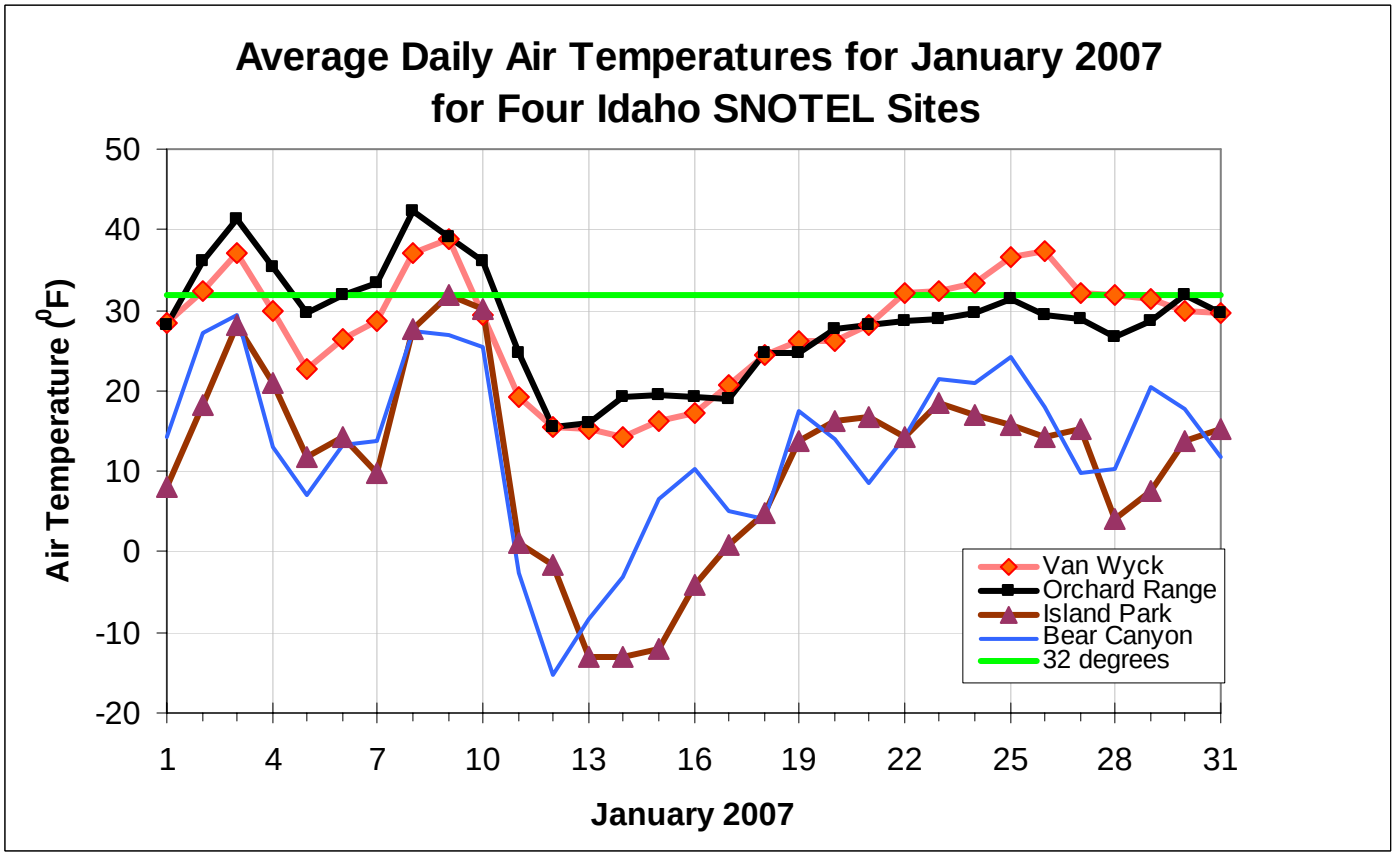
United States Department of Agriculture
Natural Resources Conservation Service

Idaho Water Supply Outlook Report
February 1, 2007



BRR!

