



United States
Department of
Agriculture



Natural Resources
Conservation
Service

Oregon Basin Outlook Report

April 1, 2010



(photo courtesy of Kurt Moffitt, NRCS)

The above photo was taken on April 1st at the New Dutchman #3 snow course near Mt. Bachelor in the Deschutes River basin. Winter storms returned to Oregon at the end of March, bringing some improvement to snowpack conditions across the state. However, while spring snowfall might delay water supply shortfalls, snowpack across most of Oregon is still below average for the winter. As of April 1, the statewide snowpack was 67% of average.

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General Outlook

April 1, 2010

SUMMARY

In a reversal of seasons, the beginning of March was warm, sunny and spring-like, while the period after the equinox brought wintery conditions to the mountains of Oregon. Across much of the state, the first three weeks of the month saw below normal precipitation and above normal temperatures. The snowpack was rapidly melting. Mild, spring-like weather dominated the days before equinox. Once the calendar officially welcomed spring, a series of cold, wet storms moved into the region bringing a wintery weather to Oregon.

The precipitation brought by the end of month storms was welcome in what otherwise has been a dry water year. Despite these storms, many basins in the state had yet another month with below normal precipitation. Much of the late month precipitation came in the form of snow to the mountains providing a boost to the lagging snowpack. By the end of the month, the snowpack was being refreshed, halting the early melt out.

A couple of weeks of winter in April will benefit the water supply conditions by slowing the melt of the snowpack. This season, the snowpack failed to build to normal levels in many Oregon basins. A cool spring will help keep some of that snow in the mountains which will help to delay the onset of low summer streamflows.

In March, the State of Oregon issued a drought declaration for Klamath and surrounding counties reflecting the current water supply conditions in the region.

SNOWPACK

Despite the waist deep fresh powder in the mountains, the April 1 snow pack is still well below average in most basins of the state. Winter snows failed to deliver a base to the snowpack this winter in all but the Owyhee, Malheur and Harney basins. While spring snows will assist in supplementing early season runoff, the lack of total seasonal snowpack will affect streamflows throughout the summer.

As of April 1, basin snowpack conditions in Oregon range from a low of 52 percent of average in the Willamette Basin to a high of 116 percent of average in the Owyhee and Malheur basins. First of April aerial marker flights scheduled for the Wallowas and Lake County were unfortunately cancelled due to poor visibility. Snow measurements for April 1 were recorded at 77 SNOTEL sites, 35 snow courses and 13 aerial markers across the state.

PRECIPITATION

As of April 1, every basin in Oregon has a precipitation deficit for water year 2010. Since the beginning of the water year on October 1, precipitation in Oregon ranges from 69 percent of average in the Klamath basin to 87 percent of average in the Harney basin. March precipitation totals ranged from a low of 59 percent of average in the Upper John Day to a high of 106 percent of average in the Willamette basin.

RESERVOIRS

April 1 storage at 26 major Oregon reservoirs analyzed in this publication was 64 percent of average. A total of 1,583,600 acre feet of water was stored as of April 1, representing 49 percent of useable capacity. Last year at this time, these same reservoirs stored 1,865,600 acre feet of water.

Reservoir storage in many areas across Oregon is well below average for this time of year, increasing the potential for water shortages during the upcoming summer season.

STREAMFLOW

Streamflow forecasts at most points in the state have not changed significantly since last month's report. The small changes are reflective of March precipitation and April 1 snow conditions. Water users throughout Oregon should expect streamflows that are well below normal this coming summer. Water conservation will be key to managing water supplies in Oregon this summer.

STREAM	PERIOD	PERCENT OF AVERAGE
Owyhee Reservoir Inflow	April-September	58
Grande Ronde R at La Grande	April-September	69
Umatilla R at Pendleton	April-September	66
Deschutes R at Benham Falls	April-September	75
MF Willamette R bl NF	April-September	69
Rogue R at Raygold	April-September	62
Upper Klamath Lake Inflow	April-September	60
Silvies R nr Burns	April-September	76

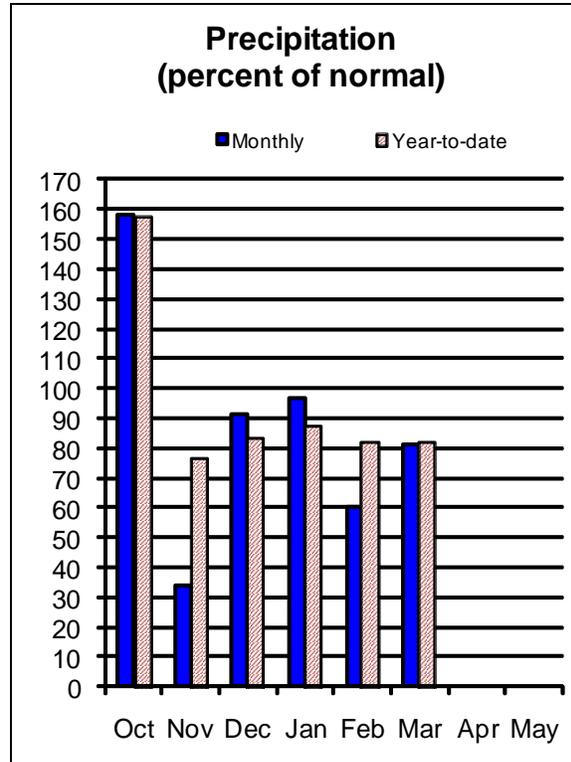
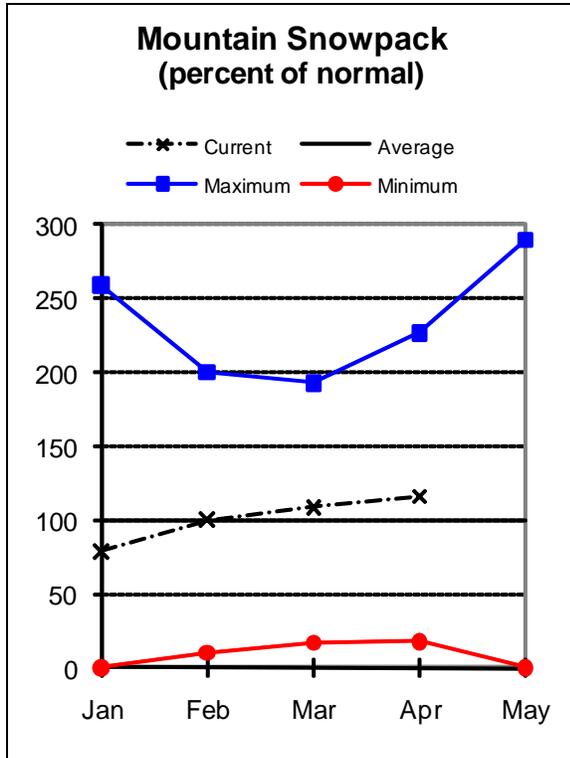
The forecasts in this bulletin are a result of coordinated activity between the Natural Resources Conservation Service and the National Weather Service as an effort to provide the best possible service to water users.

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, April through June.



Owyhee and Malheur Basins

April 1, 2010



Water Supply Outlook

This region has benefited from storm tracks that bypassed the rest of the state. March precipitation in the Owyhee and Malheur basins was 81 percent of average. Since the beginning of the water year, precipitation in the Owyhee and Malheur basins has been 82 percent of average. The April 1 snowpack, as measured at 6 snow courses, 18 aerial markers and 10 SNOTEL sites, was 116 percent of average. The Owyhee and Malheur basin had the best snowpack in Oregon as of April 1.

April 1 storage at the four irrigation reservoirs in the Owyhee and Malheur basins was 47 percent of average, or 38 percent of capacity. March runoff contributed significantly to April 1 reservoir storage in the basin.

Streamflow forecasts have improved in the Owyhee since last month due to a continued above average snowpack. The April through September streamflow forecasts in the Owyhee and Malheur basins range from 58 percent of average for the Owyhee River below Owyhee Dam to 73 percent of average for the North Fork Malheur at Beulah. 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/cgi-bin/bor.pl>

OWYHEE AND MALHEUR BASINS
Streamflow Forecasts - April 1, 2010

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>					30-Yr Avg. (1000AF)					
		90% (1000AF)		70% (1000AF)		Chance Of Exceeding * 50% (1000AF) (% AVG.)		30% (1000AF)		10% (1000AF)		
Malheur R nr Drewsey	APR-JUL	24	37	48	65	60	81	74				
	APR-SEP	27	42	53	70	66	87	76				
NF Malheur R at Beulah	APR-JUL	28	36	42	70	48	59	60				
	APR-SEP	33	42	48	73	55	66	66				
Owyhee R blw Owyhee Dam (2)	APR-JUL	8.0	98	225	56	350	540	400				
	APR-SEP	9.0	124	250	58	375	560	430				
Owyhee R nr Rome	APR-JUL	92	164	225	59	295	415	380				
	APR-SEP	102	177	240	60	310	435	400				

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

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

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	30.3	27.2	47.2	Owyhee	21	129	115
BULLY CREEK	30.0	24.0	15.7	24.1	Upper Malheur	8	107	121
OWYHEE	715.0	276.3	354.4	593.0	Jordan Creek	4	134	118
WARMSPRINGS	191.0	46.2	36.9	133.5	Bully Creek	3	0	328
					Willow Creek	4	87	167

* 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.

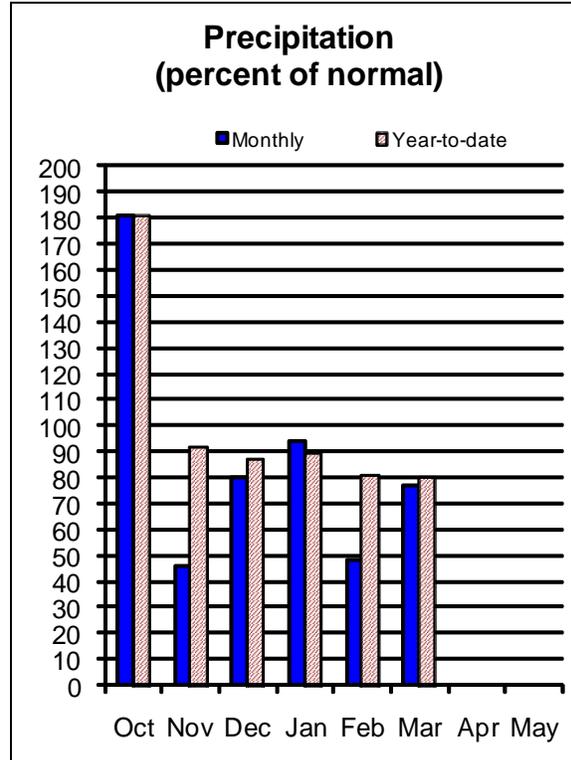
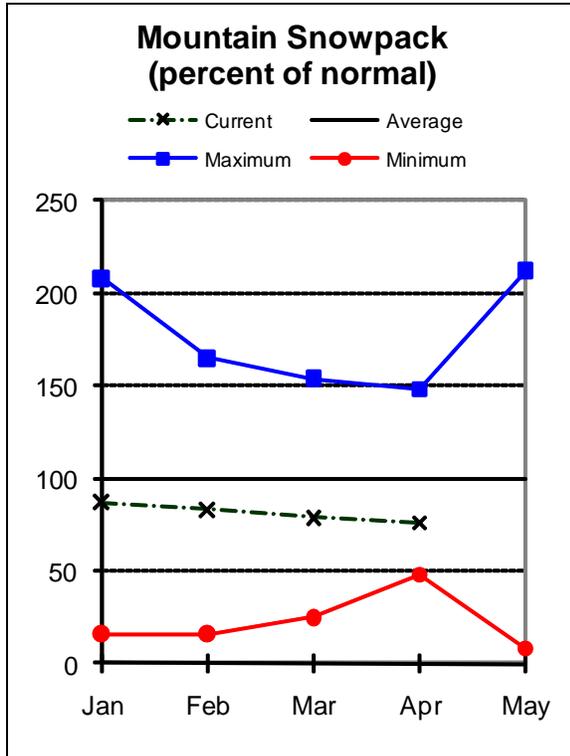
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Burnt, Powder, Grand Ronde, and Imnaha Basins

April 1, 2010



Water Supply Outlook

March precipitation in the Burnt, Powder, Pine, Grande Ronde, and Imnaha basins was 77 percent of average. Since the beginning of water year 2010, basin wide precipitation has been 80 percent of average. The April 1 snowpack, which was measured at 6 snow courses, 1 aerial marker and 15 SNOTEL sites, was 76 percent of average.

