United States
Department of
Agriculture

Natural Resources
Conservation
Service

Oregon
Basin Outlook Report

May 1, 2010

Spring Snow at Broken Top Mountain (photo courtesy of Bill Overman)

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General Outlook

May 1, 2010

SUMMARY

April 2010 brought cool, wet weather to the Pacific Northwest which improved many water supply forecasts in the region. the rapid snowmelt that had begun in March was delayed and new snow was added to the high mountains. Additionally, April showers filled many reservoirs that had been struggling through a mostly dry winter. The timing and form of precipitation greatly influences spring and summer runoff conditions. Many streamflow forecasts summarized in this report have improved over last month due to the favorable April climate conditions.

SNOWPACK

Up until April, the winter snowpack had failed to accumulate to normal levels within many basins. A warm early season melt out began in early March. Later in March, the warm and dry El Nino pattern shifted, bringing cooler temperatures along with additional precipitation to the region. The shift in the weather pattern resulted in a much needed slowing of the melt out. While April temperatures and precipitation did not completely mitigate the low snow year, it certainly helped in filling reservoirs and refreshing streamflows.

As of May 1, basin snowpack conditions in Oregon range from a low of 59 percent of average in the Upper John Day Basin to a high of 101 percent of average in the Lake County and Goose Lake Basin. Snow measurements for May 1 were recorded at 77 SNOTEL sites and 18 snow courses across the state. As May 1, most manual snow measurements of snow courses and aerial markers have been completed for the season. SNOTEL sites continue to report hourly.

PRECIPITATION

In most Oregon basins, April is only the second month this water year to post above average precipitation. The timing of this cool precipitation could not have been better for areas that depend on spring rains to refresh their stream systems. As of May 1, every basin in the state continues to post a precipitation deficit for water year 2010, but that has been ameliorated somewhat by the cool and moist conditions this past month.

Since the beginning of the water year on October 1, precipitation in Oregon has ranged from 75 percent of average in the Klamath basin to 90 percent of average in the Harney basin. April precipitation totals ranged from a low of 104 percent of average in the Umatilla, Walla Walla, Willow, Rock and Lower John Day basin to a high of 171 percent of average in the Rogue and Umpqua basin.

RESERVOIRS

Reservoirs throughout the state began to fill as April showers and snow melt contributed to increased streamflows. Many reservoirs improved their storage significantly in the last month, which will assist in meeting summer water demands.

May 1 storage at 26 major Oregon irrigation reservoirs analyzed in this publication was 71 percent of average. A total of 1,850,800 acre feet of water was stored as of May 1, representing 57 percent of useable capacity. Last year at this time, these same reservoirs stored 2,053,400 acre feet of water.

STREAMFLOW

Above normal April precipitation significantly improved the summer water supply outlook at many points throughout the state, particularly those areas that are fed by spring rains more than mountain snowmelt. For streamflow points where seasonal snow melt is the major contributor to summer flows, forecasts have not improved measurably. In general, water users throughout Oregon should expect streamflows that are below to well below normal this coming summer. Water conservation will be key to managing water supplies in Oregon this summer.

A summary of streamflow forecasts for Oregon follows:

STREAM	PERIOD	PERCENT OF AVERAGE
Owyhee Reservoir Inflow	May-September	65
Grande Ronde R at La Grande	May-September	71
Umatilla R at Pendleton	May-September	64
Deschutes R at Benham Falls	May-September	80
MF Willamette R bl NF	May-September	89
Rogue R at Raygold	May-September	78
Upper Klamath Lake Inflow	May-September	60
Silvies R nr Burns	May-September	81

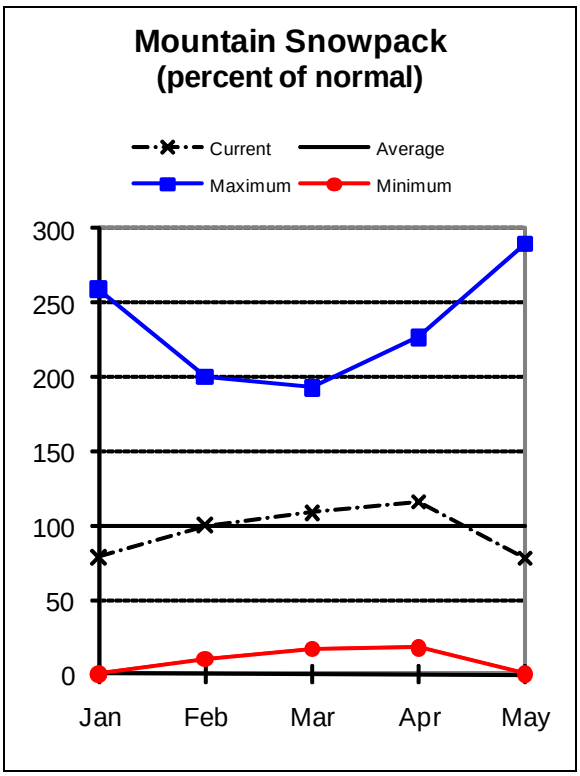
Some of these forecasts assume that normal weather conditions will occur from now to the end of the forecast period.

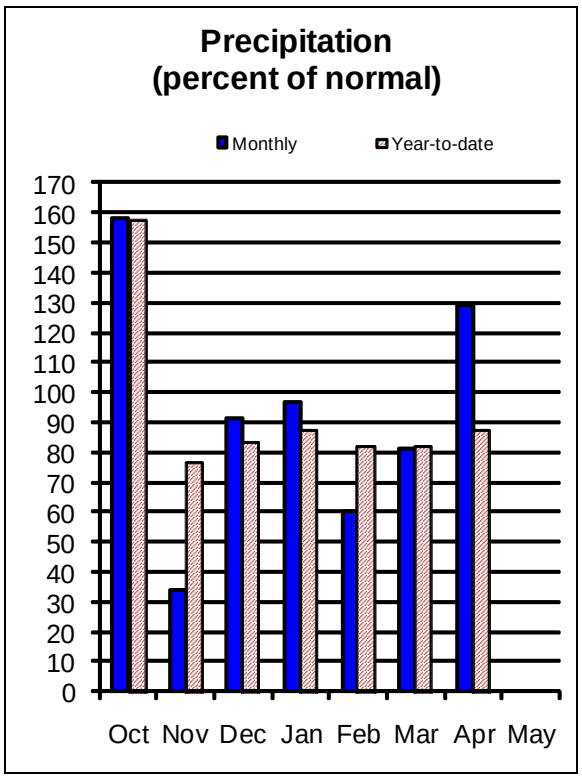
The forecasts in this bulletin are a result of coordinated activity between the Natural Resources Conservation Service and the National Weather Service as an effort to provide the best possible service to water users.

This report contains data furnished by the Oregon Department of Water Resources, U.S. Geological Survey, NOAA National Weather Service and other cooperators. This report will be updated monthly, January through June.

Owyhee and Malheur Basins

May 1, 2010





Water Supply Outlook

Precipitation in the Owyhee and Malheur was steady through the month, falling as snow early in the month and then rain later in the month. Two to four inches of precipitation fell during April at SNOTEL sites in the basin. April precipitation in the Owyhee and Malheur basins was 129 percent of average. This was only the second month this water year with above average precipitation. Since the beginning of the water year, precipitation in the Owyhee and Malheur basins has been 87 percent of average. The May 1 snowpack, as measured at 10 SNOTEL sites, was 78 percent of average. April precipitation, snow melt and runoff improved reservoir storage in the basin. May 1 storage at the four irrigation reservoirs in the Owyhee and Malheur basins was 62 percent of average, or 52 percent of capacity.

Streamflow forecasts have not changed appreciably in the Owyhee since last month. The May through September streamflow forecasts in the Owyhee and Malheur basins range from 65 percent of average for the Owyhee River below Owyhee Dam to 70 percent of average for the Malheur River at Drewsey. Water users in the Owyhee and Malheur can expect streamflows that are greatly below average in the summer of 2010. Water conservation will be key to managing water supplies this summer.

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 - May 1, 2010

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Malheur R nr Drewsey	MAY-JUL	11.0	18.2	24	69	31	42	35
	MAY-SEP	12.4	19.9	26	70	33	45	37
NF Malheur R at Beulah	MAY-JUL	17.1	22	26	70	30	37	37
	MAY-SEP	18.7	25	29	67	34	42	43
Owyhee R blw Owyhee Dam (2)	MAY-JUL	7.0	38	140	62	240	390	225
	MAY-SEP	8.0	57	165	65	275	430	255
Owyhee R nr Rome	MAY-JUL	49	93	130	62	174	250	210
	MAY-SEP	64	111	150	65	195	275	230

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BEULAH RES	60.0	48.9	35.4	51.2
BULLY CREEK	30.0	23.8	17.0	25.6
OWYHEE	715.0	371.2	412.3	613.6
WARMSPRINGS	191.0	78.8	46.8	149.9

OWYHEE AND MALHEUR BASINS
Watershed Snowpack Analysis - May 1, 2010

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Owyhee	7	131	83
Upper Malheur	3	73	51
Jordan Creek	2	208	88
Bully Creek	0	0	0
Willow Creek	0	0	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.
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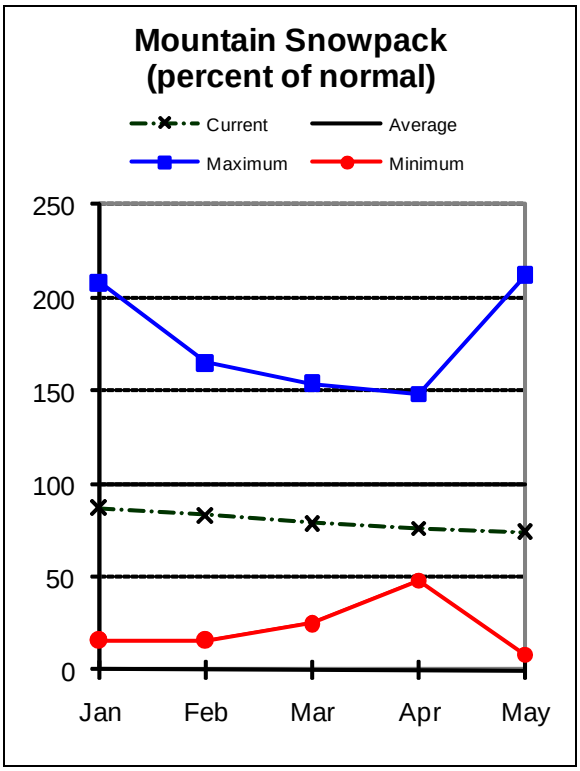
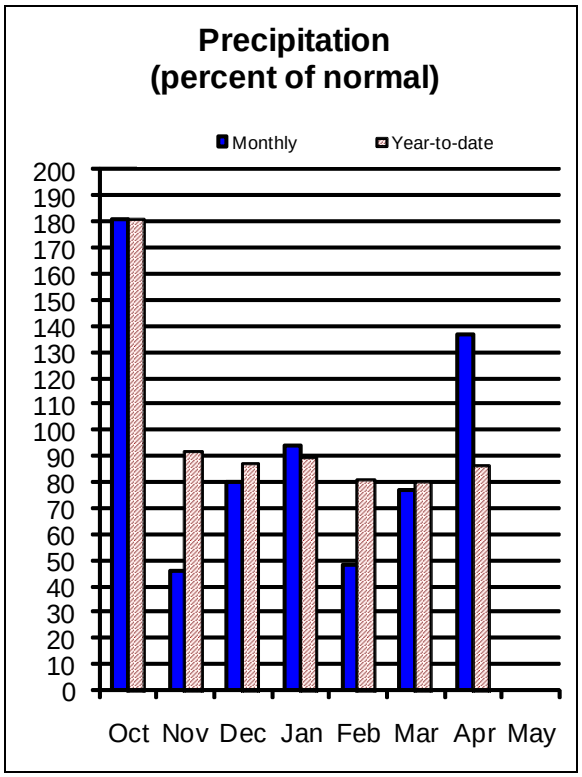
Burnt, Powder, Grand Ronde, and Imnaha Basins

May 1, 2010





Water Supply Outlook

April precipitation in the Burnt, Powder, Pine, Grande Ronde, and Imnaha basins was 137 percent of average. This was only the second month this water year with above average precipitation. Since the beginning of water year 2010, basin wide precipitation has been 86 percent of average. The May 1 snowpack, which was measured at 15 SNOTEL sites, was 74 percent of average.