On January 12-15, a cold and dry arctic air mass moved into the Pacific Northwest from Canada. The Boise Snow Survey staff wondered how cold it got at the 117 SNOTEL sites that we monitor in Idaho, western Wyoming, northern Nevada and eastern Washington. The average daily temperatures for the two coldest sites and the two warmest sites are plotted above. Notice the air temperature drop! Island Park SNOTEL is located in the Henrys Fork Basin and dropped 43 degrees in three days. The average daily temperature was -13F with a minimum temperature of -33F. Bear Canyon SNOTEL, in the Big Lost Basin, had the coldest average daily temperature of -15F and a minimum temperature of -29F. Our two warmest sites were Van Wyck SNOTEL, located in the Weiser Basin, and Orchard Range SNOTEL, between Boise and Mountain Home. Other SNOTEL sites in the Northwest had temperatures 20F degrees or more below normal, while the Southwest had temperatures 20F degrees or more *above* normal during the same time period! See additional article inside for more information on cold temperatures.

Basin 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.

IDAHO WATER SUPPLY OUTLOOK REPORT

February 1, 2007

SUMMARY

After a promising start for the snow season, Idaho's snowpack took a turn for the worst in January with precipitation at only 30-50% of average across southern Idaho and 75% in northern Idaho. Snowpacks range from 47% of average in the Owyhee basin to 60-75% across central and eastern Idaho to more than 85% in northern Idaho. The encouraging part of the water supply puzzle is good soil moisture and reservoir storage, which is a change from the drought years. Fall rains improved soil moisture and increased baseflows which will hopefully improve efficiencies of the snow to runoff into the streams this spring. Good reservoir storage will provide additional insurance if the second half of winter fails to deposit snow in Idaho's mountains. Streamflow forecasts mirror the declining snowpack and decreased from a month ago. The exceptions are streams in the Panhandle Region and Clearwater basin which remain forecast at 95-105% of average. The lowest streamflow forecasts are 40-50% of average in the Owyhee, Bear River at Stewart Dam, Camas Creek, and Big Wood below Magic Reservoir. Elsewhere, streams are forecast at 55-85% of average.

SNOWPACK

Last month we said "Most of Idaho's snowpack is on par when compared to the 30-year averages." This is not the case anymore, with the lack of precipitation across the southern two-thirds of Idaho. Snowpack averages from January 1 to February 1 dropped 15-30 percentage points. This is not a result of the snow melting but because the snow water content is not increasing at its normal January rate. Snowpacks remain the highest in the Panhandle Region and Clearwater basin at 80-90% of average. Snowpacks are 70-80% of average in the Salmon, Weiser, Payette, Boise, Big Wood, Little Lost, Upper Snake, Oakley and Salmon Falls basins. Elsewhere, the snow is 60-69% of average in the Little Wood, Big Lost, Henrys Fork, Mud Lake, Willow, Blackfoot, Portneuf, Bruneau and Bear basins. The Owyhee basin hosts the lowest snowpack at 47% of average which is the lowest February 1 amount since 1981. It is amazing how similar this year's snowpack is to 2005 across southern Idaho. 2005 was another mild El Nino year, just like this year. In 2005, the snow came late and brought good skiing conditions in March and April, but the snowpack peaked at only half of average on April 1 across most of the state. In May 2005, the skies opened up and brought precipitation amounts that were 150-300% of average and were the saving grace for Idaho's numerous water users and river runners. In contrast, the 2003 below normal snow gave way to average spring precipitation but record high temperature in late May flushed the snow out of the mountains and into the streams providing relief for surface and reservoir water users. Stay tuned to see how this El Nino year ends and if it will track 2003 or 2005 or another year. For comparisons of this year and 2005, see the Idaho Snow Basin graphs on this page: http://www.id.nrcs.usda.gov/snow/data/basin_graphs.html**.**

PRECIPITATION

Blue skies, cold temperatures and high pressure from a northerly jet stream kept precipitation to a minimum across most of Idaho and the West for that matter. Highest January precipitation amounts were in the Idaho Panhandle Region and Clearwater Basin from 70-74% of average and were enough to keep snowpack percentages from decreasing too much. However, the rest of the state received amounts ranging from 50% of average in the Henrys Fork and Upper Snake to 30% in the Weiser, Boise, Little Wood and Big Lost basins. On January 1, water year-to-date precipitation amounts were above average across most of the state except for the Upper Snake and Bear River basin. Because January was dry and is a critical month in terms of providing our winter precipitation, only the Panhandle Region and Clearwater Basin have received above normal precipitation since the water year started October 1, 2006. The Bear River basin has the lowest water year-to-date precipitation at 77% of average. February is starting how January ended with cold temperatures and blue skies; let’s hope the nice, but abnormal

weather pattern ends soon. The NWS Climate Prediction Center forecasts equal chances of above, below or normal precipitation for Idaho, Montana and Wyoming for February. Basically, that forecast means the precipitation could go either way at this point. However, the February-April precipitation forecast is for below average in Idaho, Montana and Wyoming. Air temperatures are forecast to be above average for both the February and February-April periods for most of the Pacific Northwest.