March runoff delivered little new storage to reservoirs in the basin. April 1 storage at Phillips Lake, Thief Valley and Unity reservoirs was 82 percent of average or 63 percent of capacity. There have been minor changes in the streamflow forecasts since last month, reflecting variability in the local snowpack and precipitation conditions. The April through September streamflow forecasts range from 67 percent of average for the Burnt River near Hereford, to 76 percent of average for the Lostine River near Lostine and Pine Creek near Oxbow. Elsewhere in the basin, the Grande Ronde River at LaGrande is forecast to be 69 percent of average for the April 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>

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BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS
Streamflow Forecasts - April 1, 2010

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Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
Bear Ck nr Wallowa	APR-SEP	30	40	46	71	52	62	65
Burnt R nr Hereford	APR-JUL	13.4	19.3	24	65	29	38	37
	APR-SEP	14.8	21	26	67	31	40	39
Catherine Ck nr Union	APR-JUL	32	39	44	71	49	58	62
	APR-SEP	35	42	47	71	52	61	66
Grande Ronde R at La Grande	APR-JUL	76	104	125	69	148	185	182
	APR-SEP	78	108	130	69	155	194	188
Grande Ronde R at Troy	APR-JUL	605	840	945	74	1050	1290	1270
	APR-SEP	660	915	1030	75	1150	1400	1370
Imnaha R at Imnaha	APR-JUL	116	157	185	69	215	255	270
	APR-SEP	137	180	210	71	240	285	295
Lostine R nr Lostine	APR-JUL	69	79	86	77	93	105	112
	APR-SEP	73	84	92	76	100	113	121
Pine Ck nr Oxbow	APR-JUL	71	96	113	76	130	155	148
	APR-SEP	75	100	117	76	134	159	154
Powder R nr Sumpter	APR-JUL	30	37	42	72	47	56	58
	APR-SEP	30	38	43	73	49	58	59
Wolf Ck Reservoir Inflow (2)	APR-JUN	2.5	5.8	8.0	54	10.2	13.5	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, 2010			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of Last Yr Average	
		This Year	Last Year	Avg				
PHILLIPS LAKE	73.5	44.9	43.4	50.8	Upper Grande Ronde	9	61	77
THIEF VALLEY	17.4	13.7	13.7	17.9	Wallowa	4	81	80
UNITY	25.2	14.9	19.4	21.1	Imnaha	4	96	79
WALLOWA LAKE	37.5	13.9	16.8	19.6	Powder	11	77	81
WOLF CREEK	10.4	4.6	4.3	5.8	Burnt	5	83	97

* 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.

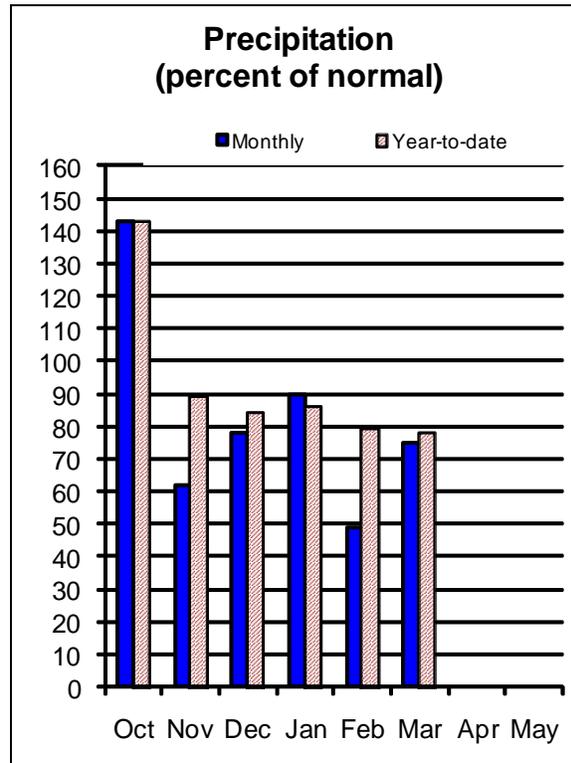
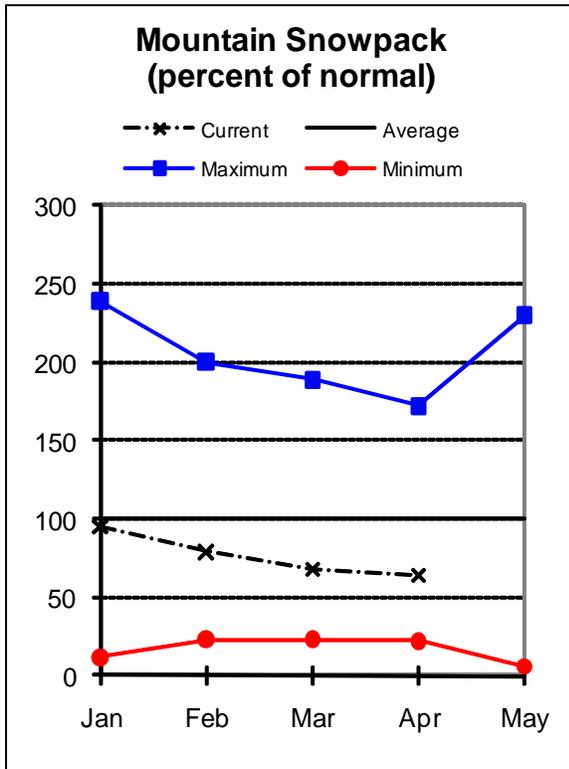
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Umatilla, Walla Walla, Willow Rock, and Lower John Day Basins

April 1, 2010



Water Supply Outlook

March precipitation in the basin was 75 percent of average. As of April 1, total precipitation for water year 2010 has been 78 percent of average. The April 1 snowpack, as measured at 2 snow courses and 7 SNOTEL sites, was 64 percent of average.

March runoff delivered some additional storage to irrigation reservoirs in the basin. However, reservoir storage remains well below normal for this time of year. April 1 storage at Cold Springs and MacKay reservoirs was 45 percent of average or 35 percent of capacity.

Summer streamflow forecasts have not changed significantly since last month. April through September streamflow forecasts range from 66 percent of average for the Umatilla River at Pendleton, to 72 percent of average for McKay Creek near Pilot Rock and for South Fork Walla Walla River near Milton-Freewater. 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 - April 1, 2010

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
Butter Ck nr Pine City	APR-JUL	2.4	4.8	6.4	68	8.0	10.4	9.4
	APR-SEP	2.9	5.3	6.9	68	8.5	10.9	10.2
McKay Ck nr Pilot Rock	APR-SEP	2.5	12.6	19.5	72	26	37	27
Rhea Ck nr Heppner	APR-JUL	0.1	2.7	4.5	74	6.3	9.0	6.1
Umatilla R ab Meacham Ck nr Gibbon	APR-JUL	27	40	49	67	58	71	73
	APR-SEP	31	44	53	67	62	75	79
Umatilla R at Pendleton	APR-JUL	48	78	98	66	118	148	149
	APR-SEP	51	81	102	66	123	153	155
SF Walla Walla R nr Milton-Freewater	APR-JUL	29	35	39	72	43	49	54
	APR-SEP	36	43	48	72	53	60	67
Willow Ck ab Willow Ck Lake nr Heppn	APR-JUL	0.9	3.2	4.8	65	6.4	8.7	7.4

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

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

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	18.4	27.7	40.1	Walla Walla	3	52	70
MCKAY	73.8	24.7	55.9	56.6	Umatilla	7	52	67
WILLOW CREEK	1.8	1.9	1.6	---	McKay Creek	4	34	50

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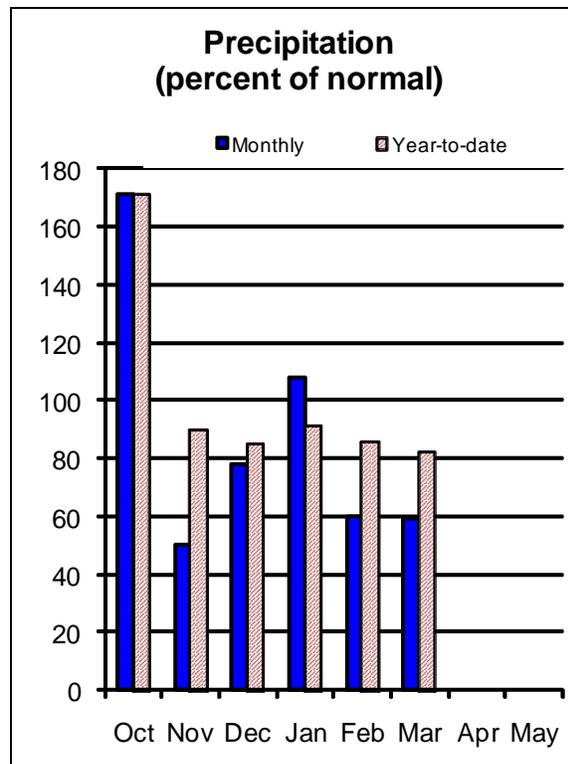
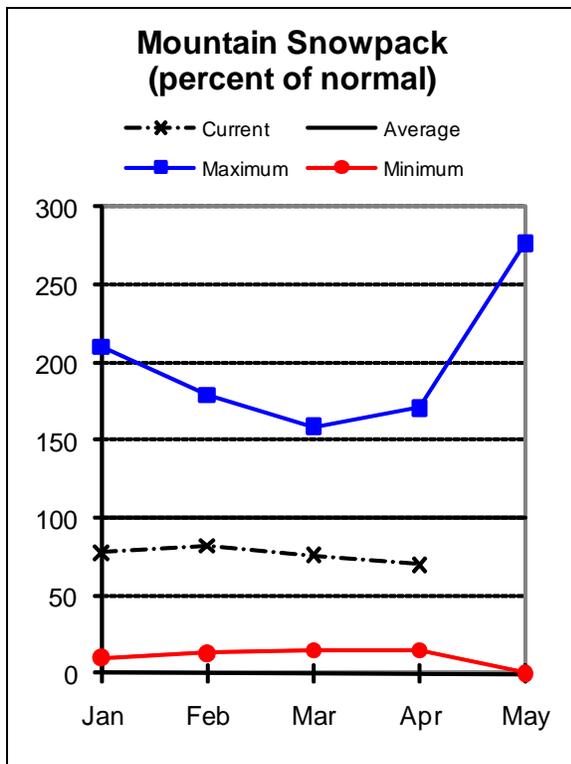
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Upper John Day Basin

April 1, 2010



Water Supply Outlook

As of April 1, total precipitation for water year 2010 was 82 percent of average in the basin. March precipitation was only 59 percent of average, the lowest in the state. On April 1, the snowpack in the basin, as measured at 1 snow course and 13 SNOTEL sites, was 70 percent of average.

