



United States  
Department of  
Agriculture



Natural Resources  
Conservation  
Service

# Oregon Basin Outlook Report

---

## February 1, 2008



# Contents

<b>General Outlook .....</b>	<b>1</b>
Owyhee and Malheur Basins .....	3
Burnt, Powder, Grand Ronde, and Imnaha Basins .....	5
Umatilla, Walla Walla, Willow Rock, and Lower John Day Basins .....	8
Upper John Day Basin .....	10
Upper Deschutes and Crooked Basins .....	12
Hood, Mile Creeks, and Lower Deschutes Basins .....	15
Lower Columbia Basin .....	17
Willamette Basin .....	19
Rogue and Umpqua Basins .....	23
Klamath Basin .....	26
Lake County and Goose Lake.....	28
Harney Basin.....	30
<b>Generalized Streamflow Forecasts .....</b>	<b>32</b>
<b>Low Flow Forecasts for Oregon .....</b>	<b>33</b>
<b>Summary of Snow Course Data .....</b>	<b>35</b>
<b>Basin Outlook Reports; How Forecasts Are Made .....</b>	<b>38</b>
<b>Interpreting Water Supply Forecasts .....</b>	<b>39</b>

# General Outlook

February 1, 2008

## **SUMMARY**

Below normal temperatures combined with above normal precipitation to deliver lots of snow to Oregon in January. The snow continues to fall throughout the state, and SNOTEL sites in the lower elevations are breaking snowpack records. Mid to upper elevations are accumulating snow as well, but this is not unusual for the higher mountains at this time of year. Below normal temperatures continue into early February, keeping snow levels low, and snow melt at lower elevations gradual. Summer water supply forecasts continue to improve with the increasing precipitation. In the shorter term, it is hoped that the low elevation snow melts gradually without stressing rivers, tributaries and low lying areas with rapid melt.

## **SNOWPACK**

The snowpack has grown considerably throughout the state of Oregon since January 1. The February 1 snowpack was well above normal west of the Cascade crest and in the Deschutes basin. East of the crest, the February 1 snowpack was near or above normal. Colder than normal temperatures during the month brought the snow level down to the lower elevations and several low elevation SNOTEL sites were reporting record conditions as of February 1. Severe weather conditions near the first of February prevented data collection for the Wallowa Mountain aerial markers and several snow courses in the state.

## **PRECIPITATION**

January was wetter than normal throughout the state. The middle of January was cold and dry, with no significant precipitation. Storms during the beginning and end of the month brought plenty of moisture to the state. January precipitation ranged from 119 percent of average in the Umatilla, Walla Walla, Willow, Rock and Lower John Day basin to 152 percent of average in the Rogue and Umpqua basin. Since the beginning of the water year, precipitation has been above average throughout the state.

## **RESERVOIRS**

The February 1 storage at 27 major Oregon reservoirs analyzed in this publication was 65 percent of normal. A total of 1,227,900 acre feet of water were stored on February 1, an increase of 132,600 acre feet over last month. Last year at this time, these reservoirs stored 1,940,300 acre feet of water.

## **STREAMFLOW**

The summer streamflow forecasts for Oregon have improved since last month's report. The abundant January snowfall has added measurably to the water supply for the coming summer. At this report, the majority of points summarized in this report are expected to experience near average or above average streamflows this coming spring and summer. The table below summarizes key points in the state.

<b>STREAM</b>	<b>PERIOD</b>	<b>PERCENT OF AVERAGE</b>
Owyhee Net Inflow	February – July	82
Grande Ronde at La Grande	April – September	109
Umatilla at Pendleton	April – September	121
Deschutes at Benham Falls	April – September	103
Willamette MF near Oakridge	April – September	125
Rogue at Raygold	April – September	109
Upper Klamath L. Net Inflow	April – September	95
Silvies near Burns	April – September	102

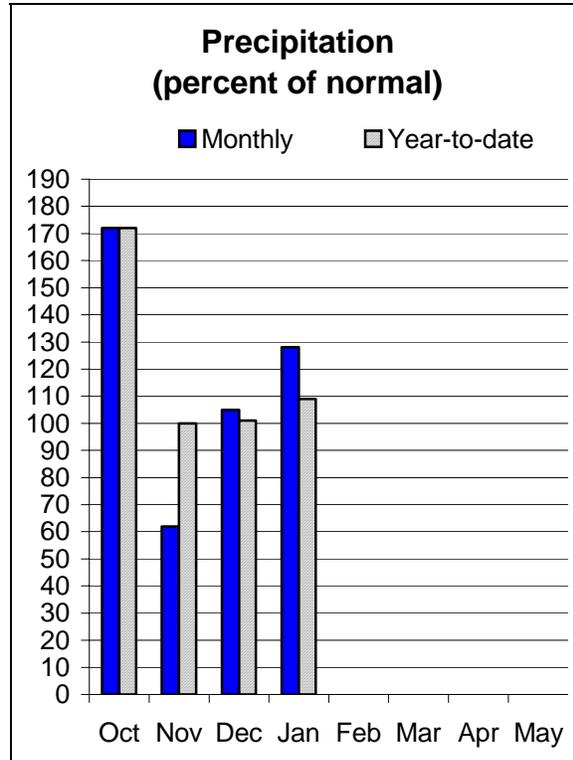
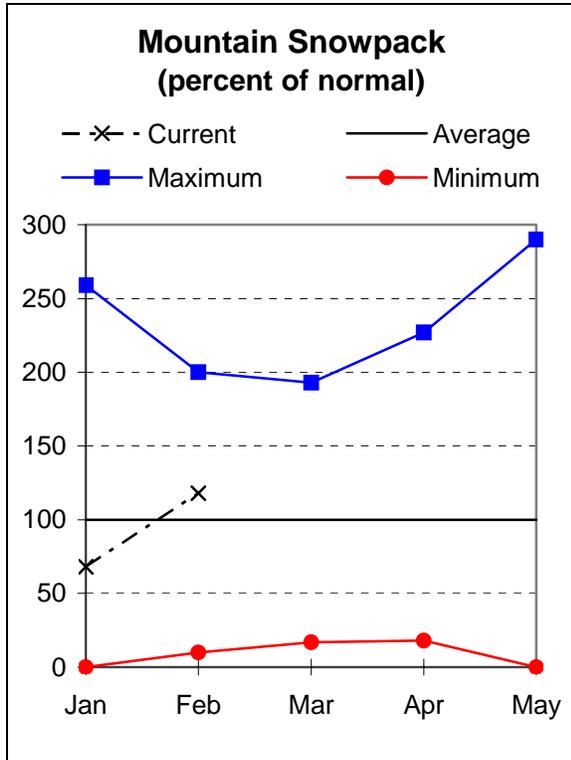
The forecasts in this bulletin are a result of coordinated activity between the Natural Resources Conservation Service and the National Weather Service as an effort to provide the best possible service to water users.

This report also contains data furnished by the Oregon Department of Water Resources, U.S. Geological Survey, NOAA National Weather Service and other cooperators.



# Owyhee and Malheur Basins

February 1, 2008



## Water Supply Outlook

January brought above normal precipitation to the Owyhee and Malheur basin, largely in the form of snow. January precipitation was 128 percent of average. Total precipitation since the beginning of the water year is 109 percent of average. Total snowpack for the Owyhee and Malheur basin on February 1 was 118 percent of average.

At the end of January, four reservoirs in the Owyhee and Malheur held only 40 percent of their average end of month storage for January, or 23 percent of their capacity.

The April through September streamflow forecasts range from 83 percent of average for the Owyhee River Reservoir inflow to 111 percent of average for the Malheur River near Drewsey. Water users in the Owyhee and Malheur basin can expect an average water supply this coming season.

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

Or visit: <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>

OWYHEE AND MALHEUR BASINS  
Streamflow Forecasts - February 1, 2008

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>					30-Yr Avg. (1000AF)	
		90%		50%		10%		
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)		(1000AF)
Malheur R nr Drewsey	FEB-JUL	73	110	140	110	173	230	127
	APR-SEP	38	63	84	111	108	149	76
NF Malheur R at Beulah	FEB-JUL	57	82	101	112	122	157	90
Owyhee Reservoir Inflow (2)	FEB-JUL	42	325	575	82	825	1190	700
	FEB-SEP	22	355	615	84	875	1250	730
	APR-SEP	17.0	205	355	83	505	730	430
Owyhee R nr Rome	FEB-JUL	280	440	565	86	710	950	655
	FEB-SEP	290	450	580	86	725	970	675
	APR-SEP	164	260	340	85	430	580	400

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

OWYHEE AND MALHEUR BASINS  
Watershed Snowpack Analysis - February 1, 2008

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	13.2	32.8	28.5	Owyhee River	18	273	125
BULLY CREEK	30.0	5.5	20.7	13.6	Malheur	9	268	154
OWYHEE	715.0	191.8	466.9	438.3	Jordan Creek	2	173	121
WARMSPRINGS	191.0	15.9	99.4	87.7	Bully Creek	2	817	213

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

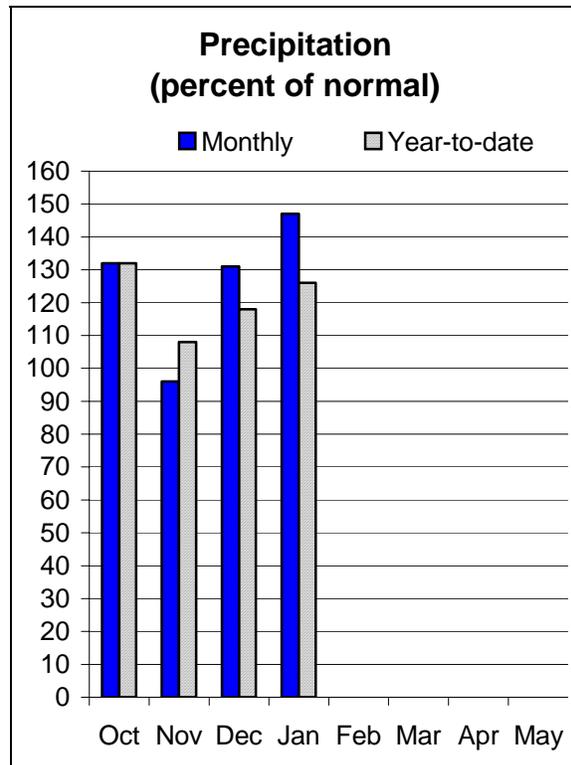
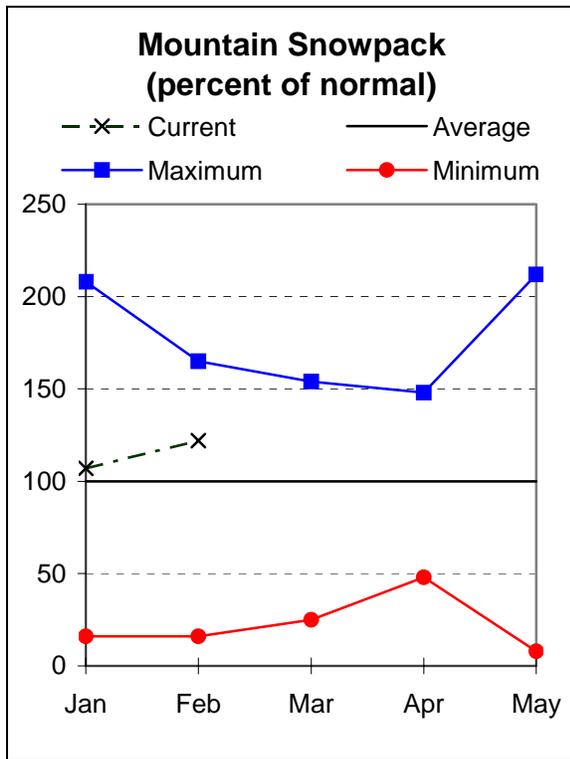
The average is computed for the 1971-2000 base period.

