

To: All Annual Operating Plan Recipients

From: Lower Colorado Region  
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In addition to the April 2018 24-Month Study based on the Most Probable inflow scenario, Reclamation conducted model runs to determine a possible range of reservoir elevations under Probable Minimum and Probable Maximum inflow scenarios. The Probable Minimum inflow scenario reflects a dry hydrologic condition which statistically would be exceeded 90% of the time. The Most Probable inflow scenario reflects a median hydrologic condition which statistically would be exceeded 50% of the time. The Probable Maximum inflow scenario reflects a wet hydrologic condition which statistically would be exceeded 10% of the time. There is approximately an 80% probability that a future elevation will fall inside the range of the minimum and maximum inflow scenarios. There are possible inflow scenarios that would result in reservoir elevations falling outside the ranges indicated in these reports.

The projected Lake Mead elevations resulting from these three inflow scenarios are summarized in a graph located at the following link:

<https://www.usbr.gov/lc/region/g4000/24mo/2018/April-Chart.pdf>.

The water year 2018 unregulated inflow into Lake Powell under the April Probable Minimum inflow scenario is 4.32 maf, or 40 percent of average. Consistent with the Interim Guidelines, the Most Probable 24-Month Study set an April adjustment to balancing releases at Glen Canyon Dam for the remainder of water year 2018. With the Probable Minimum inflow forecast, the Probable Minimum 24-Month Study results in a projected annual release volume from Glen Canyon Dam of 9.00 maf in water year 2018 and 8.81 maf in water year 2019.

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

The April 2018 Most Probable 24-Month Study is available for download at <https://www.usbr.gov/lc/region/g4000/24mo/2018/APR18.pdf>.

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2018 24-Month Study

Minimum 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)
* Apr 2017	225	1	0	304	304	6472.17	128
H May 2017	430	1	54	373	427	6472.55	129
I Jun 2017	732	2	74	469	543	6502.49	317
S Jul 2017	332	3	88	230	319	6503.83	328
T Aug 2017	102	2	95	61	156	6496.34	271
O Sep 2017	66	2	69	4	72	6495.21	263
<b>WY 2017</b>	<b>2319</b>	<b>15</b>	<b>379</b>	<b>1890</b>	<b>2270</b>		
R Oct 2017	73	1	80	0	80	6494.03	255
I Nov 2017	62	1	78	0	78	6491.65	238
C Dec 2017	46	1	72	8	80	6486.39	204
A Jan 2018	42	1	79	1	80	6479.83	165
L Feb 2018	38	0	72	0	72	6472.86	131
* Mar 2018	58	0	16	56	71	6469.78	117
Apr 2018	85	1	88	0	88	6468.79	114
May 2018	162	1	98	12	110	6479.74	165
Jun 2018	297	2	102	53	155	6500.79	305
Jul 2018	176	3	101	39	140	6505.08	338
Aug 2018	69	2	101	4	105	6500.20	300
Sep 2018	38	2	60	0	60	6496.94	276
<b>WY 2018</b>	<b>1147</b>	<b>15</b>	<b>947</b>	<b>174</b>	<b>1119</b>		
Oct 2018	36	1	61	0	61	6493.17	250
Nov 2018	38	1	60	0	60	6489.73	227
Dec 2018	30	1	61	0	61	6484.88	195
Jan 2019	28	1	61	0	61	6479.01	162
Feb 2019	26	0	60	0	60	6471.87	127
Mar 2019	47	0	49	0	49	6471.43	125
Apr 2019	65	1	48	0	48	6475.00	142
May 2019	116	1	49	0	49	6486.86	208
Jun 2019	180	2	78	0	78	6501.09	307
Jul 2019	99	3	79	0	79	6503.29	324
Aug 2019	47	2	75	0	75	6499.27	293
Sep 2019	33	2	60	0	60	6495.35	265
<b>WY 2019</b>	<b>746</b>	<b>15</b>	<b>742</b>	<b>0</b>	<b>742</b>		
Oct 2019	36	1	62	0	62	6491.60	239
Nov 2019	39	1	60	0	60	6488.35	218
Dec 2019	32	1	62	0	62	6483.60	187
Jan 2020	30	1	61	0	61	6477.86	156
Feb 2020	28	0	60	0	60	6470.87	123
Mar 2020	53	0	61	0	61	6468.78	114

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**April 2018 24-Month Study**

Minimum 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)
* Apr 2017	350	428	5	268	244	511	124	6022.93	3084	745
H May 2017	582	580	8	278	171	449	129	6026.15	3203	857
I Jun 2017	895	705	11	263	223	486	137	6031.41	3404	859
S Jul 2017	387	374	14	180	48	228	142	6034.61	3531	315
T Aug 2017	120	174	13	143	0	143	143	6035.05	3548	173
O Sep 2017	87	93	11	141	0	141	140	6033.63	3491	161
<b>WY 2017</b>	<b>3153</b>	<b>3104</b>	<b>81</b>	<b>2016</b>	<b>712</b>	<b>2728</b>				<b>4225</b>
R Oct 2017	88	95	8	107	0	107	140	6033.17	3473	155
I Nov 2017	82	98	4	139	0	139	138	6032.07	3430	171
C Dec 2017	52	86	2	174	0	174	135	6029.85	3343	202
A Jan 2018	52	90	2	175	0	175	131	6027.65	3259	209
L Feb 2018	57	91	2	155	1	157	129	6025.91	3194	197
* Mar 2018	86	99	3	106	0	106	128	6025.65	3184	178
Apr 2018	108	111	5	98	0	98	128	6025.87	3192	181
May 2018	198	146	8	158	0	158	128	6025.35	3173	364
Jun 2018	315	173	10	91	0	91	130	6027.20	3242	253
Jul 2018	170	134	13	75	0	75	132	6028.34	3285	114
Aug 2018	67	103	13	75	0	75	133	6028.71	3300	88
Sep 2018	39	61	11	73	0	73	132	6028.13	3278	84
<b>WY 2018</b>	<b>1313</b>	<b>1286</b>	<b>80</b>	<b>1426</b>	<b>1</b>	<b>1428</b>				<b>2196</b>
Oct 2018	39	64	7	75	0	75	131	6027.67	3260	98
Nov 2018	41	63	3	73	0	73	131	6027.33	3247	101
Dec 2018	28	59	2	75	0	75	130	6026.87	3230	100
Jan 2019	35	68	2	75	0	75	130	6026.63	3221	100
Feb 2019	39	73	2	68	0	68	130	6026.70	3223	91
Mar 2019	86	87	3	75	0	75	130	6026.93	3232	142
Apr 2019	97	80	5	73	0	73	130	6026.98	3234	238
May 2019	163	96	8	148	0	148	128	6025.46	3177	550
Jun 2019	217	115	10	75	0	75	129	6026.21	3205	343
Jul 2019	106	87	13	68	0	68	129	6026.36	3211	100
Aug 2019	47	75	12	68	0	68	129	6026.24	3206	81
Sep 2019	33	59	11	65	0	65	128	6025.80	3190	73
<b>WY 2019</b>	<b>930</b>	<b>926</b>	<b>79</b>	<b>939</b>	<b>0</b>	<b>939</b>				<b>2018</b>
Oct 2019	42	67	7	68	0	68	128	6025.60	3182	91
Nov 2019	48	69	3	65	0	65	128	6025.60	3182	94
Dec 2019	35	64	2	68	0	68	128	6025.47	3178	93
Jan 2020	40	72	2	68	0	68	128	6025.53	3180	93
Feb 2020	45	77	2	63	0	63	128	6025.83	3191	91
Mar 2020	102	111	3	68	0	68	130	6026.86	3229	144