There has been a small decline in water supply forecasts since last month, reflecting the well below average March precipitation. April through September streamflow forecasts range from 65 percent of average for Mountain Creek near Mitchell, to 78 percent of average for Strawberry Creek near Prairie City. Elsewhere in the basin, the North Fork John Day River at Monument is forecast to be 70 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/cgi-bin/bor.pl>

UPPER JOHN DAY BASIN
Streamflow Forecasts - April 1, 2010

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
Camas Ck nr Ukiah	APR-JUL	11.8	19.0	24	65	29	36	37
	APR-SEP	12.7	20	25	66	30	37	38
MF John Day R at Ritter	APR-JUL	41	65	81	66	97	121	123
	APR-SEP	44	68	85	66	102	126	128
NF John Day R at Monument	APR-JUL	245	345	415	70	485	585	595
	APR-SEP	255	360	430	70	500	605	615
Mountain Ck nr Mitchell	APR-JUL	1.0	2.1	2.9	64	3.7	4.8	4.5
	APR-SEP	1.1	2.2	3.0	65	3.8	5.0	4.6
Strawberry Ck nr Prairie City	APR-JUL	3.0	4.5	5.5	78	6.5	8.0	7.1
	APR-SEP	3.5	5.0	6.1	78	7.2	8.7	7.8

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

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

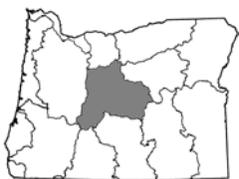
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					North Fork John Day	7	67	66
					John Day above Kimberly	5	78	76

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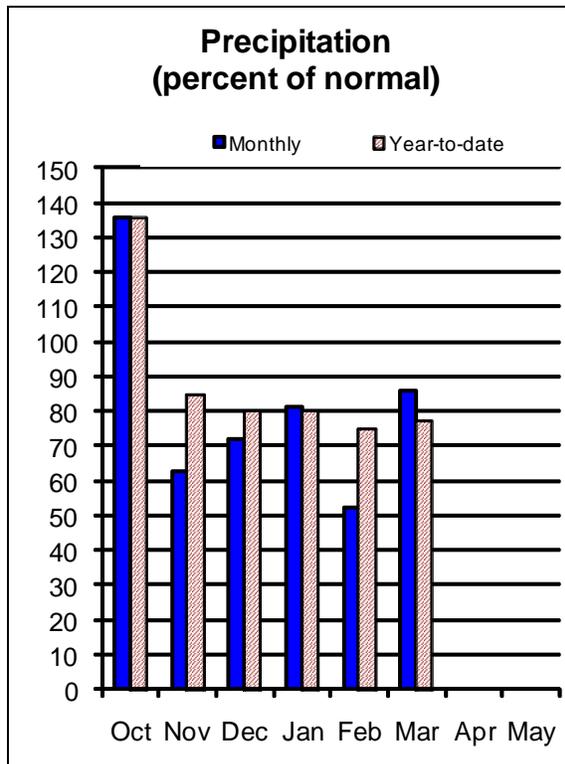
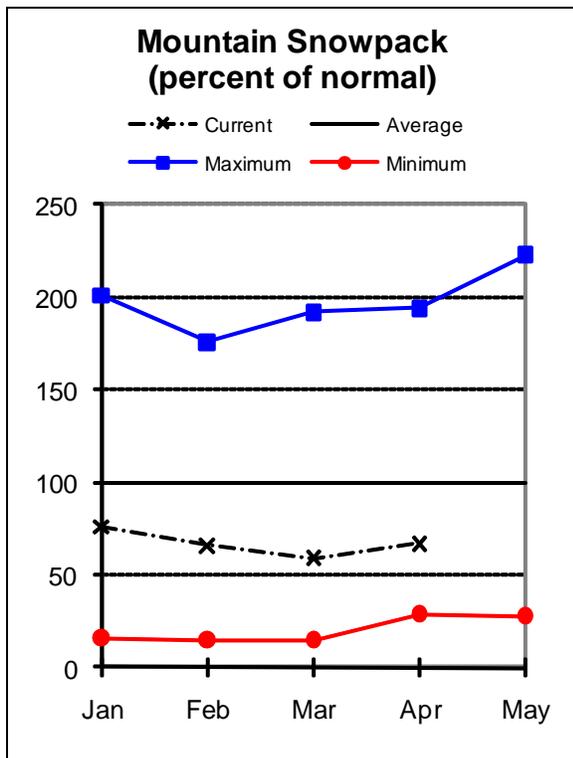
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Upper Deschutes and Crooked Basins

April 1, 2010



Water Supply Outlook

Precipitation for the month of March in the Upper Deschutes and Crooked basins was 86 percent of average. As of April 1, total precipitation for water year 2010 has been 77 percent of average. On April 1, the snowpack in the Upper Deschutes and Crooked River basins was 67 percent of average. Measurements were taken at 3 snow courses and 14 SNOTEL sites.

March runoff delivered additional storage to some irrigation reservoirs in the basin. April 1 storage at five irrigation reservoirs in the Upper Deschutes and Crooked River basins was 106 percent of average, or 88 percent of capacity.

There has been a slight improvement in streamflow forecasts since last report, reflecting the small improvement in snowpack conditions. April through September streamflow forecasts range from 50 percent of average for Crescent Creek near Crescent to 75 percent of average for the Deschutes River at Benham Falls near Bend. Elsewhere in the basin, the Ochoco Reservoir Inflow is forecast to be 59 percent of average for the April through September period.

Water users can expect streamflows that are greatly 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 - April 1, 2010

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
Crane Prairie Reservoir Inflow (2)	APR-JUL	24	32	38	64	44	52	59
	APR-SEP	43	53	60	65	67	77	93
Crescent Ck nr Crescent (2)	APR-JUL	1.9	5.9	8.6	50	11.3	15.3	17.2
	APR-SEP	4.0	7.9	10.5	50	13.1	17.0	21
Deschutes R at Benham Falls nr Bend	APR-JUL	240	250	260	74	270	280	350
	APR-SEP	370	385	395	75	405	420	525
Deschutes R bl Snow Ck nr La Pine	APR-JUL	6.8	13.2	17.5	53	22	28	33
	APR-SEP	18.2	26	31	53	36	44	59
Little Deschutes R nr La Pine (2)	APR-JUL	23	31	36	51	41	49	71
	APR-SEP	27	35	41	51	47	55	80
Ochoco Reservoir Inflow (2)	APR-JUL	2.2	8.6	13.0	59	17.4	24	22
	APR-SEP	2.5	8.7	13.0	59	17.3	24	22
Prineville Reservoir Inflow (2)	APR-JUL	10.0	43	65	60	87	120	108
	APR-SEP	9.0	42	65	60	88	121	109
Whychus Ck nr Sisters	APR-JUL	22	24	26	72	28	30	36
	APR-SEP	30	33	35	71	37	40	49

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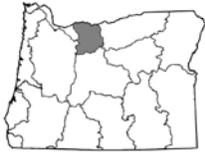
UPPER DESCHUTES AND CROOKED BASINS Reservoir Storage (1000 AF) - End of March					UPPER DESCHUTES AND CROOKED BASINS Watershed Snowpack Analysis - April 1, 2010			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of Last Yr Average	
		This Year	Last Year	Avg				
CRANE PRAIRIE	55.3	45.4	47.9	43.9	Crooked	3	79	69
CRESCENT LAKE	86.9	67.5	65.2	53.5	Little Deschutes	4	67	74
OCHOCO	47.5	28.1	28.4	32.6	Deschutes above Wickiup R	4	56	67
PRINEVILLE	153.0	136.9	120.5	132.9	Tumalo and Squaw Creeks	5	70	74
WICKIUP	200.0	200.5	200.1	189.7				

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

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

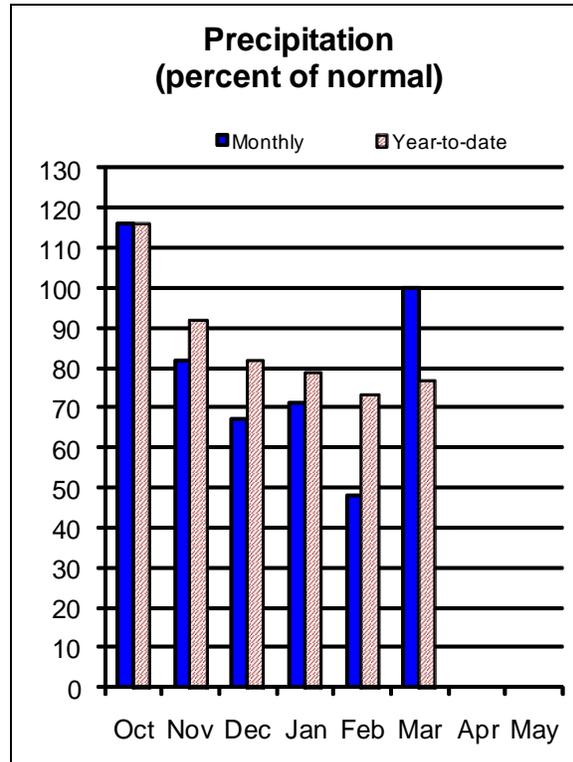
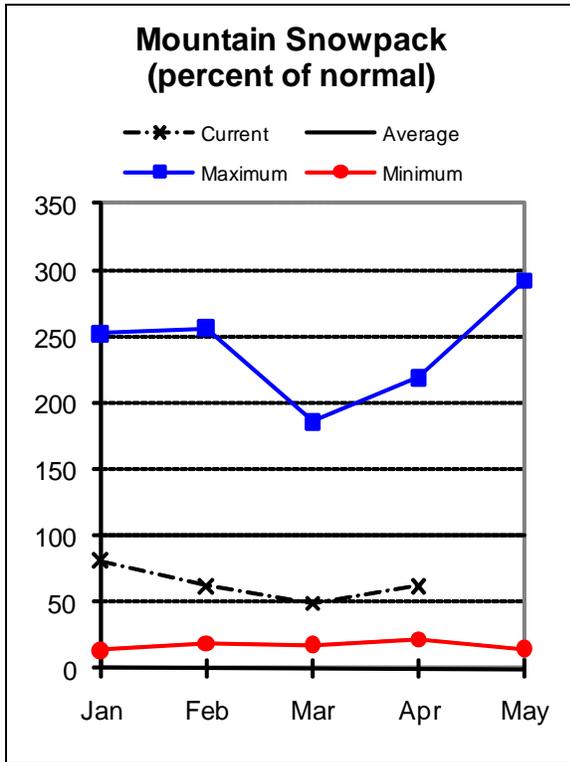
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For more information contact your local Natural Resources Conservation Service Office:
 Redmond (541) 923-4358
 Or visit: <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>



Hood, Mile Creeks, and Lower Deschutes Basins

April 1, 2010



Water Supply Outlook

March precipitation in the Hood, Mile Creeks and Lower Deschutes basin was 100 percent of average. March was only the second month since the water year began in October that near or above normal precipitation fell in the basin. As of April 1, total precipitation since the beginning of the water year has been 77 percent of average.

