

Colorado River Board of California



**Monthly Meeting:
March 14, 2012**

Public Comment



Administration

- **Approval of Meeting Minutes**
 - **February 15th Minutes (Action)**
- **Statement of Economic Interest**
 - **FPPC Form 700 due by April 7th**

Protection of Existing Rights

**Hoover Dam , Boulder Canyon,
and Lower Lake Mead National
Recreation Area**



Colorado River Water Report



Lake Powell and Glen
Canyon National
Recreation Area

Tab 2

Basin Hydrology WY-2011 (10/01/11–3/05/12)

Precipitation

(Weighted Average 10/01/11 through 3/05/12)

Current Prev. Mo.

89% 82%

Snowpack Water Equivalent

(Weighted Average as of 3/05/12)

81% 68%

Unregulated Inflow into Lake Powell

2012 Apr-Jul Forecast

MAF

5.300

% of Avg.

74%

2012 WY Forecast

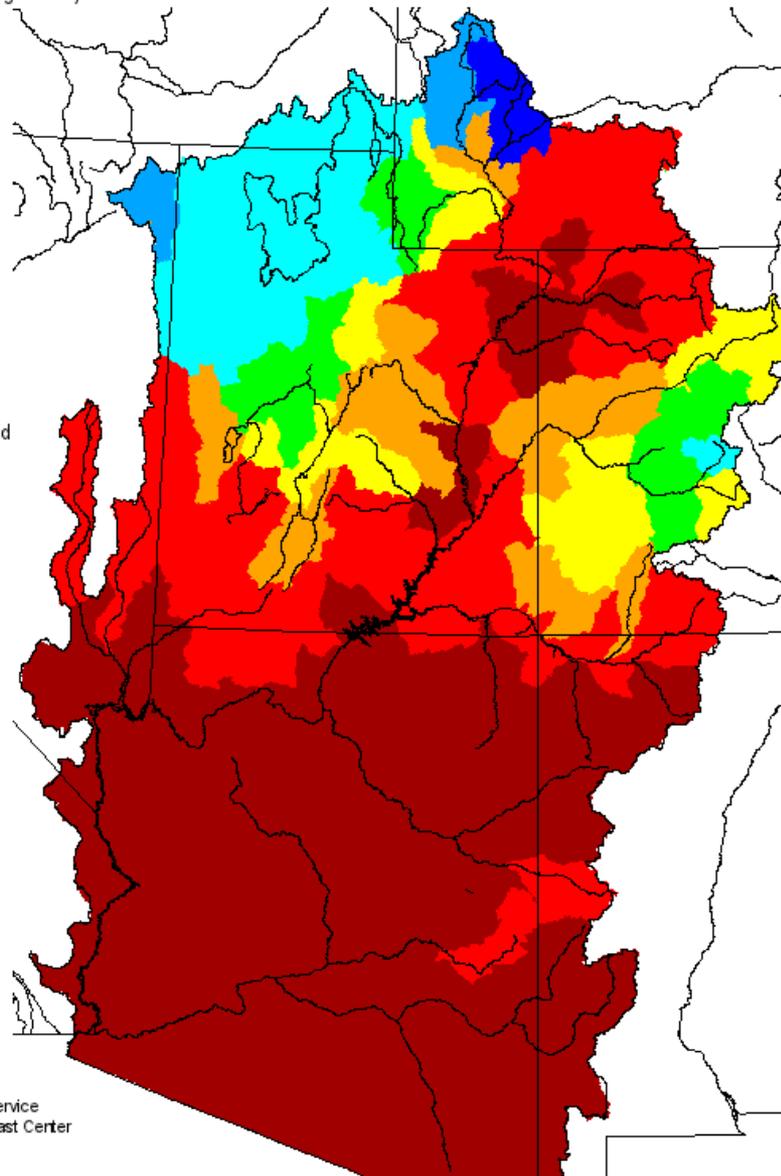
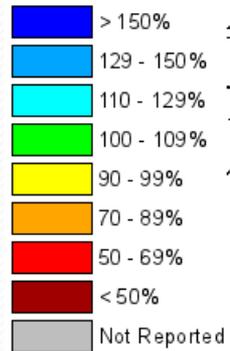
8.687

80%

Monthly Precipitation for January 2012

(Averaged by Hydrologic Unit)

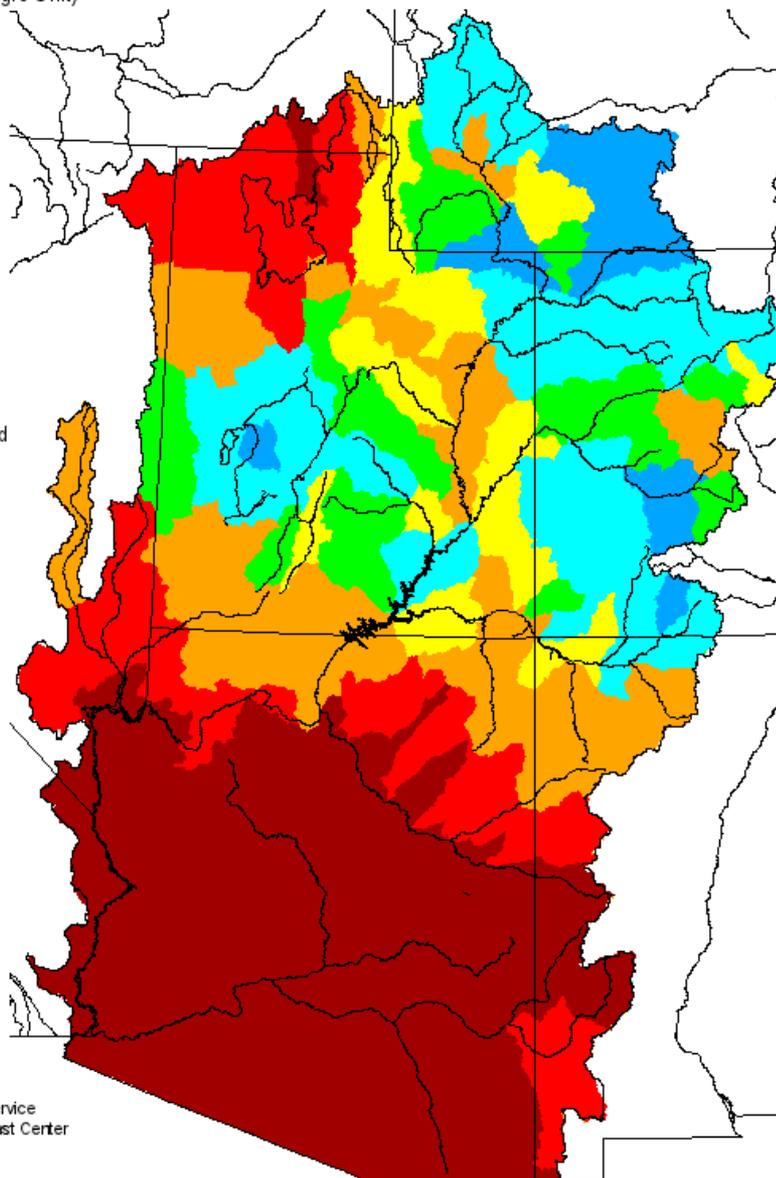
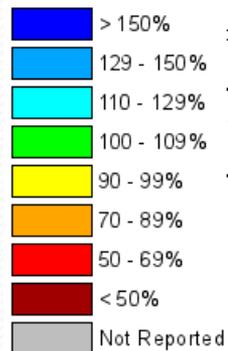
% Average



Monthly Precipitation for February 2012

(Averaged by Hydrologic Unit)

% Average



Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbrfc.noaa.gov

Reservoir Storage

(As of March 4, 2012)

