

Colorado River Storage Project

	Snowpack (Inches in Snow Water Equivalent)		Lake/Reservoir Inflow (Thousand Acre-Feet)		Lake/Reservoir Content (Million Acre-Feet)		Generation (MWh)				Purchase Power (MWh)	Purchase Power Expenses (Dollars)		
	Median	Actual	Average	Actual	Average	Actual	Projected Dry	Most Probable	Average	Actual	Actual	Projected Dry	Most Probable	Actual
	Oct 19	1.90	1.30	514.42	265.00	15.01	13.03	247,024	402,923	382,430	389,492	57,894	\$5,712,150	\$1,470,094
Nov 19	4.80	4.70	474.23	404.00	14.91	12.86	241,664	386,154	388,155	378,475	70,539	\$5,110,150	\$1,581,991	\$2,312,315
Dec 19	8.10	8.40	362.96	353.00	14.86	12.60	279,537	463,233	437,962	465,261	36,300	\$6,299,733	\$1,046,122	\$1,035,644
Jan 20	11.50	12.10	361.45	277.00	14.98	12.28	329,144	451,898	457,394	444,843	59,569	\$5,112,308	\$1,657,329	\$1,488,034
Feb 20	15.10	15.70	392.01	288.00	15.99	12.01	285,980	392,973	390,580	382,355	67,140	\$4,550,403	\$1,638,298	\$1,440,824
Mar 20	18.90	19.50	666.27	475.00	16.77	11.82	300,884	410,473	390,170	401,865	56,174	\$3,588,199	\$952,202	\$1,187,057
Apr 20	19.40	17.30	1,057.14	475.00	16.74	11.69	299,431	404,268	397,861	397,639	39,810	\$1,970,254	\$210,904	\$789,957
May 20	7.90	4.80	2,337.68	1,541.00	16.30	12.24	364,111	449,959	475,860	426,119	26,348	\$1,374,340	\$0	\$447,048
Jun 20	0.00	0.10	2,668.50	1,453.00	16.00	12.79	350,695	403,964	534,248	447,461	28,728	\$3,910,230	\$1,431,620	\$583,187
Jul 20	0.00	0.10	1,093.88	290.00	15.88	12.36	393,842	474,820	536,434	474,820	41,891	\$6,386,456	\$1,249,126	\$1,658,315
Aug 20														
Sep 20														
Total							3,092,313	4,240,665	4,391,093	4,208,330	484,393	\$44,014,225	\$11,237,686	\$12,562,725

Actual generation as a percentage of average: 95.8%

Cost per MWh: \$25.93

Lake/Reservoir Levels

Lake Powell's elevation was 3,606 feet at the end of June, about 94 feet below the maximum reservoir level and about 104 feet above the minimum generation level. The storage volume for Lake Powell was 12.4 million acre-feet (MAF) at the end of May, or about 51 percent of capacity.

Weather and Other Conditions

Hydrologic conditions continue to be dry in the Upper Colorado River Basin with only 59 percent of average inflow forecasted for Lake Powell in WY 2020. The official WY 2020 annual release for Lake Powell will be 8.23 MAF, and current forecasts predict a 9.0 MAF annual release for WY 2021.

Note: Actual generation for July was not provided by BOR in time for the release of this report. "Most Probable" generation was used in place of actual generation (highlighted) to provide a more accurate calculation of Actual generation as a percentage of average for purposes of this report. This amount will be updated for the September hydro report.



