

**COLORADO RIVER BOARD OF CALIFORNIA**

770 FAIRMONT AVENUE, SUITE 100  
GLENDALE, CA 91203-1068  
(818) 500-1625  
(818) 543-4685 FAX



November 30, 2012

**NOTICE OF SPECIAL MEETING OF THE  
COLORADO RIVER BOARD**

**NOTICE IS HEREBY GIVEN** pursuant to the call of the Chairperson, Dana B. Fisher, Jr., by the undersigned, the Executive Director of the Colorado River Board of California, that a special meeting of the Board Members is to be held as follows:

Date: December 12, 2012, Wednesday
Time: 3:00 p.m.
Place: Ballroom Augustus I Caesars Palace Hotel 3570 Las Vegas Boulevard, South Las Vegas, NV 89109-8924 TEL: (702) 731-7222, FAX: (702) 731-7172

The Colorado River Board of California welcomes any comments from members of the public pertaining to items included on this agenda and related topics. Oral comments can be provided at the beginning of each Board meeting; while written comments may be sent to Mr. Dana B. Fisher, Jr., Chairperson, Colorado River Board of California, 770 Fairmont Avenue, Suite 100, Glendale, California, 91203-1068.

An Executive Session may be held in accordance with provisions of Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2 of the Government Code and in accordance with Sections 12516 and 12519 of the Water Code to discuss matters concerning interstate claims to the use of Colorado River System waters in judicial proceedings, administrative proceedings, and/or negotiations with representatives from other states or the federal government.

Requests for additional information may be directed to: Ms. Tanya M. Trujillo, Executive Director, Colorado River Board of California, 770 Fairmont Avenue, Suite 100, Glendale, CA 91203-1068, or 818-500-1625. A copy of this Notice and Agenda may be found on the Colorado River Board's web page at [www.crb.ca.gov](http://www.crb.ca.gov).

A copy of the meeting agenda, showing the matters to be considered and transacted, is attached.

A handwritten signature in cursive script that reads "Tanya Trujillo".

Tanya M. Trujillo  
Executive Director

attachment: Agenda

Special Meeting  
COLORADO RIVER BOARD OF CALIFORNIA  
December 12, 2012, Wednesday  
3:00 p.m.

Ballroom Augustus I  
Caesars Palace Hotel  
3570 Las Vegas Boulevard, South  
Las Vegas, NV 89109-8924

**A G E N D A**

At the discretion of the Board, all items appearing on this agenda, whether or not expressly listed for action, may be deliberated upon and may be subject to action by the Board. Items may not necessarily be taken up in the order shown.

1. Call to Order
2. Opportunity for the Public to Address the Board (Limited to 5 minutes)  
As required by Government Code, Section 54954.3(a)
3. Administration
  - a. Minutes of the Meeting held November 14, 2012,  
Consideration and Approval (**Action**) ..... TAB 1
  - b. 2013 Colorado River Board Meeting Schedule (**Action**) ..... TAB 2
  - c. Resolution Commemorating the Colorado River Board's  
75<sup>th</sup> Anniversary (**Action**) ..... TAB 3
4. Protection of Existing Rights
  - a. Colorado River Water Report(s) ..... TAB 4  
Report on current reservoir storage, reservoir releases, projected water use,  
forecasted river flows, scheduled deliveries to Mexico, and salinity
  - b. State and Local Water Reports ..... TAB 5  
Reports on current water supply and use conditions
  - c. Colorado River Operations
  - d. Colorado River Environmental Issues ..... TAB 6
    - Glen Canyon Dam High Flow Experimental Release, November 18-25, 2012
  - e. Basin States Discussions ..... TAB 7
    - Minute 319 of the U.S./Mexico International Boundary and Water Commission signing on November 20, 2012, in Coronado, California
    - Status of the Colorado River Basin Water Supply and Demand Study Report

## **Agenda (continued)**

### 5. Reports

- a. Ms. Anne Castle, Assistant Secretary for Water and Science, Department of the Interior
- b. Dr. Terry Fulp, Regional Director, U.S. Bureau of Reclamation, Lower Colorado Region
- c. Mr. Don Barnett, Executive Director, Colorado River Basin Salinity Control Forum
- d. Washington D.C. and Congressional Updates

### 6. Executive Session

An Executive Session may be held by the Board pursuant to provisions of Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2 of the Government Code and Sections 12516 and 12519 of the Water Code to discuss matters concerning interstate claims to the use of Colorado River system waters in judicial proceedings, administrative proceedings, and/or negotiations with representatives from other states or the federal government.

### 7. Other Business

- a. Next Board Meeting: Regular Meeting  
January 9, 2013, Wednesday, starting 10:00 a.m.  
Holiday Inn Ontario Airport  
2155 East Convention Center Way  
Ontario, CA 91764-4452  
TEL: (909) 212-8000, FAX: (909) 418-6703

3.a. – Approval November 14, 2012. Board Meeting Minutes

Minutes of Regular Meeting  
COLORADO RIVER BOARD OF CALIFORNIA  
Wednesday, November 14, 2012

A Regular Meeting of the Colorado River Board of California (Board) was held in the Vineyard Room, at the Holiday Inn Ontario Airport, at 2155 East Convention Center Way, Ontario, California, Wednesday, November 14, 2012.

Board Members and Alternates Present

Dana B. Fisher, Chairman  
Franz W. De Klotz  
W.D. "Bill" Knutson  
Henry Merle Kuiper  
David R. Pettijohn  
Bill D. Wright

Christopher G. Hayes, Designee  
Department of Fish and Game  
  
Jeanine Jones, Designee  
Department of Water Resources

Board Members and Alternate Absent

John V. Foley  
Terese Marie Ghio  
James Cleo Hanks

James B. McDaniel  
John Pierre Menvielle  
John Palmer Powell, Jr.

Others Present

Autumn Ashurst  
Steven B. Abbott  
James M. Barrett  
James H. Bond  
John P. Carter  
J.C. Jay Chen  
Dave Fogerson  
Leslie M. Gallagher  
Christopher S. Harris  
William J. Hasencamp  
Thomas E. Levy  
Lindia Y. Liu  
Jan P. Matusak

Carrie Oliphant  
Glen D. Peterson  
Jack Seiler  
Peter S. Silva  
Ed W. Smith  
Mark Stuart  
Gary E. Tavetian  
Tanya M. Trujillo  
Micheal Yu  
Joseph A. Vanderhorst  
Mark Van Vlack  
Gerald R. Zimmerman

**CALL TO ORDER**

Chairman Fisher announced the presence of a quorum, called the meeting to order at 10:10 a.m. Chairman Fisher thanked Vice Chairman Knutson for officiating the October Board meeting.

## **OPPORTUNITY FOR THE PUBLIC TO ADDRESS THE BOARD**

Chairman Fisher asked if there was anyone in the audience who wanted to address the Board on items on the agenda or matters related to the Board. Hearing none, Chairman Fisher moved to the next agenda item.

### **ADMINISTRATION**

#### Approval of Minutes

Chairman Fisher requested the approval of the October 10<sup>th</sup> meeting minutes.

MOTION: Mr. Knutson moved the October 10<sup>th</sup> minutes be approved. Mr. Pettijohn seconded the motion. Unanimously carried, the Board approved the October 10<sup>th</sup> meeting minutes.

#### Proposed 2012 Board Meeting Schedule

Executive Director, Ms. Tanya M. Trujillo reported that included in the Board folder is the proposed 2013 calendar year Board meeting schedule. The proposed 2013 meeting schedule is expected to be voted on by the Board at its meeting in December.

### **PROTECTION OF EXISTING RIGHTS**

#### Colorado River Water Report

Mr. Harris reported that from October 1<sup>st</sup> to November 5<sup>th</sup>, precipitation in the Basin was about 55 percent of normal. The observed April through July unregulated flow into Lake Powell for 2012 was 2.06 million acre-feet (maf), or 29 percent of capacity. The observed 2012 water year unregulated flow into Lake Powell was 4.91 maf, or 45 percent of capacity.

Mr. Harris reported that as of October 31<sup>st</sup> the reservoir storage in Lake Powell was 13.71 maf, or 56 percent of capacity. The water surface elevation was 3,619.5 feet. The storage in Lake Mead was 13.26 maf, or 51 percent of capacity. Last year at this time, there was 38.53 maf of water in storage, or 65 percent of capacity. Total System storage was about five million acre-feet less than this time last year.

Mr. Harris reported that Reclamation's estimated consumptive use (CU) for the State of Nevada is projected to be under its entitlement of 300,000 acre-feet (256,000 acre-feet); and Arizona's, CU is projected to be slightly over its basic entitlement of 2.8 maf (2.809 maf); and California's CU is also projected to be slightly over its basic mainstream apportionment of 4.4 maf (4.409 maf). The total projected CU in the Lower Basin is expected to be approximately 7.475 maf.

## State and Local Water Reports

Mr. Stuart of the Department of Water Resources' (DWR) Southern District reported that the water year has not yet begun in California. Storage in Lake Oroville was about 1.8 maf, or 51 percent of capacity. Last year at this time, Lake Oroville stored about 2.9 maf. Storage in San Luis Reservoir, south of the Delta, is about 300,000 acre-feet, or about 28 percent of capacity. Total SWP storage was 2.81 maf or 51 percent of capacity. Table A allocation is currently set at 65 percent.

Ms. Jeanine Jones added that on November 15<sup>th</sup> and 16<sup>th</sup>, DWR is convening their annual winter outlook for the next water year. The panel of experts and researchers will convene to give their best estimate of the next winter season using the latest climate telemetry. Current forecast are 50/50 for a normal water year for 2013.

Mr. Wright, of The Metropolitan Water District of Southern California (MWD), reported that the Colorado River Aqueduct is still operating at one-pump capacity, allowing maintenance to be performed on the other pumps. As of November 1<sup>st</sup>, 2012, the storage in Diamond Valley Lake was about 733,300 acre-feet, or 91 percent of capacity. Storage in Lake Mathews was about 133,600 acre-feet, or 73 percent of capacity. Storage in Lake Skinner was 37,400 acre-feet, or 85 percent of capacity. Total storage of the three reservoirs was about 904,300 acre-feet or 87 percent of capacity. Total delivery to member agencies as of October 1<sup>st</sup>, was about 1.36 maf, or 85 percent of average (over the last ten years).

