

Washington Water Supply Outlook Report February 1, 2009



Water Supply Outlook Reports and Federal - State – Private Cooperative Snow Surveys

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How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. 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.

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Washington Water Supply Outlook

February 2009

General Outlook

The first week of January proved to be almost too much of a good thing. Approximately 90% of the total monthly precipitation for Washington fell within the first 10-12 days, causing higher than normal runoff and localized flooding. Nearly every county in the state was affected by some form of flooding concerns, some great enough to be listed as federal disaster areas. Forecasters are predicting that the rest of February could see above average precipitation with below normal temperatures. Below average temperatures should remain though the end of April however long range precipitation forecasts are undecided. Unless we make up a lot of ground in the next couple of months water and resource managers may begin planning for worst case scenarios and water shortages for spring and summer runoff.

Snowpack

The February 1 statewide SNOTEL readings were 82% of average, down from a high of 106% after the January rains. The Conconully Lake area snow surveys reported the lowest readings at 34% of average. The Green and Tolt river basins are the only basins to remain above average at 105% and 130% respectively. Westside averages from SNOTEL, and February 1 snow surveys, included the North Puget Sound river basins with 79% of average, the Central Puget river basins with 102%, and the Lewis-Cowlitz basins with 90% of average. Snowpack along the east slopes of the Cascade Mountains included the Yakima area with 75% and the Wenatchee area with 63%. Snowpack in the Spokane River Basin was at 82% and the Walla Walla River Basin had 83% of average. Maximum snow cover in Washington was at Paradise SNOTEL near MT. Rainer, with water content of 39.6 inches. Last year at this time Paradise had 56.9 inches of snow water. The highest average in the state was at Huckleberry SNOTEL with 375% of average.

BASIN	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Spokane	68	82
Newman Lake	74	87
Pend Oreille	85	90
Okanogan	79	74
Methow	60	63
Conconully Lake	30	34
Wenatchee	68	70
Chelan	74	67
Upper Yakima	59	71
Lower Yakima	69	79
Ahtanum Creek	68	74
Walla Walla	62	83
Lower Snake	74	88
Cowlitz	67	96
Lewis	54	85
White	66	82
Green	74	105
Puyallup	75	93
Cedar	53	89
Snoqualmie	68	93
Skykomish	74	96
Skagit	70	78
Baker	71	78
Nooksack	57	82
Olympic Peninsula	42	59

Precipitation

During the month of January, the National Weather Service and Natural Resources Conservation Service climate stations reported well above to well below average precipitation totals throughout Washington river basins. The highest percent of average in the state was at Rimrock, WA (Tieton Dam) which reported 178% of average for a total of 8.48 inches. The average for Rimrock is 16 inches and 4.76 inches for January. The wettest spot in the state was reported at Skookum Creek SNOTEL with a January accumulation of 33.5 inches. Approximately 90% of the total monthly precipitation fell within the first 10-12 days of January. The rest of the month only brought minor showers to accumulate 2-4 inches of new precipitation.

RIVER BASIN	JANUARY PERCENT OF AVERAGE	WATER YEAR PERCENT OF AVERAGE
Spokane	102	92
Pend Oreille	82	77
Upper Columbia	74	78
Central Columbia	110	96
Upper Yakima	138	111
Lower Yakima	121	102
Walla Walla	131	113
Lower Snake	113	105
Lower Columbia	102	91
South Puget Sound	122	103
Central Puget Sound	144	120
North Puget Sound	113	91
Olympic Peninsula	74	92

Reservoir

Seasonal reservoir levels in Washington vary greatly due to specific watershed management practices required in preparation for irrigation season, fisheries management, power generation, municipal demands and flood control. Reservoir storage in the Yakima Basin was 649,000-acre feet, 146% of average for the Upper Reaches and 146,000-acre feet or 120% of average for Rimrock and Bumping Lakes. Storage at the Okanogan reservoirs was 28% of average for February 1. The power generation reservoirs included the following: Coeur d'Alene Lake, 96,000 acre feet, 83% of average and 40% of capacity; Chelan Lake, 342,000-acre feet, 108% of average and 51% of capacity; and the Skagit River reservoirs at 108% of average and 77% of capacity. Current climate impacts and management procedures may change these numbers on a daily or weekly basis.

BASIN	PERCENT OF CAPACITY	CURRENT STORAGE AS PERCENT OF AVERAGE
Spokane	40	83
Pend Oreille	37	77
Upper Columbia	20	28
Central Columbia	51	108
Upper Yakima	78	146
Lower Yakima	63	120
Lower Snake	68	108
Lower Columbia	N/A	N/A
North Puget Sound	77	108

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

Streamflow

Forecasts vary from 99% of average for the Walla Walla River near Milton-Freewater to 68% of average for Okanogan River. April-September forecasts for some Western Washington streams include the Cedar River near Cedar Falls, 94%; White River, 86%; and Skagit River, 80%. Some Eastern Washington streams include the Yakima River near Parker, 86%; Wenatchee River at Plain, 84%; and Spokane River near Post Falls, 82%. Volumetric forecasts are developed using current, historic and average snowpack, precipitation and streamflow data collected and coordinated by organizations cooperating with NRCS. Caution should be followed when using early season forecasts for critical water resource management decisions since conditions can change rapidly.

Statewide January streamflows were mostly above average due to considerable precipitation and some snowmelt during the first part of the month and moderate temperatures later on. The Yakima River at Cle Elum had the highest reported flows with 235% of average. The Priest River near the town of Priest River with 70% of average was the lowest in the state. Other streamflows were the following percentage of average as reported by the River Forecast Center: the Cowlitz at Castle Rock, 167%; the Spokane at Spokane, 128%; the Columbia below Rock Island Dam, 100%; and the Cle Elum near Roslyn, 216%.

BASIN	PERCENT OF AVERAGE (50 PERCENT CHANCE OF EXCEEDENCE)
Spokane	75-84
Pend Oreille	80-87
Upper Columbia	68-90
Central Columbia	81-87
Upper Yakima	80-84
Lower Yakima	86-93
Walla Walla	96-99
Lower Snake	86-94
Lower Columbia	89-91
South Puget Sound	86-90
Central Puget Sound	93-95
North Puget Sound	78-83
Olympic Peninsula	79-80

STREAM	PERCENT OF AVERAGE JANUARY STREAMFLOWS
Pend Oreille Below Box Canyon	101
Kettle at Laurier	131
Columbia at Birchbank	126
Spokane at Long Lake	110
Similkameen at Nighthawk	100
Okanogan at Tonasket	78
Methow at Pateros	140
Chelan at Chelan	155
Wenatchee at Pashastin	175
Yakima at Cle Elum	235
Yakima at Parker	205
Naches at Naches	230
Grande Ronde at Troy	138
Snake below Lower Granite Dam	86
SF Walla Walla near Milton Freewater	201
Columbia River at The Dalles	100
Lewis at Ariel	136
Cowlitz below Mayfield Dam	165
Skagit at Concrete	111
Dungeness near Sequim	84

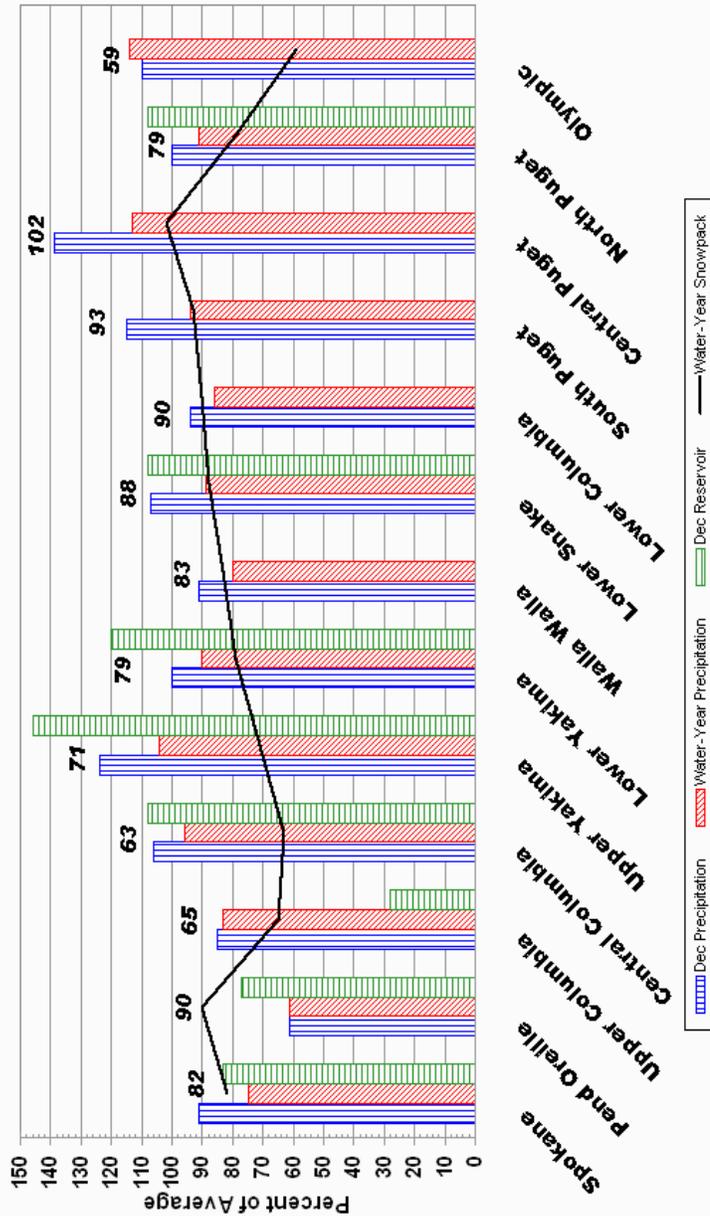
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SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1971-00
SPENCER MDW SNOTEL	3400	2/01/09	53	19.5	41.2	21.9
SPIRIT LAKE SNOTEL	3100	2/01/09	7	5.7	16.3	5.1
SPOTTED BEAR MTN.	7000	1/30/09	39	9.7	9.9	10.1
SPRUCE SPGS SNOTEL	5700	2/01/09	38	12.2	18.1	--
STARVATION MOUNTAIN	6750	1/29/09	29	8.5	12.4	13.0
STAHL PEAK SNOTEL	6030	2/01/09	55	18.4	27.1	24.1
STAMPEDE PASS SNOTEL	3860	2/01/09	65	21.5	35.1	31.0
STEVENS PASS SNOTEL	4070	2/01/09	65	21.4	31.3	30.2
STORM LAKE	7780	1/29/09	38	10.6	7.3	8.3
STRYKER BASIN	6180	1/28/09	57	17.1	24.7	21.3
SUMMERLAND RES CAN.	4200	1/29/09	21	5.1	5.7	6.9
SUMMIT G.S. #2	4600	1/29/09	25	5.6	6.6	6.3
SUNSET SNOTEL	5540	2/01/09	--	13.3	14.1	20.9
SURPRISE LKS SNOTEL	4250	2/01/09	78	24.8	41.1	32.2
SWAMP CREEK SNOTEL	4000	2/01/09	44	12.9	14.1	13.9
TEN MILE LOWER	6600	1/30/09	22	4.8	3.6	4.7
TEN MILE MIDDLE	6800	1/29/09	30	6.6	4.9	7.1
THUNDER BASIN SNOTEL	4200	2/01/09	35	13.1	25.4	24.3
THUNDER BASIN	4200	2/01/09	34	10.8	--	14.5
THOMPSON CREEK	2500	1/26/09	24	8.1	8.4	--
THOMPSON RIDGE	4650	1/29/09	21	5.5	9.1	--
TINKHAM CREEK SNOTEL	3000	2/01/09	48	12.8	29.5	22.7
TOATS COULEE	2850	1/26/09	10	1.6	2.8	2.6
TOGO	3370	1/28/09	24	6.4	10.2	7.4

