



United States  
Department of  
Agriculture



Natural Resources  
Conservation  
Service

# Oregon Basin Outlook Report

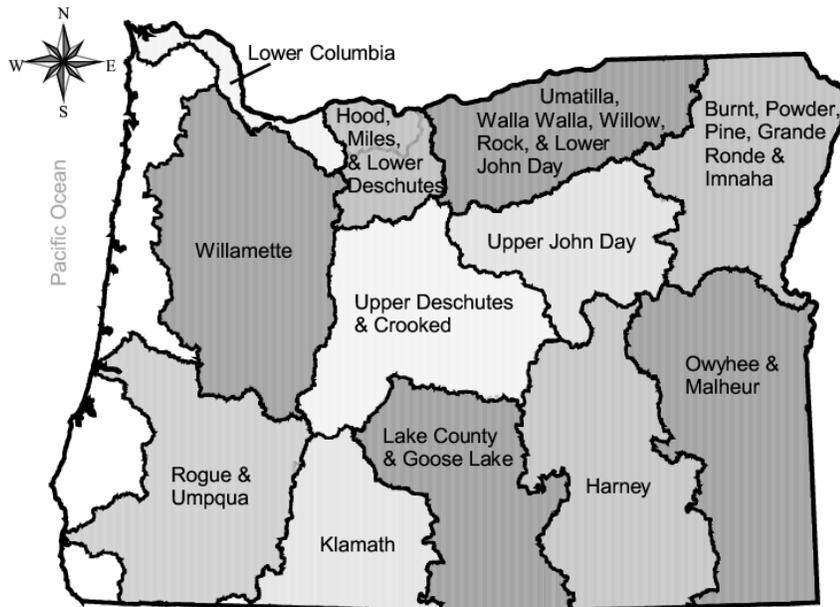
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April 1, 2007



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# General Outlook

April 1, 2007

## SUMMARY

The brief return of winter reported in the last Oregon Basin Outlook report did not last long. A snowstorm at the end of February boosted snow levels temporarily, then temperatures throughout Oregon warmed up and the snowpack began to melt away. Of the 146 snow courses, aerial markers and SNOTEL sites in Oregon that were measured for April 1, 46 were snow free. Normally snow is on the ground at this time of year at all but a couple of sites. Spring in the mountains of Oregon is early this year.

With the early snowmelt and sporadic precipitation this water year, many water users in Eastern Oregon may not see normal April streamflows or reservoir inflow. Most irrigation reservoirs referenced in this document were reporting average storage levels on April 1. These conditions reflect the early snow melt. Without appreciable April rainfall, some reservoirs may not receive their normal April inflows. Some river systems are already flowing at below normal levels for this time of year. The water supply and reservoir inflow forecasts summarized in this report show more details on these conditions. Water users in some Eastern Oregon basins should begin to plan for lower than normal spring and summer streamflow conditions.

## SNOWPACK

March 2007 was drier and warmer than normal throughout Oregon. In many regions of the state the snowpack has been lacking this winter. In these areas, the snow melted quickly as sunshine and spring temperatures climbed. Statewide, April 1 snowpack was only 69 percent of average, down from 91 percent of average on March 1. Many basins in the state have half of their normal April 1 snowpack.

## PRECIPITATION

This water year, November, December and February brought normal or above normal precipitation amounts. October, January and March were much drier than normal. Statewide, the accumulated precipitation for water year 2007 ranges from near 80 percent of average in the far eastern portion of the state to near normal in the Deschutes basin and west of the Cascades.

## RESERVOIRS

The April 1 storage at 27 major Oregon reservoirs analyzed in this publication was 97 percent of average. A total of 2,416,600 acre feet of water were stored on April 1, representing 74 percent of useable capacity. The forecasts for April through September inflows to many of the irrigation reservoirs east of the Deschutes are significantly below average. While current conditions appear close to average, much of the annual runoff may have already occurred. Without significant April storm events, many reservoirs may be well below average one month from now.

## STREAMFLOW

Streamflow forecasts have decreased significantly since last month for all points in the table below. The lack of precipitation and rapid snow melt in March strongly influenced these forecast declines. All water users should monitor water supply conditions as the spring and summer progresses. April showers would be of great benefit to Oregon water users. A summary of selected streamflow forecasts follows.

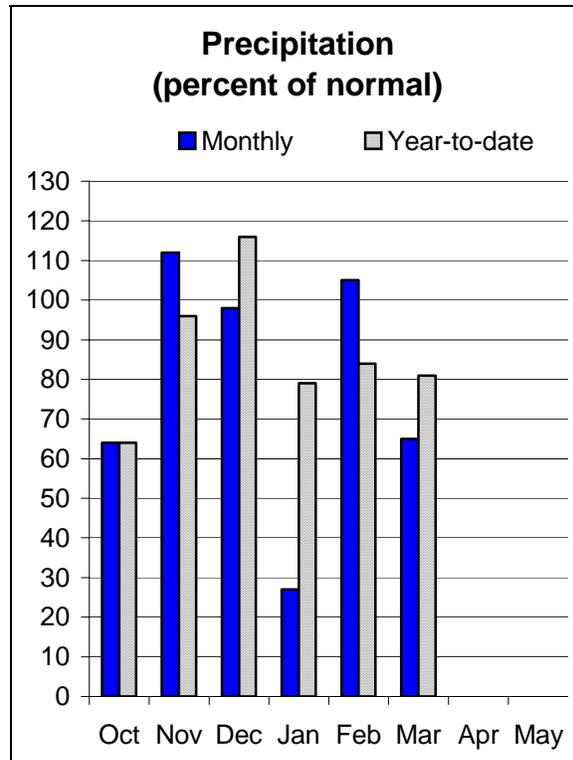
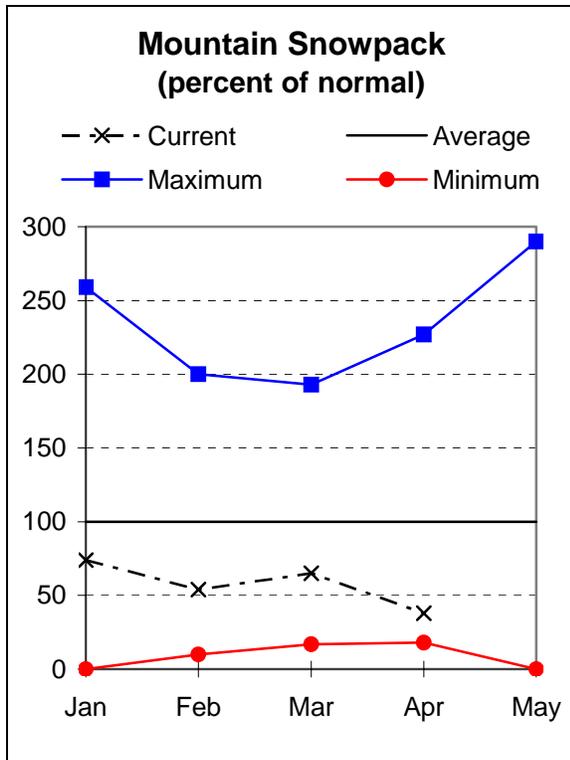
<b>STREAM</b>	<b>PERIOD</b>	<b>PERCENT OF AVERAGE</b>
Owyhee Net Inflow	March-July	34
Grande Ronde at La Grande	April-September	55
Umatilla at Pendleton	April - September	71
Deschutes at Benham Falls	April - September	91
Willamette MF near Oakridge	April-September	92
Rogue at Raygold	April- September	82
Upper Klamath L. Net Inflow	April- September	70
Silvies near Burns	April- September	49

Some of these forecasts assume that normal weather conditions will occur from now to the end of the forecast period. 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 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

April 1, 2007



## Water Supply Outlook

The months of October, January and March in the Owyhee and Malheur basins were drier than normal this water year. March precipitation was only 65 percent of average. Since the beginning of the water year, total precipitation in the basin has been 81 percent of average. The snowpack declined from 65 percent of average on March 1 to only 38 percent of average on April 1. Of the 46 snow measurement sites in the basin, 26 were snow free as of April 1. Normally, few of these sites are snow free as of April 1.

Reservoirs in the Owyhee and Malheur are currently storing near normal levels of water for this time of year. As of April 1, storage at Beulah, Bully Creek, Owyhee and Warm Springs reservoirs was 98 percent of average. The April through September forecast for the Malheur near Drewsey is only 30 percent of average. Owyhee reservoir inflow for the April through September period is forecast to be 34 percent of average. Water users in the Owyhee and Malheur should plan for significantly lower than normal water supplies 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/cgi-bin/bor.pl>

OWYHEE AND MALHEUR BASINS  
Streamflow Forecasts - April 1, 2007

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)		
		90%		70%		50% (Most Probable)			30%	10%
		(1000AF)	(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)		(1000AF)	
MALHEUR near Drewsey	APR-JUL	6.6	14.7	22	30	31	46	74		
	APR-SEP	7.3	15.6	23	30	32	48	76		
NF MALHEUR at Beulah	APR-JUL	10.9	18.6	25	42	32	45	60		
OWYHEE RESV INFLOW (2)	APR-JUL	67	103	133	33	166	222	400		
	APR-SEP	78	117	148	34	183	241	430		
OWYHEE near Rome	APR-JUL	44	90	130	34	178	260	380		
SUCCOR CK nr Jordan Valley	APR-JUL	1.4	2.8	4.0	33	5.4	7.9	12.1		

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

OWYHEE AND MALHEUR BASINS  
Watershed Snowpack Analysis - April 1, 2007

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	47.7	50.2	47.2	Owyhee River	20	21	33
BULLY CREEK	30.0	25.7	26.2	24.1	Malheur	9	13	31
OWYHEE	715.0	577.4	579.8	593.0	Jordan Creek	2	45	55
WARMSPRINGS	191.0	129.7	155.8	133.5	Bully Creek	2	0	0

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

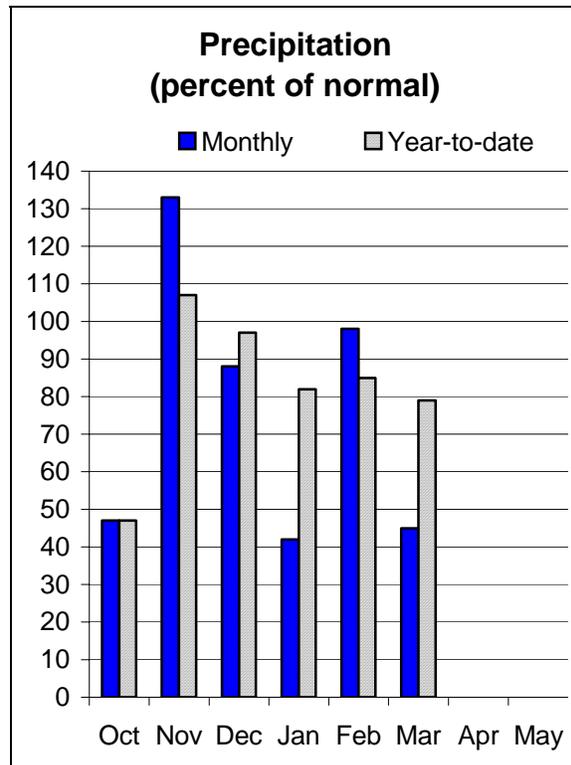
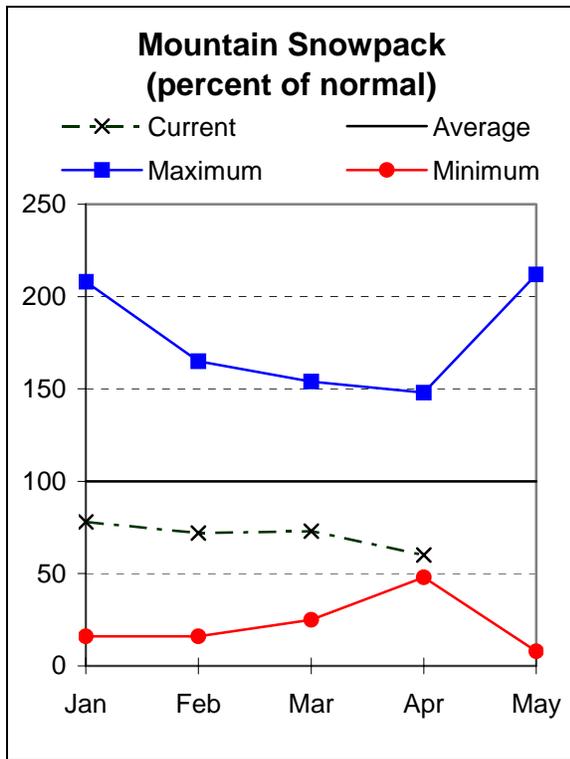
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

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



# Burnt, Powder, Grand Ronde, and Imnaha Basins

April 1, 2007



## Water Supply Outlook

March precipitation in the Burnt, Powder, Pine, Grande Ronde and Imnaha was only 45 percent of average. Since the beginning of the water year, the basin has received 79 percent of normal precipitation. The snowpack declined from 73 percent of average on March 1 to 60 percent of average on April 1. Of the 25 snow measurement sites in the basin, 5 were snow free as of April 1. Normally, all of these sites are snow covered at this time of year.

