

## April 24-Month Study

Date: April 8, 2011

**From:** Water Resources Group, Salt Lake City  
**To:** All Colorado River Annual Operating Plan (AOP) Recipients

### Current Reservoir Status

Reservoir	March Inflow (unregulated) (acre-feet)	Percent of Average (%)	April 7 Midnight Elevation (feet)	Reservoir Storage (acre-feet)
Fontenelle	36,000	69	6474.35	139,000
Flaming Gorge	101,000	94	6025.41	3,175,000
Blue Mesa	38,000	106	7477.49	488,000
Navajo	41,000	46	6058.85	1,333,000
Powell	595,000	90	3609.84	12,714,000

### **Expected Operations**

The operation of Lake Powell and Lake Mead in this April 2011 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 2011 Annual Operating Plan (AOP). Pursuant to the Interim Guidelines, the Lake Powell operational tier for water year 2011 is the Upper Elevation Balancing Tier. The Intentionally Created Surplus (ICS) Surplus condition is the criterion governing the operation of Lake Mead for calendar year 2011.

Consistent with Section 6.B.3 of the Interim Guidelines, if the April 24-Month study projects the September 30 Lake Powell elevation to be greater than the 2011 Equalization elevation of 3,643.0 feet with an annual release from Lake Powell of 8.23 maf, the Equalization Tier will govern operations of Lake Powell for the remainder of the water year.

The April 24-Month Study with an annual release volume from Glen Canyon Dam of 8.23 maf projects a Lake Powell end of water year elevation of 3,662.63 feet. Based on this projected condition and consistent with the provision in Section 6.B.3 of the Interim Guidelines, a shift in Glen Canyon Dam operations to being governed by the Equalization Tier will occur for the remainder of water year 2011. The April 24-Month Study projects a Lake Powell annual release volume of 11.56 maf; however, the projected annual release

will be updated each month throughout the remainder of the water year to reflect changing hydrology in order to achieve the operation specified by the Equalization Tier.

The Interim Guidelines are available for download at

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

The 2011 AOP is available for download at

[http://www.usbr.gov/uc/water/rsvrs/ops/aop/AOP11\\_final.pdf](http://www.usbr.gov/uc/water/rsvrs/ops/aop/AOP11_final.pdf).

***Fontenelle Reservoir*** – Inflows for the month of March were 36,000 acre-feet, or 69% of average. The reservoir elevation is 6474 feet above sea level and 40% of capacity. Current inflows are approximately 1,500 cfs and reservoir releases are 1400 cfs. Releases will likely be increased to 1,700cfs in mid-April and then further in May. The reservoir elevation has likely reached its lowest level and will begin to rise as the early season snowmelt enters the reservoir.

The Colorado Basin River Forecast Center and Natural Resources Conservation Service have issued the joint water supply forecast for the 2011 spring runoff. The April official forecast for the April to July runoff period is 980 kaf (114%). Given this forecasted inflow, the reservoir is projected to fill late this summer and sustained releases of approximately 4,700 cfs or more will likely be required for a month to safely route the inflow to the reservoir. Note that these projections are provisional and subject to change as forecasts are updated and actual inflows are realized. Inflows over the next three months are forecasted to be near average: 115,000 acre-ft (124%), 250,000 acre-ft (128%), and 410,000 acre-ft (115%) for April, May, and June respectively. Basin snowpack is currently 122% of the average for this time of year.

The next Fontenelle Working Group meeting is scheduled for April 21, 2011 at 10:00 am at the Seedskafee National Wildlife Refuge Visitor Center. The Fontenelle Working Group is an open public forum for information exchange between Reclamation and other parties associated with the operation of Fontenelle Reservoir.

***Flaming Gorge Reservoir*** – Unregulated inflow into Flaming Gorge Reservoir during the month of March was 101,000 acre-feet (AF), or 94 percent of average inflow. Recent storms over both the Upper Green and Yampa River Basins have significantly increased the potential for high spring flows in 2011. Upper Green River Basin snowpack is currently 118% of the average for this time of year. Yampa River Basin snowpack is currently 131% of the average for this time of year.

The Colorado Basin River Forecast Center and Natural Resources Conservation Service have issued the joint water supply forecast for the 2011 spring runoff. The Flaming Gorge Reservoir April official forecast for the April to July runoff period is 1,350 kaf (113%). The Yampa River Basin April official forecast for the April to July runoff period is 2,130 kaf (157%). **Note that these projections are provisional and that observed**

**runoff, current conditions and changing forecasts will determine releases during the spring period.**

**Reclamation acknowledges that April and May temperature and precipitation may provide an average year in both the Green and Yampa River Basins.** Current snowpack in both basins are similar to 1983 and 1984. The Yampa River at Deerlodge Park flows in 1984 reached a daily average of 32,300 cfs on May 18, 1984, and maintained 28 days above 18,600 cfs beginning on May 13, 1984. Please be advised that the potential for wet conditions currently exist in the Green and Yampa River Basins.

The next Flaming Gorge Working Group meeting is scheduled for April 26, 2011, at 7:00 p.m. at the Western Park Convention Center, 302 East 200 South, Vernal, Utah. The Flaming Gorge Working Group is an open public forum for information exchange between Reclamation and the stake holders of Flaming Gorge Dam. The public is encouraged to attend and comment on the operations and plans presented by Reclamation at these meetings. For more information on this group and these meetings please contact Heather Hermansen at 801-524-3883 or Ed Vidmar at 801-379-1182.

**Aspinall Unit Reservoirs** – March unregulated inflow into Blue Mesa Reservoir was 38,000 acre-feet or 106 percent of average. On April 8, 2011 the basin snowpack was 112 percent of average. Precipitation during March was 85 percent of average. The current inflow rate into Blue Mesa Reservoir is about 900 cfs while reservoir releases are averaging about 1700 cfs. Lately the weather pattern has been wetter and colder than average. However, spring conditions can return at anytime which will most likely start the annual spring snowmelt. With the higher than average snowpack and inflow forecast, we have increased reservoir releases in anticipation of making room for the runoff in Blue Mesa Reservoir. The reservoir elevation is currently at 7477.49 feet, which corresponds to a storage content of about 488,000 acre-feet. This elevation is about 12 feet lower than a year ago.

The latest Water Supply Forecast for Water Year 2011 has been issued and the April through July unregulated inflow is forecasted to be at 800,000 acre-feet (111% of normal). If this forecast holds through May 1st, the senior Black Canyon Water Right would call for a one day spring peak flow of 6,369 cfs. At this time, Reclamation plans to operate the Aspinall Unit to allow the water right to be met. Under the proposed operation Blue Mesa is projected to fill this runoff season. The projected fill is calculated to be between 7516.4 feet and 7519.4 feet. Any elevation above 7516.00 is considered a fill for the season.

Releases from Crystal are currently set at 1800 cfs. The Gunnison Diversion Tunnel started taking water for the new season on March 21, 2011. The current diversion rate in the tunnel is 500 cfs, which results in a river flow below the diversion tunnel of approximately 1300 cfs. These rates will most likely change as conditions warrant, primarily as we respond to changes in the forecasted spring inflows.

The next meeting of the "Aspinall Unit Working Group" will be held on Thursday, April 21, 2011 starting at 1:00 PM in Reclamation's Grand Junction Office. At this meeting, review of this winter's reservoir operations, and plans for this spring and summer operations will be discussed. These meetings are open forum discussions on the Aspinall Unit reservoir operations with many interested groups participating. Anyone needing further information about these meetings should contact Dan Crabtree in the Grand Junction Area Office at (970) 248-0652.

**Navajo Reservoir** - Releases from Navajo Reservoir have been set at 500 cfs since early fall 2010. All reservoir releases are made for the authorized purposes of the Navajo Unit, and to attempt to maintain a target base flow through the endangered fish critical habitat reach of the San Juan River (Farmington to Lake Powell).

The San Juan River Basin Recovery Implementation Program recommends a target base flow of between 500 cfs and 1,000 cfs through the critical habitat area. The target base flow is calculated as the weekly average of gaged flows throughout the critical habitat area, therefore daily flows of less than 500 cfs may occur at some gages.

Snowpack for the upper San Juan basin now stands at 82 percent of average, while the Animas River basin is 79 percent of average. Precipitation during March was only 50 percent of average. Unregulated inflow into Navajo Reservoir during the month of March was 41,000 acre-feet, or 46 percent of average. Currently, the daily reservoir inflow is averaging about 1500 cfs. The reservoir water surface elevation is currently 6058.85 feet, which corresponds to a storage content of about 1,333,000 acre-feet. NIIP started their diversions on March 17<sup>th</sup>, which are currently set at about 400 cfs.

The latest Water Supply Forecast for Water Year 2011 has been issued and the April through July unregulated inflow is forecasted to be at 550,000 acre-feet (70% of normal), this is a decrease of 100,000 acre-feet from last month's forecast. Given this forecast, there will be a one week spring peak release of 5,000 cfs which results in an end of water year reservoir elevation estimated to be 6058 feet.

A public meeting on Navajo Reservoir operations was held on Wednesday, April 20, 2011 in Farmington, New Mexico. At this meeting, review of this winter's reservoir operations, and plans for this spring and summer operations will be discussed. These are open forum discussions on the operation of Navajo Reservoir with many interested groups participating. Anyone interested in the general operation of the reservoir is encouraged to attend. Please contact Ryan Christianson in Reclamation's Durango, Colorado Office at (970) 385-6590 for information about these meetings or the daily operation of Navajo Reservoir.

