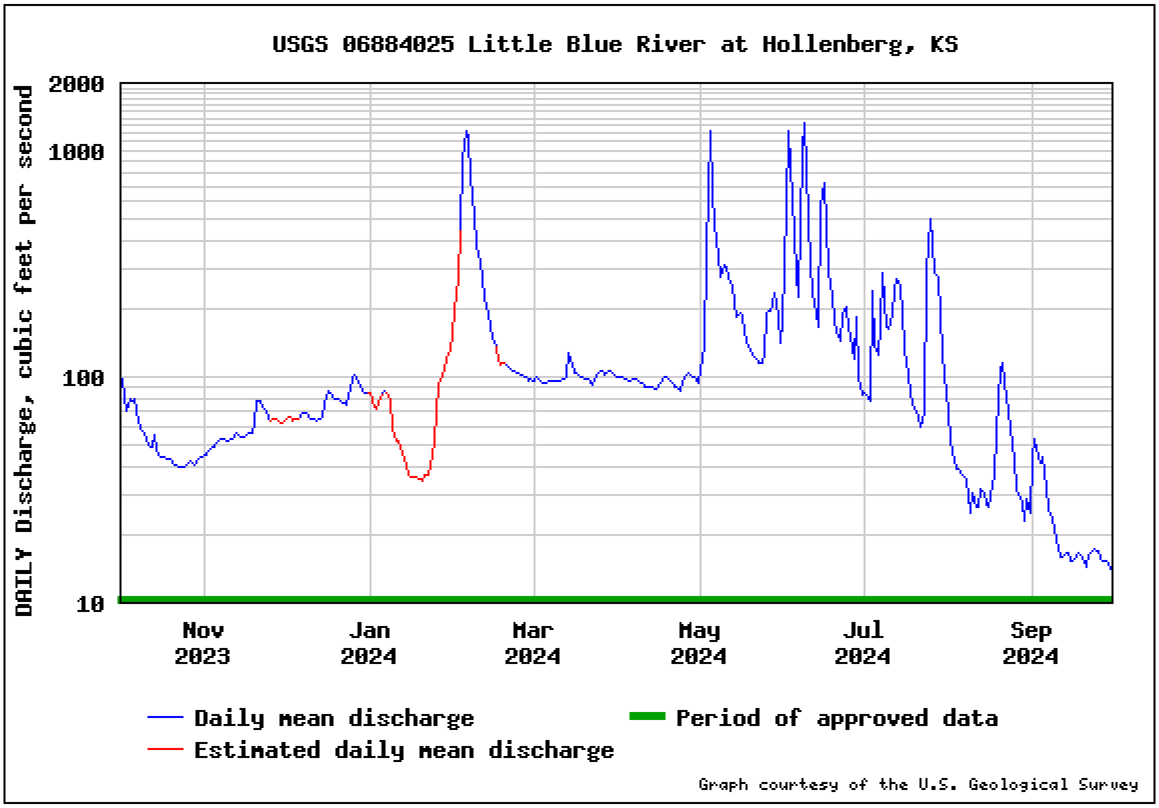
Little Blue River

Area consists of approximately 2,752 square miles upstream of the Hollenberg, Ks gage. DNR operates 3 gages in the Little Blue Basin. One on the Little Blue River in Hebron, one on Big Sandy Creek and one on Rose Creek. The USGS has four additional gages in the Little Blue Basin, including Hollenberg, Ks. At the state line, the annual mean for WY2024 was 134.9 CFS, about 29% of the annual mean for the period of record, which is 469.5 CFS. Ill try not to venture off into Mr. Lambrecht's territory here but something I thought was interesting is the monthly minimum daily means at Hollenberg...The record low flows in 10 of the 12 months have taken place over the last few years, this is over a 50 or 51 year period.