On April 1, storage at Phillips Lake, Thief Valley and Unity reservoirs was 91 percent of average for this time of year. This represents 71 percent of capacity. April through September streamflow forecasts in the basin range from 27 percent of average for the Burnt near Hereford to 82 percent of average for Bear Creek near Wallowa. The April through September streamflow for the Grande Ronde at LaGrande is forecast to be 55 percent of average. Water users should plan for significantly lower than normal water supplies 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>

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BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS  
Streamflow Forecasts - April 1, 2007

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Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
ANTHONY CK bl NF nr North Powder	APR-JUL	3.9	5.5	6.7	41	8.0	10.3	16.2
BEAR CREEK near Wallowa	APR-SEP	44	49	53	82	57	63	65
BIG CK bl Burn Ck nr Medical Spgs	APR-JUL	2.7	4.2	5.4	45	6.7	9.0	11.9
BURNT near Hereford (2)	APR-JUL	3.2	6.8	10.0	27	13.9	21	37
	APR-SEP	3.4	7.1	10.5	27	14.5	22	39
CATHERINE CREEK near Union	APR-SEP	29	35	40	61	45	53	66
DEER CK nr Sumpster	APR-JUL	1.5	2.7	3.7	24	4.8	6.8	15.4
EAGLE CREEK abv Skull Creek	APR-JUL	72	86	96	60	107	123	161
	APR-SEP	80	95	106	60	117	135	176
GRANDE RONDE at La Grande	APR-JUL	57	81	99	54	119	152	182
	APR-SEP	59	84	103	55	124	159	188
GRANDE RONDE at Troy (1)	APR-JUL	660	790	885	70	985	1140	1270
	APR-SEP	725	860	960	70	1070	1230	1370
HURRICANE CREEK near Joseph	APR-SEP	25	28	30	71	32	35	42
IMNAHA at Imnaha	APR-SEP	127	161	187	63	215	260	295
LOSTINE near Lostine	APR-SEP	70	78	83	69	89	97	121
PINE CREEK near Oxbow	APR-JUL	42	56	66	45	77	96	148
POWDER near Sumpster (2)	APR-JUL	12.8	18.0	22	38	26	34	58
	APR-SEP	12.6	17.9	22	37	27	34	59
EF WALLOWA near Joseph	APR-SEP	6.6	7.3	7.8	70	8.3	9.1	11.1
WALLOWA at Joseph (2)	APR-JUL	43	47	50	78	53	58	64
WOLF CK RESERVOIR inflow	APR-JUN	1.7	2.9	3.9	26	5.1	7.1	14.8

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BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS Reservoir Storage (1000 AF) - End of March					BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS Watershed Snowpack Analysis - April 1, 2007			
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	45.3	24.5	50.8	Grande Ronde ab LaGrande	6	49	56
THIEF VALLEY	17.4	13.5	13.7	17.9	Powder River	10	37	48
UNITY	25.2	23.3	22.7	21.1	Wallowa,Imnaha,Catherine	11	62	68
WALLOWA LAKE		NO REPORT			Burnt River	6	24	43
WOLF CREEK		NO REPORT						

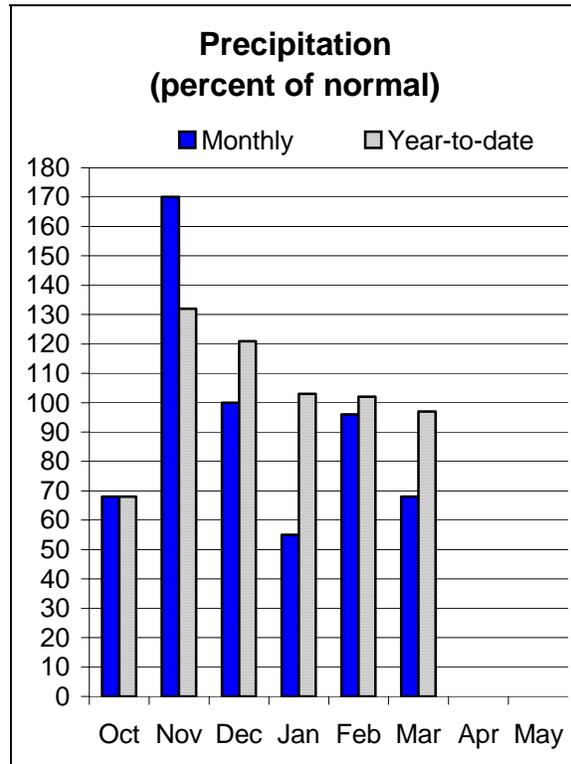
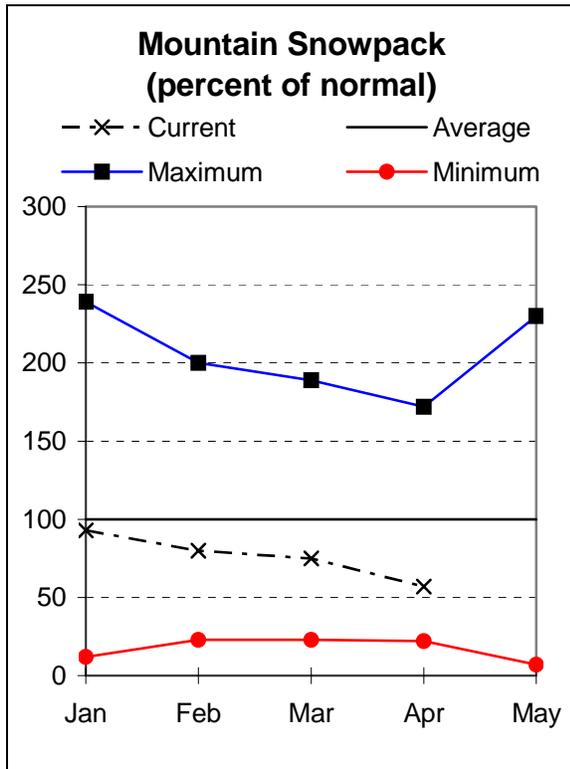
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# Umatilla, Walla Walla, Willow Rock, and Lower John Day Basins

April 1, 2007



## Water Supply Outlook

It was another month of dry weather in the Umatilla, Walla Walla, Willow, Rock and Lower John Day basins. March precipitation was 68 percent of average. Since the beginning of the water year, total precipitation in the basin has been near normal (97 percent of average). The snowpack declined from 75 percent of average on March 1 to 57 percent of average on April 1. Of the 10 snow measurement sites in the basin, 4 were snow free as of April 1. Normally, all of these sites would be snow covered at this time of year.

April 1 storage at Cold Springs and McKay reservoirs was 91 percent of average for this time of year. This represents 71 percent of capacity. April through September streamflow forecasts for the basin range from 71 percent of average for the Umatilla at Pendleton to 88 percent of average for the South Fork of the Walla Walla near Milton-Freewater. McKay creek near Pilot Rock is forecast to experience 78 percent of average streamflow for the April through September period. These forecasts have declined significantly from last month. Water users in the basin should plan conservation measures for this coming summer.

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/cgi-bin/bor.pl>

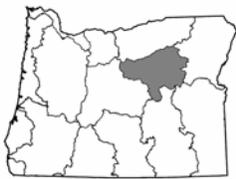
UMATILLA, WALLA WALLA, WILLOW, ROCK AND LOWER JOHN DAY BASINS  
Streamflow Forecasts - April 1, 2007

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
BUTTER CK nr Pine City	APR-JUL	2.3	4.3	5.9	63	7.8	11.1	9.4
COUSE CREEK near Milton-Freewater	APR-JUL	2.0	2.6	3.0	75	3.5	4.2	4.0
MCKAY near Pilot Rock	APR-SEP	6.9	15.3	21	78	27	35	27
PINE CREEK near Weston	APR-JUL	0.9	1.6	2.1	70	2.7	3.7	3.0
RHEA CREEK near Heppner	APR-JUL	1.6	2.8	3.8	62	4.9	7.0	6.1
ROCK CREEK above Whyte	APR-JUL	1.3	4.0	6.6	55	9.8	16.0	12.1
UMATILLA near Gibbon	APR-JUL	41	51	59	81	67	80	73
	APR-SEP	46	57	64	81	72	84	79
UMATILLA at Pendleton	APR-JUL	70	91	106	71	123	150	149
	APR-SEP	74	94	110	71	127	154	155
SF WALLA WALLA near Milton-Freewater	APR-SEP	48	55	59	88	64	71	67
WILLOW CREEK LAKE INFLOW	APR-JUL	1.3	2.9	4.3	61	6.0	9.0	7.0

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 March					Watershed Snowpack Analysis - April 1, 2007			
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	35.9	27.1	40.1	Walla Walla River	3	70	79
MCKAY	73.8	52.2	35.8	56.6	Umatilla River	7	49	56
WILLOW CREEK		NO REPORT			McKay Creek	4	1	1

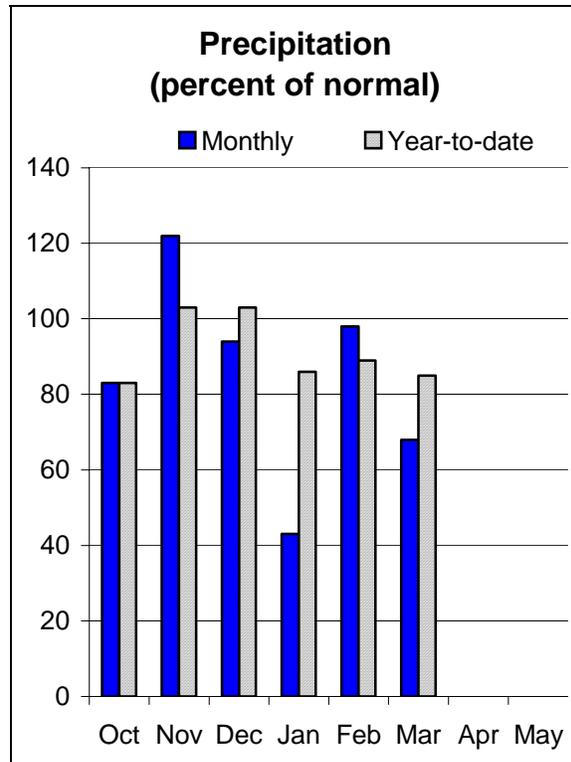
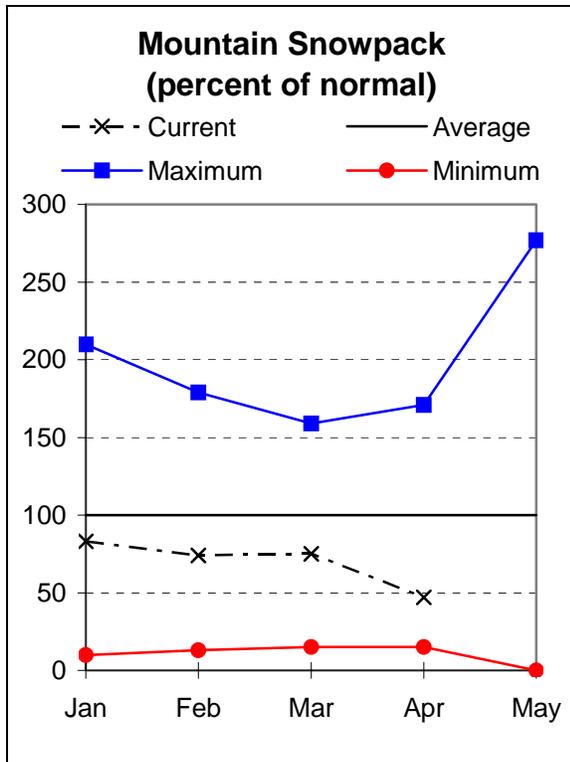
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# Upper John Day Basin

April 1, 2007



## Water Supply Outlook

After normal levels of precipitation in February, March in the Upper John Day basin was drier than normal. Precipitation for the month was only 68 percent of average. Since the beginning of the water year, precipitation in the Upper John day has been 85 percent of average.

