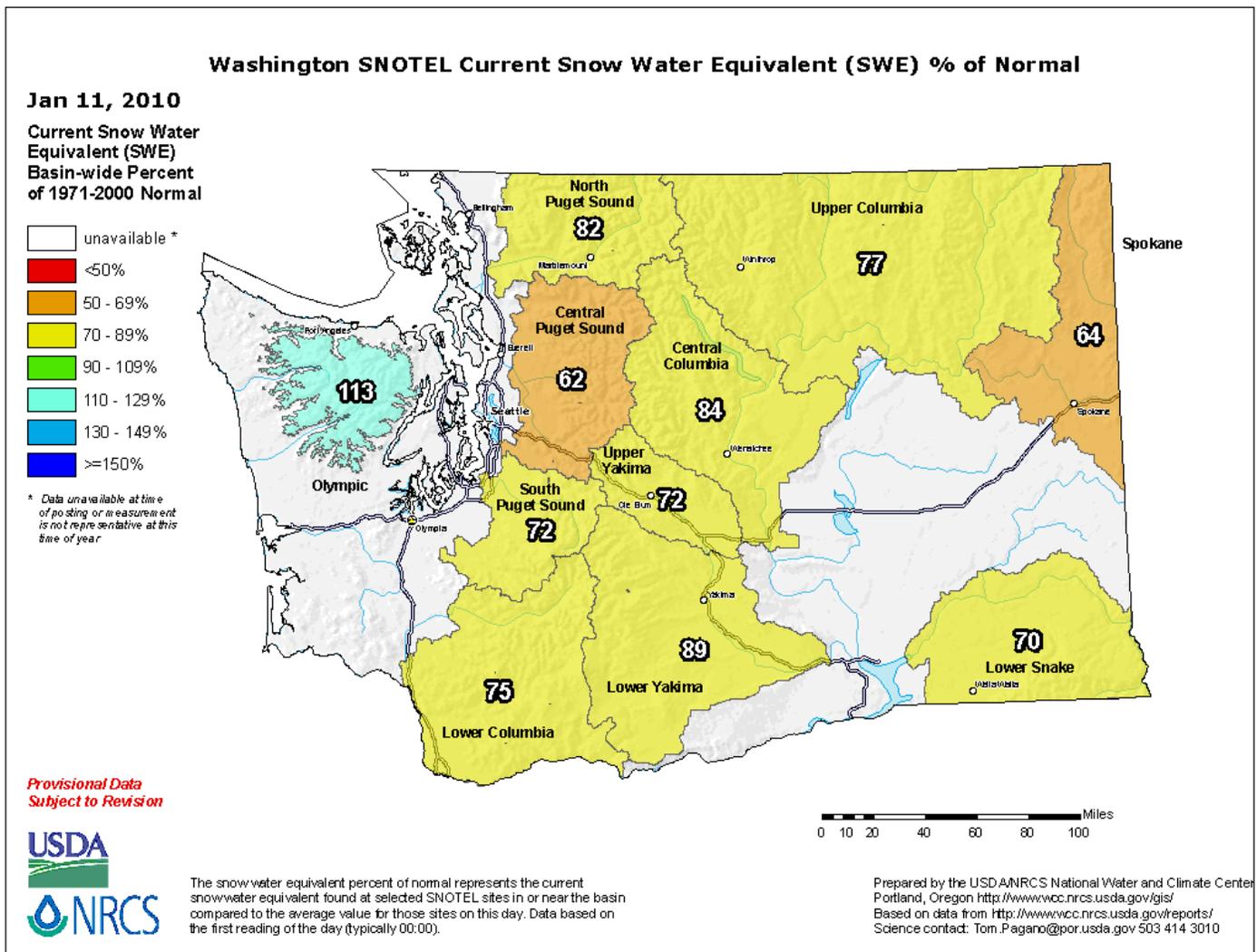


Washington Water Supply Outlook Report January 1, 2010



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

January 2010

General Outlook

The water year started off with, desperately needed, above average precipitation during October which helped to recharge deficit soil moisture conditions after a dry summer. November was a little dryer but brought the start of the snow season with record breaking accumulations in some locations. Unfortunately Mother Nature decided to turn the faucet down to a drizzle throughout December, leaving Washington with mostly below average snow and precipitation conditions coming into the New Year. With a mixed bag of near and long range weather forecasts most of them agree that there is a relatively high chance of seeing above average temperatures for the next few months. Precipitation amounts are the variance with forecasts ranging from near too much below average. Regardless of precipitation amounts it appears that the snow will stay in the mountains with only valley rain.

Snowpack

The January 1 statewide SNOTEL readings were 84% of average, down from 132% a month ago. The Green River SNOTEL data reported the lowest readings at 49% of average. Readings from the Olympic Peninsula reported the highest at 123% of average. Westside averages from SNOTEL, and January 1 snow surveys, included the North Puget Sound river basins with 79% of average, the Central Puget river basins with 72%, and the Lewis-Cowlitz basins with 90% of average. Snowpack along the east slopes of the Cascade Mountains included the Yakima area with 79% and the Wenatchee area with 72%. Snowpack in the Spokane River Basin was at 56% and the Walla Walla River Basin had 89% of average. Maximum snow cover in Washington was at Brown Top SNOTEL near Ross Lake, with water content of 35.3 inches. Brown Top is a new SNOTEL just installed last fall so an average has not been developed. However the adjacent snow course averages 27.2 inches on the years that it has been measured.

| BASIN | PERCENT OF LAST YEAR | PERCENT OF AVERAGE |
|-------------------|----------------------|--------------------|
| Spokane | 65 | 56 |
| Newman Lake | 82 | 78 |
| Pend Oreille | 89 | 73 |
| Okanogan | 129 | 71 |
| Methow | 142 | 72 |
| Conconully Lake | 190 | 75 |
| Wenatchee | 116 | 75 |
| Chelan | 147 | 80 |
| Upper Yakima | 90 | 68 |
| Lower Yakima | 114 | 87 |
| Ahtanum Creek | 124 | 82 |
| Walla Walla | 90 | 89 |
| Lower Snake | 85 | 72 |
| Cowlitz | 98 | 84 |
| Lewis | 95 | 93 |
| White | 114 | 92 |
| Green | 74 | 49 |
| Puyallup | 85 | 91 |
| Cedar | 66 | 77 |
| Snoqualmie | 71 | 69 |
| Skykomish | 85 | 78 |
| Skagit | 141 | 77 |
| Baker | 149 | 69 |
| Nooksack | 146 | 91 |
| Olympic Peninsula | 186 | 123 |

Precipitation

During the month of December, the National Weather Service and Natural Resources Conservation Service climate stations reported well below average precipitation totals throughout Washington river basins. The highest percent of average in the state was at Mill Creek Dam near Walla Walla which reported 131% of average for a total of 3.20 inches. The average for Mill Creek Dam is 2.45 inches for December. The wettest spot in the state was reported at June Lake SNOTEL with a December accumulation of 17 inches. Normally June Lake would receive 28.7 inches for this period. October precipitation was well above average across the state. November also did well in most areas including good mountain snow. Water-year 2009 ended with near to slightly below average precipitation statewide however a dry summer lead to exceedingly low soil moisture conditions. Octobers' above average precipitation helped rebuild those soil moisture levels to near water holding capacity before the snow started piling up, which should help facilitate better runoff this summer.

| RIVER BASIN | DECEMBER PERCENT OF AVERAGE | WATER YEAR PERCENT OF AVERAGE |
|---------------------------|--------------------------------|----------------------------------|
| Spokane | 56 | 75 |
| Pend Oreille | 61 | 84 |
| Upper Columbia | 51 | 85 |
| Central Columbia | 42 | 85 |
| Upper Yakima | 38 | 82 |
| Lower Yakima | 59 | 92 |
| Walla Walla | 80 | 89 |
| Lower Snake | 78 | 80 |
| Lower Columbia | 59 | 92 |
| South Puget Sound | 43 | 89 |
| Central Puget Sound | 39 | 91 |
| North Puget Sound | 43 | 111 |
| Olympic Peninsula | 56 | 143 |

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 345,000-acre feet, 87% of average for the Upper Reaches and 88,000-acre feet or 79% of average for Rimrock and Bumping Lakes. Storage at the Okanogan reservoirs was 60% of average for January 1. The power generation reservoirs included the following: Coeur d'Alene Lake, 41,000 acre feet, 38% of average and 17% of capacity; Chelan Lake, 450,000-acre feet, 113% of average and 66% of capacity; and the Skagit River reservoirs at 101% of average and 83% of capacity. Recent climate impacts and management procedures may affect these numbers on a daily or weekly basis.

| BASIN | PERCENT OF CAPACITY | CURRENT STORAGE AS PERCENT OF AVERAGE |
|-------------------------|---------------------|------------------------------------------|
| Spokane | 17 | 38 |
| Pend Oreille | 35 | 81 |
| Upper Columbia | 41 | 60 |
| Central Columbia | 66 | 113 |
| Upper Yakima | 41 | 87 |
| Lower Yakima | 38 | 79 |
| Lower Snake | 62 | 96 |
| Lower Columbia | N/A | N/A |
| North Puget Sound | 83 | 101 |

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

Streamflow

Forecasts vary from 96% of average for the SF Walla Walla to 68% of average for Teanaway River. April-September forecasts for some Western Washington streams include the Cedar River near Cedar Falls, 75%; White River, 88%; and Skagit River, 92%. Some Eastern Washington streams include the Yakima River near Parker, 80%; Wenatchee River at Plain, 73%; and Spokane River near Post Falls, 77%. 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 used when using early season forecasts for critical water resource management decisions.

Statewide December streamflows were mostly below average due to lack of precipitation and extremely cold temperatures. The Similkameen River had the highest reported flows with 104% of average. The S.F. Walla Walla River with 35% 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, 58%; the Spokane at Spokane, 43%; the Columbia below Rock Island Dam, 60%; and the Cle Elum near Roslyn, 52%.

| BASIN | PERCENT OF AVERAGE (50 PERCENT CHANCE OF EXCEEDENCE) |
|---------------------------|---------------------------------------------------------|
| Spokane | 71-77 |
| Pend Oreille | 77-83 |
| Upper Columbia | 79-88 |
| Central Columbia | 71-87 |
| Upper Yakima | 68-84 |
| Lower Yakima | 80-91 |
| Walla Walla | 89-96 |
| Lower Snake | 86-94 |
| Lower Columbia | 80-100 |
| South Puget Sound | 74-88 |
| Central Puget Sound | 75-82 |
| North Puget Sound | 78-92 |
| Olympic Peninsula | 90-93 |

| STREAM | PERCENT OF AVERAGE DECEMBER STREAMFLOWS |
|--------------------------------------------|--------------------------------------------|
| Pend Oreille Below Box Canyon | 56 |
| Kettle at Laurier | 47 |
| Columbia at Birchbank | 70 |
| Spokane at Long Lake | 45 |
| Similkameen at Nighthawk | 104 |
| Okanogan at Tonasket | 96 |
| Methow at Pateros | 90 |
| Chelan at Chelan | 68 |
| Wenatchee at Pashastin | 76 |
| Yakima at Cle Elum | 50 |
| Yakima at Parker | 60 |
| Naches at Naches | 56 |
| Grande Ronde at Troy | 43 |
| Snake below Lower Granite Dam | 60 |
| SF Walla Walla near Milton Freewater | 34 |
| Columbia River at The Dalles | 65 |
| Lewis at Ariel | 56 |
| Cowlitz below Mayfield Dam | 68 |
| Skagit at Concrete | 75 |
| Dungeness near Sequim | 87 |