- (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.



# Burnt, Powder, Grand Ronde, and Imnaha Basins

February 1, 2008



## Water Supply Outlook

Precipitation in the Burnt, Powder, Pine, Grand Ronde and Imnaha was 147 percent of average for the month of January. Most of this precipitation fell as snow. The February 1 snowpack measured 122 percent of average. Since the beginning of the water year, precipitation in the basin has been 126 percent of average, the wettest in the state.

At the end of January, 3 of the irrigation reservoirs in the basin held only 36 percent of their average end of month storage for January, or 22 percent of their capacity.

The April through September streamflow forecasts range from 108 percent of average for Catherine Creek near Union to 114 percent of average for the Imnaha River at Imnaha. Elsewhere in the basin, the April through September forecast for the Grande Ronde at LaGrande is 109 percent of average. Water users in the basin can expect near to above average water supply this coming season.

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.wcc.nrcs.usda.gov/cgibin/bor.pl>

=====

BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS  
Streamflow Forecasts - February 1, 2008

=====

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>					30-Yr Avg. (1000AF)	
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)		30% (1000AF)		10% (1000AF)
Bear Ck nr Wallowa	APR-SEP	53	64	72	111	80	91	65
Burnt R nr Hereford	FEB-JUL	39	53	63	111	74	92	57
	APR-SEP	25	35	43	110	52	66	39
Catherine Ck nr Union	APR-JUL	50	59	66	107	73	84	62
	APR-SEP	54	64	71	108	78	90	66
Deer Ck nr Sumpster	FEB-JUL	17.4	21	24	124	27	32	19.4
Grande Ronde R at La Grande	MAR-JUL	195	240	275	111	310	370	247
	APR-SEP	135	175	205	109	235	290	188
Grande Ronde R at Troy	MAR-JUL	1230	1620	1800	114	1980	2370	1580
	APR-SEP	1040	1390	1550	113	1710	2060	1370
Imnaha R at Imnaha	APR-JUL	215	270	310	115	350	405	270
	APR-SEP	235	295	335	114	375	435	295
Lostine R nr Lostine	APR-JUL	99	114	125	112	137	155	112
	APR-SEP	104	121	133	110	146	166	121
Pine Ck nr Oxbow	FEB-JUL	161	200	230	111	260	300	208
	APR-JUL	112	141	160	108	179	210	148
	APR-SEP	119	148	168	109	188	215	154
Powder R nr Sumpster	FEB-JUL	58	73	84	114	96	115	74
	APR-JUL	41	54	63	109	73	89	58
	APR-SEP	44	56	66	112	76	93	59
Wolf Creek Reservoir Inflow (2)	MAR-JUN	12.2	16.2	19.0	117	22	26	16.2

=====

BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS Reservoir Storage (1000 AF) - End of January					BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS Watershed Snowpack Analysis - February 1, 2008			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
PHILLIPS LAKE	73.5	9.0	35.2	40.8	Grande Ronde ab LaGrande	6	168	127
THIEF VALLEY	17.4	9.3	11.6	16.5	Powder River	9	176	128
UNITY	25.2	7.0	12.0	12.9	Wallowa,Imnaha,Catherine	5	156	111
WALLOWA LAKE		NO REPORT			Burnt River	6	189	143
WOLF CREEK		NO REPORT						

\* 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 1971-2000 base period.

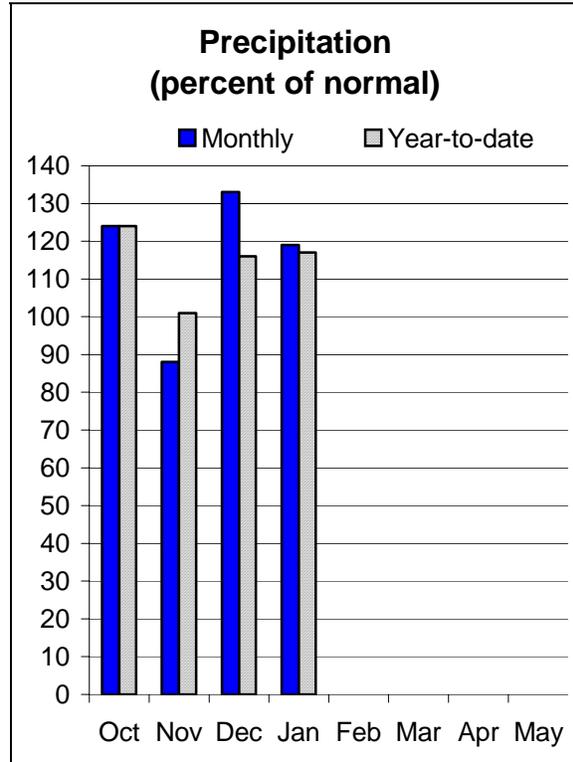
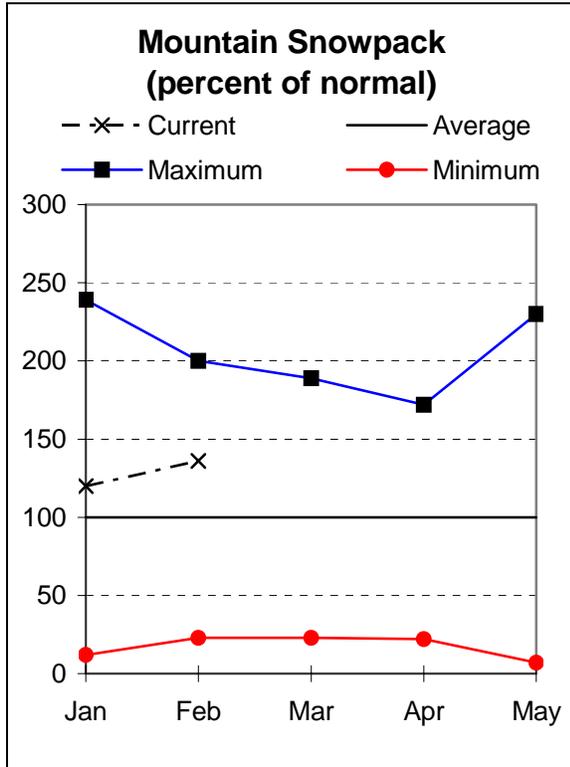
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

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



# Umatilla, Walla Walla, Willow Rock, and Lower John Day Basins

February 1, 2008



## Water Supply Outlook

January brought above normal precipitation to the Umatilla, Walla Walla, Willow, Rock and Lower John Day basins, largely in the form of snow. January precipitation was 119 percent of average. Since the beginning of the water year precipitation has been 117 percent of average in the basin. Total snowpack for the Umatilla, Walla Walla, Willow, Rock and Lower John Day basin on February 1 was 136 percent of average. At the end of January, Cold Springs and McKay reservoirs held 41 percent of their average storage, or 18 percent of capacity.

The above average snowpack will contribute to the spring and summer surface water supply. April through September streamflow forecasts in the basin range from 112 percent of average for the South Fork Walla Walla near Milton-Freewater to 126 percent of average for McKay Creek near Pilot Rock. Elsewhere in the basin, the April through September forecast for the Umatilla at Pendleton is 121 percent of average. Water users in the basin can expect above average water supply this coming season.

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.wcc.nrcs.usda.gov/cgibin/bor.pl>

UMATILLA, WALLA WALLA, WILLOW, ROCK AND LOWER JOHN DAY BASINS  
Streamflow Forecasts - February 1, 2008

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>					30-Yr Avg. (1000AF)					
		90% (1000AF)		70% (1000AF)		50% (1000AF) (% AVG.)		30% (1000AF)		10% (1000AF)		
		Chance Of Exceeding *										
Butter Ck nr Pine City	MAR-JUL	12.8	16.8	19.5	130	22	26	15.0				
	APR-SEP	7.6	10.4	12.3	121	14.2	17.0	10.2				
McKay Ck nr Pilot Rock	APR-SEP	15.4	26	34	126	42	53	27				
Rhea Ck nr Heppner	FEB-JUL	10.9	14.9	17.6	130	20	24	13.5				
Umatilla R ab Meacham Ck nr Gibbon	APR-JUL	66	78	87	119	96	108	73				
	MAR-SEP	100	115	125	118	135	150	106				
	APR-SEP	72	84	93	118	102	114	79				
Umatilla R at Pendleton	APR-JUL	133	162	182	122	200	230	149				
	MAR-SEP	225	255	280	122	305	335	230				
	APR-SEP	138	168	188	121	210	240	155				
SF Walla Walla R nr Milton-Freewater	MAR-SEP	77	85	91	112	97	105	81				
	APR-SEP	63	70	75	112	80	87	67				
Willow Ck ab Willow Ck Lake nr Heppn	FEB-JUL	10.6	13.9	16.2	122	18.5	22	13.3				
	APR-JUL	4.9	7.3	9.0	122	10.7	13.1	7.4				

UMATILLA, WALLA WALLA, WILLOW, ROCK AND LOWER JOHN DAY BASINS | UMATILLA, WALLA WALLA, WILLOW, ROCK AND LOWER JOHN DAY BASINS  
Reservoir Storage (1000 AF) - End of January | Watershed Snowpack Analysis - February 1, 2008

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
COLD SPRINGS	50.0	7.2	17.9	21.4	Walla Walla River	3	149	141
MCKAY	73.8	15.4	29.2	34.1	Umatilla River	7	177	136
WILLOW CREEK	1.8	0.1	0.0	---	McKay Creek	4	232	131

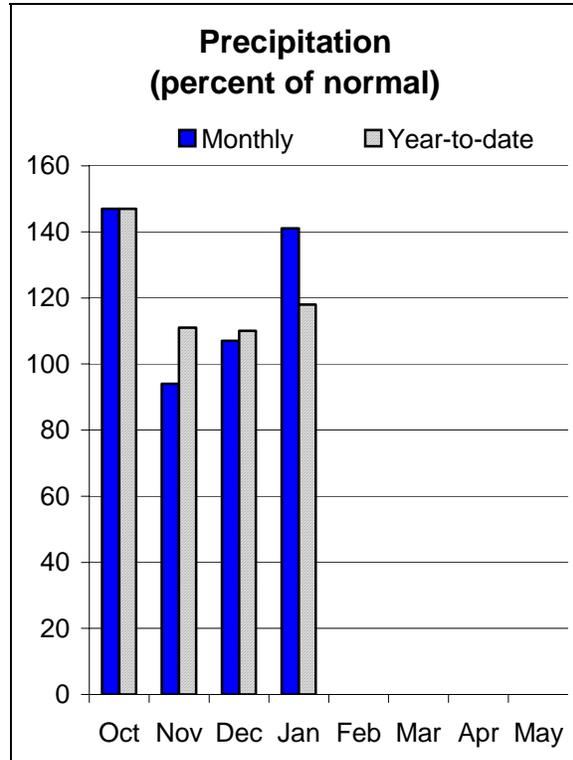
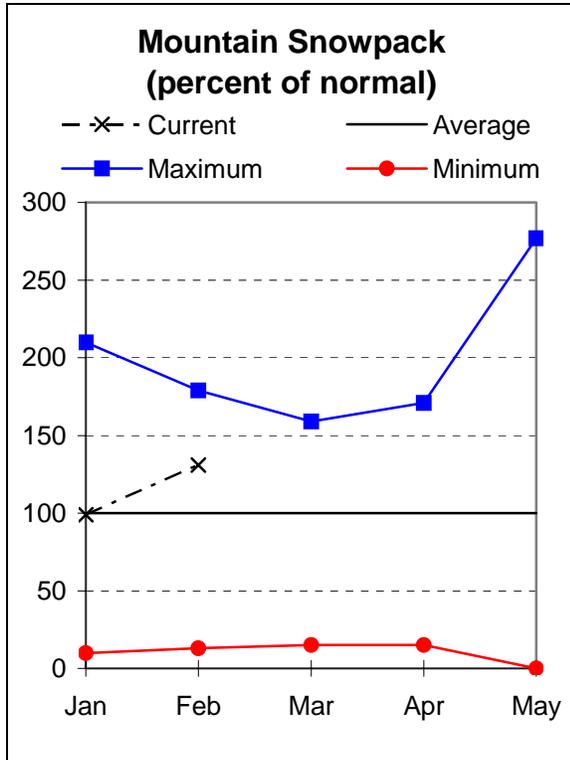
\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.  
The average is computed for the 1971-2000 base period.

