

# Milk River Project Water Supply and Projected Operations



— BUREAU OF —  
RECLAMATION

September 2024



*Fresno Reservoir, August 2024*

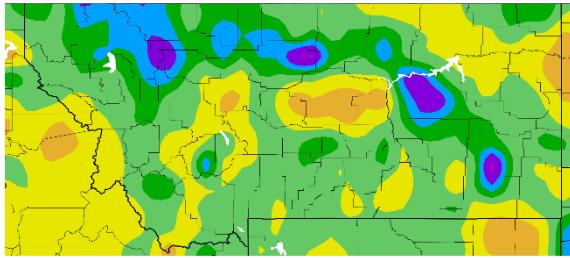
The September monthly operating plan covers actual operations from October 1, 2023, through August 31, 2024, and projected operations for September 1, 2024, through August 31, 2025. The projections are based on forecasted water supply and use.

<b>Median Forecasted Operations</b>	<b>Sherburne</b>	<b>Fresno</b>	<b>Nelson</b>
September Inflow Forecast (kaf)	6	1	-2
Percent of Average	104	2	-
September Release Forecast (cfs)	30	100	0
September 30 Elevation Forecast (feet)	4771.9	2550.2	2217.6

# Climate Departure from Normal

August 1 through August 31

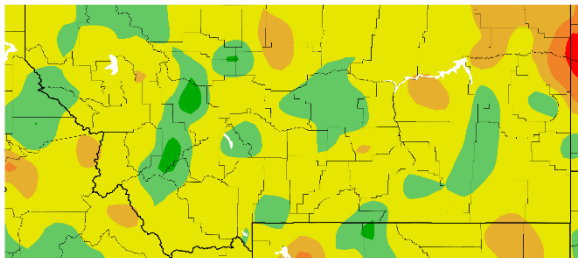
## Precipitation



Departure from Normal (inches)

## Temperature

Departure from Normal (°F)



HPRCC using provisional data NOAA Regional Climate Centers

# CLIMATE SUMMARY

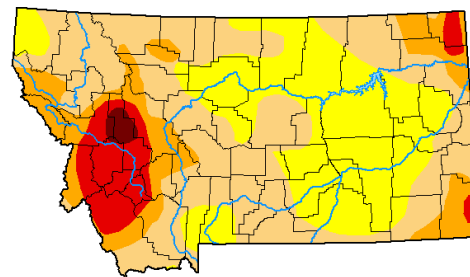
Precipitation in the St. Mary and Milk River Basins was above average for August. Temperatures were near to above average.

There is a 33 to 50 percent chance precipitation will be below average in the St. Mary and Milk River Basins during September. There is a 40 to 70 percent chance temperatures will be above average between the two basins.

The St. Mary and Milk River Basins are experiencing abnormally dry to moderate drought conditions.

## Montana Drought Monitor Map

August 27, 2024

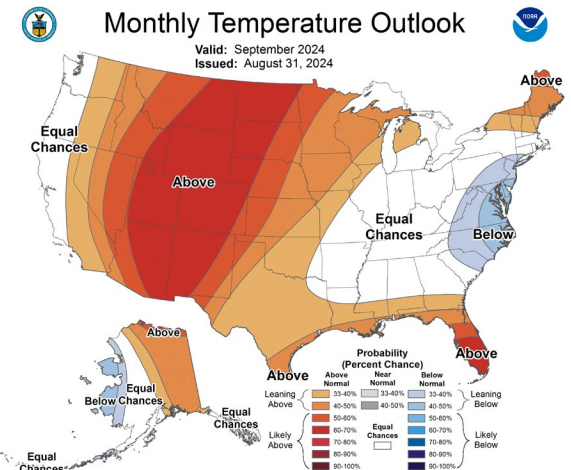
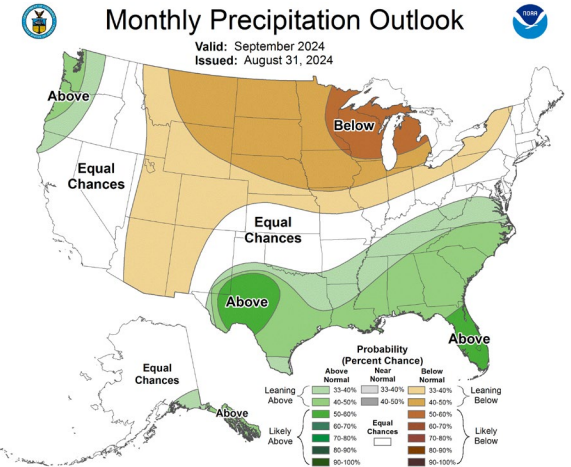


