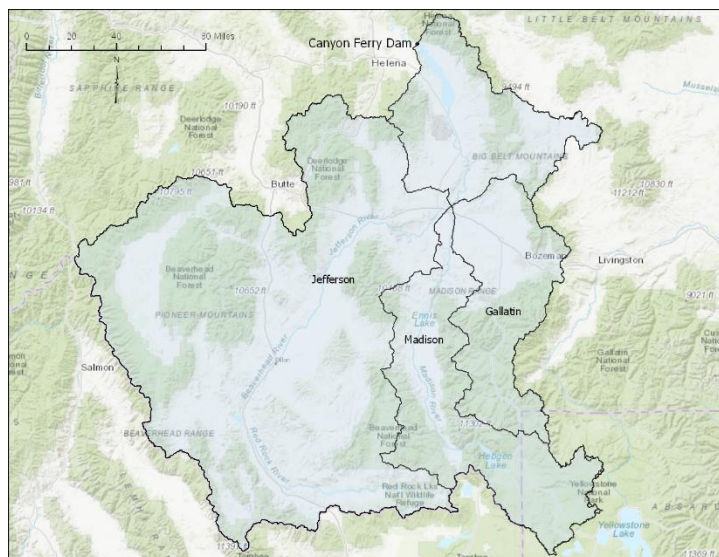


Canyon Ferry Dam Water Supply and Projected Operations *June 2022*



— BUREAU OF —
RECLAMATION



Forecast	Minimum	Median	Maximum
Monthly Inflow (kaf)	430	632	950
End of Month Elevation (ft)	3788.2	3794.5	3797.0
Missouri River below Holter Dam Average River Release (cfs)	3,000	3,000	7,500

Watershed above Canyon Ferry Dam



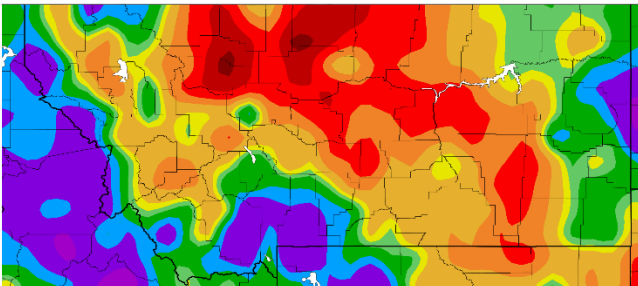
Canyon Ferry Dam

June – July 2022 Inflow Forecast	
June – July Volume (kaf)	873
Percent of Average (%)	90
Water Year	Historic Inflow (kaf)
2021	372
2020	1,018
2019	923
2018	1,468
30 Year Average	967

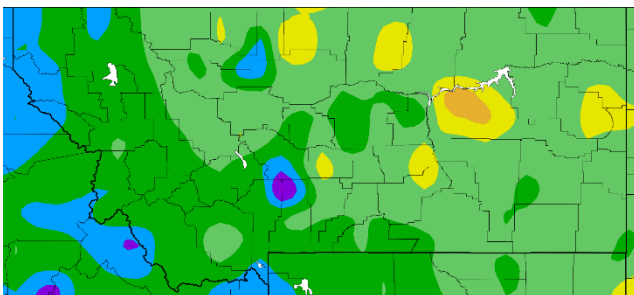
CLIMATE SUMMARY

Western Regional Climate Center May 1-31 Climate

Percent of Normal Precipitation



Departure from Normal Temperature (F)

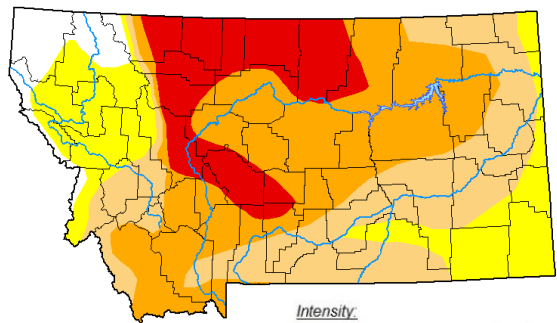


May temperatures were cooler than normal, while much needed snow and rain fell in the Missouri Basin headwaters.