The snowpack has declined significantly in the last month. On April 1 the snowpack in the Upper John Day was 47 percent of average, down from 75 percent of average on March 1. Of the 14 snow measurement sites in the basin, 4 were snow free as of April 1. Normally, these sites are snow covered on April 1.

April through September streamflow forecasts for the Upper John Day basin range from 57 percent of average for the Middle Fork John Day at Ritter to 73 percent of average for Strawberry Creek near Prairie City. The April through September streamflow forecast for the North Fork of the John Day at Monument is 62 percent of average. These forecasts have declined significantly from last month. Water users in the Upper John Day will need to plan for below normal supplies this coming summer.

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>

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UPPER JOHN DAY BASIN  
Streamflow Forecasts - April 1, 2007

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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)	
CAMAS CREEK nr Ukiah	APR-JUL	10.2	15.5	19.7	53	24	32	37
MF JOHN DAY at Ritter	APR-SEP	41	59	73	57	89	114	128
NF JOHN DAY at Monument	APR-SEP	230	315	380	62	450	565	615
MOUNTAIN CREEK near Mitchell	APR-JUL	0.9	1.6	2.2	49	2.9	4.1	4.5
STRAWBERRY CREEK nr Prairie City	APR-JUL	3.6	4.5	5.2	73	5.9	7.0	7.1
	APR-SEP	4.0	5.0	5.7	73	6.5	7.7	7.8

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

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UPPER JOHN DAY BASIN  
Watershed Snowpack Analysis - April 1, 2007

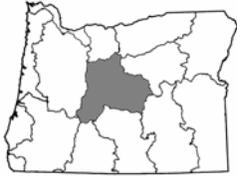
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Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					John Day, North Fork	8	41	50
					John Day above Dayville	4	38	54

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

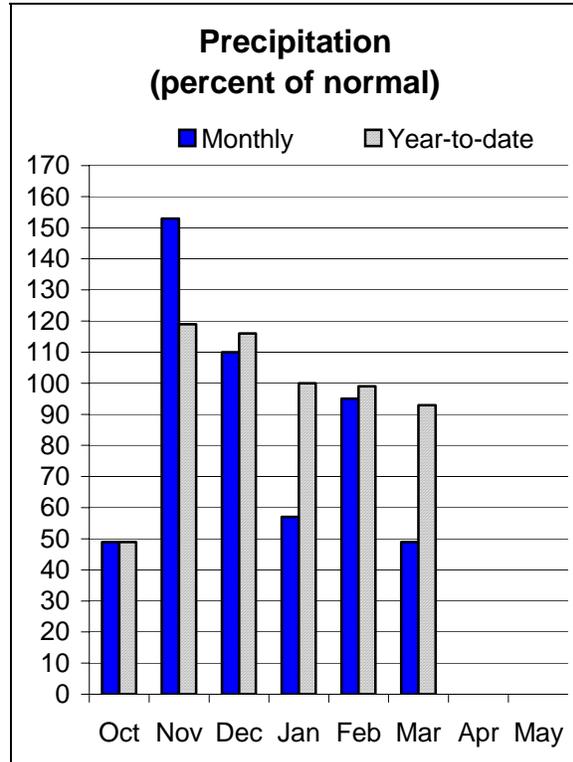
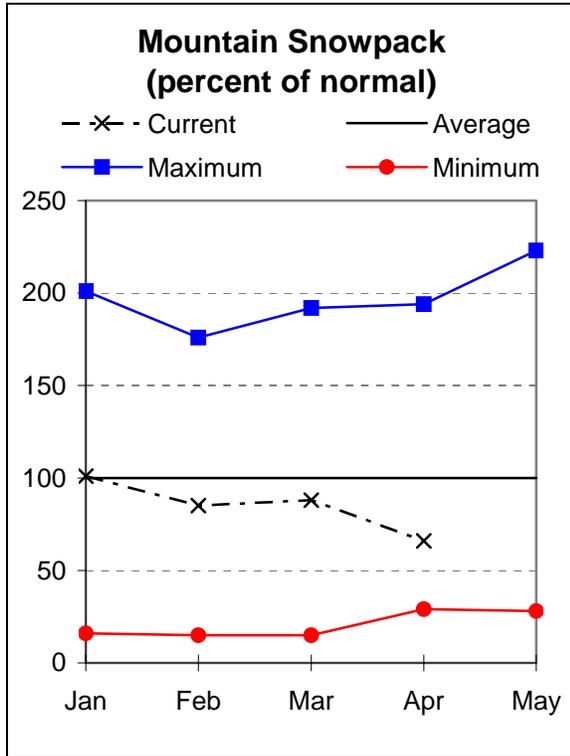
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# Upper Deschutes and Crooked Basins

April 1, 2007



## Water Supply Outlook

Less than half of the normal March precipitation fell in the Upper Deschutes and Crooked River basins. March precipitation was 49 percent of average, down from 95 percent of average for February monthly precipitation. Since the beginning of the water year, precipitation in the Upper Deschutes and Crooked River basins has been 93 percent of average. April 1 snowpack was 66 percent of average, a decline from 88 percent of average on March 1. Of the 17 snow measurement sites in the basin, 5 were snow free as of April 1. Normally, these sites are all snow covered on April 1.

Storage in five of the Upper Deschutes and Crooked River reservoirs at the end of March was 107 percent of average and 90 percent of capacity. The April through September inflow to Prineville reservoir is forecast to be only 40 percent of average. The April through September inflow to Ochoco reservoir is forecast to be 43 percent of average. These forecasts have declined significantly from last month. The Deschutes at Benham Falls is forecast to be 91 percent of average for the April through September period. Water users in the Crooked River basin will need to plan for significantly reduced supplies this coming summer, while Upper Deschutes basin water users can expect slightly below normal water supplies.

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>

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UPPER DESCHUTES AND CROOKED BASINS  
Streamflow Forecasts - April 1, 2007

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Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
BEAVER CREEK near Paulina	APR-SEP	3.3	8.4	13.2	49	19.1	30	27
	APR-JUL	3.1	8.2	13.0	48	18.9	30	27
CRANE PRAIRIE RESERVOIR INFLOW	APR-JUL	40	47	53	90	59	68	59
	APR-SEP	64	75	84	90	93	107	93
CRESCENT CREEK near Crescent	APR-JUL	8.3	12.0	15.0	87	18.3	24	17.2
	APR-SEP	10.0	14.5	18.0	86	22	28	21
DESCHUTES below Bend (2)	AUG-SEP	136	146	153	91	160	170	168
DESCHUTES at Benham Falls	APR-JUL	300	315	320	91	325	340	350
	APR-SEP	450	470	480	91	490	510	525
DESCHUTES below Snow Creek	APR-JUL	20	26	31	94	36	44	33
	APR-SEP	37	47	55	93	63	76	59
LITTLE DESCHUTES near La Pine	APR-JUL	39	50	58	82	67	81	71
	APR-SEP	41	55	65	81	76	94	80
NF CROOKED blw Lookout Ck	APR-JUL	1.3	2.4	3.2	34	4.1	5.8	9.4
OCHOCO RESERVOIR INFLOW	APR-JUL	2.7	6.2	9.5	43	13.4	20	22
	APR-SEP	2.4	6.0	9.4	43	13.6	21	22
PRINEVILLE RESERVOIR INFLOW	APR-JUL	14.0	29	43	40	59	88	108
	APR-SEP	13.0	29	44	40	61	92	109
WHYCHUS CREEK nr Sisters	APR-JUL	27	30	32	89	34	38	36
	APR-SEP	36	40	43	88	46	51	49
TUMALO CREEK near Bend	APR-JUL	28	31	34	92	37	41	37
	APR-SEP	34	38	41	91	44	49	45
WICKIUP RESERVOIR INFLOW	APR-JUL	145	159	169	99	179	195	171
	APR-SEP	250	270	285	100	300	320	285

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UPPER DESCHUTES AND CROOKED BASINS Reservoir Storage (1000 AF) - End of March					UPPER DESCHUTES AND CROOKED BASINS Watershed Snowpack Analysis - April 1, 2007			
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	52.7	37.1	43.9	Crooked, Ochoco	4	26	43
CRESCENT LAKE	86.9	46.4	22.9	53.5	Deschutes above Wickiup	3	56	83
OCHOCO	47.5	41.9	34.3	32.6	Little Deschutes	4	52	82
PRINEVILLE	153.0	145.0	120.3	132.9	Tumalo and Squaw Creeks	4	52	75
WICKIUP	200.0	199.8	185.9	189.7				

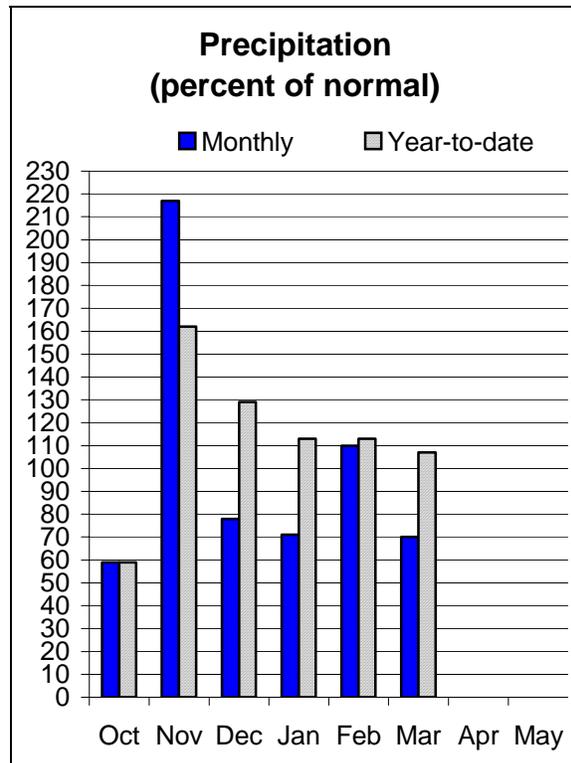
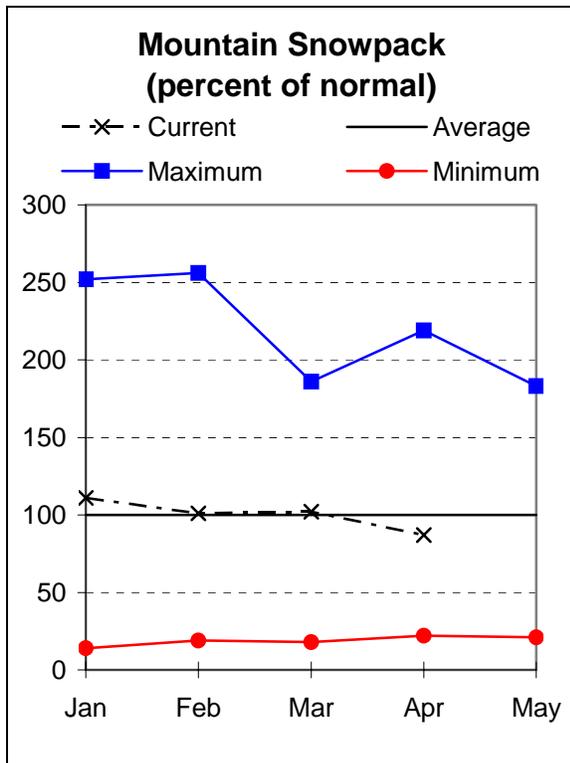
\* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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



# Hood, Mile Creeks, and Lower Deschutes Basins

April 1, 2007



## Water Supply Outlook

After near normal February precipitation, March was much drier than usual in the Hood, Mile Creeks and Lower Deschutes basins. March precipitation was 70 percent of average. Since the beginning of the water year, the basin has received slightly above normal precipitation.