Unity reservoir storage improved significantly since the last Water Supply Outlook Report on April 1. Other reservoirs in the basin showed modest improvement in storage following April precipitation, snow melt and runoff. May 1 storage at Phillips Lake, Thief Valley and Unity reservoirs was 90 percent of average or 79 percent of capacity.

April precipitation has led to a slight improvement in streamflow forecasts in the basin since last month. The May through September streamflow forecasts range from 69 percent of average for the Burnt River near Hereford to 82 percent of average for Pine Creek near Oxbow. Elsewhere in the basin, the Grande Ronde River at LaGrande is forecast to be 71 percent of average for the May through September period. Water users in the basin can expect streamflows that are well below normal in the summer of 2010. Water conservation measures will be key to managing limited water supplies.

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 - May 1, 2010

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Bear Ck nr Wallowa	MAY-SEP	29	38	44	79	50	59	56
Burnt R nr Hereford	MAY-JUL	5.8	9.2	12.0	69	15.1	20	17.3
	MAY-SEP	6.7	10.3	13.2	69	16.5	22	19.1
Catherine Ck nr Union	MAY-JUL	29	34	38	78	42	48	49
	MAY-SEP	32	37	41	77	45	51	53
Deer Ck nr Sumpter	MAY-JUL	4.1	5.7	7.0	67	8.4	10.7	10.5
Grande Ronde R at La Grande	MAY-JUL	38	57	72	68	89	118	106
	MAY-SEP	41	62	79	71	98	129	112
Grande Ronde R at Troy	MAY-JUL	440	610	685	75	760	930	910
	MAY-SEP	505	690	775	77	860	1050	1010
Imnaha R at Imnaha	MAY-JUL	96	131	155	72	179	215	215
	MAY-SEP	116	153	178	74	205	240	240
Lostine R nr Lostine	MAY-JUL	65	76	83	81	91	103	103
	MAY-SEP	67	79	87	78	96	110	112
Pine Ck nr Oxbow	MAY-JUL	60	77	88	82	99	116	108
	MAY-SEP	65	82	93	82	104	121	114
Powder R nr Sumpter	MAY-JUL	20	26	31	76	36	44	41
	MAY-SEP	19.7	26	31	74	36	45	42
Wolf Ck Reservoir Inflow (2)	MAY-JUN	2.4	4.9	6.6	64	8.3	10.8	10.3

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BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
PHILLIPS LAKE	73.5	54.0	57.0	59.9
THIEF VALLEY	17.4	13.7	13.6	17.5
UNITY	25.2	23.5	24.9	24.3
WALLOWA LAKE	37.5	16.9	19.7	22.6
WOLF CREEK	10.4	10.0	11.1	9.4

BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS
Watershed Snowpack Analysis - May 1, 2010

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Upper Grande Ronde	7	59	76
Wallowa	4	83	87
Imnaha	3	90	84
Powder	7	72	75
Burnt	2	48	52

* 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.

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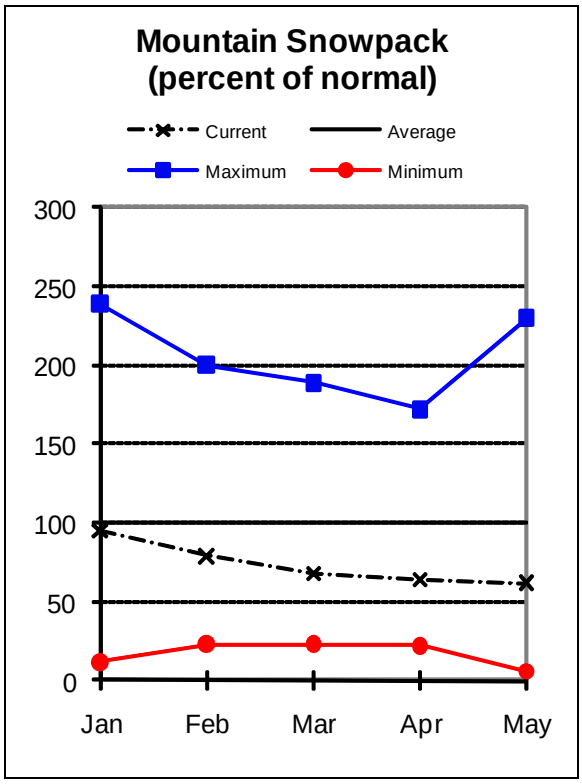
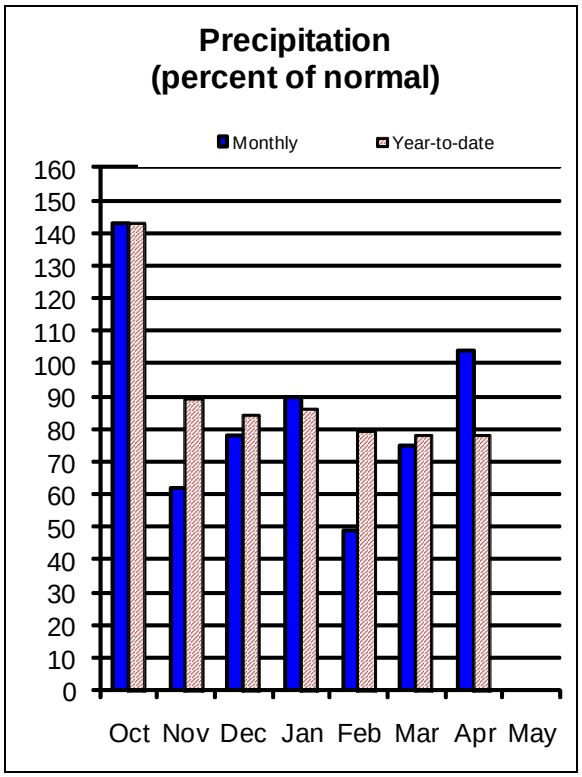
Umatilla, Walla Walla, Willow Rock, and Lower John Day Basins

May 1, 2010





Water Supply Outlook

April precipitation in the Umatilla, Walla Walla, Willow, Rock and Lower John Day basin was steady throughout the month with a few dry days mid month. April precipitation in the basin was 104 percent of average, the lowest in the state. Between 2 and 5 inches of precitation fell at SNOTEL sites in the basin, some of which was in the form of snow. This was only the second month this water year with above average precipitation. As of May 1, total precipitation for water year 2010 has been 78 percent of average. The May 1 snowpack, as measured at 7 SNOTEL sites, was 62 percent of average.

Storage increased measurably at McKay reservoir over the last month, following April precipitation, snow melt and runoff. While these conditions delivered some additional water to irrigation reservoirs in the basin, storage remains well below normal for this time of year. May 1 storage at Cold Springs and MacKay reservoirs was 55 percent of average or 46 percent of capacity.

With the exception of Butter Creek near Pine City, streamflow forecasts have not changed appreciably in the basin since the April Water Supply Outlook report. May through September streamflow forecasts range from 64 percent of average for the Umatilla River at Pendleton, to 81 percent of average for Butter Creek near Pine City. Elsewhere in the basin, the South Fork Walla Walla River near Milton-Freewater is forecast to be 71 percent of average for the same period. Most water users in the Umatilla, Walla Walla, Willow, Rock and Lower John Day basins can expect well below normal streamflow conditions for the summer of 2010. Water conservation measures will be key to managing limited water supplies.

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 - May 1, 2010

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Butter Ck nr Pine City	MAY-JUL	0.5	2.5	3.8	81	5.1	7.1	4.7
	MAY-SEP	0.9	2.9	4.2	76	5.5	7.5	5.5
McKay Ck nr Pilot Rock	MAY-SEP	1.0	4.7	9.5	77	14.3	21	12.4
Rhea Ck nr Heppner	MAY-JUL	0.2	1.8	3.0	88	4.2	6.0	3.4
Umatilla R ab Meacham Ck nr Gibbon	MAY-JUL	10.0	20	27	64	34	44	42
	MAY-SEP	13.8	24	31	65	38	48	48
Umatilla R at Pendleton	MAY-JUL	6.7	32	50	64	68	93	78
	MAY-SEP	9.8	36	54	64	72	98	84
SF Walla Walla R nr Milton-Freewater	MAY-JUL	18.5	24	27	71	30	36	38
	MAY-SEP	26	32	36	71	40	46	51
Willow Ck ab Willow Ck Lake nr Heppn	MAY-JUL	0.1	1.8	2.9	66	4.0	5.8	4.4

UMATILLA, WALLA WALLA, WILLOW, ROCK AND LOWER JOHN DAY BASINS
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
COLD SPRINGS	50.0	21.3	31.4	42.7
MCKAY	73.8	35.8	65.5	61.6
WILLOW CREEK	1.8	0.4	1.8	---

UMATILLA, WALLA WALLA, WILLOW, ROCK AND LOWER JOHN DAY BASINS
Watershed Snowpack Analysis - May 1, 2010