### Intensity

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



## September Climate Outlook



# OPERATIONS REVIEW

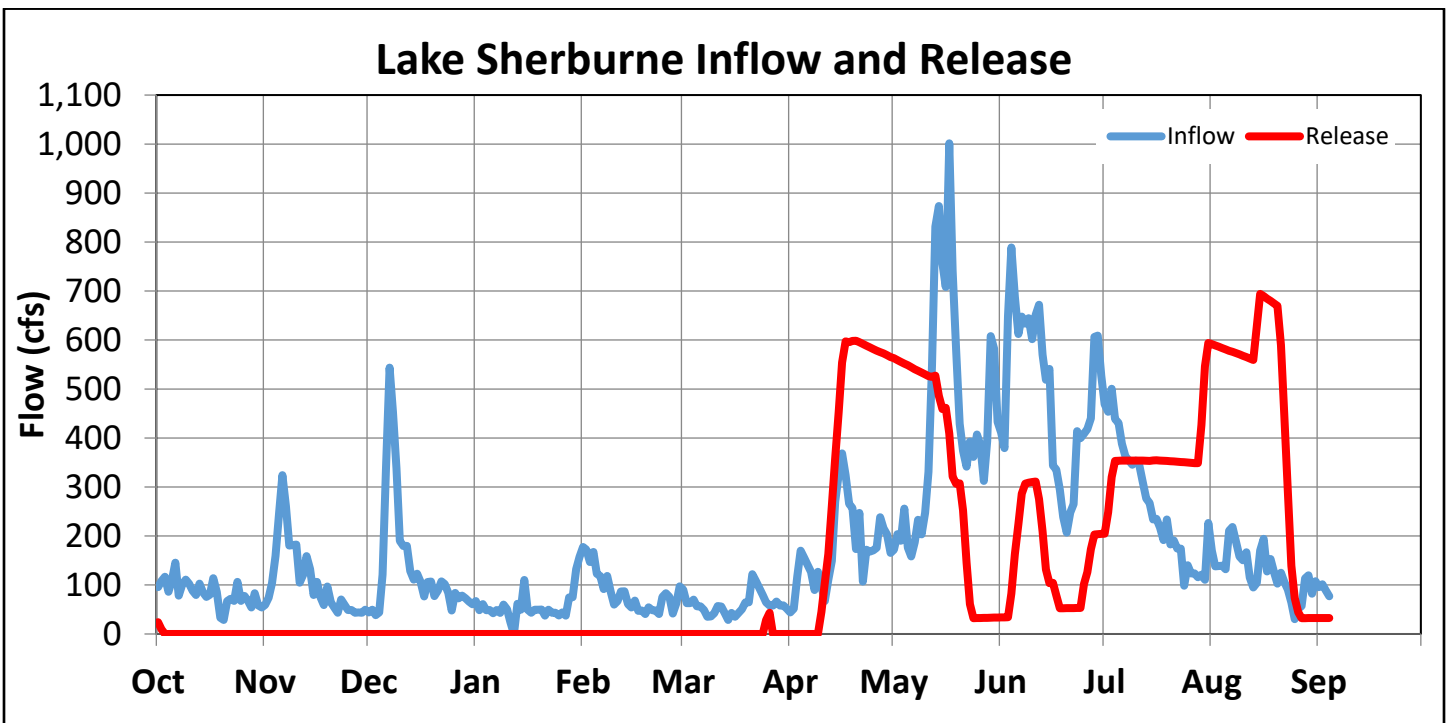
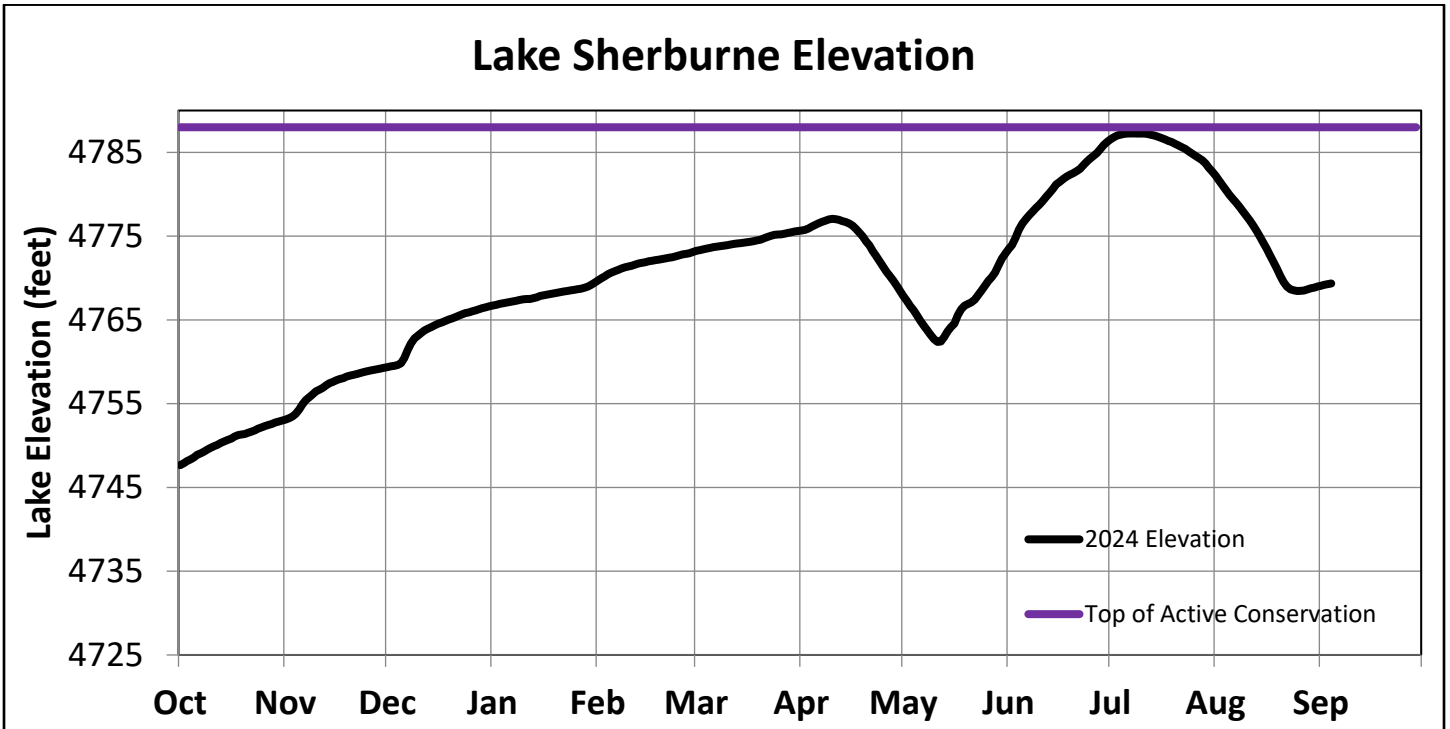
## September 1 Elevation and Storage

	<b>Elevation (feet)</b>	<b>Storage (acre-feet)</b>	<b>Percent of Average</b>	<b>Percent Full</b>
Sherburne Reservoir	4768.98	37,457	138	57
Fresno Reservoir	2553.37	24,915	65	27
Nelson Reservoir	2218.08	64,600	121	82

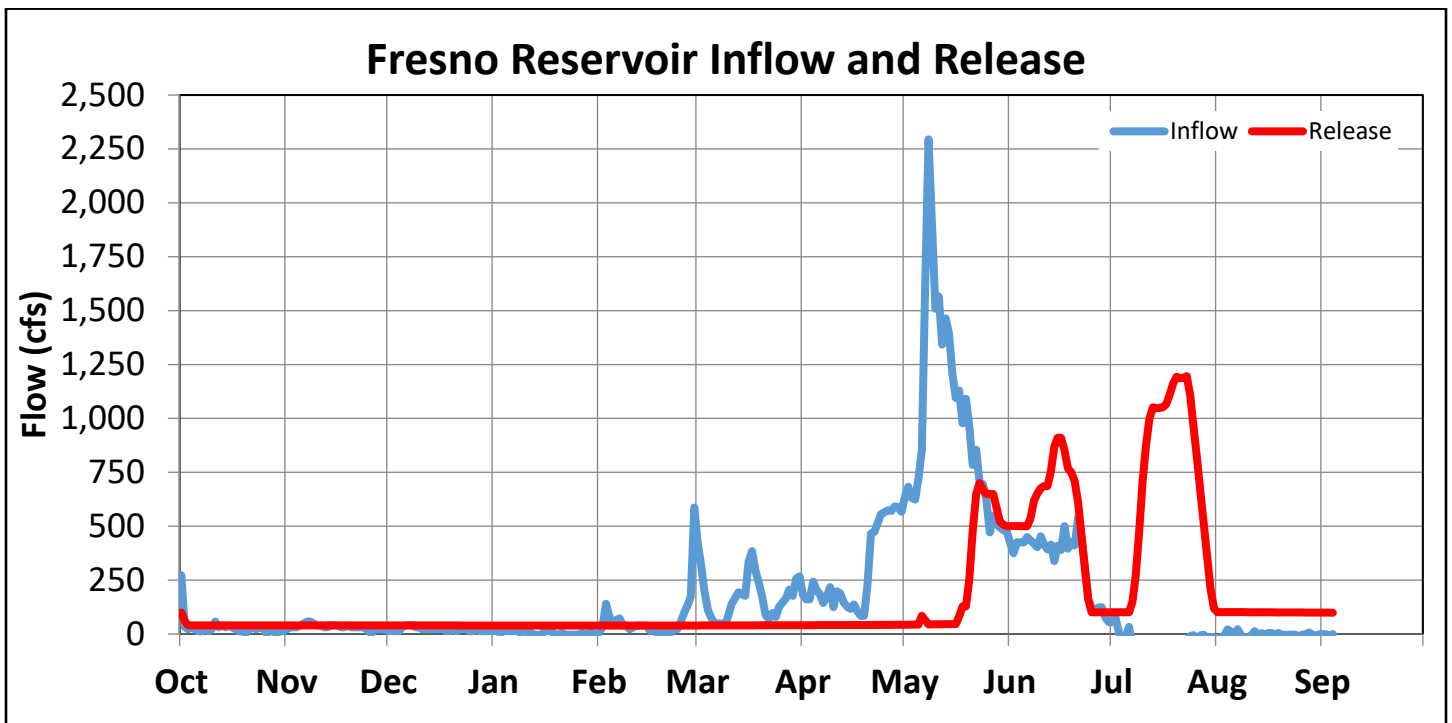
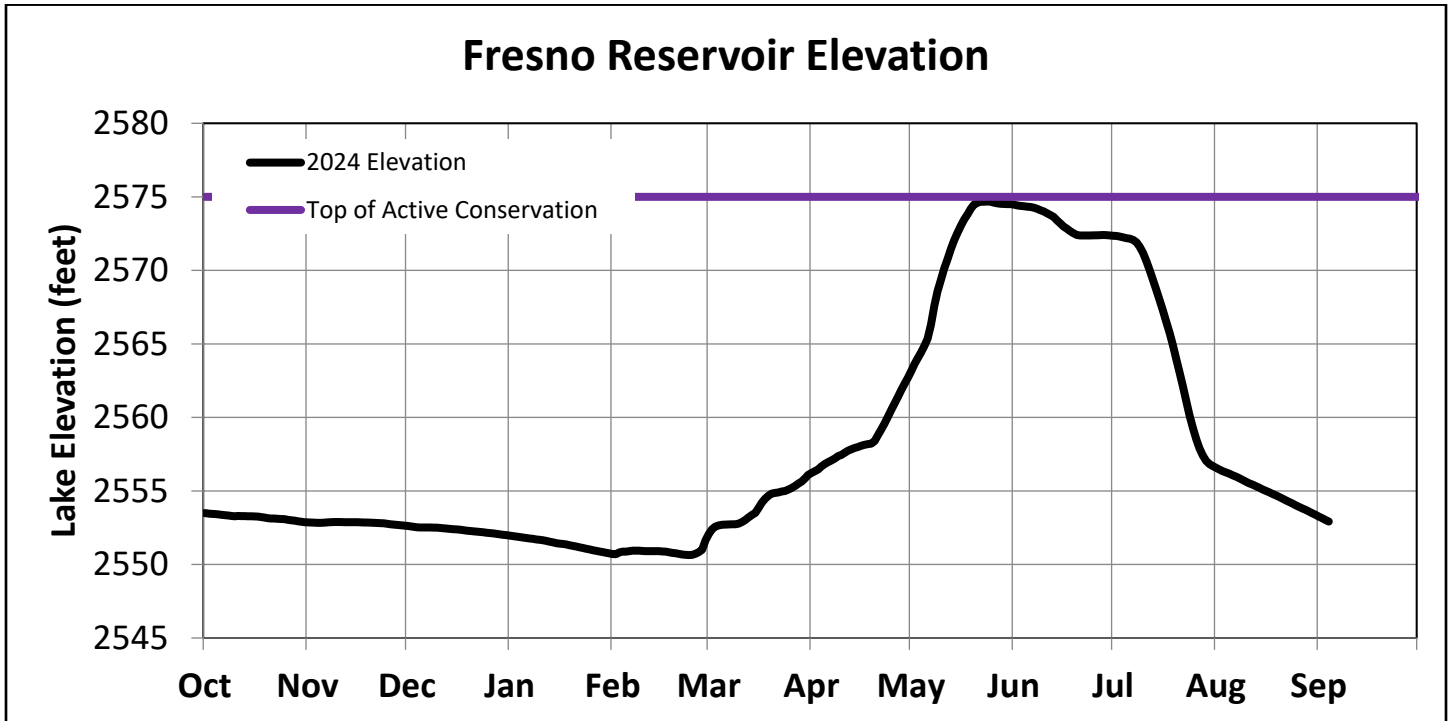
## Past Inflows (1,000's of acre-feet)