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

BASIN SUMMARY OF
SNOW COURSE DATA

JANUARY 2010

| SNOW COURSE | ELEVATION | DATE | SNOW DEPTH | WATER CONTENT | LAST YEAR | AVERAGE 1971-00 | SNOW COURSE | ELEVATION | DATE | SNOW DEPTH | WATER CONTENT | LAST YEAR | AVERAGE 1971-00 |
|------------------------|-----------|----------|------------|---------------|-----------|-----------------|----------------------|-----------|----------|------------|---------------|-----------|-----------------|
| ALPINE MEADOWS SNTL | 3500 | 1/01/10 | 32 | 15.9 | 24.0 | 20.1 | MOULTON RESERVOIR | 6850 | 12/31/09 | 10 | 2.0 | 3.9 | 3.5 |
| ASHLEY DIVIDE | 4820 | 12/29/09 | 7 | .8 | 3.8 | 3.4 | MOUNT BLUM AM | 5800 | 12/29/09 | 60 | 21.0 | -- | 28.1 |
| BADGER PASS SNOTEL | 6900 | 1/01/10 | 60 | 15.8 | 9.1 | 15.2 | MOUNT CRAG SNOTEL | 3960 | 1/01/10 | 48 | 13.5 | 6.0 | 11.6 |
| BARKER LAKES SNOTEL | 8250 | 1/01/10 | 37 | 9.5 | 9.1 | 6.7 | MOWICH SNOTEL | 3160 | 1/01/10 | 1 | .8 | 5.1 | .4 |
| BASIN CREEK SNOTEL | 7180 | 1/01/10 | 14 | 3.6 | 4.2 | 3.7 | MOUNT GARDNER SNOTEL | 2920 | 1/01/10 | 16 | 4.1 | 10.3 | 7.4 |
| BEAVER PASS SNOTEL | 3630 | 1/01/10 | 52 | 14.9 | 10.0 | 18.8 | N.F. ELK CR SNOTEL | 6250 | 1/01/10 | 15 | 3.2 | 4.4 | 5.1 |
| BLACK PINE SNOTEL | 7100 | 1/01/10 | 18 | 3.4 | 5.9 | 5.2 | NEVADA RIDGE SNOTEL | 7020 | 1/01/10 | 32 | 5.7 | 5.8 | 6.8 |
| BLEWETT PASS#2SNOTEL | 4240 | 1/01/10 | 24 | 5.5 | 6.9 | 8.2 | NEZ PERCE CMP SNOTEL | 5650 | 1/01/10 | 24 | 4.0 | 5.7 | 6.1 |
| BUMPING LAKE (NEW) | 3400 | 12/29/09 | 24 | 6.0 | 6.6 | 7.2 | NOISY BASIN SNOTEL | 6040 | 1/01/10 | 72 | 17.0 | 14.7 | 19.8 |
| BUMPING RIDGE SNOTEL | 4610 | 1/01/10 | 42 | 11.3 | 12.1 | 12.1 | OLALLIE MDWS SNOTEL | 4030 | 1/01/10 | 55 | 19.3 | 17.4 | 22.2 |
| BUNCHGRASS MDWS SNOTEL | 5000 | 1/01/10 | 48 | 11.9 | 10.1 | 12.6 | OPHIR PARK | 7150 | 1/01/10 | 25 | 6.0 | -- | 6.6 |
| BURNT MOUNTAIN PIL | 4170 | 1/01/10 | 13 | 4.2 | 10.9 | 5.7 | PARADISE SNOTEL | 5130 | 1/01/10 | 70 | 28.8 | 24.5 | 32.8 |
| CAYUSE PASS SNOTEL | 5240 | 1/01/10 | 71 | 21.4 | 17.5 | -- | PARK CK RIDGE SNOTEL | 4600 | 1/01/10 | 66 | 19.6 | 10.0 | 22.5 |
| CHESSMAN RESERVOIR | 6200 | 12/28/09 | 8 | 1.5 | 2.0 | 1.5 | PETERSON MDW SNOTEL | 7200 | 1/01/10 | 17 | 4.2 | 5.9 | 4.4 |
| COMBINATION SNOTEL | 5600 | 1/01/10 | 7 | 1.7 | 2.7 | 2.2 | PIGTAIL PEAK SNOTEL | 5800 | 1/01/10 | 58 | 19.3 | 20.2 | 23.1 |
| COPPER BOTTOM SNOTEL | 5200 | 1/01/10 | 15 | 3.1 | 3.7 | 5.3 | PIKE CREEK SNOTEL | 5930 | 1/01/10 | 32 | 7.1 | 4.4 | 12.0 |
| CORRAL PASS SNOTEL | 5800 | 1/01/10 | 44 | 12.1 | 12.8 | 15.8 | PIPESTONE PASS | 7200 | 12/27/09 | 8 | 1.5 | 1.6 | 2.2 |
| COUGAR MTN. SNOTEL | 3200 | 1/01/10 | 8 | 2.9 | 11.3 | 8.5 | POPE RIDGE SNOTEL | 3590 | 1/01/10 | 33 | 6.7 | 5.7 | 9.8 |
| COYTE HILL | 4200 | 12/31/09 | 15 | 2.1 | 3.6 | 4.3 | POTATO HILL SNOTEL | 4510 | 1/01/10 | 46 | 12.2 | 11.5 | 12.4 |
| DALY CREEK SNOTEL | 5780 | 1/01/10 | 15 | 3.6 | 5.1 | 4.9 | QUARTZ PEAK SNOTEL | 4700 | 1/01/10 | 28 | 8.0 | 9.8 | 10.2 |
| DISCOVERY BASIN | 7050 | 12/28/09 | 14 | 2.2 | 5.0 | 4.2 | RAGGED MOUNTAIN | 4200 | 1/02/10 | 28 | 6.5 | -- | 9.9 |
| DIX HILL | 6400 | 1/01/10 | 17 | 2.9 | -- | 4.5 | RAGGED MTN SNOTEL | 4210 | 1/01/10 | 25 | 4.7 | 12.1 | -- |
| DOCK BUTTE AM | 3800 | 12/29/09 | 47 | 18.8 | -- | 28.5 | RAINY PASS SNOTEL | 4890 | 1/01/10 | 46 | 14.8 | 9.1 | 19.9 |
| DOMMERIE FLATS | 2200 | 12/29/09 | 5 | 1.0 | 5.9 | 3.9 | REX RIVER SNOTEL | 3810 | 1/01/10 | 26 | 8.7 | 14.8 | 13.0 |
| DUNGENESS SNOTEL | 4010 | 1/01/10 | 9 | 4.1 | 2.4 | 3.5 | ROCKER PEAK SNOTEL | 8000 | 1/01/10 | 26 | 6.1 | 8.8 | 6.4 |
| EASY PASS AM | 5200 | 12/29/09 | 48 | 19.2 | -- | 31.9 | ROCKY CREEK AM | 2100 | 12/29/09 | 39 | 15.6 | -- | 12.9 |
| ELBOW LAKE SNOTEL | 3200 | 1/01/10 | 41 | 14.7 | 13.3 | 15.4 | SF THUNDER CK AM | 2200 | 12/29/09 | 6 | 2.4 | -- | 5.0 |
| EMERY CREEK SNOTEL | 4350 | 1/01/10 | 25 | 5.7 | 6.7 | 7.0 | SADDLE MTN SNOTEL | 7900 | 1/01/10 | 33 | 7.0 | 10.3 | 11.7 |
| FISH CREEK | 8000 | 12/31/09 | 21 | 4.8 | 5.6 | 4.4 | SALMON MDWS SNOTEL | 4460 | 1/01/10 | 19 | 4.0 | 2.1 | 5.3 |
| FISH LAKE | 3370 | 12/29/09 | 35 | 10.4 | 9.7 | 14.5 | SASSE RIDGE SNOTEL | 4340 | 1/01/10 | 43 | 9.4 | 8.3 | 14.7 |
| FISH LAKE SNOTEL | 3430 | 1/01/10 | 41 | 10.4 | 10.3 | 15.0 | SAVAGE PASS SNOTEL | 6170 | 1/01/10 | 37 | 7.4 | 10.2 | 11.7 |
| FLATTOP MTN SNOTEL | 6300 | 1/01/10 | 112 | 21.0 | 12.1 | 21.4 | SAWMILL RIDGE SNOTEL | 4640 | 1/01/10 | 58 | 20.2 | 20.0 | -- |
| FOURTH OF JULY SUM | 3200 | 12/28/09 | 1 | .2 | 5.0 | 3.7 | SCHREIBERS MDW AM | 3400 | 12/29/09 | 48 | 19.2 | -- | 23.2 |
| FROHNER MDWS SNOTEL | 6480 | 1/01/10 | 14 | 3.0 | 3.0 | 3.4 | SENTINEL BT SNOTEL | 4680 | 1/01/10 | 23 | 4.2 | 3.3 | 4.0 |
| GRAVE CRK SNOTEL | 4300 | 1/01/10 | 27 | 6.6 | 5.0 | 7.7 | SHEEP CANYON SNOTEL | 3990 | 1/01/10 | 40 | 12.5 | 17.2 | 15.4 |
| GREEN LAKE SNOTEL | 5920 | 1/01/10 | 34 | 9.2 | 9.1 | 10.7 | SHERWIN SNOTEL | 3200 | 1/01/10 | --- | 2.6 | 5.8 | 5.1 |
| GROUSE CAMP SNOTEL | 5390 | 1/01/10 | 29 | 6.9 | 6.9 | 9.6 | SKALKAHO SNOTEL | 7260 | 1/01/10 | 30 | 5.9 | 8.7 | 10.3 |
| HAND CREEK SNOTEL | 5030 | 1/01/10 | 18 | 4.0 | 6.1 | 5.9 | SKOOKUM CREEK SNOTEL | 3310 | 1/01/10 | 17 | 4.4 | 15.8 | 10.8 |
| HARTS PASS SNOTEL | 6490 | 1/01/10 | 53 | 15.1 | 12.7 | 21.7 | SOURDOUGH GUL SNOTEL | 4000 | 1/01/10 | 3 | .6 | 4.0 | -- |
| HELL ROARING DIVIDE | 5770 | 12/28/09 | 43 | 11.2 | 10.4 | 13.4 | SPENCER MDW SNOTEL | 3400 | 1/01/10 | 42 | 13.5 | 14.0 | 12.5 |
| HIGH RIDGE SNOTEL | 4920 | 1/01/10 | 44 | 10.3 | 12.6 | 10.4 | SPIRIT LAKE SNOTEL | 3520 | 1/01/10 | 2 | 1.9 | 5.0 | 3.6 |
| HOLBROOK | 4530 | 12/28/09 | 6 | 1.5 | 3.5 | 4.2 | SPOTTED BEAR MTN. | 7000 | 12/28/09 | 23 | 4.9 | 4.9 | 6.9 |
| HOODOO BASIN SNOTEL | 6050 | 1/01/10 | 44 | 10.8 | 13.0 | 19.3 | SPRUCE SPGS SNOTEL | 5700 | 1/01/10 | 24 | 5.7 | 6.7 | -- |
| HUCKLEBERRY SNOTEL | 2250 | 1/01/10 | 5 | 1.2 | 6.7 | 1.0 | STAHL PEAK SNOTEL | 6030 | 1/01/10 | 63 | 15.6 | 11.1 | 17.1 |
| HUMBOLDT GLCH SNOTEL | 4250 | 1/01/10 | --- | 3.7 | 5.0 | 6.0 | STAMPEDE PASS SNOTEL | 3850 | 1/01/10 | 36 | 10.7 | 14.1 | 19.4 |
| JASPER PASS AM | 5400 | 12/29/09 | 48 | 16.8 | -- | 40.9 | STEVENS PASS SNOTEL | 3950 | 1/01/10 | 53 | 14.7 | 12.1 | 19.1 |
| JUNE LAKE SNOTEL | 3440 | 1/01/10 | 51 | 15.3 | 21.0 | 17.1 | STORM LAKE | 7780 | 12/28/09 | 22 | 4.4 | 8.9 | 5.5 |
| KELLOGG PEAK | 5560 | 12/28/09 | 27 | 7.8 | 14.6 | 11.7 | SUNSET SNOTEL | 5540 | 1/01/10 | --- | 5.1 | 6.6 | 13.6 |
| KRAFT CREEK SNOTEL | 4750 | 1/01/10 | 25 | 4.4 | 5.2 | 6.9 | SURPRISE LKS SNOTEL | 4290 | 1/01/10 | 51 | 16.9 | 17.5 | 20.3 |
| LOLO PASS SNOTEL | 5240 | 1/01/10 | 38 | 8.1 | 9.6 | 13.0 | SWAMP CREEK SNOTEL | 3930 | 1/01/10 | 26 | 7.0 | 5.9 | 9.6 |
| LONE PINE SNOTEL | 3930 | 1/01/10 | 51 | 17.8 | 14.5 | 16.2 | TEN MILE LOWER | 6600 | 12/28/09 | 14 | 3.2 | 3.0 | 3.0 |
| LOOKOUT SNOTEL | 5140 | 1/01/10 | 36 | 8.0 | 8.7 | 13.7 | TEN MILE MIDDLE | 6800 | 12/28/09 | 21 | 4.9 | 4.4 | 4.6 |
| LOST HORSE SNOTEL | 5120 | 1/01/10 | 25 | 6.3 | 3.4 | 8.3 | THUNDER BASIN SNOTEL | 4320 | 1/01/10 | --- | 14.0 | 9.1 | 15.7 |
| LOST LAKE SNOTEL | 6110 | 1/01/10 | 50 | 14.0 | 17.0 | 27.1 | TINKHAM CREEK SNOTEL | 2990 | 1/01/10 | 33 | 10.2 | 11.1 | 12.3 |
| LUBRECHT FOREST NO 3 | 5450 | 12/29/09 | 6 | 1.0 | 2.2 | 2.7 | TOUCHET SNOTEL | 5530 | 1/01/10 | 43 | 12.1 | 12.3 | 14.7 |
| LUBRECHT FOREST NO 4 | 4650 | 12/29/09 | 4 | .8 | 1.6 | 1.4 | TRINKUS LAKE | 6100 | 12/28/09 | 58 | 16.0 | 15.7 | 19.4 |
| LUBRECHT FOREST NO 6 | 4040 | 12/29/09 | 6 | 1.0 | 1.6 | 1.6 | TROUGH #2 SNOTEL | 5480 | 1/01/10 | 20 | 4.9 | 2.9 | 5.3 |
| LUBRECHT HYDROPLOT | 4200 | 12/29/09 | 7 | 1.0 | 1.8 | 2.5 | TRUMAN CREEK | 4060 | 12/29/09 | 3 | .5 | 3.2 | 2.0 |
| LUBRECHT SNOTEL | 4680 | 1/01/10 | 8 | 1.9 | 2.7 | 2.6 | TUNNEL AVENUE | 2450 | 12/30/09 | 17 | 5.4 | 8.7 | 8.3 |
| LYMAN LAKE SNOTEL | 5980 | 1/01/10 | 82 | 23.3 | 16.7 | 29.7 | TV MOUNTAIN | 6800 | 12/28/09 | 23 | 4.7 | 7.1 | 7.7 |
| MARIAS PASS | 5250 | 12/30/09 | 20 | 4.3 | 5.0 | 7.3 | TWELVEMILE SNOTEL | 5600 | 1/01/10 | 22 | 4.7 | 8.2 | 7.5 |
| MARTEN LAKE AM | 3600 | 12/29/09 | 76 | 30.4 | -- | 32.4 | TWIN LAKES SNOTEL | 6400 | 1/01/10 | 44 | 10.0 | 14.5 | 17.5 |
| MARTEN RIDGE SNOTEL | 3520 | 1/01/10 | 65 | 26.4 | 17.7 | -- | TWIN SPIRIT DIVIDE | 3480 | 1/02/10 | 9 | 1.8 | 9.4 | 6.6 |
| MEADOWS PASS SNOTEL | 3230 | 1/01/10 | 30 | 9.6 | 13.2 | 9.6 | UPPER HOLLAND LAKE | 6200 | 12/28/09 | 35 | 8.0 | 12.7 | 15.2 |
| M F NOOKSACK SNOTEL | 4970 | 1/01/10 | 57 | 20.7 | 12.9 | 26.1 | UPPER WHEELER SNOTEL | 4330 | 1/01/10 | 18 | 4.1 | 4.5 | 5.9 |
| MICA CREEK SNOTEL | 4510 | 1/01/10 | 28 | 7.3 | 10.0 | 11.7 | WARM SPRINGS SNOTEL | 7800 | 1/01/10 | 39 | 8.6 | 12.2 | 9.4 |
| MINERS RIDGE SNOTEL | 6110 | 1/01/10 | 75 | 20.9 | 17.6 | 26.6 | WATSON LAKES AM | 4500 | 12/29/09 | 36 | 14.4 | -- | 25.1 |
| MORSE LAKE SNOTEL | 5410 | 1/01/10 | 72 | 23.7 | 14.2 | 23.4 | WATERHOLE SNOTEL | 5010 | 1/01/10 | 51 | 18.3 | 10.9 | 14.0 |
| MOSES MTN SNOTEL | 5010 | 1/01/10 | 21 | 4.1 | 3.0 | 7.1 | WEASEL DIVIDE | 5450 | 12/30/09 | 46 | 12.4 | 8.2 | 15.2 |
| MOSQUITO RDG SNOTEL | 5200 | 1/01/10 | --- | 11.1 | 9.8 | 15.5 | WELLS CREEK SNOTEL | 4030 | 1/01/10 | 46 | 15.1 | 8.5 | 14.2 |
| | | | | | | | WHITE PASS ES SNOTEL | 4440 | 1/01/10 | 29 | 7.9 | 10.4 | 10.7 |



Natural Resources Conservation Service

Washington State
Snow, Water and Climate Services

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Mount Vernon, WA 98273-2873
phone: 360-428-7684
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Rashawn Tama
Forecast Hydrologist
National Water and Climate Center
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phone: 503-414-3010
fax: 503-414-3101
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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>

