To: All Annual Operating Plan Recipients

From: Noe Santos, P.E.
River Operations Manager
Boulder Canyon Operations Office
Interior Region 8: Lower Colorado Basin
P.O. Box 61470
Boulder City, NV 89006-1470
Email: nsantos@usbr.gov

From: Alex Pivarnik
Supervisor, Water Management Group
Water and Power Division, Power Office
Interior Region 7: Upper Colorado Basin
125 South State Street, Room 8100
Salt Lake City, UT 84138-5571
Email: apivarnik@usbr.gov

In addition to the November 2022 24-Month Study based on the Most Probable inflow scenario, and in accordance with the Upper Basin Drought Response Operations Agreement (DROA), Reclamation has conducted an additional model run in November to determine a possible range of reservoir elevations. The October 2022 24-Month Study Probable Maximum inflow, along with the November 2022 24-Month Study Probable Minimum inflow, was used to determine the range of probable outcomes. Probable minimum and probable maximum model runs are conducted in January, April, August, and October, or when necessary to incorporate changing conditions. 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. Additionally, there are possible inflow scenarios that would result in reservoir elevations falling outside the ranges indicated in these reports.

The projected Lake Powell and Lake Mead elevations resulting from these three inflow scenarios are summarized in graphs located at either of the following links:

https://www.usbr.gov/uc/water/crsp/studies/images/PowellElevations.pdf or
https://www.usbr.gov/lc/region/g4000/24mo/2022/November-Chart.pdf.

In light of the prolonged drought, low runoff conditions, and depleted storage at Lake Powell, the Department of the Interior implemented an action under Sections 6 and 7.D of the 2007 Interim Guidelines specifically reducing the Glen Canyon Dam annual releases to 7.00 million acre-feet (maf) in water year (WY) 2022.[1] This action was undertaken in conjunction with the 2022 Drought Response Operations Plan[2] actions which together are anticipated to add approximately one million additional acre-feet of storage to Lake Powell by April 2023. The Department of Interior and Reclamation will work to determine the manner in which to operate Glen Canyon Dam to ensure the benefits of these actions are preserved.

The reduction of releases from Lake Powell from 7.48 maf to 7.00 maf in WY 2022 resulted in a reduced release volume of 0.480 maf that normally would have been released from Glen Canyon Dam to Lake Mead as part of the 7.48 maf annual release volume, consistent with routine operations under the 2007 Interim Guidelines. The reduction of releases from Glen Canyon Dam in WY 2022 (resulting in increased storage in Lake Powell) did not affect operating determinations in 2023 and was accounted for "as if" this volume of water had been delivered to Lake Mead. The 24-Month Study will continue to model 2023 and 2024 operations at lakes Powell and Mead as if the 0.480 maf had been delivered to Lake Mead for operating tier/condition purposes both for the U.S. Lower Basin and for Mexico unless otherwise determined through additional consultation and communication.

The WY 2023 unregulated inflow into Lake Powell in the Probable Minimum inflow scenario is 4.94 maf, or 51% of average. The November Probable Minimum 24-Month Study includes a release volume from Glen Canyon Dam of 7.00 maf in WY 2023 and 7.00 maf in WY 2024. Under the Probable Minimum scenario, Lake

[1] For more information: https://www.usbr.gov/uc/DocLibrary/Plans/20220503-2022DROA-GlenCanyonDamOperationsDecisionLetter-508-DOI.pdf.

[2] For more information: https://www.usbr.gov/uc/DocLibrary/Plans/20220429-2022DroughtResponseOperationsPlan-ApprovalMemo-508-DOI.pdf.

Powell's physical elevation is projected to be 3,489.33 feet on December 31, 2023. With intervening flows between Lake Powell and Lake Mead of 0.634 maf in calendar year 2023, Lake Mead's physical elevation is projected to be 1,018.12 feet on December 31, 2023.

The 2022 AOP is available online at:
https://www.usbr.gov/lc/region/g4000/aop/AOP22.pdf.
The Draft 2023 AOP is available online at:
https://www.usbr.gov/uc/water/rsvrs/ops/aop/AOP23_draft.pdf.
The Interim Guidelines are available online at:
https://www.usbr.gov/lc/region/programs/strategies/RecordofDecision.pdf.
The Colorado River DCPs are available online at:
https://www.usbr.gov/dcp/finaldocs.html.
The 2021 Lower Basin MOU is available online at:
https://www.usbr.gov/lc/region/g4000/2021_MOU.pdf.
The Upper Basin Drought Response Operations Agreement is online at:
https://www.usbr.gov/dcp/droa.html.
The Upper Basin Hydrology Summary is available online at:
https://www.usbr.gov/uc/water/crsp/studies/24Month_11_ucb.pdf.

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Fontenelle Reservoir

— BUREAU OF —
RECLAMATION

	Date	Regulated Inflow (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	Power Release (1000 Ac-Ft)	Bypass Release (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)
*	Nov 2021	39	1	43	0	43	6491.01	225
H	Dec 2021	29	1	50	0	50	6487.63	203
I	Jan 2022	29	1	51	0	51	6483.90	180
S	Feb 2022	23	1	46	0	46	6479.63	157
T	Mar 2022	46	1	50	0	50	6478.63	151
O	Apr 2022	50	1	5	44	49	6478.74	152
R	May 2022	63	1	47	8	55	6479.96	158
I	Jun 2022	241	2	82	0	82	6503.59	315
C	Jul 2022	102	3	83	11	93	6504.34	321
A	Aug 2022	56	2	67	1	68	6502.43	306
L	Sep 2022	29	2	61	0	61	6498.08	274
	WY 2022	**744**	**15**	**617**	**67**	**685**		
*	Oct 2022	40	1	22	39	61	6494.58	249
	Nov 2022	33	1	57	0	57	6491.03	225
	Dec 2022	27	1	58	0	58	6486.04	193
	Jan 2023	25	1	58	0	58	6480.10	159
	Feb 2023	11	0	53	0	53	6471.06	117
	Mar 2023	20	0	44	0	44	6464.79	93
	Apr 2023	31	0	24	0	24	6466.66	100
	May 2023	59	1	25	0	25	6474.79	133
	Jun 2023	125	2	24	0	24	6492.10	232
	Jul 2023	73	2	25	0	25	6498.63	278
	Aug 2023	27	2	43	0	43	6496.06	260
	Sep 2023	19	2	54	0	54	6490.79	223
	WY 2023	**490**	**14**	**485**	**39**	**525**		
	Oct 2023	30	1	55	0	55	6486.70	197
	Nov 2023	35	1	50	0	50	6484.09	181
	Dec 2023	32	1	49	0	49	6480.95	164
	Jan 2024	29	1	49	0	49	6476.91	143
	Feb 2024	27	0	46	0	46	6472.62	123
	Mar 2024	43	0	48	0	48	6471.24	118
	Apr 2024	65	1	24	0	24	6479.93	158
	May 2024	116	2	36	0	36	6492.72	237
	Jun 2024	201	2	102	26	128	6502.46	307
	Jul 2024	90	3	83	0	83	6503.08	311
	Aug 2024	42	2	61	0	61	6500.20	290
	Sep 2024	32	2	60	0	60	6496.17	260
	WY 2024	**742**	**15**	**664**	**26**	**690**		
	Oct 2024	39	1	61	0	61	6492.78	237

