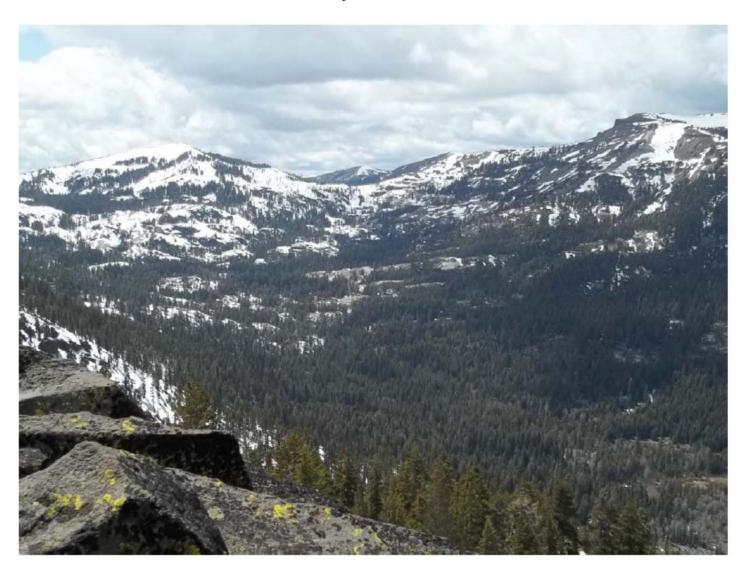
#### UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

#### California Water Supply Outlook Report May, 2014



Looking west from Carpenter Ridge, near Independence Lake, CA. May 7, 2014

Photo by Evan Smith, NRCS

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#### 1. 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.

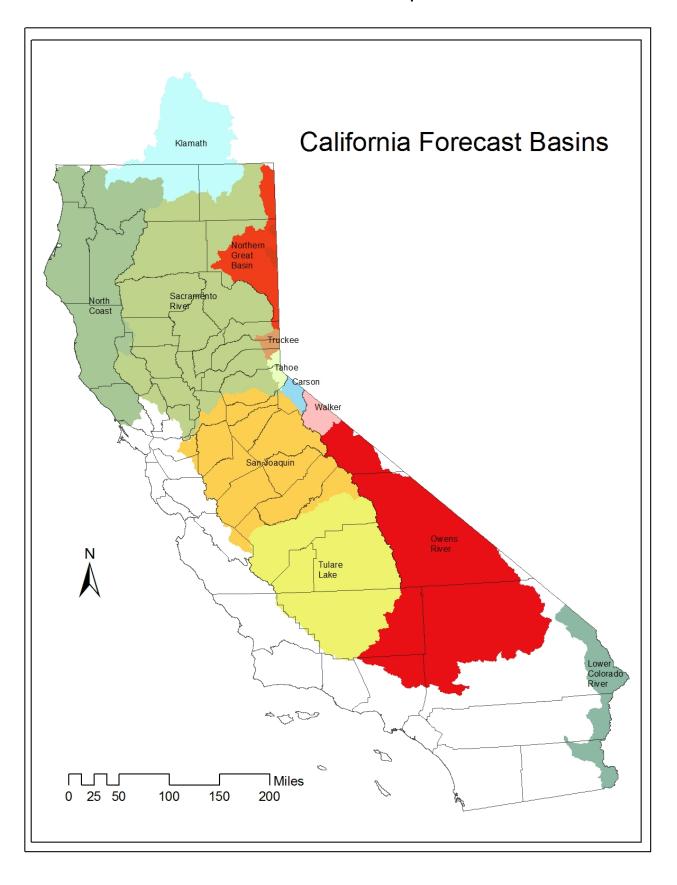
The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. 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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#### 2.Basin Map



#### 3. STATE OF CALIFORNIA GENERAL OUTLOOK May 12, 2014

#### **SUMMARY**

California received minimal precipitation during the month of April 2014. The few storms that moved through California during April did little to affect the snowpack amounts, but did help maintain reservoir amounts from decreasing.

#### **SNOWPACK**

The May 1 snowpack measurements showed that snowpack amounts are decreasing rapidly, remaining far below normal for this time of year in all three Sierra Regions: Northern, Central, and Southern. The snow water equivalents are as follows: Northern Sierras 10% of normal, Central Sierras 13% of normal, and the Southern Sierras 11% of normal. For more information and current conditions please visit:

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

#### **PRECIPITATION**

As of May 1, the precipitation totals are still much below average, but stayed steady in terms of percent of average. Referring to the Northern Sierra 8-Station precipitation average, gages show rainfall amounts for this Northern Sierra region to be at 62% of normal (Same as last report). Similarly, gages used to develop a San Joaquin 5-station precipitation average show rainfall amounts for the Central/Southern Sierra region to be 49% of average (increase of 2% from April).

