

To: All Annual Operating Plan Recipients

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The operation of Lake Powell and Lake Mead in this October 2018 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 2018 Annual Operating Plan (AOP) and draft 2019 AOP. Pursuant to the Interim Guidelines, the August 2018 24-Month Study projections of the January 1, 2019, system storage and reservoir water surface elevations set the operational tier for the coordinated operation of Lake Powell and Lake Mead during 2019.

Consistent with Section 6.B of the Interim Guidelines, the Lake Powell operational tier for water year 2019 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 2019. This October 2018 24-Month Study indicates that, consistent with Section 6.B.4 of the Interim Guidelines, an April adjustment to balancing releases is projected to occur and the contents of Lake Powell and Lake Mead will be balanced by the end of the water year, but not more than 9.0 maf and not less than 8.23 maf shall be released from Lake Powell. Based on the most probable inflow forecast, this October 24-Month Study projects a balancing release of 8.92 maf in water year 2019.

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 2018 and 2019.

The 2019 operational tier determinations will be documented in the 2019 AOP, which is currently in development.

The Interim Guidelines are available for download at: <https://www.usbr.gov/lc/region/programs/strategies/RecordofDecision.pdf>

The 2018 AOP is available for download at: <https://www.usbr.gov/lc/region/g4000/aop/AOP18.pdf>

The draft 2019 AOP is available for download at: [https://www.usbr.gov/uc/water/rsvrs/ops/aop/AOP19\\_Third\\_Consultation\\_draft.pdf](https://www.usbr.gov/uc/water/rsvrs/ops/aop/AOP19_Third_Consultation_draft.pdf)

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 September was 0.001 maf or <1 percent of the 30-year average from 1981 to 2010. The forecast for October unregulated inflow into Lake Powell is 0.250 maf or 49 percent of the 30-year average. The observed 2018 April through July unregulated inflow is 2.602 maf or 36 percent of average.

In this study, the calendar year 2018 diversion for Metropolitan Water District of Southern California (MWD) is forecasted to be 0.843 maf. The calendar year 2018 diversion for the Central Arizona Project (CAP) is forecasted to be 1.468 maf. Consumptive use for Nevada above Hoover (SNWP Use) is forecasted to be 0.280 maf for calendar year 2018.

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 Management Office, Bureau of Reclamation, Boulder City, Nevada. Questions regarding these historical energy numbers can be directed to Eric Carty at (702) 293-8129.

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## October 2018 24-Month Study

Most Probable Inflow\*

### Fontenelle Reservoir



	Regulated Inflow	Evap Losses	Power Release	Bypass Release	Total Release	Reservoir Elev End of Month	Live Storage
Date	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(Ft)	(1000 Ac-Ft)
* Oct 2017	73	1	80	0	80	6494.03	255
H Nov 2017	62	1	78	0	78	6491.65	238
I Dec 2017	46	1	72	8	80	6486.39	204
S Jan 2018	42	1	79	1	80	6479.83	165
T Feb 2018	38	0	72	0	72	6472.86	131
O Mar 2018	58	0	16	56	71	6469.78	117
R Apr 2018	101	1	83	4	87	6472.76	130
I May 2018	354	2	100	123	223	6494.84	260
C Jun 2018	404	2	101	269	370	6499.18	292
A Jul 2018	138	3	92	8	100	6503.79	327
L Aug 2018	50	2	75	1	76	6500.10	299
* Sep 2018	30	2	7	58	65	6495.11	262
<b>WY 2018</b>	<b>1397</b>	<b>15</b>	<b>856</b>	<b>528</b>	<b>1382</b>		
Oct 2018	50	1	66	0	66	6492.61	246
Nov 2018	47	1	64	0	64	6489.88	228
Dec 2018	36	1	66	0	66	6485.21	197
Jan 2019	35	1	66	0	66	6479.78	166
Feb 2019	32	0	60	0	60	6474.10	137
Mar 2019	48	0	65	0	65	6470.22	120
Apr 2019	78	1	73	0	73	6471.24	124
May 2019	130	1	83	0	83	6480.55	170
Jun 2019	270	2	102	49	151	6498.40	287
Jul 2019	175	3	102	30	132	6503.68	327
Aug 2019	66	2	69	0	69	6502.98	322
Sep 2019	43	2	65	0	65	6499.82	298
<b>WY 2019</b>	<b>1010</b>	<b>15</b>	<b>882</b>	<b>78</b>	<b>961</b>		
Oct 2019	47	1	68	0	68	6496.80	275
Nov 2019	41	1	65	0	65	6493.29	250
Dec 2019	32	1	68	0	68	6487.83	214
Jan 2020	30	1	68	0	68	6481.65	176
Feb 2020	28	1	63	0	63	6474.65	140
Mar 2020	53	0	80	0	80	6468.33	112
Apr 2020	85	1	77	0	77	6470.13	120
May 2020	164	1	98	12	111	6480.84	172
Jun 2020	299	2	102	70	173	6499.61	296
Jul 2020	178	3	102	40	141	6503.96	329
Aug 2020	77	2	102	9	111	6499.22	293
Sep 2020	46	2	103	34	137	6485.72	200
<b>WY 2020</b>	<b>1079</b>	<b>15</b>	<b>997</b>	<b>164</b>	<b>1161</b>		

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**October 2018 24-Month Study**

Most Probable Inflow\*

**Flaming Gorge Reservoir**



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)
* Oct 2017	88	95	8	107	0	107	140	6033.17	3473	151
H Nov 2017	82	98	4	139	0	139	138	6032.07	3430	166
I Dec 2017	52	86	2	174	0	174	135	6029.85	3343	197
S Jan 2018	52	90	2	175	0	175	131	6027.65	3259	208
T Feb 2018	57	91	2	155	1	157	129	6025.91	3194	197
O Mar 2018	86	99	3	106	0	106	128	6025.65	3184	178
R Apr 2018	121	108	5	101	0	101	128	6025.69	3186	277
I May 2018	422	290	8	163	6	169	133	6028.57	3294	572
C Jun 2018	435	401	11	125	0	125	143	6035.09	3550	278
A Jul 2018	140	102	14	120	0	120	142	6034.33	3519	139
L Aug 2018	42	68	13	124	0	124	139	6032.67	3453	137
* Sep 2018	17	52	11	119	0	119	136	6030.75	3378	127
<b>WY 2018</b>	<b>1594</b>	<b>1580</b>	<b>82</b>	<b>1608</b>	<b>7</b>	<b>1616</b>				<b>2626</b>
Oct 2018	51	67	7	97	0	97	134	6029.84	3343	113
Nov 2018	51	68	3	89	0	89	134	6029.22	3319	114
Dec 2018	36	66	2	123	0	123	131	6027.74	3263	146
Jan 2019	45	76	2	123	0	123	129	6026.49	3216	143
Feb 2019	45	73	2	111	0	111	128	6025.45	3177	130
Mar 2019	95	112	3	86	0	86	129	6026.04	3199	146
Apr 2019	125	120	5	83	0	83	130	6026.86	3229	253
May 2019	175	128	8	111	0	111	130	6027.11	3239	561
Jun 2019	315	196	10	167	0	167	131	6027.58	3257	592
Jul 2019	200	157	13	102	0	102	133	6028.63	3296	177
Aug 2019	76	79	13	105	0	105	131	6027.67	3260	123
Sep 2019	51	73	11	101	0	101	130	6026.68	3223	115
<b>WY 2019</b>	<b>1265</b>	<b>1216</b>	<b>79</b>	<b>1298</b>	<b>0</b>	<b>1298</b>				<b>2613</b>
Oct 2019	56	77	7	68	0	68	130	6026.74	3225	94
Nov 2019	50	74	3	71	0	71	130	6026.72	3224	100
Dec 2019	35	71	2	105	0	105	128	6025.80	3190	130
Jan 2020	40	78	2	105	0	105	127	6025.06	3162	130
Feb 2020	45	80	2	98	0	98	127	6024.55	3143	126
Mar 2020	102	130	3	80	0	80	128	6025.76	3188	157
Apr 2020	134	125	5	77	0	77	130	6026.87	3230	293
May 2020	245	192	8	180	0	180	130	6026.98	3234	712
Jun 2020	390	263	10	119	0	119	135	6030.35	3363	539
Jul 2020	210	174	14	135	0	135	136	6030.97	3387	235
Aug 2020	89	123	13	135	0	135	135	6030.34	3362	160
Sep 2020	55	146	11	135	0	135	135	6030.34	3362	154
<b>WY 2020</b>	<b>1450</b>	<b>1533</b>	<b>80</b>	<b>1308</b>	<b>0</b>	<b>1308</b>				<b>2830</b>