RESERVOIRS

Near average or better reservoir carryover storage across most of Idaho is another bright spot in Idaho's water supply picture. Reservoir storage is 125-150% of average in Magic, Little Wood, Oakley, Salmon Falls, Wildhorse, and Montpelier reservoirs. Storage is about 110% of average in American Falls, Island Park, Dworshak and the Boise and Payette reservoir systems. Combined storage in Palisades Reservoir and Jackson Lake is 106% of average. Mackay, Henrys Fork, and Grassy Lake reservoirs are storing near average amounts. The lowest storage is in Blackfoot Reservoir at 77% of average and Bear Lake at 59% of average because of low runoff in previous drought years. Water storage in northern Idaho and western Montana's lakes and storage facilities remains near or above average except for Coeur d'Alene Lake at 53% of average.

Note: NRCS reports reservoir information in terms of usable volumes, which includes both active, inactive and in some cases, dead storage. Other operators may report reservoir contents in different terms. For additional information, see the reservoir definitions in this report.

STREAMFLOW

Spring and summer streamflow forecasts dropped from a month ago as result of below normal precipitation in January. November, December and January are the months when the greatest amount of precipitation falls in Idaho. More importantly the skill level to predict the spring and summer streamflow from mountain snowfall increases dramatically in January. This means that our predictions should be better from February on, unless future weather is extremely wet or dry. If future precipitation is dry like in January, we'll see the streamflow forecasts decrease more in February. Future precipitation is not used in our forecast equations to predict streamflow forecasts; however, the multiple regression equations assume normal future amounts. Streamflow forecasts will mirror future precipitation. Instead of waiting for first of month or mid-month forecasts, daily changes in runoff forecasts from yesterday's weather or lack of moisture, can be monitored by clicking on our Daily Guidance Streamflow Forecasts on our Idaho "Water Supply" webpage: http://www.id.nrcs.usda.gov/snow/watersupply/.

The forecast numbers mentioned in the narrative are the volume under the 50% Chance of Exceeding, which means there is a 50% chance the volume will be greater or less than the given value. Water users may wish to use a lesser exceedance forecast to reduce the risk of coming up short on water. If snowfall fails to occur in the second half of winter as we approach the usual peak in snow water equivalent, then the forecasts may drop even more in future months.

Note: Forecasts published in this report are NRCS guidance forecasts. NRCS is using SNOTEL data in a timely manner to provide timely streamflow forecast for users. Official jointly coordinated and published forecasts by the USDA Natural Resources Conservation Service and the US Department of Commerce, NOAA, National Weather Service are available from the joint west-wide Water Supply Outlook for the Western US at http://www.wcc.nrcs.usda.gov/wsf/westwide.html.

RECREATION

Cold temperatures in January helped to preserve the snow for skiers and snowmobilers to enjoy. Idaho's snowpacks range from 47% of average in the Owyhee basin to around 90% in northern Idaho. A lack of Pacific storm systems this season has resulted in below to much below normal mountain snow across the West. The few locations with above average snowpacks are western Washington, the Front Range of Colorado and northern New Mexico, where several early season snowstorms helped to improve snow in

these areas. Snowpacks are only 40-80% of average in the mountains of Wyoming, southwestern Montana and Oregon. In California and Nevada, many locations have less than half of the normal snowpack for the end of January. The lack of mountain snowfall has caused ski race locations to be rearranged to locations with better snow and the ability to host a race. These are signs of a snow drought and affects local income for ski clubs and local economies. River runners will still find good whitewater boating even with below normal snowpacks in Idaho. Many of Idaho's streams are near the headwaters and source of moisture, but you may have to put your boats on the river early or end the season floating below reservoirs. Until the boating season starts, keep praying for snow in the second half of winter or spring rains to give the rivers an added boost when spring arrives.