### Colorado River Operations

#### *Revised Schedule of Calendar Year 2012 Water Delivery to Mexico*

Ms. Trujillo reported that on October 16<sup>th</sup> Reclamation acknowledged Mexico's request to change its water delivery schedule for 2012. The total delivery will be 1,367,771 acre-feet in Calendar Year 2012, with deferred delivery of 132,229 acre feet, pursuant to Minute 318, to be delivered in subsequent years.

#### *Reclamation's Finalization of the Inadvertent Overrun and Payback Policy Procedures*

Ms. Trujillo reported that the Lower Basin States met with Reclamation regarding the latest version of the Inadvertent Overrun and Payback Policy (IOPP) Procedures. Reclamation has scheduled a meeting on November 20<sup>th</sup> to continue the discussion. Currently, Reclamation expects to finalize the IOPP Procedures by the end of 2012.

#### *Reclamation's Water SMART Program Funding Opportunities*

Ms. Trujillo reported that the Department of the Interior has issued its three-year progress report for the Water SMART program. Ms. Trujillo reported that Title XVI Project and Water Efficiency Grant funding opportunities are available. Applications for Title XVI Project funding are due December 12<sup>th</sup>, and Applications for Water Efficiency Grant are due January 17, 2013. Ms. Trujillo reported that since 2010, California has received funding of about \$2.3 million under the Water Efficiency Grant programs, to support projects totaling about ten million dollars. Under

the Advanced Water Treatment category, California has also received about \$2.3 million for projects totaling about \$17 million. Ms. Trujillo encouraged interested member agencies to apply for funds to support projects in their service areas.

### Colorado River Environmental and Water Quality Issues

#### *Glen Canyon Dam Proposed High Flow Experiment, November 18-25, 2012*

Ms. Trujillo reported that a High-Flow Experiment (HFE) release from Glen Canyon Dam is scheduled to begin on November 19<sup>th</sup>. The HFE release is estimated to redistribute between 500,000 and 700,000 metric tons of sediment accumulated in the Marble Canyon reach of the Colorado River below Glen Canyon Dam. Reclamation and the U.S. Geological Survey are planning to conduct studies during and following the HFE release to study the deposition and movement of sediment. The HFE will begin by ramping flows up to a peak flow, then decreasing until returning to the base flow. The HFE release is intended to increase the scientific understanding of the Colorado River and improve the management of the natural resources below Glen Canyon Dam. Data collected and analyzed will be utilized in the ongoing Glen Canyon Adaptive Management Program.

#### *Status of the Lower Colorado River Multi-Species Conservation Program*

Ms. Trujillo reported that Mr. Harris attended the Lower Colorado River Multi-Species Conservation Program (LCR MSCP) Steering Committee meeting that met in Las Vegas, Nevada on October 24<sup>th</sup>. The Steering Committee: 1) approved the Program's Fiscal Year 2013 budget of about \$34.5 million; 2) approved the Fiscal Year 2013 Work Plan; and 3) reviewed the draft Five-Year Research and Monitoring Report for the period 2013-2017.

The LCR MSCP also received accolades for the completion of three of the original Conservation Measure Tasks. The federal Fish and Wildlife Service signed off on these completed tasks. The completed LCR MSCP Conservation Measures included: 1) acquisition and protection of 240 acres of flat-tailed horned lizard habitat; 2) completion of riparian habitat monitoring for cottonwood/willow below Parker Dam associated with the 2001 Biological Opinion for Lower Colorado River operations; and 3) rerouting and construction of the Topock Marsh inlet canal and pump station project on Havasu National Wildlife Refuge. All three were significant achievements and were accomplished approximately five years ahead of the original schedule.

#### *Colorado River Basin Salinity Control Forum and Advisory Council Meetings*

Ms. Trujillo reported that she and Ms. Liu attended the Colorado River Basin Salinity Control Forum and Advisory Council meeting on November 7-9, in Phoenix, Arizona. The discussions included the status of the review of options for the Paradox Valley Salinity Control Unit. There is growing concern about the potential failure of the high-pressure deep-injection well at the Paradox Unit. The next Workgroup meeting is scheduled to be in February 11-13, 2013, in San Diego, California, and the next Forum and Council meetings are scheduled to be in May 16-17, 2013 in Grand Junction, Colorado, coinciding with celebrations associated with the completion of the Grand Valley salinity control project in the Upper Basin.

## *Update on the Moab Uranium Mill-Tailings Removal Project*

Ms. Trujillo reported that Ms. Lindia Liu provided an update through the Board materials on the Moab Uranium Mill-Tailings Removal Project. About 36 percent, or 5.6 million tons, of the estimated total of 16 million tons of radioactive mill-tailings have been removed and relocated. The final repository site for the material is about 30 miles north of Moab, near Crescent Junction, Utah. The completion of the removal project is scheduled to occur between 2025 and 2029, with a total cost of approximately \$1.0 billion.

### Basin States Discussions

Ms. Trujillo reported that the Board would be going into Executive Session to discuss the status of the Minute 319 negotiations with Mexico. She also reported that the Colorado River Basin Water Supply and Demand Study Report is expected to be completed by late-November, and that final reviews of the documents were being conducted. The Basin States are currently preparing a document outlining potential “Next Steps” to address the projected water supply and demand imbalances described in the Basin Study Report.

Chairman Fisher called the meeting into Executive Session at 10:40 a.m.

Chairman Fisher reconvened the meeting at 11:30 a.m. Chairman Fisher reported that the Board discussed the status of the negotiations with Mexico relative to the conclusion of Minute 319, and the necessary domestic documents associated with Minute No. 319.

Chairman Fisher asked for a motion to approve the Resolution of the Colorado River Board of California regarding Minute No. 319 to the 1944 Mexico Treaty.

MOTION: Upon the motion of Mr. Knutson, seconded by Mr. Kuiper, and unanimously carried, the Board approved the Resolution of the Colorado River Board of California and Minute No. 319 to the 1944 Mexico Treaty.

Chairman Fisher asked the Board to approve a Memorandum of Agreement associated with the implementation of Minute No. 319.

MOTION: Upon the motion of Mr. Kuiper, seconded by Mr. Knutson, and unanimously carried, the Board approved the Memorandum of Agreement on the Implementation of Minute No. 319.

### **OTHER BUSINESS**

Mr. Knutson reported that Mr. James Bond, who has served as an alternate on the Board for more than ten years, is retiring and that this would be his last meeting. Mr. Dave Fogerson, who has attended the Board meetings on behalf of the San Diego County Water Authority (SDCWA), is also retiring and that this is his last Board meeting as well. The Board and the audience recognized the service of the gentlemen from SDCWA.

## Next Board Meeting

Chairman Fisher announced that the next meeting of the Colorado River Board will be held on Wednesday, December 12, 2012, at 3:00 p.m., at Caesars Palace Hotel, Las Vegas, Nevada, in conjunction with the annual conference of Colorado River Water Users Association.

There being no further items to be brought before the Board, Chairman Fisher asked for a motion to adjourn. Mr. Knutson moved the Board meeting be adjourned. Mr. Kuiper seconded the motion. With unanimous approval, the Board meeting was adjourned at 11:35 a.m. on November 14, 2012.

Tanya M. Trujillo  
Executive Director

DRAFT

3.b. – 2013 Colorado River Board Meeting Schedule

COLORADO RIVER BOARD OF CALIFORNIA  
Calendar Year 2013 Meetings

December 12, 2012

Board Meeting Date

Other Meetings and Events

January 9	January 1: New Year's Day Holiday January 3-4: NWRA Leadership Forum, Monte Carlo, Las Vegas, NV January 21: Martin Luther King Jr. Day Holiday
February 13	February 18: President's Day Holiday February 20-22: UWII Spring Water Conference, Hilton Palm Springs, Palm Springs, CA February 26-28: ACWA 2013 Washington D.C. Conference, The Washington Court Hotel, Washington, D.C.
March 13	
April 10	April 1: Cesar Chavez Day Holiday April 9-11: CMUA 81st Annual Conference, Loews, Coronado Bay Hotel, San Diego, CA April 14-16: NWRA Federal Water Issues Conference, The Washington Court Hotel, Washington, D.C.
May 15	May 7-10: ACWA 2013 Spring Conference, Sacramento Convention Center & Surrounding Hotels, CA May 27: Memorial Day Holiday
June 12	
July 10	July 4: Independence Day Holiday July 29-31: NWRA Western Water Seminar, Skamania Lodge, Stevenson, WA
August 14	August 14-16: UWII 20th Annual Urban Water Conference, Hilton Mission Bay Resort, San Diego, CA
September 11	September 2: Labor Day Holiday
October 9	
November 13	November 11: Veteran's Day Holiday November 13-15: NWRA 82nd Annual Conference, Crowne Plaza Riverwalk, San Antonio, TX November 28-29: Thanksgiving Day Holiday
December 11 (Special Meeting in conjunction with CRWUA Conference)	December 3-6: ACWA 2013 Fall Conference, JW Marriott Hotel at L.A. Live, Los Angeles, CA December 11-13: CRWUA 68th Annual Conference, Caesars Palace, Las Vegas, Nevada December 25: Christmas Day Holiday