**Glen Canyon Dam / Lake Powell** – The unregulated inflow to Lake Powell for March 2011 was 594 kaf (90% of average). Observed inflows to Lake Powell have increased over the past several weeks and are currently averaging about 10,400 cfs. With daily

average release rate from Glen Canyon Dam that is about 16,000 cfs, the elevation of Lake Powell is still declining , but the rate of decline has been moderated by these increased inflow conditions. The elevation of Lake Powell at midnight on April 7, 2011 was 3609.84 feet above sea level (90.16 feet from full pool). The elevation of Lake Powell will begin to increase later in April when inflows exceed releases. It is projected that the elevation of Lake Powell could increase by more than 30 feet to a peak elevation of approximately 3643 feet above sea level by late July or early August.

### **Current Dam Operations**

The release volume scheduled for April is 966 kaf. During the first 3 days of April, daily releases fluctuates for power production between an afternoon peak of approximately 19,600 cfs and an early morning low release of approximately 14,000 cfs. On April 4, 2011, Glen Canyon Powerplant Units 3 and 4 were taken out of service for approximately 6 weeks for annual maintenance. Releases from Glen Canyon Dam were set to 16,000 cfs with no fluctuations for power generation at that time due to limited capacity of the available generating units at Glen Canyon Power Plant. Releases of 16,000 cfs steady will likely continue until the end of April. In early May, releases will likely be steady at about 15,000 cfs for the first 13 days of the month. On May 14, 2011 it is projected that Units 3 and 4 will be returned to service. When this occurs, releases from Glen Canyon Dam will be increased such that peak releases will be about 22,000 cfs and off peak releases will be about 16,000 cfs. The projected release volume for May is approximately 1.10 maf.

In addition to daily operations that may or may not include daily fluctuation patterns for load following power generation, the instantaneous releases from Glen Canyon Dam may also fluctuate somewhat to provide approximately 40 megawatts of system regulation. These instantaneous releases adjustments maintain stable conditions within the electrical generation and transmission system and result in momentary release fluctuations within a range that is about 1100 cfs above or below the targeted release rate for a given hour of the day. These momentary fluctuations for regulation are very short lived and typically balance out over the hour. Spinning and non-spinning reserve generation can also occur at Glen Canyon Dam. When an unanticipated electrical outage event occurs within the electrical transmission system, reserve generation at Glen Canyon Dam can be called upon up to a maximum of 98 megawatts (approximately 2,600 cfs of release) for a duration of up to 2 hours. Under normal circumstances, calls for reserve generation occur fairly infrequently and are for much less than the required 98 megawatts.

### **Annual Operations-Coordinated Operation of Lake Mead and Lake Powell under Interim Guidelines for Water Year 2011**

In August of 2010, the 24-Month Study model projected the January 1, 2010 elevation of Lake Powell and Lake Mead under the most probable inflow scenario. 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 based on this August projection, the operational tier for water year 2011

was selected to be the Upper Elevation Balancing Tier. Under this operational tier, there is a possibility that the annual release volume from Lake Powell could be as low as 8.23 maf and there is also a possibility under this tier that Equalization or Balancing could occur which would result in an annual release volume greater than 8.23 maf.

The possibility of Equalization or Balancing in water year 2011 is dependent upon the reservoir conditions of Lake Powell and Lake Mead projected at the end of the water year in the Most Probable April 24-Month Study when the projected Glen Canyon Dam annual release condition is 8.23 maf . The April 24-Month Study, with a projected water year release of 8.23 maf projects the elevation of Lake Powell on September 30, 2011 (end of water year 2011) to be 3662.63 feet above sea level which is above the Equalization Level for 2011 (3643 feet). Based on this model projection and consistent with the Interim Guidelines, the Equalization Tier will govern the operation of Lake Powell for the remainder of water year 2011.

### **Current Inflow Forecasts and Model Projections**

Snowpack conditions above Lake Powell have persisted to be above average since late December 2010. The overall snowpack above Lake Powell on April 7, 2011 was 115% of average. The current Water Supply forecast for Lake Powell (April through July Unregulated Inflow Volume) is 9.5 maf (120% of average) and this forecast was issued by the CBRFC on April 4, 2011.

The unregulated inflow forecast for Lake Powell over the next 3 months is as follows: April-1,100 kaf (112% of average); May-3,000 kaf (130% of average); June-3,850 kaf (125% of average). Incorporating these new forecasts with the current Water Supply forecast, the projected unregulated inflow volume to Lake Powell during water year 2011 is now 13.11 maf (109% of average). These forecasts combined with projected inflows in August and September of 2011 make up the 2011 Most Probable water year inflow condition. The Most Probable inflow condition has a statistical probability of being achieved that is 50%. In other words, there is a 50% chance that the unregulated inflow volume for water year 2011 for Lake Powell will be 13.11 maf or greater.

A Minimum Probable water year inflow conditions has also been developed for water year 2011. The Minimum Probable inflow condition has a statistical probability of being achieved that is 90%. The 2011 Minimum Probable water year inflow condition is currently 10.5 maf (87% of average). A Maximum Probable water year inflow condition has also been developed for water year 2011. The 2011 Maximum Probable inflow condition is currently 16.2 maf (135% of average).

The April 2011 24-Month Study, with the 2011 Most Probable inflow condition projects that Equalization will be required under the Interim Guidelines and the projected annual release volume is projected to be 11.56 maf. As hydrologic conditions change during the remainder of the water year, this annual release projection will be adjusted to achieve the Equalization Tier of the Interim Guidelines.

## **Upper Colorado River Basin Hydrology**

In the Upper Colorado River Basin during water year 2010, the overall precipitation accumulated through September 30, 2010 was approximately 90% of average based on the 30 year average for the period from 1971 through 2000. For Water Year 2011 thus far, the estimated monthly precipitation within the Upper Colorado River Basin (above Lake Powell) as a percentage of average has been: (October - 135%, November - 95%, December - 225%, January - 50%, February - 100%, March- 90%)

The Climate Prediction Center outlook (dated March 17, 2010) for temperature over the next 3 months indicates that temperatures in the Upper Colorado River Basin are expected to be above average while precipitation over the next 3 months is projected to be near average in the northern reaches of the basin while below average in the southern reaches of the basin.

## **Upper Colorado River Basin Drought**

The Upper Colorado River Basin continues to experience a protracted multi-year drought. Since 1999, inflow to Lake Powell has been below average in every year except water years 2005 and 2008. In the summer of 1999, Lake Powell was close to full with reservoir storage at 23.5 million acre-feet, or 97 percent of capacity. During the next 5 years (2000 through 2004) unregulated inflow to Lake Powell was well below average. This resulted in Lake Powell storage decreasing during this period to 8.0 million acre-feet (33 percent of capacity) which occurred on April 8, 2005. During 2005, 2008 and 2009, drought conditions eased somewhat with net gains in storage to Lake Powell. As of April 7, 2011 the storage in Lake Powell was approximately 12.71 million acre-feet (52.2 % of capacity) which is below desired levels. The overall reservoir storage in the Colorado River Basin as of April 7, 2011 is approximately 31.42 million acre-feet (52.8 % of capacity).

TO ALL ANNUAL OPERATING PLAN RECIPIENTS

MAILED FROM UPPER COLORADO REGION

WATER RESOURCES GROUP

ATTENTION UC-430

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SALT LAKE CITY, UT 84138-5571

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RUNOFF AND INFLOW PROJECTIONS INTO UPPER BASIN RESERVOIRS ARE PROVIDED BY  
THE COLORADO RIVER FORECASTING SERVICE THROUGH THE NATIONAL WEATHER SERVICES'S  
COLORADO BASIN RIVER FORECAST CENTER AND ARE AS FOLLOWS

:			Obs		mar	Forecast		Outlook		
:	dec	jan	feb	mar	%Avg	apr	may	jun	apr-jul	%Avg
GLDA3:Lake Powell	417	381	318	595e	90%:	1100/	3000/	3850/	9500/:	120%
GBRW4:Fontenelle	37	29	26	36e	69%:	115/	250/	410/	980/:	114%
GRNU1:Flaming Gorge	45	44	36	101e	94%:	190/	390/	535/	1350/:	113%
BMDC2:Blue Mesa	30	23	21	38e	106%:	97/	260/	325/	800/:	111%
MPSC2:Morrow Point	30	23	21	38e	95%:	111/	290/	350/	875/:	111%
CLSC2:Crystal	34	27	24	43e	91%:	125/	330/	390/	985/:	108%
TPIC2:Taylor Park	5.4	4.6	4.0	4.5e	105%:	9/	38/	55/	125/:	121%
VCRC2:Vallecito	6.2	4.8	4.2	7.4e	91%:	19/	59/	62/	160/:	78%
NVRN5:Navajo	23	16.0	17.6	41e	46%:	118/	225/	180/	550/:	70%
LEMC2:Lemon	1.05	0.76	0.65	1.2e	80%:	4.1/	16.4/	17.3/	42/:	72%
MPHC2:McPhee	6.0	3.8	3.3	11.6e	70%:	45/	100/	64/	225/:	70%
RBSC2:Ridgway	4.7	3.9	3.2	4.7e	85%:	/	/	/	95/:	93%