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 far below average capacity for this time of year. Early May reports show Lake Oroville is at 63 percent of normal storage, Lake Shasta is at 60 percent of normal storage, Folsom Lake is at 74 percent of normal storage, and New Hogan is at 72 percent of normal storage. The reservoir levels will not expected to increase much due to the low snowpack as forecasted in the following section.

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

#### **STREAMFLOW**

Predicted stream flows from snowpack fed streams all show much below normal due to minimal snowpack. The streamflow forecasts for the major basins in California are shown as follows:

#### 4. Sacramento River Basin

Forecasted streamflow volumes for this April through July are much below average, ranging from 27% to 58% of average.

\_\_\_\_\_\_

#### SACRAMENTO RIVER BASIN Streamflow Forecasts - May 1, 2014

Streamflow Forecasts - May 1, 2014 \_\_\_\_\_\_ <=== Drier === Future Conditions === Wetter ===> Forecast Pt | ======== Chance of Exceeding \* ========= Forecast | 90% 70% | 50% (Most Prob) | 30% 10% Period |(1000AF) |(1000AF) |(1000AF) (% AVG.)|(1000AF) (1000AF) |(1000AF) \_\_\_\_\_\_ Sacramento R at Shasta (DWR) APR-JUL Sacramento R at Shasta (NWS) APR-JUL 97 98 McCloud R ab Shasta (DWR) APR-JUL McCloud R ab Shasta (NWS) APR-JUL 226 Pit R at Shasta Lk (DWR) APR-JUL Pit R at Shasta Lk (NWS) APR-JUL 463 465 Inflow to Shasta Lk (DWR) APR-JUL 740 OCT-SEP Inflow to Shasta Lk (NWS) APR-JUL 925 931 Sacramento R nr Red Bluff (DWR) APR-JUL OCT-SEP 3570 Sacramento R nr Red Bluff (NWS) APR-JUL 983 994 Feather R at Lk Almanor (DWR) APR-JUL NF Feather R at Pulga (DWR) APR-JUL NF Feather R nr Prattville (NWS) APR-JUL 156 MF Feather R nr Clio (DWR) APR-JUL SF Feather R at Ponderosa Dam (DWR) Inflow to Oroville Res (DWR) APR-JUL OCT-SEP Inflow to Oroville Res (NWS) APR-JUL 517 521 N Yuba R bl Goodyears Bar (DWR) APR-JUL N Yuba R bl Goodyears Bar (NWS) APR-JUL 95 97 Inflow Jackson Mdws & Bowman Res (DWR) APR-JUL 

S Yuba R nr Langs Crossing (DWR)

APR-JUL	80	34			233
Yuba R at Smartville (DWR)					
APR-JUL 340	320	32		460	996
OCT-SEP 804	845	36		945	2329
Yuba R at Smartville (NWS)					
APR-JUL 330 337	345	35	358	425	981
NF American R at N FK Dam (DWR)					
APR-JUL	70	27			262
MF American R nr Auburn (DWR)					
APR-JUL	160	31			522
MF American R nr Auburn (NWS)					
APR-JUL 168 171	178	36	190	219	490
Inflow to Union Valley Res (NWS)					
APR-JUL 49 50	52	53	55	62	98
Silver Ck bl Camino Div. Dam (DWR)					
APR-JUL	60	35			173
Silver Ck bl Camino Div. Dam (NWS)					
APR-JUL 35 36	39	25	43	55	158
Inflow to Folsom Res (DWR)				1.50	
APR-JUL 340	390	32		460	1231
OCT-SEP 857	907	34		990	2683
Inflow to Folsom Res (NWS)	420	2.6	460	F26	1020
APR-JUL 413 419	437	36	462	536	1232

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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.

