



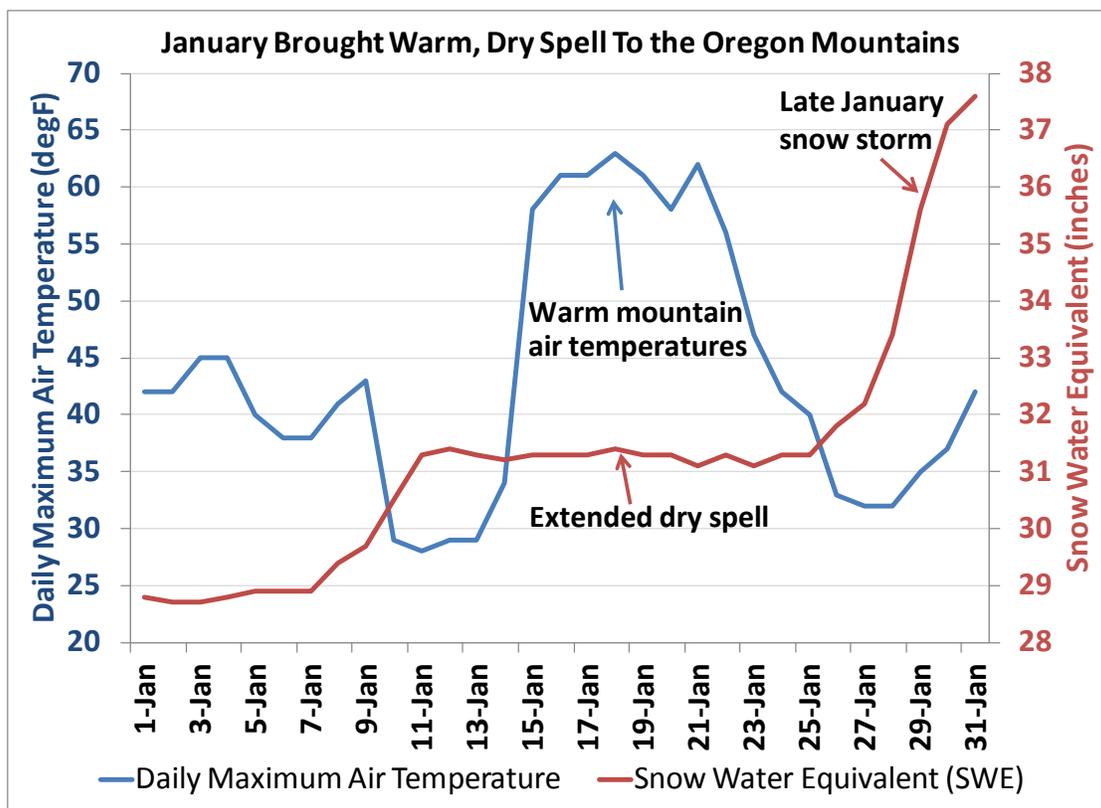
United States
Department of
Agriculture



Natural Resources
Conservation
Service

Oregon Basin Outlook Report

February 1, 2013



A ridge of high pressure dominated Oregon weather during January. Not only do these weather patterns block Pacific moisture from moving onshore, they often create stubborn air temperature inversions. During the winter months, cool air drains into the valleys under high pressure conditions and the sun is not strong enough to burn the thick, valley clouds off during the daytime. The result is cooler than normal temperatures in the valleys, and warmer than normal temperatures in the mountains.

The above graph shows the effect of a persistent temperature inversion at Bear Grass SNOTEL, a high elevation (4720 ft) site in the Upper McKenzie River basin. The site warmed to over 60° F in mid-January, while other parts of the West were in a deep freeze. During the last week of the month, the blocking weather pattern broke and Pacific moisture came in like a lion bringing much of Oregon's mountain snowpack back to near normal levels.

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General Outlook

February 1, 2013

SUMMARY

As of February 1, water supply conditions across most of Oregon are leaning towards average, based on above average water year precipitation and near normal mountain snowpack for most of the state. However, the southeast corner of Oregon remains drier than normal and has below normal streamflow forecasts as a result.

A few storm systems brushed through Oregon during the first half of January, but the month will be remembered by a persistent dry spell followed by a very strong storm cycle during the last week of the month. Several new feet of snow piled up in the mountains during the last week of the month, allowing the mountain snowpack to rebound to near normal levels for most of the state. Interestingly, areas such as Bend, Sisters, and Heppner had a record dry January, while the surrounding mountains picked up a month's worth of snowfall over a few short days.

Southeastern Oregon will remain on the radar for potential lower water supplies for the coming summer season. Fortunately, October brought abundant precipitation that soaked into the ground before the snow began accumulating. Once the snow melts, it will be able to move into the stream channels more efficiently instead of satisfying a large soil moisture deficit. If the snowpack levels do not improve in the next couple of months, spring time rainfall can also improve water supplies. While it is no guarantee that this spring will bring such conditions, it has been the trend over the last few years.

SNOWPACK

The extended dry spell during much of January caused the snowpack across the state to fall below normal. During the final week of the month, a moisture-laden storm cycle boosted the February 1 snowpack to near normal for most of Oregon.

As of February 1, the Willamette basin had the highest snowpack in the state at 114% of normal. Basins that remain below normal include the Klamath, Owyhee, Malheur and parts of the Grande Ronde and Powder basins, where the snowpack ranges from 70% to 85% of normal. Within each of these drier basins, the snowpack is highly variable depending on location. SNOTEL sites that benefitted from the early season snowfall and southwest storm track continue to hover near normal, whereas sites that were behind last month remain below normal. Although we are about halfway through the snow accumulation season, recent experience shows that one strong storm cycle can drastically improve the snowpack.

PRECIPITATION

January was a dry month across the state. Oregon's mountains had only received about half of the normal January precipitation until the final week of the month. The powerful storm that landed at the end of the month brought levels up significantly in most regions of the state. Harney basin received 104% of average January precipitation; the only basin above normal for the month. The Klamath basin received the lowest amount of January precipitation at 54% of average. Areas that usually receive a higher quantity of precipitation, such as the Willamette and the Upper Deschutes basins, received about 60% of average moisture for January. Even though January was a dry month, all basins in Oregon have received above average precipitation since the water year began on October 1; including the drier eastern half of the state.

RESERVOIRS

Reservoir storage as of February 1 varies greatly across Oregon. In general, reservoirs in the western half of the state are faring better than those in the drier eastern region.

The February 1 storage at 26 major Oregon reservoirs analyzed in this publication was 82 percent of average. As of February 1, water storage at these reservoirs totaled 1,476 thousand acre feet (kaf), representing 46 percent of useable capacity. Last year at this time these same reservoirs stored 1,929 kaf of water, or 60 percent of useable capacity.

STREAMFLOW

Generally speaking, the summer streamflow forecasts are near normal across most of Oregon, except for the southeastern basins which are forecast to be below normal. About half of the streamflow forecasts decreased slightly from last month, while the rest changed very little. Forecasts decreased 10-15% in the Rogue, Umpqua and Deschutes basins but the outlook is still calling for near normal summer streamflow volumes for these basins. The forecasts in Lake County have declined to below normal due to below average January precipitation and the snowpack levels dipping below normal. The Owyhee, Malheur and Klamath basins have a very similar outlook as last month and remain below normal (near 90% of average overall).

A summary of streamflow forecasts for Oregon follows:

STREAM	PERIOD	PERCENT OF AVERAGE
Owyhee Reservoir Inflow	Apr-Sep	99%
Grande Ronde R at Troy	Apr-Sep	100%
Umatilla R at Pendleton	Apr-Sep	95%
Deschutes R at Benham Falls	Apr-Sep	100%
MF Willamette R bl NF	Apr-Sep	101%
Rogue R at Raygold	Apr-Sep	103%
Upper Klamath Lake Inflow	Apr-Sep	92%
Silvies R nr Burns	Apr-Sep	54%

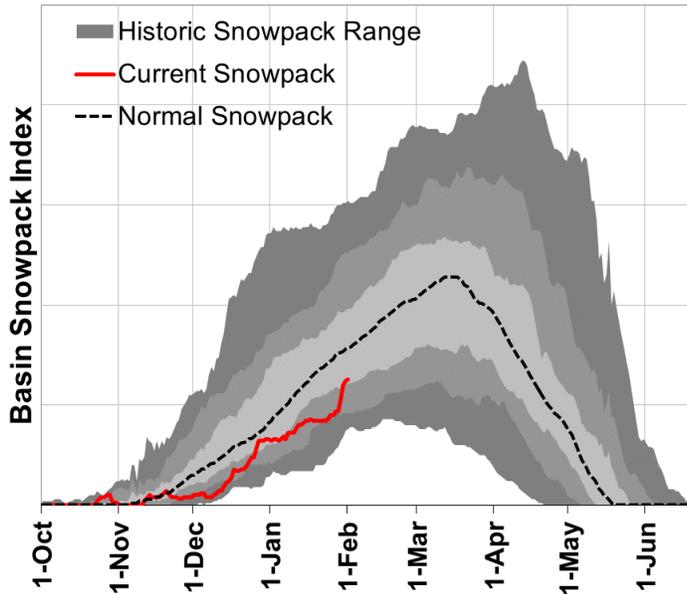
Some of these forecasts assume that normal weather conditions will occur from now to the end of the forecast period. This report contains data furnished by the Oregon Department of Water Resources, U.S. Geological Survey, NOAA National Weather Service and other cooperators. This report will be updated monthly, January through June.



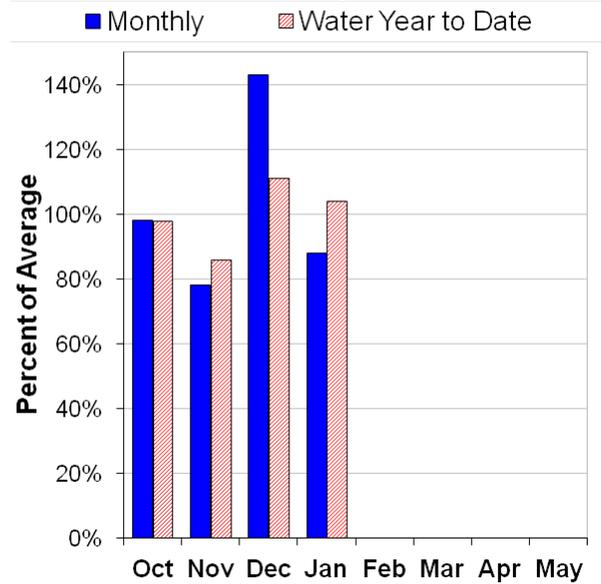
Owyhee and Malheur Basins

February 1, 2013

Mountain Snowpack



Basin Precipitation



Summary of Water Supply Conditions

SNOWPACK

As of February 1, the basin snowpack was 82% of normal. This is slightly higher than last month when the snowpack was 79% of normal.

PRECIPITATION

January precipitation was 88% of average. Precipitation since the beginning of the water year (October 1 - February 1) has been 104% of average.

RESERVOIR

Reservoir storage across the basin is currently well below average. As of February 1, storage at published reservoirs was 68% of average and 37% percent of capacity.

STREAMFLOW FORECAST

April through September streamflow forecasts in the basin range from 72% to 103% of average. Overall, forecasts remain similar to last month's report.

For more information contact your local Natural Resources Conservation Service office:
Ontario - (541) 889-7637

Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

OWYHEE AND MALHEUR BASINS
Streamflow Forecasts - February 1, 2013

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)		
		90%		70%		50%			30%	
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)		(1000AF)	(1000AF)
Malheur R nr Drewsey	FEB-JUL	46	70	90	70	112	148	128		
	APR-JUL	17.4	35	50	67	68	99	75		
	APR-SEP	24	40	53	72	68	93	74		
NF Malheur R at Beulah (2)	FEB-JUL	35	55	71	84	89	119	85		
Owyhee R nr Rome	FEB-JUL	275	470	600	103	730	925	580		
	FEB-SEP	280	475	610	103	745	940	595		
	APR-SEP	136	280	375	103	470	615	365		
Owyhee R bl Owyhee Dam (2)	FEB-JUL	350	515	645	102	790	1030	635		
	FEB-SEP	370	535	665	100	810	1050	665		
	APR-SEP	200	310	400	99	500	670	405		

OWYHEE AND MALHEUR BASINS
Reservoir Storage (1000 AF) - End of January

OWYHEE AND MALHEUR BASINS
Watershed Snowpack Analysis - February 1, 2013

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BEULAH RES	60.0	17.9	32.4	26.0	Owyhee	17	151	92
BULLY CREEK	30.0	9.2	13.8	12.5	Upper Malheur	8	96	75
OWYHEE	715.0	280.7	516.6	438.3	Jordan Creek	3	118	86
WARMSPRINGS	191.0	62.3	109.2	68.5	Bully Creek	2	75	56
					Willow Creek	3	114	86

* 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.