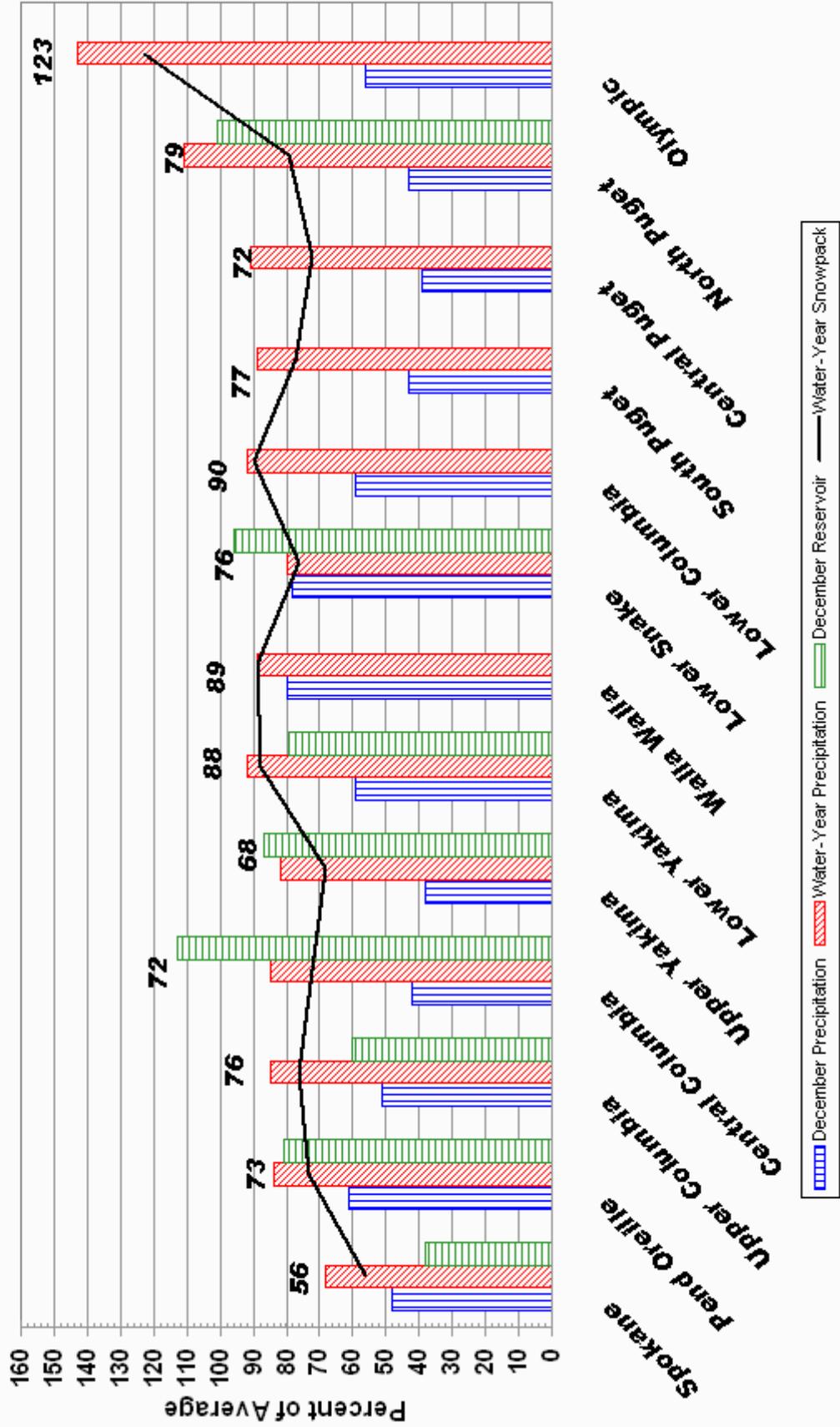
USDA-NRCS Agency Homepages

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

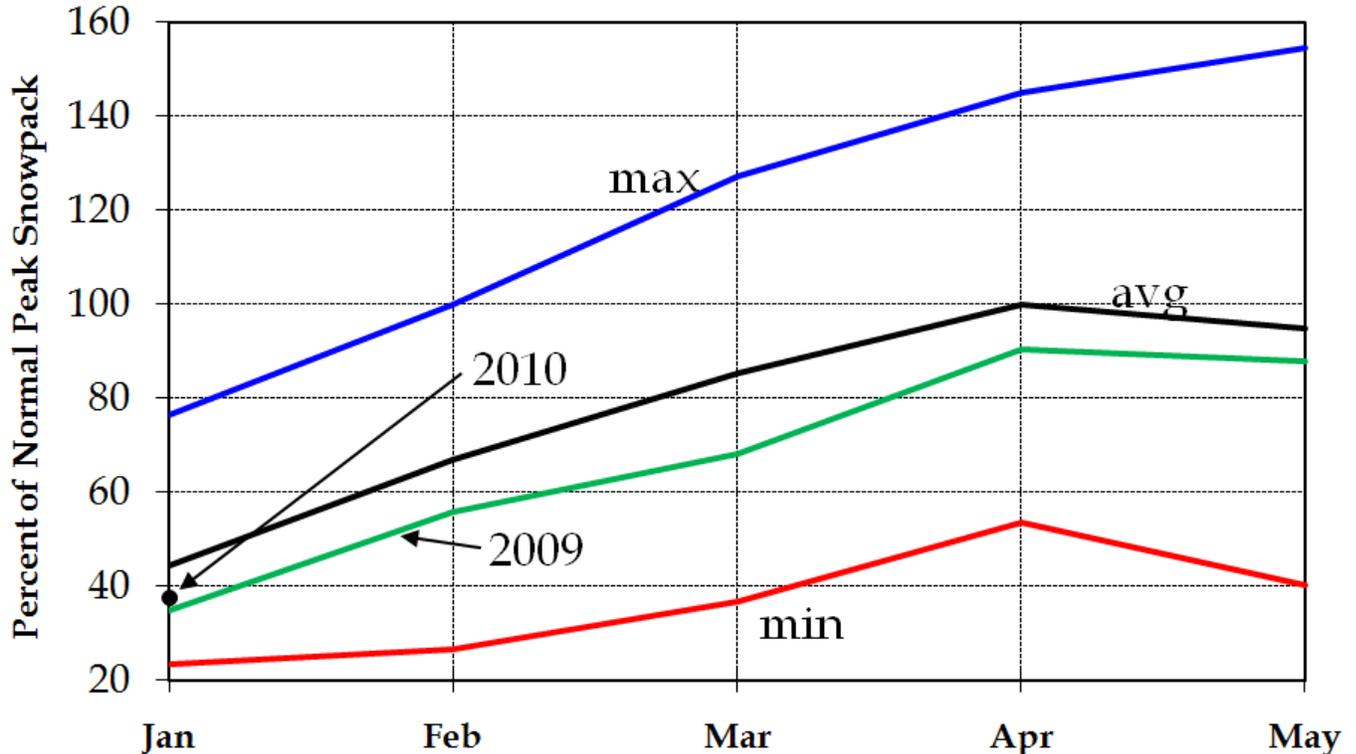
NRCS National:
<http://www.nrcs.usda.gov>

January 1, 2010 - Snowpack, Precipitation and Reservoir Conditions at a Glance

(Water Year = October 1, 2009 - Current Date)



Columbia above The Dalles



January 1, 2010

The Columbia Basin snowpack charts are produced, using only automated data. These data are telemetered via remote collection sites in Canada 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 85 percent of average, compared to 79 percent of average last year. It's early in the season, but the snowpack in the U.S. has a lot of catching up to do. Fortunately, the Canadian portion of the basin is above average, measured at 106% of average. The Kootenay Basin is also in good shape at 96% of average. Unfortunately, that's the extent of the good news. All snowpacks in the U.S. portion of the Columbia Basin are below average. The Snake Basin snowpack is in particularly bad shape, measured at 65% of average, with the Snake headwaters at 55% of average.

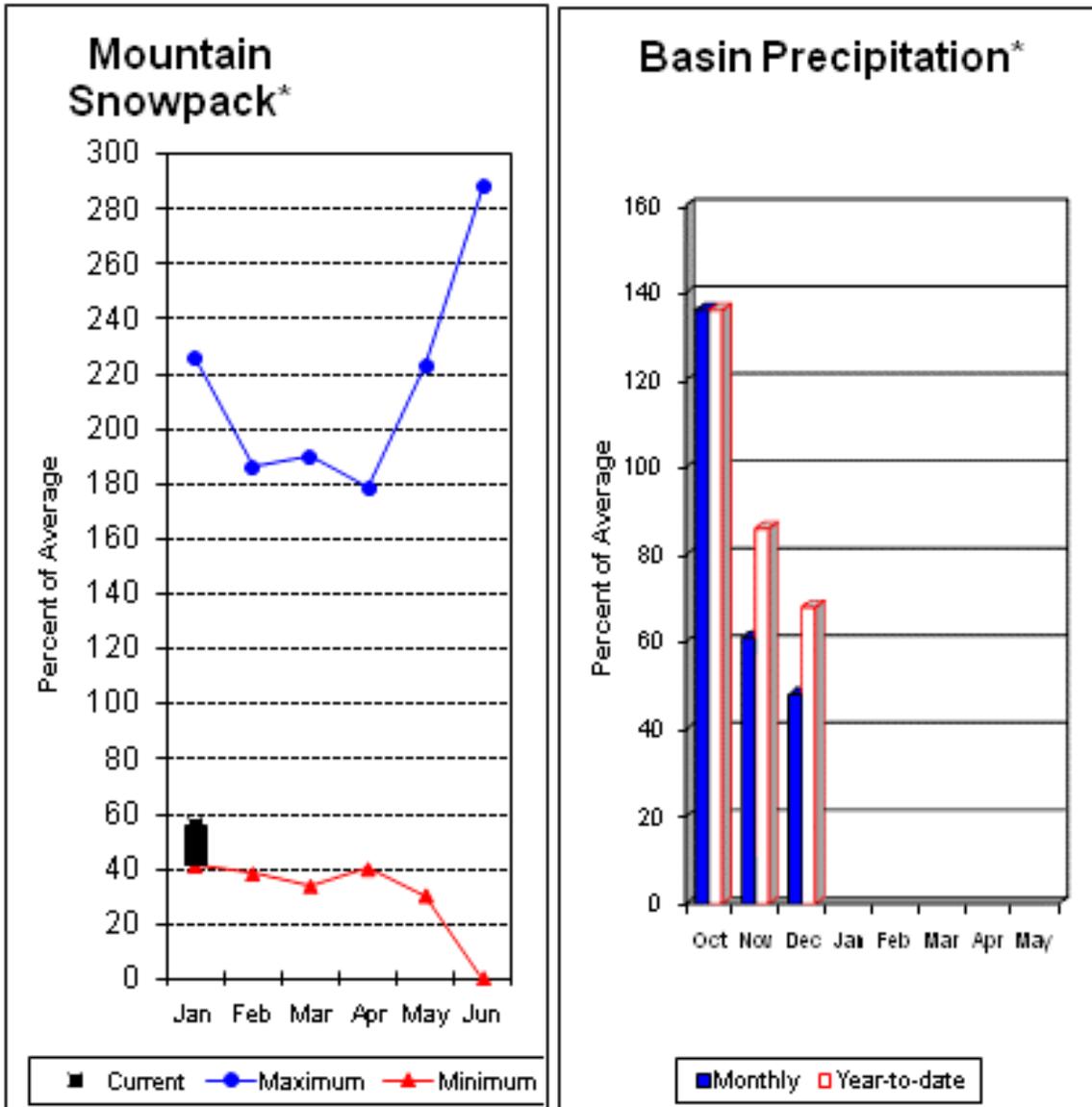
Other basin snowpack percentages are: Pend Oreille (77), Kettle (87) Spokane (58), Northern Cascades (81), Yakima (79), Boise (67), Eastern Oregon (84), Salmon (68), Clearwater (62), John Day (84), and Deschutes (79).

The overall snowpack above The Dalles is at 38 percent of the average peak accumulation. This compares to 35 percent last year.

The snowpack in the Columbia Basin above Castlegar is at 102 percent of average. This compares to 77 percent last year. For the basin above Grand Coulee, the snowpack is at 93 percent of average, compared to 77 percent last year. The Snake River snowpack above Ice Harbor is at 65 percent of average, compared to 87 percent last year.

We would like to see a better start to the Columbia Basin snowpack, but the healthy Canadian snowpack is certainly good to see.

Spokane River Basin



*Based on selected stations

The January 1 forecasts for summer runoff within the Spokane River Basin are 77% of average near Post Falls and 79% at Long Lake. The Chamokane River near Long Lake forecasted to have 71% of average flows for the May-August period. The forecast is based on a basin snowpack that is 56% of average and precipitation that is 84% of average for the water year. Precipitation for December was much below normal at 56% of average. Water year precipitation totaled to 75% Streamflow on the Spokane River at Long Lake was 45% of average for December. January 1 storage in Coeur d'Alene Lake was 41,000acre feet, 38% of average and 17% of capacity. Snowpack at Quartz Peak SNOTEL site was 78% of average with 8 inches of water content. Average temperatures in the Spokane basin were near normal for December and 1 degree below normal for the water year.

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

Spokane River Basin

Streamflow Forecasts - January 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.) | | | |
| SPOKANE near Post Falls (2) | APR-JUL | 1260 | 1680 | 1960 | 77 | 2240 | 2550 |
| | APR-SEP | 1380 | 1770 | 2030 | 77 | 2290 | 2650 |
| SPOKANE at Long Lake (2) | APR-JUL | 1140 | 1780 | 2210 | 78 | 2640 | 2850 |
| | APR-SEP | 1280 | 1950 | 2410 | 79 | 2870 | 3070 |
| CHAMOKANE CREEK near Long Lake | MAY-AUG | 0.4 | 4.5 | 7.2 | 71 | 9.9 | 10.2 |

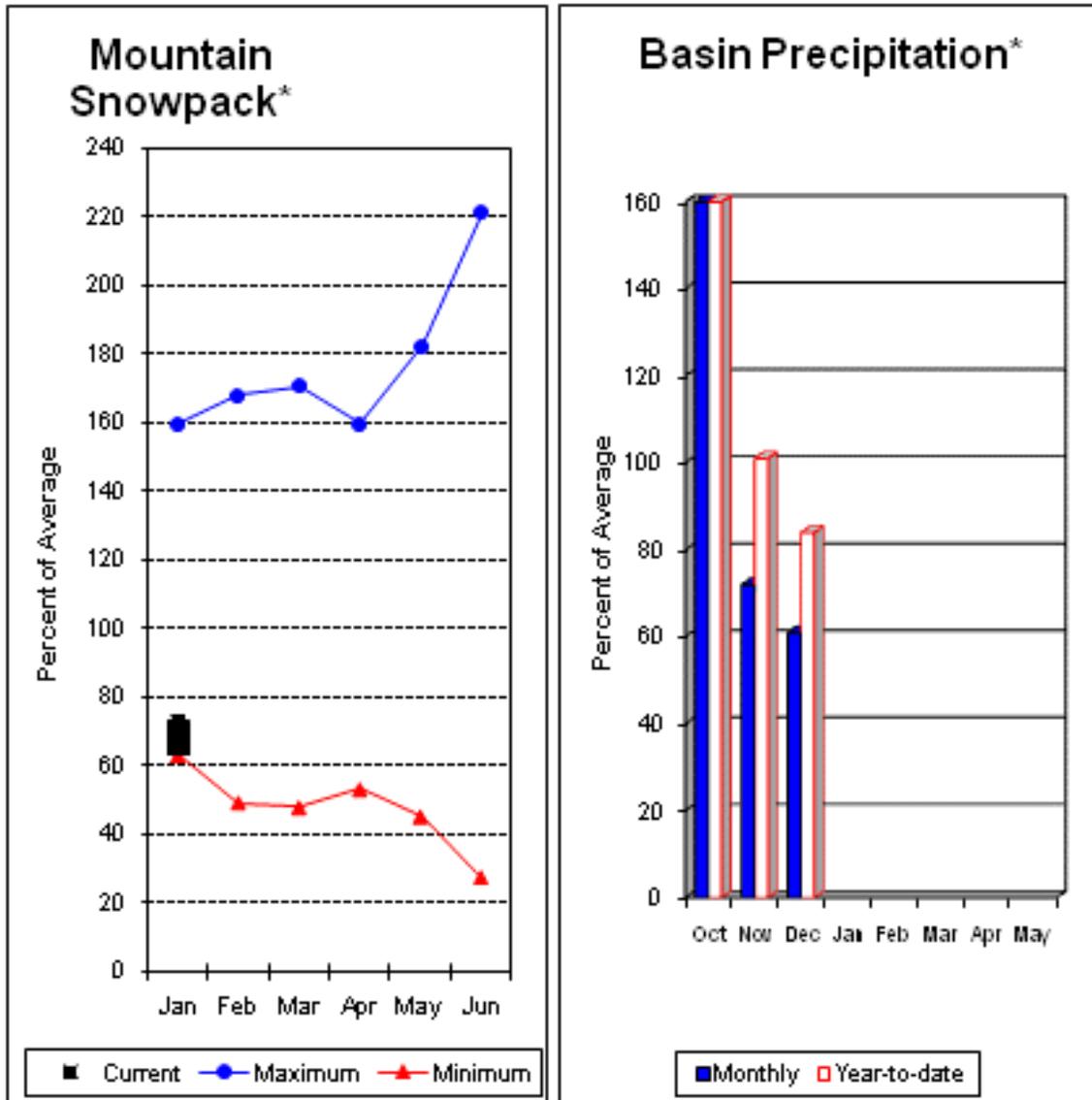
| SPOKANE RIVER BASIN Reservoir Storage (1000 AF) - End of December | | | | | SPOKANE RIVER BASIN Watershed Snowpack Analysis - January 1, 2010 | | | |
|----------------------------------------------------------------------|-----------------|------------------------|-----------|-------|----------------------------------------------------------------------|----------------------|-------------------|---------|
| Reservoir | Usable Capacity | *** Usable Storage *** | | | Watershed | Number of Data Sites | This Year as % of | |
| | | This Year | Last Year | Avg | | | Last Yr | Average |
| COEUR D'ALENE | 238.5 | 41.3 | 52.2 | 110.1 | SPOKANE RIVER | 12 | 65 | 56 |
| | | | | | NEWMAN LAKE | 1 | 82 | 78 |

* 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.