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

#### 5. San Joaquin River Basin

 $For ecasted \ stream flow \ volumes \ for \ this \ April \ through \ July \ are \ much \ below \ average, \ ranging \ from \ 20\% \ to \ 49\% \ of \ average.$ 

\_\_\_\_\_ SAN JOAQUIN RIVER BASIN

SAN GOAQUIN RIVER BASIN  Streamflow Forecasts - May 1, 2014						
=======	<=== Drier === Fut				_	
	====== Char 90% 70%   5 (1000AF) (1000AF)   (1	50% (Mos .000AF)	st Prob)   (% AVG.) (	30% 1000AF)	10%   (1000AF)	30 Yr Avg (1000AF)
	: Michigan Bar (DWR)					
APR-JUL OCT-SEP	20 75	25 80	20 21		50 108	128 385
Cosumnes R at	Michigan Bar (NWS) 27 28	30	23	32	41	128
NF Mokelumne	R nr West Point (DWR)					
APR-JUL	it iii wese reliie (suit)	150	34			437
Inflow to Par	dee Res (DWR)					
APR-JUL	120	160	35		220	461
OCT-SEP	209	249	33		310	751
Inflow to Par	dee Res (NWS)					
APR-JUL	169 175	182	39	192	208	467
MF Stanislaus APR-JUL	R bl Beardsley (DWR)	110	33			334
N F Inflow to	McKays Pt Dam (DWR)	70	31			224
Inflow to New APR-JUL	Melones Res (DWR) 195	240	34		340	699
Inflow to New OCT-SEP	Melones Resr (DWR) 318	363	31		470	1167
Inflow to New APR-JUL	Melones Res (NWS) 231 234	243	35	263	281	690
Cherry & Elea APR-JUL	nor Cks, Hetch Hetchy	(DWR)	38			315
Tuolumne R nr APR-JUL	Hetch Hetchy (DWR)	240	40			604
Tuolumne R nr APR-JUL	Hetch Hetchy (NWS) 267 277	289	49	317	341	596
Inflow to New APR-JUL 0	Don Pedro Res (DWR)	430	35		590	1221

OCT-SEP	497	600	31		775	1943
Inflow to New APR-JUL	Don Pedro Res (NWS 409 423	444	35	489	530	1288
Merced R, Poho APR-JUL	ono Bridge Yosemite	(DWR) 110	30			372
Merced R, Poho APR-JUL	ono Bridge Yosemite 130 136	(NWS) 141	37	151	165	385
Inflow to Lake APR-JUL OCT-SEP	e McClure (DWR) 135 191	175 231	28 23		280 345	636 1007
Inflow to Lake	e McClure (NWS) 164 171	178	28	190	208	642
San Joaquin R APR-JUL	at Mammoth Pool (D	WR) 330	32			1026
Big Ck bl Hunt APR-JUL	ington Lk (DWR)	30	33			91
SF San Joaquin APR-JUL	R nr Florence Lk	(DWR) 60	30			201
Inflow to Mill APR-JUL OCT-SEP	erton Lk (DWR) 290 410	370 500	29 27		540 680	1258 1831
Inflow to Mill APR-JUL	erton Lk (NWS) 366 374	397	32	444	467	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.

#### 6. Tulare Lake Basin

Forecasted streamflow volumes for this April through July are much below average, ranging from 10% to 35% of average.

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=========	=======			=======	=======	=======	========	
	TULARE LAKE BASIN							
Streamflow Forecasts - May 1, 2014								
	<=== Dr:	ier ===	Future Co	nditions	=== Wett	er ===>		
	İ					į		
Forecast Pt	======	====== (	Chance of E	xceeding	* =====	====== i		
Forecast	90%		50% (Mos			10%	30 Yr Avq	
	1		(1000AF)				_	
=========	1 .		1 .					
NF Kings R n	r Cliff Car	mp (DWR)						
APR-JUL		<u>-</u> - (=,	80	34			239	
11111 001			00	31			237	
Inflow to Pin	ne Flat Res	s (DWR)						
APR-JUL	310	(2,111)	400	32		520	1236	
OCT-SEP	426		520	30		650	1729	
OCI DEF	420		520	30		030	1/2/	
Inflow to Pin	ne Flat De	- (NIMC)						
APR-JUL	401	414	431	35	480	527	1231	
AFK-00L	401	414	431	33	400	327	1231	
Kaweah R at '	Torminua D	og (DWD)						
APR-JUL	ferminus Re 61	es (DWK)	72	25		115	290	
			· <del>-</del>	23				
OCT-SEP	88		100	22		146	456	
Warran In Dock of		(NTT-TC)						
Kaweah R at			F-0	0.4	П.С	0.2	000	
APR-JUL	66	67	70	24	76	83	288	
m 1 n	_	( D. I.D. )						
Tule R at Suc		(DWR)	П. О	1.1		11 0	<i>c</i> 4	
APR-JUL	5.0		7.0	11		11.0	64	
OCT-SEP	13.0		15.0	10		20	147	
m 1 n	_	(37776)						
Tule R at Suc		,						
APR-JUL	7.0	8.0	8.0	13	9.0	11.0	63	
	177 (							
Kern R nr Ke	rnville (D	WR)						
APR-JUL			90	23			384	
_ 67		>						
Inflow to Isa		(DWR)		_				
APR-JUL	80		95	20		140	465	
OCT-SEP	157		175	24		225	733	
Inflow to Isa								
APR-JUL	100	104	109	24	122	130	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.

