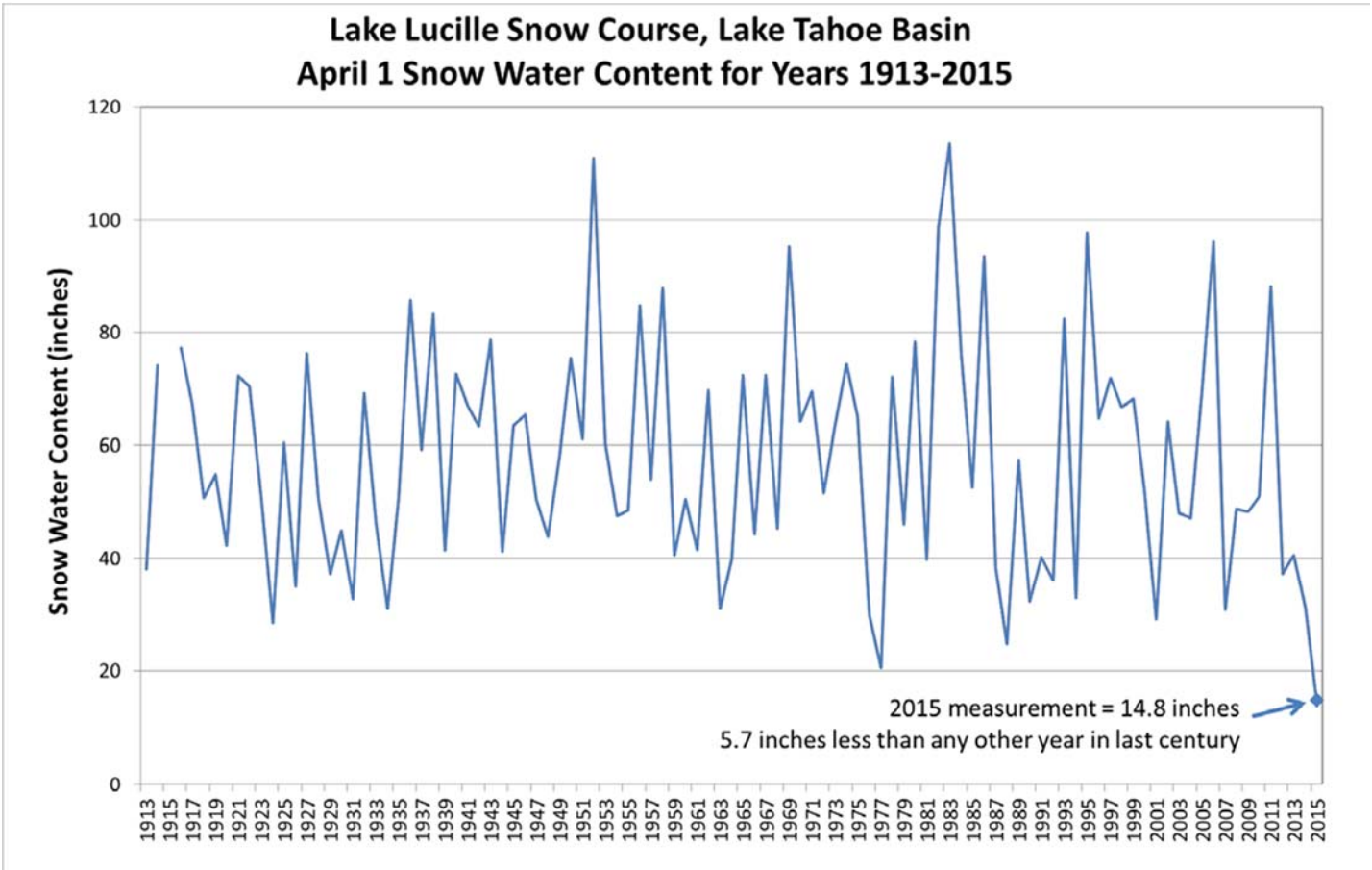
UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

California Water Supply Outlook Report

April 10, 2015



A Graph is worth a 1,000 words.

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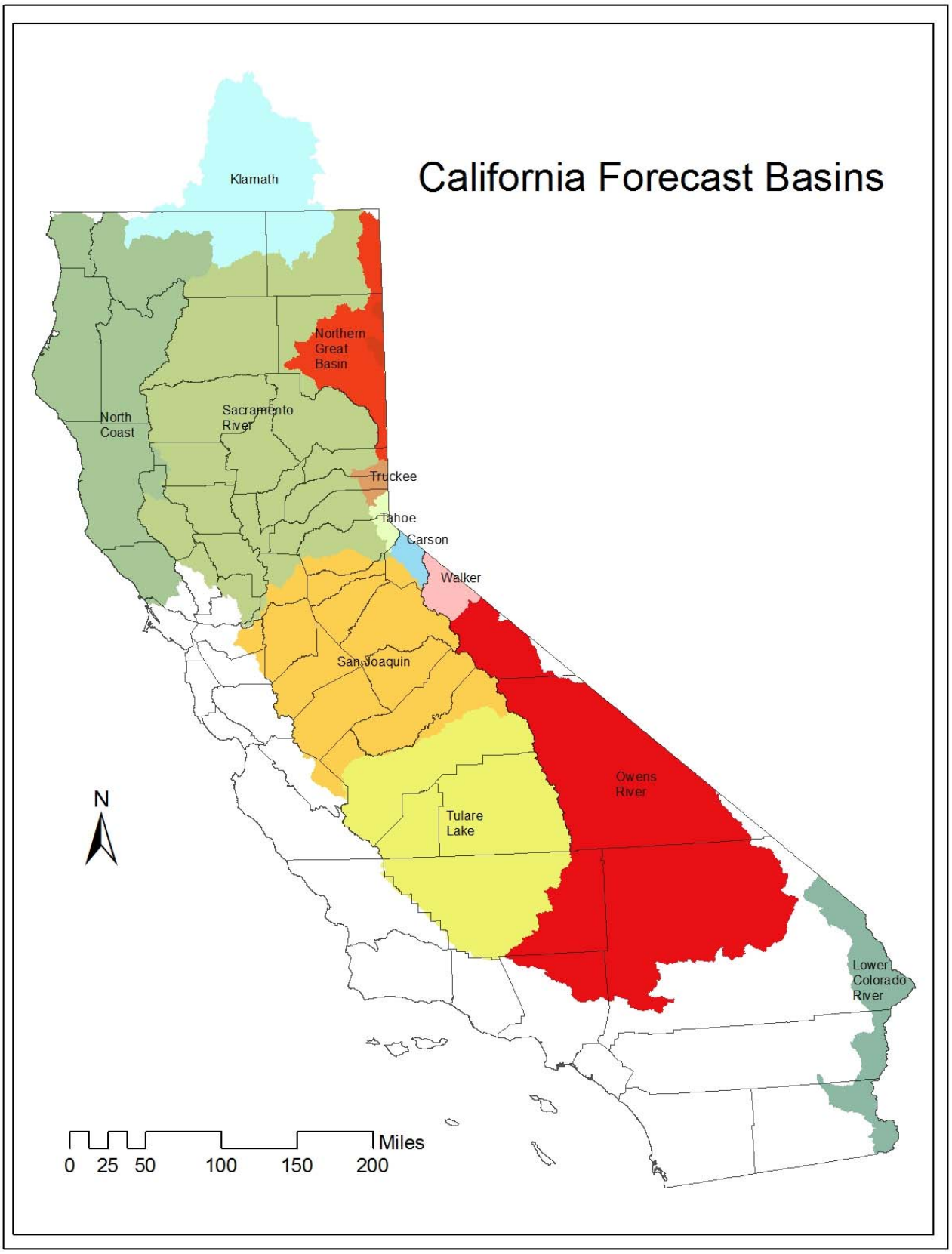
California Forecast Basins
Klamath
Northern Great Basin
North Coast
Sacramento River
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Tahoe
Carson
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0 25 50 100 150 200
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STATE OF CALIFORNIA GENERAL OUTLOOK