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1971-00
TOUCHET SNOTEL	5530	2/01/09	56	18.0	28.7	23.8
TRINKUS LAKE	6100	1/30/09	77	24.1	25.3	26.6
TROUGH #2 SNOTEL	5310	2/01/09	13	3.9	8.0	7.5
TRUMAN CREEK	4060	1/28/09	19	4.8	5.0	3.5
TUNNEL AVENUE	2450	1/30/09	34	13.4	24.6	14.8
TV MOUNTAIN	6800	1/30/09	41	11.0	13.0	11.8
TWELVEMILE SNOTEL	5600	2/01/09	53	13.8	15.4	12.8
TWIN CAMP	4100	1/29/09	45	18.3	18.7	17.4
TWIN LAKES SNOTEL	6400	2/01/09	90	28.2	30.6	27.5
TWIN SPIRIT DIVIDE	3480	1/31/09	32	10.0	16.8	10.5
UPPER HOLLAND LAKE	6200	1/30/09	74	22.2	21.1	23.7
UPPER WHEELER SNOTEL	4400	2/01/09	20	6.1	9.8	9.2
VULCAN MTN	4660	1/29/09	27	7.2	8.2	--
VULCAN ROAD	3840	1/29/09	22	5.3	5.1	--
WARM SPRINGS SNOTEL	7800	2/01/09	63	17.7	12.6	13.8
WATERHOLE SNOTEL	5000	2/01/09	40	15.2	36.7	23.2
WEASEL DIVIDE	5450	1/29/09	54	16.3	23.1	21.5
WELLS CREEK SNOTEL	4200	2/01/09	47	14.0	24.7	22.0
WHITE PASS ES SNOTEL	4500	2/01/09	44	13.9	18.3	17.1
WHITE ROCKS MTN CAN.	7200	1/31/09	31	8.6	14.6	15.7

**February 1, 2009 -
Snowpack, Precipitation and Reservoir
Conditions at a Glance**
(Water Year = October 1, 2008 - Current Date)

NRCS
Natural Resources
Conservation Service





Natural Resources Conservation Service

Washington State
Snow, Water and Climate Services

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Helpful Internet Addresses

NRCS Snow Survey and Climate Services Homepages

Washington:
<http://www.wa.nrcs.usda.gov/snow>

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

Idaho:
<http://www.id.nrcs.usda.gov/snow>

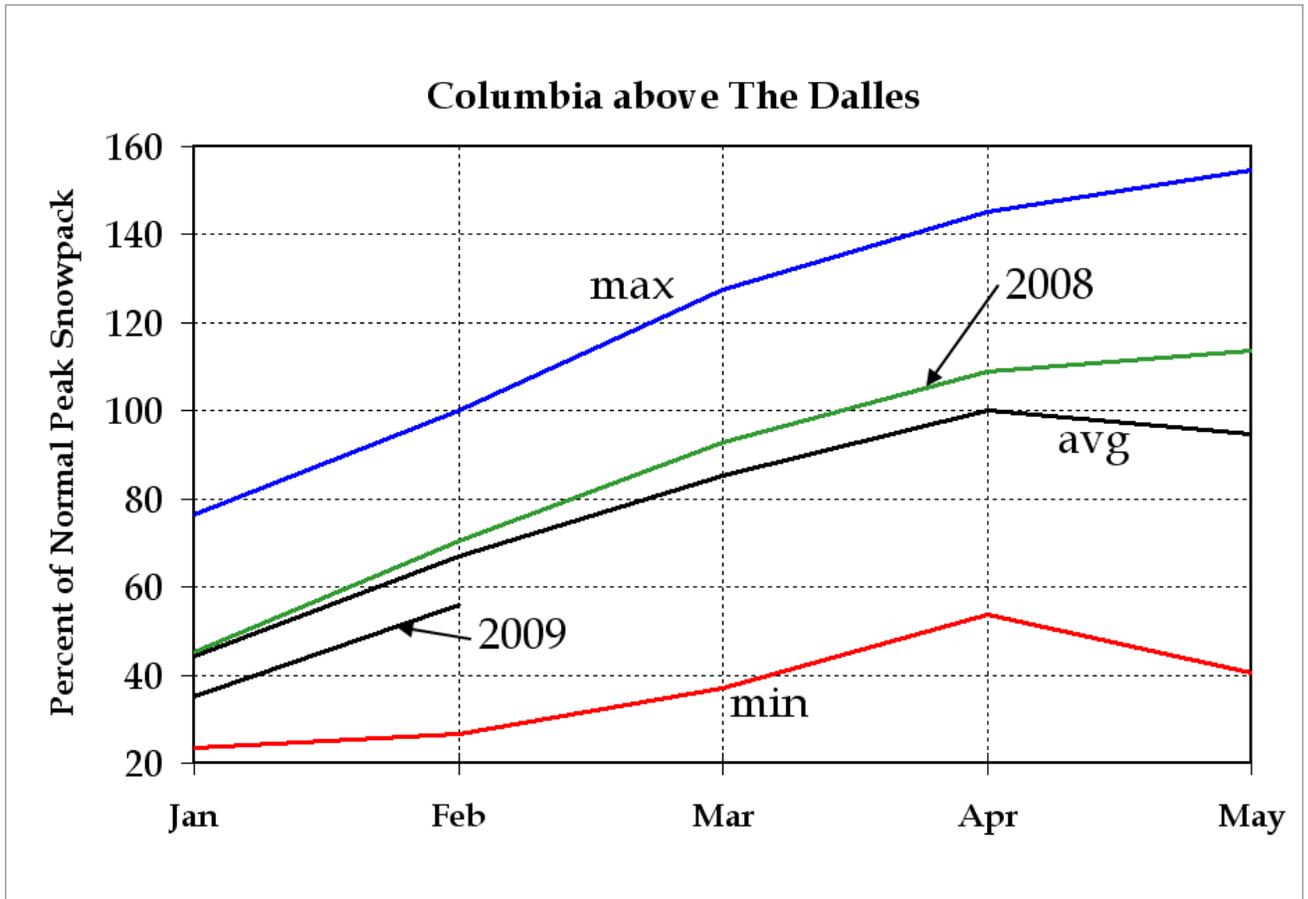
National Water and Climate Center (NWCC):
<http://www.wcc.nrcs.usda.gov>

NWCC Anonymous FTP Server:
<ftp.wcc.nrcs.usda.gov>

USDA-NRCS Agency Homepages

Washington:
<http://www.wa.nrcs.usda.gov>

NRCS National:
<http://www.nrcs.usda.gov>



February 1, 2009

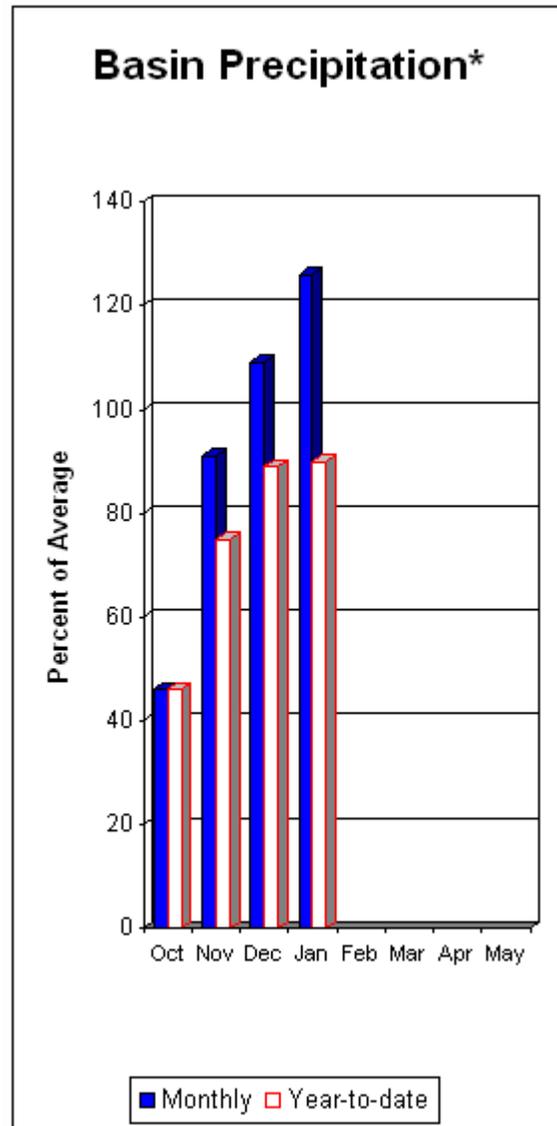
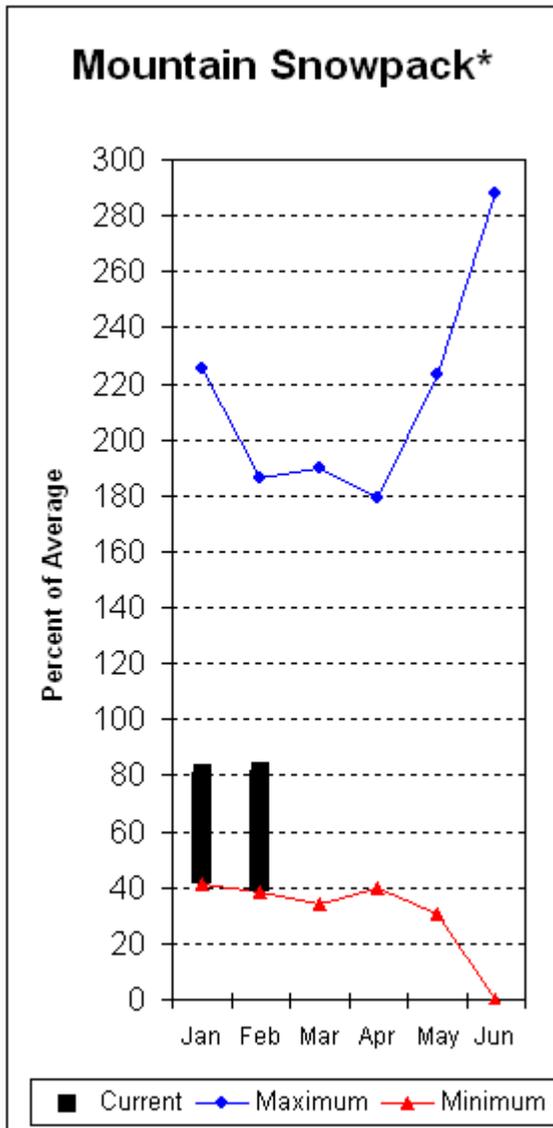
The Columbia Basin snowpack charts are produced, using data collected by automated monitors from numerous remote locations in British Columbia, Alberta, and the United States. The data are provisional, until they are officially released by the responsible data collection agency.

The combined Columbia Basin snowpack above The Dalles is currently at 84 percent of average, compared to 79 percent last month and 105 percent last year. The snowpacks in southern Idaho and Oregon reported a decrease from last month's percent of average, however, all other basin snowpacks reported an increase, including a 7 to 9 percent increase in the Canadian snowpack. The largest increase was 12 percent in the North Cascades snow pack, and the largest decrease was 14 percent in the Deschutes River basin. Mountain snowpack increases and decreases were consistent with the January precipitation patterns over the basin. The overall snowpack is at 56 percent of the average peak accumulation. This compares to 71 percent last year. As a reference, the February 1 snowpack is normally at 67 percent of the peak (April) snowpack.

The snowpack in the Columbia Basin above Castlegar, B.C. is at 82 percent of average. This compares to 77 percent last month and 102 percent last year. For the basin above Grand Coulee, the snowpack is at 83 percent of average, compared to 77 percent last month and 102 percent last year. The Snake River snowpack above Ice Harbor is at 89 percent of average, compared to 87 percent last month and 112 percent last year.

The 5 percent increase in the snowpack percentage from last month is a positive thing. Let's hope that this trend continues.

Spokane River Basin



*Based on selected stations

The February 1 forecasts for summer runoff within the Spokane River Basin are 82% of average near Post Falls and 84% at Long Lake. The Chamokane River near Long Lake forecasted to have 75% of average flows for the May-August period. The forecast is based on a basin snowpack that is 82% of average and precipitation that is 92% of average for the water year. Precipitation for January was above normal at 126% of average. Streamflow on the Spokane River at Long Lake was 110% of average for January. February 1 storage in Coeur d'Alene Lake was 96,000acre feet, 83% of average and 40% of capacity. Snowpack at Quartz Peak SNOTEL site was 87% of average with 13.4 inches of water content. Average temperatures in the Spokane basin were 1 degree below normal for January and near normal for the water year.