Closed a total of 59 days

Closed	Open	#of days
7/22	7/24	3
8/02	8/20	20
8/26	9/30	36



SUMMARY STATISTICS

	Water Year 2024		Water Years 1974 - 2024	
Annual total	49,360			
Annual mean	134.9		469.5	
Highest annual mean			1,891	1993
Lowest annual mean			96.8	2023
Highest daily mean	1,320	Jun 09	39,300	Jul 26, 1992
Lowest daily mean	14.2	Sep 30	12.2	Aug 25, 2023
Annual 7-day minimum	15.6	Sep 15	13.2	Aug 19, 2023
Maximum peak flow	2,490	Jun 15	59,200	May 07, 2015
Maximum peak stage	5.82	Jun 15	23.07	Oct 12, 1973
Annual runoff (cfsm)	0.049		0.170	
Annual runoff (inches)	0.667		2.31	
10 percent exceeds	271.9		773.0	
50 percent exceeds	89.1		182.0	
90 percent exceeds	31.5		90.0	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2024, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	329	203	197	179	282	628	425	815	921	783	461	347
Max	2,163	1,113	1,646	577	1,059	3,816	2,379	2,638	4,654	9,014	2,572	1,696
(WY)	(1987)	(1997)	(2019)	(1984)	(1993)	(1993)	(1987)	(2015)	(2015)	(1993)	(1985)	(2018)
Min	34.8	58.6	70.8	67.5	89.1	101	95.4	102	40.6	68.1	38.8	22.2
(WY)	(2023)	(2024)	(2023)	(2024)	(2018)	(2024)	(2024)	(2023)	(2023)	(2013)	(2022)	(2024)

