NRCS
Natural Resources Conservation Service

California Water Supply Outlook Report

January, 2014

Dismal snowpack outside USFS Lake Tahoe Mgmt. Unit Office, ~6,300” elev. January 8, 2014

Photo by Brian Hansen, USFS

Water Supply Outlook Reports

Federal - State - Private Cooperative Snow Surveys

For more water supply and resource management information, contact:

State Water Supply Specialist, 430 G Street #4164, Davis, CA, 95616 - Phone: (530)792-5609
Internet Address: http://www.nrcs.usda.gov/wps/portal/nrcs/main/ca/snow/

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.

STATE OF CALIFORNIA GENERAL OUTLOOK
January 1, 2014

SUMMARY
The 2014 snow accumulation season started out in October 2013 under very dry conditions due to much below average precipitation received during the spring of 2013. These dry conditions have been further exacerbated due to below average precipitation during the fall of 2013 and into January 2014. California thus far this snow accumulation season has had few storms and only one that was noteworthy. Because of the paucity of storm events and the long duration between said storms, snow that has accumulated at times has also melted leaving even less for future runoff. The bottom line is that current snowpacks in California are near historic low levels.

SNOWPACK
January first snowpack in general is far below normal conditions for the Northern, Central, and Southern Sierras. In addition, the snow water equivalents range from 8% of nomal in the northern Sierras to 23% of normal in the Southern Sierras. For more information please visit:

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

PRECIPITATION
Mountain precipitation during the fall of 2013 through the end of December 2013 is remarkably low, paralleling the driest years on record, 1922-23 and 1976-77. Referring to the Northern Sierra 8-Station precipitation average, gages show rainfall amounts for this Northern Sierra region to be at 16% of normal. Similarly, gages used to develop a San Joaquin 5-station precipitation average show rainfall amounts for the Southern Sierra region to be 20% of average.

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

RESERVOIRS
Most major reservoirs in California, especially those fed by the Sierra Mountains and Foothills are far below average capacity for this time of year. In comparison, most of these reservoirs were slightly above normal capacity one year ago due to significant rainfall during the October through December months of 2012. However since then, the lack of snowpack and rainfall during January 2013 through December 2013 has not recharged the reservoirs. Currently Lake Oroville is at 56 percent of normal storage, Lake Shasta is at 55 percent of normal storage, Folsom Lake is at 35 percent of normal storage, and New Hogan is at 74 percent of normal storage.

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

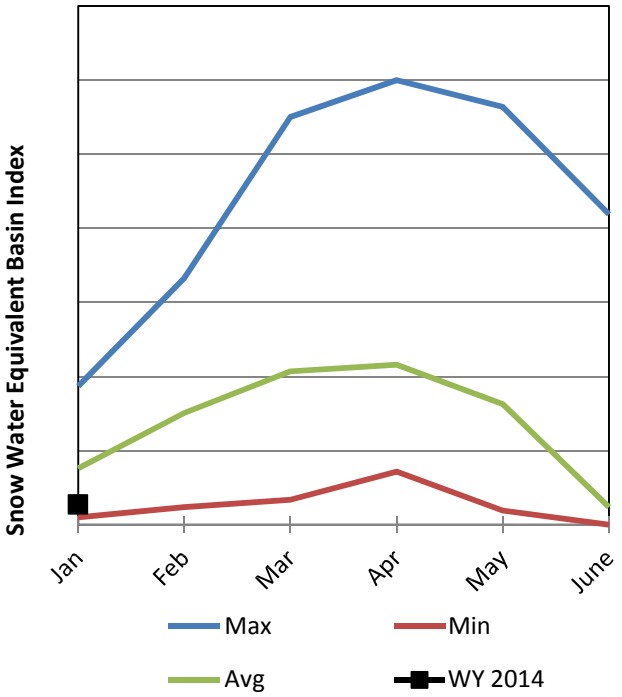
STREAMFLOW
Flows from Sierra fed streams all show much below normal due to minimal rainfall. The streamflow forecasts for the major basins in California are shown below.

Carson River Basin

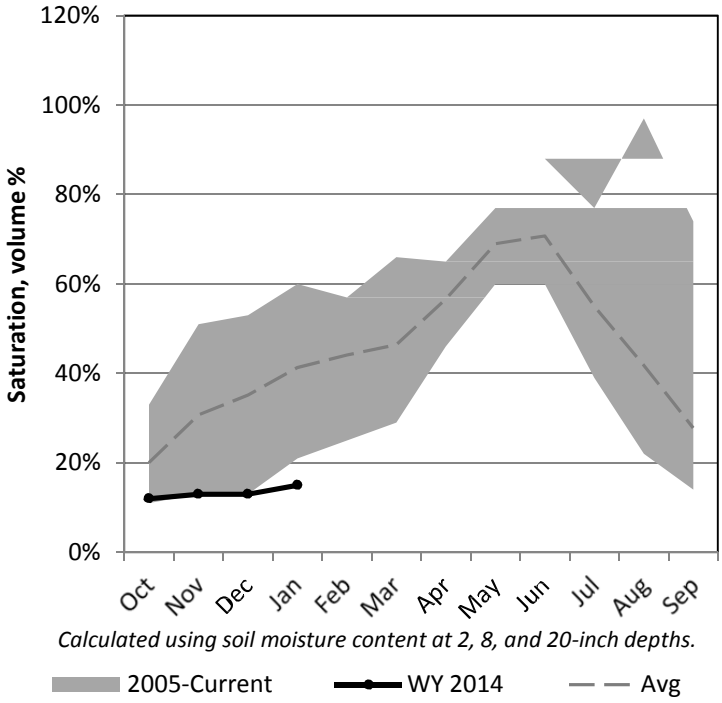
1/1/2014

Snowpack in the Carson River Basin is much below average at 36% of normal, compared to 192% last year. Precipitation in December was much below average at 28%, which brings the seasonal accumulation (Oct-Dec) to 28% of average. Soil moisture is at 15% compared to 53% last year. Reservoir storage is at 14% of capacity, compared to 22% last year. Forecast streamflow volumes range from 15% to 31% of average.

