



THE SECRETARY OF THE INTERIOR

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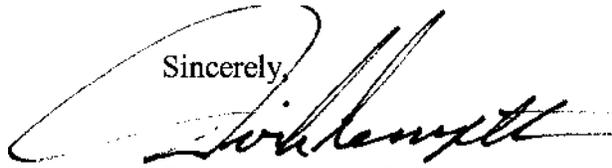
Honorable Kenny Guinn
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Carson City, Nevada 89701

Dear Governor Guinn:

Enclosed is the Annual Operating Plan (AOP) for Colorado River System Reservoirs for 2007. The AOP was prepared in consultation with representatives of the Governors of the seven Colorado River Basin States, Indian Tribes, Upper Colorado River Commission, appropriate Federal agencies, and others interested in Colorado River operations through meetings of the Colorado River Management Work Group (Work Group). The Work Group held meetings on June 16 and August 16, 2006, and completed consultations at a meeting on September 21, 2006.

The AOP contains the projected plan of operation of Colorado River reservoirs for 2007 based on the most probable runoff conditions. The plan of operation reflects use of the reservoirs for all purposes consistent with the *Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of September 30, 1968*.

Sincerely,



DIRK KEMPTHORNE

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INTRODUCTION

Authority

This 2007 Annual Operating Plan (AOP) was developed in accordance with Section 602 of the Colorado River Basin Project Act (Public Law 90-537) and the Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of September 30, 1968 (Operating Criteria), promulgated by the Secretary of the Interior (Secretary). In accordance with the Colorado River Basin Project Act and the Operating Criteria, the AOP must be developed and administered consistent with applicable Federal laws, the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, Treaty Between the United States of America and Mexico, signed February 3, 1944 (1944 United States-Mexico Water Treaty), interstate compacts, court decrees, Colorado River Interim Surplus Guidelines (Interim Surplus Guidelines) (66 *Federal Register* 7772, January 25, 2001), Colorado River Water Delivery Agreement (69 *Federal Register* 12202, March 15, 2004), Interim 602(a) Storage Guideline (69 *Federal Register* 28945, May 19, 2004), and other documents relating to the use of the waters of the Colorado River, which are commonly and collectively known as “The Law of the River.”

The Operating Criteria and Section 602 of the Colorado River Basin Project Act mandate consultation with representatives of the Governors of the seven Basin States and such other parties as the Secretary may deem appropriate in preparing the annual plan for operation of the Colorado River reservoirs. In addition, the Grand Canyon Protection Act of 1992 (Title XVIII of Public Law 102-575) requires consultation to include the general public and others. Accordingly, the 2007 AOP was prepared by the Bureau of Reclamation in consultation with the seven Basin States Governors’ representatives; the Upper Colorado River Commission; Native American tribes; appropriate Federal agencies; representatives of the academic and scientific communities, environmental organizations, and the recreation industry; water delivery contractors; contractors for the purchase of Federal power; others interested in Colorado River operations; and the general public, through the Colorado River Management Work Group (CRMWG).

Article I(2) of the Operating Criteria allows for revision of this 2007 AOP by June of 2007 to reflect the current hydrologic conditions. Any revision to the AOP may occur only through the AOP consultation process as required by applicable Federal law.

Purpose

The purposes of the AOP are to determine: (1) the projected operation of the Colorado River reservoirs to satisfy project purposes under varying hydrologic and climatic conditions; (2) the quantity of water considered necessary to be in storage in the Upper Basin reservoirs as of September 30, 2007, pursuant to Section 602(a) of the Colorado River Basin Project Act; (3) water available for delivery pursuant to the 1944 United States-Mexico Water Treaty and Minutes No. 242 and 310 of the International Boundary and Water Commission, United States and Mexico (IBWC); (4) whether the reasonable consumptive use requirements of mainstream users in the Lower Division States will be met

under a “Normal,” “Surplus,” or “Shortage” Condition as outlined in Article III of the Operating Criteria and as implemented by the Interim Surplus Guidelines; and (5) whether water apportioned to, but unused by, one or more Lower Division States exists and can be used to satisfy beneficial consumptive use requests of mainstream users in other Lower Division States as provided in the Consolidated Decree of the Supreme Court of the United States in *Arizona v. California*, 547 U.S.__(2006) (Consolidated Decree).

Consistent with the above determinations and in accordance with other applicable provisions of the “Law of the River,” the AOP was developed with “appropriate consideration of the uses of the reservoirs for all purposes, including flood control, river regulation, beneficial consumptive uses, power production, water quality control, recreation, enhancement of fish and wildlife, and other environmental factors” (Operating Criteria, Article I(2)).

Since the hydrologic conditions of the Colorado River Basin can never be completely known in advance, the AOP addresses the operations resulting from three different hydrologic scenarios: the probable maximum, most probable, and probable minimum reservoir inflow conditions. River operations under the plan are modified during the year as runoff predictions are adjusted to reflect existing snowpack, basin storage, and flow conditions.

Summary

Upper Basin Delivery. The objective minimum release criterion will most likely control the annual release from Glen Canyon Dam during water year 2007 in accordance with Article II(2) of the Operating Criteria unless spill avoidance and/or the storage equalization criteria in Article II(3) are controlling. To maintain, as nearly as practicable, active storage in Lake Mead equal to the active storage in Lake Powell, releases from Lake Powell greater than the minimum objective of 8.23 million acre-feet (maf), 10,150 million cubic meters (mcm), will be made if (1) storage in Lake Powell on September 30, 2007, is projected to be greater than 14.85 maf (18,320 mcm) (water surface elevation 3,630 feet [1,106.4 meters]); and (2) active storage in Lake Powell is greater than active storage in Lake Mead, consistent with Article II (3) of the Operating Criteria and Section V of the Interim 602(a) Storage Guideline.

Lower Basin Delivery. Under the most probable inflow scenario, downstream deliveries are expected to control the releases from Hoover Dam. Taking into account (1) the existing water storage conditions in the basin, (2) the most probable near-term water supply conditions in the basin, and (3) Sections 2(B)(1) and (7) of the Interim Surplus Guidelines, the Partial Domestic Surplus Condition is the criterion governing the operation of Lake Mead for calendar year 2007 in accordance with Article III(3)(b) of the Operating Criteria, and Article II(B)(2) of the Consolidated Decree. It should be noted, however, that the projected releases in 2007 currently reflect demands under the Normal Condition for the Metropolitan Water District of Southern California (MWD), the Central Arizona Project (CAP), and the Southern Nevada Water Authority (SNWA), per their request. This does not, however, preclude the MWD, CAP, and SNWA from requesting Partial Domestic Surplus water in calendar year 2007.

If any unused apportionment is available, the Secretary shall allocate any available unused apportionments for calendar year 2007 in accordance with Article II(B)(6) of the Consolidated Decree and Section 1(B) of the Interim Surplus Guidelines.

Water may be made available for diversion pursuant to 43 CFR Part 414¹ to contractors within the Lower Division States. The Secretary shall make Intentionally Created Unused Apportionment (ICUA) available to contractors in Arizona, California, or Nevada for the off-stream storage or consumptive use of water pursuant to individual Storage and Interstate Release Agreements (SIRA) and 43 CFR Part 414.

On October 10, 2003, the Secretary approved the Record of Decision for the Inadvertent Overrun and Payback Policy (IOPP) which became effective January 1, 2004. The IOPP will be in effect during calendar year 2007 with calendar year 2005 paybacks to begin in calendar year 2007.

The Colorado River Water Delivery Agreement requires payback of overruns from 2001 to 2002 as noted in Exhibit C of that document. Each district with a payback obligation under Exhibit C may at its own discretion elect to accelerate paybacks in calendar year 2007. It is anticipated that calendar year paybacks for calendar years 2006 and 2007 will total 0.073 maf (90.11 mcm) and 0.075 maf (92.58 mcm), respectively.

Reclamation implemented two demonstration programs in 2006 in the Lower Basin for Intentionally Created Surplus Water (ICS Water) and System Conservation Water (SC Water).

The ICS demonstration program allows entitlement holders to undertake extraordinary conservation activities to reduce their approved annual consumptive use of Colorado River water and store that conserved water in Lake Mead. The ICS demonstration program does not provide for the release or use of ICS Water until appropriate environmental compliance and forbearance agreements have been completed.

The SC demonstration program allows entitlement holders to participate in voluntary conservation to conserve a portion of their approved annual consumptive use of Colorado River water in exchange for appropriate compensation provided by Reclamation. The water conserved would be stored and retained in Lake Mead to assist in providing an interim, supplemental source of water to replace the drainage water from the Wellton-Mohawk Irrigation and Drainage District that is bypassed to the Cienega de Santa Clara and the reject stream from operation of the Yuma Desalting Plant.

1944 United States-Mexico Water Treaty Delivery. A volume of 1.500 maf (1,852 mcm) of water will be available to be scheduled for delivery to Mexico during calendar year 2007 in accordance with Article 15 of the 1944 United States-Mexico Water Treaty and Minutes No. 242 and 310 of the IBWC.

¹ Off-stream Storage of Colorado River Water; Development and Release of Intentionally Created Unused Apportionment in the Lower Division States: Final Rule (43 CFR Part 414).

2006 HYDROLOGY SUMMARY AND RESERVOIR STATUS

Below average streamflows were observed in the Colorado River Basin during 2006. Unregulated² inflow to Lake Powell in water year 2006 was 8.770 maf (10,820 mcm), or 73 percent of the 30 year average³ which is 12.06 maf (14,870 mcm). Unregulated inflow to Flaming Gorge, Blue Mesa, and Navajo Reservoirs was 60, 83, and 62 percent of average, respectively.

Snowpack in the Upper Colorado River Basin varied greatly by geographical area throughout the winter of 2005-2006, with the southern regions recording much below average snowpack and the northern regions recording average or above average snowpack. Basinwide snowpack above Lake Powell on April 1, 2006, was 102 percent of average. At that time, the projected April through July inflow to Lake Powell was 97 percent of average. This inflow projection did not hold, however. Below average precipitation was observed in the months of April, May, and June, and inflow projections to Colorado River reservoirs were adjusted downward throughout this period. Observed April through July unregulated inflow to Lake Powell was 5.32 maf (6,560 mcm), or 67 percent of average.

The Colorado River Basin experienced five consecutive years of extreme drought during water years 2000 through 2004. Unregulated inflow into Lake Powell during this five-year period was only 62, 59, 25, 51, and 49 percent of average, respectively. These years of very low inflow resulted in significant drawdown of Colorado River reservoirs with total system storage decreasing from 92 percent of capacity on October 1, 1999, to 50 percent of capacity on October 1, 2004. Hydrologic conditions improved in 2005 with above average inflow to Lake Powell (105 percent of average) and record-breaking tributary flows in the Lower Colorado Basin. Colorado River reservoirs gained 5.10 maf (6,290 mcm) of storage in water year 2005. Drier hydrologic conditions returned in 2006. Inflow to all major Colorado River reservoirs was below average in 2006.

Inflow to Lake Powell has been below average in six out of the past seven years. While drought conditions eased in 2005, and the inflow in 2006 was not as low as what occurred in 2000 through 2004, drought conditions in the Colorado River Basin persist. Provisional calculations of natural flow for the Colorado River at Lees Ferry, Arizona, show that the average flow over the last seven water years (2000-2006, inclusive) was the lowest seven-year average in 100 years of record keeping.

Although tributary inflows in the Lower Colorado River Basin were exceptionally high during water year 2005, tributary inflows were below average for water year 2006. Drought conditions persisted for water year 2006 throughout the State of Arizona.⁴ Abnormally dry to severe drought conditions persisted throughout southeastern Arizona, contributing to 75

² Unregulated inflow adjusts for the effects of operations at upstream reservoirs. It is computed by adding the change in storage and the evaporation losses from upstream reservoirs to the observed inflow. Unregulated inflow is used because it provides an inflow time series that is not biased by upstream reservoir operations.

³ Inflow statistics throughout this document will be compared to the 30-year average, 1971-2000, unless otherwise noted.

⁴ From the US Drought Monitor website: <http://drought.unl.edu/dm/monitor.html>.

percent of average precipitation being recorded in the Gila River Basin. During water year 2006 no tributary inflow from the Gila River reached the mainstem of the Colorado River. By contrast, for water year 2005, tributary inflow from the Gila River Basin that reached the mainstem totaled 0.264 maf (325.9 mcm).⁵

Tributary inflow from the Little Colorado River for water year 2006 also reflected extreme drought conditions in the State of Arizona. Tributary inflow from the Little Colorado for water year 2006 totaled 0.077 maf (95.05 mcm), or 40 percent of the long-term⁶ average. By contrast, tributary inflow for water year 2005 totaled 0.285 maf (351.8 mcm), or 146 percent of the long-term average of 0.195 maf (240.7 mcm).

Tributary inflow from the Bill Williams River into the mainstem totaled 0.055 maf (67.89 mcm) for water year 2006, or 50 percent of the long-term average. By contrast, tributary inflow from the Bill Williams River into the mainstem of the Colorado River for water year 2005 totaled 0.519 maf (640.7 mcm), or 477 percent of the long-term average of 0.109 maf (134.6 mcm).

Tributary inflow from the Virgin River for water year 2006 was below average, totaling 0.162 maf (200.0 mcm), or 85 percent of the long-term average. By contrast, tributary inflow from the Virgin River for water year 2005 totaled 0.520 maf (641.9 mcm), or 274 percent of the long-term average of 0.190 maf (234.5 mcm).

Below average inflow to Colorado River reservoirs in 2006 resulted in a net loss in Colorado River total system storage. Reservoir storage in Lake Powell experienced a nominal decline during water year 2006, decreasing by 0.022 maf (27 mcm). Storage in Lake Mead declined by 1.332 maf (1,643 mcm) during water year 2006. At the beginning of water year 2006, Colorado River total system storage was 59 percent of capacity. As of September 30, 2006, total system storage was 56 percent of capacity, a decrease of approximately 1.41 maf (1,740 mcm).

Tables 1 and 2 list the October 1, 2006, reservoir vacant space, live storage, water elevation, percent of capacity, change in storage, and change in water elevation during water year 2006.

⁵ Tributary inflow from the Gila River to the mainstem is very sporadic. These flows occur very seldom and when they do they are typically of high magnitude.

⁶ The basis for the long-term average is natural flow data from 1906 to 1995. Additional information regarding natural flows may be found at <http://www.usbr.gov/lc/region/g4000/NaturalFlow/current.html>. Future references to long-term averages will utilize the most recent natural flow database, currently 1906 to 2003.

Table 1. Reservoir Conditions on October 1, 2006 (English Units)

Reservoir	Vacant Space	Live Storage	Water Elevation	Percent of Capacity	Change in Storage*	Change in Elevation*
	(maf)	(maf)	(ft)	(%)	(maf)	(ft)
Fontenelle	0.105	0.240	6,491.8	70	-0.005	-0.7
Flaming Gorge	0.619	3.130	6,024.2	83	-0.047	-1.3
Blue Mesa	0.162	0.657	7,500.7	80	0.079	9.8
Navajo	0.275	1.420	6,065.5	84	-0.096	-7.0
Lake Powell	12.41	11.92	3,601.7	49	0.022	0.2
Lake Mead	11.99	13.89	1,125.4	54	-1.332	-13.0
Lake Mohave	0.226	1.584	638.8	88	0.011	0.4
Lake Havasu	0.064	0.555	446.7	90	0.001	0.0
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Totals	25.85	33.40		56.4	-1.411	

* From October 1, 2005, to September 30, 2006.

Table 2. Reservoir Conditions on October 1, 2006 (Metric Units)

Reservoir	Vacant Space	Live Storage	Water Elevation	Percent of Capacity	Change in Storage*	Change in Elevation*
	(mcm)	(mcm)	(m)	(%)	(mcm)	(m)
Fontenelle	129	296	1,979	70	-6	-0.2
Flaming Gorge	763	3,861	1,836	83	-58	-0.4
Blue Mesa	200	822	2,286	80	97	3.0
Navajo	339	1,751	1,848	84	-119	-2.1
Lake Powell	15,300	14,700	1,098	49	-27	-0.1
Lake Mead	14,790	17,130	343	54	-1643	-4.0
Lake Mohave	278	1,954	195	88	14	0.1
Lake Havasu	79	685	136	90	1	0.0
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Totals	31,880	41,200		56.4	-1,740	

* From October 1, 2005, to September 30, 2006.