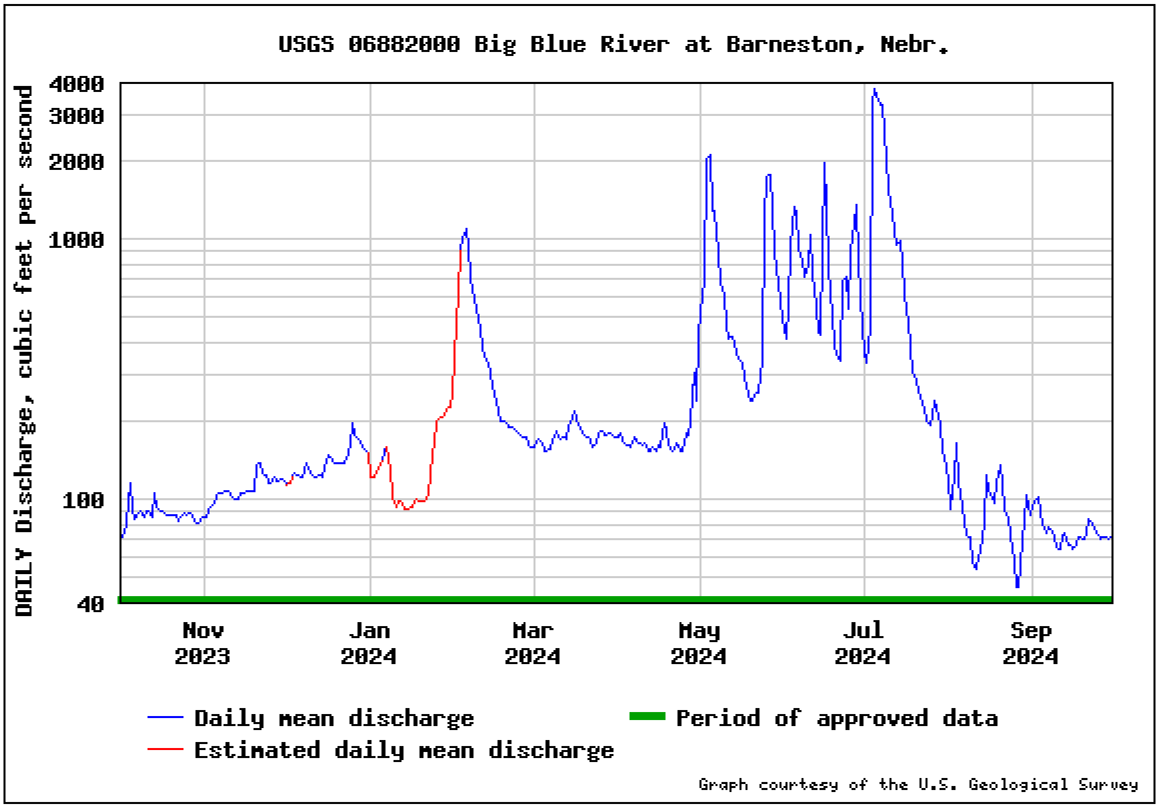
Big Blue River

Area consists of approximately 4,447 square miles upstream of the Barneston, Ne gage. With the addition of the two new gages, DNR now operates 7 gages on the Big Blue River- One at Surprise, Staplehurst, Seward and Beatrice. We also have a few gages on tributaries, one on Lincoln Creek, one on the West Fork of the Big Blue River and one on Turkey Creek. The USGS operates four additional sites, including the gage at Barneston.

The WY2024 annual mean at the Barneston gage was 328.9cfs, about 39% of the annual mean averaged which is 842.6cfs.

Closed a total of 20 days

Closed	Open	#of days
8/7	8/15	9
8/23	9/2	11


USGS 06882000 Big Blue River at Barneston, Nebr.
DAILY Discharge, cubic feet per second
4000
3000
2000
1000
100
40
Nov 2023
Jan 2024
Mar 2024
May 2024
Jul 2024
Sep 2024
Daily mean discharge
Estimated daily mean discharge
Period of approved data
Graph courtesy of the U.S. Geological Survey

SUMMARY STATISTICS

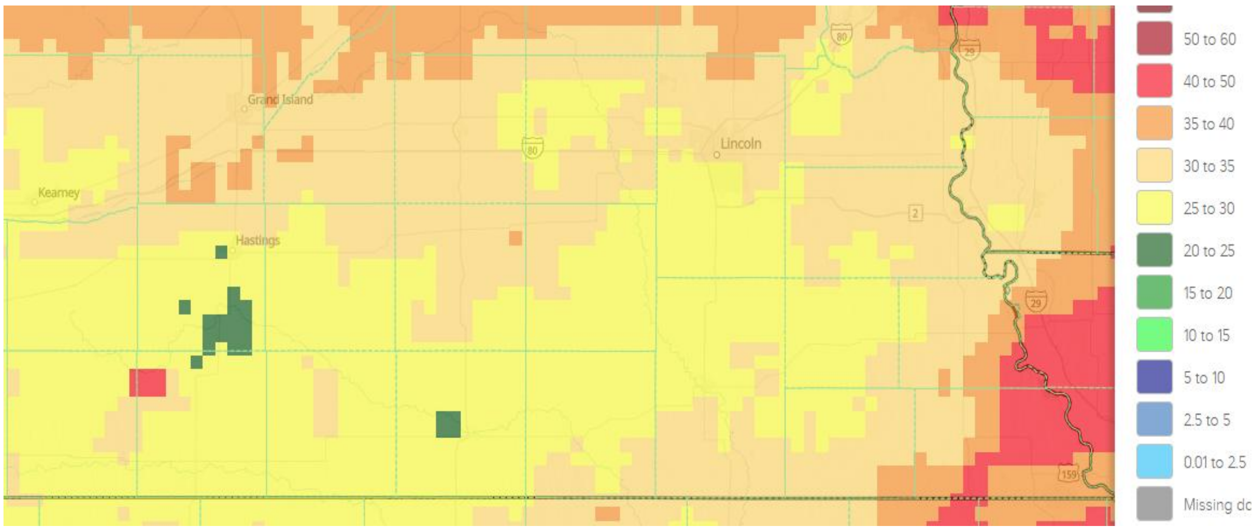
	Water Year 2024		Water Years 1933 - 2024	
Annual total	120,400			
Annual mean	328.9		842.6	
Highest annual mean			2,781	1993
Lowest annual mean			115.0	1934
Highest daily mean	3,810	Jul 05	50,000	Jun 09, 1941
Lowest daily mean	45.7	Aug 26	1.00	Nov 30, 1945
Annual 7-day minimum	65.4	Aug 23	15.1	Aug 03, 1934
Maximum peak flow	3,850	Jul 05	57,700	Jun 09, 1941
Maximum peak stage	9.45	Jul 05	34.30[a]	Jun 09, 1941
Annual runoff (cfsm)	0.074		0.189	
Annual runoff (inches)	1.01		2.57	
10 percent exceeds	824.9		1,710	
50 percent exceeds	158.0		283.0	
90 percent exceeds	79.7		108.0	