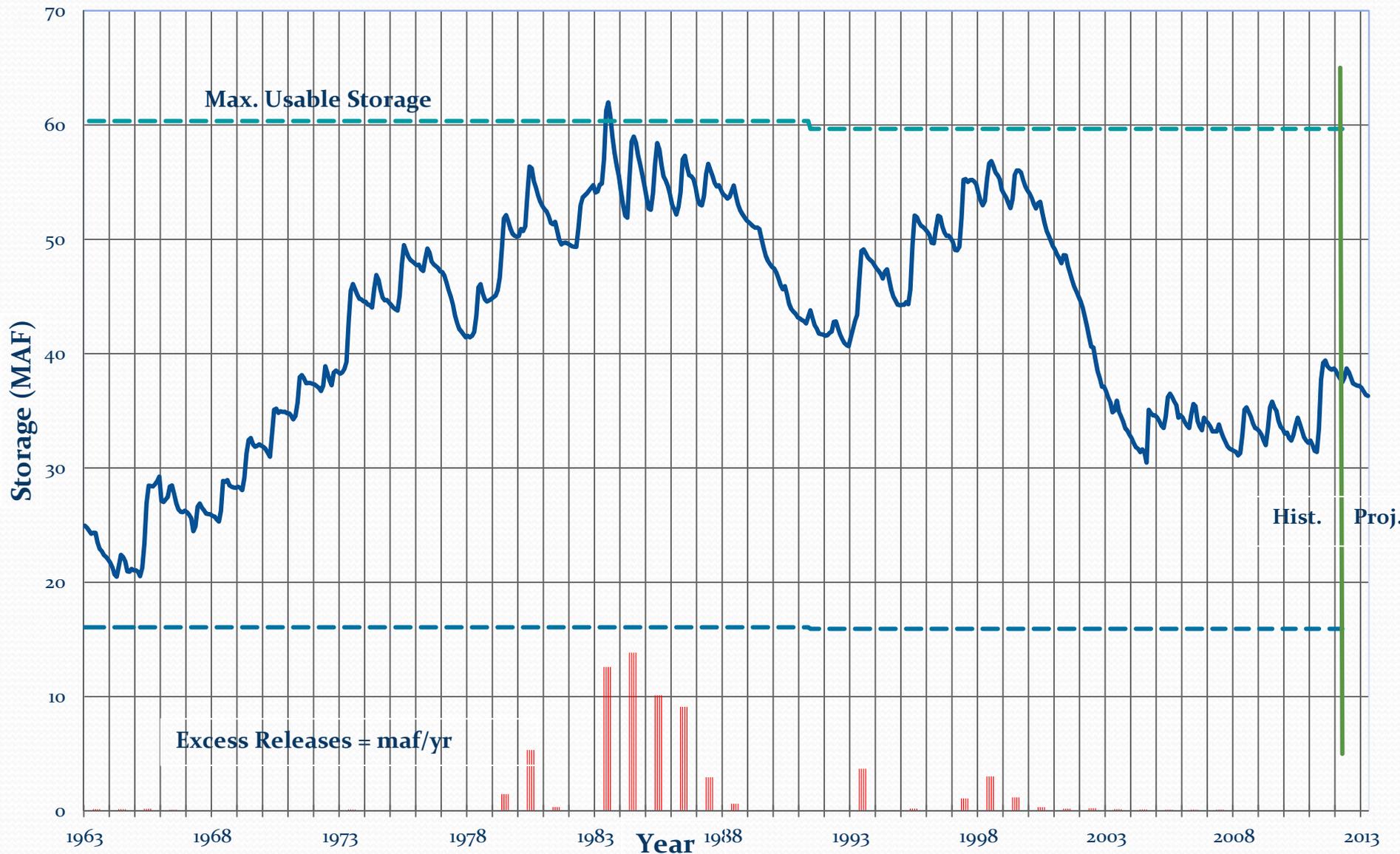
<u>Reservoir</u>	<u>MAF</u>	<u>Elev. In Feet</u>	<u>% of Capacity</u>
Lake Powell	15.44	3,635.2	64
Lake Mead	14.89	1,132.9	58
Total Sys. Storage	37.88	-	63
Sys. Storage Last Yr.	31.79	-	53

2012 Consumptive Use (USBR Estimate)

(Millions of Acre-Feet)

	<u>2012</u>	<u>2011</u>
Nevada (Total)	0.281	0.221
Arizona (Total)	2.841	2.785
California (Total)	<u>4.268</u>	<u>4.315</u>
Total LDS Use	7.389	7.321

Colorado River Basin Storage – March 2012



State & Local Water Reports



Parker Dam and Lake Havasu

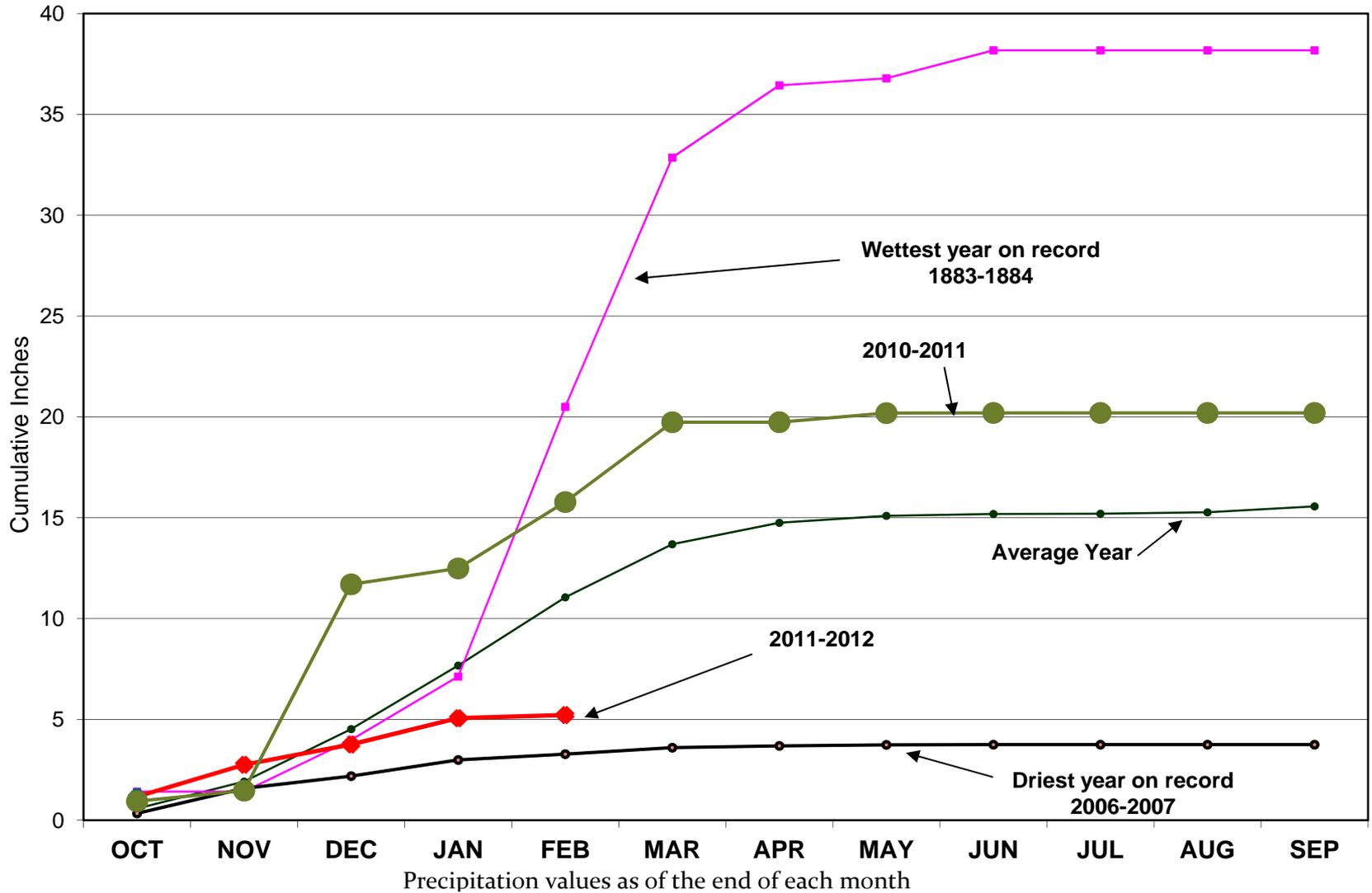
California Department of Water Resources Water Report – as of March 1, 2012



Mark Stuart, District Chief
California DWR
Southern District

Los Angeles Civic Center Precipitation

Data Used from 1877 to Present



Precipitation at Six Major Stations in Southern California

From October 1, 2011 to March 1, 2012

Station	Precipitation in Inches		Normal to Date	Percent of Normal
	Jan	Precipitation Oct 1 to Mar 1		
San Luis Obispo	0.48	6.65	16.59	40%
Santa Barbara	0.08	6.02	13.27	45%
Los Angeles	0.16	5.22	10.30	51%
San Diego	0.63	3.62	6.95	52%
Blythe	0.00	0.92	1.73	53%
Imperial	0.17	0.61	1.70	36%