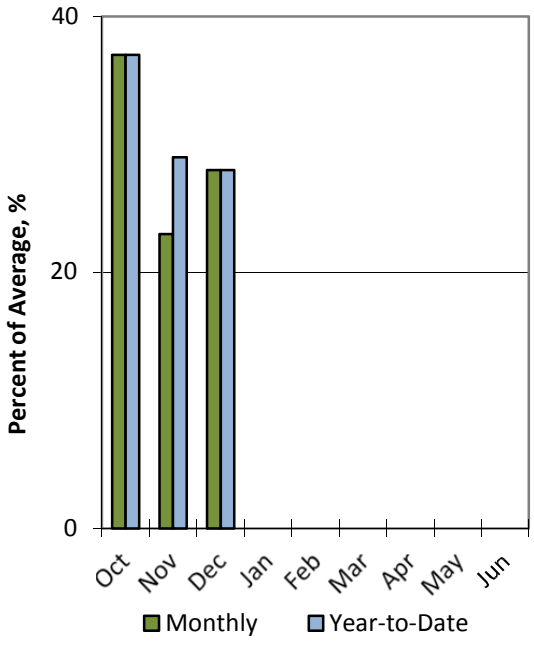
Snowpack



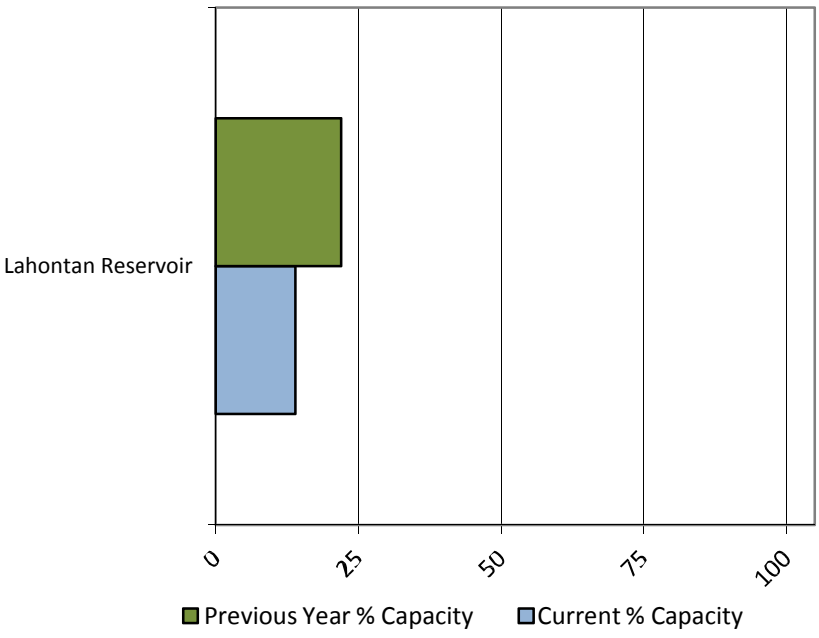
Soil Moisture



Precipitation



Reservoir Storage



CARSON RIVER BASIN
Streamflow Forecasts - January 1, 2014

Forecast Pt / Forecast Period	<=== Drier === 90% (1000AF)	70% (1000AF)	Future Conditions 50% (1000AF) (% AVG.)	30% (1000AF)	=== Wetter ===> 10% (1000AF)	30 Yr Avg (1000AF)
EF Carson R nr Gardnerville						
MAR-JUL	6.0	18.0	60	29	114	194	205
APR-JUL	5.0	32	50	27	68	95	186
EF Carson Date of 200 cfs flow (julian_day)						
200 cfs	May 22	Jun 12	Jun 20	Jul 10	Jul 31	Jul 25
EF Carson Date of 500 cfs flow (julian_day)						
500 cfs	May 06	May 25	Jun 01	Jun 20	Jul 09	Jul 01
WF Carson R at Woodfords						
MAR-JUL	0.6	4.7	20	34	36	61	59
APR-JUL	0.5	5.9	16.0	30	33	52	54

* 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.

CARSON RIVER BASIN
Reservoir Storage (1000AF) End of December

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
LAHONTAN RESERVOIR	295.1	40.7	64.6	123.4

CARSON RIVER BASIN
Watershed Snowpack Analysis - January 1, 2014

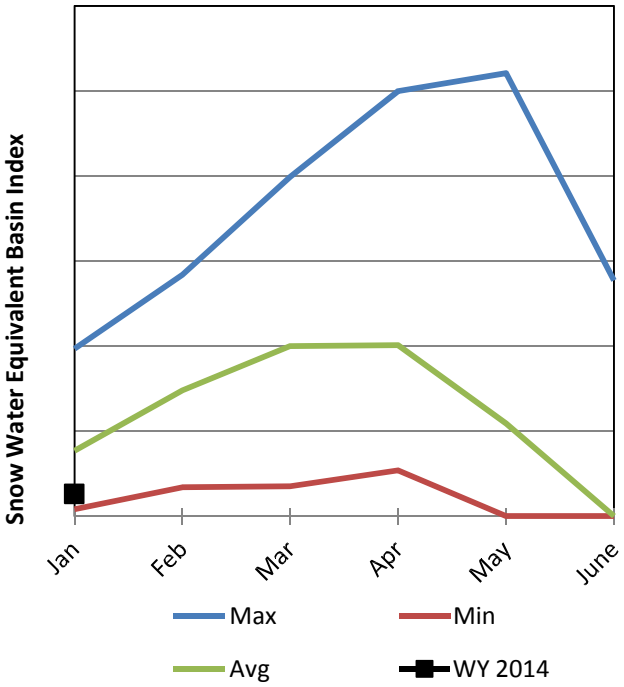
Watershed	Number of Data Sites	This Year as Percent of Last Year	Median
E. CARSON RIVER	6	18	33
W. CARSON RIVER	3	21	38
CARSON Rv. at Carson City	8	19	35
CARSON Rv. at Ft. Churchill	8	19	35
CARSON RIVER BASIN	8	19	35