2013

<p>JANUARY</p> <table border="1"> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td></td><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> <tr><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td></tr> <tr><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td></tr> <tr><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td></tr> <tr><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td><td></td><td></td></tr> </table>	S	M	T	W	T	F	S			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			<p>FEBRUARY</p> <table border="1"> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td></td><td></td><td></td><td></td><td>1</td><td>2</td><td></td></tr> <tr><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td></tr> <tr><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td></td><td></td></tr> </table>	S	M	T	W	T	F	S					1	2		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28			<p>MARCH</p> <table border="1"> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td></td><td></td><td></td><td></td><td>1</td><td>2</td><td></td></tr> <tr><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td></tr> <tr><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr> <tr><td>31</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	S	M	T	W	T	F	S					1	2		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31							<p>APRIL</p> <table border="1"> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td></td><td></td><td></td><td></td><td>1</td><td>2</td><td>3</td></tr> <tr><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td></tr> <tr><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td></td></tr> </table>	S	M	T	W	T	F	S					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		<p>MAY</p> <table border="1"> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td></td><td></td><td></td><td></td><td>1</td><td>2</td><td>3</td></tr> <tr><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr> <tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td></tr> <tr><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td></tr> <tr><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td></tr> </table>	S	M	T	W	T	F	S					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	<p>JUNE</p> <table border="1"> <tr><td>S</td><td>M</td><td>T</td><td>W</td><td>T</td><td>F</td><td>S</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td></tr> <tr><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr> </table>	S	M	T	W	T	F	S						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
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ACWA - Association of California Water Agencies	(916) 441-4545	FAX (916) 325-4849
CMUA - California Municipal Utilities Association	(916) 326-5800	FAX (916) 326-5810
CRWUA - Colorado River Water Users Association	(760) 398-2651	FAX (760) 398-3711
NWRA - National Water Resources Association	(703) 524-1544	FAX (703) 524-1548
UWII - Urban Water Institute, Inc.	(949) 679-9676	FAX (949) 305-9919

**NOTE:** Regular Meetings are held on Wednesday following the second Tuesday in the month. Unless otherwise noted, Regular Meetings will be held in Ontario area, California, or in the Board's office, 770 Fairmont Avenue, Conference Room, Glendale, California, and will start at 10:00 a.m.

3.c. – Resolution Commemorating the Colorado River Board’s 75<sup>th</sup> Anniversary

DRAFT

**RESOLUTION  
OF THE  
COLORADO RIVER BOARD OF CALIFORNIA  
TO COMMEMORATE ITS 75<sup>th</sup> ANNIVERSARY**

**December 12, 2012**

WHEREAS, the Colorado River Board of California (“Board”) is created by, and operates under, California Water Code sections 12500, *et seq.*

WHEREAS, the California Water Code charges the Board and its officers with the duty to confer with representatives of other States in the Colorado River Basin, representatives of the United States, and others concerning problems and measures relating to the development of the Colorado River Basin, the use of the water of the Colorado River System, and the protection of the interests therein of the State, and to negotiate and make recommendations respecting such problems and measures.

WHEREAS, the Board was established by the California Legislature in 1937, thus marking 2012 as the 75<sup>th</sup> anniversary of the Board. During the past 75 years, the Board has continued to protect California’s ability to efficiently utilize its full apportionment of water from the Colorado River for the benefit of agricultural, municipal and industrial uses and the environment.

WHEREAS, over the past 75-years through interstate and international negotiations, working with U.S. Congress, the courts, the State Legislature, and various federal and state agencies and departments, the Board has represented the interests of municipal, agricultural, hydroelectric and various other sectors of the economy in Southern California who rely on water from the Colorado River.

WHEREAS, the Board has continued to recognize the value and benefits of working with the other Colorado River Basin States, Native American Tribes, other stakeholders and the Federal Government to strive for the maximum benefits within the region and to protect and enhance the benefits that California, its agencies, and citizens receive from the water and hydroelectric power resources from the Colorado River.

WHEREAS, the Board has participated in the successful negotiations in framing the “Law-of-the River,” obtaining Congressional authorizations and appropriations that promote economic security for the State; in participating in the development of criteria, rules, procedures, policy and guidelines for management of Colorado River System water, operation of the Colorado River reservoirs and the delivery of Colorado River water under surplus, normal and shortage conditions within the Lower Basin; in addressing environmental and endangered species issues along the mainstream of the Colorado River in the Lower Basin to provide security to California’s water supplies and

the environment and to provide additional economic benefits to the region through increased recreational opportunities and tourism; and in building partnerships for joint ventures with the other Colorado River Basin states, among entities in those states, with federal agencies and departments, and with the Republic of Mexico.

WHEREAS, the past 75 years have resulted in many accomplishments within the Colorado River Basin that have benefited not only California, but also the other six Colorado River Basin states and the Republic of Mexico.

NOW, THEREFORE, the Board commemorates its 75<sup>th</sup> anniversary and acknowledges the hard work, dedication and service of its present and past Board members and staff.

BE IT FURTHER RESOLVED, the Board challenges itself, and future Board members and the staff to build upon the past 75 years and make the next 75 years even more significant to California, its agencies, and citizens, who rely on the Colorado River for water supplies, hydroelectric power, recreation, and economic security.

BE IT FURTHER RESOLVED, that a copy of this Resolution shall be delivered to the Governor of the State of California and the Secretary of the California Natural Resources Agency.

THE FOREGOING RESOLUTION is approved and adopted by the Colorado River Board, this 12<sup>th</sup> day of December 2012.

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Dana B. Fisher, Jr., Chairman

Attest:

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W. D. "Bill" Knutson

4.a. – Colorado River Water Report

**SUMMARY WATER REPORT  
COLORADO RIVER BASIN  
December 1, 2012**

	October 31, 2012					
	MAF	ELEV. IN FEET	% of Capacity	MAF	ELEV. IN FEET	% of Capacity
<b>RESERVOIR STORAGE</b> (as of November 30)						
<b>Lake Powell</b>	13.251	3,615.1	<b>54</b>	13.706	3,619.5	<b>56</b>
<b>Flaming Gorge</b>	3.023	6,021.2	<b>81</b>	3.020	6,021.2	<b>81</b>
<b>Navajo</b>	0.970	6,026.1	<b>57</b>	0.986	6,027.8	<b>58</b>
<b>Lake Mead</b>	13.334	1,117.2	<b>52</b>	13.263	1,116.5	<b>51</b>
<b>Lake Mohave</b>	1.507	635.8	<b>83</b>	1.377	630.8	<b>76</b>
<b>Lake Havasu</b>	0.581	448.1	<b>94</b>	0.606	449.3	<b>98</b>
<b>Total System Storage</b>	<b>33.336</b>		<b>55</b>	<b>33.643</b>		<b>56</b>
<b>System Storage Last Year</b>	<b>38.469</b>		<b>63</b>	<b>38.527</b>		<b>65</b>

			November 5, 2012	
WY 2013 Precipitation (Basin Weighted Avg) 10/01/12 through 12/03/12		<b>63 percent (3.5")</b>		<b>55 percent (1.5")</b>
WY 2013 Snowpack Water Equivalent (Basin Weighted Avg) on day of 12/03/12 (Above two values based on average of data from 116 sites.)		<b>61 percent (2.2")</b>		<b>N/A(N/A)</b>
				<b>November 1, 2012</b>
November 19, 2012 Forecast of Unregulated Lake Powell Inflow	MAF	% of Normal	MAF	% of Avg.
2012 April through July unregulated inflow observed	2.063	<b>29 %</b>	2.063	<b>29%</b>
2012 Water Year observed	4.908	<b>45 %</b>	4.908	<b>45%</b>

	USBR Forecasted Year-End 2012 and 2011 Consum. Use, December 3, 2012 a.			
			MAF	
			<u>2012</u>	<u>2011</u>
		Diversion - Return =	Net	
Nevada (Estimated Total)		0.451	0.207	0.244
Arizona (Total)		3.685	0.889	2.796
CAP Total				1.615
<i>Az. Water Banking Authority</i>				0.134
OTHERS				1.181
California (Total) b./		5.070	0.636	4.434
MWD				0.732
3.85 Agriculture				0.699
IID c./	<u>Total</u>	<u>Conserved</u>		<u>Forecasted</u>
CVWD d./	3.208	-0.304		2.904
PVID	0.361	-0.031		0.330
YPRD	0.372	0		0.372
Island e./	0.050	0		0.050
Total Ag.	0.007	0		0.007
Others	3.998	-0.335		3.663
PVID-MWD following to storage (to be determined)				0.039
<b>Arizona, California, and Nevada Total f./</b>			<b>9.206</b>	<b>1.732</b>
			<b>7.474</b>	<b>7.321</b>

- a./ Incorporates Jan.-Oct. USGS monthly data and 75 daily reporting stations which may be revised after provisions data reports are distributed by USGS. Use to date estimated for users reporting monthly and annually.
- b./ California 2012 basic use apportionment of 4.4 MAF has been adjusted to 4.175 MAF for creation of Intentionally Created Surplus Water by IID (-25,000 AF), and Creation of Extraordinary Conservation (ICS) by MWD (-200,000 AF).
- c./ In 2012, 0.104 MAF being conserved by IID-MWD Agreement as amended in 2007: 112,500 AF being conserved for SDCWA under the IID-SDCWA Transfer Agreement as amended, 90,000 AF of which is being diverted by MWD; 21,000 AF being conserved for CVWD under the IID-CVWD Acquisition Agreement, 67,700 AF being conserved by the All American Canal Lining Project.
- d./ In 2012, 30,850 AF conserved by the Coachella Canal Lining Project(may be ammended by 4,850 AF for mitigation).
- e./ Includes estimated amount of 6,660 acre-feet of disputed uses by Yuma Island pumpers and 98 acre-feet by Yuma Project Ranch 5 being charged by USBR to Priority 2.
- f./ Includes unmeasured returns based on estimated consumptive use/diversion ratios by user from studies provided by Arizona Dept. of Water Resources, Colorado River Board of California, and Reclamation.