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2018 24-Month Study

### Minimum 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)
* Apr 2017	13	9	9312.04	73
H May 2017	30	19	9318.55	84
I Jun 2017	62	45	9327.76	102
S Jul 2017	24	26	9326.95	100
T Aug 2017	12	25	9320.31	88
O Sep 2017	8	18	9314.58	77
<b>WY 2017</b>	<b>179</b>	<b>173</b>		
R Oct 2017	8	8	9314.93	78
I Nov 2017	6	6	9315.09	78
C Dec 2017	4	6	9313.84	76
A Jan 2018	4	6	9312.64	74
L Feb 2018	4	6	9311.50	72
* Mar 2018	5	6	9310.51	71
Apr 2018	5	6	9309.67	69
May 2018	15	10	9312.49	74
Jun 2018	22	17	9315.17	78
Jul 2018	11	18	9310.42	71
Aug 2018	7	15	9304.66	62
Sep 2018	6	14	9298.21	53
<b>WY 2018</b>	<b>95</b>	<b>120</b>		
Oct 2018	6	6	9297.99	52
Nov 2018	5	6	9296.87	51
Dec 2018	4	6	9295.32	49
Jan 2019	4	6	9293.76	47
Feb 2019	4	6	9291.74	45
Mar 2019	4	6	9290.09	43
Apr 2019	8	6	9291.60	45
May 2019	23	18	9296.00	50
Jun 2019	31	30	9296.43	50
Jul 2019	11	20	9288.57	41
Aug 2019	7	10	9285.88	38
Sep 2019	6	8	9284.02	37
<b>WY 2019</b>	<b>112</b>	<b>128</b>		
Oct 2019	6	8	9281.93	35
Nov 2019	5	8	9278.60	32
Dec 2019	5	8	9274.62	28
Jan 2020	4	8	9269.86	25
Feb 2020	4	8	9263.72	20
Mar 2020	4	8	9257.77	17

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2018 24-Month Study

Minimum 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)
*	Apr 2017	145	140	1	53	0	53	7499.55	658
H	May 2017	244	233	1	151	65	293	7491.98	597
I	Jun 2017	392	373	1	139	35	175	7515.35	793
S	Jul 2017	135	137	2	113	0	110	7518.20	819
T	Aug 2017	84	96	1	111	0	111	7516.38	802
O	Sep 2017	35	45	1	115	0	114	7508.43	732
<b>WY 2017</b>		<b>1245</b>	<b>1238</b>	<b>9</b>	<b>987</b>	<b>101</b>	<b>1163</b>		
R	Oct 2017	37	37	1	102	0	102	7500.64	667
I	Nov 2017	32	32	0	40	0	40	7499.68	659
C	Dec 2017	25	27	0	93	0	93	7491.44	593
A	Jan 2018	20	22	0	60	0	60	7486.51	554
L	Feb 2018	23	25	0	32	0	32	7485.54	547
*	Mar 2018	28	29	0	43	0	43	7483.73	534
	Apr 2018	30	31	1	77	0	77	7477.38	487
	May 2018	85	80	1	67	0	67	7479.07	499
	Jun 2018	100	96	1	59	0	59	7483.89	535
	Jul 2018	45	53	1	77	0	77	7480.50	510
	Aug 2018	34	43	1	79	0	79	7475.37	473
	Sep 2018	26	35	1	67	0	67	7470.57	440
<b>WY 2018</b>		<b>485</b>	<b>510</b>	<b>8</b>	<b>795</b>	<b>0</b>	<b>795</b>		
	Oct 2018	32	32	0	40	0	40	7469.34	431
	Nov 2018	29	31	0	15	0	15	7471.69	447
	Dec 2018	25	27	0	15	0	15	7473.33	459
	Jan 2019	24	26	0	16	0	16	7474.79	469
	Feb 2019	22	24	0	14	0	14	7476.29	479
	Mar 2019	34	36	0	17	0	17	7478.84	498
	Apr 2019	63	62	1	40	0	40	7481.67	518
	May 2019	156	150	1	99	0	99	7488.31	568
	Jun 2019	177	177	1	52	0	52	7503.68	692
	Jul 2019	62	71	1	87	0	87	7501.56	674
	Aug 2019	45	48	1	87	0	87	7496.59	634
	Sep 2019	29	31	1	67	0	67	7491.96	597
<b>WY 2019</b>		<b>699</b>	<b>715</b>	<b>8</b>	<b>550</b>	<b>0</b>	<b>550</b>		
	Oct 2019	32	34	1	42	0	42	7490.92	588
	Nov 2019	30	33	0	14	0	14	7493.26	607
	Dec 2019	26	29	0	56	0	56	7489.79	580
	Jan 2020	24	28	0	52	0	52	7486.68	556
	Feb 2020	22	27	0	37	0	37	7485.32	545
	Mar 2020	36	40	0	33	0	33	7486.16	552

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2018 24-Month Study

Minimum 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)
*	Apr 2017	157	53	12	66	65	0	65	7149.64	109
H	May 2017	263	293	19	312	203	0	312	7149.70	109
I	Jun 2017	411	175	19	195	184	0	193	7151.34	110
S	Jul 2017	139	110	4	114	37	0	111	7155.13	113
T	Aug 2017	86	111	2	113	0	0	115	7152.68	111
O	Sep 2017	35	114	0	115	92	0	112	7155.62	114
<b>WY 2017</b>		<b>1314</b>	<b>1163</b>	<b>69</b>	<b>1232</b>	<b>893</b>	<b>0</b>	<b>1226</b>		
R	Oct 2017	38	102	1	103	105	0	105	7153.17	112
I	Nov 2017	34	40	1	41	42	0	42	7152.45	111
C	Dec 2017	26	93	1	94	94	0	94	7152.45	111
A	Jan 2018	22	60	2	62	62	0	63	7150.65	110
L	Feb 2018	24	32	1	33	34	0	34	7149.19	108
*	Mar 2018	29	43	1	44	49	0	49	7143.05	104
	Apr 2018	35	77	5	82	74	0	74	7153.73	112
	May 2018	97	67	12	79	79	0	79	7153.73	112
	Jun 2018	110	59	10	69	69	0	69	7153.73	112
	Jul 2018	48	77	3	80	80	0	80	7153.73	112
	Aug 2018	36	79	2	81	81	0	81	7153.73	112
	Sep 2018	28	67	2	70	70	0	70	7153.73	112
<b>WY 2018</b>		<b>528</b>	<b>795</b>	<b>43</b>	<b>837</b>	<b>838</b>	<b>0</b>	<b>839</b>		
	Oct 2018	35	40	3	43	43	0	43	7153.73	112
	Nov 2018	31	15	2	17	17	0	17	7153.73	112
	Dec 2018	27	15	2	17	17	0	17	7153.73	112
	Jan 2019	26	16	2	18	18	0	18	7153.73	112
	Feb 2019	24	14	2	16	16	0	16	7153.73	112
	Mar 2019	38	17	4	21	21	0	21	7153.73	112
	Apr 2019	72	40	9	49	49	0	49	7153.73	112
	May 2019	171	99	16	115	115	0	115	7153.73	112
	Jun 2019	187	52	10	62	62	0	62	7153.73	112
	Jul 2019	64	87	2	90	90	0	90	7153.73	112
	Aug 2019	47	87	2	89	89	0	89	7153.73	112
	Sep 2019	31	67	2	69	69	0	69	7153.73	112
<b>WY 2019</b>		<b>755</b>	<b>550</b>	<b>55</b>	<b>606</b>	<b>606</b>	<b>0</b>	<b>606</b>		
	Oct 2019	35	42	3	45	45	0	45	7153.73	112
	Nov 2019	32	14	2	16	16	0	16	7153.73	112
	Dec 2019	28	56	2	58	58	0	58	7153.73	112
	Jan 2020	27	52	2	54	54	0	54	7153.73	112
	Feb 2020	25	37	3	39	39	0	39	7153.73	112
	Mar 2020	40	33	4	37	37	0	37	7153.73	112