Pend Oreille River Basins



*Based on selected stations

The April – September average forecast for the Priest River near the town of Priest River is 83% and the Pen Orielle below Box Canyon is 78%. December streamflow was 56% of average on the Pend Oreille River and 70% on the Columbia Birchbank. January 1 snow cover was 73% of average in the Pend Oreille Basin River Basin. Bunchgrass Meadows SNOTEL site had 11.9 inches of snow water on the snow pillow. Normally Bunchgrass would have 12.6 inches on January 1. Precipitation during December was 61% of average, bringing the year-to-date precipitation to 84% of average. Reservoir storage in the basin, including Lake Pend Oreille and Priest Lake was 81% of normal. Average temperatures were near normal for December and for the water year.

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

Pend Oreille River Basins

Streamflow Forecasts - January 1, 2010

| Forecast Point | Forecast Period | <<===== Drier ===== Future Conditions ===== Wetter =====>> | | | | 30-Yr Avg. (1000AF) | | | | | | |
|--------------------------------|-----------------|------------------------------------------------------------|-------|--------------|----|------------------------|---------------------------------------|-------|--------------|--|--------------|--|
| | | 90% (1000AF) | | 70% (1000AF) | | | Chance Of Exceeding * 50% (% AVG.) | | 30% (1000AF) | | 10% (1000AF) | |
| | | | | | | | | | | | | |
| PEND OREILLE Lake Inflow (2) | APR-JUL | 9230 | 9560 | 9780 | 77 | 10000 | 10300 | 12700 | | | | |
| | APR-SEP | 10100 | 10500 | 10700 | 77 | 10900 | 11300 | 13900 | | | | |
| PRIEST near Priest River (1,2) | APR-JUL | 330 | 565 | 675 | 83 | 785 | 1020 | 815 | | | | |
| | APR-SEP | 360 | 605 | 720 | 83 | 835 | 1080 | 870 | | | | |
| PEND OREILLE bl Box Canyon (2) | APR-JUL | 6510 | 8650 | 10100 | 78 | 11600 | 13700 | 12900 | | | | |
| | APR-SEP | 6460 | 9160 | 11000 | 78 | 12800 | 15500 | 14100 | | | | |

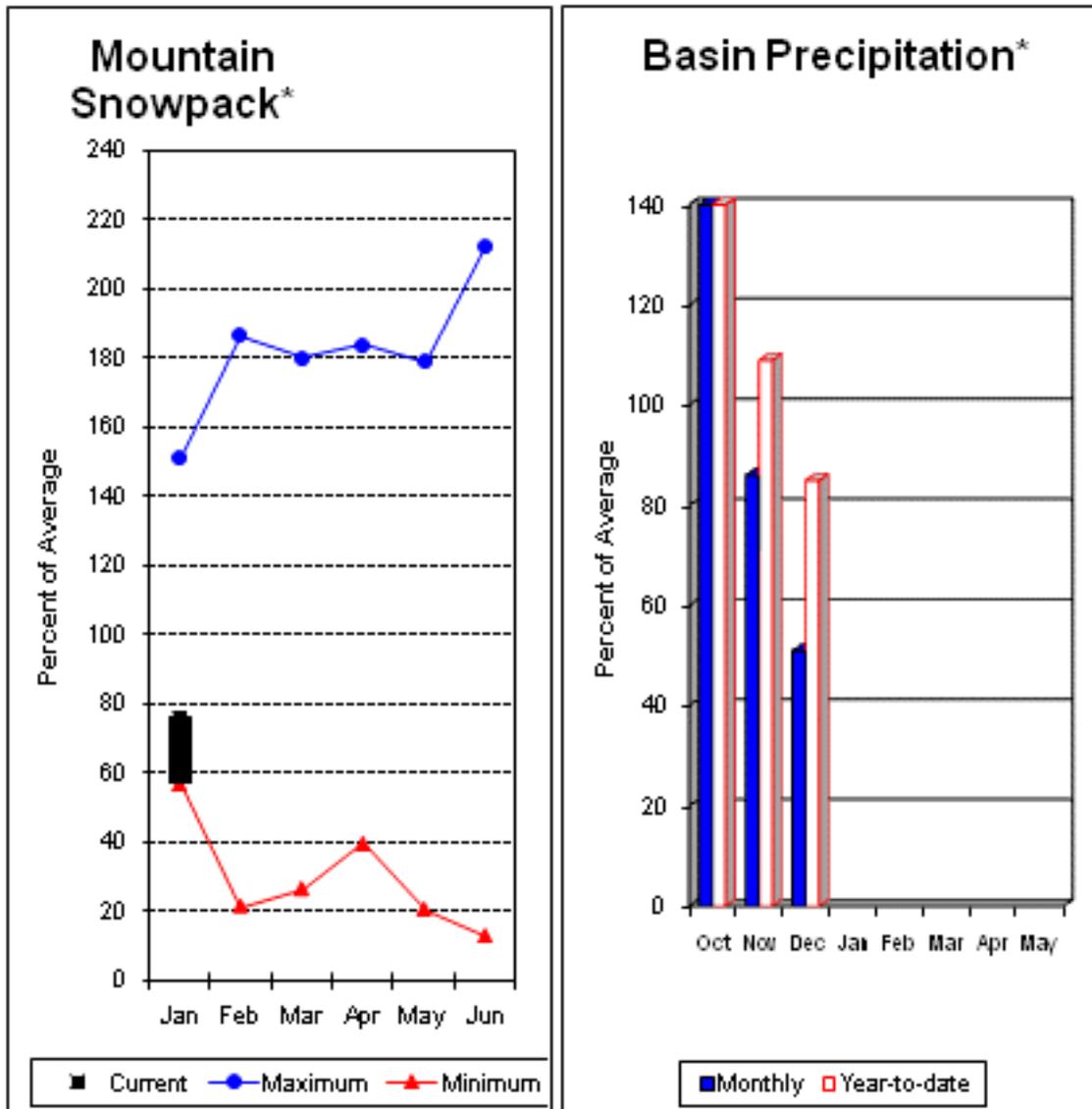
| PEND OREILLE RIVER BASINS Reservoir Storage (1000 AF) - End of December | | | | | PEND OREILLE RIVER BASINS Watershed Snowpack Analysis - January 1, 2010 | | | |
|----------------------------------------------------------------------------|-----------------|------------------------|-----------|-------|----------------------------------------------------------------------------|----------------------|-------------------|---------|
| Reservoir | Usable Capacity | *** Usable Storage *** | | | Watershed | Number of Data Sites | This Year as % of | |
| | | This Year | Last Year | Avg | | | Last Yr | Average |
| PEND OREILLE | 1561.3 | 545.6 | 389.0 | 673.4 | COLVILLE RIVER | 0 | 0 | 0 |
| PRIEST LAKE | 119.3 | 55.5 | 53.6 | 55.7 | PEND OREILLE RIVER | 8 | 90 | 64 |
| | | | | | KETTLE RIVER | 1 | 127 | 105 |

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

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

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

Upper Columbia River Basins



*Based on selected stations

Summer runoff average forecast for the Okanogan River is 86%, Similkameen River is 88%, Kettle River 82% and Methow River is 79%. January 1 snow cover on the Okanogan was 71% of average, Omak Creek was 58% and the Methow was 72%. December precipitation in the Upper Columbia was 51% of average, with precipitation for the water year at 85% of average. December streamflow for the Methow River was 90% of average, 96% for the Okanogan River and 104% for the Similkameen. Snow-water content at Salmon Meadows SNOTEL was 4 inches. Average for this site is 5.3 inches on January 1. Combined storage in the Conconully Reservoirs was 10,000-acre feet, which is 41% of capacity and 60% of the January 1 average. Temperatures were near normal for December and for the water year.

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

Upper Columbia River Basins

Streamflow Forecasts - January 1, 2010

| 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 | 23 | 70 | 102 | 80 | 134 | 181 | 128 |
| | APR-SEP | 26 | 78 | 113 | 80 | 148 | 200 | 141 |
| KETTLE near Laurier | APR-JUL | 770 | 1220 | 1530 | 82 | 1840 | 2290 | 1870 |
| | APR-SEP | 820 | 1290 | 1610 | 82 | 1930 | 2400 | 1970 |
| COLUMBIA at Birchbank (1,2) | APR-JUL | 25200 | 30900 | 33500 | 96 | 36100 | 41800 | 34900 |
| | APR-SEP | 31300 | 38500 | 41700 | 96 | 44900 | 52100 | 43500 |
| Similkameen R nr Nighthawk (1) | APR-JUL | 740 | 1050 | 1190 | 88 | 1330 | 1640 | 1350 |
| | APR-SEP | 785 | 1120 | 1270 | 88 | 1420 | 1750 | 1450 |
| Okanogan R nr Tonasket (1) | APR-JUL | 615 | 1130 | 1360 | 86 | 1590 | 2110 | 1580 |
| | APR-SEP | 680 | 1260 | 1530 | 86 | 1800 | 2380 | 1770 |
| Okanogan R at Malott (1) | APR-JUL | 640 | 1180 | 1420 | 87 | 1660 | 2200 | 1630 |
| | APR-SEP | 705 | 1310 | 1590 | 87 | 1870 | 2480 | 1830 |
| Methow R nr Pateros | APR-SEP | 485 | 660 | 780 | 79 | 895 | 1070 | 985 |
| | APR-JUL | 440 | 605 | 720 | 79 | 835 | 1000 | 910 |

| UPPER COLUMBIA RIVER BASINS Reservoir Storage (1000 AF) - End of December | | | | | UPPER COLUMBIA RIVER BASINS Watershed Snowpack Analysis - January 1, 2010 | | | |
|------------------------------------------------------------------------------|-----------------|------------------------|-----------|-----|------------------------------------------------------------------------------|----------------------|-------------------|---------|
| Reservoir | Usable Capacity | *** Usable Storage *** | | | Watershed | Number of Data Sites | This Year as % of | |
| | | This Year | Last Year | Avg | | | Last Yr | Average |
| SALMON LAKE | 10.5 | 5.6 | 6.7 | 8.5 | OKANOGAN RIVER | 2 | 129 | 71 |
| CONCONULLY RESERVOIR | 13.0 | 4.1 | 7.6 | 7.7 | OMAK CREEK | 1 | 137 | 58 |
| | | | | | SANPOIL RIVER | 0 | 0 | 0 |
| | | | | | SIMILKAMEEN RIVER | 0 | 0 | 0 |
| | | | | | TOATS COULEE CREEK | 0 | 0 | 0 |
| | | | | | CONCONULLY LAKE | 1 | 190 | 75 |
| | | | | | METHOW RIVER | 3 | 142 | 72 |

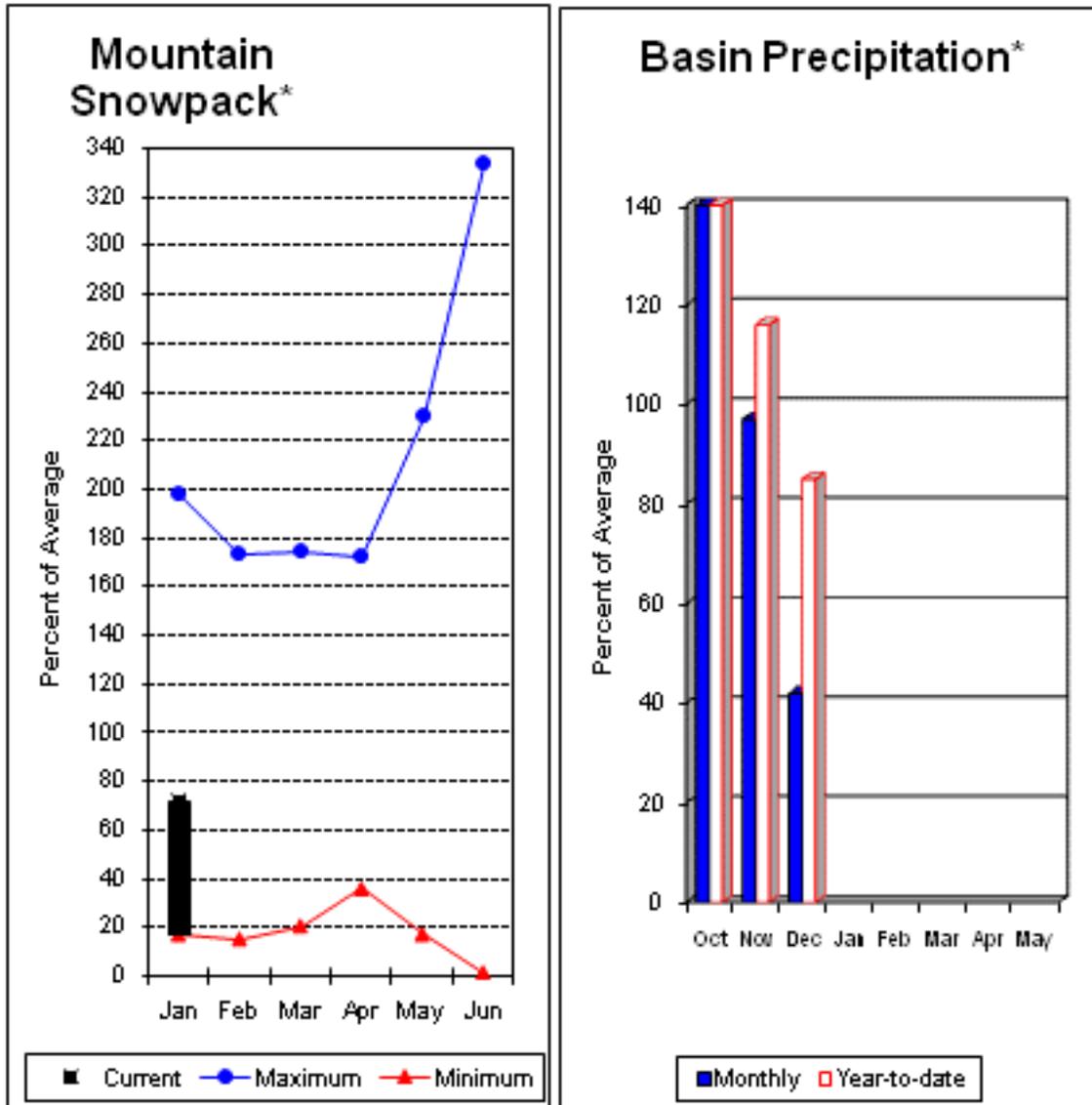
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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.

Central Columbia River Basins



*Based on selected stations

Precipitation during December was 42% of average in the basin and 85% for the year-to-date. Runoff for Entiat River is forecast to be 75% of average for the summer. The January-September average forecast for Chelan River is 85%, Wenatchee River at Plain is 73%, Stehekin River is 87% and Icicle Creek is 71%. December average streamflows on the Chelan River were 68% and on the Wenatchee River 76%. January 1 snowpack in the Wenatchee River Basin was 75% of average; the Chelan, 80%; the Entiat, 68%; Stemilt Creek, 69% and Colockum Creek, 92%. Reservoir storage in Lake Chelan was 450,000-acre feet, 113% of January 1 average and 66% of capacity. Lyman Lake SNOTEL had the most snow water with 20.9 inches of water. This site would normally have 29.7 inches on January 1. Temperatures were 1-2 degrees below normal for December and for the water year.