Lake Tahoe Basin

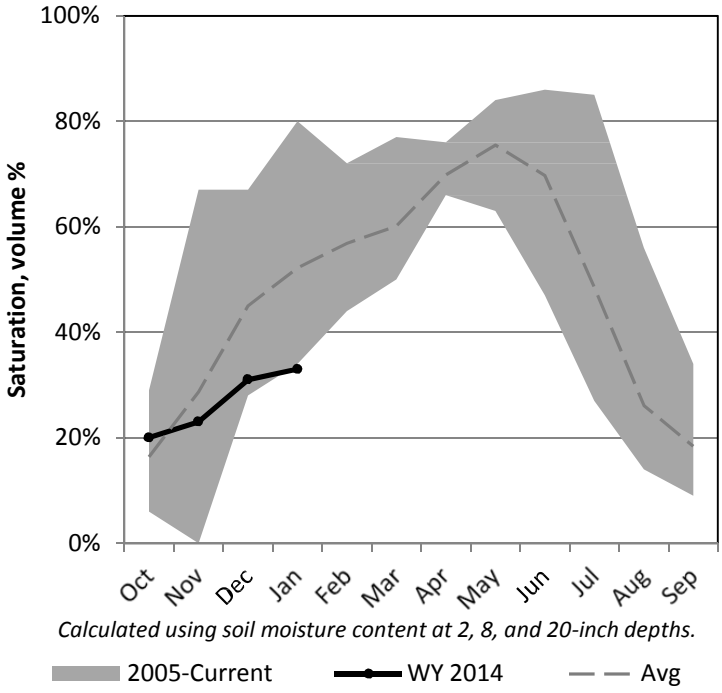
1/1/2014

Snowpack in the Lake Tahoe Basin is much below average at 34% of normal, compared to 162% last year. Precipitation in December was much below average at 30%, which brings the seasonal accumulation (Oct-Dec) to 30% of average. Soil moisture is at 33% compared to 52% last year. Reservoir storage is at 10% of capacity, compared to 52% last year. Forecast streamflow volumes range from 15% to 20% of average.

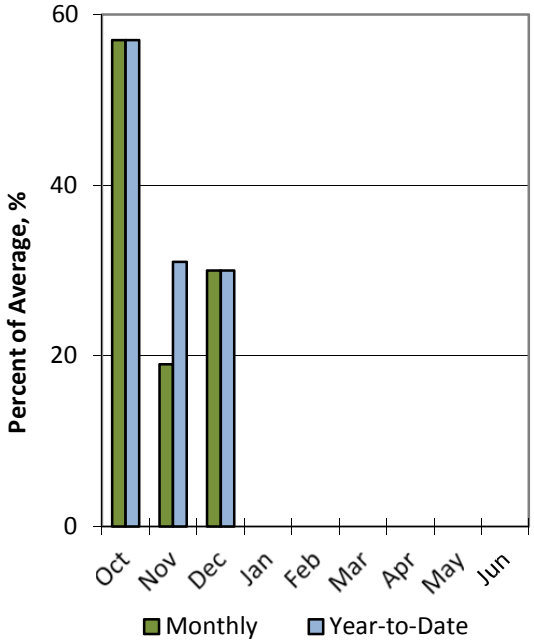
Snowpack



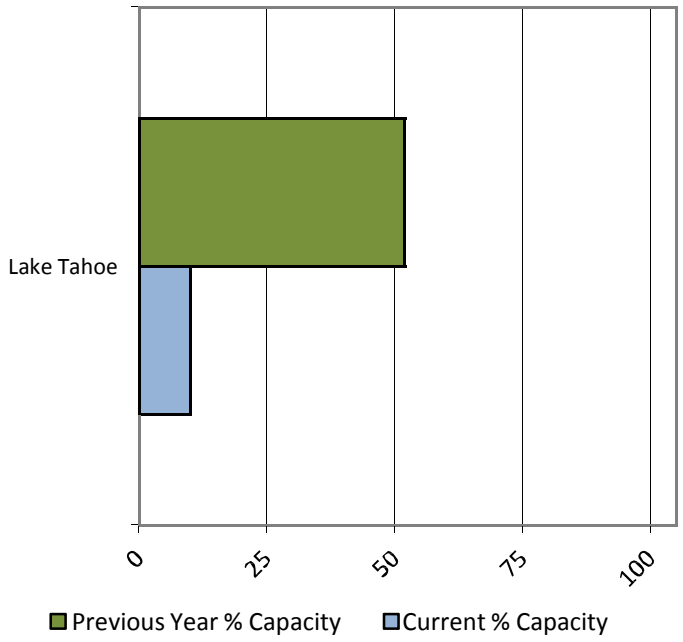
Soil Moisture



Precipitation



Reservoir Storage



LAKE TAHOE BASIN
Streamflow Forecasts - January 1, 2014

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Marlette Lk Inflow (Acre-Ft)							
MAR-JUL	-892.0	-176.0	311	28	798	1514	1110
APR-JUL	-938.0	-303.0	128	15	559	1194	830
Lake Tahoe Rise (Gates Closed) (1)							
MAR-HIGH	0.02	0.07	0.35	20	0.71	1.49	1.73
APR-HIGH	0.01	0.07	0.30	23	0.66	1.44	1.31
OCT-HIGH	0.05	0.18	0.40	18	1.21	2.30	2.24

* 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
Reservoir Storage (1000AF) End of December

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
LAKE TAHOE	744.6	75.2	386.8	----

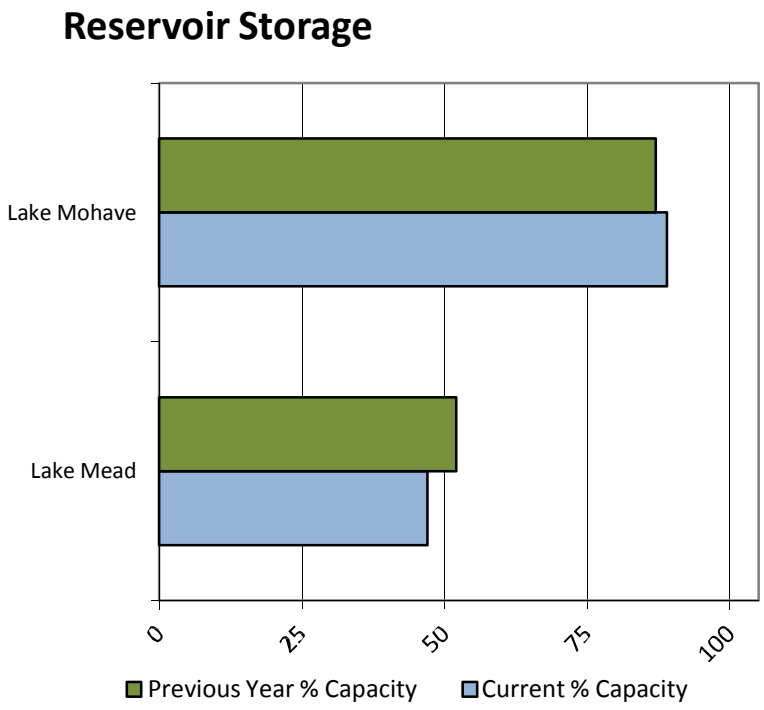
LAKE TAHOE BASIN
Watershed Snowpack Analysis - January 1, 2014