On April 1, the snowpack in the basin was 62 percent of average. Snow measurements were taken at 8 SNOTEL sites and 1 snow course.

The April through September streamflow for Hood River at Tucker Bridge is forecast to be 69 percent of average. Water users in the Hood, Mile Creeks and Lower Deschutes basin can expect greatly 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 - April 1, 2010

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>					30-Yr Avg. (1000AF)				
		90% (1000AF)		70% (1000AF)		Chance Of Exceeding * 50% (1000AF) (% AVG.)		30% (1000AF)		10% (1000AF)	
Hood R At Tucker Bridge	APR-JUL	112	139	157	69	175	200	228			
	APR-SEP	138	167	187	69	205	235	271			

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, 2010

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	4.0	5.7	4.5	Hood River	5	58	69
					Mile Creeks	0	0	0
					White River	4	45	58

* 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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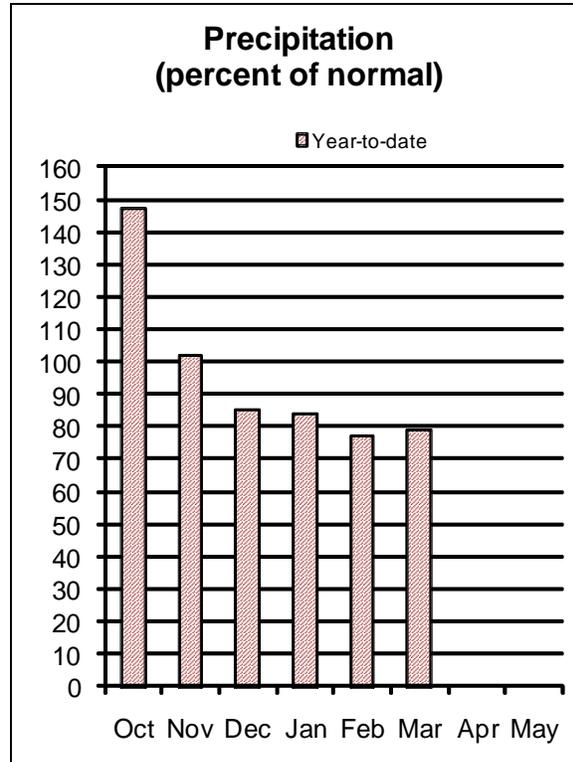
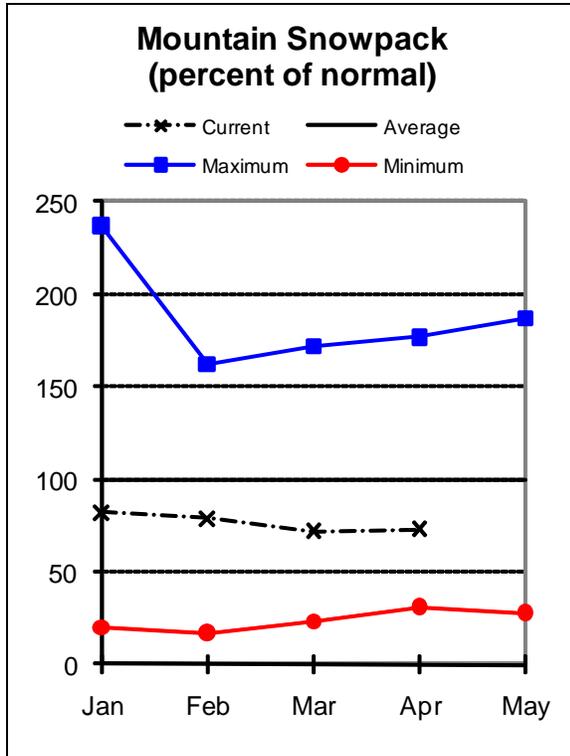
The Dalles (541) 296-6178

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



Lower Columbia Basin

April 1, 2010



Water Supply Outlook

On April 1, the snowpack in the Columbia basin above The Dalles was 73 percent of average. The Columbia basin snowpack normally reaches its peak around April 1.

Since the beginning of the water year, precipitation in the Columbia basin has been 79 percent of average. Locally, March precipitation in the Sandy basin was 104 percent of average.

The April through September streamflow forecast for the Columbia at The Dalles is 65 percent of average, down 2 points from last month. For the Sandy near Marmot, the April through September streamflow forecast is 80 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/cgi-bin/bor.pl>

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LOWER COLUMBIA BASIN
Streamflow Forecasts - April 1, 2010

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Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)	30% (1000AF)		10% (1000AF)	
Columbia R at The Dalles (2)	APR-JUL	45900	51300	55000	65	58700	64100	84600
	APR-SEP	53800	60200	64500	65	68800	75200	98600
Sandy R nr Marmot	APR-JUL	187	225	250	80	275	315	313
	APR-SEP	225	265	290	80	315	355	363

LOWER COLUMBIA BASIN Reservoir Storage (1000 AF) - End of March					LOWER COLUMBIA BASIN Watershed Snowpack Analysis - April 1, 2010			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					Sandy	7	45	63

* 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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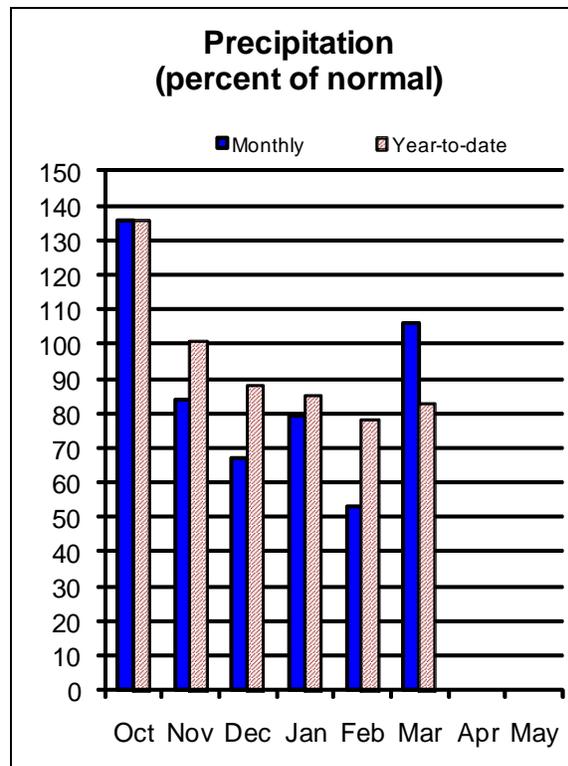
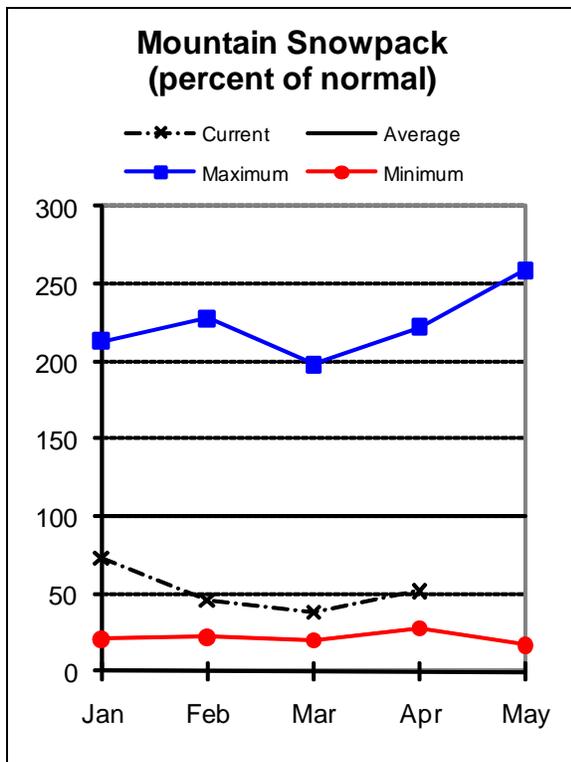
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Willamette Basin

April 1, 2010



Water Supply Outlook

March precipitation in the Willamette basin was slightly better than normal at 106 percent of average. March was only the second month since the water year began in October that near or above normal precipitation fell in the basin. As of April 1, total precipitation for water year 2010 has been 83 percent of average. On April 1, the snowpack in the Willamette basin was 52 percent of average, the lowest in the state. Snow measurements were taken at 2 snow courses and 20 SNOTEL sites.

While some Willamette Valley flood control reservoirs began to fill, several remain well below normal for this time of year. Spring rains will largely determine the summer storage for these reservoirs. In contrast, the April 1 storage at Henry Hagg and Timothy lake reservoirs in the Willamette basin was 109 percent of average, or 97 percent of capacity.

The April through September streamflow forecasts for the Willamette basin range from 66 percent of average for the inflow to Green Peter Lake to 85 percent of average for the South Santiam at Waterloo. There has been little change in most forecasts since last month. Water users in the basin can expect well 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>

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WILLAMETTE BASIN
Streamflow Forecasts - April 1, 2010

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Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
Blue Lake Inflow (1,2)	APR-JUN	25	49	60	74	71	95	81
	APR-JUL	28	53	64	74	75	100	86
	APR-SEP	29	53	64	74	75	99	86
Clackamas R at Estacada	APR-JUL	325	405	460	72	515	595	640
	APR-SEP	400	480	540	72	600	680	748
Clackamas R ab Three Lynx (2)	APR-JUL	255	310	345	73	380	435	474
	APR-SEP	315	370	410	73	450	505	562
Cottage Grove Lake Inflow (1,2)	APR-JUN	0.2	19.3	28	74	37	56	38
	APR-JUL	4.4	22	30	74	38	56	41
	APR-SEP	3.2	23	32	74	41	61	43
Cougar Lake Inflow (1,2)	APR-JUN	79	113	129	70	145	179	184
	APR-JUL	91	127	143	70	159	195	204
	APR-SEP	109	145	161	70	177	215	230
Detroit Lake Inflow (1,2)	APR-JUN	181	275	315	69	355	450	460
	APR-JUL	215	315	360	68	405	505	528
	APR-SEP	270	370	420	68	470	570	616
Dorena Lake Inflow (1,2)	APR-JUN	13.0	67	91	72	115	169	127
	APR-JUL	15.0	69	94	72	119	173	131
	APR-SEP	21	75	99	72	123	177	137
Fall Creek Lake Inflow (1,2)	APR-JUN	19.9	52	66	70	80	112	95
	APR-JUL	25	59	74	70	89	123	106
	APR-SEP	18.0	59	78	70	97	137	112
Fern Ridge Lake Inflow (1,2)	APR-JUN	8.3	21	32	70	43	66	46
	APR-JUL	9.0	23	34	69	45	69	49
	APR-SEP	9.0	24	35	70	46	70	50
Foster Lake Inflow (1,2)	APR-JUN	255	320	350	75	380	445	470
	APR-JUL	265	335	365	75	395	465	490
	APR-SEP	290	360	390	74	420	490	527

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For more information contact your local Natural Resources Conservation Service Office:
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 Salem - (503) 399-5746; Dallas - (503) 623-5534
 Or visit: <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>