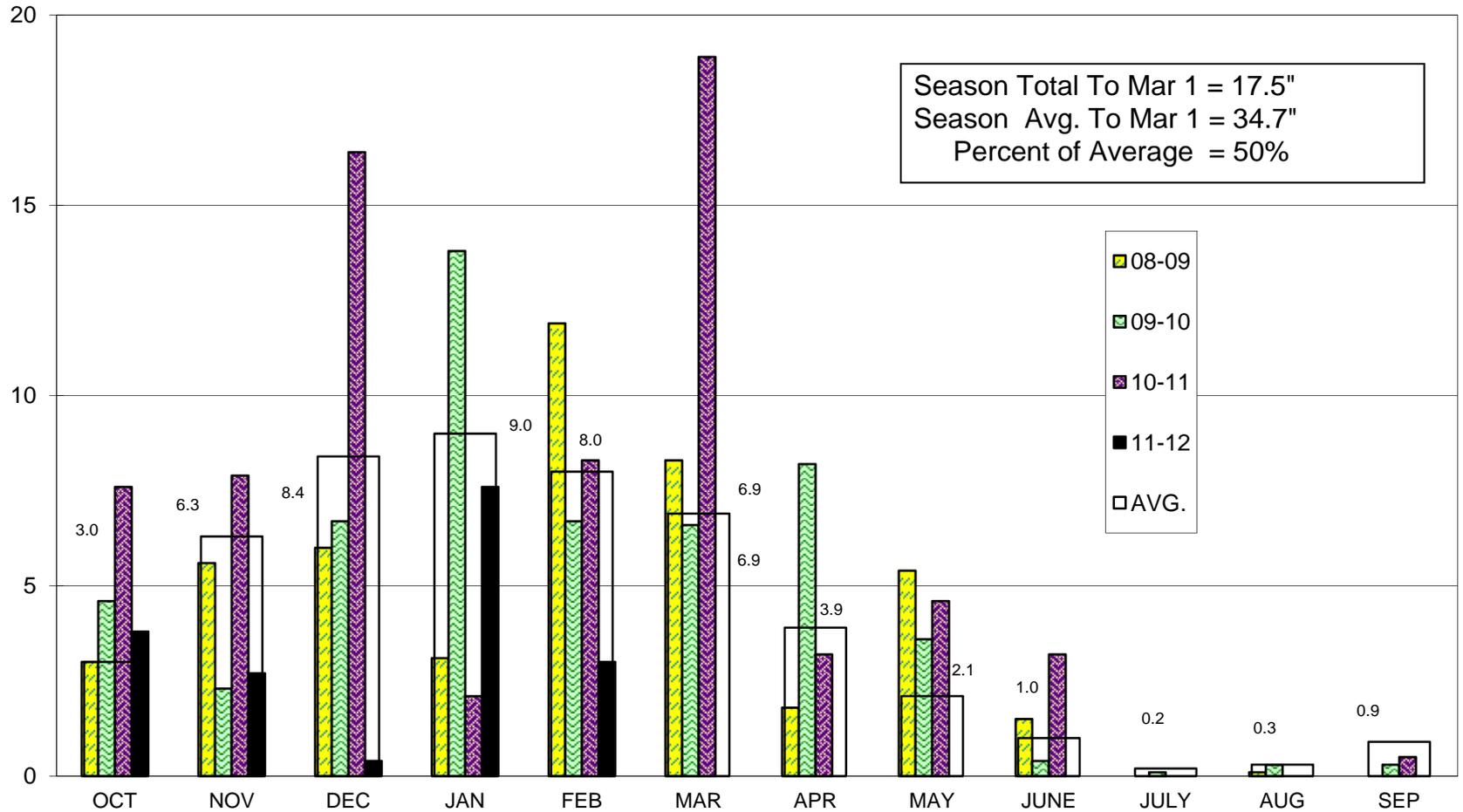
Statewide Summary of Water-Year Data

Water Year	Precipitation (233 Stations) % of avg.	Runoff (31 Rivers) % of avg.	Res. Storage (155 Reservoirs) % of avg.	Sacto. Riv. Run-off * (MAF)
2007-08	75	35	80	10.2
2008-09	80	65	80	12.9
2009-10	110	90	105	15.9
2010-11	135	145	130	15.1
<u>Comparison of Water Year Data as of Mar 1</u>				
2010-11	125	100	110	7.7
2011-12	55	35	105	3.0

* The Sacramento River Run-off is the sum of the unimpaired water year flow from the Sacramento River above Bend Bridge near Red Bluff, Feather River inflow to Oroville, Yuba River at Smartville, and American River inflow to Folsom. The average annual run-off is 18.4 MAF.

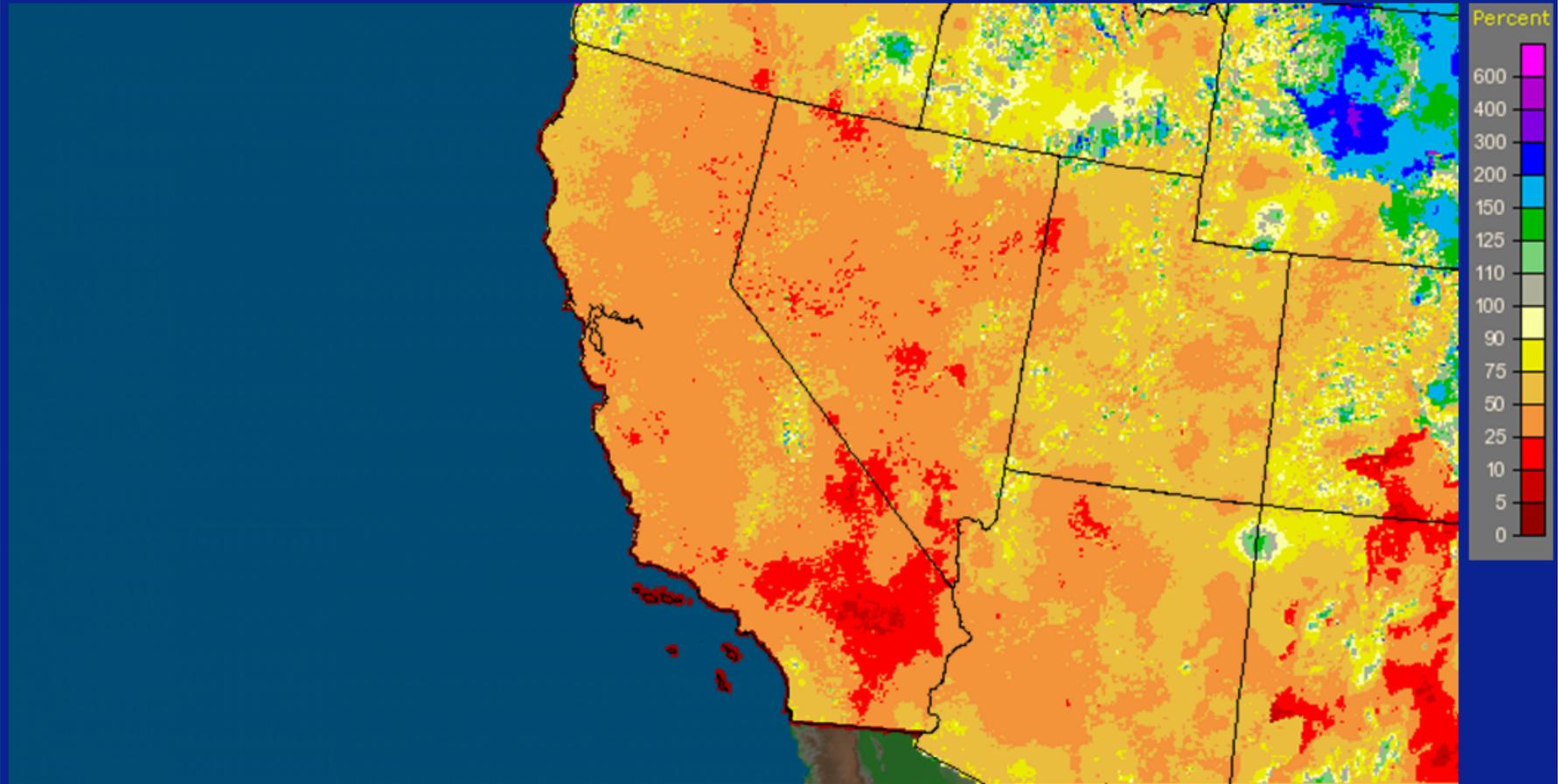
SACRAMENTO RIVER INDEX PRECIPITATION

Eight Station Average (in inches)