Desert Southwest Region

	Snowpack (Inches in Snow Water Equivalent)		Lake/Reservoir Inflow (Thousand Acre-Feet)		Lake/Reservoir Content (Million Acre-Feet)		Generation (MWh)				Purchase Power (MWh)	Purchase Power Expenses (Dollars)		
	Median	Actual	Average	Actual	Average	Actual	Projected Dry	Most Probable	Average	Actual	Actual	Projected Dry	Most Probable	Actual
Oct 19	1.90	1.30	60.21	34.00	19.92	12.38	327,200	329,395	377,088	330,202	15,083	\$294,158	\$294,158	\$447,125
Nov 19	4.80	4.70	55.46	116.00	19.97	12.61	296,000	290,135	362,492	287,607	18,264	\$427,033	\$427,033	\$949,591
Dec 19	8.10	8.40	73.34	117.00	20.11	13.12	184,850	116,990	366,538	116,854	55,017	\$2,216,576	\$2,216,576	\$2,834,831
Jan 20	11.50	12.10	93.42	75.00	20.27	13.47	207,550	159,910	389,375	220,912	37,881	\$1,705,683	\$1,705,683	\$1,656,511
Feb 20	15.10	15.70	108.62	67.00	20.31	13.66	273,750	394,620	387,932	305,060	15,958	\$653,885	\$653,885	\$631,359
Mar 20	18.90	19.50	105.22	150.00	20.12	13.86	542,600	319,525	526,478	319,340	66,858	\$3,428,841	\$3,428,841	\$2,973,584
Apr 20	19.40	17.30	84.70	84.00	19.94	13.68	492,750	480,530	569,428	482,984	22,734	\$873,879	\$873,879	\$706,345
May 20	7.90	4.80	59.04	33.00	20.03	13.25	560,900	575,115	570,839	578,772	10,286	\$335,328	\$335,328	\$283,025
Jun 20	0.00	0.10	27.15	19.00	20.22	12.89	518,100	526,020	536,369	525,096	34,548	\$470,235	\$470,235	\$989,291
Jul 20	0.00	0.10	65.69	35.00	20.12	12.67	474,100	481,175	546,249	487,899	40,695	\$2,246,069	\$2,246,069	\$2,109,078
Aug 20														
Sep 20														
Total							3,877,800	3,673,415	4,632,788	3,654,727	317,324	\$12,651,687	\$12,651,687	\$13,580,740

Actual generation as a percentage of average: 78.9%

Cost per MWh: \$42.80

Lake/Reservoir Levels

Lake Mead's elevation was 1084 feet at the end of July, about 135 feet below the full storage level and about 135 feet above the minimum generation level. Lake Mead's elevation started WY 2020 at a minimum elevation of 1,083 feet in October and its elevation peaked at 1,099 feet in March.

Weather and Other Conditions

The Desert Southwest Region's (DSWR) hydrology is mostly dependent on the Colorado River Basin snowpack and precipitation above Lake Powell. The precipitation is currently 80 percent of average and the snowpack is gone.

Note: DSWR's projected dry and most probable generation data are reported from studies conducted by the U.S. Bureau of Reclamation.



Rocky Mountain Region

	Snowpack (Inches in Snow Water Equivalent)		Lake/Reservoir Inflow (Thousand Acre-Feet)		Lake/Reservoir Content (Million Acre-Feet)		Generation (MWh)				Purchase Power (MWh)	Purchase Power Expenses (Dollars)		
	Median	Actual	Average	Actual	Average	Actual	Projected Dry	Most Probable	Average	Actual	Actual	Projected Dry	Most Probable	Actual
Oct 19	0.00	0.50	140.00	161.80	3.87	4.16	958,083	114,970	104,469	105,869	53,942	\$1,842,801	\$1,486,854	\$1,436,710
Nov 19	3.90	9.10	123.80	151.50	3.83	4.78	905,908	108,709	71,586	73,486	90,100	\$1,066,471	\$729,908	\$2,582,110
Dec 19	11.90	14.30	100.70	123.10	3.79	4.75	1,236,250	148,350	105,136	107,536	78,461	\$483,802	\$24,510	\$2,320,018
Jan 20	19.70	22.20	99.50	110.20	4.92	4.71	1,337,442	160,493	101,067	103,667	56,015	\$907,287	\$410,401	\$1,377,620
Feb 20	27.90	30.60	98.00	117.10	3.73	4.67	1,972,450	236,694	100,751	103,051	27,562	\$0	\$0	\$622,733
Mar 20	35.90	45.00	159.30	179.00	3.84	4.04	2,505,533	300,664	144,642	146,800	16,906	\$0	\$0	\$315,890
Apr 20	39.80	48.50	252.20	241.10	3.86	4.47	2,135,383	256,246	206,415	208,215	2,665	\$941,791	\$148,453	\$58,000
May 20	43.50	44.20	746.70	819.10	4.33	4.84	1,855,683	222,682	234,507	235,907	5,427	\$393,188	\$0	\$88,130
Jun 20	11.30	10.30	859.60	967.20	4.75	5.57	1,063,300	127,596	269,854	270,954	562	\$1,143,340	\$748,303	\$14,854
Jul 20	0.00	0.00	543.60	357.20	4.54	5.28	620,317	74,438	260,779	261,779	24,506	\$2,499,880	\$2,269,420	\$951,981
Aug 20														
Sep 20														
Total							14,590,350	1,750,842	1,599,207	1,617,265	356,146	\$9,278,559	\$5,817,848	\$9,768,046