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 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)
*	Nov 2021	47	49	3	51	0	51	117	6018.09	2913	87
H	Dec 2021	21	41	2	52	0	52	117	6017.72	2900	82
I	Jan 2022	33	55	2	52	0	52	117	6017.75	2901	80
S	Feb 2022	30	54	2	47	0	47	117	6017.87	2905	70
T	Mar 2022	74	83	3	52	0	52	118	6018.65	2932	111
O	Apr 2022	66	62	5	51	0	51	118	6018.81	2938	179
R	May 2022	88	88	7	139	48	187	114	6015.77	2769	570
I	Jun 2022	274	113	9	110	12	121	113	6015.25	2752	465
C	Jul 2022	125	110	11	79	0	79	106	6016.09	2780	137
A	Aug 2022	58	70	11	105	0	105	104	6014.73	2735	124
L	Sep 2022	32	63	9	112	0	112	102	6013.01	2680	125
	WY 2022	**897**	**837**	**70**	**927**	**60**	**987**				**2138**
*	Oct 2022	41	65	6	111	0	111	100	6011.45	2630	142
	Nov 2022	40	64	3	105	0	105	98	6010.11	2587	128
	Dec 2022	28	59	1	112	0	112	96	6008.45	2536	134
	Jan 2023	32	65	1	112	0	112	94	6006.95	2490	134
	Feb 2023	17	59	2	98	0	98	93	6005.64	2450	111
	Mar 2023	39	63	2	66	0	66	92	6005.46	2444	99
	Apr 2023	49	42	4	64	0	64	91	6004.64	2419	170
	May 2023	86	52	6	141	0	141	88	6001.56	2328	426
	Jun 2023	165	64	8	51	0	51	88	6001.73	2333	273
	Jul 2023	89	41	10	52	0	52	87	6001.01	2312	89
	Aug 2023	32	48	10	61	0	61	86	6000.26	2290	70
	Sep 2023	23	58	8	58	0	58	86	5999.96	2281	67
	WY 2023	**641**	**679**	**63**	**1030**	**0**	**1030**				**1843**
	Oct 2023	35	60	6	52	0	52	86	6000.05	2284	72
	Nov 2023	41	56	3	51	0	51	86	6000.15	2287	78
	Dec 2023	33	50	1	52	0	52	86	6000.03	2283	77
	Jan 2024	40	60	1	52	0	52	86	6000.25	2290	77
	Feb 2024	42	61	2	49	0	49	87	6000.60	2300	74
	Mar 2024	68	73	2	52	0	52	87	6001.22	2318	117
	Apr 2024	91	50	4	51	0	51	87	6001.07	2314	216
	May 2024	165	85	6	131	0	131	85	5999.34	2264	543
	Jun 2024	249	176	8	60	0	60	89	6002.91	2368	286
	Jul 2024	92	85	11	54	0	54	90	6003.55	2387	70
	Aug 2024	45	64	10	56	0	56	90	6003.51	2385	67
	Sep 2024	34	62	9	57	0	57	90	6003.38	2382	64
	WY 2024	**935**	**883**	**62**	**717**	**0**	**717**				**1741**
	Oct 2024	44	66	6	52	0	52	90	6003.65	2390	74

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Taylor Park Reservoir

— BUREAU OF —
RECLAMATION

	Date	Regulated Inflow (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)
*	Nov 2021	4	4	9302.58	59
H	Dec 2021	5	5	9302.55	59
I	Jan 2022	4	4	9302.29	58
S	Feb 2022	3	4	9301.88	58
T	Mar 2022	4	4	9301.56	57
O	Apr 2022	8	6	9302.92	59
R	May 2022	27	12	9312.55	74
I	Jun 2022	26	19	9316.61	81
C	Jul 2022	11	15	9314.18	77
A	Aug 2022	8	14	9310.35	70
L	Sep 2022	5	8	9308.87	68
	WY 2022	**110**	**100**		
*	Oct 2022	6	6	9308.80	68
	Nov 2022	5	5	9308.77	68
	Dec 2022	4	5	9307.96	67
	Jan 2023	4	5	9307.18	66
	Feb 2023	3	5	9305.99	64
	Mar 2023	3	5	9304.50	62
	Apr 2023	6	4	9305.85	64
	May 2023	20	9	9312.84	75
	Jun 2023	30	15	9321.39	90
	Jul 2023	11	18	9317.52	83
	Aug 2023	6	15	9312.23	74
	Sep 2023	5	15	9305.85	64
	WY 2023	**103**	**107**		
	Oct 2023	5	6	9305.18	63
	Nov 2023	4	4	9304.88	62
	Dec 2023	4	5	9304.47	61
	Jan 2024	4	5	9304.06	61
	Feb 2024	4	4	9303.95	61
	Mar 2024	4	5	9303.54	60
	Apr 2024	8	4	9306.26	64
	May 2024	23	9	9314.98	78
	Jun 2024	28	15	9322.26	91
	Jul 2024	9	18	9317.30	82
	Aug 2024	7	15	9312.60	74
	Sep 2024	6	12	9308.86	68
	WY 2024	**106**	**101**		
	Oct 2024	6	6	9308.86	68

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 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)
*	Nov 2021	27	27	0	16	0	16	7431.94	220
H	Dec 2021	22	22	0	11	0	11	7434.40	231
I	Jan 2022	20	20	0	14	0	14	7435.60	236
S	Feb 2022	18	19	0	14	0	14	7436.57	241
T	Mar 2022	30	30	0	32	0	32	7436.17	239
O	Apr 2022	62	60	0	44	0	46	7438.94	252
R	May 2022	177	162	1	79	0	79	7454.56	335
I	Jun 2022	133	126	1	69	0	69	7463.76	391
C	Jul 2022	59	63	1	84	0	84	7460.15	368
A	Aug 2022	57	64	1	89	0	89	7455.69	341
L	Sep 2022	31	33	1	55	28	82	7446.72	292
	WY 2022	**661**	**652**	**6**	**566**	**28**	**595**		
*	Oct 2022	32	32	0	0	58	58	7441.74	266
	Nov 2022	25	25	0	0	16	16	7443.60	275
	Dec 2022	21	22	0	14	0	14	7445.22	284
	Jan 2023	20	21	0	15	0	15	7446.44	290
	Feb 2023	12	14	0	16	0	16	7446.03	288
	Mar 2023	18	20	0	19	0	19	7446.18	289
	Apr 2023	35	33	0	57	0	57	7441.33	264
	May 2023	116	105	1	57	0	57	7450.39	311
	Jun 2023	161	146	1	49	0	49	7466.42	408
	Jul 2023	59	66	1	74	0	74	7464.96	398
	Aug 2023	33	42	1	78	0	78	7459.00	361
	Sep 2023	21	31	1	76	0	76	7451.08	315
	WY 2023	**553**	**558**	**6**	**455**	**74**	**528**		
	Oct 2023	26	27	0	74	0	74	7442.06	268
	Nov 2023	26	26	0	14	0	14	7444.41	280
	Dec 2023	25	26	0	14	0	14	7446.67	291
	Jan 2024	24	25	0	14	0	14	7448.69	302
	Feb 2024	23	23	0	13	0	13	7450.44	312
	Mar 2024	35	36	0	17	0	17	7453.68	330
	Apr 2024	64	60	1	31	0	31	7458.61	359
	May 2024	159	145	1	49	0	49	7473.20	453
	Jun 2024	165	152	1	64	0	64	7485.08	540
	Jul 2024	53	62	1	88	0	88	7481.37	512
	Aug 2024	42	50	1	77	0	77	7477.47	484
	Sep 2024	28	34	1	74	0	74	7471.60	442
	WY 2024	**670**	**665**	**7**	**531**	**0**	**531**		
	Oct 2024	32	32	0	77	0	77	7464.74	397

