

To: All Annual Operating Plan Recipients

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The operation of Lake Powell and Lake Mead in this December 2016 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 2016 Annual Operating Plan (AOP) and the draft 2017 AOP. Pursuant to the Interim Guidelines, the August 2016 24-Month Study projections of the January 1, 2017, system storage and reservoir water surface elevations set the operational tier for the coordinated operation of Lake Powell and Lake Mead during 2017.

Consistent with Section 6.B of the Interim Guidelines, Lake Powell's operations in water year 2017 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 2017. This December 2016 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 Lake Powell is projected to release 9.0 maf in water year 2017.

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 2016 and 2017.

The 2017 operational tier determinations will be documented in the 2017 AOP, which is currently in the final stages of development.

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

The 2016 AOP is available for download at: <https://www.usbr.gov/lc/region/g4000/aop/AOP16.pdf>.

The draft 2017 AOP is available for download at [https://www.usbr.gov/uc/water/rsvrs/ops/aop/2017AOP\\_2016-09-02\\_Consultation-3.pdf](https://www.usbr.gov/uc/water/rsvrs/ops/aop/2017AOP_2016-09-02_Consultation-3.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 November was 0.383 maf or 81 percent of the 30-year average from 1981 to 2010. The forecast for December unregulated inflow into Lake Powell is 0.320 maf or 88 percent of the 30-year average. The observed 2016 April through July unregulated inflow is 6.610 maf or 92 percent of average.

In this study, the calendar year 2016 diversion for Metropolitan Water District of Southern California (MWD) is forecasted to be 1.000 maf. The calendar year 2016 diversion for the Central Arizona Project (CAP) is forecasted to be 1.491 maf. Consumptive use for Nevada above Hoover (SNWP Use) is forecasted to be 0.224 maf for calendar year 2016.

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 Larry Karr at (702) 293-8094.

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## December 2016 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)
* Dec 2015	36	1	58	0	58	6485.40	197
H Jan 2016	32	1	49	10	58	6480.71	170
I Feb 2016	34	0	55	0	55	6476.59	149
S Mar 2016	50	1	58	0	58	6474.73	140
T Apr 2016	91	1	56	0	56	6481.34	174
O May 2016	186	2	86	20	106	6493.63	252
R Jun 2016	293	2	101	143	243	6500.14	299
I Jul 2016	80	3	73	3	76	6500.25	300
C Aug 2016	29	2	65	0	65	6495.03	262
A Sep 2016	26	2	36	21	58	6490.22	229
<b>WY 2016</b>	<b>943</b>	<b>15</b>	<b>739</b>	<b>213</b>	<b>952</b>		
L Oct 2016	57	1	0	57	57	6490.08	228
* Nov 2016	62	1	0	59	59	6490.44	230
Dec 2016	38	1	65	0	65	6486.17	203
Jan 2017	32	1	63	0	63	6480.85	172
Feb 2017	28	1	57	0	57	6475.12	142
Mar 2017	46	0	63	0	63	6471.29	125
Apr 2017	75	1	89	0	89	6467.76	110
May 2017	150	1	97	8	105	6477.57	154
Jun 2017	270	2	102	23	125	6499.76	297
Jul 2017	170	3	101	22	123	6505.47	341
Aug 2017	70	2	85	0	85	6503.22	324
Sep 2017	46	2	72	0	72	6499.59	296
<b>WY 2017</b>	<b>1044</b>	<b>15</b>	<b>794</b>	<b>169</b>	<b>963</b>		
Oct 2017	49	1	69	0	69	6496.61	274
Nov 2017	42	1	67	0	67	6492.96	248
Dec 2017	32	1	69	0	69	6487.21	210
Jan 2018	30	1	69	0	69	6480.59	170
Feb 2018	28	1	63	0	63	6473.49	135
Mar 2018	53	0	69	0	69	6469.55	117
Apr 2018	85	1	89	0	89	6468.49	113
May 2018	164	1	98	7	105	6480.71	171
Jun 2018	299	2	102	69	171	6499.72	297
Jul 2018	178	3	101	28	129	6505.60	342
Aug 2018	77	2	100	5	105	6501.74	312
Sep 2018	46	2	89	0	89	6495.65	267
<b>WY 2018</b>	<b>1082</b>	<b>15</b>	<b>988</b>	<b>108</b>	<b>1096</b>		
Oct 2018	49	1	92	0	92	6489.06	222
Nov 2018	42	1	89	0	89	6481.38	175

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**December 2016 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)
* Dec 2015	38	61	2	137	0	137	130	6026.75	3225	172
H Jan 2016	44	71	2	134	0	134	127	6025.07	3163	168
I Feb 2016	63	84	2	118	0	118	126	6024.11	3127	164
S Mar 2016	84	93	3	51	0	51	127	6025.13	3165	131
T Apr 2016	140	105	5	50	0	50	129	6026.43	3213	316
O May 2016	362	282	8	52	0	52	138	6032.01	3427	701
R Jun 2016	455	405	11	270	198	469	135	6030.17	3356	965
I Jul 2016	91	88	13	116	4	120	133	6029.03	3312	220
C Aug 2016	28	64	13	110	0	110	131	6027.55	3255	133
A Sep 2016	36	67	11	107	0	107	129	6026.27	3207	123
<b>WY 2016</b>	<b>1427</b>	<b>1437</b>	<b>80</b>	<b>1406</b>	<b>203</b>	<b>1609</b>				<b>3431</b>
L Oct 2016	70	70	7	85	0	85	128	6025.69	3186	119
* Nov 2016	73	70	4	77	0	77	128	6025.41	3175	112
Dec 2016	40	67	2	106	0	106	126	6024.35	3136	132
Jan 2017	43	74	2	111	0	111	125	6023.34	3099	134
Feb 2017	45	74	2	100	0	100	124	6022.59	3072	121
Mar 2017	90	107	3	52	0	52	126	6023.96	3122	110
Apr 2017	115	129	5	48	0	48	129	6025.97	3196	193
May 2017	205	160	8	104	0	104	130	6027.21	3243	474
Jun 2017	325	180	10	156	0	156	131	6027.55	3256	556
Jul 2017	200	153	13	95	0	95	133	6028.67	3298	160
Aug 2017	82	97	13	95	0	95	132	6028.41	3288	113
Sep 2017	50	76	11	92	0	92	131	6027.72	3262	106
<b>WY 2017</b>	<b>1338</b>	<b>1257</b>	<b>79</b>	<b>1122</b>	<b>0</b>	<b>1122</b>				<b>2331</b>
Oct 2017	55	76	7	95	0	95	130	6027.04	3236	122
Nov 2017	50	75	3	92	0	92	129	6026.51	3216	121
Dec 2017	35	72	2	95	0	95	128	6025.87	3192	121
Jan 2018	40	80	2	95	0	95	128	6025.42	3176	120
Feb 2018	45	80	2	86	0	86	127	6025.19	3167	114
Mar 2018	102	119	3	95	0	95	128	6025.74	3187	172
Apr 2018	134	137	5	92	0	92	130	6026.77	3226	307
May 2018	245	186	8	157	0	157	131	6027.32	3247	689
Jun 2018	390	262	10	140	0	140	135	6030.13	3354	560
Jul 2018	210	162	14	98	0	98	137	6031.35	3402	198
Aug 2018	89	117	13	98	0	98	137	6031.49	3407	124
Sep 2018	55	99	11	95	0	95	137	6031.29	3399	114
<b>WY 2018</b>	<b>1449</b>	<b>1463</b>	<b>80</b>	<b>1240</b>	<b>0</b>	<b>1240</b>				<b>2762</b>
Oct 2018	59	103	7	98	0	98	137	6031.21	3396	131
Nov 2018	51	98	4	95	0	95	137	6031.19	3395	127