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

Spokane River Basin

Streamflow Forecasts - February 1, 2009

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		=====		Chance Of Exceeding *		=====		
		90% (1000AF)	70% (1000AF)	(1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	
SPOKANE near Post Falls (2)	APR-JUL	1530	1870	2100	82	2330	2670	2550
	APR-SEP	1610	1950	2180	82	2410	2750	2650
SPOKANE at Long Lake (2)	APR-JUL	1710	2110	2380	84	2650	3050	2850
	APR-SEP	1880	2300	2580	84	2860	3280	3070
CHAMOKANE CREEK near Long Lake	MAY-AUG	1.8	5.3	7.6	75	9.9	13.4	10.2

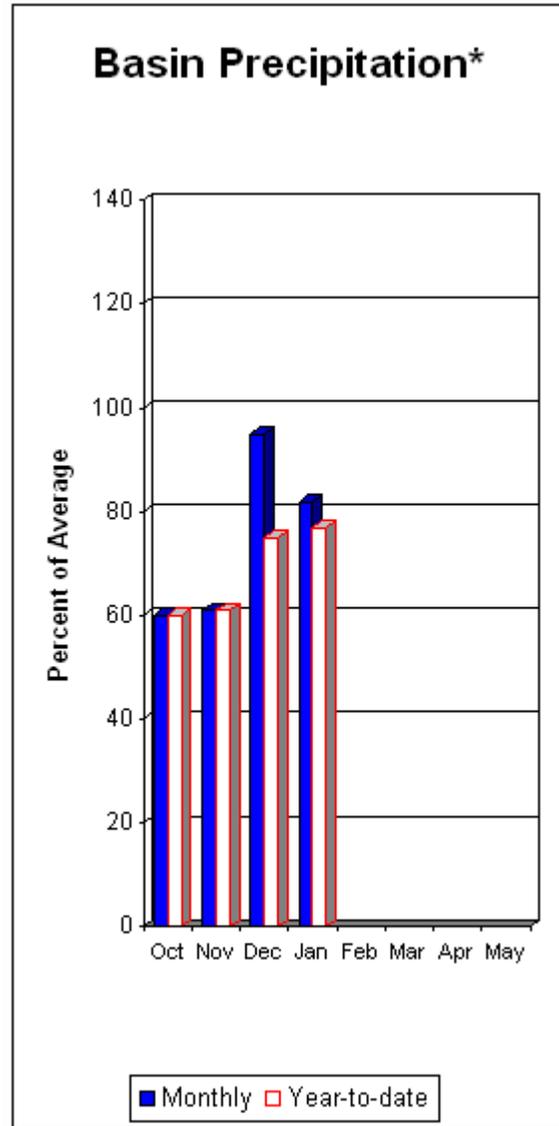
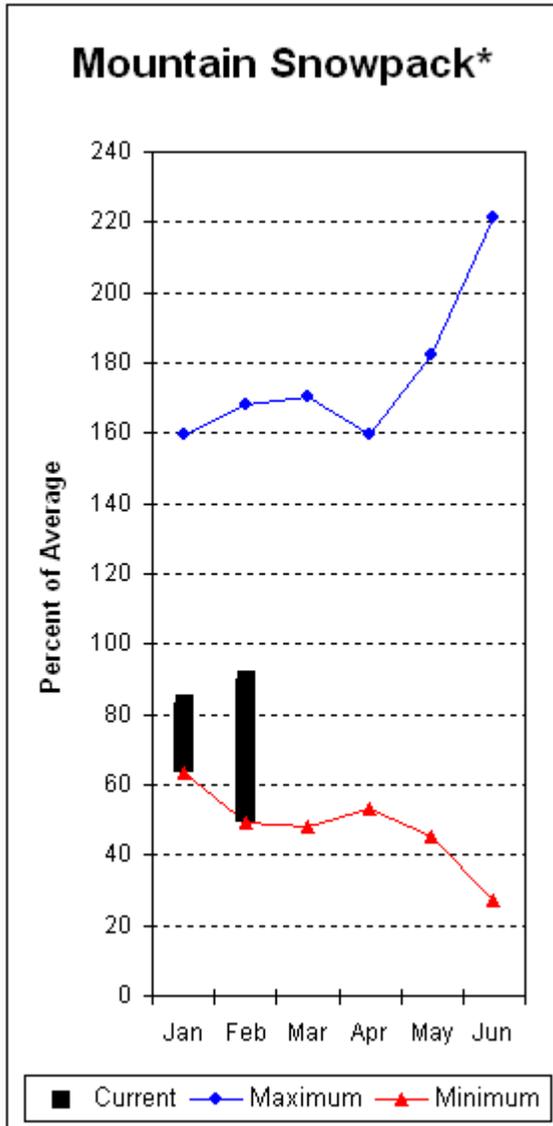
SPOKANE RIVER BASIN Reservoir Storage (1000 AF) - End of January					SPOKANE RIVER BASIN Watershed Snowpack Analysis - February 1, 2009			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					SPOKANE RIVER	12	68	82
					NEWMAN LAKE	1	74	87

* 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.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level.
The value listed under 70% is actually a 75% exceedance level.

Pend Oreille River Basins



*Based on selected stations

The April – September average forecast for the Priest River near the town of Priest River is 80% and the Pen Orielle below Box Canyon is 87%. January streamflow was 110% of average on the Pend Oreille River and 126% on the Columbia at the International Boundary. February 1 snow cover was 66% of average in the Pend Oreille Basin River Basin. Bunchgrass Meadows SNOTEL site had 14.5 inches of snow water on the snow pillow. Normally Bunchgrass would have 18.6 inches on February 1. Precipitation during January was 82% of average, bringing the year-to-date precipitation to 77% of average. Reservoir storage in the basin, including Lake Pend Oreille and Priest Lake was 77% of normal. Average temperatures were 1 degree below normal for January and near normal for the water year.

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

Pend Oreille River Basins

Streamflow Forecasts - February 1, 2009

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>				30-Yr Avg. (1000AF)			
		90% (1000AF)		70% (1000AF)			Chance Of Exceeding * 50% (1000AF) (% AVG.)		30% (1000AF)
PEND OREILLE Lake Inflow (2)	APR-JUL	10600	10900	11100	87	11300	11600	12700	
	APR-SEP	11500	11900	12100	87	12300	12700	13900	
PRIEST near Priest River (1,2)	APR-JUL	395	570	650	80	730	905	815	
	APR-SEP	420	610	695	80	780	970	870	
PEND OREILLE bl Box Canyon (2)	APR-JUL	8620	10200	11300	88	12400	14000	12900	
	APR-SEP	9070	11000	12300	87	13600	15500	14100	

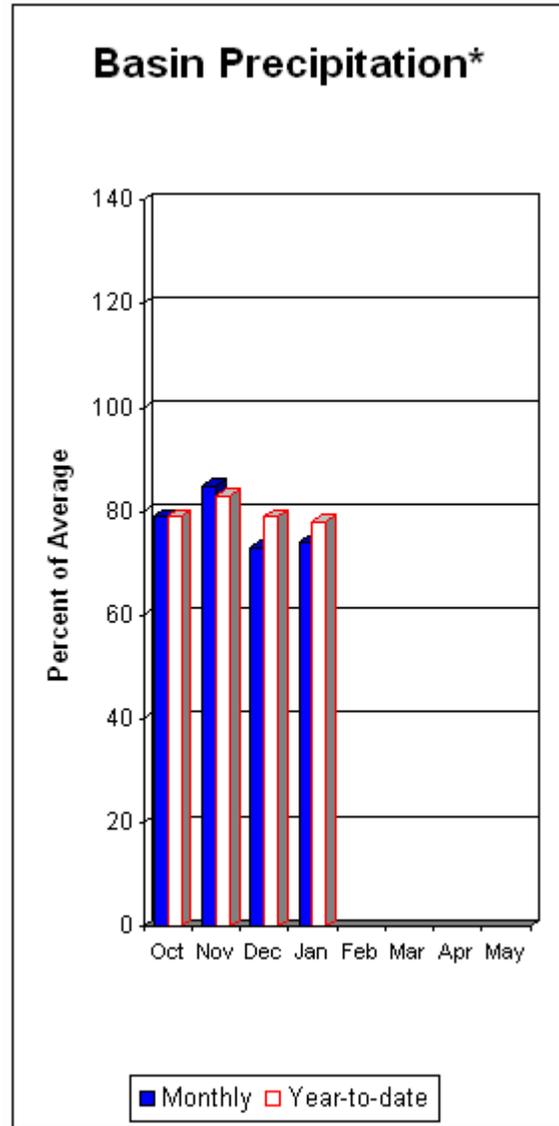
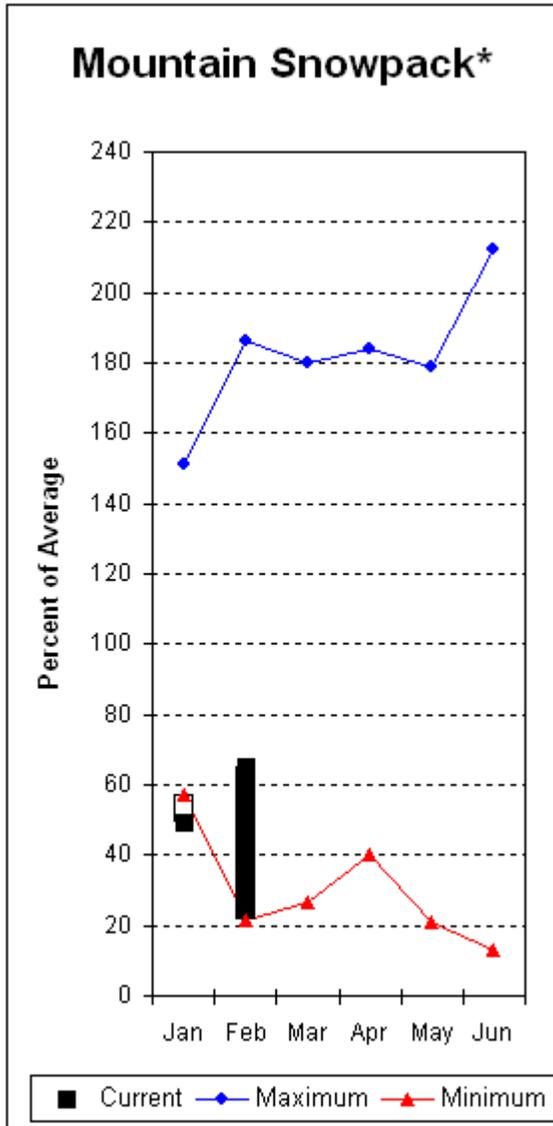
PEND OREILLE RIVER BASINS Reservoir Storage (1000 AF) - End of January					PEND OREILLE RIVER BASINS Watershed Snowpack Analysis - February 1, 2009			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average

* 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.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level.

Upper Columbia River Basins



*Based on selected stations

Summer runoff average forecast for the Okanogan River is 68%, Similkameen River is 72%, Kettle River 87% and Methow River is 71%. February 1 snow cover on the Okanogan was 74% of average, Omak Creek was 48% and the Methow was 63%. January precipitation in the Upper Columbia was 74% of average, with precipitation for the water year at 78% of average. January streamflow for the Methow River was 140% of average, 78% for the Okanogan River and 100% for the Similkameen. Snow-water content at Salmon Meadows SNOTEL was 2.5 inches. Average for this site is 7.5 inches on February 1. Combined storage in the Conconully Reservoirs was 5,000-acre feet, which is 20% of capacity and 28% of the February 1 average. Temperatures were 2 degrees below normal for January and near normal for the water year.