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 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)
*	Nov 2021	30	16	3	19	17	0	17	7151.77	110
H	Dec 2021	23	11	1	12	16	0	16	7145.62	106
I	Jan 2022	21	14	1	15	16	0	16	7144.25	105
S	Feb 2022	19	14	1	15	14	0	14	7145.30	105
T	Mar 2022	31	32	2	33	30	0	30	7149.87	109
O	Apr 2022	65	46	3	50	47	0	47	7153.31	112
R	May 2022	186	79	9	88	89	0	89	7152.08	111
I	Jun 2022	134	69	1	70	71	0	71	7150.86	110
C	Jul 2022	60	84	1	85	84	0	84	7152.31	111
A	Aug 2022	58	89	1	90	90	0	90	7152.25	111
L	Sep 2022	31	82	1	83	78	0	78	7157.81	115
	WY 2022	**685**	**595**	**24**	**619**	**614**	**0**	**614**		
*	Oct 2022	33	58	1	59	60	0	60	7156.10	114
	Nov 2022	27	16	2	18	19	0	19	7153.73	112
	Dec 2022	23	14	2	16	16	0	16	7153.73	112
	Jan 2023	22	15	2	17	17	0	17	7153.73	112
	Feb 2023	13	16	1	17	17	0	17	7153.73	112
	Mar 2023	19	19	1	20	20	0	20	7153.73	112
	Apr 2023	39	57	4	61	61	0	61	7153.73	112
	May 2023	128	57	12	69	69	0	69	7153.73	112
	Jun 2023	172	49	11	60	60	0	60	7153.72	112
	Jul 2023	61	74	2	76	76	0	76	7153.73	112
	Aug 2023	34	78	1	79	79	0	79	7153.73	112
	Sep 2023	22	76	1	77	77	0	77	7153.73	112
	WY 2023	**593**	**528**	**40**	**568**	**571**	**0**	**571**		
	Oct 2023	27	74	1	75	75	0	75	7153.73	112
	Nov 2023	28	14	2	16	16	0	16	7153.73	112
	Dec 2023	27	14	2	16	16	0	16	7153.73	112
	Jan 2024	26	14	2	16	16	0	16	7153.73	112
	Feb 2024	25	13	2	15	15	0	15	7153.73	112
	Mar 2024	37	17	2	19	19	0	19	7153.73	112
	Apr 2024	72	31	8	39	39	0	39	7153.73	112
	May 2024	176	49	17	66	66	0	66	7153.73	112
	Jun 2024	173	64	8	72	72	0	72	7153.72	112
	Jul 2024	54	88	1	89	89	0	89	7153.73	112
	Aug 2024	43	77	1	78	78	0	78	7153.73	112
	Sep 2024	30	74	2	76	76	0	76	7153.73	112
	WY 2024	**718**	**531**	**48**	**579**	**579**	**0**	**579**		
	Oct 2024	33	77	1	78	78	0	78	7153.73	112

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Crystal Reservoir

	Date	Unreg Inflow (1000 Ac-Ft)	Morrow Release (1000 Ac-Ft)	Side Inflow (1000 Ac-Ft)	Total Inflow (1000 Ac-Ft)	Power Release (1000 Ac-Ft)	Bypass Release (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)	Tunnel Flow (1000 Ac-Ft)	Below Tunnel Flow (1000 Ac-Ft)
*	Nov 2021	34	17	4	21	22	0	22	6749.65	16	1	19
H	Dec 2021	27	16	4	21	20	0	21	6750.09	16	1	19
I	Jan 2022	25	16	4	21	20	0	21	6750.38	16	1	18
S	Feb 2022	22	14	3	17	18	0	18	6746.37	15	0	17
T	Mar 2022	36	30	4	34	32	1	32	6752.56	17	6	25
O	Apr 2022	73	47	8	54	54	1	54	6752.33	17	31	24
R	May 2022	203	89	17	105	92	13	106	6751.40	16	59	48
I	Jun 2022	145	71	10	82	80	2	81	6752.67	17	62	21
C	Jul 2022	64	84	4	88	89	0	90	6747.68	15	65	28
A	Aug 2022	62	90	3	94	92	0	92	6751.52	17	66	31
L	Sep 2022	33	78	2	80	69	12	80	6750.17	16	62	22
	WY 2022	**754**	**614**	**69**	**683**	**622**	**62**	**684**			**393**	**295**
*	Oct 2022	36	60	3	63	53	10	63	6751.29	16	41	21
	Nov 2022	31	19	4	23	23	0	23	6753.04	17	0	23
	Dec 2022	27	16	4	20	20	0	20	6753.04	17	0	20
	Jan 2023	25	17	3	20	20	0	20	6753.04	17	0	20
	Feb 2023	14	17	1	18	18	0	18	6753.04	17	0	18
	Mar 2023	23	20	4	24	24	0	24	6753.04	17	5	19
	Apr 2023	44	61	5	66	66	0	66	6753.04	17	42	24
	May 2023	144	69	16	85	85	0	85	6753.04	17	62	23
	Jun 2023	191	60	19	79	79	0	79	6753.03	17	40	39
	Jul 2023	66	76	5	81	81	0	81	6753.04	17	30	51
	Aug 2023	36	79	2	81	81	0	81	6753.04	17	40	41
	Sep 2023	23	77	1	78	78	0	78	6753.04	17	55	23
	WY 2023	**660**	**571**	**67**	**638**	**627**	**10**	**637**			**315**	**321**
	Oct 2023	30	75	3	78	52	26	78	6753.04	17	55	23
	Nov 2023	31	16	3	19	19	0	19	6753.04	17	0	19
	Dec 2023	31	16	4	20	20	0	20	6753.04	17	0	20
	Jan 2024	30	16	4	20	20	0	20	6753.04	17	0	20
	Feb 2024	28	15	3	18	18	0	18	6753.04	17	0	18
	Mar 2024	42	19	5	24	24	0	24	6753.04	17	0	24
	Apr 2024	82	39	10	49	49	0	49	6753.04	17	0	49
	May 2024	195	66	19	85	85	0	85	6753.04	17	0	85
	Jun 2024	190	72	17	89	89	0	89	6753.03	17	0	89
	Jul 2024	57	89	3	92	92	0	92	6753.04	17	0	92
	Aug 2024	48	78	5	83	83	0	83	6753.04	17	0	83
	Sep 2024	34	76	4	80	80	0	80	6753.04	17	0	80
	WY 2024	**798**	**579**	**80**	**659**	**632**	**26**	**658**			**55**	**603**
	Oct 2024	38	78	5	83	52	31	83	6753.04	17	0	83

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Vallecito Reservoir

BUREAU OF RECLAMATION

	Date	Regulated Inflow (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)
*	Nov 2021	5	2	7621.90	32
H	Dec 2021	4	0	7624.23	35
I	Jan 2022	4	0	7626.39	39
S	Feb 2022	3	0	7628.13	42
T	Mar 2022	7	0	7631.90	48
O	Apr 2022	27	2	7644.01	73
R	May 2022	53	33	7652.10	92
I	Jun 2022	26	34	7648.50	83
C	Jul 2022	19	32	7642.57	70
A	Aug 2022	18	28	7637.64	59
L	Sep 2022	12	26	7630.15	45
	WY 2022	**185**	**160**		
*	Oct 2022	14	3	7635.84	56
	Nov 2022	7	2	7638.41	61
	Dec 2022	5	2	7639.88	64
	Jan 2023	5	2	7641.32	67
	Feb 2023	2	2	7641.43	68
	Mar 2023	4	2	7642.34	70
	Apr 2023	11	2	7646.30	78
	May 2023	42	29	7651.47	91
	Jun 2023	42	40	7651.98	92
	Jul 2023	12	39	7639.92	64
	Aug 2023	8	36	7624.67	36
	Sep 2023	7	28	7606.77	15
	WY 2023	**159**	**187**		
	Oct 2023	8	15	7596.68	7
	Nov 2023	7	2	7604.01	12
	Dec 2023	6	2	7608.73	16
	Jan 2024	6	2	7612.75	21
	Feb 2024	5	2	7615.58	24
	Mar 2024	8	2	7620.36	30
	Apr 2024	20	2	7631.58	48
	May 2024	56	29	7644.47	74
	Jun 2024	40	40	7644.38	74
	Jul 2024	13	39	7631.69	48
	Aug 2024	12	35	7616.11	24
	Sep 2024	11	28	7597.50	8
	WY 2024	**192**	**197**		
	Oct 2024	10	14	7590.75	4