April 10, 2015

SUMMARY

California received very little precipitation during March, but in early April a sizeable spring storm delivered some snow and rainfall throughout California. Although the recent precipitation was very welcome and needed, it was not enough to change drought related trends.

SNOWPACK

As of April 10, snowpacks conditions for the Northern, Central, and Southern Sierras are far below normal for this time of year. The snow water equivalents (SCE) decreased about 8 percent from last month and are currently in the range of 7%-8% of normal. The SWE continues to have a downward trend due to higher than normal day time temperatures and long durations between storms. The major storms that California received this year were warm in nature and did not provide significant amounts of snow to the snowpack. For more information please visit:

http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ

PRECIPITATION

Mountain rainfall precipitation varies from the Northern end of the Sierras to the Southern end of the Sierras. As of April 10, rainfall gages in the Northern Sierra Region (8-Station index) show rainfall amounts to be 77% of normal while gages used to develop a Central Sierra Region (5-Station index) show rainfall amounts to be at 42% of normal for this time of year. The Southern Sierra region is also below average at 43% of normal for this time of year. All three sections trended downward compared to last month by about 10 percent.

http://cdec.water.ca.gov/snow_rain.html

RESERVOIRS

Most major reservoirs in California, especially those fed by the Sierra Mountains and Foothills are still below average capacity for this time of year. The April 10th readings shows Lake Oroville is at 65% of normal storage, Lake Shasta is at 72% of normal storage, and New Hogan is at 38% of normal storage.

http://cdec.water.ca.gov/cgi-progs/reservoirs/RES

STREAMFLOW

Forecasted flows from Sierra fed streams all show below normal due to the lack of snowpack to date. The streamflow forecasts for the major basins in California are shown as follows:

Sacramento River Basin

April 1, 2015

Forecasted streamflow volumes for this April through July are below average, ranging from 21% to 64% of average.

SACRAMENTO RIVER BASIN
Streamflow Forecasts - April 1, 2015

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	Wetter ===> 10% (1000AF)	30 Yr Avg (1000AF)
Sacramento R at Shasta (DWR)							
APR-JUL			90	30			302
Sacramento R at Shasta (NWS)							
APR-JUL	91	99	114	37	150	199	312
McCloud R ab Shasta (DWR)							
APR-JUL			195	52			379
McCloud R ab Shasta (NWS)							
APR-JUL	208	211	221	56	236	269	392
Pit R at Shasta Lk (DWR)							
APR-JUL			560	54			1046
Pit R at Shasta Lk (NWS)							
APR-JUL	435	451	473	47	515	572	1013
Inflow to Shasta Lk (DWR)							
APR-JUL	600		860	48		1490	1806
OCT-SEP	3465		3775	63		4515	5979
Inflow to Shasta Lk (NWS)							
APR-JUL	811	877	956	53	1076	1331	1803
Sacramento R nr Red Bluff (DWR)							
APR-JUL	800		1190	48		1800	2485
OCT-SEP	5150		5620	64		6350	8727
Sacramento R nr Red Bluff (NWS)							
APR-JUL	1173	1263	1363	55	1592	2010	2479
Feather R at Lk Almanor (DWR)							
APR-JUL			100	30			333
NF Feather R at Pulga (DWR)							
APR-JUL			270	26			1028
NF Feather R nr Prattville (NWS)							
APR-JUL	101	111	122	37	135	156	333
MF Feather R nr Clio (DWR)							
APR-JUL			20	23			86
SF Feather R at Ponderosa Dam (DWR)							
APR-JUL			25	23			110
Inflow to Oroville Res (DWR)							
APR-JUL	320		460	26		1110	1758
OCT-SEP	1920		2090	46		2770	4523
Inflow to Oroville Res (NWS)							
APR-JUL	267	311	356	21	469	584	1701
N Yuba R bl Goodyears Bar (DWR)							
APR-JUL			60	22			279
N Yuba R bl Goodyears Bar (NWS)							
APR-JUL	39	50	62	23	96	126	273
Inflow Jackson Mdws & Bowman Res (DWR)							
APR-JUL			30	27			112
S Yuba R nr Langs Crossing (DWR)							
APR-JUL			60	26			233

Yuba R at Smartville (DWR)							
APR-JUL	145		220	22		550	996
OCT-SEP	850		930	40		1280	2329
Yuba R at Smartville (NWS)							
APR-JUL	147	173	220	22	352	461	981
NF American R at N FK Dam (DWR)							
APR-JUL			40	15			262
MF American R nr Auburn (DWR)							
APR-JUL			80	15			522
MF American R nr Auburn (NWS)							
APR-JUL	54	70	101	21	160	207	490
Inflow to Union Valley Res (NWS)							
APR-JUL	12.0	16.0	23	24	32	40	98
Silver Ck bl Camino Div. Dam (DWR)							
APR-JUL			30	17			173
Silver Ck bl Camino Div. Dam (NWS)							
APR-JUL	23	28	40	25	56	72	158
Inflow to Folsom Res (DWR)							
APR-JUL	165		210	17		650	1231
OCT-SEP	825		870	32		1320	2683
Inflow to Folsom Res (NWS)							
APR-JUL	107	144	219	18	342	448	1232

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

San Joaquin River Basin

April 1, 2015

Forecasted streamflow volumes for this April through July are below average, ranging from 11% to 30% of average.