Figure 1. Total Colorado River Basin Storage as of December 2012

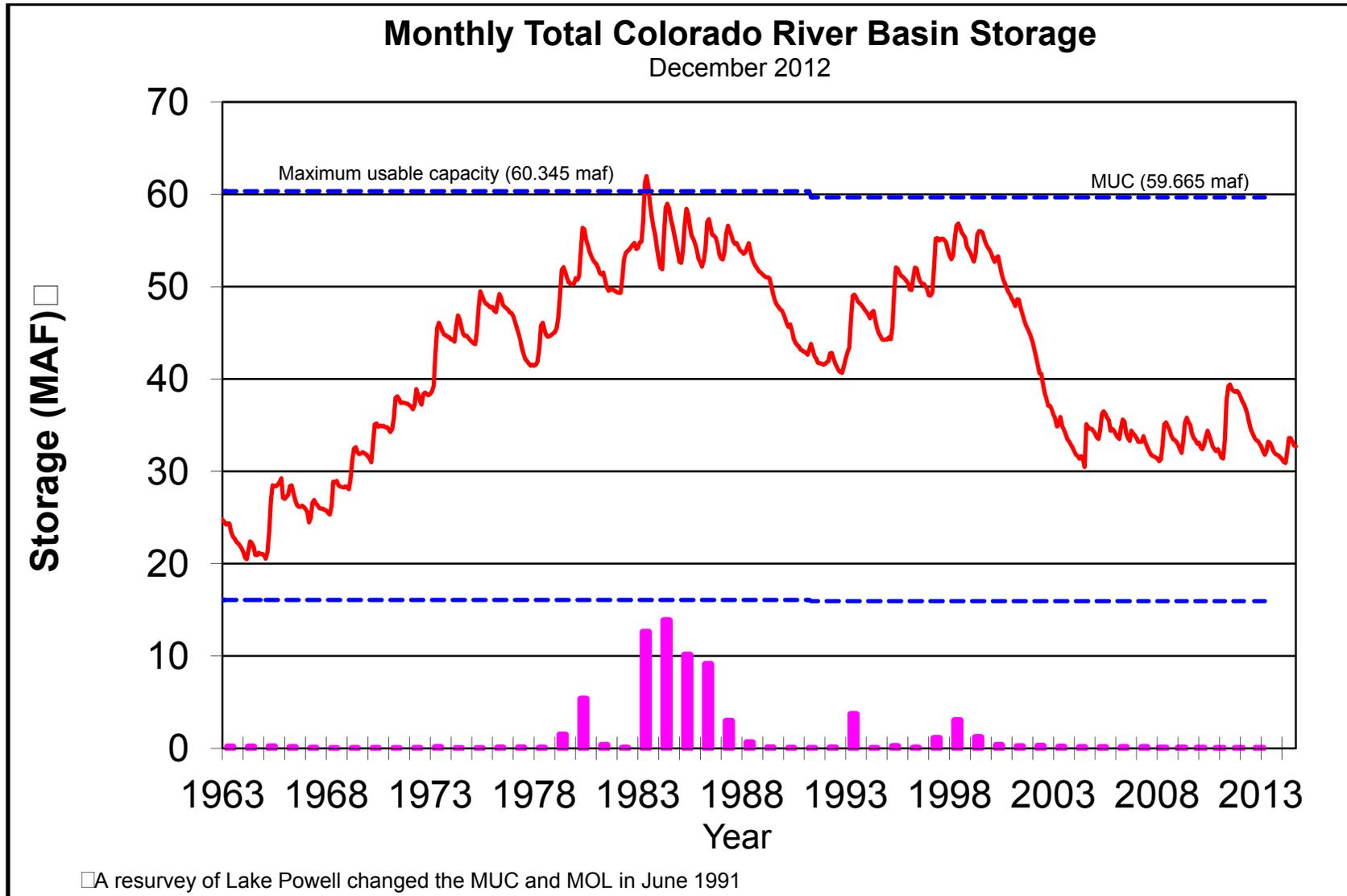


Figure 2. Lakes Powell and Mead Monthly Pool Elevation Levels

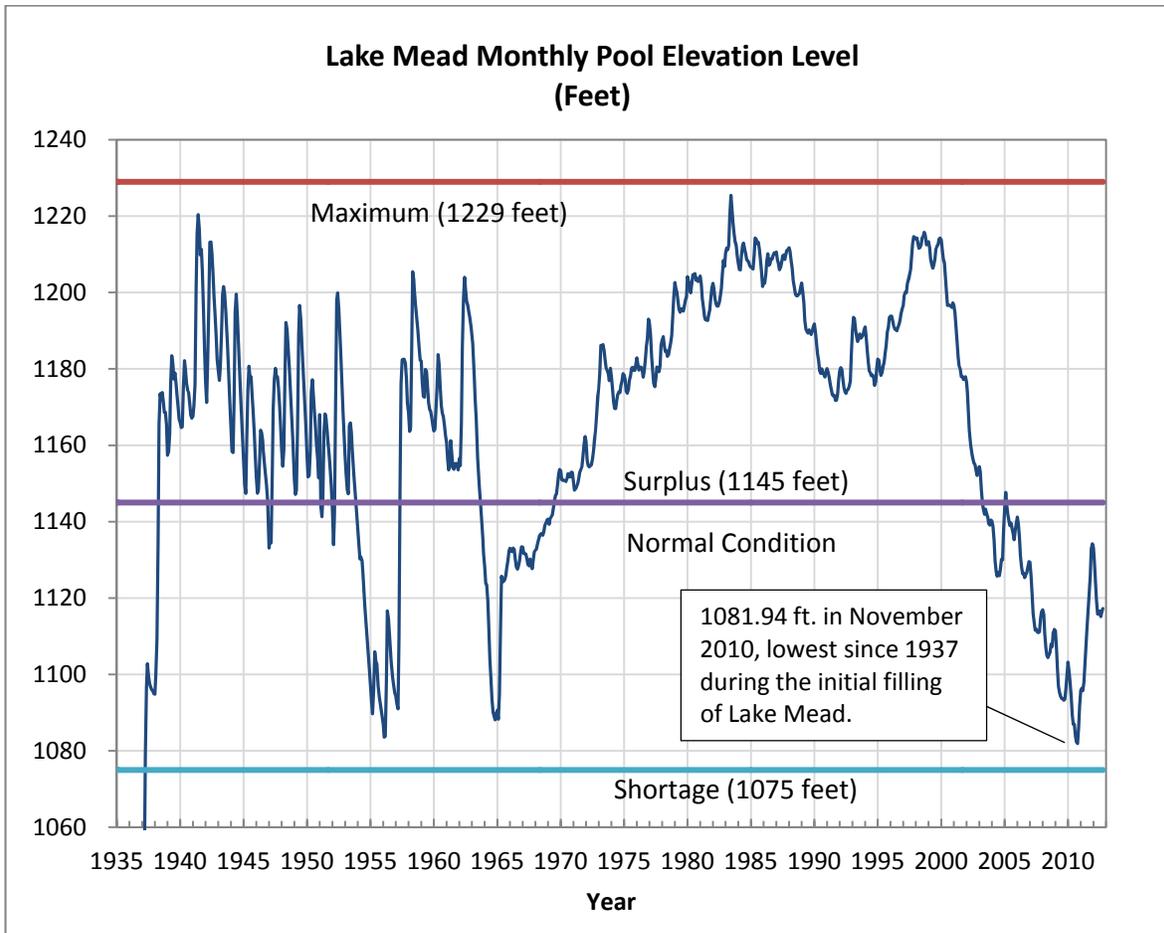
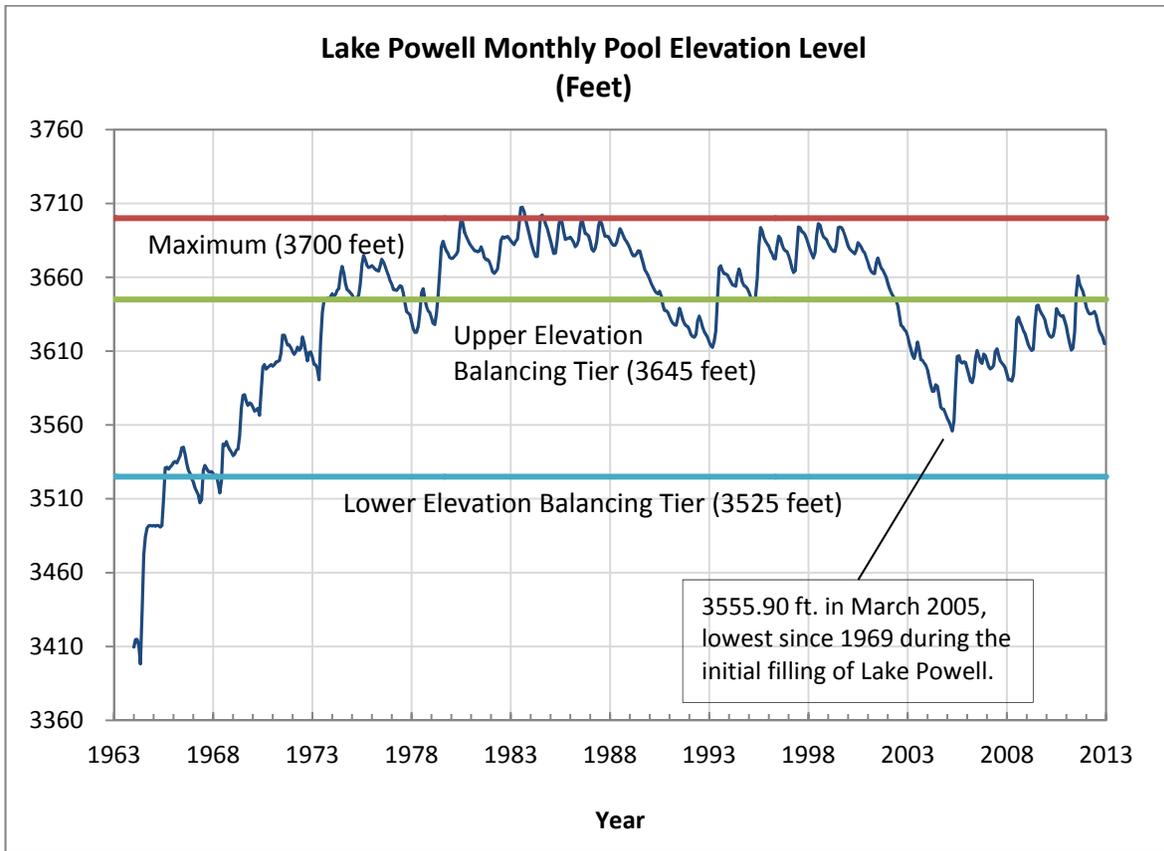