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**October 2018 24-Month Study**

Most Probable Inflow\*  
**Taylor Park Reservoir**



Date	Regulated Inflow (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)
* Oct 2017	8	8	9314.93	78
H Nov 2017	6	6	9315.09	78
I Dec 2017	4	6	9313.84	76
S Jan 2018	4	6	9312.64	74
T Feb 2018	4	6	9311.50	72
O Mar 2018	5	6	9310.51	71
R Apr 2018	8	7	9311.18	72
I May 2018	24	12	9318.33	84
C Jun 2018	13	15	9317.29	82
A Jul 2018	5	14	9311.71	73
L Aug 2018	3	13	9305.51	63
* Sep 2018	3	8	9301.71	58
<b>WY 2018 88 108</b>				
Oct 2018	4	3	9301.92	58
Nov 2018	4	3	9302.28	58
Dec 2018	3	3	9302.21	58
Jan 2019	3	3	9302.14	58
Feb 2019	2	3	9301.57	57
Mar 2019	3	3	9301.50	57
Apr 2019	5	3	9302.91	59
May 2019	21	10	9310.20	70
Jun 2019	34	15	9321.24	89
Jul 2019	14	18	9319.04	85
Aug 2019	7	15	9314.46	77
Sep 2019	6	13	9310.20	70
<b>WY 2019 105 92</b>				
Oct 2019	6	6	9310.09	70
Nov 2019	5	5	9309.93	70
Dec 2019	5	5	9309.60	69
Jan 2020	4	5	9309.06	68
Feb 2020	4	5	9308.35	67
Mar 2020	4	8	9306.02	64
Apr 2020	9	8	9306.52	65
May 2020	28	30	9305.38	63
Jun 2020	42	30	9312.84	75
Jul 2020	20	10	9318.73	85
Aug 2020	10	8	9320.00	87
Sep 2020	7	8	9319.66	86
<b>WY 2020 144 128</b>				

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**October 2018 24-Month Study**

Most Probable Inflow\*

**Blue Mesa Reservoir**



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)
* Oct 2017	37	37	1	102	0	102	7500.64	667
H Nov 2017	32	32	0	40	0	40	7499.68	659
I Dec 2017	25	27	0	93	0	93	7491.44	593
S Jan 2018	20	22	0	60	0	60	7486.51	554
T Feb 2018	23	25	0	32	0	32	7485.54	547
O Mar 2018	28	29	0	43	0	43	7483.73	534
R Apr 2018	48	47	1	82	0	82	7478.94	498
I May 2018	112	100	1	85	0	85	7480.90	513
C Jun 2018	56	57	1	98	0	98	7475.06	471
A Jul 2018	21	31	1	101	0	101	7464.43	399
L Aug 2018	19	28	1	93	0	93	7453.77	334
* Sep 2018	12	17	1	30	39	68	7444.44	282
<b>WY 2018</b>	<b>433</b>	<b>453</b>	<b>7</b>	<b>856</b>	<b>39</b>	<b>895</b>		
Oct 2018	20	20	0	47	0	47	7438.99	255
Nov 2018	20	20	0	18	0	18	7439.33	256
Dec 2018	17	17	0	25	0	25	7437.77	249
Jan 2019	15	15	0	30	0	30	7434.70	234
Feb 2019	13	14	0	25	0	25	7432.31	223
Mar 2019	24	24	0	26	0	26	7431.90	221
Apr 2019	54	52	0	48	0	48	7432.57	224
May 2019	163	152	1	160	0	160	7430.66	215
Jun 2019	230	211	1	87	0	87	7454.48	338
Jul 2019	88	92	1	69	0	69	7458.17	360
Aug 2019	46	54	1	75	0	75	7454.51	338
Sep 2019	35	42	1	65	0	65	7450.30	314
<b>WY 2019</b>	<b>725</b>	<b>712</b>	<b>5</b>	<b>675</b>	<b>0</b>	<b>675</b>		
Oct 2019	36	36	0	43	0	43	7448.96	307
Nov 2019	30	31	0	14	0	14	7451.92	323
Dec 2019	26	26	0	15	0	15	7453.89	335
Jan 2020	24	25	0	15	0	15	7455.67	345
Feb 2020	22	23	0	14	0	14	7457.29	355
Mar 2020	36	40	0	14	0	14	7461.37	380
Apr 2020	77	76	1	36	0	36	7467.56	419
May 2020	221	223	1	195	0	195	7471.50	446
Jun 2020	261	249	1	24	0	24	7501.06	670
Jul 2020	117	107	1	62	0	62	7506.19	713
Aug 2020	63	61	1	71	0	71	7504.84	702
Sep 2020	38	39	1	66	0	66	7501.50	674
<b>WY 2020</b>	<b>952</b>	<b>936</b>	<b>8</b>	<b>569</b>	<b>0</b>	<b>569</b>		

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**October 2018 24-Month Study**

Most Probable Inflow\*

**Morrow Point Reservoir**



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)
* Oct 2017	38	102	1	103	105	0	105	7153.17	112
H Nov 2017	34	40	1	41	42	0	42	7152.45	111
I Dec 2017	26	93	1	94	94	0	94	7152.45	111
S Jan 2018	22	60	2	62	62	0	63	7150.65	110
T Feb 2018	24	32	1	33	34	0	34	7149.19	108
O Mar 2018	29	43	1	44	49	0	49	7143.05	104
R Apr 2018	54	82	6	87	79	0	79	7154.30	112
I May 2018	121	85	8	94	94	0	94	7153.76	112
C Jun 2018	57	98	2	99	99	0	99	7154.16	112
A Jul 2018	22	101	1	102	101	0	101	7155.49	113
L Aug 2018	19	93	0	93	94	0	94	7153.96	112
* Sep 2018	14	68	2	70	84	0	84	7135.77	98
<b>WY 2018</b>	<b>460</b>	<b>895</b>	<b>27</b>	<b>922</b>	<b>935</b>	<b>0</b>	<b>937</b>		
Oct 2018	21	47	1	48	35	0	35	7153.73	112
Nov 2018	21	18	1	19	19	0	19	7153.73	112
Dec 2018	18	25	1	26	26	0	26	7153.73	112
Jan 2019	15	30	0	30	30	0	30	7153.73	112
Feb 2019	14	25	1	26	26	0	26	7153.73	112
Mar 2019	26	26	2	28	28	0	28	7153.73	112
Apr 2019	60	48	6	54	54	0	54	7153.73	112
May 2019	178	160	15	175	175	0	175	7153.73	112
Jun 2019	245	87	15	102	102	0	102	7153.73	112
Jul 2019	92	69	4	73	73	0	73	7153.73	112
Aug 2019	48	75	2	77	77	0	77	7153.73	112
Sep 2019	37	65	2	67	67	0	67	7153.73	112
<b>WY 2019</b>	<b>775</b>	<b>675</b>	<b>50</b>	<b>725</b>	<b>711</b>	<b>0</b>	<b>711</b>		
Oct 2019	38	43	2	46	46	0	46	7153.73	112
Nov 2019	32	14	2	16	16	0	16	7153.73	112
Dec 2019	28	15	2	17	17	0	17	7153.73	112
Jan 2020	27	15	2	17	17	0	17	7153.73	112
Feb 2020	25	14	3	16	16	0	16	7153.73	112
Mar 2020	40	14	4	18	18	0	18	7153.73	112
Apr 2020	88	36	11	47	47	0	47	7153.73	112
May 2020	247	195	26	221	221	0	221	7153.73	112
Jun 2020	281	24	20	44	44	0	44	7153.73	112
Jul 2020	123	62	6	69	69	0	69	7153.73	112
Aug 2020	67	71	3	75	75	0	75	7153.73	112
Sep 2020	41	66	3	68	68	0	68	7153.73	112
<b>WY 2020</b>	<b>1037</b>	<b>569</b>	<b>84</b>	<b>654</b>	<b>654</b>	<b>0</b>	<b>654</b>		