Watershed	Number of Data Sites	This Year as Percent of Last Year	Median
LAKE TAHOE RISE	7	19	32
LAKE TAHOE BASIN	7	19	32

Colorado River Basin

1/1/2014

Streamflows are expected to be below normal. The Colorado River inflow to Lake Powell is expected to flow at 91 percent of average or produce 6,500,000 acre-feet during the April-July forecast period.



COLORADO RIVER BASIN
Streamflow Forecasts - January 1, 2014

	<=== Drier === Future Conditions === Wetter ===>	
Forecast Pt	Chance of Exceeding *	
Forecast Period	90% (1000AF) / 70% (1000AF) / 50% (1000AF) (% AVG.) / 30% (1000AF) / 10% (1000AF)	30 Yr Avg (1000AF)
Lake Powell Inflow (2)		
APR-JUL	3200 / 5030 / 6500 / 91 / 8160 / 10900	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.

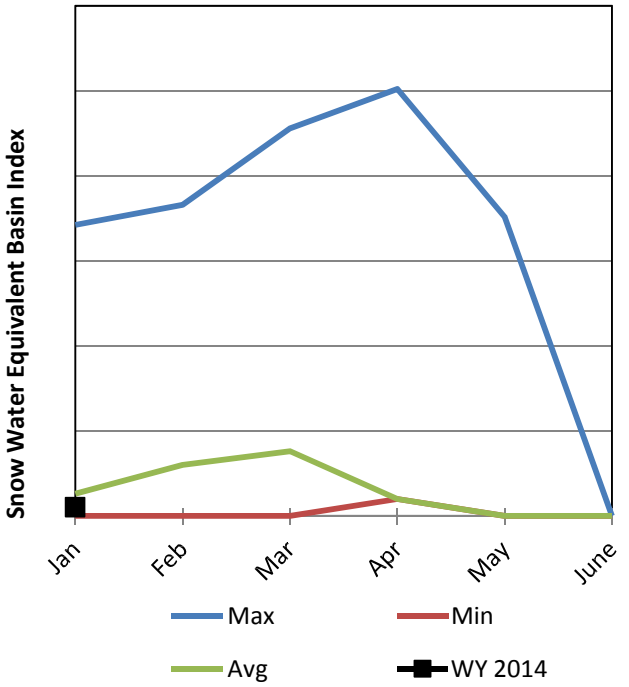
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

Northern Great Basin

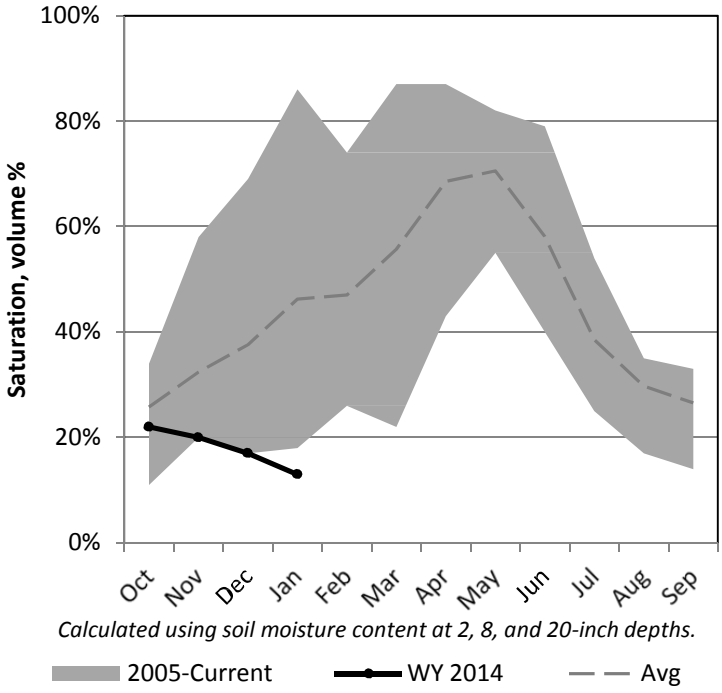
1/1/2014

Snowpack in the Northern Great Basin is much below average at 35% of normal, compared to 169% last year. Precipitation in December was much below average at 27%, which brings the seasonal accumulation (Oct-Dec) to 36% of average. Soil moisture is at 13% compared to 32% last year. Forecast streamflow volumes range from 9% to 41% of average.

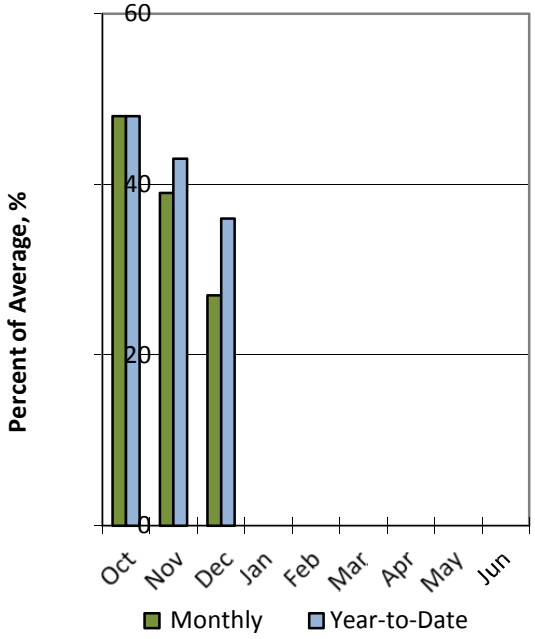
Snowpack



Soil Moisture



Precipitation



NORTHERN GREAT BASIN
Streamflow Forecasts - January 1, 2014

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Eagle Ck nr Eagleville							
APR-JUL	0.043	0.129	0.40	9	2.2	4.3	4.3
Bidwell CK nr Ft. Bidwell							
APR-JUL	0.120	0.36	1.80	15	3.0	5.9	12.0
Davis Ck (acre-ft)							
APR-JUL	779	1283	1800	25	2526	4157	7233
APR-SEP	952	1516	2080	26	2854	4547	7991

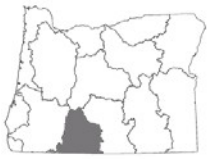
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

(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.