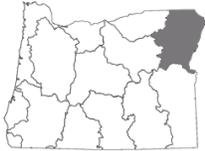
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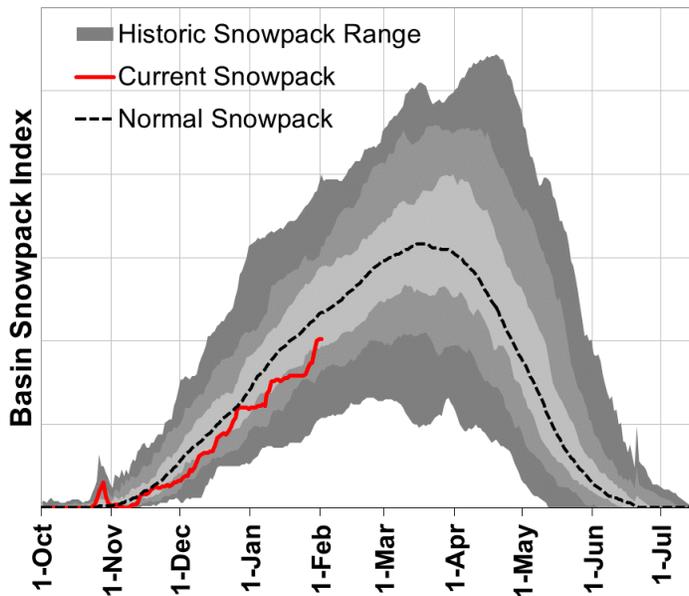
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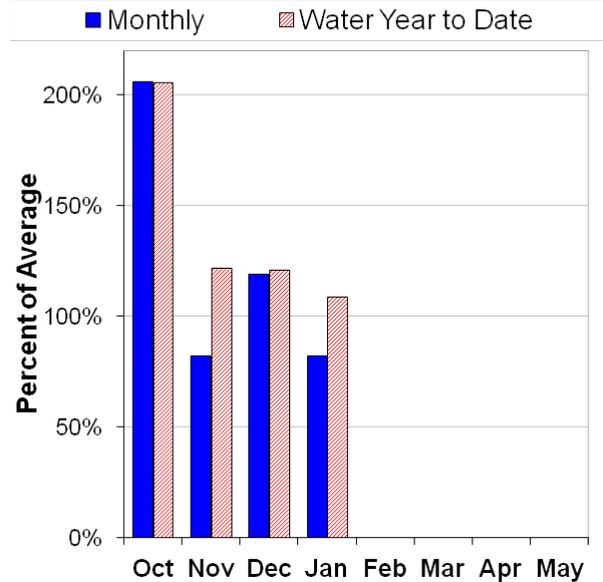
Grande Ronde, Powder, Burnt and Imnaha Basins

February 1, 2013

Mountain Snowpack



Basin Precipitation



Summary of Water Supply Conditions

SNOWPACK

As of February 1, the basin snowpack was 87% of normal. This is slightly higher than last month when the snowpack was 83% of normal.

PRECIPITATION

January precipitation was 82% of average. Precipitation since the beginning of the water year (October 1 - February 1) has been 109% of average.

RESERVOIR

Reservoir storage across the basin is currently below average. As of February 1, storage at published reservoirs was 85% of average and 42% percent of capacity.

STREAMFLOW FORECAST

April through September streamflow forecasts in the basin range from 84% to 104% of average. Overall, forecasts decreased slightly from last month's report.

For more information contact your local Natural Resources Conservation Service office:
 Enterprise- (541) 426-4588; Baker City - (541) 523-7121; LaGrande - (541) 963-4178
 Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

GRANDE RONDE, POWDER, BURNT AND IMNAHA BASINS
Streamflow Forecasts - February 1, 2013

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>					30-Yr Avg. (1000AF)	
		===== Chance Of Exceeding * =====						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)		10% (1000AF)
Burnt R nr Hereford (2)	FEB-JUL	30	41	48	94	55	66	51
	APR-SEP	15.4	25	32	91	39	49	35
Deer Ck nr Sumpster	FEB-JUL	11.3	14.6	16.9	86	19.2	23	19.7
Powder R nr Sumpster	FEB-JUL	42	56	65	97	74	88	67
	APR-JUL	31	43	51	96	59	71	53
	APR-SEP	31	43	52	96	61	73	54
Wolf Ck Reservoir Inflow (2)	MAR-JUN	9.9	13.3	15.6	86	17.9	21	18.1
Pine Ck nr Oxbow	FEB-JUL	123	164	192	87	220	260	220
	APR-JUL	84	113	132	84	151	180	157
	APR-SEP	88	117	137	84	157	186	163
Imnaha R at Imnaha	APR-JUL	187	235	265	104	295	345	255
	APR-SEP	210	255	290	104	325	370	280
Lostine R nr Lostine	APR-JUL	95	104	109	103	114	123	106
	APR-SEP	101	111	117	102	123	133	115
Bear Ck nr Wallowa	APR-SEP	51	59	64	99	69	77	65
Catherine Ck nr Union	APR-JUL	44	52	58	97	64	72	60
	APR-SEP	47	55	61	95	67	75	64
Grande Ronde R at Troy (1)	MAR-JUL	1100	1390	1520	101	1650	1940	1510
	APR-SEP	900	1180	1310	100	1440	1720	1310

For more information contact your local Natural Resources Conservation Service office:
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GRANDE RONDE, POWDER, BURNT AND IMNAHA BASINS Reservoir Storage (1000 AF) - End of January					GRANDE RONDE, POWDER, BURNT AND IMNAHA BASINS Watershed Snowpack Analysis - February 1, 2013			
Reservoir	Usable Capacity	*** Usable Storage This Year	Last Year	*** Avg	Watershed	Number of Data Sites	This Year as % of Last Yr Average	
PHILLIPS LAKE	73.5	28.5	38.0	32.0	Upper Grande Ronde	9	99	84
THIEF VALLEY	17.4	13.7	13.6	14.1	Wallowa	4	113	92
UNITY	25.2	6.8	10.1	11.7	Imnaha	3	106	91
WALLOWA LAKE	37.5	20.9	16.8	15.1	Powder	10	99	84
WOLF CREEK	10.4	2.7	4.7	2.8	Burnt	4	122	96

* 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.

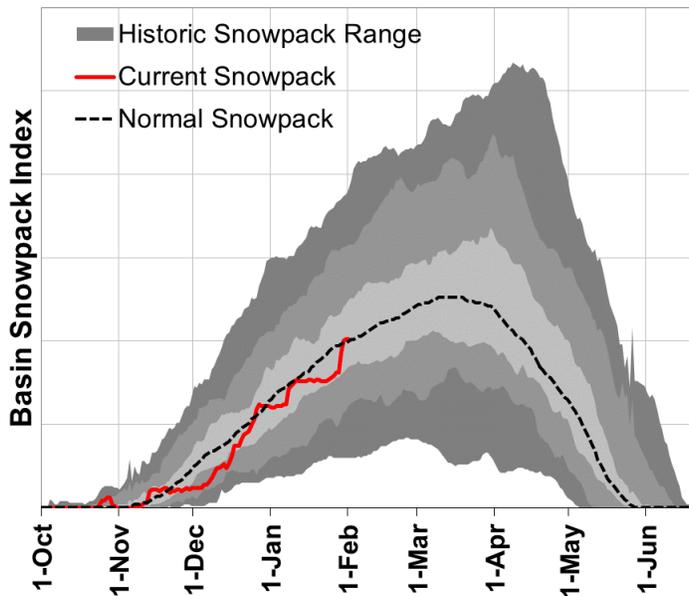
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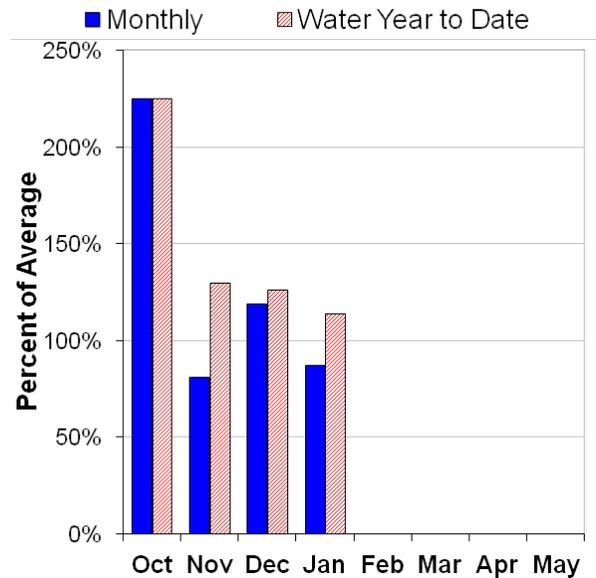
Umatilla, Walla Walla, and Willow Basins

February 1, 2013

Mountain Snowpack



Basin Precipitation



Summary of Water Supply Conditions

SNOWPACK

As of February 1, the basin snowpack was 101% of normal. This is significantly higher than last month when the snowpack was 92% of normal.

PRECIPITATION

January precipitation was 87% of average. Precipitation since the beginning of the water year (October 1 - February 1) has been 114% of average.

RESERVOIR

Reservoir storage across the basin is currently well below average. As of February 1, storage at published reservoirs was 80% of average and 31% percent of capacity.

STREAMFLOW FORECAST

April through September streamflow forecasts in the basin range from 93% to 120% of average. Overall, forecasts increased slightly from last month's report.

For more information contact your local Natural Resources Conservation Service office:
 Pendleton - (541) 278-8049; Heppner - (541) 676-5021; Condon - (541) 384-2671
 Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

UMATILLA, WALLA WALLA, AND WILLOW BASINS
Streamflow Forecasts - February 1, 2013

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Butter Ck nr Pine City	MAR-JUL	11.6	15.4	17.9	120	20	24	14.9
	APR-SEP	7.3	10.0	11.8	120	13.6	16.3	9.8
McKay Ck nr Pilot Rock	APR-SEP	11.4	23	30	97	38	49	31
Rhea Ck nr Heppner	FEB-JUL	11.7	15.4	18.0	132	21	24	13.6
Umatilla R ab Meacham Ck nr Gibbon	APR-JUL	48	60	69	93	78	90	74
	MAR-SEP	76	91	101	95	111	126	106
	APR-SEP	53	65	74	93	83	95	80
Umatilla R at Pendleton	APR-JUL	91	120	140	95	160	189	147
	MAR-SEP	163	197	220	98	243	277	225
	APR-SEP	95	125	145	95	165	195	153
SF Walla Walla R nr Milton-Freewater	APR-JUL	39	46	50	93	54	61	54
	MAR-SEP	62	70	76	95	82	90	80
	APR-SEP	51	58	63	96	68	75	66
Willow Ck ab Willow Ck Lake nr Heppn	FEB-JUL	9.2	12.5	14.8	125	17.1	20	11.8
	APR-JUL	4.7	7.1	8.8	126	10.5	12.9	7.0

UMATILLA, WALLA WALLA, AND WILLOW BASINS
Reservoir Storage (1000 AF) - End of January

UMATILLA, WALLA WALLA, AND WILLOW BASINS
Watershed Snowpack Analysis - February 1, 2013

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
COLD SPRINGS	44.6	10.0	6.3	16.1	Walla Walla	4	96	82
MCKAY	73.8	26.8	19.9	29.8	Umatilla	7	105	91
WILLOW CREEK	1.8	4.4	4.5	4.1	McKay Creek	4	124	92

* 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.

