

To: All Annual Operating Plan Recipients

From: Lower Colorado Region  
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The operation of Lake Powell and Lake Mead in this December 2019 24-Month Study is pursuant to the December 2007 Record of Decision on Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations of Lake Powell and Lake Mead (Interim Guidelines), and reflects the 2019 Annual Operating Plan (AOP) and draft 2020 AOP. Pursuant to the Interim Guidelines, the August 2019 24-Month Study projections of the January 1, 2020, system storage and reservoir water surface elevations set the operational tier for the coordinated operation of Lake Powell and Lake Mead during 2020.

The August 2019 24-Month Study projected the January 1, 2020, Lake Powell elevation to be below the 2019 Equalization Elevation of 3,657 feet and above elevation 3,575 feet. Consistent with Section 6.B of the Interim Guidelines, Lake Powell's operations in water year 2020 will be governed by the Upper Elevation Balancing Tier, with an initial water year release volume of 8.23 maf and the potential for an April adjustment to equalization or balancing releases in April 2020. Based on the most probable inflow forecast, this December 24-Month Study projects an annual release of 8.23 maf in water year 2020.

Consistent with Section 2.B.5 of the Interim Guidelines, the Intentionally Created Surplus (ICS) Surplus Condition is the criterion governing the operation of Lake Mead for calendar years 2019 and 2020. In addition, Section III.B of Exhibit 1 to the Lower Basin Drought Contingency Plan (DCP) Agreement will also govern the operation of Lake Mead for calendar year 2020.

The 2020 operational tier determinations for Lake Powell and Lake Mead will be documented in the 2020 AOP, which is in the final stage of development.

The Interim Guidelines are available for download at:

<https://www.usbr.gov/lc/region/programs/strategies/RecordofDecision.pdf>.

The 2019 AOP is available for download at:

<https://www.usbr.gov/lc/region/g4000/aop/AOP19.pdf>.

The draft 2020 AOP is available for download at:

[https://www.usbr.gov/lc/region/g4000/AOP2020/AOP20\\_draft.pdf](https://www.usbr.gov/lc/region/g4000/AOP2020/AOP20_draft.pdf).

The Colorado River DCPs are available for download at:

<https://www.usbr.gov/lc/region/programs/dcp.html>.

Current runoff projections into Lake Powell are provided by the National Weather Service's Colorado Basin River Forecast Center and are as follows: Observed unregulated inflow into Lake Powell for the month of November was 0.402 maf or 85 percent of the 30-year average from 1981 to 2010. The December unregulated inflow forecast for Lake Powell is 0.330 maf or 91 percent of the 30-year average. The observed 2019 April through July unregulated inflow is 10.410 maf or 145 percent of average.

In this study, the calendar year 2019 diversion for Metropolitan Water District of Southern California (MWD) is forecasted to be 0.536 maf. The calendar year 2019 diversion for the Central Arizona Project (CAP) is forecasted to be 1.429 maf. Consumptive use for Nevada above Hoover (SNWP Use) is forecasted to be 0.237 maf for calendar year 2019.

Due to changing Lake Mead elevations, Hoover's generator capacity is adjusted based on estimated effective capacity and plant availability. The estimated effective capacity is based on projected Lake Mead elevations. Unit capacity tests will be performed as the lake elevation changes. This study reflects these changes in the projections.

Hoover, Davis, and Parker historical gross energy figures come from PO&M reports provided by the Lower Colorado Region's Power Office, Bureau of Reclamation, Boulder City, Nevada. Questions regarding these historical energy numbers can be directed to Colleen Dwyer at (702) 293-8420.



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Fontenelle Reservoir



— BUREAU OF —  
RECLAMATION

	Date	Regulated Inflow (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	Power Release (1000 Ac-Ft)	Bypass Release (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)
*	Dec 2018	30	1	61	1	61	6483.19	184
H	Jan 2019	28	1	61	0	61	6476.81	150
I	Feb 2019	26	0	55	1	56	6470.41	120
S	Mar 2019	37	0	61	0	61	6464.13	95
T	Apr 2019	114	1	71	0	71	6474.10	137
O	May 2019	167	1	98	0	98	6486.46	204
R	Jun 2019	337	2	107	171	278	6494.89	261
I	Jul 2019	184	3	86	39	125	6502.48	317
C	Aug 2019	57	2	74	0	74	6499.98	298
A	Sep 2019	41	2	19	47	66	6496.36	271
<b>WY 2019</b>		<b>1101</b>	<b>15</b>	<b>799</b>	<b>278</b>	<b>1077</b>		
L	Oct 2019	51	1	61	7	68	6493.83	253
*	Nov 2019	47	1	63	0	63	6491.39	236
	Dec 2019	35	1	65	0	65	6486.76	207
	Jan 2020	32	1	65	0	65	6481.26	174
	Feb 2020	30	1	60	0	60	6475.28	143
	Mar 2020	46	0	66	0	66	6470.83	123
	Apr 2020	75	1	79	0	79	6469.86	119
	May 2020	135	1	88	0	88	6479.54	164
	Jun 2020	255	2	102	26	128	6498.75	290
	Jul 2020	155	3	103	18	120	6502.96	322
	Aug 2020	65	2	80	0	80	6500.68	304
	Sep 2020	45	2	20	51	71	6496.88	276
<b>WY 2020</b>		<b>971</b>	<b>15</b>	<b>851</b>	<b>101</b>	<b>952</b>		
	Oct 2020	48	1	74	0	74	6493.09	249
	Nov 2020	42	1	64	0	64	6489.62	226
	Dec 2020	32	1	66	0	66	6484.26	191
	Jan 2021	30	1	66	0	66	6477.74	155
	Feb 2021	28	0	60	0	60	6470.80	123
	Mar 2021	53	0	69	0	69	6466.77	106
	Apr 2021	85	1	79	0	79	6468.14	111
	May 2021	164	1	93	0	93	6482.46	181
	Jun 2021	299	2	103	83	185	6499.14	292
	Jul 2021	178	3	102	40	143	6503.35	325
	Aug 2021	77	2	82	0	82	6502.32	317
	Sep 2021	46	2	20	58	77	6497.90	283
<b>WY 2021</b>		<b>1081</b>	<b>15</b>	<b>878</b>	<b>181</b>	<b>1059</b>		
	Oct 2021	49	1	74	0	74	6494.24	257
	Nov 2021	42	1	60	0	60	6491.63	239