The one-month outlook forecast, dated May 31, is for 33 - 40 percent of above normal precipitation and 33-40 percent of below normal temperatures during June.

The Memorial weekend precipitation event improved the drought status above Canyon Ferry Reservoir. The designation went from extreme drought to severe drought conditions.

MT Drought Monitor Map May 31, 2022

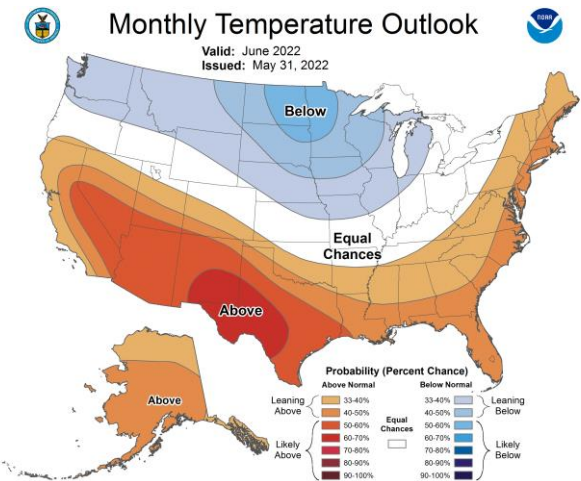
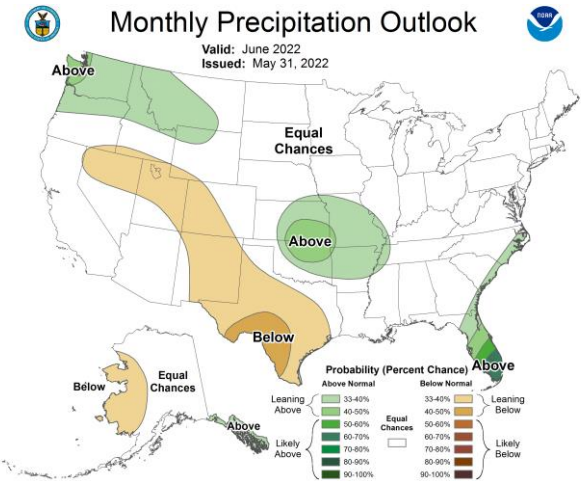


Intensity

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

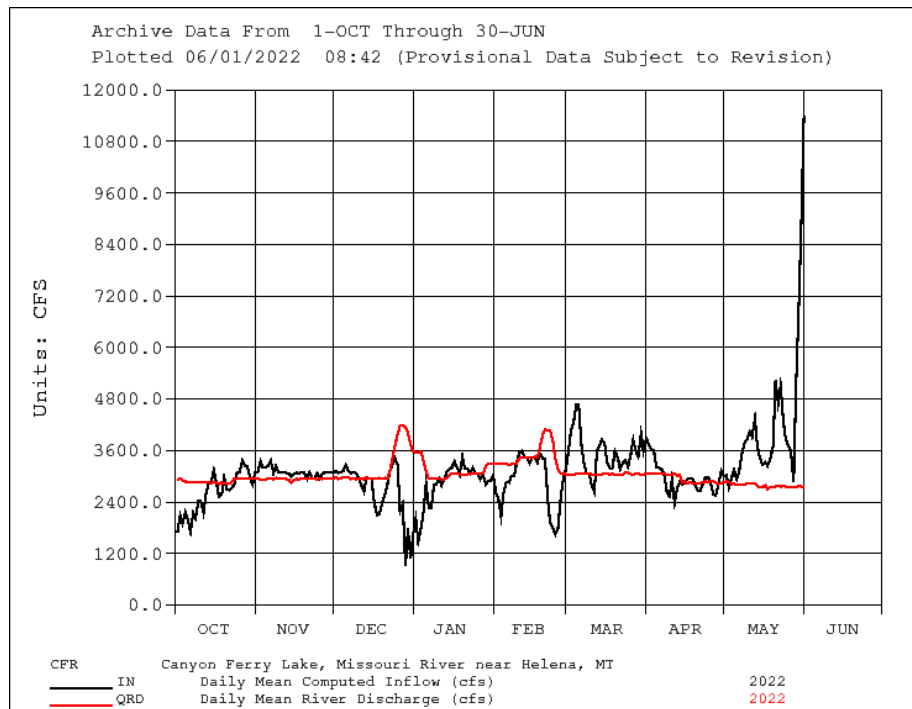
National Weather Service June Weather Outlook