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## October 2018 24-Month Study

Most Probable Inflow\*

### Crystal Reservoir



	Unreg Inflow	Morrow Release	Side Inflow	Total Inflow	Power Release	Bypass Release	Total Release	Reservoir Elev End of Month	Live Storage	Tunnel Flow	Below Tunnel Flow
Date	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)
* Oct 2017	43	105	5	110	109	0	109	6751.20	16	55	53
H Nov 2017	38	42	4	46	46	0	46	6749.89	16	1	46
I Dec 2017	29	94	3	97	97	0	97	6749.23	16	1	98
S Jan 2018	25	63	3	66	62	4	66	6747.99	16	1	65
T Feb 2018	27	34	3	37	16	20	36	6750.06	16	0	34
O Mar 2018	33	49	4	52	53	0	53	6747.97	16	13	38
R Apr 2018	60	79	6	84	84	0	84	6749.35	16	53	28
I May 2018	129	94	9	102	102	0	102	6749.41	16	62	39
C Jun 2018	61	99	3	102	102	0	102	6750.48	16	63	42
A Jul 2018	24	101	2	103	103	0	103	6750.59	16	64	41
L Aug 2018	21	94	2	96	98	0	98	6744.83	15	65	36
* Sep 2018	15	84	1	85	87	0	87	6737.22	13	59	33
<b>WY 2018</b>	<b>505</b>	<b>937</b>	<b>45</b>	<b>982</b>	<b>959</b>	<b>26</b>	<b>985</b>			<b>438</b>	<b>553</b>
Oct 2018	23	35	2	37	32	0	32	6753.04	17	30	2
Nov 2018	23	19	2	21	21	0	21	6753.04	17	0	21
Dec 2018	20	26	2	28	28	0	28	6753.04	17	0	28
Jan 2019	16	30	1	31	31	0	31	6753.04	17	0	31
Feb 2019	16	26	2	28	28	0	28	6753.04	17	0	28
Mar 2019	29	28	3	31	31	0	31	6753.04	17	5	26
Apr 2019	68	54	8	62	62	0	62	6753.04	17	42	20
May 2019	200	175	22	197	134	63	197	6753.04	17	62	135
Jun 2019	275	102	30	132	130	2	132	6753.04	17	61	71
Jul 2019	102	73	10	83	83	0	83	6753.04	17	65	18
Aug 2019	54	77	6	83	83	0	83	6753.04	17	65	18
Sep 2019	44	67	7	74	74	0	74	6753.04	17	55	19
<b>WY 2019</b>	<b>870</b>	<b>711</b>	<b>95</b>	<b>806</b>	<b>737</b>	<b>65</b>	<b>802</b>			<b>385</b>	<b>417</b>
Oct 2019	45	46	7	52	52	0	52	6753.04	17	30	22
Nov 2019	37	16	5	21	21	0	21	6753.04	17	0	21
Dec 2019	32	17	5	22	22	0	22	6753.04	17	0	22
Jan 2020	31	17	5	22	22	0	22	6753.04	17	0	22
Feb 2020	29	16	4	20	20	0	20	6753.04	17	0	20
Mar 2020	46	18	6	25	25	0	25	6753.04	17	5	20
Apr 2020	101	47	12	60	60	0	60	6753.04	17	42	18
May 2020	281	221	34	256	134	121	256	6753.04	17	62	194
Jun 2020	315	44	34	78	78	0	78	6753.04	17	61	17
Jul 2020	138	69	14	83	83	0	83	6753.04	17	65	18
Aug 2020	75	75	8	83	83	0	83	6753.04	17	65	18
Sep 2020	47	68	6	74	74	0	74	6753.04	17	55	19
<b>WY 2020</b>	<b>1177</b>	<b>654</b>	<b>140</b>	<b>794</b>	<b>673</b>	<b>121</b>	<b>794</b>			<b>385</b>	<b>409</b>

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

October 2018 24-Month Study

Most Probable Inflow\*

**Vallecito Reservoir**



	<b>Regulated Inflow</b>	<b>Total Release</b>	<b>Reservoir Elev End of Month</b>	<b>Live Storage</b>
<b>Date</b>	<b>(1000 Ac-Ft)</b>	<b>(1000 Ac-Ft)</b>	<b>(Ft)</b>	<b>(1000 Ac-Ft)</b>
* Oct 2017	9	22	7638.22	61
H Nov 2017	5	2	7639.49	63
I Dec 2017	3	1	7640.27	65
S Jan 2018	3	0	7641.42	67
T Feb 2018	3	0	7642.57	70
O Mar 2018	4	0	7644.11	73
R Apr 2018	15	3	7649.29	85
I May 2018	30	31	7648.91	84
C Jun 2018	14	35	7639.22	63
A Jul 2018	8	35	7624.15	35
L Aug 2018	5	19	7613.87	22
* Sep 2018	3	4	7613.06	21
<hr/>				
<b>WY 2018</b>	<b>102</b>	<b>153</b>		
Oct 2018	6	2	7616.55	25
Nov 2018	4	1	7618.67	27
Dec 2018	3	0	7620.62	30
Jan 2019	2	0	7621.75	32
Feb 2019	2	0	7622.86	33
Mar 2019	4	0	7625.16	37
Apr 2019	12	0	7631.84	48
May 2019	44	31	7638.49	61
Jun 2019	60	43	7646.14	78
Jul 2019	24	42	7637.88	60
Aug 2019	16	38	7625.82	38
Sep 2019	13	30	7613.26	21
<hr/>				
<b>WY 2019</b>	<b>190</b>	<b>187</b>		
Oct 2019	13	17	7609.11	17
Nov 2019	8	2	7614.31	22
Dec 2019	6	2	7618.01	27
Jan 2020	5	2	7620.67	30
Feb 2020	5	2	7622.74	33
Mar 2020	9	2	7627.00	40
Apr 2020	23	2	7638.39	61
May 2020	71	31	7655.57	101
Jun 2020	70	46	7664.55	124
Jul 2020	29	41	7659.64	111
Aug 2020	20	38	7652.40	93
Sep 2020	17	29	7647.66	81
<hr/>				
<b>WY 2020</b>	<b>277</b>	<b>214</b>		