2007 WATER SUPPLY ASSUMPTIONS

For 2007 operations, three reservoir unregulated inflow scenarios were developed and analyzed and are labeled as probable maximum, most probable, and probable minimum. The attached graphs show these inflow scenarios with associated release patterns and end-of-month contents for each reservoir.

Although there is considerable uncertainty associated with streamflow forecasts and reservoir operating plans made a year in advance, these projections are valuable in analyzing probable impacts on project uses and purposes. The National Weather Service's Colorado Basin River Forecast Center developed the inflow for the probable maximum (10 percent exceedance), most probable (50 percent exceedance), and probable minimum (90 percent exceedance) inflow scenarios in 2007 using the Ensemble Streamflow Prediction (ESP) model. ESP accounts for antecedent streamflows as well as current soil moisture levels with a continuous soil moisture accounting model known as the Sacramento Soil Moisture Accounting Model. The most probable unregulated inflow for Lake Powell in water year 2007 is 10.99 maf (13,550 mcm), or 91 percent of average. The probable minimum unregulated inflow to Lake Powell in water year 2007 is 4.80 maf (5,920 mcm), or 40 percent of average. The probable maximum unregulated inflow is 19.00 maf (23,440 mcm), or 158 percent of average. The three inflow scenarios for Lake Powell are shown in Tables 3 and 4.

The monthly volumes of inflow resulting from these assumptions were input into Reclamation's monthly reservoir simulation model and used to plan reservoir operations for 2007. Starting with October 1, 2006, reservoir storage conditions, the monthly releases for each reservoir were adjusted until release and storage levels best accomplished project purposes.

Graphs of the projected 2007 inflows, releases, and storages for each hydrologic scenario are presented in Attachment I.

**Table 3. Projected Unregulated Inflow into Lake Powell for Water Year 2007
(English Units: maf)**

Time Period	Probable Maximum	Most Probable	Probable Minimum
10/06–12/06	2.47	1.33	0.62
1/07 – 3/07	2.54	1.48	0.64
4/07 – 7/07	12.31	7.20	3.11
8/07 – 9/07	1.68	0.98	0.42
10/07 – 12/07	1.41	1.41	1.41
WY 2007	19.00	10.99	4.80
CY 2007	17.94	11.07	5.58

**Table 4. Projected Unregulated Inflow into Lake Powell for Water Year 2007
(Metric Units: mcm)**

Time Period	Probable Maximum	Most Probable	Probable Minimum
10/06 –12/06	3,050	1,630	770
1/07 –3/07	3,130	1,830	790
4/07 –7/07	15,190	8,880	3,840
8/07 –9/07	2,080	1,210	524
10/07 –12/07	1,730	1,730	1,730
WY 2007	23,440	13,550	5,920
CY 2007	22,120	13,650	6,880

SUMMARY OF RESERVOIR OPERATIONS IN 2006 AND PROJECTED 2007 RESERVOIR OPERATIONS

The regulation of the Colorado River has had effects on downstream aquatic and riparian resources. Controlled releases from dams have modified temperature, sediment load, and flow patterns, resulting in increased productivity of some introduced aquatic resources and the development of economically significant sport fisheries. However, these same releases have detrimental effects on endangered and other native species. Operating strategies designed to protect and enhance downstream aquatic and riparian resources have been established at several locations in the Colorado River Basin.

In the Upper Basin, public stakeholder work groups have been established at Fontenelle Dam, Flaming Gorge Dam, the Aspinall Unit, and Navajo Dam. These work groups provide a public forum for dissemination of information regarding ongoing and projected reservoir operations throughout the year and allow stakeholders the opportunity to provide information and feedback with respect to ongoing reservoir operations. At Glen Canyon Dam, the Glen Canyon Dam Adaptive Management Work Group (AMWG), a Federal Advisory Committee Act (FACA) committee, was established in 1997. Since its inception, the AMWG has met regularly to analyze and make recommendations to the Secretary regarding research and monitoring programs in the Grand Canyon as well as experimental modifications to dam operations.⁷

Modifications to planned operations may be made based on changes in forecast conditions or other relevant factors. Consistent with the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (Upper Colorado Recovery Program),⁸ the San Juan River Basin Recovery Implementation Program (San Juan Recovery Program),⁹ Section 7 consultations under the Endangered Species Act (ESA), and other downstream concerns, modifications to monthly operation plans may be based on other factors in addition to changes in streamflow forecasts. Decisions on spring peak releases and downstream habitat target flows may be made midway through the runoff season. Reclamation will initiate meetings with the U.S. Fish and Wildlife Service (Service), representatives of the Basin States, and with public stakeholder work groups to facilitate the discussions necessary to finalize site-specific operations plans.

In 1995, Reclamation and the Service formed a partnership with other Federal, state, and local public agencies and private organizations to develop the Lower Colorado River Multi-Species conservation program (LCR MSCP). This program permits both non-Federal and Federal parties to participate in and address ESA compliance requirements under Sections 7

⁷ Additional information on the AMWG can be found at www.usbr.gov/uc/rm/amp.

⁸ Additional information on the Upper Colorado Recovery Program can be found at <http://coloradoriverrecovery.fws.gov>.

⁹ Additional information on the San Juan Recovery Program can be found at www.fws.gov/southwest/sjrip.

and 10 of the ESA. In April 2005 the Secretary signed the Record of Decision to begin implementation of the MSCP.¹⁰

The following paragraphs discuss the operation of each of the reservoirs with respect to applicable provisions of compacts, the Consolidated Decree, statutes, regulations, contracts, and instream flow needs for maintaining or improving aquatic resources where appropriate.

Fontenelle Reservoir

Hydrologic conditions in water year 2006 in the Upper Green River Basin were near normal when compared to the historic record for the reservoir. The April through July inflow to Fontenelle Reservoir during water year 2006 was 0.620 maf (765 mcm), which was 72 percent of average. Fontenelle Reservoir nearly filled in 2006 and bypass releases were necessary in order to accommodate the spring runoff. Inflow peaked at 7,300 cubic feet per second (cfs), 207 cubic meters per second (cms), on May 24, 2006. Releases from Fontenelle Reservoir reached a maximum of 4,150 cfs (118 cms) between June 1, 2006, and June 5, 2006. These maximum releases were a combination of bypass releases and powerplant releases. The releases through the powerplant during this period were at powerplant capacity, approximately 1,500 cfs (42 cms). The peak elevation of Fontenelle Reservoir during water year 2006 was 6,500.6 feet (1,981.1 meters) above sea level which occurred on July 20, 2006. This elevation is 5.4 feet (1.6 meters) below the spillway crest elevation.

The most probable April through July inflow to Fontenelle Reservoir during water year 2007 is 0.751 maf (926 mcm). This volume far exceeds 0.345 maf (426 mcm), the storage capacity of Fontenelle Reservoir. For this reason, the most probable and probable maximum inflow scenarios require releases during the spring that exceed the capacity of the powerplant to avoid uncontrolled spills from the reservoir. It is very likely that Fontenelle Reservoir will fill during water year 2007. In order to minimize high spring releases and to maximize downstream water resources and power production, the reservoir will most likely be drawn down to about elevation 6,468 feet (1,971 meters) by early April 2007, which is five feet (1.5 meters) above minimum power pool, and corresponds to a volume of 0.111 maf (137 mcm) of live storage.

Flaming Gorge Reservoir

Inflows to Flaming Gorge Reservoir during water year 2006 were below normal. Unregulated inflow in 2006 was 1.041 maf (1,284 mcm), which is 60 percent of average. Flaming Gorge Reservoir did not fill during water year 2006. On October 1, 2005, the beginning of water year 2006, the reservoir elevation was 6,025.5 feet (1,836.5 meters). The reservoir elevation decreased during water year 2006 and ended water year 2006 (on September 30, 2006) at an elevation of 6,024.2 feet (1,836.1 meters). The water year ending reservoir elevation was 15.8 feet (4.8 meters) below the full pool elevation of 6,040 feet (1,841 meters) which corresponds to an available storage space of 0.619 maf (763 mcm).

¹⁰ Additional information on the MSCP can be found at <http://www.usbr.gov/lc/lcrmscp>.

On February 16, 2006, the Regional Director of Reclamation's Upper Colorado Region signed a Record of Decision (Flaming Gorge ROD) for the Operation of Flaming Gorge Dam Final Environmental Impact Statement. The Flaming Gorge ROD adopted the Action Alternative as the Federal Action to modify the operation of Flaming Gorge Dam. Under the ROD, releases from Flaming Gorge Dam are patterned so that the peak flows, durations, and base flows and temperatures, described in the Upper Colorado Recovery Program's "Flow and Temperature Recommendations for Endangered Fishes in the Green River Downstream of Flaming Gorge Dam" (Flow and Temperature Recommendations) (September 2000) are achieved to the extent possible, while maintaining and continuing all authorized purposes of Flaming Gorge Dam.

Reclamation convened a technical working group, comprised of Service, Western Area Power Administration (Western), and Reclamation personnel, which developed three possible flow scenarios for 2006 spring operations which were consistent with the Flaming Gorge ROD. The flow objective of 18,600 cfs (527 cms) for one day in Reach 2 (the Green River below the confluence with the Yampa River) was one of these three scenarios. In early May 2006, Reclamation decided, based on hydrologic conditions, to attempt to achieve the 18,600 cfs (527 cms) objective for one day in Reach 2.

Releases from Flaming Gorge Reservoir were increased to powerplant capacity of 4,550 cfs (129 cms) on May 18, 2006, in anticipation of peak flows on the Yampa River. A bypass release of 2,000 cfs (57 cms) from Flaming Gorge Reservoir was made for 24 hours on May 22-23, 2006, to match high flows of the Yampa River. Green River flows, measured at Jensen, Utah, reached 18,700 cfs (530 cms) on May 24, 2006, as a result of this bypass release. This peak was followed by a second peak which occurred on May 25, 2006, which reached 18,950 cfs (537 cms). The second peak occurred as a result of a precipitation event in the Yampa River Basin. Powerplant capacity releases were made from May 18 to May 30, 2006, to maintain connectivity between the main channel of the Green River and the floodplain depressions where the endangered fish larvae are entrained. Releases were decreased to a base flow level of 1,000 cfs (28 cms) by mid-June.

During water year 2007, Flaming Gorge Dam will be operated in accordance with the Flaming Gorge ROD. High spring releases will likely occur in 2007, timed with the Yampa River's spring runoff peak flow, followed by lower summer and autumn base flows. Under the most probable scenario, releases in the winter and early spring of 2007 will be relatively low (approximately 1,200 cfs [34 cms]).

The Upper Colorado Recovery Program in coordination with Reclamation, the Service, and Western will conduct studies associated with flood plain inundation. Such studies will include: improving connectivity of flood plain habitats, identifying ways to improve entrainment of larval razorback suckers into floodplain habitats, maintaining the river channel, restoring natural variability of the river system, and analyzing possibilities for meeting the goals of the Flow and Temperature Recommendations at lower peak flow levels where feasible.

Blue Mesa, Morrow Point, and Crystal Reservoirs (Aspinall Unit)

Near average to below average snowpack conditions prevailed in the Gunnison Basin during water year 2006. Most snow measurement sites in the basin reported near average moisture the first week in April, but a rapid decline in snowpack took place throughout April and May. The April through July unregulated runoff into Blue Mesa Reservoir in 2006 was 0.551 maf (680 mcm), or 77 percent of average, and occurred earlier than normal. Water year 2006 unregulated inflow into Blue Mesa Reservoir was 0.829 maf (1,020 mcm), or 83 percent of average. Blue Mesa Reservoir filled in 2006 reaching a peak elevation of 7,517.7 feet (2,291.3 meters) on June 17, 2006, only 1.7 feet (0.5 meters) from full pool. Storage in Blue Mesa Reservoir increased during water year 2006 by 0.079 maf (97 mcm). Storage in Blue Mesa Reservoir on September 30, 2006, was 0.667 maf (822 mcm), or 80 percent of capacity.

Releases from Aspinall Unit reservoirs in 2006 were near normal levels. Releases from the Aspinall Unit provided for a flow of 400 to 500 cfs (11.3 to 14.2 cms) from October 1, 2005, to January 15, 2006, in the Gunnison River through the Black Canyon (below the Gunnison Tunnel). On January 16, 2006, releases were increased to 700 cfs (19.8 cms) in response to slightly above average forecasted inflow. Beginning the last week of March, Crystal releases were increased as the diversions through the Gunnison Tunnel increased. Water year 2006 powerplant bypasses were approximately 0.050 maf (62 mcm) at Crystal Dam. These bypass releases occurred because the powerplant was shut down for a week in November 2005 and 30 days in February and March of 2006 for maintenance and turbine repair.

On August 16, 1995, Memorandum of Agreement (MOA) No. 95-07-40-R1760 was signed by the Bureau of Reclamation, the Service, and the Colorado Water Conservation Board. The purpose of the MOA was to provide water to the Redlands Fish Ladder, assure at least 300 cfs (8.5 cms) of flow in the 2-mile reach of the Gunnison River between the Redlands Fish Ladder and the confluence of the Gunnison and Colorado Rivers (2-mile reach), and to benefit Colorado River endangered fish. This MOA was extended for an additional five years on June 30, 2000. A key provision of the MOA requires that the parties adopt a plan to share water shortages in dry years, when total storage at Blue Mesa Reservoir is projected to drop below 0.4 maf (493 mcm) by the end of the calendar year. However, the MOA was not renewed in 2005. Reclamation intends to operate the Aspinall Unit to meet the intent of the MOA if water supplies are available. While deliveries of 100 cfs (2.8 cms) to the Redlands Fish Ladder can be protected under Colorado water law, absent the MOA, the additional releases for the benefit of the 2-mile reach cannot. Releases from the Aspinall Unit combined with runoff from intervening tributaries resulted in water being available for the fish ladder and 2-mile reach of the Gunnison River in 2006.

In July 2003, a final report titled, "Flow Recommendations to Benefit Endangered Fishes in the Colorado and Gunnison Rivers" was published by the Upper Colorado Recovery Program. The report compiled and summarized the results of endangered fish research in the Gunnison and Upper Colorado Rivers under the Upper Colorado Recovery Program. The report presents flow recommendations for two different river reaches: one for the lower

Gunnison River between Delta and Grand Junction, Colorado, as measured at Whitewater (Gunnison River near Grand Junction gage); and the other for the Colorado River downstream of the Gunnison River confluence as measured at the Colorado-Utah State line. In January 2004, Reclamation published a Notice of Intent to prepare an environmental impact statement (EIS) on operations to assist with meeting the flow recommendations or a reasonable alternative to them while maintaining authorized project purposes. Public scoping meetings were held in February 2004 and cooperating agency meetings were held in 2005 and 2006. A draft EIS is likely to be released in 2008.

On January 17, 2001, the United States filed an application to quantify the Federal reserved water right decreed to the Black Canyon of the Gunnison National Monument. The water right is for flows in the Gunnison River through the Black Canyon of the Gunnison National Park downstream of the Gunnison Tunnel. On April 2, 2003, the Department of the Interior and the State of Colorado reached agreement regarding water for the Park. Under the 2003 agreement, an amended water right application was filed by the United States for the National Park Service for 300 cfs (8.5 cms) with a 1933 priority date. In a separate action, the Colorado Water Conservation Board filed, under the State of Colorado instream flow program, for additional flows in excess of those required to fulfill the purposes of the Aspinall Unit (with a 2003 priority date) to provide for protection of additional water resources for the Park. The 2003 amended Federal reserved water right application was challenged in United States District Court in Colorado. On September 11, 2006, the District Court set aside the 2003 agreement. Currently, both water right applications filed in state water court remain stayed. In short, the reserved water right claim for the Black Canyon of the Gunnison National Park remains unquantified.

For water year 2007, the Aspinall Unit will be operated to conserve storage while meeting downstream delivery requirements, consistent with authorized project purposes. Under normal conditions, the minimum release objectives of the Aspinall Unit are to meet the delivery requirements of the Uncompahgre Valley Project, to meet senior water rights downstream, to the extent possible maintain a year round minimum flow of 300 cfs (8.5 cms) in the Gunnison River through the Black Canyon, and to the extent possible maintain a minimum flow of 300 cfs (8.5 cms) in the 2-mile reach below the Redlands Diversion Dam during the months of July through October. In dry years, the 300 cfs (8.5 cms) flow through the canyon and the 2-mile reach can be reduced. In 2007, under the most probable inflow conditions, flows through the Black Canyon of the Gunnison National Park will be above the 300 cfs (8.5 cms) minimum release objective during the summer months. Consideration shall be given to the gold medal trout fishery in the Black Canyon and recreational interests consistent with project purposes. Releases during 2007 will be planned to minimize large fluctuations in the daily and monthly flows in the Gunnison River below the Gunnison Tunnel diversion.