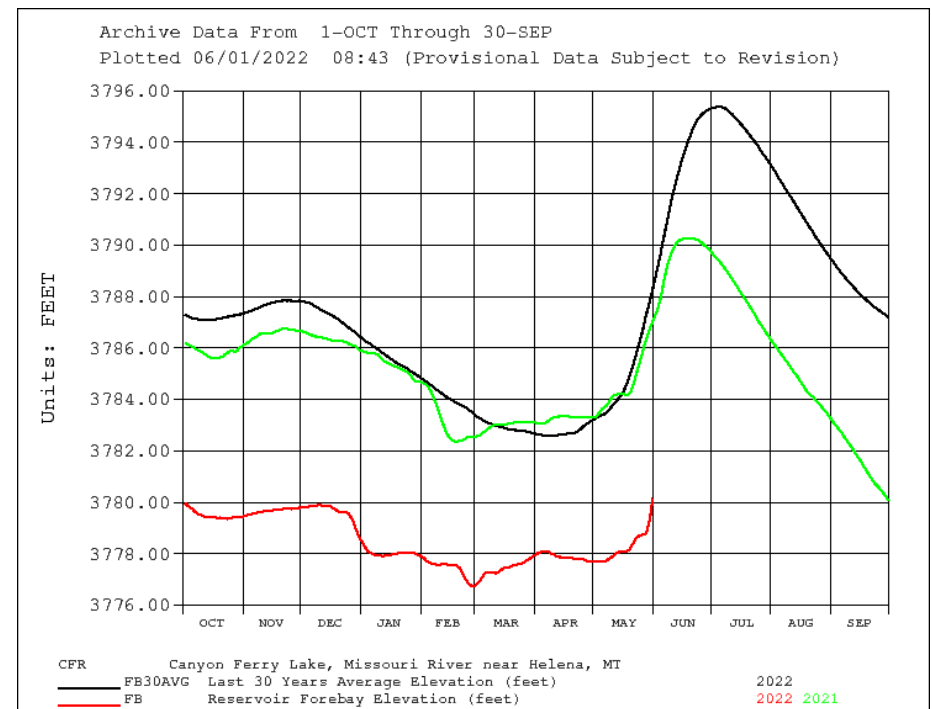
Operations Review

May inflows totaled 260,800 acre-feet or 49 percent of average while releases remained at the 3,000 cfs minimum flow below Holter Dam. Inflows for May have not been this low in the last 20 years, since 2002. The reservoir started to gain storage at the end of the month as runoff and rainfall began in the basin resulting in a June 1, 2022 elevation of 3780.1 feet.

Canyon Ferry Dam Inflow & Releases (cfs)