All but the lowest elevation snow measurement sites had snow on April 1. The April 1 snowpack was 87 percent of average. The snowpack declined from 102 percent of average on March 1.

The April through September streamflow forecast for the Hood River at Tucker bridge is 81 percent of average. The April through September streamflow forecast for the White River below Tygh Valley is 94 percent of average. Water users in the basin can anticipate somewhat less than normal supplies this coming summer.

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 - April 1, 2007

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
HOOD at Tucker Bridge	APR-JUL	144	168	184	81	200	224	228
	APR-SEP	179	203	220	81	237	261	271
WF HOOD near Dee	APR-JUL	79	93	102	84	111	125	121
	APR-SEP	97	111	121	86	131	145	141
WHITE below Tygh Valley	APR-JUL	80	93	103	94	113	129	110
	APR-SEP	92	106	116	94	126	142	124

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

HOOD, MILE CREEKS AND LOWER DESCHUTES BASINS  
Watershed Snowpack Analysis - April 1, 2007

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	4.8	2.5	4.5	Hood River	6	69	84
					Mile Creeks	0	0	0
					White River	3	68	81

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

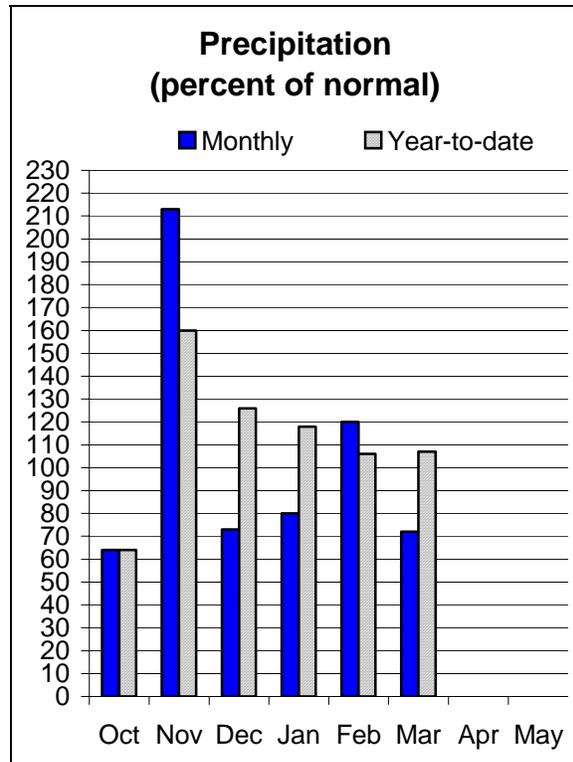
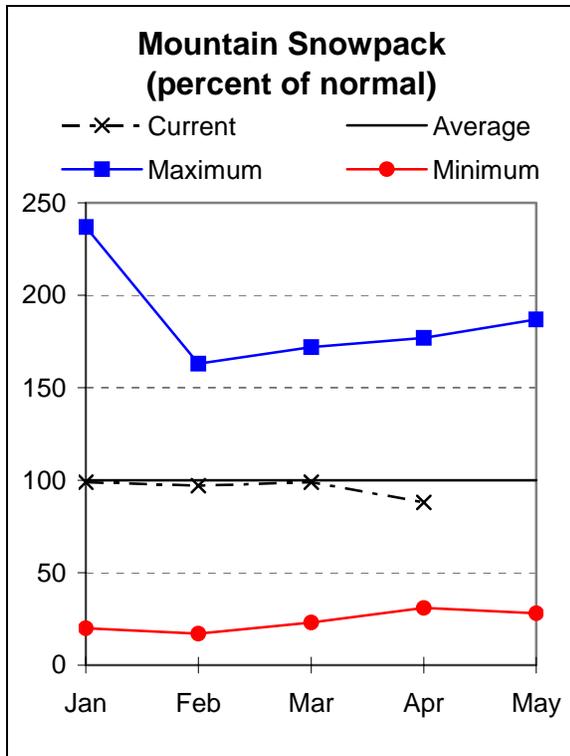
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

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



# Lower Columbia Basin

April 1, 2007



## Water Supply Outlook

Total snow pack in the Columbia basin above The Dalles was 93 percent of average on April 1. The Canadian portion of the Columbia basin is boosting the basin snowpack total. South of the border, the snowpack declined significantly in March due to warm, dry conditions. Total precipitation in the basin since the beginning of the water year has been slightly above average. February precipitation for the Columbia below The Dalles was only 72 percent of average.

The April through September flow for the Columbia River at The Dalles is forecast to be 92 percent of average. The April through September flow for the Sandy River near Marmot is forecast to be 83 percent of average. Water users in the Lower Columbia can anticipate somewhat less than normal supplies this coming summer.

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>

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LOWER COLUMBIA BASIN  
Streamflow Forecasts - April 1, 2007

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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)	
COLUMBIA R. at The Dalles (2)	APR-JUL	66200	72900	77400	92	81900	88600	84600
	APR-SEP	79900	86200	90400	92	94600	101000	98600
SANDY near Marmot	APR-JUL	185	224	250	80	276	315	313
	APR-SEP	231	272	300	83	328	369	363

LOWER COLUMBIA BASIN Reservoir Storage (1000 AF) - End of March					LOWER COLUMBIA BASIN Watershed Snowpack Analysis - April 1, 2007			
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	65	83

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

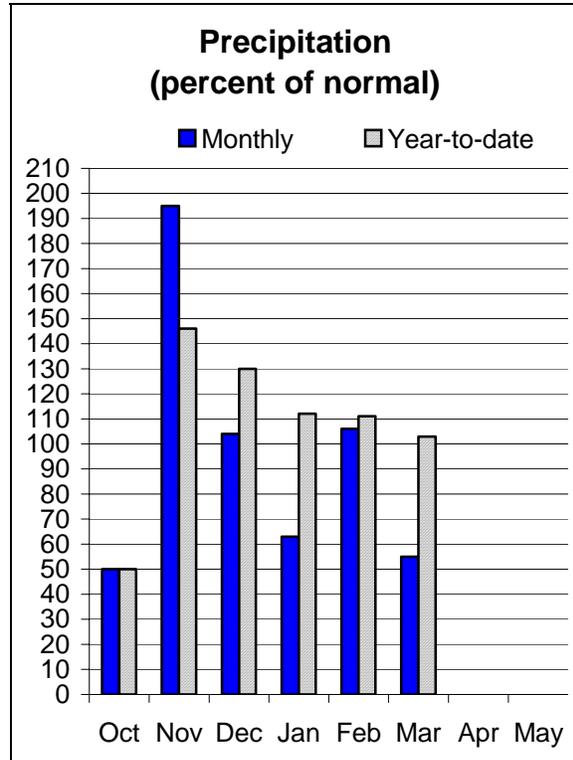
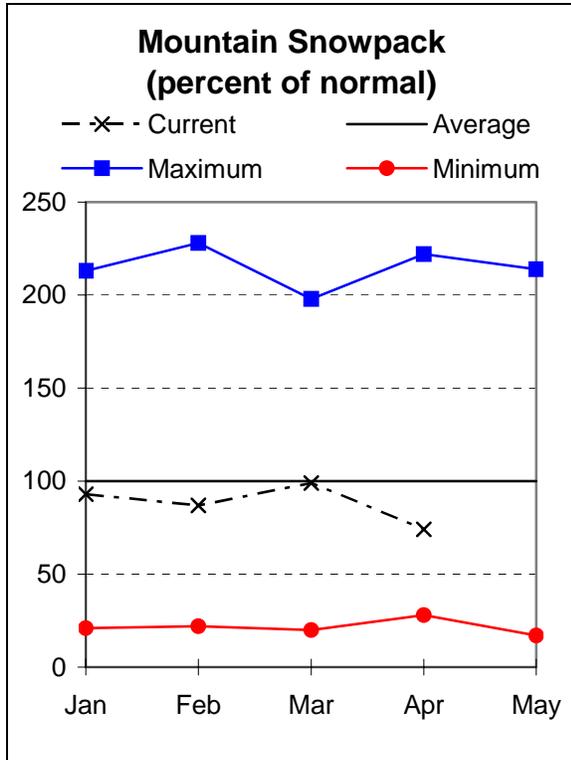
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(2) - The value is natural flow - actual flow may be affected by upstream water management.



# Willamette Basin

April 1, 2007



## Water Supply Outlook

After near normal February precipitation in the Willamette basin, March was much drier than normal. March precipitation in the Willamette basin was 55 percent of average. Since the beginning of the water year, total precipitation in the Willamette basin has been slightly above normal. The snowpack in the basin declined from 99 percent of average on March 1 to 74 percent of average on April 1. Of the 24 snow measurement sites in the basin, 3 were snow free as of April 1. Normally, all but one of these sites would be snow covered as of April 1.

At the end of March, storage at Timothy Lake and Henry Hagg reservoir was 110 percent of average and 98 percent of capacity. The stream flow forecasts for the Willamette River and its tributaries are slightly below normal for the coming summer. At this time, major reservoirs in the basin can anticipate near normal inflow. The April through September flow for the Willamette at Salem is forecast to be 85 percent of average. Some water users in the Willamette basin may anticipate slightly below average flows this coming summer.