Under the probable minimum inflow scenario, Blue Mesa Reservoir would not fill in 2007. Under the most probable and probable maximum inflow scenarios, Blue Mesa Reservoir is expected to fill in 2007.

Navajo Reservoir

Inflow to Navajo Reservoir in 2006 was less than the 30-year average, marking the sixth year since 1999 that inflows have been below average. The April through July unregulated inflow into Navajo Reservoir in water year 2006 was 0.377 maf (465 mcm), or 47 percent of average. Water year 2006 unregulated inflow was 0.687 maf (848 mcm), or 62 percent of average. Unregulated inflow to Navajo Reservoir in water years 2000, 2001, 2002, 2003, 2004, and 2005 was 42, 93, 11, 44, 72, and 136 percent of average, respectively. Storage in Navajo Reservoir was significantly reduced during the 2000 through 2004 period of extreme drought.

The above average inflow in 2005 resulted in Navajo Reservoir nearly filling in 2005. Carryover storage from 2005 helped maintain storage at Navajo Reservoir at above average levels for most of 2006. The reservoir reached a peak water surface elevation of 6,077.9 feet (1,852 meters) on May 26, 2006, 7.1 feet (2.2 meters) from full pool. The water surface elevation at Navajo Reservoir on September 30, 2006, was 6,065.5 feet (1,848.7 meters), with reservoir storage at 84 percent of capacity.

The final report titled, "Flow Recommendations for the San Juan River" (San Juan Flow Recommendations), which outlines flow recommendations for the San Juan River below Navajo Dam, was completed by the San Juan Recovery Program in May 1999 after a seven-year research period. The purpose of the report is to provide flow recommendations for the San Juan River that promote the recovery of the endangered Colorado pikeminnow and razorback sucker, maintain important habitat for these two species as well as the other native species, and provide information for the evaluation of continued water development in the basin. These flow recommendations may be revised in the future to reflect knowledge gained over the last several years of operation.

Reclamation completed a National Environmental Policy Act (NEPA) process on the implementation of operations at Navajo Dam that meet the San Juan Flow Recommendations, or a reasonable alternative to them in 2006. A Notice of Intent to prepare an EIS was published on October 1, 1999, in the *Federal Register*. In January 2006, the Service issued a non-jeopardy biological opinion for the operations of Navajo Dam to meet the San Juan Flow Recommendations, or a reasonable alternative. The Navajo Reservoir Operations Final EIS was issued on April 20, 2006. The Record of Decision (ROD) for the Navajo Reservoir Operations Final EIS was signed by the Regional Director of Reclamation's Upper Colorado Region on July 31, 2006.

The San Juan Flow Recommendations called for making the minimum spring peak release from Navajo Reservoir in 2006. The spring release pattern implemented in 2006 followed the ramping rates set forth in the San Juan Flow Recommendations. Releases were increased beginning on May 25, 2006. A release rate of 5,000 cfs (125 cms) was reached on June 1, 2006, and the release remained at that rate until June 8, 2006. Releases were reduced to a base summer release rate of 500 cfs (14 cms) on June 15, 2006. At times during the summer months of 2006, higher than normal base flows were released from Navajo Reservoir. Releases from Navajo Reservoir from July through September 2006

averaged 650 cfs (18.4 cms) and were as high as 756 cfs (21.4 cms) in July 2006. The higher releases in July 2006 were necessary due to decreasing flows in the San Juan River endangered fish critical habitat area (Farmington, New Mexico, to Lake Powell). The San Juan Flow Recommendations call for an average weekly flow of between 500 cfs (14 cms) and 1,000 cfs (28 cms) in this reach of the river.

Once again in 2006, an annual agreement was developed among water users who agreed to limit their water use to the rates/volumes indicated in the agreement. The 2006 “Recommendations for Administration and Operation of the San Juan River” was similar to the agreements that were developed in 2003, 2004, and 2005. Ten major water users (the Jicarilla Apache and Navajo Nations, Hammond Conservancy District, Public Service Company of New Mexico, City of Farmington, Arizona Public Service Company, BHP-Billiton, Bloomfield Irrigation District, Farmers Mutual Ditch, and Jewett Valley Ditch) endorsed the recommendations which included limitations on diversions for 2006, criteria for determining a shortage, and shortage-sharing requirements in the event of a water supply shortfall, including sharing of shortages between the water users and the flow demands for endangered fish habitat. In addition to the ten major water users, the New Mexico Interstate Stream Commission, the Bureau of Indian Affairs, the Service, and the San Juan Recovery Program all provided input to the recommendations. The recommendations were accepted for reservoir operation and river administration purposes by Reclamation and the New Mexico State Engineer. Because of a combination of inflow into Navajo Reservoir in 2006 and above average carryover storage from 2005, no shortages occurred during the 2006 water year.

During water year 2007, Navajo Reservoir will be operated in accordance with the Navajo Reservoir Operations ROD. Navajo Reservoir storage levels are expected to be above average in 2007 under the most probable and probable maximum inflow scenarios. Releases from the reservoir will likely be 500 cfs (14 cms) through the fall and winter. Under the probable minimum inflow condition in 2007, the minimum spring peak release as described in the San Juan Flow Recommendations is likely to occur.

Lake Powell

Reservoir storage in Lake Powell remains relatively low (49 percent of capacity on September 30, 2006) due to effects of continuing drought in the Colorado River Basin. Lake Powell storage was 97 percent of capacity in July 1999. Extreme drought conditions were observed in the Colorado River Basin for five consecutive years (water years 2000-2004) with Lake Powell storage declining during this period. Lake Powell storage on September 30, 2004, was only 38 percent of capacity. Inflow was above average in 2005 and Lake Powell gained 2.77 maf (3,420 mcm) of storage in water year 2005, however. The inflow in 2005 was not sufficient to erase the storage deficit from the preceding five years of extreme drought. Lake Powell began water year 2006 with 11.94 maf (14,730 mcm) of water in storage (49 percent of capacity). Below average inflow conditions returned in 2006. Water year 2006 unregulated inflow to Lake Powell was 8.770 maf (10,820 mcm), or 73 percent of average. As water year 2006 ended on September 30, 2006, Lake Powell storage was 11.92 maf (14,700 mcm), or 49 percent of capacity.

Due to continued low reservoir storage at Lake Powell, and storage in Lake Powell being less than Lake Mead, releases from Glen Canyon Dam in 2006 were scheduled to maintain the minimum release objective from Lake Powell of 8.23 maf (10,150 mcm) in accordance with Article II(2) of the Operating Criteria. Forecasted inflow to Lake Powell was near average in the early months of 2006 (January through April). However, dry conditions prevailed during the spring months and inflow projections were progressively reduced during the April through July runoff period. Reservoir storage in Lake Powell in 2006 was not sufficient to trigger storage equalization releases from Lake Powell to Lake Mead. The total release from Lake Powell in water year 2006 was 8.23 maf (10,150 mcm).

April through July unregulated inflow to Lake Powell in water year 2006 was 5.32 maf (6,560 mcm), or 67 percent of average. Lake Powell reached a seasonal peak elevation of 3,610.9 feet (1,100.5 meters), 89.1 feet (27.2 meters) from full pool, on June 22, 2006. On September 30, 2006, the water surface elevation of Lake Powell was 3,601.7 feet (1097.7 meters), 98.3 feet (30.0 meters) from full pool.

During water year 2007, under the most probable and probable minimum inflow scenario, the objective shall be to maintain a minimum release of water from Lake Powell of 8.23 maf (10,150 mcm) consistent with Article II(2) of the Operating Criteria. Under the probable maximum inflow condition, an annual release of approximately 12.3 maf (15,200 mcm) would be required to equalize storage between Lake Powell and Lake Mead on September 30, 2007. Releases to equalize storage between Lakes Powell and Mead will be made in 2007 if storage in Lake Powell is projected to be greater than 14.85 maf (18,320 mcm) (elevation 3,630 feet [1,106.4 meters]) on September 30, 2007, and active storage in Lake Powell is greater than active storage in Lake Mead. Under the most probable inflow in 2007, the projected water surface elevation at Lake Powell on September 30, 2007, will be 3,619.5 feet (1,103.2 meters) with 13.71 maf (16,910 mcm) of storage (56 percent of capacity).

The Glen Canyon Dam Adaptive Management Program is currently actively evaluating experimental proposals for future operations at Glen Canyon Dam and other related management actions, which may include short-term and/or long-term experimental releases from Glen Canyon Dam. The Science Planning Group, an ad hoc technical committee within the Glen Canyon Dam Adaptive Management Program, analyzed experimental proposals, and through the Glen Canyon Dam Technical Work Group is in the process of providing information and recommendations to the Glen Canyon Dam Adaptive Management Work Group (AMWG). The AMWG, a FACA committee, has not yet made a recommendation to the Secretary on these experimental proposals. Implementation of experimental releases is subject to consistency with the AOP, approval by the Secretary, and completion of appropriate environmental compliance.

On September 6, 2006, the AMWG approved a budget and work plan for 2007. Included in the work plan is a recommendation to return to operations consistent with the parameters of the Glen Canyon Operating Criteria (the ROD for the Glen Canyon Dam Final Environmental Impact Statement) in water year 2007. Pending consideration by the Secretary of this recommendation, experimental flows are not anticipated in 2007. While

experimental releases are not anticipated in 2007, any experimental release conducted during water year 2007 would not alter the total volume of water to be released from Lake Powell.

In 2007, scheduled maintenance activities at Glen Canyon Dam powerplant will require that one or more of the eight generating units periodically be offline. Coordination between Reclamation offices in Salt Lake City, Utah, and Page, Arizona, will take place in the scheduling of maintenance activities to minimize impacts, including those on potential experimental releases.

Because of less than full storage conditions in Lake Powell resulting from drought in the Colorado River Basin, releases for dam safety purposes are highly unlikely in 2007. If implemented, releases greater than powerplant capacity would be made consistent with the 1956 Colorado River Storage Project Act, the 1968 Colorado River Basin Project Act, and the 1992 Grand Canyon Protection Act. Reservoir releases in excess of powerplant capacity required for dam safety purposes during high reservoir conditions may be used to accomplish the objectives of the beach/habitat-building flow according to the terms contained in the Glen Canyon Dam Record of Decision (ROD) and as published in the Glen Canyon Dam Operating Criteria (62 *Federal Register* 9447, Mar. 3, 1997).

Daily and hourly releases in 2007 will be made according to the parameters of the ROD for the Glen Canyon Dam Final Environmental Impact Statement (GCDFEIS) and the Glen Canyon Dam Operating Criteria, as shown in Table 5. Exceptions to these parameters may be made during power system emergencies, during experimental releases, or for purposes of humanitarian search and rescue.

Table 5. Glen Canyon Dam Release Restrictions (Glen Canyon Dam Operating Criteria)

<u>Parameter</u>	(cfs)	(cms)	<u>Conditions</u>
Maximum Flow ¹¹	25,000	708.0	
Minimum Flow	5,000	141.6	7:00 pm to 7:00 am
	8,000	226.6	7:00 am to 7:00 pm
Ramp Rates			
Ascending	4,000	113.3	per hour
Descending	1,500	42.5	per hour
Daily Fluctuations ¹²	5,000 / 8,000	141.6 / 226.6	

Releases from Lake Powell in water year 2007 will continue to reflect consideration of the uses and purposes identified in the authorizing legislation for Glen Canyon Dam. Powerplant releases will reflect criteria based on the findings, conclusions, and recommendations made in the ROD for the GCDFEIS pursuant to the Grand Canyon Protection Act of 1992 and appropriate NEPA documentation regarding experimental flows.

¹¹ May be exceeded during beach/habitat-building flows, habitat maintenance flows, or when necessary to manage above average hydrologic conditions.

¹² Daily fluctuations limit is 5,000 cfs (141.6 cms) for months with release volumes less than 0.600 maf (740 mcm); 6,000 cfs (169.9 cms) for monthly release volumes of 0.600 to 0.800 maf (740 to 987 mcm); and 8,000 cfs (226.6 cms) for monthly release volumes over 0.800 maf (990 mcm).

The schedule of monthly releases under the most probable inflow scenario for water year 2007 is displayed in Table 6.

Table 6. Scheduled Monthly Releases from Lake Powell in Water Year 2007 Under Most Probable Inflow Conditions¹³

Month	Monthly Release (maf)	Monthly Release (mcm)
October 2006	0.600	740
November 2006	0.600	740
December 2006	0.800	987
January 2007	0.800	987
February 2007	0.630	777
March 2007	0.600	740
April 2007	0.600	740
May 2007	0.600	740
June 2007	0.800	987
July 2007	0.800	987
August 2007	0.800	987
September 2007	0.600	740

The ten-year total flow of the Colorado River at Lee Ferry¹⁴ for water years 1997 through 2006 is 98.6 maf (122,000 mcm). This total is computed as the sum of the flow of the Colorado River at Lees Ferry, Arizona and the Paria River at Lees Ferry, Arizona, surface-water discharge stations, which are operated and maintained by the United States Geological Survey.

Lake Mead

For calendar year 2006, the Partial Domestic Surplus Condition was the criterion governing the operation of Lake Mead in accordance with Article III(3)(b) of the Operating Criteria, Article II(B)(2) of the Consolidated Decree, and Section 2(B)(1) of the Interim Surplus Guidelines. A volume of 1.500 maf (1,852 mcm) of water was scheduled for delivery to Mexico in accordance with Article 15 of the 1944 United States-Mexico Treaty and Minutes No. 242 and 310 of the International Boundary and Water Commission.

Lake Mead began water year 2006 at elevation 1,138.4 feet (347.0 meters), with 15.22 maf (18,790 mcm) in storage, which is 59 percent of the conservation capacity of 25.80 maf (31,850 mcm). Lake Mead's elevation increased to elevation 1,141.2 feet (347.8 meters) by the end of February, 2006. After February, 2006, Lake Mead steadily declined and ended

¹³ Modifications to scheduled monthly releases from Lake Powell would be made based on changes in forecast conditions or other relevant factors.

¹⁴ A point in the main stream of the Colorado River one mile below the mouth of the Paria River.

the water year at an elevation of 1,125.4 feet (343.0 meters), with 13.89 maf (17,150 mcm) in storage (54 percent of capacity).

The total release from Lake Mead through Hoover Dam during water year 2006 was 9.395 maf (11,600 mcm). The total release from Lake Mead through Hoover Dam during calendar year 2006 is projected to be 9.284 maf (11,460 mcm). Consumptive use from Lake Mead during calendar year 2006 diverted through the Robert Griffith Water Project is projected to be 0.290 maf (357.0 mcm).

The total inflow into Lake Mead is a combination of water released from Glen Canyon Dam plus inflows from the tributaries in the reach between Glen Canyon and Hoover Dams. In water year 2006, inflow into Lake Mead was 8.931 maf (11,020 mcm). For water year 2007, total inflow into Lake Mead is anticipated to be 9.081 maf (11,210 mcm).

Under the most probable inflow conditions during water year 2007, Lake Mead will be at its maximum elevation of 1,128.7 feet (344.0 meters), with 14.22 maf (17,550 mcm) in storage, at the end of January, 2007. Lake Mead will likely decline during water year 2007 to reach its minimum elevation of approximately 1,113.2 feet (339.3 meters), with approximately 12.71 maf (15,690 mcm) in storage, at the end of September, 2007.^{15,16}

Based on the August, 2006 24-Month Study, Lake Mead's elevation on January 1, 2007, was projected to be 1127.5 feet (343.7 meters). Therefore, in accordance with Section 7 of the Interim Surplus Guidelines, the Partial Domestic Surplus Condition will govern the releases from Lake Mead in calendar year 2007. It should be noted, however, that the projected releases in 2007 currently reflect demands under the Normal Condition for the MWD, CAP, and SNWA, per their request. This does not, however, preclude the MWD, CAP, and SNWA from requesting Partial Domestic Surplus water in calendar year 2007. Releases from Lake Mead through Hoover Dam for water year and calendar year 2007 are anticipated to be approximately the same as 2006 releases. Some variability between the 2006 and 2007 releases may result from the two demonstration programs to create ICS Water in Lake Mead and to achieve System Conservation (SC).