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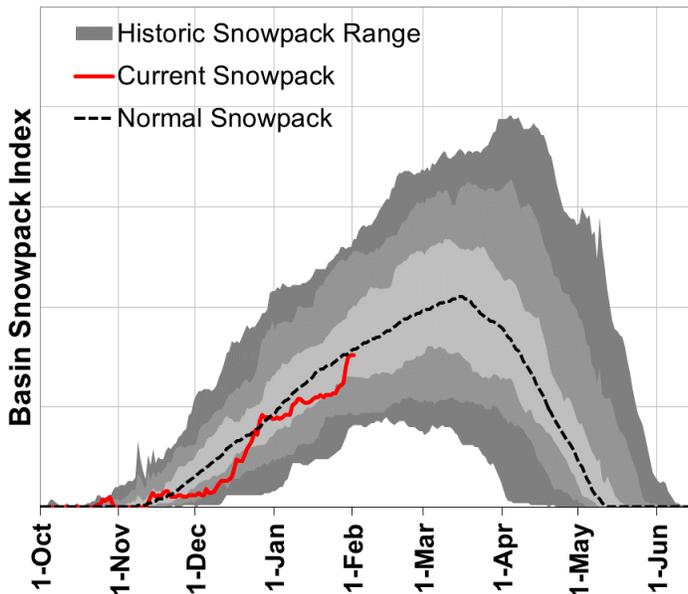
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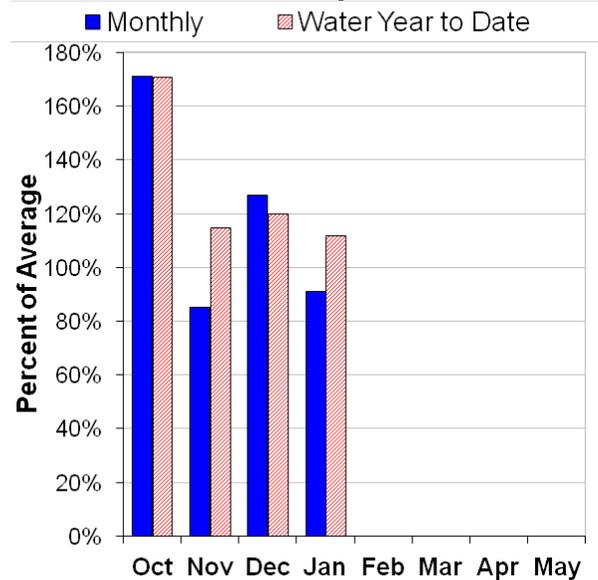
John Day Basin

February 1, 2013

Mountain Snowpack



Basin Precipitation



Summary of Water Supply Conditions

SNOWPACK

As of February 1, the basin snowpack was 98% of normal. This is slightly higher than last month when the snowpack was 95% of normal.

PRECIPITATION

January precipitation was 91% of average. Precipitation since the beginning of the water year (October 1 - February 1) has been 112% of average.

STREAMFLOW FORECAST

April through September streamflow forecasts in the basin range from 90% to 106% of average. Overall, forecasts remain similar to last month's report.

For more information contact your local Natural Resources Conservation Service office:
John Day - (541) 575-0135

Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

JOHN DAY BASIN
Streamflow Forecasts - February 1, 2013

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)				
		90%		70%		50%			30%		10%	
		(1000AF)	(1000AF)	(1000AF)	(1000AF)	(1000AF)	(1000AF)		(1000AF)	(1000AF)	(1000AF)	(1000AF)
Strawberry Ck nr Prairie City	MAR-JUL	5.0	6.6	7.6	89	8.6	10.2	8.5				
	APR-SEP	5.2	6.8	7.9	90	9.0	10.6	8.8				
Mountain Ck nr Mitchell	FEB-JUL	3.2	5.4	6.9	99	8.4	10.6	7.0				
	APR-SEP	1.7	3.3	4.4	90	5.5	7.1	4.9				
Camas Ck nr Ukiah	MAR-JUL	36	45	51	104	57	67	49				
	APR-SEP	21	30	36	103	42	51	35				
MF John Day R at Ritter	MAR-JUL	115	147	168	108	189	221	156				
	APR-SEP	88	115	134	106	153	180	126				
NF John Day R at Monument	MAR-JUL	560	710	810	106	910	1060	765				
	APR-SEP	420	545	630	105	715	840	600				

JOHN DAY BASIN
Reservoir Storage (1000 AF) - End of January

JOHN DAY BASIN
Watershed Snowpack Analysis - February 1, 2013

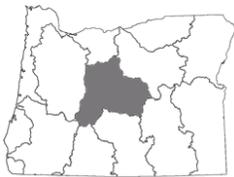
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					North Fork John Day	7	130	104
					John Day above Kimberly	5	99	85

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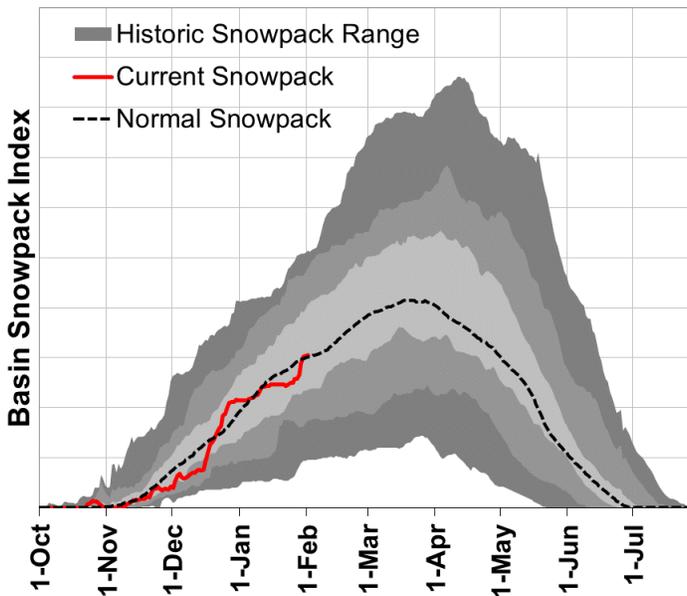
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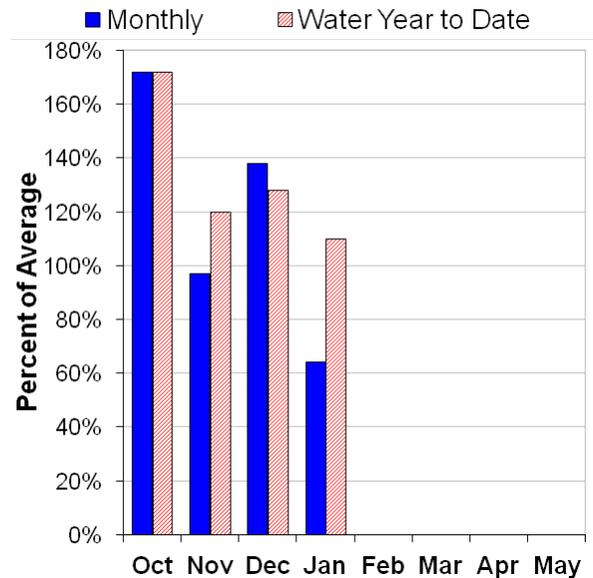
Upper Deschutes and Crooked Basins

February 1, 2013

Mountain Snowpack



Basin Precipitation



Summary of Water Supply Conditions

SNOWPACK

As of February 1, the basin snowpack was 101% of normal. This is significantly lower than last month when the snowpack was 110% of normal.

PRECIPITATION

January precipitation was 64% of average. Precipitation since the beginning of the water year (October 1 - February 1) has been 110% of average.

RESERVOIR

Reservoir storage across the basin is currently above average. As of February 1, storage at published reservoirs was 117% of average and 75% percent of capacity.

STREAMFLOW FORECAST

April through September streamflow forecasts in the basin range from 85% to 106% of average. Overall, forecasts decreased significantly from last month's report.

For more information contact your local Natural Resources Conservation Service office:
Redmond (541) 923-4358

Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

UPPER DESCHUTES AND CROOKED BASINS
Streamflow Forecasts - February 1, 2013

Forecast Point	Forecast Period	Future Conditions				Wetter		30-Yr Avg. (1000AF)
		<<==== Drier =====>>		Chance Of Exceeding *		====>>		
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Deschutes R bl Snow Ck nr La Pine	FEB-JUL	28	36	41	100	46	54	41
	APR-JUL	21	26	30	100	34	39	30
	FEB-SEP	47	57	63	100	69	79	63
	APR-SEP	39	47	52	100	57	65	52
Crane Prairie Reservoir Inflow (2)	FEB-JUL	60	70	77	101	84	94	76
	APR-JUL	45	52	57	102	62	69	56
	FEB-SEP	85	98	107	100	116	129	107
	APR-SEP	68	79	87	99	95	106	88
Crescent Ck nr Crescent (2)	FEB-JUL	8.9	15.5	20	102	24	31	19.6
	APR-JUL	7.0	12.1	15.6	104	19.1	24	15.0
	FEB-SEP	11.4	18.3	23	105	28	35	22
	APR-SEP	9.6	14.9	18.5	106	22	27	17.4
Little Deschutes R nr La Pine (2)	FEB-JUL	54	75	89	100	103	124	89
	APR-JUL	44	55	63	100	71	82	63
	FEB-SEP	57	79	95	101	111	133	94
	APR-SEP	46	60	69	100	78	92	69
Whychus Ck nr Sisters	FEB-JUL	34	38	41	95	44	48	43
	APR-JUL	29	32	33	94	34	37	35
	FEB-SEP	44	49	53	96	57	62	55
	APR-SEP	38	42	44	94	46	50	47
Prineville Reservoir Inflow (2)	FEB-JUL	98	159	200	98	240	300	205
	APR-JUL	29	64	88	86	112	147	102
	FEB-SEP	95	157	199	97	240	305	205
	APR-SEP	26	62	87	85	112	148	102
Ochoco Reservoir Inflow (2)	FEB-JUL	24	34	41	103	48	58	40
	APR-JUL	9.3	15.1	19.1	91	23	29	21
	FEB-SEP	24	34	41	103	48	58	40
	APR-SEP	8.8	14.9	19.1	96	23	29	20
Deschutes R at Benham Falls nr Bend	FEB-JUL	400	440	465	101	490	530	460
	APR-JUL	290	310	325	102	340	360	320
	FEB-SEP	545	595	625	100	655	705	625
	APR-SEP	430	465	485	100	505	540	485

For more information contact your local Natural Resources Conservation Service office:
Redmond (541) 923-4358
Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

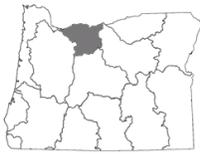
UPPER DESCHUTES AND CROOKED BASINS Reservoir Storage (1000 AF) - End of January					UPPER DESCHUTES AND CROOKED BASINS Watershed Snowpack Analysis - February 1, 2013			
Reservoir	Usable Capacity	*** Usable Storage This Year	Last Year	*** Avg	Watershed	Number of Data Sites	This Year Last Yr	as % of Average
CRANE PRAIRIE	55.3	48.9	44.6	37.7	Crooked	4	139	112
CRESCENT LAKE	86.9	72.6	84.0	46.1	Little Deschutes	4	133	96
OCHOCO	47.5	20.4	27.1	18.8	Deschutes above Wickiup R	4	145	97
PRINEVILLE	153.0	86.6	93.5	86.8	Tumalo and Squaw Creeks	5	116	94
WICKIUP	200.0	181.1	188.3	161.7				

* 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.