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2018 24-Month Study

Minimum 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)
*	Apr 2017	167	65	10	75	31	44	75	6751.65	17	39	38
H	May 2017	285	312	22	334	86	73	331	6759.83	19	62	270
I	Jun 2017	446	193	36	229	44	127	231	6751.78	17	61	172
S	Jul 2017	148	111	8	119	96	25	121	6746.24	15	63	60
T	Aug 2017	89	115	3	119	119	0	119	6744.79	15	62	58
O	Sep 2017	39	112	4	116	115	0	115	6748.63	16	59	56
<b>WY 2017</b>		<b>1423</b>	<b>1226</b>	<b>109</b>	<b>1335</b>	<b>751</b>	<b>350</b>	<b>1334</b>			<b>413</b>	<b>929</b>
R	Oct 2017	43	105	5	110	109	0	109	6751.20	16	55	53
I	Nov 2017	38	42	4	46	46	0	46	6749.89	16	1	46
C	Dec 2017	29	94	3	97	97	0	97	6749.23	16	1	98
A	Jan 2018	25	63	3	66	62	4	66	6747.99	16	1	66
L	Feb 2018	27	34	3	37	16	20	36	6750.06	16	0	36
*	Mar 2018	33	49	4	52	53	0	53	6747.97	16	13	39
	Apr 2018	40	74	5	79	77	0	77	6753.04	17	42	35
	May 2018	111	79	14	94	94	0	94	6753.04	17	62	32
	Jun 2018	125	69	14	83	83	0	83	6753.04	17	61	22
	Jul 2018	54	80	6	86	86	0	86	6753.04	17	63	23
	Aug 2018	41	81	5	86	86	0	86	6753.04	17	65	21
	Sep 2018	33	70	5	74	74	0	74	6753.04	17	55	19
<b>WY 2018</b>		<b>599</b>	<b>839</b>	<b>72</b>	<b>910</b>	<b>884</b>	<b>25</b>	<b>909</b>			<b>419</b>	<b>490</b>
	Oct 2018	40	43	6	49	49	0	49	6753.04	17	30	19
	Nov 2018	35	17	4	21	21	0	21	6753.04	17	0	21
	Dec 2018	31	17	4	22	22	0	22	6753.04	17	0	22
	Jan 2019	30	18	4	22	22	0	22	6753.04	17	0	22
	Feb 2019	28	16	4	19	19	0	19	6753.04	17	0	19
	Mar 2019	43	21	6	26	26	0	26	6753.04	17	5	21
	Apr 2019	83	49	10	60	60	0	60	6753.04	17	42	18
	May 2019	193	115	21	136	134	2	136	6753.04	17	62	74
	Jun 2019	206	62	19	80	80	0	80	6753.04	17	61	19
	Jul 2019	70	90	6	95	95	0	95	6753.04	17	65	30
	Aug 2019	53	89	6	95	95	0	95	6753.04	17	65	30
	Sep 2019	37	69	5	74	74	0	74	6753.04	17	55	19
<b>WY 2019</b>		<b>848</b>	<b>606</b>	<b>94</b>	<b>699</b>	<b>697</b>	<b>2</b>	<b>699</b>			<b>385</b>	<b>314</b>
	Oct 2019	41	45	6	51	51	0	51	6753.04	17	30	21
	Nov 2019	37	16	5	21	21	0	21	6753.04	17	0	21
	Dec 2019	32	58	5	63	63	0	63	6753.04	17	0	63
	Jan 2020	31	54	5	59	59	0	59	6753.04	17	0	59
	Feb 2020	29	39	4	43	43	0	43	6753.04	17	0	43
	Mar 2020	46	37	6	43	43	0	43	6753.04	17	5	38

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2018 24-Month Study

Minimum 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)
* Apr 2017	45	35	7649.82	87
H May 2017	67	44	7658.86	109
I Jun 2017	72	57	7664.54	124
S Jul 2017	30	39	7660.94	115
T Aug 2017	19	33	7655.15	100
O Sep 2017	9	34	7644.31	74
<b>WY 2017</b>	<b>303</b>	<b>297</b>		
R Oct 2017	9	22	7638.22	61
I Nov 2017	5	2	7639.49	63
C Dec 2017	3	1	7640.27	65
A Jan 2018	3	0	7641.42	67
L Feb 2018	3	0	7642.57	70
* Mar 2018	4	0	7644.11	73
Apr 2018	4	0	7645.59	77
May 2018	17	18	7645.16	76
Jun 2018	11	24	7638.81	62
Jul 2018	6	24	7629.32	44
Aug 2018	7	22	7619.72	29
Sep 2018	9	17	7612.99	21
<b>WY 2018</b>	<b>81</b>	<b>132</b>		
Oct 2018	11	10	7613.57	21
Nov 2018	8	2	7618.49	27
Dec 2018	6	2	7621.85	32
Jan 2019	6	2	7624.37	35
Feb 2019	5	2	7626.42	39
Mar 2019	8	2	7629.70	44
Apr 2019	19	2	7638.31	61
May 2019	62	31	7651.74	91
Jun 2019	49	43	7654.21	97
Jul 2019	18	42	7644.04	73
Aug 2019	15	38	7632.70	50
Sep 2019	15	30	7623.74	34
<b>WY 2019</b>	<b>220</b>	<b>204</b>		
Oct 2019	11	17	7619.11	28
Nov 2019	8	2	7623.26	34
Dec 2019	6	2	7626.13	38
Jan 2020	5	2	7628.23	42
Feb 2020	5	2	7629.92	45
Mar 2020	9	2	7633.53	51