<b>Month</b>	<b>Sherburne Reservoir</b>		<b>Fresno Reservoir % of Average</b>	
	<b>Inflow</b>	<b>% of Average</b>	<b>Inflow</b>	<b>Average</b>
<b>Water Year 2024</b>				
October	5.2	78	1.9	29
November	6.5	84	2.0	68
December	8.4	216	1.3	75
January	3.4	124	0.3	23
February	4.9	205	3.7	86
March	3.7	97	10.6	47
April	10.5	107	17.2	51
May	26.6	85	60.1	144
June	29.3	74	20.6	42
July	16.2	89	-5.9	-
August	7.8	94	-0.1	-

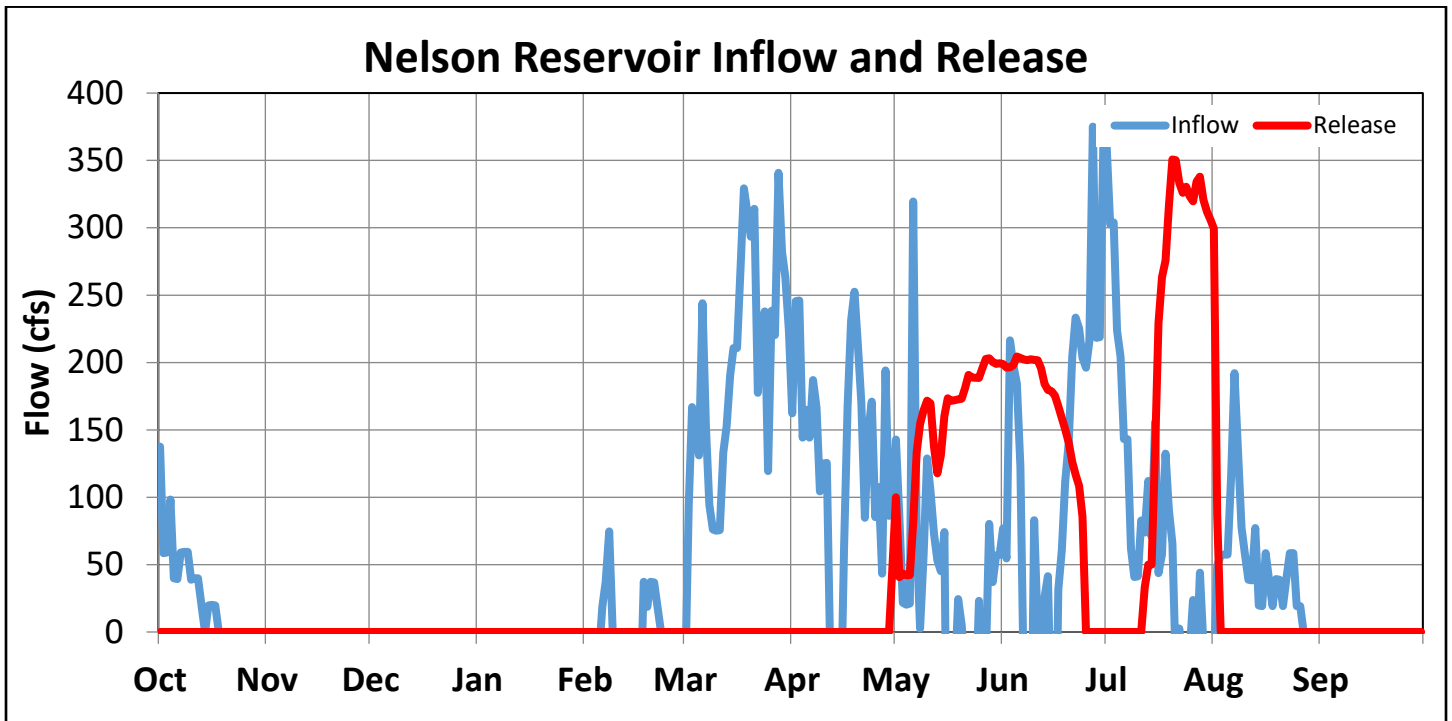
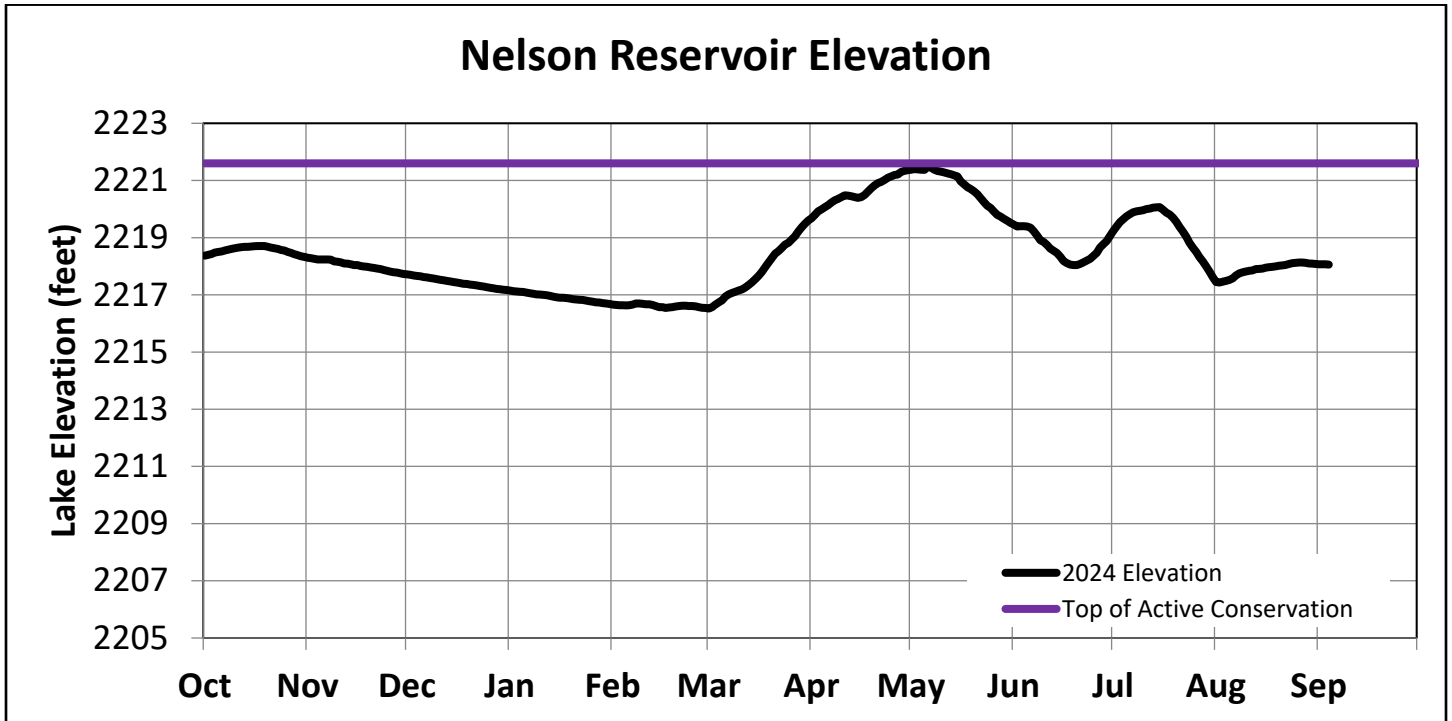
# OPERATIONS REVIEW: LAKE SHERBURNE