Figure 4. Westside SNOTEL basin snow water equivalent (SWE) as a percent of average

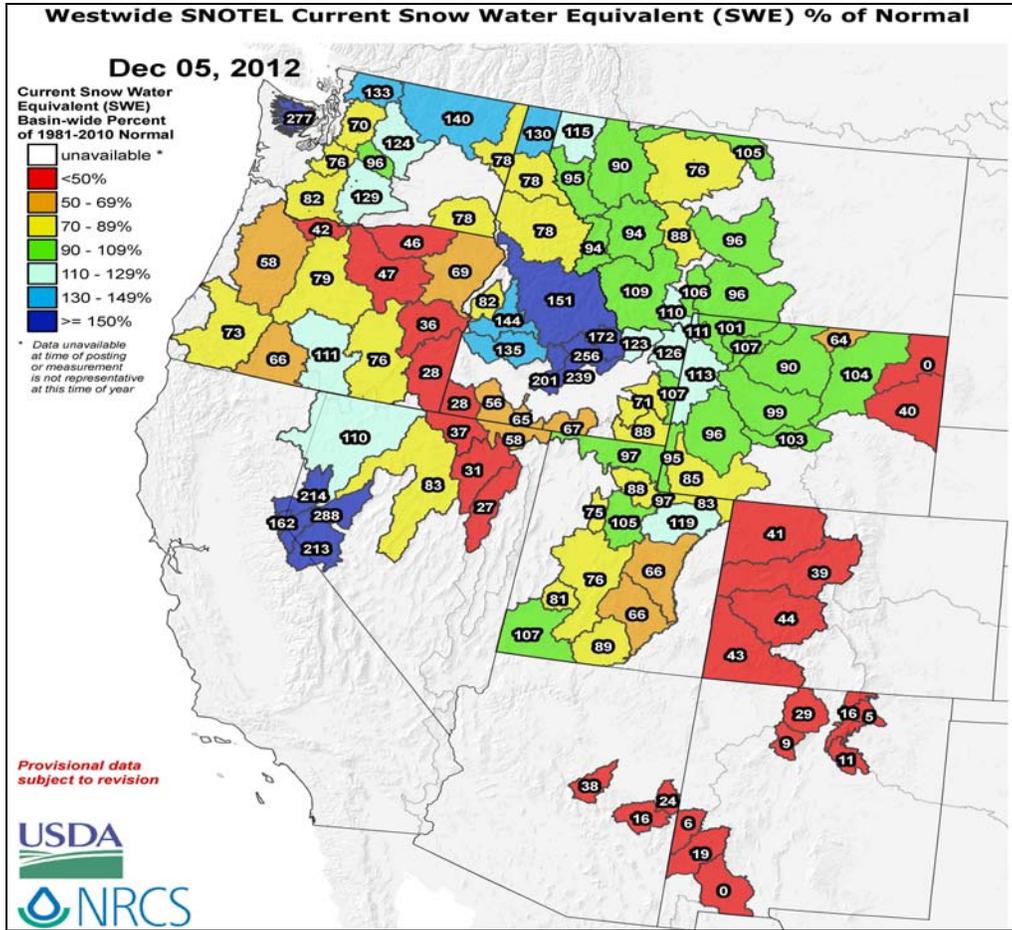


Figure 5. SNOTEL Water-Year-To-Date (WYTD) SWE for the CO headwaters basin

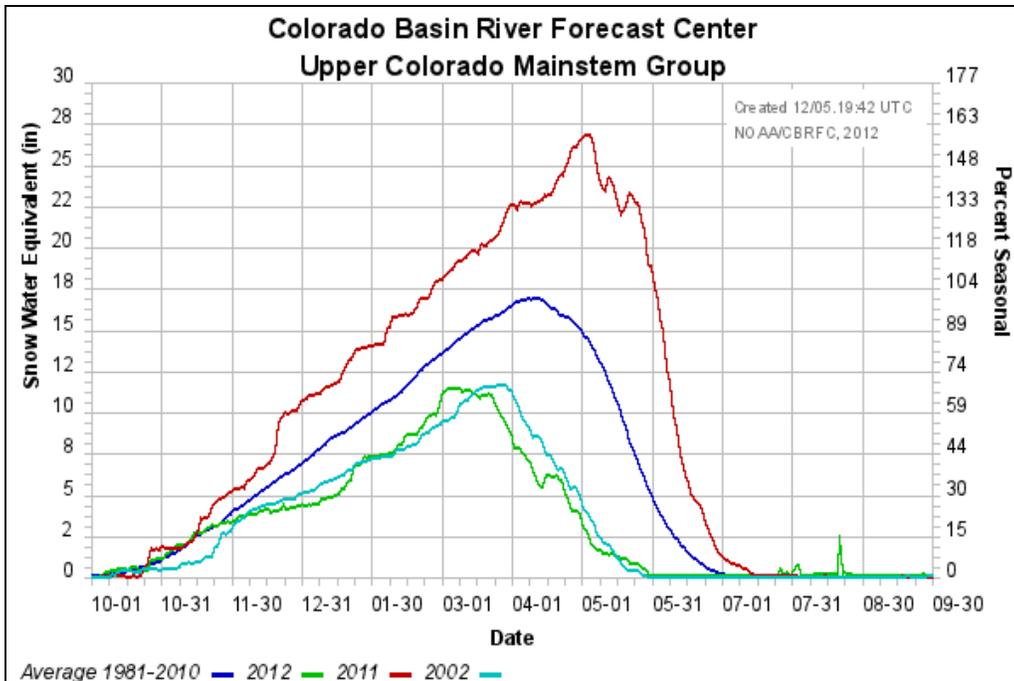


Figure 3. NOAA National Weather Service Monthly Precipitation Maps for October and November 2012

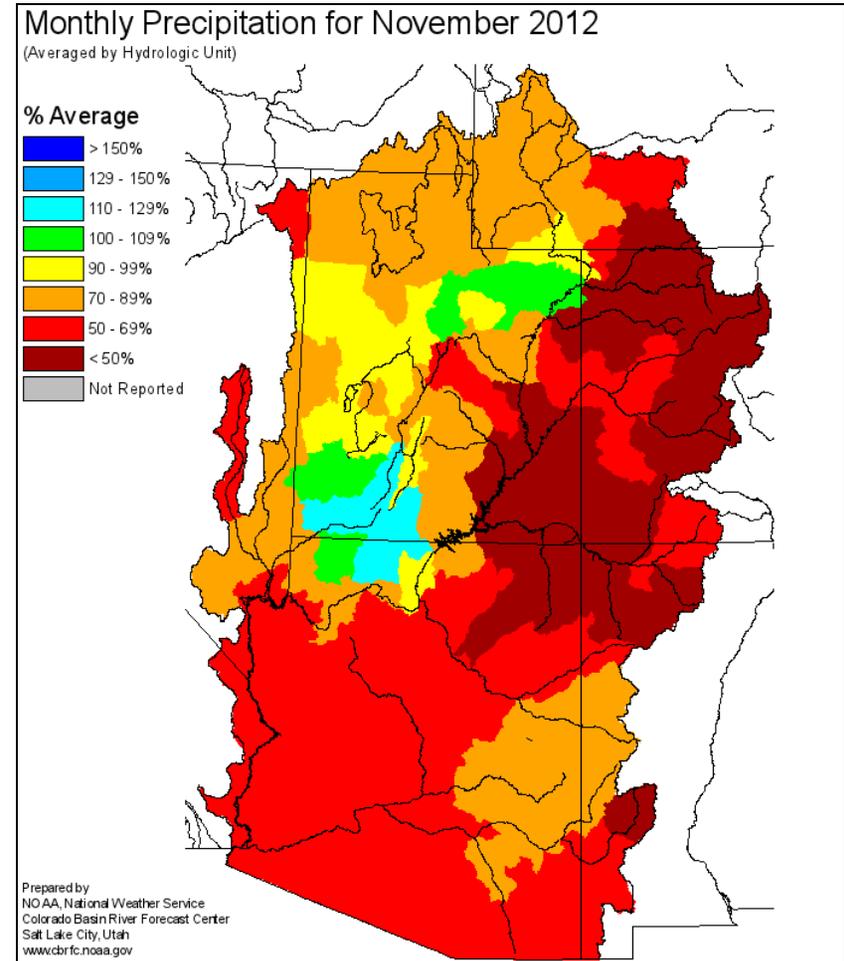
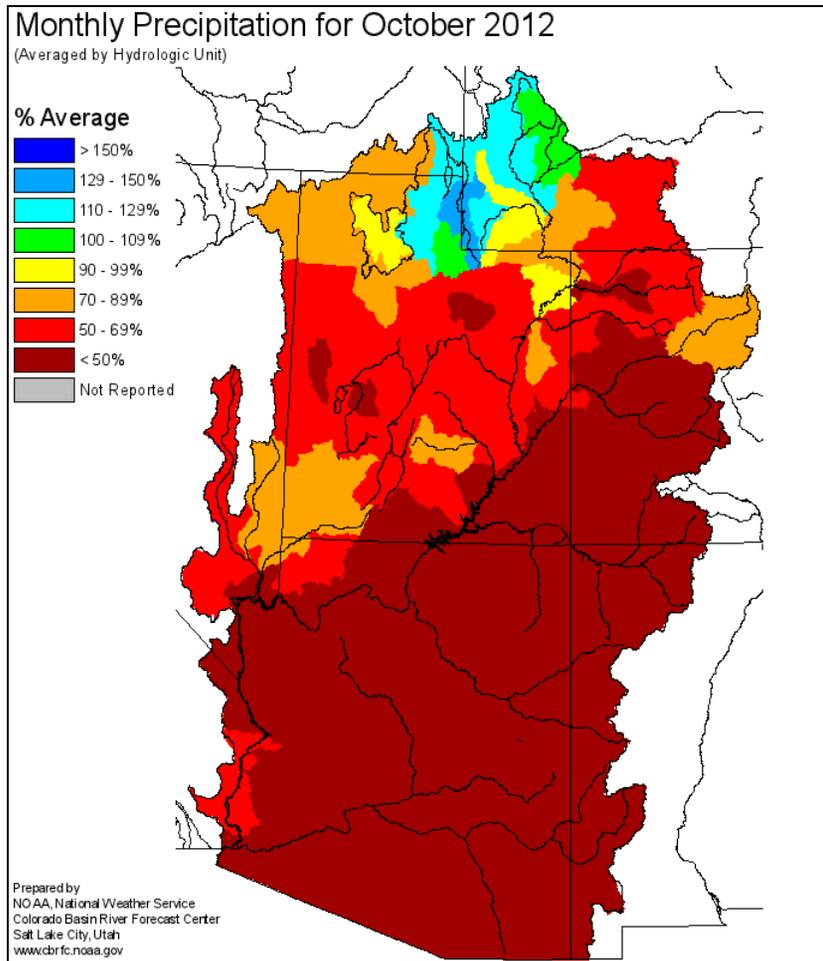
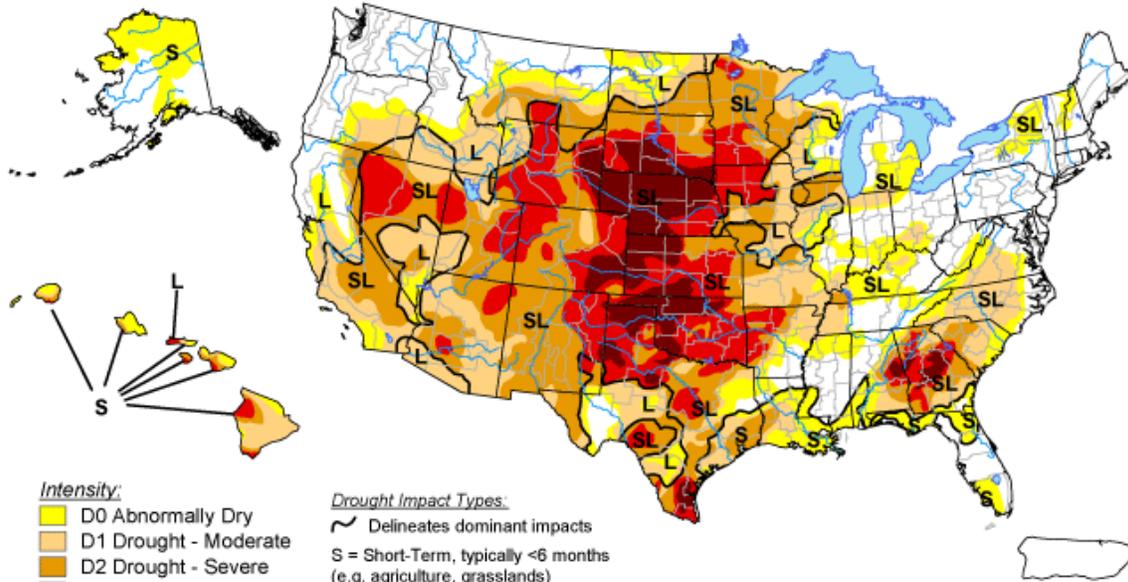