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**December 2016 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)
*	Dec 2015	5	6	9309.95	70
H	Jan 2016	6	6	9309.87	70
I	Feb 2016	4	5	9309.07	68
S	Mar 2016	5	6	9308.44	67
T	Apr 2016	9	6	9310.70	71
O	May 2016	17	11	9314.16	77
R	Jun 2016	41	20	9325.34	97
I	Jul 2016	11	21	9320.04	87
C	Aug 2016	9	16	9315.75	79
A	Sep 2016	6	14	9310.77	71
<b>WY 2016</b>		<b>125</b>	<b>125</b>		
L	Oct 2016	5	6	9310.23	70
*	Nov 2016	4	5	9309.76	70
	Dec 2016	4	5	9309.13	69
	Jan 2017	4	5	9308.29	67
	Feb 2017	3	5	9307.06	65
	Mar 2017	3	5	9305.93	64
	Apr 2017	6	5	9306.26	64
	May 2017	18	10	9311.38	72
	Jun 2017	28	15	9318.99	85
	Jul 2017	12	15	9317.30	82
	Aug 2017	7	15	9312.61	74
	Sep 2017	5	15	9306.26	64
<b>WY 2017</b>		<b>99</b>	<b>106</b>		
	Oct 2017	5	7	9305.07	62
	Nov 2017	5	6	9304.09	61
	Dec 2017	5	6	9303.18	60
	Jan 2018	4	6	9302.01	58
	Feb 2018	4	6	9300.43	56
	Mar 2018	4	6	9299.28	54
	Apr 2018	9	6	9301.30	57
	May 2018	28	20	9306.99	65
	Jun 2018	42	22	9318.89	85
	Jul 2018	20	22	9317.85	83
	Aug 2018	10	20	9312.16	73
	Sep 2018	7	16	9306.68	65
<b>WY 2018</b>		<b>144</b>	<b>143</b>		
	Oct 2018	7	8	9305.79	63
	Nov 2018	5	6	9305.19	63

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**December 2016 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)
* Dec 2015	27	28	0	62	0	62	7495.46	624
H Jan 2016	27	27	0	61	0	61	7491.12	590
I Feb 2016	26	27	0	59	0	58	7487.04	559
S Mar 2016	41	42	0	36	0	37	7487.62	563
T Apr 2016	75	72	1	63	0	63	7488.62	571
O May 2016	161	155	1	134	19	153	7488.74	572
R Jun 2016	285	265	1	46	0	46	7514.84	788
I Jul 2016	81	91	2	112	0	112	7512.31	766
C Aug 2016	57	65	1	110	0	110	7506.94	720
A Sep 2016	38	46	1	100	0	100	7500.48	665
<b>WY 2016</b>	<b>881</b>	<b>882</b>	<b>9</b>	<b>913</b>	<b>19</b>	<b>934</b>		
L Oct 2016	32	33	1	90	0	90	7493.44	608
* Nov 2016	26	27	0	33	0	33	7492.53	601
Dec 2016	24	25	0	35	0	35	7491.25	591
Jan 2017	22	23	0	35	0	35	7489.77	580
Feb 2017	19	21	0	31	0	31	7488.49	570
Mar 2017	29	31	0	38	0	38	7487.50	562
Apr 2017	59	59	1	52	0	52	7488.23	568
May 2017	135	127	1	169	0	169	7482.58	525
Jun 2017	175	162	1	61	0	61	7495.48	625
Jul 2017	66	69	1	78	0	78	7494.21	614
Aug 2017	43	51	1	84	0	84	7489.89	580
Sep 2017	33	43	1	73	0	73	7485.81	549
<b>WY 2017</b>	<b>663</b>	<b>670</b>	<b>8</b>	<b>778</b>	<b>0</b>	<b>778</b>		
Oct 2017	35	37	0	49	0	49	7484.07	536
Nov 2017	30	31	0	19	0	19	7485.70	548
Dec 2017	26	27	0	19	0	19	7486.68	556
Jan 2018	24	26	0	35	0	35	7485.51	547
Feb 2018	22	25	0	31	0	31	7484.68	541
Mar 2018	36	38	0	35	0	35	7484.99	543
Apr 2018	77	74	1	52	0	52	7487.81	564
May 2018	221	213	1	171	0	171	7493.04	605
Jun 2018	261	241	1	97	0	97	7510.23	748
Jul 2018	117	119	2	118	0	118	7510.16	747
Aug 2018	63	73	1	121	0	121	7504.46	698
Sep 2018	38	47	1	109	0	109	7496.77	635
<b>WY 2018</b>	<b>951</b>	<b>950</b>	<b>8</b>	<b>856</b>	<b>0</b>	<b>856</b>		
Oct 2018	38	40	1	72	0	72	7492.62	602
Nov 2018	31	32	0	31	0	31	7492.77	603

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**December 2016 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)
* Dec 2015	28	62	1	62	46	1	47	7154.01	112
H Jan 2016	27	61	1	62	64	0	64	7150.69	110
I Feb 2016	27	58	1	60	61	0	61	7148.82	108
S Mar 2016	43	37	2	39	36	0	36	7152.74	111
T Apr 2016	83	63	7	71	71	0	71	7152.57	111
O May 2016	176	153	15	168	176	4	180	7136.53	99
R Jun 2016	302	46	18	64	52	0	52	7152.31	111
I Jul 2016	83	112	2	114	113	0	113	7153.43	112
C Aug 2016	58	110	1	111	111	0	111	7153.88	112
A Sep 2016	39	100	1	100	103	0	103	7150.03	109
<b>WY 2016</b>	<b>931</b>	<b>934</b>	<b>49</b>	<b>983</b>	<b>972</b>	<b>5</b>	<b>978</b>		
L Oct 2016	33	90	1	91	93	0	93	7146.55	106
* Nov 2016	28	33	2	36	32	0	35	7147.39	107
Dec 2016	25	35	1	36	31	0	31	7153.73	112
Jan 2017	23	35	1	36	36	0	36	7153.73	112
Feb 2017	22	31	3	34	34	0	34	7153.73	112
Mar 2017	32	38	3	41	41	0	41	7153.73	112
Apr 2017	67	52	8	60	60	0	60	7153.73	112
May 2017	150	169	15	184	184	0	184	7153.73	112
Jun 2017	185	61	10	71	71	0	71	7153.73	112
Jul 2017	68	78	2	80	80	0	80	7153.73	112
Aug 2017	44	84	1	85	85	0	85	7153.73	112
Sep 2017	34	73	1	74	74	0	74	7153.73	112
<b>WY 2017</b>	<b>711</b>	<b>778</b>	<b>48</b>	<b>826</b>	<b>821</b>	<b>0</b>	<b>823</b>		
Oct 2017	36	49	1	51	51	0	51	7153.73	112
Nov 2017	31	19	2	20	20	0	20	7153.73	112
Dec 2017	28	19	2	21	21	0	21	7153.73	112
Jan 2018	27	35	2	37	37	0	37	7153.73	112
Feb 2018	25	31	3	33	33	0	33	7153.73	112
Mar 2018	40	35	4	39	39	0	39	7153.73	112
Apr 2018	88	52	11	63	63	0	63	7153.73	112
May 2018	247	171	26	197	197	0	197	7153.73	112
Jun 2018	281	97	20	117	117	0	117	7153.73	112
Jul 2018	123	118	6	124	124	0	124	7153.73	112
Aug 2018	67	121	3	124	124	0	124	7153.73	112
Sep 2018	41	109	3	112	112	0	112	7153.73	112
<b>WY 2018</b>	<b>1034</b>	<b>856</b>	<b>84</b>	<b>939</b>	<b>939</b>	<b>0</b>	<b>939</b>		
Oct 2018	41	72	3	75	75	0	75	7153.73	112
Nov 2018	33	31	2	33	33	0	33	7153.73	112