The Interim Surplus Guidelines ROD included ESA conservation measures. One such conservation measure specified in Article X(4)(1) includes provisions for spawning razorback suckers in Lake Mead. Reclamation continues to provide funding and support for the ongoing Lake Mead Razorback Sucker study. The focus of the study has been on locating populations of razorbacks in Lake Mead, documenting use and availability of spawning areas at various water elevations, continuing aging studies, and confirming recruitment events. Based on the anticipated operation of Lake Powell for water year 2007,

¹⁵ In calendar year 2006, it is assumed that 50,000 acre-feet and 1,000 acre-feet of ICS Water would be conserved by the MWD and the Imperial Irrigation District (IID), respectively. In calendar year 2007, it was assumed that 50,000 acre-feet and 1,000 acre-feet of ICS Water would be conserved by the MWD and the IID, respectively.

¹⁶ In calendar year 2006, it was assumed that 3,000 acre-feet of SC Water would be conserved. In calendar year 2007, it was assumed that 7,000 acre-feet of SC Water would be conserved.

no changes in operations to provide rising elevations in Lake Mead are expected in the spring of 2007.

In a letter to the Governors of the seven Colorado River Basin States (May 2, 2005), the Secretary directed Reclamation to develop Colorado River Lower Basin shortage guidelines and coordinated reservoir management strategies for Lake Powell and Lake Mead under low reservoir conditions. A notice to solicit comments and hold public meetings on the development of the guidelines and strategies was issued on June 15, 2005 (70 *Federal Register* 34,794). A Notice of Intent was issued on September 30, 2005 (70 *Federal Register* 57,322) to prepare an EIS and hold public scoping meetings on the proposed action. Key milestones in the EIS process include: (1) the Scoping Summary Report, published March 31, 2006 (71 *Federal Register* 16,341); (2) draft alternatives published June 30, 2006; (3) a Draft EIS targeted in February, 2007; (4) a Final EIS targeted in September 2007; and (5) a Record of Decision targeted in December 2007.¹⁷

Lakes Mohave and Havasu

At the beginning of water year 2006, Lake Mohave was at an elevation of 638.3 feet (194.6 meters), with an active storage of 1.573 maf (1,942 mcm). The water level of Lake Mohave was regulated between elevation 634.0 feet (193.3 meters) and 643.4 feet (196.1 meters) throughout the water year, ending at an elevation of 638.8 feet (194.7 meters) with 1.584 maf (1,955 mcm) in storage. The total release from Lake Mohave through Davis Dam for water year 2006 was 9.152 maf (11,300 mcm) for downstream water use requirements. The calendar year 2006 total release is projected to be 9.069 maf (11,200 mcm).

For water year and calendar year 2007, Davis Dam is expected to release approximately the same amount of water as in 2006. The water level in Lake Mohave will be regulated between an elevation of approximately 630 feet (192 meters) and 645 feet (197 meters).

Lake Havasu started water year 2006 at an elevation of 446.6 feet (136.1 meters) with 0.554 maf (683.9 mcm) in storage. The water level of Lake Havasu was regulated between elevation 445.8 feet (135.9 meters) and 448.8 feet (136.8 meters). During water year 2006, 6.695 maf (8,258 mcm) were released from Parker Dam. The calendar year 2006 total release is projected to be 6.771 maf (8,352 mcm). Diversions from Lake Havasu during calendar year 2006 by the CAP and the MWD are projected to be 1.606 maf (1,982 mcm) and 0.620 maf (765.3 mcm), respectively.

For water year 2007, Parker Dam is expected to release approximately the same amount of water as in 2006. Diversions from Lake Havasu in calendar year 2007 by the CAP and the MWD are expected to be 1.601 maf (1,976 mcm) and 0.584 maf (720.9 mcm), respectively.

¹⁷ Additional information on the EIS for the “Development of Lower Colorado River Basin Shortage Guidelines & Coordinated Management Strategies for Lakes Powell and Mead Under Low Reservoir Conditions” may be found at <http://www.usbr.gov/lc/region/programs/strategies.html>.

Lakes Mohave and Havasu are scheduled to be drawn down in the late summer and fall months to provide storage space for local storm runoff and will be filled in the winter to meet higher summer water needs. This drawdown will also correspond with normal maintenance at both Davis and Parker powerplants which is scheduled for September through February.

At Davis Dam, a major overhaul of Unit No. 3 is scheduled for October 2, 2006, through February 16, 2007. This overhaul will include removal and maintenance of the fixed wheel gate and hydraulic cylinder, as well as testing the generator windings and station service transformer. Rehabilitation of Units 1, 2, 4, and 5 has yet to be decided by both Reclamation and funding board customers.

No major overhauls at Parker Dam have been scheduled for water year 2007.

During 2007, Lake Mohave will continue to be operated under the constraints as described in the Interim Surplus Guidelines' Biological and Conference Opinion on Lower Colorado River Operations and Maintenance, as extended through the LCR MSCP Biological and Conference Opinion. Reclamation, as provided in the LCR MSCP ROD, will continue these existing operations in Lake Mohave that benefit native fish and will explore additional ways to provide benefits to native fish. The normal filling and drawdown pattern of Lake Mohave coincides well with the fishery spawning period. Since lake elevations for Lake Mohave and Lake Havasu will be typical of previous years, normal conditions are expected for boating and other recreational uses.

Reclamation is the lead agency in the Native Fish Work Group, a multi-agency group of scientists attempting to augment the ageing stock of the endangered razorback sucker in Lake Mohave. Larval razorback suckers are captured by hand in and around spawning areas in late winter and early spring for rearing at Willow Beach National Fish Hatchery below Hoover Dam. The following year, 1-year old razorback suckers are placed into predator-free, lake-side backwaters for rearing through the spring and summer. When Lake Mohave is normally drawn down during August through October, these fish are harvested from these rearing areas and then released into Lake Mohave. The razorback suckers grow very quickly, usually exceeding 10 inches in length by September.

In 2005, 12,203 razorback suckers (325 mm minimum size) were repatriated into Lake Mohave from all sources, a 29% decrease compared to 2004. In 2006, 63,749 wild razorback suckers were captured from natural spawning congregations on Lake Mohave and delivered to Willow Beach National Fish Hatchery, a 5% increase compared to 2005.

Bill Williams River

Although tributary inflows from the Bill Williams River were exceptionally high during water year 2005, tributary inflows were below average for water year 2006. Moderate to severe drought conditions persisted for water year 2006 throughout western Arizona, including the Bill Williams River watershed. Tributary inflow from the Bill Williams River into the mainstem of the Colorado River totaled 0.055 maf (67.89 mcm) for water year 2006, approximately 50 percent of the long-term average of 0.019 maf (23.45 mcm).

Above average flood control releases from the U.S. Army Corps of Engineer's (USACE) Alamo Dam during water year 2005 enhanced riparian habitat along the Bill Williams River corridor. Releases in water year 2006 from USACE's Alamo Dam were coordinated with the Service and the Bill Williams Steering Committee to maintain riparian habitat established in water year 2005. Although standing operating procedures target an Alamo Lake elevation of approximately 1,125 feet (342.9 meters), the elevation was maintained at approximately 1,130 feet (344.4 meters) after October 1, 2005. A storage volume of 0.019 maf (23.45 mcm), equivalent to the storage between approximately elevations 1,130 feet (344.4 meters) and 1,125 feet (342.9 meters), was released beginning March 13, 2006. The purpose of the release was to lower the Alamo Lake elevation to approximately 1,125 feet (342.9 meters), and maintain downstream riparian habitat. The March 13, 2006, release from Alamo Dam increased from approximately 40 cfs (1 cms) to approximately 2,000 cfs (60 cms) for a two day period, tapering to approximately 40 cfs (1 cms) over the following two weeks. Data collection associated with Alamo Dam releases supports ongoing studies conducted by the Bill Williams Steering Committee. The Bill Williams Steering Committee is chaired by the Service and is comprised of other stakeholders, including, but not limited to, Reclamation, the USACE, the Bureau of Land Management, and other governmental and non-governmental organizations.

Senator Wash and Laguna Reservoirs

Operations at Senator Wash Reservoir allow regulation of water deliveries to United States water users upstream and downstream of Imperial Dam and Mexican water users downstream of Imperial Dam. The reservoir is utilized as an off-stream storage facility to meet downstream water demands and to conserve water for future uses in the United States and the scheduled uses of Mexico in accordance with Treaty obligations. Senator Wash Reservoir is the only major storage facility below Parker Dam (approximately 142 river miles downstream) and has a storage capacity of 0.014 maf (17.04 mcm) at full pool elevation of 251.0 feet (76.5 meters). Operational objectives are to store excess flows from the river caused by water user cutbacks and side wash inflows due to rain. Stored waters are utilized to meet the United States' and Mexico's demands.

Since 1992, elevation restrictions have been placed on Senator Wash due to potential piping and liquefaction of foundation and embankment materials at West Squaw Lake Dike and Senator Wash Dam. Currently, Senator Wash is restricted to an elevation of 240.0 feet (73.2 meters) with 0.009 maf (11.28 mcm) of storage, a loss of about 0.005 maf (5.802 mcm) of storage from its original capacity. Senator Wash elevation must not exceed elevation 240.0

feet (73.2 meters) for more than 10 consecutive days. This reservoir restriction is expected to continue in 2007.

Laguna Reservoir is a regulating storage facility located approximately five river miles downstream of Imperial Dam. Operational objectives are similar to those for Senator Wash Reservoir and are primarily used to capture sluicing flows from Imperial Dam. The storage capability of Laguna Reservoir has diminished from about 1500 acre-feet (1.852 mcm) to approximately 400 acre-feet (0.494 mcm) due to sediment accumulation and vegetation growth. Sediment accumulation in the reservoir has occurred primarily due to flood releases that occurred in 1983 and 1984, and flood control or space building releases that occurred between 1985 and 1988 and from 1997 through 1999. Action to restore the lost capacity at the Laguna Reservoir is ongoing. It is anticipated that dredging to restore its capacity will begin in early 2007, and be completed within a 3 year period, subject to the availability of funds and the completion of the environmental compliance process.

Imperial Dam

Imperial Dam is the last diversion dam on the Colorado River for United States water users. From the head works at Imperial Dam, the diversions of flows for the United States' and Mexico's water users occur into the All-American Canal on the California side, and into the Gila Gravity Main Canal on the Arizona side of the dam. These diversions supply all the irrigation districts in the Yuma area, in Wellton-Mohawk, in the Imperial and Coachella Valleys, and through Siphon Drop and Pilot Knob to the Northerly International Boundary (NIB) to the Mexicali Valley in Mexico. The diversions also supply much of the domestic and industrial water needs in the Yuma area. Flows arriving at Imperial Dam for calendar year 2006 are expected to be 5.720 maf (7,061 mcm). The flows arriving at Imperial Dam for calendar year 2007 are anticipated to be approximately the same as calendar year 2006.

Dredging of Imperial Reservoir was completed on June 1, 2006, resulting in the removal of 1.2 million cubic yards (0.9 mcm) of material from the reservoir. This dredging is done periodically to remove sediment that might impede diversions to water users from Imperial Dam. This dredging also temporarily increases the storage behind Imperial Dam by about 500 acre-feet.

Gila River Flows

Drought conditions persisted for water year 2006 throughout the State of Arizona. Abnormally dry to severe drought conditions persisted throughout southeastern Arizona, contributing to 75 percent of average precipitation being recorded in the Gila River Basin. During water year 2006 no tributary inflow from the Gila River reached the mainstem of the Colorado River. By contrast, for water year 2005, tributary inflow from the Gila River Basin that reached the mainstem totaled 0.264 maf (325.9 mcm).

Additional Regulatory Storage

In 2004, Reclamation completed a study that evaluated the needs and developed options for additional water storage facilities on the mainstem of the Colorado River below Parker Dam. The study, developed in cooperation with the IID, Coachella Valley Water District (CVWD), San Diego County Water Authority (SDCWA), and the MWD, recommended that additional storage be constructed at a site north of Drop 2 along the All-American Canal.

The proposed Drop 2 reservoir is in the engineering design and environmental compliance and permitting stage. The purpose of the planned 0.008 maf (9.875 mcm) reservoir is the same as Senator Wash and it will be operated similar to Senator Wash to capture extra water in the system, especially during storm events. The reservoir will make up for the loss of water storage at Senator Wash because of the operational restrictions and allow for additional regulatory storage. Additional storage will allow for more efficient management of water below Parker Dam.

Construction of the first phase of the Drop 2 reservoir is scheduled to start in calendar year 2007 and be completed in late calendar year 2009, with a capacity of 0.004 maf (4.938 mcm) of storage. This schedule is subject to completion of appropriate compliance and the availability of funds and obtaining the necessary permits to perform the work.

Yuma Desalting Plant

The Yuma Desalting Plant (YDP) was not operated in calendar year 2006 and is being maintained in a ready reserve status. In calendar year 2006 the amount of water discharged through the Main Outlet Drain (bypass flows) is anticipated to be 0.110 maf (135.8 mcm) at an approximate concentration of total dissolved solids of 2,430 parts per million (ppm). Water users in the Colorado River Basin have raised concerns over the continued bypass of Wellton-Mohawk agricultural return flow around Morelos Dam to the Cienega de Santa Clara, a wetland of approximately 40,000 acres (16,200 hectares) that is within a Biosphere Reserve in Mexico. These flows do not count as part of Mexico's 1,500 maf (1,852 mcm) allotment under the Treaty of 1944.

On October 26, 2005, Reclamation submitted to Congress a report that describes activities required to operate the YDP, provides an estimate of how long those activities would take, and presents a current estimate of their anticipated cost. In addition, this report explores interim and/or supplemental opportunities for replacement of water that is bypassed into Mexico, including options that do not potentially have an adverse impact on the Cienega de Santa Clara. Reclamation initiated a public process on September 22, 2005 to investigate options to replace or recover the bypass flows.

In January 2005, Commissioner John Keys announced the United States' commitment to demonstrate operation of the YDP at a bi-national meeting of the IBWC. Preparations for the demonstration are well underway and this operation is scheduled to begin in March 2007. For the demonstration, the YDP will operate at about 10 percent of full capacity for a

period of 90 days. It is anticipated that about 0.003 maf (3.703 mcm) will be stored in Lake Mead as a result of recovered bypass flows in calendar year 2007.

Lower Basin Demonstration Programs: Intentionally Created Surplus and System Conservation Water

Reclamation implemented two demonstration programs in 2006 in the Lower Basin for Intentionally Created Surplus Water (ICS Water) and System Conservation Water (SC Water).

The ICS demonstration program allows entitlement holders to undertake extraordinary conservation activities to reduce their approved annual consumptive use of Colorado River water and store that conserved water in Lake Mead. The ICS demonstration program does not provide for the release or use of ICS Water until appropriate environmental compliance and forbearance agreements have been completed.

The SC demonstration program allows entitlement holders to participate in voluntary conservation to conserve a portion of their approved annual consumptive use of Colorado River water in exchange for appropriate compensation provided by Reclamation. The water conserved would be stored and retained in Lake Mead to assist in providing an interim, supplemental source of water to replace the drainage water from the Wellton-Mohawk Irrigation and Drainage District that is bypassed to the Cienega de Santa Clara and the reject stream from operation of the Yuma Desalting Plant.

Intentionally Created Surplus Water (ICS Water) Agreements

Reclamation has entered into an agreement with the MWD for the creation of Intentionally Created Surplus Water (ICS Water) in 2006 and 2007.¹⁸ Through this program, the MWD may undertake extraordinary conservation measures to create up to 0.050 maf (61.72 mcm) in calendar year 2006. The MWD may, either separately or in conjunction with other California agencies with rights to use Colorado River water, create up to 0.200 maf (246.9 mcm) in calendar year 2007. Currently, the MWD anticipates creating 0.050 maf (61.72 mcm) per year in calendar years 2006 and 2007.

Reclamation has also entered into an agreement with the IID for the creation of ICS Water in 2006 and 2007.¹⁹ Through this program, the IID will undertake extraordinary conservation measures to create up to 0.005 maf (6.172 mcm) in calendar year 2006 and up to 0.025 maf (30.86 mcm) in calendar year 2007. Currently, the IID anticipates creating 0.001 maf (1.234 mcm) per year in calendar years 2006 and 2007.

¹⁸ “Implement a Demonstration Program to Create Intentionally Created Surplus Water,” between Reclamation and the MWD, dated May 18, 2006.

¹⁹ “Implement a Demonstration Program to Create Intentionally Created Surplus Water,” between Reclamation and the IID, dated June 26, 2006.