Actual generation as a percentage of average: 101.1%

Cost per MWh: \$27.43

Lake/Reservoir Content

Reservoir inflows were 66 percent of average at the end of July, which is a large decrease from the 117 percent reported at the end of June. Storage is 116 percent of average.

Weather and Other Conditions

Hydrologic conditions for the Loveland Area Projects (LAP) area can vary from one river basin and watershed to another. LAP is currently drought free from a water perspective and the snowpack has all melted. The latest National Weather Service forecast indicates September through October temperatures are more likely to be above average and the precipitation is likely to be just slightly below normal. September generation is expected to be below the marketed amount. Fall generation in the Colorado River Basin, the North Platte Basin and the Big Horn Basin is forecasted to be below average due to unit maintenance needs which had been delayed due to Covid-19.

Note: The Rocky Mountain Region's (RMR) most recent reported actual generation and purchase power data are provisional values.



Sierra Nevada Region

	Snowpack (Inches in Snow Water Equivalent)		Lake/Reservoir Inflow (Thousand Acre-Feet)		Lake/Reservoir Content (Million Acre-Feet)		Generation (MWh)				Purchase Power (MWh)	Purchase Power Expenses (Dollars)		
	Median	Actual	Average	Actual	Average	Actual	Projected Dry	Most Probable	Average	Actual	Actual	Projected Dry	Most Probable	Actual
	Oct 19	N/A	N/A	335	349	5.513	7.837	195,000	190,000	163,000	287,596	40,285	\$383,616	\$ 383,616
Nov 19	22	2	381	356	5.470	7.630	83,000	93,000	104,000	156,862	47,391	\$355,200	\$ 355,200	\$ 864,154
Dec 19	27	9	960	692	5.839	7.779	42,000	57,000	143,000	110,113	53,378	\$355,200	\$ 355,200	\$ 738,876
Jan 20	28	12	844	736	6.188	7.974	32,000	107,000	163,000	41,046	59,939	\$232,060	\$ 232,060	\$ 986,093
Feb 20	28	11	1,533	378	6.808	7.947	46,000	266,000	195,000	103,091	48,897	\$209,420	\$ 209,420	\$ 673,863
Mar 20	30	16	1,574	514	7.520	7.943	133,000	138,000	207,000	182,229	42,769	\$231,353	\$ 231,353	\$ 358,618
Apr 20	27	8	1,452	899	7.931	8.210	380,000	350,000	288,000	306,150	28,049	\$215,080	\$ 215,080	\$ 265,445
May 20	30	0	1,181	695	7.900	8.022	445,000	445,000	442,000	420,710	26,159	\$243,380	\$ 243,380	\$ 371,560
Jun 20	-	-	767	384	7.481	7.333	491,000	481,000	440,000	463,808	26,058	\$215,080	\$ 215,080	\$ 363,933
Jul 20	-	-	439	317	6.720	6.501	435,000	400,000	524,000	431,144	25,881	\$232,060	\$ 232,060	\$ 736,105
Aug 20														
Sep 20														
Total							2,282,000	2,527,000	2,669,000	2,502,750	398,807	\$2,672,449	\$2,672,449	\$5,867,391

Actual generation as a percentage of average: 93.8%

Cost per MWh: \$14.71

Lake/Reservoir Content

As of July 31, reservoir storage for the water year was 100 percent of the 15-year average for Trinity, 89 percent for Shasta, 91 percent for Folsom, and 111 percent for New Melones. Accumulated inflow for the same date was 40 percent of the 15-year average for Trinity, 61 percent for Shasta, 53 percent for Folsom, and 58 percent for New Melones.