# OPERATIONS REVIEW: FRESNO RESERVOIR



# OPERATIONS REVIEW: NELSON RESERVOIR



# OPERATIONS OUTLOOK (September 1, 2024 through August 31, 2025)

## Median Inflow Conditions

Sherburne Reservoir		Initial Content		37,457 acre-feet		Elevation		4768.98 feet		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Sherburne Inflow (kaf)	5.5	5.6	4.6	3.7	2.9	2.8	3.2	9.5	32.9	39.3	17.5	8.6	136.1									
Sherburne Release (kaf)	1.8	12.3	0.0	0.0	0.0	0.0	11.9	30.7	24.6	17.5	8.6	107.4										
Sherburne Release (cfs)	30	200	0	0	0	0	200	499	413	285	140											
Net Content Change (kaf)	3.7	-6.7	4.6	3.7	2.9	2.8	3.2	-2.4	2.2	14.7	0.0	28.7										
End of Month Content (kaf)	41.2	34.5	39.1	42.8	45.7	48.5	51.7	49.3	51.5	66.2	66.2	66.2										
End of Month Elevation (feet)	4771.9	4766.6	4770.3	4773.1	4775.1	4777.0	4779.2	4777.6	4779.0	4788.0	4788.0	4788.0										
St. Mary River Runoff (kaf)																						
St. Mary River Runoff (kaf)	26.4	27.3	13.6	8.8	7.2	6.1	8.7	24.5	95.5	135.0	80.6	32.3	466.0									
Natural Flow at Boundary (kaf)	31.9	32.9	18.2	12.5	10.1	8.9	11.9	34.0	128.4	174.3	98.1	40.9	602.1									
St. Mary Canal Diversion (cfs)																						
St. Mary Canal Diversion (cfs)	0	0	0	0	0	0	0	0	0	0	0	0	0.0									
St. Mary Canal Diversion (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									
Fresno Reservoir		Initial Content		24,915 acre-feet		Elevation		2553.37 feet		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Milk River Runoff (kaf)	0.5	1.2	1.2	1.1	0.9	2.3	14.5	15.1	7.3	5.0	0.8	0.0	49.9									
From St. Mary Canal (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									
Fresno Inflow (kaf)	0.5	1.2	1.2	1.1	0.9	2.3	14.5	15.1	7.3	5.0	0.8	0.0	49.9									
Fresno Release (kaf)	6.0	2.5	2.4	2.5	2.5	2.2	2.5	2.4	18.5	9.3	6.1	2.5	59.4									
Fresno Release (cfs)	101	41	40	41	41	40	41	40	301	156	99	41										
Net Content Change (kaf)	-5.5	-1.3	-1.2	-1.4	-1.6	0.1	12.0	12.7	-11.2	-4.3	-5.3	-2.5	-9.5									
End of Month Content (kaf)	19.4	18.1	16.9	15.5	13.9	14.0	26.0	38.7	27.5	23.2	17.9	15.4										
End of Month Elevation (feet)	2550.2	2549.4	2548.6	2547.6	2546.5	2546.6	2554.0	2560.2	2554.8	2552.4	2549.2	2547.5										
Irrigation Allotment (ft/ac)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.10	0.00	0.00	0.30									
Irrigation Delivery (kaf)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.5	9.3	0.0	0.0	27.8									
FBIIP Demand (kaf)	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	7.0									
Fresno to Dodson Gain (kaf)	1.6	2.0	0.0	0.0	0.0	0.0	17.4	18.2	12.6	16.4	6.8	2.0	77.0									
Bowdoin Demand (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									
Transfer to Nelson (kaf)	0.0	0.0	0.0	0.0	0.0	0.0	10.0	18.0	5.0	4.0	5.0	0.6	42.6									
Nelson Reservoir		Initial Content		64,600 acre-feet		Elevation		2218.08 feet		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
Delivery to Nelson (kaf)	0.0	0.0	0.0	0.0	0.0	0.0	9.0	16.2	4.5	3.6	4.5	0.5	38.3									
Net Content Change (kaf)	-1.8	-1.8	-1.8	-1.8	-1.8	-1.7	7.2	14.4	-1.0	0.0	2.7	-1.3	11.3									
End of Month Content (kaf)	62.8	61.0	59.2	57.4	55.6	53.9	61.1	75.5	74.5	74.5	77.2	75.9										
End of Month Elevation (feet)	2217.6	2217.1	2216.7	2216.2	2215.7	2215.2	2217.2	2220.8	2220.6	2220.6	2221.2	2220.9										
Total Release (kaf)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	1.8	0.0	0.0	5.5									

