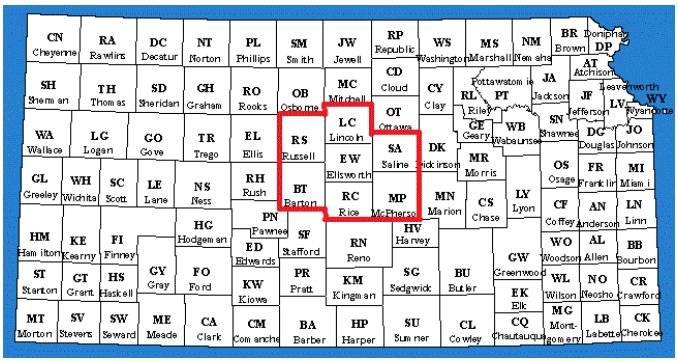
Counties and Reservoirs



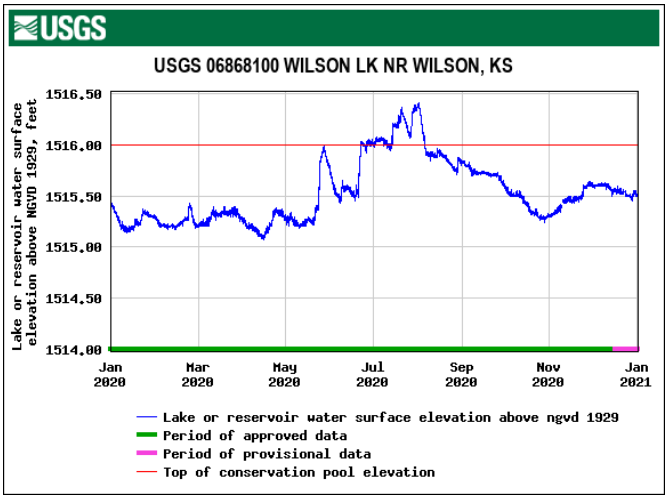
Russell	Wilson Reservoir - 9000 acres
Lincoln	Only leased F.I.S.H. properties
Saline	Saline State Lake (DRY)
	Lakewood Lake - Salina – 6 acres
	Indian Rock Lake - Salina (DRY)
Barton	Cheyenne Bottoms Wildlife Area
	Stone Lake – Great Bend - 40 acres
	Veteran's Lake – Great Bend - 13 acres
Ellsworth	Kanopolis Reservoir - 3550 acres
	Holyrood City Lake – 13 acres
Rice	Sterling City Lake - 10 acres
McPherson	McPherson State Lake - 47 acres
	Black Kettle State Lake – 8 acres
	Windom City Pond – 1 acre

Note: Keep in mind that there are various Arkansas River access points throughout the region and F.I.S.H. Program properties. The F.I.S.H. Program leases the angling rights from private landowners to allow you to fish their ponds. Get the latest Kansas Fishing Atlas for details.

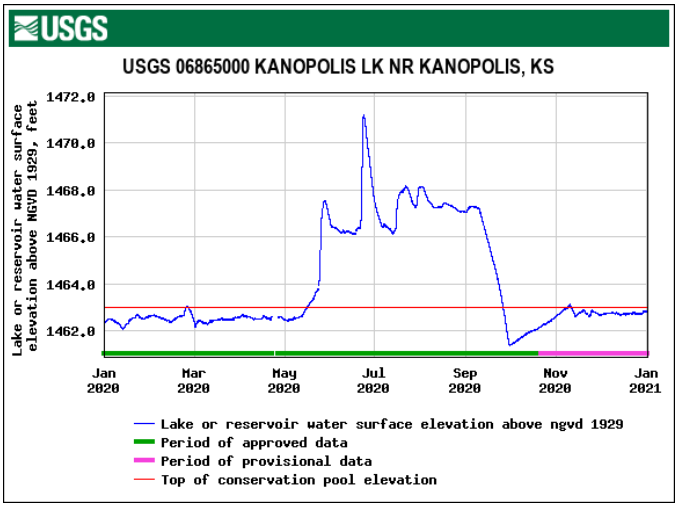
fishing's future
MORE THAN A SPORT

Annual Weather Conditions

Wilson Reservoir) After a high elevation year in 2019, the Army Corps of Engineers kept the reservoir 0.5 – 1 feet low for most of 2020 to armor several shoreline areas at Lucas and Minooka parks with riprap rock due to erosion that has been occurring there.