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Flaming Gorge Reservoir



— BUREAU OF —  
RECLAMATION

Date	Unreg Inflow (1000 Ac-Ft)	Reg Inflow (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	Power Release (1000 Ac-Ft)	Bypass Release (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Bank Storage (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)	Jensen Flow (1000 Ac-Ft)
* Dec 2018	29	60	2	124	0	124	131	6027.49	3253	153
H Jan 2019	34	68	2	124	0	124	129	6026.01	3198	154
I Feb 2019	34	63	2	112	0	112	127	6024.69	3149	143
S Mar 2019	74	99	3	58	0	58	128	6025.67	3185	128
T Apr 2019	240	198	5	71	0	71	133	6028.79	3303	341
O May 2019	252	183	8	99	0	99	136	6030.71	3376	568
R Jun 2019	460	400	11	215	100	315	139	6032.55	3448	950
I Jul 2019	227	169	14	100	0	100	141	6033.89	3502	376
C Aug 2019	59	76	13	109	0	109	139	6032.79	3458	151
A Sep 2019	49	74	11	113	0	113	137	6031.57	3410	134
<b>WY 2019</b>	<b>1553</b>	<b>1529</b>	<b>82</b>	<b>1315</b>	<b>100</b>	<b>1415</b>				<b>3351</b>
L Oct 2019	53	70	7	80	0	80	136	6031.13	3393	109
* Nov 2019	64	80	4	81	0	81	136	6031.01	3388	115
Dec 2019	40	70	2	132	0	132	134	6029.42	3327	157
Jan 2020	43	76	2	132	0	132	132	6027.95	3271	156
Feb 2020	46	76	2	124	0	124	130	6026.69	3223	148
Mar 2020	95	115	3	114	0	114	130	6026.64	3221	184
Apr 2020	125	129	5	110	0	110	130	6026.99	3234	290
May 2020	210	163	8	74	0	74	133	6029.06	3313	554
Jun 2020	330	203	10	267	0	267	130	6027.15	3240	727
Jul 2020	190	155	13	78	0	78	133	6028.77	3302	153
Aug 2020	76	91	13	92	0	92	132	6028.43	3289	113
Sep 2020	55	81	11	89	0	89	132	6027.95	3271	104
<b>WY 2020</b>	<b>1327</b>	<b>1308</b>	<b>80</b>	<b>1373</b>	<b>0</b>	<b>1373</b>				<b>2810</b>
Oct 2020	59	85	7	66	0	66	132	6028.24	3282	94
Nov 2020	51	73	3	70	0	70	132	6028.24	3282	99
Dec 2020	35	69	2	108	0	108	130	6027.21	3243	133
Jan 2021	40	76	2	108	0	108	129	6026.36	3211	133
Feb 2021	45	77	2	97	0	97	128	6025.78	3189	125
Mar 2021	102	119	3	101	0	101	129	6026.14	3203	178
Apr 2021	134	127	5	98	0	98	130	6026.77	3226	313
May 2021	245	175	8	83	0	83	133	6028.90	3307	615
Jun 2021	390	276	10	237	93	330	131	6027.25	3244	750
Jul 2021	210	175	13	92	0	92	133	6029.01	3311	192
Aug 2021	89	94	13	111	0	111	132	6028.28	3283	136
Sep 2021	55	87	11	107	0	107	131	6027.48	3253	126
<b>WY 2021</b>	<b>1454</b>	<b>1432</b>	<b>80</b>	<b>1278</b>	<b>93</b>	<b>1371</b>				<b>2895</b>
Oct 2021	59	84	7	80	0	80	131	6027.40	3250	113
Nov 2021	51	69	3	78	0	78	130	6027.07	3237	110

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Taylor Park Reservoir



— BUREAU OF —  
RECLAMATION

	Date	Regulated Inflow (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)
*	Dec 2018	4	3	9302.74	59
H	Jan 2019	4	3	9302.92	59
I	Feb 2019	3	3	9303.16	60
S	Mar 2019	5	4	9303.75	60
T	Apr 2019	10	7	9306.14	64
O	May 2019	21	26	9302.64	59
R	Jun 2019	68	38	9320.92	89
I	Jul 2019	47	32	9328.49	103
C	Aug 2019	15	24	9323.77	94
A	Sep 2019	7	20	9316.42	81
<b>WY 2019</b>		<b>191</b>	<b>168</b>		
L	Oct 2019	7	11	9314.38	77
*	Nov 2019	5	6	9313.69	76
	Dec 2019	5	6	9312.70	74
	Jan 2020	5	6	9311.69	73
	Feb 2020	4	6	9310.73	71
	Mar 2020	4	6	9309.38	69
	Apr 2020	7	6	9310.01	70
	May 2020	22	12	9316.04	80
	Jun 2020	38	24	9323.75	94
	Jul 2020	15	24	9318.88	85
	Aug 2020	8	21	9311.26	72
	Sep 2020	6	15	9305.46	63
<b>WY 2020</b>		<b>125</b>	<b>143</b>		
	Oct 2020	6	6	9305.35	63
	Nov 2020	5	6	9304.56	62
	Dec 2020	5	6	9303.55	60
	Jan 2021	4	6	9302.28	58
	Feb 2021	4	6	9301.03	57
	Mar 2021	4	6	9299.78	55
	Apr 2021	9	6	9301.79	58
	May 2021	28	15	9310.63	71
	Jun 2021	42	21	9322.53	92
	Jul 2021	20	21	9322.07	91
	Aug 2021	10	21	9316.12	80
	Sep 2021	7	18	9309.71	69
<b>WY 2021</b>		<b>144</b>	<b>138</b>		
	Oct 2021	7	6	9310.12	70
	Nov 2021	5	6	9309.56	69

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Blue Mesa Reservoir



— BUREAU OF —  
RECLAMATION

Date	UnReg Inflow (1000 Ac-Ft)	Regulated Inflow (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	Power Release (1000 Ac-Ft)	Bypass Release (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)
* Dec 2018	20	19	0	21	0	21	7437.82	249
H Jan 2019	20	20	0	17	0	17	7438.40	252
I Feb 2019	20	20	0	23	0	23	7437.59	248
S Mar 2019	28	27	0	25	0	25	7438.01	250
T Apr 2019	121	118	0	33	0	33	7453.91	335
O May 2019	214	218	1	86	18	105	7471.68	447
R Jun 2019	471	444	1	124	70	194	7504.14	696
I Jul 2019	282	266	2	87	51	138	7518.61	823
C Aug 2019	92	100	1	76	62	137	7514.39	784
A Sep 2019	32	45	1	45	47	93	7508.84	736
<b>WY 2019</b>	<b>1344</b>	<b>1320</b>	<b>7</b>	<b>601</b>	<b>260</b>	<b>859</b>		
L Oct 2019	28	32	1	82	3	85	7502.51	682
* Nov 2019	31	32	0	72	0	72	7497.65	642
Dec 2019	26	28	0	78	0	78	7491.33	592
Jan 2020	25	27	0	58	0	58	7487.20	560
Feb 2020	23	25	0	40	0	40	7485.13	544
Mar 2020	34	36	0	21	23	43	7484.15	537
Apr 2020	60	59	1	64	0	64	7483.41	531
May 2020	160	150	1	202	10	212	7474.72	468
Jun 2020	235	221	1	41	0	41	7498.30	647
Jul 2020	90	99	1	74	0	74	7501.20	671
Aug 2020	51	64	1	77	0	77	7499.48	657
Sep 2020	37	46	1	72	0	72	7496.22	631
<b>WY 2020</b>	<b>800</b>	<b>818</b>	<b>8</b>	<b>879</b>	<b>36</b>	<b>915</b>		
Oct 2020	38	38	1	67	0	67	7492.45	601
Nov 2020	31	32	0	21	0	21	7493.84	612
Dec 2020	26	27	0	48	0	48	7491.20	591
Jan 2021	24	26	0	42	0	42	7489.10	574
Feb 2021	22	24	0	33	0	33	7487.94	565
Mar 2021	36	38	0	0	37	37	7488.04	566
Apr 2021	77	74	1	0	58	58	7490.10	582
May 2021	221	208	1	6	196	202	7490.65	586
Jun 2021	261	240	1	42	0	42	7514.30	784
Jul 2021	117	118	2	87	0	87	7517.55	813
Aug 2021	63	74	1	99	0	99	7514.71	787
Sep 2021	38	49	1	86	0	86	7510.33	749
<b>WY 2021</b>	<b>954</b>	<b>948</b>	<b>9</b>	<b>530</b>	<b>290</b>	<b>821</b>		
Oct 2021	38	38	1	90	0	90	7504.17	696
Nov 2021	31	32	0	58	0	58	7501.02	670