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

Upper Columbia River Basins

Streamflow Forecasts - February 1, 2009

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)	
COLVILLE at Kettle Falls	APR-JUL	61	93	115	90	137	169	128
	APR-SEP	67	103	127	90	151	187	141
KETTLE near Laurier	APR-JUL	1140	1440	1640	88	1840	2140	1870
	APR-SEP	1130	1480	1720	87	1960	2310	1970
COLUMBIA at Birchbank (1,2)	APR-JUL	28148	30384	31400	88	32416	34652	35700
	APR-SEP	35557	37925	39000	87	40075	42443	44800
COLUMBIA at Grand Coulee Dm (1,2)	APR-JUL	43500	46300	47600	89	48900	51700	53800
	APR-SEP	51800	55300	56900	89	58500	62000	64000
Similkameen R nr Nighthawk (1)	APR-JUL	600	855	970	72	1090	1340	1350
	APR-SEP	665	925	1040	72	1160	1410	1450
Okanogan R nr Tonasket (1)	APR-JUL	515	895	1070	68	1240	1620	1580
	APR-SEP	605	1020	1210	68	1400	1810	1770
Okanogan R at Malott (1)	APR-JUL	525	925	1110	68	1290	1700	1635
	APR-SEP	610	1050	1250	69	1450	1890	1826
Methow R nr Pateros	APR-SEP	525	630	700	71	770	875	985
	APR-JUL	485	580	645	71	710	805	910

UPPER COLUMBIA RIVER BASINS
Reservoir Storage (1000 AF) - End of January

UPPER COLUMBIA RIVER BASINS
Watershed Snowpack Analysis - February 1, 2009

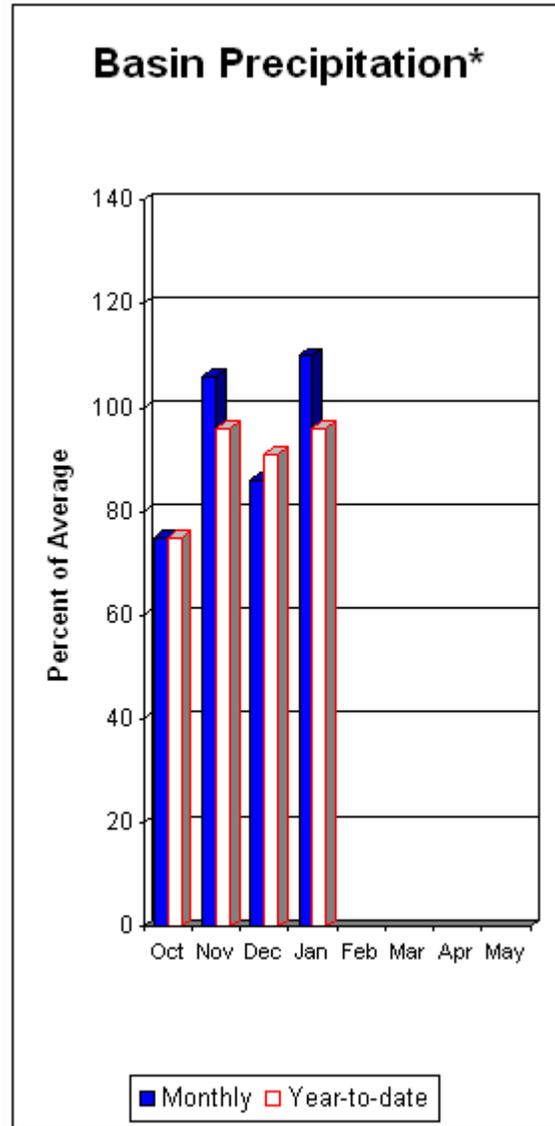
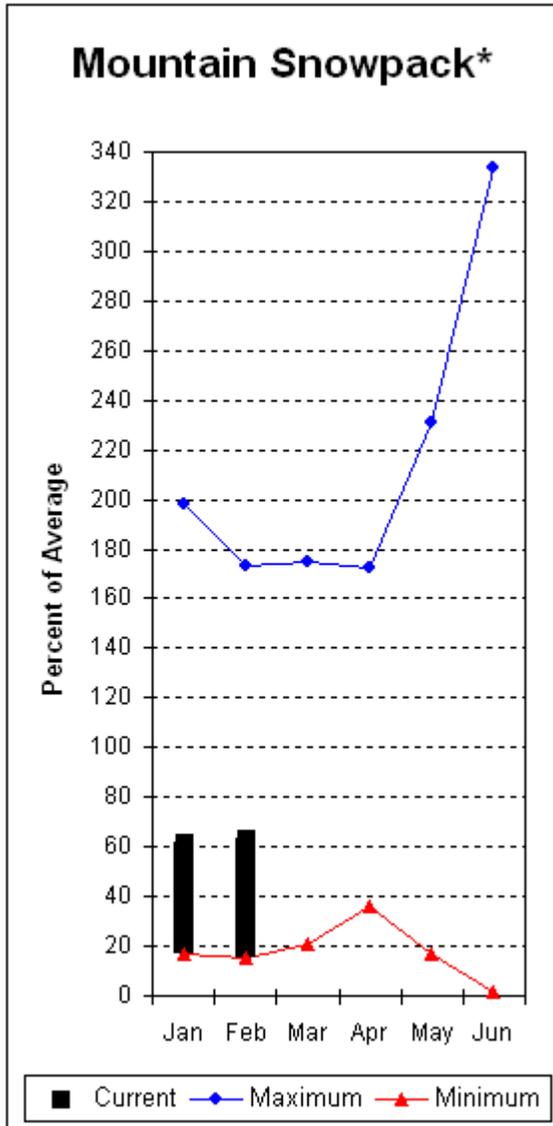
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average

* 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.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level.

Central Columbia River Basins



*Based on selected stations

Precipitation during January was 110% of average in the basin and 96% for the year-to-date. Runoff for Entiat River is forecast to be 81% of average for the summer. The February-September average forecast for Chelan River is 81%, Wenatchee River at Plain is 84%, Stehekin River is 87% and Icicle Creek is 85%. January average streamflows on the Chelan River were 155% and on the Wenatchee River 175%. February 1 snowpack in the Wenatchee River Basin was 70% of average; the Chelan, 67%; the Entiat, 62%; Stemilt Creek, 66% and Colockum Creek, 52%. Reservoir storage in Lake Chelan was 342,000-acre feet, 108% of February 1 average and 51% of capacity. Miners Ridge SNOTEL had the most snow water with 31.5 inches of water. This site would normally have 36.2 inches on February 1. Temperatures were 2 degree below normal for January and near normal for the water year.

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

Central Columbia River Basins

Streamflow Forecasts - February 1, 2009

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)	
Stehekin R at Stehekin	APR-JUL	500	565	610	87	655	720	700
	APR-SEP	605	675	720	87	765	835	830
Chelan R at Chelan (2)	APR-JUL	740	805	850	81	895	960	1050
	APR-SEP	820	905	960	81	1020	1100	1190
Entiat R nr Ardenvoir	APR-JUL	144	162	174	81	186	205	215
	APR-SEP	162	182	195	81	210	230	240
Wenatchee R at Plain	APR-JUL	775	850	900	84	950	1030	1070
	APR-SEP	840	930	990	84	1050	1140	1180
Icicle Ck nr Leavenworth	APR-JUL	235	250	265	86	280	295	310
	APR-SEP	250	275	290	85	305	330	340
Wenatchee R at Peshastin	APR-JUL	1100	1200	1270	86	1340	1440	1480
	APR-SEP	1190	1310	1400	86	1490	1610	1630
Columbia R bl Rock Island Dam (2)	APR-JUL	41200	49600	53400	91	57200	65600	59000
	APR-SEP	48600	58400	62900	91	67400	77200	69500

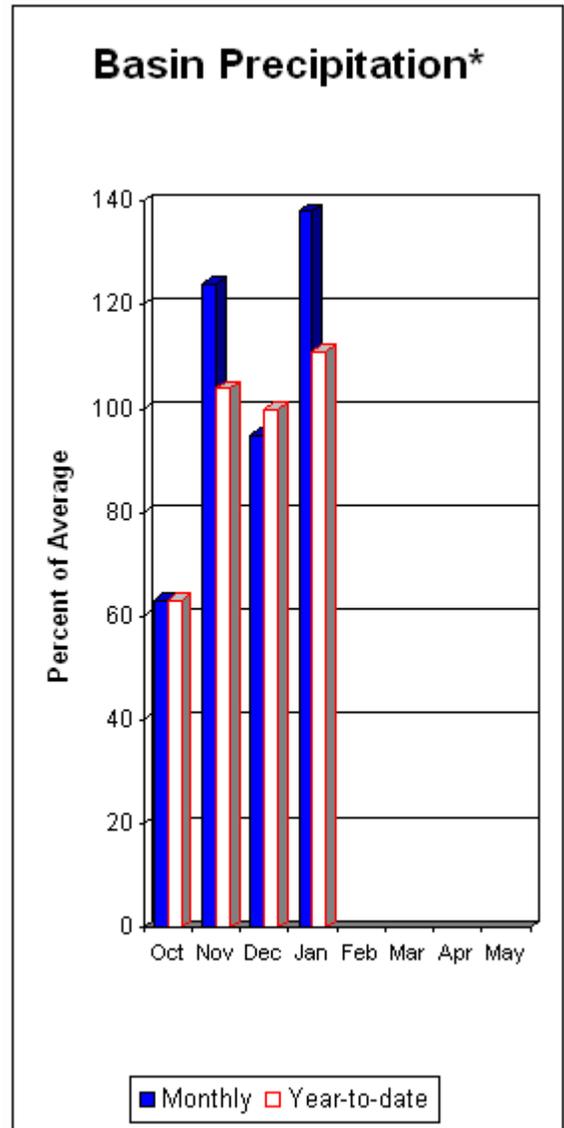
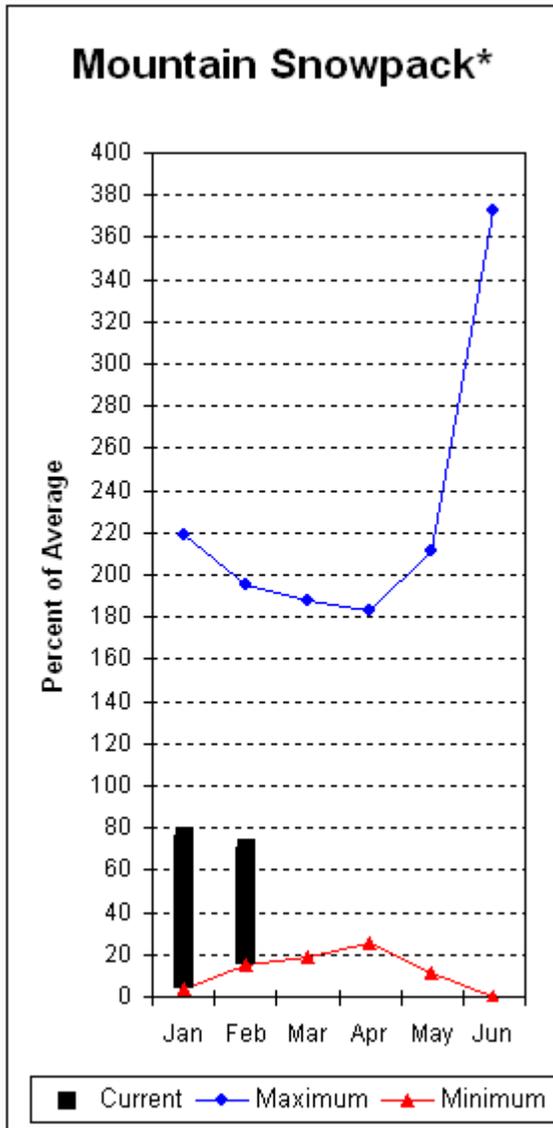
CENTRAL COLUMBIA RIVER BASINS Reservoir Storage (1000 AF) - End of January					CENTRAL COLUMBIA RIVER BASINS Watershed Snowpack Analysis - February 1, 2009			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average

* 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.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level.

Upper Yakima River Basin



*Based on selected stations

February 1 reservoir storage for the Upper Yakima reservoirs was 649,000-acre feet, 146% of average. Forecasts for the Yakima River at Cle Elum are 83% of average and the Teanaway River near Cle Elum is at 82%. Lake inflows are all forecasted to be slightly below normal this summer. January streamflows within the basin were Yakima at Cle Elum at 235% and Cle Elum River near Roslyn at 216%. February 1 snowpack was 71% based upon 9 snow course and SNOTEL readings within the Upper Yakima Basin. Precipitation was 138% of average for January and 111% year-to-date for water. Volume forecasts for the Yakima Basin are for natural flow. As such, they may differ from the U.S. Bureau of Reclamation's forecast for the total water supply available, which includes irrigation return flow.