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



April 2011 24-Month Study

Most Probable Inflow\*

**Fontenelle Reservoir**



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)
* Apr 2010	63	1	47	1	48	6471.88	127
H May 2010	40	1	49	0	49	6469.44	117
I Jun 2010	251	2	50	1	51	6502.04	314
S Jul 2010	134	3	91	22	113	6504.39	333
T Aug 2010	50	2	68	0	68	6501.76	312
O Sep 2010	29	2	26	35	61	6497.33	279
<b>WY 2010</b>	<b>781</b>	<b>14</b>	<b>530</b>	<b>233</b>	<b>763</b>		
R Oct 2010	31	1	5	55	59	6493.24	250
I Nov 2010	34	1	53	1	54	6490.17	229
C Dec 2010	37	1	55	0	55	6487.27	210
A Jan 2011	29	1	55	0	55	6482.87	183
L Feb 2011	26	1	50	0	50	6478.35	158
* Mar 2011	36	1	58	0	58	6473.74	136
Apr 2011	115	1	94	20	114	6473.76	136
May 2011	250	1	99	116	215	6480.45	169
Jun 2011	410	2	102	177	280	6499.81	297
Jul 2011	205	3	101	62	163	6504.90	337
Aug 2011	88	2	100	5	105	6502.51	318
Sep 2011	50	2	36	32	68	6499.89	298
<b>WY 2011</b>	<b>1311</b>	<b>15</b>	<b>810</b>	<b>468</b>	<b>1277</b>		
Oct 2011	49	1	71	0	71	6496.72	275
Nov 2011	41	1	68	0	68	6492.81	247
Dec 2011	32	1	71	0	71	6486.88	208
Jan 2012	30	1	71	0	71	6480.01	167
Feb 2012	28	0	66	0	66	6472.06	128
Mar 2012	52	0	71	0	71	6467.44	109
Apr 2012	89	1	83	0	83	6468.78	114
May 2012	176	1	86	0	86	6486.09	203
Jun 2012	307	2	104	106	210	6499.86	298
Jul 2012	185	3	101	38	138	6505.55	342
Aug 2012	82	2	89	0	89	6504.39	333
Sep 2012	48	2	71	0	71	6501.32	309
<b>WY 2012</b>	<b>1121</b>	<b>15</b>	<b>951</b>	<b>144</b>	<b>1095</b>		
Oct 2012	49	1	73	0	73	6497.92	283
Nov 2012	41	1	71	0	71	6493.76	254
Dec 2012	32	1	73	0	73	6487.56	212
Jan 2013	30	1	73	0	73	6480.40	169
Feb 2013	28	0	66	0	66	6472.65	131
Mar 2013	52	0	73	0	73	6467.55	109

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



April 2011 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)
* Apr 2010	96	81	5	49	0	49	130	6026.69	3223	237
H May 2010	72	81	8	101	0	101	129	6025.97	3196	537
I Jun 2010	387	187	10	138	0	138	130	6026.97	3234	736
S Jul 2010	151	130	13	96	0	96	131	6027.51	3254	195
T Aug 2010	54	72	12	100	0	100	129	6026.47	3215	135
O Sep 2010	22	54	10	106	0	106	127	6024.83	3154	127
<b>WY 2010</b>	<b>1018</b>	<b>1000</b>	<b>79</b>	<b>1168</b>	<b>1</b>	<b>1169</b>				<b>2764</b>
R Oct 2010	32	60	7	77	0	77	126	6024.21	3131	113
I Nov 2010	31	52	4	63	0	63	125	6023.83	3117	107
C Dec 2010	45	64	2	68	0	68	125	6023.67	3111	114
A Jan 2011	44	70	2	68	0	68	125	6023.69	3112	525
L Feb 2011	36	60	2	67	0	67	125	6023.47	3104	489
* Mar 2011	98	120	3	59	0	59	127	6024.99	3160	182
Apr 2011	190	189	5	160	0	160	128	6025.62	3183	160
May 2011	390	355	8	188	0	188	134	6029.67	3336	188
Jun 2011	535	405	11	229	0	229	140	6033.72	3495	229
Jul 2011	235	193	14	231	0	231	138	6032.46	3445	231
Aug 2011	101	118	13	118	0	118	138	6032.12	3432	118
Sep 2011	60	78	11	115	0	115	136	6030.95	3386	115
<b>WY 2011</b>	<b>1798</b>	<b>1764</b>	<b>81</b>	<b>1442</b>	<b>0</b>	<b>1442</b>				<b>2571</b>
Oct 2011	59	81	7	118	0	118	134	6029.84	3343	118
Nov 2011	50	77	3	115	0	115	133	6028.82	3304	115
Dec 2011	36	74	2	118	0	118	131	6027.66	3260	118
Jan 2012	41	81	2	118	0	118	130	6026.68	3223	118
Feb 2012	46	84	2	111	0	111	128	6025.93	3195	111
Mar 2012	104	123	3	118	0	118	129	6025.97	3196	118
Apr 2012	142	136	5	115	0	115	129	6026.41	3213	115
May 2012	265	175	8	118	0	118	131	6027.66	3260	118
Jun 2012	399	301	11	150	0	150	136	6031.17	3394	150
Jul 2012	218	171	14	206	0	206	135	6029.98	3348	206
Aug 2012	96	103	13	108	0	108	134	6029.55	3332	108
Sep 2012	58	81	11	104	0	104	133	6028.67	3298	104
<b>WY 2012</b>	<b>1515</b>	<b>1489</b>	<b>80</b>	<b>1500</b>	<b>0</b>	<b>1500</b>				<b>1500</b>
Oct 2012	59	83	7	108	0	108	131	6027.87	3268	108
Nov 2012	50	79	3	104	0	104	130	6027.16	3241	104
Dec 2012	36	77	2	108	0	108	129	6026.32	3209	108
Jan 2013	41	84	2	108	0	108	128	6025.66	3185	108
Feb 2013	46	84	2	97	0	97	127	6025.25	3170	97
Mar 2013	104	125	3	108	0	108	128	6025.63	3183	108

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

OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



April 2011 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)
* Apr 2010	11	6	9308.40	67
H May 2010	22	9	9316.36	80
I Jun 2010	35	18	9325.55	97
S Jul 2010	10	20	9320.19	87
T Aug 2010	10	17	9316.06	80
O Sep 2010	6	14	9311.57	72
<b>WY 2010</b>	<b>121</b>	<b>122</b>		
R Oct 2010	7	6	9312.21	73
I Nov 2010	5	5	9312.27	74
C Dec 2010	5	5	9312.71	74
A Jan 2011	5	5	9312.70	74
L Feb 2011	4	4	9312.51	74
* Mar 2011	5	6	9311.89	73
Apr 2011	9	16	9307.47	66
May 2011	38	30	9312.50	74
Jun 2011	55	28	9327.37	101
Jul 2011	23	28	9324.81	96
Aug 2011	11	22	9318.80	85
Sep 2011	7	16	9313.77	76
<b>WY 2011</b>	<b>173</b>	<b>169</b>		
Oct 2011	6	10	9311.45	72
Nov 2011	5	6	9310.77	71
Dec 2011	4	6	9309.81	70
Jan 2012	4	6	9308.68	68
Feb 2012	4	6	9307.24	66
Mar 2012	4	6	9306.09	64
Apr 2012	8	8	9306.31	64
May 2012	27	14	9314.54	77
Jun 2012	43	20	9327.02	100
Jul 2012	20	22	9326.21	99
Aug 2012	10	22	9319.84	87
Sep 2012	7	16	9314.71	78
<b>WY 2012</b>	<b>144</b>	<b>142</b>		
Oct 2012	6	10	9312.42	74
Nov 2012	5	6	9311.76	73
Dec 2012	4	6	9310.81	71
Jan 2013	4	6	9309.69	69
Feb 2013	4	6	9308.40	67
Mar 2013	4	6	9307.27	66

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



April 2011 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)
* Apr 2010	96	92	1	45	0	45	7490.80	588
H May 2010	143	131	1	110	6	116	7492.59	602
I Jun 2010	205	186	1	51	0	51	7508.76	735
S Jul 2010	50	60	1	98	0	98	7504.17	696
T Aug 2010	56	63	1	92	0	92	7500.54	666
O Sep 2010	23	31	1	86	0	86	7493.54	609
<b>WY 2010</b>	<b>725</b>	<b>727</b>	<b>8</b>	<b>754</b>	<b>6</b>	<b>760</b>		
R Oct 2010	29	29	1	85	0	85	7486.20	552
I Nov 2010	27	27	0	24	0	24	7486.60	555
C Dec 2010	30	29	0	27	0	27	7486.84	557
A Jan 2011	23	23	0	27	0	27	7486.34	553
L Feb 2011	21	21	0	43	0	43	7483.46	532
* Mar 2011	38	39	0	75	0	75	7478.48	495
Apr 2011	97	104	1	102	0	102	7478.66	496
May 2011	260	252	1	168	0	168	7489.74	579
Jun 2011	325	298	1	83	0	83	7515.36	793
Jul 2011	118	123	2	112	0	112	7516.40	803
Aug 2011	61	72	1	123	0	123	7510.50	750
Sep 2011	36	45	1	116	0	116	7502.01	678
<b>WY 2011</b>	<b>1065</b>	<b>1061</b>	<b>9</b>	<b>984</b>	<b>0</b>	<b>984</b>		
Oct 2011	36	39	1	71	0	71	7498.10	646
Nov 2011	31	32	0	41	0	41	7496.92	636
Dec 2011	25	27	0	81	0	81	7490.00	581
Jan 2012	24	26	0	79	0	79	7482.99	528
Feb 2012	22	24	0	50	0	50	7479.46	502
Mar 2012	34	36	0	30	0	30	7480.22	508
Apr 2012	73	73	1	48	0	48	7483.46	532
May 2012	212	199	1	117	0	117	7493.95	612
Jun 2012	271	248	1	67	0	67	7515.22	792
Jul 2012	121	122	2	110	0	110	7516.40	803
Aug 2012	62	74	1	122	0	122	7510.79	753
Sep 2012	36	45	1	113	0	113	7502.73	684
<b>WY 2012</b>	<b>946</b>	<b>945</b>	<b>9</b>	<b>930</b>	<b>0</b>	<b>930</b>		
Oct 2012	36	39	1	71	0	71	7498.85	652
Nov 2012	31	32	0	41	0	41	7497.66	642
Dec 2012	25	27	0	87	0	87	7490.00	581
Jan 2013	24	26	0	79	0	79	7482.99	528
Feb 2013	22	24	0	54	0	54	7478.87	498
Mar 2013	34	36	0	36	0	36	7478.80	497