COLD TEMPERATURES

BRRRR! A cold and dry arctic air mass moved through the Pacific Northwest on January 12-14 and caused numerous power outages, ice jams on some rivers, and worries of crop reduction as far south as San Diego, California. How did this cold air affect our SNOTEL sites? Well, they got cold! The cold didn't "snap" until January 15 in Wyoming and eastern Idaho and lasted a few days longer than in parts of northern and central Idaho. Most of the SNOTEL sites in the Pacific Northwest experienced air temperatures 10-20 degrees or more below normal, while parts of the Southwestern US recorded much warmer than normal temperatures. Of the 117 SNOTEL sites that the Boise Snow Survey office maintains, the coldest average daily temperature was
-15F (-26C) on January 12 at Bear Canyon SNOTEL, located in the Big Lost basin. Just three days earlier, Bear Canyon had an average temperature of 27F (-3C), that's a 42F temperature drop! The second coldest site averaged -13F (-25C) on January 13, at Island Park SNOTEL in the Henrys Fork basin. On January 10, Island Park's average daily temperature was 30F (-1C); that is a 43F temperature difference in three days! Bear Canyon had an overall colder day since the maximum temperature that day only reached 3F (-16C) and the minimum was -29F (-34C), while Island Park was a bit warmer at 12F (-11C) and had a minimum temperature of -33F (-36C). Island Park area has a history of being cold. The Island Park National Weather Service Station had the coldest temperature recorded in Idaho at -60F (-51C) on January 18, 1943! Some of our lower elevation SNOTEL stations did not experience the extremely cold temperatures. The warmest sites were Orchard Range (between Mountain Home and Boise) and Van Wyck (Weiser Basin), which both had average daily temperatures of 16F (-9C) on January 12. In addition, the cold temperatures and lack of insulating snow cover froze soils deeper than 20 inches in valley locations around Boise and Mountain Home, and to three feet deep in the Carey area!

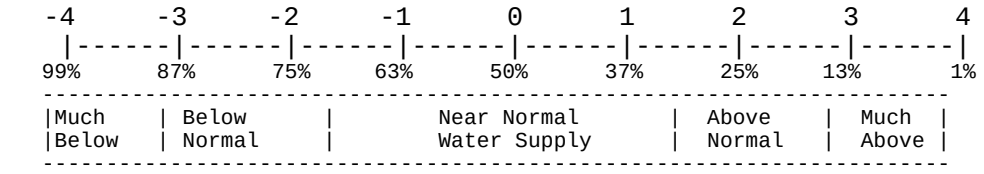
IDAHO SURFACE WATER SUPPLY INDEX (SWSI) As of February 1, 2007

The Surface Water Supply Index (SWSI) is a predictive indicator of surface water availability within a watershed for the spring and summer water use season. The index is calculated by combining pre-runoff reservoir storage (carryover) with forecasts of spring and summer streamflow. SWSI values are scaled from +4.0 (abundant supply) to -4.0 (extremely dry), with a value of zero indicating a median water supply as compared to historical occurrences. The SWSI analysis period is from 1971 to present.

SWSI values provide a more comprehensive outlook of water availability by combining streamflow forecasts and reservoir storage where appropriate. The SWSI index allows comparison of water availability between basins for drought or flood severity analysis. Threshold SWSI values have been determined for some basins to indicate the potential for agricultural irrigation water shortages.

BASIN or REGION	***SWSI Value***	***Most Recent Year With Similar SWSI Value***	***Agricultural Water Supply Shortage May Occur When SWSI is Less Than***
PANHANDLE	-0.5	1983	NA
CLEARWATER	0.1	2003	NA
SALMON	-0.5	2002/2003	NA
WEISER	-1.4	2005	NA
PAYETTE	-0.9	2004	NA
BOISE	-0.5	2003	-2.0
BIG WOOD	-0.7	2000	-0.2
LITTLE WOOD	-0.7	1981	-1.8
BIG LOST	1.1	2005	-0.2
LITTLE LOST	-2.0	2000	-0.5
HENRYS FORK	-1.3	2005	-3.3
SNAKE (HEISE)	-0.9	1993	-1.8
OAKLEY	0.2	1996	-1.0
SALMON FALLS	0.1	1995	-1.5
BRUNEAU	-1.1	2004	NA
BEAR RIVER	-1.8	2002	-3.3