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

Upper Yakima River Basin

Streamflow Forecasts - February 1, 2009

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)	
Keechelus Reservoir Inflow (2)	APR-JUL	67	87	100	83	113	133	121
	APR-SEP	76	96	110	83	124	144	133
Kachess Reservoir Inflow (2)	APR-JUL	62	78	89	80	100	116	111
	APR-SEP	69	85	96	80	107	123	120
Cle Elum Lake Inflow (2)	APR-JUL	270	315	345	84	375	420	410
	APR-SEP	295	345	380	84	415	465	450
Yakima R at Cle Elum (2)	APR-JUL	480	600	680	83	760	880	820
	APR-SEP	525	660	750	83	840	975	900
Teanaway R bl Forks nr Cle Elum	APR-JUL	78	101	117	82	133	156	143
	APR-SEP	81	104	120	82	136	159	146

UPPER YAKIMA RIVER BASIN Reservoir Storage (1000 AF) - End of January

UPPER YAKIMA RIVER BASIN Watershed Snowpack Analysis - February 1, 2009

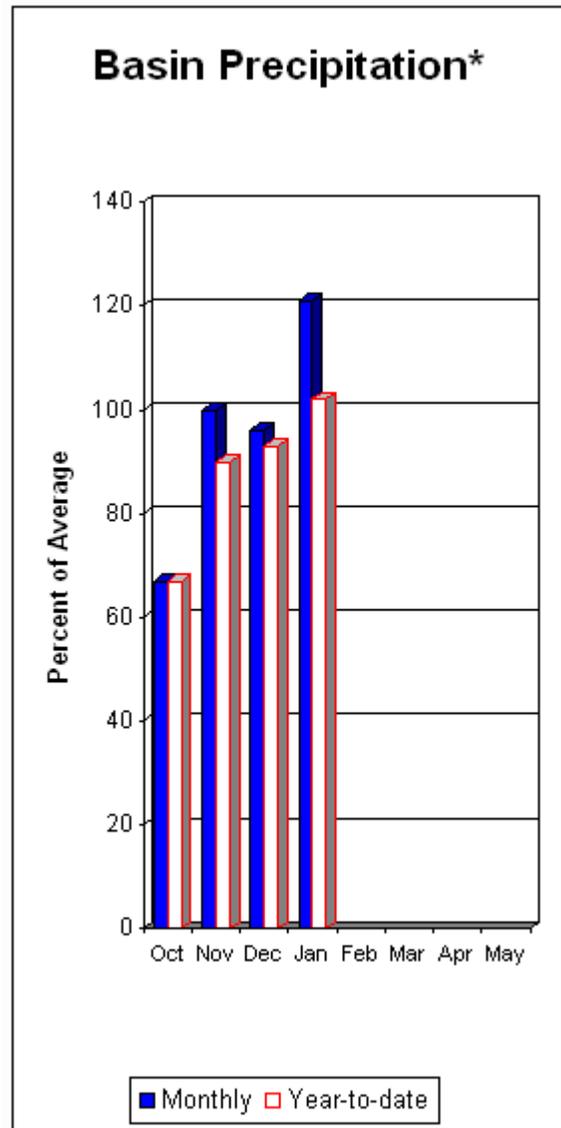
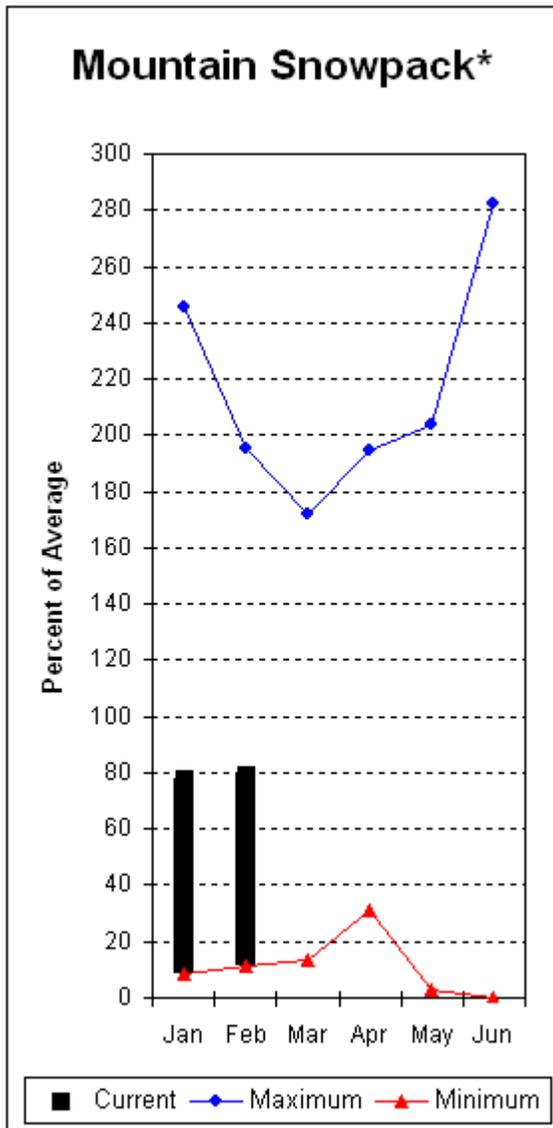
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
KEECHELUS	157.8	126.8	61.3	89.9	UPPER YAKIMA RIVER	9	59	71
KACHESS	239.0	205.7	139.6	139.4				
CLE ELUM	436.9	316.8	131.8	215.4				

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- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level.
The value listed under 70% is actually a 75% exceedance level.

Lower Yakima River Basin



*Based on selected stations

January average streamflows within the basin were: Yakima River near Parker, 205%; Naches River near Naches, 230%; and Yakima River at Kiona, 150%. February 1 reservoir storage for Bumping and Rimrock reservoirs was 146,000-acre feet, 120% of average. Forecast averages for Yakima River near Parker are 86%; American River near Nile, 91%; Ahtanum Creek, 91%; and Klickitat River near Glenwood, 90%. February 1 snowpack was 79% based upon 9 snow course and SNOTEL readings within the Lower Yakima Basin and Ahtanum Creek reported in at 74% of average. Precipitation was 121% of average for January and 102% year-to-date for water. Temperatures were near normal for January and 1 degree below for the water year. Volume forecasts for Yakima Basin are for natural flow. As such, they February differ from the U.S. Bureau of Reclamation's forecast for the total water supply available, which includes irrigation return flow.

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

Lower Yakima River Basin

Streamflow Forecasts - February 1, 2009

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)	
Bumping Lake Inflow (2)	APR-JUL	90	104	113	93	122	136	122
	APR-SEP	98	113	123	93	133	148	132
American R nr Nile	APR-JUL	78	90	98	91	106	118	108
	APR-SEP	84	98	107	91	116	130	118
Rimrock Lake Inflow (2)	APR-JUL	160	175	185	90	195	210	205
	APR-SEP	184	200	215	90	230	245	240
Naches R nr Naches (2)	APR-JUL	530	605	660	92	715	790	720
	APR-SEP	565	655	715	92	775	865	780
Ahtanum Ck at Union Gap	APR-JUL	17.4	23	27	90	31	37	30
	APR-SEP	19.3	25	29	91	33	39	32
Yakima R nr Parker (2)	APR-JUL	1230	1420	1550	86	1680	1870	1800
	APR-SEP	1350	1560	1700	86	1840	2050	1980
Klickitat near Glenwood	APR-JUL	89	103	113	90	123	137	126
	APR-SEP	120	136	147	90	158	174	163
Klickitat River near Pitt WA	APR-JUL	335	380	415	90	450	495	462
	APR-SEP	405	465	505	90	545	605	559

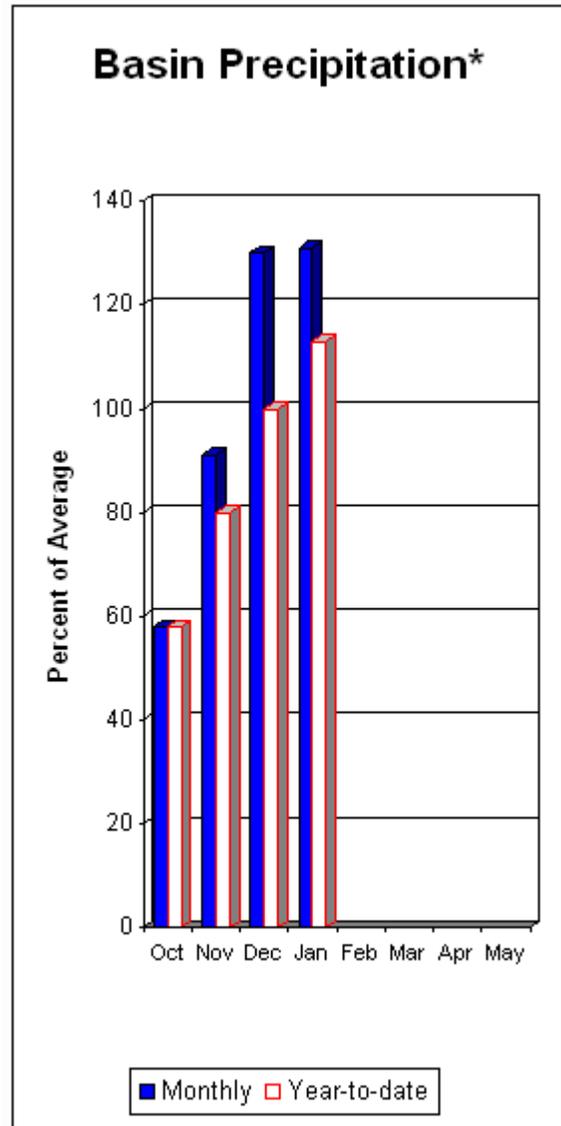
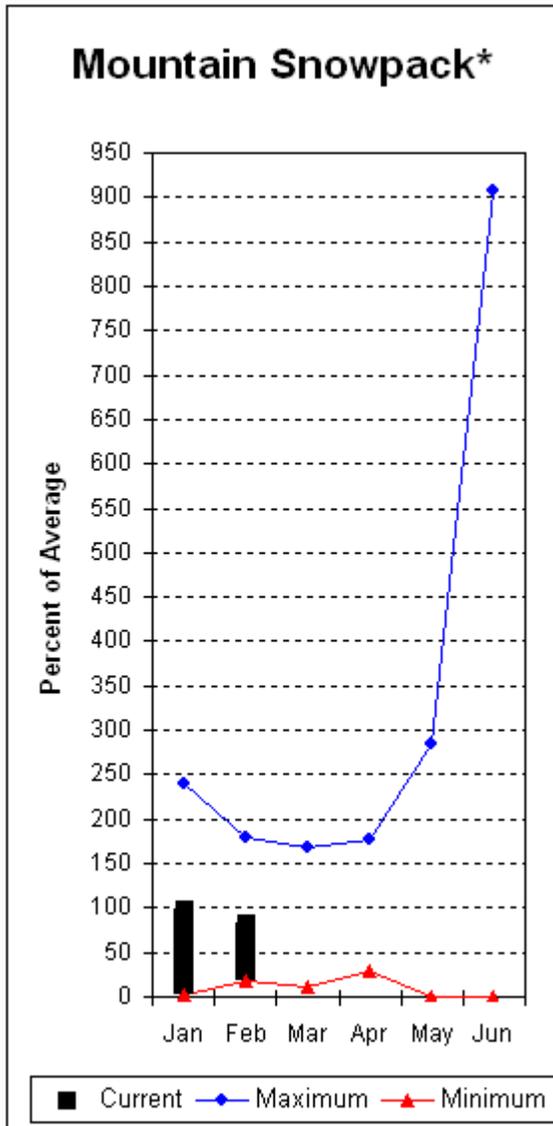
LOWER YAKIMA RIVER BASIN Reservoir Storage (1000 AF) - End of January					LOWER YAKIMA RIVER BASIN Watershed Snowpack Analysis - February 1, 2009			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites		
		This Year	Last Year	Avg		This Year as % of Last Yr	Average	
BUMPING LAKE	33.7	16.7	12.2	9.9				
RIMROCK	198.0	129.0	105.5	111.8				

* 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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- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level.
The value listed under 70% is actually a 75% exceedance level.

Walla Walla River Basin



*Based on selected stations

January precipitation was 131% of average, maintaining the year-to-date precipitation at 113% of average. Snowpack in the basin was 83% of average. Streamflow forecasts are 96% of average for Mill Creek and 99% for the SF Walla Walla near Milton-Freewater. January streamflow was 201% of average for the Walla Walla River. Average temperatures were 1 degree below normal for January and near average for the water year.