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Walla Walla	2	34	64
Umatilla	5	48	58
McKay Creek	3	0	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.
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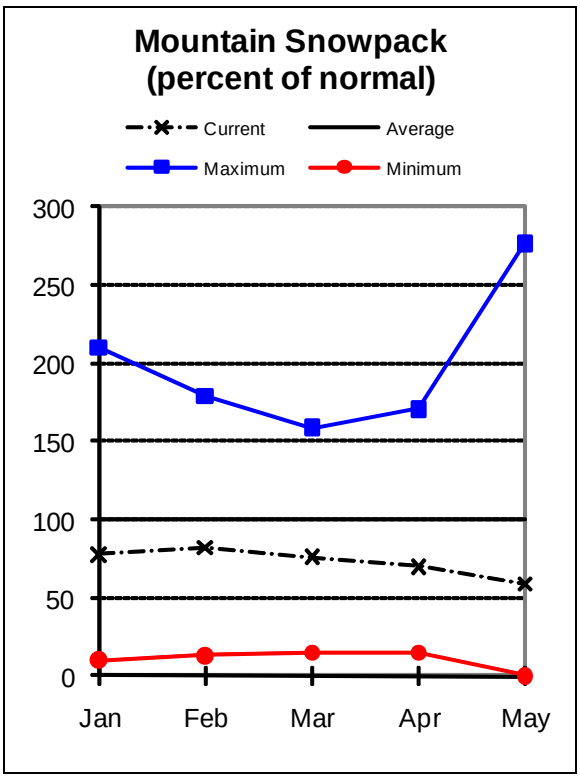
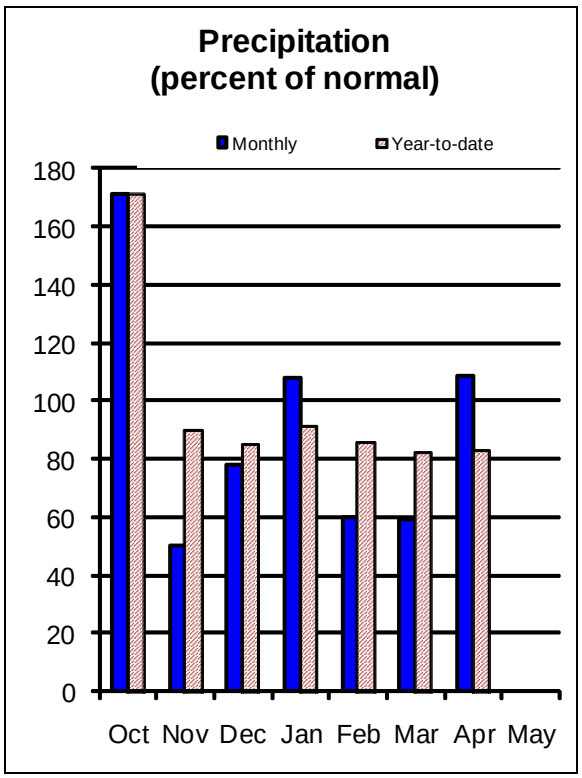
Upper John Day Basin

May 1, 2010





Water Supply Outlook

Snow began to melt and streams began to rise in the Upper John Day during April. The May 1 snowpack in the basin was 59 percent of average, the lowest in the state. Snow measurements were made at 13 SNOTEL sites. Six of these SNOTEL sites were snow free on May 1. Total precipitation for water year 2010 has been 83 percent of average in the Upper John Day basin as of May 1. April precipitation was 109 percent of average.

Summer streamflow forecasts in the Upper John Day basin have not changed appreciably since the April Water Supply Outlook Report. Spring and early summer precipitation will largely influence summer streamflows for the rest of the season. May through September streamflow forecasts range from 60 percent of average for Mountain Creek near Mitchell, to 76 percent of average for North Fork John Day River at Monument. Elsewhere in the basin, Camas Creek near Ukiah is forecast to be 64 percent of average for the same period. Water users in the Upper John Day basin can expect well below normal streamflows for the summer of 2010. Water conservation measures will be key to managing limited water supplies.

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 - May 1, 2010

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Camas Ck nr Ukiah	MAY-JUL	2.4	8.0	11.8	64	15.6	21	18.4
	MAY-SEP	2.8	8.4	12.3	64	16.2	22	19.2
MF John Day R at Ritter	MAY-JUL	24	43	55	71	67	86	78
	MAY-SEP	27	46	59	71	72	91	83
NF John Day R at Monument	MAY-JUL	142	225	285	76	345	430	375
	MAY-SEP	149	235	295	76	355	440	390
Mountain Ck nr Mitchell	MAY-JUL	0.3	1.1	1.6	60	2.2	3.0	2.7
	MAY-SEP	0.3	1.1	1.6	57	2.2	3.0	2.8
Strawberry Ck nr Prairie City	MAY-JUL	2.9	4.1	4.9	74	5.7	6.9	6.6
	MAY-SEP	3.3	4.6	5.4	74	6.2	7.5	7.3

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

UPPER JOHN DAY BASIN
Watershed Snowpack Analysis - May 1, 2010

Watershed	Number of Data Sites	This Year as % of: Last Yr	Average
North Fork John Day	7	68	55
John Day above Kimberly	5	95	66

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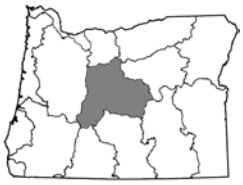
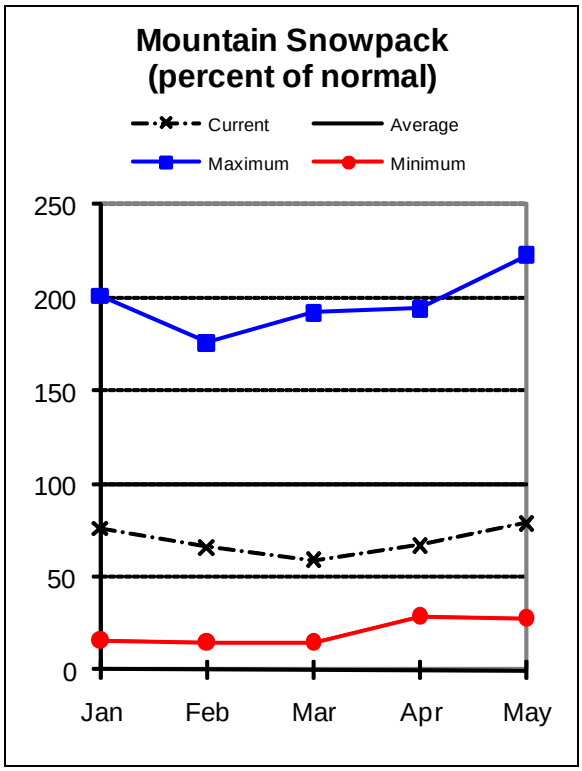
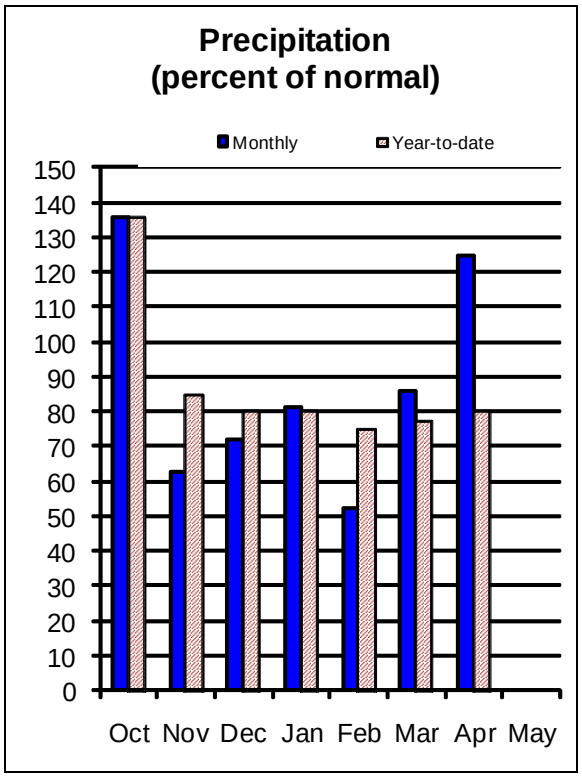


Upper Deschutes and Crooked Basins

May 1, 2010





Water Supply Outlook

Precipitation for the month of April in the Upper Deschutes and Crooked basins was 125 percent of average. This was only the second month this water year with above average precipitation. As of May 1, total precipitation for water year 2010 has been 80 percent of average. The cool April temperatures allowed snow to accumulate at some sites in the basin, aiding the deficient snowpack. On May 1, the snowpack in the Upper Deschutes and Crooked River basins was 79 percent of average. Measurements were taken at 3 snow courses and 14 SNOTEL sites.

April runoff improved storage at Ochoco reservoir while conditions stayed near to normal at the remaining reservoirs in the basin. May 1 storage at five irrigation reservoirs in the Upper Deschutes and Crooked River basins was 105 percent of average, or 91 percent of capacity.

With one exception, there has been minor improvement in basin streamflow forecasts since the April Water Supply Outlook Report. A large improvement in the forecast for Ochoco Reservoir inflow was realized as April precipitation allowed the reservoir to fill. May through September streamflow forecasts range from 51 percent of average for Crescent Creek near Crescent to 80 percent of average for the Ochoco Reservoir inflow. Elsewhere in the basin, the Deschutes River at Benham Falls near Bend is forecast to be 80 percent of average for the May through September period. Water users in the Upper Deschutes and Crooked River basin can expect streamflows that are below average during the summer of 2010. Water conservation measures will be key to managing limited 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

UPPER DESCHUTES AND CROOKED BASINS
Streamflow Forecasts - May 1, 2010

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Crane Prairie Reservoir Inflow (2)	MAY-JUL	23	30	34	69	38	45	49
	MAY-SEP	42	51	57	69	63	72	83
Crescent Ck nr Crescent (2)	MAY-JUL	1.9	5.1	7.2	51	9.3	12.5	14.1
	MAY-SEP	3.7	6.9	9.0	51	11.1	14.3	17.8
Deschutes R at Benham Falls nr Bend	MAY-JUL	191	205	215	80	225	240	270
	MAY-SEP	320	340	355	80	370	390	445
Deschutes R bl Snow Ck nr La Pine	MAY-JUL	5.8	10.8	14.2	53	17.6	23	27
	MAY-SEP	17.2	24	28	53	32	39	53
Little Deschutes R nr La Pine (2)	MAY-JUL	14.6	22	27	52	32	39	52
	MAY-SEP	17.1	25	31	51	37	45	61
Ochoco Reservoir Inflow (2)	MAY-JUL	1.0	4.9	8.2	80	11.5	16.4	10.3
	MAY-SEP	1.0	4.7	8.2	80	11.7	16.8	10.3
Prineville Reservoir Inflow (2)	MAY-JUL	1.7	16.8	27	61	37	52	44
	MAY-SEP	1.3	16.6	27	60	37	53	45
Whychus Ck nr Sisters	MAY-JUL	21	24	25	78	26	29	32
	MAY-SEP	30	32	34	77	36	38	44

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UPPER DESCHUTES AND CROOKED BASINS Reservoir Storage (1000 AF) - End of April					UPPER DESCHUTES AND CROOKED BASINS Watershed Snowpack Analysis - May 1, 2010			
Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg	Watershed	Number of Data Sites	This Year as % of Last Yr	Average
CRANE PRAIRIE	55.3	46.8	49.6	44.9	Crooked	3	110	71
CRESCENT LAKE	86.9	67.9	66.0	55.5	Little Deschutes	4	91	95
OCHOCO	47.5	39.8	32.9	36.0	Deschutes above Wickiup R	4	70	85
PRINEVILLE	153.0	150.6	151.1	145.0	Tumalo and Squaw Creeks	5	78	79
WICKIUP	200.0	190.2	185.5	188.5				