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Morrow Point Reservoir



— BUREAU OF —  
RECLAMATION

Date	Unreg Inflow (1000 Ac-Ft)	Blue Mesa Release (1000 Ac-Ft)	Side Inflow (1000 Ac-Ft)	Total Inflow (1000 Ac-Ft)	Power Release (1000 Ac-Ft)	Bypass Release (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)
* Dec 2018	21	21	1	22	18	0	18	7147.95	107
H Jan 2019	21	17	1	17	18	0	18	7147.00	107
I Feb 2019	20	23	0	24	23	0	23	7147.57	107
S Mar 2019	29	25	1	26	26	0	26	7146.90	107
T Apr 2019	136	33	15	47	41	0	41	7155.16	113
O May 2019	240	105	25	130	127	0	131	7154.68	113
R Jun 2019	512	194	41	235	186	0	234	7155.10	113
I Jul 2019	295	138	13	150	151	0	151	7154.18	112
C Aug 2019	93	137	2	139	137	0	139	7153.99	112
A Sep 2019	32	93	1	93	60	0	96	7151.09	110
<b>WY 2019</b>	<b>1446</b>	<b>859</b>	<b>102</b>	<b>961</b>	<b>858</b>	<b>0</b>	<b>949</b>		
L Oct 2019	29	85	1	86	78	0	89	7147.93	107
* Nov 2019	32	72	1	72	71	0	71	7149.15	108
Dec 2019	28	78	2	80	81	0	81	7147.94	107
Jan 2020	27	58	2	60	60	0	60	7147.94	107
Feb 2020	26	40	3	43	43	0	43	7147.94	107
Mar 2020	38	43	4	47	47	0	47	7147.94	107
Apr 2020	70	64	10	74	74	0	74	7147.94	107
May 2020	180	212	20	232	232	0	232	7147.94	107
Jun 2020	250	41	15	56	56	0	56	7147.94	107
Jul 2020	95	74	5	79	79	0	79	7147.94	107
Aug 2020	54	77	3	80	80	0	80	7147.94	107
Sep 2020	39	72	2	74	74	0	74	7147.94	107
<b>WY 2020</b>	<b>868</b>	<b>915</b>	<b>68</b>	<b>983</b>	<b>974</b>	<b>0</b>	<b>985</b>		
Oct 2020	40	67	2	69	69	0	69	7147.94	107
Nov 2020	33	21	2	23	23	0	23	7147.94	107
Dec 2020	28	48	2	50	50	0	50	7147.94	107
Jan 2021	27	42	2	44	44	0	44	7147.94	107
Feb 2021	25	33	3	35	35	0	35	7147.94	107
Mar 2021	40	37	4	41	41	0	41	7147.94	107
Apr 2021	88	58	11	69	69	0	69	7147.94	107
May 2021	247	202	26	228	228	0	228	7147.94	107
Jun 2021	281	42	20	62	62	0	62	7147.94	107
Jul 2021	123	87	6	93	93	0	93	7147.94	107
Aug 2021	67	99	3	102	102	0	102	7147.94	107
Sep 2021	41	86	3	89	89	0	89	7147.94	107
<b>WY 2021</b>	<b>1039</b>	<b>821</b>	<b>84</b>	<b>905</b>	<b>905</b>	<b>0</b>	<b>905</b>		
Oct 2021	41	90	3	92	92	0	92	7147.94	107
Nov 2021	33	58	2	60	60	0	60	7147.94	107

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*  
Crystal Reservoir



— BUREAU OF —  
RECLAMATION

	Date	Unreg Inflow (1000 Ac-Ft)	Morrow Release (1000 Ac-Ft)	Side Inflow (1000 Ac-Ft)	Total Inflow (1000 Ac-Ft)	Power Release (1000 Ac-Ft)	Bypass Release (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)	Tunnel Flow (1000 Ac-Ft)	Below Tunnel Flow (1000 Ac-Ft)
*	Dec 2018	25	18	4	22	21	0	22	6745.32	15	0	20
H	Jan 2019	25	18	4	22	19	3	22	6746.57	15	1	20
I	Feb 2019	24	23	3	27	9	17	26	6748.26	16	1	25
S	Mar 2019	34	26	5	32	30	0	30	6752.77	17	0	29
T	Apr 2019	150	41	15	55	55	0	55	6753.29	17	26	29
O	May 2019	264	131	24	155	108	31	153	6759.30	19	47	105
R	Jun 2019	558	234	46	280	115	73	282	6753.12	17	51	231
I	Jul 2019	321	151	26	177	121	57	178	6746.79	15	59	124
C	Aug 2019	98	139	5	144	119	28	147	6733.35	12	64	87
A	Sep 2019	36	96	4	99	94	0	95	6750.61	16	61	33
	<b>WY 2019</b>	<b>1587</b>	<b>949</b>	<b>142</b>	<b>1091</b>	<b>768</b>	<b>210</b>	<b>1087</b>			<b>344</b>	<b>747</b>
L	Oct 2019	33	89	3	92	92	0	92	6749.75	16	64	29
*	Nov 2019	35	71	4	75	76	0	76	6746.90	15	2	72
	Dec 2019	32	81	4	85	84	0	84	6749.63	16	0	84
	Jan 2020	31	60	4	64	64	0	64	6749.63	16	0	64
	Feb 2020	29	43	3	46	46	0	46	6749.63	16	0	46
	Mar 2020	44	47	6	53	53	0	53	6749.63	16	5	48
	Apr 2020	83	74	13	87	87	0	87	6749.63	16	42	45
	May 2020	205	232	25	257	136	121	257	6749.63	16	62	195
	Jun 2020	280	56	30	86	86	0	86	6749.63	16	61	25
	Jul 2020	100	79	5	84	84	0	84	6749.63	16	65	19
	Aug 2020	60	80	6	86	86	0	86	6749.63	16	65	21
	Sep 2020	43	74	4	78	78	0	78	6749.63	16	55	23
	<b>WY 2020</b>	<b>975</b>	<b>985</b>	<b>107</b>	<b>1093</b>	<b>971</b>	<b>121</b>	<b>1093</b>			<b>420</b>	<b>671</b>
	Oct 2020	44	69	5	74	74	0	74	6749.63	16	30	44
	Nov 2020	37	23	4	27	27	0	27	6749.63	16	0	27
	Dec 2020	32	50	5	55	55	0	55	6749.63	16	0	55
	Jan 2021	31	44	5	49	49	0	49	6749.63	16	0	49
	Feb 2021	29	35	4	39	0	39	39	6749.63	16	0	39
	Mar 2021	46	41	6	47	47	0	47	6749.63	16	5	42
	Apr 2021	101	69	12	81	81	0	81	6749.63	16	42	39
	May 2021	281	228	34	263	136	126	263	6749.63	16	62	201
	Jun 2021	315	62	34	96	96	0	96	6749.63	16	61	35
	Jul 2021	138	93	14	108	108	0	108	6749.63	16	65	43
	Aug 2021	75	102	8	110	110	0	110	6749.63	16	65	45
	Sep 2021	47	89	6	95	95	0	95	6749.63	16	55	40
	<b>WY 2021</b>	<b>1176</b>	<b>905</b>	<b>138</b>	<b>1043</b>	<b>877</b>	<b>166</b>	<b>1043</b>			<b>385</b>	<b>658</b>
	Oct 2021	47	92	6	98	98	0	98	6749.63	16	30	68
	Nov 2021	38	60	5	65	65	0	65	6749.63	16	0	65

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Vallecito Reservoir



— BUREAU OF —  
RECLAMATION

	Date	Regulated Inflow (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)
*	Dec 2018	3	0	7623.31	34
H	Jan 2019	4	0	7625.50	37
I	Feb 2019	4	0	7627.67	41
S	Mar 2019	6	6	7627.39	40
T	Apr 2019	32	25	7631.32	47
O	May 2019	58	41	7640.08	64
R	Jun 2019	160	101	7664.36	124
I	Jul 2019	69	68	7664.45	124
C	Aug 2019	20	38	7657.21	105
A	Sep 2019	8	33	7646.82	79
<b>WY 2019</b>		<b>378</b>	<b>316</b>		
L	Oct 2019	4	13	7643.13	71
*	Nov 2019	4	2	7644.14	73
	Dec 2019	4	2	7644.85	75
	Jan 2020	4	2	7645.54	77
	Feb 2020	3	2	7646.06	78
	Mar 2020	4	2	7646.91	80
	Apr 2020	13	2	7651.48	91
	May 2020	48	31	7657.99	107
	Jun 2020	58	43	7663.59	122
	Jul 2020	24	41	7656.70	104
	Aug 2020	15	38	7647.23	81
	Sep 2020	14	29	7640.26	65
<b>WY 2020</b>		<b>194</b>	<b>206</b>		
	Oct 2020	14	16	7638.81	62
	Nov 2020	8	2	7641.45	68
	Dec 2020	6	2	7643.46	72
	Jan 2021	5	2	7645.01	75
	Feb 2021	5	2	7646.31	78
	Mar 2021	9	2	7649.11	85
	Apr 2021	23	2	7657.67	106
	May 2021	71	54	7664.04	123
	Jun 2021	70	70	7663.86	123
	Jul 2021	29	42	7658.89	109
	Aug 2021	20	38	7651.56	91
	Sep 2021	17	30	7646.30	78
<b>WY 2021</b>		<b>278</b>	<b>261</b>		
	Oct 2021	16	17	7645.53	77
	Nov 2021	9	2	7648.19	83