# OPERATIONS OUTLOOK (September 1, 2024 through August 31, 2025)

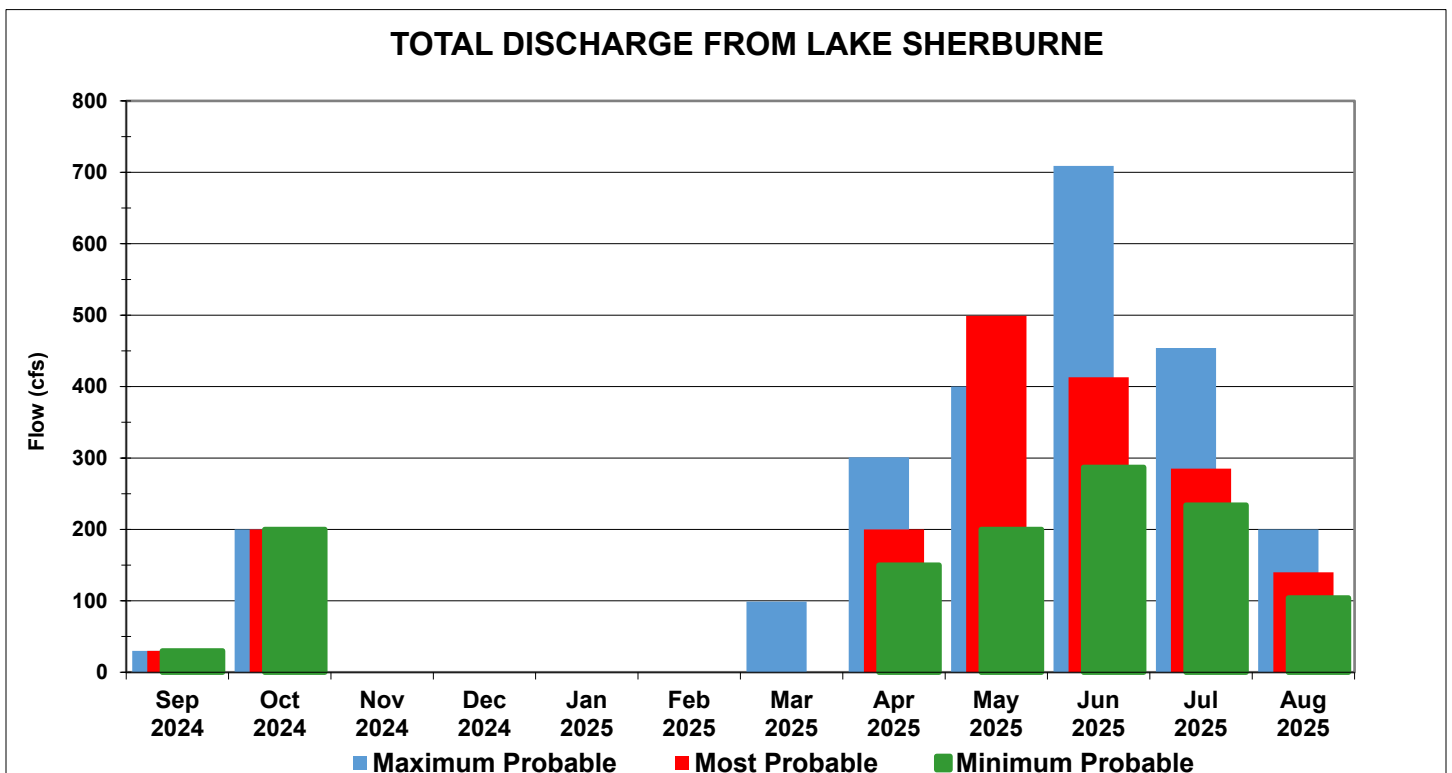
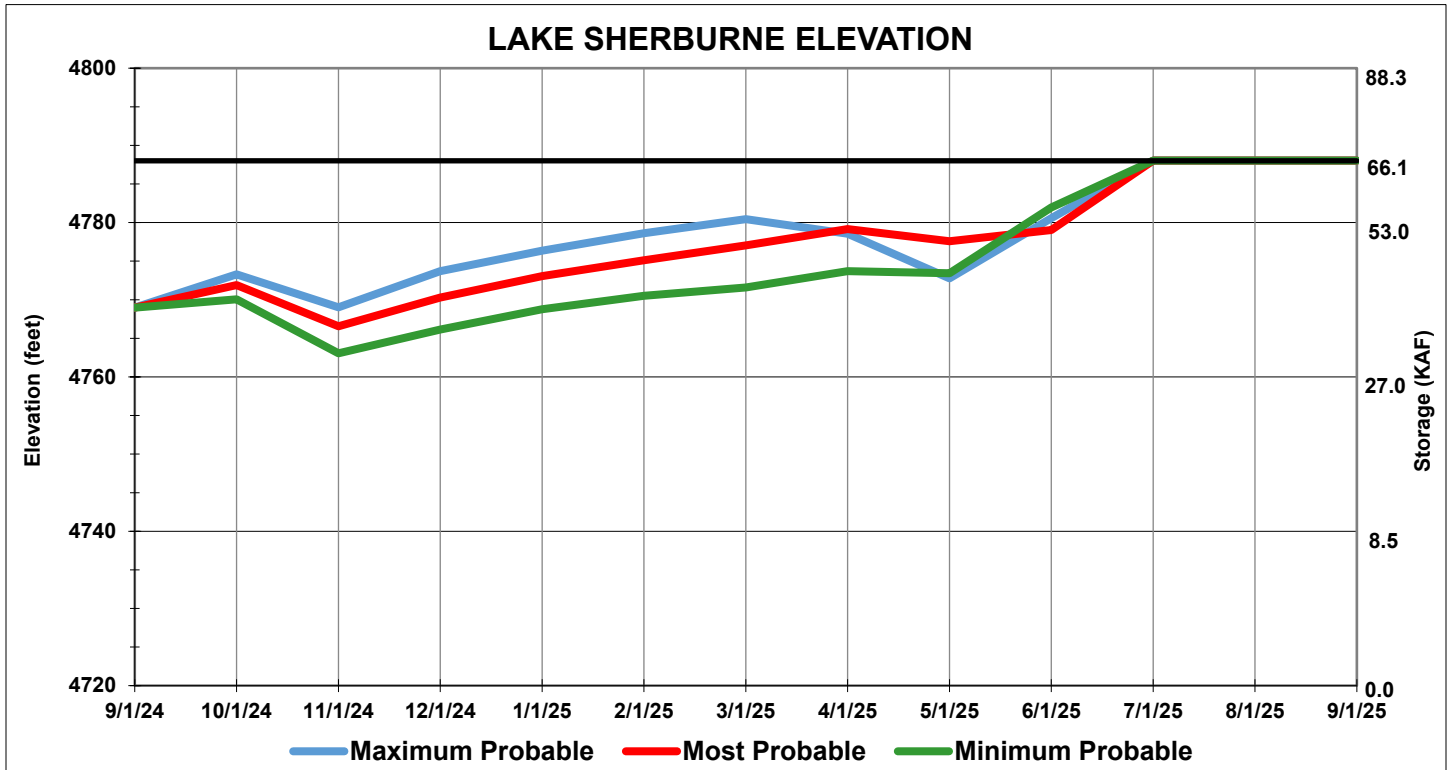
<b>Minimum Inflow Conditions</b>													
<b>Sherburne Reservoir</b>	<b>Initial Content</b>		<b>37,457 acre-feet</b>										
	<b>Elevation</b>		<b>4768.98 feet</b>										
	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Total</b>
<b>Sherburne Inflow (kaf)</b>	3.1	3.9	3.6	3.2	2.2	1.4	2.9	8.5	25.1	27.2	14.4	6.4	101.9
<b>Sherburne Release (kaf)</b>	1.8	12.3	0.0	0.0	0.0	0.0	0.0	8.9	12.3	17.1	14.4	6.4	73.2
<b>Sherburne Release (cfs)</b>	30	200	0	0	0	0	0	150	200	287	234	104	
<b>Net Content Change (kaf)</b>	1.3	-8.4	3.6	3.2	2.2	1.4	2.9	-0.4	12.8	10.1	0.0	0.0	28.7
<b>End of Month Content (kaf)</b>	38.8	30.4	34.0	37.2	39.4	40.8	43.7	43.3	56.1	66.2	66.2	66.2	
<b>End of Month Elevation (feet)</b>	4770.1	4763.1	4766.1	4768.8	4770.5	4771.6	4773.7	4773.4	4782.0	4788.0	4788.0	4788.0	
	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Total</b>
<b>St. Mary River Runoff (kaf)</b>	15.3	9.0	5.1	4.9	4.0	4.6	4.1	7.4	68.2	81.5	42.1	21.7	267.9
<b>Natural Flow at Boundary (kaf)</b>	18.4	12.9	8.7	8.1	6.2	6.0	7.0	15.9	93.3	108.7	56.5	28.1	369.8
<b>St. Mary Canal Diversion (cfs)</b>	0	0	0	0	0	0	0	0	0	0	0	0	
<b>St. Mary Canal Diversion (kaf)</b>	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
	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Total</b>
<b>Fresno Reservoir</b>	<b>Initial Content</b>		<b>24,915 acre-feet</b>										
	<b>Elevation</b>		<b>2553.37 feet</b>										
<b>Milk River Runoff (kaf)</b>	0.0	0.0	0.5	0.2	0.3	0.7	4.7	3.5	1.3	1.2	0.0	-1.0	11.4
<b>From St. Mary Canal (kaf)</b>	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
<b>Fresno Inflow (kaf)</b>	0.0	0.0	0.5	0.2	0.3	0.7	4.7	3.5	1.3	1.2	0.0	-1.0	11.4
<b>Fresno Release (kaf)</b>	6.0	2.5	2.4	2.5	2.5	2.2	1.5	1.5	1.5	1.5	1.6	1.5	27.2
<b>Fresno Release (cfs)</b>	101	41	40	41	41	40	24	25	24	25	26	24	
<b>Net Content Change (kaf)</b>	-6.0	-2.5	-1.9	-2.3	-2.2	-1.5	3.2	2.0	-0.2	-0.3	-1.6	-2.5	-15.8
<b>End of Month Content (kaf)</b>	18.9	16.4	14.5	12.2	10.0	8.5	11.7	13.7	13.5	13.2	11.6	9.1	
<b>End of Month Elevation (feet)</b>	2549.9	2548.2	2546.9	2545.2	2543.5	2542.2	2544.8	2546.3	2546.2	2546.0	2544.8	2542.7	
<b>Irrigation Allotment (ft/ac)</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Irrigation Delivery (kaf)</b>	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
<b>FBIIP Demand (kaf)</b>	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
<b>Fresno to Dodson Gain (kaf)</b>	2.7	2.0	0.0	0.0	0.0	0.0	8.7	9.1	6.3	8.2	3.4	1.0	41.4
<b>Bowdoin Demand (kaf)</b>	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
<b>Transfer to Nelson (kaf)</b>	0.0	0.0	0.0	0.0	0.0	0.0	8.0	9.0	6.0	8.0	5.0	0.0	36.0
	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Total</b>
<b>Nelson Reservoir</b>	<b>Initial Content</b>		<b>64,600 acre-feet</b>										
	<b>Elevation</b>		<b>2218.08 feet</b>										
<b>Delivery to Nelson (kaf)</b>	0.0	0.0	0.0	0.0	0.0	0.0	7.2	8.1	5.4	7.2	4.5	0.0	32.4
<b>Net Content Change (kaf)</b>	-1.8	-1.8	-1.8	-1.8	-1.8	-1.7	5.4	6.3	3.6	5.4	2.7	-1.8	10.9
<b>End of Month Content (kaf)</b>	62.8	61.0	59.2	57.4	55.6	53.9	59.3	65.6	69.2	74.6	77.3	75.5	
<b>End of Month Elevation (feet)</b>	2217.6	2217.1	2216.7	2216.2	2215.7	2215.2	2216.7	2218.3	2219.3	2220.6	2221.2	2220.8	
<b>Total Release (kaf)</b>	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