#### 7. North Coast Area Basin

Forecasted streamflow volumes for this April through July are much below average, ranging from 17% to 29% of average.

\_\_\_\_\_\_ NORTH COASTAL AREA Streamflow Forecasts - May 1, 2014 \_\_\_\_\_\_ <=== Drier === Future Conditions === Wetter ===> | Forecast Pt | ======== Chance of Exceeding \* ======== Forecast | 90% 70% | 50% (Most Prob) | 30% 10% | 30 Yr Avg Period |(1000AF) (1000AF)|(1000AF) (% AVG.)|(1000AF) (1000AF)| (1000AF) \_\_\_\_\_\_ Trinity R at Lewiston (DWR) 160 25 401 29 APR-JUL 120 160 290 651 380 OCT-SEP 535 1376 Inflow to Clair Engle Lk (NWS) 146 22 159 APR-JUL 132 136 206 666 Scott R nr Fort Jones (NWS)

-----

30

17

35

39

173

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.

APR-JUL

27

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

#### 8. Klamath Basin

Forecasted streamflow volumes for this April through July are much below average, ranging from 17% to 48% of average.

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#### KLAMATH BASIN Streamflow Forecasts - May 1, 2014

=========		======	========	=======	, =======	=======	========
	<=== Dr:	ier ===	Future Co	onditions	=== Wett	er ===>	
Forecast Pt Forecast Period	90%	70%	Chance of E   50% (Mos F) (1000AF)	st Prob)	30%	10%	30 Yr Avg (1000AF)
Clear Lk Inf	======== low (2)						
	0.1	0.8	2.4	18	6.4	12.4	13.3
MAY-SEP	0.2	0.5	2.7	17	6.9	14.5	16.1
Gerber Res II	nflow (2)						
MAY-SEP	0.1	0.3	1.1	19	4.5	7.0	5.8
Sprague R nr	Chiloquin						
MAY-JUL	3.0	22	40	34	58	85	118
MAY-SEP	3.0	32	51	36	70	99	141
Upper Klamath	n Lk Inflo	v (1)					
APR-SEP	107	185	220	46	255	333	475
MAY-JUL	13.0	73	100	42	127	187	240
Williamson R	bl Sprague	e R nr (	Chiloquin				
MAY-JUL	39	69	89	48	109	139	187

\* 90% 70% 50% 30% and 10% changes of exceeding are the probabilities that

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.

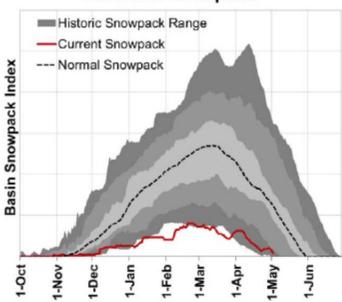
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#### KLAMATH BASIN Watershed Snowpack Analysis - May 1, 2014

=======================================		============	=========
	Number of	This Year as P	ercent of
Watershed	Data Sites	Last Year	Median
=======================================		================	=========
Lost River	1	0	1
Sprague River	0	0	0
Upper Klamath Lake	6	90	39
Williamson River	3	94	64

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

#### Mountain Snowpack



## Basin Precipitation Monthly Water Year to Date 180% 160% 140% 100% 60% 40% 20%

Oct Nov Dec Jan Feb Mar Apr May

0%

#### 9. Lake Tahoe Basin

Useable storage for this year is roughly 50% of last year's useable storage.

LAKE TAHOE BASIN

Streamflow Forecasts - May 1, 2014

=========	=======	=======	========	=======	=======	=======	========
	<=== D	rier === 1	Future Con	ditions	=== Wette	er ===>	
						[	
Forecast Pt	=====	====== Cl	hance of Ex	ceeding	* ======	=====	
Forecast	90%	70%	50% (Most	Prob)	30%	10%	30 Yr Avg
Period	(1000AF)	(1000AF)	(1000AF) (	% AVG.)	(1000AF)	(1000AF)	(1000AF)
=========	======	=======	=======	=======	=======		========
Marlette Lk	Inflow (A	cre-Ft)					
APR-JUL	-447.0	-151.0	50	6	251	547	830
MAY-JUL	-441.0	-160.0	30	5	220	501	630
Lake Tahoe R	ise (Gate	s Closed)	(1)1				
APR-HIGH	0.013	0.080	0.17	13	0.27	0.48	1.31
MAY-HIGH	0.001	0.011	0.03	3	0.12	0.32	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.
- (2) The value is natural volume actual volume may be affected by upstream water management.