WILLAMETTE BASIN
Streamflow Forecasts - April 1, 2010

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
Green Peter Lake Inflow (1,2)	APR-JUN	79	166	205	67	245	330	305
	APR-JUL	89	179	220	67	260	350	327
	APR-SEP	105	194	235	66	275	365	354
Hills Creek Reservoir Inflow (1,2)	APR-JUN	88	148	176	72	205	265	245
	APR-JUL	106	170	199	72	230	290	277
	APR-SEP	134	200	230	72	260	325	320
Little North Santiam R nr Mehama (1)	APR-JUL	29	71	90	68	109	151	133
	APR-SEP	36	78	97	68	116	158	143
Middle Fork Willamette nr Dexter	APR-JUN	225	390	465	73	540	705	640
	APR-JUL	270	445	525	72	605	780	726
	APR-SEP	325	510	595	72	680	865	828
McKenzie R bl Trail Bridge (2)	APR-JUL	148	171	186	70	200	225	266
	APR-SEP	240	265	285	71	305	330	404
Mc Kenzie River Nr Vida	APR-JUN	445	585	650	78	715	855	832
	APR-JUL	540	690	760	78	830	980	977
	APR-SEP	700	865	940	78	1010	1180	1201
Mohawk R nr Springfield	APR-JUL	42	56	65	82	74	88	79
Oak Grove fk above Power Intake	APR-JUL	76	87	95	73	103	114	130
	APR-SEP	95	111	122	73	133	149	167
North Santiam R at Mehama (1,2)	APR-JUN	265	385	440	72	495	615	610
	APR-JUL	350	475	535	73	595	720	732
	APR-SEP	415	550	610	73	670	805	834
South Santiam R at Waterloo (2)	APR-JUL	285	395	465	85	535	645	549
	APR-SEP	325	430	500	85	570	675	587
Scoggins Ck nr Gaston (2)	APR-JUL	2.6	7.4	10.7	83	14.0	18.8	12.9
Thomas Ck Nr Scio	APR-JUL	32	49	60	80	71	88	75

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WILLAMETTE BASIN
Streamflow Forecasts - April 1, 2010

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Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>					30-Yr Avg. (1000AF)	
		90% (1000AF)		70% (1000AF)		Chance Of Exceeding * 50% (1000AF) (% AVG.)		
		30% (1000AF)		10% (1000AF)				
MF Willamette bl NF (1,2)	APR-JUN	194	345	415	69	485	635	600
	APR-JUL	245	405	480	69	555	715	698
	APR-SEP	215	445	550	69	655	885	798
Willamette R at Salem (1,2)	APR-JUL	2030	3120	3610	83	4100	5190	4347
	APR-SEP	2520	3540	4000	83	4460	5480	4804

WILLAMETTE BASIN Reservoir Storage (1000 AF) - End of March					WILLAMETTE BASIN Watershed Snowpack Analysis - April 1, 2010			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BLUE RIVER	85.5	52.2	51.7	52.6	Clackamas	4	24	37
COTTAGE GROVE	29.8	21.0	15.7	18.5	McKenzie	8	44	52
COUGAR	155.2	38.8	63.9	150.5	Row River	1	25	32
DETROIT	300.7	154.9	157.3	222.0	Santiam	6	34	40
DORENA	70.5	50.7	34.8	45.3	Middle Fork Willamette	7	55	66
FALL CREEK	115.5	58.9	78.4	71.1				
FERN RIDGE	109.6	92.1	74.4	77.1				
FOSTER	29.7	15.6	0.3	12.4				
GREEN PETER	268.2	186.2	192.7	236.2				
LOOKOUT POINT	337.0	83.9	175.2	188.7				
TIMOTHY LAKE	61.7	59.2	52.0	51.6				
HENRY HAGG LAKE	53.0	51.7	50.8	49.8				

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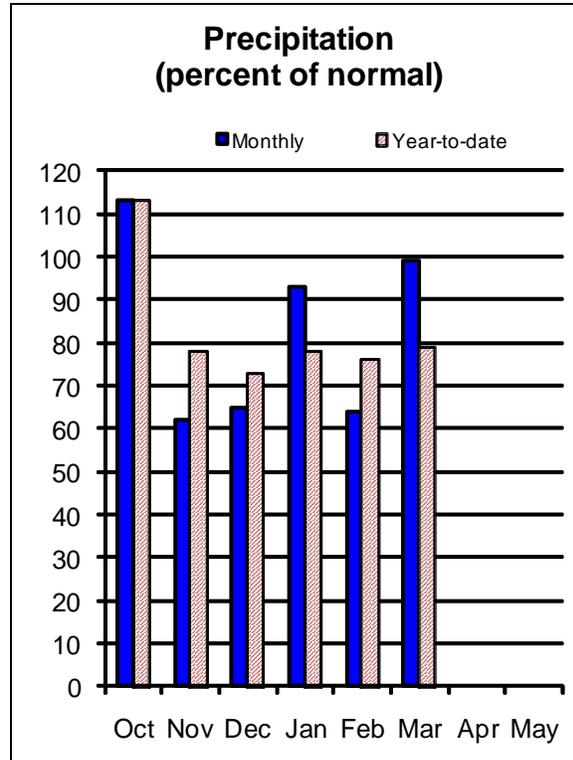
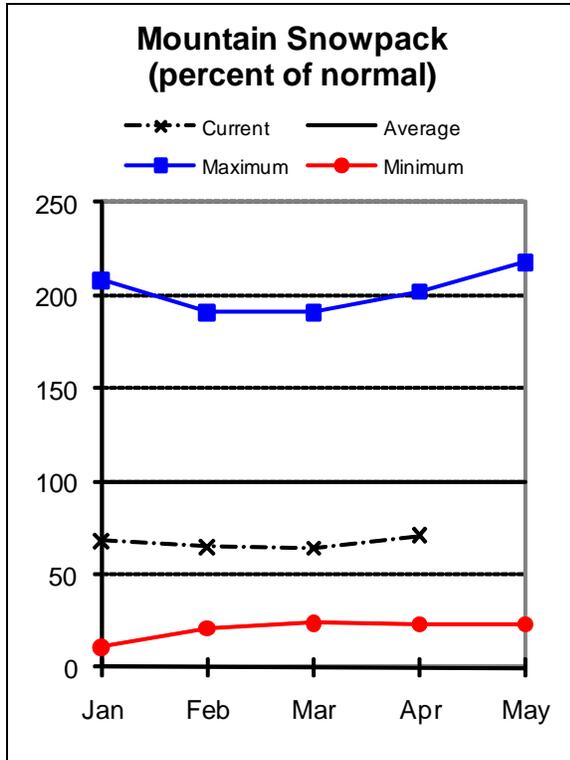
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Salem - (503) 399-5746; Dallas - (503) 623-5534

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Rogue and Umpqua Basins

April 1, 2010



Water Supply Outlook

March precipitation was 99 percent of average in the Rogue and Umpqua basins. Since the water year began in October there has only been one month that had above normal precipitation in the basin. On April 1, total accumulated precipitation for water year 2010 was 79 percent of average. The April 1 snowpack in the Rogue and Umpqua basins was 71 percent of average. Snow measurements were collected at 20 snow courses and 12 SNOTEL sites.

Reservoirs in the basin made small gains in March. The April 1 storage at 5 irrigation reservoirs in the Rogue and Umpqua basin was 87 percent of average, or 67 percent of capacity.

The April through September streamflow forecasts for the Rogue and Umpqua basin range from 62 percent of average for the Rogue at Raygold, to 82 percent of average for the Illinois River at Kerby. Elsewhere in the basin, the Applegate Lake Inflow is forecast to be 72 percent of average for the April through September period. There has been little change in the streamflow forecasts since last month.

Water users in the Rogue and Umpqua basins can expect well 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:
 Roseburg - (541) 673-8316; Medford - (541) 776-4267
 Or visit: <http://www.wcc.nrcs.usda.gov/cgi-bin/bor.pl>

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ROGUE AND UMPQUA BASINS
Streamflow Forecasts - April 1, 2010

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Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)			30% (1000AF)	10% (1000AF)
Applegate Lake Inflow (2)	APR-JUL	50	68	81	72	94	112	112
	APR-SEP	54	73	86	72	99	118	119
SF Big Butte Ck nr Butte Falls	APR-JUL	12.3	18.7	23	68	27	34	34
	APR-SEP	18.2	25	30	69	35	42	44
Cow Ck nr Azalea (2)	APR-JUL	1.0	7.0	11.1	67	15.2	21	16.5
	APR-SEP	1.5	7.7	11.9	67	16.1	22	17.7
Hyatt Prairie Reservoir Inflow (2)	APR-JUL	0.5	1.9	2.9	60	3.9	5.3	4.8
Illinois R at Kerby	APR-JUL	44	105	147	82	189	250	179
	APR-SEP	50	111	153	82	195	255	186
NF Little Butte Ck nr Lakecreek (2)	APR-JUL	16.3	21	24	76	27	32	32
	APR-SEP	25	30	34	73	38	43	46
Lost Creek Lake Inflow (2)	APR-JUL	285	340	375	71	410	465	530
	APR-SEP	365	430	470	71	510	575	665
Rogue R at Raygold (2)	APR-JUL	260	380	460	63	540	660	730
	APR-SEP	345	470	555	62	640	765	890
Rogue R at Grants Pass (2)	APR-JUL	305	440	535	72	630	765	740
	APR-SEP	385	535	635	72	735	885	885
Sucker Ck bl Ltl Grayback Ck nr Holl	APR-JUL	17.3	32	42	81	52	67	52
	APR-SEP	20	35	45	80	55	70	56
North Umpqua R at Winchester	APR-JUL	400	540	635	80	730	870	795
	APR-SEP	495	640	735	80	830	975	920
South Umpqua R nr Brockway	APR-JUL	107	230	310	78	390	515	400
	APR-SEP	118	240	325	77	410	530	420
South Umpqua R at Tiller	APR-JUL	66	115	149	77	183	230	193
	APR-SEP	74	124	158	77	192	240	205

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For more information contact your local Natural Resources Conservation Service Office:
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 Or visit: <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>

ROGUE AND UMPQUA BASINS Reservoir Storage (1000 AF) - End of March					ROGUE AND UMPQUA BASINS Watershed Snowpack Analysis - April 1, 2010			
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	32.3	32.5	46.9	Applegate	6	110	85
EMIGRANT LAKE	39.0	27.8	34.0	34.4	Bear Creek	5	120	80
FISH LAKE	8.0	5.0	6.3	5.8	Little Butte Creek	6	48	60
FOURMILE LAKE	16.1	9.0	12.4	10.2	Illinois	5	81	82
HOWARD PRAIRIE	60.0	39.0	47.5	44.9	North Umpqua	7	49	54
HYATT PRAIRIE	16.1	12.3	15.6	12.3	Rogue River above Grants	21	73	70
LOST CREEK	315.0	85.2	131.9	263.2				