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Navajo Reservoir



— BUREAU OF —  
RECLAMATION

Date	Mod Unreg Inflow (1000 Ac-Ft)	Azetea Tunnel Div (1000 Ac-Ft)	Reg Inflow (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	NIIP Diversion (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)	Farmington Flow (1000 Ac-Ft)
* Dec 2018	12	0	9	0	0	18	6016.39	879	30
H Jan 2019	13	0	10	0	0	19	6015.33	869	31
I Feb 2019	17	0	14	1	1	16	6014.90	865	37
S Mar 2019	114	1	113	1	4	18	6024.61	955	62
T Apr 2019	230	24	203	2	20	20	6040.36	1117	102
O May 2019	270	34	215	3	25	25	6054.45	1279	139
R Jun 2019	491	57	376	4	36	114	6071.44	1501	386
I Jul 2019	171	26	142	5	47	60	6073.56	1531	228
C Aug 2019	40	6	52	4	42	78	6068.40	1459	104
A Sep 2019	3	0	29	3	29	67	6063.13	1388	71
<b>WY 2019</b>	<b>1401</b>	<b>150</b>	<b>1188</b>	<b>26</b>	<b>211</b>	<b>483</b>			<b>1264</b>
L Oct 2019	6	0	15	2	6	33	6061.08	1362	46
* Nov 2019	15	0	12	1	0	25	6060.04	1348	45
Dec 2019	15	0	13	1	0	23	6059.24	1338	34
Jan 2020	16	0	14	1	0	22	6058.62	1330	32
Feb 2020	20	0	19	1	0	20	6058.43	1328	29
Mar 2020	55	3	50	2	6	22	6060.05	1348	37
Apr 2020	105	11	83	3	21	30	6062.33	1378	65
May 2020	195	24	154	4	36	31	6068.58	1461	131
Jun 2020	180	22	143	5	53	30	6072.55	1516	145
Jul 2020	37	1	53	5	57	31	6069.76	1477	76
Aug 2020	33	1	55	4	48	45	6066.69	1435	74
Sep 2020	34	1	48	3	26	68	6063.01	1387	91
<b>WY 2020</b>	<b>711</b>	<b>64</b>	<b>659</b>	<b>29</b>	<b>253</b>	<b>378</b>			<b>805</b>
Oct 2020	40	2	41	2	9	31	6062.97	1386	53
Nov 2020	31	0	25	1	0	30	6062.54	1380	46
Dec 2020	25	0	21	1	0	31	6061.70	1370	46
Jan 2021	22	0	18	1	0	31	6060.68	1357	44
Feb 2021	30	0	27	1	0	28	6060.54	1355	40
Mar 2021	92	9	77	2	6	31	6063.54	1394	53
Apr 2021	170	21	128	3	22	30	6069.07	1468	82
May 2021	277	37	223	4	37	187	6068.77	1464	333
Jun 2021	224	29	195	4	53	277	6058.09	1324	428
Jul 2021	66	5	74	4	57	47	6055.29	1289	114
Aug 2021	45	2	61	3	48	31	6053.54	1268	69
Sep 2021	43	2	54	3	26	30	6053.14	1263	62
<b>WY 2021</b>	<b>1066</b>	<b>106</b>	<b>943</b>	<b>28</b>	<b>258</b>	<b>781</b>			<b>1373</b>
Oct 2021	47	2	46	2	9	31	6053.55	1268	59
Nov 2021	34	0	27	1	0	30	6053.24	1264	48

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Lake Powell



— BUREAU OF —  
RECLAMATION

Date	Unreg Inflow (1000 Ac-Ft)	Regulated Inflow (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	PowerPlant Release (1000 Ac-Ft)	Bypass Release (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Bank Storage (1000 Ac-Ft)	EOM Storage (1000 Ac-Ft)	Lees Ferry Gage (1000 Ac-Ft)
* Dec 2018	228	322	22	740	0	740	3581.85	4862	10099	744
H Jan 2019	212	303	7	804	0	804	3576.34	4824	9629	815
I Feb 2019	255	339	7	730	0	730	3571.89	4795	9261	741
S Mar 2019	625	574	11	791	0	791	3569.28	4778	9049	798
T Apr 2019	1242	899	18	720	0	720	3571.12	4790	9198	734
O May 2019	2511	1980	23	720	0	720	3584.65	4881	10343	752
R Jun 2019	4206	3583	41	765	0	765	3611.82	5087	12914	807
I Jul 2019	2451	2015	57	857	0	857	3621.60	5168	13933	896
C Aug 2019	472	608	58	900	0	900	3618.55	5143	13610	932
A Sep 2019	143	379	52	687	0	687	3615.36	5116	13277	703
<b>WY 2019</b>	<b>12951</b>	<b>11787</b>	<b>356</b>	<b>8924</b>	<b>77</b>	<b>9001</b>				<b>9242</b>
L Oct 2019	265	397	35	625	0	625	3612.99	5096	13034	633
* Nov 2019	403	466	34	625	0	625	3611.23	5082	12855	630
Dec 2019	330	482	27	750	0	750	3608.51	5060	12581	756
Jan 2020	320	448	8	760	0	760	3605.52	5036	12285	771
Feb 2020	360	455	9	675	0	675	3603.36	5020	12073	684
Mar 2020	550	554	15	700	0	700	3601.81	5008	11924	714
Apr 2020	810	756	23	630	0	630	3602.80	5015	12019	645
May 2020	1500	1312	28	630	0	630	3608.95	5064	12625	641
Jun 2020	2150	1818	46	650	0	650	3619.05	5147	13663	661
Jul 2020	840	763	57	750	0	750	3618.67	5144	13623	769
Aug 2020	400	503	56	835	0	835	3615.22	5115	13263	852
Sep 2020	375	505	51	599	0	599	3613.91	5104	13128	613
<b>WY 2020</b>	<b>8303</b>	<b>8458</b>	<b>389</b>	<b>8230</b>	<b>0</b>	<b>8230</b>				<b>8368</b>
Oct 2020	484	523	35	640	0	640	3612.53	5093	12987	650
Nov 2020	460	468	34	640	0	640	3610.65	5077	12796	641
Dec 2020	363	463	27	720	0	720	3608.04	5056	12534	726
Jan 2021	361	455	8	860	0	860	3604.16	5026	12152	871
Feb 2021	393	454	9	750	0	750	3601.25	5003	11870	759
Mar 2021	665	618	14	800	0	800	3599.34	4989	11688	814
Apr 2021	1056	903	23	710	0	710	3600.99	5001	11845	725
May 2021	2343	2145	28	710	0	710	3614.10	5105	13147	721
Jun 2021	2666	2523	49	750	0	750	3629.02	5233	14743	761
Jul 2021	1091	986	61	850	0	850	3629.64	5239	14812	869
Aug 2021	500	593	61	900	0	900	3626.56	5211	14472	917
Sep 2021	408	523	55	670	0	670	3624.85	5196	14284	684
<b>WY 2021</b>	<b>10790</b>	<b>10653</b>	<b>404</b>	<b>9000</b>	<b>0</b>	<b>9000</b>				<b>9138</b>
Oct 2021	512	580	38	640	0	640	3624.02	5189	14194	650
Nov 2021	473	523	36	640	0	640	3622.70	5178	14052	641