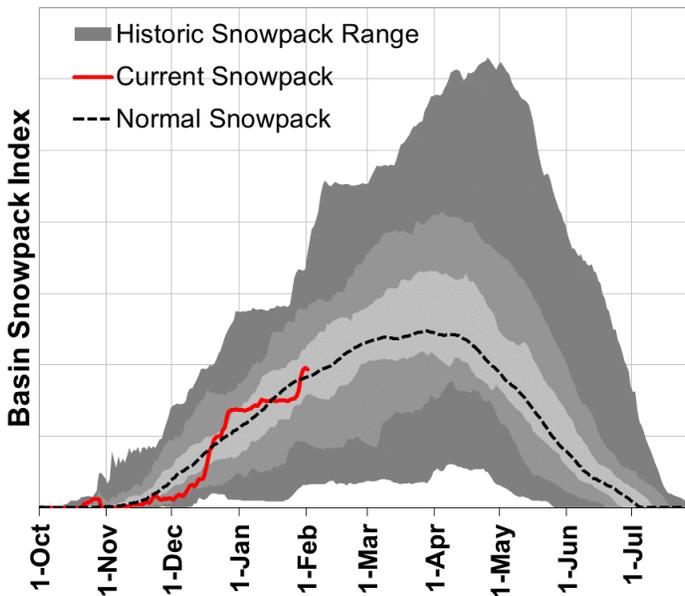
For more information contact your local Natural Resources Conservation Service office:
 Redmond (541) 923-4358
 Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>



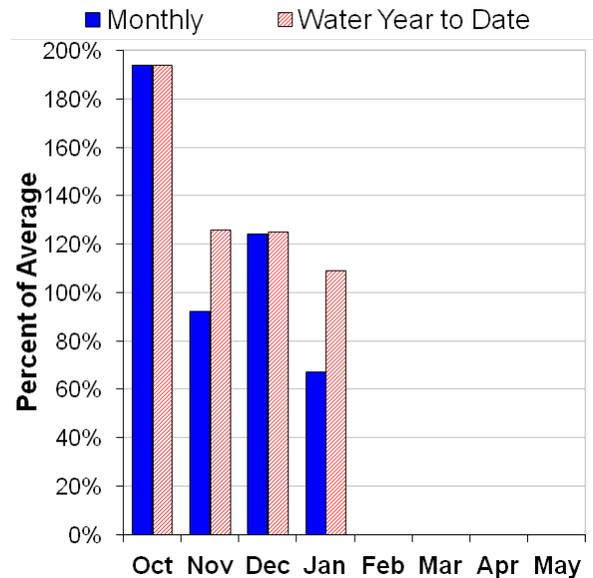
Hood, Sandy, and Lower Deschutes Basins

February 1, 2013

Mountain Snowpack



Basin Precipitation



Summary of Water Supply Conditions

SNOWPACK

As of February 1, the basin snowpack was 105% of normal. This is significantly lower than last month when the snowpack was 120% of normal.

PRECIPITATION

January precipitation was 67% of average. Precipitation since the beginning of the water year (October 1 - February 1) has been 109% of average.

STREAMFLOW FORECAST

April through September streamflow forecasts in the basin range from 93% to 96% of average. Overall, forecasts decreased significantly from last month's report but current conditions lean towards adequate water supplies.

For more information contact your local Natural Resources Conservation Service office:
The Dalles (541) 296-6178

Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

HOOD, SANDY AND LOWER DESCHUTES BASINS
Streamflow Forecasts - February 1, 2013

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
WF Hood River nr Dee	APR-JUL	84	106	121	101	136	158	120
Hood R At Tucker Bridge	APR-JUL	154	185	205	91	225	255	225
	APR-SEP	190	225	245	93	265	300	265
Sandy R nr Marmot	APR-JUL	225	265	295	95	325	365	310
	APR-SEP	270	315	345	96	375	420	360

HOOD, SANDY AND LOWER DESCHUTES BASINS
Reservoir Storage (1000 AF) - End of January

HOOD, SANDY AND LOWER DESCHUTES BASINS
Watershed Snowpack Analysis - February 1, 2013

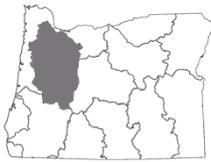
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
CLEAR LAKE (WASCO)	11.9	6.2	4.8	3.0	Hood River	5	108	92
					Mile Creeks	0	0	0
					White River	5	99	86

* 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.

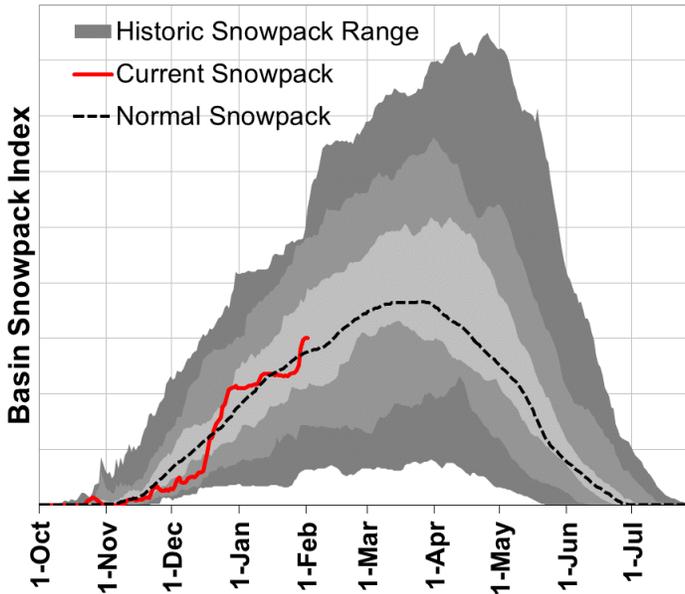
For more information contact your local Natural Resources Conservation Service office:
The Dalles (541) 296-6178
Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>



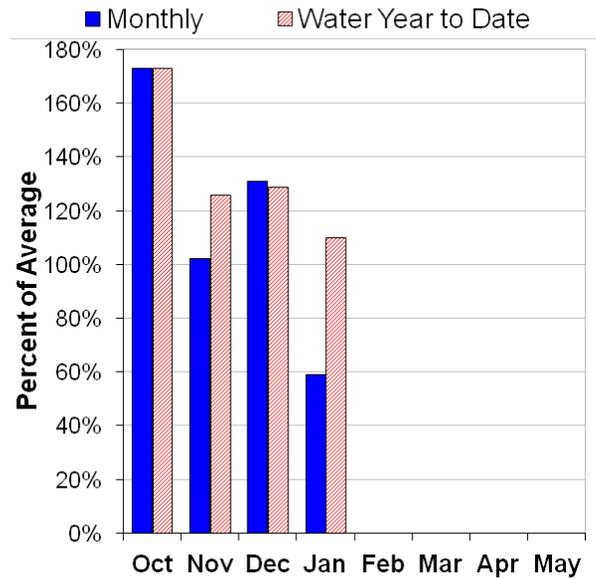
Willamette Basin

February 1, 2013

Mountain Snowpack



Basin Precipitation



Summary of Water Supply Conditions

SNOWPACK

As of February 1, the basin snowpack was 114% of normal. This is slightly lower than last month when the snowpack was 117% of normal.

PRECIPITATION

January precipitation was 59% of average. Precipitation since the beginning of the water year (October 1 - February 1) has been 110% of average.

RESERVOIR

Reservoir storage across the basin is currently slightly below average. As of February 1, storage at published reservoirs was 95% of average and 74% percent of capacity.

STREAMFLOW FORECAST

April through September streamflow forecasts in the basin range from 99% to 118% of average. Overall, forecasts decreased slightly from last month's report.

For more information contact your local Natural Resources Conservation Service office:
 Eugene - (541) 465-6436; Portland - (503) 231-2270; Tangent - (541) 967-5925; Oregon City - (503) 656-3499;
 Hillsboro - (503) 648-3174; McMinnville - (503) 472-1474
 Salem - (503) 399-5746; Dallas - (503) 623-5534
 Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

WILLAMETTE BASIN
Streamflow Forecasts - February 1, 2013

Forecast Point	Forecast Period	<<===== Drier =====>>		Future Conditions		===== Wetter =====>>		30-Yr Avg. (1000AF)
		Chance Of Exceeding *		Chance Of Exceeding *		Chance Of Exceeding *		
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Oak Grove Fork Of Clackamas	APR-JUL	95	111	122	106	133	149	115
	APR-SEP	132	152	165	107	178	198	155
Clackamas R ab Three Lynx	APR-JUL	357	412	450	100	488	543	450
	APR-SEP	437	495	535	100	575	633	535
Clackamas R at Estacada	APR-JUL	477	559	615	98	671	753	625
	APR-SEP	577	662	720	99	778	863	730
Detroit Lake Inflow (1,2)	FEB-MAY	541	678	740	101	802	939	730
	APR-JUL	360	484	540	102	596	720	530
	APR-SEP	438	570	630	103	690	822	610
Little North Santiam R nr Mehama (1)	APR-JUL	81	119	136	102	153	191	133
	APR-SEP	89	127	145	103	163	201	141
North Santiam R at Mehama (1,2)	FEB-MAY	755	992	1100	101	1208	1445	1090
	APR-JUL	517	670	740	100	810	963	740
	APR-SEP	608	768	840	100	912	1072	840
Green Peter Lake Inflow (1,2)	FEB-MAY	345	475	535	112	595	725	480
	APR-JUL	185	280	320	114	360	455	280
	APR-SEP	199	295	335	114	375	470	295
Foster Lake Inflow (1,2)	FEB-MAY	607	819	915	100	1011	1223	915
	APR-JUL	285	460	540	102	620	795	530
	APR-SEP	323	496	575	102	654	827	565
South Santiam R at Waterloo (2)	FEB-MAY	723	879	985	100	1091	1247	985
	APR-JUL	375	500	585	105	670	795	555
	APR-SEP	414	536	620	105	704	826	590
McKenzie R bl Trail Bridge (2)	FEB-MAY	240	273	295	104	317	350	285
	APR-JUL	226	249	265	102	281	304	260
	APR-SEP	302	331	350	101	369	398	345

For more information contact your local Natural Resources Conservation Service office:

Eugene - (541) 465-6436; Portland - (503) 231-2270; Tangent - (541) 967-5925; Oregon City - (503) 656-3499; Hillsboro - (503) 648-3174; McMinnville - (503) 472-1474
Salem - (503) 399-5746; Dallas - (503) 623-5534

Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)				
		90%		70%		50%			30%		10%	
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)		(1000AF)	(1000AF)		
Cougar Lake Inflow (1,2)	FEB-MAY	195	257	285	102	313	375	280				
	APR-JUL	148	191	210	102	229	272	205				
	APR-SEP	177	220	240	102	260	303	235				
Blue Lake Inflow (1,2)	FEB-MAY	100	143	163	105	183	226	156				
	APR-JUL	46	72	84	100	96	122	84				
	APR-SEP	49	74	86	100	98	124	86				
McKenzie R nr Vida (1,2)	FEB-MAY	938	1173	1280	102	1387	1622	1260				
	APR-JUL	734	896	970	100	1044	1206	970				
	APR-SEP	929	1108	1190	100	1272	1451	1190				
Hills Creek Reservoir Inflow (1,2)	FEB-MAY	259	363	410	108	457	561	380				
	APR-JUL	192	263	295	107	327	398	275				
	APR-SEP	230	306	340	108	374	450	315				
MF Willamette R bl NF (1,2)	FEB-MAY	587	885	1020	107	1155	1453	950				
	APR-JUL	376	602	705	101	808	1034	695				
	APR-SEP	433	685	800	101	915	1167	790				
Lookout Point Lake Inflow (1,2)	FEB-MAY	679	941	1060	106	1179	1441	1000				
	APR-JUL	493	683	770	106	857	1047	725				
	APR-SEP	579	789	885	107	981	1191	825				
Fall Creek Lake Inflow (1,2)	FEB-MAY	123	180	205	108	230	287	190				
	APR-JUL	68	109	128	117	147	188	109				
	APR-SEP	72	114	133	118	152	194	113				
Cottage Grove Lake Inflow (1,2)	FEB-MAY	50	78	91	110	104	133	83				
	APR-JUL	15.5	36	45	110	54	75	41				
	APR-SEP	17.3	38	47	109	56	77	43				
Dorena Lake Inflow (1,2)	FEB-MAY	150	233	270	110	307	390	245				
	APR-JUL	63	120	146	107	172	229	136				
	APR-SEP	66	124	150	108	176	234	139				
Scoggins Ck nr Gaston (2)	FEB-JUL	28	39	46	115	53	64	40				
Willamette R at Salem (1,2)	FEB-MAY	5050	6880	7710	103	8540	10400	7490				
	APR-JUL	2654	4006	4620	107	5234	6586	4310				
	APR-SEP	3041	4416	5040	107	5664	7039	4730				

For more information contact your local Natural Resources Conservation Service office:

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Salem - (503) 399-5746; Dallas - (503) 623-5534

Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

WILLAMETTE BASIN Reservoir Storage (1000 AF) - End of January					WILLAMETTE BASIN Watershed Snowpack Analysis - February 1, 2013			
Reservoir	Usable Capacity	*** Usable Storage This Year	Last Year	*** Avg	Watershed	Number of Data Sites	This Year as % of Last Yr	% of Average
BLUE RIVER	85.5	6.8	15.8	9.4	Clackamas	5	113	90
COTTAGE GROVE	29.8	4.8	3.5	4.8	McKenzie	8	153	111
COUGAR	155.2	50.9	56.0	54.0	Row River	1	389	107
DETROIT	300.7	153.2	255.9	180.5	Santiam	6	159	134
DORENA	70.5	12.2	15.1	11.4	Middle Fork Willamette	7	158	104
FALL CREEK	115.5	19.3	21.7	16.2				
FERN RIDGE	109.6	5.1	50.9	15.9				
FOSTER	29.7	25.4	24.0	---				
GREEN PETER	268.2	192.7	271.6	---				
HILLS CREEK	200.2	112.3	98.4	103.0				
LOOKOUT POINT	337.0	166.1	209.8	---				
TIMOTHY LAKE	61.7	48.5	56.0	51.0				
HENRY HAGG LAKE	53.0	35.9	42.6	38.0				

* 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.