Figure 6. USDA United States Drought Monitor Map

# U.S. Drought Monitor

December 4, 2012  
Valid 7 a.m. EST



**Intensity:**

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

**Drought Impact Types:**

- Delineates dominant impacts
- S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months (e.g. hydrology, ecology)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu/>



Released Thursday, December 6, 2012  
Author: Rich Tinker, NOAA/NWS/NCEP/CPC

# U.S. Drought Monitor

## West

December 4, 2012  
Valid 7 a.m. EST

Drought Conditions (Percent Area)

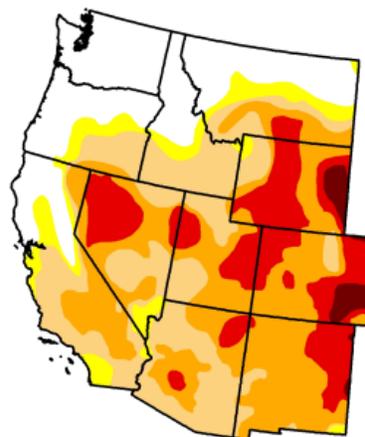
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	22.41	77.59	70.26	46.06	17.85	2.12
Last Week (11/27/2012 map)	18.70	81.30	72.70	46.27	17.45	2.03
3 Months Ago (09/04/2012 map)	15.09	84.91	76.86	46.33	17.26	1.49
Start of Calendar Year (12/27/2011 map)	48.49	51.51	20.05	12.22	2.67	0.78
Start of Water Year (09/25/2012 map)	15.12	84.88	77.15	43.65	16.85	1.77
One Year Ago (11/29/2011 map)	72.29	27.71	18.55	14.99	9.48	1.96

**Intensity:**

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

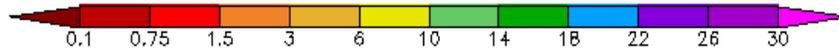
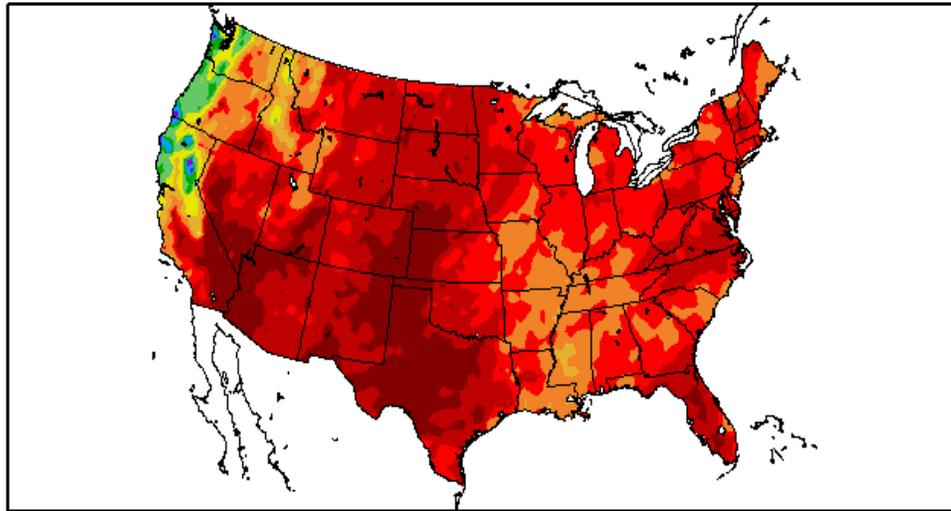
<http://droughtmonitor.unl.edu/>



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Richard Tinker, NOAA/CPC

Figure 7. Current Climate Summary Maps – Powered by Applied Climate Information System (ACIS)

Precipitation (in)  
11/5/2012 – 12/4/2012



Generated 12/5/2012 at HPRCC using provisional data.

Regional Climate Centers

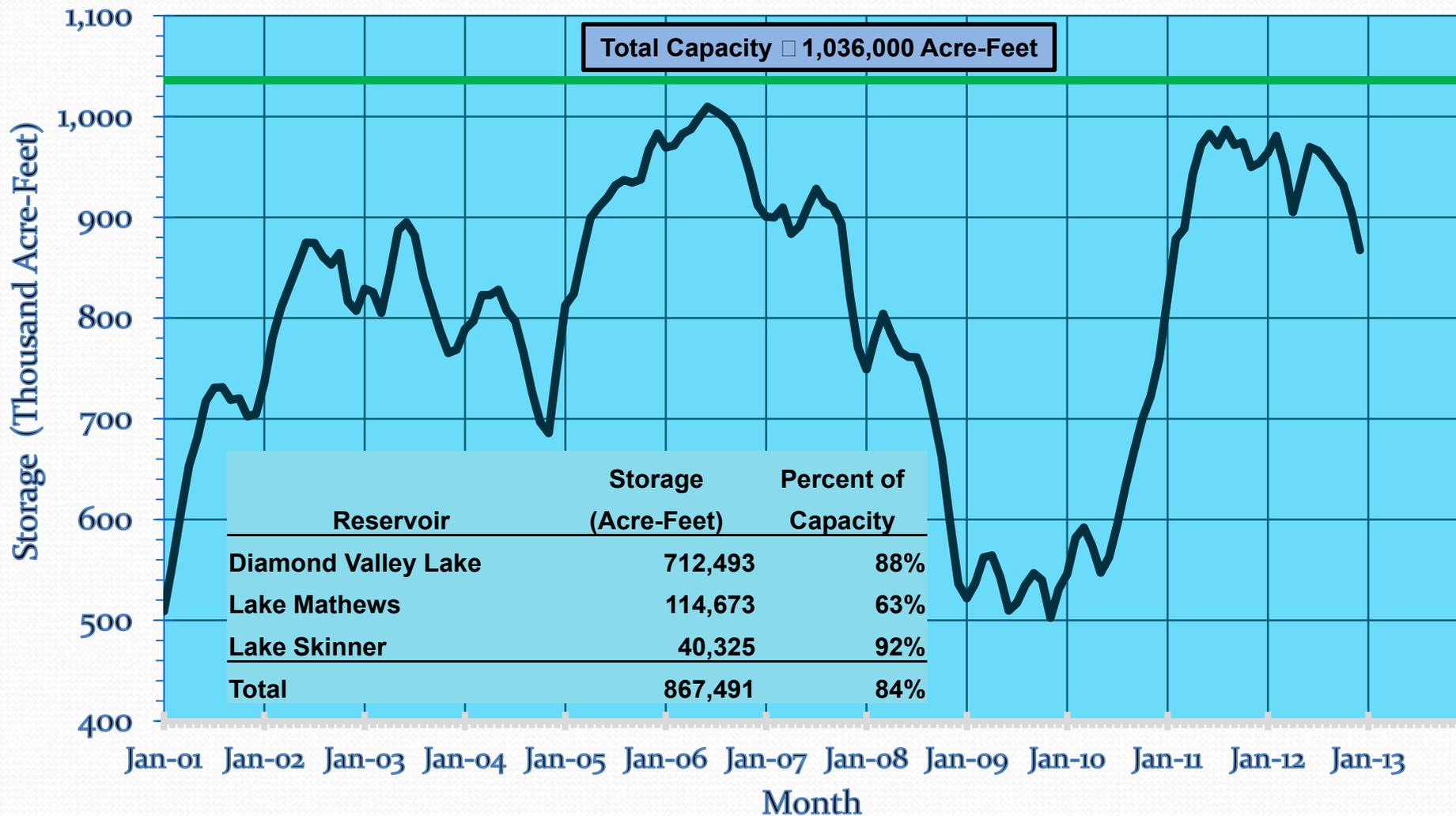
The Current Climate Summary Maps are produced daily using data from the [Applied Climate Information System \(ACIS\)](#). Stations used are from the National Weather Service Cooperative Observer Network (COOP), and the Automated Weather Data Network (AWDN). All near-real-time data are considered preliminary and should be used responsibly.