\_\_\_\_\_\_

#### LAKE TAHOE BASIN

Reservoir Storage (1000AF) End of April

Reservoir	Usable	*********	Usable Storage	*******
	Capacity	This Year	Last Year	Average
LAKE TAHOE	744.6	161.5	374.6	

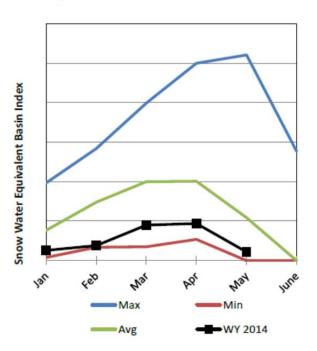
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#### LAKE TAHOE BASIN

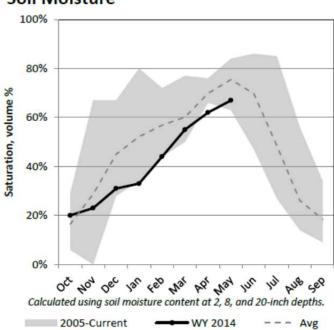
Watershed Snowpack Analysis - May 1, 2014

	Number of	This Year as Perc	ent of
Watershed	Data Sites	Last Year M	edian
LAKE TAHOE RISE	======================================	465	19
LAKE TAHOE BASIN	7	465	19
=======================================	=============	=======================================	========

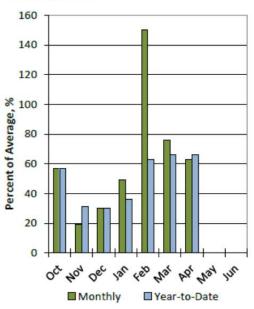
#### Snowpack



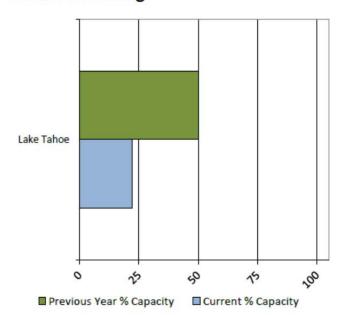
#### Soil Moisture



#### Precipitation



#### **Reservoir Storage**



#### 10. Truckee River Basin

Forecast streamflow volumes range from 10% to 25% of average.

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TRUCKEE RIVER BASIN

Streamflow Forecasts - May 1, 2014

	<=== Dr	ier ===	Future Con	nditions	=== Wett	er ===>	
Forecast Pt Forecast Period	   ======   90%  (1000AF)	70%	hance of Ex   50% (Most  (1000AF)	Prob)	30%	10%	30 Yr Avg (1000AF)
========	=======	=======	=======	=======	=======	=======	========
Sagehen Ck n	r Truckee						
APR-JUL	0.8	0.8	0.9	16	1.0	1.1	5.6
MAY-JUL	0.3	0.4	0.4	10	0.4	0.5	4.2
L Truckee R	ab Boca						
APR-JUL	0.8	4.8	16.0	20	47	93	80
MAY-JUL	0.6	3.8	12.0	19	42	85	63
Truckee R at	Farad						
APR-JUL	3.0	35	64	25	93	136	260
MAY-JUL	2.0	17.0	42	22	67	104	193
========	=======	=======	========	=======	=======	=======	========

\* 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 April

Usable \*\*\*\*\*\*\*\*\* Usable Storage \*\*\*\*\*\*\*

Reservoir Capacity This Year Last Year Average

BOCA RESERVOIR 40.9 16.1 25.7 27.4

PROSSER RESERVOIR 28.6 10.9 11.2 14.3

STAMPEDE RESERVOIR 226.5 89.7 163.9 157.6

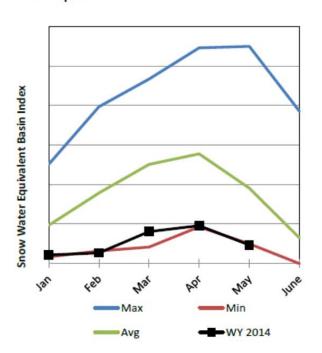
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#### TRUCKEE RIVER BASIN