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



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2018 24-Month Study

Minimum 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)
* Apr 2017	235	33	193	3	19	33	6078.18	1598	132
H May 2017	261	45	195	4	25	228	6073.94	1536	323
I Jun 2017	231	46	166	5	40	259	6063.90	1398	458
S Jul 2017	49	11	48	4	43	38	6061.00	1361	95
T Aug 2017	30	5	38	4	35	36	6058.07	1323	57
O Sep 2017	9	2	33	3	23	42	6055.28	1289	46
<b>WY 2017</b>	<b>1157</b>	<b>160</b>	<b>991</b>	<b>28</b>	<b>198</b>	<b>785</b>			<b>1422</b>
R Oct 2017	38	2	49	2	8	32	6055.89	1296	52
I Nov 2017	19	0	16	1	0	25	6055.04	1286	42
C Dec 2017	10	0	9	1	0	24	6053.69	1270	41
A Jan 2018	12	0	9	1	0	23	6052.47	1255	40
L Feb 2018	14	0	11	1	1	18	6051.73	1246	33
* Mar 2018	24	2	19	2	6	21	6050.92	1236	29
Apr 2018	45	2	39	2	20	39	6049.05	1214	51
May 2018	78	7	72	3	35	31	6049.31	1217	68
Jun 2018	24	3	34	4	51	38	6044.22	1159	68
Jul 2018	21	0	39	4	56	57	6037.06	1081	68
Aug 2018	18	0	33	3	47	56	6029.93	1008	70
Sep 2018	21	0	29	2	26	52	6024.75	957	69
<b>WY 2018</b>	<b>324</b>	<b>16</b>	<b>359</b>	<b>24</b>	<b>250</b>	<b>417</b>			<b>630</b>
Oct 2018	27	0	26	1	9	37	6022.47	935	57
Nov 2018	25	0	20	1	0	25	6021.85	929	41
Dec 2018	22	0	18	0	0	25	6021.06	922	40
Jan 2019	21	0	17	0	0	25	6020.25	914	39
Feb 2019	27	0	23	1	0	21	6020.44	916	34
Mar 2019	80	0	74	1	5	22	6025.26	962	41
Apr 2019	120	2	101	2	21	24	6030.72	1016	65
May 2019	221	7	184	3	36	22	6042.44	1139	145
Jun 2019	142	3	132	4	52	22	6047.30	1194	136
Jul 2019	23	0	46	4	57	46	6041.99	1134	86
Aug 2019	19	0	42	3	48	50	6036.49	1075	77
Sep 2019	26	0	41	2	26	45	6033.40	1043	71
<b>WY 2019</b>	<b>753</b>	<b>12</b>	<b>725</b>	<b>23</b>	<b>254</b>	<b>362</b>			<b>832</b>
Oct 2019	28	0	35	1	10	38	6031.98	1029	58
Nov 2019	28	0	22	1	0	22	6031.86	1027	39
Dec 2019	25	0	21	1	0	25	6031.42	1023	40
Jan 2020	22	0	18	1	0	26	6030.66	1015	39
Feb 2020	30	0	27	1	0	23	6031.01	1019	35
Mar 2020	92	0	86	1	6	22	6036.47	1075	44

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2018 24-Month Study

Minimum 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)
* Apr 2017	1608	1494	23	623	0	623	3604.14	5026	12149	629
H May 2017	2377	2321	29	652	0	652	3619.09	5147	13667	658
I Jun 2017	3115	2680	51	749	0	749	3634.89	5286	15408	763
S Jul 2017	1073	889	64	850	0	850	3634.69	5284	15385	875
T Aug 2017	446	495	63	900	0	900	3630.88	5250	14952	929
O Sep 2017	196	410	57	663	0	663	3628.31	5227	14664	671
<b>WY 2017</b>	<b>11905</b>	<b>11396</b>	<b>409</b>	<b>8874</b>	<b>126</b>	<b>9000</b>				<b>9152</b>
R Oct 2017	449	533	39	640	0	640	3627.09	5216	14530	634
I Nov 2017	387	454	37	630	0	630	3625.29	5200	14332	619
C Dec 2017	299	483	29	740	0	740	3622.85	5179	14068	733
A Jan 2018	262	442	9	860	0	860	3619.14	5147	13672	860
L Feb 2018	269	387	10	730	0	730	3616.02	5121	13346	748
* Mar 2018	332	395	16	800	0	800	3612.23	5090	12956	832
Apr 2018	280	324	25	705	0	705	3608.51	5060	12580	708
May 2018	622	559	29	705	0	705	3606.88	5047	12419	708
Jun 2018	708	511	43	760	0	760	3604.12	5026	12148	761
Jul 2018	290	319	51	860	0	860	3598.42	4982	11600	870
Aug 2018	202	340	49	900	0	900	3592.37	4937	11036	916
Sep 2018	222	354	44	670	0	670	3588.70	4910	10703	682
<b>WY 2018</b>	<b>4321</b>	<b>5101</b>	<b>379</b>	<b>9000</b>	<b>0</b>	<b>9000</b>				<b>9072</b>
Oct 2018	349	414	30	640	0	640	3586.04	4891	10466	647
Nov 2018	419	435	28	640	0	640	3583.59	4874	10250	647
Dec 2018	330	370	22	720	0	720	3579.60	4846	9905	727
Jan 2019	329	364	7	830	0	830	3574.41	4811	9468	839
Feb 2019	372	387	7	740	0	740	3570.35	4785	9135	752
Mar 2019	585	505	11	780	0	780	3567.04	4763	8870	785
Apr 2019	747	627	18	700	0	700	3565.98	4757	8786	704
May 2019	1625	1395	21	690	0	690	3573.82	4807	9419	694
Jun 2019	1654	1322	35	720	0	720	3580.06	4849	9945	722
Jul 2019	404	470	43	820	0	820	3575.76	4820	9581	831
Aug 2019	256	399	41	870	0	870	3569.99	4782	9106	887
Sep 2019	287	403	37	655	0	655	3566.64	4761	8838	667
<b>WY 2019</b>	<b>7356</b>	<b>7091</b>	<b>299</b>	<b>8805</b>	<b>0</b>	<b>8805</b>				<b>8903</b>
Oct 2019	361	416	25	480	0	480	3565.59	4754	8755	486
Nov 2019	447	443	24	500	0	500	3564.63	4748	8680	500
Dec 2019	363	425	19	600	0	600	3562.31	4734	8500	605
Jan 2020	361	420	6	720	0	720	3558.59	4711	8217	731
Feb 2020	393	419	6	640	0	640	3555.78	4694	8006	644
Mar 2020	665	563	10	675	0	675	3554.25	4685	7894	680