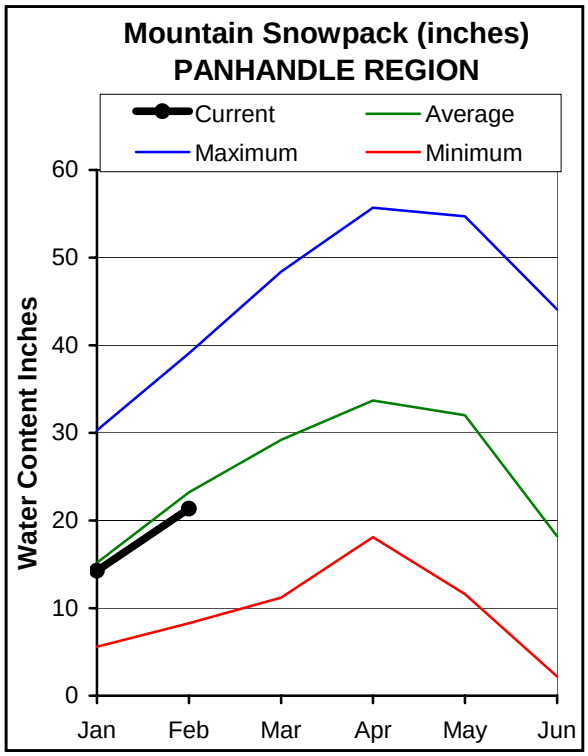
SWSI SCALE, PERCENT CHANCE OF EXCEEDANCE, AND INTERPRETATION

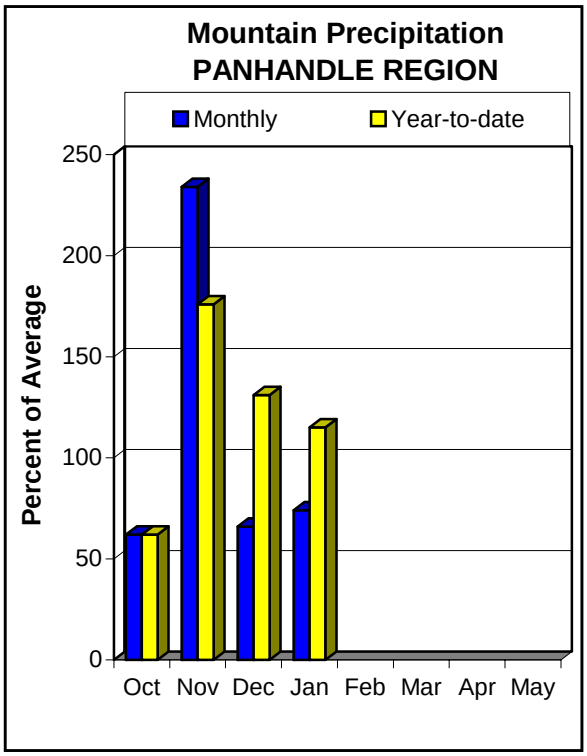


NA = Not Applicable

Note: The Percent Chance of Exceedance is an indicator of how often a range of SWSI values might be expected to occur. Each SWSI unit represents about 12% of the historical occurrences. As an example of interpreting the above scale, the SWSI can be expected to be greater than -3.0, 87% of the time and less than -3.0, 13% of the time. Half the time, the SWSI will be below and half the time above a value of zero. The interval between -1.5 and +1.5 described as "Near Normal Water Supply," represents three SWSI units and would be expected to occur about one-third (36%) of the time.

PANHANDLE REGION
FEBRUARY 1, 2007





WATER SUPPLY OUTLOOK

Northern Idaho was able to accumulate a near average snowpack in December and receive some precipitation in January to help maintain the snow levels when the storm track moved further north missing most of Idaho. January precipitation was 74% of average while basins south of the Clearwater basin only received amounts in the 30-50% of average range. The Panhandle Region snowpack increases from south to north with the St. Joe at 85% of average, Spokane and Coeur d'Alene at around 88%, Rathdrum and Priest at about 98%, Kootenai at 102% and Moyie at 118%. Water year-to-date precipitation remains above average at 115% due to the early season rains. The current water storage is in good shape. Pend Oreille and Priest Lakes are storing near average amounts while Coeur d'Alene Lake is 53% of average. Baseflows remain near average due to the fall rains and took a while to decrease even with the frigid temperatures. Thus soils are primed for spring runoff. Streams are forecast 95-105% of average except for the Moyie River which is forecast at 116%.