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## October 2018 24-Month Study

Most Probable Inflow\*  
Navajo Reservoir



	Mod Unreg	Azetea	Reg	Evap	NIIP	Total	Reservoir Elev	Live	Farmington
	Inflow	Tunnel Div	Inflow	Losses	Diversion	Release	End of Month	Storage	Flow
Date	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)
* Oct 2017	38	2	49	2	8	32	6055.89	1296	52
H Nov 2017	19	0	16	1	0	26	6055.04	1286	41
I Dec 2017	11	0	9	1	0	25	6053.69	1270	40
S Jan 2018	12	0	9	1	0	23	6052.47	1255	40
T Feb 2018	13	0	11	1	1	17	6051.73	1246	33
O Mar 2018	24	2	19	2	6	21	6050.92	1236	30
R Apr 2018	70	13	46	2	20	38	6049.73	1222	42
I May 2018	88	16	71	3	36	32	6049.80	1223	69
C Jun 2018	6	3	24	4	42	42	6044.23	1159	49
A Jul 2018	-9	0	18	4	42	51	6036.94	1080	53
L Aug 2018	-7	0	7	3	42	51	6028.27	991	48
* Sep 2018	2	0	3	2	27	46	6020.80	919	42
<b>WY 2018</b>	<b>268</b>	<b>36</b>	<b>283</b>	<b>24</b>	<b>224</b>	<b>405</b>			<b>540</b>
Oct 2018	17	0	13	1	6	24	6018.80	901	36
Nov 2018	15	0	12	1	0	20	6017.91	893	28
Dec 2018	14	0	11	0	0	20	6016.91	883	27
Jan 2019	14	0	12	0	0	21	6015.95	875	28
Feb 2019	18	0	16	1	0	16	6015.89	874	22
Mar 2019	48	0	44	1	5	16	6018.32	896	28
Apr 2019	92	2	78	2	21	17	6022.47	935	41
May 2019	185	9	163	3	36	22	6032.89	1038	117
Jun 2019	176	23	136	3	52	21	6038.60	1098	138
Jul 2019	42	22	38	4	57	22	6034.44	1054	71
Aug 2019	32	1	52	3	48	25	6032.14	1030	55
Sep 2019	32	1	48	2	26	21	6031.95	1028	44
<b>WY 2019</b>	<b>685</b>	<b>57</b>	<b>625</b>	<b>21</b>	<b>250</b>	<b>244</b>			<b>634</b>
Oct 2019	39	1	42	1	10	22	6032.85	1038	44
Nov 2019	31	1	24	1	0	21	6033.11	1040	37
Dec 2019	25	0	20	1	0	22	6032.95	1039	37
Jan 2020	22	0	18	1	0	22	6032.59	1035	35
Feb 2020	30	0	27	1	0	20	6033.20	1041	33
Mar 2020	92	0	85	1	6	22	6038.62	1098	44
Apr 2020	170	9	140	2	22	21	6047.25	1194	73
May 2020	277	21	216	3	36	22	6060.07	1349	168
Jun 2020	224	37	163	4	53	28	6066.02	1426	180
Jul 2020	66	29	50	5	57	31	6062.81	1384	98
Aug 2020	45	5	58	4	48	31	6060.95	1360	69
Sep 2020	43	2	52	3	26	30	6060.47	1354	62
<b>WY 2020</b>	<b>1064</b>	<b>104</b>	<b>897</b>	<b>26</b>	<b>257</b>	<b>289</b>			<b>880</b>

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## October 2018 24-Month Study

Most Probable Inflow\*

### Lake Powell



	Unreg Inflow	Regulated Inflow	Evap Losses	PowerPlant Release	Bypass Release	Total Release	Reservoir Elev End of Month	Bank Storage	EOM Storage	Lees Ferry Gage
Date	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)
* Oct 2017	449	533	39	640	0	640	3627.09	5216	14530	634
H Nov 2017	387	454	37	630	0	630	3625.29	5200	14332	619
I Dec 2017	299	483	29	740	0	740	3622.85	5179	14068	733
S Jan 2018	262	442	9	860	0	860	3619.14	5147	13672	861
T Feb 2018	269	387	10	730	0	730	3616.02	5121	13346	750
O Mar 2018	332	395	16	800	0	800	3612.23	5090	12956	835
R Apr 2018	382	419	25	705	0	705	3609.39	5067	12669	738
I May 2018	1214	968	29	705	0	705	3611.54	5085	12886	730
C Jun 2018	883	635	45	760	0	760	3609.98	5072	12728	781
A Jul 2018	123	252	53	860	0	860	3603.80	5023	12116	877
L Aug 2018	11	260	50	900	0	900	3597.12	4972	11477	911
* Sep 2018	1	230	45	670	0	670	3592.28	4936	11028	680
<b>WY 2018</b>	<b>4612</b>	<b>5459</b>	<b>386</b>	<b>9000</b>	<b>0</b>	<b>9000</b>				<b>9148</b>
Oct 2018	250	318	30	625	0	625	3588.84	4911	10716	631
Nov 2018	300	341	29	625	0	625	3585.59	4888	10426	625
Dec 2018	250	351	22	750	0	750	3581.12	4857	10035	755
Jan 2019	260	359	7	850	0	850	3575.69	4820	9575	861
Feb 2019	270	346	7	760	0	760	3570.97	4789	9185	764
Mar 2019	460	426	11	790	0	790	3566.64	4761	8838	795
Apr 2019	690	591	18	700	0	700	3565.14	4751	8720	708
May 2019	1500	1314	21	700	0	700	3571.99	4795	9269	706
Jun 2019	2150	1779	35	740	0	740	3582.99	4870	10198	748
Jul 2019	760	701	44	840	0	840	3581.03	4856	10028	859
Aug 2019	370	470	43	890	0	890	3575.99	4822	9600	908
Sep 2019	340	437	39	652	0	652	3573.15	4803	9364	663
<b>WY 2019</b>	<b>7600</b>	<b>7432</b>	<b>306</b>	<b>8922</b>	<b>0</b>	<b>8922</b>				<b>9022</b>
Oct 2019	455	468	27	480	0	480	3572.71	4800	9328	486
Nov 2019	447	443	26	500	0	500	3571.78	4794	9251	500
Dec 2019	363	418	20	600	0	600	3569.46	4779	9064	605
Jan 2020	361	415	6	720	0	720	3565.85	4756	8776	731
Feb 2020	393	428	6	640	0	640	3563.26	4740	8574	644
Mar 2020	665	556	11	675	0	675	3561.71	4730	8454	680
Apr 2020	1056	839	17	600	0	600	3564.36	4746	8659	608
May 2020	2343	2054	22	600	0	600	3580.53	4853	9985	606
Jun 2020	2666	2052	38	630	0	630	3594.86	4955	11267	638
Jul 2020	1091	1012	49	710	0	710	3597.37	4974	11501	729
Aug 2020	500	593	49	760	0	760	3595.23	4958	11300	778
Sep 2020	408	530	45	565	0	565	3594.43	4952	11227	576
<b>WY 2020</b>	<b>10747</b>	<b>9806</b>	<b>315</b>	<b>7480</b>	<b>0</b>	<b>7480</b>				<b>7580</b>

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## October 2018 24-Month Study