Weather and Other Conditions

February only had 0.02 inches of precipitation for the month, which is the driest February on the index going back to 1921. March precipitation was 90 percent of average, April was 71 percent, and May was 200 percent. June and July were 39 percent and 53 percent of average, respectively. The water year total remains 63 percent of average. Based upon May 1 conditions, the Sacramento River Index forecast for 50 percent exceedance at 9.2 is "critical" and the 90 percent exceedance at 8.5 is also "critical." This is a dry year.

Note: The Sierra Nevada Region's (SNR) average generation is based upon long-term modeling done for its "Green Book." SNR does not project purchase power expenses for dry conditions, and its most probable expenses are based upon term purchases of 35 to 65 percent of projected power needs, with the difference being left to day-ahead markets after project pumping and generation have been scheduled.



Upper Great Plains Region

	Snowpack (Inches in Snow Water Equivalent)		Lake/Reservoir Inflow (Thousand Acre-Feet)		Lake/Reservoir Content (Million Acre-Feet)		Generation (MWh)				Purchase Power (MWh)	Purchase Power Expenses (Dollars)		
	Median	Actual	Average	Actual	Average	Actual	Projected Dry	Most Probable	Average	Actual	Actual	Projected Dry	Most Probable	Actual
	Oct 19	1.20	2.60	7,972.00	18,502.03	56.14	62.49	1,506,881	1,519,930	878,137	1,434,267	380	\$0	\$0
Nov 19	3.80	4.20	7,334.00	17,463.46	55.06	59.17	1,389,518	1,443,590	818,207	1,346,166	548	\$0	\$0	\$4,278
Dec 19	7.10	6.80	6,422.00	10,075.10	54.46	58.43	999,369	1,041,419	686,859	979,796	61,694	\$3,345,041	\$1,969,000	\$1,341,167
Jan 20	10.30	10.20	6,641.00	8,781.15	54.18	57.66	1,060,394	1,047,444	774,981	981,201	27,145	\$1,950,317	\$2,027,011	\$957,914
Feb 20	13.10	13.80	6,281.00	9,216.01	54.50	57.74	989,354	970,782	647,124	905,272	28,338	\$2,292,804	\$2,420,706	\$808,454
Mar 20	0.00	17.00	0.00	11,894.82	0.00	59.92	1,002,312	1,012,020	664,919	977,403	4,747	\$1,369,022	\$1,802,203	\$75,585
Apr 20	0.00	13.80	0.00	9,558.73	0.00	60.04	995,602	930,500	830,935	958,344	15,131	\$126,604	\$163,265	\$240,527
May 20	0.00	4.80	0.00	11,123.84	0.00	61.42	1,034,940	1,004,313	944,519	968,607	4,334	\$0	\$0	\$62,798
Jun 20	0.00	0.40	0.00	11,423.42	0.00	63.14	1,028,052	989,720	1,056,668	972,872	5,586	\$0	\$0	\$75,076
Jul 20	0.00	0.00	0.00	10,276.33	0.00	63.44	1,119,844	1,086,894	1,179,092	1,041,740	*	\$55,426	\$85,345	*
Aug 20														
Sep 20														
Total							11,126,266	11,046,612	8,481,441	10,565,668	147,903	\$9,139,214	\$8,467,530	\$3,592,405

Actual generation as a percentage of average: 124.6%

Cost per MWh: \$24.29

Lake/Reservoir Content

As of Aug. 20, the active conservation pools for the Canyon Ferry and Yellowtail Dams were 94.1 percent and 95.6 percent full, respectively.

Weather and Other Conditions

The snowpack melt for the year is complete, with the last recorded mountain Snow Water Equivalent (SWE) in the “Total above Fort Peck” reach on July 5, which was less than an inch, 81% of the July 5 average. The mountain SWE in the “Total Fort Peck to Garrison” reach has melted. The U.S. Drought Monitor shows larger areas of the upper Basin being impacted by abnormally dry conditions, primarily in the north-central and eastern regions of Montana, largely the western half of North Dakota and most of South Dakota with moderate drought in areas of North Dakota and South Dakota. The 90- to 180- day precipitation outlook are normal to slightly below normal.

Note: The Upper Great Plains Region reports its 50 percent share of generation from Yellowtail Dam, and RMR reports the snowpack, inflow, content, and remaining share of generation. Asterisks indicate that actual purchase power data is not available for the month, and so the projected dry and most probable purchase power expenses are not included for that month in order to allow for a meaningful comparison between the total amounts.