PANHANDLE REGION
Streamflow Forecasts - February 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
KOOTENAI at Leonia (1,2)	APR-JUL	5722	6573	6960	99	7347	8198	7040
	APR-SEP	7849	7987	8050	99	8113	8251	8120
MOYIE RIVER at Eastport	APR-JUL	389	436	470	116	505	559	405
	APR-SEP	402	450	485	116	521	576	420
SMITH CREEK	APR-JUL	105	121	132	107	143	161	123
	APR-SEP	110	127	139	108	152	172	129
BOUNDARY CREEK	APR-JUL	111	122	130	106	138	150	123
	APR-SEP	117	128	136	105	144	157	129
CLARK FK at Whitehorse Rpds (1,2)	APR-JUL	7162	9526	10600	94	11674	14038	11300
	APR-SEP	7917	10519	11700	94	12881	15483	12500
PEND OREILLE Lake Inflow (2)	APR-JUL	8950	10706	11900	94	13094	14850	12700
	APR-SEP	9873	11795	13100	94	14405	16327	13900
PRIEST near Priest River (1,2)	APR-JUL	647	739	805	99	874	980	815
	APR-SEP	688	785	855	98	928	1040	870
NF COEUR D'ALENE RIVER AT ENAVILLE	APR-JUL	499	620	710	96	806	959	740
	APR-SEP	531	654	745	96	842	995	780
ST. JOE at Calder	APR-JUL	846	976	1070	94	1169	1320	1140
	APR-SEP	911	1044	1140	95	1240	1395	1200
SPOKANE near Post Falls (2)	APR-JUL	1818	2164	2400	94	2636	2982	2550
	APR-SEP	1894	2249	2490	94	2731	3086	2650
SPOKANE at Long Lake (2)	APR-JUL	2022	2420	2690	94	2960	3358	2850
	APR-SEP	2199	2616	2900	95	3184	3601	3070

PANHANDLE REGION
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
HUNGRY HORSE	3451.0	2881.0	3000.0	2214.7
FLATHEAD LAKE	1791.0	1056.0	1033.0	971.2
NOXON RAPIDS	335.0	302.5	323.0	310.9
PEND OREILLE	1561.3	676.2	809.2	749.3
COEUR D'ALENE	238.5	61.1	137.3	115.6
PRIEST LAKE	119.3	48.0	60.8	55.5

PANHANDLE REGION
Watershed Snowpack Analysis - February 1, 2007

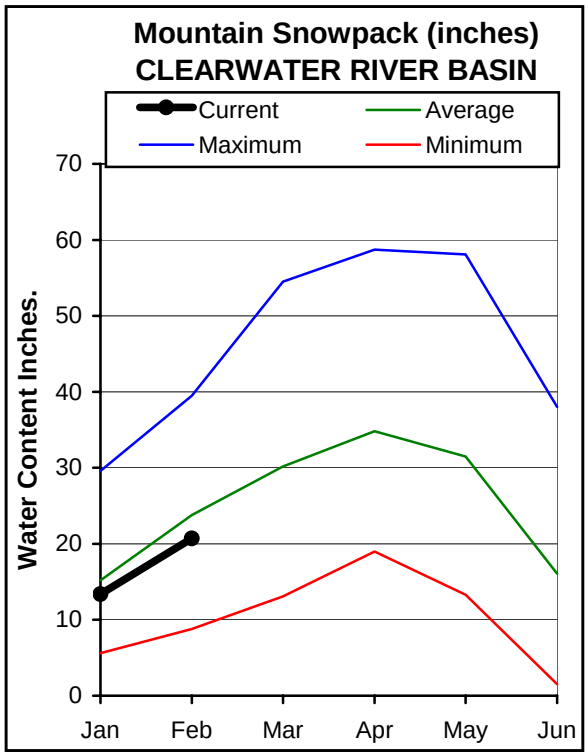
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Kootenai ab Bonners Ferry	23	106	102
Moyie River	8	120	118
Priest River	4	80	97
Pend Oreille River	68	80	84
Rathdrum Creek	3	77	98
Hayden Lake	0	0	0
Coeur d'Alene River	6	92	88
St. Joe River	4	88	85
Spokane River	11	88	89
Palouse River	1	118	108