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2018 24-Month Study

Minimum Probable Inflow\*

### Hoover Dam - Lake Mead



	<b>Date</b>	<b>Glen Release (1000 Ac-Ft)</b>	<b>Side Inflow Glen to Hoover (1000 Ac-Ft)</b>	<b>Evap Losses (1000 Ac-Ft)</b>	<b>Total Release (1000 Ac-Ft)</b>	<b>Total Release (1000 CFS)</b>	<b>SNWP Use (1000 Ac-Ft)</b>	<b>Downstream Requirements (1000 Ac-Ft)</b>	<b>Bank Storage (1000 Ac-Ft)</b>	<b>Reservoir Elev End of Month (Ft)</b>	<b>EOM Storage (1000 Ac-Ft)</b>
*	Apr 2017	623	92	39	961	16.1	20	960	677	1084.89	10420
H	May 2017	652	39	44	917	14.9	29	915	659	1081.56	10141
I	Jun 2017	749	17	53	864	14.5	29	864	648	1079.52	9971
S	Jul 2017	850	89	66	885	14.4	31	885	646	1079.03	9931
T	Aug 2017	900	94	70	683	11.1	28	683	658	1081.44	10131
O	Sep 2017	663	70	58	600	10.1	21	591	662	1082.05	10182
<b>WY 2017</b>		<b>9000</b>	<b>995</b>	<b>541</b>	<b>8620</b>		<b>236</b>	<b>8591</b>			
R	Oct 2017	640	44	43	596	9.7	23	595	663	1082.30	10202
I	Nov 2017	630	40	42	731	12.3	16	731	656	1080.95	10090
C	Dec 2017	740	43	37	594	9.7	12	593	664	1082.52	10221
A	Jan 2018	860	78	30	449	7.3	10	448	692	1087.50	10642
L	Feb 2018	730	61	28	687	12.4	11	693	696	1088.21	10703
*	Mar 2018	800	71	32	833	13.5	16	832	695	1088.11	10694
	Apr 2018	705	26	39	1002	16.8	23	1002	675	1084.44	10382
	May 2018	705	23	44	1001	16.3	27	1001	654	1080.57	10059
	Jun 2018	760	6	53	906	15.2	33	906	640	1078.01	9847
	Jul 2018	860	77	66	882	14.3	36	882	637	1077.47	9803
	Aug 2018	900	127	70	771	12.5	34	771	646	1079.21	9946
	Sep 2018	670	91	58	800	13.4	27	800	639	1077.81	9831
<b>WY 2018</b>		<b>9000</b>	<b>687</b>	<b>541</b>	<b>9253</b>		<b>267</b>	<b>9255</b>			
	Oct 2018	640	56	42	600	9.8	28	600	641	1078.11	9855
	Nov 2018	640	52	42	752	12.6	21	752	633	1076.71	9740
	Dec 2018	720	54	36	676	11.0	14	676	636	1077.26	9785
	Jan 2019	830	70	30	640	10.4	12	640	649	1079.75	9990
	Feb 2019	740	96	27	706	12.7	14	706	655	1080.75	10073
	Mar 2019	780	39	31	1076	17.5	21	1076	636	1077.23	9783
	Apr 2019	700	33	37	1080	18.1	23	1080	611	1072.51	9400
	May 2019	690	32	42	988	16.1	27	988	591	1068.56	9085
	Jun 2019	720	13	50	901	15.1	33	901	575	1065.55	8849
	Jul 2019	820	88	62	860	14.0	36	860	572	1064.94	8802
	Aug 2019	870	134	66	761	12.4	34	761	581	1066.65	8936
	Sep 2019	655	91	55	768	12.9	27	768	574	1065.41	8838
<b>WY 2019</b>		<b>8805</b>	<b>756</b>	<b>520</b>	<b>9807</b>		<b>290</b>	<b>9807</b>			
	Oct 2019	480	69	40	531	8.6	28	531	571	1064.80	8791
	Nov 2019	500	61	39	691	11.6	21	691	560	1062.49	8613
	Dec 2019	600	50	34	615	10.0	14	615	559	1062.33	8601
	Jan 2020	720	78	28	607	9.9	14	607	568	1064.15	8741
	Feb 2020	640	93	26	663	11.5	17	663	570	1064.49	8767
	Mar 2020	675	56	28	988	16.1	22	988	551	1060.74	8479

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2018 24-Month Study

Minimum 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)
*	Apr 2017	961	-23	17	955	0	955	16.1	642.45	1684
H	May 2017	917	-13	22	846	0	846	13.8	643.74	1719
I	Jun 2017	864	-6	25	853	0	853	14.3	643.01	1699
S	Jul 2017	885	-5	26	809	0	809	13.2	644.65	1744
T	Aug 2017	683	-8	23	707	0	707	11.5	642.64	1689
O	Sep 2017	600	-11	18	656	0	656	11.0	639.47	1603
<b>WY 2017</b>		<b>8620</b>	<b>-183</b>	<b>199</b>	<b>8261</b>	<b>0</b>	<b>8261</b>			
R	Oct 2017	596	-2	15	671	0	671	10.9	636.00	1512
I	Nov 2017	731	-18	11	595	0	595	10.0	640.07	1619
C	Dec 2017	594	-16	9	552	0	552	9.0	640.68	1636
A	Jan 2018	449	2	10	437	0	437	7.1	640.86	1641
L	Feb 2018	687	-4	10	611	0	611	11.0	643.18	1704
*	Mar 2018	833	-1	13	836	0	836	13.6	642.57	1687
	Apr 2018	1002	-20	17	954	0	954	16.0	643.00	1699
	May 2018	1001	-12	22	967	0	967	15.7	643.00	1699
	Jun 2018	906	-15	25	893	0	893	15.0	642.00	1671
	Jul 2018	882	-15	25	855	0	855	13.9	641.50	1658
	Aug 2018	771	-12	23	736	0	736	12.0	641.50	1658
	Sep 2018	800	-12	18	809	0	809	13.6	640.01	1617
<b>WY 2018</b>		<b>9253</b>	<b>-126</b>	<b>197</b>	<b>8914</b>	<b>0</b>	<b>8914</b>			
	Oct 2018	600	-4	15	764	0	764	12.4	633.00	1434
	Nov 2018	752	-12	10	678	0	678	11.4	635.00	1486
	Dec 2018	676	-12	9	558	0	558	9.1	638.71	1583
	Jan 2019	640	-19	10	528	0	528	8.6	641.80	1666
	Feb 2019	706	-15	10	681	0	681	12.3	641.80	1666
	Mar 2019	1076	-17	13	1011	0	1011	16.5	643.05	1700
	Apr 2019	1080	-20	17	1045	0	1045	17.6	643.00	1699
	May 2019	988	-12	22	954	0	954	15.5	643.00	1699
	Jun 2019	901	-15	25	888	0	888	14.9	642.00	1671
	Jul 2019	860	-15	25	833	0	833	13.6	641.50	1658
	Aug 2019	761	-12	23	727	0	727	11.8	641.50	1658
	Sep 2019	768	-12	18	778	0	778	13.1	640.01	1617
<b>WY 2019</b>		<b>9807</b>	<b>-166</b>	<b>197</b>	<b>9443</b>	<b>0</b>	<b>9443</b>			
	Oct 2019	531	-4	15	696	0	696	11.3	633.00	1434
	Nov 2019	691	-12	10	616	0	616	10.4	635.00	1486
	Dec 2019	615	-12	9	497	0	497	8.1	638.71	1583
	Jan 2020	607	-19	10	495	0	495	8.1	641.80	1666
	Feb 2020	663	-15	10	638	0	638	11.1	641.80	1666
	Mar 2020	988	-17	13	923	0	923	15.0	643.05	1700

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**April 2018 24-Month Study**