* 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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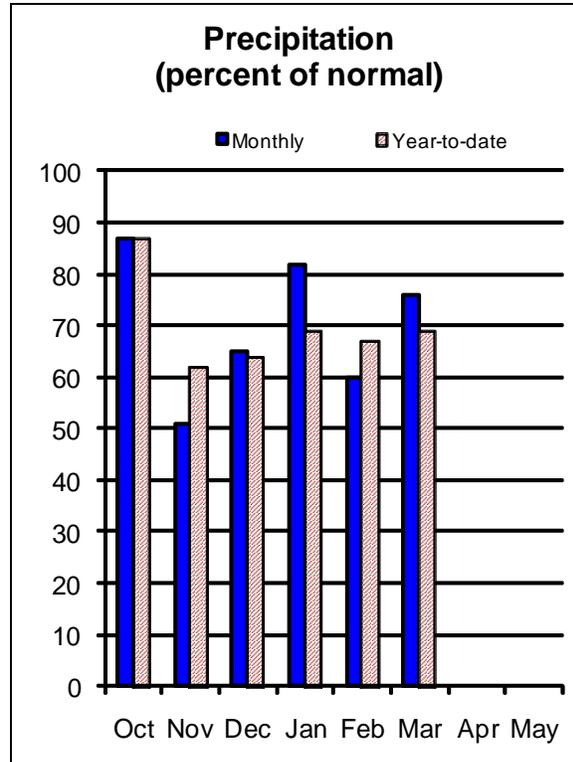
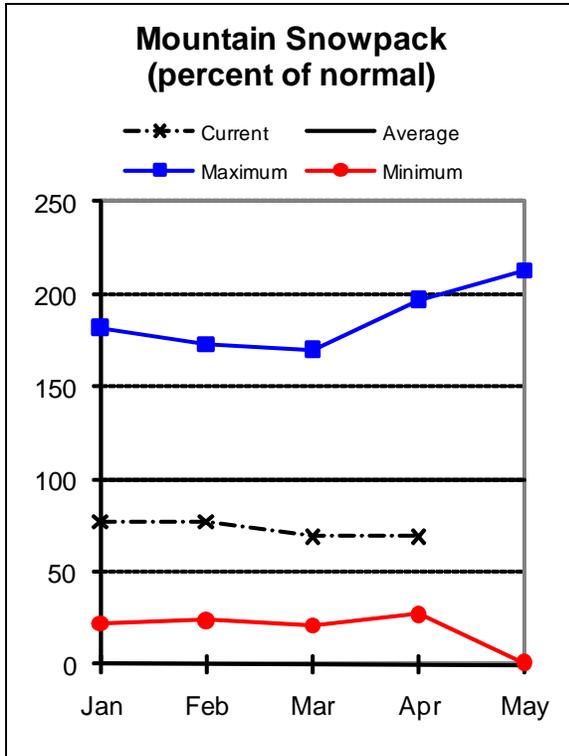
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Klamath Basin

April 1, 2010



Water Supply Outlook

Since the water year began in October, monthly precipitation totals in the Klamath basin have all been below average. This past month, precipitation in the basin was 76 percent of average. On April 1, total accumulated precipitation for water year 2010 in the Klamath basin was 69 percent of average, the lowest in the state. The snowpack in the Klamath basin was 69 percent of average on April 1. Snow measurements for April 2010 were collected at 5 snow courses 1 aerial marker and 15 SNOTEL sites. The normally scheduled aerial marker flight had to turn back after one measurement due to poor visibility.

March runoff brought small gains to Klamath basin reservoirs. The April 1 storage at Upper Klamath Lake, Clear Lake (CA) and Gerber reservoirs was 51 percent of average or 35 percent of capacity. Clear Lake reservoir is especially low this year at only 29 percent of average. There have been some decreases in the Klamath basin streamflow forecasts since last month. The decreases are due to decreases in the snowpack at key measurement points. As of April 1, the April through September forecasts range from 34 percent of average for Gerber Reservoir Inflow, to 64 percent of average for the Williamson River below Sprague River near Chiloquin. Elsewhere in the basin, the Upper Klamath Lake Inflow forecast for the April 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>

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KLAMATH BASIN
Streamflow Forecasts - April 1, 2010

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Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>					30-Yr Avg. (1000AF)	
		=====		Chance Of Exceeding *		=====		
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)		10% (1000AF)
Clear Lake Inflow (2)	APR-JUL	0.4	3.7	15.0	37	26	43	41
	APR-SEP	1.9	7.5	18.0	38	28	44	48
Gerber Reservoir Inflow (2)	APR-JUL	0.3	2.0	5.0	30	9.9	17.1	16.9
	APR-SEP	0.5	2.3	6.0	34	10.8	17.9	17.8
Sprague R nr Chiloquin	APR-JUL	63	92	111	54	130	159	205
	APR-SEP	81	110	130	57	150	179	230
Upper Klamath Lake Inflow	APR-JUL	162	230	260	61	290	360	425
	APR-SEP	205	275	310	60	345	415	515
Williamson R bl Sprague R nr Chiloquin	APR-JUL	145	178	200	63	220	255	320
	APR-SEP	186	220	245	64	270	305	385

KLAMATH BASIN Reservoir Storage (1000 AF) - End of March					KLAMATH BASIN Watershed Snowpack Analysis - April 1, 2010			
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	72.9	89.5	248.9	Lost	2	100	36
GERBER	94.3	31.6	56.3	66.6	Sprague	5	96	83
UPPER KLAMATH LAKE	523.7	289.1	417.1	457.8	Upper Klamath Lake	7	74	73
					Williamson River	5	76	72

* 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.

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

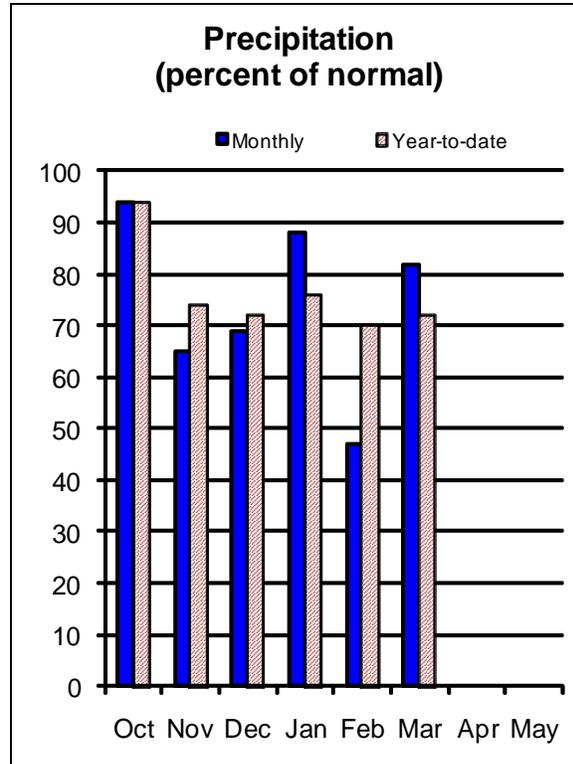
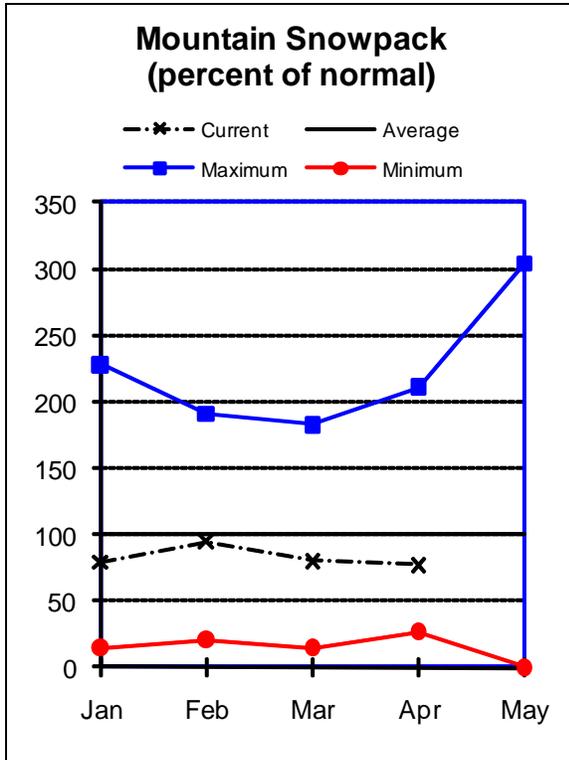
Klamath Falls - (541) 883-6932

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



Lake County and Goose Lake

April 1, 2010



Water Supply Outlook

March precipitation in the Lake County and Goose Lake basins was 82 percent of average. Since the water year began in October, monthly precipitation totals in the basin have all been below average. Since the beginning of the water year, total precipitation in the basin has been 72 percent of average. On April 1, the snowpack in the Lake County and Goose Lake basins was 77 percent of average. Snow measurements were collected at 2 snow courses, 1 aerial marker and and 9 SNOTEL sites. The normally scheduled aerial marker flight had to turn back after one measurement due to poor visibility.

Drews reservoir posted a significant gain in water storage since last month, however reservoirs in the basin remain notably low. The April 1 storage at Cottonwood and Drews reservoirs was 26 percent of average or 20 percent of capacity.

There have been minor changes to summer streamflow since the last report. The April through September forecasts range from 51 percent of average for Twentymile Creek near Adel, to 62 percent of average for the Honey Creek near Plush and the Chewaucan near Paisley. Water users in the Lake County and Goose Lake basins can expect greatly 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/cgi-bin/bor.pl>

LAKE COUNTY AND GOOSE LAKE BASINS
Streamflow Forecasts - April 1, 2010

Forecast Point	Forecast Period	Future Conditions					30-Yr Avg. (1000AF)	
		<<===== Drier =====>>		===== Wetter =====>>				
		90% (1000AF)	70% (1000AF)	50% (1000AF)	30% (1000AF)	10% (1000AF)		
		Chance Of Exceeding *						
		(% AVG.)						
Chewaucan R nr Paisley	APR-JUL	27	37	44	60	51	61	74
	APR-SEP	31	41	48	62	55	65	78
Deep Ck ab Adel	APR-JUL	21	31	38	57	45	55	67
	APR-SEP	22	33	40	58	47	58	69
Honey Ck nr Plush	APR-JUL	4.1	7.8	10.2	62	12.6	16.3	16.4
	APR-SEP	4.2	7.8	10.3	62	12.8	16.4	16.6
Silver Ck nr Silver Lake (2)	APR-JUL	1.2	3.5	5.0	47	6.5	8.8	10.7
	APR-SEP	1.1	3.6	5.4	48	7.2	9.7	11.2
Twentymile Ck nr Adel	APR-JUL	0.3	3.0	8.6	51	14.2	22	16.9
	APR-SEP	0.5	3.3	8.9	51	14.5	23	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, 2010

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
COTTONWOOD	8.7	5.0	9.3	5.7	Chewaucan River	3	115	81
DREWS	63.0	9.2	17.0	47.9	Deep Creek	1	111	84
					Drew Creek	2	0	40
					Honey Creek	1	111	84
					Silver Creek (Lake Co.)	4	97	83
					Twentymile Creek	1	111	84

* 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.