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Navajo Reservoir

BUREAU OF RECLAMATION

	Date	Mod Unreg Inflow (1000 Ac-Ft)	Azotea Tunnel Div (1000 Ac-Ft)	Reg Inflow (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	NIIP Diversion (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)	Farmington Flow (1000 Ac-Ft)
*	Nov 2021	14	0	10	1	0	18	6021.39	879	36
H	Dec 2021	15	0	11	0	0	18	6020.63	872	35
I	Jan 2022	14	0	10	0	0	22	6019.21	859	38
S	Feb 2022	14	0	11	1	1	20	6018.00	848	33
T	Mar 2022	41	2	32	1	4	22	6018.57	853	38
O	Apr 2022	123	17	84	2	17	20	6023.53	898	44
R	May 2022	167	30	114	3	38	18	6029.39	954	104
I	Jun 2022	47	7	50	3	37	24	6027.89	939	61
C	Jul 2022	44	5	54	3	39	35	6025.41	916	55
A	Aug 2022	53	5	56	3	38	30	6023.95	902	49
L	Sep 2022	22	1	35	2	23	40	6020.65	872	56
	WY 2022	**574**	**66**	**484**	**20**	**200**	**296**			**595**
*	Oct 2022	44	2	32	1	5	33	6019.84	865	51
	Nov 2022	26	0	21	1	0	23	6019.53	862	36
	Dec 2022	21	0	18	0	0	21	6019.09	858	32
	Jan 2023	19	0	16	0	0	23	6018.24	851	33
	Feb 2023	14	2	12	1	0	14	6017.86	847	20
	Mar 2023	32	7	23	1	5	19	6017.59	845	28
	Apr 2023	66	13	44	2	21	19	6017.89	848	41
	May 2023	132	24	95	2	35	15	6022.59	890	89
	Jun 2023	102	4	97	3	51	41	6022.76	891	123
	Jul 2023	18	1	44	3	56	59	6014.35	817	91
	Aug 2023	14	0	42	2	39	46	6008.90	772	64
	Sep 2023	15	0	36	2	18	42	6005.77	746	56
	WY 2023	**503**	**53**	**479**	**19**	**231**	**355**			**664**
	Oct 2023	23	0	30	1	9	28	6004.78	738	43
	Nov 2023	25	1	19	1	0	18	6004.78	738	32
	Dec 2023	24	0	19	0	0	17	6005.05	740	31
	Jan 2024	24	0	20	0	0	19	6005.05	740	32
	Feb 2024	27	1	23	1	0	15	6005.95	748	27
	Mar 2024	74	7	60	1	6	16	6010.57	785	34
	Apr 2024	110	13	79	2	21	18	6015.11	823	58
	May 2024	190	25	138	2	36	19	6024.27	905	131
	Jun 2024	102	12	90	3	52	19	6026.00	921	118
	Jul 2024	9	0	35	3	55	47	6018.19	850	77
	Aug 2024	2	0	25	2	46	41	6010.59	785	63
	Sep 2024	13	0	30	2	25	36	6006.52	752	55
	WY 2024	**623**	**59**	**569**	**19**	**251**	**293**			**701**
	Oct 2024	25	2	27	1	9	22	6005.98	748	39

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Lake Powell

BUREAU OF RECLAMATION

	Date	Unreg Inflow (1000 Ac-Ft)	Regulated Inflow (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	PowerPlant Release (1000 Ac-Ft)	Bypass Release (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Bank Storage (1000 Ac-Ft)	EOM Storage (1000 Ac-Ft)	Lees Ferry Gage (1000 Ac-Ft)
*	Nov 2021	346	342	20	500	0	500	3541.84	4615	7016	496
H	Dec 2021	266	290	16	600	0	600	3537.33	4591	6713	599
I	Jan 2022	249	269	4	673	0	673	3531.52	4561	6335	681
S	Feb 2022	215	235	4	540	0	540	3526.97	4538	6048	556
T	Mar 2022	329	327	7	574	0	574	3523.13	4519	5812	584
O	Apr 2022	594	490	12	502	0	502	3522.77	4517	5791	510
R	May 2022	1382	1212	14	598	0	598	3531.69	4561	6346	599
I	Jun 2022	1284	1198	25	598	0	598	3539.81	4604	6878	595
C	Jul 2022	491	463	28	672	0	672	3536.20	4551	6212	672
A	Aug 2022	368	444	27	713	0	713	3531.69	4529	5938	722
L	Sep 2022	245	420	24	547	0	547	3529.33	4517	5797	562
	WY 2022	**6084**	**6107**	**203**	**6999**	**0**	**6999**				**7066**
*	Oct 2022	437	535	17	480	0	480	3529.92	4520	5832	494
	Nov 2022	355	408	17	500	0	500	3528.22	4512	5732	512
	Dec 2022	300	377	13	600	0	600	3524.46	4495	5514	613
	Jan 2023	270	349	3	664	0	664	3519.22	4471	5218	682
	Feb 2023	153	241	3	587	0	587	3513.28	4445	4894	601
	Mar 2023	234	261	6	620	0	620	3506.82	4418	4557	631
	Apr 2023	361	384	9	552	0	552	3503.60	4405	4394	561
	May 2023	889	827	10	550	0	550	3508.46	4425	4641	554
	Jun 2023	1185	952	17	577	0	577	3514.72	4451	4972	574
	Jul 2023	412	489	22	652	0	652	3511.51	4438	4800	655
	Aug 2023	170	316	21	696	0	696	3504.30	4408	4429	710
	Sep 2023	171	306	18	522	0	522	3499.92	4391	4212	535
	WY 2023	**4937**	**5443**	**156**	**7000**	**0**	**7000**				**7122**
	Oct 2023	284	364	12	480	0	480	3497.46	4381	4093	491
	Nov 2023	370	362	12	500	0	500	3494.55	4370	3954	511
	Dec 2023	347	348	9	600	0	600	3489.33	4351	3712	613
	Jan 2024	333	330	2	443	221	664	3482.34	4326	3401	682
	Feb 2024	378	364	2	0	587	587	3477.48	4309	3193	601
	Mar 2024	564	485	4	0	620	620	3474.43	4299	3065	636
	Apr 2024	716	584	6	0	552	552	3475.01	4301	3089	562
	May 2024	1552	1297	7	0	550	550	3490.69	4356	3774	556
	Jun 2024	1570	1261	15	577	0	577	3503.60	4405	4394	582
	Jul 2024	298	389	19	652	0	652	3498.30	4384	4133	657
	Aug 2024	211	343	18	696	0	696	3491.01	4357	3789	710
	Sep 2024	226	343	16	429	93	522	3487.04	4342	3609	536
	WY 2024	**6849**	**6471**	**123**	**4377**	**2623**	**7000**				**7137**
	Oct 2024	350	410	11	468	12	480	3485.37	4336	3534	493