Kanopolis Reservoir) The reservoir was held low for much of the year and reached summer pool (1467') in early June. A few high-water events occurred throughout the summer but the water level was much more stable compared to the last few years.



Fall Fish Sampling Guide

Wilson Reservoir

Blue Catfish	2019 samples	2020 samples
Total fish	22	72
% of <20” fish	9	60
% of 20” fish	75	25
% of 30” fish	10	13
% of 32-40” fish	6	3

These catches are a combination of Blue Catfish caught from gill nets and electrofishing. Blue Catfish growth has improved. ***There is a new protective-slot limit for Blue Catfish at Wilson Reservoir. You must release all fish between 32 and 40 inches. You may keep 2 fish outside of this range but only 1 over 40 inches can be kept.***

Blue Catfish naturally reproduced for the first time during the 2019 flood and several 6-8-inch fish were collected in 2020. This bodes well for the future of this population.

Channel Catfish	2019 sample	2020 sample
Total fish in nets	147	147
% of 11” fish	40	49
% of 16” fish	50	41
% of 24” fish	9	10
% of 28” fish	1	0

Channel catfish numbers have remained high and there’s a higher proportion of smaller catfish, indicating good recruitment, and larger catfish, greater than 24” remains the same. Channel Catfish are plentiful at Wilson Reservoir right now!

Largemouth Bass	2019 sample	2020 sample
Total fish electrofished	400	506
% of 8” fish	19	7
% of 12” fish	45	38
% of 15” fish	36	53
% of 20” fish	<1	2

Bass reproduction exploded when the lake re-filled. Those young fish have grown extremely well and most fish born in 2016 will be over the legal size (15”) this spring. Largemouth bass stockings in 2016 seem to have aided in the quick recovery of the population. High angler pressure in 2020 will make fishing conditions a bit tougher in 2021.

Travis Riley displaying a quality largemouth bass collected with electrofishing in May 2020.

Smallmouth Bass	2019 sample	2020 sample
Total fish electrofished	78	91
% of 7” fish	57	20
% of 11” fish	12	31
% of 14” fish	20	41
% of 17” fish	12	8

Wilson remains one of the top 3 Smallmouth Bass destinations in Kansas.

The author and Rose with a 4 lb. smallmouth caught at Wilson Reservoir.

Stripers	2019 sample	2020 sample
Total fish in nets	35	30
% of 12” fish	37	0
% of 20” fish	57	73
% of 30” fish	6	27

The Striped Bass population is aging and many fish are > 30 inches. However, few smaller individuals occur here due to missed stockings the last couple of years. ***New for 2021: Striped Bass daily creel limit reduced from 5/day to 2/day.***

Walleye	2019 sample	2020 sample
Total fish in nets	228	311
% of 10” fish	17	16
% of 15” fish	15	46
% of 20” fish	63	31
% of 25” fish	5	7

A 2019 year class of fish and large, older adults are anchoring this population. Wilson ranks 1st in the state for Walleye in 2021. Walleye density has increased for three straight years!

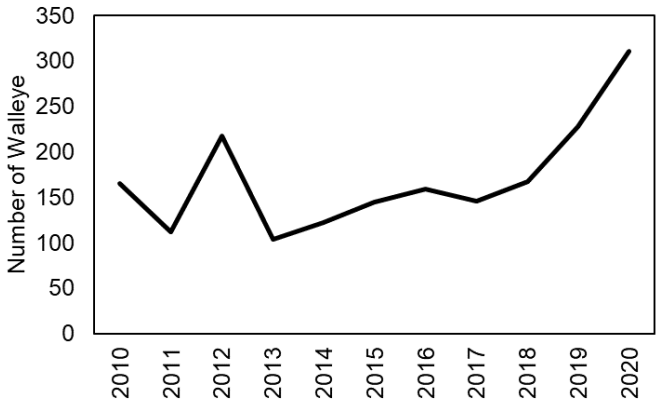


Figure 3. Number of Walleye collected in gill nets at Wilson Reservoir from 2010 – 2020.