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## December 2016 24-Month Study

Most Probable Inflow\*

### Crystal Reservoir



		Unreg	Morrow	Side	Total	Power	Bypass	Total	Reservoir Elev	Live	Tunnel	Below Tunnel
	Date	Inflow	Release	Inflow	Inflow	Release	Release	Release	End of Month	Storage	Flow	Flow
		(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)
*	Dec 2015	32	47	4	51	40	12	52	6747.07	15	1	53
H	Jan 2016	31	64	4	68	67	0	68	6748.20	16	1	69
I	Feb 2016	30	61	3	64	63	0	63	6752.48	17	0	65
S	Mar 2016	48	36	5	41	41	0	41	6752.32	17	2	41
T	Apr 2016	92	71	9	80	80	0	80	6751.41	16	47	36
O	May 2016	194	180	18	198	109	64	197	6753.13	17	51	154
R	Jun 2016	344	52	41	93	74	20	93	6752.00	17	43	53
I	Jul 2016	89	113	6	119	117	2	119	6750.04	16	64	58
C	Aug 2016	62	111	4	114	114	0	114	6749.30	16	62	53
A	Sep 2016	42	103	3	106	106	1	107	6747.05	15	59	47
<b>WY 2016</b>		<b>1034</b>	<b>978</b>	<b>103</b>	<b>1081</b>	<b>811</b>	<b>243</b>	<b>1080</b>			<b>384</b>	<b>724</b>
L	Oct 2016	37	93	4	97	97	0	97	6747.92	15	57	39
*	Nov 2016	31	35	3	38	37	0	37	6750.47	16	1	36
	Dec 2016	28	31	3	34	33	0	33	6753.04	17	0	33
	Jan 2017	26	36	3	39	39	0	39	6753.04	17	0	39
	Feb 2017	26	34	4	38	38	0	38	6753.04	17	0	38
	Mar 2017	37	41	5	46	46	0	46	6753.04	17	5	41
	Apr 2017	76	60	9	69	69	0	69	6753.04	17	30	39
	May 2017	168	184	18	202	134	67	202	6753.04	17	55	147
	Jun 2017	200	71	15	86	86	0	86	6753.04	17	60	26
	Jul 2017	74	80	6	86	86	0	86	6753.04	17	65	21
	Aug 2017	50	85	6	91	91	0	91	6753.04	17	65	26
	Sep 2017	40	74	6	80	80	0	80	6753.04	17	55	25
<b>WY 2017</b>		<b>793</b>	<b>823</b>	<b>82</b>	<b>905</b>	<b>836</b>	<b>68</b>	<b>903</b>			<b>393</b>	<b>510</b>
	Oct 2017	42	51	6	57	57	0	57	6753.04	17	30	27
	Nov 2017	36	20	5	25	25	0	25	6753.04	17	0	25
	Dec 2017	32	21	5	26	26	0	26	6753.04	17	0	26
	Jan 2018	31	37	5	42	42	0	42	6753.04	17	0	42
	Feb 2018	29	33	4	37	37	0	37	6753.04	17	0	37
	Mar 2018	46	39	6	45	45	0	45	6753.04	17	5	40
	Apr 2018	101	63	12	76	76	0	76	6753.04	17	30	46
	May 2018	281	197	34	231	134	97	231	6753.04	17	55	176
	Jun 2018	315	117	34	151	130	21	151	6753.04	17	60	91
	Jul 2018	138	124	14	139	134	4	139	6753.04	17	65	74
	Aug 2018	75	124	8	132	132	0	132	6753.04	17	65	67
	Sep 2018	47	112	6	118	118	0	118	6753.04	17	55	63
<b>WY 2018</b>		<b>1174</b>	<b>939</b>	<b>140</b>	<b>1079</b>	<b>956</b>	<b>123</b>	<b>1079</b>			<b>365</b>	<b>714</b>
	Oct 2018	47	75	6	81	81	0	81	6753.04	17	30	51
	Nov 2018	38	33	5	38	38	0	38	6753.04	17	0	38

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

December 2016 24-Month Study

Most Probable Inflow\*

**Vallecito Reservoir**



	Date	Regulated Inflow (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)
*	Dec 2015	7	4	7649.57	86
H	Jan 2016	6	7	7649.21	85
I	Feb 2016	7	6	7649.77	86
S	Mar 2016	14	6	7652.71	94
T	Apr 2016	25	13	7657.23	105
O	May 2016	60	44	7663.23	121
R	Jun 2016	77	73	7664.30	124
I	Jul 2016	17	38	7656.15	102
C	Aug 2016	15	33	7648.82	84
A	Sep 2016	14	27	7643.21	71
<b>WY 2016</b>		<b>269</b>	<b>270</b>		
L	Oct 2016	11	8	7644.63	74
*	Nov 2016	6	2	7646.51	79
	Dec 2016	6	2	7648.04	82
	Jan 2017	5	2	7649.34	85
	Feb 2017	4	2	7650.28	88
	Mar 2017	5	2	7651.50	91
	Apr 2017	15	2	7656.66	103
	May 2017	56	39	7662.88	120
	Jun 2017	57	58	7662.11	118
	Jul 2017	22	42	7654.30	98
	Aug 2017	16	38	7644.99	75
	Sep 2017	14	30	7637.63	59
<b>WY 2017</b>		<b>217</b>	<b>226</b>		
	Oct 2017	14	17	7635.74	56
	Nov 2017	8	2	7638.84	62
	Dec 2017	6	2	7640.92	66
	Jan 2018	5	2	7642.52	70
	Feb 2018	5	2	7643.87	73
	Mar 2018	9	2	7646.75	79
	Apr 2018	23	2	7655.49	101
	May 2018	71	53	7662.54	119
	Jun 2018	70	70	7662.51	119
	Jul 2018	29	42	7657.49	106
	Aug 2018	20	38	7650.06	87
	Sep 2018	17	30	7644.72	75
<b>WY 2018</b>		<b>278</b>	<b>259</b>		
	Oct 2018	16	17	7643.94	73
	Nov 2018	9	2	7646.95	80