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

Central Columbia River Basins

Streamflow Forecasts - January 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) | |
| | | | | | | | | | | |
| Stehekin R at Stehekin | APR-JUL | 470 | 560 | 625 | 89 | 690 | 780 | 700 | | |
| | APR-SEP | 570 | 670 | 740 | 89 | 810 | 910 | 830 | | |
| Chelan R at Chelan (2) | APR-JUL | 670 | 790 | 870 | 83 | 950 | 1070 | 1050 | | |
| | APR-SEP | 750 | 895 | 990 | 83 | 1090 | 1230 | 1190 | | |
| Entiat R nr Ardenvoir | APR-JUL | 126 | 160 | 183 | 85 | 205 | 240 | 215 | | |
| | APR-SEP | 144 | 180 | 205 | 85 | 230 | 265 | 240 | | |
| Wenatchee R at Plain | APR-JUL | 670 | 820 | 920 | 86 | 1020 | 1170 | 1070 | | |
| | APR-SEP | 735 | 900 | 1010 | 86 | 1120 | 1280 | 1180 | | |
| Icicle Ck nr Leavenworth | APR-JUL | 198 | 240 | 265 | 86 | 290 | 330 | 310 | | |
| | APR-SEP | 220 | 260 | 290 | 85 | 320 | 360 | 340 | | |
| Wenatchee R at Peshastin | APR-JUL | 935 | 1130 | 1270 | 86 | 1410 | 1610 | 1480 | | |
| | APR-SEP | 1040 | 1260 | 1410 | 87 | 1560 | 1780 | 1630 | | |
| Columbia R bl Rock Island Dam (2) | APR-JUL | 37600 | 49500 | 54900 | 93 | 60300 | 72200 | 59000 | | |
| | APR-SEP | 44000 | 58000 | 64400 | 93 | 70800 | 84800 | 69500 | | |

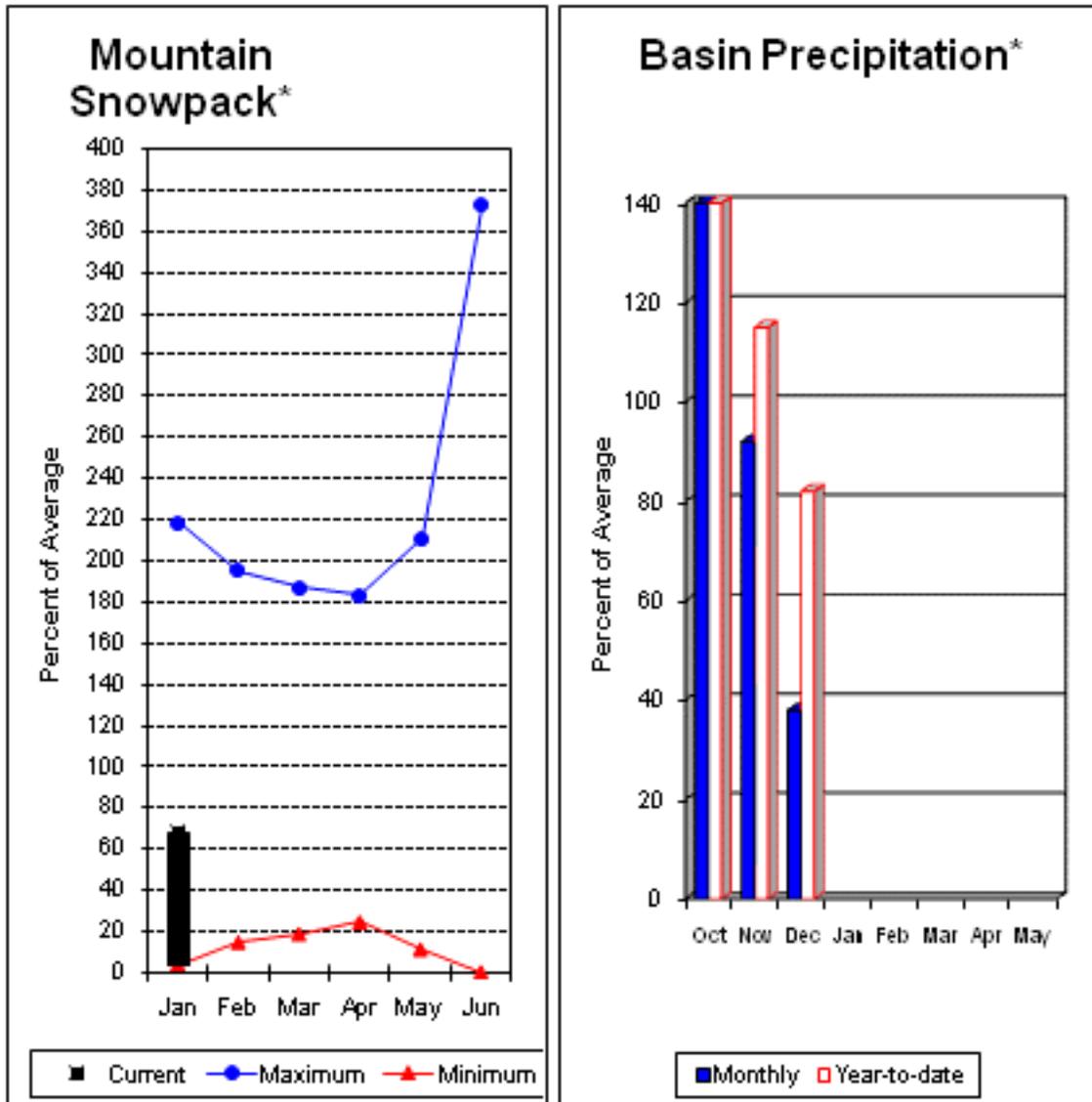
| WENATCHEE - CHELAN RIVER BASINS Reservoir Storage (1000 AF) - End of December | | | | | WENATCHEE - CHELAN RIVER BASINS Watershed Snowpack Analysis - January 1, 2010 | | | |
|----------------------------------------------------------------------------------|-----------------|------------------------|-----------|-------|----------------------------------------------------------------------------------|----------------------|-------------------|---------|
| Reservoir | Usable Capacity | *** Usable Storage *** | | | Watershed | Number of Data Sites | This Year as % of | |
| | | This Year | Last Year | Avg | | | Last Yr | Average |
| CHELAN LAKE | 676.1 | 397.5 | 346.3 | 396.9 | CHELAN LAKE BASIN | 4 | 61 | 54 |
| | | | | | ENTIAT RIVER | 1 | 51 | 58 |
| | | | | | WENATCHEE RIVER | 7 | 64 | 65 |
| | | | | | STEMILT CREEK | 1 | 79 | 76 |
| | | | | | COLOCKUM CREEK | 1 | 62 | 55 |

* 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

January 1 reservoir storage for the Upper Yakima reservoirs was 345,000-acre feet, 87% of average. Forecasts for the Yakima River at Cle Elum are 81% of average and the Teanaway River near Cle Elum is at 68%. Lake inflows are all forecasted to be slightly below this summer. December streamflows within the basin were Yakima at Cle Elum at 50% and Cle Elum River near Roslyn at 52%. January 1 snowpack was 68% based upon 9 snow course and SNOTEL readings within the Upper Yakima Basin. Precipitation was 38% of average for December and 82% 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 - January 1, 2010

| Forecast Point | Forecast Period | Future Conditions <<==== Drier ===== Future Conditions ===== Wetter =====>> | | | | | | 30-Yr Avg. (1000AF) | | | | |
|---------------------------------|-----------------|-----------------------------------------------------------------------------|-----|-----------------------|----|-----------------------|-----|------------------------|-----------------------|--|-----------------------|--|
| | | 90% (1000AF) | | 70% (1000AF) | | 50% (1000AF) (% AVG.) | | | 30% (1000AF) | | 10% (1000AF) | |
| | | Chance Of Exceeding * | | Chance Of Exceeding * | | Chance Of Exceeding * | | | Chance Of Exceeding * | | Chance Of Exceeding * | |
| Keechelus Reservoir Inflow (2) | APR-JUL | 62 | 85 | 100 | 83 | 115 | 138 | 121 | | | | |
| | APR-SEP | 72 | 95 | 111 | 84 | 127 | 150 | 133 | | | | |
| Kachess Reservoir Inflow (2) | APR-JUL | 55 | 76 | 91 | 82 | 106 | 127 | 111 | | | | |
| | APR-SEP | 63 | 84 | 98 | 82 | 112 | 133 | 120 | | | | |
| Cle Elum Lake Inflow (2) | APR-JUL | 225 | 290 | 335 | 82 | 380 | 445 | 410 | | | | |
| | APR-SEP | 250 | 320 | 370 | 82 | 415 | 485 | 450 | | | | |
| Yakima R at Cle Elum (2) | APR-JUL | 430 | 570 | 665 | 81 | 760 | 900 | 820 | | | | |
| | APR-SEP | 475 | 625 | 725 | 81 | 825 | 975 | 900 | | | | |
| Teanaway R bl Forks nr Cle Elum | APR-JUL | 40 | 74 | 97 | 68 | 120 | 154 | 143 | | | | |
| | APR-SEP | 42 | 76 | 99 | 68 | 122 | 156 | 146 | | | | |

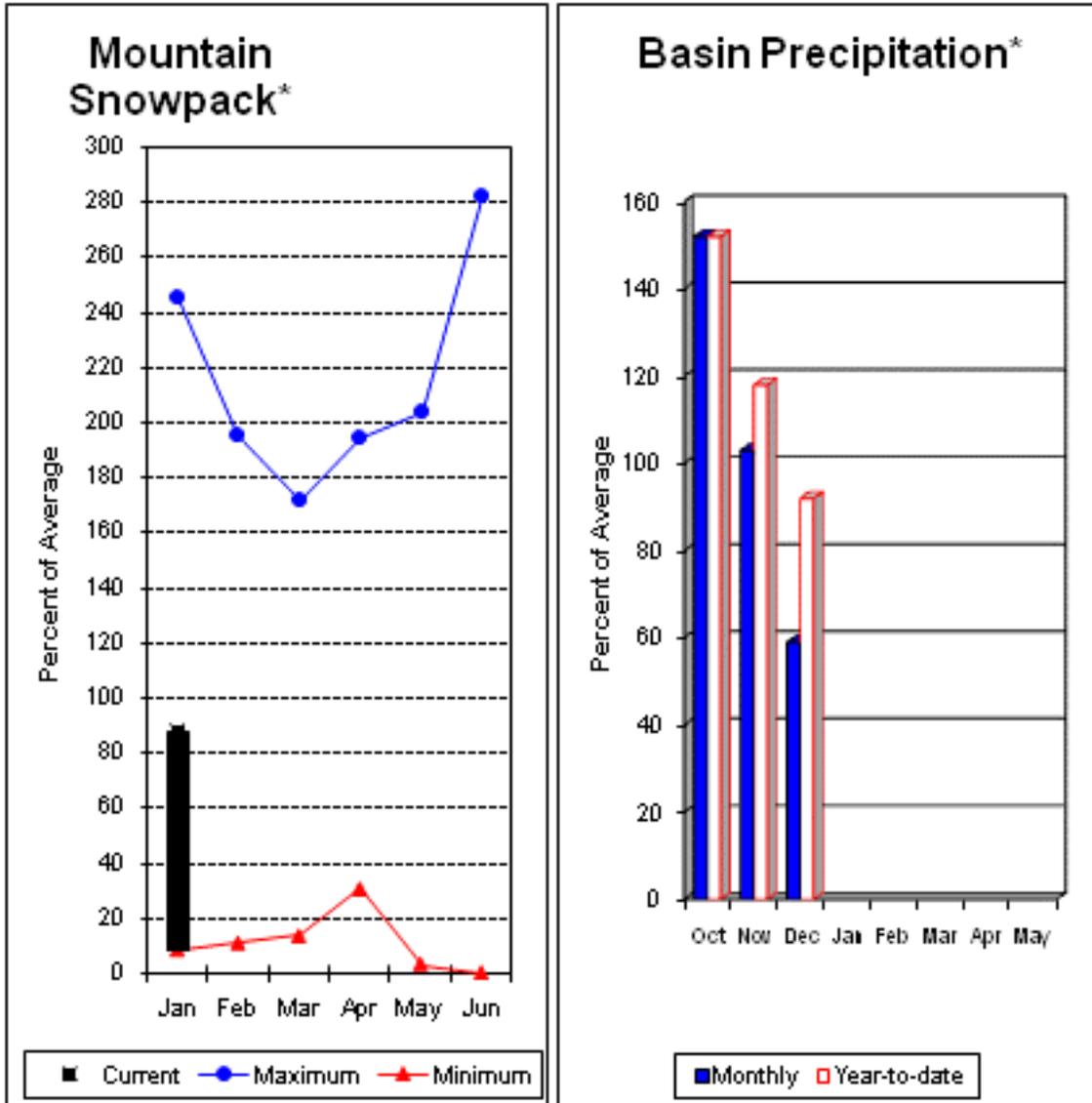
| UPPER YAKIMA RIVER BASIN Reservoir Storage (1000 AF) - End of December | | | | | UPPER YAKIMA RIVER BASIN Watershed Snowpack Analysis - January 1, 2010 | | | |
|---------------------------------------------------------------------------|-----------------|------------------------|-----------|-------|---------------------------------------------------------------------------|----------------------|-------------------|---------|
| 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 | 69.7 | 94.9 | 78.0 | UPPER YAKIMA RIVER | 9 | 90 | 68 |
| KACHESS | 239.0 | 129.8 | 174.3 | 125.5 | | | | |
| CLE ELUM | 436.9 | 145.0 | 249.6 | 194.7 | | | | |

* 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.