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

Walla Walla River Basin

Streamflow Forecasts - February 1, 2009

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)				
		90%		70%		50%			30%		10%	
		(1000AF)	(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)		(1000AF)	(1000AF)	(1000AF)	
SF Walla Walla R nr Milton-Freewater	MAR-SEP	66	74	80	99	86	94	81				
	APR-JUL	42	49	53	98	57	64	54				
	APR-SEP	54	61	66	99	71	78	67				
Mill Ck nr Walla Walla	APR-JUL	16.8	20	23	96	26	29	24				
	APR-SEP	20	24	27	96	30	34	28				

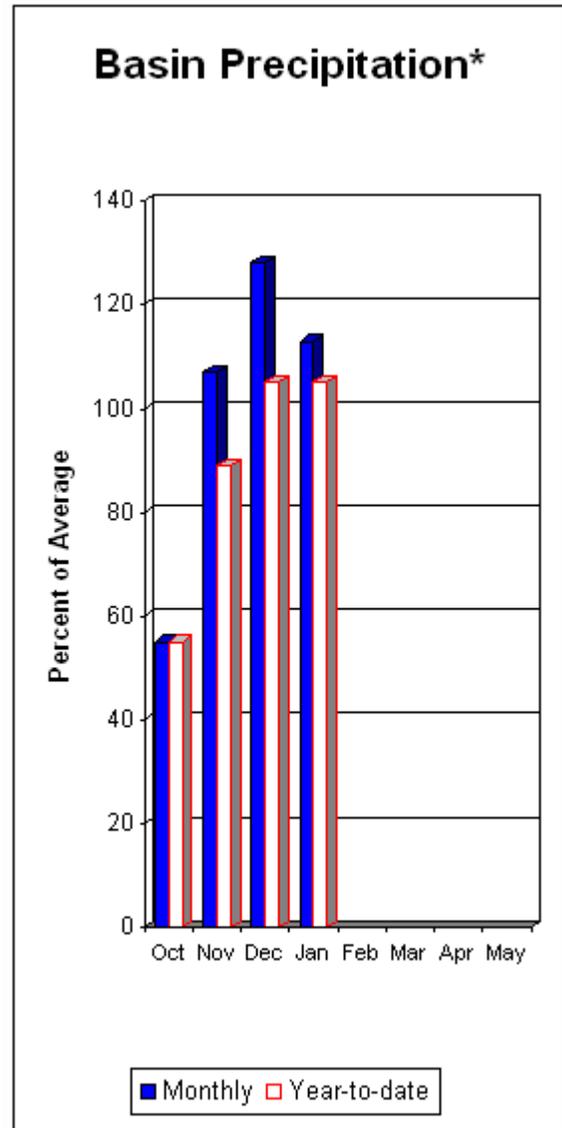
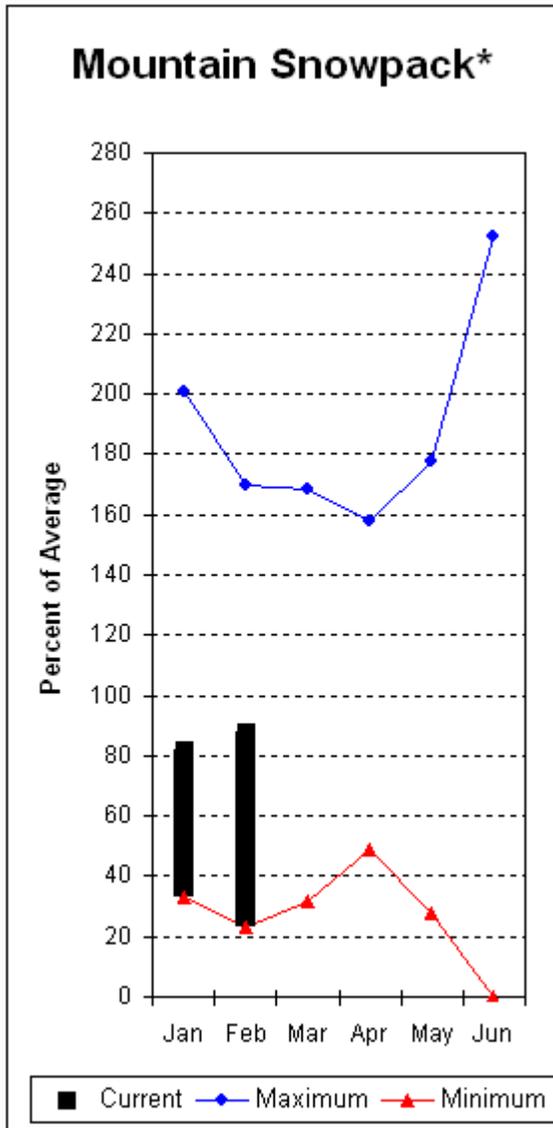
WALLA WALLA RIVER BASIN Reservoir Storage (1000 AF) - End of January					WALLA WALLA RIVER BASIN Watershed Snowpack Analysis - February 1, 2009			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					WALLA WALLA RIVER	2	62	83

* 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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- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level.

Lower Snake River Basin



*Based on selected stations

The April - September forecast is for 95% for Clearwater River at Spalding. The Snake and Grande Ronde rivers can expect summer flows to be about 84% and 89% of normal respectively. January precipitation was 113% of average, bringing the year-to-date precipitation to 105% of average. February 1 snowpack readings averaged 88% of normal. January streamflow was 86% of average for Snake River below Lower Granite Dam and 138% for Grande Ronde River near Troy. Average temperatures were near normal for January and near normal for the water year.

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

Lower Snake River Basin

Streamflow Forecasts - February 1, 2009

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		=====		Chance Of Exceeding *		=====		
		90% (1000AF)	70% (1000AF)	(1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	
Grande Ronde R at Troy	MAR-JUL	854	1244	1422	90	1600	1990	1580
	APR-SEP	704	1057	1218	89	1379	1732	1370
Clearwater R at Spalding	APR-JUL	5144	6455	7050	95	7645	8956	7430
	APR-SEP	5436	6821	7450	95	8079	9464	7850
SNAKE blw Lower Granite Dam (1,2)	APR-JUL	8685	15091	18000	83	20909	27315	21600
	APR-SEP	9731	16930	20200	84	23470	30669	24100

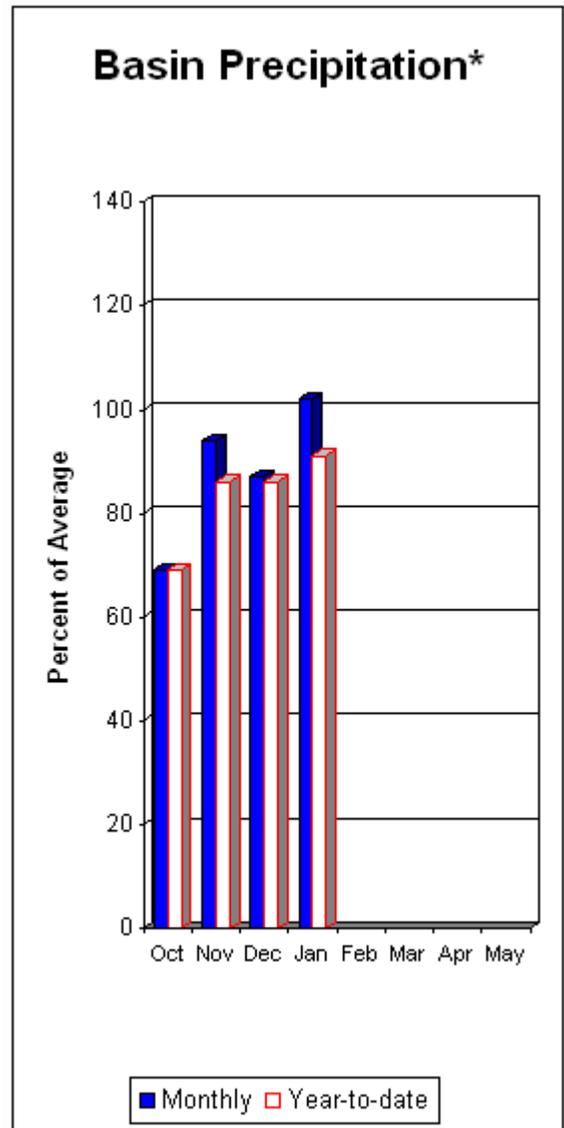
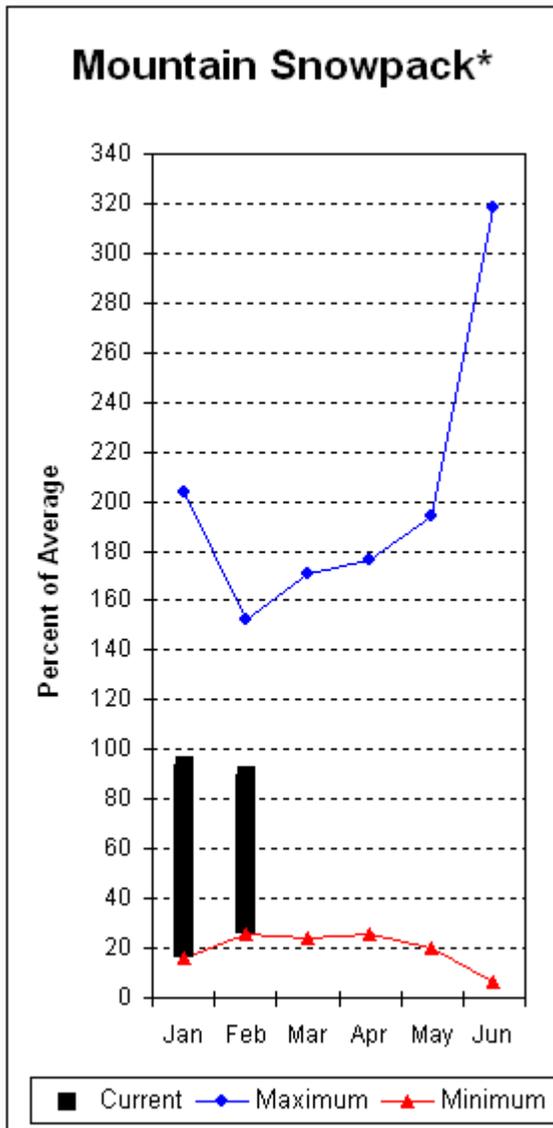
LOWER SNAKE RIVER BASIN Reservoir Storage (1000 AF) - End of January					LOWER SNAKE RIVER BASIN Watershed Snowpack Analysis - February 1, 2009			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
DWORSHAK	3468.0	2343.1	2254.7	2170.7	LOWER SNAKE, GRANDE RONDE	15	74	88

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The value listed under 70% is actually a 75% exceedance level.

Lower Columbia River Basins



*Based on selected stations

Forecasts for April – September streamflows within the basin are Lewis River at Ariel, 91% and Cowlitz River at Castle Rock, 89% of average. The Columbia at The Dalles is forecasted to have 86% of average flows this summer. January average streamflow for Cowlitz River was 165% and 136% for Lewis River. The Columbia River at The Dalles was 100% of average. January precipitation was 102% of average and the water-year average was 91%. February 1 snow cover for Cowlitz River was 96%, and Lewis River was 85% of average. Average temperatures were near normal during January and near normal for the water year. A new SNOTEL site named Calamity was installed, in cooperation with PacifiCorp, in the Lewis River Basin. Indian Rock SNOTEL was also a new installation in the Klickitat River Basin, in cooperation with Klickitat County and the City of Goldendale. We look forward to utilizing data from both new sites to help enhance forecasting efforts.