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

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

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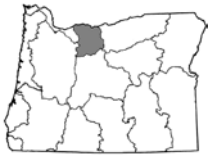
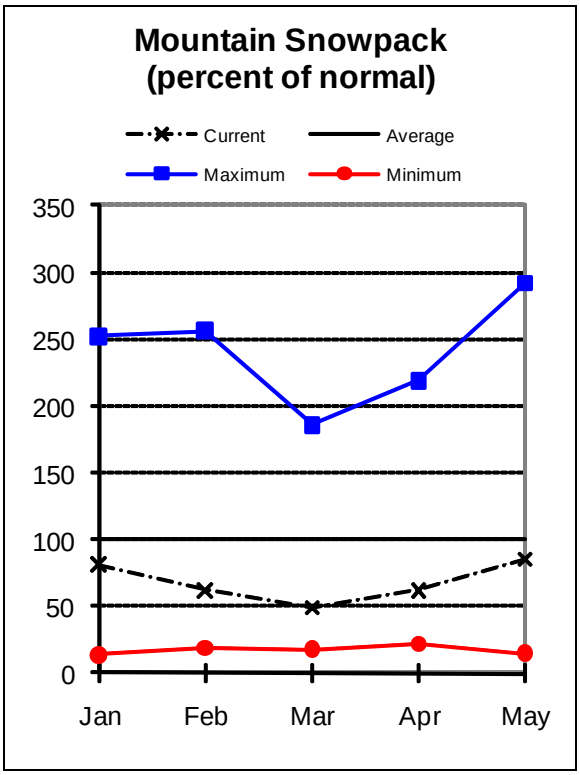
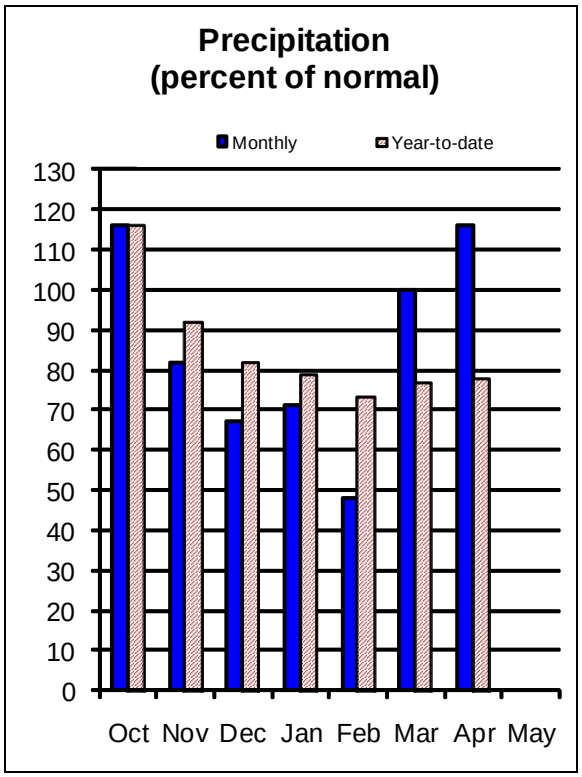


Hood, Mile Creeks, and Lower Deschutes Basins

May 1, 2010





Water Supply Outlook

April precipitation in the Hood, Mile Creeks and Lower Deschutes basins was 116 percent of average. As of May 1, total precipitation since the beginning of the water year has been 78 percent of average. On May 1, the snowpack in the basin was 85 percent of average. Snow measurements were taken at 8 SNOTEL sites.

The May through September streamflow for Hood River at Tucker Bridge is forecast to be 81 percent of average, a significant improvement over last month. Water users in the Hood, Mile Creeks and Lower Deschutes basin can expect reduced streamflows during the summer of 2010. Water conservation measures will be key to managing limited water supplies.

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 - May 1, 2010

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Hood R At Tucker Bridge	MAY-JUL	100	116	126	82	136	152	153
	MAY-SEP	126	145	158	81	171	190	196

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CLEAR LAKE (WASCO)	11.9	4.7	6.6	5.2

HOOD, MILE CREEKS AND LOWER DESCHUTES BASINS
Watershed Snowpack Analysis - May 1, 2010

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Hood River	5	71	88
Mile Creeks	0	0	0
White River	4	51	75

* 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.

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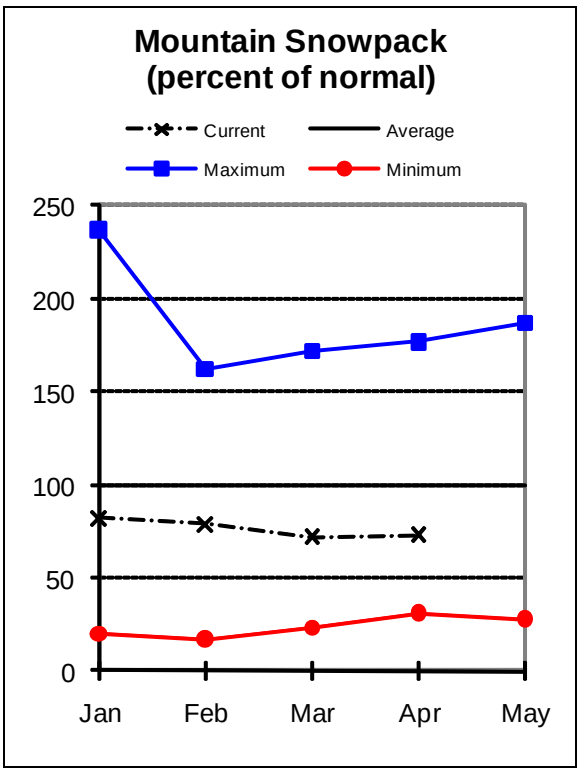
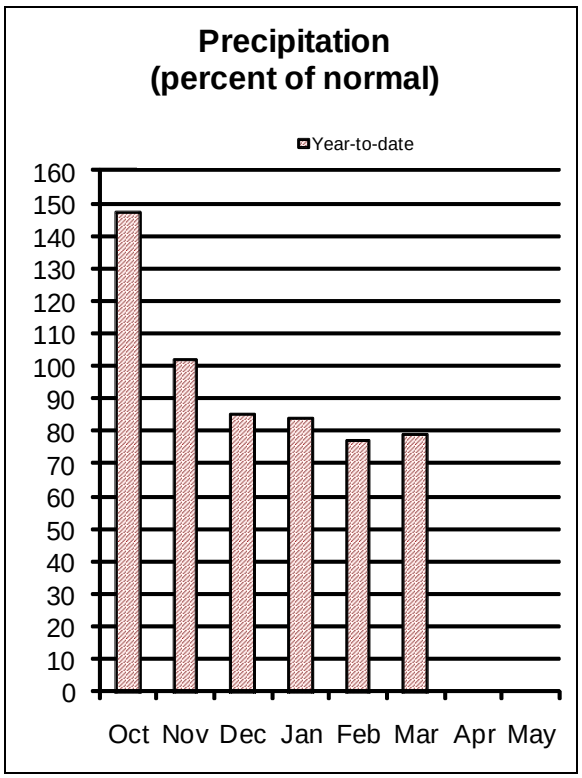
Lower Columbia Basin

May 1, 2010





Water Supply Outlook

Columbia basin snow pack conditions have not changed measurably since the April Water Supply Outlook Report. On May 1, the snowpack in the Columbia basin above The Dalles was 73 percent of average.

Since the beginning of the water year, precipitation in the Columbia basin has been 84 percent of average. Locally, April precipitation in the Sandy basin was 121 percent of average.

The May through September streamflow forecast for the Columbia at The Dalles is 66 percent of average, a minor improvement over last month. For the Sandy near Marmot, the May through September streamflow forecast is 85 percent of average.

Water users throughout the Columbia basin can expect reduced to greatly reduced supplies this coming summer. Water conservation measures will be key to managing limited water supplies.

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 - May 1, 2010

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Columbia R at The Dalles (2)	MAY-JUL	39800	44000	46800	66	49600	53800	70500
	MAY-SEP	47700	52700	56100	66	59500	64500	84500
Sandy R nr Marmot	MAY-JUL	128	157	176	84	195	225	209
	MAY-SEP	166	198	220	85	240	275	259

LOWER COLUMBIA BASIN
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

LOWER COLUMBIA BASIN
Watershed Snowpack Analysis - May 1, 2010

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Sandy	7	54	85

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

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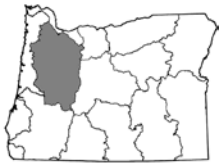
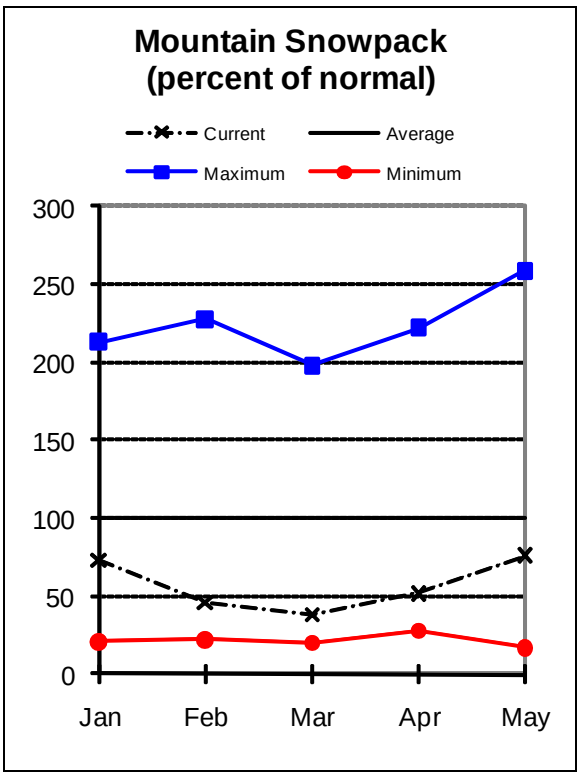
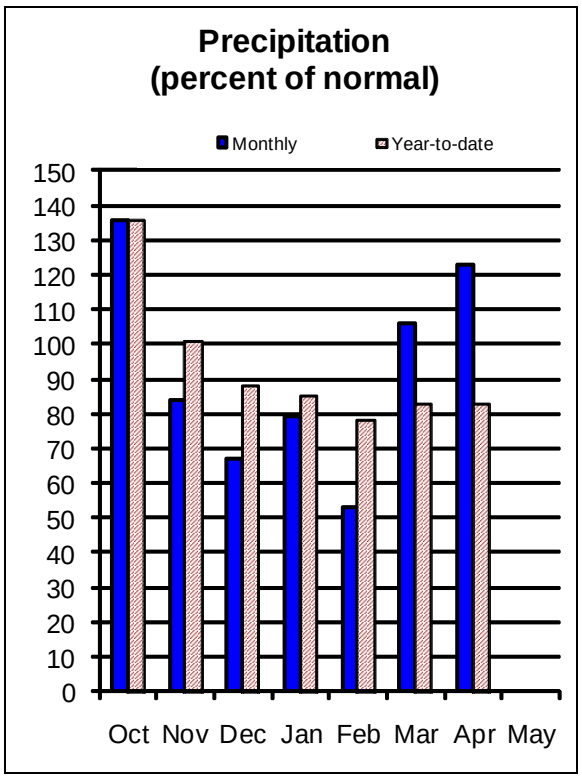


Willamette Basin

May 1, 2010





Water Supply Outlook

March and April precipitation in the Willamette basin were above normal, helping to offset an unusually dry winter. April precipitation in the Willamette basin was 123 percent of average. As of May 1, total precipitation for water year 2010 has been 83 percent of average. Cool April temperatures allowed snow to accumulate at some sites in the basin and slowed the melt at others. These conditions aided the deficient winter snowpack. On May 1, the snowpack in the Willamette basin was 76 percent of average. Snow measurements were taken at 20 SNOTEL sites.