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Hoover Dam - Lake Mead



— BUREAU OF —  
RECLAMATION

Date	Glen Release (1000 Ac-Ft)	Side Inflow Glen to Hoover (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Total Release (1000 CFS)	SNWP Use (1000 Ac-Ft)	Downstream Requirements (1000 Ac-Ft)	Bank Storage (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	EOM Storage (1000 Ac-Ft)
* Dec 2018	740	52	36	468	7.6	11	467	659	1081.46	10132
H Jan 2019	804	106	30	487	7.9	8	486	682	1085.75	10493
I Feb 2019	730	126	28	621	11.2	6	620	694	1087.97	10682
S Mar 2019	791	200	32	738	12.0	13	737	707	1090.24	10878
T Apr 2019	720	118	39	902	15.2	15	900	700	1088.95	10767
O May 2019	720	108	45	989	16.1	18	988	686	1086.48	10555
R Jun 2019	765	69	54	912	15.3	27	911	676	1084.71	10405
I Jul 2019	857	20	67	946	15.4	33	946	666	1082.82	10246
C Aug 2019	900	64	71	802	13.0	34	801	669	1083.45	10299
A Sep 2019	687	58	59	696	11.7	30	690	667	1083.00	10261
<b>WY 2019</b>	<b>9001</b>	<b>1087</b>	<b>547</b>	<b>8892</b>		<b>234</b>	<b>8868</b>			
L Oct 2019	625	34	43	626	10.2	25	621	665	1082.61	10228
* Nov 2019	625	117	40	575	9.7	14	561	672	1083.85	10333
Dec 2019	750	51	37	225	3.7	14	225	704	1089.63	10825
Jan 2020	760	83	31	466	7.6	9	466	724	1093.27	11142
Feb 2020	675	91	29	533	9.3	8	533	736	1095.37	11326
Mar 2020	700	57	32	1017	16.5	18	1017	717	1092.04	11034
Apr 2020	630	49	40	1022	17.2	22	1022	692	1087.63	10654
May 2020	630	30	45	967	15.7	31	967	669	1083.39	10293
Jun 2020	650	17	53	941	15.8	31	941	647	1079.35	9957
Jul 2020	750	80	66	811	13.2	34	811	642	1078.42	9881
Aug 2020	835	100	70	758	12.3	31	758	647	1079.28	9952
Sep 2020	599	91	58	693	11.6	24	693	642	1078.32	9873
<b>WY 2020</b>	<b>8230</b>	<b>800</b>	<b>544</b>	<b>8635</b>		<b>262</b>	<b>8615</b>			
Oct 2020	640	82	42	496	8.1	26	496	651	1080.11	10020
Nov 2020	640	54	42	613	10.3	18	613	653	1080.34	10040
Dec 2020	720	51	37	531	8.6	14	531	664	1082.48	10218
Jan 2021	860	83	30	544	8.8	9	544	686	1086.48	10555
Feb 2021	750	91	28	647	11.7	9	647	696	1088.21	10703
Mar 2021	800	57	32	964	15.7	18	964	686	1086.48	10555
Apr 2021	710	49	39	1039	17.5	23	1039	665	1082.69	10235
May 2021	710	30	44	981	16.0	32	981	646	1079.11	9937
Jun 2021	750	17	53	922	15.5	32	922	631	1076.37	9713
Jul 2021	850	80	65	831	13.5	34	831	631	1076.36	9711
Aug 2021	900	100	70	746	12.1	32	746	641	1078.11	9855
Sep 2021	670	91	58	704	11.8	25	704	639	1077.81	9831
<b>WY 2021</b>	<b>9000</b>	<b>784</b>	<b>539</b>	<b>9020</b>		<b>271</b>	<b>9020</b>			
Oct 2021	640	82	42	471	7.7	26	471	650	1079.89	10002
Nov 2021	640	54	42	593	10.0	18	593	653	1080.35	10040

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Davis Dam - Lake Mohave



— BUREAU OF —  
RECLAMATION

Date	Hoover Release (1000 Ac-Ft)	Side Inflow (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	Power Release (1000 Ac-Ft)	Spill Release (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Total Release (1000 CFS)	Reservoir Elev End of Month (Ft)	EOM Storage (1000 Ac-Ft)
* Dec 2018	468	-14	9	386	0	386	6.3	640.79	1639
H Jan 2019	487	-29	10	418	0	418	6.8	641.89	1668
I Feb 2019	621	-6	10	569	0	569	10.2	643.20	1704
S Mar 2019	738	7	13	749	0	749	12.2	642.57	1687
T Apr 2019	902	0	17	886	0	886	14.9	642.52	1686
O May 2019	989	-9	22	937	0	937	15.2	643.32	1707
R Jun 2019	912	-12	25	886	0	886	14.9	642.89	1696
I Jul 2019	946	-11	25	895	0	894	14.5	643.48	1712
C Aug 2019	802	-11	23	800	0	800	13.0	642.31	1680
A Sep 2019	696	-17	18	767	0	767	12.9	638.35	1573
<b>WY 2019</b>	<b>8892</b>	<b>-142</b>	<b>198</b>	<b>8538</b>	<b>0</b>	<b>8539</b>			
L Oct 2019	626	-24	15	589	0	589	9.6	638.28	1572
* Nov 2019	575	-4	11	457	0	457	7.7	642.13	1675
Dec 2019	225	-12	9	266	0	266	4.3	639.81	1612
Jan 2020	466	-16	10	386	0	386	6.3	641.80	1666
Feb 2020	533	-13	10	510	0	510	8.9	641.80	1666
Mar 2020	1017	-15	13	955	0	955	15.5	643.05	1700
Apr 2020	1022	-17	17	990	0	990	16.6	643.00	1699
May 2020	967	-11	22	934	0	934	15.2	643.00	1699
Jun 2020	941	-16	25	899	0	899	15.1	643.00	1699
Jul 2020	811	-12	25	801	0	801	13.0	642.00	1671
Aug 2020	758	-11	23	724	0	724	11.8	642.00	1671
Sep 2020	693	-12	18	716	0	716	12.0	640.01	1618
<b>WY 2020</b>	<b>8635</b>	<b>-165</b>	<b>198</b>	<b>8227</b>	<b>0</b>	<b>8227</b>			
Oct 2020	496	-4	15	661	0	661	10.8	633.00	1434
Nov 2020	613	-19	10	533	0	533	9.0	635.00	1486
Dec 2020	531	-12	9	391	0	391	6.4	639.51	1604
Jan 2021	544	-16	10	456	0	456	7.4	641.80	1666
Feb 2021	647	-13	10	624	0	624	11.2	641.80	1666
Mar 2021	964	-15	13	901	0	901	14.7	643.05	1700
Apr 2021	1039	-17	17	1007	0	1007	16.9	643.00	1699
May 2021	981	-11	22	948	0	948	15.4	643.00	1699
Jun 2021	922	-16	25	880	0	880	14.8	643.00	1699
Jul 2021	831	-12	25	822	0	822	13.4	642.00	1671
Aug 2021	746	-11	23	712	0	712	11.6	642.00	1671
Sep 2021	704	-12	18	728	0	728	12.2	640.01	1618
<b>WY 2021</b>	<b>9020</b>	<b>-159</b>	<b>197</b>	<b>8662</b>	<b>0</b>	<b>8662</b>			
Oct 2021	471	-4	15	635	0	635	10.3	633.00	1434
Nov 2021	593	-19	10	513	0	513	8.6	635.00	1486