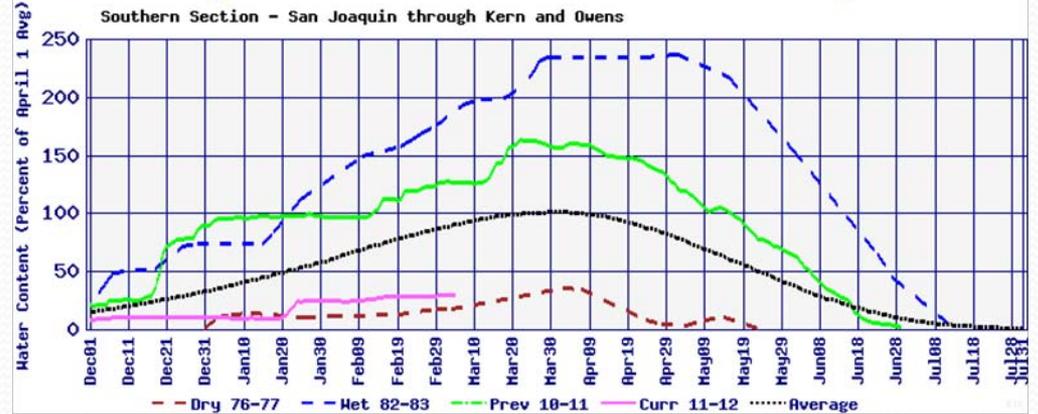
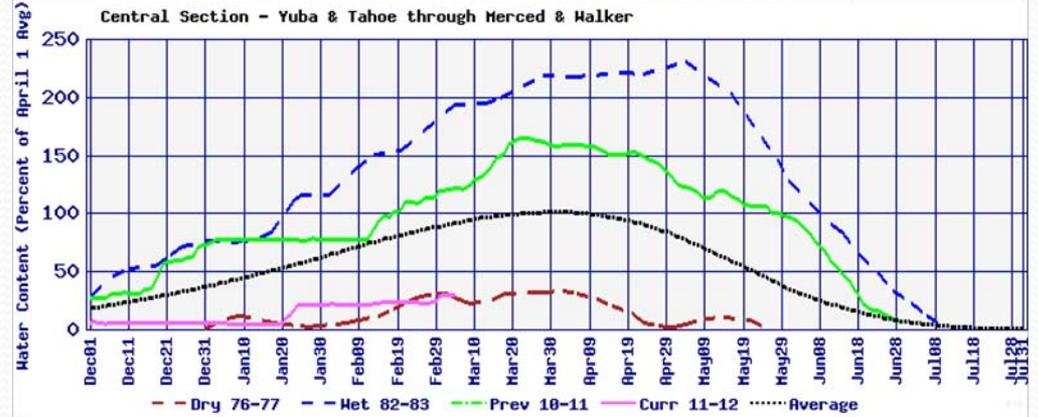
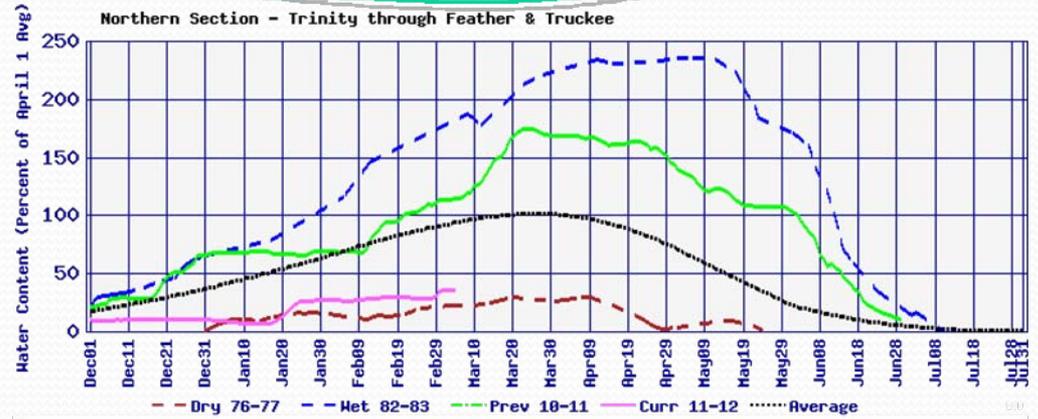


Current Water Year – Percent of Normal Precipitation

California: Current Water-Year (Oct 1) Percent of Normal Precipitation
Valid at 3/8/2012 1200 UTC - Created 3/8/12 17:54 UTC



Snow Water Content (Percent of April 1st Average as of March 5, 2012)

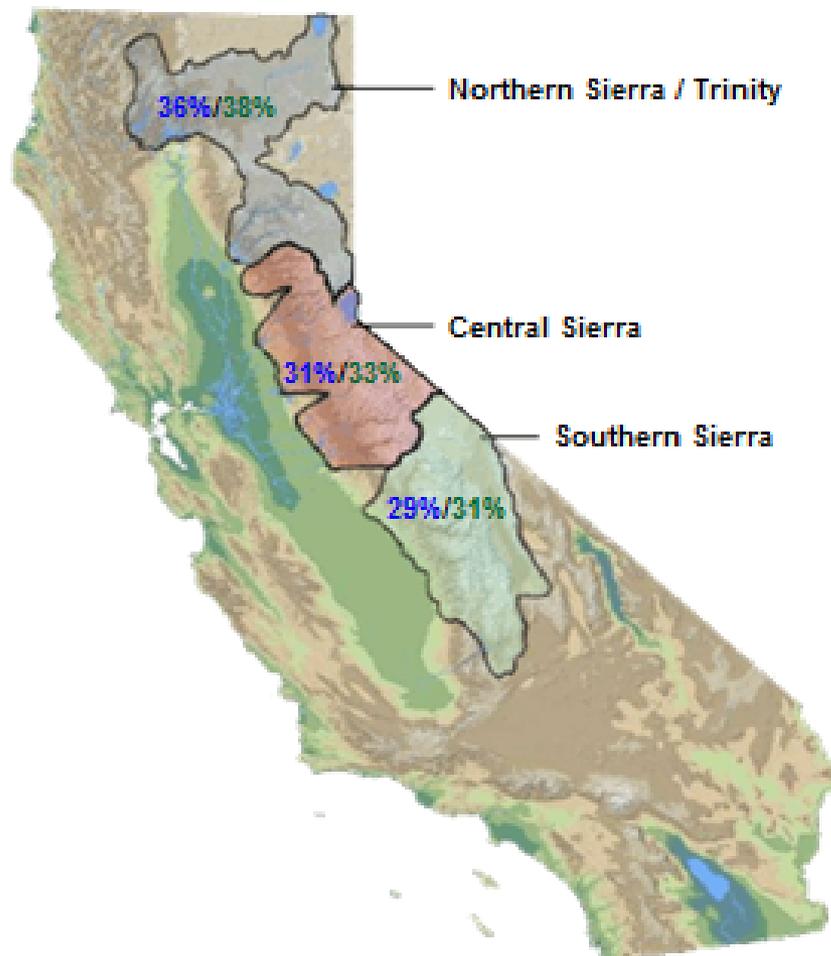


Snow Water Equivalents (inches)

Provided by the California Cooperative Snow Surveys

Data For: 09-Mar-2012

% Apr 1 Avg. / % Normal for this Date



NORTH

Data For: 09-Mar-2012

Number of Stations Reporting	29
Average snow water equivalent	10.2"
Percent of April 1 Average	36%
Percent of normal for this date	38%

CENTRAL

Data For: 09-Mar-2012

Number of Stations Reporting	42
Average snow water equivalent	9.2"
Percent of April 1 Average	31%
Percent of normal for this date	33%

SOUTH

Data For: 09-Mar-2012

Number of Stations Reporting	28
Average snow water equivalent	7.4"
Percent of April 1 Average	29%
Percent of normal for this date	31%