- (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.



# Upper John Day Basin

February 1, 2008



## Water Supply Outlook

Precipitation in the Upper John Day was 141 percent of average for the month of January. Most of this precipitation fell as snow. The February 1 snowpack measured 131 percent of average. Since the beginning of the water year, precipitation in the Upper John Day basin has been 118 percent of average.

The April through September streamflow forecasts range from 103 percent of average for Camas Creek near Ukiah to 135 percent of average for Strawberry Creek near Prairie City. Elsewhere in the basin, the April through September forecast for the North Fork John Day near Monument is 117 percent of average. Water users in the Upper John Day can expect above average water supply this coming season.

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

Or visit: <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>

=====

UPPER JOHN DAY BASIN  
Streamflow Forecasts - February 1, 2008

=====

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)
Camas Ck nr Ukiah	MAR-JUL	40	50	56	108	62	72	52
	APR-SEP	24	33	39	103	45	54	38
MF John Day R at Ritter	MAR-JUL	139	171	192	121	215	245	159
	APR-SEP	108	135	154	120	173	200	128
NF John Day R at Monument	MAR-JUL	690	840	940	119	1040	1190	790
	APR-SEP	510	635	720	117	805	930	615
Mountain Ck nr Mitchell	FEB-JUL	4.7	6.9	8.4	120	9.9	12.1	7.0
	APR-SEP	2.7	4.3	5.4	117	6.5	8.1	4.6
Strawberry Ck nr Prairie City	MAR-JUL	7.4	9.0	10.0	135	11.0	12.6	7.4
	APR-SEP	7.8	9.4	10.5	135	11.6	13.2	7.8

=====

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

=====

=====

UPPER JOHN DAY BASIN  
Watershed Snowpack Analysis - February 1, 2008

=====

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					John Day, North Fork	8	170	122
					John Day above Dayville	4	165	115

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

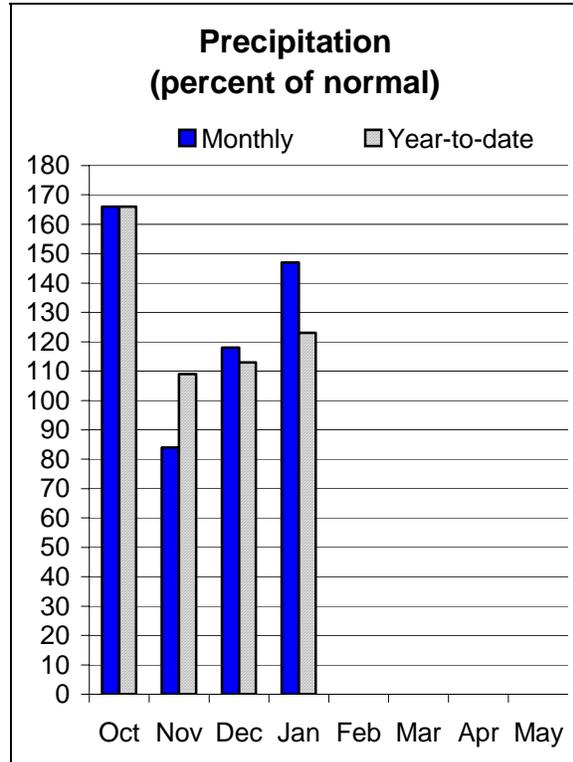
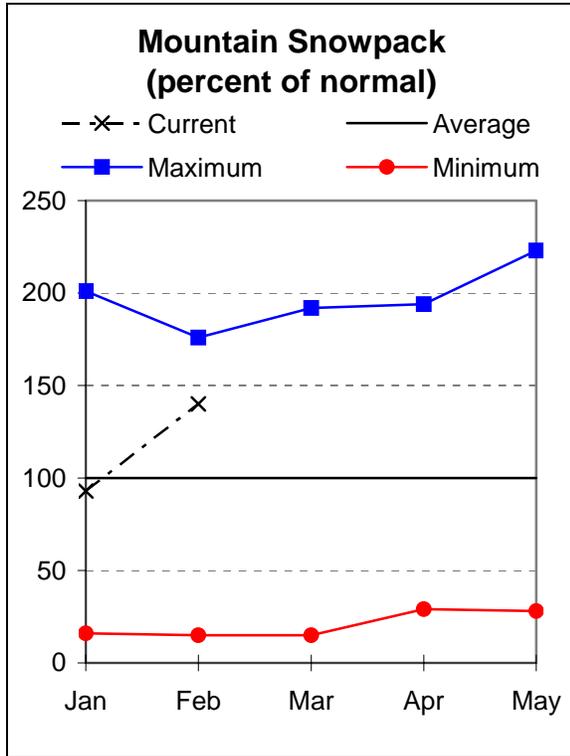
The average is computed for the 1971-2000 base period.

- (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.



# Upper Deschutes and Crooked Basins

February 1, 2008



## Water Supply Outlook

January brought above normal precipitation to the Upper Deschutes and Crooked river basins, largely in the form of snow. January precipitation was 147 percent of average. Since the beginning of the water year precipitation in the Upper Deschutes and Crooked river basin has been 123 percent of average. Total snowpack for the Upper Deschutes and Crooked river basin on February 1 was 140 percent of average.

Reservoir storage in the Upper Deschutes and Crooked river basin was 99 percent of average at the end of January or 66 percent of capacity.

The April through September streamflow forecasts range from 98 percent of average for the Prineville reservoir inflow to 116 percent of average for Whychus Creek near Sisters. Elsewhere in the basin, the April through September forecast for the Deschutes River at Benham Falls near Bend is forecast to be near average. Water users in the Upper Deschutes and Crooked River basin can expect slightly near to above average water supplies this coming season.

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

Or visit: <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>

=====

UPPER DESCHUTES AND CROOKED BASINS  
Streamflow Forecasts - February 1, 2008

=====

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
Crane Prairie Reservoir Inflow (2)	FEB-JUL	71	81	88	113	95	105	78
	APR-JUL	56	63	68	115	73	80	59
	FEB-SEP	105	118	127	113	136	149	112
	APR-SEP	87	98	106	114	114	125	93
Crescent Ck nr Crescent (2)	FEB-JUL	10.9	17.5	22	96	26	33	23
	APR-JUL	9.6	14.7	18.2	106	22	27	17.2
	FEB-SEP	14.4	21	26	96	31	38	27
	APR-SEP	13.1	18.4	22	105	26	31	21
Deschutes R at Benham Falls nr Bend	FEB-JUL	435	475	500	100	525	565	500
	APR-JUL	325	345	360	103	375	395	350
	FEB-SEP	600	650	680	100	710	760	680
	APR-SEP	485	520	540	103	560	595	525
Deschutes R bl Snow Ck nr La Pine	FEB-JUL	32	40	45	100	50	58	45
	APR-JUL	24	29	33	100	37	42	33
	FEB-SEP	55	65	71	100	77	87	71
	APR-SEP	47	55	60	102	65	73	59
Little Deschutes R nr La Pine (2)	FEB-JUL	81	102	116	115	130	151	101
	APR-JUL	64	75	83	117	91	102	71
	FEB-SEP	86	108	124	113	140	162	110
	APR-SEP	69	83	92	115	101	115	80
Ochoco Reservoir Inflow (2)	FEB-JUL	32	42	49	114	56	66	43
	APR-JUL	13.2	19.0	23	105	27	33	22
	FEB-SEP	32	42	49	114	56	66	43
	APR-SEP	12.7	18.8	23	105	27	33	22
Prineville Reservoir Inflow (2)	FEB-JUL	138	199	240	109	280	340	221
	APR-JUL	48	83	107	99	131	166	108
	FEB-SEP	136	198	240	108	280	345	222
	APR-SEP	46	82	107	98	132	168	109
Whychus Ck nr Sisters	FEB-JUL	46	50	53	124	56	60	43
	APR-JUL	39	42	43	119	44	47	36
	APR-SEP	51	55	57	116	59	63	49

=====

UPPER DESCHUTES AND CROOKED BASINS Reservoir Storage (1000 AF) - End of January					UPPER DESCHUTES AND CROOKED BASINS Watershed Snowpack Analysis - February 1, 2008			
Reservoir	Usable Capacity	*** Usable Storage This Year	Last Year	*** Avg	Watershed	Number of Data Sites	This Year as % of Last Yr	% of Average
CRANE PRAIRIE	55.3	43.2	47.2	39.6	Crooked, Ochoco	4	212	161
CRESCENT LAKE	86.9	46.7	41.6	49.1	Deschutes above Wickiup	3	151	146
OCHOCO	47.5	19.6	28.1	21.0	Little Deschutes	4	157	145
PRINEVILLE	153.0	81.9	89.6	90.0	Tumalo and Squaw Creeks	4	155	144
WICKIUP	200.0	166.6	185.9	161.6				

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

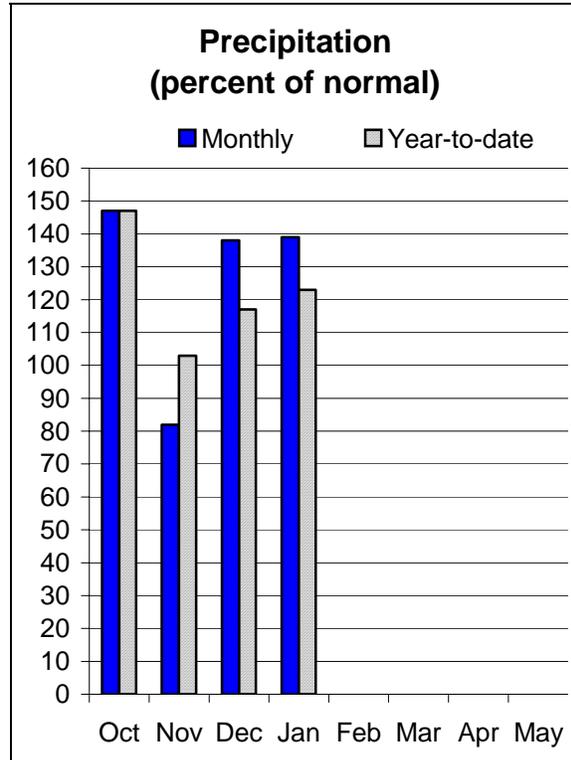
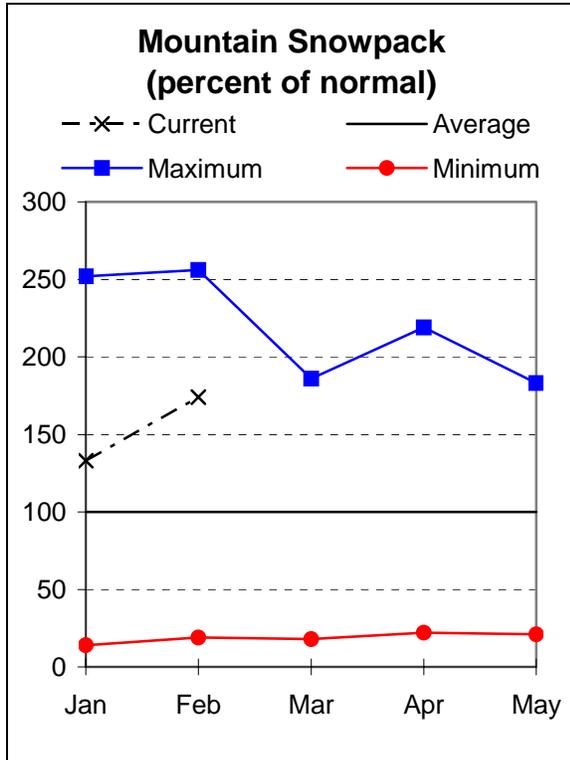
The average is computed for the 1971-2000 base period.