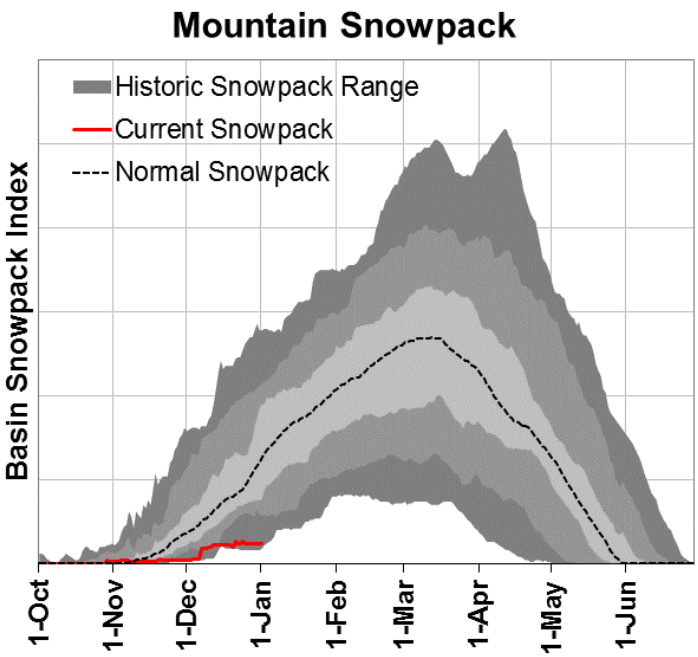
NORTHERN GREAT BASIN
Watershed Snowpack Analysis - January 1, 2014

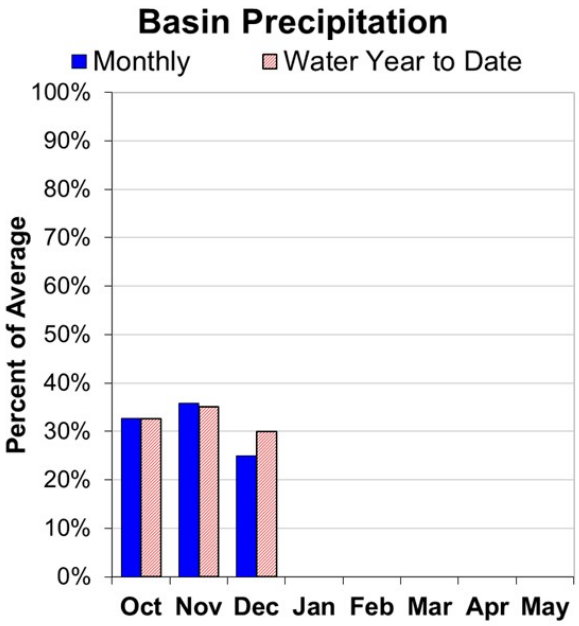
Watershed	Number of Data Sites	This Year as Percent of Last Year	Median
BIDWELL	2	28	34
MILL CREEK	1	35	34
DEEP CREEK	1	35	34
EAGLE CREEK	1	35	34
NORTHERN GREAT BASIN	2	28	34



Klamath Basin

January 1, 2014





Summary of Water Supply Conditions

SNOWPACK

As of January 1, the basin snowpack was 19% of normal. Two SNOTEL sites in the basin have set new record lows for snowpack measurements, and others are near record lows. Park Headquarters Revised snow course (near Crater Lake) is the third lowest on record since measurements began in 1945. Last January 1, the snowpack was 108% of normal.

PRECIPITATION

December precipitation was 25% of average. Precipitation since the beginning of the water year (October 1 - January 1) has been 30% of average.

RESERVOIR

Reservoir storage across the basin is currently well below average. As of January 1, storage at published reservoirs was 54% of average and 25% percent of capacity.

STREAMFLOW FORECAST

April through September streamflow forecasts in the basin range from 21% to 51% of average.

For more information contact your local Natural Resources Conservation Service office:
Klamath Falls - (541) 883-6932
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

KLAMATH BASIN

Streamflow Forecasts - January 1, 2014

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding *						
	90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Clear Lk Inflow (2)							
FEB-JUL	1.9	11.2	31	33	65	116	93
APR-SEP	0.3	3.8	9.6	27	23	42	35
Gerber Res Inflow (2)							
FEB-JUL	0.4	3.3	9.0	22	21	40	41
APR-SEP	0.1	1.0	3.0	21	8.6	15.3	14.4
Sprague R nr Chiloquin							
FEB-JUL	6.0	60	127	43	194	294	295
APR-SEP	4.0	41	86	41	131	197	210
Upper Klamath Lk Inflow (1)							
JAN-SEP	60.0	360	495	53	630	930	935
FEB-JUL	14.0	245	365	51	480	740	715
MAR-SEP	51	275	378	58	480	705	655
APR-SEP	9.5	146	220	46	295	460	475
Williamson R bl Sprague R nr Chiloquin							
JAN-SEP	110	235	320	54	405	530	595
FEB-JUL	43	161	240	51	320	440	475
APR-SEP	47	126	180	51	235	315	355

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

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(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.