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>

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WILLAMETTE BASIN  
Streamflow Forecasts - April 1, 2007

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Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
BLUE RIVER LAKE INFLOW (1,2)	APR-MAY	34	50	58	87	66	82	67
	APR-SEP	39	62	73	85	84	107	86
CLACKAMAS at Estacada (2)	APR-JUL	474	543	590	92	637	706	640
	APR-SEP	566	640	690	92	740	814	748
CLACKAMAS above Three Lynx (2)	APR-JUL	358	401	430	91	459	502	474
	APR-SEP	433	479	510	91	541	587	562
COTTAGE GROVE LAKE INFLOW (1,2)	APR-MAY	8.2	23	29	88	36	50	33
	APR-SEP	9.2	29	38	88	47	67	43
COUGAR LAKE INFLOW (1,2)	APR-MAY	79	107	120	85	133	161	141
	APR-SEP	133	172	190	83	208	247	230
DETROIT LAKE INFLOW (1,2)	APR-MAY	184	250	280	80	310	376	349
	APR-JUL	259	356	400	76	444	541	528
	APR-SEP	312	414	460	75	506	608	616
DORENA LAKE INFLOW (1,2)	APR-MAY	25	72	94	87	116	163	108
	APR-SEP	29	83	107	88	131	185	122
FALL CREEK LAKE INFLOW (1,2)	APR-MAY	28	61	76	91	91	124	84
FERN RIDGE LAKE INFLOW (1,2)	APR-MAY	4.3	26	36	78	46	68	46
	APR-SEP	-19.1	9.9	23	85	36	65	27
FOSTER LAKE INFLOW (1,2)	APR-MAY	158	262	310	84	358	462	371
	APR-JUL	182	332	400	82	468	618	490
	APR-SEP	222	375	445	84	515	668	527
GREEN PETER LAKE INFLOW (1,2)	APR-MAY	115	180	210	85	240	305	248
	APR-JUL	123	221	265	81	309	407	327
	APR-SEP	152	250	295	83	340	438	354
HILLS CREEK LAKE INFLOW (1,2)	APR-MAY	115	156	175	94	194	235	186
	APR-JUL	170	232	260	94	288	350	277
	JUN-OCT	116	140	150	92	160	184	164
	APR-SEP	207	264	290	91	316	373	320
LITTLE NORTH SANTIAM (1)	APR-JUL	52	92	110	83	128	168	133
	APR-SEP	59	101	120	84	139	181	143

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WILLAMETTE BASIN  
Streamflow Forecasts - April 1, 2007

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Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
LOOKOUT POINT LAKE INFLOW (1,2)	APR-MAY	307	412	460	94	508	613	492
	APR-JUL	426	587	660	91	733	894	726
	JUN-OCT	269	345	380	95	415	491	402
	APR-SEP	544	706	780	94	854	1016	828
McKENZIE below Trail Bridge (2)	APR-JUL	199	218	230	87	242	261	266
	APR-SEP	294	315	330	82	345	366	404
McKENZIE near Vida (1,2)	APR-JUL	584	753	830	85	907	1076	977
	APR-SEP	790	969	1050	87	1131	1310	1201
MOHAWK near Springfield	APR-JUL	27	50	65	82	81	103	79
OAK GROVE FORK above Power Intake	APR-JUL	98	108	115	89	122	132	130
	APR-SEP	130	142	150	90	158	170	167
NORTH SANTIAM at Mehama (1,2)	APR-JUL	381	539	610	83	681	839	732
	APR-SEP	462	626	700	84	774	938	834
SOUTH SANTIAM at Waterloo (2)	APR-JUL	270	383	460	84	537	650	549
	APR-SEP	308	422	500	85	578	692	587
SCOGGINS CREEK near Gaston (2)	APR-JUL	2.4	6.7	9.7	75	12.7	17.0	12.9
THOMAS CREEK near Scio	APR-JUL	26	42	53	71	64	81	75
MF WILLAMETTE below NF (1,2)	JUN-OCT	279	338	365	93	392	451	391
	APR-JUL	431	568	630	90	692	829	698
	APR-MAY	301	397	440	93	483	579	471
	APR-SEP	531	671	735	92	799	939	798
WILLAMETTE at Salem (1,2)	APR-MAY	1554	2273	2600	83	2927	3646	3140
	APR-JUL	2060	3119	3600	83	4081	5140	4347
	APR-SEP	2559	3619	4100	85	4581	5641	4804

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WILLAMETTE BASIN Reservoir Storage (1000 AF) - End of March					WILLAMETTE BASIN Watershed Snowpack Analysis - April 1, 2007			
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	54.6	52.5	52.6	Clackamas River	5	39	55
COTTAGE GROVE **	29.8	17.4	17.8	18.5	McKenzie River	5	59	71
COUGAR **	155.2	94.3	81.2	150.5	Row River	1	58	63
DETROIT **	300.7	212.2	156.8	222.0	Santiam River	6	45	53
DORENA **	70.5	39.6	39.5	45.3	Willamette, Middle Fork	6	69	91
FALL CREEK **	115.5	78.8	78.8	71.1				
FERN RIDGE **	109.6	62.9	82.1	77.1				
FOSTER **	29.7	15.7	7.9	12.4				
GREEN PETER **	268.2	188.2	191.2	236.2				
HILLS CREEK **	200.2	139.8	134.9	169.1				
LOOKOUT POINT **	337.0	226.3	209.7	188.7				
TIMOTHY LAKE		NO REPORT						
HENRY HAGG LAKE	53.0	51.0	4.9	49.8				

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

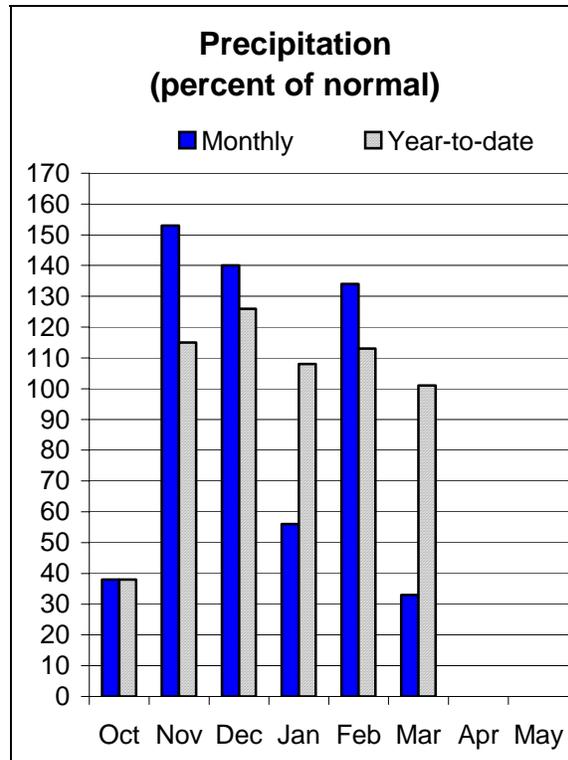
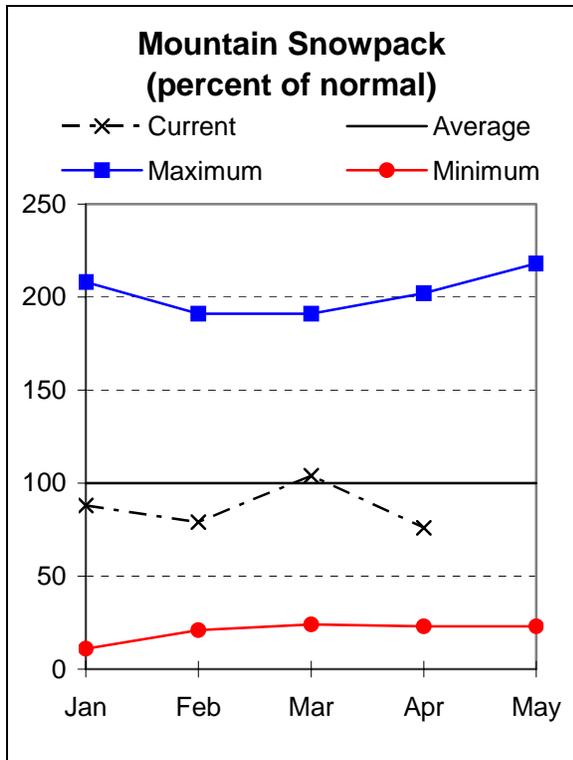
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# Rogue and Umpqua Basins

April 1, 2007



## Water Supply Outlook

After an exceptionally wet and snowy February, the Rogue and Umpqua basins had a very dry March. The precipitation for the month of March in Rogue and Umpqua basins was 33 percent of average, the lowest in the state. Since the beginning of the water year, total precipitation in the Rogue and Umpqua basins has been near normal.

The snowpack declined from 104 percent of average on March 1 to 76 percent of average on April 1. Of the 32 snow measurement sites in the basin, 7 were snow free as of April 1. Normally, only 1 or 2 sites are snow free this time of year.

At the end of March, storage at 5 reservoirs in the Rogue and Umpqua basins was 123 percent of average or 95 percent of capacity. Summer streamflow forecasts range from 62 percent of average for the inflow to Fourmile Lake to 91 percent of average for Sucker Creek below Little Grayback. Elsewhere in the basin, summer streamflows are forecast to be 70 to 80 percent of normal. Summer streamflow forecasts have declined appreciably since last month. A few water users may experience water deficits this coming summer.

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>

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ROGUE AND UMPQUA BASINS  
Streamflow Forecasts - April 1, 2007

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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)	
APPLEGATE LAKE Net Inflow (2)	APR-JUL	59	76	87	78	98	115	112
	APR-SEP	65	82	93	78	104	121	119
SF BIG BUTTE CK nr Butte Falls	APR-JUL	17.3	23	27	79	31	37	34
CLEARWATER above Trap Creek (2)	APR-SEP	40	47	52	78	57	64	67
COW CREEK near Azalea	APR-JUL	6.6	10.5	13.2	80	15.9	19.8	16.5
	APR-SEP	7.3	11.3	14.0	79	16.7	21	17.7
FOURMILE LAKE net Inflow (2)	APR-JUL	1.9	3.0	3.8	66	4.6	5.7	5.8
	APR-SEP	2.5	3.6	4.4	62	5.2	6.3	7.1
GRAVE CREEK at Pease Bridge	APR-JUL	2.4	4.4	5.7	78	7.0	9.0	7.3
HYATT PRAIRIE RES net Inflow (2)	APR-JUL	0.9	2.1	3.0	63	3.9	5.1	4.8
ILLINOIS R near Kerby	APR-JUL	65	104	130	73	156	195	179
	APR-SEP	75	114	140	75	166	205	186
NF LITTLE BUTTE CK nr Lakecreek (2)	APR-SEP	5.9	8.4	10.0	75	11.6	14.1	13.4
SF LITTLE BUTTE CK nr Lakecreek (2)	APR-SEP	15.4	21	25	78	29	35	32
LOST CREEK LAKE INFLOW (2)	APR-JUL	348	388	415	78	442	482	530
	APR-SEP	455	500	530	80	560	605	665
RED BLANKET CK nr Prospect	APR-JUL	17.9	24	28	82	32	38	34
ROGUE above Prospect	APR-JUL	150	171	185	76	199	220	245
	APR-SEP	191	214	230	77	246	269	300
SF ROGUE near Prospect (2)	APR-JUL	32	40	45	78	50	58	58
	APR-SEP	38	47	53	76	59	68	70
ROGUE R at Raygold (2)	APR-JUL	497	552	590	81	628	683	730
	APR-SEP	626	685	725	82	765	824	890
ROGUE R at Grants Pass (2)	APR-JUL	483	553	600	81	647	717	740
	APR-SEP	592	668	720	81	772	848	885
SUCKER CK blw Little Grayback	APR-JUL	30	40	47	90	54	64	52
	APR-SEP	33	44	51	91	58	69	56
NORTH UMPQUA nr Toketee Falls (2)	APR-SEP	96	113	125	83	137	154	151
NORTH UMPQUA at Winchester	APR-JUL	455	586	675	85	764	895	795
SOUTH UMPQUA near Brockway	APR-JUL	119	241	325	81	409	531	400
SOUTH UMPQUA at Tiller	APR-JUL	79	121	150	78	179	221	193
	APR-SEP	94	136	165	81	194	236	205

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ROGUE AND UMPQUA BASINS Reservoir Storage (1000 AF) - End of March					ROGUE AND UMPQUA BASINS Watershed Snowpack Analysis - April 1, 2007			
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	40.0	41.6	46.9	Applegate River	6	51	72
EMIGRANT LAKE	39.0	37.2	37.7	34.4	Bear Creek	5	53	76
FISH LAKE	8.0	6.6	4.3	5.8	Butte Creek	6	45	73
FOURMILE LAKE	16.1	12.3	5.6	10.2	Illinois River	5	27	47
HOWARD PRAIRIE	60.0	60.6	60.2	44.9	North Umpqua River	9	48	70
HYATT PRAIRIE	16.1	16.1	16.1	12.3	Rogue River	23	48	75
LOST CREEK **	315.0	136.5	137.3	263.2				