- (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.



# Hood, Mile Creeks, and Lower Deschutes Basins

February 1, 2008



## Water Supply Outlook

Precipitation in the Hood, Mile Creeks and Lower Deschutes basin was 139 percent of average for the month of January. Most of this precipitation fell as snow. The February 1 snowpack measured 174 percent of average. Since the beginning of the water year, precipitation in the Hood, Mile Creeks and Lower Deschutes basin has been 123 percent of average. New records were established at two lower elevation SNOTEL sites in the Hood, Mile Creeks and Lower Deschutes basin on February 1.

The April through September streamflow forecasts for the Hood River at Tucker Bridge 127 percent of average. Water users in the Hood River, Mile Creeks and Lower Deschutes basin can expect an above average water supply this coming season.

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

Or visit: <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>

HOOD, MILE CREEKS AND LOWER DESCHUTES BASINS  
Streamflow Forecasts - February 1, 2008

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>					30-Yr Avg. (1000AF)			
		90%		70%		50%		30%		10%
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)		(1000AF)	(1000AF)	
Hood R at Tucker Bridge	APR-JUL	245	270	290	127	310	335	228		
	APR-SEP	295	325	345	127	365	395	271		

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

HOOD, MILE CREEKS AND LOWER DESCHUTES BASINS  
Watershed Snowpack Analysis - February 1, 2008

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	1.1	2.7	3.7	Hood River	6	168	169
					Mile Creeks	0	0	0
					White River	3	158	151

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

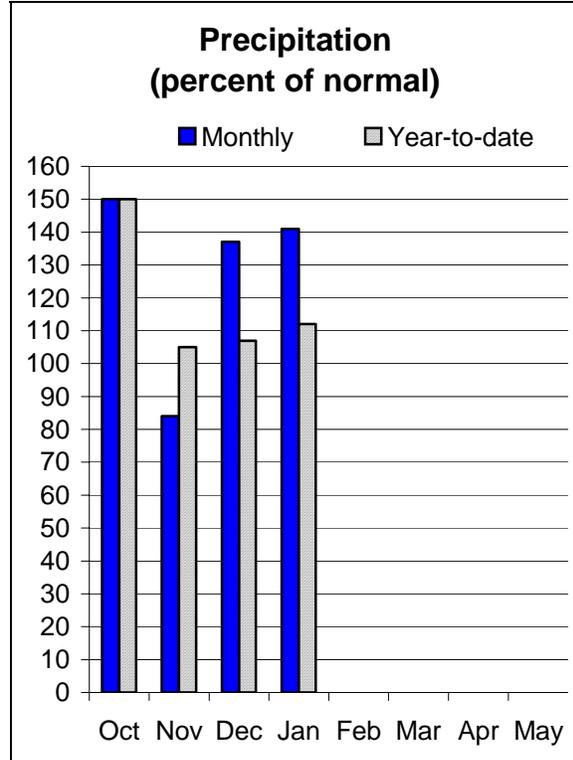
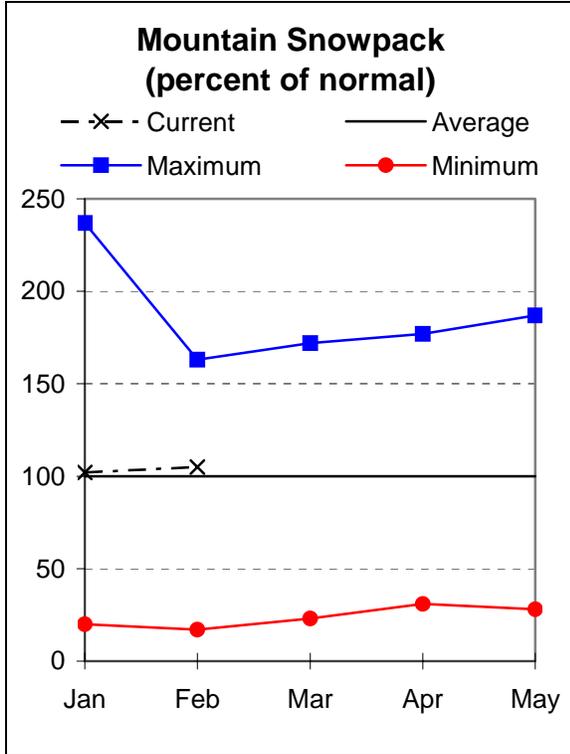
The average is computed for the 1971-2000 base period.

- (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.



# Lower Columbia Basin

February 1, 2008



## Water Supply Outlook

Precipitation in the Lower Columbia basin was 141 percent of average for the month of January. Most of this precipitation fell as snow. The February 1 snowpack for the Columbia above The Dalles measured 105 percent of average. Since the beginning of the water year, precipitation in the basin has been 112 percent of average. New records were established at 3 lower elevation SNOTEL sites in the Sandy basin on February 1.

The April through September streamflow forecasts range from near average for The Columbia River at The Dalles to 110 percent of average for the Sandy near Marmot. Water users in the Lower Columbia and Sandy basin can expect a near average water supply this coming season.

For more information contact your local Natural Resources Conservation Service Office:  
Oregon City - (503) 656-3499

Or visit: <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>

=====

LOWER COLUMBIA BASIN  
Streamflow Forecasts - February 1, 2008

=====

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)
Columbia R at The Dalles (2)	APR-JUL	64800	76100	83800	99	91500	103000	84600
	APR-SEP	74700	88100	97300	99	106000	120000	98600
Sandy R nr Marmot	APR-JUL	285	320	345	110	370	405	313
	APR-SEP	335	375	400	110	425	465	363

LOWER COLUMBIA BASIN Reservoir Storage (1000 AF) - End of January					LOWER COLUMBIA BASIN Watershed Snowpack Analysis - February 1, 2008			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					Sandy River	5	197	189

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

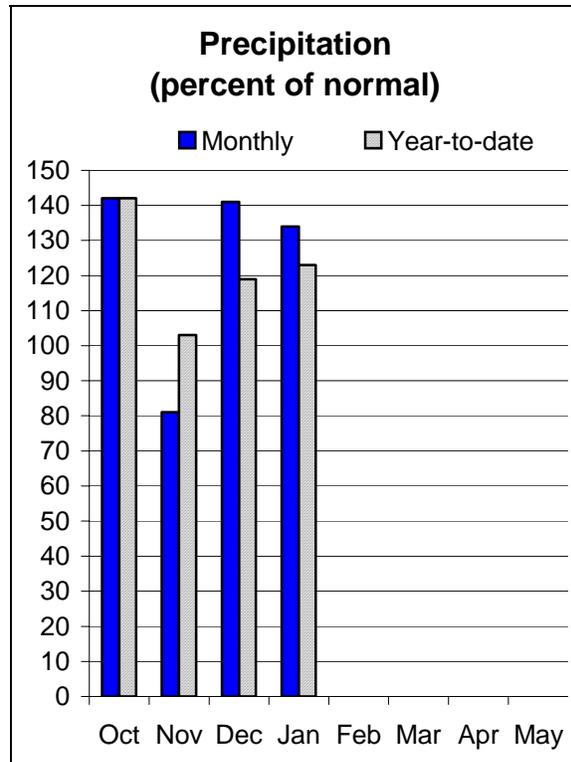
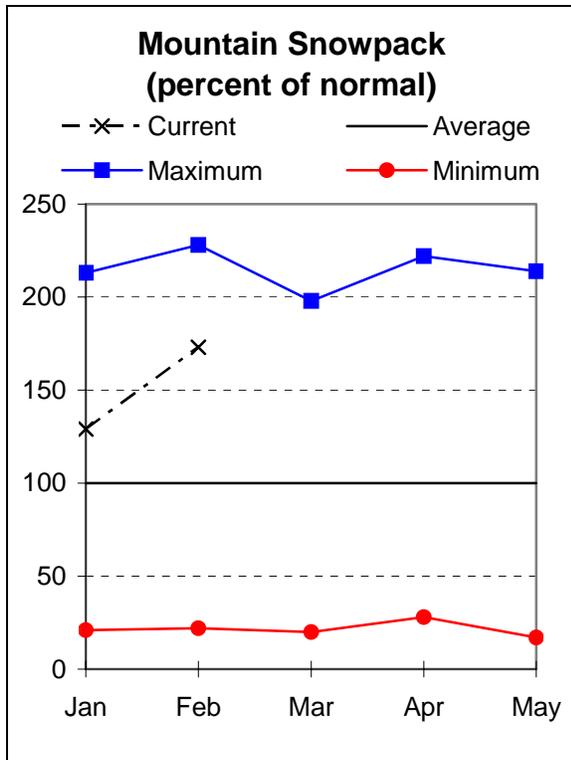
The average is computed for the 1971-2000 base period.

- (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.



# Willamette Basin

February 1, 2008



## Water Supply Outlook

January brought above normal precipitation to the Willamette basin, largely in the form of snow. January precipitation was 134 percent of average, bringing the total since the beginning of the water year to 123 percent of average. Total snowpack for the Willamette basin on February 1 was 173 percent of average. New records were established at nine lower elevation SNOTEL sites in the Willamette basin on February 1.

The April through September streamflow forecasts range from 109 percent of average for the McKenzie River near Vida to 135 percent of average for the Dorena Lake inflow. Elsewhere in the basin, the April through September forecast for the Willamette at Salem is 113 percent of average. Water users in the Willamette basin can expect above average water supplies this coming season.

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.wcc.nrcs.usda.gov/cgibin/bor.pl>

=====

WILLAMETTE BASIN  
Streamflow Forecasts - February 1, 2008

=====

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)	
Blue River Lake Inflow (1,2)	FEB-MAY	149	177	190	117	205	230	163
	APR-SEP	66	89	99	115	109	132	86
Clackamas R at Estacada (2)	APR-JUL	635	725	785	123	845	935	640
	APR-SEP	760	855	920	123	985	1080	748
Clackamas R ab Three Lynx (2)	APR-JUL	505	565	605	128	645	705	474
	APR-SEP	615	675	720	128	765	825	562
Cottage Grove Lake Inflow (1,2)	FEB-MAY	82	110	123	141	136	164	87
	APR-SEP	32	48	55	128	62	78	43
Cougar Lake Inflow (1,2)	FEB-MAY	275	320	340	119	360	405	285
	APR-SEP	210	250	265	115	280	320	230
Detroit Lake Inflow (1,2)	FEB-MAY	715	860	925	124	990	1140	744
	APR-JUL	485	590	635	120	680	785	528
	APR-SEP	580	690	740	120	790	900	616
Dorena Lake Inflow (1,2)	FEB-MAY	220	295	330	129	365	440	255
	APR-SEP	103	146	165	135	184	225	122
Fall Creek Lake Inflow (1,2)	FEB-MAY	144	190	210	107	230	275	197
Fern Ridge Lake Inflow (1,2)	FEB-MAY	139	191	215	119	240	290	180
Foster Lake Inflow (1,2)	FEB-MAY	935	1140	1230	140	1320	1530	878
	APR-JUL	360	525	600	122	675	840	490
	APR-SEP	405	570	645	122	720	885	527
Green Peter Lake Inflow (1,2)	FEB-MAY	715	850	915	152	980	1120	604
	APR-JUL	220	325	375	115	425	530	327
	APR-SEP	250	355	405	114	455	560	354
Hills Creek Lake Inflow (1,2)	FEB-MAY	360	455	500	129	545	640	388
	APR-JUL	215	295	330	119	365	445	277
	APR-SEP	285	350	380	119	410	475	320
	JUN-OCT	118	157	175	107	193	230	164
Little North Santiam R (1)	APR-JUL	111	145	160	120	175	210	133
	APR-SEP	121	156	172	120	188	225	143