“Wilson ranks 1st in the state for Walleye in 2021.”

White Bass	2019 sample	2020 sample
Total fish in nets	139	138
% of 6” fish	54	9
% of 9” fish	2	31
% of 12” fish	16	34
% of 15” fish	27	26
% of 18” fish	0	0

Recruitment improved in 2020 and those fish have grown to larger sizes. White bass fishing will be good in 2021 at Wilson Reservoir and statewide.

Kanopolis Reservoir

Blue Catfish	2019 Sample	2020 sample
Total fish collected	23	123
% of fish <12”	0	0
% of 12” fish	96	99
% of 20” fish	4	1
% of 30” fish	0	0

Blue catfish have been stocked since 2008 but have not become established. We stocked 30,000 blue catfish in 2017 and 2018. The 2019 sample was poor due to flooding and high flows through the outlet. Regardless, Blue Catfish are growing very fast at Kanopolis and should provide good angling in 2021. ***Blue Catfish are regulated with a 35-inch minimum-length limit.***

Travis Riley with 18-20-inch Blue Catfish that are now common at Kanopolis Reservoir.

Channel Catfish	2019 sample	2020 sample
Total fish in nets	245	175
% of 11” fish	37	34
% of 16” fish	61	57
% of 24” fish	2	9

Kanopolis remains one of the premier catfishing destinations in Kansas. Trophy potential is low but many fish > 20 inches are common. Kanopolis ranks 4th in the state for Channel Catfish in 2021.

“Kanopolis ranks 4th in the state for Channel Catfish in 2021.”

Largemouth Bass	2019 sample	2020 sample
Total fish in nets	210	47
% of 8” fish	75	68
% of 12” fish	22	24
% of 15” fish	3	8
% of 21” fish	0	0

The high catch rate in the 2019 sample was due to sampling in September rather than the normal May sampling period. Therefore, the high catch rate was likely not representative of the population.

Crappie	2019 sample	2020 sample
Total fish in nets	160	162
% of 5” fish	4	78
% of 8” fish	81	10
% of 10” fish	14	12
% of 12” fish	1	1

Crappie remain good but a high percentage of smaller fish indicates good recruitment for the future. ***New for 2021: Crappie daily creel limit was reduced from 50/day to 20/day.***

Many black-nosed crappie have been collected from Kanopolis the last few years. Black-nosed crappie are Black Crappie, not hybrid crappie. The black stripe is a recessive genetic trait that causes a color variation and sometimes is well expressed in certain populations. They are often used to create hybrid Black x White crappie (Magnolia Crappie) because the resulting offspring will have the black stripe, however it remains a natural trait in wild Black Crappie.

White Bass	2019 sample	2020 sample
Total fish in nets	1,472	323
% of 6” fish	64	3
% of 9” fish	9	77
% of 12” fish	22	15
% of 15” fish	5	5

White Bass numbers have exploded, due to higher recruitment in 2018 and 2019. They have recruited well and most are > 9 inches. Kanopolis ranks 2nd in the state for White Bass in 2021.

“Kanopolis ranks 2nd in the state for White Bass in 2021.”

Saugeye	2019 sample	2020 sample
Total fish in nets	131	38
% of 9” fish	59	21
% of 14” fish	3.5	53
% of 18” fish	34	16
% of 22” fish	3.5	10

Adult Saugeye catch has decreased likely due to high water levels and high releases in fall 2018 and summer 2019. However, a good 2019 year class of Saugeye have recruited to the fishery. These fish will grow fast and provide reasonable Saugeye fishing in 2021 and beyond.