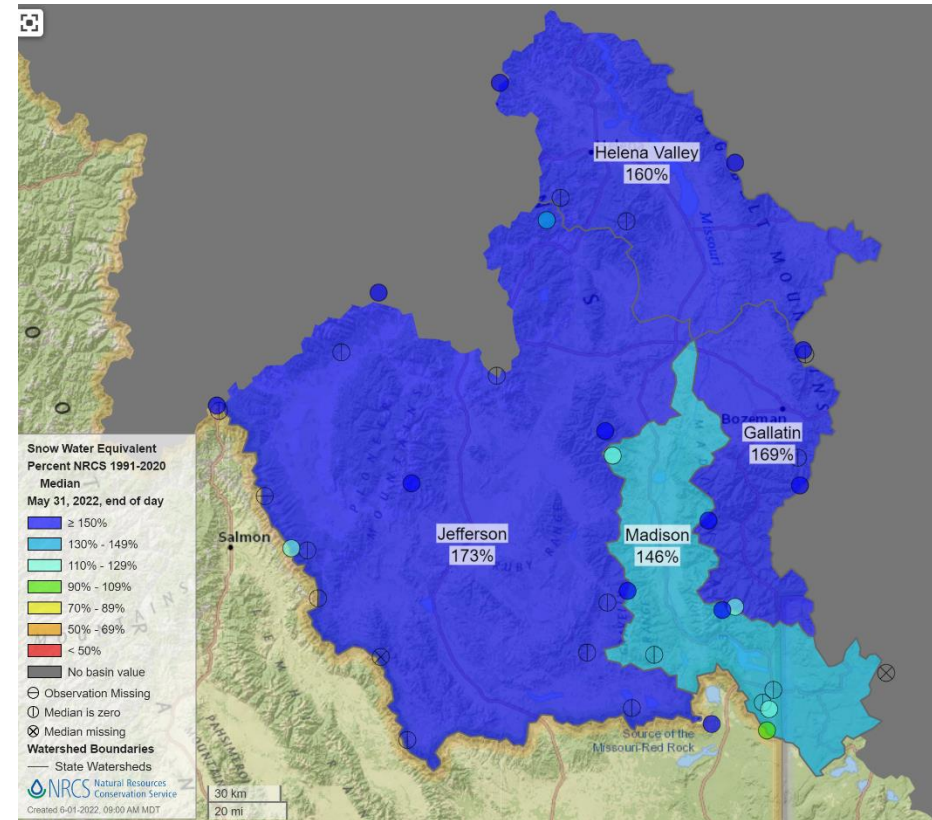
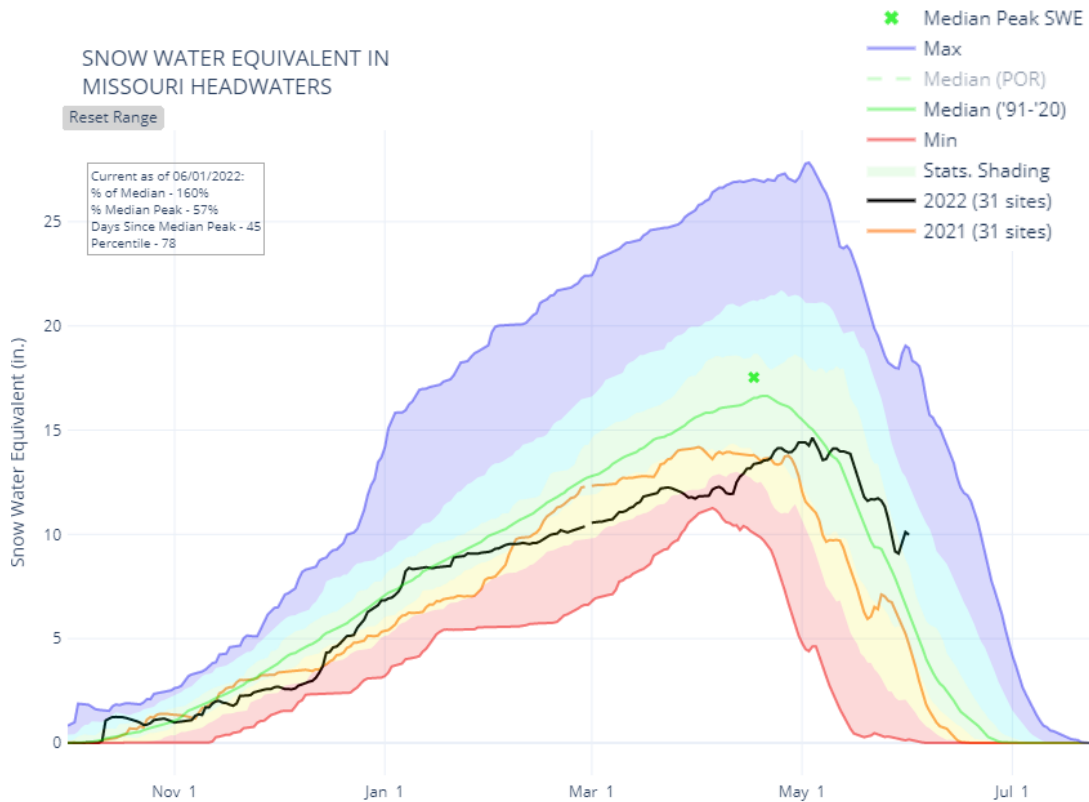