=====

=====

WILLAMETTE BASIN  
Streamflow Forecasts - February 1, 2008

=====

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)		
Lookout Point Lake Inflow (1,2)	FEB-MAY	965	1220	1330	130	1440	1700	1025
	APR-JUL	635	795	870	120	945	1110	726
	APR-SEP	725	910	990	120	1070	1250	828
	JUN-OCT	300	410	460	114	510	620	402
McKenzie R nr Vida (1,2)	APR-JUL	815	985	1060	109	1140	1310	977
	APR-SEP	1080	1240	1310	109	1380	1540	1201
Mohawk R nr Springfield	FEB-JUL	145	190	220	112	250	295	196
Oak Grove Fork ab Power Intake	APR-JUL	142	156	166	128	176	190	130
	APR-SEP	188	205	215	129	225	240	167
North Santiam R at Mehama (1,2)	APR-JUL	635	785	850	116	915	1070	732
	APR-SEP	735	895	965	116	1040	1190	834
South Santiam R at Waterloo (2)	APR-JUL	445	570	655	119	740	865	549
	APR-SEP	490	615	700	119	785	910	587
Scoggins Ck nr Gaston (2)	FEB-JUL	45	51	55	128	59	65	43
Thomas Ck nr Scio	FEB-JUL	167	200	225	130	250	285	173
MF Willamette R bl NF (1,2)	FEB-MAY	895	1150	1260	130	1370	1630	973
	APR-JUL	665	810	875	125	940	1090	698
	APR-SEP	770	930	1000	125	1070	1230	798
	JUN-OCT	355	450	495	127	540	635	391
Willamette R at Salem (1,2)	FEB-MAY	6340	8170	9000	115	9830	11700	7837
	APR-JUL	3190	4370	4900	113	5430	6610	4347
	APR-SEP	3770	4920	5450	113	5980	7130	4804

=====

WILLAMETTE BASIN Reservoir Storage (1000 AF) - End of January					WILLAMETTE BASIN Watershed Snowpack Analysis - February 1, 2008			
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	1.4	3.8	6.0	Clackamas River	5	206	199
COTTAGE GROVE	29.8	3.2	1.5	3.6	McKenzie River	4	180	156
COUGAR	155.2	6.9	7.3	77.6	Row River	1	244	164
DETROIT	300.7	16.6	19.5	69.0	Santiam River	6	257	199
DORENA	70.5	3.3	3.8	11.8	Willamette, Middle Fork	6	178	165
FALL CREEK	115.5	1.8	0.0	7.1				
FERN RIDGE	109.6	6.5	3.2	18.6				
FOSTER	29.7	2.5	2.1	4.9				
GREEN PETER	268.2	7.5	13.5	91.2				
HILLS CREEK	200.2	10.7	9.0	71.3				
LOOKOUT POINT	337.0	21.4	26.1	41.8				
TIMOTHY LAKE	61.7	44.7	57.3	49.9				
HENRY HAGG LAKE	53.0	36.3	37.6	36.2				

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

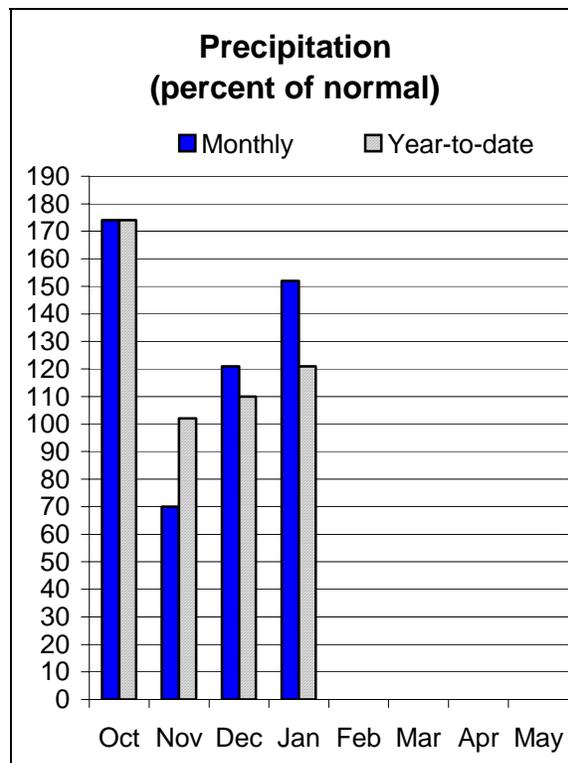
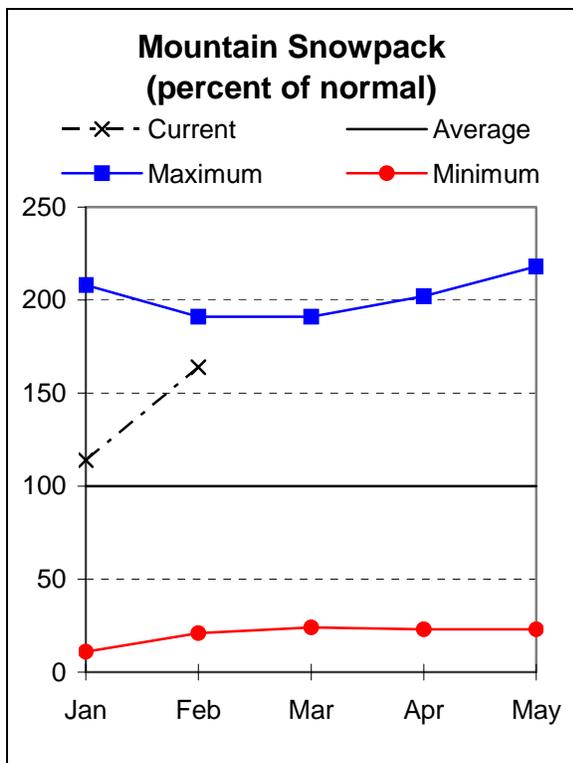
The average is computed for the 1971-2000 base period.

- (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.



# Rogue and Umpqua Basins

February 1, 2008



## Water Supply Outlook

Precipitation in the Rogue and Umpqua basin was 152 percent of average for the month of January. Most of this precipitation fell as snow. The February 1 snowpack measured 164 percent of average. Since the beginning of the water year, precipitation in the basin has been 121 percent of average.

Reservoir storage in the Rogue and Umpqua basin was 110 percent of average at the end of January or 68 percent of capacity.

The April through September streamflow forecasts range from 109 percent of average for the Rogue at Raygold to 148 percent of average for Sucker Creek below Little Grayback Creek. Elsewhere in the basin, the April through September forecast for the South Umpqua River at Tiller is 117 percent of average. Water users in the Rogue and Umpqua basin can expect an above average water supply this coming season.

For more information contact your local Natural Resources Conservation Service Office:  
 Roseburg - (541) 673-8316; Medford - (541) 776-4267  
 Or visit: <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>

=====

ROGUE AND UMPQUA BASINS  
Streamflow Forecasts - February 1, 2008

=====

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
Applegate Lake Inflow (2)	FEB-JUL	167	230	270	132	310	375	205
	APR-JUL	100	130	150	134	170	200	112
	FEB-SEP	176	240	280	130	320	385	215
	APR-SEP	105	136	157	132	178	210	119
SF Big Butte Ck nr Butte Falls	APR-JUL	30	37	42	124	47	54	34
	APR-SEP	37	46	52	119	58	67	44
Cow Ck nr Azalea (2)	FEB-JUL	21	38	49	117	60	77	42
	APR-JUL	8.0	14.9	19.5	118	24	31	16.5
	APR-SEP	9.0	16.1	21	119	26	33	17.7
Hyatt Prairie Reservoir Inflow (2)	APR-JUL	2.3	4.1	5.3	110	6.5	8.3	4.8
Illinois R at Kerby	APR-JUL	127	191	235	131	280	345	179
	APR-SEP	131	196	240	129	285	350	186
NF Little Butte Ck nr Lakecreek (2)	APR-JUL	27	33	37	116	41	47	32
	APR-SEP	42	50	55	119	60	68	46
Lost Creek Lake Inflow (2)	FEB-JUL	735	845	920	112	995	1100	825
	APR-JUL	470	545	595	112	645	720	530
	FEB-SEP	855	975	1060	110	1140	1270	960
	APR-SEP	590	675	735	111	795	880	665
Rogue R at Raygold (2)	APR-JUL	560	705	805	110	905	1050	730
	APR-SEP	710	865	970	109	1080	1230	890
Rogue R at Grants Pass (2)	APR-JUL	600	765	875	118	985	1150	740
	APR-SEP	730	910	1030	116	1150	1330	885
Sucker Ck bl Ltl Grayback Ck nr Holl	APR-JUL	58	70	78	150	86	98	52
	APR-SEP	63	75	83	148	91	103	56
N Umpqua R at Winchester	APR-JUL	640	795	900	113	1000	1160	795
	APR-SEP	770	930	1040	113	1150	1310	920
S Umpqua R nr Brockway	APR-JUL	280	400	485	121	570	690	400
	APR-SEP	300	425	510	121	595	720	420
S Umpqua R at Tiller	APR-JUL	142	195	230	119	265	320	193
	APR-SEP	151	205	240	117	275	330	205

=====

ROGUE AND UMPQUA BASINS Reservoir Storage (1000 AF) - End of January					ROGUE AND UMPQUA BASINS Watershed Snowpack Analysis - February 1, 2008			
Reservoir	Usable Capacity	*** Usable Storage This Year	Last Year	*** Avg	Watershed	Number of Data Sites	This Year as % of Last Yr	% of Average
APPLEGATE	75.2	1.5	1.0	12.7	Applegate River	5	201	153
EMIGRANT LAKE	39.0	21.8	23.3	21.9	Bear Creek	5	203	156
FISH LAKE	8.0	4.8	6.1	5.3	Butte Creek	6	187	151
FOURMILE LAKE	16.1	9.7	10.0	9.0	Illinois River	1	341	254
HOWARD PRAIRIE	60.0	44.2	49.9	39.1	North Umpqua River	7	255	213
HYATT PRAIRIE	16.1	13.8	15.0	10.2	Rogue River	17	195	154
LOST CREEK	315.0	20.5	21.6	162.0				

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

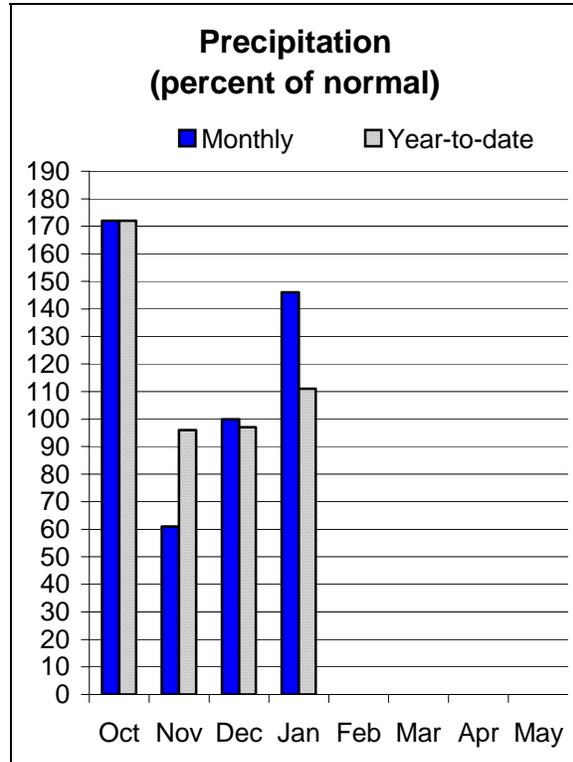
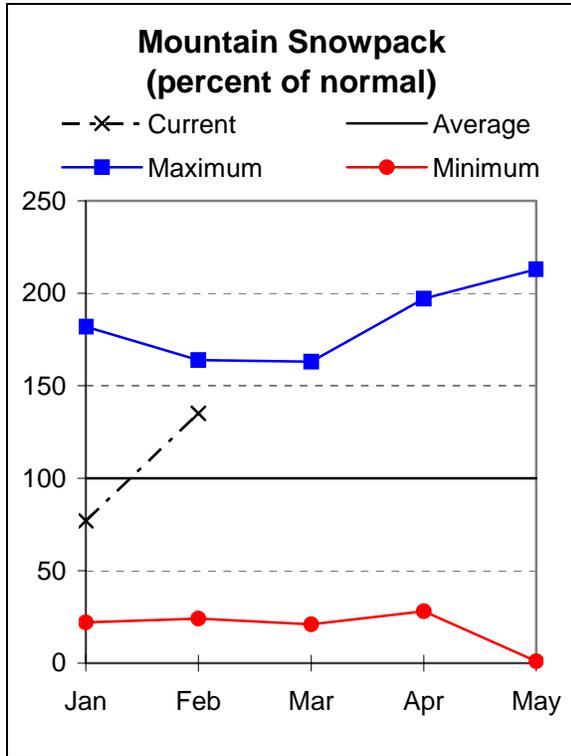
The average is computed for the 1971-2000 base period.