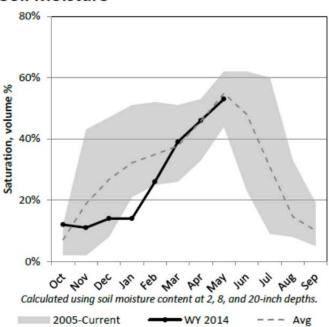
Watershed Snowpack Analysis - May 1, 2014

Watershed	Number of Data Sites	This Year as P Last Year	ercent of Median
TRUCKEE RIVER	10	76	24
LITTLE TRUCKEE RIVER	4	58	38
SAGE HEN CREEK	3	58	39
GALENA CREEK	0	0	0
PYRAMID LAKE	17	99	22
TRUCKEE RIVER BASIN	10	76	24

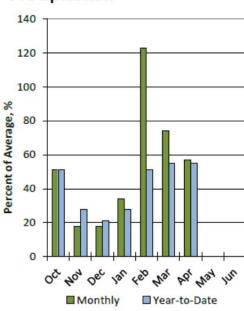
#### Snowpack



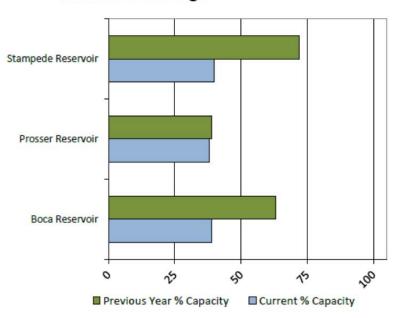
#### Soil Moisture



#### Precipitation



#### **Reservoir Storage**



#### 11. Carson River Basin

Forecast streamflow volumes range from 15% to 32% of average.

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Streamflow Forecasts - May 1, 2014

=========	=======	=======	=======		=======	=======	========
	<=== Dr	rier ===	Future Cor	nditions	=== Wett	er ===>	
	İ					į	
Forecast Pt	======	:====== (	hance of Ex	ceedina	* ======	======	
	!	70%		<b>.</b>		!	20 37 3
Forecast	90%	106	50% (Most	(dord	306	10%	30 Yr Avg
Period	(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
========	:=======		· :=========		=======	=======	========
EF Carson R	nr Gardner	rville					
APR-JUL	2.0	32	56	30	80	116	186
MAY-JUL	2.0	8.0	23	15	38	60	151
WF Carson R	at Woodfor	ds					
APR-JUL	3.2	11.4	17.0	32	23	31	54
MAY-JUL	0.4	4.2	10.0	24	15.8	24	42

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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.

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#### CARSON RIVER BASIN

Reservoir Storage (1000AF) End of April

=======================================		========	==========	
	Usable	******	Usable Storage	*****
Reservoir	Capacity	This Year	Last Year	Average
		=======		
LAHONTAN RESERVOIR	295.1	83.3	119.7	204.3
=======================================		:=======	===========	========

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#### CARSON RIVER BASIN

Watershed Snowpack Analysis - May 1, 2014

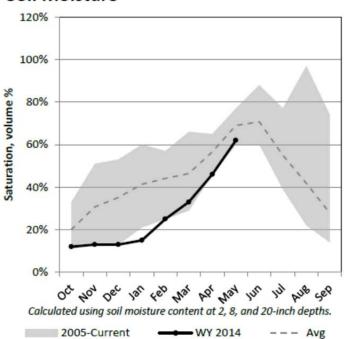
=======================================	======================================	This Year as I	ercent of
Watershed	Data Sites	Last Year	Median
=======================================	===========	:==========	========
E. CARSON RIVER	6	135	34
W. CARSON RIVER	4	174	39
CARSON Rv. at Carson City	9	150	34
CARSON Rv. at Ft. Churchill	9	150	34
CARSON RIVER BASIN	9	150	34
=======================================	============	:===========	=========

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

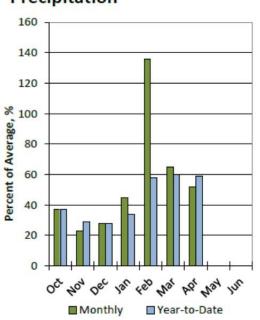
#### Snowpack

# Sow Water Equivalent Basin Index Water Equivalent Basin Index Max Min Avg WY 2014

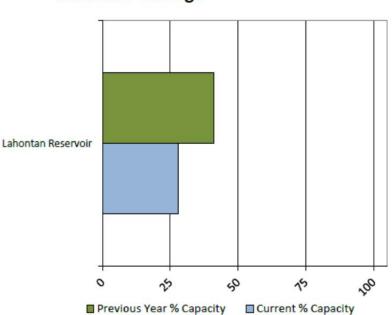
#### Soil Moisture



#### Precipitation



#### Reservoir Storage



#### 12. Walker River Basin

Forecast streamflow volumes range from 9% to 32% of average.