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2011 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)
*	Apr 2010	107	45	11	57	55	0	55	7149.84	109
H	May 2010	159	116	16	132	129	0	129	7154.46	113
I	Jun 2010	216	51	12	63	64	0	64	7153.15	112
S	Jul 2010	51	98	1	98	96	0	96	7156.02	114
T	Aug 2010	56	92	1	93	93	0	93	7155.63	114
O	Sep 2010	23	86	0	87	92	0	92	7148.78	108
<b>WY 2010</b>		<b>773</b>	<b>760</b>	<b>48</b>	<b>807</b>	<b>805</b>	<b>0</b>	<b>805</b>		
R	Oct 2010	30	85	1	86	82	0	82	7153.88	112
I	Nov 2010	29	24	1	25	26	0	26	7152.79	111
C	Dec 2010	30	27	0	28	27	0	27	7153.98	112
A	Jan 2011	23	27	0	27	27	0	27	7153.70	112
L	Feb 2011	21	43	0	43	44	0	44	7152.08	111
*	Mar 2011	38	75	1	75	73	0	73	7154.37	113
	Apr 2011	111	102	14	116	117	0	117	7153.73	112
	May 2011	290	168	30	198	198	0	198	7153.73	112
	Jun 2011	350	83	25	108	108	0	108	7153.73	112
	Jul 2011	124	112	6	118	118	0	118	7153.73	112
	Aug 2011	64	123	3	126	126	0	126	7153.73	112
	Sep 2011	39	116	3	119	119	0	119	7153.73	112
<b>WY 2011</b>		<b>1150</b>	<b>984</b>	<b>85</b>	<b>1069</b>	<b>1065</b>	<b>0</b>	<b>1065</b>		
	Oct 2011	38	71	3	74	74	0	74	7153.73	112
	Nov 2011	33	41	2	43	43	0	43	7153.73	112
	Dec 2011	27	81	2	83	83	0	83	7153.73	112
	Jan 2012	26	79	2	81	81	0	81	7153.73	112
	Feb 2012	25	50	3	53	53	0	53	7153.73	112
	Mar 2012	38	30	4	34	34	0	34	7153.73	112
	Apr 2012	84	48	11	59	59	0	59	7153.73	112
	May 2012	237	117	25	142	142	0	142	7153.73	112
	Jun 2012	292	67	21	88	88	0	88	7153.73	112
	Jul 2012	127	110	7	117	117	0	117	7153.73	112
	Aug 2012	65	122	4	126	126	0	126	7153.73	112
	Sep 2012	39	113	3	116	116	0	116	7153.73	112
<b>WY 2012</b>		<b>1033</b>	<b>930</b>	<b>86</b>	<b>1016</b>	<b>1016</b>	<b>0</b>	<b>1016</b>		
	Oct 2012	38	71	3	74	74	0	74	7153.73	112
	Nov 2012	33	41	2	43	43	0	43	7153.73	112
	Dec 2012	27	87	2	89	89	0	89	7153.73	112
	Jan 2013	26	79	2	81	81	0	81	7153.73	112
	Feb 2013	25	54	3	57	57	0	57	7153.73	112
	Mar 2013	38	36	4	40	40	0	40	7153.73	112

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



April 2011 24-Month Study

Most 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)
*	Apr 2010	118	55	11	66	66	0	66	6750.96	16	34	34
H	May 2010	179	129	20	148	108	36	148	6752.53	17	60	91
I	Jun 2010	242	64	25	89	89	0	89	6752.91	17	56	39
S	Jul 2010	55	96	4	100	100	0	100	6751.15	16	69	39
T	Aug 2010	61	93	5	98	98	0	98	6749.05	16	68	37
O	Sep 2010	26	92	3	95	95	0	95	6748.16	16	63	36
<b>WY 2010</b>		<b>859</b>	<b>805</b>	<b>86</b>	<b>891</b>	<b>824</b>	<b>63</b>	<b>890</b>			<b>415</b>	<b>528</b>
R	Oct 2010	34	82	4	86	85	0	85	6750.41	16	51	33
I	Nov 2010	32	26	4	30	30	0	30	6748.60	16	1	29
C	Dec 2010	34	27	4	31	31	0	31	6748.24	16	1	30
A	Jan 2011	27	27	4	31	30	1	31	6749.02	16	1	30
L	Feb 2011	24	44	3	47	24	23	46	6751.55	17	1	47
*	Mar 2011	43	73	5	78	78	0	78	6751.94	17	5	76
	Apr 2011	125	117	14	131	130	0	130	6753.04	17	30	100
	May 2011	330	198	40	238	134	104	238	6753.04	17	55	183
	Jun 2011	390	108	40	148	130	18	148	6753.04	17	60	88
	Jul 2011	140	118	16	134	134	0	134	6753.04	17	65	69
	Aug 2011	72	126	8	134	134	0	134	6753.04	17	65	69
	Sep 2011	45	119	6	125	125	0	125	6753.04	17	55	70
<b>WY 2011</b>		<b>1297</b>	<b>1065</b>	<b>147</b>	<b>1212</b>	<b>1065</b>	<b>145</b>	<b>1211</b>			<b>389</b>	<b>824</b>
	Oct 2011	44	74	6	80	80	0	80	6753.04	17	30	50
	Nov 2011	38	43	5	48	48	0	48	6753.04	17	0	48
	Dec 2011	32	83	5	88	88	0	88	6753.04	17	0	88
	Jan 2012	31	81	5	86	86	0	86	6753.04	17	0	86
	Feb 2012	29	53	4	57	57	0	57	6753.04	17	0	57
	Mar 2012	46	34	7	41	41	0	41	6753.04	17	5	36
	Apr 2012	96	59	12	71	71	0	71	6753.04	17	30	41
	May 2012	272	142	35	177	134	43	177	6753.04	17	55	122
	Jun 2012	330	88	38	127	127	0	127	6753.04	17	60	67
	Jul 2012	144	117	17	134	134	0	134	6753.04	17	65	69
	Aug 2012	74	126	8	134	134	0	134	6753.04	17	65	69
	Sep 2012	45	116	6	122	122	0	122	6753.04	17	55	67
<b>WY 2012</b>		<b>1183</b>	<b>1016</b>	<b>150</b>	<b>1167</b>	<b>1123</b>	<b>43</b>	<b>1167</b>			<b>365</b>	<b>802</b>
	Oct 2012	44	74	6	80	80	0	80	6753.04	17	30	50
	Nov 2012	38	43	5	48	48	0	48	6753.04	17	0	48
	Dec 2012	32	89	5	94	94	0	94	6753.04	17	0	94
	Jan 2013	31	81	5	86	86	0	86	6753.04	17	0	86
	Feb 2013	29	57	4	61	61	0	61	6753.04	17	0	61
	Mar 2013	46	40	7	47	47	0	47	6753.04	17	5	42

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2011 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)
*	Apr 2010	27	4	7640.13	65
H	May 2010	69	20	7660.32	113
I	Jun 2010	46	42	7661.51	116
S	Jul 2010	12	37	7651.21	90
T	Aug 2010	19	33	7645.00	75
O	Sep 2010	10	26	7637.70	59
<b>WY 2010</b>		<b>210</b>	<b>196</b>		
R	Oct 2010	12	13	7636.95	58
I	Nov 2010	7	2	7639.20	63
C	Dec 2010	6	2	7641.20	67
A	Jan 2011	5	2	7642.53	70
L	Feb 2011	4	2	7643.62	72
*	Mar 2011	7	2	7645.67	77
	Apr 2011	19	2	7652.77	94
	May 2011	59	35	7662.09	118
	Jun 2011	62	56	7664.00	123
	Jul 2011	20	42	7655.52	101
	Aug 2011	15	38	7645.76	77
	Sep 2011	15	30	7639.04	62
<b>WY 2011</b>		<b>231</b>	<b>224</b>		
	Oct 2011	14	17	7637.27	59
	Nov 2011	8	2	7640.39	65
	Dec 2011	6	2	7642.32	69
	Jan 2012	5	2	7643.83	73
	Feb 2012	5	2	7645.17	76
	Mar 2012	8	2	7647.90	82
	Apr 2012	22	1	7656.16	102
	May 2012	69	53	7662.18	118
	Jun 2012	78	72	7664.15	123
	Jul 2012	31	42	7659.90	112
	Aug 2012	19	38	7652.38	93
	Sep 2012	17	30	7647.05	80
<b>WY 2012</b>		<b>282</b>	<b>261</b>		
	Oct 2012	14	13	7647.27	81
	Nov 2012	8	6	7648.26	83
	Dec 2012	6	5	7648.84	84
	Jan 2013	5	3	7649.69	86
	Feb 2013	5	3	7650.48	88
	Mar 2013	8	3	7652.44	93