For more information contact your local Natural Resources Conservation Service office:
 Eugene - (541) 465-6436; Portland - (503) 231-2270; Tangent - (541) 967-5925; Oregon City - (503) 656-3499; Hillsboro - (503) 648-3174; McMinnville - (503) 472-1474
 Salem - (503) 399-5746; Dallas - (503) 623-5534

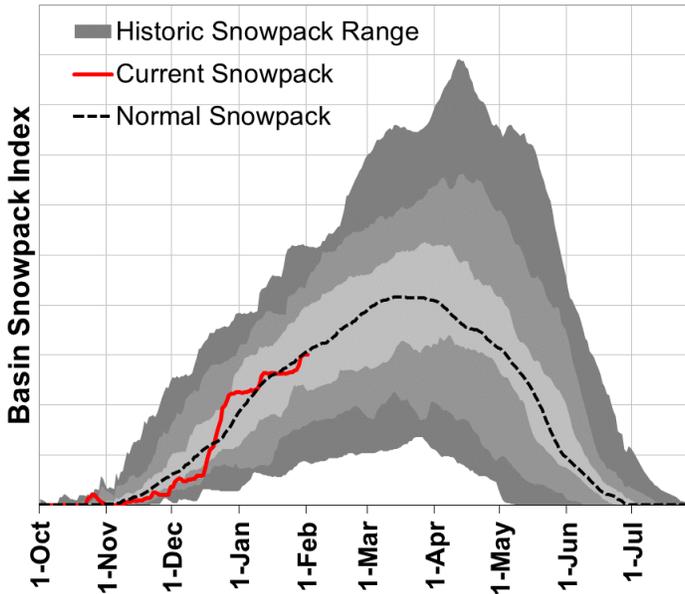
Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>



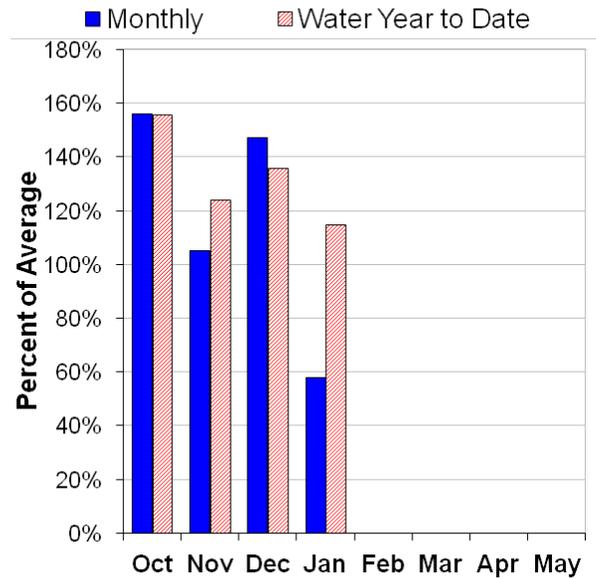
Rogue and Umpqua Basins

February 1, 2013

Mountain Snowpack



Basin Precipitation



Summary of Water Supply Conditions

SNOWPACK

As of February 1, the basin snowpack was 106% of normal. This is significantly lower than last month when the snowpack was 136% of normal. See page 37 for more information on how to interpret the above snowpack plot.

PRECIPITATION

January precipitation was 58% of average. Precipitation since the beginning of the water year (October 1 - February 1) has been 115% of average.

RESERVOIR

Reservoir storage across the basin is currently above average. As of February 1, storage at published reservoirs was 110% of average and 63% percent of capacity.

STREAMFLOW FORECAST

April through September streamflow forecasts in the basin range from 101% to 134% of average. Overall, forecasts decreased significantly from last month's report, but remain near normal to above normal.

For more information contact your local Natural Resources Conservation Service office:
 Roseburg - (541) 673-8316; Medford - (541) 776-4267
 Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

ROGUE AND UMPQUA BASINS
Streamflow Forecasts - February 1, 2013

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Cow Ck nr Azalea (2)	FEB-JUL	17.5	34	45	125	56	72	36
	APR-JUL	6.9	13.5	18.0	122	22	29	14.7
	APR-SEP	8.4	15.3	20	126	25	32	15.9
North Umpqua R at Winchester	APR-JUL	585	735	835	108	935	1090	775
	APR-SEP	695	855	960	108	1070	1220	890
South Umpqua R at Tiller	APR-JUL	139	190	225	117	260	310	193
	APR-SEP	143	195	230	115	265	315	200
South Umpqua R nr Brockway	APR-JUL	250	370	455	117	540	660	390
	APR-SEP	265	390	475	116	560	685	410
Hyatt Prairie Reservoir Inflow (2)	APR-JUL	0.5	2.3	3.5	97	4.7	6.5	3.6
Lost Creek Lake Inflow (2)	FEB-JUL	620	730	805	101	880	990	795
	APR-JUL	400	475	525	101	575	650	520
	FEB-SEP	730	850	935	102	1020	1140	920
	APR-SEP	505	590	650	101	710	795	645
Rogue R at Raygold (2)	APR-JUL	450	595	695	103	795	940	675
	APR-SEP	570	725	830	103	935	1090	805
Rogue R at Grants Pass (2)	APR-JUL	475	640	750	103	860	1030	725
	APR-SEP	575	755	875	104	995	1180	845
Applegate Lake Inflow (2)	FEB-JUL	132	193	235	121	275	340	195
	APR-JUL	79	109	129	118	149	179	109
	FEB-SEP	136	198	240	120	280	345	200
	APR-SEP	84	115	136	118	157	188	115
Sucker Ck bl Ltl Grayback Ck nr Holl	APR-JUL	54	66	74	135	82	94	55
	APR-SEP	59	71	79	134	87	99	59
Illinois R at Kerby	APR-JUL	117	181	225	120	270	335	188
	APR-SEP	121	186	230	119	275	340	193

For more information contact your local Natural Resources Conservation Service office:
Roseburg - (541) 673-8316; Medford - (541) 776-4267
Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

ROGUE AND UMPQUA BASINS Reservoir Storage (1000 AF) - End of January					ROGUE AND UMPQUA BASINS Watershed Snowpack Analysis - February 1, 2013			
Reservoir	Usable Capacity	*** Usable Storage This Year	Last Year	*** Avg	Watershed	Number of Data Sites	This Year Last Yr	as % of Average
APPLEGATE	75.2	15.1	14.0	10.8	Applegate	5	203	109
EMIGRANT LAKE	39.0	23.4	22.4	21.6	Bear Creek	5	184	108
FISH LAKE	8.0	5.0	6.2	4.8	Little Butte Creek	6	167	96
FOURMILE LAKE	16.1	8.2	11.1	6.9	Illinois	2	461	146
HOWARD PRAIRIE	60.0	38.1	44.2	36.1	North Umpqua	7	189	122
HYATT PRAIRIE	16.1	12.6	13.7	10.2	Rogue River above Grants	21	187	112
LOST CREEK	315.0	174.7	183.5	---				

* 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.

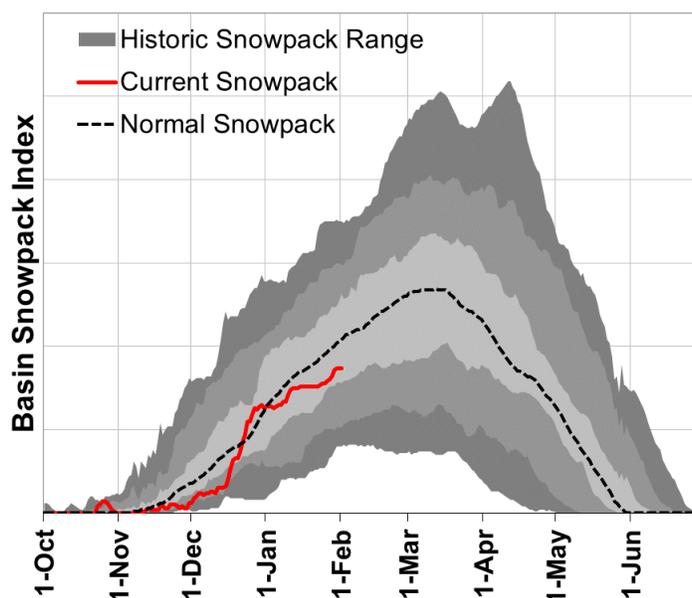
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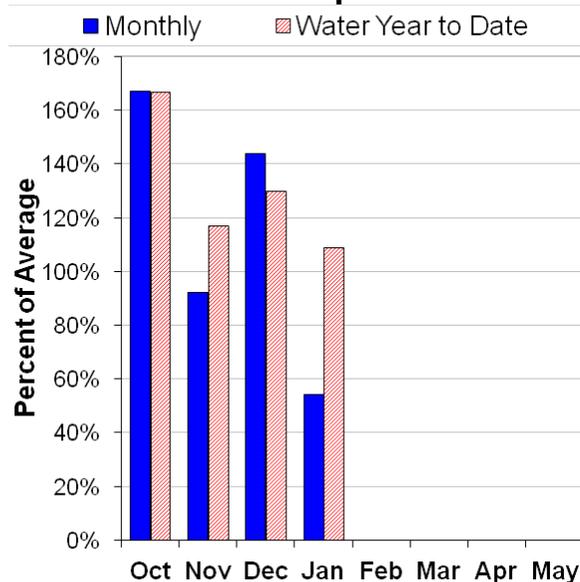
Klamath Basin

February 1, 2013

Mountain Snowpack



Basin Precipitation



Summary of Water Supply Conditions

SNOWPACK

As of February 1, the basin snowpack was 91% of normal. This is significantly lower than last month when the snowpack was 108% of normal.

PRECIPITATION

January precipitation was 54% of average. Precipitation since the beginning of the water year (October 1 - February 1) has been 109% of average.

RESERVOIR

Reservoir storage across the basin is currently well below average. As of February 1, storage at published reservoirs was 68% of average and 36% percent of capacity.

STREAMFLOW FORECAST

April through September streamflow forecasts in the basin range from 69% to 100% of average. Overall, forecasts decreased slightly from last month's report.

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 - February 1, 2013

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Clear Lake Inflow (2)	FEB-JUL	24	62	87	94	112	150	93
	APR-SEP	8.8	23	33	94	43	57	35
Gerber Res Inflow (2)	FEB-JUL	8.4	25	36	88	47	64	41
	APR-SEP	0.3	3.7	10.0	69	16.3	25	14.4
Sprague R nr Chiloquin	FEB-JUL	171	245	295	100	345	419	295
	FEB-SEP	190	267	320	100	373	450	320
	APR-SEP	125	176	210	100	244	295	210
Williamson R bl Sprague R nr Chiloquin	FEB-JUL	302	393	455	96	517	608	475
	FEB-SEP	354	450	515	97	580	676	530
	APR-SEP	231	293	335	94	377	439	355
Upper Klamath Lk Inflow (1)	FEB-JUL	384	581	670	94	759	956	715
	FEB-SEP	438	653	750	94	847	1062	795
	APR-SEP	256	376	435	92	484	604	475

KLAMATH BASIN Reservoir Storage (1000 AF) - End of January					KLAMATH BASIN Watershed Snowpack Analysis - February 1, 2013			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
CLEAR LAKE (CALIF)	513.3	82.9	120.4	207.8	Lost	2	177	100
GERBER	94.3	34.2	43.1	43.5	Sprague	5	139	94
UPPER KLAMATH LAKE	523.7	285.4	328.7	338.7	Upper Klamath Lake	7	129	86
					Williamson River	5	123	96

* 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.