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

Lower Yakima River Basin



*Based on selected stations

December average streamflows within the basin were: Yakima River near Parker, 60%; Naches River near Naches, 56%; and Yakima River at Kiona, 64%. January 1 reservoir storage for Bumping and Rimrock reservoirs was 88,000-acre feet, 79% of average. Forecast averages for Yakima River near Parker are 80%; American River near Nile, 91%; Ahtanum Creek, 81%; and Klickitat River near Glenwood, 78%. January 1 snowpack was 87% based upon 7 snow course and SNOTEL readings within the Lower Yakima Basin and Ahtanum Creek reported in at 82% of average. Precipitation was 59% of average for December and 92% year-to-date for water. Temperatures were 2-4 degrees below normal for December and 2-3 degree below for the water year. Volume forecasts for Yakima Basin are for natural flow. As such, they January 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 - January 1, 2010

| Forecast Point | Forecast Period | Future Conditions | | | | | 30-Yr Avg. (1000AF) | |
|-------------------------|-----------------|-------------------|-----------------|-----------------|-----------------|------------------------------------------|------------------------|------|
| | | Drier | | Wetter | | Chance Of Exceeding * 50% (% AVG.) | | |
| | | 90% (1000AF) | 70% (1000AF) | 30% (1000AF) | 10% (1000AF) | | | |
| Bumping Lake Inflow (2) | APR-JUL | 76 | 95 | 107 | 88 | 119 | 138 | 122 |
| | APR-SEP | 85 | 105 | 118 | 89 | 131 | 151 | 132 |
| American R nr Nile | APR-JUL | 72 | 88 | 99 | 92 | 110 | 126 | 108 |
| | APR-SEP | 77 | 95 | 107 | 91 | 119 | 137 | 118 |
| Rimrock Lake Inflow (2) | APR-JUL | 130 | 156 | 174 | 85 | 192 | 220 | 205 |
| | APR-SEP | 154 | 184 | 205 | 85 | 225 | 255 | 240 |
| Naches R nr Naches (2) | APR-JUL | 465 | 580 | 660 | 92 | 740 | 855 | 720 |
| | APR-SEP | 495 | 620 | 710 | 91 | 795 | 925 | 780 |
| Ahtanum Ck at Union Gap | APR-JUL | 8.8 | 17.8 | 24 | 80 | 30 | 39 | 30 |
| | APR-SEP | 10.4 | 19.7 | 26 | 81 | 32 | 42 | 32 |
| Yakima R nr Parker (2) | APR-JUL | 930 | 1230 | 1440 | 80 | 1650 | 1950 | 1800 |
| | APR-SEP | 1040 | 1370 | 1590 | 80 | 1810 | 2140 | 1980 |
| Klickitat R nr Glenwood | APR-JUL | 64 | 85 | 100 | 79 | 115 | 136 | 126 |
| | APR-SEP | 88 | 111 | 127 | 78 | 143 | 166 | 163 |
| Klickitat R nr Pitt | APR-JUL | 235 | 300 | 345 | 75 | 390 | 455 | 462 |
| | APR-SEP | 290 | 370 | 420 | 75 | 470 | 550 | 559 |

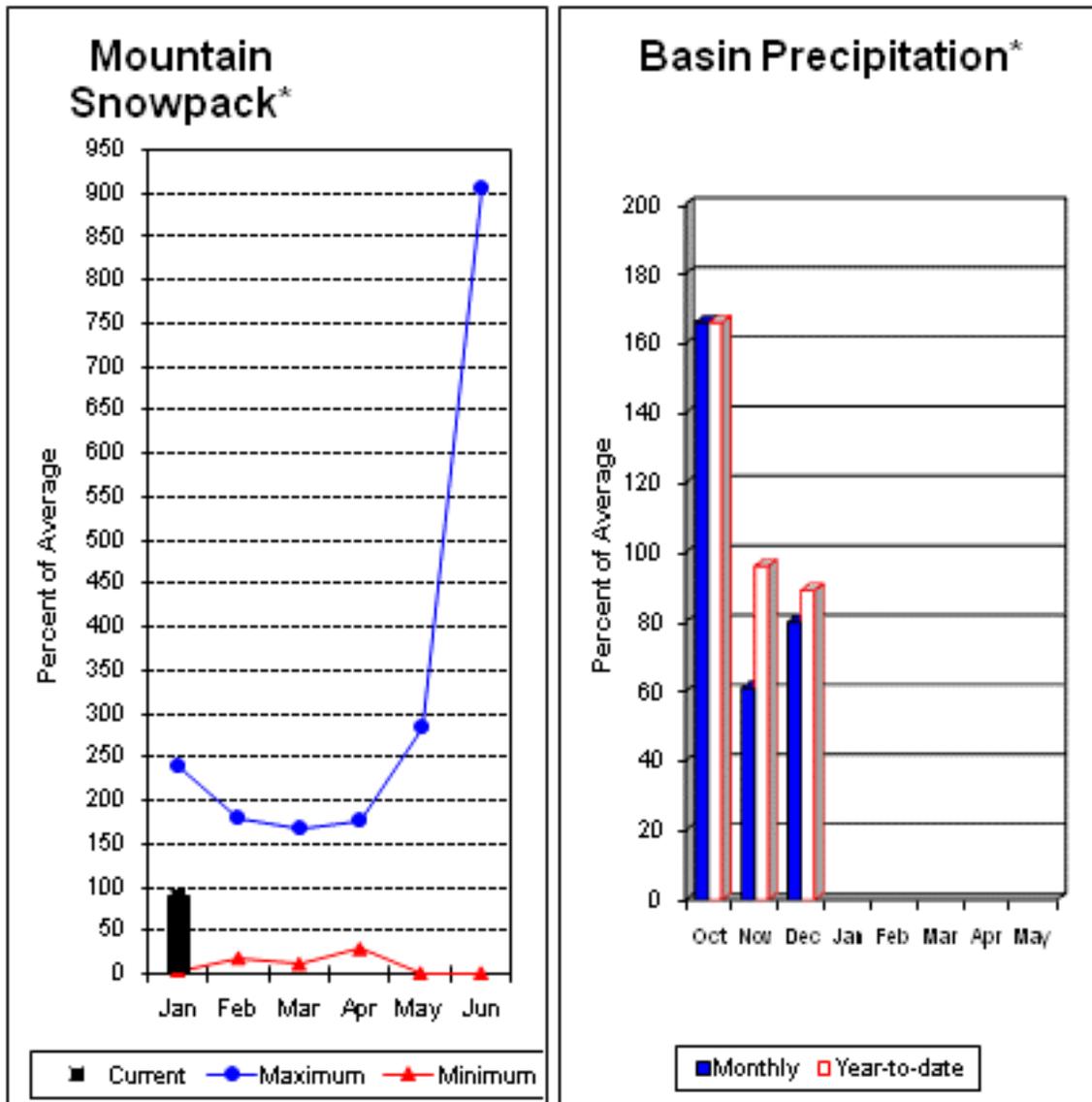
| LOWER YAKIMA RIVER BASIN Reservoir Storage (1000 AF) - End of December | | | | | LOWER YAKIMA RIVER BASIN Watershed Snowpack Analysis - January 1, 2010 | | | |
|---------------------------------------------------------------------------|-----------------|------------------------|-----------|-------|---------------------------------------------------------------------------|----------------------|-------------------|---------|
| Reservoir | Usable Capacity | *** Usable Storage *** | | | Watershed | Number of Data Sites | This Year as % of | |
| | | This Year | Last Year | Avg | | | Last Yr | Average |
| BUMPING LAKE | 33.7 | 12.8 | 10.6 | 10.3 | LOWER YAKIMA RIVER | 7 | 114 | 87 |
| RIMROCK | 198.0 | 75.5 | 95.6 | 101.1 | AHTANUM CREEK | 2 | 124 | 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.

Walla Walla River Basin



*Based on selected stations

December precipitation was 80% of average, maintaining the year-to-date precipitation at 89% of average. Snowpack in the basin was 89% of average. Streamflow forecasts are 89% of average for Mill Creek and 96% for the SF Walla Walla near Milton-Freewater. December streamflow was 34% of average for the SF Walla Walla River. Average temperatures were 2 degrees below normal for December and 3 degrees below average for the water year.

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

Walla Walla River Basin

Streamflow Forecasts - January 1, 2010

| Forecast Point | Forecast Period | Future Conditions <<==== Drier ===== Future Conditions ===== Wetter =====>> | | | | | | 30-Yr Avg. (1000AF) | | | | |
|--------------------------------------|-----------------|-----------------------------------------------------------------------------|------|-----------------|----|---------------------------------------------------|----|------------------------|-----------------|--|-----------------|--|
| | | 90% (1000AF) | | 70% (1000AF) | | Chance Of Exceeding * 50% (1000AF) (% AVG.) | | | 30% (1000AF) | | 10% (1000AF) | |
| | | | | | | | | | | | | |
| SF Walla Walla R nr Milton-Freewater | MAR-SEP | 65 | 73 | 78 | 96 | 83 | 91 | 81 | | | | |
| | APR-JUL | 42 | 48 | 52 | 96 | 56 | 62 | 54 | | | | |
| | APR-SEP | 53 | 59 | 64 | 96 | 69 | 75 | 67 | | | | |
| Mill Ck nr Walla Walla | APR-JUL | 15.2 | 19.2 | 22 | 92 | 25 | 29 | 24 | | | | |
| | APR-SEP | 17.8 | 22 | 25 | 89 | 28 | 32 | 28 | | | | |

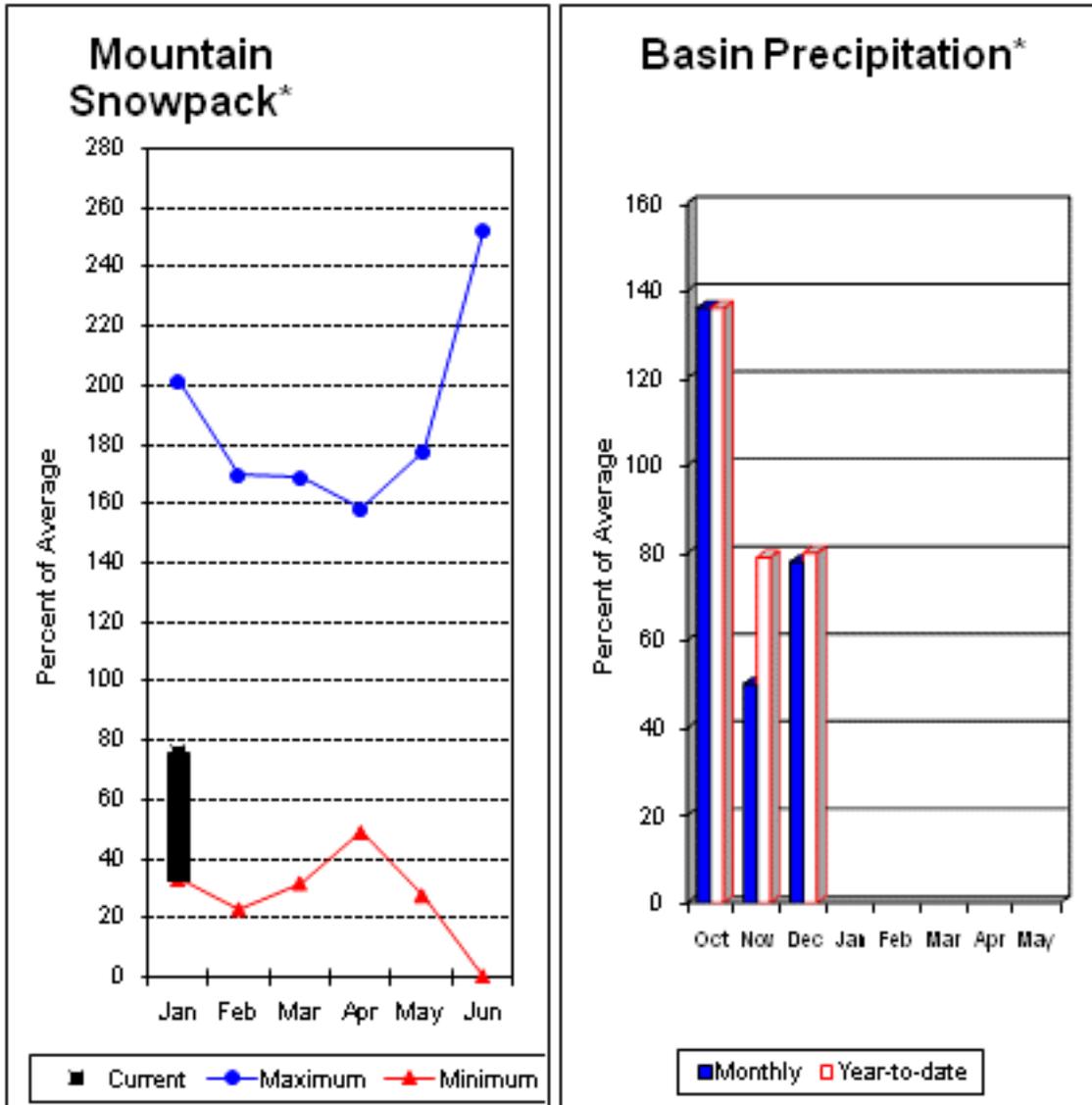
| WALLA WALLA RIVER BASIN | | | | | WALLA WALLA RIVER BASIN | | | |
|-----------------------------------------------|-----------------|------------------------|-----------|-----|-----------------------------------------------|----------------------|-------------------|---------|
| Reservoir Storage (1000 AF) - End of December | | | | | Watershed Snowpack Analysis - January 1, 2010 | | | |
| 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 | 90 | 89 |

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

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

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

Lower Snake River Basin



*Based on selected stations

The April - September forecast is for 82% for Clearwater River at Spalding. The Snake and Grande Ronde rivers can expect summer flows to be about 75% and 86% of normal respectively. December precipitation was 78% of average, bringing the year-to-date precipitation to 80% of average. January 1 snowpack readings averaged 72% of normal. December streamflow was 60% of average for Snake River below Lower Granite Dam and 43% for Grande Ronde River near Troy. Average temperatures were 2 degrees below normal for December and 1 degree below normal for the water year.

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

Lower Snake River Basin

Streamflow Forecasts - January 1, 2010

| Forecast Point | Forecast Period | Future Conditions | | | | | | 30-Yr Avg. (1000AF) |
|-----------------------------------|-----------------|-------------------|-----------------|-----------------|-----------------|-----------------------|-----------------|------------------------|
| | | Drier | | Wetter | | Chance Of Exceeding * | | |
| | | 90% (1000AF) | 70% (1000AF) | 30% (1000AF) | 10% (1000AF) | 50% (% AVG.) | 50% (% AVG.) | |
| Grande Ronde R at Troy | MAR-JUL | 635 | 1150 | 1380 | 87 | 1610 | 2120 | 1580 |
| | APR-SEP | 505 | 970 | 1180 | 86 | 1390 | 1850 | 1370 |
| CLEARWATER at Spalding (1,2) | APR-JUL | 2460 | 5030 | 6200 | 83 | 7370 | 9940 | 7430 |
| | APR-SEP | 2810 | 5380 | 6550 | 83 | 7720 | 10300 | 7850 |
| SNAKE blw Lower Granite Dam (1,2) | APR-JUL | 5230 | 12700 | 16100 | 75 | 19500 | 27000 | 21600 |
| | APR-SEP | 5780 | 14200 | 18000 | 75 | 21800 | 30200 | 24100 |

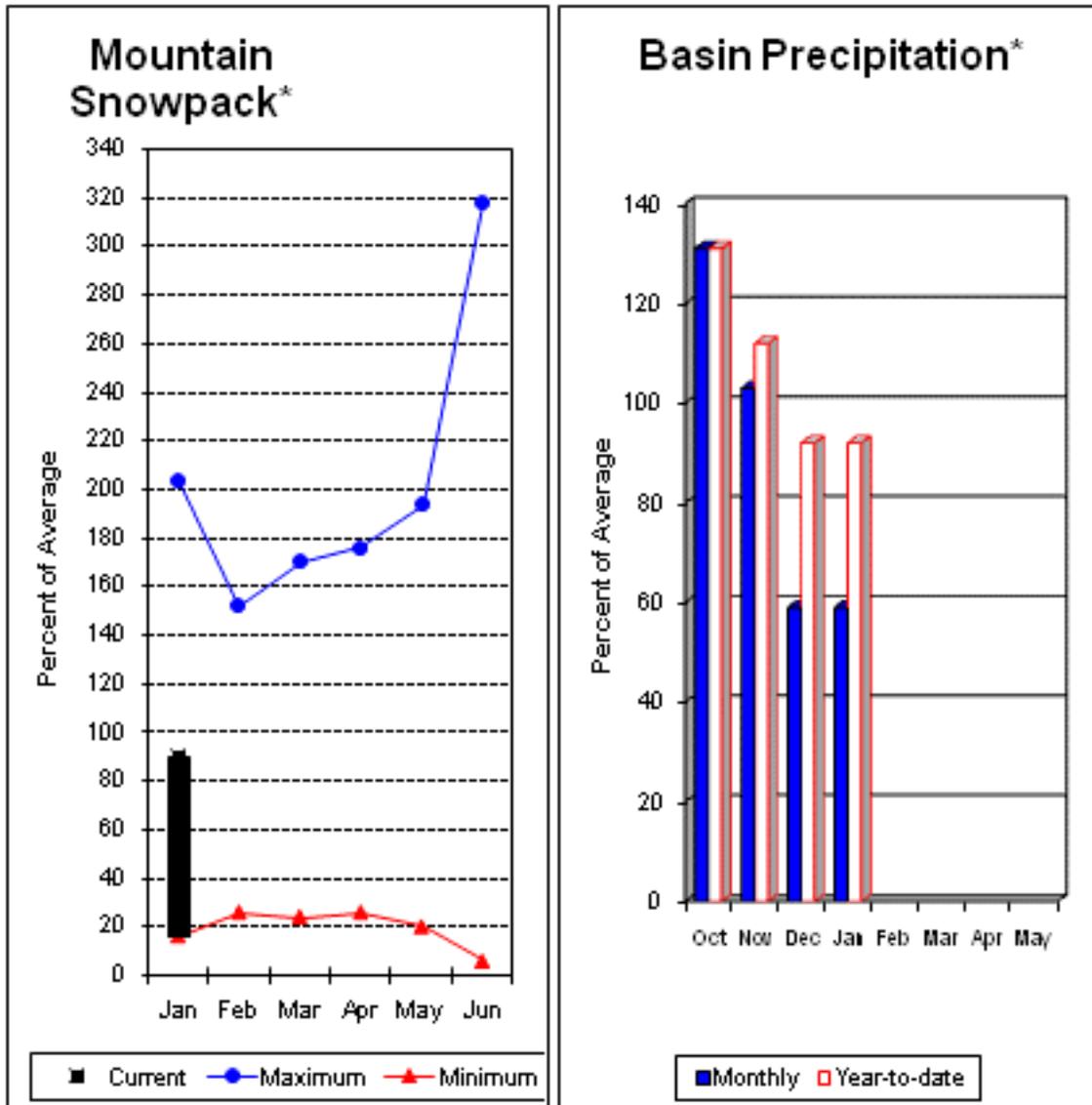
| LOWER SNAKE RIVER BASIN Reservoir Storage (1000 AF) - End of December | | | | | LOWER SNAKE RIVER BASIN Watershed Snowpack Analysis - January 1, 2010 | | | |
|--------------------------------------------------------------------------|-----------------|------------------------|-----------|--------|--------------------------------------------------------------------------|----------------------|-------------------|---------|
| 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 | 2149.0 | 2378.1 | 2228.2 | LOWER SNAKE, GRANDE RONDE | 10 | 85 | 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.