SAN JOAQUIN RIVER BASIN
Streamflow Forecasts - April 1, 2015

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Cosumnes R at Michigan Bar (DWR)							
APR-JUL	7.0		18.0	14		75	128
OCT-SEP	76		87	23		145	385
Cosumnes R at Michigan Bar (NWS)							
APR-JUL	6.0	9.0	17.0	13	29	46	128
NF Mokelumne R nr West Point (DWR)							
APR-JUL			90	21			437
Inflow to Pardee Res (DWR)							
APR-JUL	66		95	21		220	461
OCT-SEP	203		233	31		360	751
Inflow to Pardee Res (NWS)							
APR-JUL	64	76	97	21	133	190	467
MF Stanislaus R bl Beardsley (DWR)							
APR-JUL			80	24			334
N F Inflow to McKays Pt Dam (DWR)							
APR-JUL			50	22			224
Inflow to New Melones Res (DWR)							
APR-JUL	75		160	23		370	699
Inflow to New Melones Resr (DWR)							
OCT-SEP	268		353	30		570	1167
Inflow to New Melones Res (NWS)							
APR-JUL	107	131	158	23	202	255	690
Cherry & Eleanor Cks, Hetch Hetchy (DWR)							
APR-JUL			70	22			315
Tuolumne R nr Hetch Hetchy (DWR)							
APR-JUL			150	25			604
Tuolumne R nr Hetch Hetchy (NWS)							
APR-JUL	113	140	169	28	236	282	596
Inflow to New Don Pedro Res (DWR)							
APR-JUL	175		260	21		490	1221
OCT-SEP	452		540	28		770	1943
Inflow to New Don Pedro Res (NWS)							
APR-JUL	195	243	301	23	425	535	1288
Merced R, Pohono Bridge Yosemite(DWR)							
APR-JUL			60	16			372
Merced R, Pohono Bridge Yosemite (NWS)							
APR-JUL	35	46	65	17	90	127	385
Inflow to Lake McClure (DWR)							
APR-JUL	65		90	14		270	636
OCT-SEP	131		156	16		340	1007
Inflow to Lake McClure (NWS)							
APR-JUL	44	58	80	13	118	176	642
San Joaquin R at Mammoth Pool (DWR)							
APR-JUL			150	15			1026

Big Ck bl Huntington Lk (DWR)							
APR-JUL			10.0	11			91
SF San Joaquin R nr Florence Lk (DWR)							
APR-JUL			30	15			201
Inflow to Millerton Lk (DWR)							
APR-JUL	135		170	14		420	1258
OCT-SEP	265		305	17		565	1831
Inflow to Millerton Lk (NWS)							
APR-JUL	106	142	206	16	310	446	1258

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Tulare Lake Basin

April 1, 2015

Forecasted streamflow volumes for this April through July are below average, ranging from 6% to 21% of average.

TULARE LAKE BASIN
Streamflow Forecasts - April 1, 2015

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	Wetter ===> 10% (1000AF)	30 Yr Avg (1000AF)
NF Kings R nr Cliff Camp (DWR)							
APR-JUL			30	13			239
Inflow to Pine Flat Res (DWR)							
APR-JUL	140		175	14		400	1236
OCT-SEP	280		320	19		555	1729
Inflow to Pine Flat Res (NWS)							
APR-JUL	123	154	240	20	332	513	1231
Kaweah R at Terminus Res (DWR)							
APR-JUL	1.0		50	17		110	290
OCT-SEP	81		97	21		160	456
Kaweah R at Terminus Res (NWS)							
APR-JUL	22	28	47	16	68	111	288
Tule R at Success Res (DWR)							
APR-JUL	1.0		4.0	6		26	64
OCT-SEP	9.0		12.0	8		34	147
Tule R at Success Res (NWS)							
APR-JUL	2.0	2.0	4.0	6	7.0	13.0	63
Kern R nr Kernville (DWR)							
APR-JUL			60	16			384
Inflow to Isabella Res (DWR)							
APR-JUL	45		65	14		170	465
OCT-SEP	115		140	19		255	733
Inflow to Isabella Res (NWS)							
APR-JUL	26	34	67	15	96	138	454

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

North Coast Area Basin

April 1, 2015

Forecasted streamflow volumes for this April through July are below average, ranging from 0% to 68% of average.

NORTH COASTAL AREA
Streamflow Forecasts - April 1, 2015

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	Future Conditions: 50% (Most Prob) (1000AF)	50% (Most Prob) (% AVG.)	=== Wetter ===> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Trinity R at Lewiston (DWR)							
APR-JUL	75		155	24		380	651
OCT-SEP	854		934	68		1170	1376
Inflow to Clair Engle Lk (NWS)							
APR-JUL	130	156	186	28	272	325	666
Scott R nr Fort Jones (NWS)							
APR-JUL			39	0			0.0
APR-JUL	27	30	35	20	45	55	173