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Hoover Dam - Lake Mead

BUREAU OF RECLAMATION

	Date	Glen Release (1000 Ac-Ft)	Side Inflow Glen to Hoover (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Total Release (1000 CFS)	SNWP Use (1000 Ac-Ft)	Downstream Requirements (1000 Ac-Ft)	Bank Storage (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	EOM Storage (1000 Ac-Ft)
*	Nov 2021	500	42	44	642	10.8	10	650	572	1064.97	8804
H	Dec 2021	600	64	36	503	8.2	10	511	579	1066.39	8915
I	Jan 2022	673	60	25	640	10.4	11	639	583	1067.09	8970
S	Feb 2022	540	58	23	590	10.6	10	590	581	1066.78	8946
T	Mar 2022	574	41	25	1010	16.4	17	1009	555	1061.49	8536
O	Apr 2022	502	30	33	1027	17.3	17	1026	522	1054.69	8026
R	May 2022	598	8	40	1083	17.6	25	1075	489	1047.69	7517
I	Jun 2022	598	16	47	889	14.9	29	877	467	1043.02	7187
C	Jul 2022	672	70	45	822	13.4	31	814	458	1040.92	7041
A	Aug 2022	713	183	48	573	9.3	25	567	473	1044.28	7275
L	Sep 2022	547	118	48	539	9.1	22	545	476	1045.03	7328
	WY 2022	**6999**	**771**	**463**	**8899**		**223**	**8888**			
*	Oct 2022	480	94	46	418	6.8	17	434	482	1046.28	7417
	Nov 2022	500	61	40	676	11.4	21	676	471	1043.95	7252
	Dec 2022	600	66	32	436	7.1	16	436	482	1046.36	7423
	Jan 2023	664	94	22	583	9.5	11	583	491	1048.23	7556
	Feb 2023	587	73	21	542	9.8	7	542	497	1049.41	7640
	Mar 2023	620	59	23	900	14.6	17	900	481	1045.99	7396
	Apr 2023	552	50	30	1016	17.1	23	1016	452	1039.69	6956
	May 2023	550	21	37	994	16.2	28	994	422	1032.90	6497
	Jun 2023	577	-13	44	925	15.5	33	925	396	1026.63	6086
	Jul 2023	652	17	41	835	13.6	33	835	381	1023.10	5860
	Aug 2023	696	73	44	795	12.9	33	795	375	1021.57	5763
	Sep 2023	522	70	43	696	11.7	25	696	364	1018.99	5602
	WY 2023	**7000**	**666**	**423**	**8818**		**264**	**8833**			
	Oct 2023	480	60	40	514	8.4	18	514	362	1018.50	5571
	Nov 2023	500	60	35	618	10.4	11	618	356	1016.93	5474
	Dec 2023	600	70	28	552	9.0	11	552	361	1018.12	5547
	Jan 2024	664	92	20	571	9.3	11	571	370	1020.44	5692
	Feb 2024	587	74	18	549	9.5	8	549	375	1021.72	5773
	Mar 2024	620	86	20	885	14.4	15	885	362	1018.51	5572
	Apr 2024	552	53	26	1010	17.0	17	1010	335	1011.60	5150
	May 2024	550	29	32	997	16.2	22	997	306	1004.07	4707
	Jun 2024	577	25	38	904	15.2	30	904	283	997.95	4360
	Jul 2024	652	29	36	790	12.9	34	790	272	994.90	4191
	Aug 2024	696	73	38	769	12.5	36	769	268	993.63	4122
	Sep 2024	522	71	37	677	11.4	32	677	259	991.00	3979
	WY 2024	**7000**	**723**	**368**	**8838**		**245**	**8838**			
	Oct 2024	480	69	35	491	8.0	26	491	259	990.97	3978

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Davis Dam - Lake Mohave

— BUREAU OF —
RECLAMATION

	Date	Hoover Release (1000 Ac-Ft)	Side Inflow (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	Power Release (1000 Ac-Ft)	Spill Release (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Total Release (1000 CFS)	Reservoir Elev End of Month (Ft)	EOM Storage (1000 Ac-Ft)
*	Nov 2021	642	-9	13	543	0	543	9.1	637.48	1551
H	Dec 2021	503	-6	13	465	0	465	7.6	638.32	1573
I	Jan 2022	640	-20	9	523	0	523	8.5	641.60	1661
S	Feb 2022	590	-26	8	555	0	555	10.0	641.69	1663
T	Mar 2022	1010	-38	10	931	0	931	15.1	642.79	1693
O	Apr 2022	1027	-31	13	975	0	975	16.4	643.08	1701
R	May 2022	1083	-20	14	1041	0	1041	16.9	643.35	1708
I	Jun 2022	889	-30	14	842	0	842	14.1	643.47	1712
C	Jul 2022	822	-26	12	770	0	770	12.5	643.97	1725
A	Aug 2022	573	-13	16	575	0	575	9.3	642.87	1695
L	Sep 2022	539	-6	16	617	0	617	10.4	639.17	1595
	WY 2022	**8899**	**-228**	**151**	**8495**	**0**	**8495**			
*	Oct 2022	418	-2	14	540	0	542	8.8	633.78	1454
	Nov 2022	676	-16	13	510	0	510	8.6	639.01	1591
	Dec 2022	436	-5	13	392	0	392	6.4	640.01	1618
	Jan 2023	583	-12	9	514	0	514	8.4	641.80	1666
	Feb 2023	542	-11	8	523	0	523	9.4	641.80	1666
	Mar 2023	900	-9	10	847	0	847	13.8	643.05	1700
	Apr 2023	1016	-13	13	993	0	993	16.7	643.00	1699
	May 2023	994	-13	14	967	0	967	15.7	643.00	1699
	Jun 2023	925	-18	14	892	0	892	15.0	643.00	1699
	Jul 2023	835	-19	12	831	0	831	13.5	642.00	1671
	Aug 2023	795	-17	15	763	0	763	12.4	642.00	1671
	Sep 2023	696	-8	16	726	0	726	12.2	640.01	1617
	WY 2023	**8818**	**-143**	**151**	**8498**	**0**	**8501**			
	Oct 2023	514	-11	14	672	0	672	10.9	633.00	1434
	Nov 2023	618	-16	13	538	0	538	9.0	635.00	1486
	Dec 2023	552	-5	13	416	0	416	6.8	639.51	1604
	Jan 2024	571	-12	9	489	0	489	8.0	641.80	1666
	Feb 2024	549	-11	8	530	0	530	9.2	641.80	1666
	Mar 2024	885	-9	10	832	0	832	13.5	643.05	1700
	Apr 2024	1010	-13	13	986	0	986	16.6	643.00	1699
	May 2024	997	-13	14	970	0	970	15.8	643.00	1699
	Jun 2024	904	-18	14	872	0	872	14.6	643.00	1699
	Jul 2024	790	-19	12	786	0	786	12.8	642.00	1671
	Aug 2024	769	-17	15	736	0	736	12.0	642.00	1671
	Sep 2024	677	-8	16	707	0	707	11.9	640.01	1617
	WY 2024	**8838**	**-151**	**151**	**8535**	**0**	**8535**			
	Oct 2024	491	-11	14	649	0	649	10.6	633.00	1434