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

Lower Columbia River Basins

Streamflow Forecasts - February 1, 2009

Forecast Point	Forecast Period	<<==== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)				
		90%		70%		50%			30%		10%	
		(1000AF)	(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)		(1000AF)	(1000AF)	(1000AF)	
Columbia R at The Dalles (2)	APR-JUL	53000	66300	72400	86		78500	91800			84600	
	APR-SEP	61900	77400	84500	86		91600	107000			98600	
Klickitat near Glenwood	APR-JUL	89	103	113	90		123	137			126	
	APR-SEP	120	136	147	90		158	174			163	
Klickitat River near Pitt WA	APR-JUL	335	380	415	90		450	495			462	
	APR-SEP	405	465	505	90		545	605			559	
LEWIS at Ariel (2)	APR-JUL	700	840	940	91		1040	1180			1031	
	APR-SEP	820	970	1070	91		1170	1320			1176	
COWLITZ R. bl Mayfield Dam (2)	APR-JUL	1160	1390	1540	91		1690	1920			1689	
	APR-SEP	1280	1560	1750	91		1940	2220			1922	
COWLITZ R. at Castle Rock (2)	APR-JUL	1620	1870	2040	89		2210	2460			2295	
	APR-SEP	1870	2160	2350	89		2540	2830			2639	

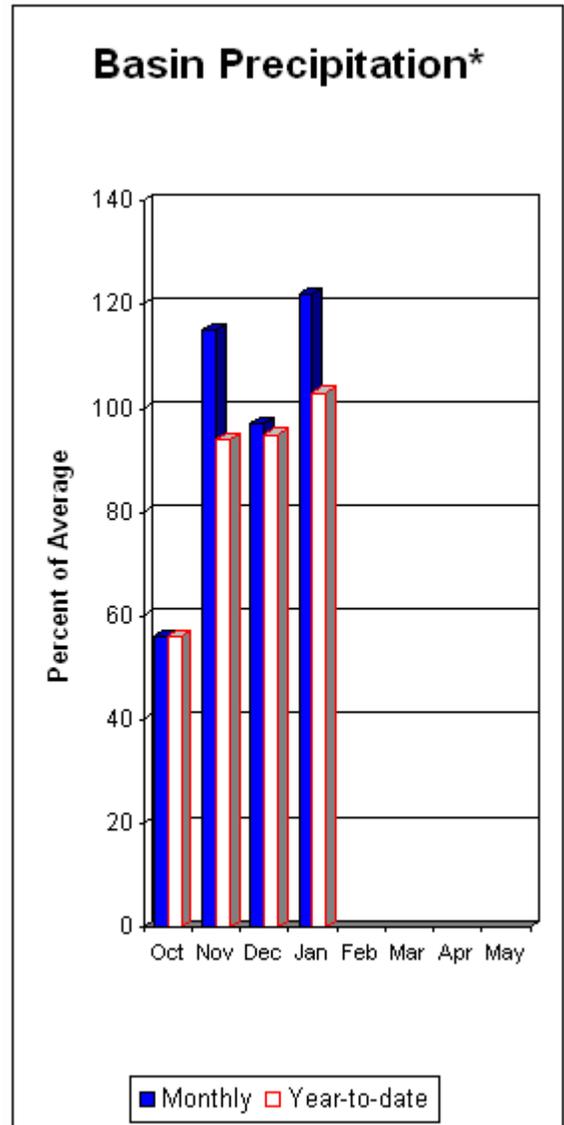
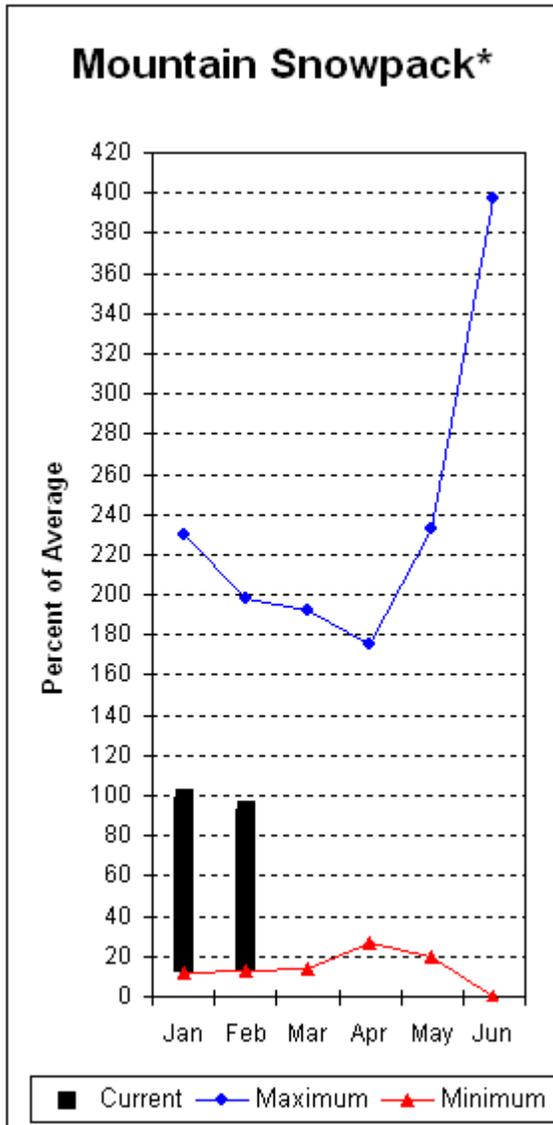
LOWER COLUMBIA RIVER BASINS Reservoir Storage (1000 AF) - End of January					LOWER COLUMBIA RIVER BASINS Watershed Snowpack Analysis - February 1, 2009			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
MOSSYROCK	0.0	1301.6	1117.5	---	LEWIS RIVER	5	54	85
SWIFT	0.0	683.4	486.0	---	COWLITZ RIVER	6	67	96
YALE	0.0	386.2	363.0	---				
MERWIN	0.0	410.1	408.9	---				

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- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level.
The value listed under 70% is actually a 75% exceedance level.

South Puget Sound River Basins



*Based on selected stations

Summer runoff is forecast to be 90% of normal for the Green River below Howard Hanson Dam and 86% for the White River near Buckley. February 1 snowpack was 82% of average for the White River, 93 % for Puyallup River and 105% in the Green River Basin. Water content on February 1 at Corral Pass SNOTEL, at an elevation of 6,000 feet, was 20.8 inches. This site has a February 1 average of 22.1 inches. January precipitation was 122% of average, bringing the water year-to-date to 103% of average for the basins. Average temperatures in the area were near normal for January and near normal for the water-year.

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

South Puget Sound River Basins

Streamflow Forecasts - February 1, 2009

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)				
		90%		70%		50%			30%		10%	
		(1000AF)	(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)		(1000AF)	(1000AF)	(1000AF)	(1000AF)
WHITE near Buckley (1,2)	APR-JUL	285	355	385	88	415	485	440				
	APR-SEP	345	425	460	86	495	575	534				
GREEN R below Howard Hansen (1,2)	APR-JUL	120	189	220	91	250	320	243				
	APR-SEP	134	205	240	90	275	345	268				

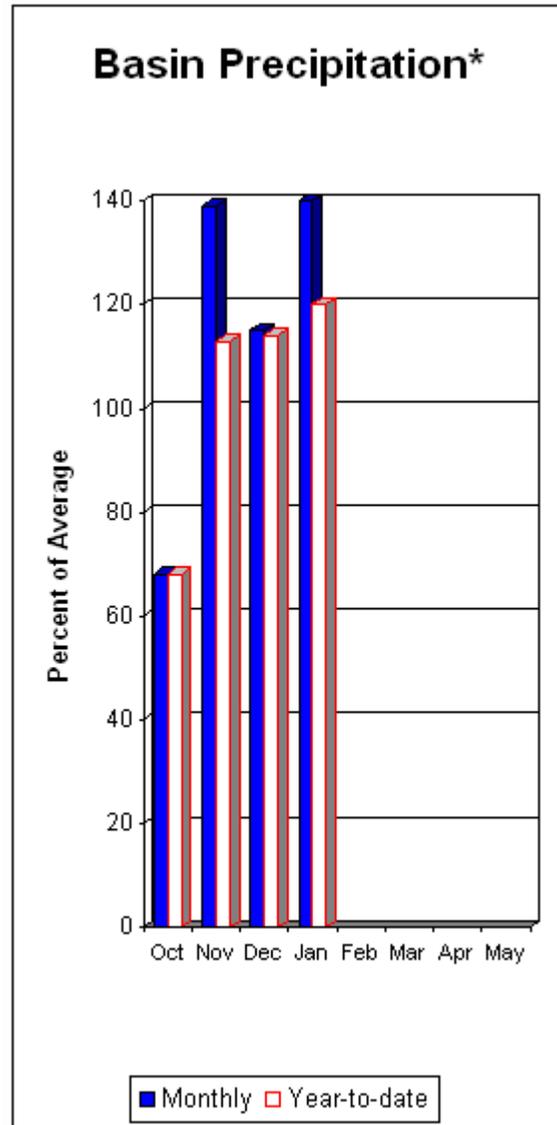
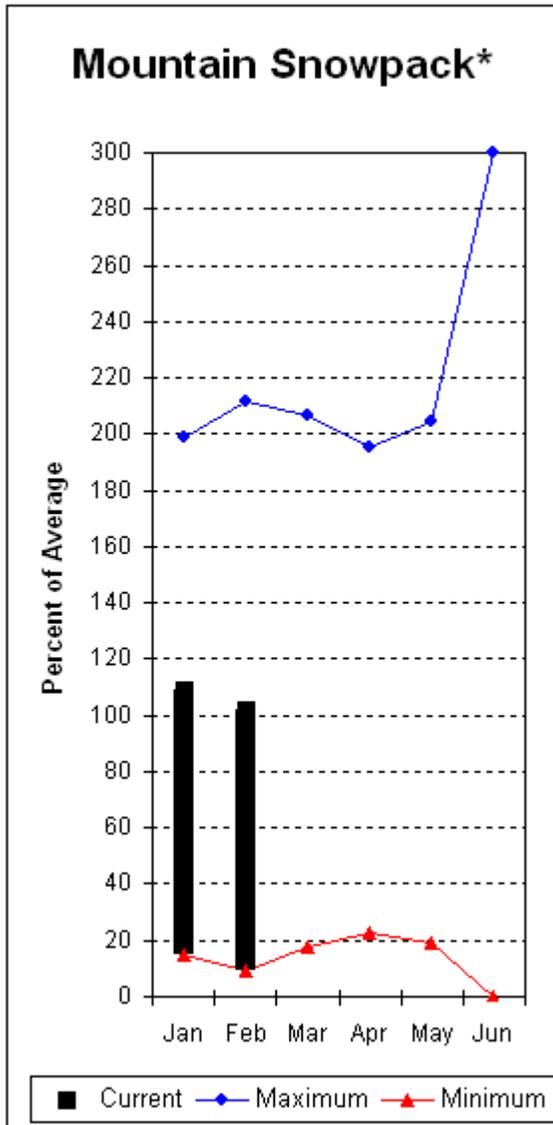
SOUTH PUGET SOUND RIVER BASINS					SOUTH PUGET SOUND RIVER BASINS				
Reservoir Storage (1000 AF) - End of January					Watershed Snowpack Analysis - February 1, 2009				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of		
		This Year	Last Year	Avg			Last Yr	Average	

* 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.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level.
The value listed under 70% is actually a 75% exceedance level.

Central Puget Sound River Basins



*Based on selected stations

Forecast for spring and summer flows are: 94% for Cedar River near Cedar Falls; 93% for Rex River; 94% for South Fork of the Tolt River; and 95% for Cedar River at Cedar Falls. Basin-wide precipitation for January was 144% of average, bringing water-year-to-date to 120% of average. February 1 average snow cover in Cedar River Basin was 89%, Tolt River Basin was 130%, Snoqualmie River Basin was 93%, and Skykomish River Basin was 96%. Skookum Creek SNOTEL site, at 3920 feet, had 28.4 inches of water content. Average February 1 water content is 20.2 inches at Skookum Creek. Temperatures were 1 degree below average for January and near normal for the water-year.

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

Central Puget Sound River Basins

Streamflow Forecasts - February 1, 2009

Forecast Point	Forecast Period	<<==== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		====		Chance Of Exceeding *		====		
		90% (1000AF)	70% (1000AF)	(1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	
CEDAR near Cedar Falls	APR-JUL	50	62	69	95	76	88	73
	APR-SEP	56	67	75	94	83	94	80
REX near Cedar Falls	APR-JUL	16.4	21	24	96	27	32	25
	APR-SEP	18.2	23	26	93	29	34	28
CEDAR RIVER at Cedar Falls	APR-JUL	41	58	70	95	82	99	74
	APR-SEP	41	58	69	95	80	97	73
SOUTH FORK TOLT near Index	APR-JUL	9.3	12.1	14.0	95	15.9	18.7	14.7
	APR-SEP	10.9	13.8	15.8	94	17.8	21	16.9