Ellsworth District Top 15 Fishing Prospects for 2021

1. **Walleye – Wilson Reservoir**
2. **White Bass – Kanopolis Reservoir**
3. **Crappie – McPherson SFL**
4. **Bluegill – Sterling City Lake**
5. **Channel Catfish – Kanopolis Reservoir**
6. **Bluegill – Holyrood City Lake**
7. **Channel Catfish – Kanopolis Reservoir**
8. **Crappie – Kanopolis Reservoir**
9. **Blue Catfish – Wilson Reservoir**
10. **Bluegill – McPherson State Lake**
11. **Largemouth Bass – Wilson Reservoir**
12. **Channel Catfish – Saline State Lake**
13. **Smallmouth Bass – Wilson Reservoir**
14. **Largemouth Bass – McPherson SFL**
15. **Striped Bass – Wilson Reservoir**

Reservoir Elevation and Dam Releases – A quick guide for reading and understanding what it means

Reservoir Surface Elevation

Reservoir surface elevation can give an angler an overview of what current conditions to expect and recent trends that might dictate fish behavior. Some terms to remember are “conservation pool,” “active pool,” “water releases,” and “discharge.” Conservation pool (a.k.a. active pool) is the target elevation that a dam is designed to hold during normal conditions and can be simplified as the typical target surface elevation, or normal lake level. Conservation pool is also considered the bottom of the flood pool. This level allows for consistent recreational opportunities while maintaining an adequate amount/volume for flood control during wet seasons. In eastern Kansas the surface elevation typically maintains or exceeds the conservation pool while western Kansas reservoirs typically are below conservation pool and only reach that elevation after periods of high rainfall.