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Parker Dam - Lake Havasu

BUREAU OF RECLAMATION

	Date	Davis Release (1000 Ac-Ft)	Side Inflow (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Total Release (1000 CFS)	MWD Diversion (1000 Ac-Ft)	CAP Diversion (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	EOM Storage (1000 Ac-Ft)	Flow To Mexico (1000 Ac-Ft)	Flow To Mexico (1000 CFS)
*	Nov 2021	543	13	9	348	5.8	96	124	447.05	562	92	1.5
H	Dec 2021	465	16	7	281	4.6	99	87	447.33	567	89	1.5
I	Jan 2022	523	-3	6	342	5.6	96	89	446.38	550	114	1.9
S	Feb 2022	555	12	8	445	8.0	4	103	446.44	551	127	2.3
T	Mar 2022	931	2	9	658	10.7	97	133	448.02	580	170	2.8
O	Apr 2022	975	6	11	737	12.4	100	141	447.11	563	161	2.7
R	May 2022	1041	8	13	741	12.0	106	150	448.68	593	145	2.4
I	Jun 2022	842	18	15	679	11.4	103	60	448.30	586	154	2.6
C	Jul 2022	770	31	17	639	10.4	106	19	448.84	596	150	2.4
A	Aug 2022	575	40	17	482	7.8	106	16	448.16	583	120	2.0
L	Sep 2022	617	14	15	458	7.7	103	52	447.96	579	108	1.8
	WY 2022	**8495**	**176**	**140**	**6231**		**1117**	**1112**			**1499**	
*	Oct 2022	542	27	12	393	6.4	106	66	447.14	564	67	1.1
	Nov 2022	510	17	9	338	5.7	103	74	447.00	561	88	1.5
	Dec 2022	392	18	6	235	3.8	106	68	446.50	552	86	1.4
	Jan 2023	514	14	6	312	5.1	105	101	446.50	552	136	2.2
	Feb 2023	523	5	8	407	7.3	0	106	446.50	552	122	2.2
	Mar 2023	847	4	9	609	9.9	105	115	446.70	555	145	2.4
	Apr 2023	993	8	11	715	12.0	102	124	448.70	593	144	2.4
	May 2023	967	6	13	714	11.6	105	129	448.70	593	109	1.8
	Jun 2023	892	7	16	704	11.8	102	64	448.70	593	114	1.9
	Jul 2023	831	14	17	684	11.1	105	40	448.00	580	121	2.0
	Aug 2023	763	13	17	612	10.0	105	40	447.50	571	100	1.6
	Sep 2023	726	12	15	529	8.9	102	82	447.50	570	97	1.6
	WY 2023	**8501**	**144**	**139**	**6253**		**1143**	**1010**			**1329**	
	Oct 2023	672	18	12	484	7.9	105	83	447.50	571	87	1.4
	Nov 2023	538	17	9	372	6.3	102	67	447.50	571	113	1.9
	Dec 2023	416	18	7	266	4.3	105	71	446.50	552	108	1.8
	Jan 2024	489	14	6	300	4.9	89	103	446.50	552	129	2.1
	Feb 2024	530	5	8	398	6.9	11	111	446.50	552	116	2.0
	Mar 2024	832	4	9	601	9.8	89	124	446.70	555	138	2.2
	Apr 2024	986	8	11	712	12.0	86	137	448.70	593	137	2.3
	May 2024	970	6	13	718	11.7	89	144	448.70	593	103	1.7
	Jun 2024	872	7	16	713	12.0	86	51	448.70	593	109	1.8
	Jul 2024	786	14	17	678	11.0	89	17	448.00	580	115	1.9
	Aug 2024	736	13	17	625	10.2	89	17	447.50	571	95	1.5
	Sep 2024	707	12	15	532	8.9	86	76	447.50	570	93	1.6
	WY 2024	**8535**	**135**	**139**	**6398**		**1023**	**1001**			**1344**	
	Oct 2024	649	18	12	481	7.8	89	78	447.50	571	83	1.4

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Hoover Dam - Lake Mead

BUREAU OF RECLAMATION

	Date	Power Release (1000 Ac-Ft)	Power Release (1000 CFS)	Reservoir Elev End of Month (Ft)	EOM Storage (1000 Ac-Ft)	Change In Storage (1000 Ac-Ft)	Hoover Static Head (Ft)	Hoover Gen Capacity MW	Hoover Gross Energy MKWH	Percent of Units Available	KWH/AF
*	Nov 2021	642	10.8	1064.97	8804	-140	421.30	938.0	241.3	67	375.8
H	Dec 2021	503	8.2	1066.39	8915	111	424.48	957.0	185.9	68	369.9
I	Jan 2022	640	10.4	1067.09	8970	55	420.00	993.0	236.8	67	370.2
S	Feb 2022	590	10.6	1066.78	8946	-24	420.26	994.0	220.4	67	373.2
T	Mar 2022	1010	16.4	1061.49	8536	-409	413.69	898.0	375.9	62	372.3
O	Apr 2022	1027	17.3	1054.69	8026	-511	405.75	863.0	380.5	61	370.4
R	May 2022	1083	17.6	1047.69	7517	-509	397.38	1082.0	391.7	80	361.7
I	Jun 2022	889	14.9	1043.02	7187	-330	396.77	1076.9	315.1	81	354.6
C	Jul 2022	822	13.4	1040.92	7041	-146	392.29	1236.6	287.9	94	350.1
A	Aug 2022	573	9.3	1044.28	7275	234	399.70	1224.8	200.6	94	349.9
L	Sep 2022	539	9.1	1045.03	7328	53	400.65	1157.3	188.5	88	349.7
	WY 2022	**8899**							**3240.9**		
*	Oct 2022	418	6.8	1046.28	7417	88	402.36	924.5	145.8	70	348.8
	Nov 2022	676	11.4	1043.95	7252	-164	399.21	948.8	241.9	72	358.2
	Dec 2022	436	7.1	1046.36	7423	170	397.23	966.8	154.7	72	354.5
	Jan 2023	583	9.5	1048.23	7556	133	399.22	874.7	208.5	64	357.5
	Feb 2023	542	9.8	1049.41	7640	85	399.92	912.1	194.4	66	358.9
	Mar 2023	900	14.6	1045.99	7396	-245	397.75	868.3	324.0	73	359.9
	Apr 2023	1016	17.1	1039.69	6956	-440	392.62	812.7	362.5	72	356.7
	May 2023	994	16.2	1032.90	6497	-459	386.76	709.5	348.0	66	350.0
	Jun 2023	925	15.5	1026.63	6086	-411	379.02	816.2	314.8	78	340.5
	Jul 2023	835	13.6	1023.10	5860	-226	372.29	1027.4	277.4	100	332.1
	Aug 2023	795	12.9	1021.57	5763	-97	370.11	1031.5	261.2	100	328.3
	Sep 2023	696	11.7	1018.99	5602	-162	368.72	1018.1	225.5	100	324.0
	WY 2023	**8818**							**3058.8**		
	Oct 2023	514	8.4	1018.50	5571	-30	372.58	702.0	172.6	69	335.7
	Nov 2023	618	10.4	1016.93	5474	-97	373.86	690.6	206.5	69	334.0
	Dec 2023	552	9.0	1018.12	5547	74	371.55	698.2	180.8	69	327.2
	Jan 2024	571	9.3	1020.44	5692	145	370.42	778.4	186.5	76	326.4
	Feb 2024	549	9.5	1021.72	5773	81	371.46	787.0	180.1	76	328.2
	Mar 2024	885	14.4	1018.51	5572	-201	368.32	945.4	291.4	93	329.4
	Apr 2024	1010	17.0	1011.60	5150	-421	364.15	772.3	324.0	81	320.7
	May 2024	997	16.2	1004.07	4707	-443	357.68	661.0	309.1	74	310.0
	Jun 2024	904	15.2	997.95	4360	-347	350.24	680.1	271.4	81	300.3
	Jul 2024	790	12.9	994.90	4191	-169	344.17	812.6	230.9	100	292.2
	Aug 2024	769	12.5	993.63	4122	-69	342.36	801.9	222.2	100	289.1
	Sep 2024	677	11.4	991.00	3979	-143	341.08	779.5	193.5	100	285.8
	WY 2024	**8838**							**2769.1**		
	Oct 2024	491	8.0	990.97	3978	-2	344.19	606.9	146.8	78	299.2