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



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## December 2016 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)
* Dec 2015	23	0	19	1	0	21	6063.81	1397	34
H Jan 2016	22	0	23	1	0	22	6063.77	1396	34
I Feb 2016	42	2	39	1	1	28	6064.39	1405	43
S Mar 2016	81	7	67	2	4	25	6067.08	1441	52
T Apr 2016	119	13	94	3	19	22	6070.75	1491	53
O May 2016	209	26	165	4	12	91	6074.87	1549	175
R Jun 2016	214	35	174	5	25	250	6067.29	1443	376
I Jul 2016	24	4	40	5	37	79	6061.29	1364	97
C Aug 2016	30	4	45	4	33	35	6059.16	1337	55
A Sep 2016	21	1	33	3	27	30	6056.98	1310	41
<b>WY 2016</b>	<b>864</b>	<b>94</b>	<b>769</b>	<b>29</b>	<b>169</b>	<b>653</b>			<b>1054</b>
L Oct 2016	27	0	24	2	5	27	6056.19	1300	47
* Nov 2016	24	0	19	1	0	22	6055.87	1296	41
Dec 2016	20	0	16	1	0	23	6055.26	1289	35
Jan 2017	18	0	15	1	0	23	6054.51	1279	34
Feb 2017	21	0	19	1	0	21	6054.25	1276	31
Mar 2017	50	1	45	2	5	23	6055.53	1292	38
Apr 2017	102	11	78	2	20	22	6058.19	1325	60
May 2017	205	33	156	4	34	23	6065.52	1420	138
Jun 2017	160	26	136	4	50	22	6069.84	1478	139
Jul 2017	33	4	48	5	55	30	6066.78	1437	76
Aug 2017	30	1	51	4	46	38	6063.98	1399	67
Sep 2017	31	1	46	3	26	32	6062.89	1385	54
<b>WY 2017</b>	<b>721</b>	<b>77</b>	<b>652</b>	<b>28</b>	<b>243</b>	<b>307</b>			<b>761</b>
Oct 2017	38	1	40	2	9	24	6063.29	1390	46
Nov 2017	30	1	23	1	0	22	6063.29	1390	39
Dec 2017	25	0	21	1	0	23	6063.05	1387	38
Jan 2018	22	0	18	1	0	23	6062.64	1382	37
Feb 2018	30	0	27	1	0	21	6063.06	1387	33
Mar 2018	92	2	84	2	5	23	6067.10	1441	45
Apr 2018	170	15	134	3	21	22	6073.46	1529	75
May 2018	277	41	218	4	35	215	6070.87	1493	361
Jun 2018	224	33	190	4	51	296	6058.67	1331	448
Jul 2018	66	7	72	4	56	82	6052.96	1261	149
Aug 2018	45	1	62	3	47	33	6051.10	1238	72
Sep 2018	43	1	55	3	26	26	6051.10	1239	58
<b>WY 2018</b>	<b>1063</b>	<b>102</b>	<b>943</b>	<b>28</b>	<b>251</b>	<b>811</b>			<b>1401</b>
Oct 2018	47	2	47	2	10	24	6052.07	1250	52
Nov 2018	34	1	26	1	0	22	6052.28	1253	40

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## December 2016 24-Month Study

Most Probable Inflow\*

### Lake Powell



	Unreg	Regulated	Evap	PowerPlant	Bypass	Total	Reservoir Elev	Bank	EOM	Lees
	Inflow	Inflow	Losses	Release	Release	Release	End of Month	Storage	Storage	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)
* Dec 2015	266	393	26	857	0	857	3600.80	5000	11827	863
H Jan 2016	300	433	8	857	0	857	3596.58	4968	11427	865
I Feb 2016	396	490	8	700	0	700	3594.41	4952	11224	704
S Mar 2016	553	486	14	694	0	694	3592.18	4935	11019	707
T Apr 2016	814	681	22	665	0	665	3592.12	4935	11014	681
O May 2016	2294	1925	26	700	0	700	3603.87	5024	12123	714
R Jun 2016	2907	2618	46	800	0	800	3620.01	5155	13764	812
I Jul 2016	595	804	58	950	0	950	3618.22	5140	13576	969
C Aug 2016	253	432	56	900	0	900	3613.55	5101	13091	920
A Sep 2016	281	461	50	699	0	699	3610.93	5080	12824	717
<b>WY 2016</b>	<b>9616</b>	<b>9909</b>	<b>378</b>	<b>9000</b>	<b>0</b>	<b>9000</b>				<b>9145</b>
L Oct 2016	381	477	35	601	0	601	3609.48	5068	12678	614
* Nov 2016	383	389	33	624	126	750	3605.81	5039	12313	731
Dec 2016	320	395	26	900	0	900	3600.75	4999	11822	903
Jan 2017	300	386	8	900	0	900	3595.63	4961	11338	907
Feb 2017	340	407	8	700	0	700	3592.62	4938	11059	704
Mar 2017	500	451	14	600	0	600	3590.97	4926	10908	605
Apr 2017	700	577	21	600	0	600	3590.52	4923	10867	609
May 2017	1500	1317	26	600	0	600	3597.44	4974	11508	608
Jun 2017	2100	1755	42	800	0	800	3606.22	5042	12353	807
Jul 2017	650	614	52	950	0	950	3602.54	5013	11994	966
Aug 2017	360	470	50	900	0	900	3597.88	4978	11549	915
Sep 2017	300	410	45	699	0	699	3594.57	4953	11239	712
<b>WY 2017</b>	<b>7834</b>	<b>7647</b>	<b>359</b>	<b>8874</b>	<b>126</b>	<b>9000</b>				<b>9083</b>
Oct 2017	422	473	31	600	0	600	3592.98	4941	11092	609
Nov 2017	431	455	30	600	0	600	3591.22	4928	10931	604
Dec 2017	363	415	23	800	0	800	3587.02	4898	10553	803
Jan 2018	361	428	7	800	0	800	3583.03	4870	10202	807
Feb 2018	393	433	7	650	0	650	3580.64	4853	9994	654
Mar 2018	665	595	12	650	0	650	3579.91	4848	9932	655
Apr 2018	1056	877	20	600	0	600	3582.67	4867	10170	609
May 2018	2343	2218	25	650	0	650	3598.41	4982	11599	658
Jun 2018	2666	2409	44	800	0	800	3613.13	5098	13048	807
Jul 2018	1091	1058	55	1000	0	1000	3613.17	5098	13052	1016
Aug 2018	500	604	54	1050	0	1050	3608.59	5061	12589	1065
Sep 2018	408	529	49	800	0	800	3605.60	5037	12292	813
<b>WY 2018</b>	<b>10698</b>	<b>10494</b>	<b>357</b>	<b>9000</b>	<b>0</b>	<b>9000</b>				<b>9102</b>
Oct 2018	512	574	33	600	0	600	3605.04	5033	12237	609
Nov 2018	473	506	32	600	0	600	3603.84	5023	12121	600

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**December 2016 24-Month Study**