Most Probable Inflow\*

### Hoover Dam - Lake Mead



	Glen Release	Side Inflow	Evap Losses	Total Release	Total Release	SNWP Use	Downstream Requirements	Bank Storage	Reservoir Elev End of Month	EOM Storage
Date	(1000 Ac-Ft)	Glen to Hoover (1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 CFS)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(Ft)	(1000 Ac-Ft)
* Oct 2017	640	44	43	596	9.7	23	595	663	1082.30	10202
H Nov 2017	630	40	42	731	12.3	16	731	656	1080.95	10090
I Dec 2017	740	43	37	594	9.7	12	593	664	1082.52	10221
S Jan 2018	860	78	30	449	7.3	10	448	692	1087.50	10642
T Feb 2018	730	60	28	687	12.4	10	693	696	1088.21	10703
O Mar 2018	800	70	32	833	13.5	14	832	695	1088.11	10694
R Apr 2018	705	43	39	1015	17.1	21	1015	675	1084.49	10387
I May 2018	705	21	44	1055	17.1	27	1054	651	1080.00	10011
C Jun 2018	760	27	53	986	16.6	28	985	634	1076.81	9748
A Jul 2018	860	106	65	820	13.3	27	819	637	1077.43	9799
L Aug 2018	900	74	70	749	12.2	28	748	645	1078.88	9918
* Sep 2018	670	86	58	725	12.2	26	724	642	1078.29	9870
<b>WY 2018</b>	<b>9000</b>	<b>692</b>	<b>541</b>	<b>9240</b>		<b>243</b>	<b>9237</b>			
Oct 2018	625	69	42	659	10.7	37	659	639	1077.79	9829
Nov 2018	625	61	42	703	11.8	30	703	633	1076.77	9745
Dec 2018	750	50	36	472	7.7	22	472	650	1079.83	9997
Jan 2019	850	78	30	610	9.9	12	610	667	1082.94	10256
Feb 2019	760	93	28	684	12.3	14	684	674	1084.36	10376
Mar 2019	790	56	31	1054	17.1	21	1054	659	1081.45	10132
Apr 2019	700	48	38	1058	17.8	23	1058	636	1077.23	9783
May 2019	700	31	43	966	15.7	27	966	617	1073.71	9496
Jun 2019	740	12	51	907	15.2	33	907	603	1070.91	9272
Jul 2019	840	81	64	825	13.4	36	825	602	1070.87	9269
Aug 2019	890	112	68	739	12.0	34	739	612	1072.75	9419
Sep 2019	652	105	56	733	12.3	27	733	609	1072.07	9364
<b>WY 2019</b>	<b>8922</b>	<b>796</b>	<b>529</b>	<b>9411</b>		<b>317</b>	<b>9411</b>			
Oct 2019	480	69	41	509	8.3	28	509	607	1071.72	9337
Nov 2019	500	61	41	669	11.2	21	669	597	1069.72	9178
Dec 2019	600	50	35	593	9.6	14	593	597	1069.82	9185
Jan 2020	720	78	29	607	9.9	14	607	606	1071.57	9324
Feb 2020	640	93	26	663	11.5	17	663	608	1071.88	9349
Mar 2020	675	56	29	988	16.1	22	988	589	1068.24	9060
Apr 2020	600	48	36	997	16.8	25	997	564	1063.30	8675
May 2020	600	31	40	917	14.9	31	917	542	1058.90	8340
Jun 2020	630	12	48	929	15.6	31	929	520	1054.30	7997
Jul 2020	710	81	59	813	13.2	31	813	513	1052.88	7892
Aug 2020	760	112	62	773	12.6	28	773	514	1052.99	7900
Sep 2020	565	105	51	701	11.8	25	701	507	1051.61	7800
<b>WY 2020</b>	<b>7480</b>	<b>796</b>	<b>497</b>	<b>9160</b>		<b>285</b>	<b>9160</b>			

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## October 2018 24-Month Study

Most Probable Inflow\*

### Davis Dam - Lake Mohave



	Hoover Release	Side Inflow	Evap Losses	Power Release	Spill Release	Total Release	Total Release	Reservoir Elev	EOM Storage
Date	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 Ac-Ft)	(1000 CFS)	End of Month (Ft)	(1000 Ac-Ft)
* Oct 2017	596	-2	15	671	0	671	10.9	636.00	1512
H Nov 2017	731	-18	11	595	0	595	10.0	640.07	1619
I Dec 2017	594	-16	9	552	0	552	9.0	640.68	1636
S Jan 2018	449	2	10	437	0	437	7.1		1641
T Feb 2018	687	-4	10	611	0	611	11.0	643.18	1704
O Mar 2018	833	-1	13	836	0	836	13.6	642.57	1687
R Apr 2018	1015	-3	17	1001	0	1001	16.8	642.40	1682
I May 2018	1055	-11	22	1001	0	1001	16.3	643.17	1703
C Jun 2018	986	-21	26	909	0	909	15.3	644.29	1734
A Jul 2018	820	-6	26	827	0	827	13.4	642.91	1696
L Aug 2018	749	-13	23	730	0	730	11.9	642.29	1679
* Sep 2018	725	-11	18	814	0	814	13.7	637.87	1561
<b>WY 2018</b>	<b>9240</b>	<b>-103</b>	<b>198</b>	<b>8981</b>	<b>0</b>	<b>8981</b>			
Oct 2018	659	-4	15	690	0	690	11.2	636.00	1512
Nov 2018	703	-12	10	627	0	627	10.5	638.00	1564
Dec 2018	472	-12	9	425	0	425	6.9	639.01	1591
Jan 2019	610	-19	10	506	0	506	8.2	641.80	1666
Feb 2019	684	-15	10	659	0	659	11.9	641.80	1666
Mar 2019	1054	-17	13	990	0	990	16.1	643.05	1700
Apr 2019	1058	-20	17	1023	0	1023	17.2	643.00	1699
May 2019	966	-12	22	932	0	932	15.2	643.00	1699
Jun 2019	907	-15	25	866	0	866	14.6	643.00	1699
Jul 2019	825	-15	25	811	0	811	13.2	642.00	1671
Aug 2019	739	-12	23	705	0	705	11.5	642.00	1671
Sep 2019	733	-12	18	756	0	756	12.7	640.01	1618
<b>WY 2019</b>	<b>9411</b>	<b>-166</b>	<b>198</b>	<b>8989</b>	<b>0</b>	<b>8989</b>			
Oct 2019	509	-4	15	674	0	674	11.0	633.00	1434
Nov 2019	669	-12	10	595	0	595	10.0	635.00	1486
Dec 2019	593	-12	9	475	0	475	7.7	638.71	1583
Jan 2020	607	-19	10	496	0	496	8.1	641.80	1666
Feb 2020	663	-15	10	639	0	639	11.1	641.80	1666
Mar 2020	988	-17	13	923	0	923	15.0	643.05	1700
Apr 2020	997	-20	17	962	0	962	16.2	643.00	1699
May 2020	917	-12	22	882	0	882	14.3	643.00	1699
Jun 2020	929	-15	25	889	0	889	14.9	643.00	1699
Jul 2020	813	-15	25	800	0	800	13.0	642.00	1671
Aug 2020	773	-12	23	739	0	739	12.0	642.00	1671
Sep 2020	701	-12	18	724	0	724	12.2	640.01	1618
<b>WY 2020</b>	<b>9160</b>	<b>-166</b>	<b>197</b>	<b>8796</b>	<b>0</b>	<b>8796</b>			

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**October 2018 24-Month Study**