April runoff greatly improved storage at many Willamette Valley flood control reservoirs. The May 1 storage did not change appreciably at Henry Hagg and Timothy lake reservoirs. May 1 storage at these 2 Willamette basin reservoirs was 104 percent of average, or 99 percent of capacity. Stream systems within the Willamette basin that rely more on spring rainfall than mountain snowmelt saw great improvements to their forecasts since the April Water Supply Outlook Report.

The May through September streamflow forecasts for the Willamette basin range from 76 percent of average for both the Clackamas River at Estacada and the Willamette River at Salem to 95 percent of average for the South Santiam at Waterloo. Elsewhere in the basin, the McKenzie near Vida is forecast to be 82 percent of average for the May through September period. Most forecast points in the basin range from 79 to 89 percent of average. Water users in the basin can expect below normal water supplies this coming summer. Water conservation measures will be key to managing limited water supplies.

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 - May 1, 2010

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Blue Lake Inflow (1,2)	MAY-JUN	9.2	26	34	79	42	59	43
	MAY-SEP	12.0	29	37	79	45	62	47
Clackamas R at Estacada	MAY-JUL	220	280	320	77	360	420	418
	MAY-SEP	290	355	400	76	445	510	526
Clackamas R ab Three Lynx (2)	MAY-JUL	181	220	245	79	270	310	312
	MAY-SEP	240	280	310	78	340	380	400
Cottage Grove Lake Inflow (1,2)	MAY-JUN	1.8	9.6	15.5	85	21	34	18.2
	MAY-SEP	2.0	10.8	17.0	85	23	37	20
Cougar Lake Inflow (1,2)	MAY-JUN	54	82	95	81	108	136	117
	MAY-SEP	84	116	130	81	144	176	161
Detroit Lake Inflow (1,2)	MAY-JUN	124	205	245	86	285	365	286
	MAY-SEP	225	330	375	86	420	525	438
Dorena Lake Inflow (1,2)	MAY-JUN	6.5	37	56	86	75	116	65
	MAY-SEP	3.3	45	64	85	83	125	75
Fall Creek Lake Inflow (1,2)	MAY-JUN	3.7	33	47	90	61	90	52
	MAY-SEP	7.6	37	57	91	77	120	63
Fern Ridge Lake Inflow (1,2)	MAY-JUN	2.0	11.5	16.7	90	22	33	18.6
	MAY-SEP	1.2	3.9	9.5	90	15.1	28	10.6
Foster Lake Inflow (1,2)	MAY-JUN	154	199	220	87	240	285	253
	MAY-SEP	210	260	280	87	300	350	321
Green Peter Lake Inflow (1,2)	MAY-JUN	46	107	135	80	163	225	168
	MAY-SEP	73	141	172	80	205	270	215

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WILLAMETTE BASIN
Streamflow Forecasts - May 1, 2010

		30%	50%	70%	30%	70%	30%	50%	70%
Hills Creek Reservoir Inflow (1,2)	MAY-JUN	62	104	123	80	142	184	154
	MAY-SEP	114	159	180	80	200	245	225
Little North Santiam R nr Mehama (1)	MAY-JUN	12.3	45	60	85	75	108	71
	MAY-SEP	21	58	75	84	92	129	89
Lookout Point Lake Inflow (1,2)	MAY-JUN	149	265	315	80	365	480	395
	MAY-SEP	250	385	445	80	505	640	558
McKenzie R bl Trail Bridge (2)	MAY-JUL	134	153	165	86	177	196	193
	MAY-SEP	196	220	235	84	250	275	279
McKenzie R nr Vida (1,2)	MAY-JUN	260	375	425	82	475	590	519
	MAY-SEP	525	665	730	82	795	935	888
Mohawk R nr Springfield	MAY-JUL	18.6	33	42	100	51	65	42
Oak Grove fk above Power Intake	MAY-JUL	60	68	74	82	80	88	90
	MAY-SEP	86	97	104	82	111	122	127
North Santiam R at Mehama (1,2)	MAY-JUN	138	255	310	80	365	480	390
	MAY-SEP	240	385	450	79	515	660	572
South Santiam R at Waterloo (2)	MAY-JUN	61	138	190	95	240	320	200
	MAY-SEP	200	280	335	95	390	470	353
Scoggins Ck nr Gaston (2)	MAY-JUL	1.9	3.8	5.0	93	6.2	8.1	5.4
Thomas Ck nr Scio	MAY-JUL	12.5	27	37	95	47	62	39
Willamette R at Salem (1,2)	MAY-JUN	730	1380	1670	76	1960	2610	2203
	MAY-SEP	1280	1990	2310	76	2630	3340	3036

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WILLAMETTE BASIN
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BLUE RIVER	85.5	74.9	66.9	70.1
COTTAGE GROVE	29.8	24.7	22.3	25.9
COUGAR	155.2	83.3	106.1	188.3
DETROIT	300.7	258.2	275.9	293.6
DORENA	70.5	57.8	51.8	62.0
FALL CREEK	115.5	106.5	94.6	96.8
FERN RIDGE	109.6	92.0	85.4	93.4
FOSTER	29.7	3.1	1.0	11.7
GREEN PETER	268.2	238.7	189.1	286.4
HILLS CREEK	200.2	144.8	175.5	209.8
LOOKOUT POINT	337.0	182.6	273.7	265.0
TIMOTHY LAKE	61.7	60.6	57.3	56.9
HENRY HAGG LAKE	53.0	53.1	53.4	52.7

WILLAMETTE BASIN
Watershed Snowpack Analysis - May 1, 2010

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Clackamas	4	24	61
McKenzie	7	59	69
Row River	1	41	64
Santiam	6	49	59
Middle Fork Willamette	7	68	88

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

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Salem - (503) 399-5746; Dallas - (503) 623-5534
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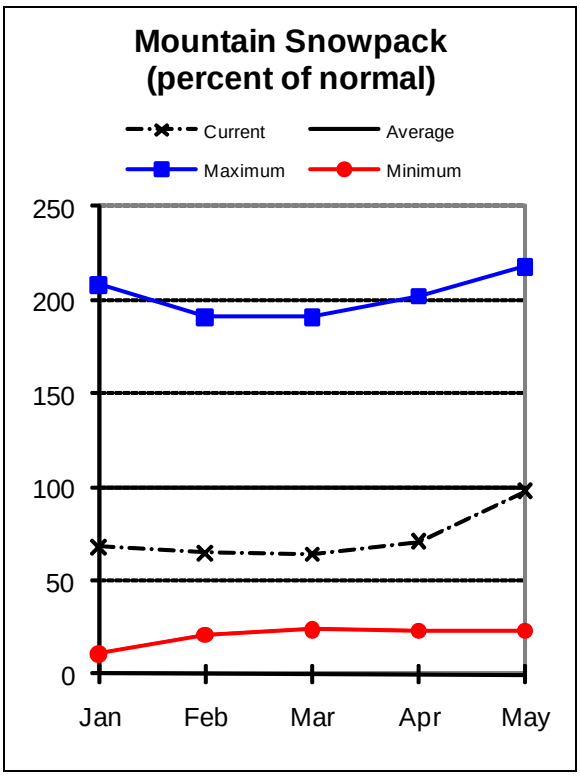
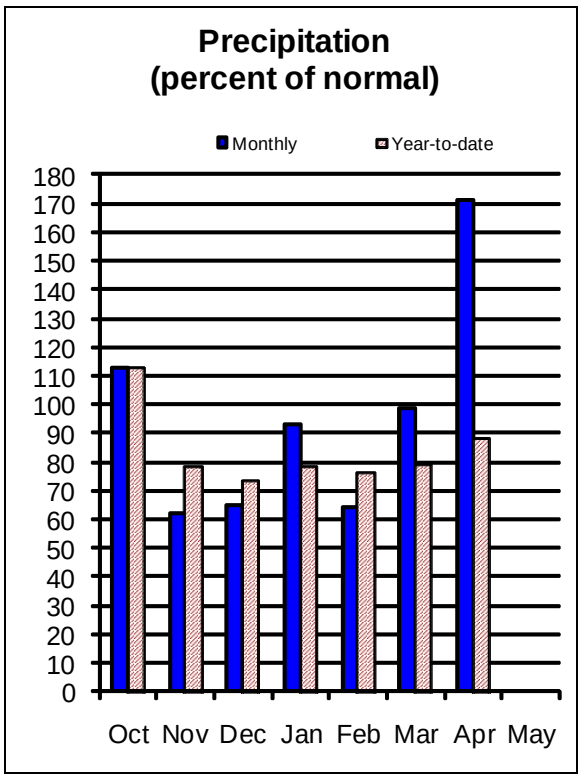
Rogue and Umpqua Basins

May 1, 2010





Water Supply Outlook

April precipitation was 171 percent of average in the Rogue and Umpqua basins, the highest in the state. April was only the second month this water year to post above average precipitation in the basin. On May 1, total accumulated precipitation for water year 2010 was 88 percent of average, a significant improvement from last month. Cool April temperatures allowed snow to accumulate at several sites in the basin and slowed the melt at others. The May 1 snowpack in the Rogue and Umpqua basins was 98 percent of average. Combined, these conditions helped to improve the water supply outlook in the basin. Snow measurements were collected at 15 snow courses and 12 SNOTEL sites.