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Klamath Basin

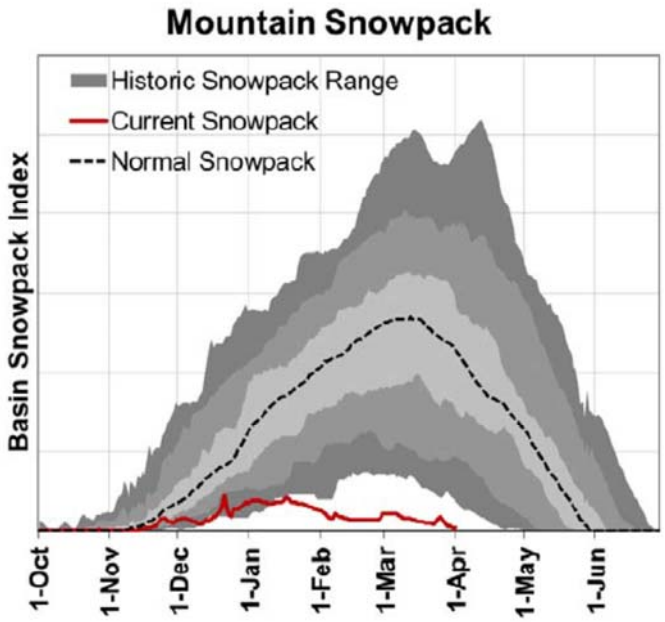
April 1, 2015

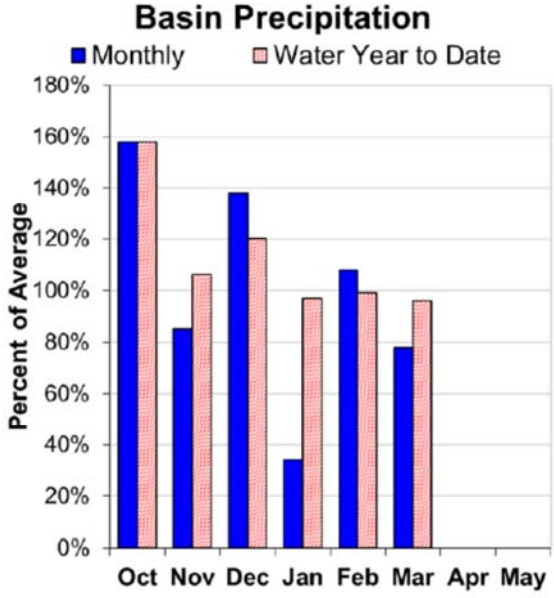
As of April 1, the basin snowpack was 13% of normal. This is slightly lower than last month when the snowpack was 17% of normal. The snowpack in this region peaked well below normal this winter. In general, SNOTEL sites in the basin peaked 70% to 90% below typical peak snowpack levels. There are five long-term snow monitoring sites in the basin that set new record lows for April 1 snowpack. One of these records occurred at Finley Corrals AM, which was snow-free for the first time since measurement began in 1958. Normal April 1 snow water content for this site is 13.0 inches.

March precipitation was 78% of average. Precipitation since the beginning of the water year (October 1 - April 1) has been 96% of average.

As of April 1, storage at major reservoirs in the basin ranges from 19% of average at Clear Lake Reservoir to 114% of average at Upper Klamath Lake Reservoir.

As of April 1, summer streamflow forecasts in the basin range from 32% to 46% of average. Water managers in the basin should expect water shortages this summer and plan accordingly.





KLAMATH BASIN

Streamflow Forecasts - April 1, 2015

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	50% (Most Prob) (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Clear Lk Inflow (2)							
APR-JUL	0.64	3.3	14.6	46	26	42	32
APR-SEP	0.7	5.5	16.0	46	26	42	35
Gerber Res Inflow (2)							
APR-JUL	0.1	0.7	4.2	30	9.1	16.3	14.0
APR-SEP	0.1	0.6	4.6	32	9.4	16.5	14.4
Upper Klamath Lk Inflow (1)							
APR-JUL	43	110	141	35	172	239	400
APR-SEP	80	153	186	39	219	292	480
Williamson R bl Sprague R nr Chiloquin							
APR-JUL	56	89	111	38	133	166	295
APR-SEP	96	131	155	44	179	214	355

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

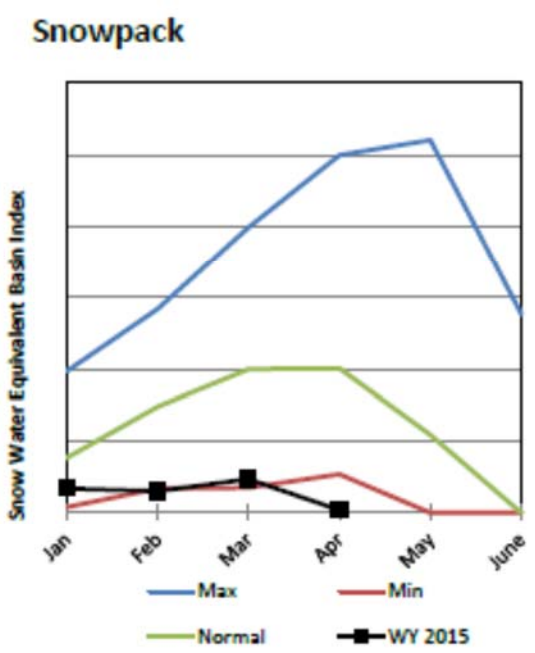
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

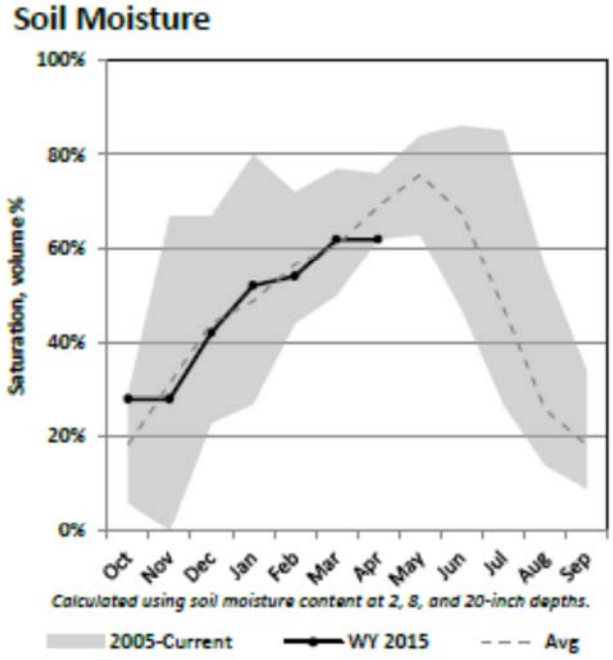
(2) - The value is natural volume - actual volume may be affected by upstream water management.