- (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.



# Klamath Basin

February 1, 2008



## Water Supply Outlook

January brought above normal precipitation to the Klamath basin, largely in the form of snow. January precipitation was 146 percent of average. Since the beginning of the water year, precipitation in the Klamath basin has been 111 percent of average. Total snowpack on February 1 was 135 percent of average for the Klamath basin.

Reservoir storage in the Klamath basin was 65 percent of average at the end of January or 35 percent of capacity.

The April through September streamflow forecasts range from 90 percent of average for Gerber Reservoir inflow to 102 percent of average for the Sprague near Chiloquin. Elsewhere in the basin, the April through September forecast for the Upper Klamath Lake inflow is 95 percent of average. Water users in the Klamath basin can expect a near average water supply this coming season.

For more information contact your local Natural Resources Conservation Service Office:  
Klamath Falls - (541) 883-6932

Or visit: <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>

=====

KLAMATH BASIN  
Streamflow Forecasts - February 1, 2008

=====

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>					30-Yr Avg. (1000AF)	
		===== Chance Of Exceeding * =====						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)			30% (1000AF)
Clear Lake Inflow (2)	FEB-JUL	42	80	105	100	130	168	105
	APR-SEP	23	37	47	98	57	71	48
Gerber Reservoir Inflow (2)	FEB-JUL	17.4	34	45	96	56	73	47
	APR-SEP	0.5	9.7	16.0	90	22	31	17.8
Sprague R nr Chiloquin	FEB-JUL	210	285	335	103	385	460	325
	APR-SEP	150	200	235	102	270	320	230
Upper Klamath Lake Inflow (1,2)	FEB-JUL	465	660	750	96	840	1030	780
	APR-SEP	320	435	490	95	545	660	515
Williamson R bl Sprague R nr Chiloqu	FEB-JUL	355	450	510	99	570	665	518
	APR-SEP	270	335	375	97	415	480	385

KLAMATH BASIN Reservoir Storage (1000 AF) - End of January					KLAMATH BASIN Watershed Snowpack Analysis - February 1, 2008			
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	88.7	169.1	207.8	Lost River	3	617	183
GERBER	94.3	45.0	60.6	46.9	Sprague River	7	213	114
UPPER KLAMATH LAKE	523.7	261.6	339.0	354.6	Upper Klamath Lake	16	182	132
					Williamson River	4	169	123

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

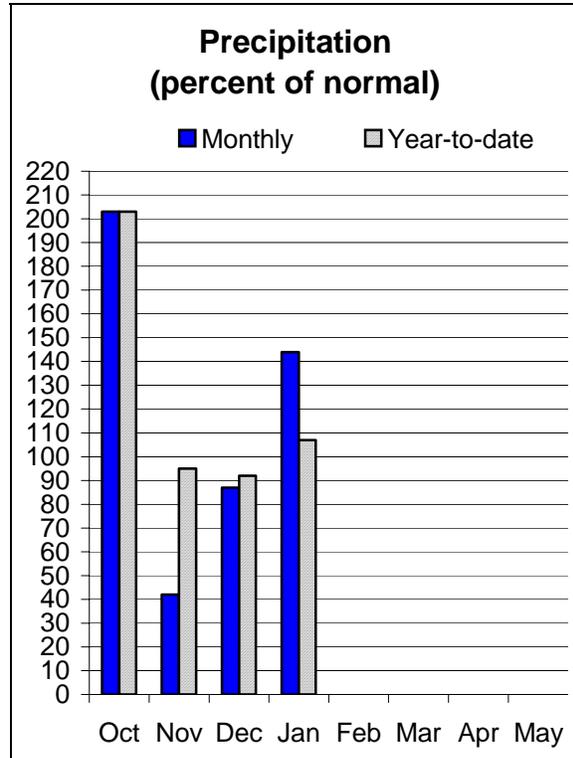
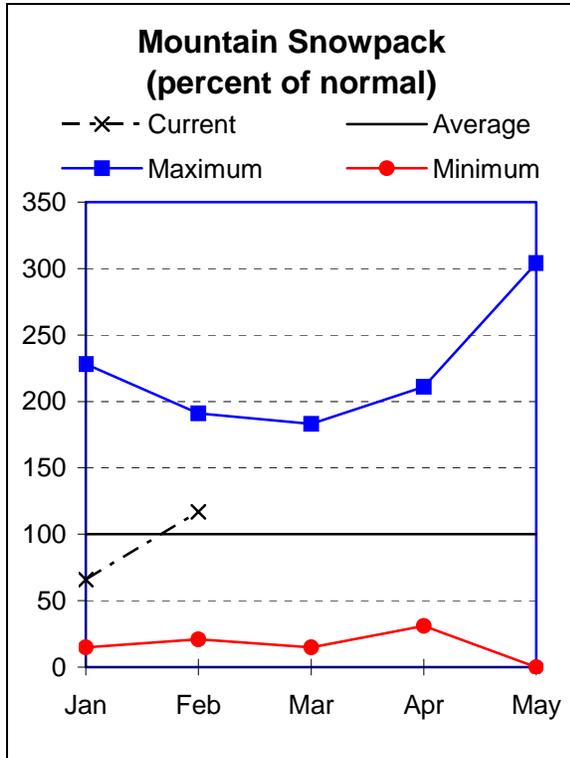
The average is computed for the 1971-2000 base period.

- (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 County and Goose Lake

February 1, 2008



## Water Supply Outlook

Precipitation in the Lake County and Goose Lake basin was 144 percent of average for the month of January. Most of this precipitation fell as snow. The February 1 snowpack measured 117 percent of average. This is the lowest snowpack percent in the state. Since the beginning of the water year, precipitation in the Lake County and Goose Lake basin has been 107 percent of average.

Reservoir storage in the Lake County and Goose Lake basin was 55 percent of average at the end of January or 28 percent of capacity.

The April through September streamflow forecasts range from 90 percent of average for Deep Creek near Adel to 100 percent of average for Twentymile Creek near Adel. Elsewhere in the basin, the April through September forecast for the Chewaucan River near Paisley is 97 percent of average. Water users in Lake County and Goose Lake basin can expect near average water supply this coming season.

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

Or visit: <http://www.wcc.nrcs.usda.gov/cgi-bin/bor.pl>

LAKE COUNTY AND GOOSE LAKE BASINS  
Streamflow Forecasts - February 1, 2008

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)
Chewaucan R nr Paisley	MAR-JUL	56	74	86	97	98	116	89
	APR-SEP	50	65	76	97	87	102	78
Deep Ck ab Adel	MAR-JUL	44	63	76	91	89	108	84
	APR-SEP	35	51	62	90	73	89	69
Honey Ck nr Plush	MAR-JUL	7.4	14.5	19.4	97	24	31	20
	APR-SEP	5.7	11.8	16.0	96	20	26	16.6
Silver Ck nr Silver Lake (2)	MAR-JUL	9.7	14.6	18.0	91	21	26	19.7
	APR-SEP	5.4	10.7	14.3	90	17.9	23	15.9
Twentymile Ck nr Adel	MAR-JUL	5.2	18.8	28	100	37	51	28
	APR-SEP	0.7	10.6	17.4	100	24	34	17.4

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

LAKE COUNTY AND GOOSE LAKE BASINS  
Watershed Snowpack Analysis - February 1, 2008

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	5.3	6.7	3.1	Chewaucan River	5	212	109
DREWS	63.0	10.2	34.7	33.1	Deep Creek	3	166	107
THOMPSON VALLEY	18.4	9.5	12.9	9.2	Drew Creek	4	207	109
					Honey Creek	3	448	162
					Silver Creek (Lake Co.)	4	149	106
					Twentymile Creek	5	191	103

\* 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 1971-2000 base period.

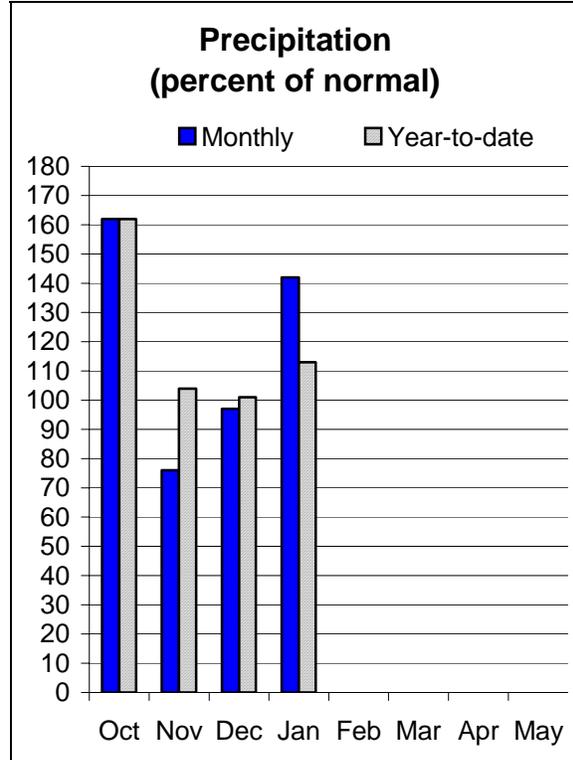
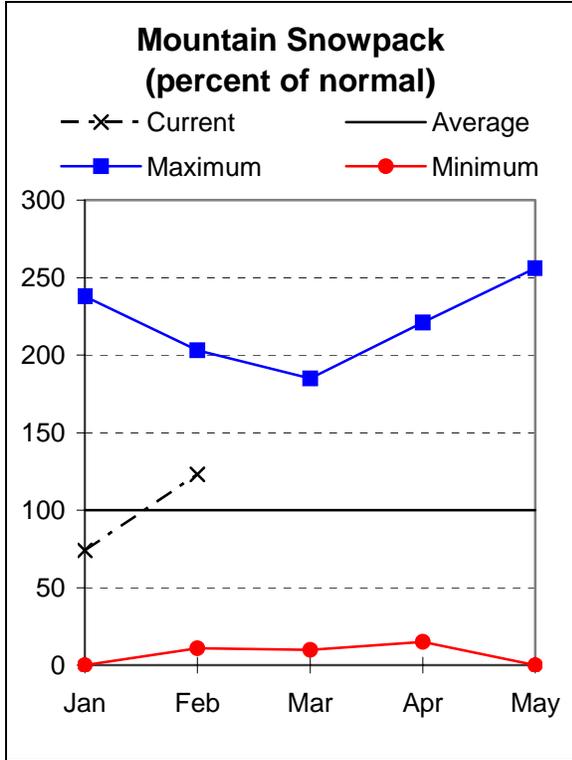
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

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



# Harney Basin

February 1, 2008



## Water Supply Outlook

January brought above normal precipitation to the Harney basin, largely in the form of snow. January precipitation was 142 percent of average. Since the beginning of the water year, total precipitation in the Harney basin has been 113 percent of average. Total snowpack on February 1 was 123 percent of average for the Harney basin.