Most Probable Inflow\*

**Hoover Dam - Lake Mead**



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 2015	857	43	36	619	10.1	9	618	656	1080.91	10087
H Jan 2016	857	89	30	662	10.8	8	661	671	1083.68	10318
I Feb 2016	700	81	28	699	12.2	10	698	673	1084.17	10360
S Mar 2016	694	31	31	1008	16.4	18	1007	653	1080.45	10048
T Apr 2016	665	68	38	1055	17.7	18	1055	630	1076.13	9693
O May 2016	700	50	43	887	14.4	22	885	618	1073.80	9504
R Jun 2016	800	14	51	920	15.5	28	919	606	1071.64	9330
I Jul 2016	950	70	64	831	13.5	30	840	612	1072.75	9419
C Aug 2016	900	107	69	701	11.4	28	700	625	1075.17	9615
A Sep 2016	699	88	57	702	11.8	22	701	625	1075.23	9620
<b>WY 2016</b>	<b>9000</b>	<b>798</b>	<b>531</b>	<b>9293</b>		<b>224</b>	<b>9291</b>			
L Oct 2016	601	79	42	518	8.4	25	517	631	1076.34	9710
* Nov 2016	750	78	42	751	12.6	17	750	632	1076.55	9727
Dec 2016	900	54	36	528	8.6	-2	528	656	1081.02	10096
Jan 2017	900	62	30	688	11.2	5	688	671	1083.70	10320
Feb 2017	700	73	28	654	11.8	6	654	676	1084.65	10400
Mar 2017	600	55	31	1070	17.4	14	1070	648	1079.49	9968
Apr 2017	600	53	38	1092	18.4	21	1092	618	1073.77	9501
May 2017	600	37	42	936	15.2	26	936	595	1069.45	9156
Jun 2017	800	21	51	857	14.4	27	857	588	1068.10	9049
Jul 2017	950	78	63	804	13.1	30	804	596	1069.65	9172
Aug 2017	900	124	68	751	12.2	28	751	607	1071.75	9339
Sep 2017	699	112	56	728	12.2	25	728	607	1071.78	9342
<b>WY 2017</b>	<b>9000</b>	<b>827</b>	<b>526</b>	<b>9376</b>		<b>221</b>	<b>9374</b>			
Oct 2017	600	69	41	535	8.7	20	535	612	1072.64	9410
Nov 2017	600	56	41	668	11.2	12	668	608	1071.88	9350
Dec 2017	800	54	35	635	10.3	8	635	618	1073.93	9514
Jan 2018	800	62	29	692	11.2	15	692	626	1075.39	9633
Feb 2018	650	73	27	675	12.2	18	675	626	1075.43	9636
Mar 2018	650	55	30	1010	16.4	23	1010	605	1071.26	9300
Apr 2018	600	53	36	1056	17.7	26	1056	576	1065.73	8864
May 2018	650	37	41	909	14.8	32	909	558	1062.15	8587
Jun 2018	800	21	49	887	14.9	32	887	549	1060.34	8449
Jul 2018	1000	78	61	802	13.0	32	802	560	1062.59	8621
Aug 2018	1050	124	66	748	12.2	29	748	581	1066.60	8932
Sep 2018	800	112	55	700	11.8	26	700	589	1068.17	9054
<b>WY 2018</b>	<b>9000</b>	<b>795</b>	<b>511</b>	<b>9316</b>		<b>273</b>	<b>9316</b>			
Oct 2018	600	69	40	444	7.2	26	444	598	1070.05	9203
Nov 2018	600	52	41	580	9.7	17	580	599	1070.22	9217

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## December 2016 24-Month Study

Most Probable Inflow\*

### Davis Dam - Lake Mohave



	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 2015	619	-13	9	527	0	527	8.6	638.77	1585
H	Jan 2016	662	-32	10	553	0	553	9.0	641.26	1651
I	Feb 2016	699	-20	10	675	0	675	11.7	641.04	1645
S	Mar 2016	1008	-16	13	921	0	921	15.0	643.17	1703
T	Apr 2016	1055	-18	17	979	0	979	16.4	644.70	1746
O	May 2016	887	-6	22	903	0	903	14.7	643.07	1701
R	Jun 2016	920	-16	26	838	0	838	14.1	644.53	1741
I	Jul 2016	831	-24	26	803	0	803	13.1	643.75	1719
C	Aug 2016	701	-12	23	714	0	714	11.6	642.00	1671
A	Sep 2016	702	-18	18	711	0	711	11.9	640.34	1627
<b>WY 2016</b>		<b>9293</b>	<b>-195</b>	<b>198</b>	<b>8879</b>	<b>0</b>	<b>8879</b>			
L	Oct 2016	518	-7	15	640	0	640	10.4	634.86	1482
*	Nov 2016	751	-29	11	574	0	574	9.6	640.09	1620
	Dec 2016	528	-12	9	509	0	509	8.3	640.01	1617
	Jan 2017	688	-14	10	624	0	624	10.1	641.50	1658
	Feb 2017	654	-14	10	622	0	622	11.2	641.80	1666
	Mar 2017	1070	-16	13	1007	0	1007	16.4	643.05	1700
	Apr 2017	1092	-19	17	1058	0	1058	17.8	643.00	1699
	May 2017	936	-13	22	901	0	901	14.6	643.00	1699
	Jun 2017	857	-16	25	843	0	843	14.2	642.00	1671
	Jul 2017	804	-13	25	779	0	779	12.7	641.50	1658
	Aug 2017	751	-11	23	717	0	717	11.7	641.50	1658
	Sep 2017	728	-9	18	741	0	741	12.4	640.01	1617
<b>WY 2017</b>		<b>9376</b>	<b>-173</b>	<b>197</b>	<b>9014</b>	<b>0</b>	<b>9014</b>			
	Oct 2017	535	-1	15	702	0	702	11.4	633.00	1434
	Nov 2017	668	-8	10	599	0	599	10.1	635.00	1486
	Dec 2017	635	-12	9	517	0	517	8.4	638.71	1583
	Jan 2018	692	-14	10	585	0	585	9.5	641.80	1666
	Feb 2018	675	-14	10	651	0	651	11.7	641.80	1666
	Mar 2018	1010	-16	13	947	0	947	15.4	643.05	1700
	Apr 2018	1056	-19	17	1021	0	1021	17.2	643.00	1699
	May 2018	909	-13	22	874	0	874	14.2	643.00	1699
	Jun 2018	887	-16	25	873	0	873	14.7	642.00	1671
	Jul 2018	802	-13	25	777	0	777	12.6	641.50	1658
	Aug 2018	748	-11	23	714	0	714	11.6	641.50	1658
	Sep 2018	700	-9	18	714	0	714	12.0	640.01	1617
<b>WY 2018</b>		<b>9316</b>	<b>-146</b>	<b>197</b>	<b>8973</b>	<b>0</b>	<b>8973</b>			
	Oct 2018	444	-1	15	611	0	611	9.9	633.00	1434
	Nov 2018	580	-8	10	511	0	511	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 2016 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)
*	Dec 2015	527	22	7	321	5.2	101	130	446.92	560	105	1.7
H	Jan 2016	553	26	6	324	5.3	97	156	446.60	554	154	2.5
I	Feb 2016	675	9	8	543	9.4	13	117	446.50	552	180	3.1
S	Mar 2016	921	18	9	695	11.3	89	123	447.40	569	221	3.6
T	Apr 2016	979	18	11	689	11.6	93	169	448.89	597	202	3.4
O	May 2016	903	13	13	636	10.3	97	176	448.08	581	97	1.6
R	Jun 2016	838	18	15	633	10.6	95	89	448.81	596	92	1.5
I	Jul 2016	803	20	17	617	10.0	100	74	449.03	600	102	1.7
C	Aug 2016	714	22	17	570	9.3	85	65	448.50	590	99	1.6
A	Sep 2016	711	14	15	490	8.2	89	134	447.97	579	92	1.5
<b>WY 2016</b>		<b>8879</b>	<b>225</b>	<b>140</b>	<b>6360</b>		<b>1057</b>	<b>1467</b>			<b>1496</b>	
L	Oct 2016	640	36	12	466	7.6	80	133	446.90	559	61	1.0
*	Nov 2016	574	22	9	374	6.3	78	140	446.33	549	97	1.6
	Dec 2016	509	19	6	315	5.1	84	115	446.50	552	106	1.7
	Jan 2017	624	13	6	379	6.2	98	140	447.00	561	154	2.5
	Feb 2017	622	12	8	493	8.9	68	67	446.50	552	180	3.2
	Mar 2017	1007	4	9	727	11.8	76	188	446.70	555	206	3.4
	Apr 2017	1058	19	11	761	12.8	73	183	448.70	593	192	3.2
	May 2017	901	16	13	628	10.2	76	188	448.70	593	97	1.6
	Jun 2017	843	14	16	664	11.2	73	91	448.70	593	98	1.6
	Jul 2017	779	29	17	636	10.3	76	80	448.00	580	99	1.6
	Aug 2017	717	26	17	570	9.3	76	79	447.50	571	99	1.6
	Sep 2017	741	23	15	522	8.8	73	146	447.50	570	89	1.5
<b>WY 2017</b>		<b>9014</b>	<b>234</b>	<b>139</b>	<b>6535</b>		<b>929</b>	<b>1550</b>			<b>1478</b>	
	Oct 2017	702	27	12	494	8.0	76	139	447.50	571	68	1.1
	Nov 2017	599	22	9	398	6.7	73	135	447.50	571	103	1.7
	Dec 2017	517	19	7	329	5.3	76	139	446.50	552	115	1.9
	Jan 2018	585	13	6	380	6.2	101	107	446.50	552	150	2.4
	Feb 2018	651	12	8	489	8.8	58	101	446.50	552	175	3.1
	Mar 2018	947	4	9	720	11.7	84	126	446.70	555	199	3.2
	Apr 2018	1021	19	11	756	12.7	98	126	448.70	593	185	3.1
	May 2018	874	16	13	625	10.2	101	139	448.70	593	93	1.5
	Jun 2018	873	14	16	660	11.1	98	101	448.70	593	94	1.6
	Jul 2018	777	29	17	625	10.2	101	63	448.00	580	95	1.5
	Aug 2018	714	26	17	564	9.2	101	57	447.50	571	96	1.6
	Sep 2018	714	23	15	501	8.4	98	114	447.50	570	86	1.5
<b>WY 2018</b>		<b>8973</b>	<b>224</b>	<b>139</b>	<b>6541</b>		<b>1064</b>	<b>1347</b>			<b>1460</b>	
	Oct 2018	611	27	12	477	7.8	28	114	447.50	571	66	1.1
	Nov 2018	511	22	9	377	6.3	28	114	447.50	571	99	1.7