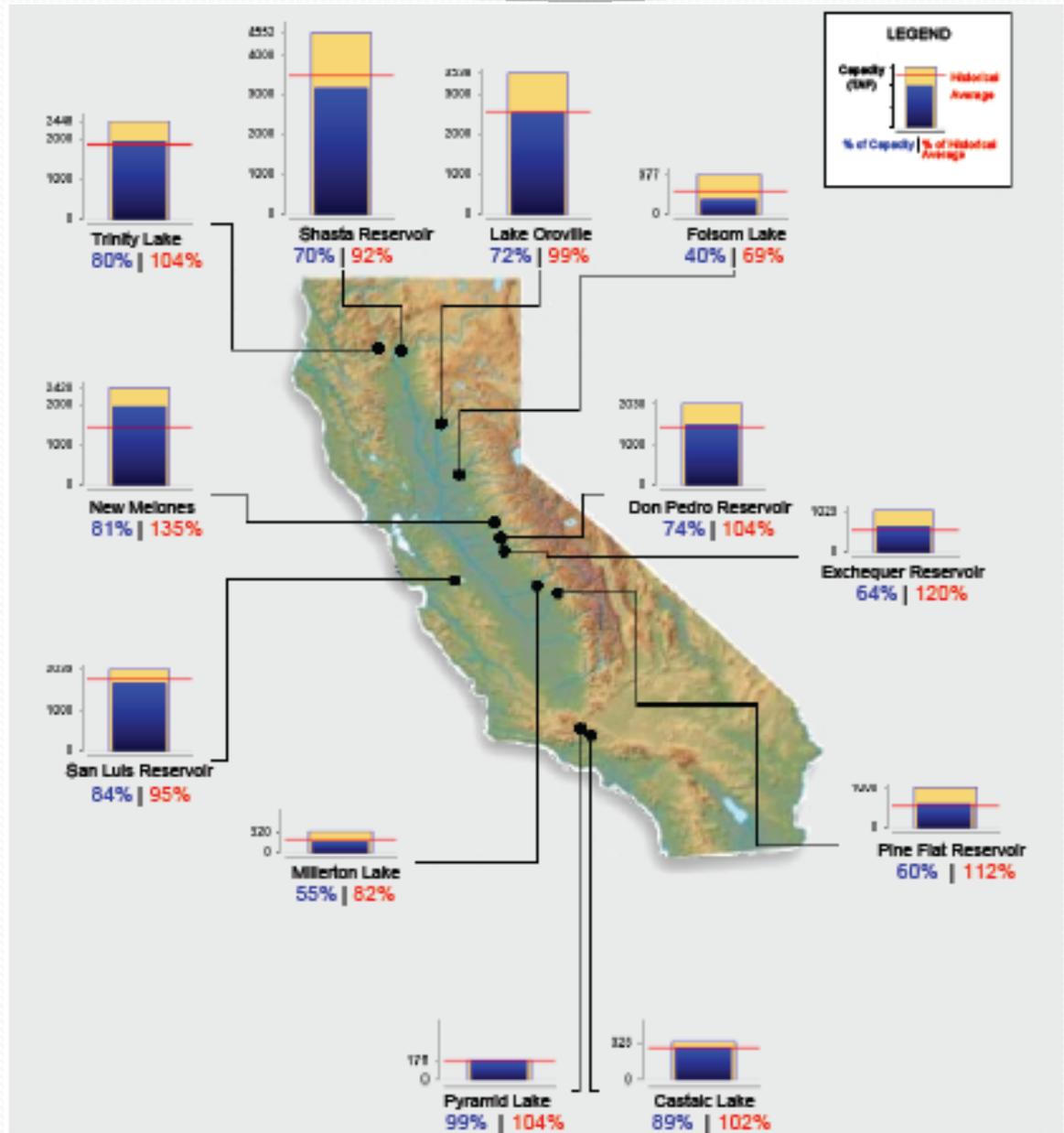
SWP Water Storage

Comparison of Storage Mar 1, 2011 vs Mar 1, 2012		2011 SWP STORAGE (acre-feet)		2012 SWP STORAGE (acre-feet)	
Reservoir	Capacity	As of 3/1/2011	% of Cap.	As of 3/1/2012	% of Cap.
Frenchman	55,477	26,235	47%	44,099	79%
Lake Davis	84,371	54,948	65%	62,506	74%
Antelope	22,566	22,825	101%	18,520	82%
Oroville	3,521,797	2,690,479	76%	2,518,250	72%
TOTAL North	3,684,211	2,545,300	69%	2,643,375	72%
Del Valle	77,111	37,459	49%	28,688	37%
San Luis	1,062,180	1,038,396	98%	973,964	92%
Pyramid	169,901	167,588	99%	165,232	97%
Castaic	319,247	291,985	91%	292,069	91%
Silverwood	73,032	70,308	96%	71,720	98%
Perris	126,841	73,485	58%	73,840	58%
TOTAL South	1,828,312	1,587,654	87%	1,605,513	88%
TOTAL SWP	5,512,523	4,132,954	75%	4,248,888	77%

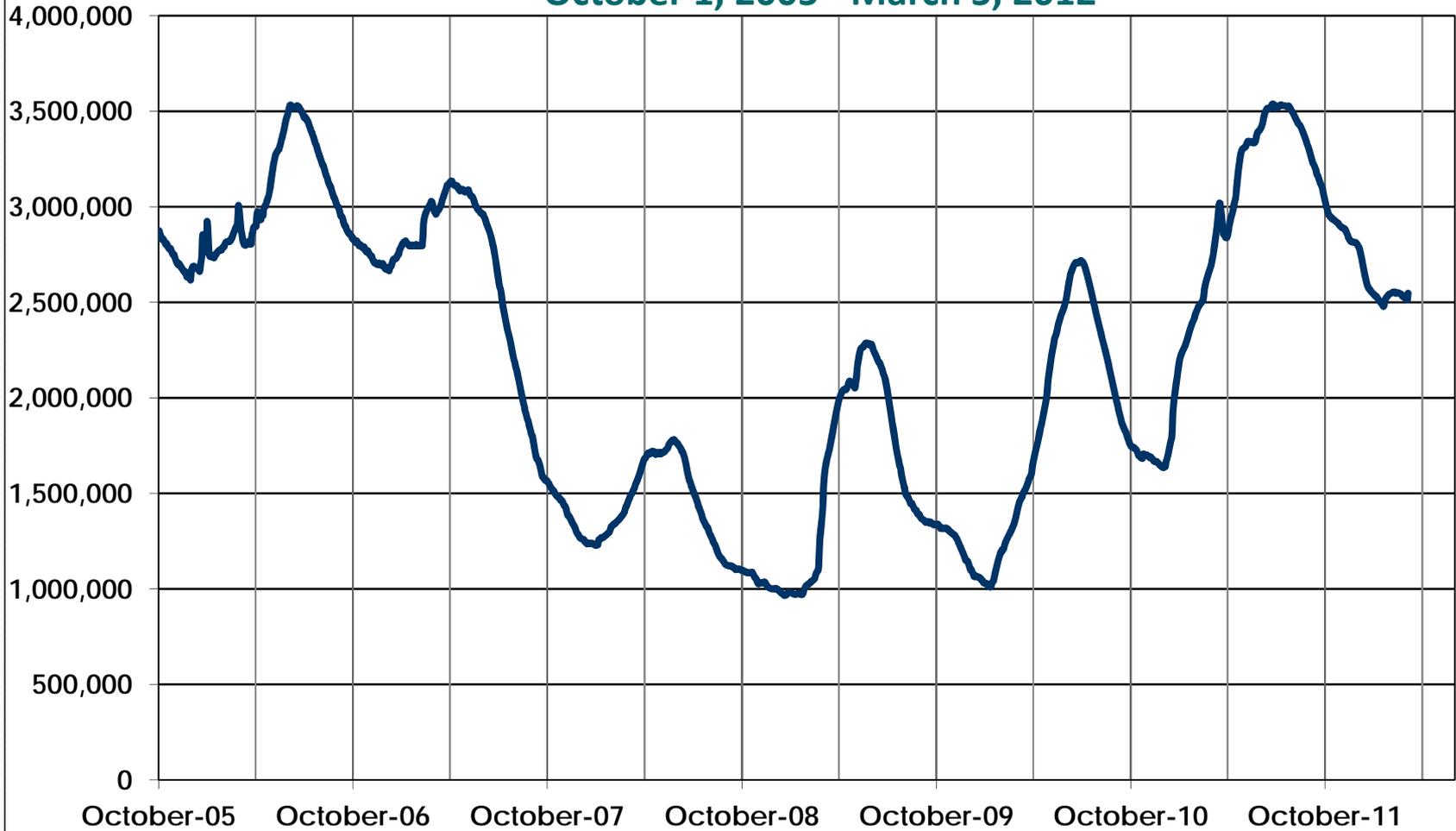
State Water Project Projected Deliveries:

On February 21, 2012, Table A allocation decrease from **60% to 50%**

Current Reservoir Conditions



Oroville Storage (af) October 1, 2005 - March 5, 2012



MWD Water Report

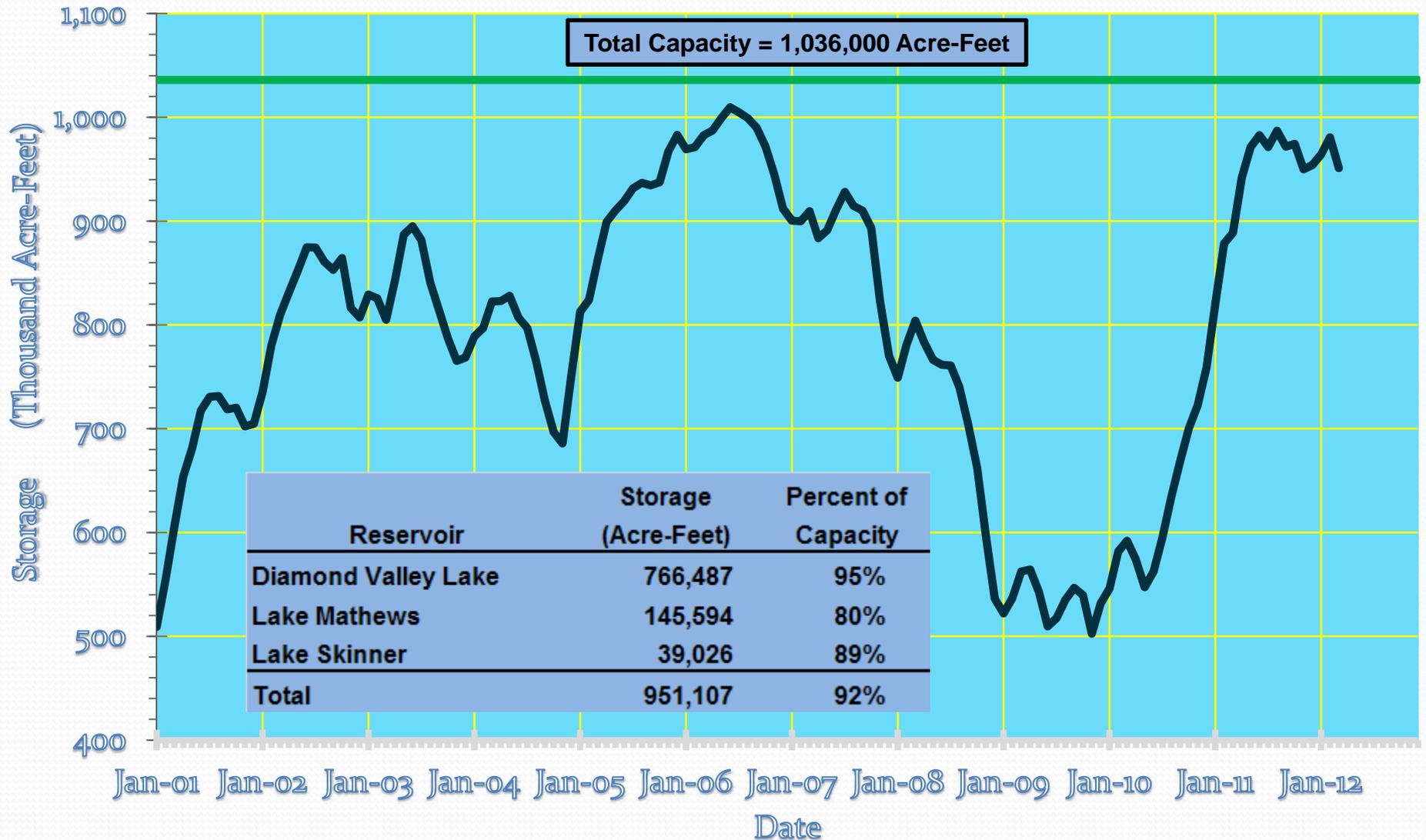


MWD's Diamond Valley Lake Pumping Plant Facility

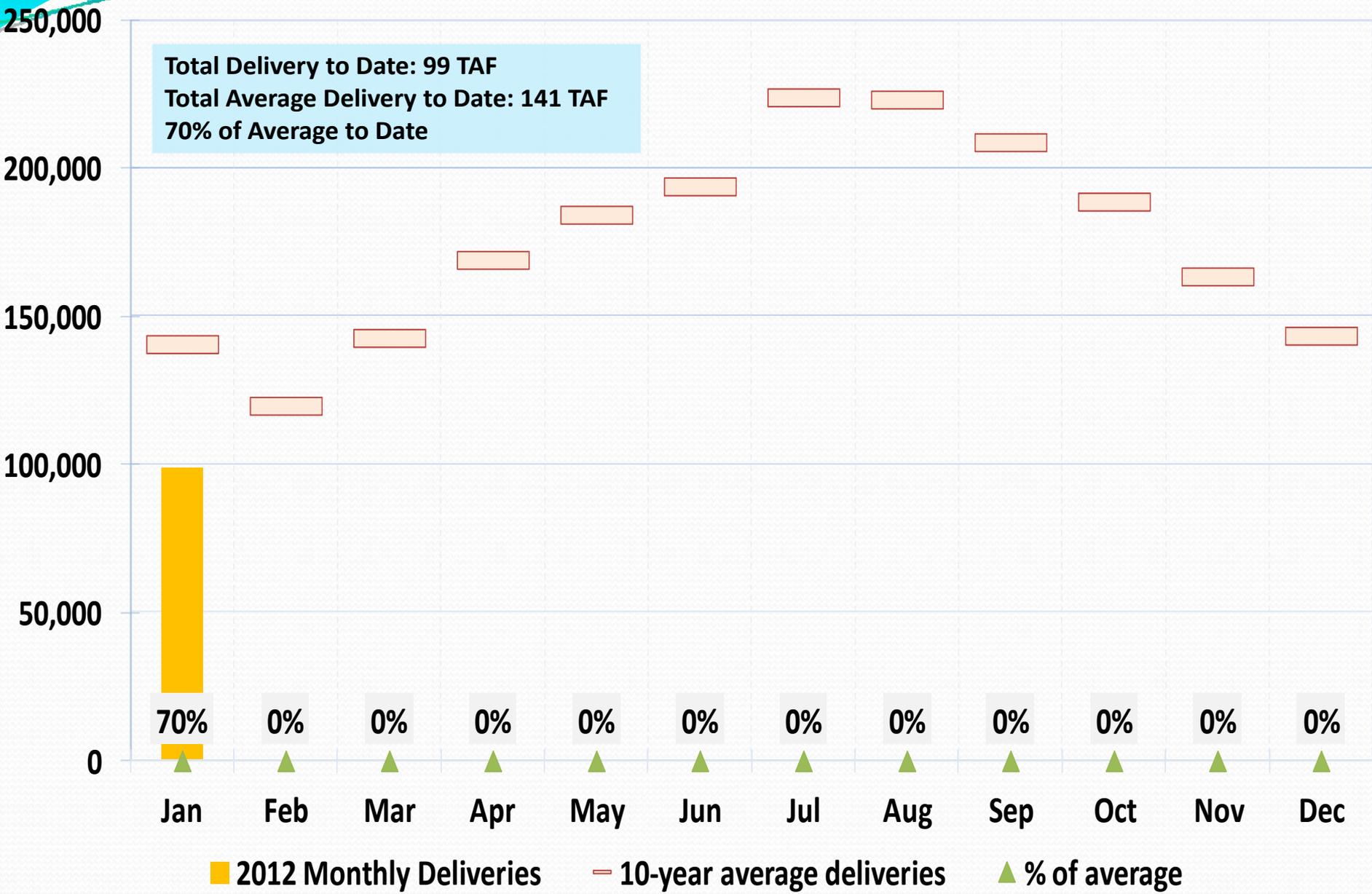


MWD's Combined Reservoir Storage

(as of March 1, 2012) Lake Skinner, Lake Mathews, & Diamond Valley Lake



2012 Water Deliveries to Member Agencies (AF)



LADWP Water Report



LA Aqueduct, Cascades, Newhall Pass

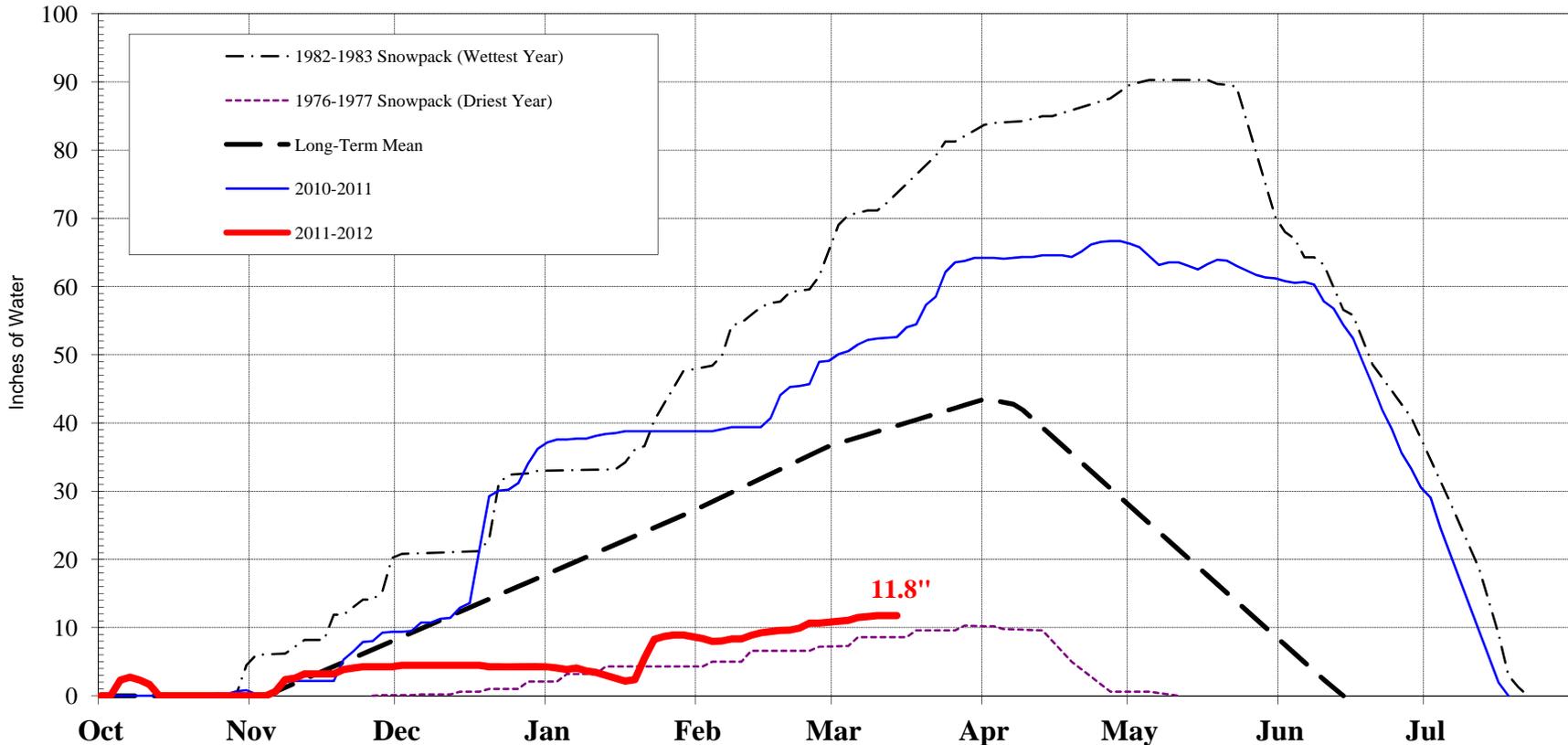


Storm-clouds over the Eastern Sierra and the LA Aqueduct near Lone Pine, California

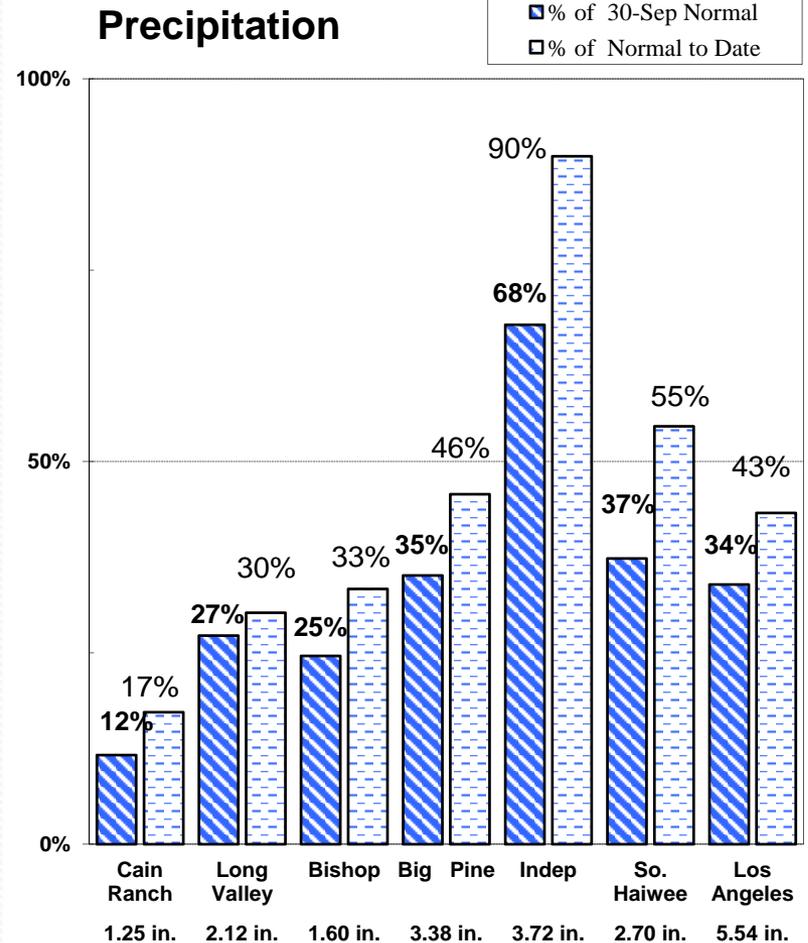
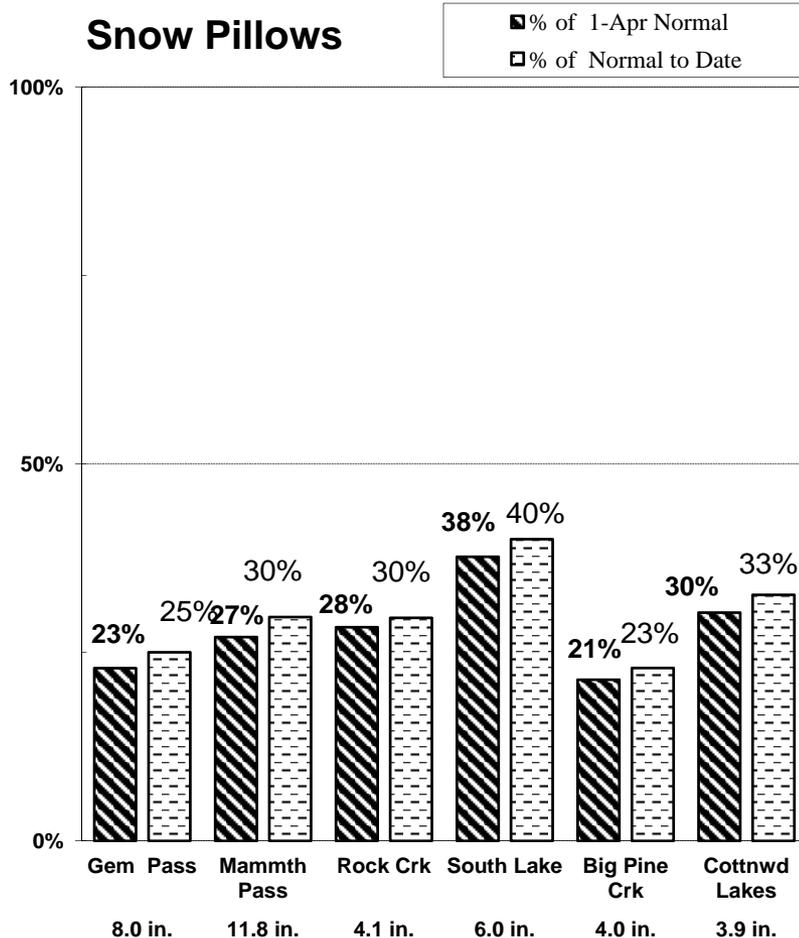
Tab 3

Eastern Sierra Current Precipitation Conditions (as of March 13, 2012)

Mammoth Pass Snowpack



Eastern Sierra Current Precipitation Conditions (as of March 13, 2012)



Colorado River Operations



Mohave Valley, Arizona-California



Palo Verde Weir & Diversion

Tab 4

MWD Report— SNWA Interstate Account for 2011

- **Based upon its 2004 Storage and Interstate Release Agreement, MWD stores unused Nevada apportionment in its system**
- **In CY-2011, MWD did not store any additional water supplies on behalf of SNWA**
- **MWD reports that SNWA's account began CY-2011 with a beginning and ending balance of 70 kaf in storage**
- **During 2011, MWD, SNWA, and CAP all requested that USBR leave any unused apportionment in storage in Lake Mead rather than reallocate via Article II.B.3**

Status of the Flaming Gorge Pipeline

- On February 23rd, the Federal Energy Regulatory Commission (FERC) dismissed the preliminary permit application to Wyco, Inc. associated with the proposed Flaming Gorge Pipeline Project
- Proposed project included a 500 mile, and seven hydroelectric power generation facilities, and a terminal storage reservoir
- FERC dismissed the Wyco application because of its lack of specific data and information that would have been required to develop a more complete license application for the proposed hydropower project.