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

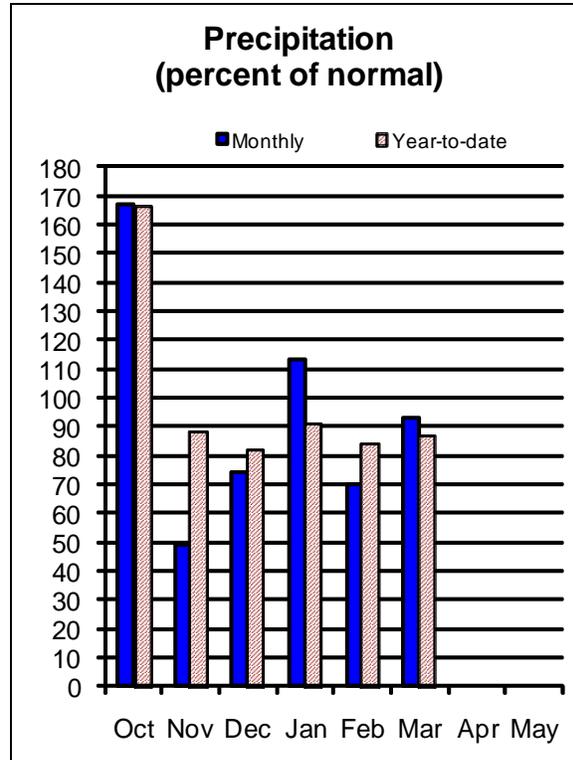
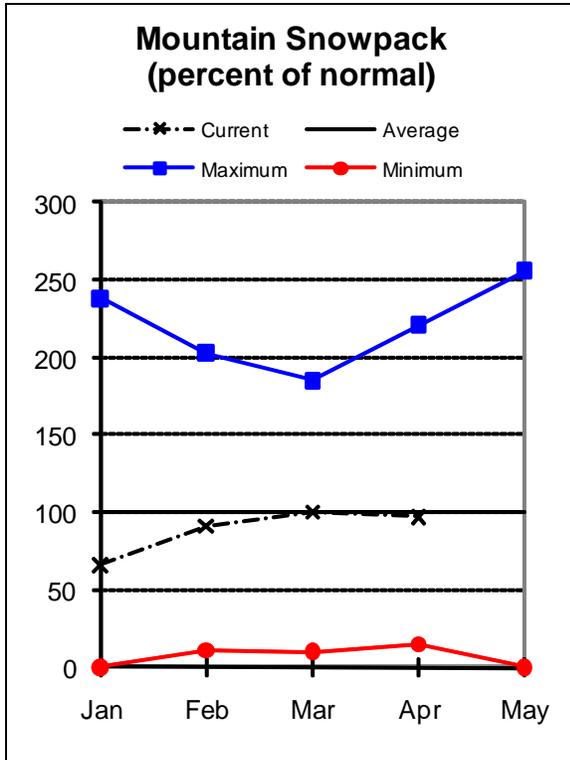
Lakeview - (541) 947-2202

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



Harney Basin

April 1, 2010



Water Supply Outlook

March precipitation in the Harney basin was 93 percent of average. As of April 1, total precipitation since the beginning of the water year has been only 87 percent of average, yet this is the highest in the state. On April 1, the snowpack in the Harney basin was 97 percent of average. Snow measurements were taken at 6 aerial markers and 9 SNOTEL sites.

There have been minor changes to the streamflow forecasts since the last report. The April through September streamflow forecast for the Donner Und Blitzen River near Frenchglen is expected to be 83 percent of average. The Silvies River near Burns is expected to be 76 percent of average for the same period. The April through September forecast for Trout Creek near Denio is 63 percent of average.

Water users in the Harney basin can expect 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/cgi-bin/bor.pl>

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HARNEY BASIN
Streamflow Forecasts - April 1, 2010

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Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)		
		=====		Chance Of Exceeding *			=====	
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)		30% (1000AF)	10% (1000AF)
Donner Und Blitzen R nr Frenchglen	APR-JUL	30	44	53	83	62	76	64
	APR-SEP	34	48	58	83	68	82	70
Silvies R nr Burns	APR-JUL	28	54	72	75	90	116	96
	APR-SEP	30	57	75	76	93	120	99
Trout Ck nr Denio	APR-JUL	1.8	4.4	6.1	64	7.8	10.4	9.6
	APR-SEP	2.1	4.7	6.5	63	8.3	10.9	10.3

HARNEY BASIN Reservoir Storage (1000 AF) - End of March					HARNEY BASIN Watershed Snowpack Analysis - April 1, 2010			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					Donner und Blitzen River	5	150	111
					Silver Creek (Harney Co.)	2	59	68
					Silvies River	6	82	88
					Trout Creek	5	196	104

* 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.

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>

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					
<i>FORECAST POINT</i>	<i>FORECAST THRESHOLD</i>	<i>FORECAST VALUE</i> ----- <i>CHANCE OF EXCEEDING</i> ----- -----			<i>LONG-TERM AVERAGE VALUE</i>
		90%	50%	10%	
Owyhee R nr Rome	2000 cfs	Mar 14	Apr 20	May 27	May 6
Owyhee R nr Rome	1000 cfs	Mar 23	Apr 28	Jun 3	May 18
Owyhee R nr Rome	500 cfs	Apr 11	May 15	Jun 18	Jun 2

UPPER JOHN DAY BASIN					
<i>FORECAST POINT</i>	<i>FORECAST THRESHOLD</i>	<i>FORECAST VALUE</i> ----- <i>CHANCE OF EXCEEDING</i> ----- -----			<i>LONG-TERM AVERAGE VALUE</i>
		90%	50%	10%	
John Day R at Service Creek	Average Daily Flow on Aug. 1st	24	190	400	271

UPPER DESCHUTES AND CROOKED BASINS					
<i>FORECAST POINT</i>	<i>FORECAST THRESHOLD</i>	<i>FORECAST VALUE</i> ----- <i>CHANCE OF EXCEEDING</i> ----- -----			<i>LONG-TERM AVERAGE VALUE</i>
		90%	50%	10%	
Crane Prairie Inflow *	Date of Peak	May 8	May 24	Jun 9	May 25
Crane Prairie Inflow	Peak Flow	106	235	365	403
Crane Prairie Inflow	Average Daily Flow on Oct. 1st	111	145	179	269
Prineville Reservoir Inflow	113 cfs	May 3	May 24	Jun 14	June 3
Prineville Reservoir Inflow	75 cfs	May 9	May 30	Jun 20	June 11
Prineville Reservoir Inflow	50 cfs	May 15	Jun 7	Jun 30	June 19
Whychus Creek nr Sisters	100 cfs	Jul 6	Jul 29	Aug 21	August 16

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

ROGUE AND UMPQUA BASINS					
<i>FORECAST POINT</i>	<i>FORECAST THRESHOLD</i>	<i>FORECAST VALUE ----- CHANCE OF EXCEEDING -----</i>			<i>LONG-TERM AVERAGE VALUE</i>
		<i>90%</i>	<i>50%</i>	<i>10%</i>	
South Umpqua R nr Brockway *	90 cfs	Jul 11	Jul 28	Aug 14	August 8
South Umpqua R at Tiller	140 cfs	Jun 12	Jul 2	Jul 22	July 11
South Umpqua R at Tiller	90 cfs	Jul 01	Jul 22	Aug 12	August 1
South Umpqua R at Tiller	60 cfs	Jul 23	Aug 17	Sep 11	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					
<i>FORECAST POINT</i>	<i>FORECAST THRESHOLD</i>	<i>FORECAST VALUE ----- CHANCE OF EXCEEDING -----</i>			<i>LONG-TERM AVERAGE VALUE</i>
		<i>90%</i>	<i>50%</i>	<i>10%</i>	
Deep Ck ab Adel	100 cfs	May 18	Jun 4	Jun 21	June 17
Honey Ck nr Plush	100 cfs	Apr 8	May 9	Jun 9	May 16
Honey Ck nr Plush	50 cfs	Apr 26	May 23	Jun 19	June 4
Twentymile Ck nr Adel	50 cfs	Apr 8	May 6	Jun 3	May 30
Twentymile Ck nr Adel	10 cfs	Jun 4	Jun 24	Jul 14	July 7

HARNEY BASIN					
<i>FORECAST POINT</i>	<i>FORECAST THRESHOLD</i>	<i>FORECAST VALUE ----- CHANCE OF EXCEEDING -----</i>			<i>LONG-TERM AVERAGE VALUE</i>
		<i>90%</i>	<i>50%</i>	<i>10%</i>	
Silvies R nr Burns	400 cfs	Apr 15	May 6	May 27	May 21
	200 cfs	Apr 26	May 19	Jun 11	June 2
	100 cfs	May 10	Jun 3	Jun 27	June 13
	50 cfs	May 31	Jun 26	Jul 22	July 3
Donner Und Blitzen R nr Frenchglen	200 cfs	May 30	Jun 18	Jul 7	June 20
Donner Und Blitzen R nr Frenchglen	100 cfs	Jun 22	Jul 8	Jul 24	July 9

Summary of Snow Course Data

April 2010

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
Oregon						
ALTHOUSE #2	4530	3/29/10	0	.0	--	4.1
ALTHOUSE #3	5000	3/29/10	22	7.8	11.2	12.8
ANEROID LAKE SNOTEL	7400	4/01/10	61	16.7	18.9	25.7
ANNIE SPRING SNOTEL	6010	4/01/10	99	35.3	34.5	42.8
ANTHONY LAKE (REV)	7130	3/29/10	57	17.2	29.2	--
ARBUCKLE MTN SNOTEL	5770	4/01/10	45	14.9	20.1	22.3
BARNEY CREEK (NEW)	5840	3/30/10	29	9.0	10.6	--
BEAVER DAM CREEK	5100	3/31/10	22	5.3	15.3	10.0
BEAVER RES. SNOTEL	5150	4/01/10	26	9.2	14.0	9.2
BIG RED MTN SNOTEL	6050	4/01/10	72	24.2	21.0	28.4
BIGELOW CAMP SNOTEL	5130	4/01/10	28	6.4	14.0	11.6
BILLIE CK DVD SNOTEL	5280	4/01/10	37	14.1	24.8	21.5
BLAZED ALDER SNOTEL	3650	4/01/10	48	14.4	49.5	32.1
BLUE MTN SPGS SNOTEL	5870	4/01/10	34	13.2	15.9	17.3
BOULDER CREEK AM	5690	3/24/10	11	4.0	--	1.1
BOURNE SNOTEL	5850	4/01/10	33	11.8	15.1	17.9
BOWMAN SPRNGS SNOTEL	4530	4/01/10	6	2.5	11.2	8.6
BUCK PASTURE AM	5700	3/24/10	14	5.0	2.0	1.2
BUCKSKIN LAKE AM	5200	3/24/10	0	.0	.0	.3
BULLY CREEK AM	5300	3/24/10	8	3.0	--	.5
CALIBAN ALT	6500	3/28/10	71	25.4	19.4	30.9
CALL MEADOWS AM	5340	3/24/10	14	4.1	--	2.1
CAMAS CREEK #3	5850	3/31/10	37	11.0	9.9	13.1
CASCADE SUM. SNOTEL	5100	4/01/10	76	24.3	36.2	31.3
CHEMULT ALT SNOTEL	4850	4/01/10	4	2.5	5.1	5.3
CLACKAMAS LK. SNOTEL	3400	4/01/10	6	1.2	17.5	11.3
CLEAR LAKE SNOTEL	3810	4/01/10	14	2.8	16.6	14.1
COLD SPRINGS SNOTEL	5940	4/01/10	59	20.7	32.4	28.2
COUNTY LINE SNOTEL	4830	4/01/10	1	1.0	4.3	2.2
CRAZYMAN FLAT SNOTEL	6180	4/01/10	31	12.3	9.1	15.7
DALY LAKE SNOTEL	3690	4/01/10	16	3.2	21.5	12.7
DEADHORSE GRADE	3700	3/29/10	0	.0	10.0	9.0
DEADWOOD JUNCTION	4600	3/31/10	6	1.5	7.7	4.8
DERR SNOTEL	5850	4/01/10	30	10.5	14.5	16.4
DIAMOND LAKE SNOTEL	5280	4/01/10	20	7.0	21.3	14.8
DOOLEY MOUNTAIN	5430	3/30/10	26	9.0	10.3	7.1
EAST EAGLE	4400	4/03/10	61	19.7	17.8	23.7
EILERTSON SNOTEL	5510	4/01/10	22	8.8	10.5	9.6
ELDORADO PASS	4600	3/30/10	0	.0	.0	.9
EMIGRANT SPGS SNOTEL	3800	4/01/10	0	.4	10.7	3.3
FISH CREEK SNOTEL	7660	4/01/10	90	29.9	22.8	30.5
FISH LK. SNOTEL	4660	4/01/10	18	5.1	12.1	8.4
FLAG PRAIRIE AM	4750	3/24/10	13	4.8	--	2.0
FOURMILE LAKE SNOTEL	5970	4/01/10	55	20.1	30.7	30.7
GERBER RES SNOTEL	4890	4/01/10	0	.0	.0	.1
GOLD CENTER SNOTEL	5410	4/01/10	10	6.1	10.7	8.3
GOVT CORRALS AM	7450	3/24/10	45	13.5	7.8	--
GRAYBACK PEAK	6000	4/02/10	78	27.3	25.9	20.8
GREENPOINT SNOTEL	3310	4/01/10	29	10.2	23.9	17.5
HIGH RIDGE SNOTEL	4920	4/01/10	42	16.3	33.0	23.1
HOGG PASS SNOTEL	4790	4/01/10	65	21.7	27.7	39.0
HOLLAND MDWS SNOTEL	4930	4/01/10	27	7.5	29.6	23.1
HOWARD PRAIRIE	4500	3/31/10	7	2.1	9.4	5.6
HUNGRY FLAT	4400	4/01/10	1	.2	.0	1.4
IRISH-TAYLOR SNOTEL	5540	4/01/10	88	27.1	37.6	36.6
JUMP OFF JOE SNOTEL	3520	4/01/10	11	1.1	17.8	10.3
KING MTN #1	4500	3/31/10	15	2.3	6.4	5.2
KING MTN #2 SNOTEL	4340	4/01/10	7	.8	3.4	2.9
KING MTN #3	3650	3/31/10	4	.5	.0	.6
KING MTN #4	3050	3/31/10	0	.0	.0	.0