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2011 24-Month Study

Most Probable Inflow\*

### Navajo Reservoir



	Date	Mod Unreg Inflow (1000 Ac-Ft)	Azetea Tunnel Div (1000 Ac-Ft)	Reg Inflow (1000 Ac-Ft)	Evap Losses (1000 Ac-Ft)	NIIP Diversion (1000 Ac-Ft)	Total Release (1000 Ac-Ft)	Reservoir Elev End of Month (Ft)	Live Storage (1000 Ac-Ft)	Farmington Flow (1000 Ac-Ft)
*	Apr 2010	222	22	179	2	12	28	6062.79	1384	75
H	May 2010	264	35	182	4	26	30	6071.80	1506	126
I	Jun 2010	152	27	116	5	40	33	6074.50	1544	118
S	Jul 2010	15	2	39	5	47	58	6069.52	1474	72
T	Aug 2010	39	2	52	4	35	41	6067.48	1446	69
O	Sep 2010	24	1	39	3	25	45	6064.97	1412	57
<b>WY 2010</b>		<b>855</b>	<b>89</b>	<b>753</b>	<b>29</b>	<b>202</b>	<b>423</b>			<b>802</b>
R	Oct 2010	24	0	26	2	8	36	6063.49	1393	46
I	Nov 2010	17	0	12	1	1	29	6062.08	1374	46
C	Dec 2010	23	0	19	1	1	30	6061.11	1362	42
A	Jan 2011	16	0	13	1	1	31	6059.58	1342	50
L	Feb 2011	18	0	15	1	1	28	6058.41	1328	45
*	Mar 2011	41	2	35	2	4	31	6058.28	1326	49
	Apr 2011	118	17	84	2	16	30	6061.08	1362	30
	May 2011	225	33	168	4	28	59	6066.99	1439	59
	Jun 2011	180	22	152	4	43	120	6065.85	1424	120
	Jul 2011	27	2	46	5	46	39	6062.58	1381	39
	Aug 2011	25	0	48	4	39	42	6059.74	1344	42
	Sep 2011	33	2	46	3	22	38	6058.38	1327	38
<b>WY 2011</b>		<b>748</b>	<b>79</b>	<b>664</b>	<b>28</b>	<b>210</b>	<b>511</b>			<b>606</b>
	Oct 2011	40	0	44	2	8	31	6058.66	1331	31
	Nov 2011	33	0	26	1	0	30	6058.31	1327	30
	Dec 2011	24	0	20	1	0	31	6057.37	1315	31
	Jan 2012	22	0	18	1	0	31	6056.33	1302	31
	Feb 2012	30	0	27	1	0	28	6056.21	1300	28
	Mar 2012	88	1	81	2	4	52	6058.13	1324	52
	Apr 2012	174	16	137	2	17	56	6063.01	1387	56
	May 2012	279	35	227	4	29	121	6068.54	1460	121
	Jun 2012	246	27	213	4	44	182	6067.25	1443	182
	Jul 2012	74	4	81	5	47	37	6066.72	1436	37
	Aug 2012	43	2	60	4	40	42	6064.85	1411	42
	Sep 2012	42	1	54	3	22	36	6064.29	1403	36
<b>WY 2012</b>		<b>1096</b>	<b>85</b>	<b>990</b>	<b>28</b>	<b>210</b>	<b>675</b>			<b>675</b>
	Oct 2012	40	0	40	2	8	31	6064.24	1403	31
	Nov 2012	33	0	31	1	0	30	6064.22	1402	30
	Dec 2012	24	0	22	1	0	31	6063.54	1393	31
	Jan 2013	22	0	20	1	0	31	6062.64	1382	31
	Feb 2013	30	0	29	1	0	27	6062.69	1382	27
	Mar 2013	88	1	83	2	4	31	6066.19	1429	31

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2011 24-Month Study

Most Probable Inflow\*

### Lake Powell



	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 (1000 Ac-Ft)
*	Apr 2010	944	717	26	602	0	602	3620.50	17783	13816	614
H	May 2010	1399	1224	32	601	0	601	3625.96	17785	14405	612
I	Jun 2010	2776	2321	53	601	0	601	3638.82	17994	15864	612
S	Jul 2010	674	706	65	802	0	802	3636.52	18100	15596	824
T	Aug 2010	504	608	64	802	0	802	3634.55	18070	15369	826
O	Sep 2010	277	461	58	480	0	480	3633.66	18095	15267	490
	<b>WY 2010</b>	<b>8634</b>	<b>8674</b>	<b>444</b>	<b>8234</b>	<b>0</b>	<b>8235</b>				<b>8419</b>
R	Oct 2010	362	512	41	495	0	495	3634.08	18023	15315	502
I	Nov 2010	438	474	39	810	0	810	3630.31	18075	14888	826
C	Dec 2010	416	446	30	847	0	847	3626.54	18063	14469	865
A	Jan 2011	381	429	9	997	0	997	3620.55	18133	13822	1015
L	Feb 2011	317	377	10	964	0	964	3614.95	18123	13235	984
*	Mar 2011	594	596	16	1033	0	1033	3610.73	18100	12804	1055
	Apr 2011	1100	1020	25	966	0	966	3611.00	18103	12831	966
	May 2011	3000	2600	31	1103	0	1103	3623.98	18211	14189	1103
	Jun 2011	3850	3307	52	1179	0	1179	3640.91	18365	16111	1179
	Jul 2011	1550	1600	67	1255	0	1255	3643.07	18386	16369	1255
	Aug 2011	623	759	66	1193	0	1193	3639.17	18348	15905	1193
	Sep 2011	483	646	60	714	0	714	3638.16	18339	15787	714
	<b>WY 2011</b>	<b>13114</b>	<b>12766</b>	<b>445</b>	<b>11556</b>	<b>0</b>	<b>11556</b>				<b>11657</b>
	Oct 2011	514	607	42	738	0	738	3636.79	18326	15627	738
	Nov 2011	523	595	40	800	0	800	3634.83	18308	15400	800
	Dec 2011	414	559	31	875	0	875	3632.01	18282	15079	875
	Jan 2012	384	525	10	875	0	875	3629.05	18256	14746	875
	Feb 2012	398	488	10	800	0	800	3626.35	18232	14448	800
	Mar 2012	628	606	17	700	0	700	3625.41	18224	14345	700
	Apr 2012	950	812	28	600	0	600	3626.97	18237	14516	600
	May 2012	2161	1826	34	700	0	700	3635.93	18318	15527	700
	Jun 2012	2811	2366	56	860	0	860	3647.20	18426	16870	860
	Jul 2012	1346	1336	70	1000	0	1000	3649.20	18445	17116	1000
	Aug 2012	566	678	69	987	0	987	3646.35	18417	16766	987
	Sep 2012	460	599	63	714	0	714	3645.00	18404	16601	714
	<b>WY 2012</b>	<b>11154</b>	<b>10997</b>	<b>469</b>	<b>9649</b>	<b>0</b>	<b>9649</b>				<b>9649</b>
	Oct 2012	514	596	43	738	0	738	3643.58	18390	16429	738
	Nov 2012	523	584	41	800	0	800	3641.59	18371	16192	800
	Dec 2012	414	555	33	900	0	900	3638.63	18343	15842	900
	Jan 2013	384	514	10	900	0	900	3635.48	18314	15475	900
	Feb 2013	398	478	11	800	0	800	3632.78	18289	15167	800
	Mar 2013	628	581	18	600	0	600	3632.48	18287	15132	600