Lower Columbia River Basins



*Based on selected stations

Forecasts for April – September streamflows within the basin are Lewis River at Ariel, 95% and Cowlitz River at Castle Rock, 93% of average. The Columbia at The Dalles is forecasted to have 83% of average flows this summer. December average streamflow for Cowlitz River was 68% and 56% for Lewis River. The Columbia River at The Dalles was 65% of average. December precipitation was 59% of average and the water-year average was 92%. January 1 snow cover for Cowlitz River was 84%, and Lewis River was 93% of average. Average temperatures were 1 degrees below normal during December and 3 degrees below normal for the water year.

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

Lower Columbia River Basins

Streamflow Forecasts - January 1, 2010

| Forecast Point | Forecast Period | Future Conditions | | | | | | 30-Yr Avg. (1000AF) |
|-------------------------------|-----------------|-----------------------|-----------------|----------------------|-----------------|-----------------|-----------------|------------------------|
| | | <<----- Drier ----->> | | ----- Wetter ----->> | | | | |
| | | 90% (1000AF) | 70% (1000AF) | 50% (1000AF) | 50% (% AVG.) | 30% (1000AF) | 10% (1000AF) | |
| Columbia R at The Dalles (2) | APR-JUL | 50200 | 61900 | 69800 | 83 | 77700 | 89400 | 84600 |
| | APR-SEP | 58400 | 72000 | 81300 | 83 | 90600 | 104000 | 98600 |
| Klickitat R nr Glenwood | APR-JUL | 64 | 85 | 100 | 79 | 115 | 136 | 126 |
| | APR-SEP | 88 | 111 | 127 | 78 | 143 | 166 | 163 |
| Klickitat R nr Pitt | APR-JUL | 235 | 300 | 345 | 75 | 390 | 455 | 462 |
| | APR-SEP | 290 | 370 | 420 | 75 | 470 | 550 | 559 |
| Lewis R at Ariel (2) | APR-JUL | 720 | 880 | 990 | 96 | 1100 | 1260 | 1031 |
| | APR-SEP | 850 | 1010 | 1120 | 95 | 1240 | 1400 | 1176 |
| Cowlitz R bl Mayfield Dam (2) | APR-JUL | 1120 | 1390 | 1570 | 93 | 1750 | 2020 | 1689 |
| | APR-SEP | 1300 | 1590 | 1790 | 93 | 1990 | 2280 | 1922 |
| Cowlitz R at Castle Rock (2) | APR-JUL | 1620 | 1920 | 2130 | 93 | 2340 | 2640 | 2295 |
| | APR-SEP | 1880 | 2220 | 2460 | 93 | 2700 | 3040 | 2639 |
| Klickitat R nr Glenwood | APR-JUL | 64 | 85 | 100 | 79 | 115 | 136 | 126 |
| | APR-SEP | 88 | 111 | 127 | 78 | 143 | 166 | 163 |
| Klickitat R nr Pitt | APR-JUL | 235 | 300 | 345 | 75 | 390 | 455 | 462 |
| | APR-SEP | 290 | 370 | 420 | 75 | 470 | 550 | 559 |

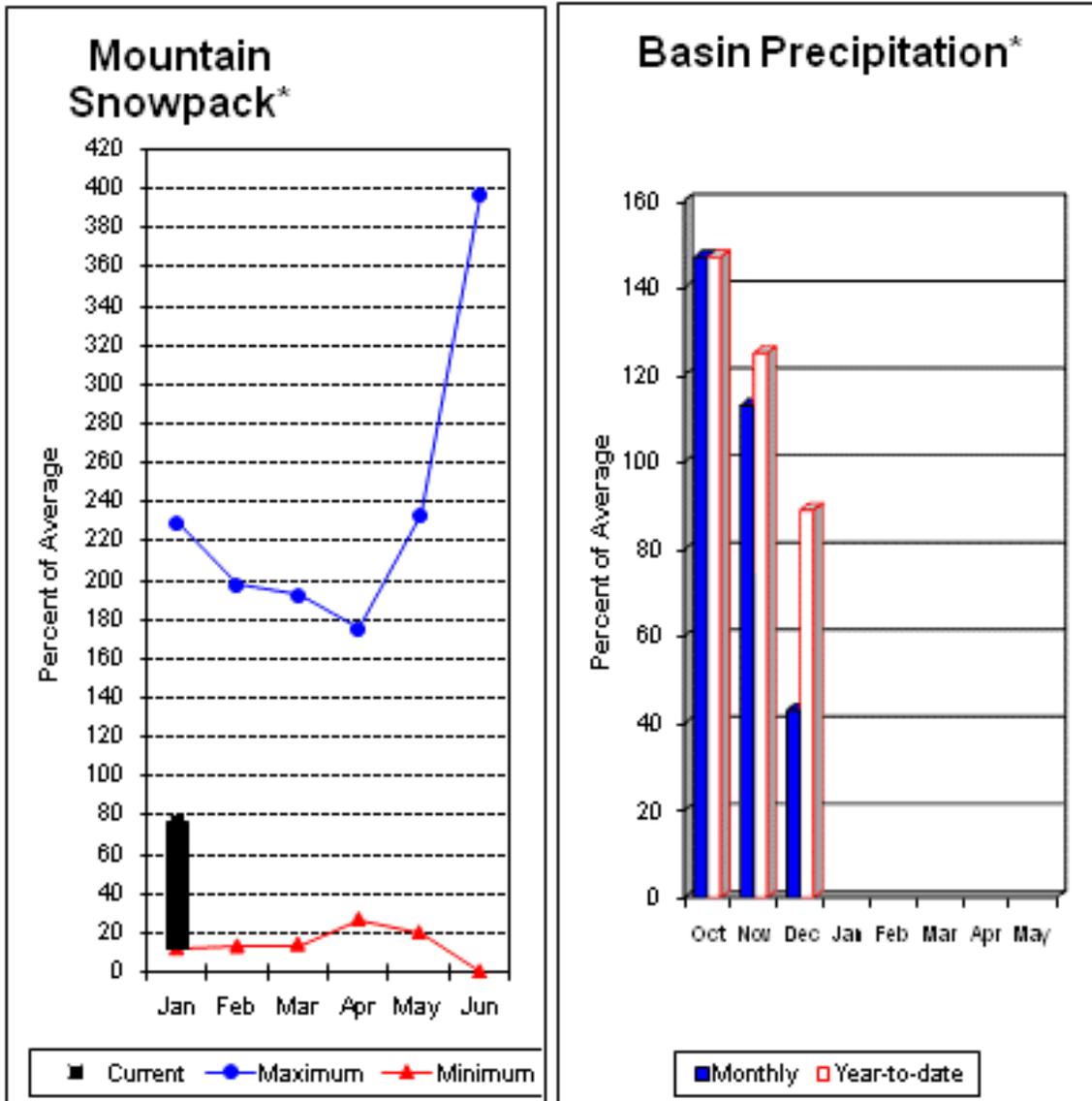
| LOWER COLUMBIA RIVER BASINS Reservoir Storage (1000 AF) - End of December | | | | | LOWER COLUMBIA RIVER BASINS Watershed Snowpack Analysis - January 1, 2010 | | | |
|------------------------------------------------------------------------------|-----------------|------------------------|-----------|-----|------------------------------------------------------------------------------|----------------------|-------------------|---------|
| 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 | 1192.3 | 1079.8 | --- | LEWIS RIVER | 5 | 95 | 93 |
| SWIFT | 0.0 | 718.1 | 672.2 | --- | COWLITZ RIVER | 6 | 98 | 84 |
| YALE | 0.0 | 365.7 | 384.0 | --- | | | | |
| MERWIN | 0.0 | 402.3 | 415.1 | --- | | | | |

* 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.

South Puget Sound River Basins



*Based on selected stations

Summer runoff is forecast to be 74% of normal for the Green River below Howard Hanson Dam and 88% for the White River near Buckley. January 1 snowpack was 92% of average for the White River, 91% for Puyallup River and 49% in the Green River Basin. Water content on January 1 at Corral Pass SNOTEL, at an elevation of 6,000 feet, was 12.1 inches. This site has a January 1 average of 15.8 inches. December precipitation was 43% of average, bringing the water year-to-date to 89% of average for the basins. Average temperatures in the area were 1 degrees below normal for December and 2 degrees below normal for the water-year.

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

South Puget Sound River Basins

Streamflow Forecasts - January 1, 2010

| Forecast Point | Forecast Period | Future Conditions | | | | | | 30-Yr Avg. (1000AF) |
|-----------------------------------|-----------------|-------------------|-----------------|-----------------|-----------------|-----------------------|----------|------------------------|
| | | Drier | | Wetter | | Chance Of Exceeding * | | |
| | | 90% (1000AF) | 70% (1000AF) | 30% (1000AF) | 10% (1000AF) | 50% (1000AF) | (% AVG.) | |
| WHITE near Buckley (1,2) | APR-JUL | 252 | 340 | 380 | 86 | 420 | 508 | 440 |
| | APR-SEP | 324 | 424 | 470 | 88 | 516 | 616 | 534 |
| GREEN R below Howard Hansen (1,2) | APR-JUL | 74 | 147 | 180 | 74 | 213 | 286 | 243 |
| | APR-SEP | 88 | 164 | 199 | 74 | 235 | 310 | 268 |

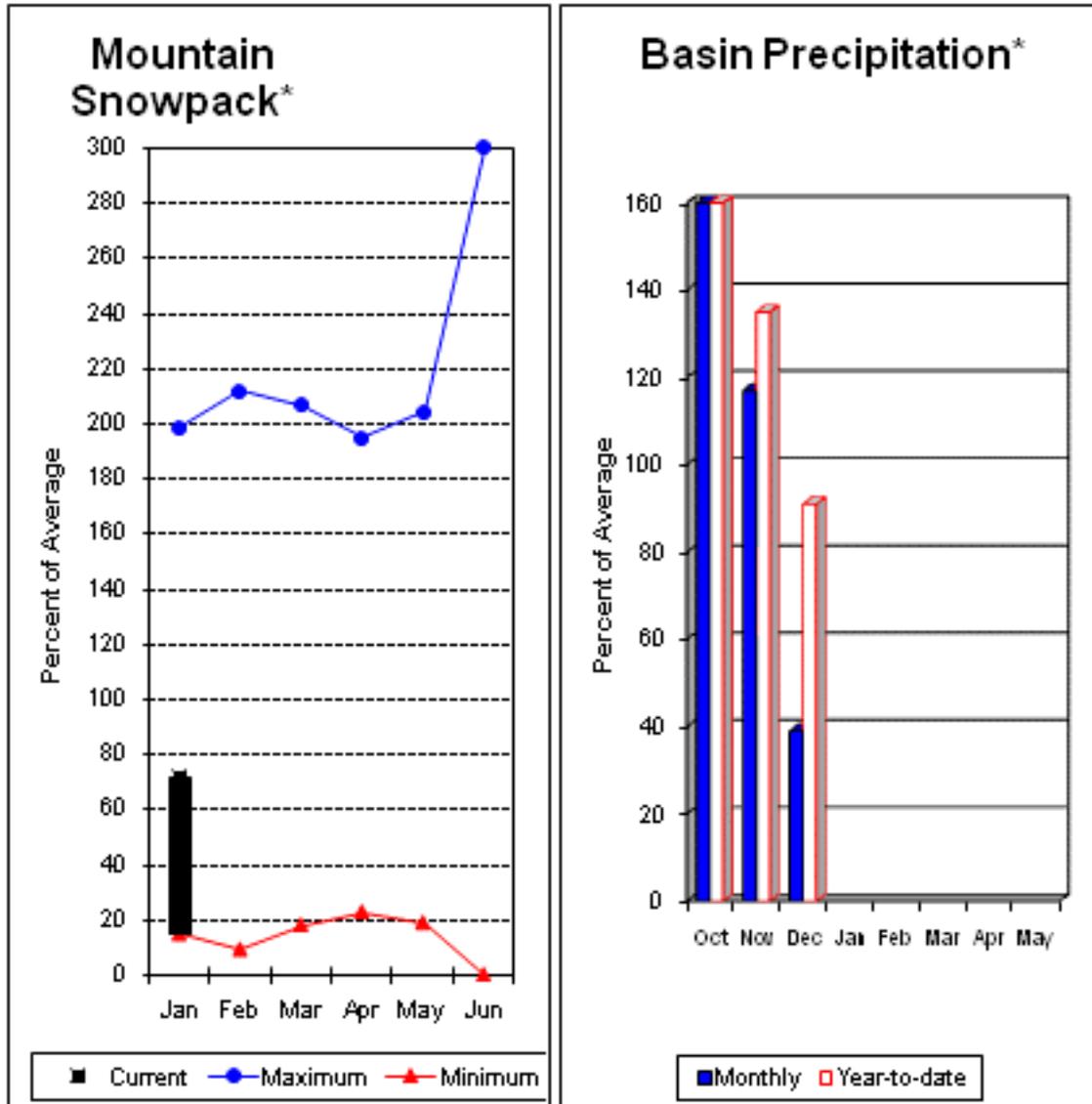
| SOUTH PUGET SOUND RIVER BASINS Reservoir Storage (1000 AF) - End of December | | | | | SOUTH PUGET SOUND RIVER BASINS Watershed Snowpack Analysis - January 1, 2010 | | | |
|---------------------------------------------------------------------------------|-----------------|------------------------|-----------|-----|---------------------------------------------------------------------------------|----------------------|-------------------|---------|
| Reservoir | Usable Capacity | *** Usable Storage *** | | | Watershed | Number of Data Sites | This Year as % of | |
| | | This Year | Last Year | Avg | | | Last Yr | Average |
| | | | | | WHITE RIVER | 3 | 114 | 92 |
| | | | | | GREEN RIVER | 2 | 74 | 49 |
| | | | | | PUYALLUP RIVER | 5 | 85 | 91 |

* 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.