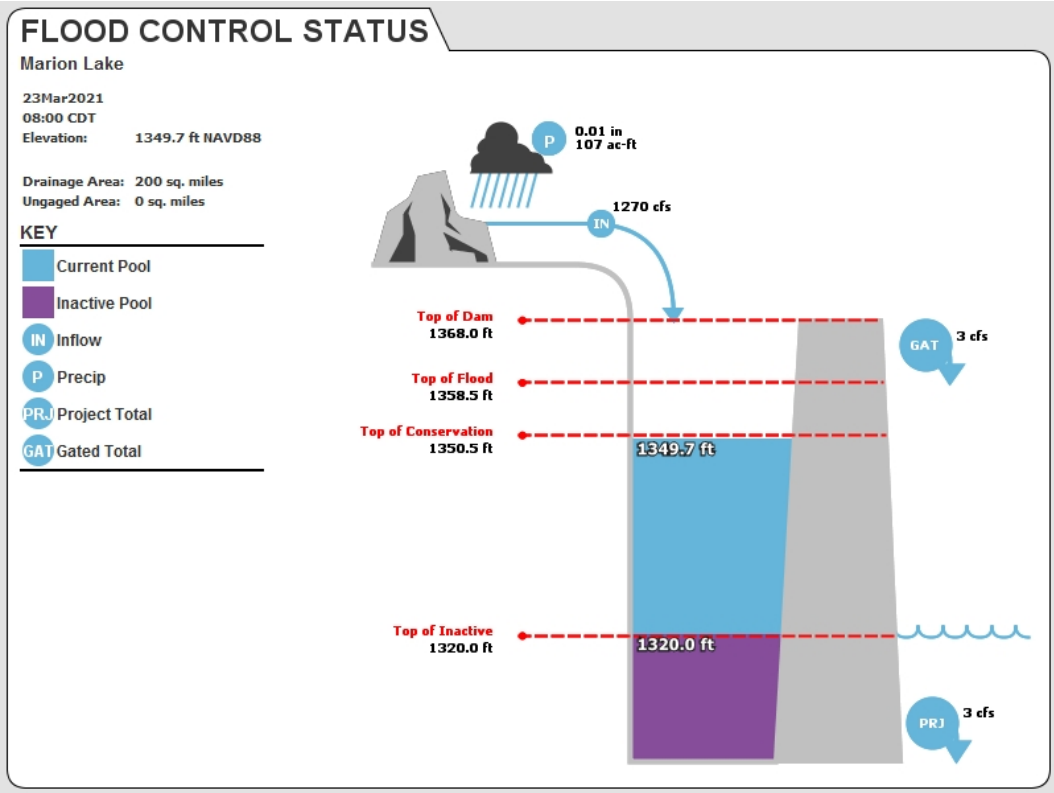


Image. This example reservoir surface elevation diagram, or teacup diagram, illustrates the current elevation (1349.7 ft.) versus the conservation pool (1350.5 ft.). This means the lake is 0.8 ft, 10 inches low.

Reservoir elevation is illustrated in Kansas reservoirs in different ways so anglers should familiarize themselves with these. Reservoir surface elevation diagrams, or teacups (shown above), are simplified views of the surface elevation at the dam. It shows where the current elevation is in relation to conservation pool and other benchmark elevations. A hydrograph is another common way that reservoir elevation is illustrated but shows the elevation over a period of days and is a better way of showing trends (below). Either way, subtract the current, or pool, elevation from the conservation pool elevation and the result will show you where the current elevation is in relation to conservation pool.

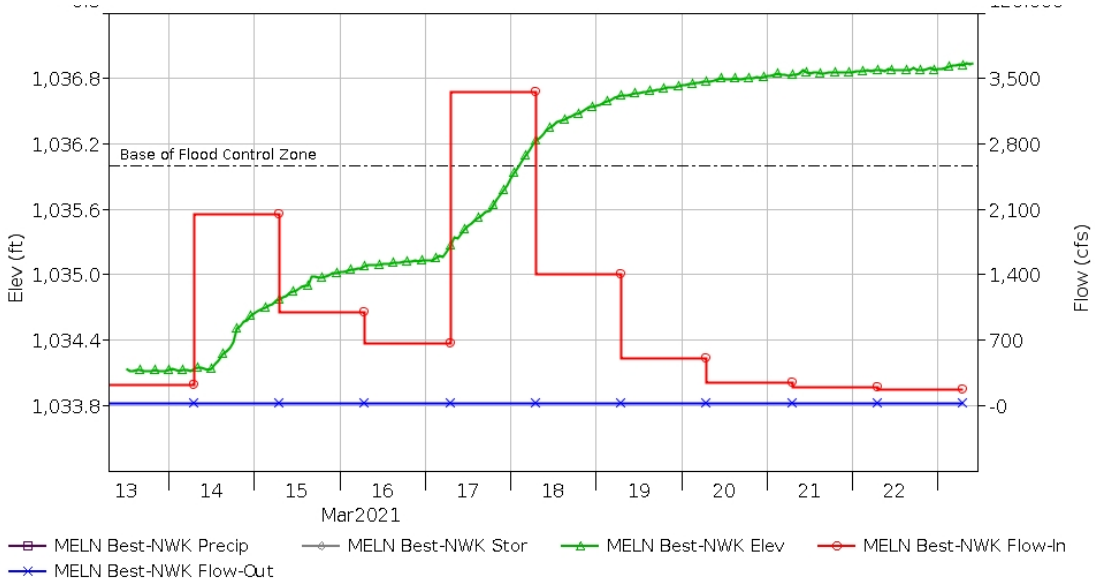


Image. A USGS hydrograph illustrating the surface elevation (green triangles) and outflow (blue x's) at Melvern Reservoir. Reservoir elevation is shown on the y-axis on the left-hand side while outflow or release is shown on the y-axis on the right-hand side of the graph. The conservation pool here is 1036.0 ft. Therefore, the lake has surpassed conservation pool and is rising.

Dam releases/Outflow

Water releases and discharge mean the same thing and are a measure, in cubic feet per second, of the volume of water being released from the dam every second. The release rate, when high, can be a good indicator of quality fishing conditions at the spillway below the dam and even further downstream. Moderate to high release rates, especially during the spring, provide excellent fishing opportunities for White Bass, Walleye and Sauger, catfish, Paddlefish, and other species as they move upstream to spawn and are often concentrated below dams.