KLAMATH BASIN

Watershed Snowpack Analysis - January 1, 2014

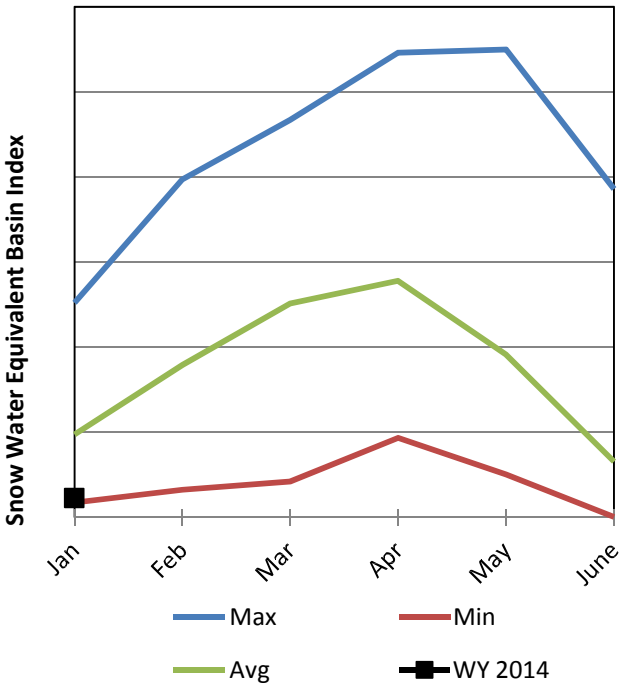
Watershed	Number of Data Sites	This Year as Percent of Last Year	Median
Lost River	1	35	34
Sprague River	0	0	0
Upper Klamath Lake	6	21	21
Williamson River	3	21	27

Truckee River Basin

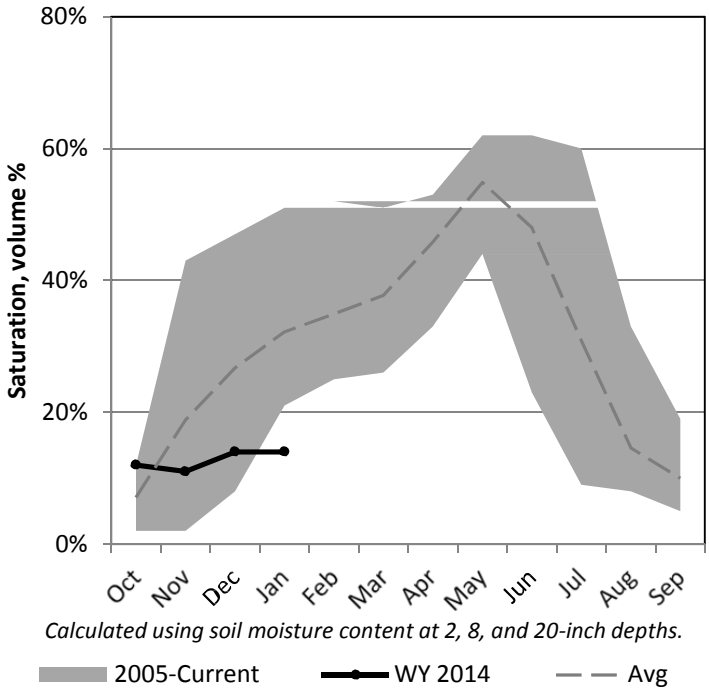
1/1/2014

Snowpack in the Truckee River Basin is much below average at 20% of normal, compared to 191% last year. Precipitation in December was much below average at 18%, which brings the seasonal accumulation (Oct-Dec) to 21% of average. Soil moisture is at 14% compared to 52% last year. Reservoir storage is at 44% of capacity, compared to 69% last year. Forecast streamflow volumes range from 13% to 30% of average.

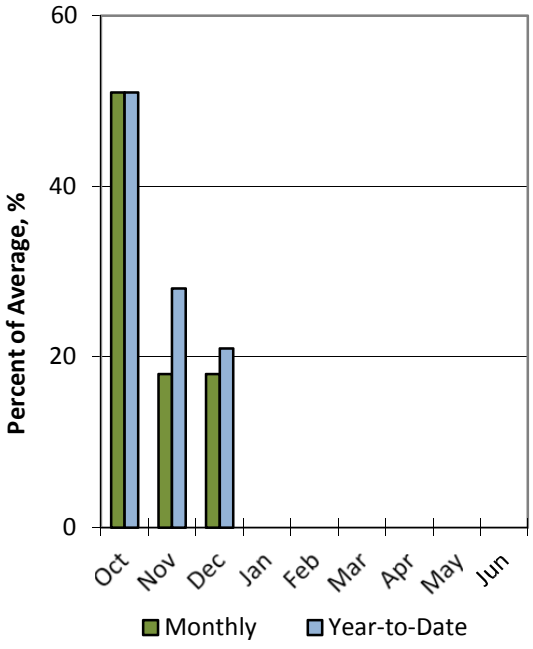
Snowpack



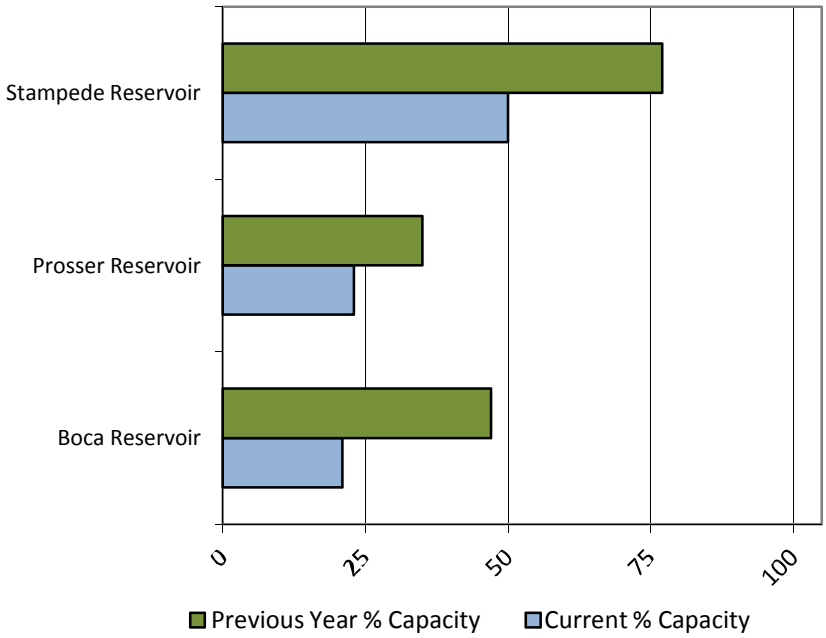
Soil Moisture



Precipitation



Reservoir Storage



TRUCKEE RIVER BASIN
Streamflow Forecasts - January 1, 2014

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Sagehen Ck nr Truckee							
MAR-JUL	0.7	1.1	1.4	22	1.9	2.9	6.4
APR-JUL	0.5	0.8	1.1	20	1.5	2.4	5.6
L Truckee R ab Boca							
MAR-JUL	1.8	7.2	25	28	51	94	90
APR-JUL	0.8	4.8	20	25	45	86	80
Truckee R at Farad							
MAR-JUL	6.0	37	98	32	196	379	306
APR-JUL	3.0	16.0	78	30	159	289	260

* 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.