For more information contact your local Natural Resources Conservation Service office:

Klamath Falls - (541) 883-6932

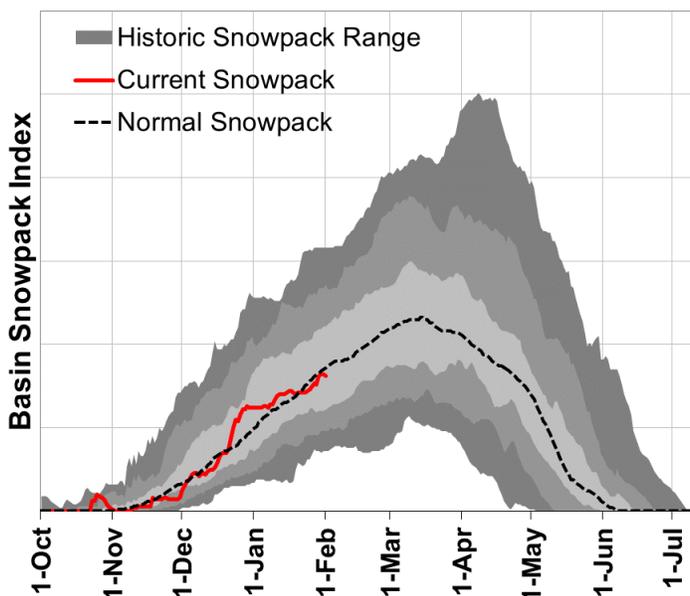
Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>



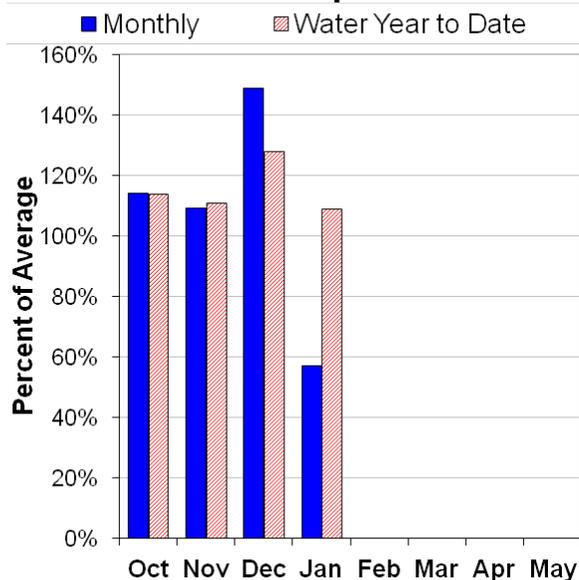
Lake County and Goose Lake

February 1, 2013

Mountain Snowpack



Basin Precipitation



Summary of Water Supply Conditions

SNOWPACK

As of February 1, the basin snowpack was 92% of normal. This is significantly lower than last month when the snowpack was 120% of normal.

PRECIPITATION

January precipitation was 57% of average. Precipitation since the beginning of the water year (October 1 - February 1) has been 109% of average.

RESERVOIR

Reservoir storage across the basin is currently above average. As of February 1, storage at published reservoirs was 114% of average and 51% percent of capacity.

STREAMFLOW FORECAST

April through September streamflow forecasts in the basin range from 65% to 87% of average. Overall, forecasts decreased significantly from last month's report.

For more information contact your local Natural Resources Conservation Service office:
Lakeview - (541) 947-2202

Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

LAKE COUNTY AND GOOSE LAKE BASINS
Streamflow Forecasts - February 1, 2013

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Twentymile Ck nr Adel	MAR-JUL	1.3	9.2	18.4	68	28	41	27
	APR-SEP	0.9	5.0	11.8	68	18.6	29	17.4
Deep Ck ab Adel	MAR-JUL	32	51	64	81	77	96	79
	APR-SEP	25	41	52	80	63	79	65
Honey Ck nr Plush	MAR-JUL	2.0	9.1	14.0	82	18.9	26	17.1
	APR-SEP	1.3	7.4	11.6	82	15.8	22	14.1
Chewaucan R nr Paisley	MAR-JUL	44	62	74	88	86	104	84
	APR-SEP	39	54	65	87	76	91	75
Silver Ck nr Silver Lake (2)	MAR-JUL	4.7	9.6	13.0	65	16.4	21	20
	APR-SEP	4.7	10.0	13.6	65	17.2	22	21

LAKE COUNTY AND GOOSE LAKE BASINS
Reservoir Storage (1000 AF) - End of January

LAKE COUNTY AND GOOSE LAKE BASINS
Watershed Snowpack Analysis - February 1, 2013

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
COTTONWOOD	8.7	4.2	3.2	3.9	Chewaucan River	3	157	106
DREWS	63.0	32.5	39.8	28.4	Deep Creek	1	160	64
					Drew Creek	2	213	108
					Honey Creek	1	160	64
					Silver Creek (Lake Co.)	4	123	90
					Twentymile Creek	1	160	64

* 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.

For more information contact your local Natural Resources Conservation Service office:

Lakeview - (541) 947-2202

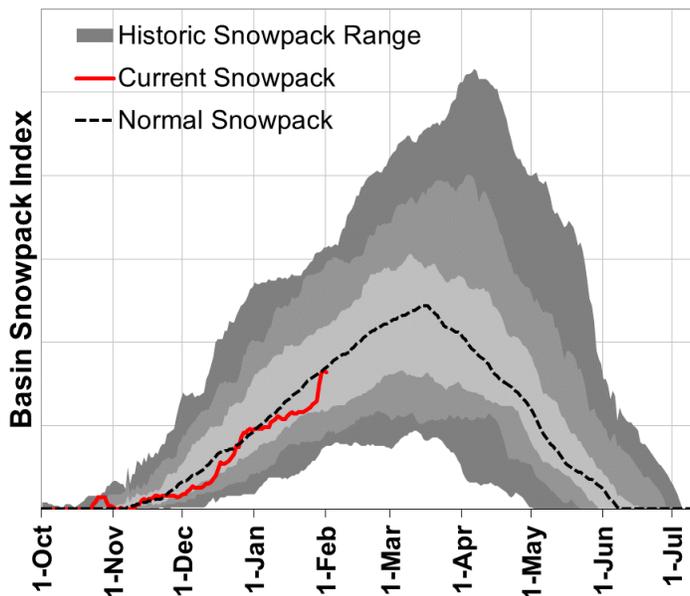
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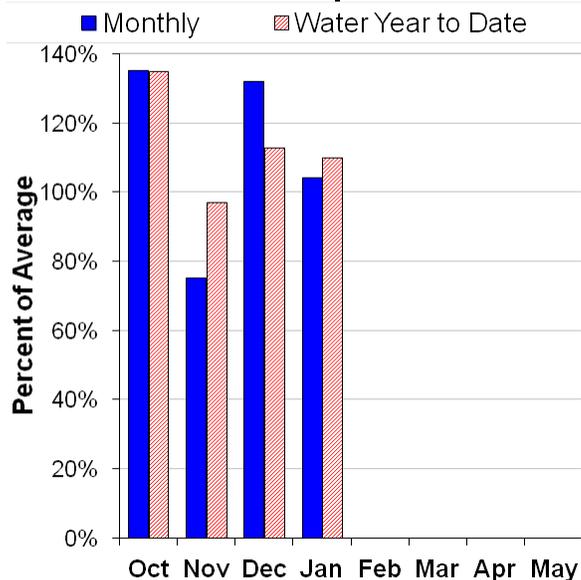
Harney Basin

February 1, 2013

Mountain Snowpack



Basin Precipitation



Summary of Water Supply Conditions

SNOWPACK

As of February 1, the basin snowpack was 99% of normal. This is slightly lower than last month when the snowpack was 103% of normal.

PRECIPITATION

January precipitation was 104% of average. Precipitation since the beginning of the water year (October 1 - February 1) has been 110% of average.

STREAMFLOW FORECAST

April through September streamflow forecasts in the basin range from 54% to 108% of average. Overall, forecasts increased significantly from last month's report. The forecast variability mirrors the variable snowpack across the basin.

For more information contact your local Natural Resources Conservation Service office:
Hines - (541) 573-6446

Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

HARNEY BASIN
Streamflow Forecasts - February 1, 2013

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)		
		90%		70%		50%			30%	
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)		(1000AF)	(1000AF)
Silvies R nr Burns	MAR-JUL	9.0	42	72	59	102	147	123		
	APR-SEP	6.4	28	50	54	72	105	92		
Donner Und Blitzen R nr Frenchglen	MAR-JUL	35	54	66	92	78	97	72		
	APR-SEP	32	51	63	93	75	94	68		
Trout Ck nr Denio	MAR-JUL	3.9	7.1	9.3	107	11.5	14.7	8.7		
	APR-SEP	3.1	6.4	8.6	108	10.8	14.1	8.0		

HARNEY BASIN
Reservoir Storage (1000 AF) - End of January

HARNEY BASIN
Watershed Snowpack Analysis - February 1, 2013

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					Donner und Blitzen River	3	263	130
					Silver Creek (Harney Co.)	2	122	96
					Silvies River	6	93	76
					Trout Creek	3	211	123

* 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.

For more information contact your local Natural Resources Conservation Service office:
Hines - (541) 573-6446
Or visit: <http://www.or.nrcs.usda.gov/snow/watersupply/>

Recession Flow Forecasts

Recession flow forecasts are presented below for key streamflow sites where reliable, daily streamflow data are available. The recession flow forecasts use exceedance probabilities in a format similar to the standard water supply forecasts presented in this document. Each forecast provides a range of possible outcomes representing the uncertainty of forecasting models.

The types of forecasts in the table below are:

- 1) Threshold flow -- Date that the daily streamflow rate falls below the given threshold flow
- 2) Peak flow -- Maximum daily flow
- 3) Date of peak flow -- Date of occurrence of maximum daily flow
- 4) Average daily flow on a given date

OWYHEE AND MALHEUR BASINS					
<i>FORECAST POINT</i>	<i>FORECAST THRESHOLD</i>	<i>FORECAST VALUE</i> ----- <i>CHANCE OF EXCEEDING</i> ----- -----			<i>LONG-TERM AVERAGE VALUE</i>
		90%	50%	10%	
Owyhee R nr Rome	2000 cfs	Mar 18	Apr 28	June 8	May 6
Owyhee R nr Rome	1000 cfs	Mar 24	May 6	June 18	May 18
Owyhee R nr Rome	500 cfs	Apr 12	May 23	July 3	June 2

JOHN DAY BASIN					
<i>FORECAST POINT</i>	<i>FORECAST THRESHOLD</i>	<i>FORECAST VALUE</i> ----- <i>CHANCE OF EXCEEDING</i> ----- -----			<i>LONG-TERM AVERAGE VALUE</i>
		90%	50%	10%	
John Day R at Service Creek	Average Daily Flow on Aug. 1st	70	295	520	271

UPPER DESCHUTES AND CROOKED BASINS					
<i>FORECAST POINT</i>	<i>FORECAST THRESHOLD</i>	<i>FORECAST VALUE</i> ----- <i>CHANCE OF EXCEEDING</i> ----- -----			<i>LONG-TERM AVERAGE VALUE</i>
		90%	50%	10%	
Crane Prairie Inflow	Date of Peak	May 9	May 25	June 10	May 25
Crane Prairie Inflow	Peak Flow	225	375	525	403
Crane Prairie Inflow	Average Daily Flow on Oct. 1st	182	255	330	269
Prineville Reservoir Inflow	113 cfs	May 7	June 1	June 26	June 3
Prineville Reservoir Inflow	75 cfs	May 14	June 8	July 3	June 11
Prineville Reservoir Inflow	50 cfs	May 21	June 16	July 12	June 19
Whychus Creek nr Sisters	100 cfs	Jul 23	Aug 18	Sep 16	August 16

ROGUE AND UMPQUA BASINS					
<i>FORECAST POINT</i>	<i>FORECAST THRESHOLD</i>	<i>FORECAST VALUE</i> ----- <i>CHANCE OF EXCEEDING</i> ----- -----			<i>LONG-TERM AVERAGE VALUE</i>
		90%	50%	10%	
South Umpqua R nr Brockway	90 cfs	July 28	Aug 17	Sep 6	August 8
South Umpqua R at Tiller	140 cfs	June 28	July 20	Aug 12	July 11
South Umpqua R at Tiller	90 cfs	July 17	Aug 9	Sep 1	August 1
South Umpqua R at Tiller	60 cfs	Aug 2	Aug 31	Oct 1	August 28

LAKE COUNTY AND GOOSE LAKE BASINS					
<i>FORECAST POINT</i>	<i>FORECAST THRESHOLD</i>	<i>FORECAST VALUE</i> ----- <i>CHANCE OF EXCEEDING</i> ----- -----			<i>LONG-TERM AVERAGE VALUE</i>
		90%	50%	10%	
Deep Ck ab Adel	100 cfs	May 26	June 15	July 5	June 17
Honey Ck nr Plush	100 cfs	Apr 1	May 6	June 10	May 16
Honey Ck nr Plush	50 cfs	Apr 19	May 21	June 22	June 4
Twentymile Ck nr Adel	50 cfs	Apr 25	May 25	June 24	May 30
Twentymile Ck nr Adel	10 cfs	June 13	July 6	July 28	July 20