Colorado River Basin Water Supply & Demand Study Report

- In late 2011, USBR initiated Phase 4 of the Project—*Development and Evaluation of Opportunities for Balancing Water Supply and Demand*
- USBR and the Study Team sought public input and suggestions associated with a broad range of options and strategies to help resolve future water supply and demand imbalances
- Proposed options and strategies were solicited through February 1st
- A total of 139 options/strategies were received—
 - 21 options were submitted by members of the Project Team, and
 - 118 options were submitted by the public
- Currently the Project Team is working on developing the “Project Types” and “Categories” that each of the submitted options and strategies can be included within for analysis and evaluation
- The Project is still on schedule to have the final Basin Study Report published in July 2012

Basin States Discussions



Status of Binational Discussions--U.S. & Mexico

- A draft U.S. Minute 319 was presented to Mexico in late-February
- After receiving the U.S. draft, Mexico responded with a series of questions related to the draft Minute
- The “Small Group” of U.S. federal and state representatives collaborated in developing responses to Mexico’s questions
- Additionally, the Small Group continues to work on a series of important and related agreements that need to be in place prior to execution of Minute 319 between the U.S. and Mexico—
 - States’ agreement on the voluntary non-use of surplus water;
 - Guidelines & Forebearance agreement(s) for conversion of ICMA to ICS;
 - Assurance agreements between the U.S. and the Basin states regarding Treaty interpretation;
 - Environmental compliance documentation; and
 - Funding and water delivery agreements for the proposed Pilot Projects

Navajo-Hopi Little Colorado Water Rights Settlement Act of 2012 (S. 2109)

- **The purpose of S. 2109 is to resolve long-standing water rights claims of the Hopi Tribe and Navajo Nation within Arizona**
- **The proposed legislation would authorize \$359 million to build two groundwater delivery projects on the Navajo reservation and one on the Hopi reservation**
- **In exchange the tribes will settle their reserved water rights claims within the Little Colorado River watershed**
- **The proposed settlement would also make 6,411 acre-feet available for use on the eastern portion of Navajo reservation**
- **The Navajo Nation will work to ensure the continued long-term operation of the Navajo Generating Station near Page, Arizona**

Water Quality and Environmental Activities



Razorback sucker



Moab Uranium Mill-Tailings Site



Jet-tube release from Glen Canyon Dam

Colorado River Basin Salinity Control Program—Work Group Meeting

- **Work Group meeting held in Phoenix, Arizona on February 14-15, 2012**
- **Items discussed included—**
 - **USGS hydrogeologic study of the Paradox Valley should be completed in March 2012, and will provide a better understanding of where the underlying salt is being dissolved and depth to freshwater-brine interface;**
 - **USBR held public scoping meetings in early-December 2011 associated with the proposed Paradox Evaporation Pond Pilot Study in Paradox and Montrose, Colorado; and**
 - **USBR continues to identify alternative sites for the evaporation pond and plans to update the Forum on status of its efforts at the May meeting.**

Colorado River Basin Salinity Control Program—Work Group Meeting (cont.)

- **The current Farm Bill is set to expire on September 30th, and the process for Farm Bill development/reauthorization is getting underway--**
 - **The Forum's Executive Director has contacted staff of Colorado's U.S. Senator Michael Bennet regarding the Salinity Control Program's interests in the upcoming Farm Bill legislative process.**
- **The Work Group and Science Team are continuing to explore options and potential methods for capturing saline flows from Pah Tempe Springs (Virgin River watershed)**
- **The next meetings of the Forum, Work Group, and Advisory Council have been scheduled for May 15-18, and will be held in Midway, Utah**

Glen Canyon Dam Adaptive Management Work Group Meeting

- The AMWG met in Tempe, Arizona on February 22-23, 2012
- Approved the catalog of “Desired Future Conditions” (DFCs) that will be used to guide future budget development, development of science and monitoring plans, and future experimental activities
- AMWG recommended that the Secretary of the Interior authorize the development of a socioeconomics program for the Glen Canyon Dam AMP that evaluate market, non-market, and non-use impacts
- AMWG received a first-look at the biennial FY-2013/2014 budget for the AMP (\$8.5 million for FY-2013 and \$8.8 million for FY-2014)
- Currently about 60% of the GCMRC’s annual budget in both the Physical Sciences and the Biology Programs are committed to environmental compliance activities associated with recent NEPA and ESA decisions or opinions.

Status of the Long-Term Experimental and Management Plan (LTEMP) for Glen Canyon Dam

- **The Basin states submitted its comment letter to USBR on January 31st providing scoping comments associated with preparation of the LTEMP EIS**
- **Primary comments in the letter included--**
 - **Discussion of the legal framework for the LTEMP EIS analyses;**
 - **Consistency of GCD operations and the 2007 Interim Guidelines;**
 - **Geographic scope of the LTEMP EIS;**
 - **Impacts to existing species conservation and recovery implementation programs;**
 - **Ensure clear distinction between experimental and management actions associated with operations at Glen Canyon Dam;**
 - **Ensure development of alternatives that are realistic and comply with existing laws and regulations; and**
 - **Comments associated with actual process of developing the LTEMP EIS**

Status of the Long-Term Experimental and Management Plan (LTEMP) for Glen Canyon Dam (cont.)

- I attended a meeting on February 29th of Basin states representatives in Las Vegas, Nevada, with several scientists involved in on-going long-term monitoring and research activities through the GCD AMP
- The scientists represented expertise in—
 - Humpback chub biology and ecology;
 - Biology and ecology of Rainbow trout;
 - Aquatic foodbase ecology of Glen and Marble Canyons; and
 - Sediment and sand resources of the Grand Canyon Ecosystem
- The purpose of the meeting was to receive an overview and synthesis of the current state-of-knowledge scientific data and information, and
- To determine if there is interest among the Basin states for development of an alternative to be submitted to USBR and NPS for analysis and evaluation in the LTEMP EIS process (i.e., similar to the “Basin States’ Alternative” submitted in the 2007 Interim Guidelines process)

Basin States' Letter—Comments on the Final EA for the Development & Implementation of a Protocol for High-Flow Experimental Releases from Glen Canyon Dam, 2011-2020

- **On March 8th, the Basin states finalized the joint-letter to USBR's UC Regional Office associated with the final EA for the HFE Releases Protocol for Glen Canyon Dam**
- **Primary purpose of the HFE Protocol is to test and evaluate short-duration, high-volume dam releases during sediment-enriched conditions during a ten-year period of experimentation (i.e., 2011-2020)**

Basin States' Letter—Comments on the Final EA for the HFE Protocol (cont.)

- **Primary issues described in the letter—**
 - **Ensure clear distinction and/or demarcation between management actions vs. experimental actions;**
 - **Decision-making process and the relationship between the HFE Protocol and the goals and objectives of the GCD Adaptive Management Program and the Desired Future Conditions for the Grand Canyon Ecosystem;**
 - **The HFE Protocol Monthly Release Determinations must be consistent with the 2007 Interim Guidelines; and**
 - **USBR needs to clearly articulate process and steps for coordinating and integrating the HFE Protocol with LTEMP EIS process.**

Next Meeting



Belted Kingfisher (*Ceryle alcyon*)

April 11, 2012

10:00 a.m. PDT

Holiday Inn Ontario Airport

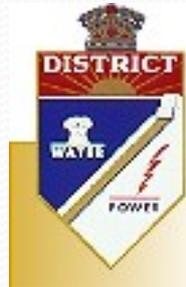
2155 East Convention Center Way

Ontario, California

Six Agency Committee Meeting



Coachella
Valley
Water
District



Colorado River Authority

CRA