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Davis Dam - Lake Mohave

BUREAU OF RECLAMATION

	Date	Power Release (1000 Ac-Ft)	Power Release (1000 CFS)	Reservoir Elev End of Month (Ft)	EOM Storage (1000 Ac-Ft)	Change In Storage (1000 Ac-Ft)	Davis Static Head (Ft)	Davis Gen Capacity MW	Davis Gross Energy MKWH	Percent of Units Available	KWH/AF
*	Nov 2021	543	9.1	637.48	1551	80	136.32	164.9	65.8	65	121.0
H	Dec 2021	465	7.6	638.32	1573	22	137.10	192.5	56.1	75	120.6
I	Jan 2022	523	8.5	641.60	1661	88	139.02	159.6	64.6	63	123.6
S	Feb 2022	555	10.0	641.69	1663	2	140.45	174.9	72.1	69	130.0
T	Mar 2022	931	15.1	642.79	1693	30	140.26	253.3	118.7	99	127.4
O	Apr 2022	975	16.4	643.08	1701	8	137.93	255.0	124.0	100	127.1
R	May 2022	1041	16.9	643.35	1708	7	140.42	241.8	132.1	95	126.9
I	Jun 2022	842	14.1	643.47	1712	3	139.18	251.6	108.5	99	128.9
C	Jul 2022	770	12.5	643.97	1725	14	144.37	255.0	99.3	100	129.1
A	Aug 2022	575	9.3	642.87	1695	-30	141.93	253.3	74.7	99	129.9
L	Sep 2022	617	10.4	639.17	1595	-100	137.50	248.2	78.5	97	127.3
	WY 2022	**8495**							**1074.5**		
*	Oct 2022	540	8.8	633.78	1454	-141	134.35	185.9	66.9	73	123.8
	Nov 2022	510	8.6	639.01	1591	136	135.14	153.0	62.1	60	121.8
	Dec 2022	392	6.4	640.01	1618	27	139.25	157.9	49.2	62	125.5
	Jan 2023	514	8.4	641.80	1666	49	139.75	157.9	64.7	62	125.9
	Feb 2023	523	9.4	641.80	1666	0	140.19	193.1	66.1	76	126.3
	Mar 2023	847	13.8	643.05	1700	34	139.11	255.0	106.2	100	125.3
	Apr 2023	993	16.7	643.00	1699	-2	138.71	255.0	124.0	100	125.0
	May 2023	967	15.7	643.00	1699	0	139.00	255.0	121.1	100	125.2
	Jun 2023	892	15.0	643.00	1699	0	139.25	255.0	111.9	100	125.5
	Jul 2023	831	13.5	642.00	1671	-27	139.28	255.0	104.3	100	125.5
	Aug 2023	763	12.4	642.00	1671	0	139.19	255.0	95.7	100	125.4
	Sep 2023	726	12.2	640.01	1617	-54	138.27	255.0	90.4	100	124.6
	WY 2023	**8498**							**1062.6**		
	Oct 2023	672	10.9	633.00	1434	-183	134.27	227.0	81.3	89	121.0
	Nov 2023	538	9.0	635.00	1486	51	132.54	159.8	64.3	63	119.4
	Dec 2023	416	6.8	639.51	1604	118	136.80	154.7	51.3	61	123.3
	Jan 2024	489	8.0	641.80	1666	62	139.68	156.3	61.5	61	125.8
	Feb 2024	530	9.2	641.80	1666	0	140.27	160.0	67.0	63	126.4
	Mar 2024	832	13.5	643.05	1700	34	139.21	194.1	104.3	76	125.4
	Apr 2024	986	16.6	643.00	1699	-2	138.74	249.9	123.3	98	125.0
	May 2024	970	15.8	643.00	1699	0	138.99	255.0	121.4	100	125.2
	Jun 2024	872	14.6	643.00	1699	0	139.38	255.0	109.4	100	125.6
	Jul 2024	786	12.8	642.00	1671	-27	139.55	255.0	98.8	100	125.7
	Aug 2024	736	12.0	642.00	1671	0	139.36	255.0	92.4	100	125.6
	Sep 2024	707	11.9	640.01	1617	-54	138.40	255.0	88.2	100	124.7
	WY 2024	**8535**							**1063.4**		
	Oct 2024	649	10.6	633.00	1434	-183	134.42	227.0	78.6	89	121.1

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Parker Dam - Lake Havasu

BUREAU OF RECLAMATION

	Date	Power Release (1000 Ac-Ft)	Power Release (1000 CFS)	Reservoir Elev End of Month (Ft)	EOM Storage (1000 Ac-Ft)	Change In Storage (1000 Ac-Ft)	Parker Static Head (Ft)	Parker Gen Capacity MW	Parker Gross Energy MKWH	Percent of Units Available	KWH/AF
*	Nov 2021	348	5.8	447.05	562	-25	81.18	90.0	24.0	75	69.1
H	Dec 2021	281	4.6	447.33	567	5	81.34	102.6	18.6	85	66.1
I	Jan 2022	342	5.6	446.38	550	-18	80.46	93.9	23.0	78	67.4
S	Feb 2022	445	8.0	446.44	551	1	80.54	86.8	30.9	72	69.4
T	Mar 2022	658	10.7	448.02	580	30	77.95	112.3	45.8	94	69.6
O	Apr 2022	737	12.4	447.11	563	-17	79.08	120.0	50.8	100	68.9
R	May 2022	741	12.0	448.68	593	30	84.09	120.0	51.5	100	69.5
I	Jun 2022	679	11.4	448.30	586	-7	78.23	120.0	47.2	100	69.4
C	Jul 2022	639	10.4	448.84	596	10	82.19	120.0	44.7	100	69.9
A	Aug 2022	482	7.8	448.16	583	-13	83.58	120.0	33.4	100	69.3
L	Sep 2022	458	7.7	447.96	579	-4	81.26	120.0	31.4	100	68.7
	WY 2022	**6231**							**431.0**		
*	Oct 2022	393	6.4	447.14	564	-15	81.28	91.9	27.2	77	69.1
	Nov 2022	338	5.7	447.00	561	-3	79.97	90.0	23.2	75	68.5
	Dec 2022	235	3.8	446.50	552	-9	80.65	111.3	15.0	93	63.7
	Jan 2023	312	5.1	446.50	552	0	79.71	93.9	20.8	78	66.9
	Feb 2023	407	7.3	446.50	552	0	78.58	95.2	28.1	79	69.0
	Mar 2023	609	9.9	446.70	555	4	77.52	120.0	41.8	100	68.6
	Apr 2023	715	12.0	448.70	593	38	77.78	120.0	49.7	100	69.5
	May 2023	714	11.6	448.70	593	0	78.94	120.0	50.2	100	70.4
	Jun 2023	704	11.8	448.70	593	0	78.85	120.0	49.5	100	70.3
	Jul 2023	684	11.1	448.00	580	-13	78.78	120.0	47.8	100	69.8
	Aug 2023	612	10.0	447.50	571	-10	78.65	120.0	42.5	100	69.5
	Sep 2023	529	8.9	447.50	570	0	78.86	120.0	36.7	100	69.3
	WY 2023	**6253**							**432.5**		
	Oct 2023	484	7.9	447.50	571	0	79.32	91.0	33.9	76	70.1
	Nov 2023	372	6.3	447.50	571	0	80.10	92.0	25.5	77	68.6
	Dec 2023	266	4.3	446.50	552	-19	80.62	112.3	16.9	94	63.6
	Jan 2024	300	4.9	446.50	552	0	79.82	92.9	20.1	77	66.9
	Feb 2024	398	6.9	446.50	552	0	78.77	95.4	27.6	79	69.2
	Mar 2024	601	9.8	446.70	555	4	77.58	120.0	41.2	100	68.7
	Apr 2024	712	12.0	448.70	593	38	77.80	120.0	49.5	100	69.6
	May 2024	718	11.7	448.70	593	0	78.92	120.0	50.5	100	70.3
	Jun 2024	713	12.0	448.70	593	0	78.80	120.0	50.0	100	70.2
	Jul 2024	678	11.0	448.00	580	-13	78.82	120.0	47.4	100	69.9
	Aug 2024	625	10.2	447.50	571	-10	78.57	120.0	43.4	100	69.4
	Sep 2024	532	8.9	447.50	570	0	78.84	120.0	36.9	100	69.3
	WY 2024	**6398**							**442.9**		
	Oct 2024	481	7.8	447.50	571	0	79.34	91.0	33.7	76	70.2