System Conservation Water (SC Water) Agreements

Reclamation has entered into an agreement with the MWD for the creation of SC Water in 2006 and 2007.²⁰ Through this program, the MWD will undertake extraordinary conservation measures to create 0.003 maf (3.703 mcm) of SC Water in calendar year 2006 and 0.007 maf (8.641 mcm) of SC Water in calendar year 2007. This water will be stored and retained in Lake Mead.

Delivery of Water to Mexico

Total delivery to Mexico for calendar year 2006 is projected to be approximately 1.530 maf (1,889 mcm), an over-delivery of approximately 0.030 maf (37.03 mcm). Of the total delivery, approximately 0.140 maf (172.8 mcm) is projected to be delivered at the Southerly International Boundary (SIB) and 1.390 maf (1,716 mcm) is projected to be delivered at the NIB. The over-deliveries in 2006 resulted from a combination of rejected water from water users after rain storms, side-wash inflow into the Colorado River, and spills from irrigation facilities below Imperial Dam to the river. As part of Mexico's delivery schedule, it is anticipated that 102.0 acre-feet (0.126 mcm) will be diverted from Lake Havasu to Tijuana, Baja California at the request of the Mexican section of the IBWC in calendar year 2006.

In 2007, it is anticipated that 0.140 maf (172.8 mcm) will be delivered to Mexico at the SIB. In accordance with Minute No. 310 and the Emergency Delivery Agreement²¹ up to 0.001 maf per month (1.481 mcm) may be delivered for Tijuana. The remainder of Mexico's available water will be delivered at NIB.

To further improve control of the deliveries of water from Parker Dam, Senator Wash Reservoir and the reservoirs behind Imperial Dam and Laguna Dam will continue to be operated at lower elevations during periods of potential rain storms to capture flows in excess of water demand at Imperial Dam. Improvements to the river routing software used to schedule the releases from Parker Dam have also reduced the uncertainty in estimating the flows arriving at Imperial Dam, further helping to reduce non-storable flows arriving at Imperial Dam. As mentioned previously, the proposed Drop 2 Reservoir would improve control of water deliveries below Parker Dam once construction is complete.

Drainage flows to the Colorado River from the Yuma Mesa Conduit and South Gila Conduit are projected to be 0.043 maf (53.08 mcm) and 0.067 maf (82.71 mcm), respectively, for calendar year 2006. As stated in Minute 242, the maximum allowable salinity differential is 145 ppm by the United States' measurement or count and 151 ppm by the Mexican count. The salinity differential for calendar year 2006 is projected to be 143 ppm by the United States' count.

²⁰ "Implement a Demonstration Program for System Conservation of Colorado River Water," between Reclamation and the MWD, dated August 15, 2006.

²¹ "The Agreement for Temporary Emergency Delivery of a Portion of the Mexican Treaty Waters of the Colorado River to the International Boundary in the Vicinity of Tijuana, Baja California, Mexico, and for Operation of the Facilities in the United States," applicable through calendar year 2008.

Mexico has identified four critical months, October through January, regarding improving the quality of water delivered at the SIB. As a matter of comity, the United States has agreed to reduce the salinity of water delivered at SIB. To accomplish the reduction in salinity, the United States constructed a diversion channel to bypass up to 0.008 maf (9.875 mcm) of Yuma Valley drainage water during the four critical months identified by Mexico. This water will be replaced by better quality water from the Minute 242 well field to reduce the salinity at SIB. Currently, the facilities required for real time monitoring and control of the flow and salinity of water delivered to SIB will be fully operational in Fiscal Year 2007. In 2006 and 2007, about 0.008 maf (9.875 mcm) of water is expected to be spilled to the diversion channel each year for salinity control.

2007 DETERMINATIONS

The AOP provides guidance regarding reservoir storage and release conditions during the upcoming year, based upon congressionally mandated and authorized storage, release, and delivery criteria and determinations. After meeting these requirements, specific reservoir releases may be modified within these requirements as forecasted inflows change in response to climatic variability and to provide additional benefits coincident to the projects' multiple purposes.

Upper Basin Reservoirs

The objective minimum release criterion will most likely control the annual release from Glen Canyon Dam during water year 2007 in accordance with Article II(2) of the Operating Criteria unless spill avoidance and/or the storage equalization criteria in Article II(3) are controlling. Under the most probable and minimum probable inflow scenario, the objective shall be to maintain a minimum release of water from Lake Powell of 8.23 maf (10,150 mcm) in water year 2007. Under the maximum probable inflow scenario, storage equalization would control the release of water from Lake Powell in water year 2007.

Pursuant to Section 602(b) of the Colorado River Basin Project Act and Section 1804 (c)(3) of the Grand Canyon Protection Act, the Secretary is required to develop this AOP in consultation with the Upper Colorado River Commission, representatives from the three Lower Division States, and with the general public. Section 602(a) of the Colorado River Basin Project Act provides for the storage of Colorado River water in Upper Basin reservoirs and the release of water from Lake Powell that the Secretary finds reasonably necessary to assure deliveries to comply with Articles III(c), III(d), and III(e) of the 1922 Colorado River Compact without impairment to the annual consumptive use in the Upper Basin. The Operating Criteria provide that the annual plan of operation shall include a determination of the quantity of water considered necessary to be in Upper Basin storage at the end of the water year after taking into consideration all relevant factors including historic stream flows, the most critical period of record, the probabilities of water supply, and estimated future depletions. Water not required to be so stored will be released from Lake Powell:

- to the extent it can be reasonably applied in the States of the Lower Division to the uses specified in Article III(e) of the 1922 Colorado River Compact, but these releases will not be made when the active storage in Lake Powell is less than the active storage in Lake Mead;
- to maintain, as nearly as practicable, active storage in Lake Mead equal to the active storage in Lake Powell; and
- to avoid anticipated spills from Lake Powell.

Taking into consideration all relevant factors required by Section 602(a)(3) of the Colorado River Basin Project Act, the Operating Criteria, and the Interim 602(a) Storage Guideline, it

is determined that the active storage in Upper Basin reservoirs forecast for September 30, 2007, under the most probable inflow scenario would not exceed the storage required under Section 602(a) of the Colorado River Basin Project Act. Consistent with Section V of the Interim 602(a) Storage Guideline, releases from Lake Powell greater than the minimum objective of 8.23 maf (10,150 mcm), to maintain, as nearly as practicable, active storage in Lake Mead equal to the active storage in Lake Powell, will be made if storage in Lake Powell, on September 30, 2007, is projected to be greater than 14.85 maf (18,320 mcm) (water surface elevation 3,630 feet [1,106.4 meters]) and active storage in Lake Powell is greater than active storage in Lake Mead.

Lower Basin Reservoirs

Pursuant to Article III of the Operating Criteria and consistent with the Consolidated Decree, water shall be released or pumped from Lake Mead to meet the following requirements:

- (a) 1944 United States-Mexico Water Treaty obligations,
- (b) Reasonable beneficial consumptive use requirements of mainstream users in the Lower Division States,
- (c) Net river losses,
- (d) Net reservoir losses,
- (e) Regulatory wastes,
- (f) Flood control.

The Operating Criteria provide that after the commencement of delivery of mainstream water by means of the CAP, the Secretary will determine the extent to which the reasonable beneficial consumptive use requirements of mainstream users are met in the Lower Division States. Reasonable beneficial consumptive use requirements are met depending on whether a Normal, Surplus, or Shortage Condition has been determined. The Normal Condition is defined as annual pumping and release from Lake Mead sufficient to satisfy 7.500 maf (9,258 mcm) of consumptive use in accordance with Article III(3)(a) of the Operating Criteria and Article II(B)(1) of the Consolidated Decree. The Surplus Condition is defined as annual pumping and release from Lake Mead sufficient to satisfy in excess of 7.500 maf (9,258 mcm) consumptive use in accordance with Article III(3)(b) of the Operating Criteria and Article II(B)(2) of the Consolidated Decree.

The Interim Surplus Guidelines, which became effective February 26, 2001, and were first utilized in calendar year 2002, serve to implement the narrative provisions of Article III(3)(b) of the Operating Criteria and Article II(B)(2) of the Consolidated Decree for the period through 2016. These specific interim surplus guidelines will be used annually by the Secretary to determine the quantity of water available for use within the Lower Division States.

Consistent with Section 7 of the Interim Surplus Guidelines, the August, 2006 24-Month Study was used to forecast the system storage as of January 1, 2007. Based on this projected elevation, the Partial Domestic Surplus Condition will govern releases for use in the states

of Arizona, Nevada, and California during calendar year 2007 in accordance with Article III(3)(b) of the Operating Criteria and Article II(B)(2) of the Consolidated Decree. It should be noted, however, that the projected releases in 2007 currently reflect demands under the Normal Condition for the MWD, the CAP, and the SNWA, per their request. This does not, however, preclude the MWD, CAP and SNWA from requesting Partial Domestic Surplus water in calendar year 2007.

Article II(B)(6) of the Consolidated Decree allows the Secretary to allocate water that is apportioned to one Lower Division State but is for any reason unused in that state to another Lower Division State. This determination is made for one year only, and no rights to recurrent use of the water accrue to the state that receives the allocated water. If any unused apportionment is available the Secretary shall allocate any available unused apportionment for calendar year 2007 in accordance with Article II(B)(6) of the Consolidated Decree, and Section 1(B) of the Interim Surplus Guidelines.

Water may be made available for diversion pursuant to 43 CFR Part 414 to contractors within the Lower Division States. The Secretary shall make Intentionally Created Unused Apportionment (ICUA) available to contractors in Arizona, California, or Nevada for the off-stream storage or consumptive use of water pursuant to individual SIRA agreements and 43 CFR Part 414. On October 10, 2003, the Secretary approved the ROD for the Inadvertent Overrun and Payback Policy (IOPP) which became effective January 1, 2004. The IOPP is in effect during calendar year 2007 with calendar year 2005 paybacks to begin in calendar year 2007.

The Colorado River Water Delivery Agreement also requires payback of 2001 and 2002 overruns as noted in Exhibit C of that document. Each district with a payback obligation under Exhibit C may, at its own discretion, elect to accelerate paybacks in calendar year 2007. It is anticipated that calendar year paybacks for calendar years 2006 and 2007 will total 0.073 maf (90.11 mcm), and 0.075 maf (92.58 mcm), respectively.

Given the limitation of available supply and the low inflow amounts within the Colorado River Basin, the Secretary, through Reclamation, will continue to review Lower Basin operations to assure that all deliveries and diversions of mainstream water are in strict accordance with the Consolidated Decree, applicable statutes, contracts, rules, and agreements.

As provided in Section 3 of the Interim Surplus Guidelines, the Secretary shall undertake a "mid-year review" pursuant to Article I(2) of the Operating Criteria, allowing for the revision of the current AOP, as appropriate, based on actual runoff conditions which are greater than projected or demands which are lower than projected. The Secretary shall revise the determination for the current year only to allow for additional deliveries. Any revision to the AOP may occur only through the AOP consultation process as required by applicable Federal law.

1944 United States-Mexico Water Treaty

Under the most probable, probable minimum, and probable maximum inflow scenarios, water in excess of that required to supply uses in the United States will not be available. Vacant storage space in main stem reservoirs is substantially greater than that required by flood control regulations. Therefore, a volume of 1.500 maf (1,852 mcm) of water will be available to be scheduled for delivery to Mexico during calendar year 2007 in accordance with Article 15 of the 1944 United States-Mexico Water Treaty and Minutes 242 and 310 of the IBWC.

Calendar year schedules of the monthly deliveries of Colorado River water are formulated by the Mexican Section of the IBWC and presented to the United States Section before the beginning of each calendar year. The monthly quantity prescribed by those schedules may be increased or decreased by not more than 20 percent of the monthly quantity, upon 30 days notice in advance to the United States Section. Any change in a monthly quantity is offset in another month so that the total delivery for the calendar year is unchanged.

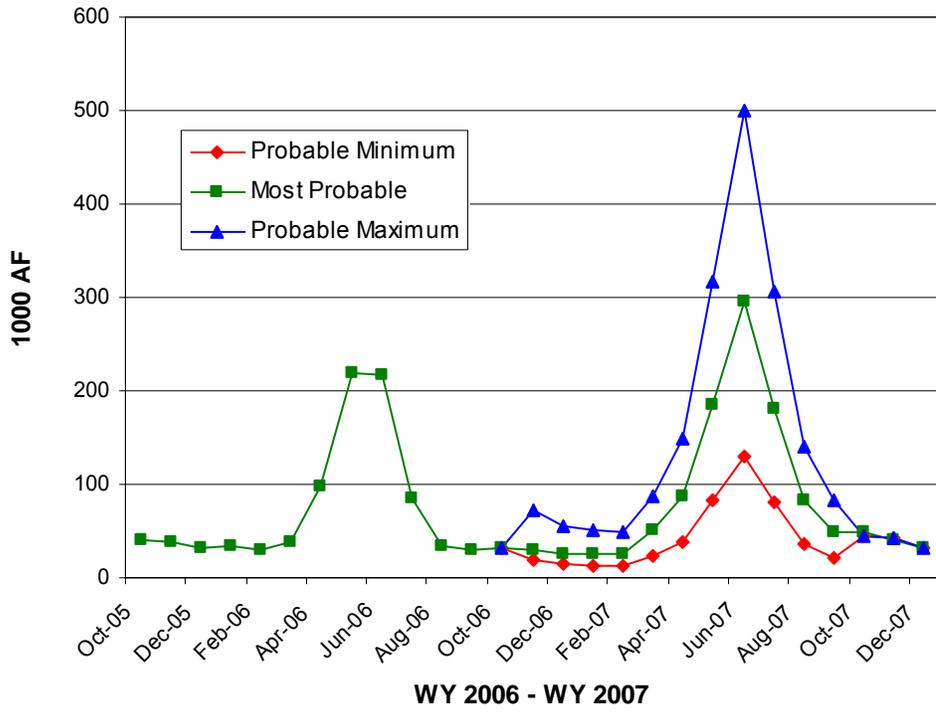
DISCLAIMER

Nothing in this AOP is intended to interpret the provisions of the Colorado River Compact (45 Stat. 1057); the Upper Colorado River Basin Compact (63 Stat. 31); the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, Treaty Between the United States of America and Mexico (Treaty Series 994, 59 Stat. 1219); the United States/Mexico agreement in Minute No. 242 of August 30, 1973, (Treaty Series 7708; 24 UST 1968); the Consolidated Decree entered by the Supreme Court of the United States in *Arizona v. California* (547 U.S. __ (2006)); the Boulder Canyon Project Act (45 Stat. 1057); the Boulder Canyon Project Adjustment Act (54 Stat. 774; 43 U.S.C. 618a); the Colorado River Storage Project Act (70 Stat. 105; 43 U.S.C. 620); the Colorado River Basin Project Act (82 Stat. 885; 43 U.S.C. 1501); the Colorado River Basin Salinity Control Act (88 Stat. 266; 43 U.S.C. 1951); the Hoover Power Plant Act of 1984 (98 Stat. 1333); the Colorado River Floodway Protection Act (100 Stat. 1129; 43 U.S.C. 1600); or the Grand Canyon Protection Act of 1992 (Title XVIII of Public Law 102-575, 106 Stat. 4669).

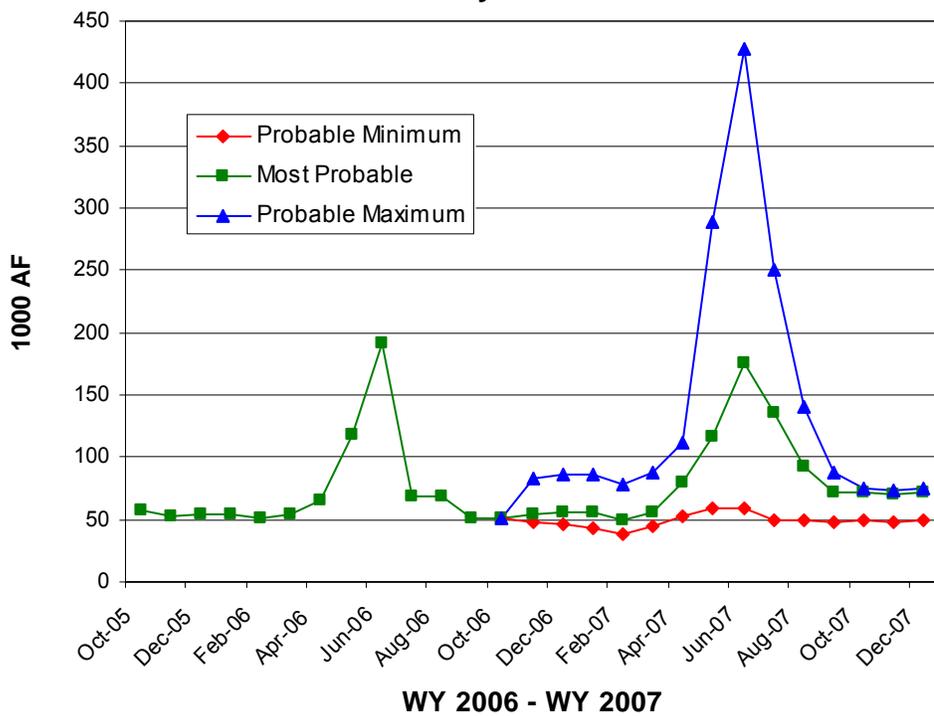
ATTACHMENT 1

Monthly inflow, monthly release, and end of month contents for Colorado River reservoirs (October 2005 through December 2007) under the probable maximum, most probable, and probable minimum inflow scenarios, and historic end of month contents.