CENTRAL PUGET SOUND RIVER BASINS Reservoir Storage (1000 AF) - End of January

CENTRAL PUGET SOUND RIVER BASINS Watershed Snowpack Analysis - February 1, 2009

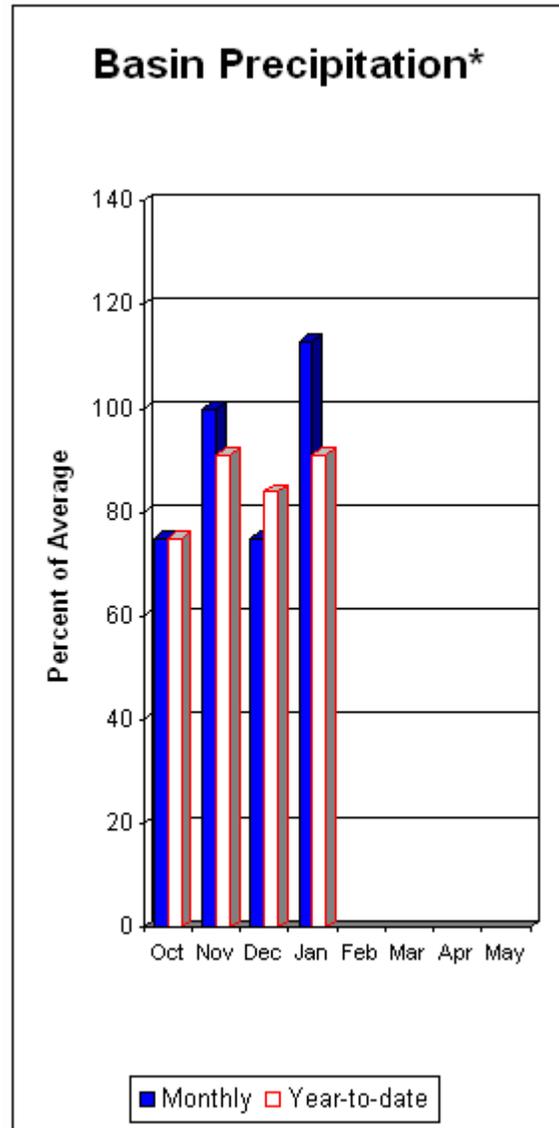
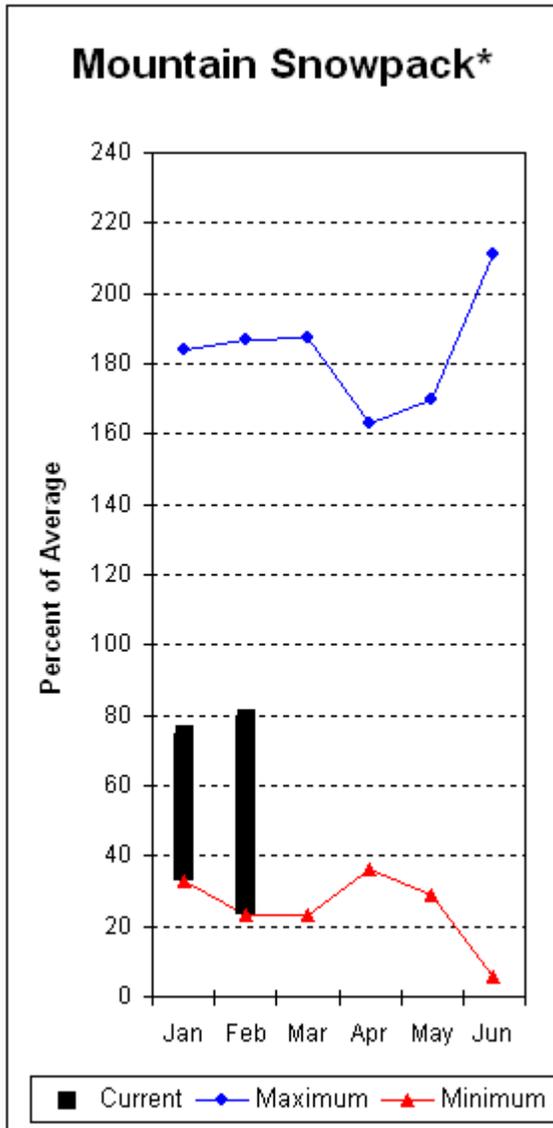
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					CEDAR RIVER	4	53	89
					TOLT RIVER	2	77	130
					SNOQUALMIE RIVER	4	68	93
					SKYKOMISH RIVER	2	74	96

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

The average is computed for the 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.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level.
The value listed under 70% is actually a 75% exceedance level.

North Puget Sound River Basins



*Based on selected stations

Forecast for Skagit River streamflow at Newhalem is 80% of average for the spring and summer period. January streamflow in Skagit River was 111% of average. Other forecast points included Baker River at 78% and Thunder Creek at 83% of average. Basin-wide precipitation for January was 113% of average, bringing water-year-to-date to 91% of average. February 1 average snow cover in Skagit River Basin was 78%, and Nooksack River Basin was 82%. Baker River Basin snow surveys reported 78% of average as well. Rainy Pass SNOTEL, at 4,780 feet, had 19.4 inches of water content. Average February 1 water content is 27.6 inches at Rainy Pass. February 1 Skagit River reservoir storage was 108% of average and 77% of capacity. Average temperatures for January were 1 degree below normal for the basin and 1 degree below average for the water year. Two new SNOTEL sites, Easy Pass and Noisy Glacier, were installed in the Baker River Basin in cooperation with Puget Sound Energy and the North Cascades National Park. They will be used for streamflow forecasting and glacier monitoring.

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

North Puget Sound River Basins

Streamflow Forecasts - February 1, 2009

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)	
THUNDER CREEK near Newhalem	APR-JUL	161	181	195	83	210	230	234
	APR-SEP	235	260	275	83	290	315	333
SKAGIT at Newhalem (2)	APR-JUL	1250	1390	1490	80	1590	1730	1864
	APR-SEP	1530	1670	1770	80	1870	2010	2217
BAKER RIVER near Concrete	APR-JUL	490	585	650	79	715	810	828
	APR-SEP	605	735	820	78	905	1040	1050

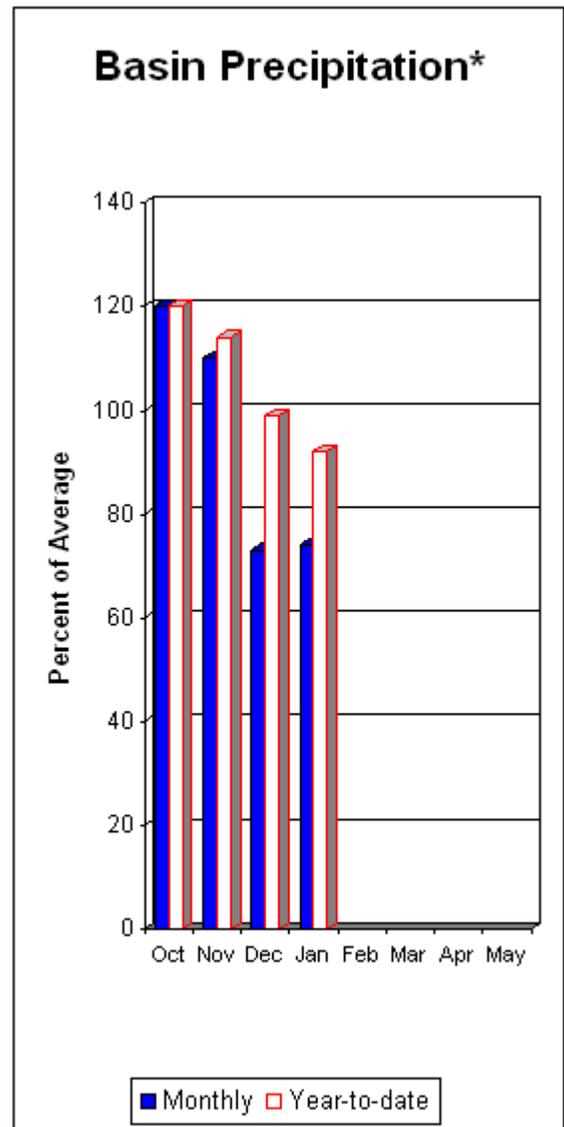
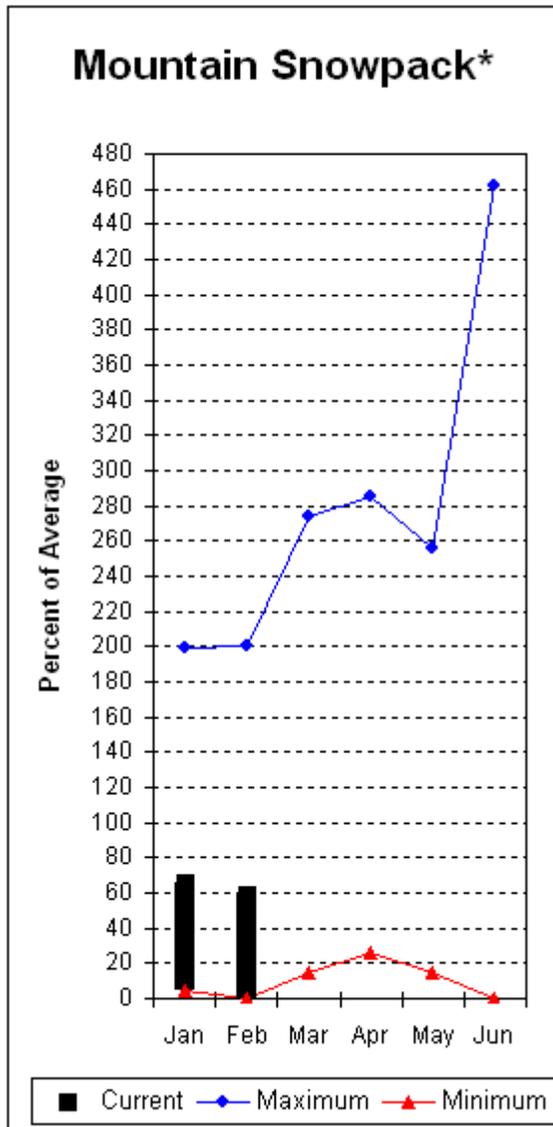
NORTH PUGET SOUND RIVER BASINS Reservoir Storage (1000 AF) - End of January					NORTH PUGET SOUND RIVER BASINS Watershed Snowpack Analysis - February 1, 2009			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ROSS	1404.1	1060.7	923.9	978.3	SKAGIT RIVER	16	70	78
DIABLO RESERVOIR	90.6	85.7	86.2	85.5	BAKER RIVER	1	71	78
					NOOKSACK RIVER	2	57	82

* 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.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level.

Olympic Peninsula River Basins



*Based on selected stations

Forecasted average runoff for streamflow for the Dungeness River is 79% and Elwha River is 80%. January runoff in the Dungeness River was 84% of normal. Big Quilcene and Wynoochee rivers should expect below average runoff this summer as well. January precipitation was 74% of average. Precipitation has accumulated at 92% of average for the water year. January precipitation at Quillayute was 11.16 inches. The thirty-year average for January is 13.65 inches. Olympic Peninsula snowpack averaged 59% of normal on February 1. Temperatures were near average for January and for the water year. A new SNOTEL site named Buckingham was installed this summer, in cooperation with the North Olympic Peninsula RC&D, NASA and the Olympic National Park Service, in the Upper Elwah River Basin. Buckingham will provide much anticipated data needs with the basin.

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

Olympic Peninsula River Basins

Streamflow Forecasts - February 1, 2009

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)	
DUNGENESE near Sequim	APR-JUL	44	80	105	85	130	166	124
	APR-SEP	42	94	129	85	164	215	152
ELWHA near Port Angeles	APR-JUL	330	355	375	90	395	420	419
	APR-SEP	395	430	450	90	470	505	503

OLYMPIC PENINSULA RIVER BASINS Reservoir Storage (1000 AF) - End of January				OLYMPIC PENINSULA RIVER BASINS Watershed Snowpack Analysis - February 1, 2009				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					OLYMPIC PENINSULA	3	54	66

* 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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- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average. The value listed under 30% is actually a 25% exceedance level. The value listed under 70% is actually a 75% exceedance level.

Issued by

Dave White
Acting Chief
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U.S. Department of Agriculture

Released by

Roylene Rides At The Door
State Conservationist
Natural Resources Conservation Service
Spokane, Washington

The Following Organizations Cooperate with the Natural Resources Conservation Service in Snow Survey Work*:

Canada	Ministry of Sustainable Resources Snow Survey, River Forecast Centre, Victoria, British Columbia
State	Washington State Department of Ecology Washington State Department of Natural Resources
Federal	Department of the Army Corps of Engineers U.S. Department of Agriculture Forest Service U.S. Department of Commerce NOAA, National Weather Service U.S. Department of Interior Bonneville Power Administration Bureau of Reclamation Geological Survey National Park Service Bureau of Indian Affairs Recourse Conservation & Development Councils
Local	City of Tacoma City of Seattle Chelan County P.U.D. Pacific Power and Light Company Puget Sound Power and Light Company Washington Water Power Company Snohomish County P.U.D. Colville Confederated Tribes Spokane County Yakama Indian Nation Whatcom County Pierce County Kalispel Tribe of Indians Spokane Indian Tribe Jamestown S'klallum Tribe
Private	Okanogan Irrigation District Wenatchee Heights Irrigation District Newman Lake Homeowners Association Whitestone Reclamation District

*Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.



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Washington Water Supply Outlook Report

Natural Resources Conservation Service
Spokane, WA