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

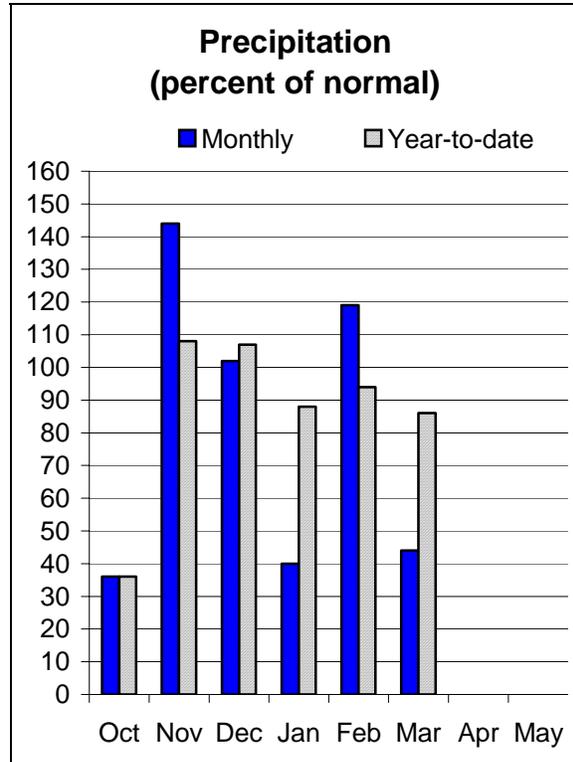
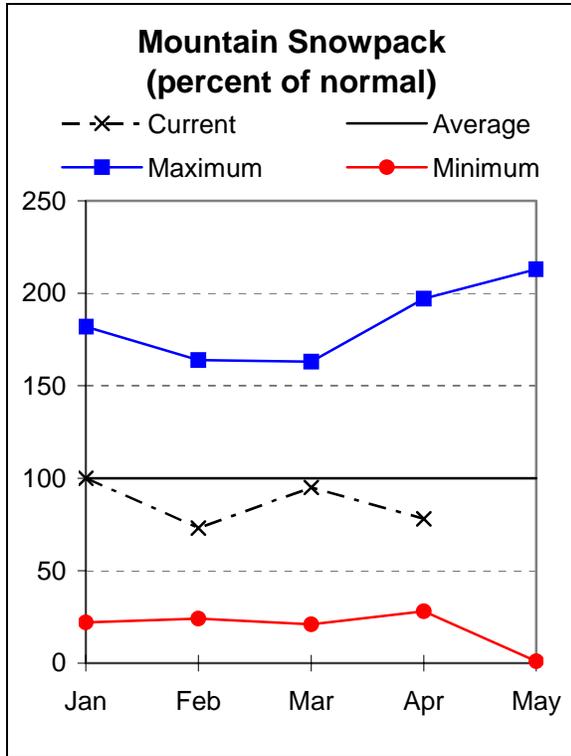
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(2) - The value is natural flow - actual flow may be affected by upstream water management.



# Klamath Basin

April 1, 2007



## Water Supply Outlook

After a very wet and snowy February, the Klamath basin had a very warm and dry March. March precipitation in the Klamath basin was 44 percent of average. Since the beginning of the water year, total precipitation has been 86 percent of average.

The snowpack on April 1 was 78 percent of average, down from 95 percent of average on March 1. Ten out of 24 snow measurement sites in the Klamath basin were snow free on April 1. Normally only one of these sites is melted out by April 1.

At the end of March, the combined storage at Clear Lake (CA), Gerber Lake and Upper Klamath Lake was 93 percent of average and 64 percent of capacity. April through September streamflow forecasts range from 39 percent of average for Gerber reservoir net inflow to 72 percent of average for the Sprague near Chiloquin. The April through September net inflow to Upper Klamath Lake is forecast to be 70 percent of average. Summer streamflow forecasts have declined appreciably since last month. Water users in the Klamath basin should plan for reduced supplies this coming irrigation 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>

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KLAMATH BASIN  
Streamflow Forecasts - April 1, 2007

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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)	
CLEAR LAKE NET INFLOW (2)	APR-JUL	0.3	9.6	16.0	39	22	32	41
	APR-SEP	5.6	14.2	20	42	26	34	48
GERBER RESERVOIR Net Inflow (2)	APR-JUL	0.3	2.1	6.0	36	9.9	15.6	16.9
	APR-SEP	0.2	3.3	7.0	39	10.7	16.0	17.8
Sprague River near Chiloquin	APR-JUL	92	124	145	71	166	198	203
	APR-SEP	112	143	165	72	187	218	230
UPPER KLAMATH LAKE NET INFLOW (1)	APR-JUL	216	274	300	71	326	384	425
	APR-SEP	280	335	360	70	385	440	515
WILLIAMSON R near Chiloquin	APR-JUL	183	208	225	70	242	267	320
	APR-SEP	217	243	260	68	277	303	385

KLAMATH BASIN Reservoir Storage (1000 AF) - End of March					KLAMATH BASIN Watershed Snowpack Analysis - April 1, 2007			
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	179.3	203.4	248.9	Lost River	6	0	0
GERBER	94.3	82.6	96.1	66.6	Sprague River	6	38	74
UPPER KLAMATH LAKE	523.7	458.9	445.0	457.8	Upper Klamath Lake	13	48	78
					Williamson River	5	44	75

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

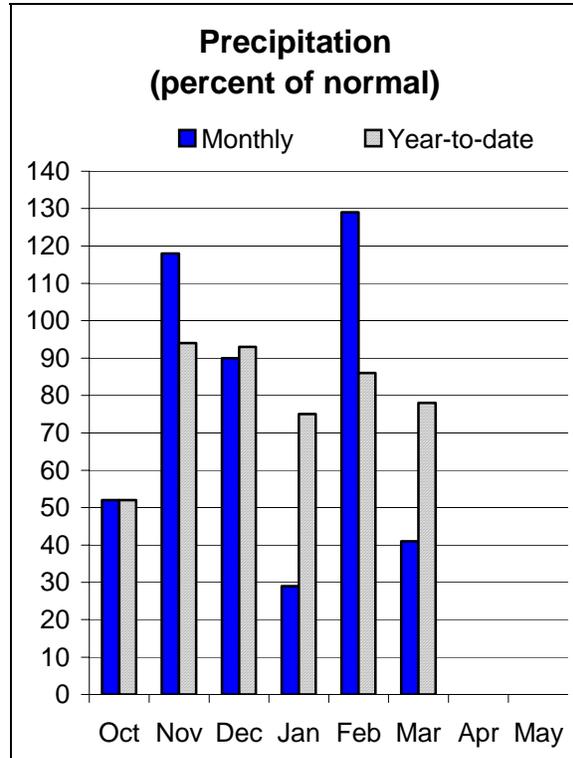
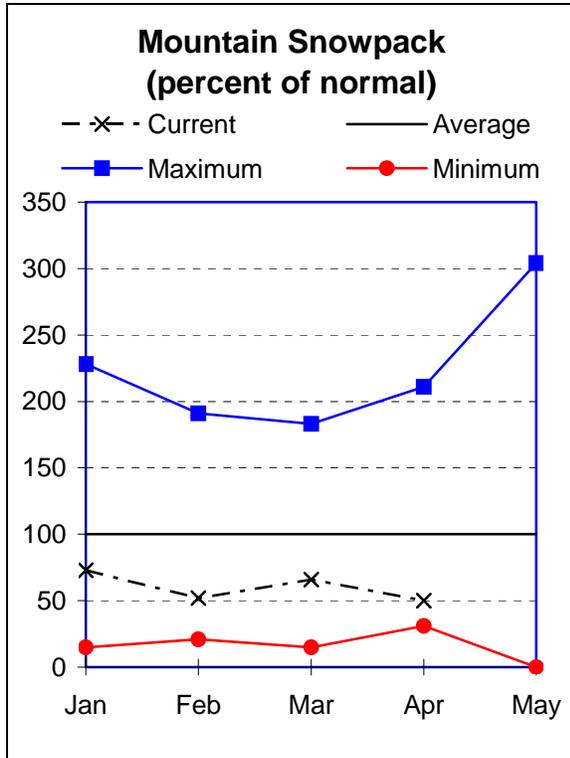
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

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



# Lake County and Goose Lake

April 1, 2007



## Water Supply Outlook

Water year 2007 has been drier than normal in Lake County and Goose Lake basin. After a wetter than normal February, March precipitation was only 41 percent of average. Since the beginning of the water year, total precipitation has been only 78 percent of average, the lowest in the state.

The snowpack declined from 66 percent of average on March 1 to 50 percent of average on April 1. Of the 26 snow measurement sites in the basin 12 were snow free as of April 1. Normally, none of these sites are snow free at this time of year.

At the end of March, the combined storage at Cottonwood, Drews and Thompson Valley reservoirs was 113 percent of average or 84 percent of capacity. April through September streamflows range from 49 percent of average for Twentymile Creek near Adel to 60 percent of average for the Chewaucan River near Paisley. Water users in the basin should plan for significantly lower than normal water supplies 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/cgibin/bor.pl>

LAKE COUNTY AND GOOSE LAKE BASINS  
Streamflow Forecasts - April 1, 2007

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)	
BRIDGE CK nr Spahr Ranch	APR-JUL	0.5	1.2	1.7	53	2.2	2.9	3.2
CHEWAUCAN R nr Paisley	APR-JUL	25	37	45	61	53	65	74
	APR-SEP	27	39	47	60	55	67	78
COTTONWOOD CK nr Lakeview (2)	APR-JUL	3.9	5.1	6.0	69	6.9	8.1	8.7
DEEP CK abv Adel	APR-JUL	18.1	27	33	49	39	48	67
	APR-SEP	18.9	28	34	49	40	49	69
DREWS RESERVOIR net Inflow (2)	APR-JUL	2.8	9.2	13.5	64	17.8	24	21
HONEY CK nr Plush	APR-JUL	2.1	5.6	8.0	49	10.4	13.9	16.4
	APR-SEP	8.1	8.2	8.3	50	8.4	8.5	16.6
SILVER CK nr Silver Lk	APR-JUL	3.0	6.0	8.0	55	10.0	13.0	14.5
TWENTYMILE CK nr Adel	APR-JUL	0.9	5.3	8.4	50	11.5	15.9	16.9
	APR-SEP	1.0	5.5	8.6	49	11.7	16.2	17.4

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

LAKE COUNTY AND GOOSE LAKE BASINS  
Watershed Snowpack Analysis - April 1, 2007

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
COTTONWOOD		NO REPORT			Chewaucan River	5	43	62
DREWS		NO REPORT			Deep Creek	4	41	71
THOMPSON VALLEY	18.4	18.0	12.4	13.2	Drew Creek	5	22	31
					Honey Creek	3	58	77
					Silver Creek (Lake Co.)	4	20	49
					Twentymile Creek	6	40	66