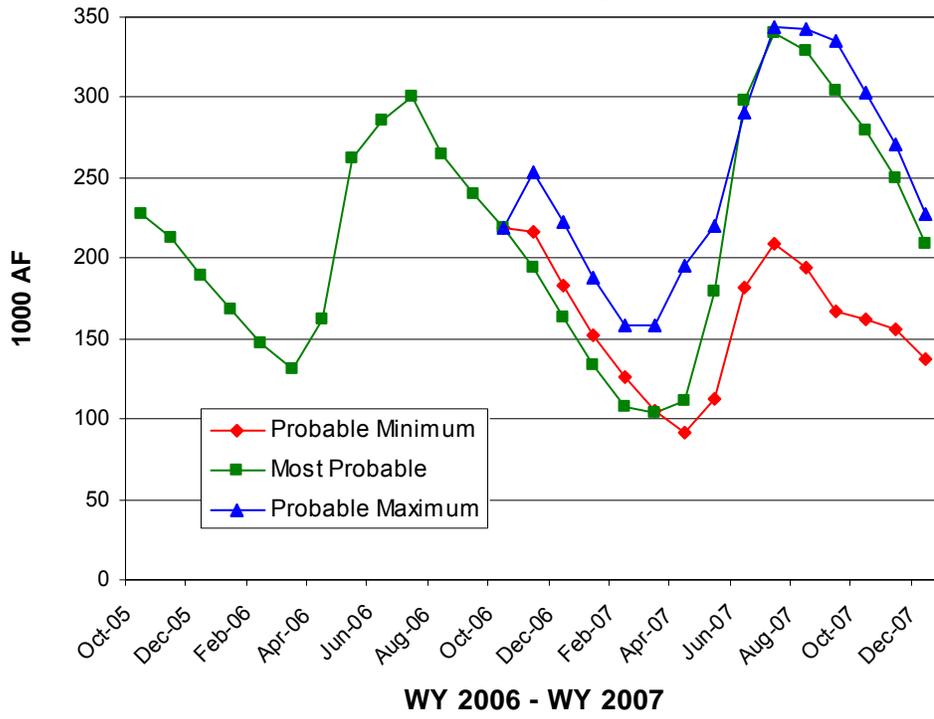
Fontenelle Monthly Inflow



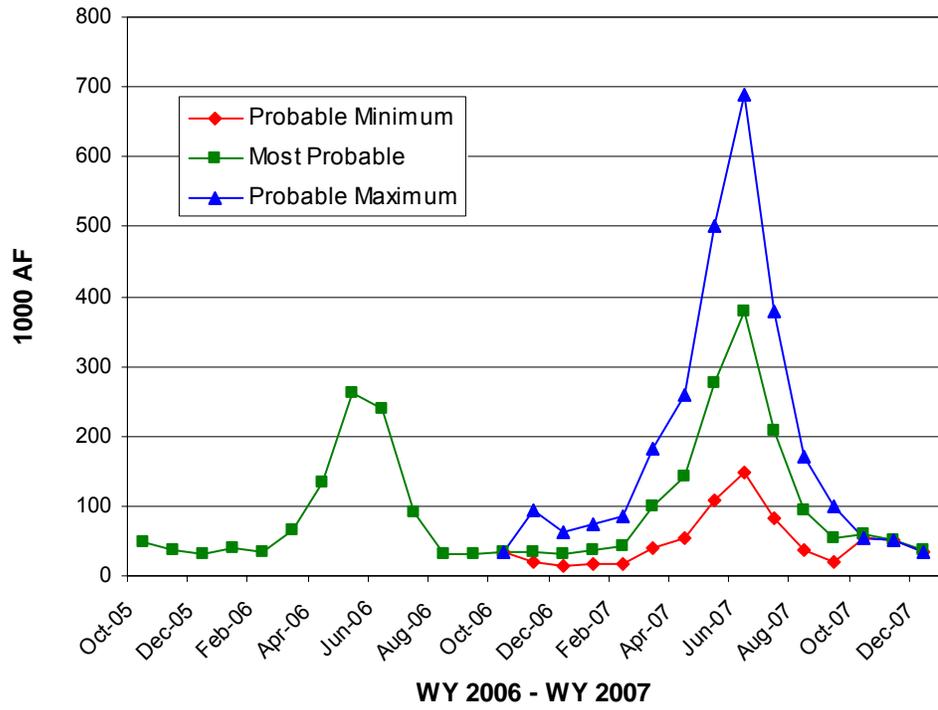
Fontenelle Monthly Releases



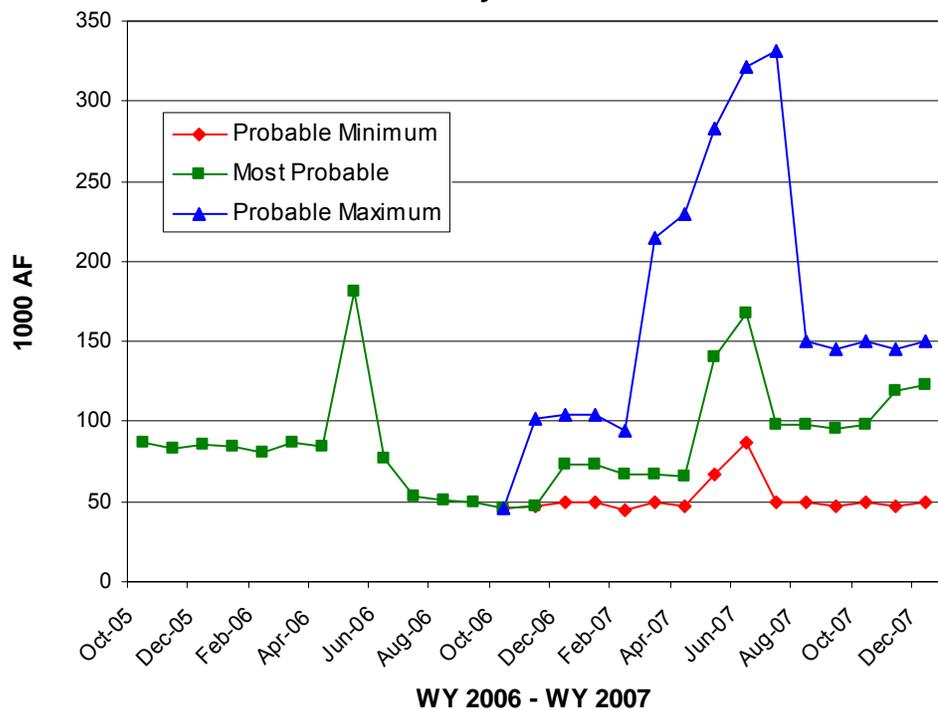
Fontenelle Monthly Storage



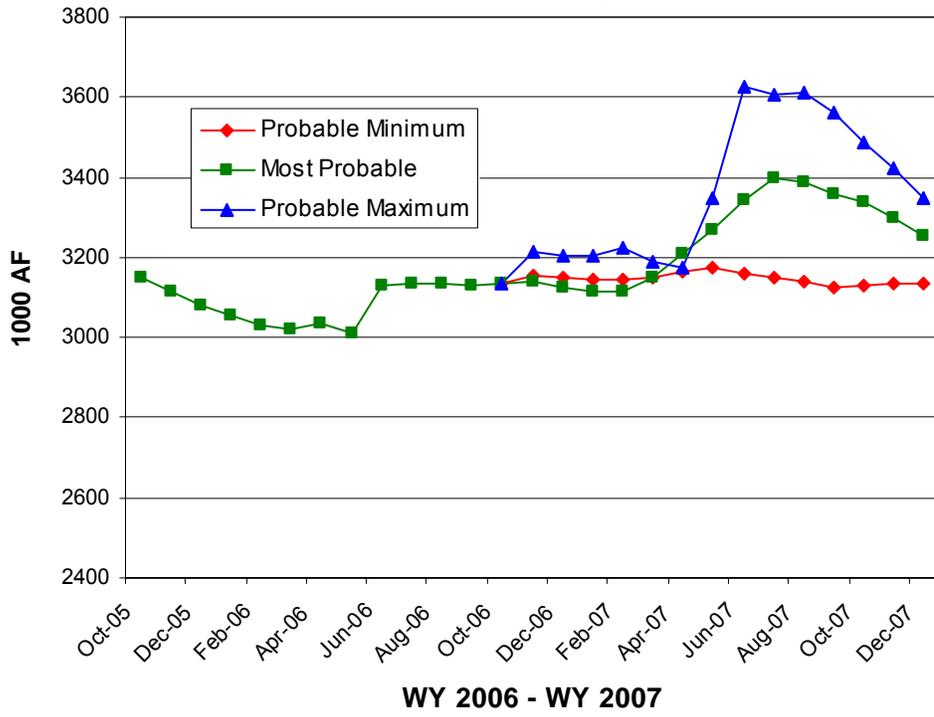
Flaming Gorge Monthly Inflow



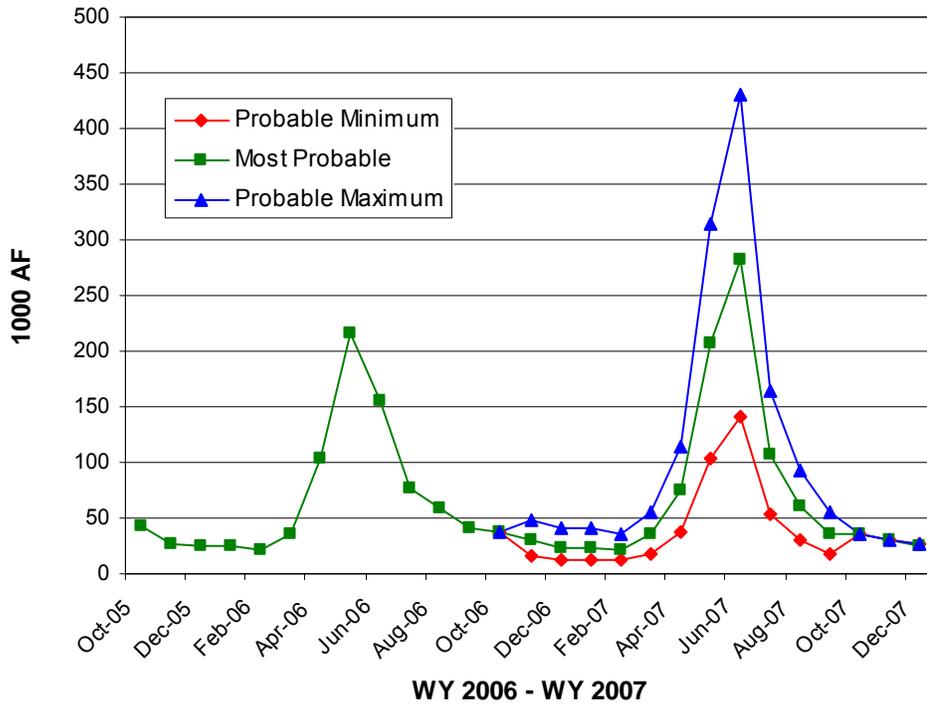
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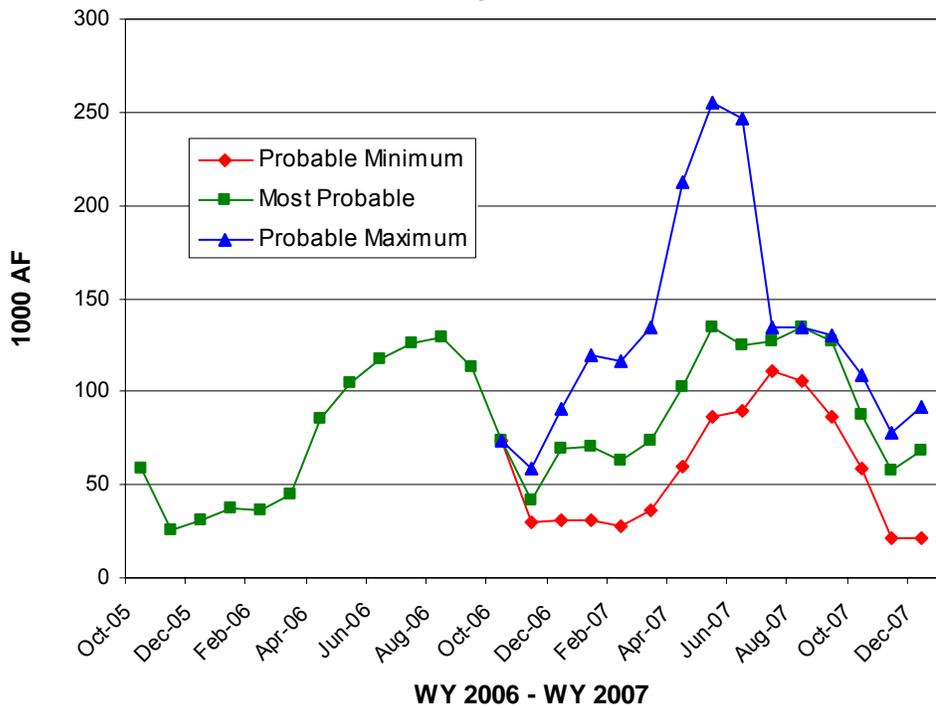
Flaming Gorge Monthly Storage