April runoff improved the storage at many basin reservoirs. The May 1 storage at 5 irrigation reservoirs in the Rogue and Umpqua basin was 91 percent of average, or 75 percent of capacity. The Rogue and Umpqua basin saw a great improvement in streamflow forecasts since the April Water Supply Outlook Report. The May through September streamflow forecasts for the Rogue and Umpqua basin range from 78 percent of average for the Rogue at Raygold to average flows at a number of sites in the basin. Specifically, the South Umpqua at Tiller, the Illinois River at Kerby and the Applegate Lake Inflow are now forecast to be 100 percent of average for the May through September period. Due to the favorable effect of generous April precipitation, many water users in the Rogue and Umpqua basins can now expect near normal water supplies 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

ROGUE AND UMPQUA BASINS
Streamflow Forecasts - May 1, 2010

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *						
		90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	
Applegate Lake Inflow (2)	MAY-JUL	51	63	72	100	81	93	72
	MAY-SEP	56	69	78	100	87	100	78
SF Big Butte Ck nr Butte Falls	MAY-JUL	12.9	17.1	20	91	23	27	22
	MAY-SEP	19.5	25	28	90	31	37	31
Cow Ck nr Azalea (2)	MAY-JUL	2.4	5.7	7.9	100	10.1	13.4	7.9
	MAY-SEP	3.2	6.7	9.1	100	11.5	15.0	9.1
Hyatt Prairie Reservoir Inflow (2)	MAY-JUL	0.4	1.4	2.1	88	2.8	3.8	2.4
Illinois R at Kerby	MAY-JUL	39	65	83	100	101	127	83
	MAY-SEP	45	72	90	100	108	135	90
NF Little Butte Ck nr Lakecreek (2)	MAY-JUL	17.4	21	24	96	27	31	25
	MAY-SEP	29	34	38	96	42	47	40
Lost Creek Lake Inflow (2)	MAY-JUL	280	320	345	91	370	410	380
	MAY-SEP	385	435	465	90	495	545	515
Rogue R at Raygold (2)	MAY-JUL	235	320	375	78	430	515	480
	MAY-SEP	350	440	500	78	560	650	645
Rogue R at Grants Pass (2)	MAY-JUL	260	350	410	87	470	560	470
	MAY-SEP	370	470	535	87	600	700	615
Sucker Ck bl Ltl Grayback Ck nr Holl	MAY-JUL	21	27	31	100	35	41	31
	MAY-SEP	25	31	35	100	39	45	35
North Umpqua R at Winchester	MAY-JUL	310	405	470	96	535	630	490
	MAY-SEP	430	525	590	96	655	750	615
South Umpqua R nr Brockway	MAY-JUL	74	143	191	100	240	310	191
	MAY-SEP	88	160	210	100	260	330	210
South Umpqua R at Tiller	MAY-JUL	52	84	106	100	128	160	106
	MAY-SEP	61	94	116	100	138	171	116

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

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
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
APPLEGATE	75.2	61.5	47.7	64.5
EMIGRANT LAKE	39.0	35.3	38.8	35.9
FISH LAKE	8.0	5.1	6.6	6.2
FOURMILE LAKE	16.1	9.7	13.2	11.0
HOWARD PRAIRIE	60.0	42.1	56.7	48.8
HYATT PRAIRIE	16.1	12.8	16.0	13.3
LOST CREEK	315.0	139.1	175.9	283.2

ROGUE AND UMPQUA BASINS
Watershed Snowpack Analysis - May 1, 2010

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Applegate	5	195	107
Bear Creek	4	185	107
Little Butte Creek	6	91	102
Illinois	1	0	102
North Umpqua	7	70	85
Rogue River above Grants	20	121	98

* 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.

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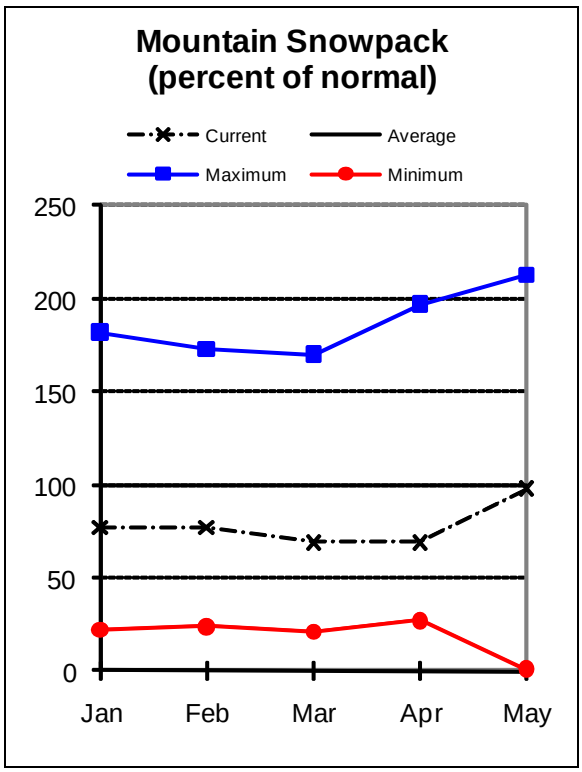
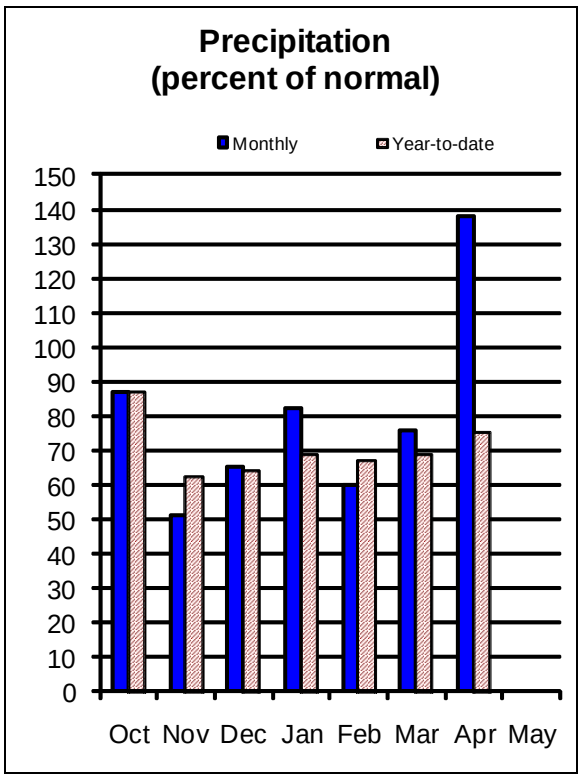
Klamath Basin

May 1, 2010





Water Supply Outlook

April 2010 precipitation in the Klamath basin was 138 percent of average. This is the only month since the water year began in October to bring above average precipitation to the Klamath basin. SNOTEL sites in the Klamath basin measured from 3 to 7 inches of precipitation for the month. As of May 1, total accumulated precipitation for water year 2010 in the Klamath basin has been only 75 percent of average, the lowest in the state. The snowpack showed gains during the early part of April but began to melt by mid month at most sites. As of May 1, the snowpack in the Klamath basin was 98 percent of average. While this number is near average, the snow pack failed to reach its normal peak this winter. The May 1 percent of average reflects a late melt out of a below normal winter snowpack. Snow measurements for May 2010 were collected at 4 snow courses and 15 SNOTEL sites.

April precipitation, snowmelt, and streamflow runoff offered little improvement to Klamath Basin reservoirs. The May 1 storage at Upper Klamath Lake, Clear Lake (CA) and Gerber reservoirs was 54 percent of average or 39 percent of capacity. Clear Lake reservoir is especially low this year at only 30 percent of average. There has been little change in the summer streamflow forecasts since the last report in April. The May through September forecasts range from 32 percent of average for Gerber Reservoir Inflow, to 66 percent of average for the Williamson River below Sprague River near Chiloquin. Elsewhere in the basin, the Upper Klamath Lake Inflow forecast for the May through September period is 60 percent of average. Water users in the Klamath basin can expect water supplies to be greatly below average this coming season. Water conservation measures will be key to managing limited water supplies.

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 - May 1, 2010

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Clear Lake Inflow (2)	MAY-JUL	0.6	3.5	7.0	36	10.5	15.8	19.3
	MAY-SEP	0.8	2.9	9.0	35	15.1	24	26
Gerber Reservoir Inflow (2)	MAY-JUL	0.1	0.7	2.0	31	6.1	12.0	6.4
	MAY-SEP	0.1	0.7	2.1	32	6.1	12.0	6.6
Sprague R nr Chiloquin	MAY-JUL	30	57	75	59	93	120	128
	MAY-SEP	42	71	90	58	109	138	155
Upper Klamath Lake Inflow	MAY-JUL	73	133	160	63	187	245	255
	MAY-SEP	112	176	205	60	235	300	340
Williamson R bl Sprague R nr Chiloqu	MAY-JUL	85	115	135	66	155	185	205
	MAY-SEP	123	154	175	66	196	225	265

KLAMATH BASIN
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CLEAR LAKE (CALIF)	513.3	78.2	89.5	264.3
GERBER	94.3	36.1	57.6	72.9
UPPER KLAMATH LAKE	523.7	327.1	444.0	483.4

KLAMATH BASIN
Watershed Snowpack Analysis - May 1, 2010

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Lost	2	187	0
Sprague	5	197	109
Upper Klamath Lake	7	101	99
Williamson River	5	103	89

* 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.

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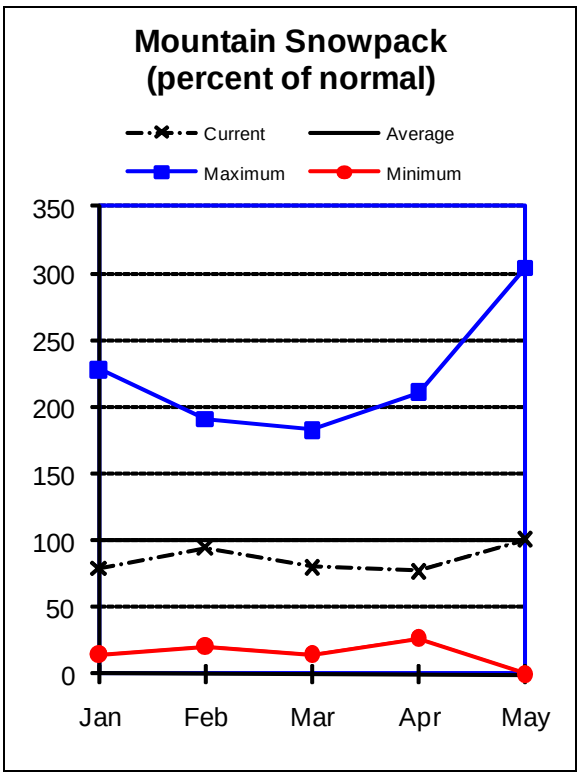
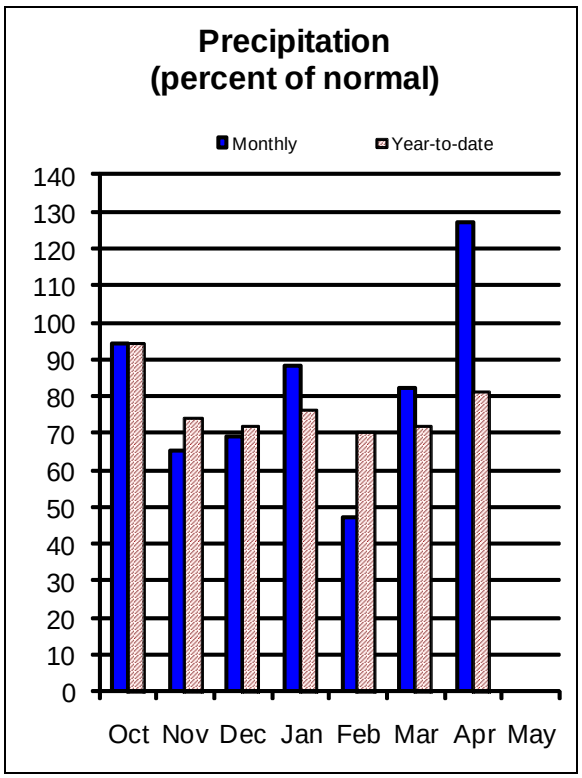
Lake County and Goose Lake

May 1, 2010





Water Supply Outlook

April precipitation in the Lake County and Goose Lake basins was 127 percent of average. This is the first time since the beginning of the water year that monthly precipitation has been above normal in Lake County and Goose Lake basin. Since the beginning of the water year, total precipitation in the basin has been 81 percent of average. Cool temperatures and steady precipitation attenuated the snowmelt in the basin, partially mitigating the winter snowpack deficit. On May 1, the snowpack in the Lake County and Goose Lake basins was near average. Five SNOTEL sites in the basin were snow free on May 1. Snow measurements were collected at 9 SNOTEL sites.