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**December 2016 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
* Dec 2015	619	10.1	1080.91	10087	222	434.77	1069.0	241.9	68	390.9
H Jan 2016	662	10.8	1083.68	10318	232	438.04	775.0	258.5	49	390.7
I Feb 2016	699	12.2	1084.17	10360	41	437.39	880.0	277.0	55	396.1
S Mar 2016	1008	16.4	1080.45	10048	-311	434.20	973.0	402.7	61	399.7
T Apr 2016	1055	17.7	1076.13	9693	-355	429.37	1244.0	413.9	80	392.2
O May 2016	887	14.4	1073.80	9504	-189	426.83	1164.0	343.6	74	387.5
R Jun 2016	920	15.5	1071.64	9330	-174	425.27	1528.0	349.7	100	380.2
I Jul 2016	831	13.5	1072.75	9419	89	427.46	1528.0	311.5	100	374.8
C Aug 2016	701	11.4	1075.17	9615	196	431.00	1549.0	265.2	100	378.4
A Sep 2016	702	11.8	1075.23	9620	5	429.97	1539.0	266.3	100	379.1
<b>WY 2016</b>	<b>9293</b>							<b>3596.9</b>		
L Oct 2016	518	8.4	1076.34	9710	90	438.10	1158.0	195.2	87	377.1
* Nov 2016	751	12.6	1076.55	9727	17	427.42	860.8	290.6	80	386.7
Dec 2016	528	8.6	1081.02	10096	369	430.34	1103.0	199.4	71	377.9
Jan 2017	688	11.2	1083.70	10320	224	432.30	1291.0	265.2	82	385.5
Feb 2017	654	11.8	1084.65	10400	80	433.96	1228.0	255.2	77	390.3
Mar 2017	1070	17.4	1079.49	9968	-432	431.04	1252.0	420.4	80	392.9
Apr 2017	1092	18.4	1073.77	9501	-467	425.20	1233.0	426.2	81	390.2
May 2017	936	15.2	1069.45	9156	-345	420.38	1192.0	357.8	79	382.2
Jun 2017	857	14.4	1068.10	9049	-107	415.73	1494.0	325.1	100	379.2
Jul 2017	804	13.1	1069.65	9172	122	416.32	1506.0	302.5	100	376.1
Aug 2017	751	12.2	1071.75	9339	167	418.28	1525.0	281.5	100	375.0
Sep 2017	728	12.2	1071.78	9342	3	419.82	1531.0	273.9	100	376.4
<b>WY 2017</b>	<b>9376</b>							<b>3592.9</b>		
Oct 2017	535	8.7	1072.64	9410	69	425.09	1145.0	199.9	75	373.9
Nov 2017	668	11.2	1071.88	9350	-61	426.83	1227.0	254.7	80	381.3
Dec 2017	635	10.3	1073.93	9514	164	426.80	1064.0	244.6	69	385.1
Jan 2018	692	11.2	1075.39	9633	119	426.98	974.0	266.8	63	385.7
Feb 2018	675	12.2	1075.43	9636	3	426.72	975.0	262.7	63	389.3
Mar 2018	1010	16.4	1071.26	9300	-336	423.53	1065.0	390.5	70	386.8
Apr 2018	1056	17.7	1065.73	8864	-436	418.34	1039.0	407.7	69	386.2
May 2018	909	14.8	1062.15	8587	-277	412.77	1165.7	339.6	79	373.6
Jun 2018	887	14.9	1060.34	8449	-138	408.28	1456.7	324.5	100	365.8
Jul 2018	802	13.0	1062.59	8621	172	408.98	1469.4	295.9	100	369.1
Aug 2018	748	12.2	1066.60	8932	311	412.24	1492.0	276.4	100	369.4
Sep 2018	700	11.8	1068.17	9054	123	415.49	1500.8	259.7	100	370.9
<b>WY 2018</b>	<b>9316</b>							<b>3523.1</b>		
Oct 2018	444	7.2	1070.05	9203	149	422.01	1126.7	166.5	75	375.1
Nov 2018	580	9.7	1070.22	9217	14	424.72	1212.1	219.5	80	378.6