HARNEY BASIN					
<i>FORECAST POINT</i>	<i>FORECAST THRESHOLD</i>	<i>FORECAST VALUE</i> ----- <i>CHANCE OF EXCEEDING</i> ----- -----			<i>LONG-TERM AVERAGE VALUE</i>
		90%	50%	10%	
Silvies R nr Burns	400 cfs	Apr 16	May 13	June 9	May 21
	200 cfs	Apr 27	May 25	June 22	June 2
	100 cfs	May 11	June 9	July 8	June 13
	50 cfs	May 28	July 2	Aug 7	July 3
Donner Und Blitzen R nr Frenchglen	200 cfs	May 29	June 20	July 12	June 20
Donner Und Blitzen R nr Frenchglen	100 cfs	June 20	July 10	July 28	July 9

Summary of SNOTEL Data

February 2013

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	MEDIAN 81-10
Oregon						
ALTHOUSE #3	5000	1/30/13	33	10.6	1.6	7.2
ANEROID LAKE SNOTEL	7400	2/01/13	51	15.1	10.2	14.4
ANNIE SPRING SNOTEL	6010	2/01/13	75	24.2	17.3	26.8
ANTHONY LAKE (REV)	7130	2/04/13	56	17.0	15.0	--
ARBUCKLE MTN SNOTEL	5770	2/01/13	49	13.5	9.3	12.2
BALD PETER	5400	2/01/13	56	19.2	19.8	19.7
BARLEY CAMP AM	6900	2/01/13	38	11.0	2.6	10.0
BARNEY CREEK (NEW)	5840	2/01/13	24	5.2	4.9	--
BEAR FLAT MEADOW AM	5900	2/01/13	24	6.0	2.9	7.4
BEAR GRASS SNOTEL	4720	2/01/13	102	37.4	24.7	--
BEAVER CREEK #1	4250	1/31/13	28	8.0	7.8	--
BEAVER CREEK #2	4250	1/31/13	20	5.4	4.2	8.0
BEAVER DAM CREEK	5100	2/01/13	37	12.5	4.6	10.2
BEAVER RES. SNOTEL	5150	2/01/13	30	7.2	6.7	6.6
BIG RED MTN SNOTEL	6050	2/01/13	55	18.2	7.4	17.6
BIG SHEEP AM	6200	2/01/13	61	15.9	--	17.2
BIGELOW CAMP SNOTEL	5130	2/01/13	33	12.9	3.5	8.9
BILLIE CK DVD SNOTEL	5280	2/01/13	46	12.8	10.3	16.7
BLAZED ALDER SNOTEL	3650	2/01/13	71	23.9	17.1	21.4
BLUE MTN SPGS SNOTEL	5870	2/01/13	32	8.1	11.1	11.2
BOURNE SNOTEL	5850	2/01/13	35	9.3	9.1	11.1
BOWMAN SPRNGS SNOTEL	4530	2/01/13	23	5.7	4.8	6.2
BUCK PASTURE AM	5700	2/01/13	16	4.0	.6	2.3
BUCKSKIN LAKE AM	5200	2/01/13	5	1.5	.0	.1
BULLY CREEK AM	5300	2/01/13	7	1.8	2.7	2.9
CALIBAN ALT	6500	1/30/13	64	22.6	11.6	20.2
CALL MEADOWS AM	5340	2/01/13	7	1.8	1.8	3.6
CAMAS CREEK #3	5850	1/31/13	22	5.6	3.5	8.8
CASCADE SUM. SNOTEL	5100	2/01/13	75	20.7	15.1	20.4
CHEMULT ALT SNOTEL	4850	2/01/13	15	5.4	6.8	7.6
CLACKAMAS LK. SNOTEL	3400	2/01/13	25	8.1	7.7	9.2
CLEAR LAKE SNOTEL	3810	2/01/13	28	7.5	7.7	9.7
COLD SPRINGS SNOTEL	5940	2/01/13	50	17.2	12.8	22.5
COUNTY LINE SNOTEL	4830	2/01/13	14	4.0	2.0	3.9
COX FLAT AM	5750	2/01/13	18	4.5	1.4	5.4
CRAZYMEN FLAT SNOTEL	6180	2/01/13	32	10.5	7.9	10.9
DALY LAKE SNOTEL	3690	2/01/13	40	11.9	6.9	10.0
DEADHORSE GRADE	3700	2/01/13	33	8.6	1.2	5.2
DEADWOOD JUNCTION	4600	2/01/13	32	10.3	3.3	6.2
DERR	5670	2/05/13	29	9.4	6.5	7.9
DERR SNOTEL	5850	2/01/13	41	11.4	8.0	9.8
DIAMOND LAKE SNOTEL	5280	2/01/13	34	11.8	9.8	12.2
DOOLEY MOUNTAIN	5430	2/01/13	24	5.8	4.8	6.6
EILERTSON SNOTEL	5510	2/01/13	22	5.7	8.4	7.9
ELDORADO PASS	4600	2/01/13	13	3.0	1.8	2.8
EMIGRANT SPGS SNOTEL	3800	2/01/13	18	5.3	3.1	5.4
FINLEY CORRALS AM	6000	2/01/13	19	4.8	6.5	9.8
FISH CREEK SNOTEL	7660	2/01/13	66	23.8	9.1	15.8
FISH LK. SNOTEL	4660	2/01/13	34	10.4	5.9	9.1
FLAG PRAIRIE AM	4750	2/01/13	10	2.5	3.0	4.8
FOURMILE LAKE SNOTEL	5970	2/01/13	42	13.1	13.0	21.2
GERBER RES SNOTEL	4890	2/01/13	4	2.1	.7	1.5
GOLD CENTER SNOTEL	5410	2/01/13	34	8.0	7.0	7.3
GOVT CORRALS AM	7450	2/01/13	34	8.5	5.1	--
GREENPOINT SNOTEL	3310	2/01/13	29	10.1	8.1	13.2
HART MOUNTAIN AM	6350	2/01/13	9	2.3	.0	1.4
HIGH RIDGE SNOTEL	4920	2/01/13	55	14.6	16.6	16.1

SNOW COURSE		ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	MEDIAN 81-10
Oregon (continued)							
HOGG PASS	SNOTEL	4790	2/01/13	61	19.2	15.0	13.9
HOLLAND MDWS	SNOTEL	4930	2/01/13	48	17.1	4.4	16.0
HOWARD PRAIRIE		4500	2/01/13	22	7.2	2.7	5.9
HUNGRY FLAT		4400	1/30/13	6	2.0	2.0	2.3
IRISH-TAYLOR	SNOTEL	5540	2/01/13	75	21.2	18.0	22.7
JUMP OFF JOE	SNOTEL	3520	2/01/13	42	12.1	4.3	9.1
KING MTN #1		4500	2/01/13	39	15.2	1.7	3.8
KING MTN #2	SNOTEL	4340	2/01/13	35	14.1	.0	2.5
KING MTN #3		3650	2/01/13	18	5.7	.0	.0
KING MTN #4		3050	2/01/13	0	.0	.0	.0
LAKE CK R.S.	SNOTEL	5240	2/01/13	24	5.3	8.2	9.4
LITTLE ALPS		6200	2/04/13	33	8.4	6.4	7.8
LITTLE ANTONE (ALT)		5000	2/04/13	23	5.9	5.6	6.8
LITTLE MEADOW	SNOTEL	4020	2/01/13	71	23.6	14.1	16.6
LOOKOUT BUTTE	AM	5650	2/01/13	4	1.4	.0	.2
LOUSE CANYON	AM	6440	2/01/13	26	7.3	.0	4.2
LUCKY STRIKE	SNOTEL	4970	2/01/13	20	5.7	5.7	5.9
MADISON BUTTE	SNOTEL	5150	2/01/13	24	7.2	2.9	3.8
MARION FORKS	SNOTEL	2590	2/01/13	25	10.4	8.0	6.3
MARKS CREEK		4540	1/28/13	17	4.7	2.6	3.4
MARY'S PEAK REV		3620	1/31/13	37	15.0	4.1	1.2
MCKENZIE	SNOTEL	4770	2/01/13	83	27.4	20.8	29.8
MEACHAM		4300	2/01/13	24	6.2	4.8	7.3
MILKSHAKES	SNOTEL	5580	2/01/13	83	26.1	22.4	--
MILLER WOODS	SNOTEL	420	2/01/13	0	.0	.0	--
MOSS SPRINGS	SNOTEL	5760	2/01/13	49	13.3	13.0	16.2
MT ASHLAND SWBK.		6400	1/30/13	62	22.3	11.9	21.2
MT HOOD		5370	1/31/13	110	38.2	40.0	37.2
MT HOOD TEST	SNOTEL	5370	2/01/13	105	33.8	36.5	38.4
MT HOWARD	SNOTEL	7910	2/01/13	31	10.9	9.0	10.2
MUD RIDGE	SNOTEL	4070	2/01/13	59	17.6	17.4	18.5
NEW CRESCENT	SNOTEL	4910	2/01/13	34	9.0	4.8	10.7
NEW DUTCHMAN #3		6320	1/30/13	101	31.8	28.0	31.9
NORTH FK RES	SNOTEL	3060	2/01/13	59	21.1	12.1	13.2
NORTH UMPQUA		4220	2/06/13	28	7.4	5.5	8.4
OCHOCO MEADOWS		5200	1/28/13	25	6.5	5.1	8.5
OCHOCO MEADOW	SNOTEL	5430	2/01/13	26	7.2	5.9	7.4
OREGON CANYON	AM	6950	2/01/13	13	3.9	1.5	4.0
PARK H.Q. REV		6550	1/31/13	103	39.6	26.3	36.9
PATTON MEADOWS	AM	6800	2/01/13	34	8.5	5.5	10.2
PEAVINE RIDGE	SNOTEL	3420	2/01/13	34	11.5	6.7	10.3
PUEBLO SUMMIT	AM	6800	2/01/13	18	4.5	.3	1.8
QUARTZ MTN	SNOTEL	5720	2/01/13	8	2.6	.7	1.5
RACING CREEK		4800	2/01/13	39	11.6	5.6	10.5
R.R. OVERPASS	SNOTEL	2680	2/01/13	2	1.5	.0	.0
RED BUTTE #1		4560	1/31/13	40	12.7	3.3	7.4
RED BUTTE #2		4000	1/31/13	6	1.2	.0	2.3
RED BUTTE #3		3500	1/31/13	14	3.5	.0	.4
RED BUTTE #4		3000	1/31/13	2	.3	.0	.0
RED HILL	SNOTEL	4410	2/01/13	72	28.3	26.8	30.9
ROARING RIVER	SNOTEL	4950	2/01/13	60	20.2	12.8	18.6
ROCK SPRINGS	SNOTEL	5290	2/01/13	20	4.6	3.2	4.7
ROGGER MEADOWS	AM	6500	2/01/13	25	6.3	1.8	7.7
SADDLE MTN	SNOTEL	3110	2/01/13	20	10.5	.0	--
SALT CK FALLS	SNOTEL	4220	2/01/13	47	14.5	7.3	13.9
SANTIAM JCT.	SNOTEL	3740	2/01/13	48	15.5	10.1	13.5
SCHNEIDER MDW	SNOTEL	5400	2/01/13	55	14.3	18.9	19.6
SEINE CREEK	SNOTEL	2060	2/01/13	0	.0	.0	.2
SEVENMILE MARSH SNTL		5700	2/01/13	50	14.8	11.2	20.0
SHERMAN VALLEY	AM	6600	2/01/13	16	4.2	3.2	8.0
SILVER BURN		3720	1/31/13	34	9.6	3.9	8.2
SILVER CREEK	SNOTEL	5740	2/01/13	20	5.4	6.9	8.1
SILVIES	SNOTEL	6990	2/01/13	36	8.2	4.0	9.6
SISKIYOU SUMMIT REV		4630	1/30/13	26	8.0	5.5	5.0
SKI BOWL ROAD		6000	1/30/13	43	14.3	10.0	15.0