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2011 24-Month Study

Most Probable Inflow\*

### Hoover Dam - Lake Mead



	Date	Glen Release (1000 Ac-Ft)	Side Inflow (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)
*	Apr 2010	602	138	41	933	15.7	19	856	735	1098.00	11313
H	May 2010	601	87	47	961	15.6	28	933	714	1094.30	10987
I	Jun 2010	601	30	55	1007	16.9	27	1006	686	1089.30	10556
S	Jul 2010	802	29	68	941	15.3	33	937	673	1086.97	10357
T	Aug 2010	802	126	72	829	13.5	33	823	673	1086.91	10352
O	Sep 2010	480	82	59	758	12.7	23	755	656	1083.81	10092
<b>WY 2010</b>		<b>8235</b>	<b>928</b>	<b>564</b>	<b>9260</b>		<b>235</b>	<b>9039</b>			
R	Oct 2010	495	80	42	638	10.4	24	607	648	1082.36	9971
I	Nov 2010	810	13	42	800	13.4	18	795	646	1081.94	9936
C	Dec 2010	847	248	37	660	10.7	9	630	670	1086.30	10301
A	Jan 2011	997	75	31	540	8.8	9	526	700	1091.73	10765
L	Feb 2011	964	84	29	635	11.4	9	616	723	1095.78	11117
*	Mar 2011	1033	77	33	1006	16.4	14	1002	726	1096.39	11170
	Apr 2011	966	60	40	1092	18.4	17	1092	719	1095.07	11054
	May 2011	1103	49	46	1042	16.9	27	1042	721	1095.46	11088
	Jun 2011	1179	23	56	957	16.1	23	957	731	1097.22	11244
	Jul 2011	1255	50	71	914	14.9	25	914	749	1100.33	11521
	Aug 2011	1193	109	77	820	13.3	27	820	772	1104.25	11875
	Sep 2011	714	70	64	628	10.6	19	628	776	1105.00	11943
<b>WY 2011</b>		<b>11556</b>	<b>936</b>	<b>569</b>	<b>9731</b>		<b>221</b>	<b>9629</b>			
	Oct 2011	738	59	47	471	7.7	23	471	792	1107.62	12184
	Nov 2011	800	48	47	663	11.1	22	663	799	1108.79	12293
	Dec 2011	875	99	41	542	8.8	18	542	822	1112.52	12643
	Jan 2012	875	76	34	708	11.5	20	708	833	1114.40	12821
	Feb 2012	800	92	31	729	12.7	18	729	840	1115.51	12927
	Mar 2012	700	80	35	1033	16.8	24	1033	821	1112.42	12634
	Apr 2012	600	60	43	1156	19.4	20	1156	787	1106.80	12109
	May 2012	700	49	49	993	16.2	31	993	767	1103.48	11805
	Jun 2012	860	23	58	860	14.5	26	860	764	1102.84	11747
	Jul 2012	1000	50	73	901	14.7	28	901	766	1103.34	11792
	Aug 2012	987	109	78	822	13.4	31	822	777	1105.04	11947
	Sep 2012	714	70	64	676	11.4	22	676	778	1105.26	11968
<b>WY 2012</b>		<b>9649</b>	<b>815</b>	<b>600</b>	<b>9554</b>		<b>283</b>	<b>9554</b>			
	Oct 2012	738	59	47	463	7.5	26	463	794	1107.92	12213
	Nov 2012	800	48	47	573	9.6	25	573	806	1109.96	12402
	Dec 2012	900	99	41	558	9.1	21	558	829	1113.74	12758
	Jan 2013	900	76	34	708	11.5	20	708	842	1115.84	12959
	Feb 2013	800	92	32	715	12.9	18	715	850	1117.09	13078
	Mar 2013	600	80	35	1052	17.1	24	1052	824	1112.84	12672

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2011 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)
*	Apr 2010	933	-17	17	878	0	878	14.8	642.94	1697
H	May 2010	961	-19	22	937	0	937	15.2	642.30	1680
I	Jun 2010	1007	-23	25	912	0	912	15.3	643.98	1726
S	Jul 2010	941	-14	26	913	0	913	14.8	643.57	1714
T	Aug 2010	829	-12	23	838	0	838	13.6	641.95	1670
O	Sep 2010	758	-2	18	833	0	833	14.0	638.40	1575
<b>WY 2010</b>		<b>9260</b>	<b>-172</b>	<b>197</b>	<b>8816</b>	<b>0</b>	<b>8816</b>			
R	Oct 2010	638	6	15	766	0	766	12.5	633.10	1437
I	Nov 2010	800	-29	10	631	0	631	10.6	638.09	1567
C	Dec 2010	660	-15	9	553	0	553	9.0	641.21	1650
A	Jan 2011	540	-7	10	502	0	502	8.2	641.95	1670
L	Feb 2011	635	-10	10	586	0	586	10.5	643.01	1699
*	Mar 2011	1006	-11	13	976	0	976	15.9	643.23	1705
	Apr 2011	1092	-15	17	1067	0	1067	17.9	643.00	1699
	May 2011	1042	-10	22	1009	0	1009	16.4	643.00	1699
	Jun 2011	957	-6	25	953	0	953	16.0	642.00	1671
	Jul 2011	914	1	25	903	0	903	14.7	641.50	1658
	Aug 2011	820	-5	23	793	0	793	12.9	641.50	1658
	Sep 2011	628	1	18	705	0	705	11.8	638.00	1564
<b>WY 2011</b>		<b>9731</b>	<b>-101</b>	<b>197</b>	<b>9443</b>	<b>0</b>	<b>9443</b>			
	Oct 2011	471	3	15	589	0	589	9.6	633.00	1434
	Nov 2011	663	-10	10	592	0	592	9.9	635.00	1486
	Dec 2011	542	-13	9	423	0	423	6.9	638.71	1583
	Jan 2012	708	-17	10	598	0	598	9.7	641.80	1666
	Feb 2012	729	-6	10	714	0	714	12.4	641.80	1666
	Mar 2012	1033	-15	13	971	0	971	15.8	643.05	1700
	Apr 2012	1156	-15	17	1125	0	1125	18.9	643.00	1699
	May 2012	993	-10	22	961	0	961	15.6	643.00	1699
	Jun 2012	860	-6	25	856	0	856	14.4	642.00	1671
	Jul 2012	901	1	25	890	0	890	14.5	641.50	1658
	Aug 2012	822	-5	23	795	0	795	12.9	641.50	1658
	Sep 2012	676	1	18	752	0	752	12.6	638.00	1564
<b>WY 2012</b>		<b>9554</b>	<b>-91</b>	<b>197</b>	<b>9266</b>	<b>0</b>	<b>9266</b>			
	Oct 2012	463	3	15	581	0	581	9.5	633.00	1434
	Nov 2012	573	-10	10	502	0	502	8.4	635.00	1486
	Dec 2012	558	-13	9	438	0	438	7.1	638.71	1583
	Jan 2013	708	-17	10	599	0	599	9.7	641.80	1666
	Feb 2013	715	-6	10	699	0	699	12.6	641.80	1666
	Mar 2013	1052	-15	13	990	0	990	16.1	643.05	1700

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



April 2011 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)
*	Apr 2010	878	34	11	670	11.3	43	153	448.61	592	210	3.5
H	May 2010	937	24	13	662	10.8	102	172	448.83	596	114	1.9
I	Jun 2010	912	23	16	650	10.9	91	171	448.64	592	113	1.9
S	Jul 2010	913	17	17	743	12.1	107	50	448.61	592	126	2.1
T	Aug 2010	838	21	17	646	10.5	108	84	448.20	584	101	1.6
O	Sep 2010	833	17	15	583	9.8	98	171	446.95	560	93	1.6
<b>WY 2010</b>		<b>8816</b>	<b>318</b>	<b>140</b>	<b>6298</b>		<b>1043</b>	<b>1572</b>			<b>1619</b>	
R	Oct 2010	766	25	12	465	7.6	102	166	449.14	602	106	1.7
I	Nov 2010	631	38	9	428	7.2	98	159	447.59	572	114	1.9
C	Dec 2010	553	33	7	290	4.7	93	183	448.10	582	147	2.4
A	Jan 2011	502	8	6	391	6.4	52	89	446.40	550	141	2.3
L	Feb 2011	586	15	8	415	7.5	22	135	447.29	567	173	3.1
*	Mar 2011	976	1	9	694	11.3	71	181	448.06	581	199	3.2
	Apr 2011	1067	18	11	813	13.7	75	178	448.00	580	192	3.2
	May 2011	1009	13	13	706	11.5	99	184	448.50	589	111	1.8
	Jun 2011	953	9	15	683	11.5	83	168	448.50	589	117	2.0
	Jul 2011	903	15	17	737	12.0	85	75	448.00	580	121	2.0
	Aug 2011	793	18	17	631	10.3	85	75	447.50	571	96	1.6
	Sep 2011	705	15	15	532	8.9	83	95	446.81	557	89	1.5
<b>WY 2011</b>		<b>9443</b>	<b>209</b>	<b>140</b>	<b>6785</b>		<b>948</b>	<b>1685</b>			<b>1605</b>	
	Oct 2011	589	20	12	439	7.1	48	112	446.31	548	68	1.1
	Nov 2011	592	26	8	379	6.4	47	174	446.50	552	109	1.8
	Dec 2011	423	21	6	282	4.6	50	99	446.50	552	118	1.9
	Jan 2012	598	15	6	342	5.6	96	165	446.50	552	122	2.0
	Feb 2012	714	6	8	464	8.1	86	156	446.50	552	153	2.7
	Mar 2012	971	22	9	702	11.4	96	174	446.70	555	208	3.4
	Apr 2012	1125	18	11	827	13.9	93	166	448.70	593	200	3.4
	May 2012	961	13	13	696	11.3	96	159	448.70	593	111	1.8
	Jun 2012	856	9	16	653	11.0	93	90	448.70	593	112	1.9
	Jul 2012	890	15	17	719	11.7	96	72	448.00	580	118	1.9
	Aug 2012	795	18	17	629	10.2	96	68	447.50	571	92	1.5
	Sep 2012	752	15	15	540	9.1	69	148	446.81	557	89	1.5
<b>WY 2012</b>		<b>9266</b>	<b>199</b>	<b>139</b>	<b>6670</b>		<b>965</b>	<b>1583</b>			<b>1501</b>	
	Oct 2012	581	20	12	452	7.3	26	113	446.31	548	72	1.2
	Nov 2012	502	26	8	371	6.2	27	111	446.50	552	105	1.8
	Dec 2012	438	21	6	295	4.8	27	125	446.50	552	118	1.9
	Jan 2013	599	15	6	356	5.8	106	141	446.50	552	122	2.0
	Feb 2013	699	6	8	461	8.3	96	135	446.50	552	153	2.8
	Mar 2013	990	22	9	708	11.5	106	178	446.70	555	208	3.4