Most Probable Inflow\*

**Parker Dam - Lake Havasu**



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)
* Oct 2017	671	9	12	478	7.8	69	131	446.27	548	65	1.1
H Nov 2017	595	12	9	349	5.9	89	127	447.86	577	99	1.7
I Dec 2017	552	17	7	335	5.5	100	144	446.80	557	109	1.8
S Jan 2018	437	3	6	329	5.3	29	90	445.81	539	125	2.0
T Feb 2018	611	3	8	429	7.7	12	109	448.52	590	145	2.6
O Mar 2018	836	-3	9	637	10.4	61	139	447.46	570	195	3.2
R Apr 2018	1001	-8	11	735	12.4	75	168	447.13	564	175	2.9
I May 2018	1001	10	13	697	11.3	87	178	448.51	590	124	2.0
C Jun 2018	909	6	15	712	12.0	91	88	448.43	588	136	2.3
A Jul 2018	827	20	17	656	10.7	101	72	448.00	580	133	2.2
L Aug 2018	730	21	17	611	9.9	99	22	447.53	571	104	1.7
* Sep 2018	814	10	15	512	8.6	95	164	448.95	598	94	1.6
<b>WY 2018</b>	<b>8981</b>	<b>100</b>	<b>139</b>	<b>6479</b>		<b>910</b>	<b>1431</b>			<b>1504</b>	
Oct 2018	690	23	12	461	7.5	85	175	447.50	571	63	1.0
Nov 2018	627	16	9	407	6.8	82	139	447.50	571	97	1.6
Dec 2018	425	18	7	301	4.9	26	124	446.50	552	104	1.7
Jan 2019	506	21	6	318	5.2	78	120	446.50	552	138	2.2
Feb 2019	659	11	8	485	8.7	51	120	446.50	552	160	2.9
Mar 2019	990	7	9	718	11.7	69	188	446.70	555	198	3.2
Apr 2019	1023	16	11	710	11.9	88	183	448.70	593	175	2.9
May 2019	932	15	13	642	10.4	90	188	448.70	593	104	1.7
Jun 2019	866	13	16	683	11.5	88	78	448.70	593	105	1.8
Jul 2019	811	21	17	647	10.5	90	78	448.00	580	111	1.8
Aug 2019	705	23	17	589	9.6	90	29	447.50	571	100	1.6
Sep 2019	756	17	15	509	8.6	88	152	447.50	570	89	1.5
<b>WY 2019</b>	<b>8989</b>	<b>200</b>	<b>139</b>	<b>6471</b>		<b>927</b>	<b>1574</b>			<b>1444</b>	
Oct 2019	674	23	12	490	8.0	48	140	447.50	571	74	1.2
Nov 2019	595	16	9	408	6.9	48	140	447.50	571	116	1.9
Dec 2019	475	18	7	313	5.1	48	140	446.50	552	131	2.1
Jan 2020	496	21	6	313	5.1	87	106	446.50	552	134	2.2
Feb 2020	639	11	8	479	8.3	57	100	446.50	552	155	2.7
Mar 2020	923	7	9	708	11.5	77	125	446.70	555	191	3.1
Apr 2020	962	16	11	699	11.7	97	125	448.70	593	168	2.8
May 2020	882	15	13	635	10.3	99	137	448.70	593	100	1.6
Jun 2020	889	13	16	675	11.3	97	100	448.70	593	102	1.7
Jul 2020	800	21	17	642	10.4	99	62	448.00	580	107	1.7
Aug 2020	739	23	17	587	9.5	99	56	447.50	571	97	1.6
Sep 2020	724	17	15	507	8.5	97	112	447.50	570	86	1.5
<b>WY 2020</b>	<b>8796</b>	<b>200</b>	<b>139</b>	<b>6455</b>		<b>955</b>	<b>1342</b>			<b>1460</b>	

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**October 2018 24-Month Study**

Most Probable Inflow\*

**Hoover Dam - Lake Mead**



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
* Oct 2017	596	9.7	1082.30	10202	21	441.43	976.1	229.0	66	384.2
H Nov 2017	731	12.3	1080.95	10090	-113	435.01	996.0	287.9	63	393.6
I Dec 2017	594	9.7	1082.52	10221	131	439.05	821.0	235.7	52	396.6
S Jan 2018	449	7.3	1087.50	10642	421	442.14	834.0	176.5	51	392.9
T Feb 2018	687	12.4	1088.21	10703	61	441.97	1220.1	275.0	75	400.3
O Mar 2018	833	13.5	1088.11	10694	-9	442.23	1005.9	333.9	62	400.8
R Apr 2018	1015	17.1	1084.49	10387	-308	437.15	880.9	406.2	55	400.0
I May 2018	1055	17.1	1080.00	10011	-376	432.39	1385.9	412.1	88	390.8
C Jun 2018	986	16.6	1076.81	9748	-263	428.91	1552.0	378.6	100	384.1
A Jul 2018	820	13.3	1077.43	9799	51	432.34	1552.0	313.2	100	382.0
L Aug 2018	749	12.2	1078.88	9918	119	435.01	1562.0	287.4	100	383.8
* Sep 2018	725	12.2	1078.29	9870	-49	434.15	1562.0	278.7	100	384.7
<b>WY 2018</b>	<b>9240</b>							<b>3614.3</b>		
Oct 2018	659	10.7	1077.79	9829	-41	429.95	1406.1	252.6	87	383.0
Nov 2018	703	11.8	1076.77	9745	-83	431.84	1005.9	277.5	62	394.7
Dec 2018	472	7.7	1079.83	9997	252	432.55	880.9	185.5	55	392.7
Jan 2019	610	9.9	1082.94	10256	259	429.59	1576.0	234.3	100	384.1
Feb 2019	684	12.3	1084.36	10376	119	430.92	1552.0	265.7	100	388.6
Mar 2019	1054	17.1	1081.45	10132	-244	429.78	1552.0	408.1	100	387.1
Apr 2019	1058	17.8	1077.23	9783	-349	425.85	1562.0	407.8	100	385.4
May 2019	966	15.7	1073.71	9496	-287	422.03	1562.0	369.7	100	382.7
Jun 2019	907	15.2	1070.91	9272	-225	422.26	1067.9	352.3	68	388.6
Jul 2019	825	13.4	1070.87	9269	-3	421.97	945.0	322.8	61	391.4
Aug 2019	739	12.0	1072.75	9419	151	423.22	950.0	286.9	61	388.0
Sep 2019	733	12.3	1072.07	9364	-55	424.26	999.0	285.4	63	389.4
<b>WY 2019</b>	<b>9411</b>							<b>3648.7</b>		
Oct 2019	509	8.3	1071.72	9337	-28	426.03	999.0	198.2	63	389.1
Nov 2019	669	11.2	1069.72	9178	-159	427.09	1000.0	259.1	63	387.6
Dec 2019	593	9.6	1069.82	9185	7	424.68	925.9	228.1	60	384.7
Jan 2020	607	9.9	1071.57	9324	139	423.36	913.0	233.6	60	384.6
Feb 2020	663	11.5	1071.88	9349	25	419.10	1512.0	249.1	100	375.6
Mar 2020	988	16.1	1068.24	9060	-289	420.92	944.8	382.2	63	387.0
Apr 2020	997	16.8	1063.30	8675	-385	416.67	871.6	386.4	60	387.4
May 2020	917	14.9	1058.90	8340	-335	412.03	858.0	349.4	60	381.0
Jun 2020	929	15.6	1054.30	7997	-343	403.35	1409.7	338.6	100	364.4
Jul 2020	813	13.2	1052.88	7892	-105	400.69	1401.7	295.5	100	363.5
Aug 2020	773	12.6	1052.99	7900	8	400.37	1402.3	279.6	100	361.5
Sep 2020	701	11.8	1051.61	7800	-100	400.39	1394.5	251.7	100	359.2
<b>WY 2020</b>	<b>9160</b>							<b>3451.6</b>		