The April through September streamflow forecasts range from 86 percent of average for Trout Creek near Denio to 102 percent of average for the Silvies River near Burns. Elsewhere in the basin, the April through September forecast for the Donner und Blitzen River near Frenchglen is 93 percent of average. Water users in the Harney basin can expect near average water supply this coming season.

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

Or visit: <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>

=====

HARNEY BASIN  
Streamflow Forecasts - February 1, 2008

=====

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)
Donner Und Blitzen R nr Frenchglen	MAR-JUL	39	58	70	93	82	101	75
	APR-SEP	34	53	65	93	77	96	70
Silvies R nr Burns	MAR-JUL	62	107	137	106	167	210	129
	APR-SEP	46	79	101	102	123	156	99
Trout Ck Nr Denio	MAR-JUL	3.8	7.3	9.7	87	12.1	15.6	11.1
	APR-SEP	3.0	6.5	8.9	86	11.3	14.8	10.3

=====

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

=====

=====

HARNEY BASIN  
Watershed Snowpack Analysis - February 1, 2008

=====

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	5	203	115
					Silver Creek (Harney Co)	2	195	109
					Silvies River	6	200	125
					Trout Creek	4	690	118

=====

\* 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 1971-2000 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.

# Generalized Streamflow Forecasts

February 1, 2008

FORECAST POINT TO BE DISCONTINUED	GENERALIZED WY 2008 STREAMFLOW FORECAST (APR - SEP)
SUCCOR CK nr Jordan Valley	NEAR AVERAGE
ANTHONY CK bl NF nr North Powder	NEAR AVERAGE
BIG CK bl Burn Ck nr Medical Spgs	NEAR AVERAGE
HURRICANE CREEK near Joseph	NEAR AVERAGE
EF WALLOWA near Joseph	NEAR AVERAGE
WALLOWA at Joseph (2)	NEAR AVERAGE
COUSE CREEK near Milton-Freewater	NEAR AVERAGE
ROCK CREEK above Whyte	NEAR AVERAGE
NF CROOKED blw Lookout Ck	NEAR AVERAGE
WHYCHUS CREEK near Sisters	NEAR AVERAGE
TUMALO CREEK near Bend	NEAR AVERAGE
WF HOOD near Dee	ABOVE AVERAGE
WHITE below Tygh Valley	ABOVE AVERAGE
CLEARWATER above Trap Creek (2)	ABOVE AVERAGE
FOURMILE LAKE net Inflow (2)	ABOVE AVERAGE
GRAVE CREEK at Pease Bridge	ABOVE AVERAGE
NORTH UMPQUA nr Toketee Falls (2)	ABOVE AVERAGE
BRIDGE CK nr Spahr Ranch	NEAR AVERAGE
COTTONWOOD CK nr Lakeview (2)	NEAR AVERAGE
DREWS RESERVOIR net Inflow (2)	NEAR AVERAGE
SILVER CK nr Riley	NEAR AVERAGE

The streamflow at the points above can no longer be modeled within an acceptable level of certainty. Forecasts at these sites will be completely discontinued in water year 2009.

# Low Flow Forecasts for Oregon

<b>OWYHEE AND MALHEUR BASINS</b>			
<i>FORECAST POINT</i>	<i>LOW FLOW CFS</i>	<i>FORECAST DATE OF LOW FLOW</i>	<i>AVERAGE DATE OF LOW FLOW</i>
Owyhee nr Rome	2000	May 27	May 21
	1000	June 10	June 2
	500	June 29	June 17

<b>BURNT, POWDER, PINE, GRAND RONDE AND IMNAHA BASINS</b>			
<i>FORECAST POINT</i>	<i>LOW FLOW CFS</i>	<i>FORECAST DATE OF LOW FLOW</i>	<i>AVERAGE DATE OF LOW FLOW</i>
Eagle Ck above Skull Ck	225	August 4	July 22
	160	August 14	August 4
Catherine Ck nr Union	45	August 1	Avg Value = 49 cfs
	100	July 5	July 9
	50	July 25	July 28
Powder near Sumpter	100	June 25	June 25
	20	July 20	July 22
Deer Ck above Phillips Resv nr Sumpter	40	June 15	June 17
	10	July 1	July 6

<b>UMATILLA, WALLA WALLA, WILLOW, ROCK AND LOWER JOHN DAY BASINS</b>			
<i>FORECAST POINT</i>	<i>LOW FLOW CFS</i>	<i>FORECAST DATE OF LOW FLOW</i>	<i>AVERAGE DATE OF LOW FLOW</i>
Umatilla at Pendleton	550	May 20	May 17
SF Walla Walla nr Milton	200	June 14	June 9
	110	August-September	Avg Value = 105 cfs

<b>UPPER JOHN DAY</b>			
<i>FORECAST POINT</i>	<i>LOW FLOW CFS</i>	<i>FORECAST DATE OF LOW FLOW</i>	<i>AVERAGE DATE OF LOW FLOW</i>
John Day at Service Ck	220	August 1	Avg Value = 212 cfs

<b>UPPER DESCHUTES AND CROOKED BASINS</b>			
<i>FORECAST POINT</i>	<i>FLOW CFS</i>	<i>FORECAST DATE OF LOW FLOW</i>	<i>AVERAGE DATE OF LOW FLOW</i>
Crane Prairie net Inflow	326	Peak flow = 326 on May 28	
	206	Oct 31	
Crooked R	100	June 1	
Little Deschutes nr LaPine	400	June 7	June 7
	200	July 8	July 8
Whychus Cr nr Sisters	100	August 20	August 16
Tumalo Ck nr Bend	235	June 25	June 23
	207	June 27	June 25
	150	July 4	July 5
	71	August 7	August 7

**HOOD, MILE CREEKS, AND LOWER DESCHUTES BASINS**

<i>FORECAST POINT</i>	<i>FLOW CFS</i>	<i>FORECAST DATE OF LOW FLOW</i>	<i>AVERAGE DATE OF LOW FLOW</i>
Clear Branch Inflow	42*	July 15-31	39**
*Average cfs forecast to flow for this two-week period.			
** Average cfs for period of record			
White bl Tygh Valley	200	July 6	July 3
	150	August 1	Avg Value = 145

**ROGUE AND UMPQUA BASINS**

<i>FORECAST POINT</i>	<i>FLOW CFS</i>	<i>FORECAST DATE OF LOW FLOW</i>	<i>AVERAGE DATE OF LOW FLOW</i>
Cow Ck nr Azalea	20	July 10	July 4
	10	August 25	August 19
Little Butte Cr SF	100	May 20	May 15
South Umpqua nr Brockway	90	September 4	August 28
South Umpqua at Tiller	140	July 20	July 12
	90	August 6	July 28
	60	August 28	August 24

**LAKE COUNTY AND GOOSE LAKE BASINS**

<i>FORECAST POINT</i>	<i>FLOW CFS</i>	<i>FORECAST DATE OF LOW FLOW</i>	<i>AVERAGE DATE OF LOW FLOW</i>
Deep Ck abv Adel	100	June 14	June 21
Honey Ck nr Plush	100	May 1	May 15
	50	May 15	May 30
Twentymile nr Adel	50	May 18	June 2
	10	June 20	July 3

**HARNEY BASIN**

<i>FORECAST POINT</i>	<i>FLOW CFS</i>	<i>FORECAST DATE OF LOW FLOW</i>	<i>AVERAGE DATE OF LOW FLOW</i>
Silvies nr Burns	400	May 1	May 5
	200	May 15	May 21
	100	June 1	June 9
	50	June 10	June 23
Donner und Blitzen	200	May 30	June 15
	100	Jun 30	July 5

# Summary of Snow Course Data

February 2008

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
<b>Oregon</b>						
ANEROID LAKE SNOTEL	7410	2/01/08	89	18.2	9.6	16.2
ANNIE SPRING SNOTEL	6010	2/01/08	111	28.5	23.5	26.0
ANTHONY LAKE	7130	1/30/08	71	17.8E	13.4	17.0
ARBUCKLE MTN SNOTEL	5770	2/01/08	64	14.4	8.5	13.9
BARLEY CAMP AM	6900	1/23/08	38	9.1	10.2	10.3
BEAR FLAT MEADOW AM	5900	1/23/08	44	10.1	5.5	7.3
BEAVER DAM CREEK	5100	2/01/08	64	17.2	8.7	9.8
BEAVER RES. SNOTEL	5150	2/01/08	43	10.7	5.1	7.1
BIG RED MTN SNOTEL	6050	2/01/08	90	24.8	12.9	16.7
BIGELOW CAMP SNOTEL	5120	2/01/08	86	23.9	7.0	9.4
BILLIE CK DVD SNOTEL	5300	2/01/08	90	23.7	13.3	16.9
BLAZED ALDER SNOTEL	3650	2/01/08	153	47.7	19.2	21.4
BLUE MTN SPGS SNOTEL	5900	2/01/08	65	15.1	10.8	12.3
BOURNE SNOTEL	5850	2/01/08	70	14.8	7.4	12.8
BOWMAN SPRNGS SNOTEL	4530	2/01/08	30	7.4	4.0	7.3
CALIBAN ALT	6500	2/01/08	100	25.2	15.6	19.1
CAMAS CREEK #3	5850	2/02/08	55	12.0	4.6	9.7
CASCADE SUM. SNOTEL	5100	2/01/08	118	31.2	23.2	21.3
CHEMULT ALT SNOTEL	4850	2/01/08	46	10.6	5.0	7.3
CLACKAMAS LK. SNOTEL	3400	2/01/08	86	16.8	9.5	10.2
CLEAR LAKE SNOTEL	3810	2/01/08	85	19.7	9.5	10.4
COLD SPRINGS SNOTEL	5940	2/01/08	91	26.7	20.9	21.3
COLVIN CREEK AM	6550	1/23/08	17	4.1	.0	3.2
COUNTY LINE SNOTEL	4800	2/01/08	25	5.6	2.5	4.2
COX FLAT AM	5750	1/23/08	25	6.5	.0	5.3
CRAZYMAN FLAT AM	6100	1/23/08	27	6.2	3.5	6.3
CRAZYMAN FLAT SNOTEL	6180	2/01/08	55	11.7	9.6	11.9
DALY LAKE SNOTEL	3690	2/01/08	115	31.6	8.1	12.6
DEADWOOD JUNCTION	4600	2/01/08	60	15.3	6.8	6.3
DERR	5670	2/01/08	44	11.0	7.1	7.6
DERR SNOTEL	5850	2/01/08	56	12.7	9.4	10.3
DIAMOND LAKE SNOTEL	5320	2/01/08	70	16.4	8.4	12.9
DOG HOLLOW AM	4900	1/23/08	21	4.4	.0	1.0
DOOLEY MOUNTAIN	5430	2/01/08	50	13.0	5.0	6.1
EILERTSON SNOTEL	5510	2/01/08	46	9.0	6.3	7.7
ELDORADO PASS	4600	2/01/08	26	5.8	1.6	3.2
EMIGRANT SPGS SNOTEL	3800	2/01/08	42	9.9	3.7	5.9
FINLEY CORRALS AM	6000	1/23/08	45	10.4	3.2	11.1
FISH CREEK SNOTEL	7660	2/01/08	61	13.3	14.7	17.6
FISH LK. SNOTEL	4670	2/01/08	70	16.4	7.2	9.3
FOURMILE LAKE SNOTEL	6000	2/01/08	92	23.1	15.8	21.3
GERBER RES SNOTEL	4850	2/01/08	22	4.0	.6	1.6
GOLD CENTER SNOTEL	5410	2/01/08	52	12.2	6.7	8.1
GOVERNMENT CORRALS	7450	2/01/08	39	11.0	4.2	9.1
GREENPOINT SNOTEL	3310	2/01/08	94	24.7	13.0	14.4
HART MOUNTAIN AM	6350	1/23/08	29	7.0	.0	1.6
HIGH RIDGE SNOTEL	4920	2/01/08	98	25.7	16.8	16.9
HOGG PASS SNOTEL	4760	2/01/08	122	30.0	14.7	26.8