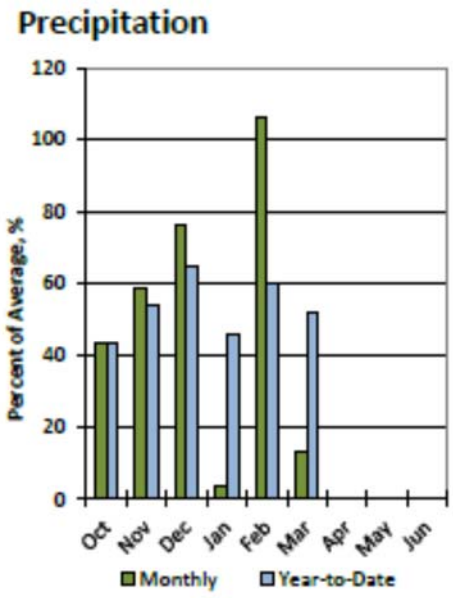
Lake Tahoe Basin

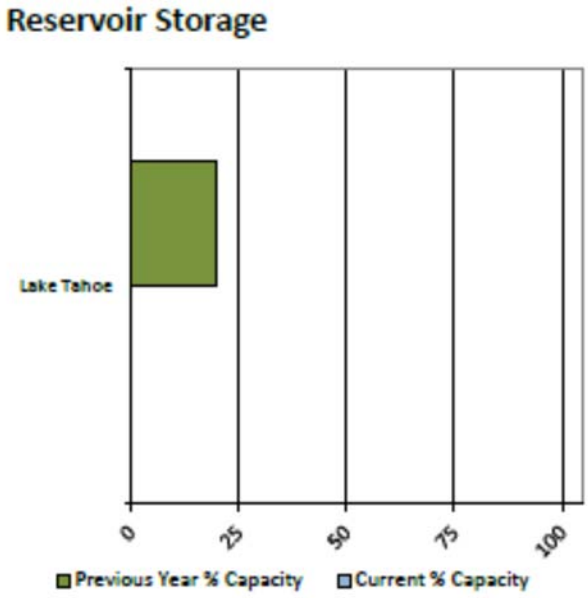
April 1,
2015

Snowpack in the Lake Tahoe Basin is much below average at 10% of normal, compared to 45% last year. Precipitation in March was much below average at 13%, which brings the seasonal accumulation (Oct-Mar) to 52% of average. Soil moisture is at 62% compared to 62% last year. Lake Tahoe's water elevation is 6222.81 ft, which is 0.19 feet below the lake's natural rim and equals a storage deficit of about 23,000 acre-feet. Last year the elevation was 6224.27 ft and the useable storage equaled 152,000 acre-feet. Lake Tahoe is forecast to rise 0.20 feet from April to its high elevation.









LAKE TAHOE BASIN
Streamflow Forecasts - April 1, 2015

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	Future Conditions: 50% (Most Prob) (1000AF) (% AVG.)	=== Wetter ===> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Lake Tahoe Rise (Gates Closed) (1)						
APR-HIGH	0.040	0.100	0.2 15	0.42	0.60	1.31
MAY-HIGH	0.000	0.022	0.1 9	0.28	0.68	1.08

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

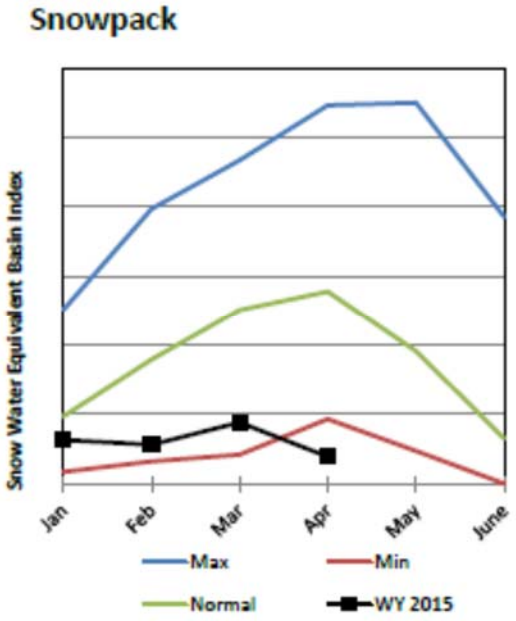
The average is computed for the 1981-2010 base period.

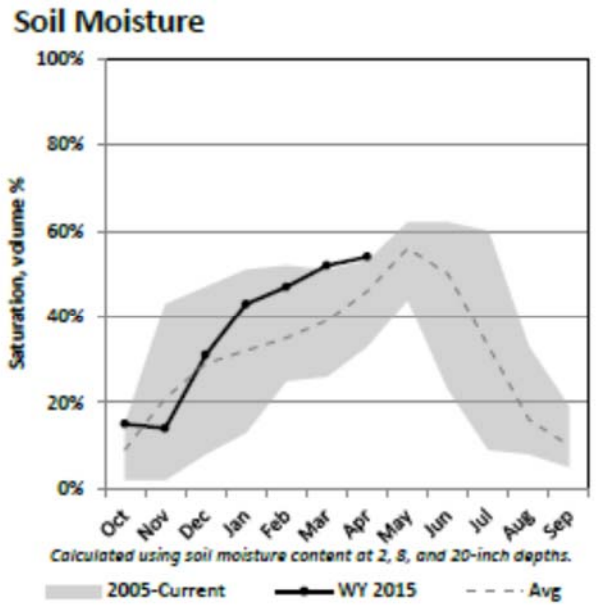
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

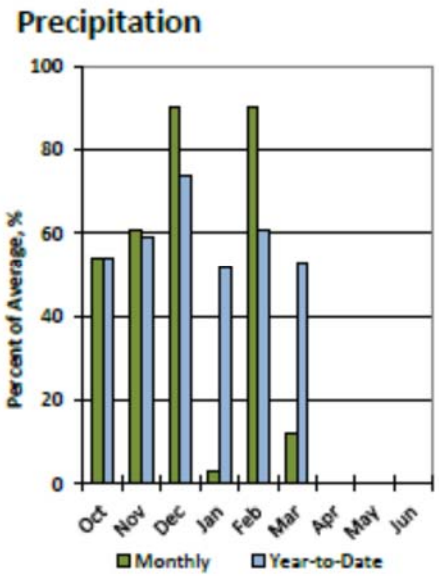
Truckee River Basin

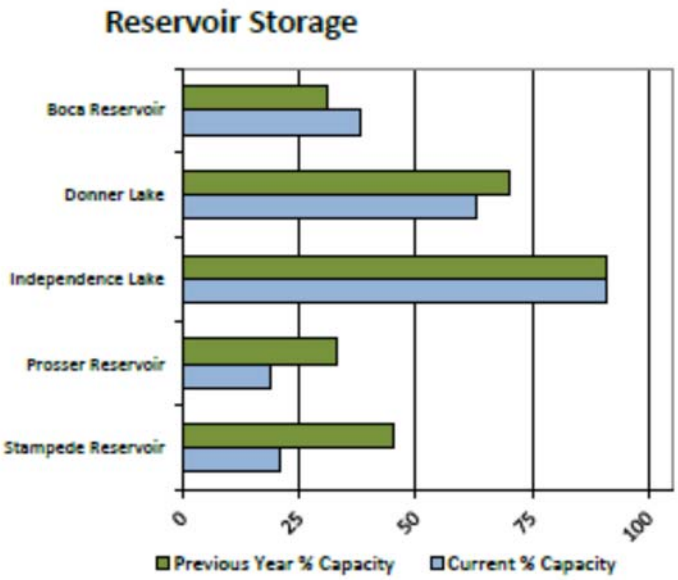
April 1, 2015

Snowpack in the Truckee River Basin is much below average at 13% of normal, compared to 31% last year. Precipitation in March was much below average at 12%, which brings the seasonal accumulation (Oct-Mar) to 53% of average. Soil moisture is at 54% compared to 46% last year. Reservoir storage is at 28% of capacity, compared to 45% last year. Forecast streamflow volumes range from 2% to 19% of average.