Minimum 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)
*	Apr 2017	955	13	11	729	12.3	42	160	448.73	594	181	3.0
H	May 2017	846	22	13	634	10.3	44	175	448.31	586	111	1.8
I	Jun 2017	853	0	15	689	11.6	57	79	448.41	588	126	2.1
S	Jul 2017	809	18	17	666	10.8	58	71	448.63	592	131	2.1
T	Aug 2017	707	12	17	570	9.3	58	70	448.28	585	102	1.7
O	Sep 2017	656	16	15	481	8.1	56	134	447.17	564	104	1.7
<b>WY 2017</b>		<b>8261</b>	<b>220</b>	<b>140</b>	<b>6204</b>		<b>664</b>	<b>1406</b>			<b>1513</b>	
R	Oct 2017	671	9	12	478	7.8	69	131	446.27	548	65	1.1
I	Nov 2017	595	12	9	349	5.9	89	127	447.86	577	99	1.7
C	Dec 2017	552	17	7	335	5.5	100	144	446.80	557	109	1.8
A	Jan 2018	437	3	6	329	5.3	29	90	445.81	539	125	2.0
L	Feb 2018	611	3	8	429	7.7	12	109	448.52	590	145	2.6
*	Mar 2018	836	-3	9	637	10.4	61	139	447.46	570	195	3.2
	Apr 2018	954	16	11	719	12.1	68	162	447.50	570	175	2.9
	May 2018	967	15	13	662	10.8	85	186	448.70	593	119	1.9
	Jun 2018	893	13	16	709	11.9	82	85	448.70	593	127	2.1
	Jul 2018	855	21	17	680	11.1	105	74	448.00	580	135	2.2
	Aug 2018	736	23	17	601	9.8	105	33	447.50	571	104	1.7
	Sep 2018	809	17	15	524	8.8	102	176	447.50	570	96	1.6
<b>WY 2018</b>		<b>8914</b>	<b>145</b>	<b>139</b>	<b>6452</b>		<b>910</b>	<b>1455</b>			<b>1494</b>	
	Oct 2018	764	23	12	475	7.7	105	188	447.50	571	65	1.1
	Nov 2018	678	16	9	389	6.5	102	188	447.50	571	99	1.7
	Dec 2018	558	18	7	295	4.8	105	183	446.50	552	109	1.8
	Jan 2019	528	21	6	318	5.2	99	121	446.50	552	138	2.2
	Feb 2019	681	11	8	485	8.7	72	121	446.50	552	160	2.9
	Mar 2019	1011	7	9	718	11.7	90	189	446.70	555	198	3.2
	Apr 2019	1045	16	11	710	11.9	109	184	448.70	593	175	2.9
	May 2019	954	15	13	642	10.4	111	189	448.70	593	104	1.7
	Jun 2019	888	13	16	683	11.5	109	79	448.70	593	105	1.8
	Jul 2019	833	21	17	647	10.5	111	79	448.00	580	111	1.8
	Aug 2019	727	23	17	589	9.6	111	29	447.50	571	100	1.6
	Sep 2019	778	17	15	509	8.6	109	152	447.50	570	89	1.5
<b>WY 2019</b>		<b>9443</b>	<b>200</b>	<b>139</b>	<b>6460</b>		<b>1237</b>	<b>1702</b>			<b>1453</b>	
	Oct 2019	696	23	12	490	8.0	69	141	447.50	571	74	1.2
	Nov 2019	616	16	9	408	6.9	69	141	447.50	571	116	1.9
	Dec 2019	497	18	7	313	5.1	69	141	446.50	552	131	2.1
	Jan 2020	495	21	6	313	5.1	86	106	446.50	552	134	2.2
	Feb 2020	638	11	8	479	8.3	57	100	446.50	552	155	2.7
	Mar 2020	923	7	9	708	11.5	76	125	446.70	555	191	3.1

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

**OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS**

**April 2018 24-Month Study**

Minimum 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
* Apr 2017	961	16.1	1084.89	10420	-287	439.75	1227.0	381.0	76	396.5
H May 2017	917	14.9	1081.56	10141	-280	434.83	1307.0	360.6	80	393.4
I Jun 2017	864	14.5	1079.52	9971	-169	433.52	1500.0	335.0	94	387.5
S Jul 2017	885	14.4	1079.03	9931	-40	432.24	1499.0	341.1	94	385.5
T Aug 2017	683	11.1	1081.44	10131	200	436.25	1478.1	261.0	93	382.0
O Sep 2017	600	10.1	1082.05	10182	51	440.10	976.1	230.7	66	384.8
<b>WY 2017</b>	<b>8620</b>							<b>3347.1</b>		
R Oct 2017	596	9.7	1082.30	10202	21	441.43	976.1	229.0	66	384.2
I Nov 2017	731	12.3	1080.95	10090	-113	435.01	996.0	287.9	63	393.6
C Dec 2017	594	9.7	1082.52	10221	131	439.05	821.0	235.7	52	396.6
A Jan 2018	449	7.3	1087.50	10642	421	442.14	834.0	176.5	51	392.9
L Feb 2018	687	12.4	1088.21	10703	61	441.97	1220.1	275.0	75	400.3
* Mar 2018	833	13.5	1088.11	10694	-9	442.23	1005.9	333.9	62	400.8
Apr 2018	1002	16.8	1084.44	10382	-312	437.68	880.9	411.7	55	410.8
May 2018	1001	16.3	1080.57	10059	-324	429.58	1478.0	385.7	95	385.2
Jun 2018	906	15.2	1078.01	9847	-212	426.15	1552.0	348.7	100	385.0
Jul 2018	882	14.3	1077.47	9803	-44	425.10	1552.0	343.7	100	389.5
Aug 2018	771	12.5	1079.21	9946	143	425.86	1552.0	296.7	100	385.0
Sep 2018	800	13.4	1077.81	9831	-115	426.51	1552.0	310.6	100	388.4
<b>WY 2018</b>	<b>9253</b>							<b>3635.1</b>		
Oct 2018	600	9.8	1078.11	9855	24	431.49	1058.0	233.3	68	389.0
Nov 2018	752	12.6	1076.71	9740	-115	431.91	1248.0	295.7	80	393.3
Dec 2018	676	11.0	1077.26	9785	45	430.32	1146.9	261.3	74	386.7
Jan 2019	640	10.4	1079.75	9990	205	431.39	904.0	252.3	57	394.5
Feb 2019	706	12.7	1080.75	10073	83	432.09	909.0	282.0	58	399.6
Mar 2019	1076	17.5	1077.23	9783	-290	429.79	993.0	430.7	64	400.3
Apr 2019	1080	18.1	1072.51	9400	-383	423.51	1237.0	420.3	80	389.2
May 2019	988	16.1	1068.56	9085	-315	417.83	1414.0	369.6	94	374.1
Jun 2019	901	15.1	1065.55	8849	-236	414.02	1499.0	336.6	100	373.6
Jul 2019	860	14.0	1064.94	8802	-48	412.72	1499.0	324.4	100	377.1
Aug 2019	761	12.4	1066.65	8936	134	413.43	1512.0	284.2	100	373.4
Sep 2019	768	12.9	1065.41	8838	-97	414.14	1521.5	288.5	100	375.6
<b>WY 2019</b>	<b>9807</b>							<b>3778.9</b>		
Oct 2019	531	8.6	1064.80	8791	-47	418.04	1140.1	197.2	75	371.2
Nov 2019	691	11.6	1062.49	8613	-179	418.28	1224.7	260.8	80	377.6
Dec 2019	615	10.0	1062.33	8601	-12	415.83	1139.0	231.0	74	375.7
Jan 2020	607	9.9	1064.15	8741	140	416.85	797.2	231.5	51	381.3
Feb 2020	663	11.5	1064.49	8767	26	416.89	805.9	254.4	52	383.7
Mar 2020	988	16.1	1060.74	8479	-288	414.16	890.1	379.2	57	384.0