-----

#### WALKER RIVER BASIN Streamflow Forecasts - May 1, 2014

=========		=======	========	=======	=======	=======	========
	<=== Dr	ier ===	Future Co	nditions	=== Wette	r ===>	
Forecast Pt Forecast Period	======   90%  (1000AF)	70%	hance of Ex   50% (Most  (1000AF)	Prob)	30%	10%	30 Yr Avg (1000AF)
E Walker R ni	r Bridgepo	rt					
APR-AUG MAY-AUG	0.7 0.6	2.0	7.0 5.0	10 9	27 22	57 48	67 59
W Walker R bl	l L Walker	R nr Col	eville				
APR-JUL	22	40	52	32	64	82	162
MAY-JUL	5.0	25	39	28	53	73	142
W Walker R nı	c Colevill	.e					
APR-JUL	44	49	52	32	55	60	163
MAY-JUL	1.43	10.0	39	27	77	132	143

-----

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.

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#### WALKER RIVER BASIN Reservoir Storage (1000AF) End of April

=======================================	usable	******	========= Usable Storage	******
Reservoir	Capacity	This Year	Last Year	Average
=======================================	=========	========	==========	========
BRIDGEPORT RESERVOIR	42.5	9.3	16.3	24.1
TOPAZ RESERVOIR	59.4	8.1	16.6	43.8
=======================================	=========	========	==========	========

\_\_\_\_\_

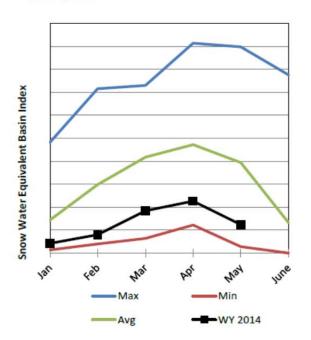
#### WALKER RIVER BASIN

Watershed Snowpack Analysis - May 1, 2014

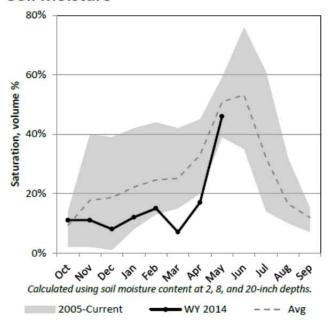
	Number of	This Year as	Percent of
Watershed	Data Sites	Last Year	Median
=======================================		==========	=========
E. WALKER Rv. nr Bridgeport	2	80	22
W. WALKER Rv. nr Coleville	5	63	31
WALKER LAKE RISE	6	65	31
WALKER RIVER BASIN	6	65	31

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

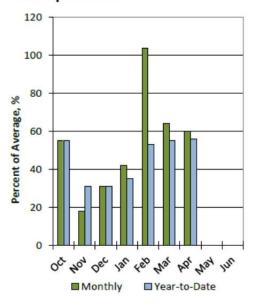
#### Snowpack



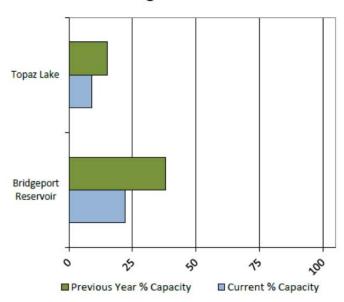
#### Soil Moisture



#### Precipitation



#### **Reservoir Storage**



#### 13. Owens River

=========		=========	=========		
		OWENS RIV	ER BASIN		
	St.	reamflow Foreca	sts - Mav 1. 2	014	
=========		==========	===========		.========
	<=== Drie 	r === Future	Conditions ==	= Wetter ===>	
Forecast Pt	=======	===== Chance of	Exceeding * =	=========	
Forecast	90%	70%   50% (M	ost Prob)   3	0% 10%	30 Yr Avg
Period	(1000AF) (	1000AF)   (1000AF	) (% AVG.) (10	00AF) (1000AF)	(1000AF)
=========		=========	=========	===========	
Owens R (DWR	)				
APR-SEP		98	42		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.