Canyon Ferry Dam Elevation (ft)



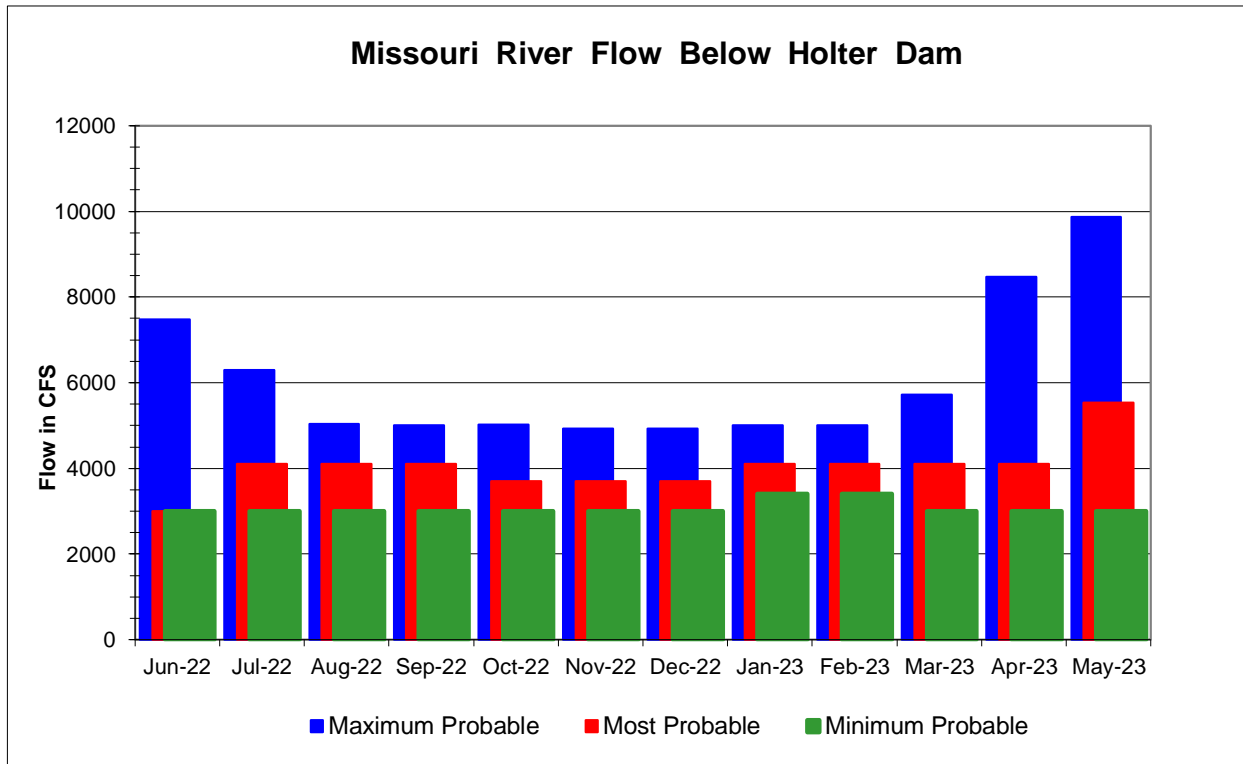