[a] Gage height at different site and(or) datum

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2024, BY WATER YEAR (WY)

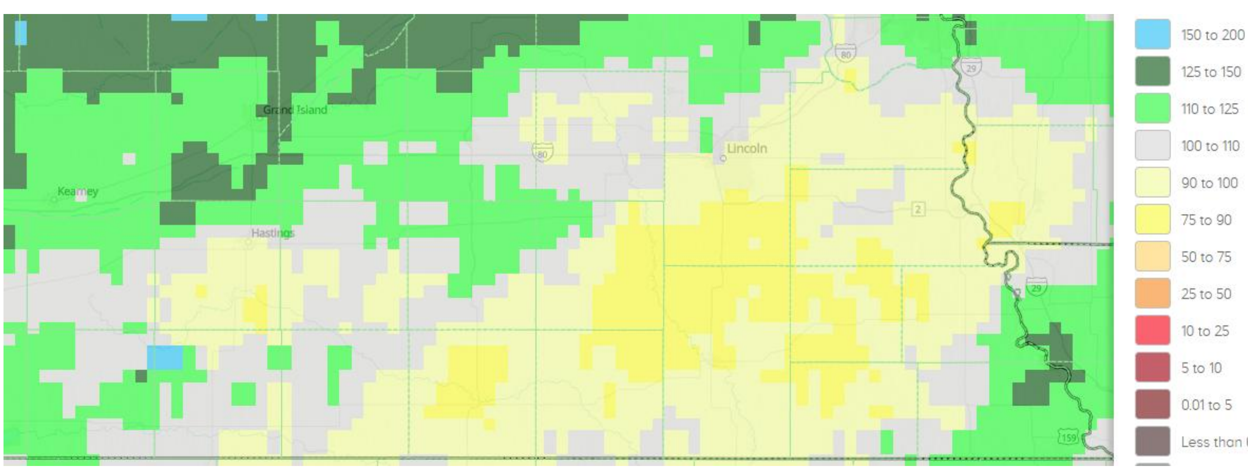
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	575	305	285	299	586	1,256	792	1,390	2,039	1,207	682	685
Max	7,451	1,526	2,731	1,596	2,876	10,560	5,280	5,207	10,460	12,270	5,227	3,420
(WY)	(1974)	(1999)	(2019)	(1973)	(1984)	(1979)	(1984)	(1995)	(1951)	(1993)	(1954)	(1989)
Min	61.5	77.5	87.4	67.6	116	137	132	96.0	69.3	30.7	21.1	50.6
(WY)	(1941)	(1937)	(1977)	(1937)	(1940)	(1968)	(1934)	(1934)	(1934)	(1934)	(1934)	(1939)

Total Precip



Most of the area had 25-35 inches with the exception of the area south of hastings on the upper reaches of the Little Blue. Some areas only got about 20 inches, and not far from there was an area that got over 40 inches. This is why we were able to stay open on the Little Blue through May and June

Percent of Normal Precip



Most of the Big Blue River Basin got around 80% or more of their normal annual rainfall. Id say there was fairly normal rainfall in the Little Blue Basin in 2024, with the exception of the small area south of hastings that received ofer 150% of their annual rainfall

In Summary, We measured the flow in the intake of the irrigation systems when we came across an irrigator running, and issued pump schedules to every senior appropriator we came across that was running during periods of water administration. This applies to both river basins, but once we have documented our first field observation on each individual appropriation, we revisit almost all of these sites until the end of September if the target flows are not met at the state line gage. We make it a point to have a DNR vehicle in the area a few times per week on each stretch of the river, so the farmers know we are still actively monitoring surface water use.

Current Drought Map