SNOW COURSE		ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
Oregon (continued)							
LAKE CK R.S.	SNOTEL	5240	4/01/10	26	11.3	9.6	10.5
LITTLE ALPS		6200	3/29/10	32	8.1	15.9	13.2
LITTLE ANTONE (ALT)		5000	3/29/10	18	6.4	10.4	7.2
LITTLE MEADOW	SNOTEL	4020	4/01/10	45	17.2	36.2	25.7
LOOKOUT BUTTE	AM	5650	3/24/10	0	.0	.0	.1
LOUSE CANYON	AM	6440	3/24/10	21	7.6	.8	5.1
LUCKY STRIKE	SNOTEL	4970	4/01/10	11	4.8	6.9	9.3
MADISON BUTTE	SNOTEL	5150	4/01/10	0	.2	6.8	2.7
MARION FORKS	SNOTEL	2590	4/01/10	3	.8	10.9	10.2
MARY'S PEAK REV		3620	4/01/10	18	3.8	14.2	6.3
MCKENZIE	SNOTEL	4770	4/01/10	80	27.2	57.3	42.9
MEACHAM		4300	3/31/10	19	6.2	12.4	6.6
MILLER WOODS	SNOTEL	420	4/01/10	0	.0	.0	--
MOSS SPRINGS	SNOTEL	5760	4/01/10	56	20.8	28.9	26.0
MT ASHLAND SWBK.		6400	3/28/10	66	24.7	20.2	33.4
MT HOOD		5370	4/01/10	121	43.8	77.0	62.5
MT HOOD TEST	SNOTEL	5370	4/01/10	120	42.0	63.1	59.1
MT HOWARD	SNOTEL	7910	4/01/10	50	15.6	19.9	16.5
MUD RIDGE	SNOTEL	4070	4/01/10	51	17.1	41.7	24.3
NEW CRESCENT	SNOTEL	4910	4/01/10	34	4.3	11.6	8.4
NEW DUTCHMAN #3		6320	4/02/10	106	38.8	50.9	51.9
NORTH FK RES	SNOTEL	3060	4/01/10	26	8.3	37.0	15.7
OCHOCO MEADOW	SNOTEL	5430	4/01/10	24	6.4	10.5	8.7
OREGON CANYON	AM	6950	3/24/10	17	6.1	1.6	4.9
PAGE MTN		4050	3/29/10	0	.0	.0	1.2
PARK H.Q. REV		6550	3/30/10	125	44.6	56.4	61.3
PEAVINE RIDGE	SNOTEL	3420	4/01/10	8	2.0	22.2	13.0
PUEBLO SUMMIT	AM	6800	3/24/10	18	6.5	.0	--
QUARTZ MTN	SNOTEL	5720	4/01/10	0	.3	.0	.4
R.R. OVERPASS	SNOTEL	2680	4/01/10	0	.0	.0	.1
RED BUTTE #1		4560	3/29/10	4	1.1	17.9	10.4
RED BUTTE #2		4000	3/29/10	0	.0	.8	5.0
RED BUTTE #3		3500	3/29/10	0	.0	.7	1.1
RED BUTTE #4		3000	3/29/10	0	.0	.0	.3
RED HILL	SNOTEL	4410	4/01/10	90	36.1	52.1	46.1
ROARING RIVER	SNOTEL	4950	4/01/10	57	19.6	41.2	28.9
ROCK SPRINGS	SNOTEL	5290	4/01/10	14	3.5	3.2	2.5
SADDLE MTN	SNOTEL	3110	4/01/10	8	2.2	8.8	6.0
SALT CK FALLS	SNOTEL	4220	4/01/10	32	7.4	28.1	18.4
SANTIAM JCT.	SNOTEL	3740	4/01/10	12	1.9	19.4	16.0
SCHNEIDER MDW	SNOTEL	5400	4/01/10	60	23.6	22.2	29.6
SEINE CREEK	SNOTEL	2060	4/01/10	0	.0	.0	1.3
SEVENMILE MARSH SNTL		5700	4/01/10	71	23.3	32.4	30.5
SILVER BURN		3720	3/30/10	7	1.7	14.5	8.2
SILVER CREEK	SNOTEL	5740	4/01/10	17	7.8	9.1	7.8
SILVIES	SNOTEL	6990	4/01/10	51	17.7	16.6	19.3
SISKIYOU SUMMIT REV		4630	3/28/10	8	3.4	4.7	3.3
SKI BOWL ROAD		6000	3/28/10	60	20.7	17.0	26.7
SNOW MTN	SNOTEL	6220	4/01/10	34	10.0	9.1	14.0
SF BULL RUN	SNOTEL	2690	4/01/10	6	1.3	12.2	2.1
STARR RIDGE	SNOTEL	5250	4/01/10	5	1.9	10.9	3.4
STRAWBERRY	SNOTEL	5770	4/01/10	0	1.5	.0	4.1
SUMMER RIM	SNOTEL	7080	4/01/10	50	15.9	15.6	19.0
SUMMIT LAKE	SNOTEL	5610	4/01/10	94	30.4	38.3	38.1
SUN PASS	SNOTEL	5400	4/01/10	46	17.5	19.9	--
SWAN LAKE MTN	SNOTEL	6830	4/01/10	50	19.9	21.4	--
TANGENT		5400	4/02/10	47	15.4	17.2	19.6
TAYLOR BUTTE	SNOTEL	5030	4/01/10	3	1.8	5.1	2.8
TAYLOR GREEN	SNOTEL	5740	4/01/10	47	18.6	21.1	21.7
THREE CK MEAD	SNOTEL	5690	4/01/10	53	18.1	16.3	19.7
TIPTON	SNOTEL	5150	4/01/10	32	11.8	11.3	14.3
TOKETEE AIRSTRIP SN		3240	4/01/10	2	.5	.0	2.7
TOLLGATE		5070	3/31/10	60	21.6	34.0	26.8
TROUT CREEK	AM	7800	3/24/10	41	12.3	8.5	12.1
V LAKE	AM	6600	3/24/10	36	13.0	2.4	8.0
WOLF CREEK	SNOTEL	5630	4/01/10	36	11.8	17.4	16.7

SNOW COURSE		ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
California							
ADIN MOUNTAIN		6350	3/31/10	41	13.1	10.4	12.5
ADIN MTN SNOTEL		6190	4/01/10	35	13.3	11.0	13.2
BLUE LAKE RANCH		6800	4/02/10	24	7.5	9.7	10.4
CEDAR PASS		7100	4/01/10	38	12.4	14.6	17.6
CEDAR PASS SNOTEL		7030	4/01/10	45	12.8	15.5	19.3
CROWDER FLAT SNOTEL		5170	4/01/10	1	.3	.0	2.4
DISMAL SWAMP SNOTEL		7360	4/01/10	75	24.7	25.8	28.9
STATE LINE	AM	5750	4/01/10	6	1.8	1.6	3.4
Idaho							
BATTLE CREEK	AM	5720	3/24/10	11	4.2	.0	1.0
BULL BASIN	AM	5460	3/24/10	5	1.9	.0	.3
MUD FLAT	SNOTEL	5730	4/01/10	19	7.7	3.0	4.4
RED CANYON	AM	6650	3/24/10	24	9.1	4.8	5.1
SILVER CITY		6400	3/30/10	56	19.4	18.8	15.8
SOUTH MTN	SNOTEL	6500	4/01/10	41	16.3	13.9	19.2
SUCCOR CREEK	AM	6100	3/24/10	33	12.5	6.0	7.8
VAUGHT RANCH	AM	5830	3/24/10	8	3.0	.0	1.1
Nevada							
BEAR CREEK SNOTEL		7800	4/01/10	44	12.8	20.8	21.6
BIG BEND SNOTEL		6700	4/01/10	25	8.4	10.1	8.3
BUCKSKIN,L SNOTEL		6700	4/01/10	31	9.2	8.3	8.5
COLUMBIA BASIN	AM	6650	4/01/10	24	7.7	7.6	6.8
DISASTER PEAK SNOTEL		6500	4/01/10	12	4.0	.4	7.4
FAWN CREEK SNOTEL		7050	4/01/10	51	15.5	14.5	18.7
FRY CANYON		6700	3/30/10	27	8.5	6.8	5.7
GOLD CREEK		6600	3/30/10	17	5.6	5.4	3.9
GRANITE PEAK SNOTEL		7800	4/01/10	48	14.2	13.2	25.1
JACK CREEK, LOWER(d)		6800	4/01/10	11	3.3	2.6	2.3
JACK CREEK, U SNOTEL		7280	4/01/10	45	13.9	14.7	19.9
LAMANCE CREEK SNOTEL		6000	4/01/10	22	8.2	1.0	10.1
LAUREL DRAW SNOTEL		6700	4/01/10	37	11.1	11.0	8.8
MERRIT MOUNTAIN	AM	7000	4/01/10	24	7.7	5.4	5.8
MIDAS	(d)	7200	4/01/10	0	.0	.4	1.7
QUINN RIDGE	AM	6300	3/24/10	0	.0	.0	.8
SEVENTYSIX CK SNOTEL		7100	4/01/10	28	8.3	8.8	10.7
STAG MOUNTAIN	AM	7700	4/01/10	18	5.8	4.3	5.7
TAYLOR CANYON SNOTEL		6200	4/01/10	4	2.6	3.2	2.9
TOE JAM	AM	7700	4/01/10	51	16.3	8.6	9.4
TREMEWAN RANCH		5700	3/30/10	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 - April 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.

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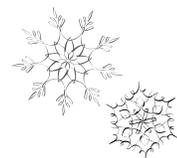
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