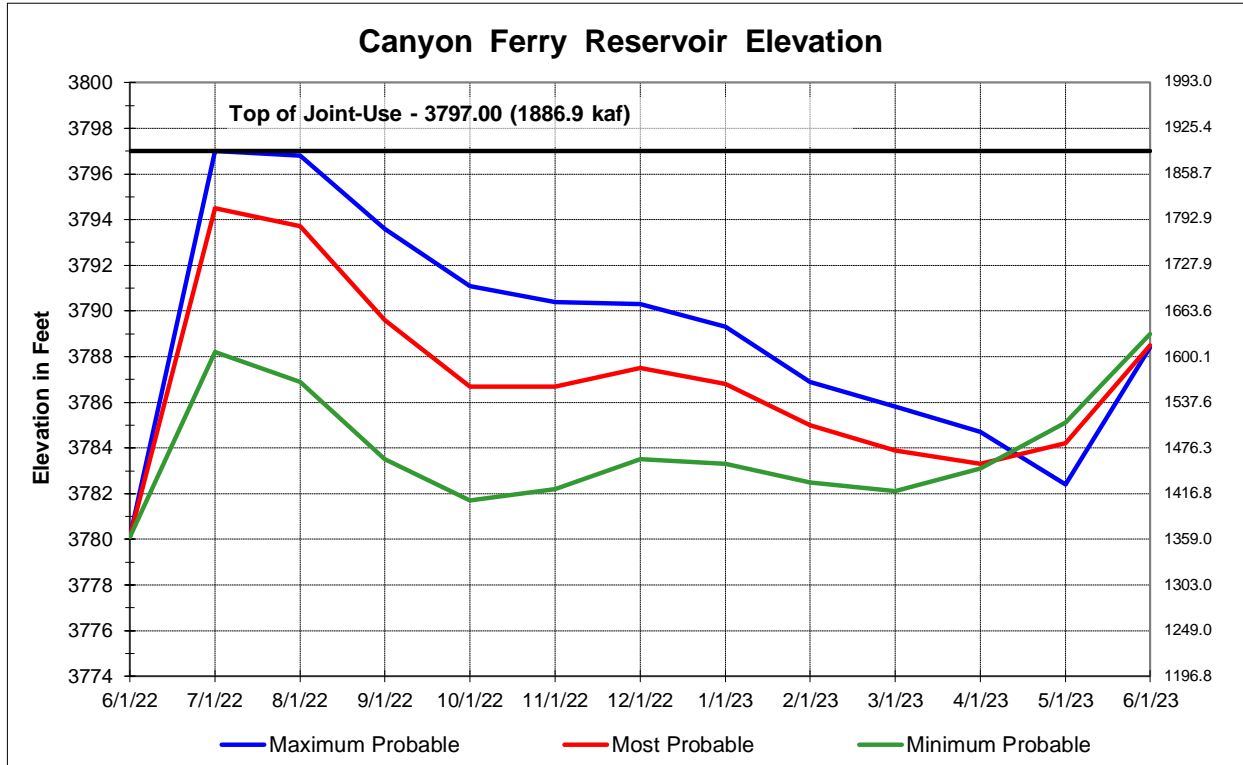
Snowpack & Spring Runoff Forecast