- (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.

#### 14. Northern Great Basin

Forecast streamflow volumes range from 36% to 47% of average.

=========	:======================================	========			
NORTHERN GREAT BASIN Streamflow Forecasts - May 1, 2014					
=========		========			
	<=== Drier === Future Conditions === Wetter ===>				
	Dilei Future Conditions Wetter>				
Decree Dr	Character of Barracidians 4				
Forecast Pt	======== Chance of Exceeding * ========				
Forecast	90% 70%   50% (Most Prob)   30% 10%	30 Yr Avg			
Period	(1000AF) (1000AF)  (1000AF) (% AVG.)  (1000AF) (1000AF)	(1000AF)			
	(, (, (, (, (, (, (, (, (, (, (, (, (, (, (	(====,			
========		========			
Eagle Ck nr	Eagleville				
	5				

APR-JUL 0.2 1.3 2.0 47 2.7 3.8 4.3 Bidwell CK nr Ft. Bidwell

Bidwell CK nr Ft. Bidwell APR-JUL 1.1 3.0 4.3 36 5.6 7.5 12.0

\* 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.

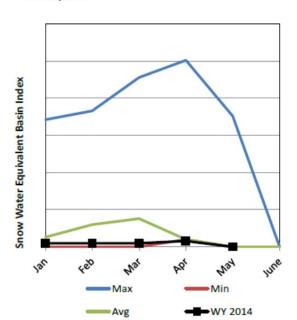
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#### NORTHERN GREAT BASIN

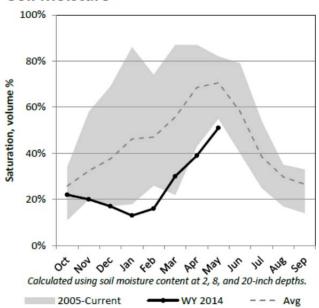
Watershed Snowpack Analysis - May 1, 2014

Watershed	Number of Data Sites	This Year as Last Year	Percent of Median
BIDWELL	2	92	39
MILL CREEK	1	0	1
DEEP CREEK	1	0	1
EAGLE CREEK	1	0	1
NORTHERN GREAT BASIN	2	92	39
=======================================			=========

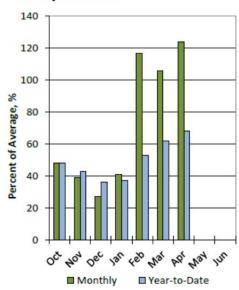
#### Snowpack



#### Soil Moisture



#### Precipitation



#### 15. Lower Colorado River Basin

The inflows into Lake Powell are forecasted to be 100% of average.

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#### COLORADO RIVER BASIN

Streamflow Forecasts - May 1, 2014

	<=== Dr	ier ===	Future Co	nditions	=== Wett	er ===>	
						į	
Forecast Pt	======	===== C	hance of E	xceeding	* ======	======	
Forecast	90%	70%	50% (Mos	t Prob)	30%	10%	30 Yr Avg
Period	(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
========	========	=======	========	=======	=======	=======	========
Lake Powell	Inflow (2	)					
APR-JUL	5610	6500	7160	100	7840	8920	7160
MAY-JUL	4650	5540	6200	102	6880	7960	6100
APR-JUL	5610	6500		_00	, 0 1 0	0,20	

\_\_\_\_\_\_

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.

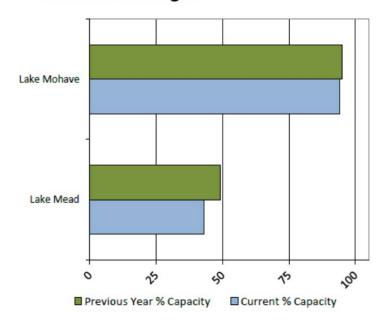
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#### COLORADO RIVER BASIN

Watershed Snowpack Analysis - May 1, 2014

Watershed	Number of	This Year as Per	ccent of
	Data Sites	Last Year	Median
COLORADO RIVER BASIN	131	122	93

#### **Reservoir Storage**



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

Issued by

Jason Weller Chief Natural Resources Conservation Service

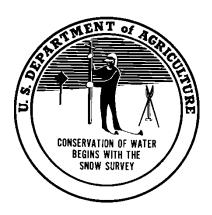
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State Conservationist
Natural Resources Conservation
Service
Davis, CA

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### California Water Supply Outlook Report

Natural Resources Conservation Service Davis, CA