TRUCKEE RIVER BASIN
Reservoir Storage (1000AF) End of December

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
BOCA RESERVOIR	40.9	8.4	19.1	16.3
PROSSER RESERVOIR	28.6	6.6	9.9	9.9
STAMPEDE RESERVOIR	226.5	114.3	175.4	145.3

TRUCKEE RIVER BASIN
Watershed Snowpack Analysis - January 1, 2014

Watershed	Number of Data Sites	This Year as Percent of Last Year	Median
TRUCKEE RIVER	6	14	25
LITTLE TRUCKEE RIVER	3	12	24
SAGE HEN CREEK	3	12	24
GALENA CREEK	0	0	0
PYRAMID LAKE	13	16	28
TRUCKEE RIVER BASIN	6	14	25

Sacramento River Basin

1/1/2014

Forecast streamflow volumes range from 36% to 58% of average.

SACRAMENTO RIVER BASIN
Streamflow Forecasts - January 1, 2014

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Sacramento R at Shasta (NWS)							
APR-JUL	62	83	142	46	259	363	312
McCloud R ab Shasta (NWS)							
APR-JUL	146	174	220	56	296	395	392
Pit R at Shasta Lk (NWS)							
APR-JUL	371	395	474	47	593	791	1013
Inflow to Shasta Lk (NWS)							
APR-JUL	679	822	998	55	1395	2028	1803
Sacramento R nr Red Bluff (NWS)							
APR-JUL	821	1008	1301	53	1887	2796	2479
NF Feather R nr Prattville (NWS)							
APR-JUL	77	106	146	44	235	308	333
Inflow to Oroville Res (NWS)							
APR-JUL	90	379	618	36	1157	1792	1701
N Yuba R bl Goodyears Bar (NWS)							
APR-JUL	56	70	149	55	234	322	273
Yuba R at Smartville (NWS)							
APR-JUL	165	232	491	50	806	1266	981
MF American R nr Auburn (NWS)							
APR-JUL	118	154	273	56	415	632	490
Inflow to Union Valley Res (NWS)							
APR-JUL	22	29	54	55	78	112	98
Silver Ck bl Camino Div. Dam (NWS)							
APR-JUL	39	50	91	58	136	208	158
Inflow to Folsom Res (NWS)							
APR-JUL	225	304	579	47	963	1540	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.

(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.

San Joaquin River Basin

1/1/2014

Forecast streamflow volumes range from 34% to 51% of average.

SAN JOAQUIN RIVER BASIN
Streamflow Forecasts - January 1, 2014

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Cosumnes R at Michigan Bar (NWS)							
APR-JUL	17.0	27	53	41	97	210	128
Inflow to Pardee Res (NWS)							
APR-JUL	57	100	188	40	326	518	467
Inflow to New Melones Res (NWS)							
APR-JUL	66	116	231	34	418	644	690
Tuolumne R nr Hetch Hetchy (NWS)							
APR-JUL	109	177	334	56	526	643	596
Inflow to New Don Pedro Res (NWS)							
APR-JUL	207	322	613	48	1050	1339	1288
Merced R, Pohono Bridge Yosemite (NWS)							
APR-JUL	57	91	196	51	343	437	385
Inflow to Lake McClure (NWS)							
APR-JUL	71	115	276	43	534	793	642
Inflow to Millerton Lk (NWS)							
APR-JUL	110	191	467	37	1031	1526	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.

(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.

Tulare Lake Basin

1/1/2014

Forecast streamflow volumes range from 21% to 41% of average.

TULARE LAKE BASIN
Streamflow Forecasts - January 1, 2014

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Inflow to Pine Flat Res (NWS)							
APR-JUL	107	202	505	41	977	1410	1231
Kaweah R at Terminus Res (NWS)							
APR-JUL	12.0	31	90	31	225	343	288
Tule R at Success Res (NWS)							
APR-JUL	3.0	5.0	13.0	21	45	80	63
Inflow to Isabella Res (NWS)							
APR-JUL	16.0	26	144	32	385	516	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.

(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.

North Coast Area Basin

1/1/2014

Forecast streamflow volumes range from 19% to 54% of average.

NORTH COASTAL AREA
Streamflow Forecasts - January 1, 2014

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
Inflow to Clair Engle Lk (NWS)							
APR-JUL	136	246	362	54	568	681	666
Scott R nr Fort Jones (NWS)							
APR-JUL	4.0	15.0	33	19	68	121	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.

(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.

Owens River Basin

1/1/2014

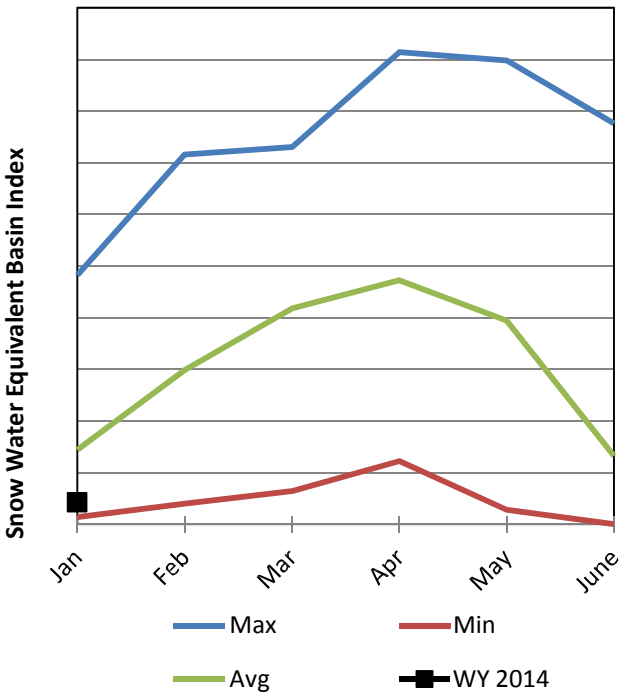
No data available for the January 1 report.