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**December 2016 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
*	Dec 2015	527	8.6	638.77	1585	70	135.98	155.6	65.1	61	123.6
H	Jan 2016	553	9.0	641.26	1651	67	141.86	163.2	71.9	64	129.9
I	Feb 2016	675	11.7	641.04	1645	-6		178.5	86.3	70	127.8
S	Mar 2016	921	15.0	643.17	1703	58	139.07	214.2	117.9	84	128.0
T	Apr 2016	979	16.4	644.70	1746	42	143.66	255.0	125.4	100	128.2
O	May 2016	903	14.7	643.07	1701	-45	141.63	252.5	115.5	99	127.8
R	Jun 2016	838	14.1	644.53	1741	40	143.17	255.0	107.4	100	128.1
I	Jul 2016	803	13.1	643.75	1719	-22	144.39	252.5	103.3	99	128.6
C	Aug 2016	714	11.6	642.00	1671	-48	142.46	255.0	91.6	100	128.4
A	Sep 2016	711	11.9	640.34	1627	-45	138.91	255.0	90.5	100	127.3
<b>WY 2016</b>		<b>8879</b>						<b>1129.0</b>			
L	Oct 2016	640	10.4	634.86	1482	-144	135.70	201.5	79.3	79	123.8
*	Nov 2016	574	9.6	640.09	1620	138	140.91	170.9	71.1	67	123.8
	Dec 2016	509	8.3	640.01	1617	-2	135.57	168.3	63.6	66	125.0
	Jan 2017	624	10.1	641.50	1658	40	134.91	211.7	77.9	83	124.9
	Feb 2017	622	11.2	641.80	1666	8	136.54	188.7	78.0	74	125.3
	Mar 2017	1007	16.4	643.05	1700	34	137.24	191.3	125.2	75	124.3
	Apr 2017	1058	17.8	643.00	1699	-2	136.07	255.0	131.7	100	124.5
	May 2017	901	14.6	643.00	1699	0	136.04	255.0	112.9	100	125.4
	Jun 2017	843	14.2	642.00	1671	-27	135.51	255.0	105.4	100	125.1
	Jul 2017	779	12.7	641.50	1658	-14	134.73	255.0	97.3	100	124.9
	Aug 2017	717	11.7	641.50	1658	0	134.46	255.0	89.6	100	125.0
	Sep 2017	741	12.4	640.01	1617	-40	133.68	255.0	91.9	100	124.1
<b>WY 2017</b>		<b>9014</b>						<b>1124.0</b>			
	Oct 2017	702	11.4	633.00	1434	-183	130.77	201.5	84.7	79	120.6
	Nov 2017	599	10.1	635.00	1486	51	129.16	170.9	71.2	67	118.9
	Dec 2017	517	8.4	638.71	1583	97	132.23	168.3	63.1	66	122.1
	Jan 2018	585	9.5	641.80	1666	83	134.39	211.7	72.9	83	124.7
	Feb 2018	651	11.7	641.80	1666	0	136.69	188.7	81.6	74	125.3
	Mar 2018	947	15.4	643.05	1700	34	137.24	191.3	118.0	75	124.6
	Apr 2018	1021	17.2	643.00	1699	-2	136.07	255.0	127.3	100	124.6
	May 2018	874	14.2	643.00	1699	0	136.04	255.0	109.7	100	125.5
	Jun 2018	873	14.7	642.00	1671	-27	135.51	255.0	109.0	100	124.9
	Jul 2018	777	12.6	641.50	1658	-14	134.73	255.0	97.0	100	124.9
	Aug 2018	714	11.6	641.50	1658	0	134.46	255.0	89.3	100	125.0
	Sep 2018	714	12.0	640.01	1617	-40	133.68	255.0	88.7	100	124.2
<b>WY 2018</b>		<b>8973</b>						<b>1112.4</b>			
	Oct 2018	611	9.9	633.00	1434	-183	130.46	211.7	74.0	83	121.2
	Nov 2018	511	8.6	635.00	1486	51	128.56	188.7	61.0	74	119.4

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**December 2016 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
* Dec 2015	321	5.2	446.92	560	-12	82.51	120.0	21.9	100	68.4
H Jan 2016	324	5.3	446.60	554	-6	80.76	94.8	22.3	79	68.8
I Feb 2016	528	9.4	446.50	552	-2	78.54	87.6	38.1	73	72.2
S Mar 2016	695	11.3	447.40	569	17	81.63	104.4	48.9	87	70.3
T Apr 2016	689	11.6	448.89	597	28	83.09	120.0	48.4	100	70.3
O May 2016	636	10.3	448.08	581	-15	82.13	120.0	45.1	100	70.9
R Jun 2016	633	10.6	448.81	596	14	83.02	120.0	44.8	100	70.8
I Jul 2016	617	10.0	449.03	600	4	83.16	120.0	43.7	100	70.9
C Aug 2016	570	9.3	448.50	590	-10	82.60	120.0	40.2	100	70.7
A Sep 2016	490	8.2	447.97	579	-10	82.24	120.0	34.7	100	70.9
<b>WY 2016</b>	<b>6345</b>							<b>447.6</b>		
L Oct 2016	466	7.6	446.90	559	-20	78.88	93.6	32.8	78	70.5
* Nov 2016	374	6.3	446.33	549	-11	80.55	90.0	26.0	75	69.6
Dec 2016	315	5.1	446.50	552	3	73.93	117.6	19.7	98	62.7
Jan 2017	379	6.2	447.00	561	9	75.38	93.6	24.5	78	64.6
Feb 2017	493	8.9	446.50	552	-9	74.96	102.0	32.2	85	65.3
Mar 2017	727	11.8	446.70	555	4	74.01	120.0	47.2	100	65.0
Apr 2017	761	12.8	448.70	593	38	75.08	120.0	50.2	100	65.9
May 2017	628	10.2	448.70	593	0	76.05	120.0	41.6	100	66.2
Jun 2017	664	11.2	448.70	593	0	76.05	120.0	44.1	100	66.4
Jul 2017	636	10.3	448.00	580	-13	75.71	120.0	42.0	100	66.0
Aug 2017	570	9.3	447.50	571	-9	75.13	120.0	37.2	100	65.3
Sep 2017	522	8.8	447.50	570	0	74.89	120.0	33.9	100	65.0
<b>WY 2017</b>	<b>6535</b>							<b>431.6</b>		
Oct 2017	494	8.0	447.50	571	0	75.74	100.8	32.4	84	65.6
Nov 2017	398	6.7	447.50	571	0	75.92	97.2	26.0	81	65.2
Dec 2017	329	5.3	446.50	552	-19	74.40	120.0	20.8	100	63.2
Jan 2018	380	6.2	446.50	552	0	74.89	98.4	24.4	82	64.2
Feb 2018	489	8.8	446.50	552	0	75.07	94.8	32.0	79	65.4
Mar 2018	720	11.7	446.70	555	4	74.01	120.0	46.8	100	65.0
Apr 2018	756	12.7	448.70	593	38	75.08	120.0	49.8	100	65.9
May 2018	625	10.2	448.70	593	0	76.05	120.0	41.4	100	66.2
Jun 2018	660	11.1	448.70	593	0	76.05	120.0	43.8	100	66.4
Jul 2018	625	10.2	448.00	580	-13	75.71	120.0	41.2	100	66.0
Aug 2018	564	9.2	447.50	571	-9	75.13	120.0	36.8	100	65.3
Sep 2018	501	8.4	447.50	570	0	74.89	120.0	32.6	100	64.9
<b>WY 2018</b>	<b>6541</b>							<b>428.0</b>		
Oct 2018	477	7.8	447.50	571	0	75.86	98.4	31.3	82	65.6
Nov 2018	377	6.3	447.50	571	0	75.80	99.6	24.4	83	64.9