Image. An extreme example of fish concentrated below Tuttle Creek Reservoir during a fish salvage prior to inspection of the dam and spillway.

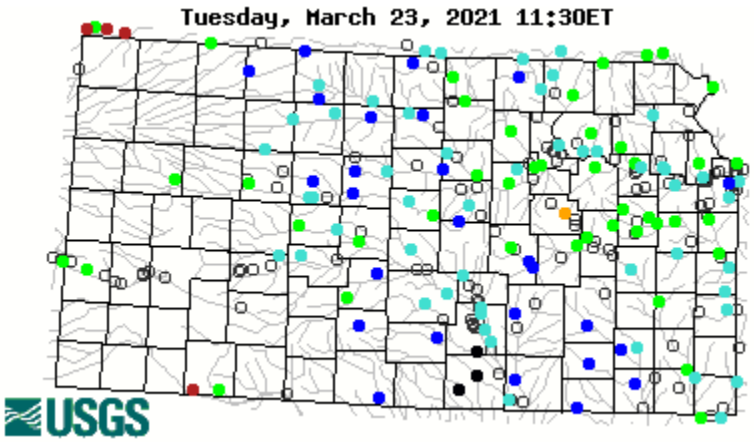
Elevation levels and reservoir releases (outflow) for reservoirs in northeastern Kansas within the Kansas/Missouri River Basin are shown in the United States Geological Survey and U.S. Army Corps of Engineers websites with hydrographs while those for reservoirs in southeastern Kansas within the Arkansas River Basin, except Cheney, are shown with surface elevation diagrams. Elevation levels for reservoirs in western Kansas, including Cheney, are shown with slightly different surface elevation diagrams, referred to as teacup diagrams. Use the links below to view the current elevation levels and reservoir releases for each reservoir.

KS/MO River Basin reservoirs	Elevation & release link	Arkansas River Basin reservoirs	Elevation & release link	Western Kansas reservoirs	Elevation & release link
Clinton	01	Big Hill	10	Cedar Bluff	18
Hillsdale	02	Council Grove	11	Cheney	19
Kanopolis	03	El Dorado	12	Glen Elder	20
Melvern	04	Elk City	13	Kirwin	21
Milford	05	Fall River	14	Lovewell	22
Perry	06	John Redmond	15	Norton	23
Pomona	07	Marion	16	Webster	24
Tuttle Creek	08	Toronto	17		
Wilson	09				

Note: Scroll over the link you're interested in and hold the CTRL key while clicking.