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2018 24-Month Study

Minimum 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
*	Apr 2017	955	16.1	642.45	1684	-34	138.31	204.0	131.0	80	137.2
H	May 2017	846	13.8	643.74	1719	35	142.74	232.0	108.4	91	128.1
I	Jun 2017	853	14.3	643.01	1699	-20	141.59	255.0	107.4	100	126.0
S	Jul 2017	809	13.2	644.65	1744	45	143.65	255.0	101.5	100	125.5
T	Aug 2017	707	11.5	642.64	1689	-55	143.10	255.0	89.9	100	127.1
O	Sep 2017	656	11.0	639.47	1603	-86	138.07	253.3	83.2	99	126.8
<b>WY 2017</b>		<b>8261</b>							<b>1061.4</b>		
R	Oct 2017	671	10.9	636.00	1512	-91	134.26	179.3	81.3	70	121.3
I	Nov 2017	595	10.0	640.07	1619	107	138.81	151.3	73.1	59	122.7
C	Dec 2017	552	9.0	640.68	1636	17	139.44	131.6	69.5	52	126.0
A	Jan 2018	437	7.1	640.86	1641	5	141.78	159.6	55.0	63	125.9
L	Feb 2018	611	11.0	643.18	1704	63	142.18	162.1	76.6	64	125.4
*	Mar 2018	836	13.6	642.57	1687	-17	139.99	189.2	105.4	74	126.1
	Apr 2018	954	16.0	643.00	1699	12	137.12	207.4	119.0	81	124.8
	May 2018	967	15.7	643.00	1699	0	137.43	204.0	120.9	80	125.1
	Jun 2018	893	15.0	642.00	1671	-27	135.51	255.0	111.4	100	124.8
	Jul 2018	855	13.9	641.50	1658	-14	134.73	255.0	106.5	100	124.5
	Aug 2018	736	12.0	641.50	1658	0	134.46	255.0	91.9	100	124.9
	Sep 2018	809	13.6	640.01	1617	-40	133.68	255.0	100.1	100	123.7
<b>WY 2018</b>		<b>8914</b>							<b>1110.7</b>		
	Oct 2018	764	12.4	633.00	1434	-183	130.59	207.3	91.9	81	120.3
	Nov 2018	678	11.4	635.00	1486	51	129.19	170.0	80.2	67	118.4
	Dec 2018	558	9.1	638.71	1583	97	132.25	167.8	67.9	66	121.8
	Jan 2019	528	8.6	641.80	1666	83	134.43	210.6	66.0	83	125.0
	Feb 2019	681	12.3	641.80	1666	0	136.73	187.6	85.2	74	125.1
	Mar 2019	1011	16.5	643.05	1700	34	137.26	190.8	125.7	75	124.3
	Apr 2019	1045	17.6	643.00	1699	-1	136.07	255.0	130.1	100	124.5
	May 2019	954	15.5	643.00	1699	0	136.04	255.0	119.3	100	125.1
	Jun 2019	888	14.9	642.00	1671	-27	135.51	255.0	110.8	100	124.9
	Jul 2019	833	13.6	641.50	1658	-14	134.73	255.0	103.8	100	124.6
	Aug 2019	727	11.8	641.50	1658	0	134.46	255.0	90.8	100	125.0
	Sep 2019	778	13.1	640.01	1617	-40	133.68	255.0	96.4	100	123.9
<b>WY 2019</b>		<b>9443</b>							<b>1168.2</b>		
	Oct 2019	696	11.3	633.00	1434	-183	130.59	207.3	84.0	81	120.7
	Nov 2019	616	10.4	635.00	1486	51	129.19	170.0	73.2	67	118.7
	Dec 2019	497	8.1	638.71	1583	97	132.25	167.8	60.7	66	122.2
	Jan 2020	495	8.1	641.80	1666	83	133.85	230.3	62.1	90	125.3
	Feb 2020	638	11.1	641.80	1666	0	136.73	187.6	80.1	74	125.5
	Mar 2020	923	15.0	643.05	1700	34	137.26	190.8	115.1	75	124.8

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2018 24-Month Study

Minimum 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
*	Apr 2017	729	12.3	448.73	594	17	80.51	120.0	51.3	100	70.3
H	May 2017	634	10.3	448.31	586	-8	82.36	120.0	44.8	100	70.6
I	Jun 2017	689	11.6	448.41	588	2	80.56	120.0	48.1	100	69.9
S	Jul 2017	666	10.8	448.63	592	4	82.74	120.0	46.5	100	69.9
T	Aug 2017	570	9.3	448.28	585	-7	82.37	120.0	39.9	100	70.0
O	Sep 2017	481	8.1	447.17	564	-21	81.08	120.0	33.8	100	70.2
<b>WY 2017</b>		<b>6204</b>							<b>434.1</b>		
R	Oct 2017	478	7.8	446.27	548	-17	80.03	92.9	33.6	77	70.4
I	Nov 2017	349	5.9	447.86	577	30	81.65	90.0	24.1	75	69.2
C	Dec 2017	335	5.5	446.80	557	-20	81.55	92.9	22.5	77	67.0
A	Jan 2018	329	5.3	445.81	539	-18	80.05	117.1	22.8	98	69.2
L	Feb 2018	429	7.7	448.52	590	50	81.30	92.1	30.3	77	70.6
*	Mar 2018	638	10.4	447.46	570	-20	81.79	102.6	44.9	85	70.4
	Apr 2018	719	12.1	447.50	570	1	74.87	120.0	47.2	100	65.7
	May 2018	662	10.8	448.70	593	23	75.47	120.0	43.7	100	65.9
	Jun 2018	709	11.9	448.70	593	0	76.05	120.0	47.2	100	66.6
	Jul 2018	680	11.1	448.00	580	-13	75.71	120.0	45.0	100	66.2
	Aug 2018	601	9.8	447.50	571	-9	75.13	120.0	39.3	100	65.5
	Sep 2018	524	8.8	447.50	570	0	74.89	120.0	34.1	100	65.0
<b>WY 2018</b>		<b>6453</b>							<b>434.7</b>		
	Oct 2018	475	7.7	447.50	571	0	76.19	91.9	31.3	77	65.9
	Nov 2018	389	6.5	447.50	571	0	75.83	99.0	25.3	83	65.0
	Dec 2018	295	4.8	446.50	552	-19	74.40	120.0	18.5	100	62.7
	Jan 2019	318	5.2	446.50	552	0	75.02	95.8	20.2	80	63.6
	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	74.34	112.3	46.9	94	65.3
	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>6460</b>							<b>423.0</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	74.40	120.0	19.7	100	63.0
	Jan 2020	313	5.1	446.50	552	0	75.02	95.8	19.9	80	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	74.34	112.3	46.2	94	65.3