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



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## December 2016 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
* Dec 2015	378	53	18	16	7	4
H Jan 2016	373	52	17	22	13	3
I Feb 2016	302	45	16	21	12	4
S Mar 2016	298	20	10	11	7	4
<b>Winter 2016</b>	<b>1871</b>	<b>274</b>	<b>100</b>	<b>118</b>	<b>38</b>	<b>23</b>
T Apr 2016	288	19	18	25	16	4
O May 2016	305	20	38	61	21	7
R Jun 2016	360	105	14	18	15	9
I Jul 2016	435	46	34	40	22	6
C Aug 2016	408	44	33	39	22	6
A Sep 2016	315	42	30	36	20	3
<b>Summer 2016</b>	<b>2111</b>	<b>276</b>	<b>166</b>	<b>218</b>	<b>116</b>	<b>34</b>
L Oct 2016	269	33	26	33	19	0
* Nov 2016	277	30	9	11	6	0
Dec 2016	357	39	10	11	6	5
Jan 2017	353	40	10	13	7	5
Feb 2017	272	36	9	12	7	4
Mar 2017	232	19	11	15	8	4
<b>Winter 2017</b>	<b>1760</b>	<b>198</b>	<b>76</b>	<b>95</b>	<b>51</b>	<b>19</b>
Apr 2017	231	17	15	22	12	6
May 2017	233	38	49	66	23	7
Jun 2017	316	57	18	26	15	8
Jul 2017	377	35	23	29	15	10
Aug 2017	354	35	25	31	16	8
Sep 2017	273	34	21	27	14	7
<b>Summer 2017</b>	<b>1786</b>	<b>216</b>	<b>152</b>	<b>200</b>	<b>94</b>	<b>45</b>
Oct 2017	233	35	14	18	10	6
Nov 2017	232	34	5	7	4	6
Dec 2017	308	35	6	8	5	6
Jan 2018	305	35	10	13	7	5
Feb 2018	246	31	9	12	6	5
Mar 2018	245	35	10	14	8	5
<b>Winter 2018</b>	<b>1568</b>	<b>204</b>	<b>54</b>	<b>73</b>	<b>40</b>	<b>33</b>
Apr 2018	227	34	15	23	13	6
May 2018	251	57	50	71	23	7
Jun 2018	319	51	30	42	22	9
Jul 2018	405	36	37	45	23	10
Aug 2018	423	36	37	45	23	10
Sep 2018	320	35	33	40	20	8
<b>Summer 2018</b>	<b>1623</b>	<b>215</b>	<b>169</b>	<b>226</b>	<b>105</b>	<b>40</b>
Oct 2018	239	36	22	27	14	8
Nov 2018	238	35	9	12	6	7

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

December 2016 24-Month Study

Most Probable Inflow\*

**Flood Control Criteria**

**Beginning of Month Conditions**



Date	Flaming	Blue	Navajo	Lake	Upper Basin	Lake	Total	Total	Flaming	Blue	Tot or Max	Lake	Lake	BOM Space		Mead	Mead	Sys	
	Gorge	Mesa	KAF	Powell	Total	Mead			Gorge	Mesa	Navajo	Allow	Powell	Mead	Total	Required	Sched Rel	FC Rel	Cont
	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	MAF	
****PREDICTED SPACE****								****CREDITABLE SPACE****											
Dec 2016	688	228	400	12009	13325	17650	30975	688	228	400	1316	12009	17650	30975	4580	528	0	29.5	
Jan 2017	755	238	407	12500	13901	17281	31182	755	238	407	1400	12500	17281	31182	5350	688	0	29.2	
****EFFECTIVE SPACE****								****EFFECTIVE SPACE****											
Jan 2017	755	238	407	12500	13901	17281	31182	358	42	331	731	12500	17281	30513	5350	688	0	29.2	
Feb 2017	823	250	417	12984	14473	17057	31530	425	55	340	820	12984	17057	30860	1500	654	0	28.9	
Mar 2017	880	260	420	13263	14822	16977	31799	480	66	342	889	13263	16977	31128	1500	1070	0	28.4	
Apr 2017	847	268	404	13414	14932	17409	32341	443	75	319	837	13414	17409	31659	1500	1092	0	28.1	
May 2017	788	262	371	13455	14876	17876	32751	375	69	264	707	13455	17876	32038	1500	936	0	28.5	
Jun 2017	697	305	276	12814	14093	18221	32314	274	102	131	507	12814	18221	31542	1500	857	0	29.5	
Jul 2017	541	205	218	11969	12933	18328	31261	105	-12	18	111	11969	18328	30407	1500	804	0	29.3	
****CREDITABLE SPACE****								****CREDITABLE SPACE****											
Aug 2017	455	215	259	12328	13257	18205	31462	455	215	259	929	12328	18205	31462	1500	751	0	28.9	
Sep 2017	482	249	297	12773	13801	18038	31839	482	249	297	1028	12773	18038	31839	2270	728	0	28.5	
Oct 2017	536	280	311	13083	14211	18035	32246	536	280	311	1128	13083	18035	32246	3040	535	0	28.1	
Nov 2017	584	293	306	13230	14413	17967	32379	584	293	306	1183	13230	17967	32379	3810	668	0	27.9	
Dec 2017	630	281	306	13391	14608	18027	32635	630	281	306	1217	13391	18027	32635	4580	635	0	27.7	
Jan 2018	692	274	309	13769	15044	17863	32906	692	274	309	1274	13769	17863	32906	5350	692	0	27.5	
****EFFECTIVE SPACE****								****EFFECTIVE SPACE****											
Jan 2018	692	274	309	13769	15044	17863	32906	402	220	60	683	13769	17863	32315	5350	692	0	27.5	
Feb 2018	748	283	314	14120	15466	17744	33210	457	231	65	753	14120	17744	32617	1500	675	0	27.3	
Mar 2018	792	289	309	14328	15718	17741	33458	498	239	59	796	14328	17741	32865	1500	1010	0	27.0	
Apr 2018	789	287	255	14390	15721	18077	33798	491	238	-2	727	14390	18077	33194	1500	1056	0	26.9	
May 2018	755	265	167	14152	15339	18513	33852	450	213	-113	550	14152	18513	33215	1500	909	0	28.2	
Jun 2018	676	224	203	12723	13827	18790	32617	362	163	-116	408	12723	18790	31922	1500	887	0	29.7	
Jul 2018	443	82	365	11274	12164	18928	31092	112	-1	-10	101	11274	18928	30302	1500	802	0	29.9	
****CREDITABLE SPACE****								****CREDITABLE SPACE****											
Aug 2018	350	82	435	11270	12138	18756	30894	350	82	435	867	11270	18756	30894	1500	748	0	29.6	
Sep 2018	375	131	458	11733	12697	18445	31143	375	131	458	964	11733	18445	31143	2270	700	0	29.3	
Oct 2018	428	194	457	12030	13110	18323	31432	428	194	457	1080	12030	18323	31432	3040	444	0	29.1	
Nov 2018	476	228	446	12085	13234	18174	31408	476	228	446	1150	12085	18174	31408	3810	580	0	29.0	

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