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**October 2018 24-Month Study**

Most Probable Inflow\*

**Davis Dam - Lake Mohave**



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
* Oct 2017	671	10.9	636.00	1512	-91	134.26	179.3	81.3	70	121.3
H Nov 2017	595	10.0	640.07	1619	107	138.81	151.3	73.1	59	122.7
I Dec 2017	552	9.0	640.68	1636	17	139.44	131.6	69.5	52	126.0
S Jan 2018	437	7.1		1641	5	141.78	159.6	55.0	63	125.9
T Feb 2018	611	11.0	643.18	1704	63	142.18	162.1	76.6	64	125.4
O Mar 2018	836	13.6	642.57	1687	-17	139.99	189.2	105.4	74	126.1
R Apr 2018	1001	16.8	642.40	1682	-5	141.14	207.4	125.1	81	125.0
I May 2018	1001	16.3	643.17	1703	21	141.89	204.0	126.2	80	126.1
C Jun 2018	909	15.3	644.29	1734	31	143.00	255.0	115.0	100	126.6
A Jul 2018	827	13.4	642.91	1696	-38	141.79	255.0	105.3	100	127.4
L Aug 2018	730	11.9	642.29	1679	-17	141.02	255.0	92.7	100	127.1
* Sep 2018	814	13.7	637.87	1561	-119	136.59	255.0	101.2	100	124.3
<b>WY 2018</b>	<b>8981</b>							<b>1126.3</b>		
Oct 2018	690	11.2	636.00	1512	-49	131.78	184.3	83.5	72	121.1
Nov 2018	627	10.5	638.00	1564	52	132.93	153.0	76.2	60	121.4
Dec 2018	425	6.9	639.01	1591	27	132.69	207.3	52.8	81	124.1
Jan 2019	506	8.2	641.80	1666	75	133.31	255.0	63.4	100	125.3
Feb 2019	659	11.9	641.80	1666	0	134.78	255.0	82.5	100	125.2
Mar 2019	990	16.1	643.05	1700	34	135.44	255.0	123.1	100	124.4
Apr 2019	1023	17.2	643.00	1699	-1	136.07	255.0	127.5	100	124.6
May 2019	932	15.2	643.00	1699	0	136.04	255.0	116.7	100	125.2
Jun 2019	866	14.6	643.00	1699	0	136.04	255.0	108.6	100	125.4
Jul 2019	811	13.2	642.00	1671	-27	135.51	255.0	101.8	100	125.4
Aug 2019	705	11.5	642.00	1671	0	134.99	255.0	88.5	100	125.5
Sep 2019	756	12.7	640.01	1618	-54	133.94	255.0	93.9	100	124.2
<b>WY 2019</b>	<b>8989</b>							<b>1118.4</b>		
Oct 2019	674	11.0	633.00	1434	-183	131.28	185.9	81.4	73	120.8
Nov 2019	595	10.0	635.00	1486	51	129.81	153.0	70.7	60	118.9
Dec 2019	475	7.7	638.71	1583	97	131.17	200.7	58.1	79	122.3
Jan 2020	496	8.1	641.80	1666	83	133.16	255.0	62.1	100	125.3
Feb 2020	639	11.1	641.80	1666	0	134.78	255.0	80.1	100	125.5
Mar 2020	923	15.0	643.05	1700	34	135.44	255.0	115.2	100	124.8
Apr 2020	962	16.2	643.00	1699	-1	136.07	255.0	120.2	100	124.9
May 2020	882	14.3	643.00	1699	0	136.04	255.0	110.7	100	125.5
Jun 2020	889	14.9	643.00	1699	0	136.04	255.0	111.3	100	125.3
Jul 2020	800	13.0	642.00	1671	-27	135.51	255.0	100.3	100	125.5
Aug 2020	739	12.0	642.00	1671	0	134.99	255.0	92.6	100	125.4
Sep 2020	724	12.2	640.01	1618	-54	133.94	255.0	90.0	100	124.4
<b>WY 2020</b>	<b>8796</b>							<b>1092.8</b>		

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**October 2018 24-Month Study**

Most Probable Inflow\*

**Parker Dam - Lake Havasu**



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
* Oct 2017	478	7.8	446.27	548	-17	80.03	92.9	33.6	77	70.4
H Nov 2017	349	5.9	447.86	577	30	81.65	90.0	24.1	75	69.2
I Dec 2017	335	5.5	446.80	557	-20	81.55	92.9	22.5	77	67.0
S Jan 2018	329	5.3	445.81	539	-18	80.05	117.1	22.8	98	69.2
T Feb 2018	429	7.7	448.52	590	50	81.30	92.1	30.3	77	70.6
O Mar 2018	638	10.4	447.46	570	-20	81.79	102.6	44.9	85	70.4
R Apr 2018	735	12.4	447.13	564	-6	81.11	120.0	50.8	100	69.1
I May 2018	697	11.3	448.51	590	26	82.36	120.0	48.5	100	69.6
C Jun 2018	712	12.0	448.43	588	-1	80.33	120.0	49.7	100	69.9
A Jul 2018	656	10.7	448.00	580	-8	81.97	120.0	46.0	100	70.2
L Aug 2018	611	9.9	447.53	571	-9	79.27	120.0	42.7	100	69.9
* Sep 2018	512	8.6	448.95	598	27	83.02	120.0	35.9	100	70.1
<b>WY 2018</b>	<b>6479</b>							<b>451.7</b>		
Oct 2018	461	7.5	447.50	571	-28	77.00	90.0	30.6	75	66.4
Nov 2018	407	6.8	447.50	571	0	76.19	92.0	26.7	77	65.5
Dec 2018	301	4.9	446.50	552	-19	74.69	113.2	18.9	94	63.0
Jan 2019	318	5.2	446.50	552	0	75.27	91.0	20.3	76	63.8
Feb 2019	485	8.7	446.50	552	0	75.21	92.1	31.8	77	65.5
Mar 2019	718	11.7	446.70	555	4	74.05	119.0	46.7	99	65.0
Apr 2019	710	11.9	448.70	593	38	75.08	120.0	46.7	100	65.8
May 2019	642	10.4	448.70	593	0	76.05	120.0	42.6	100	66.3
Jun 2019	683	11.5	448.70	593	0	76.05	120.0	45.4	100	66.5
Jul 2019	647	10.5	448.00	580	-13	75.71	120.0	42.7	100	66.1
Aug 2019	589	9.6	447.50	571	-9	75.13	120.0	38.5	100	65.4
Sep 2019	509	8.6	447.50	570	0	74.89	120.0	33.1	100	65.0
<b>WY 2019</b>	<b>6471</b>							<b>424.1</b>		
Oct 2019	490	8.0	447.50	571	0	76.29	90.0	32.4	75	66.1
Nov 2019	408	6.9	447.50	571	0	76.14	93.0	26.7	78	65.5
Dec 2019	313	5.1	446.50	552	-19	74.65	114.2	19.7	95	63.2
Jan 2020	313	5.1	446.50	552	0	75.07	94.8	19.9	79	63.6
Feb 2020	479	8.3	446.50	552	0	75.21	92.1	31.3	77	65.4
Mar 2020	708	11.5	446.70	555	4	74.01	120.0	45.9	100	64.9
Apr 2020	699	11.7	448.70	593	38	75.08	120.0	46.0	100	65.8
May 2020	635	10.3	448.70	593	0	76.05	120.0	42.1	100	66.3
Jun 2020	675	11.3	448.70	593	0	76.05	120.0	44.9	100	66.5
Jul 2020	642	10.4	448.00	580	-13	75.71	120.0	42.4	100	66.0
Aug 2020	587	9.5	447.50	571	-9	75.13	120.0	38.4	100	65.4
Sep 2020	507	8.5	447.50	570	0	74.89	120.0	32.9	100	65.0
<b>WY 2020</b>	<b>6455</b>							<b>422.7</b>		