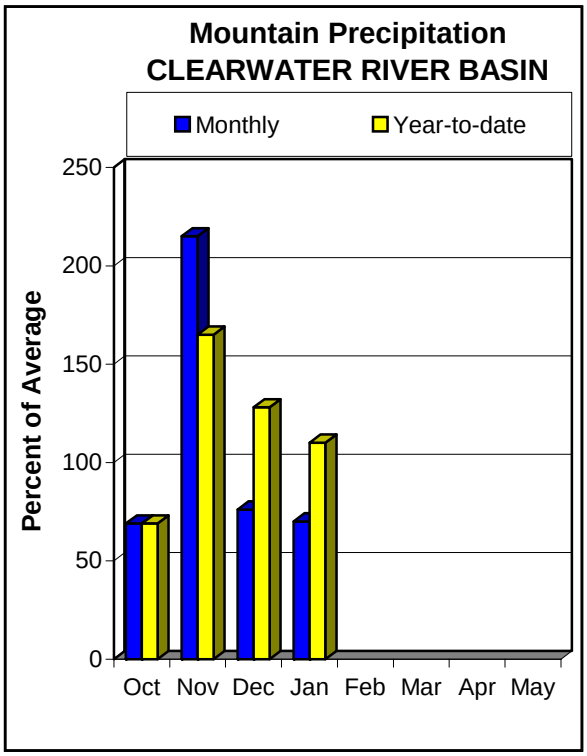
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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.

CLEARWATER RIVER BASIN
FEBRUARY 1, 2007





WATER SUPPLY OUTLOOK

The Clearwater basin is hanging on to a snowpack of 84% of average even though January precipitation was only 70% of average. This region has managed to capture more winter systems than most of Idaho, only second to the Panhandle Region. There remains quite a large range in snow conditions across the basin. Mountain Meadows SNOTEL, elevation 6,360 feet in the headwaters of Selway River drainage, has the lowest snowpack at 74% of average. The site with the highest percent of average snowpack is Crater Meadows SNOTEL, elevation 5,960 feet in the North Fork Clearwater drainage at 92% of average. Dworshak Reservoir is storing 2,386,700 acre-feet, 110% of average, 69% of capacity. The April-July streams are forecasted at 97% of average for the Lochsa River and 93% for the Selway, North Fork Clearwater, and Clearwater rivers. More snow is needed in the next few months to maintain these levels.

CLEARWATER RIVER BASIN
Streamflow Forecasts - February 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SELWAY near Lowell	APR-JUL	1575	1776	1920	93	2070	2299	2060
	APR-SEP	1662	1870	2020	93	2176	2413	2170
LOCHSA near Lowell	APR-JUL	1221	1372	1480	97	1592	1764	1530
	APR-SEP	1295	1449	1560	97	1675	1850	1610
DWORSHAK RESV INFLOW (1,2)	APR-JUL	1890	2197	2420	92	2654	3015	2640
	APR-SEP	2039	2358	2590	93	2832	3207	2800
CLEARWATER at Orofino (1)	APR-JUL	3513	3971	4300	93	4642	5167	4650
	APR-SEP	3738	4211	4550	93	4902	5442	4900
CLEARWATER at Spalding (1,2)	APR-JUL	3892	5940	6870	93	7800	9848	7430
	APR-SEP	4312	6360	7290	93	8220	10268	7850

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
DWORSHAK	3468.0	2386.7	2504.6	2170.7