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



April 2011 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
* Apr 2010	933	15.7	1098.00	11313	-237	451.78	1392.0	370.4	82	397.0
H May 2010	961	15.6	1094.30	10987	-326	449.26	1371.0	378.0	82	393.4
I Jun 2010	1007	16.9	1089.30	10556	-431	442.32	1556.0	390.5	94	387.7
S Jul 2010	941	15.3	1086.97	10357	-198	441.50	1640.0	360.3	100	382.9
T Aug 2010	829	13.5	1086.91	10352	-5	443.45	1617.0	313.3	100	378.0
O Sep 2010	758	12.7	1083.81	10092	-261	439.46	1617.0	285.1	100	375.9
<b>WY 2010</b>	<b>9260</b>							<b>3589.4</b>		
R Oct 2010	638	10.4	1082.36	9971	-121	440.25	1104.0	241.3	68	378.5
I Nov 2010	800	13.4	1081.94	9936	-35	437.87	1185.0	305.1	74	381.4
C Dec 2010	660	10.7	1086.30	10301	365	439.05	1388.0	246.5	87	373.5
A Jan 2011	540	8.8	1091.73	10765	463	446.84	1103.0	200.9	69	372.4
L Feb 2011	635	11.4	1095.78	11117	353	447.78	1414.0	244.7	88	385.7
* Mar 2011	1006	16.4	1096.39	11170	54	449.79	1232.0	398.2	75	395.8
Apr 2011	1092	18.4	1095.07	11054	-116	445.33	1157.0	451.3	70	413.2
May 2011	1042	16.9	1095.46	11088	34	441.66	1656.0	411.9	100	395.5
Jun 2011	957	16.1	1097.22	11244	155	443.05	1665.0	376.5	100	393.5
Jul 2011	914	14.9	1100.33	11521	277	445.96	1685.0	364.9	100	399.3
Aug 2011	820	13.3	1104.25	11875	354	449.61	1709.0	332.8	100	405.8
Sep 2011	628	10.6	1105.00	11943	68	453.07	1712.0	248.6	100	395.9
<b>WY 2011</b>	<b>9731</b>							<b>3822.9</b>		
Oct 2011	471	7.7	1107.62	12184	241	458.97	1392.0	190.4	81	404.4
Nov 2011	663	11.1	1108.79	12293	108	464.55	1072.0	276.0	62	416.1
Dec 2011	542	8.8	1112.52	12643	350	463.07	1410.0	218.1	81	402.1
Jan 2012	708	11.5	1114.40	12821	178	464.38	1302.0	293.2	74	414.3
Feb 2012	729	12.7	1115.51	12927	106	464.00	1445.0	304.6	82	417.8
Mar 2012	1033	16.8	1112.42	12634	-293	462.70	1416.0	431.5	81	417.8
Apr 2012	1156	19.4	1106.80	12109	-525	457.25	1504.0	485.1	87	419.8
May 2012	993	16.2	1103.48	11805	-304	451.46	1701.0	398.1	100	400.7
Jun 2012	860	14.5	1102.84	11747	-58	449.82	1698.0	352.3	100	409.7
Jul 2012	901	14.7	1103.34	11792	45	450.24	1701.0	362.2	100	402.0
Aug 2012	822	13.4	1105.04	11947	155	451.50	1711.0	335.0	100	407.5
Sep 2012	676	11.4	1105.26	11968	20	453.59	1711.0	270.6	100	400.6
<b>WY 2012</b>	<b>9554</b>							<b>3917.2</b>		
Oct 2012	463	7.5	1107.92	12213	245	457.15	1711.0	185.6	100	400.5
Nov 2012	573	9.6	1109.96	12402	190	463.24	1379.7	233.7	81	407.8
Dec 2012	558	9.1	1113.74	12758	356	466.36	1054.1	229.1	62	410.5
Jan 2013	708	11.5	1115.84	12959	200	464.97	1378.6	292.8	81	413.3
Feb 2013	715	12.9	1117.09	13078	120	466.38	1262.4	301.8	74	422.3
Mar 2013	1052	17.1	1112.84	12672	-406	463.62	1395.4	441.5	82	419.5

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



April 2011 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
*	Apr 2010	878	14.8	642.94	1697	21	141.04	255.0	111.0	100	126.4
H	May 2010	937	15.2	642.30	1680	-17	140.64	255.0	118.5	100	126.4
I	Jun 2010	912	15.3	643.98	1726	46	140.66	255.0	115.5	100	126.6
S	Jul 2010	913	14.8	643.57	1714	-11	141.98	242.3	115.3	95	126.4
T	Aug 2010	838	13.6	641.95	1670	-44	140.67	255.0	105.9	100	126.4
O	Sep 2010	833	14.0	638.40	1575	-95	137.24	255.0	102.6	100	123.1
<b>WY 2010</b>		<b>8816</b>							<b>1104.5</b>		
R	Oct 2010	766	12.5	633.10	1437	-138	129.52	209.1	92.1	82	120.2
I	Nov 2010	631	10.6	638.09	1567	130	137.83	153.0	77.2	60	122.5
C	Dec 2010	553	9.0	641.21	1650	84	141.87	168.3	67.8	66	122.6
A	Jan 2011	502	8.2	641.95	1670	20	140.42	153.0	63.3	60	125.9
L	Feb 2011	586	10.5	643.01	1699	29	139.78	181.1	73.6	71	125.6
*	Mar 2011	976	15.9	643.23	1705	6	138.82	204.0	123.0	80	126.0
	Apr 2011	1067	17.9	643.00	1699	-6	136.83	229.5	132.8	90	124.5
	May 2011	1009	16.4	643.00	1699	0	136.04	255.0	126.0	100	124.8
	Jun 2011	953	16.0	642.00	1671	-27	135.51	255.0	118.7	100	124.5
	Jul 2011	903	14.7	641.50	1658	-14	134.73	255.0	112.2	100	124.3
	Aug 2011	793	12.9	641.50	1658	0	134.46	255.0	98.8	100	124.6
	Sep 2011	705	11.8	638.00	1564	-94	132.62	255.0	87.0	100	123.4
<b>WY 2011</b>		<b>9443</b>							<b>1172.3</b>		
	Oct 2011	589	9.6	633.00	1434	-130	128.65	237.2	70.9	93	120.4
	Nov 2011	592	9.9	635.00	1486	51	127.14	234.6	70.4	92	118.9
	Dec 2011	423	6.9	638.71	1583	97	130.00	239.7	51.9	94	122.7
	Jan 2012	598	9.7	641.80	1666	83	134.16	219.3	74.6	86	124.6
	Feb 2012	714	12.4	641.80	1666	0	135.05	244.8	89.3	96	125.0
	Mar 2012	971	15.8	643.05	1700	34	135.44	255.0	120.9	100	124.5
	Apr 2012	1125	18.9	643.00	1699	-2	136.07	255.0	139.7	100	124.2
	May 2012	961	15.6	643.00	1699	0	136.04	255.0	120.2	100	125.1
	Jun 2012	856	14.4	642.00	1671	-27	135.51	255.0	107.0	100	125.0
	Jul 2012	890	14.5	641.50	1658	-14	134.73	255.0	110.7	100	124.3
	Aug 2012	795	12.9	641.50	1658	0	134.46	255.0	99.0	100	124.6
	Sep 2012	752	12.6	638.00	1564	-94	132.62	255.0	92.6	100	123.1
<b>WY 2012</b>		<b>9266</b>							<b>1147.1</b>		
	Oct 2012	581	9.5	633.00	1434	-130	128.65	237.2	70.0	93	120.4
	Nov 2012	502	8.4	635.00	1486	51	127.14	234.6	60.0	92	119.5
	Dec 2012	438	7.1	638.71	1583	97	130.00	239.7	53.7	94	122.6
	Jan 2013	599	9.7	641.80	1666	83	134.16	219.3	74.7	86	124.6
	Feb 2013	699	12.6	641.80	1666	0	135.05	244.8	87.4	96	125.0
	Mar 2013	990	16.1	643.05	1700	34	135.44	255.0	123.2	100	124.4