TRUCKEE RIVER BASIN
Streamflow Forecasts - April 1, 2015

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding *						
	90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Sagehen Ck nr Truckee							
APR-JUL	0.6	0.7	0.8	14	0.9	1.0	5.6
MAY-JUL	0.3	0.3	0.3	8	0.4	0.4	4.2
L Truckee R ab Boca Resv							
APR-JUL	6.0	10.6	15.0	18	24	37	84
MAY-JUL	0.0	1.9	8.0	13	19.9	37	63
Truckee R at Farad							
APR-JUL	12.0	32	49	19	75	110	255
MAY-JUL	2.0	5.0	22	12	48	86	183

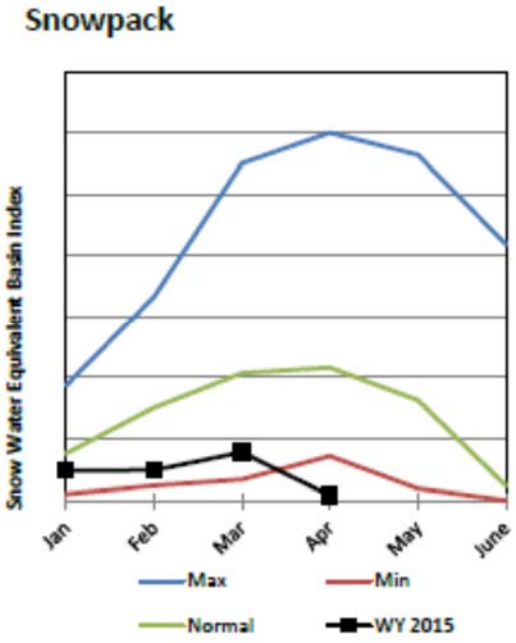
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

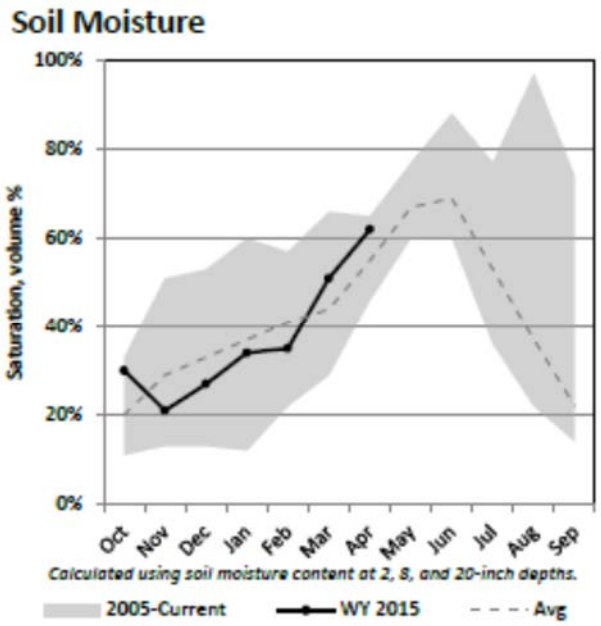
The average is computed for the 1981-2010 base period.

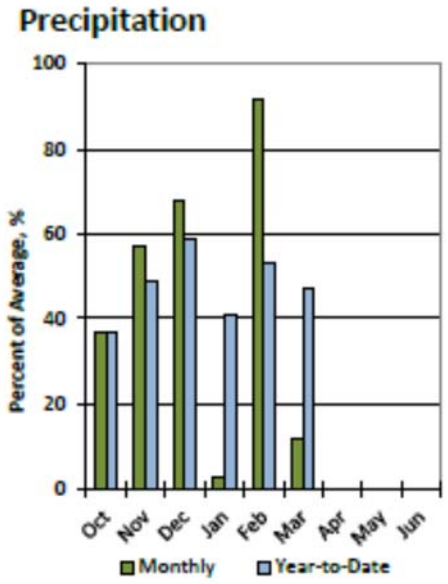
Carson River Basin

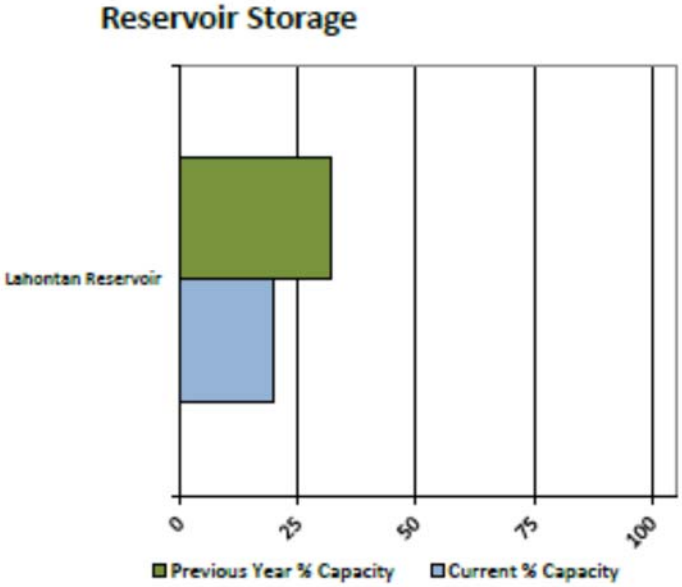
April 1, 2015

Snowpack in the Carson River Basin is much below average at 3% of normal, compared to 56% last year. Precipitation in March was much below average at 12%, which brings the seasonal accumulation (Oct-Mar) to 47% of average. Soil moisture is at 62% compared to 46% last year. Storage in Lahontan Reservoir is 20% of capacity, compared to 32% last year. Forecast streamflow volumes range from -9% to 18% of average.









CARSON RIVER BASIN
Streamflow Forecasts - April 1, 2015

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	50% (Most Prob) (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
EF Carson R nr Gardnerville							
APR-JUL	4.0	14.0	34	18	54	83	186
MAY-JUL	2.0	4.0	20	13	39	68	151
WF Carson R at Woodfords							
APR-JUL	0.0	2.1	9.0	17	15.9	26	54
MAY-JUL	0.4	1.3	5.0	12	13.3	26	42

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

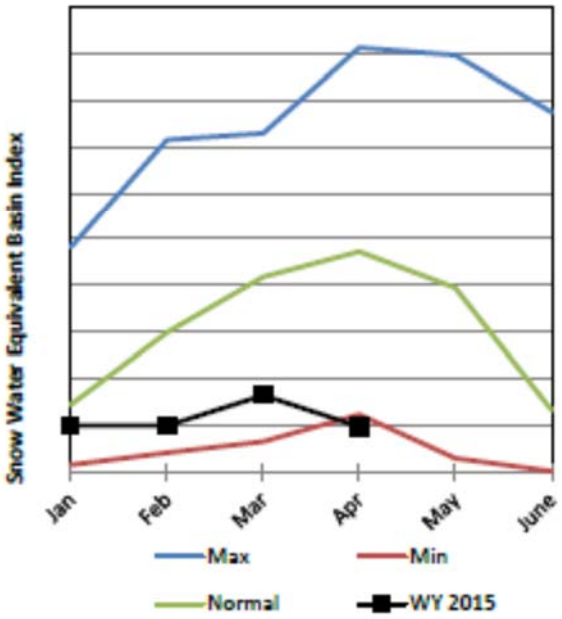
The average is computed for the 1981-2010 base period.