Spring runoff greatly improved storage conditions at Drews reservoir, although storage in the basin remains low. The May 1 storage at Cottonwood and Drews reservoirs was 42 percent of average or 34 percent of capacity. April showers recharged streams and reservoirs in Lake County and Goose Lake basins. The May through September streamflow forecasts range from 44 percent of average for Honey Creek near Plush to 68 of average for the Chewaucan near Paisley. Elsewhere in the basin, Twenty Mile Creek near Adel is forecast to be 66 percent of average for the May through September period. Water users in the Lake County and Goose Lake basins can expect reduced streamflows during the summer of 2010. Water conservation measures will be key to managing limited water supplies.

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 - May 1, 2010

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Chewacan R nr Paisley	MAY-JUL	18.7	29	36	69	43	53	52
	MAY-SEP	20	31	38	68	45	56	56
Deep Ck ab Adel	MAY-JUL	7.6	18.6	26	58	33	44	45
	MAY-SEP	8.4	19.5	27	57	35	46	47
Honey Ck nr Plush	MAY-JUL	4.4	4.5	4.6	43	4.8	4.9	10.8
	MAY-SEP	4.6	4.7	4.8	44	4.9	5.0	11.0
Silver Ck nr Silver Lake (2)	MAY-JUL	0.1	1.5	3.2	59	4.9	7.4	5.4
	MAY-SEP	0.1	1.6	3.5	59	5.4	8.1	6.0
Twentymile Ck nr Adel	MAY-JUL	0.2	4.0	7.0	66	10.0	14.3	10.6
	MAY-SEP	0.3	4.3	7.3	66	10.3	14.7	11.1

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
COTTONWOOD	8.7	6.3	9.3	6.7
DREWS	63.0	18.1	22.0	51.0

LAKE COUNTY AND GOOSE LAKE BASINS
Watershed Snowpack Analysis - May 1, 2010

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Chewaucan River	3	207	119
Deep Creek	0	0	0
Drew Creek	2	0	0
Honey Creek	0	0	0
Silver Creek (Lake Co.)	4	207	110
Twentymile Creek	0	0	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. (2) - The value is natural volume - actual volume may be affected by upstream water management.

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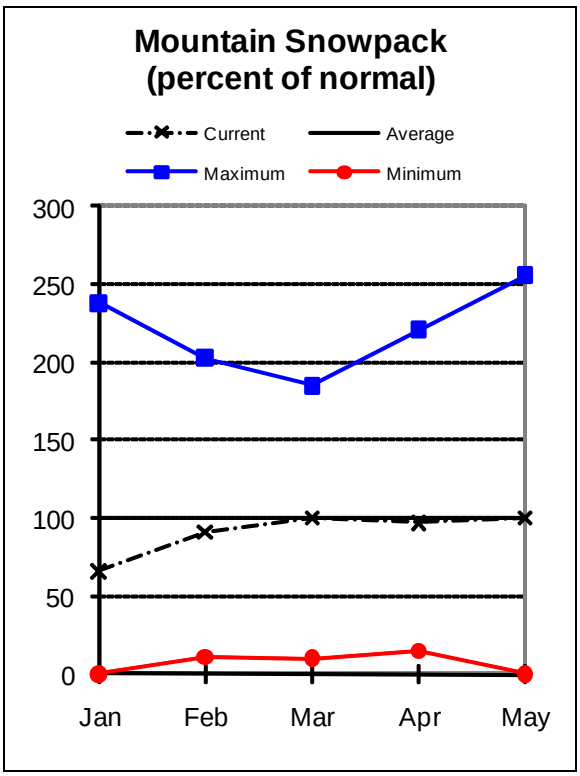
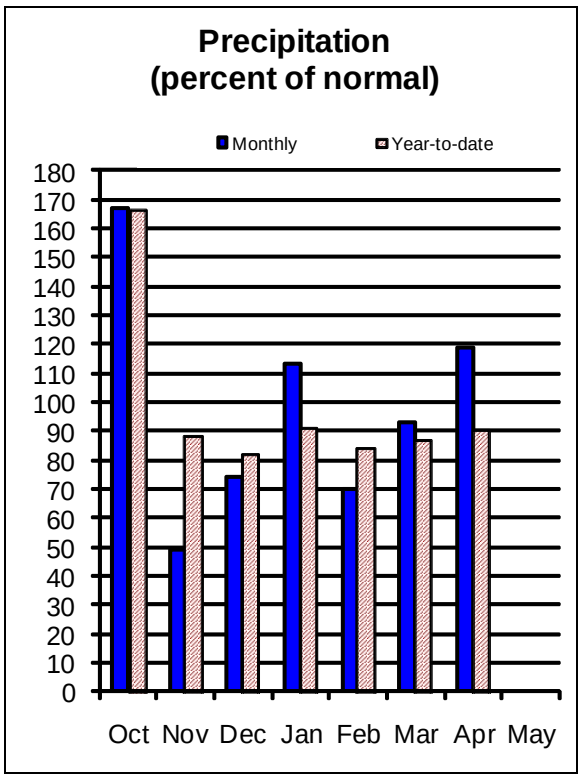
Harney Basin

May 1, 2010





Water Supply Outlook

SNOTEL sites in the basin recorded from 2 to 5.6 inches of precipitation for the month. April precipitation in the Harney basin was 119 percent of average. As of May 1, total precipitation since the beginning of the water year has been 90 percent of average, the highest in the state. Snow melted at lower elevations and accumulated at higher elevations during April in the Harney basin. Cool, moist conditions mitigated the rapid snow melt observed earlier in the season. On May 1, the snowpack in the Harney basin was 100 percent of average. Five SNOTEL sites in the basin were snow free on May 1. Snow measurements were taken at 9 SNOTEL sites.

Well timed April precipitation contributed to improve streamflow forecasts within the Harney basin since the April Water Supply Outlook Report. The April through September streamflow forecast for the Donner Und Blitzen River near Frenchglen is expected to be 93 percent of average. The Silvies River near Burns is expected to be 81 percent of average for the same period. Elsewhere in the basin, Trout Creek near Denio is forecast to be 39 percent of average for the May through September period. Water users in the Harney basin can expect below to well below average streamflows during the summer of 2010. Water conservation measures will be key to managing limited water supplies.

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 - May 1, 2010

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Donner Und Blitzen R nr Frenchglen	MAY-JUL	24	37	45	90	53	66	50
	MAY-SEP	30	43	52	93	61	74	56
Silvies R nr Burns	MAY-JUL	4.7	26	40	82	54	75	49
	MAY-SEP	5.4	27	42	81	57	79	52
Trout Ck nr Denio	MAY-JUL	0.2	1.3	2.5	35	3.8	5.6	7.2
	MAY-SEP	0.2	1.6	3.0	39	4.4	6.3	7.8

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

HARNEY BASIN
Watershed Snowpack Analysis - May 1, 2010

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Donner und Blitzen River	2	137	116
Silver Creek (Harney Co.)	2	273	111
Silvies River	5	135	77
Trout Creek	2	140	103

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

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Recession Forecasts for Oregon

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

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

OWYHEE AND MALHEUR BASINS					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ----------*			*LONG-TERM AVERAGE VALUE*
		90%	*50%*	*10%*	
Owyhee R nr Rome	2000 cfs	observed	Apr 28		**May 6**
Owyhee R nr Rome	1000 cfs	observed	May 6		**May 18**
Owyhee R nr Rome	500 cfs	Apr 24	May 19	Jun 13	**Jun 2**

UPPER JOHN DAY BASIN					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ----------*			*LONG-TERM AVERAGE VALUE*
		90%	*50%*	*10%*	
John Day R at Service Creek	Average Daily Flow on Aug. 1st	55	240	425	**271**

UPPER DESCHUTES AND CROOKED BASINS					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ----------*			*LONG-TERM AVERAGE VALUE*
		90%	*50%*	*10%*	
Crane Prairie Inflow *	Date of Peak	May 13	May 27	Jun 10	**May 25**
Crane Prairie Inflow	Peak Flow	115	235	355	**403**
Crane Prairie Inflow	Average Daily Flow on Oct. 1st	134	167	200	**269**
Prineville Reservoir Inflow	113 cfs	May 19	May 29	Jun 15	**June 3**
Prineville Reservoir Inflow	75 cfs	May 27	Jun 7	Jun 21	**June 11**
Prineville Reservoir Inflow	50 cfs	May 31	Jun 15	Jun 30	**June 19**
Whychus Creek nr Sisters	100 cfs	Jul 6	Jul 29	Aug 22	**August 16**

*No prediction possible until April 1. Historic values are shown for reference prior to the April 1 report.

ROGUE AND UMPQUA BASINS					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ----------*			*LONG-TERM AVERAGE VALUE*
		90%	*50%*	*10%*	
South Umpqua R nr Brockway *	90 cfs	Jul 23	Aug 7	Aug 23	**August 8**
South Umpqua R at Tiller	140 cfs	Jun 29	Jul 17	Aug 4	**July 11**
South Umpqua R at Tiller	90 cfs	Jul 20	Aug 7	Aug 25	**August 1**
South Umpqua R at Tiller	60 cfs	Aug 5	Aug 29	Sep 22	**August 28**

*Dates are based on streamflow data adjusted for releases from Galesville Reservoir to reflect natural flow conditions and do not match observed gage data. There is an approximately 20% chance in any given year that the flow will not recede below 90 cfs; the dates given here are for the event that the flow does recede below 90 cfs.