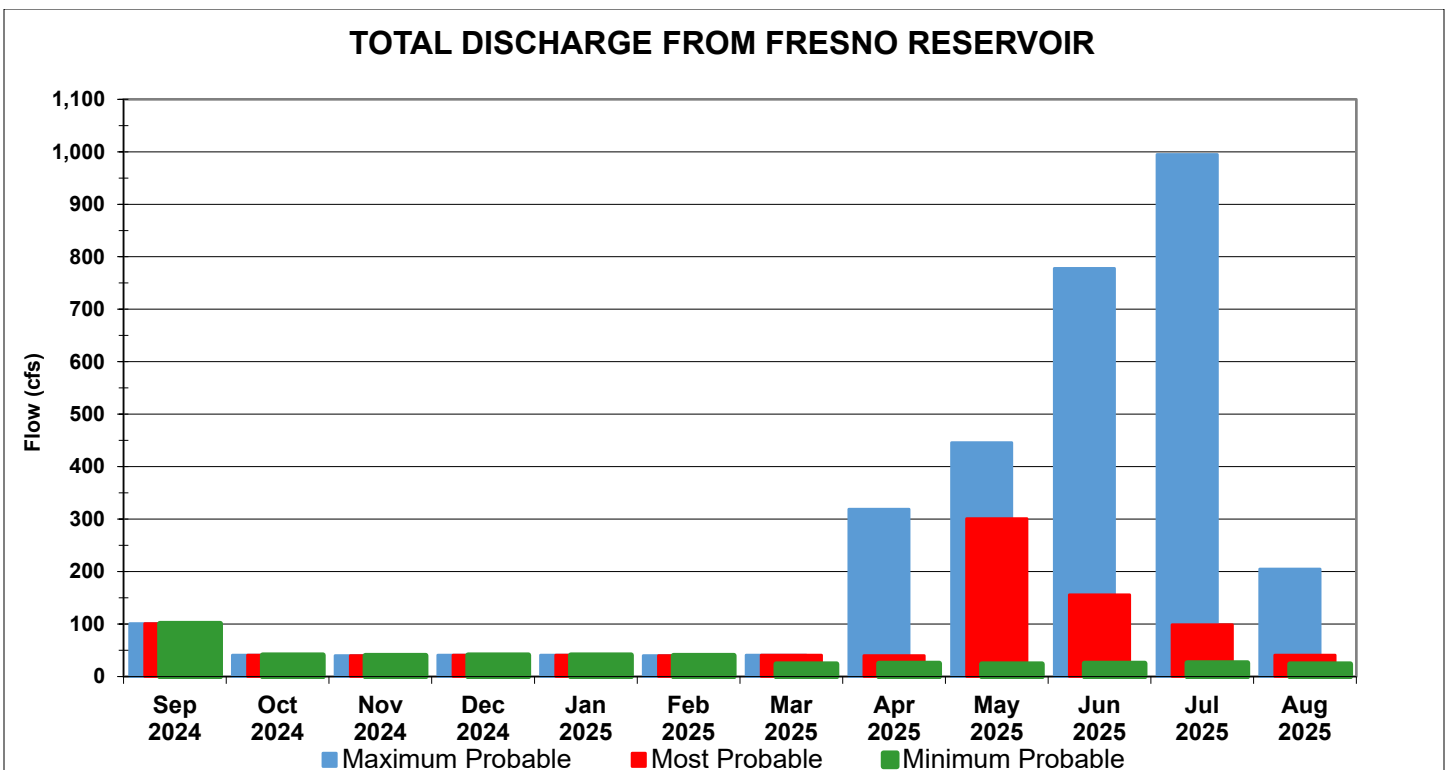
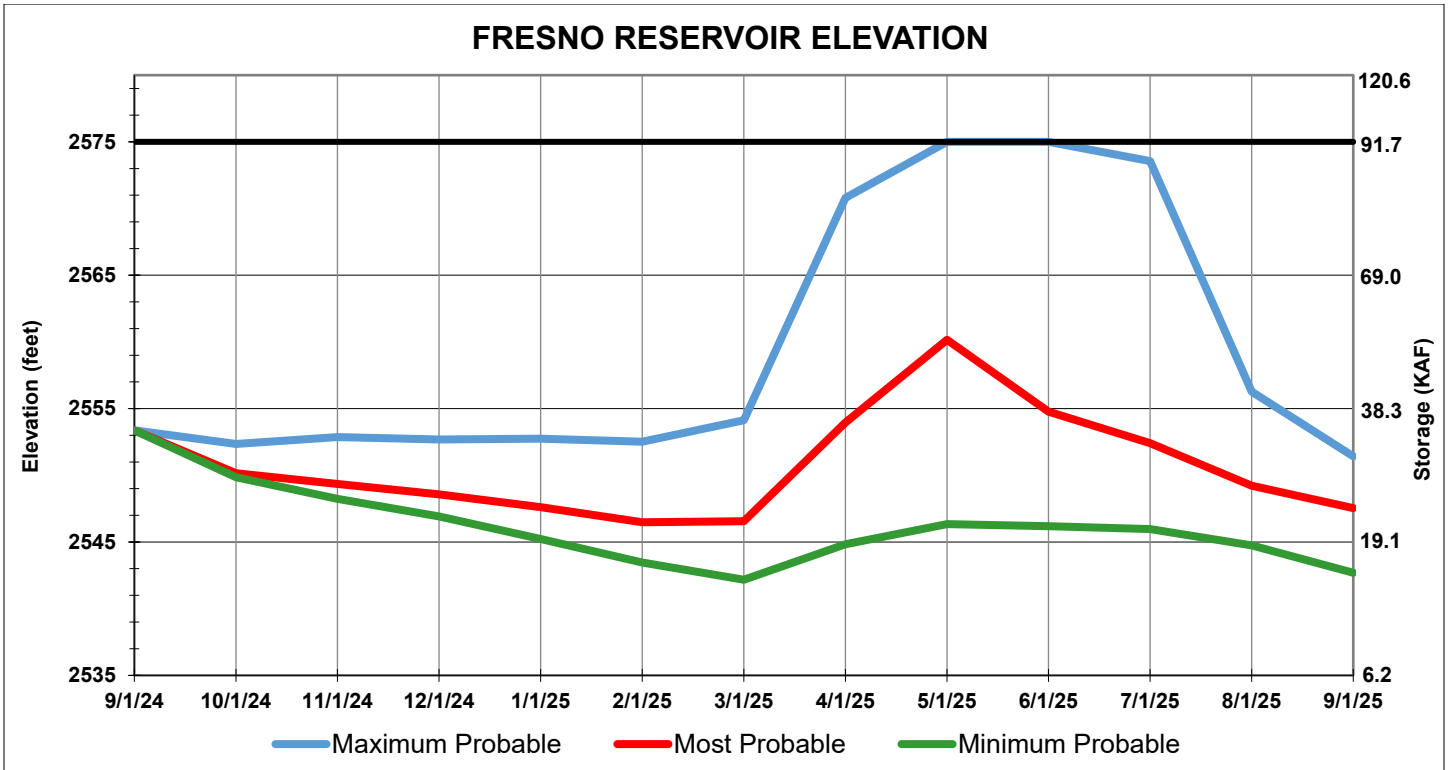
# OPERATIONS OUTLOOK (September 1, 2024 through August 31, 2025)