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
<b>Oregon (continued)</b>						
HOLLAND MDWS SNOTEL	4900	2/01/08	105	28.5	11.7	17.4
HOWARD PRAIRIE	4500	2/01/08	47	9.2	4.2	6.1
HUNGRY FLAT	4400	2/04/08	44	9.7	1.0	4.2
IRISH-TAYLOR SNOTEL	5500	2/01/08	122	31.2	22.3	23.8
JUMP OFF JOE SNOTEL	3520	2/01/08	88	24.4	10.4	8.9
KING MTN #2 SNOTEL	4340	2/01/08	60	18.7	2.4	3.1
LAKE CK R.S. SNOTEL	5200	2/01/08	48	11.4	5.9	9.5
LITTLE ALPS	6200	1/30/08	42	9.8	6.1	8.5
LITTLE ANTONE (ALT)	5000	1/30/08	40	10.2	6.1	6.5
LITTLE MEADOW SNOTEL	4000	2/01/08	142	41.3	21.5	18.2
LUCKY STRIKE SNOTEL	4970	2/01/08	38	9.2	3.7	7.6
MADISON BUTTE SNOTEL	5150	2/01/08	30	9.4	3.9	4.5
MARION FORKS SNOTEL	2600	2/01/08	79	22.1	5.0	8.1
MARKS CREEK	4540	1/31/08	34	15.8	1.4	3.2
MCKENZIE SNOTEL	4800	2/01/08	148	40.7	30.3	29.4
MEACHAM	4300	2/01/08	44	10.6	4.6	7.6
MOSS SPRINGS SNOTEL	5760	2/01/08	72	17.6	13.5	17.5
MT ASHLAND SWBK.	6400	1/31/08	106	27.8	14.7	20.6
MT HOOD	5400	1/31/08	177	53.2	43.0	43.0
MT HOOD TEST SNOTEL	5400	2/01/08	172	49.2	36.5	38.6
MT HOWARD SNOTEL	7910	2/01/08	51	14.5	8.2	10.3
MUD RIDGE SNOTEL	4070	2/01/08	116	30.7	17.0	16.9
NEW CRESCENT SNOTEL	4910	2/01/08	82	17.0	7.0	9.2
NEW DUTCHMAN #3	6400	2/04/08	147	43.3	32.3	35.7
NORTH FK RES SNOTEL	3060	2/01/08	124	39.9	12.6	11.6
OCHOCO MEADOWS	5200	1/31/08	44	10.2	6.5	7.6
OCHOCO MEADOW SNOTEL	5430	2/01/08	44	11.2	7.3	7.3
PARK H.Q. REV	6550	1/29/08	136	41.8	29.3	37.5
PATTON MEADOWS AM	6800	1/23/08	36	8.6	9.9	10.9
PEAVINE RIDGE SNOTEL	3420	2/01/08	86	25.5	11.0	9.5
QUARTZ MTN SNOTEL	5720	2/01/08	11	3.1	1.2	2.6
R.R. OVERPASS SNOTEL	2680	2/01/08	24	4.5	.0	.5
RED BUTTE #1	4560	2/04/08	110	31.8	9.2	8.3
RED BUTTE #2	4000	2/04/08	61	14.7	.0	4.4
RED BUTTE #3	3500	2/04/08	60	15.9	4.9	2.0
RED BUTTE #4	3000	2/04/08	46	11.1	2.4	1.0
RED HILL SNOTEL	4400	2/01/08	168	50.7	37.3	30.2
ROARING RIVER SNOTEL	4950	2/01/08	120	36.4	17.6	19.3
ROCK SPRINGS SNOTEL	5290	2/01/08	25	5.6	1.6	4.1
ROGGER MEADOWS AM	6500	1/23/08	39	9.4	3.6	8.6
SADDLE MTN SNOTEL	3110	2/01/08	83	28.4	.0	5.4
SALT CK FALLS SNOTEL	4220	2/01/08	91	26.4	14.3	13.1
SANTIAM JCT. SNOTEL	3750	2/01/08	103	27.8	9.2	14.6
SCHNEIDER MDW SNOTEL	5400	2/01/08	115	21.5	17.0	22.3
SEINE CREEK SNOTEL	2060	2/01/08	18	4.7	.0	2.7
SEVENMILE MARSH SNTL	5700	2/01/08	96	24.6	17.2	20.1
SHERMAN VALLEY AM	6600	1/23/08	70	17.5	2.9	7.9
SILVER BURN	3720	1/28/08	60	15.4	5.4	8.4
SILVER CREEK SNOTEL	5740	2/01/08	51	8.8	5.7	7.8
SILVIES SNOTEL	6990	2/01/08	37	11.2	6.3	11.1
SISKIYOU SUMMIT REV	4630	1/31/08	65	18.4	3.8	4.6
SKI BOWL ROAD	6000	1/31/08	88	23.7	12.2	16.1
SNOW MTN SNOTEL	6220	2/01/08	36	6.3	3.6	7.8
SF BULL RUN SNOTEL	2690	2/01/08	75	12.6	2.3	2.6
STARR RIDGE SNOTEL	5250	2/01/08	39	7.9	3.7	5.2
STRAWBERRY SNOTEL	5760	2/01/08	31	7.3	1.2	4.5
SUMMER RIM SNOTEL	7100	2/01/08	46	11.1	9.5	11.4
SUMMIT LAKE SNOTEL	5600	2/01/08	115	31.7	22.3	24.4

SNOW COURSE		ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
<b>Oregon (continued)</b>							
SYCAN FLAT	AM	5500	1/23/08	9	2.4	2.5	4.5
TANGENT		5400	2/04/08	93	25.2	15.4	15.2
TAYLOR BUTTE	SNOTEL	5030	2/01/08	41	8.6	3.1	5.4
TAYLOR GREEN	SNOTEL	5740	2/01/08	67	17.7	9.1	14.5
THREE CK MEAD	SNOTEL	5650	2/01/08	93	18.7	13.7	12.1
TIMOTHY LAKE		3300	1/31/08	71	17.2	6.4	8.3
TIPTON	SNOTEL	5150	2/01/08	54	11.5	6.6	10.3
TOLLGATE		5070	2/01/08	100	30.2	19.4	19.5
WOLF CREEK	SNOTEL	5630	2/01/08	61	14.1	7.1	11.2
<b>California</b>							
ADIN MOUNTAIN		6350	1/28/08	37	8.7	4.4	8.5
ADIN MTN	SNOTEL	6350	2/01/08	50	10.8	4.9	9.0
BLUE LAKE RANCH		6800	1/30/08	35	9.4	3.2	--
CEDAR PASS		7100	1/31/08	42	10.9	5.9	10.9
CEDAR PASS	SNOTEL	7100	2/01/08	51	12.0	6.3	11.4
CROWDER FLAT	AM	5200	1/23/08	21	5.9	.0	2.6
CROWDER FLAT	SNOTEL	5200	2/01/08	27	6.9	1.0	--
DISMAL SWAMP	SNOTEL	7000	2/01/08	73	15.0	11.5	18.0
STATE LINE	AM	5750	1/23/08	50	13.0	.0	4.8
<b>Idaho</b>							
MUD FLAT	SNOTEL	5730	2/01/08	32	6.5	2.8	5.2
SILVER CITY		6400	2/01/08	61	16.4	10.0	12.0
SOUTH MTN	SNOTEL	6500	2/01/08	51	13.6	7.3	12.8
<b>Nevada</b>							
BALD MOUNTAIN	AM	6720	1/23/08	5	.8	.0	2.7
BEAR CREEK	SNOTEL	7800	2/01/08	---	11.0	8.2	12.5
BIG BEND	SNOTEL	6700	2/01/08	33	7.1	3.2	6.7
BUCKSKIN, L	SNOTEL	6700	2/01/08	38	7.0	3.7	6.4
COLUMBIA BASIN	AM	6650	1/30/08	39	8.6	3.7	7.3
DISASTER PEAK	SNOTEL	6500	2/01/08	29	8.3	.0	9.1
FAWN CREEK	SNOTEL	7050	2/01/08	39	7.2	6.3	11.1
FRY CANYON		6700	1/30/08	30	5.9	3.6	6.0
GOLD CREEK		6600	1/30/08	28	6.1	1.9	4.2
GRANITE PEAK	SNOTEL	7800	2/01/08	48	11.0	8.3	14.2
JACK CREEK, U	SNOTEL	7280	2/01/08	45	7.5	5.0	11.4
LAMANANCE CREEK	SNOTEL	6000	2/01/08	40	9.7	3.2	9.4
LAUREL DRAW	SNOTEL	6700	2/01/08	36	8.4	3.7	7.2
LITTLE BALLY MTN.	AM	6000	1/23/08	17	3.9	.0	3.0
MERRIT MOUNTAIN	AM	7000	1/30/08	18	4.0	.5	5.6
MIDAS	(d)	7200	1/30/08	17	3.8	.0	2.8
SEVENTYSIX CK	SNOTEL	7100	2/01/08	41	7.4	4.3	7.9
STAG MOUNTAIN	AM	7700	1/30/08	4	.9	3.2	4.2
TAYLOR CANYON	SNOTEL	6200	2/01/08	23	5.6	.0	3.9
TOE JAM	AM	7700	1/30/08	27	5.9	3.2	6.9
TREMEWAN RANCH		5700	1/31/08	15	2.3	.6	1.7

(d) denotes discontinued site.

# Basin Outlook Reports

## How Forecasts Are Made And 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 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.

# 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 1971-2000. 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 below, there is a 50% chance that actual streamflow volume at the Boise River near Twin Springs will be less than 685 KAF between April 1 and July 31. There is also a 50% chance that actual streamflow volume will be greater than 685 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 610 KAF (from the 70 percent exceedance forecast). There is a 30% chance of receiving *less* than 610 KAF.

Alternatively, if users determine the risk of using the 70 percent exceedance forecast is too great, then they might plan on receiving 443 KAF (from the **90** percent exceedance forecast). There is 10% chance of receiving less than 443 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 760 KAF (from the 30 percent exceedance forecast). There is a 30% chance of receiving *more* than 760 KAF.

Alternatively, if users determine the risk of using the 30 percent exceedance forecast is too great, then they might plan on receiving 927 KAF (from the 10 percent exceedance forecast). There is a 10% chance of receiving more than 927 KAF.

Users could also choose a volume in between any of these values to reflect their desired risk level.

=====

**OWYHEE AND MALHEUR BASINS**  
**Streamflow Forecasts - February 1, 2006**

=====

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		=====		Chance Of Exceeding *		=====		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
MALHEUR near Drewsey	FEB-JUL	148	184	210	165	238	282	127
	APR-SEP	87	110	128	168	147	177	76
NF MALHEUR at Beulah	FEB-JUL	108	127	141	157	156	178	90
OWYHEE RESV INFLOW (2)	FEB-JUL	602	792	935	134	1090	1340	700
	APR-SEP	341	473	575	134	687	869	430

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



USDA Natural Resources Conservation Service  
1201 NE Lloyd Suite 900  
Portland, OR 97232-1274

---

Official Business



*The Oregon Snow Survey office has moved.  
Please note our new address.*

*Issued by*  
**Arlen Lancaster, Chief**  
**Natural Resources Conservation Service**  
**U.S. Department of Agriculture**

*Released by*  
**Robert J. Graham, State Conservationist**  
**Natural Resources Conservation Service**  
**Portland, Oregon**

This publication may be found online at:

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



**Oregon**  
**Basin Outlook Report**  
**Natural Resources Conservation Service**  
**Portland, OR**



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