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Upper Basin Power

BUREAU OF RECLAMATION

	Date	Glen Canyon 1000 MWHR	Flaming Gorge 1000 MWHR	Blue Mesa 1000 MWHR	Morrow Point 1000 MWHR	Crystal Reservoir 1000 MWHR	Fontenelle Reservoir 1000 MWHR
*	Nov 2021	189	19	3	6	2	3
H	Dec 2021	226	19	2	5	2	4
I	Jan 2022	252	19	3	5	1	4
S	Feb 2022	201	17	3	4	1	3
T	Mar 2022	208	19	8	9	4	3
	Winter 2022	**1259**	**123**	**34**	**50**	**17**	**19**
O	Apr 2022	179	19	11	15	10	0
R	May 2022	214	52	20	31	18	3
I	Jun 2022	222	41	18	25	16	6
C	Jul 2022	251	29	23	29	17	7
A	Aug 2022	265	39	23	31	18	6
L	Sep 2022	201	42	14	27	13	5
	Summer 2022	**1332**	**222**	**108**	**160**	**92**	**28**
*	Oct 2022	175	42	0	21	10	2
	Nov 2022	177	34	0	7	4	4
	Dec 2022	210	37	4	6	3	4
	Jan 2023	230	36	4	6	3	4
	Feb 2023	201	32	4	6	3	3
	Mar 2023	209	21	5	7	4	2
	Winter 2023	**1201**	**202**	**16**	**53**	**28**	**19**
	Apr 2023	183	21	15	22	11	1
	May 2023	184	45	15	25	15	1
	Jun 2023	196	16	13	21	14	2
	Jul 2023	222	17	20	27	14	2
	Aug 2023	234	20	21	29	14	3
	Sep 2023	173	19	20	28	13	4
	Summer 2023	**1190**	**137**	**104**	**152**	**81**	**13**
	Oct 2023	157	17	19	27	9	4
	Nov 2023	161	16	4	6	3	3
	Dec 2023	193	17	4	6	3	3
	Jan 2024	143	17	4	6	3	3
	Feb 2024	0	16	4	6	3	3
	Mar 2024	0	17	5	7	4	3
	Winter 2024	**654**	**99**	**38**	**57**	**27**	**18**
	Apr 2024	0	16	8	14	8	1
	May 2024	0	42	14	24	15	2
	Jun 2024	188	19	18	26	15	8
	Jul 2024	215	18	26	32	16	6
	Aug 2024	224	18	22	28	14	5
	Sep 2024	138	18	21	28	14	4
	Summer 2024	**627**	**113**	**88**	**124**	**69**	**22**
	Oct 2024	151	17	21	28	9	4

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS

November 2022 24-Month Study

Minimum Probable Inflow*

Flood Control Criteria - Beginning of Month Conditions

— BUREAU OF —
RECLAMATION

Date	Flaming Gorge KAF	Blue Mesa KAF	Navajo KAF	Lake Powell KAF	Upper Basin Total KAF	Lake Mead KAF	Total KAF	Flaming Gorge KAF	Blue Mesa KAF	Navajo KAF	Tot or Max Allow KAF	Lake Powell KAF	Lake Mead KAF	Total KAF	BOM Space Required KAF	Mead Sched Rel KAF	Mead FC Rel KAF	Sys Cont MAF
	****PREDICTED SPACE****							****CREDITABLE SPACE****										
Nov 2022	1,132	559	783	17481	19955	20203	40158	1132	559	783	2473	17481	20203	40158	3810	676	0	19.3
Dec 2022	1,198	549	786	17582	20115	20368	40482	1198	549	786	2533	17582	20368	40482	4580	436	0	19.2
Jan 2023	1,282	541	790	17800	20413	20197	40610	1282	541	790	2613	17800	20197	40610	5350	583	0	19.0
								****EFFECTIVE SPACE****										
Jan 2023	1,282	541	790	17800	20413	20197	40610	-106	134	140	167	17800	20197	38165	5350	583	0	19.0
Feb 2023	1,362	535	797	18095	20789	20064	40854	-26	129	147	249	18095	20064	38409	1500	542	0	18.7
Mar 2023	1,444	537	801	18419	21201	19980	41180	55	133	149	337	18419	19980	38736	1500	900	0	18.1
Apr 2023	1,474	536	803	18757	21569	20224	41794	82	134	145	361	18757	20224	39342	1500	1016	0	17.5
May 2023	1,492	561	800	18920	21773	20664	42437	97	156	120	373	18920	20664	39957	1500	994	0	17.3
Jun 2023	1,550	513	758	18673	21494	21123	42617	151	97	40	288	18673	21123	40084	1500	925	0	17.4
Jul 2023	1,445	417	757	18342	20961	21534	42495	37	-15	-16	6	18342	21534	39882	1500	835	0	16.9
								****CREDITABLE SPACE****										
Aug 2023	1,421	426	831	18513	21191	21760	42951	1421	426	831	2678	18513	21760	42951	1500	795	0	16.3
Sep 2023	1,461	464	876	18885	21686	21857	43543	1461	464	876	2801	18885	21857	43543	2270	696	0	15.8
Oct 2023	1,506	509	902	19102	22019	22018	44037	1506	509	902	2917	19102	22018	44037	3040	514	0	15.3
Nov 2023	1,530	557	910	19221	22218	22049	44266	1530	557	910	2996	19221	22049	44266	3810	618	0	15.2
Dec 2023	1,543	545	910	19360	22357	22146	44504	1543	545	910	2997	19360	22146	44504	4580	552	0	15.1
Jan 2024	1,564	533	908	19602	22606	22073	44679	1564	533	908	3005	19602	22073	44679	5350	571	0	15.0
								****EFFECTIVE SPACE****										
Jan 2024	1,564	533	908	19602	22606	22073	44679	298	246	292	835	19602	22073	42510	5350	571	0	15.0
Feb 2024	1,578	523	908	19913	22921	21928	44849	310	236	292	837	19913	21928	42678	1500	549	0	14.9
Mar 2024	1,587	513	900	20121	23122	21847	44969	317	226	284	826	20121	21847	42794	1500	885	0	14.6
Apr 2024	1,575	495	863	20249	23181	22048	45230	301	208	239	748	20249	22048	43045	1500	1010	0	14.4
May 2024	1,539	466	824	20225	23054	22470	45524	261	175	178	613	20225	22470	43307	1500	997	0	14.8
Jun 2024	1,511	371	743	19539	22164	22913	45077	227	65	58	350	19539	22913	42802	1500	904	0	15.4
Jul 2024	1,336	285	727	18920	21268	23260	44528	38	-35	-13	-10	18920	23260	42169	1500	790	0	14.9
								****CREDITABLE SPACE****										
Aug 2024	1,313	313	798	19181	21604	23429	45033	1313	313	798	2423	19181	23429	45033	1500	769	0	14.3
Sep 2024	1,335	341	862	19525	22064	23498	45561	1335	341	862	2539	19525	23498	45561	2270	677	0	13.8
Oct 2024	1,368	382	896	19705	22352	23641	45992	1368	382	896	2646	19705	23641	45992	3040	491	0	13.5

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

Model Run ID: 3208

Processed On: 11/15/2022 2:59:05PM