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

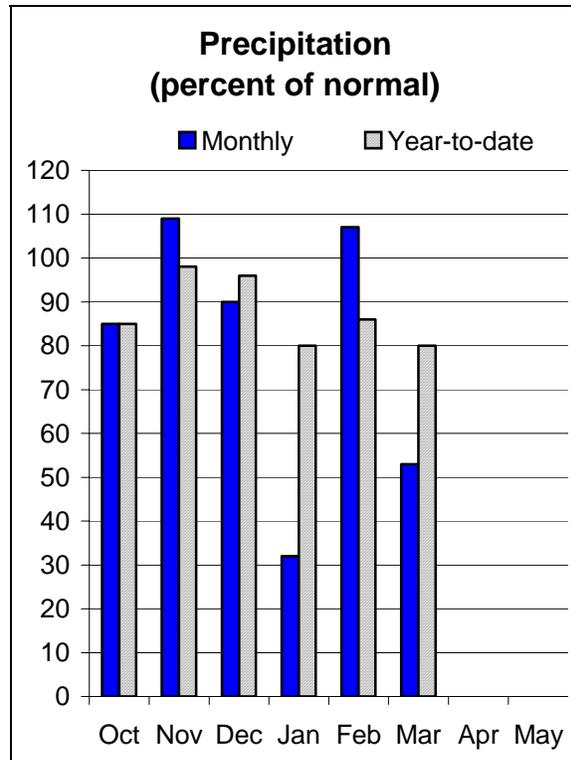
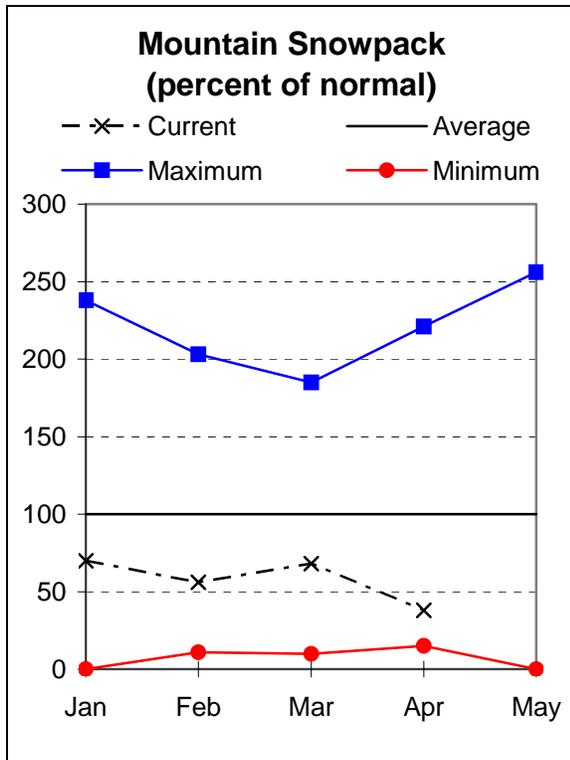
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

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



# Harney Basin

April 1, 2007



## Water Supply Outlook

Water year 2007 has been drier than normal in the Harney basin. After average precipitation in February, March precipitation was only 53 percent of average. Since the beginning of the water year, total precipitation has been only 80 percent of average in the Harney basin.

The snowpack declined from 68 percent of average on March 1 to 38 percent of average on April 1. Of the 18 snow measurement sites in the basin, 12 were snow free as of April 1. Normally, most of these sites are snow covered on April 1.

April through September streamflows for the Silvies near Burns and for Trout Creek near Denio are forecast to be near 50 percent of average. The April through September flow for the Donner und Blitzen is forecast to be 63 percent of average. Water users in the Harney Basin should expect significantly reduced supplies 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>

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HARNEY BASIN  
Streamflow Forecasts - April 1, 2007

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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)	=====	
DONNER und BLITZEN R nr Frenchglen	APR-JUL	25	34	40	63	46	55	64
	APR-SEP	28	38	44	63	51	60	70
SILVER CK nr Riley	APR-JUL	3.6	6.8	9.0	47	11.2	14.4	19.0
SILVIES R nr Burns	APR-JUL	10.9	26	46	48	66	95	96
	APR-SEP	10.0	28	48	49	68	98	99
TROUT CK nr Denio	APR-JUL	2.1	4.1	5.4	56	6.7	8.7	9.6
	APR-SEP	2.2	4.2	5.6	54	7.0	9.0	10.3

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

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HARNEY BASIN  
Watershed Snowpack Analysis - April 1, 2007

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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	4	46	57
					Silver Creek (Harney Co)	2	21	34
					Silvies River	6	21	35
					Trout Creek	4	11	14

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

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

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

# 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 near Rome	2000	February 14	May 14
	1000	March 17	May 28
	500	March 27	June 11

<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	July 12	July 25
	160	July 24	August 5
Catherine Ck near Union	35	August 1	Avg Value = 49 cfs
	100	June 20	July 9
	50	June 30	July 28
Powder near Sumpter	100	April 15	June 25
	20	May 1	July 22
Deer Ck above Phillips Resv nr Sumpter	40	April 4	June 17
	10	April 20	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	April 20	May 17
SF Walla Walla near Milton	200	April 30	June 9
	90	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	260	Peak	
	170	October 31	
	Peak	May 29	
Crooked River	100	May 10	June 1
Little Deschutes near LaPine	400	May 10	June 7
	200	May 25	July 8
Squaw Cr near Sisters	100	July 30	August 16
Tumalo Ck near Bend	235	June 1	June 23
	207	June 3	June 25
	150	June 13	July 5
	71	July 5	August 7

<b>HOOD, MILE CREEKS, AND LOWER DESCHUTES BASINS</b>			
<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	38*	July 15-31	39**
*Average cfs forecast to flow for this two-week period.			
** Average cfs for period of record			
White below Tygh Valley	200	June 30	July 3
	130	August 1	Avg Value = 145

<b>ROGUE AND UMPQUA BASINS</b>			
<i>FORECAST POINT</i>	<i>FLOW CFS</i>	<i>FORECAST DATE OF LOW FLOW</i>	<i>AVERAGE DATE OF LOW FLOW</i>
Cow Ck near Azalea	20	June 25	July 4
	10	August 7	August 19
Little Butte Cr SF	100	May 5	May 15
South Umpqua near Brockway	90	August 18	August 28
South Umpqua at Tiller	140	July 2	July 12
	90	July 18	July 28
	60	August 8	August 24

<b>LAKE COUNTY AND GOOSE LAKE BASINS</b>			
<i>FORECAST POINT</i>	<i>FLOW CFS</i>	<i>FORECAST DATE OF LOW FLOW</i>	<i>AVERAGE DATE OF LOW FLOW</i>
Deep Ck above Adel	100	May 1	June 21
Honey Ck near Plush	100	March 20	May 15
	50	April 5	May 30
Twentymile near Adel	50	April 15	June 2
	10	May 5	July 3

<b>HARNEY BASIN</b>			
<i>FORECAST POINT</i>	<i>FLOW CFS</i>	<i>FORECAST DATE OF LOW FLOW</i>	<i>AVERAGE DATE OF LOW FLOW</i>
Silvies near Burns	400	March 22	May 5
	200	April 10	May 21
	100	May 1	June 9
	50	May 14	June 23
Donner und Blitzen	200	May 1	June 15
	100	June 1	July 5

# Summary of Snow Course Data

## April 2007

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
<b>Oregon</b>						
ALTHOUSE #2	4530	3/28/07	9	1.6	10.4	4.1
ALTHOUSE #3	5000	3/28/07	6	1.8	18.4	12.8
ANEROID LAKE SNOTEL	7410	4/01/07	43	13.0	29.9	25.7
ANNIE SPRING REV	6120	3/27/07	87	35.1	68.7	42.9
ANNIE SPRING SNOTEL	6010	4/01/07	78	36.6	63.1	42.8
ANTHONY LAKE	7130	3/29/07	54	20.0	30.4	26.3
ARBUCKLE MTN SNOTEL	5770	4/01/07	35	10.8	23.6	22.3
BALD MTN,OR AM	6720	3/28/07	65	22.8	33.5	25.7
BARLEY CAMP AM	6900	3/30/07	28	10.6	--	16.3
BEAR FLAT MEADOW AM	5900	3/30/07	13	5.2	14.7	11.2
BEAVER DAM CREEK	5100	3/29/07	19	8.9	20.6	10.0
BEAVER RES. SNOTEL	5150	4/01/07	11	5.2	15.1	9.2
BIG RED MTN SNOTEL	6050	4/01/07	55	23.3	37.9	28.4
BIG SHEEP AM	6200	3/28/07	51	17.8	36.5	26.6
BIGELOW CAMP SNOTEL	5120	4/01/07	10	5.1	22.2	11.6
BILLIE CK DVD SNOTEL	5300	4/01/07	39	17.0	35.2	21.5
BLAZED ALDER SNOTEL	3650	4/01/07	58	23.0	40.0	32.1
BLUE MTN SPGS SNOTEL	5900	4/01/07	29	11.7	25.6	17.3
BOULDER CREEK AM	5690	3/30/07	0	.0	10.3	1.1
BOURNE SNOTEL	5850	4/01/07	12	5.6	18.3	17.9
BOWMAN SPRNGS SNOTEL	4530	4/01/07	0	.1	8.0	8.6
BUCK PASTURE AM	5700	3/30/07	0	.0	2.9	1.2
BUCKSKIN LAKE AM	5200	3/30/07	0	.0	.0	--
BULLY CREEK AM	5300	3/30/07	0	.0	5.9	.5
CALIBAN ALT	6500	3/28/07	60	23.2	44.6	30.9
CALL MEADOWS AM	5340	3/30/07	0	.0	10.8	2.1
CAMAS CREEK #3	5850	3/29/07	15	6.0	19.9	13.1
CASCADE SUM. SNOTEL	5100	4/01/07	73	31.1	43.5	31.3
CHEMULT ALT SNOTEL	4850	4/01/07	0	.0	16.2	5.3
CLACKAMAS LK. SNOTEL	3400	4/01/07	11	4.1	15.2	11.3
CLEAR LAKE SNOTEL	3810	4/01/07	17	7.0	17.9	14.1
COLD SPRINGS SNOTEL	5940	4/01/07	50	24.2	49.3	28.2
COLVIN CREEK AM	6550	3/30/07	0	.0	--	2.6
COUNTY LINE SNOTEL	4800	4/01/07	0	.0	.5	2.2
COX FLAT AM	5750	3/30/07	0	.0	4.5	4.3
CRAZYMAN FLAT AM	6100	3/30/07	24	10.6	16.5	9.1
CRAZYMAN FLAT SNOTEL	6180	4/01/07	27	12.5	28.4	15.7
DALY LAKE SNOTEL	3690	4/01/07	10	4.5	17.8	12.7
DEADHORSE GRADE	3700	3/30/07	4	1.5	8.4	9.0
DEADWOOD JUNCTION	4600	3/29/07	0	.0	7.4	4.8
DERR	5670	3/29/07	8	2.6	17.1	8.5
DERR SNOTEL	5850	4/01/07	27	9.5	25.2	16.4
DIAMOND LAKE SNOTEL	5320	4/01/07	8	4.8	22.2	14.8
DOG HOLLOW AM	4900	3/30/07	0	.0	.0	.1
DOOLEY MOUNTAIN	5430	3/30/07	2	.4	17.2	7.1
EILERTSON SNOTEL	5510	4/01/07	0	.0	13.2	9.6
ELDORADO PASS	4600	3/30/07	0	.0	3.6	.9
EMIGRANT SPGS SNOTEL	3800	4/01/07	---	.0	1.4	3.3
FINLEY CORRALS AM	6000	3/30/07	24	9.6	20.4	14.6
FISH CREEK SNOTEL	7660	4/01/07	60	24.6	41.2	30.5
FISH LK. SNOTEL	4670	4/01/07	17	9.0	16.7	8.4
FLAG PRAIRIE AM	4750	3/30/07	0	.0	10.1	2.0
FOURMILE LAKE SNOTEL	6000	4/01/07	51	21.4	39.8	30.7
GERBER	4850	4/01/07	0	.0	.0	.3
GERBER RES SNOTEL	4850	4/01/07	1	.8	.0	--
GOLD CENTER SNOTEL	5410	4/01/07	0	.0	15.3	8.3
GOVERNMENT CORRALS	7450	3/29/07	17	5.8	14.8	16.3
GRAYBACK PEAK	6000	3/30/07	36	14.5	32.4	21.1
GREENPOINT SNOTEL	3310	4/01/07	24	11.4	26.9	17.5