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



# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2018 24-Month Study

Minimum 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
* Apr 2017	270	102	15	22	6	0
H May 2017	291	105	43	72	17	4
I Jun 2017	346	102	40	66	8	6
S Jul 2017	399	71	35	13	18	8
T Aug 2017	421	56	34	0	22	9
O Sep 2017	306	56	35	33	22	6
<b>Summer 2017</b>	<b>2033</b>	<b>492</b>	<b>202</b>	<b>207</b>	<b>93</b>	<b>33</b>
R Oct 2017	294	42	30	37	21	7
I Nov 2017	288	55	12	14	8	7
C Dec 2017	339	68	27	33	19	6
A Jan 2018	394	68	17	21	12	6
L Feb 2018		60	9	12	3	5
* Mar 2018	364	41	12	16	9	1
<b>Winter 2018</b>	<b>1679</b>	<b>334</b>	<b>107</b>	<b>133</b>	<b>71</b>	<b>31</b>
Apr 2018	285	36	22	26	13	6
May 2018	283	58	19	29	16	7
Jun 2018	304	33	17	25	14	9
Jul 2018	341	28	22	29	15	10
Aug 2018	352	28	22	29	15	10
Sep 2018	260	27	19	25	13	5
<b>Summer 2018</b>	<b>1826</b>	<b>208</b>	<b>122</b>	<b>163</b>	<b>86</b>	<b>45</b>
Oct 2018	246	28	11	15	8	5
Nov 2018	245	27	4	6	4	5
Dec 2018	273	28	4	6	4	5
Jan 2019	312	28	5	6	4	5
Feb 2019	275	25	4	6	3	4
Mar 2019	288	28	5	8	5	3
<b>Winter 2019</b>	<b>1640</b>	<b>162</b>	<b>33</b>	<b>47</b>	<b>27</b>	<b>28</b>
Apr 2019	257	27	12	18	10	3
May 2019	255	54	29	41	23	4
Jun 2019	270	27	15	22	14	7
Jul 2019	309	25	27	32	16	7
Aug 2019	323	25	26	32	16	7
Sep 2019	241	24	20	25	13	5
<b>Summer 2019</b>	<b>1655</b>	<b>181</b>	<b>129</b>	<b>171</b>	<b>93</b>	<b>34</b>
Oct 2019	176	25	12	16	9	5
Nov 2019	183	24	4	6	4	5
Dec 2019	218	25	17	21	11	5
Jan 2020	260	25	15	19	10	5
Feb 2020	229	23	11	14	7	4
Mar 2020	241	25	10	13	7	4
<b>Winter 2020</b>	<b>1065</b>	<b>121</b>	<b>59</b>	<b>76</b>	<b>41</b>	<b>24</b>

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



April 2018 24-Month Study

Minimum Probable Inflow\*

Flood Control Criteria

Beginning of Month Conditions



Date	Flaming	Blue	Navajo	Lake	Upper Basin	Lake	Total	Flaming	Blue	Tot or Max	Lake	Lake	BOM Space		Mead	Mead	Sys	
	Gorge	Mesa		Powell	Total	Mesa			Allow		Powell	Total	Required	Sched Rel				FC Rel
	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	MAF	
<b>**** PREDICTED SPACE ****</b>								<b>**** EFFECTIVE SPACE ****</b>										
Apr 2018	792	296	460	11366	12913	16683	29596	368	-20	19	367	11366	16683	28416	1500	1002	0	30.4
May 2018	787	342	482	11742	13353	16995	30348	358	27	19	405	11742	16995	29141	1500	1001	0	30.0
Jun 2018	756	330	479	11903	13468	17318	30786	318	10	-22	306	11903	17318	29528	1500	906	0	29.7
Jul 2018	547	295	537	12174	13553	17530	31083	94	-32	-18	44	12174	17530	29749	1500	882	0	29.1
<b>**** CREDITABLE SPACE ****</b>								<b>**** EFFECTIVE SPACE ****</b>										
Aug 2018	470	320	615	12722	14127	17574	31701	470	320	615	1405	12722	17574	31701	1500	771	0	28.5
Sep 2018	494	357	688	13286	14825	17431	32256	494	357	688	1539	13286	17431	32256	2270	800	0	27.9
Oct 2018	540	390	739	13619	15288	17546	32834	540	390	739	1669	13619	17546	32834	3040	600	0	27.4
Nov 2018	585	398	761	13856	15600	17522	33122	585	398	761	1744	13856	17522	33122	3810	752	0	27.1
Dec 2018	620	382	767	14072	15841	17637	33478	620	382	767	1769	14072	17637	33478	4580	676	0	26.8
Jan 2019	669	371	774	14417	16231	17592	33823	669	371	774	1814	14417	17592	33823	5350	640	0	26.6
<b>**** EFFECTIVE SPACE ****</b>								<b>**** EFFECTIVE SPACE ****</b>										
Jan 2019	669	371	774	14417	16231	17592	33823	161	213	398	771	14417	17592	32780	5350	640	0	26.6
Feb 2019	711	361	782	14854	16708	17387	34094	201	205	405	810	14854	17387	33051	1500	706	0	26.4
Mar 2019	743	350	780	15187	17060	17304	34364	230	196	402	829	15187	17304	33319	1500	1076	0	25.9
Apr 2019	737	332	734	15452	17255	17594	34849	220	179	350	749	15452	17594	33795	1500	1080	0	25.6
May 2019	718	311	680	15536	17246	17977	35222	196	156	273	625	15536	17977	34138	1500	988	0	26.1
Jun 2019	709	261	557	14903	16430	18292	34721	180	100	111	391	14903	18292	33585	1500	901	0	26.6
Jul 2019	582	138	502	14377	15599	18528	34126	39	-25	1	14	14377	18528	32919	1500	860	0	26.1
<b>**** CREDITABLE SPACE ****</b>								<b>**** EFFECTIVE SPACE ****</b>										
Aug 2019	559	155	562	14741	16017	18575	34593	559	155	562	1276	14741	18575	34593	1500	761	0	25.6
Sep 2019	594	196	621	15216	16627	18441	35068	594	196	621	1411	15216	18441	35068	2270	768	0	25.1
Oct 2019	639	233	653	15484	17008	18539	35547	639	233	653	1525	15484	18539	35547	3040	531	0	24.8
Nov 2019	673	241	667	15567	17148	18586	35733	673	241	667	1581	15567	18586	35733	3810	691	0	24.5
Dec 2019	694	223	669	15642	17227	18764	35991	694	223	669	1585	15642	18764	35991	4580	615	0	24.4
Jan 2020	729	250	673	15822	17474	18776	36250	729	250	673	1652	15822	18776	36250	5350	607	0	24.2
<b>**** EFFECTIVE SPACE ****</b>								<b>**** EFFECTIVE SPACE ****</b>										
Jan 2020	729	250	673	15822	17474	18776	36250	551	249	616	1416	15822	18776	36014	5350	607	0	24.2
Feb 2020	759	274	681	16105	17818	18636	36454	578	274	624	1475	16105	18636	36216	1500	663	0	24.0
Mar 2020	780	284	677	16316	18057	18610	36667	597	284	619	1500	16316	18610	36425	1500	988	0	23.7

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