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



## April 2011 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
*	Apr 2010	670	11.3	448.61	592	28	81.42	90.0	46.8	75	69.8
H	May 2010	662	10.8	448.83	596	4	81.45	115.2	46.0	96	69.6
I	Jun 2010	650	10.9	448.64	592	-4	80.58	120.0	46.4	100	71.3
S	Jul 2010	743	12.1	448.61	592	-1	82.51	120.0	50.9	100	68.4
T	Aug 2010	646	10.5	448.20	584	-8	81.98	120.0	44.7	100	69.2
O	Sep 2010	583	9.8	446.95	560	-24	80.89	103.2	41.6	86	71.4
<b>WY 2010</b>		<b>6298</b>							<b>436.8</b>		
R	Oct 2010	465	7.6	449.14	602	42	82.79	90.0	31.4	75	67.4
I	Nov 2010	428	7.2	447.59	572	-30	79.41	91.2	30.4	76	71.1
C	Dec 2010	290	4.7	448.10	582	10	82.60	104.4	19.7	87	67.9
A	Jan 2011	391	6.4	446.40	550	-32	80.10	97.2	26.8	81	68.6
L	Feb 2011	415	7.5	447.29	567	17	76.83	90.0	29.3	75	70.7
*	Mar 2011	694	11.3	448.06	581	15	80.18	112.8	47.4	94	68.4
	Apr 2011	813	13.7	448.00	580	-1	75.40	120.0	53.9	100	66.3
	May 2011	706	11.5	448.50	589	9	75.61	120.0	46.7	100	66.2
	Jun 2011	683	11.5	448.50	589	0	75.86	120.0	45.3	100	66.3
	Jul 2011	737	12.0	448.00	580	-9	75.61	120.0	48.8	100	66.2
	Aug 2011	631	10.3	447.50	571	-10	75.13	120.0	41.4	100	65.6
	Sep 2011	532	8.9	446.81	557	-13	74.55	120.0	34.5	100	64.8
<b>WY 2011</b>		<b>6785</b>							<b>455.6</b>		
	Oct 2011	439	7.1	446.31	548	-9	74.77	102.0	28.3	85	64.5
	Nov 2011	379	6.4	446.50	552	3	74.62	102.0	24.3	85	64.1
	Dec 2011	282	4.6	446.50	552	0	74.71	102.0	17.7	85	62.9
	Jan 2012	342	5.6	446.50	552	0	74.71	102.0	21.7	85	63.7
	Feb 2012	464	8.1	446.50	552	0	73.92	120.0	29.8	100	64.1
	Mar 2012	702	11.4	446.70	555	4	74.01	120.0	45.6	100	64.9
	Apr 2012	827	13.9	448.70	593	38	75.08	120.0	54.6	100	66.1
	May 2012	696	11.3	448.70	593	0	76.05	120.0	46.2	100	66.5
	Jun 2012	653	11.0	448.70	593	0	76.05	120.0	43.3	100	66.4
	Jul 2012	719	11.7	448.00	580	-13	75.71	120.0	47.7	100	66.3
	Aug 2012	629	10.2	447.50	571	-10	75.13	120.0	41.2	100	65.6
	Sep 2012	540	9.1	446.81	557	-13	74.55	120.0	35.0	100	64.9
<b>WY 2012</b>		<b>6670</b>							<b>435.5</b>		
	Oct 2012	452	7.3	446.31	548	-9	74.77	102.0	29.2	85	64.6
	Nov 2012	371	6.2	446.50	552	3	74.62	102.0	23.8	85	64.0
	Dec 2012	295	4.8	446.50	552	0	74.71	102.0	18.6	85	63.1
	Jan 2013	356	5.8	446.50	552	0	74.71	102.0	22.7	85	63.8
	Feb 2013	461	8.3	446.50	552	0	73.92	120.0	29.6	100	64.2
	Mar 2013	708	11.5	446.70	555	4	74.01	120.0	45.9	100	64.9

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



April 2011 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
* Apr 2010	265	19	13	19	13	3
H May 2010	267	39	31	45	21	3
I Jun 2010	272	54	15	22	18	4
S Jul 2010	368	38	30	34	20	8
T Aug 2010	366	40	27	33	19	6
O Sep 2010	217	42	25	32	19	2
<b>Summer 2010</b>	<b>1755</b>	<b>231</b>	<b>142</b>	<b>186</b>	<b>109</b>	<b>25</b>
R Oct 2010	226	30	24	29	16	0
I Nov 2010	369	24	7	9	4	4
C Dec 2010	382	26	8	9	4	4
A Jan 2011	445	26	8	9	4	4
L Feb 2011	425	26	12	15	4	3
* Mar 2011	453	23	21	26	15	4
<b>Winter 2011</b>	<b>2299</b>	<b>156</b>	<b>79</b>	<b>97</b>	<b>48</b>	<b>19</b>
Apr 2011	391	58	29	42	22	7
May 2011	452	69	49	71	23	7
Jun 2011	497	84	25	39	22	9
Jul 2011	539	85	35	43	23	10
Aug 2011	510	44	38	46	23	10
Sep 2011	304	42	36	43	22	3
<b>Summer 2011</b>	<b>2693</b>	<b>383</b>	<b>212</b>	<b>283</b>	<b>136</b>	<b>45</b>
Oct 2011	314	43	21	27	14	6
Nov 2011	339	42	12	16	8	6
Dec 2011	369	43	24	30	15	6
Jan 2012	367	43	23	29	15	6
Feb 2012	334	40	14	19	10	5
Mar 2012	291	43	9	12	7	5
<b>Winter 2012</b>	<b>2013</b>	<b>256</b>	<b>104</b>	<b>133</b>	<b>69</b>	<b>33</b>
Apr 2012	249	42	14	21	12	5
May 2012	294	43	34	51	23	6
Jun 2012	368	55	21	32	22	9
Jul 2012	433	76	35	42	23	10
Aug 2012	428	39	38	45	23	9
Sep 2012	308	38	35	42	21	7
<b>Summer 2012</b>	<b>2081</b>	<b>294</b>	<b>177</b>	<b>233</b>	<b>125</b>	<b>45</b>
Oct 2012	318	39	22	27	14	7
Nov 2012	343	38	12	16	8	6
Dec 2012	384	39	26	32	16	6
Jan 2013	382	39	23	29	15	6
Feb 2013	338	35	16	21	11	5
Mar 2013	253	39	10	14	8	5
<b>Winter 2013</b>	<b>1765</b>	<b>191</b>	<b>98</b>	<b>124</b>	<b>64</b>	<b>29</b>

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

# OPERATION PLAN FOR COLORADO RIVER SYSTEM RESERVOIRS



April 2011 24-Month Study

Most Probable Inflow\*

Flood Control Criteria

Beginning of Month Conditions



Date	Flaming Gorge	Blue Mesa	Navajo	Lake Powell	Upper Basin Total	Lake Mead	Total	Flaming Gorge	Blue Mesa	Navajo	Tot or Max Allow	Lake Powell	Lake Mead	Total	BOM Space Required	Mead Sched Rel	Mead FC Rel	Sys Cont	
	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	KAF	MAF	
**** PREDICTED SPACE ****								**** EFFECTIVE SPACE ****											
Apr 2011	799	335	370	11518	13021	16207	29228	542	335	203	1079	11518	16207	28804	1500	1092	0	31.5	
May 2011	775	333	334	11491	12933	16323	29257	512	333	149	994	11491	16323	28808	1500	1042	0	33.3	
Jun 2011	588	250	257	10133	11228	16289	27517	310	248	39	598	10133	16289	27019	1500	957	0	35.9	
Jul 2011	302	36	272	8211	8821	16133	24954	4	6	7	17	8211	16133	24362	1500	914	0	36.3	
**** PREDICTED SPACE ****								**** CREDITABLE SPACE ****											
Aug 2011	312	27	315	7953	8608	15856	24464	312	27	315	654	7953	15856	24464	1500	820	0	36.1	
Sep 2011	344	79	352	8417	9192	15502	24694	344	79	352	775	8417	15502	24694	2270	628	0	35.7	
Oct 2011	410	152	369	8535	9466	15434	24900	410	152	369	931	8535	15434	24900	3040	471	0	35.6	
Nov 2011	477	184	365	8695	9720	15193	24913	477	184	365	1025	8695	15193	24913	3810	663	0	35.4	
Dec 2011	543	193	369	8922	10028	15084	25112	543	193	369	1106	8922	15084	25112	4580	542	0	35.4	
Jan 2012	627	248	381	9243	10499	14734	25233	627	248	381	1256	9243	14734	25233	5350	708	0	35.2	
**** PREDICTED SPACE ****								**** EFFECTIVE SPACE ****											
Jan 2012	627	248	381	9243	10499	14734	25233	278	248	280	806	9243	14734	24783	5350	708	0	35.2	
Feb 2012	705	302	394	9576	10976	14556	25532	356	302	292	949	9576	14556	25081	1500	729	0	34.9	
Mar 2012	771	327	396	9874	11368	14450	25818	421	327	292	1040	9874	14450	25364	1500	1033	0	34.6	
Apr 2012	789	322	372	9977	11460	14743	26203	435	322	263	1020	9977	14743	25740	1500	1156	0	34.4	
May 2012	767	298	309	9806	11181	15268	26449	407	298	181	886	9806	15268	25961	1500	993	0	35.4	
Jun 2012	632	217	236	8795	9879	15572	25452	261	214	75	550	8795	15572	24917	1500	860	0	37.0	
Jul 2012	402	38	253	7452	8144	15630	23775	13	11	44	67	7452	15630	23150	1500	901	0	37.3	
**** PREDICTED SPACE ****								**** CREDITABLE SPACE ****											
Aug 2012	404	27	260	7206	7897	15585	23482	404	27	260	691	7206	15585	23482	1500	822	0	37.0	
Sep 2012	430	77	285	7556	8348	15430	23777	430	77	285	792	7556	15430	23777	2270	676	0	36.6	
Oct 2012	487	146	293	7721	8646	15409	24055	487	146	293	925	7721	15409	24055	3040	463	0	36.4	
Nov 2012	543	178	293	7893	8906	15164	24071	543	178	293	1014	7893	15164	24071	3810	573	0	36.4	
Dec 2012	600	187	294	8130	9211	14975	24186	600	187	294	1080	8130	14975	24186	4580	558	0	36.3	
Jan 2013	673	248	303	8480	9704	14619	24322	673	248	303	1223	8480	14619	24322	5350	708	0	36.1	
**** PREDICTED SPACE ****								**** EFFECTIVE SPACE ****											
Jan 2013	673	248	303	8480	9704	14619	24322	479	248	235	962	8480	14619	24061	5350	708	0	36.1	
Feb 2013	740	302	314	8847	10203	14418	24621	546	302	246	1093	8847	14418	24358	1500	715	0	35.8	
Mar 2013	794	332	314	9155	10594	14299	24893	597	332	244	1173	9155	14299	24626	1500	1052	0	35.5	

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