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Parker Dam - Lake Havasu



— BUREAU OF —  
RECLAMATION

Date	Davis Release (1000 Ac-Ft)	Side Inflow (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Total Release (1000 CFS)	MWD Diversion (1000 Ac-Ft)	CAP Diversion (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	EOM Storage (1000 Ac-Ft)	Flow To Mexico (1000 Ac-Ft)	Flow To Mexico (1000 CFS)
* Dec 2018	386	26	7	218	3.5	70	143	446.53	552	105	1.7
H Jan 2019	418	19	6	250	4.1	87	91	446.58	553	122	2.0
I Feb 2019	569	13	8	372	6.7	31	151	447.53	571	143	2.6
S Mar 2019	749	-5	9	630	10.2	11	83	447.86	577	185	3.0
T Apr 2019	886	6	11	712	12.0	28	144	447.29	567	170	2.9
O May 2019	937	8	13	693	11.3	51	154	448.62	592	128	2.1
R Jun 2019	886	11	15	717	12.0	53	104	448.47	589	138	2.3
I Jul 2019	894	15	17	739	12.0	59	92	448.12	582	146	2.4
C Aug 2019	800	15	17	636	10.3	67	102	447.22	565	111	1.8
A Sep 2019	767	26	15	514	8.6	61	160	449.03	600	103	1.7
<b>WY 2019</b>	<b>8539</b>	<b>173</b>	<b>140</b>	<b>6231</b>		<b>690</b>	<b>1571</b>			<b>1515</b>	
L Oct 2019	589	18	12	430	7.0	30	151	447.77	576	68	1.1
* Nov 2019	457	23	9	300	5.0	16	125	449.10	601	133	2.2
Dec 2019	266	22	7	212	3.5	42	72	446.50	552	83	1.4
Jan 2020	386	18	6	262	4.3	57	74	446.50	552	122	2.0
Feb 2020	510	11	8	431	7.5	6	70	446.50	552	148	2.6
Mar 2020	955	5	9	705	11.5	90	143	446.70	555	186	3.0
Apr 2020	990	12	11	728	12.2	79	136	448.70	593	172	2.9
May 2020	934	13	13	695	11.3	82	144	448.70	593	116	1.9
Jun 2020	899	11	16	718	12.1	79	84	448.70	593	124	2.1
Jul 2020	801	19	17	677	11.0	82	45	448.00	580	131	2.1
Aug 2020	724	20	17	599	9.7	82	45	447.50	571	102	1.7
Sep 2020	716	14	15	508	8.5	79	117	447.50	570	93	1.6
<b>WY 2020</b>	<b>8227</b>	<b>186</b>	<b>140</b>	<b>6266</b>		<b>723</b>	<b>1206</b>			<b>1478</b>	
Oct 2020	661	24	12	486	7.9	35	145	447.50	571	63	1.0
Nov 2020	533	14	9	359	6.0	34	139	447.50	571	96	1.6
Dec 2020	391	22	7	310	5.0	35	75	446.50	552	106	1.7
Jan 2021	456	18	6	262	4.3	100	102	446.50	552	122	2.0
Feb 2021	624	11	8	430	7.7	90	100	446.50	552	148	2.7
Mar 2021	901	5	9	704	11.4	23	158	446.70	555	186	3.0
Apr 2021	1007	12	11	726	12.2	80	153	448.70	593	172	2.9
May 2021	948	13	13	694	11.3	83	158	448.70	593	116	1.9
Jun 2021	880	11	16	717	12.0	80	65	448.70	593	124	2.1
Jul 2021	822	19	17	676	11.0	83	65	448.00	580	131	2.1
Aug 2021	712	20	17	598	9.7	83	32	447.50	571	102	1.7
Sep 2021	728	14	15	508	8.5	80	129	447.50	570	93	1.6
<b>WY 2021</b>	<b>8662</b>	<b>182</b>	<b>139</b>	<b>6470</b>		<b>808</b>	<b>1320</b>			<b>1459</b>	
Oct 2021	635	24	12	485	7.9	36	119	447.50	571	63	1.0
Nov 2021	513	14	9	358	6.0	35	119	447.50	571	96	1.6

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Hoover Dam - Lake Mead



— BUREAU OF —  
RECLAMATION

Date	Power Release (1000 Ac-Ft)	Power Release (1000 CFS)	Reservoir Elev End of Month (Ft)	EOM Storage (1000 Ac-Ft)	Change In Storage (1000 Ac-Ft)	Hoover Static Head (Ft)	Hoover Gen Capacity MW	Hoover Gross Energy MKWH	Percent of Units Available	KWH/AF
* Dec 2018	453	7.6	1081.46	10132	260	438.59	959.9	179.6	61	396.6
H Jan 2019	487	7.9	1085.75	10493	361	442.10	1006.1	183.4	63	376.8
I Feb 2019	621	11.2	1087.97	10682	189	443.82	1119.0	246.4	70	396.7
S Mar 2019	738	12.0	1090.24	10878	195	444.26	1112.0	295.7	70	400.6
T Apr 2019	902	15.2	1088.95	10767	-111	439.99	810.1	365.4	51	405.2
O May 2019	989	16.1	1086.48	10555	-211	440.79	803.9	398.2	51	402.5
R Jun 2019	912	15.3	1084.71	10405	-150	439.38	1591.0	359.0	100	393.7
I Jul 2019	946	15.4	1082.82	10246	-159	435.56	1486.0	371.7	93	392.7
C Aug 2019	802	13.0	1083.45	10299	53	439.02	1297.0	313.5	81	390.9
A Sep 2019	696	11.7	1083.00	10261	-38	439.88	1494.1	267.4	93	384.4
<b>WY 2019</b>	<b>8877</b>							<b>3494.1</b>		
L Oct 2019	626	10.2	1082.61	10228	-33	439.17	1198.0	241.9	74	386.2
* Nov 2019	575	9.7	1083.85	10333	104	438.74	1192.0	221.9	75	386.0
Dec 2019	225	3.7	1089.63	10825	493	439.70	838.0	81.3	52	360.6
Jan 2020	466	7.6	1093.27	11142	316	442.57	1145.0	185.0	70	397.3
Feb 2020	533	9.3	1095.37	11326	184	446.12	948.0	213.7	57	400.8
Mar 2020	1017	16.5	1092.04	11034	-292	443.91	1116.0	414.4	68	407.3
Apr 2020	1022	17.2	1087.63	10654	-380	437.90	1356.0	407.0	85	398.1
May 2020	967	15.7	1083.39	10293	-360	432.64	1480.0	380.4	94	393.3
Jun 2020	941	15.8	1079.35	9957	-337	427.88	1552.0	365.3	100	388.3
Jul 2020	811	13.2	1078.42	9881	-76	425.74	1539.0	313.7	100	386.9
Aug 2020	758	12.3	1079.28	9952	71	426.04	1552.0	291.5	100	384.5
Sep 2020	693	11.6	1078.32	9873	-79	426.64	1552.0	264.9	100	382.5
<b>WY 2020</b>	<b>8635</b>							<b>3380.9</b>		
Oct 2020	496	8.1	1080.11	10020	147	432.81	1048.1	195.1	68	392.9
Nov 2020	613	10.3	1080.34	10040	20	436.10	1054.0	242.6	67	395.5
Dec 2020	531	8.6	1082.48	10218	178	435.14	1066.0	204.9	68	385.9
Jan 2021	544	8.8	1086.48	10555	337	435.98	1081.0	210.8	68	387.8
Feb 2021	647	11.7	1088.21	10703	148	438.81	978.1	259.1	61	400.3
Mar 2021	964	15.7	1086.48	10555	-148	435.74	1366.1	383.3	85	397.6
Apr 2021	1039	17.5	1082.69	10235	-320	432.36	1382.0	408.4	88	393.2
May 2021	981	16.0	1079.11	9937	-298	428.06	1466.2	382.5	94	389.8
Jun 2021	922	15.5	1076.37	9713	-224	424.28	1545.8	354.0	100	384.1
Jul 2021	831	13.5	1076.36	9711	-1	423.25	1545.7	320.6	100	385.7
Aug 2021	746	12.1	1078.11	9855	143	424.43	1555.6	285.4	100	382.4
Sep 2021	704	11.8	1077.81	9831	-24	425.80	1554.0	269.5	100	382.5
<b>WY 2021</b>	<b>9020</b>							<b>3516.3</b>		
Oct 2021	471	7.7	1079.89	10002	171	432.44	1057.3	183.7	68	390.5
Nov 2021	593	10.0	1080.35	10040	38	436.00	1058.3	233.6	67	393.9