Walker River Basin

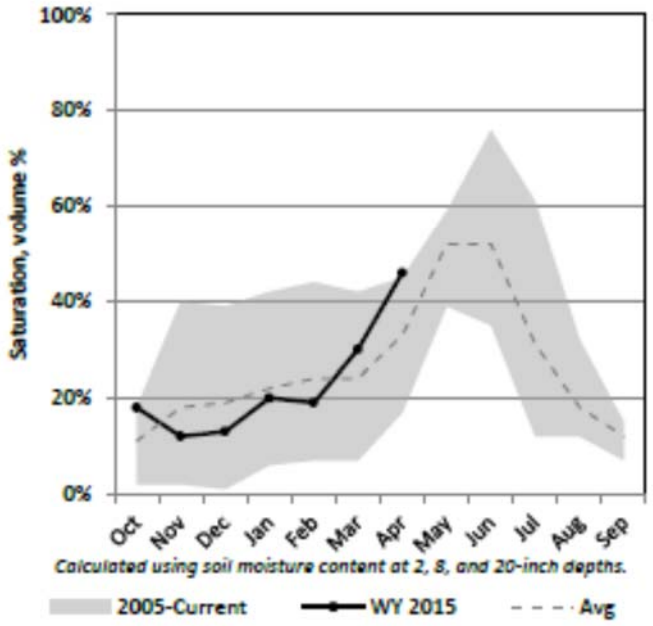
April 1, 2015

Snowpack in the Walker River Basin is much below average at 18% of normal, compared to 44% last year. Precipitation in March was much below average at 12%, which brings the seasonal accumulation (Oct-Mar) to 45% of average. Soil moisture is at 46% compared to 17% last year. Combined reservoir storage is at 16% of capacity, compared to 18% last year. Forecast streamflow volumes range from 12% to 15% of average.

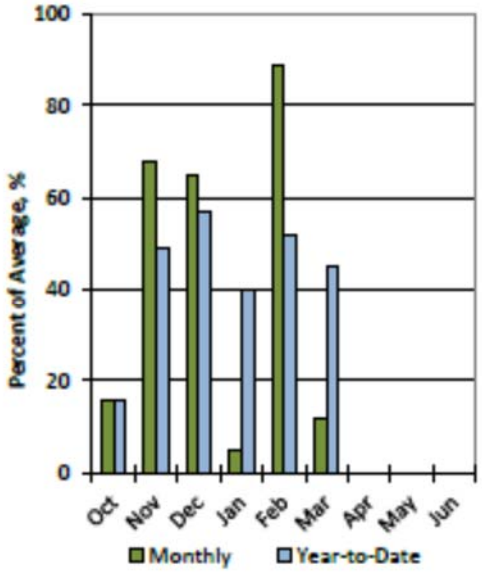
Snowpack



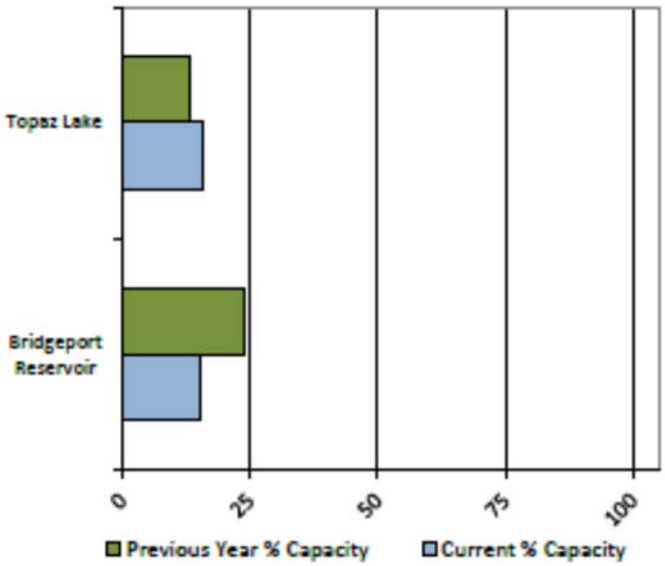
Soil Moisture



Precipitation



Reservoir Storage



WALKER RIVER BASIN
Streamflow Forecasts - April 1, 2015

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
E Walker R nr Bridgeport							
APR-AUG	0.7	2.0	8.0	12	24	46	67
MAY-AUG	0.6	1.8	6.0	10	18.4	37	59
W Walker R bl L Walker R nr Coleville							
APR-JUL	0.0	7.0	24	15	40	65	162
MAY-JUL	0.0	5.0	21	15	38	62	142
W Walker R nr Coleville							
APR-JUL	16.0	21	24	15	27	32	163
MAY-JUL	0.00	2.9	21	15	59	114	143

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Owens River Basin

April 1, 2015

OWENS RIVER BASIN
Streamflow Forecasts - April 1, 2015

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	Future Conditions === Wetter ===> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Owens R (DWR)							
APR-SEP			57	24			235

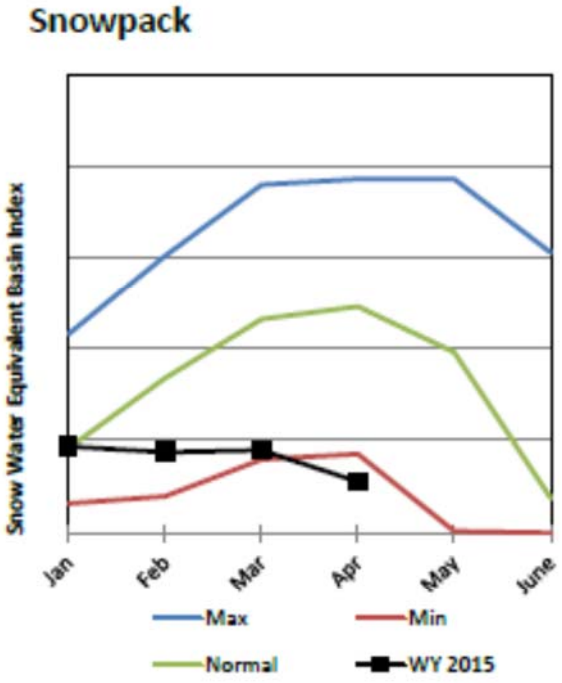
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