The below Snow Water Equivalent map is a composite of SNOTEL sites within the Missouri Headwaters that is managed by the Department of Natural Resource and Conservation Service (NRCS). As of June 1, 2022, the snowpack in the Missouri Headwaters is 160 percent of median due to the delayed runoff. The June 1st SNOTEL data along with streamflow and climate data was used to compute a June through July runoff inflow forecast volume into Canyon Ferry Reservoir of 873,000 acre-feet, or 90 percent of average.



Operating Outlook

The graphs below depict a range of possible reservoir elevations and river releases over time. The most probable plan is based on the June through July volume runoff forecast. The maximum and minimum plans are based upon ranges of possible inflow volumes due to basin variabilities and forecast uncertainties.



Most Probable Inflow Conditions

	2022	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
Reservoir Inflow	kaf	632.0	240.0	129.0	154.0	221.0	238.0	200.0	190.0	185.0	223.0	268.0	480.0	3160.0
HV Canal Diversions	kaf	17.9	18.0	18.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	16.0	88.9
HV Pump Turbines	kaf	21.3	18.8	19.7	12.9	0.0	0.0	0.0	0.0	0.0	0.0	10.3	19.5	102.5
Turbine Release	cfs	2415	3729	3666	3758	3576	3600	3586	3976	3970	3916	3738	4919	
Spill	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	9.3
Generation	gwh	16.632	30.430	29.388	28.656	27.751	27.072	27.900	31.025	27.686	30.058	27.648	37.944	342.190
River Release	cfs	2773	4035	3986	3975	3576	3600	3586	3976	3970	3916	3911	5388	
End-Month Content	kaf	1800.4	1774.3	1640.2	1546.7	1547.8	1571.6	1551.1	1496.6	1461.1	1443.3	1470.6	1603.3	
End-Month Elevation	ft	3794.5	3793.7	3789.6	3786.7	3786.7	3787.5	3786.8	3785.0	3783.9	3783.3	3784.2	3788.5	
Holter Dam Release	cfs	3000	4100	4100	4101	3700	3701	3700	4100	4100	4100	4101	5530	

Minimum Probable Inflow Conditions

	2022	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
Reservoir Inflow	kaf	430.0	155.0	95.0	130.0	195.0	210.0	175.0	180.0	170.0	205.0	237.0	320.0	2502.0
HV Canal Diversions	kaf	17.9	18.0	18.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	16.0	87.9
HV Pump Turbines	kaf	22.8	21.4	22.5	14.6	0.0	0.0	0.0	0.0	0.0	0.0	9.0	19.2	109.5
Turbine Release	cfs	2454	2545	2570	2684	2911	2897	2926	3334	3272	2830	2699	2662	
Spill	kaf	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Generation	gwh	16.704	18.451	18.377	18.504	21.055	20.376	21.427	24.924	21.974	20.460	18.792	19.418	240.462
River Release	cfs	2837	2893	2936	2929	2911	2897	2926	3334	3272	2830	2850	2975	
End-Month Content	kaf	1594.6	1553.7	1450.2	1394.9	1410.9	1448.5	1443.6	1418.6	1406.9	1437.9	1498.3	1619.4	
End-Month Elevation	ft	3788.2	3786.9	3783.5	3781.7	3782.2	3783.5	3783.3	3782.5	3782.1	3783.1	3785.1	3789.0	
Holter Dam Release	cfs	3000	3001	3001	3000	3001	3000	3001	3401	3400	3001	3000	3001	

Maximum Probable Inflow Conditions

	2022	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
Reservoir Inflow	kaf	950.0	375.0	200.0	210.0	270.0	280.0	260.0	220.0	230.0	300.0	430.0	785.0	4510.0
HV Canal Diversions	kaf	17.0	18.4	18.4	12.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	18.4	95.2
HV Pump Turbines	kaf	19.6	18.3	18.9	13.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3	22.9	107.0
Turbine Release	cfs	4813	4539	4437	4526	4735	4743	4744	4814	4734	4973	5090	4998	
Spill	kaf	90.3	67.2	0.0	0.0	0.6	0.0	0.0	0.0	0.0	29.2	171.9	252.4	611.6
Generation	gwh	36.720	37.944	36.754	35.640	37.944	36.720	37.795	37.795	33.264	37.944	36.720	37.944	443.184
River Release	cfs	6660	5930	4744	4744	4744	4743	4744	4814	4734	5448	8220	9475	
End-Month Content	kaf	1888.0	1880.0	1769.9	1685.6	1663.9	1661.7	1630.0	1554.0	1521.1	1486.1	1416.0	1600.0	
End-Month Elevation	ft	3797.0	3796.8	3793.6	3791.1	3790.4	3790.3	3789.3	3786.9	3785.8	3784.7	3782.4	3788.4	
Holter Dam Release	cfs	7477	6299	5037	5006	5016	4932	4929	4999	5000	5723	8470	9864	

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http://www.usbr.gov/gp/lakes_reservoir/wareprts/main_menu.html

<https://www.usbr.gov/gp/hydromet/>