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	MEDIAN 81-10
Oregon (continued)						
SMITH RIDGE SNOTEL	3330	2/01/13	28	11.9	1.3	--
SNOW MTN SNOTEL	6220	2/01/13	34	6.7	5.1	6.3
SF BULL RUN SNOTEL	2690	2/01/13	37	13.0	2.9	1.3
STARR RIDGE SNOTEL	5250	2/01/13	21	4.4	4.0	5.3
STRAWBERRY SNOTEL	5770	2/01/13	11	3.8	2.3	4.4
SUMMER RIM SNOTEL	7080	2/01/13	44	11.7	7.2	11.1
SUMMIT LAKE SNOTEL	5610	2/01/13	85	25.1	18.7	23.7
SUN PASS SNOTEL	5400	2/01/13	26	9.5	13.0	--
SWAN LAKE MTN SNOTEL	6830	2/01/13	41	13.7	8.1	--
SYCAN FLAT AM	5500	2/01/13	13	3.5	1.8	4.0
TANGENT	5400	1/31/13	44	14.6	14.2	14.5
TAYLOR BUTTE SNOTEL	5030	2/01/13	17	4.6	4.1	5.5
TAYLOR GREEN SNOTEL	5740	2/01/13	44	11.6	12.9	14.5
THREE CK MEAD SNOTEL	5690	2/01/13	34	10.0	9.1	12.4
TIPTON SNOTEL	5150	2/01/13	29	7.3	6.2	8.5
TOKETEE AIRSTRIP SN	3240	2/01/13	16	5.6	.0	3.4
TOLLGATE	5070	2/01/13	54	15.0	18.3	19.3
TRAP CREEK	3800	2/06/13	32	8.7	4.2	5.9
TROUT CREEK AM	7800	2/01/13	32	8.0	6.2	8.2
V LAKE AM	6600	2/01/13	20	5.0	.3	5.2
WOLF CREEK SNOTEL	5630	2/01/13	41	7.9	7.7	11.6
California						
ADIN MOUNTAIN	6350	1/29/13	26	7.4	2.4	8.8
ADIN MTN SNOTEL	6190	2/01/13	23	7.5	3.7	8.6
BLUE LAKE RANCH	6800	1/30/13	30	8.0	1.0	6.3
CEDAR PASS	7100	1/31/13	37	9.6	3.6	10.2
CEDAR PASS SNOTEL	7030	2/01/13	35	9.8	5.1	11.3
CROWDER FLAT SNOTEL	5170	2/01/13	9	3.9	1.3	3.7
DISMAL SWAMP SNOTEL	7360	2/01/13	61	17.5	7.3	18.0
STATE LINE AM	5750	2/01/13	5	1.8	1.5	3.8
Idaho						
BULL BASIN AM	5460	2/01/13	7	1.9	1.0	2.1
MUD FLAT SNOTEL	5730	2/01/13	14	3.8	4.1	5.1
RED CANYON AM	6650	2/01/13	20	5.6	3.0	6.3
SOUTH MTN SNOTEL	6500	2/01/13	29	8.1	8.4	11.5
SUCCOR CREEK AM	6100	2/01/13	31	8.7	4.9	7.4
Nevada						
BEAR CREEK SNOTEL	7800	2/01/13	54	11.6	7.8	11.5
BIG BEND SNOTEL	6700	2/01/13	16	5.2	5.5	5.5
BUCKSKIN,L SNOTEL	6700	2/01/13	31	7.0	3.9	6.5
COLUMBIA BASIN AM	6650	2/01/13	17	4.9	3.5	7.8
DISASTER PEAK SNOTEL	6500	2/01/13	14	4.7	2.0	5.6
FAWN CREEK SNOTEL	7050	2/01/13	41	9.4	5.9	10.2
FRY CANYON	6700	1/30/13	23	5.1	4.2	6.2
GOLD CREEK	6600	1/30/13	17	5.0	3.9	4.2
GRANITE PEAK SNOTEL	7800	2/01/13	49	12.6	4.4	12.1
JACK CREEK, U SNOTEL	7280	2/01/13	44	8.4	7.5	9.4
LAMANCE CREEK SNOTEL	6000	2/01/13	24	5.0	1.1	8.0
LAUREL DRAW SNOTEL	6700	2/01/13	26	5.7	5.1	7.7
MERRIT MOUNTAIN AM	7000	2/01/13	11	3.2	1.3	4.7
MIDAS (d)	7200	2/01/13	6	1.7	1.1	2.4
QUINN RIDGE AM	6300	2/01/13	10	3.4	.0	2.0
SEVENTYSIX CK SNOTEL	7100	2/01/13	29	5.3	6.3	7.0
STAG MOUNTAIN AM	7700	2/01/13	7	2.0	1.8	3.8
TAYLOR CANYON SNOTEL	6200	2/01/13	15	3.9	1.9	4.0
TOE JAM AM	7700	2/01/13	45	12.0	3.1	6.4
TREMEWAN RANCH	5700	1/30/13	6	1.8	1.8	2.3

Basin Outlook Reports: How Forecasts Are Made

Federal – State – Private Cooperative Snow Surveys

For more water supply and resource management information, contact:

**USDA, Natural Resources Conservation Service
Snow Survey Office
1201 NE Lloyd Suite 900
Portland, OR 97232**

Phone: (503) 414-3270

Web site: <http://www.or.nrcs.usda.gov/snow/index.html>

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 snow courses 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. 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 uncertainty is in 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.

Interpreting Water Supply Forecasts

Each month, five forecasts are issued for each forecast point and each forecast period. Unless otherwise specified, all streamflow forecasts are for streamflow volumes that would occur naturally without any upstream influences. Water users need to know what the different forecasts represent if they are to use the information correctly when making operational decisions. The following is an explanation of each of the forecasts.

90 Percent Chance of Exceedance Forecast. There is a 90 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 10 percent chance that the actual streamflow volume will be less than this forecast value.

70 Percent Chance of Exceedance Forecast. There is a 70 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 30 percent chance that the actual streamflow volume will be less than this forecast value.

50 Percent Chance of Exceedance Forecast. There is a 50 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 50 percent chance that the actual streamflow volume will be less than this forecast value. Generally, this forecast is the middle of the range of possible streamflow volumes that can be produced given current conditions.

30 Percent Chance of Exceedance Forecast. There is a 30 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 70 percent chance that the actual streamflow volume will be less than this forecast value.

10 Percent Chance of Exceedance Forecast. There is a 10 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 90 percent chance that the actual streamflow volume will be less than this forecast value.

*Note: There is still a 20 percent chance that actual streamflow volumes will fall either below the 90 percent exceedance forecast or above the 10 percent exceedance forecast.

These forecasts represent the uncertainty inherent in making streamflow predictions. This uncertainty may include sources such as: unknown future weather conditions, uncertainties associated with the various prediction methodologies, and the spatial coverage of the data network in a given basin.

30-Year Average. The 30-year average streamflow for each forecast period is provided for comparison. The average is based on data from 1981-2010. The % AVG. column compares the 50% chance of exceedance forecast to the 30-year average streamflow; values above 100% denote when the 50% chance of exceedance forecast would be greater than the 30-year average streamflow.

AF - Acre-feet, forecasted volume of water are typically in thousands of acre-feet.

These forecasts are given to users to help make risk-based decisions. Users can select the forecast corresponding to the level of risk they are willing to accept in order to minimize the negative impacts of having more or less water than planned for.

To Decrease the Chance of Having Less Water than Planned for: A user might determine that making decisions based on a 50 percent chance of exceedance forecast is too much risk to take (there is still a 50% chance that the user will receive less than this amount). To reduce the risk of having less water than planned for, users can base their operational decisions on one of the forecasts with a greater chance of being exceeded such as the 90 or 70 percent exceedance forecasts.

To Decrease the Chance of Having More Water than Planned for: A user might determine that making decisions based on a 50 percent chance of exceedance forecast is too much risk to take (there is still a 50% chance that the user will receive more than this amount). To reduce the risk of having more water than planned for, users can base their operational decisions on one of the forecasts with a lesser chance of being exceeded such as the 30 or 10 percent exceedance forecasts.

Using the Forecasts - an Example

Using the 50 Percent Exceedance Forecast. Using the example forecasts shown on the next page, there is a 50% chance that actual streamflow volume at the Mountain Creek near Mitchell will be less than 4.4 KAF between April 1 and Sept 30. There is also a 50% chance that actual streamflow volume will be greater than 4.4 KAF.

Using the 90 and 70 Percent Exceedance Forecasts. If an unexpected shortage of water could cause problems (such as irrigated agriculture), users might want to plan on receiving 3.3 KAF (from the 70 percent exceedance forecast). There is a 30% chance of receiving *less* than 3.3 KAF.

Alternatively, if users determine the risk of using the 70 percent exceedance forecast is too great, then they might plan on receiving 1.7 KAF (from the **90** percent exceedance forecast). There is 10% chance of receiving less than 1.7 KAF.

Using the 30 or 10 Percent Exceedance Forecasts. If an unexpected excess of water could cause problems (such as operating a flood control reservoir), users might plan on receiving 5.5 KAF (from the 30 percent exceedance forecast). There is a 30% chance of receiving *more* than 5.5 KAF.

Alternatively, if users determine the risk of using the 30 percent exceedance forecast is too great, then they might plan on receiving 7.1 KAF (from the 10 percent exceedance forecast). There is a 10% chance of receiving more than 7.1 KAF.

**JOHN DAY BASIN
Streamflow Forecasts - February 1, 2013**

Forecast Point	Forecast Period	Future Conditions				30-Yr Avg. (1000AF)		
		Drier		Wetter				
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
Strawberry Ck nr Prairie City	MAR-JUL	5.0	6.6	7.6	89	8.6	10.2	8.5
	APR-SEP	5.2	6.8	7.9	90	9.0	10.6	8.8
Mountain Ck nr Mitchell	FEB-JUL	3.2	5.4	6.9	99	8.4	10.6	7.0
	APR-SEP	1.7	3.3	4.4	90	5.5	7.1	4.9

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

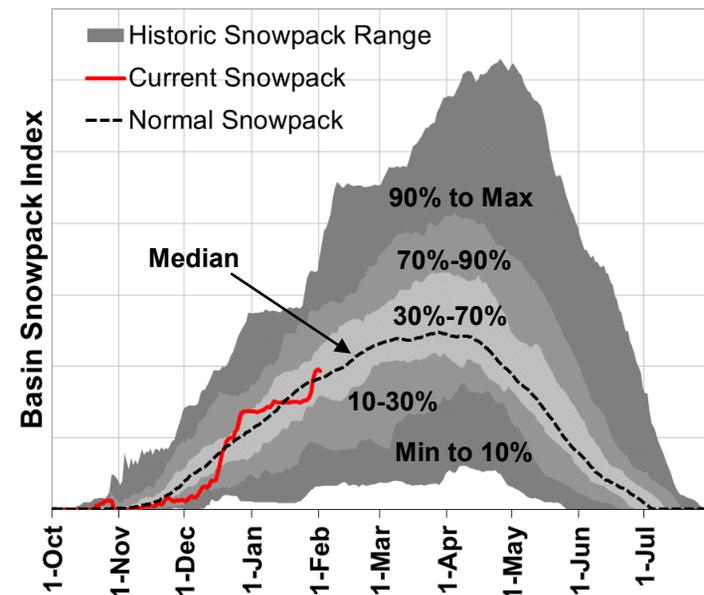
Interpreting Snowpack Plots

The basin snowpack plots use daily SNOTEL data to show how the current year's snowpack data compares to historic snowpack data in the basin. The "Current Snowpack" line can be compared with the "Normal Snowpack" (median) line, as well as the historic range for the basin. This gives users important context about the current year and historic variability of snowpack in the basin.

The basin snowpack index is calculated using many sites in each basin. The dark gray shading indicates the historic range of the basin snowpack index, from minimum to maximum for the period of record. The medium gray shading indicates the 10% to 90% range of the basin snowpack index, while the light gray shading indicates the 30% to 70% range of the basin snowpack index. For instance, the 90% line indicates that the snowpack index has been below this line for 90% of the years of record.

** Please note: These plots only use daily data from SNOTEL sites in the basin. Because snow course data is collected monthly, it cannot be included in these plots. The official snowpack percent of normal for the basin incorporates both SNOTEL and snow course data, so occasionally there might be slight discrepancies between the plot and official basin percent of normal (stated in basin summary below each plot).

Mountain Snowpack



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Official Business



This publication may be found online at:
<http://www.or.nrcs.usda.gov/snow/watersupply/>

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