Normal refers to the 1981-2010 Climate Normal for the selected product.

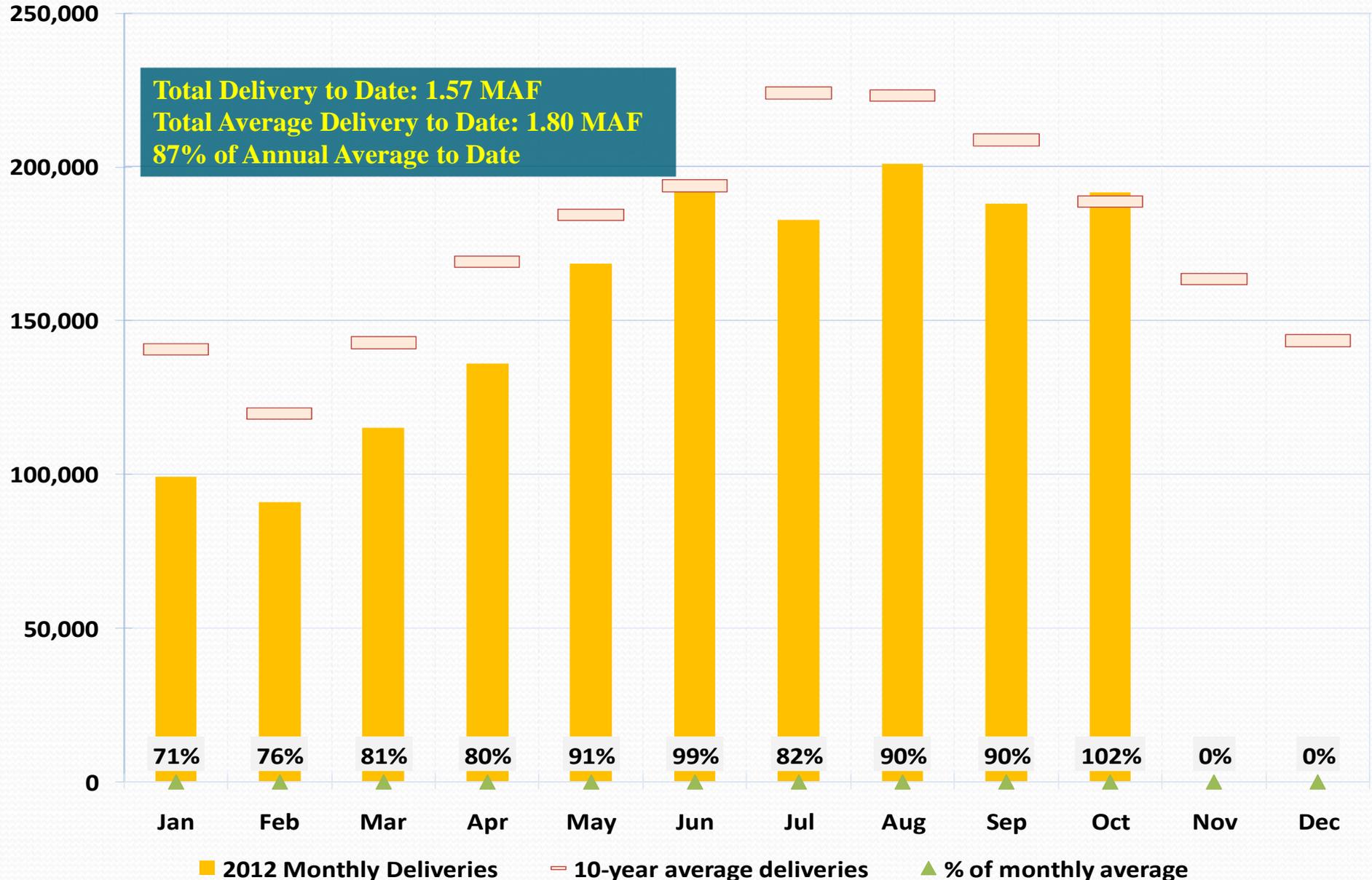
4.b. – State and Local Water Reports

# MWD's Combined Reservoir Storage as of December 1, 2012

## Lake Skinner, Lake Mathews, and Diamond Valley Lake

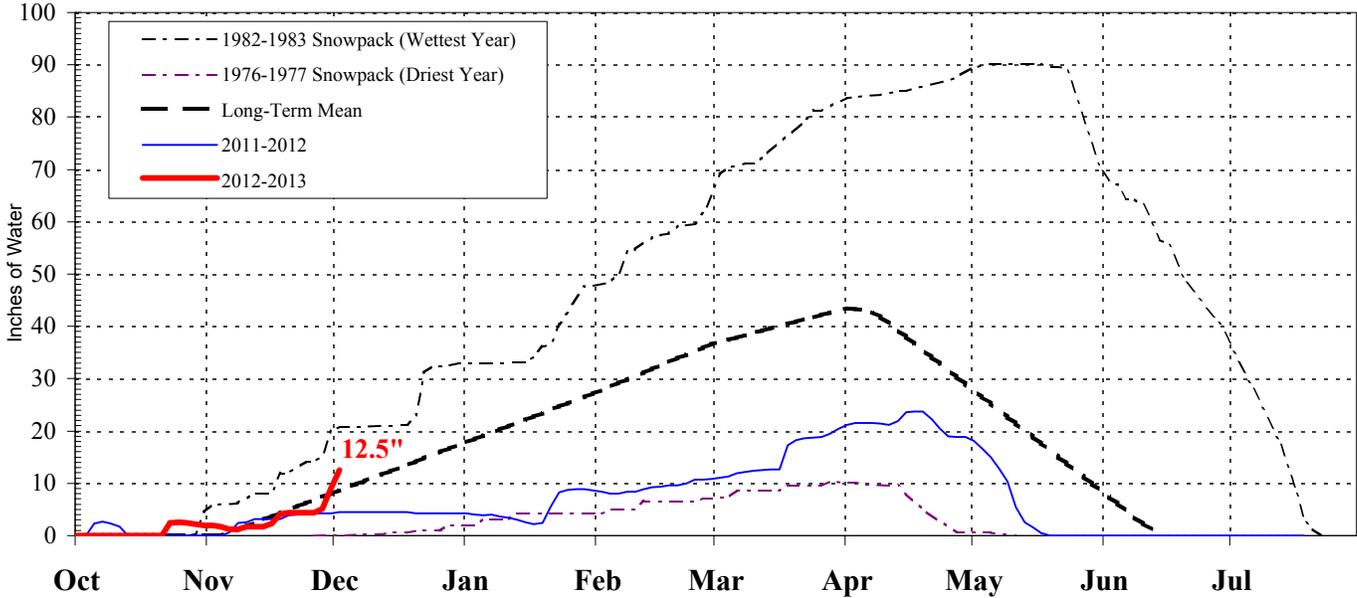


# 2012 Water Deliveries to Member Agencies (AF)

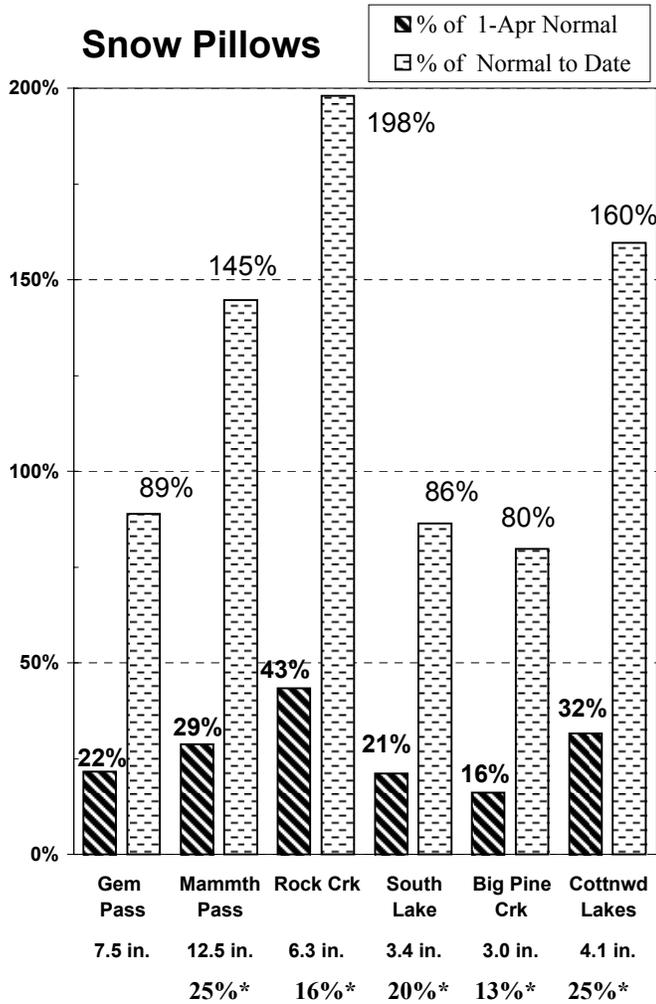


# EASTERN SIERRA CURRENT PRECIPITATION CONDITIONS As of December 3, 2012

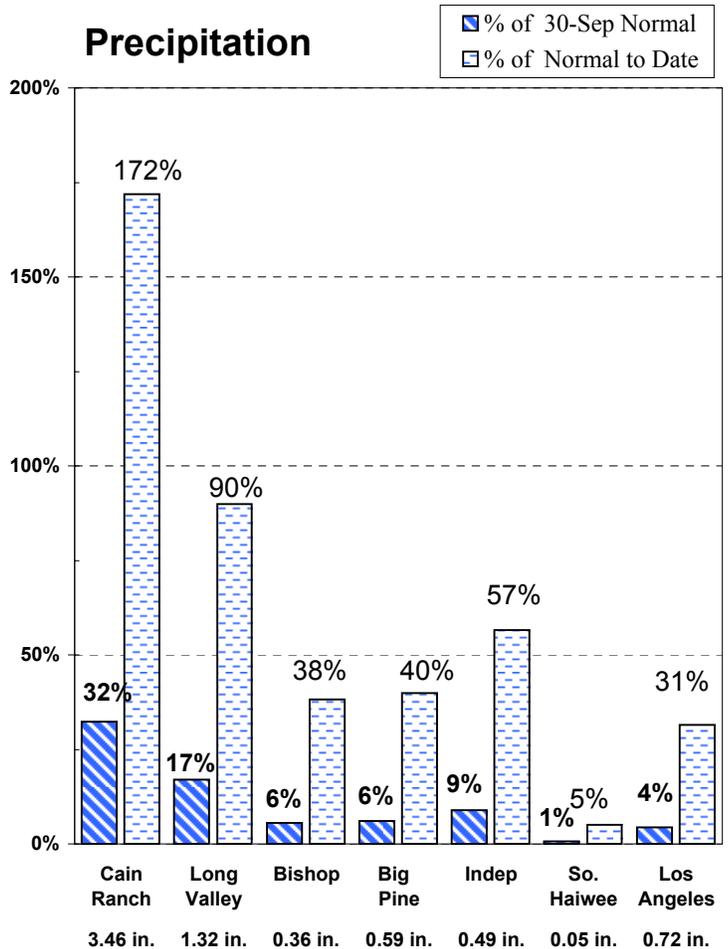
## Mammoth Pass Snowpack



## Snow Pillows



## Precipitation



\* Individual snow pillow represents an area that contributes this percent of the total Owens River Basin runoff.

Measurement as Inches Water Content; Precipitation totals are cumulative for water year beginning Oct 1

4.c. – Colorado River Environmental Issues



represents a significant milestone in our collective ability to be nimble and responsive to on-the-ground conditions for the benefit of downstream resources.”

HFE releases simulate natural flood conditions that suspend and redeposit sand stored in the river channel to provide key wildlife habitat—including habitat for the endangered humpback chub, protect archaeological sites, enhance riparian vegetation, maintain or increase recreation opportunities, and improve the wilderness experience along the Colorado River in Glen and Grand canyons. Single experimental releases were conducted in 1996, 2004, and 2008, and included extensive scientific research, monitoring, and data collection by the U.S. Geological Survey’s Grand Canyon Monitoring and Research Center, the Bureau of Reclamation, the National Park Service, and the U.S Fish and Wildlife Service.

“These high-flow releases, a new paradigm in water management, recognize that there are hugely beneficial impacts to river ecology from releasing the requisite water needed downstream in large pulses, rather than uniformly throughout the year,” said USGS Director Marcia McNutt. “In the arid West, non-uniform flow better mimics the natural environment in which the plants and animals flourished.”

This scientific process will continue and the knowledge gained from today’s experimental high flow will be used to make further refinements in determining the optimal timing, duration, frequency, and conditions for future releases as well as to inform other management actions on the river.

“As the 1992 Grand Canyon Protection Act emphasizes, the resources of the Grand Canyon are fragile, and conservation of those resources can only be achieved through wise management by today’s leaders,” said National Park Service Director Jonathan B. Jarvis. “Today’s event marks the beginning of the next generation of wisdom for managing this special place. We have only one Grand Canyon. We want to thank the Secretary for his leadership and conservation of this special place now and into the future.”

The protocol represents one of two important milestones in the history of the Colorado River. The second, a program to control non-native fish species, provides a framework for actions and research to protect native endangered fish in the river downstream of the dam. The finalization of both efforts involved extensive government-to-government consultation with Native American tribes to ensure implementation of the programs in a manner that respects tribal perspectives.

“The Bureau of Indian Affairs supports the cooperating tribes’ active involvement in the Glen Canyon Dam Adaptive Management Program,” said Assistant Secretary for Indian Affairs Kevin Washburn. “Many of their insights were incorporated into the process leading to the HFE event. Their strong connections to the Grand Canyon, including their cultural, historic and religious ties, give them a unique perspective on this national treasure. I want to thank the tribes for their long stewardship and their full participation in this important effort to conserve and protect the Colorado River ecosystem.”

The additional water released as part of the HFE is part of the annual water delivery to the Lake Mead. “The volume of water we are releasing during this high flow experiment does not change the overall volume of water delivery in the 2013 water year,” said Reclamation Commissioner Michael L. Connor. “The current operations plan based on forecast data calls for releasing 8.23 million acre-feet of water from the dam to meet delivery obligations to the Lower Colorado River Basin and Mexico. The experimental flows are included in that total annual volume and will be offset by adjustments to the monthly release volumes throughout the rest of the water year.”