LAKE COUNTY AND GOOSE LAKE BASINS					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ----------*			*LONG-TERM AVERAGE VALUE*
		90%	*50%*	*10%*	
Deep Ck ab Adel	100 cfs	May 23	Jun 7	Jun 22	**June 17**
Honey Ck nr Plush	100 cfs	Apr 19	May 14	Jun 8	**May 16**
Honey Ck nr Plush	50 cfs	May 9	Jun 1	Jun 24	**June 4**
Twentymile Ck nr Adel	50 cfs	May 14	May 19	Jun 8	**May 30**
Twentymile Ck nr Adel	10 cfs	Jun 9	Jun 28	Jul 17	**July 7**

HARNEY BASIN					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ----------*			*LONG-TERM AVERAGE VALUE*
		90%	*50%*	*10%*	
Silvies R nr Burns	400 cfs	observed	May 5		**May 21**
	200 cfs	May 5	May 26	Jun 16	**June 2**
	100 cfs	May 17	Jun 8	Jun 30	**June 13**
	50 cfs	Jun 8	Jul 1	Jul 24	**July 3**
Donner Und Blitzen R nr Frenchglen	200 cfs	Jun 7	Jun 22	Jul 7	**June 20**
Donner Und Blitzen R nr Frenchglen	100 cfs	Jun 27	Jul 12	Jul 28	**July 9**

Summary of Snow Course Data

May 2010

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
Oregon						
ANEROID LAKE SNOTEL	7400	5/01/10	80	20.6	22.8	26.2
ANNIE SPRING SNOTEL	6010	5/01/10	98	40.5	33.5	39.7
ANTHONY LAKE (REV)	7130	4/29/10	52	18.6	33.9	--
ARBUCKLE MTN SNOTEL	5770	5/01/10	25	10.8	15.1	15.0
BEAVER DAM CREEK	5100	4/27/10	7	2.5	4.0	4.1
BEAVER RES. SNOTEL	5150	5/01/10	1	.5	5.9	1.4
BIG RED MTN SNOTEL	6050	5/01/10	76	29.6	18.4	26.4
BIGELOW CAMP SNOTEL	5130	5/01/10	19	6.6	.0	6.5
BILLIE CK DVD SNOTEL	5280	5/01/10	33	14.0	15.4	10.2
BLAZED ALDER SNOTEL	3650	5/01/10	45	16.2	48.0	23.3
BLUE MTN SPGS SNOTEL	5870	5/01/10	9	4.9	6.7	8.3
BOURNE SNOTEL	5850	5/01/10	8	4.4	5.2	9.1
BOWMAN SPRNGS SNOTEL	4530	5/01/10	0	.0	.0	.8
CALIBAN ALT	6500	4/30/10	95	33.8	17.8	31.5
CASCADE SUM. SNOTEL	5100	5/01/10	65	27.0	31.1	27.9
CHEMULT ALT SNOTEL	4850	5/01/10	0	.0	.0	.7
CLACKAMAS LK. SNOTEL	3400	5/01/10	0	.0	7.3	2.3
CLEAR LAKE SNOTEL	3810	5/01/10	0	.0	13.3	5.8
COLD SPRINGS SNOTEL	5940	5/01/10	57	22.0	24.6	21.3
COUNTY LINE SNOTEL	4830	5/01/10	0	.1	.0	.4
CRAZYMAN FLAT SNOTEL	6180	5/01/10	16	8.2	1.2	6.3
DALY LAKE SNOTEL	3690	5/01/10	3	1.4	12.0	3.9
DEADWOOD JUNCTION	4600	4/27/10	0	.0	.0	.8
DERR SNOTEL	5850	5/01/10	11	2.5	6.8	6.5
DIAMOND LAKE SNOTEL	5280	5/01/10	8	3.6	8.9	6.3
EILERTSON SNOTEL	5510	5/01/10	0	.0	2.2	3.4
EMIGRANT SPGS SNOTEL	3800	5/01/10	0	.0	.0	.1
FISH CREEK SNOTEL	7660	5/01/10	80	32.4	23.2	28.6
FISH LK. SNOTEL	4660	5/01/10	12	3.6	2.0	1.4
FOURMILE LAKE SNOTEL	5970	5/01/10	55	21.6	24.3	23.5
GERBER RES SNOTEL	4890	5/01/10	0	.0	.0	.0
GOLD CENTER SNOTEL	5410	5/01/10	0	.0	.0	1.0
GREENPOINT SNOTEL	3310	5/01/10	14	5.0	15.8	4.4
HIGH RIDGE SNOTEL	4920	5/01/10	25	9.3	26.9	15.9
HOGG PASS SNOTEL	4790	5/01/10	56	20.9	22.8	34.3
HOLLAND MDWS SNOTEL	4930	5/01/10	29	10.8	26.6	17.0
HOWARD PRAIRIE	4500	4/27/10	0	.0	.0	.9
HUNGRY FLAT	4400	4/29/10	0	.0	.0	.0
IRISH-TAYLOR SNOTEL	5540	5/01/10	90	32.5	39.7	38.8
JUMP OFF JOE SNOTEL	3520	5/01/10	0	.0	9.3	3.5
KING MTN #1	4500	4/26/10	3	.8	.4	2.8
KING MTN #2 SNOTEL	4340	5/01/10	0	.0	.0	.9
KING MTN #3	3650	4/26/10	0	.0	.0	.0
KING MTN #4	3050	4/26/10	0	.0	.0	.0
LAKE CK R.S. SNOTEL	5240	5/01/10	0	.0	.0	1.3
LITTLE MEADOW SNOTEL	4020	5/01/10	45	19.1	32.1	16.9
LUCKY STRIKE SNOTEL	4970	5/01/10	0	.0	.0	2.7
MADISON BUTTE SNOTEL	5150	5/01/10	0	.0	.4	.4
MARION FORKS SNOTEL	2590	5/01/10	0	.0	5.6	3.6
MCKENZIE SNOTEL	4770	5/01/10	72	30.6	54.1	40.0
MILLER WOODS SNOTEL	420	5/01/10	0	.0	.0	--
MOSS SPRINGS SNOTEL	5760	5/01/10	46	17.8	24.5	22.3
MT ASHLAND SWBK.	6400	4/30/10	92	32.5	17.2	33.0
MT HOOD TEST SNOTEL	5370	5/01/10	126	49.8	69.4	63.9
MT HOWARD SNOTEL	7910	5/01/10	39	15.0	22.5	16.9
MUD RIDGE SNOTEL	4070	5/01/10	47	17.5	40.9	18.2
NEW CRESCENT SNOTEL	4910	5/01/10	0	.0	.0	3.0
NEW DUTCHMAN #3	6320	4/29/10	101	42.0	52.2	55.4

Oregon (continued)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
NORTH FK RES SNOTEL	3060	5/01/10	24	11.0	35.1	6.9
OCHOCO MEADOW SNOTEL	5430	5/01/10	1	.5	.4	1.8
PARK H.Q. REV	6550	4/28/10	133	54.0	59.0	63.1
PEAVINE RIDGE SNOTEL	3420	5/01/10	2	.8	15.4	3.7
QUARTZ MTN SNOTEL	5720	5/01/10	0	.0	.0	.1
R.R. OVERPASS SNOTEL	2680	5/01/10	0	.0	.0	.0
RED BUTTE #1	4560	4/26/10	8	2.5	13.8	6.7
RED BUTTE #2	4000	4/26/10	0	.0	.0	2.1
RED BUTTE #3	3500	4/26/10	0	.0	.0	.2
RED BUTTE #4	3000	4/26/10	0	.0	.0	.0
RED HILL SNOTEL	4410	5/01/10	90	42.2	42.2	42.5
ROARING RIVER SNOTEL	4950	5/01/10	49	20.1	36.9	24.0
ROCK SPRINGS SNOTEL	5290	5/01/10	0	.0	.0	.1
SADDLE MTN SNOTEL	3110	5/01/10	0	.0	.0	2.1
SALT CK FALLS SNOTEL	4220	5/01/10	24	8.3	25.7	10.5
SANTIAM JCT. SNOTEL	3740	5/01/10	0	.0	3.4	8.0
SCHNEIDER MDW SNOTEL	5400	5/01/10	37	17.7	14.1	20.2
SEINE CREEK SNOTEL	2060	5/01/10	0	.0	.0	.0
SEVENMILE MARSH SNTL	5700	5/01/10	62	24.8	25.7	22.6
SILVER BURN	3720	4/28/10	0	.0	1.7	.9
SILVER CREEK SNOTEL	5740	5/01/10	0	.0	.0	1.6
SILVIES SNOTEL	6990	5/01/10	39	16.1	12.3	13.3
SKI BOWL ROAD	6000	4/30/10	70	26.2	12.7	23.1
SNOW MTN SNOTEL	6220	5/01/10	20	8.2	3.0	7.4
SF BULL RUN SNOTEL	2690	5/01/10	0	.1	6.0	.1
STARR RIDGE SNOTEL	5250	5/01/10	0	.0	.0	.0
STRAWBERRY SNOTEL	5770	5/01/10	0	.0	.0	.8
SUMMER RIM SNOTEL	7080	5/01/10	43	14.8	9.9	13.0
SUMMIT LAKE SNOTEL	5610	5/01/10	104	40.3	43.2	39.4
SUN PASS SNOTEL	5400	5/01/10	26	11.8	5.6	--
SWAN LAKE MTN SNOTEL	6830	5/01/10	50	20.9	11.2	--
TANGENT	5400	4/29/10	21	7.8	1.6	11.3
TAYLOR BUTTE SNOTEL	5030	5/01/10	0	.0	.0	.1
TAYLOR GREEN SNOTEL	5740	5/01/10	29	12.7	10.2	10.3
THREE CK MEAD SNOTEL	5690	5/01/10	41	16.5	15.7	15.3
TIPTON SNOTEL	5150	5/01/10	6	3.0	6.3	4.8
TOKETEE AIRSTRIP SN	3240	5/01/10	0	.0	.0	.1
WOLF CREEK SNOTEL	5630	5/01/10	17	6.0	11.7	9.8
California						
ADIN MOUNTAIN	6350	4/29/10	31	11.0	4.2	6.5
ADIN MTN SNOTEL	6190	5/01/10	21	9.7	1.7	6.8
CEDAR PASS SNOTEL	7030	5/01/10	37	12.2	10.0	14.3
CROWDER FLAT SNOTEL	5170	5/01/10	0	.0	.0	.0
DISMAL SWAMP SNOTEL	7360	5/01/10	66	26.7	25.1	24.9
Idaho						
MUD FLAT SNOTEL	5730	5/01/10	0	.0	.0	.0
SOUTH MTN SNOTEL	6500	5/01/10	21	8.3	4.0	9.4
Nevada						
BEAR CREEK SNOTEL	7800	5/01/10	48	14.4	20.8	19.0
BIG BEND SNOTEL	6700	5/01/10	8	2.1	.0	2.3
BUCKSKIN,L SNOTEL	6700	5/01/10	3	1.0	.0	3.7
DISASTER PEAK SNOTEL	6500	5/01/10	0	.0	.0	2.9
FAWN CREEK SNOTEL	7050	5/01/10	32	10.5	9.9	14.5
GRANITE PEAK SNOTEL	7800	5/01/10	40	13.5	12.4	24.2
JACK CREEK, U SNOTEL	7280	5/01/10	43	13.4	14.7	17.0
LAMANCE CREEK SNOTEL	6000	5/01/10	0	.0	.0	3.9
LAUREL DRAW SNOTEL	6700	5/01/10	10	3.0	.0	1.6
SEVENTYSIX CK SNOTEL	7100	5/01/10	15	4.0	.4	3.9
TAYLOR CANYON SNOTEL	6200	5/01/10	1	.3	.0	.3

(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

		<<====== Drier ====== Future Conditions ======= Wetter =====>>				
		Chance Of Exceeding *				
Forecast Point	Forecast Period	90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (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.*

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