<b>Maximum Inflow Conditions</b>													
<b>Sherburne Reservoir</b>	<b>Initial Content</b>		37,457 <b>acre-feet</b>										
	<b>Elevation</b>		4768.98 <b>feet</b>										
	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Total</b>
<b>Sherburne Inflow (kaf)</b>	7.4	6.7	6.2	3.8	3.4	2.8	3.2	9.5	36.1	54.5	27.9	12.3	173.8
<b>Sherburne Release (kaf)</b>	1.8	12.3	0.0	0.0	0.0	0.0	6.1	17.9	24.6	42.2	27.9	12.3	145.1
<b>Sherburne Release (cfs)</b>	30	200	0	0	0	0	99	301	400	709	454	200	
<b>Net Content Change (kaf)</b>	5.6	-5.6	6.2	3.8	3.4	2.8	-2.9	-8.4	11.5	12.3	0.0	0.0	28.7
<b>End of Month Content (kaf)</b>	43.1	37.5	43.7	47.5	50.9	53.7	50.8	42.4	53.9	66.2	66.2	66.2	
<b>End of Month Elevation (feet)</b>	4773.3	4769.0	4773.7	4776.4	4778.6	4780.4	4778.6	4772.8	4780.6	4788.0	4788.0	4788.0	
	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Total</b>
<b>St. Mary River Runoff (kaf)</b>	35.2	40.2	31.1	18.5	15.8	14.4	21.7	46.1	147.5	215.6	130.5	51.7	768.3
<b>Natural Flow at Boundary (kaf)</b>	42.6	46.9	37.3	22.3	19.2	17.2	24.9	55.6	183.6	270.1	158.4	64.0	942.1
<b>St. Mary Canal Diversion (cfs)</b>	0	0	0	0	0	0	0	0	0	0	0	0	
<b>St. Mary Canal Diversion (kaf)</b>	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
	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Total</b>
<b>Fresno Reservoir</b>	<b>Initial Content</b>		24,915 <b>acre-feet</b>										
	<b>Elevation</b>		2553.37 <b>feet</b>										
<b>Milk River Runoff (kaf)</b>	4.2	3.4	2.1	2.6	2.1	5.1	48.4	38.5	27.4	39.2	7.0	3.7	183.7
<b>From St. Mary Canal (kaf)</b>	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
<b>Fresno Inflow (kaf)</b>	4.2	3.4	2.1	2.6	2.1	5.1	48.4	38.5	27.4	39.2	7.0	3.7	183.7
<b>Fresno Release (kaf)</b>	6.0	2.5	2.4	2.5	2.5	2.2	2.5	19.0	27.4	46.3	61.2	12.6	187.1
<b>Fresno Release (cfs)</b>	101	41	40	41	41	40	41	319	446	778	995	205	
<b>Net Content Change (kaf)</b>	-1.8	0.9	-0.3	0.1	-0.4	2.9	45.9	19.5	0.0	-7.1	-54.2	-8.9	-3.4
<b>End of Month Content (kaf)</b>	23.1	24.0	23.7	23.8	23.4	26.3	72.2	91.7	91.7	84.6	30.4	21.5	
<b>End of Month Elevation (feet)</b>	2552.4	2552.9	2552.7	2552.8	2552.5	2554.1	2570.8	2575.0	2575.0	2573.6	2556.3	2551.4	
<b>Irrigation Allotment (ft/ac)</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.50	0.65	0.05	1.45
<b>Irrigation Delivery (kaf)</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2	46.3	60.2	4.6	134.3
<b>FBIIP Demand (kaf)</b>	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	6.0	13.0
<b>Fresno to Dodson Gain (kaf)</b>	7.0	5.0	0.0	0.0	0.0	0.0	22.6	23.7	16.4	21.3	12.0	3.0	111.0
<b>Bowdoin Demand (kaf)</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.5	0.0	0.0	0.0	2.5
<b>Transfer to Nelson (kaf)</b>	0.0	0.0	0.0	0.0	0.0	0.0	10.0	20.0	15.0	5.0	6.0	5.0	61.0
	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Total</b>
<b>Nelson Reservoir</b>	<b>Initial Content</b>		64,600 <b>acre-feet</b>										
	<b>Elevation</b>		2218.08 <b>feet</b>										
<b>Delivery to Nelson (kaf)</b>	0.0	0.0	0.0	0.0	0.0	0.0	9.0	18.0	13.5	4.5	5.4	4.5	54.9
<b>Net Content Change (kaf)</b>	-1.8	-1.8	-1.8	-1.8	-1.8	-1.7	7.2	16.2	1.7	-6.5	-8.4	1.3	0.8
<b>End of Month Content (kaf)</b>	62.8	61.0	59.2	57.4	55.6	53.9	61.1	77.3	79.0	72.5	64.1	65.4	
<b>End of Month Elevation (feet)</b>	2217.6	2217.1	2216.7	2216.2	2215.7	2215.2	2217.2	2221.2	2221.6	2220.1	2218.0	2218.3	
<b>Total Release (kaf)</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	9.2	12.0	1.4	32.6