“This new protocol developed by Reclamation will protect both the Grand Canyon and the delivery of water for communities, agriculture and industry,” Salazar noted. “We are taking a practical approach. If, for any reason, the new high-flow experiments do not yield the positive results we anticipate, we have the ability to change and adjust future flows.”

In addition to the opportunities for HFE releases made possible under the protocol, Secretary Salazar has initiated the first comprehensive analysis of Glen Canyon Dam operations since 1996. The Glen Canyon Dam Long-Term Experimental and Management Plan Environmental Impact Statement will build on information obtained through the Adaptive Management Program and activities conducted under the protocol to analyze a broad scope of dam operations and other related activities. The goal is to determine specific alternatives that could be implemented to improve and protect downstream resources while adhering to applicable laws. Reclamation and the National Park Service are jointly developing the LTEMP EIS, which will ultimately integrate and further refine actions conducted under the protocol.

###

## Glen Canyon Dam 2012 High Flow Experimental Release

With the new science-based protocol in place for conducting more frequent high flow experimental releases from Glen Canyon Dam, the Department of the Interior will initiate the first such release based on the new guidelines beginning November 18, 2012.

The protocol allows for more frequent HFE releases to be conducted when the right conditions exist, through the year 2020. The goal is to determine the effectiveness of multiple HFE releases in rebuilding and conserving sandbars, beaches, and associated backwater habitats that have been lost or depleted since the dam's construction and operation.



Water being released from Glen Canyon Dam river outlet tubes during 2012 High Flow Experiment

### Featured Information

- VIDEO PODCASTS:
  1. ["2012 Canyon Dam Experimental High Flow Event"](#)
  2. ["Experimental High Flows Part of Adaptively Managing Glen Canyon Dam"](#) - featuring Anne Castle, Assistant Secretary of the Interior for Water and Science
- [Frequently Asked Questions](#)
- [Downstream Flow Arrival Timing Map](#)
- [National Park Service HFE & Campsite Bulletin](#)

### Related Information

- [Fact Sheet](#) - "High Flow Releases at Glen Canyon Dam"
- [Environmental Assessment](#) - Protocol for High-flow Experimental Releases from Glen Canyon Dam through 2020
- [Glen Canyon Dam Adaptive Management Program](#) web site

**From: USGS Grand Canyon Monitoring & Research Center**

- [2008 High-Flow Experiment](#) web site
- [Circular 1366](#) - "Three Experimental High Flow Releases...Effects on Downstream River Ecosystem"
- [Fact Sheet](#) - "Three Experimental High Flow Releases...Effects on Downstream Colorado River Ecosystem"
- [Fact Sheet](#) - "2008 High Flow Experiment... Benefits Colorado River Resources in Grand Canyon National Park"
- [Fact Sheet](#) - "Sediment Transport During Three Controlled Flood Experiments..."

### **2012 High Flow Experiment Snapshot**

#### Schedule & Duration

- Nov. 18 - began upramp to powerplant capacity
- Nov. 19 - bypass tubes opened at 12:00 p.m. - Nov. 23 at 7:00 p.m.
- Total duration: 5 days; 1 day at peak release

#### Ramp Rates

- Ramp up: 1,500 cfs/hr from 9,000 - 42,300 cfs
- Ramp down: 200 cfs/hr from 42,300 cfs to 31,300 cfs
- Ramp down: 1000 cfs/hr from 31,300 cfs to 27,300 cfs
- Ramp down: 1,500 cfs/hr from 27,300 cfs

#### HFE Release Details

- Maximum total release: 42,300 cfs
  - Powerplant capacity: 27,300 cfs
  - River outlet tubes: 15,000 cfs
- Hydropower generation units: 8
- River outlet tubes: 4

#### Releases and Lake Elevation

- Releases will range from 7,000 - 9,000 cfs prior to and after the HFE
- Lake elevation is projected to decrease by 2.5 feet

## **Media Resources**

- [New s Release - 11/19/12](#)
- [Media Advisory - 11/08/12 "Experimental Release from Glen Canyon Dam to Benefit Grand Canyon"](#)
- [B-roll video footage from 2012 HFE](#)
- [B-roll video footage from 2008 HFE](#)
- [Photos from 2012 HFE](#)
- [Photos from 2008 HFE](#)

Last updated: December 4, 2012

4.e. – Basin States Discussions



- Promoting the ecological health of the Colorado River Delta.

Signed by all parties today, Minute 319 becomes effective immediately. Many of the projects and programs outlined in the agreement will be implemented through the U.S. Department of the Interior's Bureau of Reclamation, Lower Colorado Region. The Lower Colorado Region manages the final 688 miles of the Colorado River on behalf of the Secretary of the Interior.

###