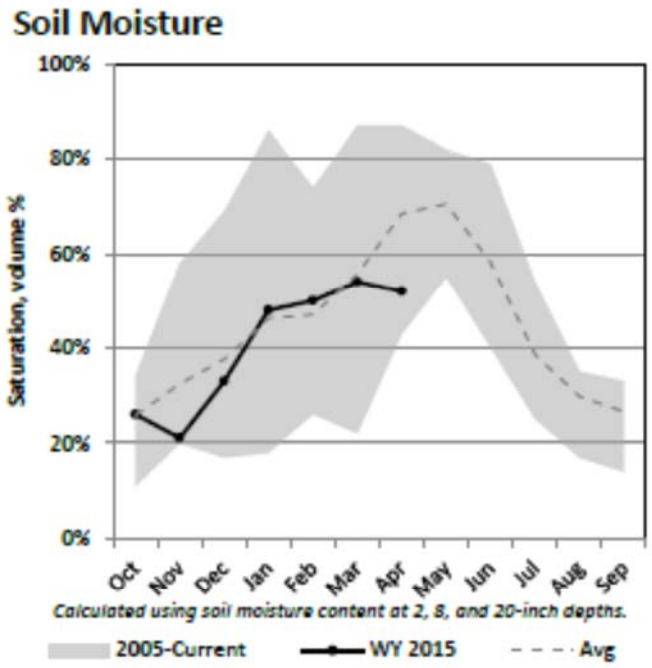
The average is computed for the 1981-2010 base period.

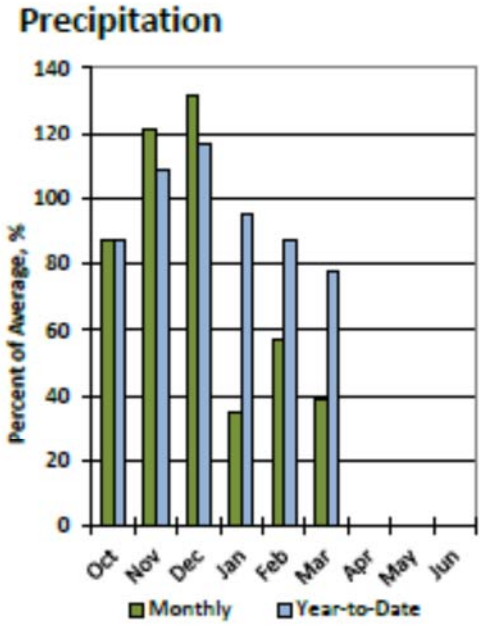
Northern Great Basin

April 1, 2015

Snowpack in the Northern Great Basin is much below average at 23% of normal, compared to 54% last year. Precipitation in March was much below average at 39%, which brings the seasonal accumulation (Oct-Mar) to 78% of average. Soil moisture is at 52% compared to 36% last year. Forecast streamflow volumes range from 3% to 29% of average.







NORTHERN GREAT BASIN
Streamflow Forecasts - April 1, 2015

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	Future Conditions: 50% (Most Prob) (1000AF)	50% (Most Prob) (% AVG.)	=== Wetter ===> 30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Eagle Ck nr Eagleville							
APR-JUL	0.0	0.1	0.8	19	1.7	3.1	4.3
Bidwell CK nr Ft. Bidwell							
APR-JUL	0.0	0.2	1.0	8	2.4	4.5	12.0
Davis Ck (Acre-Feet)							
APR-JUL	1304	1732	2100	29	2547	3383	7233
APR-SEP	1535	2003	2400	30	2875	3752	7991

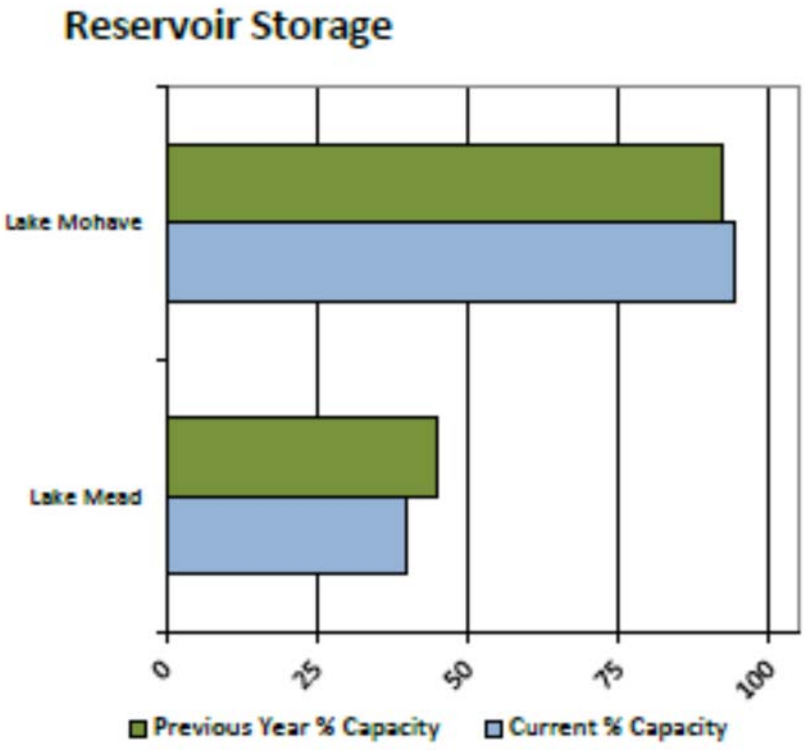
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

Lower Colorado River Basin

April 1, 2015

Snowpack in the Colorado River Basin is forecasted to produce 45% of normal runoff into Lake Powell during the April to July months. Lake Mead water levels have decreased as shown below since this time last year.



COLORADO RIVER BASIN
Streamflow Forecasts - April 1, 2015

	<=== Drier === Future Conditions === Wetter ===>						
Forecast Pt	========== Chance of Exceeding * ==========						
Forecast Period	90% (1000AF)	70% (1000AF)	50% (Most Prob) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Lake Powell Inflow (2)							
APR-JUL	1770	2570	3200	45	3900	5050	7160

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period.

(2) - The value is natural volume - actual volume may be affected by upstream water management.

How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snowcourses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

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