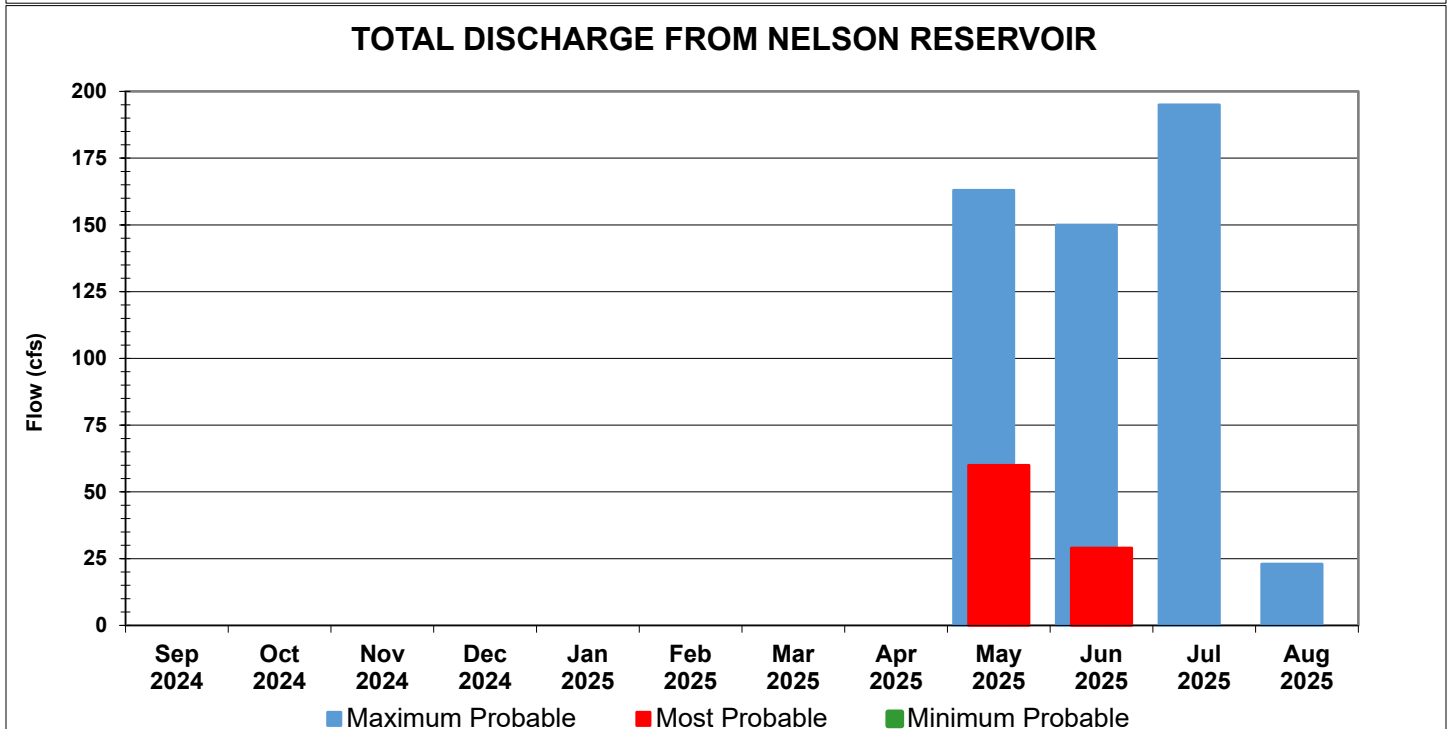
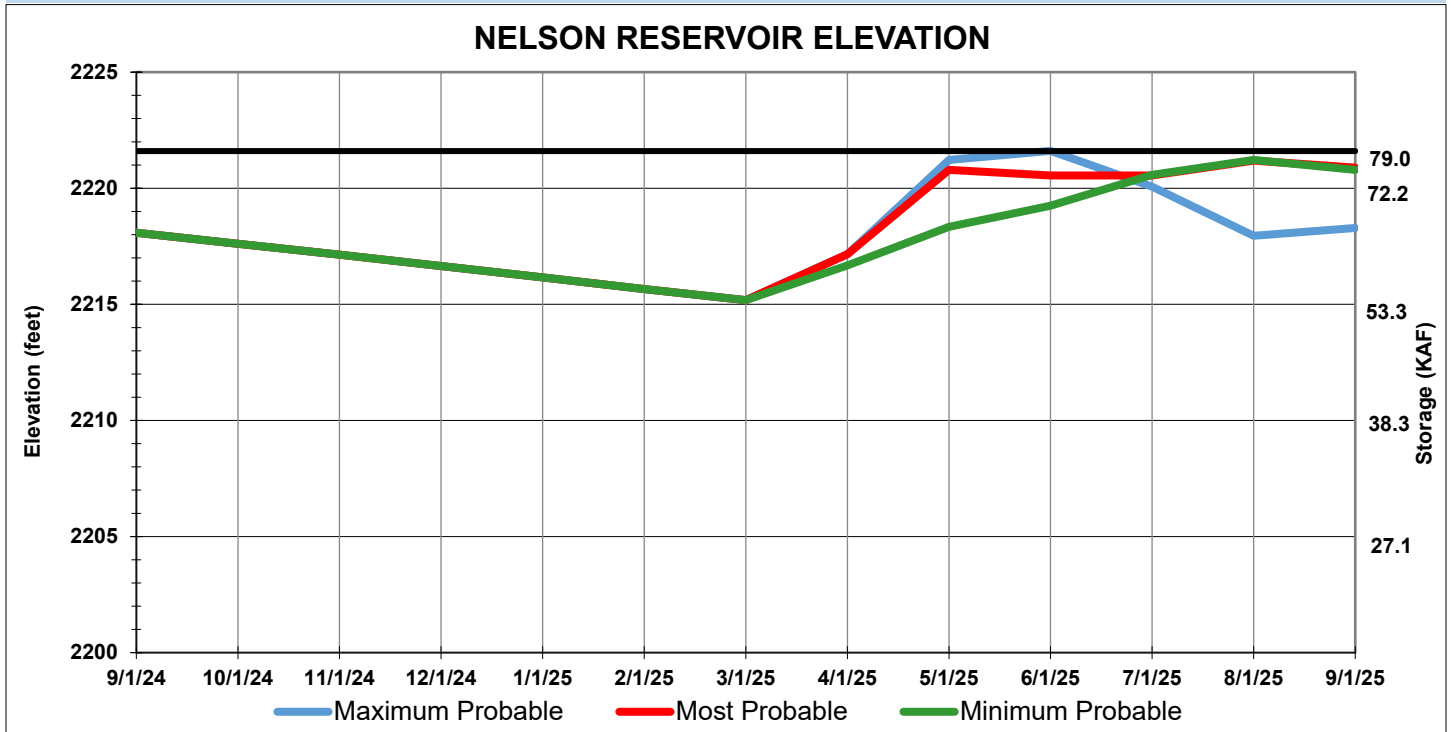
# OPERATIONS OUTLOOK: LAKE SHERBURNE



# OPERATIONS OUTLOOK: FRESNO RESERVOIR



# OPERATIONS OUTLOOK: NELSON RESERVOIR



#### Contact Us

Clayton Jordan  
[cjordan@usbr.gov](mailto:cjordan@usbr.gov)  
 406-247-7334

Chris Gomer  
[cgomer@usbr.gov](mailto:cgomer@usbr.gov)  
 406-247-7307

Monthly Operating Plans, Current Conditions, Snowpack, and Other Water Management Information  
[https://www.usbr.gov/gp/lakes\\_reservoirs/wareprts/main\\_menu.html](https://www.usbr.gov/gp/lakes_reservoirs/wareprts/main_menu.html)