Central Puget Sound River Basins



*Based on selected stations

Forecast for spring and summer flows are: 75% for Cedar River near Cedar Falls; 75% for Rex River; 82% for South Fork of the Tolt River; and 80% for Cedar River at Cedar Falls. Basin-wide precipitation for December was 39% of average, bringing water-year-to-date to 91% of average. January 1 average snow cover in Cedar River Basin was 77%, Tolt River Basin was 66%, Snoqualmie River Basin was 69%, and Skykomish River Basin was 78%. Olallie Meadows SNOTEL site, at 3960 feet, had 19.3 inches of water content. Average January 1 water content is 22.2 inches at Olallie Meadows. Temperatures were near normal for December and for the water-year.

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

Central Puget Sound River Basins

Streamflow Forecasts - January 1, 2010

| Forecast Point | Forecast Period | Future Conditions <<==== Drier ===== Wetter =====>> | | | | | | 30-Yr Avg. (1000AF) | | | | |
|----------------------------|-----------------|-----------------------------------------------------|------|-----------------|----|--------------------------|------|------------------------|-----------------|--|-----------------|--|
| | | 90% (1000AF) | | 70% (1000AF) | | 50% (1000AF) (% AVG.) | | | 30% (1000AF) | | 10% (1000AF) | |
| | | Chance Of Exceeding * | | | | | | | | | | |
| CEDAR near Cedar Falls | APR-JUL | 33 | 46 | 55 | 75 | 64 | 77 | 73 | | | | |
| | APR-SEP | 38 | 51 | 60 | 75 | 69 | 82 | 80 | | | | |
| REX near Cedar Falls | APR-JUL | 7.4 | 14.3 | 19.0 | 76 | 24 | 31 | 25 | | | | |
| | APR-SEP | 9.1 | 16.2 | 21 | 75 | 26 | 33 | 28 | | | | |
| CEDAR RIVER at Cedar Falls | APR-JUL | 26 | 43 | 55 | 74 | 67 | 84 | 74 | | | | |
| | APR-SEP | 25 | 45 | 58 | 80 | 71 | 91 | 73 | | | | |
| SOUTH FORK TOLT near Index | APR-JUL | 5.6 | 9.6 | 12.3 | 84 | 15.0 | 19.0 | 14.7 | | | | |
| | APR-SEP | 7.9 | 11.4 | 13.8 | 82 | 16.2 | 19.7 | 16.9 | | | | |

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

CENTRAL PUGET SOUND RIVER BASINS Watershed Snowpack Analysis - January 1, 2010

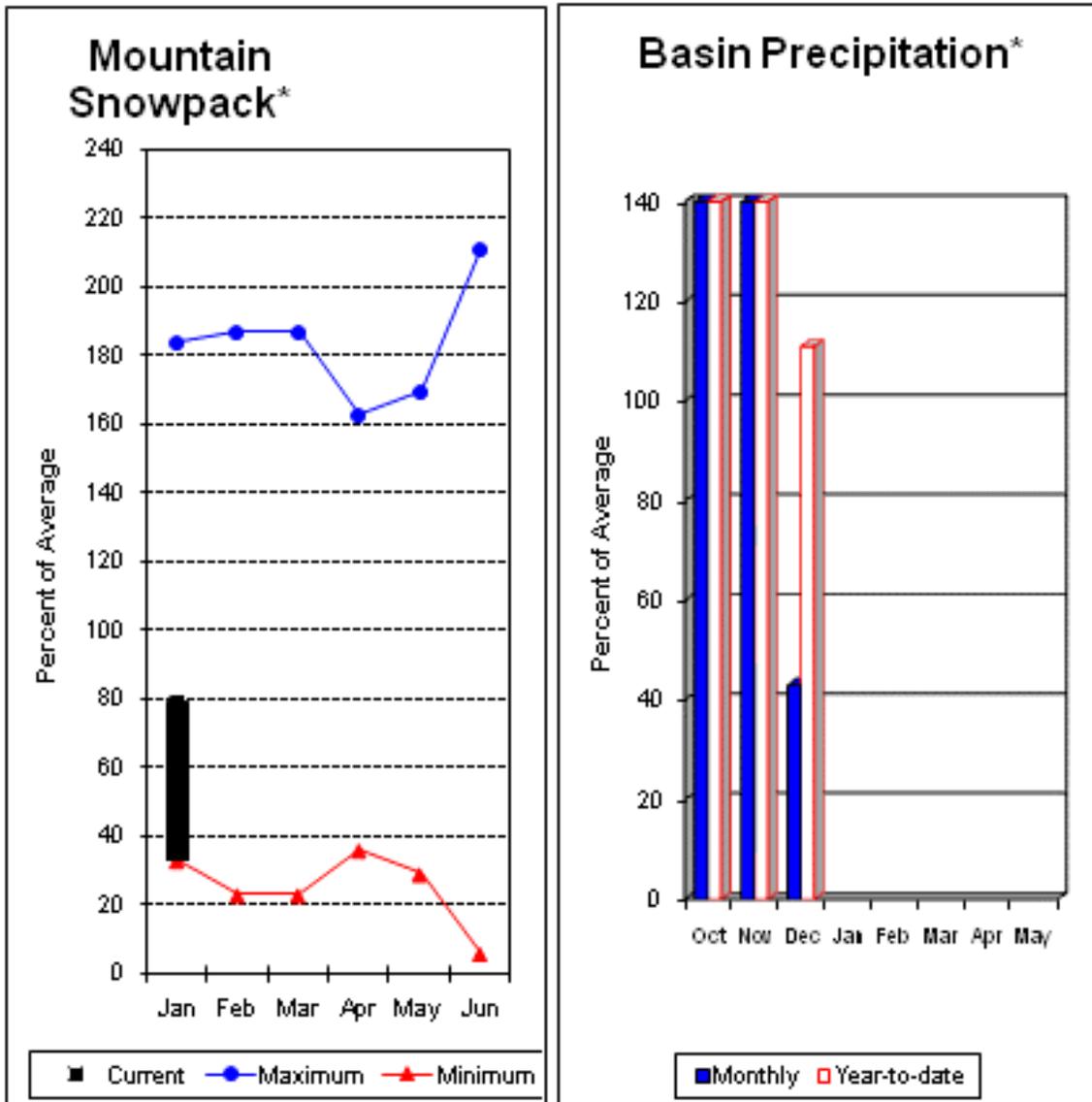
| Reservoir | Usable Capacity | *** Usable Storage *** | | | Watershed | Number of Data Sites | This Year as % of | |
|-----------|-----------------|------------------------|-----------|-----|------------------|----------------------|-------------------|---------|
| | | This Year | Last Year | Avg | | | Last Yr | Average |
| | | | | | CEDAR RIVER | 4 | 66 | 77 |
| | | | | | TOLT RIVER | 2 | 51 | 66 |
| | | | | | SNOQUALMIE RIVER | 4 | 71 | 69 |
| | | | | | SKYKOMISH RIVER | 2 | 85 | 78 |

* 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.

North Puget Sound River Basins



*Based on selected stations

Forecast for Skagit River streamflow at Newhalem is 92% of average for the spring and summer period. December streamflow in Skagit River was 75% of average. Other forecast points included Baker River at 78% and Thunder Creek at 90% of average. Basin-wide precipitation for December was 43% of average, bringing water-year-to-date to 111% of average. January 1 average snow cover in Skagit River Basin was 77%, Nooksack River Basin was 91% and Baker River Basin was 69% of average. Rainy Pass SNOTEL, at 4,780 feet, had 14.8 inches of water content. Average January 1 water content is 19.9 inches at Rainy Pass. January 1 Skagit River reservoir storage was 101% of average and 83% of capacity. Average temperatures for December were near normal for the basin and 1 degree below average for the water year. Two new SNOTEL sites, Brown Top and Silver Glacier, were installed in the Skagit River Basin in cooperation with Seattle City Light 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 - January 1, 2010

| Forecast Point | Forecast Period | Future Conditions | | | | | | 30-Yr Avg. (1000AF) |
|-----------------------------|-----------------|-------------------|-----------------|-----------------|-----------------|-----------------------|----------|------------------------|
| | | Drier | | Wetter | | Chance Of Exceeding * | | |
| | | 90% (1000AF) | 70% (1000AF) | 30% (1000AF) | 10% (1000AF) | 50% (1000AF) | (% AVG.) | |
| THUNDER CREEK near Newhalem | APR-JUL | 169 | 193 | 210 | 90 | 225 | 250 | 234 |
| | APR-SEP | 255 | 280 | 300 | 90 | 320 | 345 | 333 |
| SKAGIT at Newhalem (2) | APR-JUL | 1350 | 1560 | 1710 | 92 | 1860 | 2070 | 1864 |
| | APR-SEP | 1650 | 1880 | 2040 | 92 | 2200 | 2430 | 2217 |
| BAKER RIVER near Concrete | APR-JUL | 475 | 580 | 650 | 79 | 720 | 825 | 828 |
| | APR-SEP | 580 | 720 | 815 | 78 | 910 | 1050 | 1050 |

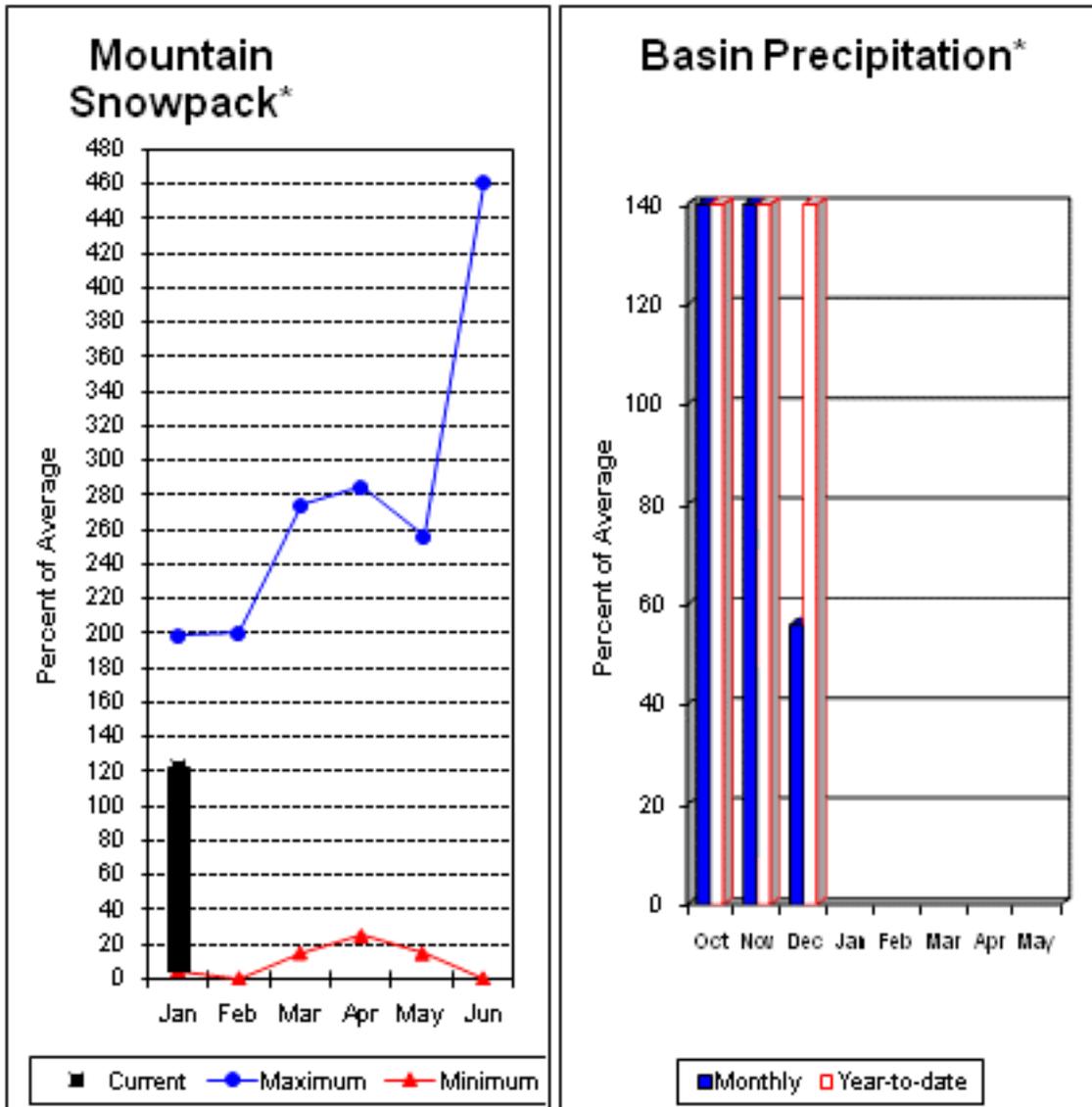
| NORTH PUGET SOUND RIVER BASINS Reservoir Storage (1000 AF) - End of December | | | | | NORTH PUGET SOUND RIVER BASINS Watershed Snowpack Analysis - January 1, 2010 | | | |
|---------------------------------------------------------------------------------|-----------------|------------------------|-----------|--------|---------------------------------------------------------------------------------|----------------------|-------------------|---------|
| 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 | 1155.2 | 1141.4 | 1142.1 | SKAGIT RIVER | 5 | 140 | 76 |
| DIABLO RESERVOIR | 90.6 | 85.3 | 87.1 | 85.3 | BAKER RIVER | 9 | 149 | 69 |
| | | | | | NOOKSACK RIVER | 3 | 146 | 91 |

* 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.

Olympic Peninsula River Basins



*Based on selected stations

Forecasted average runoff for streamflow for the Dungeness River is 93% and Elwha River is 90%. December runoff in the Dungeness River was 87% of normal. Big Quilcene and Wynoochee rivers should expect near average runoff this summer also. December precipitation was 56% of average. Precipitation has accumulated at 143% of average for the water year. December precipitation at Quillayute was 6.91 inches. The thirty-year average for December is 14.5 inches. Olympic Peninsula snowpack averaged 123% of normal on January 1. Temperatures were near average for December and for the water year.

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

Olympic Peninsula River Basins

Streamflow Forecasts - January 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) | | | | |
| DUNGENESS near Sequim | APR-JUL | 54 | 90 | 115 | 93 | 140 | 176 | 124 |
| | APR-SEP | 55 | 107 | 142 | 93 | 177 | 230 | 152 |
| ELWHA near Port Angeles | APR-JUL | 255 | 325 | 370 | 88 | 415 | 485 | 419 |
| | APR-SEP | 307 | 392 | 450 | 90 | 508 | 593 | 503 |

| OLYMPIC PENINSULA RIVER BASINS Reservoir Storage (1000 AF) - End of December | | | | | OLYMPIC PENINSULA RIVER BASINS Watershed Snowpack Analysis - January 1, 2010 | | | |
|---------------------------------------------------------------------------------|-----------------|------------------------|-----------|-----|---------------------------------------------------------------------------------|----------------------|-------------------|---------|
| 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 | 186 | 123 |

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

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

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

Issued by

Dave White
Acting Chief
Natural Resources Conservation Service
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.



Washington Snow Survey Office
2021 E. College Way, Suite 214
Mount Vernon, WA 98273-2873



Washington Water Supply Outlook Report

Natural Resources Conservation Service
Spokane, WA