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## October 2018 24-Month Study

Most Probable Inflow\*

### Upper Basin Power



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
* Oct 2017	294	42	30	37	21	7
H Nov 2017	288	55	12	14	8	7
I Dec 2017	339	68	27	33	19	6
S Jan 2018	394	68	17	21	12	6
T Feb 2018	335	60	9	12	3	5
O Mar 2018	364	41	12	16	9	1
<b>Winter 2018</b>	<b>2013</b>	<b>334</b>	<b>107</b>	<b>133</b>	<b>71</b>	<b>31</b>
R Apr 2018	318	39	23	27	16	5
I May 2018	318	63	23	33	20	7
C Jun 2018	343	50	27	34	20	8
A Jul 2018	384	48	27	36	20	8
L Aug 2018	393	50	24	33	19	7
* Sep 2018	288	47	8	29	16	1
<b>Summer 2018</b>	<b>2045</b>	<b>297</b>	<b>133</b>	<b>193</b>	<b>111</b>	<b>36</b>
Oct 2018	242	36	12	12	5	6
Nov 2018	239	33	4	7	4	5
Dec 2018	286	45	6	9	5	5
Jan 2019	321	45	7	11	5	5
Feb 2019	283	41	6	9	5	4
Mar 2019	292	31	6	10	5	4
<b>Winter 2019</b>	<b>1664</b>	<b>230</b>	<b>42</b>	<b>58</b>	<b>29</b>	<b>30</b>
Apr 2019	256	30	12	20	11	5
May 2019	257	40	39	63	23	6
Jun 2019	277	61	22	37	22	8
Jul 2019	318	37	18	26	14	10
Aug 2019	334	38	20	28	14	7
Sep 2019	244	37	17	24	13	6
<b>Summer 2019</b>	<b>1687</b>	<b>245</b>	<b>129</b>	<b>198</b>	<b>98</b>	<b>41</b>
Oct 2019	179	25	11	16	9	6
Nov 2019	185	26	4	6	4	6
Dec 2019	222	38	4	6	4	6
Jan 2020	265	38	4	6	4	5
Feb 2020	234	36	4	6	3	5
Mar 2020	245	29	4	7	4	5
<b>Winter 2020</b>	<b>1331</b>	<b>192</b>	<b>30</b>	<b>47</b>	<b>28</b>	<b>33</b>
Apr 2020	218	28	10	17	10	5
May 2020	222	66	54	80	23	7
Jun 2020	242	44	7	16	13	9
Jul 2020	277	50	19	25	14	10
Aug 2020	297	50	22	27	14	10
Sep 2020	221	50	20	25	13	9
<b>Summer 2020</b>	<b>1256</b>	<b>237</b>	<b>112</b>	<b>164</b>	<b>76</b>	<b>40</b>

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## October 2018 24-Month Study

Most Probable Inflow\*

### Flood Control Criteria

### Beginning of Month Conditions



Date	Flaming	Blue		Lake	Upper Basin	Lake	Total	Total	Flaming	Blue	Tot or Max	Lake	Lake	BOM Space		Mead	Mead	Sys	
	Gorge	Mesa	Navajo	Powell	Total	Mead			KAF	KAF	Gorge	Mesa	Navajo	Allow	Powell	Mead	Total	Required	Sched Rel
	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF
<b>****PREDICTED SPACE****</b>								<b>****CREDITABLE SPACE****</b>											
Oct 2018	453	547	777	13294	15071	17507	32578		453	547	777	1777	13294	17507	32578	3040	659	0	27.6
Nov 2018	506	575	795	13606	15482	17548	33031		506	575	795	1876	13606	17548	33031	3810	703	0	27.2
Dec 2018	547	573	803	13896	15820	17632	33452		547	573	803	1924	13896	17632	33452	4580	472	0	27.0
Jan 2019	634	581	813	14287	16314	17380	33694		634	581	813	2028	14287	17380	33694	5350	610	0	26.7
<b>****EFFECTIVE SPACE****</b>								<b>****EFFECTIVE SPACE****</b>											
Jan 2019	634	581	813	14287	16314	17380	33694		217	142	355	713	14287	17380	32380	5350	610	0	26.7
Feb 2019	713	596	821	14747	16877	17121	33997		295	157	363	814	14747	17121	32682	1500	684	0	26.4
Mar 2019	780	607	822	15137	17345	17001	34346		361	168	363	892	15137	17001	33030	1500	1054	0	25.9
Apr 2019	775	609	800	15484	17668	17245	34913		352	170	334	856	15484	17245	33586	1500	1058	0	25.5
May 2019	740	606	761	15602	17708	17594	35302		310	165	273	748	15602	17594	33943	1500	966	0	25.9
Jun 2019	685	614	658	15053	17010	17881	34891		246	162	131	539	15053	17881	33473	1500	907	0	27.0
Jul 2019	550	491	598	14124	15764	18105	33869		98	19	16	133	14124	18105	32362	1500	825	0	26.8
<b>****CREDITABLE SPACE****</b>								<b>****CREDITABLE SPACE****</b>											
Aug 2019	470	469	642	14294	15875	18108	33984		470	469	642	1582	14294	18108	33984	1500	739	0	26.4
Sep 2019	512	491	666	14722	16391	17958	34349		512	491	666	1669	14722	17958	34349	2270	733	0	26.0
Oct 2019	574	515	668	14958	16714	18013	34727		574	515	668	1757	14958	18013	34727	3040	509	0	25.7
Nov 2019	594	523	658	14994	16769	18040	34809		594	523	658	1775	14994	18040	34809	3810	669	0	25.5
Dec 2019	619	506	656	15071	16852	18199	35051		619	506	656	1781	15071	18199	35051	4580	593	0	25.4
Jan 2020	690	495	657	15258	17100	18192	35292		690	495	657	1842	15258	18192	35292	5350	607	0	25.2
<b>****EFFECTIVE SPACE****</b>								<b>****EFFECTIVE SPACE****</b>											
Jan 2020	690	495	657	15258	17100	18192	35292		372	399	535	1306	15258	18192	34756	5350	607	0	25.2
Feb 2020	756	484	661	15546	17447	18053	35500		436	389	539	1364	15546	18053	34962	1500	663	0	25.0
Mar 2020	811	475	655	15748	17689	18028	35716		489	380	532	1401	15748	18028	35177	1500	988	0	24.7
Apr 2020	793	450	598	15868	17709	18317	36026		467	359	468	1293	15868	18317	35478	1500	997	0	24.8
May 2020	744	410	502	15663	17319	18702	36021		411	317	348	1076	15663	18702	35441	1500	917	0	26.0
Jun 2020	688	384	347	14337	15756	19037	34793		346	292	154	791	14337	19037	34165	1500	929	0	27.5
Jul 2020	436	159	270	13055	13920	19380	33300		75	55	19	148	13055	19380	32584	1500	813	0	27.7
<b>****CREDITABLE SPACE****</b>								<b>****CREDITABLE SPACE****</b>											
Aug 2020	378	116	312	12821	13628	19485	33113		378	116	312	807	12821	19485	33113	1500	773	0	27.4
Sep 2020	439	128	336	13022	13924	19477	33401		439	128	336	903	13022	19477	33401	2270	701	0	27.0

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