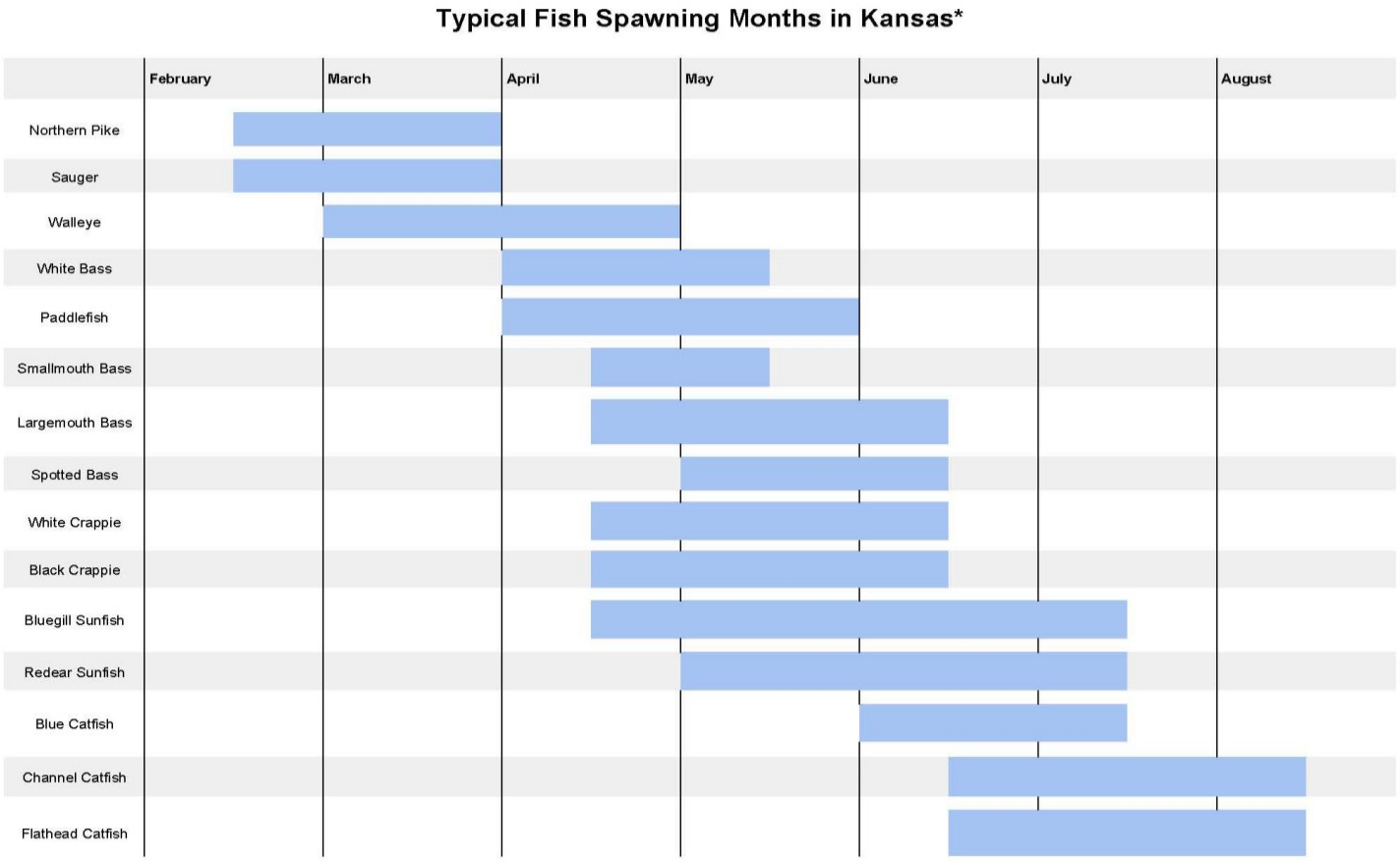
Streamflow

The rivers and streams above reservoirs can also provide excellent angling opportunity as fish from the reservoir move upstream to spawn (e.g. White Bass in April). However, discharge from the dam and even current lake elevation aren't necessarily the best ways to determine fishing opportunities upstream. For this, current streamflow at USGS gauging stations above these reservoirs should be monitored. Folks routinely monitor these gauging stations at their favorite White Bass spawning locations and Paddlefish snagging locations from March - April. However, high inflows above reservoirs can also provide quality catfish angling above the reservoirs through the spring, summer, and fall. Follow this link throughout the year for current streamflow data at your favorite rivers and streams: https://waterdata.usgs.gov/ks/nwis/rt.



Spawning Schedules

Fish species spawn at varying times of the year. This is based on a species' physiology, water temperature, and the changing day length. Water levels and other abiotic conditions can also play a role. Cold water species (Northern Pike, Walleye, etc.) typically spawn first, followed by black basses and crappies, and finally catfishes. This rough display (below) illustrates typical spawning times for popular Kansas sport fish. Remember, large females are typically more difficult to catch during the spawn for most fish species. Their energy and focus is on reproducing and not eating your bait. It's likely a better plan of action to target these fish as the spawn draws to a close and they begin feeding again.



**Please note that fish spawning is dependent on water temperatures, day length and other factors, which can vary annually and by location. This information is meant to be a general guideline for anglers curious about the approximate spawning seasons, and not an exact representation of specific start and ending dates for fish spawning time in Kansas.*

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Go Fish Kansas!

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