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Davis Dam - Lake Mohave



— BUREAU OF —  
RECLAMATION

Date	Power Release (1000 Ac-Ft)	Power Release (1000 CFS)	Reservoir Elev End of Month (Ft)	EOM Storage (1000 Ac-Ft)	Change In Storage (1000 Ac-Ft)	Davis Static Head (Ft)	Davis Gen Capacity MW	Davis Gross Energy MKWH	Percent of Units Available	KWH/AF
* Dec 2018	386	6.3	640.79	1639	58	140.00	153.0	47.3	60	122.5
H Jan 2019	418	6.8	641.89	1668	30	143.26	159.6	56.8	63	135.8
I Feb 2019	569	10.2	643.20	1704	36	144.69	209.5	68.8	82	120.9
S Mar 2019	749	12.2	642.57	1687	-17	140.17	218.8	94.8	86	126.6
T Apr 2019	886	14.9	642.52	1686	-1	142.03	210.8	111.9	83	126.3
O May 2019	937	15.2	643.32	1707	22	139.79	238.6	119.5	94	127.6
R Jun 2019	886	14.9	642.89	1696	-12	140.50	255.0	113.6	100	128.3
I Jul 2019	895	14.5	643.48	1712	16	142.50	255.0	113.2	100	126.5
C Aug 2019	800	13.0	642.31	1680	-32	139.60	255.0	101.8	100	127.3
A Sep 2019	767	12.9	638.35	1573	-107	137.20	255.0	96.0	100	125.1
<b>WY 2019</b>	<b>8538</b>							<b>1079.9</b>		
L Oct 2019	589	9.6	638.28	1572	-2	138.85	243.5	73.2	95	124.4
* Nov 2019	457	7.7	642.13	1675	103	143.18	153.0	55.6	60	121.7
Dec 2019	266	4.3	639.81	1612	-63	141.70	156.3	34.0	61	127.7
Jan 2020	386	6.3	641.80	1666	54	140.59	156.3	48.8	61	126.7
Feb 2020	510	8.9	641.80	1666	0	140.42	156.5	64.5	61	126.5
Mar 2020	955	15.5	643.05	1700	34	138.50	194.1	119.1	76	124.8
Apr 2020	990	16.6	643.00	1699	-1	138.72	249.9	123.8	98	125.0
May 2020	934	15.2	643.00	1699	0	139.19	255.0	117.1	100	125.4
Jun 2020	899	15.1	643.00	1699	0	139.21	255.0	112.8	100	125.4
Jul 2020	801	13.0	642.00	1671	-27	139.46	255.0	100.6	100	125.6
Aug 2020	724	11.8	642.00	1671	0	139.44	255.0	91.0	100	125.6
Sep 2020	716	12.0	640.01	1618	-54	138.34	255.0	89.2	100	124.6
<b>WY 2020</b>	<b>8227</b>							<b>1029.8</b>		
Oct 2020	661	10.8	633.00	1434	-183	134.34	227.0	80.0	89	121.0
Nov 2020	533	9.0	635.00	1486	51	132.59	159.8	63.6	63	119.4
Dec 2020	391	6.4	639.51	1604	118	137.00	154.7	48.3	61	123.4
Jan 2021	456	7.4	641.80	1666	62	139.92	156.3	57.4	61	126.1
Feb 2021	624	11.2	641.80	1666	0	139.44	156.6	78.4	61	125.6
Mar 2021	901	14.7	643.05	1700	34	138.80	194.1	112.7	76	125.0
Apr 2021	1007	16.9	643.00	1699	-1	138.63	249.9	125.7	98	124.9
May 2021	948	15.4	643.00	1699	0	139.11	255.0	118.8	100	125.3
Jun 2021	880	14.8	643.00	1699	0	139.32	255.0	110.5	100	125.5
Jul 2021	822	13.4	642.00	1671	-27	139.33	255.0	103.1	100	125.5
Aug 2021	712	11.6	642.00	1671	0	139.50	255.0	89.5	100	125.7
Sep 2021	728	12.2	640.01	1618	-54	138.26	255.0	90.6	100	124.6
<b>WY 2021</b>	<b>8662</b>							<b>1078.8</b>		
Oct 2021	635	10.3	633.00	1434	-183	134.51	227.0	77.0	89	121.2
Nov 2021	513	8.6	635.00	1486	51	132.73	159.8	61.3	63	119.6

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Parker Dam - Lake Havasu



— BUREAU OF —  
RECLAMATION

Date	Power Release (1000 Ac-Ft)	Power Release (1000 CFS)	Reservoir Elev End of Month (Ft)	EOM Storage (1000 Ac-Ft)	Change In Storage (1000 Ac-Ft)	Parker Static Head (Ft)	Parker Gen Capacity MW	Parker Gross Energy MKWH	Percent of Units Available	KWH/AF
* Dec 2018	218	3.5	446.53	552	-27	81.03	116.1	12.9	97	59.1
H Jan 2019	250	4.1	446.58	553	1	82.75	117.1	17.0	98	68.2
I Feb 2019	372	6.7	447.53	571	18	81.87	95.4	25.5	79	68.6
S Mar 2019	630	10.2	447.86	577	6	82.11	111.3	44.3	93	70.4
T Apr 2019	712	12.0	447.29	567	-11	79.40	115.0	49.5	96	69.5
O May 2019	673	11.3	448.62	592	25	80.51	119.0	48.6	99	72.2
R Jun 2019	717	12.0	448.47	589	-3	80.43	120.0	50.3	100	70.2
I Jul 2019	739	12.0	448.12	582	-7	80.11	120.0	51.4	100	69.5
C Aug 2019	636	10.3	447.22	565	-17	77.13	120.0	44.3	100	69.7
A Sep 2019	514	8.6	449.03	600	34	83.07	120.0	35.9	100	69.8
<b>WY 2019</b>	<b>6211</b>							<b>433.7</b>		
L Oct 2019	430	7.0	447.77	576	-24	83.21	90.0	30.2	75	70.1
* Nov 2019	300	5.0	449.10	601	25	84.29	92.0	20.2	77	67.2
Dec 2019	212	3.5	446.50	552	-50	76.04	100.6	13.1	84	61.9
Jan 2020	262	4.3	446.50	552	0	75.07	94.8	16.4	79	62.7
Feb 2020	431	7.5	446.50	552	0	75.16	93.1	28.0	78	65.1
Mar 2020	705	11.5	446.70	555	4	74.01	120.0	45.8	100	64.9
Apr 2020	728	12.2	448.70	593	38	75.08	120.0	47.9	100	65.9
May 2020	695	11.3	448.70	593	0	76.05	120.0	46.2	100	66.5
Jun 2020	718	12.1	448.70	593	0	76.05	120.0	47.8	100	66.6
Jul 2020	677	11.0	448.00	580	-13	75.71	120.0	44.8	100	66.1
Aug 2020	599	9.7	447.50	571	-9	75.13	120.0	39.2	100	65.5
Sep 2020	508	8.5	447.50	570	0	74.89	120.0	33.0	100	65.0
<b>WY 2020</b>	<b>6266</b>							<b>412.7</b>		
Oct 2020	486	7.9	447.50	571	0	76.29	90.0	32.1	75	66.1
Nov 2020	359	6.0	447.50	571	0	76.19	92.0	23.3	77	65.0
Dec 2020	310	5.0	446.50	552	-19	74.86	109.4	19.7	91	63.3
Jan 2021	262	4.3	446.50	552	0	75.07	94.8	16.4	79	62.7
Feb 2021	430	7.7	446.50	552	0	75.21	92.1	28.1	77	65.2
Mar 2021	704	11.4	446.70	555	4	74.01	120.0	45.7	100	64.9
Apr 2021	726	12.2	448.70	593	38	75.08	120.0	47.8	100	65.9
May 2021	694	11.3	448.70	593	0	76.05	120.0	46.1	100	66.5
Jun 2021	717	12.0	448.70	593	0	76.05	120.0	47.7	100	66.6
Jul 2021	676	11.0	448.00	580	-13	75.71	120.0	44.7	100	66.1
Aug 2021	598	9.7	447.50	571	-9	75.13	120.0	39.1	100	65.4
Sep 2021	508	8.5	447.50	570	0	74.89	120.0	33.0	100	65.0
<b>WY 2021</b>	<b>6470</b>							<b>423.8</b>		
Oct 2021	485	7.9	447.50	571	0	76.14	92.9	32.0	77	65.9
Nov 2021	358	6.0	447.50	571	0	76.19	92.0	23.3	77	65.0