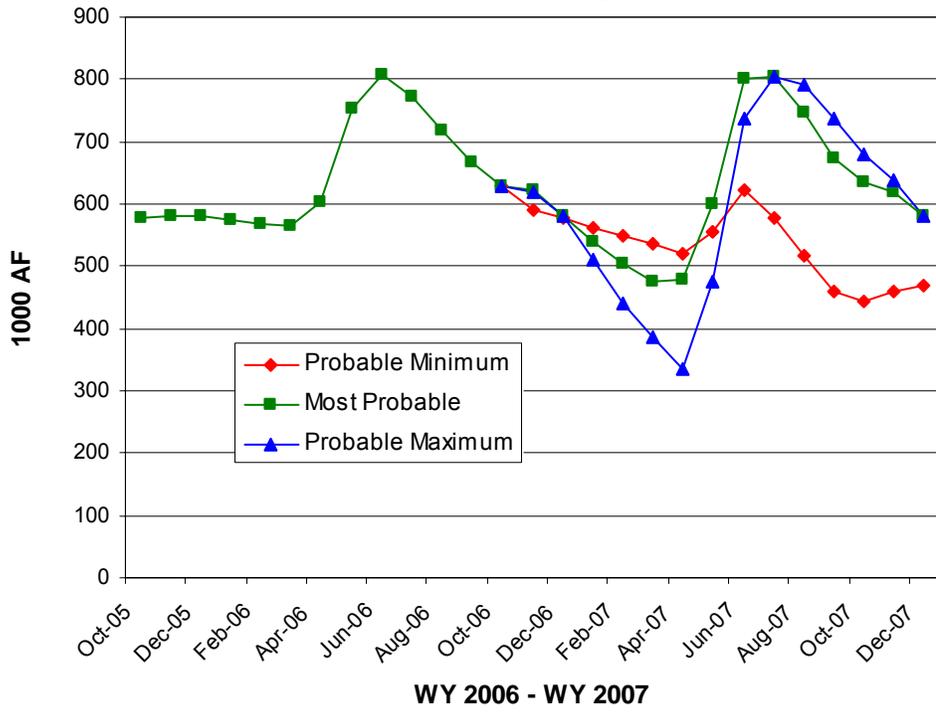
Blue Mesa Monthly Inflow



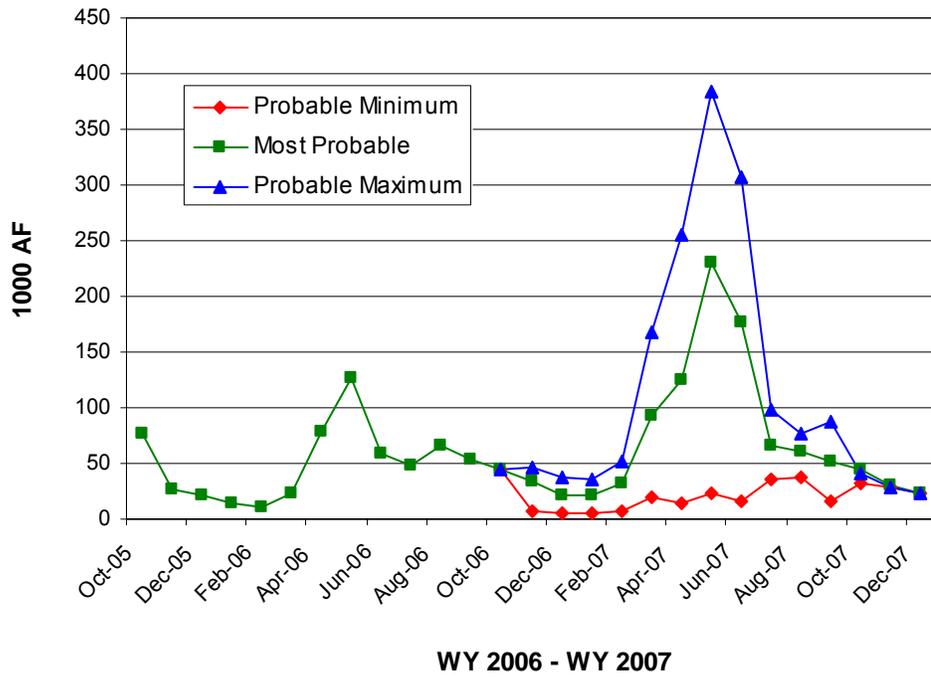
Crystal Monthly Releases



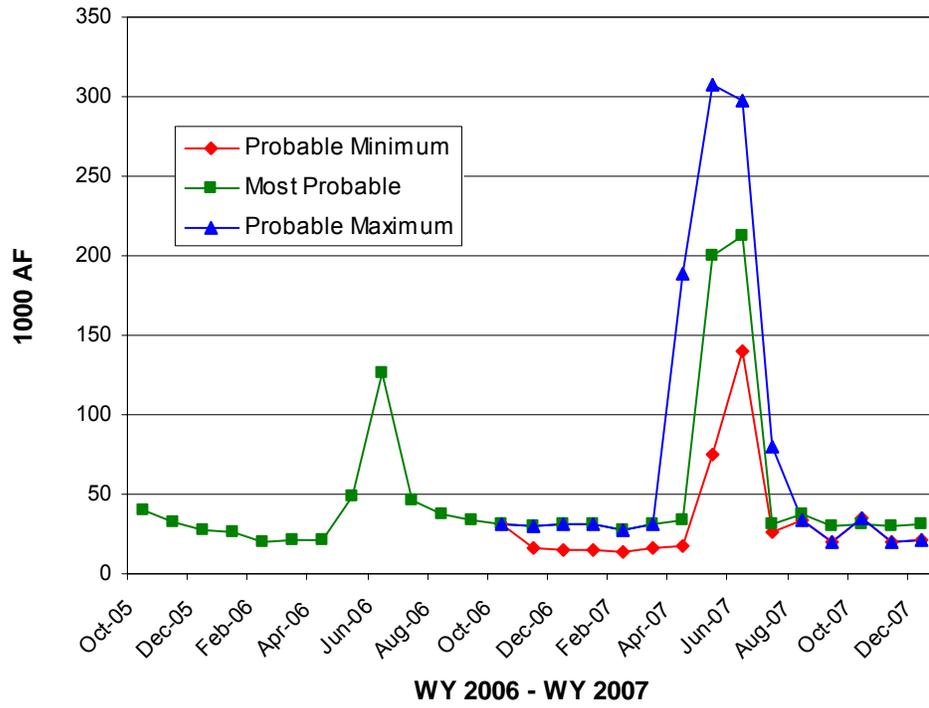
Blue Mesa Monthly Storage



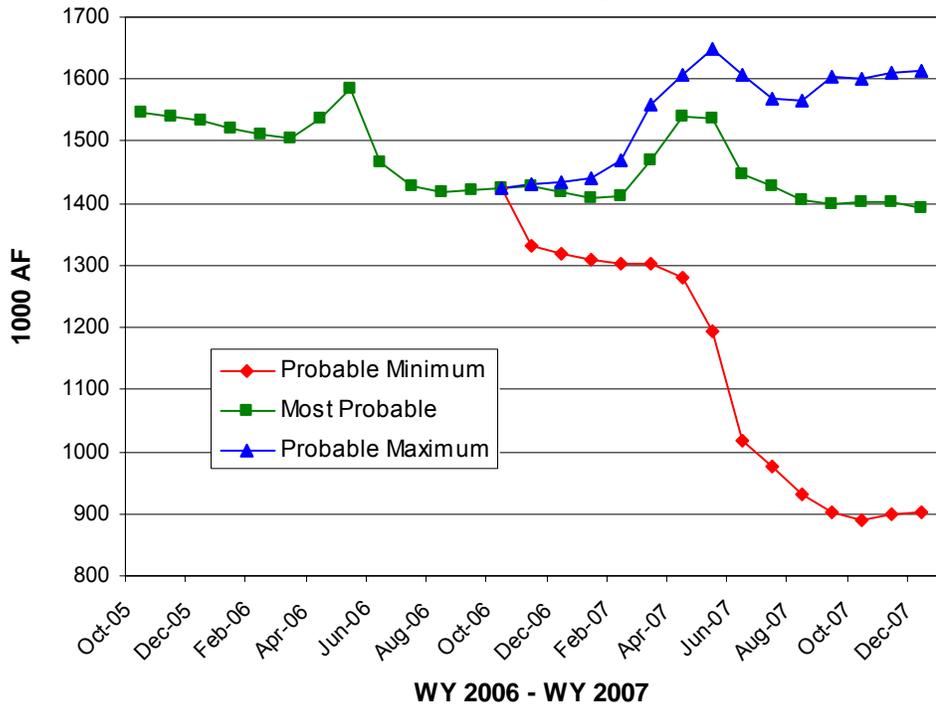
Navajo Monthly Inflow



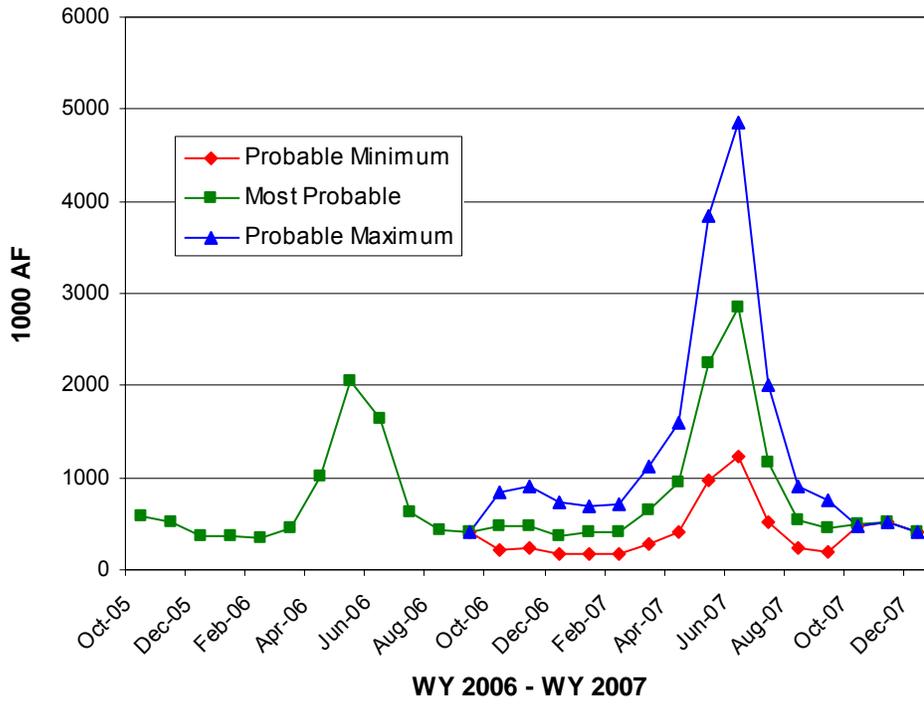
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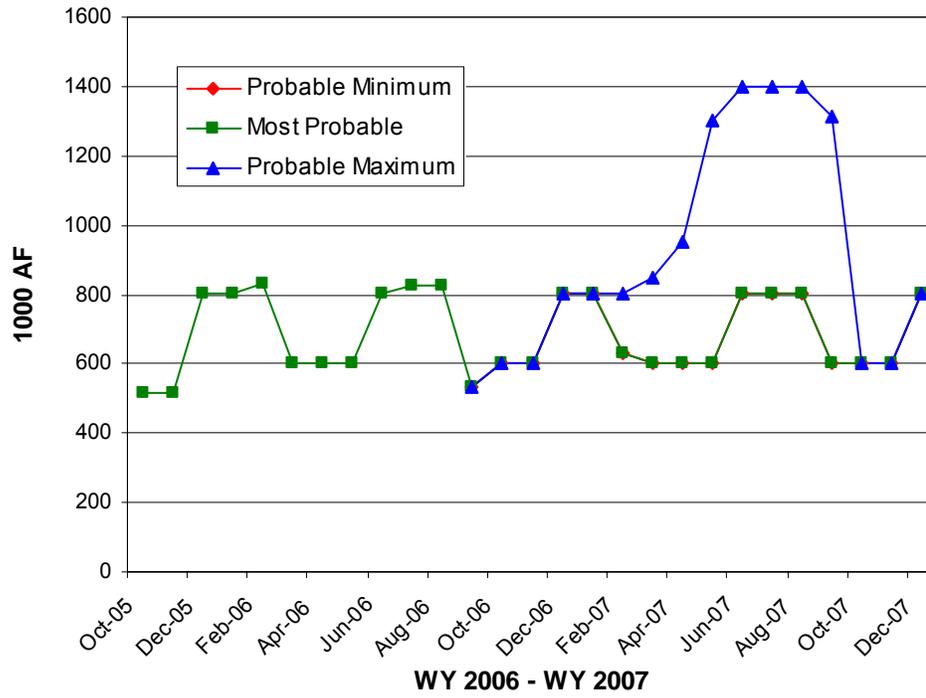
Navajo Monthly Storage