Walker River Basin

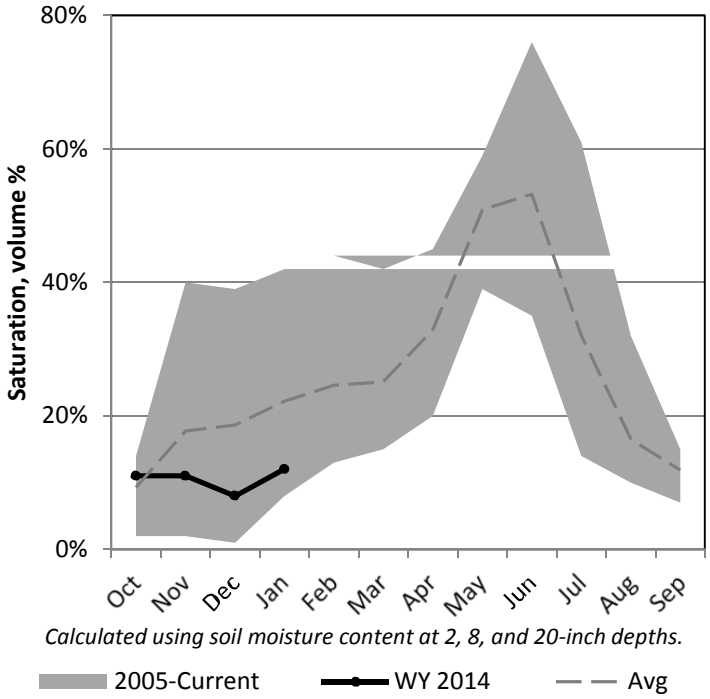
1/1/2014

Snowpack in the Walker River Basin is much below average at 30% of normal, compared to 207% last year. Precipitation in December was much below average at 31%, which brings the seasonal accumulation (Oct-Dec) to 31% of average. Soil moisture is at 12% compared to 39% last year. Reservoir storage is at 12% of capacity, compared to 22% last year. Forecast streamflow volumes range from 24% to 31% of average.

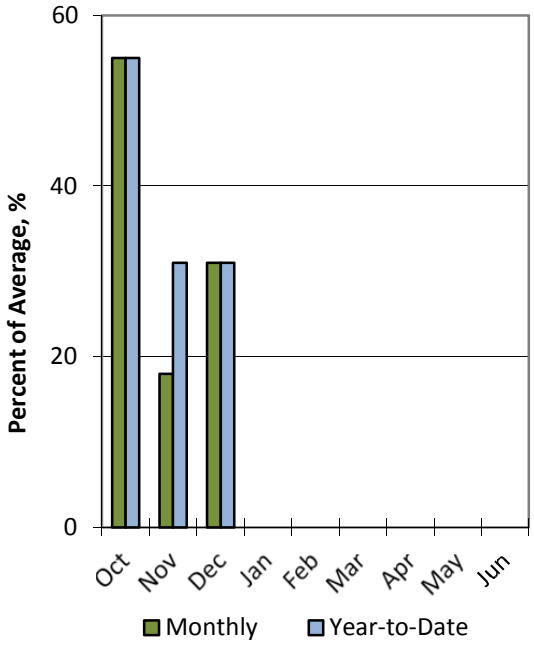
Snowpack



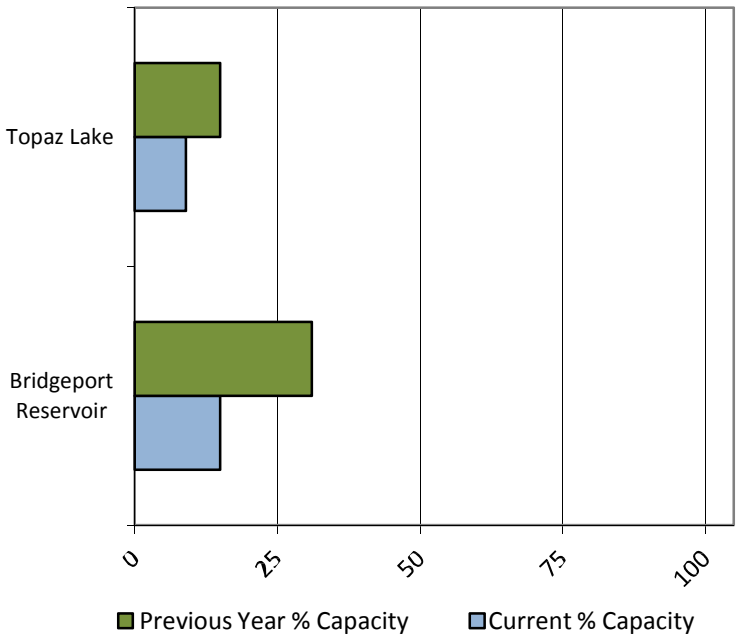
Soil Moisture



Precipitation



Reservoir Storage



WALKER RIVER BASIN
Streamflow Forecasts - January 1, 2014

Forecast Pt / Forecast Period	<=== Drier === Future Conditions === Wetter ===> Chance of Exceeding *						
	90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30 Yr Avg (1000AF)
E Walker R nr Bridgeport							
MAR-AUG	0.8	4.6	20	26	36	71	76
APR-AUG	0.7	4.7	16.0	24	34	61	67
W Walker R bl L Walker R nr Coleville							
MAR-JUL	3.0	11.0	54	32	97	161	170
APR-JUL	2.0	8.0	50	31	92	154	162
W Walker R nr Coleville							
MAR-JUL	46	52	55	32	58	64	172
APR-JUL	41	46	51	31	52	57	163

* 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.

WALKER RIVER BASIN
Reservoir Storage (1000AF) End of December

Reservoir	Usable Capacity	********** Usable Storage ********* This Year	Last Year	Average
BRIDGEPORT RESERVOIR	42.5	6.5	13.0	18.0
TOPAZ RESERVOIR	59.4	5.4	9.1	21.5

WALKER RIVER BASIN
Watershed Snowpack Analysis - January 1, 2014

Watershed	Number of Data Sites	This Year as Percent of Last Year	Median
E. WALKER Rv. nr Bridgeport	2	9	19
W. WALKER Rv. nr Coleville	5	15	30
WALKER LAKE RISE	6	14	30
WALKER RIVER BASIN	6	14	30

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California Water Supply Outlook Report

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