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Upper Basin Power



— BUREAU OF —  
RECLAMATION

Date	Glen Canyon 1000 MWHR	Flaming Gorge 1000 MWHR	Blue Mesa 1000 MWHR	Morrow Point 1000 MWHR	Crystal Reservoir 1000 MWHR	Fontenelle Reservoir 1000 MWHR
* Dec 2018	313	47	5	6	2	5
H Jan 2019	335	47	4	6	1	4
I Feb 2019	302	42	6	8	1	3
S Mar 2019	325	22	6	9	4	3
<b>Winter 2019</b>	<b>1790</b>	<b>233</b>	<b>36</b>	<b>51</b>	<b>19</b>	<b>24</b>
T Apr 2019	294	27	9	14	10	4
O May 2019	299	38	23	45	21	6
R Jun 2019	332	82	33	64	22	8
I Jul 2019	391	39	28	54	23	7
C Aug 2019	412	42	24	49	22	7
A Sep 2019	312	44	15	22	18	2
<b>Summer 2019</b>	<b>2041</b>	<b>273</b>	<b>131</b>	<b>248</b>	<b>115</b>	<b>34</b>
L Oct 2019	281	31	26	27	18	5
* Nov 2019	280	31	22	25	14	5
Dec 2019	320	48	23	29	14	5
Jan 2020	321	48	17	22	11	5
Feb 2020	284	45	12	15	8	4
Mar 2020	294	42	6	17	9	4
<b>Winter 2020</b>	<b>1781</b>	<b>246</b>	<b>107</b>	<b>134</b>	<b>74</b>	<b>29</b>
Apr 2020	264	40	19	26	15	5
May 2020	266	27	58	83	23	6
Jun 2020	279	98	12	20	15	8
Jul 2020	326	28	22	28	14	10
Aug 2020	361	34	23	28	15	8
Sep 2020	258	33	22	26	13	2
<b>Summer 2020</b>	<b>1754</b>	<b>260</b>	<b>155</b>	<b>211</b>	<b>95</b>	<b>39</b>
Oct 2020	275	24	20	25	13	6
Nov 2020	273	26	6	8	5	5
Dec 2020	306	39	14	18	9	5
Jan 2021	364	39	12	16	8	5
Feb 2021	315	35	10	13	0	4
Mar 2021	334	37	0	14	8	4
<b>Winter 2021</b>	<b>1867</b>	<b>201</b>	<b>63</b>	<b>94</b>	<b>43</b>	<b>31</b>
Apr 2021	296	36	0	25	14	5
May 2021	301	30	2	81	23	7
Jun 2021	326	87	13	22	16	9
Jul 2021	376	34	27	33	18	10
Aug 2021	397	41	31	36	19	8
Sep 2021	295	39	27	32	16	2
<b>Summer 2021</b>	<b>1696</b>	<b>227</b>	<b>73</b>	<b>197</b>	<b>90</b>	<b>37</b>
Oct 2021	281	29	28	33	17	7
Nov 2021	279	28	18	21	11	5

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

## December 2019 24-Month Study

Most Probable Inflow\*

### Flood Control Criteria

### Beginning of Month Conditions



— BUREAU OF —  
RECLAMATION

Date	Flaming Gorge	Blue Mesa	Navajo	Lake Powell	Upper Basin Total	Lake Mead	Total	Flaming Gorge	Blue Mesa	Navajo	Tot or Max Allow	Lake Powell	Lake Mead	Total	BOM Space Required	Mead Sched Rel	Mead FC Rel	Sys Cont	
	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	MAF	
**** PREDICTED SPACE ****								**** CREDITABLE SPACE ****											
Dec 2019	469	187	348	11467	12471	17044	29516	469	187	348	1004	11467	17044	29516	4580	225	0	31.2	
Jan 2020	560	238	358	11741	12897	16552	29448	560	238	358	1156	11741	16552	29448	5350	466	0	31.2	
**** EFFECTIVE SPACE ****								**** CREDITABLE SPACE ****											
Jan 2020	560	238	358	11741	12897	16552	29448	140	95	331	567	11741	16552	28859	5350	466	0	31.2	
Feb 2020	650	270	366	12037	13322	16235	29558	229	129	338	696	12037	16235	28969	1500	533	0	31.1	
Mar 2020	728	286	368	12249	13630	16051	29682	307	146	339	792	12249	16051	29093	1500	1017	0	30.6	
Apr 2020	750	293	348	12398	13788	16343	30132	326	155	312	793	12398	16343	29534	1500	1022	0	30.4	
May 2020	741	298	318	12303	13661	16723	30384	311	159	259	728	12303	16723	29755	1500	967	0	30.8	
Jun 2020	617	361	235	11697	12911	17084	29994	175	211	135	521	11697	17084	29302	1500	941	0	31.8	
Jul 2020	564	182	180	10659	11585	17420	29005	112	16	23	151	10659	17420	28230	1500	811	0	31.7	
**** CREDITABLE SPACE ****								**** CREDITABLE SPACE ****											
Aug 2020	470	158	219	10699	11547	17496	29043	470	158	219	848	10699	17496	29043	1500	758	0	31.3	
Sep 2020	501	172	261	11059	11993	17425	29418	501	172	261	934	11059	17425	29418	2270	693	0	30.9	
Oct 2020	547	199	309	11194	12250	17504	29754	547	199	309	1056	11194	17504	29754	3040	496	0	30.7	
Nov 2020	563	229	310	11335	12437	17357	29794	563	229	310	1102	11335	17357	29794	3810	613	0	30.6	
Dec 2020	586	218	316	11526	12646	17337	29983	586	218	316	1120	11526	17337	29983	4580	531	0	30.5	
Jan 2021	660	239	326	11788	13013	17159	30172	660	239	326	1225	11788	17159	30172	5350	544	0	30.4	
**** EFFECTIVE SPACE ****								**** CREDITABLE SPACE ****											
Jan 2021	660	239	326	11788	13013	17159	30172	256	239	112	607	11788	17159	29554	5350	544	0	30.4	
Feb 2021	728	255	339	12170	13493	16822	30315	323	255	124	703	12170	16822	29695	1500	647	0	30.2	
Mar 2021	783	264	341	12452	13840	16674	30515	376	264	125	765	12452	16674	29892	1500	964	0	29.9	
Apr 2021	786	263	302	12634	13986	16822	30808	375	263	79	717	12634	16822	30174	1500	1039	0	29.9	
May 2021	757	247	228	12477	13710	17142	30852	340	247	-19	568	12477	17142	30187	1500	981	0	31.1	
Jun 2021	607	243	232	11175	12257	17440	29697	177	243	-55	365	11175	17440	28980	1500	922	0	32.6	
Jul 2021	557	46	372	9579	10554	17664	28218	118	30	27	175	9579	17664	27417	1500	831	0	32.7	
**** CREDITABLE SPACE ****								**** CREDITABLE SPACE ****											
Aug 2021	458	17	407	9510	10391	17666	28057	458	17	407	882	9510	17666	28057	1500	746	0	32.4	
Sep 2021	494	42	428	9850	10815	17522	28337	494	42	428	964	9850	17522	28337	2270	704	0	32.0	
Oct 2021	558	81	433	10038	11109	17546	28656	558	81	433	1072	10038	17546	28656	3040	471	0	31.9	
Nov 2021	587	134	428	10128	11277	17375	28652	587	134	428	1149	10128	17375	28652	3810	593	0	31.8	

\* Based on the Colorado River Basin Forecast Center's Most Probable Water Supply Forecast