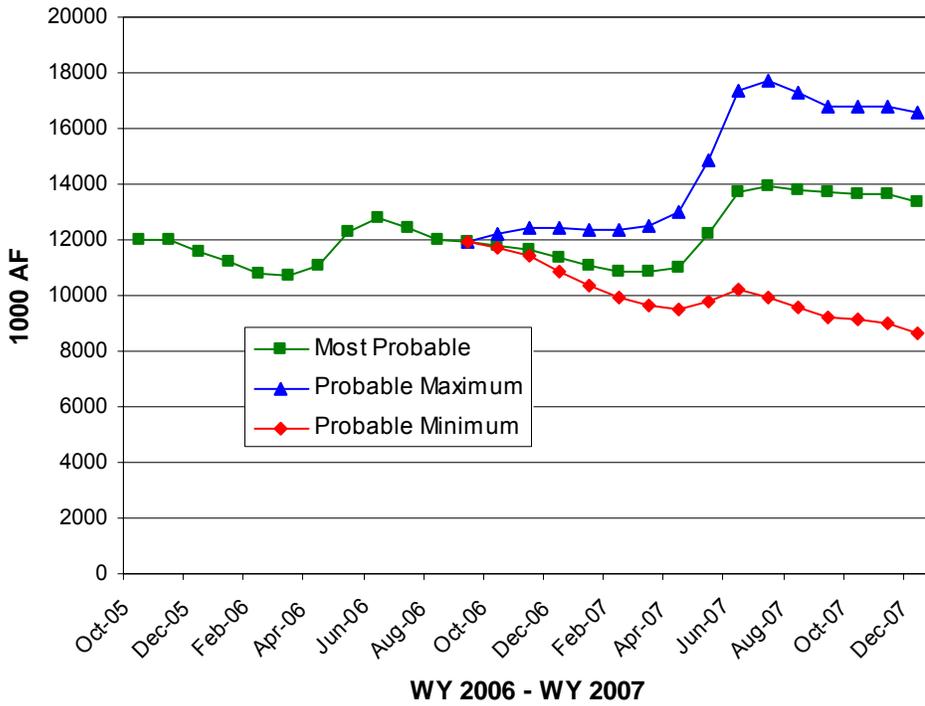
Lake Powell Monthly Inflow



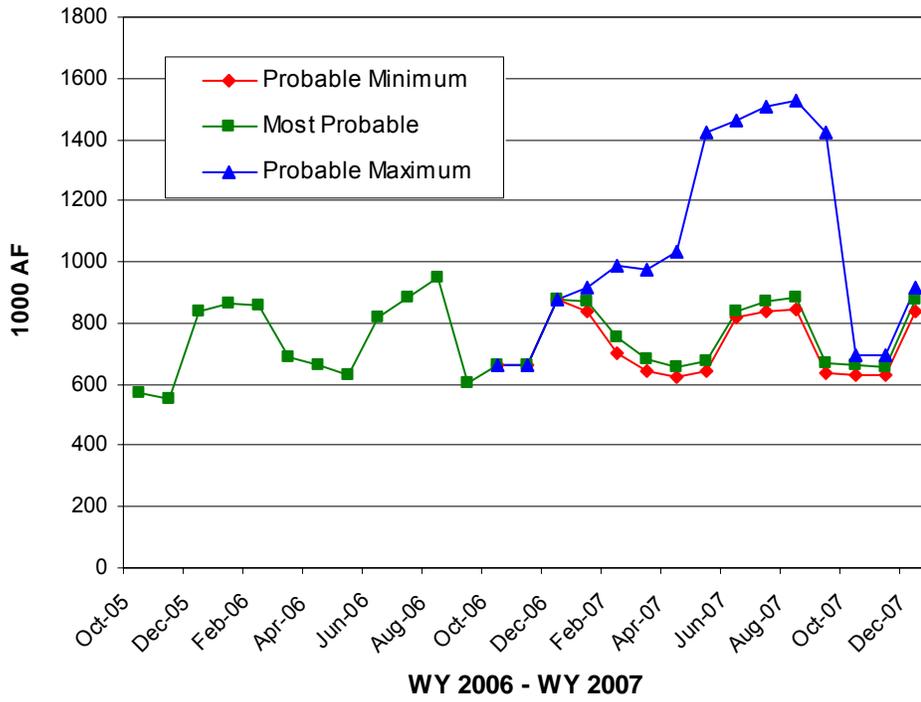
Lake Powell Monthly Releases



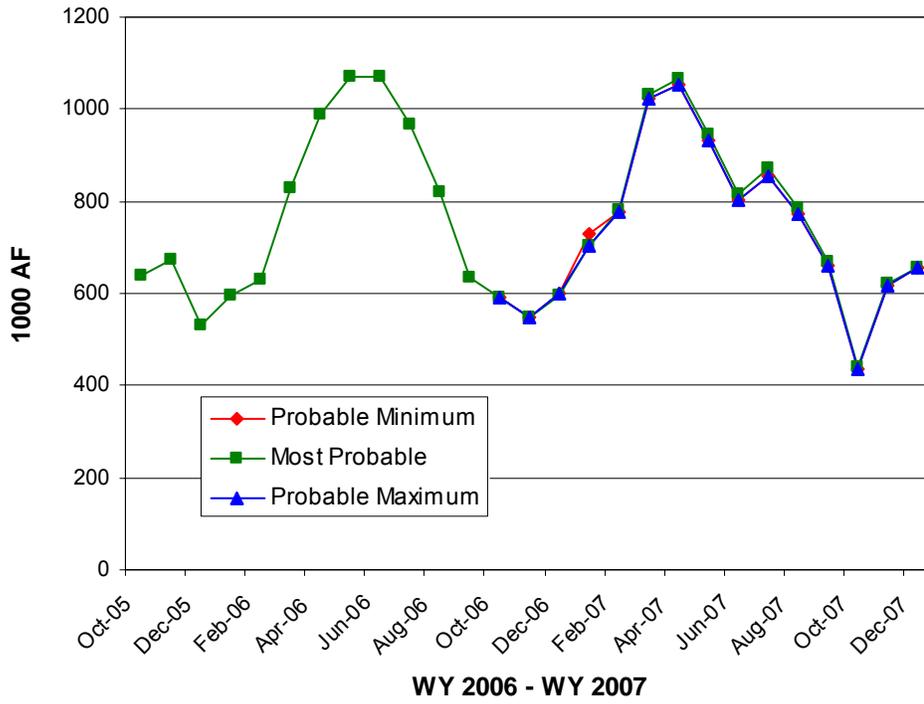
Lake Powell Monthly Storage



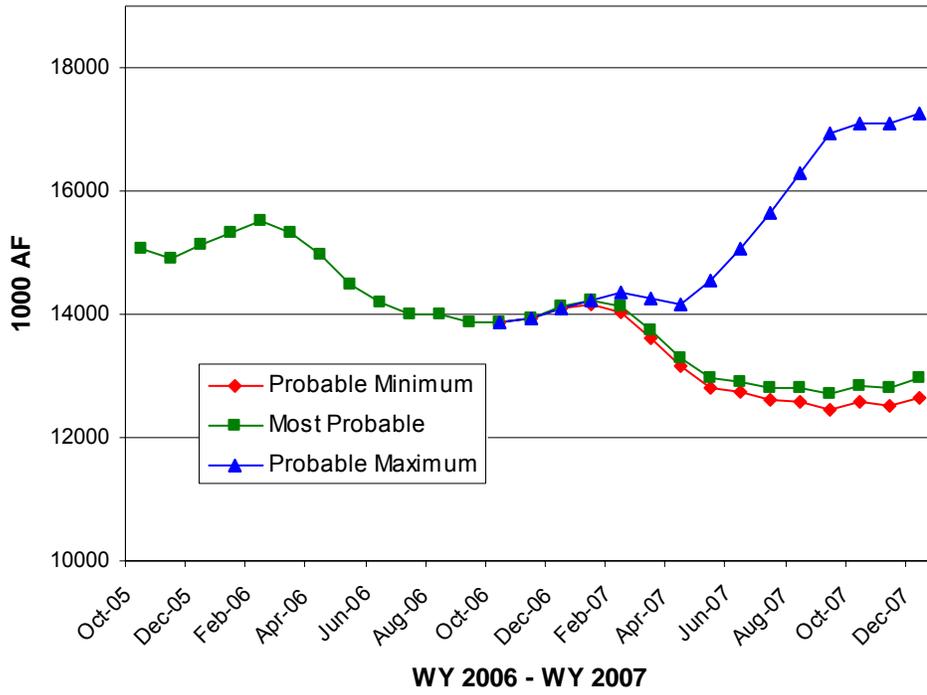
Lake Mead Monthly Inflow



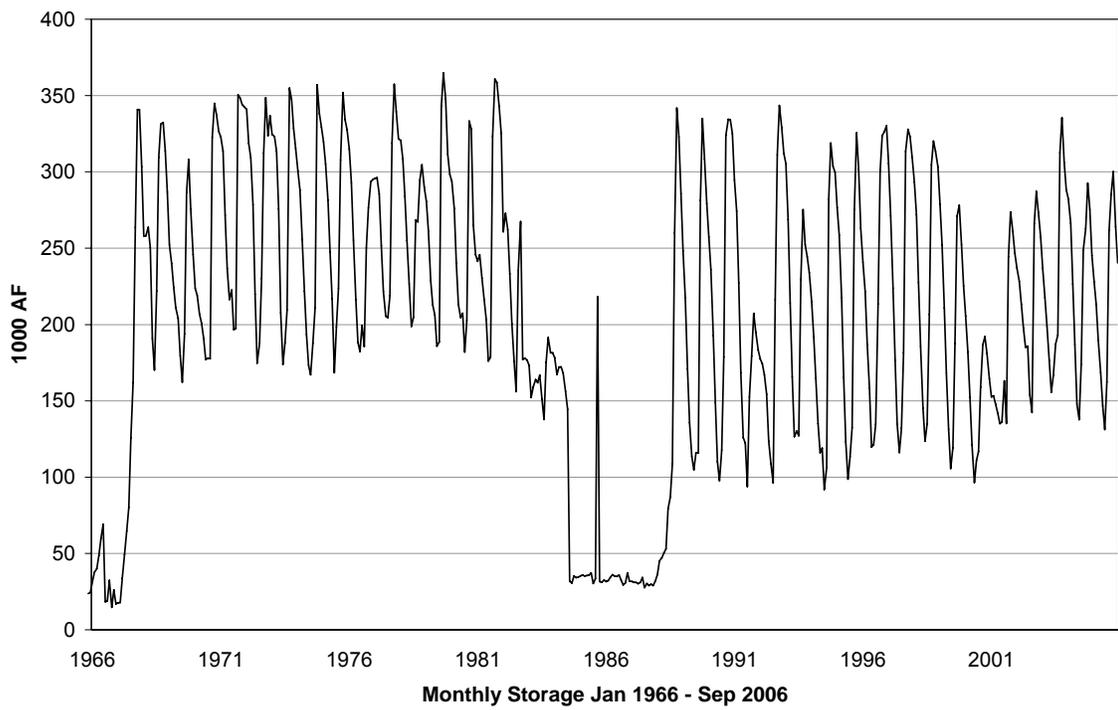
Lake Mead Monthly Releases



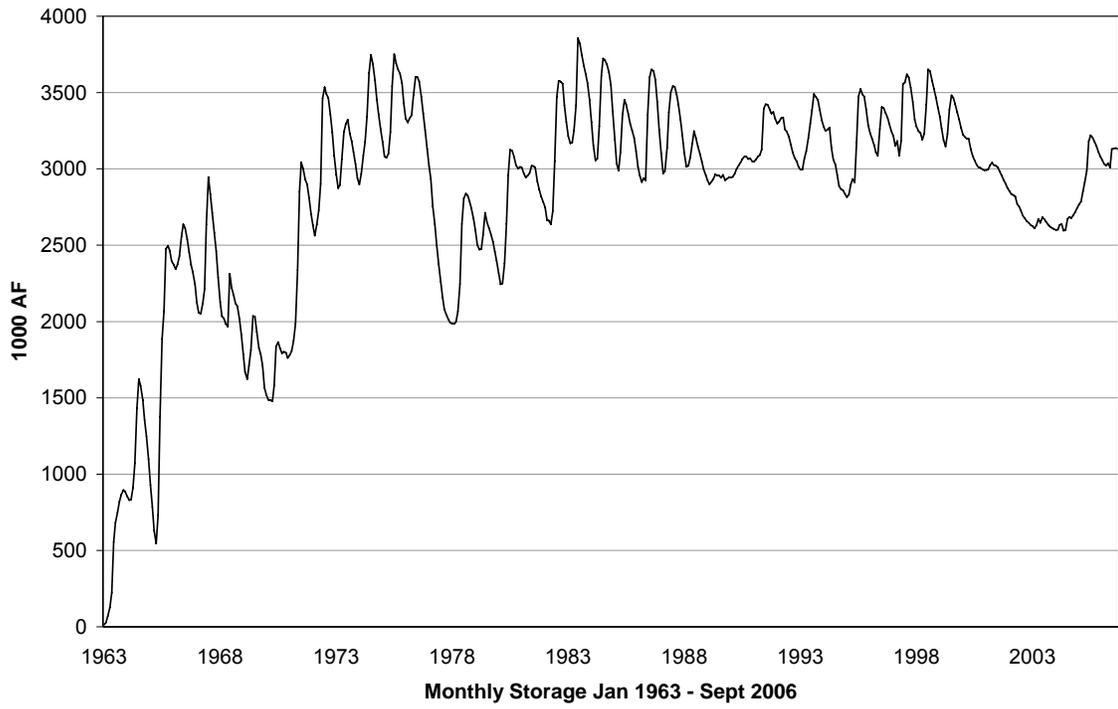
Lake Mead Monthly Storage



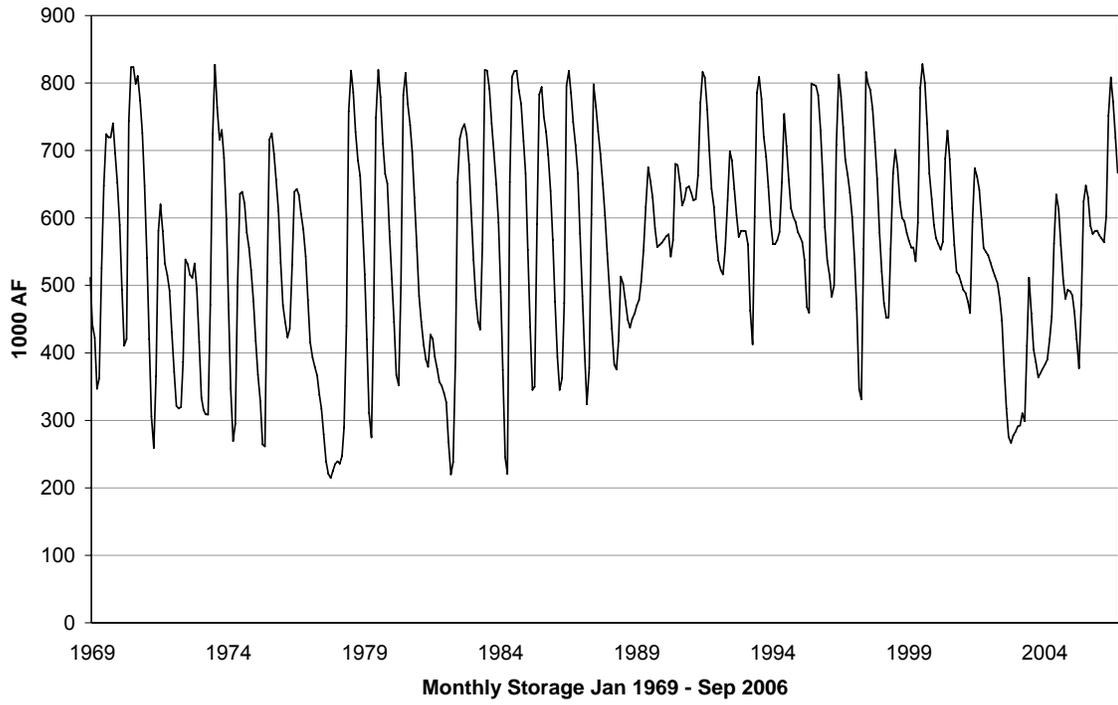
Fontenelle

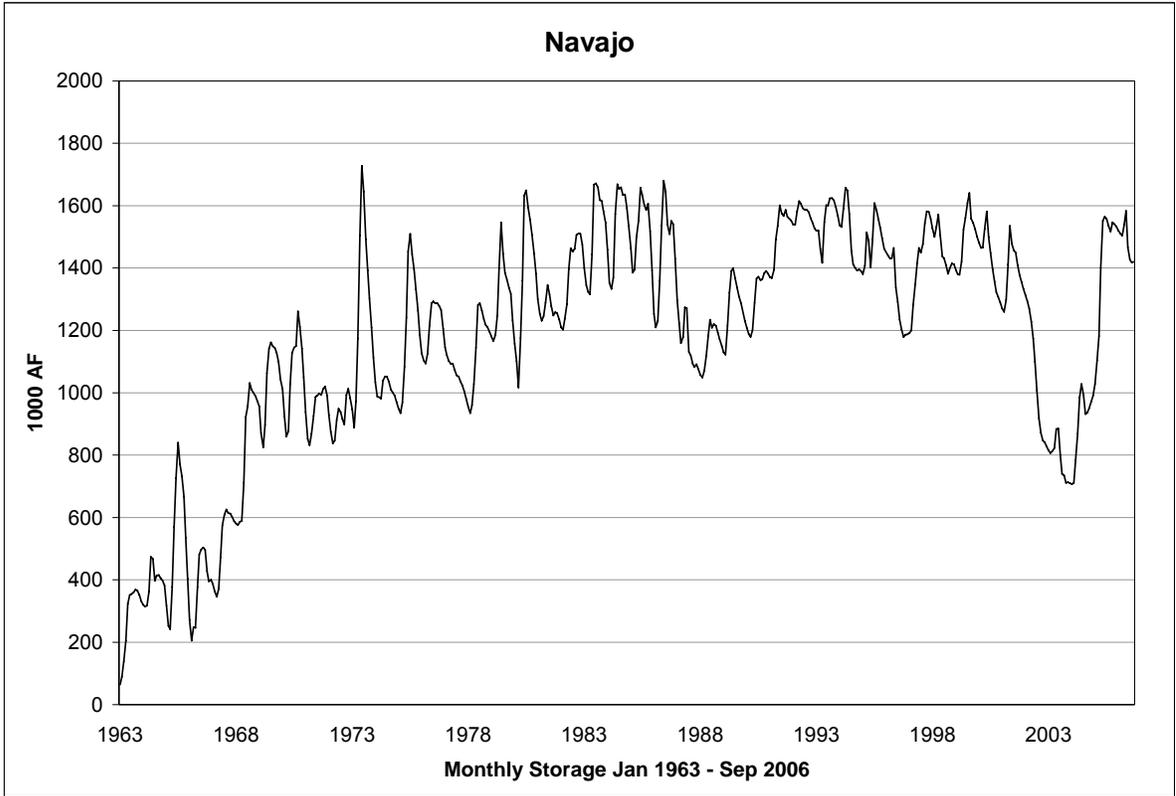


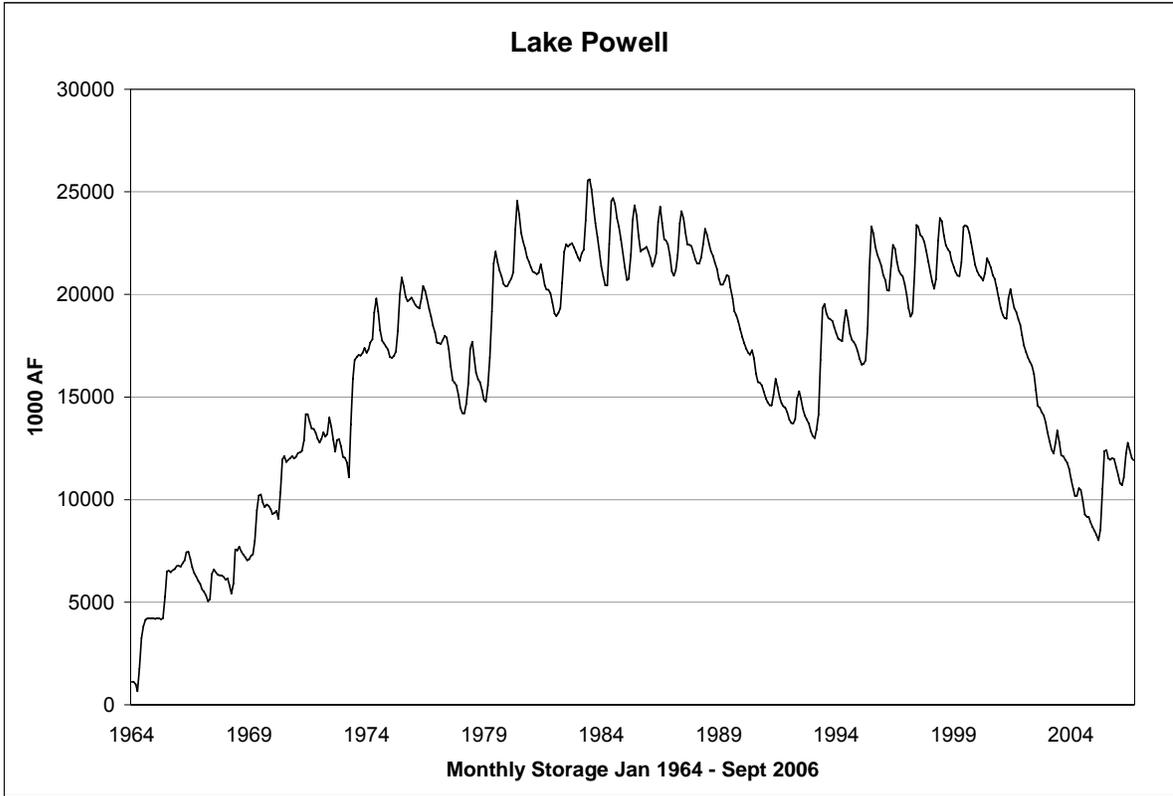
Flaming Gorge



Blue Mesa







Lake Mead