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
<b>Oregon (continued)</b>						
HART MOUNTAIN	AM	6350	3/30/07	0	.0	1.0 .9
HIGH RIDGE	SNOTEL	4920	4/01/07	43	18.9	27.5 23.1
HOGG PASS	SNOTEL	4760	4/01/07	43	16.7	39.5 39.0
HOLLAND MDWS	SNOTEL	4900	4/01/07	31	14.5	25.2 23.1
HOWARD PRAIRIE		4500	3/29/07	8	3.2	12.4 5.6
HUNGRY FLAT		4400	3/28/07	0	.0	2.8 1.4
IRISH-TAYLOR	SNOTEL	5500	4/01/07	81	32.0	45.6 36.6
JUMP OFF JOE	SNOTEL	3520	4/01/07	22	8.7	15.9 10.3
KING MTN #1		4500	3/27/07	14	2.7	12.3 5.2
KING MTN #2	SNOTEL	4340	4/01/07	0	.0	8.0 2.9
KING MTN #3		3650	3/27/07	4	.4	.2 .6
KING MTN #4		3050	3/27/07	0	.0	.0 .0
LAKE CK R.S.	SNOTEL	5200	4/01/07	0	.0	16.2 10.5
LITTLE ALPS		6200	3/29/07	29	8.4	16.0 13.2
LITTLE ANTONE (ALT)		5000	3/29/07	6	1.8	11.4 7.2
LITTLE MEADOW	SNOTEL	4000	4/01/07	54	26.6	35.7 25.7
LOOKOUT BUTTE	AM	5650	3/30/07	0	.0	.0 .1
LOUSE CANYON	AM	6440	3/30/07	0	.0	6.3 5.1
LUCKY STRIKE	SNOTEL	4970	4/01/07	0	.0	9.0 9.3
MADISON BUTTE	SNOTEL	5150	4/01/07	0	.0	6.1 2.7
MARION FORKS	SNOTEL	2600	4/01/07	7	2.6	8.5 10.2
MARKS CREEK		4540	3/28/07	0	.0	5.0 .9
MARY'S PEAK REV		3620	3/29/07	10	3.6	13.6 6.3
MCKENZIE	SNOTEL	4800	4/01/07	74	42.2	51.9 42.9
MEACHAM		4300	3/27/07	1	.2	10.3 6.6
MIRROR LAKE	AM	8200	3/28/07	141	49.4	61.1 68.0
MOSS SPRINGS	SNOTEL	5760	4/01/07	51	21.3	26.1 26.0
MT ASHLAND SWBK.		6400	3/28/07	62	24.2	43.5 33.4
MT HOOD		5400	3/29/07	118	55.5	73.0 62.5
MT HOOD TEST	SNOTEL	5400	4/01/07	115	51.5	63.8 59.1
MT HOWARD	SNOTEL	7910	4/01/07	30	12.1	20.5 16.5
MUD RIDGE	SNOTEL	4070	4/01/07	50	20.8	35.1 24.3
NEW CRESCENT	SNOTEL	4910	4/01/07	0	.0	22.6 8.4
NEW DUTCHMAN #3		6400	3/28/07	93	42.0	65.8 51.9
NORTH FK RES	SNOTEL	3060	4/01/07	42	18.8	29.0 15.7
NORTH UMPQUA		4220	3/30/07	10	3.3	18.7 8.8
OCHOCO MEADOWS		5200	3/28/07	9	3.4	17.3 8.9
OCHOCO MEADOW	SNOTEL	5430	4/01/07	1	1.7	17.0 8.7
OREGON CANYON	AM	6950	3/30/07	0	.0	6.1 4.9
PAGE MTN		4050	3/28/07	3	1.0	6.2 1.2
PARK H.Q. REV		6550	3/28/07	113	55.0	92.4 61.3
PATTON MEADOWS	AM	6800	3/30/07	24	9.1	23.0 17.5
PEAVINE RIDGE	SNOTEL	3420	4/01/07	14	8.1	21.6 13.0
PUEBLO SUMMIT	AM	6800	3/30/07	0	.0	5.1 --
QUARTZ MTN	SNOTEL	5720	4/01/07	0	.0	2.7 .5
R.R. OVERPASS	SNOTEL	2680	4/01/07	0	.0	.0 .1
RED BUTTE #1		4560	3/26/07	29	12.0	20.3 10.4
RED BUTTE #2		4000	3/26/07	0	.0	3.7 5.0
RED BUTTE #3		3500	3/26/07	0	.0	4.9 1.1
RED BUTTE #4		3000	3/26/07	0	.0	1.2 .3
RED HILL	SNOTEL	4400	4/01/07	82	49.3	53.0 46.1
ROARING RIVER	SNOTEL	4950	4/01/07	42	23.9	42.2 28.9
ROCK SPRINGS	SNOTEL	5290	4/01/07	0	.0	5.2 2.5
ROGGER MEADOWS	AM	6500	3/30/07	33	13.2	-- 11.3
SADDLE MTN	SNOTEL	3110	4/01/07	0	.0	.7 6.0
SALT CK FALLS	SNOTEL	4220	4/01/07	42	20.5	26.0 18.4
SANTIAM JCT.	SNOTEL	3750	4/01/07	2	.8	17.0 16.0
SCHNEIDER MDW	SNOTEL	5400	4/01/07	46	18.6	34.4 29.6
SEINE CREEK	SNOTEL	2060	4/01/07	0	.0	.0 1.3
SEVENMILE MARSH SNTL		5700	4/01/07	57	26.3	42.6 30.5
SHERMAN VALLEY	AM	6600	3/30/07	38	15.2	16.8 12.0
SILVER BURN		3720	3/27/07	19	6.9	19.9 8.2
SILVER CREEK	SNOTEL	5740	4/01/07	---	.0	23.6 7.8
SILVIES	SNOTEL	6990	4/01/07	22	9.3	15.4 19.3
SISKIYOU SUMMIT REV		4630	3/28/07	10	3.5	13.4 3.3
SKI BOWL ROAD		6000	3/28/07	52	19.2	35.8 26.7

SNOW COURSE		ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
<b>Oregon (continued)</b>							
SNOW MTN	SNOTEL	6220	4/01/07	18	5.9	18.9	14.0
SF BULL RUN	SNOTEL	2690	4/01/07	0	.0	4.9	--
SOUTH FORK CANAL		3500	3/25/07	0	.0	.0	.5
STANDLEY	AM	7400	3/28/07	71	24.8	34.6	33.3
STARR RIDGE	SNOTEL	5250	4/01/07	0	.0	8.8	3.4
STRAWBERRY	SNOTEL	5760	4/01/07	0	.0	7.5	4.1
SUMMER RIM	SNOTEL	7100	4/01/07	49	15.9	28.7	19.0
SUMMIT LAKE	SNOTEL	5600	4/01/07	82	37.3	48.8	38.1
SYCAN FLAT	AM	5500	3/30/07	0	.0	10.8	3.2
TANGENT		5400	3/28/07	22	10.2	36.8	19.6
TAYLOR BUTTE	SNOTEL	5030	4/01/07	1	.2	15.5	2.8
TAYLOR GREEN	SNOTEL	5740	4/01/07	25	10.5	24.0	21.7
THREE CK MEAD	SNOTEL	5650	4/01/07	41	17.1	27.2	19.7
TIMOTHY LAKE		3300	3/29/07	4	.7	13.5	11.3
TIPTON	SNOTEL	5150	4/01/07	21	9.1	16.4	14.3
TOLLGATE		5070	3/27/07	64	26.0	35.1	26.8
TRAP CREEK		3800	3/30/07	14	4.2	15.0	7.3
TROUT CREEK	AM	7800	3/30/07	0	.0	20.0	12.1
TV RIDGE #2	AM	7000	3/28/07	27	9.4	18.4	20.2
V LAKE	AM	6600	3/30/07	0	.0	8.6	8.0
WEST EAGLE MEADOWS		5500	3/28/07	54	18.9	35.7	28.1
WOLF CREEK	SNOTEL	5630	4/01/07	29	9.3	20.9	16.7
<b>California</b>							
ADIN MOUNTAIN		6350	3/27/07	20	6.0	15.2	12.5
ADIN MTN	SNOTEL	6350	4/01/07	13	4.6	14.6	13.2
BLUE LAKE RANCH		6800	3/28/07	8	1.2	11.0	10.4
CEDAR PASS		7100	3/28/07	24	6.6	18.9	17.6
CEDAR PASS	SNOTEL	7100	4/01/07	25	9.7	19.9	19.3
CROWDER FLAT	AM	5200	3/30/07	0	.0	1.0	.4
CROWDER FLAT	SNOTEL	5200	4/01/07	0	.0	5.1	--
DISMAL SWAMP	SNOTEL	7000	4/01/07	51	19.4	41.5	28.9
STATE LINE	AM	5750	3/30/07	0	.0	4.0	3.4
<b>Idaho</b>							
BATTLE CREEK	AM	5720	3/30/07	0	.0	5.8	1.0
BULL BASIN	AM	5460	3/30/07	0	.0	2.3	.3
MUD FLAT	SNOTEL	5730	4/01/07	0	.0	10.9	4.4
RED CANYON	AM	6650	3/30/07	3	1.2	10.4	5.1
SILVER CITY		6400	3/29/07	27	11.6	22.4	15.8
SOUTH MTN	SNOTEL	6500	4/01/07	19	7.5	19.7	19.2
SUCCOR CREEK	AM	6100	3/30/07	0	.0	11.5	7.8
VAUGHT RANCH	AM	5830	3/30/07	0	.0	10.4	1.1
<b>Nevada</b>							
BALD MOUNTAIN	AM	6720	3/30/07	0	.0	2.5	2.5
BEAR CREEK	SNOTEL	7800	4/01/07	---	14.2	29.6	21.6
BIG BEND	SNOTEL	6700	4/01/07	6	1.8	14.5	8.3
BUCKSKIN,L	SNOTEL	6700	4/01/07	12	3.7	12.8	8.5
COLUMBIA BASIN	AM	6650	3/29/07	0	.0	12.2	6.8
DISASTER PEAK	SNOTEL	6500	4/01/07	0	.0	5.4	7.4
FAWN CREEK	SNOTEL	7050	4/01/07	32	11.3	19.3	18.7
FRY CANYON		6700	3/28/07	11	1.0	11.1	5.7
GOLD CREEK		6600	3/28/07	4	.6	7.8	3.9
GRANITE PEAK	SNOTEL	7800	4/01/07	37	12.4	26.9	25.1
JACK CREEK, LOWER(d)		6800	3/29/07	13	2.0	5.1	2.3
JACK CREEK, U	SNOTEL	7280	4/01/07	43	11.4	24.7	19.9
LAMANCE CREEK	SNOTEL	6000	4/01/07	0	.0	13.0	10.1
LAUREL DRAW	SNOTEL	6700	4/01/07	1	.6	15.2	8.8
LITTLE BALLY MTN.	AM	6000	3/30/07	0	.0	--	2.9
MERRIT MOUNTAIN	AM	7000	3/29/07	3	.5	11.2	5.8
MIDAS	(d)	7200	3/29/07	0	.0	5.1	1.7
QUINN RIDGE	AM	6300	3/30/07	0	.0	.0	.8
SEVENTYSIX CK	SNOTEL	7100	4/01/07	13	3.6	18.7	10.7
STAG MOUNTAIN	AM	7700	3/29/07	0	.0	11.6	5.7
TAYLOR CANYON	SNOTEL	6200	4/01/07	0	.0	9.6	2.9
TOE JAM	AM	7700	3/29/07	14	2.4	18.4	9.4
TREMEWAN RANCH		5700	3/28/07	0	.0	.0	.1

(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.

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

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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

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Official Business



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

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**Natural Resources Conservation Service**  
**U.S. Department of Agriculture**

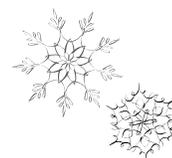
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