CLEARWATER RIVER BASIN
Watershed Snowpack Analysis - February 1, 2007

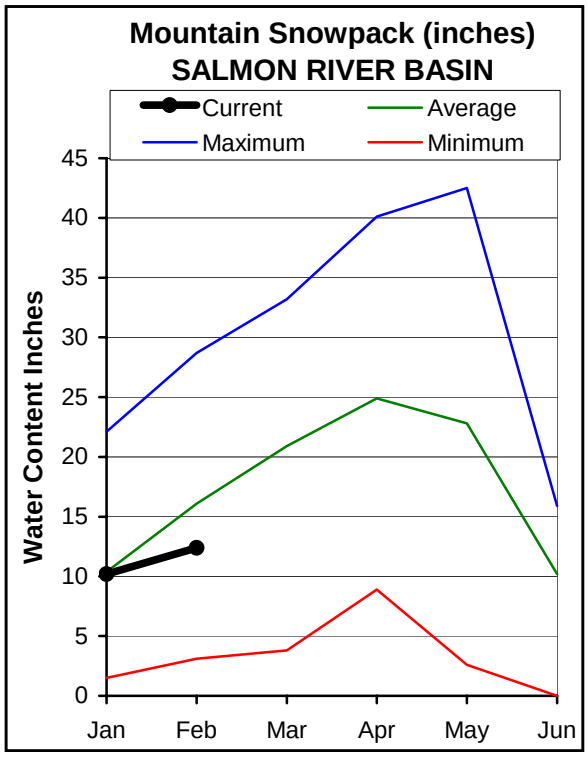
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
North Fork Clearwater	9	82	83
Lochsa River	4	86	85
Selway River	5	77	83
Clearwater Basin Total	18	83	83

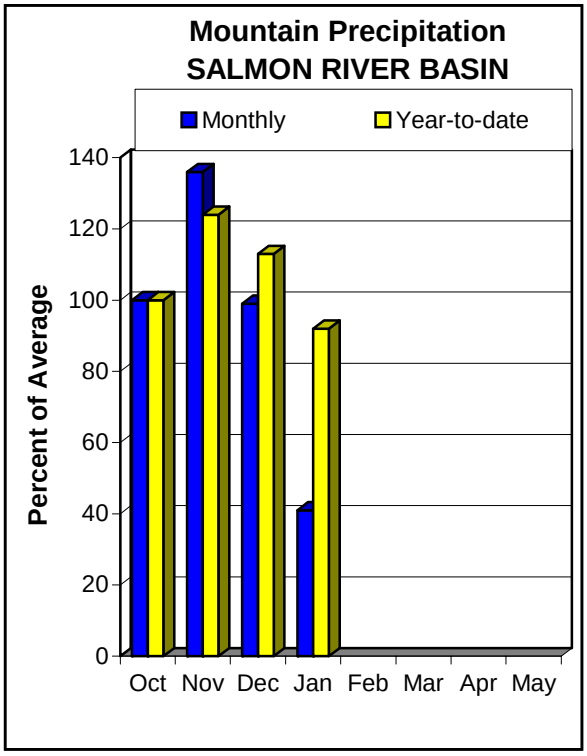
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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.

SALMON RIVER BASIN
FEBRUARY 1, 2007





WATER SUPPLY OUTLOOK

The Salmon River basin acted as the dividing area between major drainage basins receiving below average precipitation to the north and well below normal precipitation to the south. Cold air temperatures helped preserve the meager snowpack. Current snowpacks range from 75% of average in the Lemhi and Little Salmon basins to 80% in the Salmon River above Salmon, Middle Fork Salmon and South Fork Salmon rivers. Overall, the Salmon River snowpack is 77% of average and precipitation in January was 41%. Water year-to-date precipitation is 92% of average. Currently, snow levels are slightly more than half of last year at this time, and only half of the April 1 seasonal peaks; so a lot more snow is needed in the second half of winter. Since 1981, this is the 8th lowest snowpack for the Salmon basin, and in the last 10 years, only 2001 and 2005 had less snow than this year. The Lemhi River is forecast at only 71% of average while the Middle Fork, South Fork and Salmon River at White Bird are forecast at 80-85% of average.

SALMON RIVER BASIN
Streamflow Forecasts - February 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SALMON at Salmon (1)	APR-JUL	532	643	725	85	812	948	855
	APR-SEP	627	755	850	85	950	1107	1000
Lemhi River nr Lemhi	APR-JUL	29	46	59	69	74	99	86
	APR-SEP	39	58	74	71	92	121	105
MF Salmon at MF Lodge	APR-JUL	477	572	640	82	712	827	785
	APR-SEP	545	647	720	82	797	920	875
SALMON at White Bird (1)	APR-JUL	3646	4329	4830	83	5358	6180	5850
	APR-SEP	4092	4836	5380	83	5953	6843	6480

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

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

SALMON RIVER BASIN
Watershed Snowpack Analysis - February 1, 2007

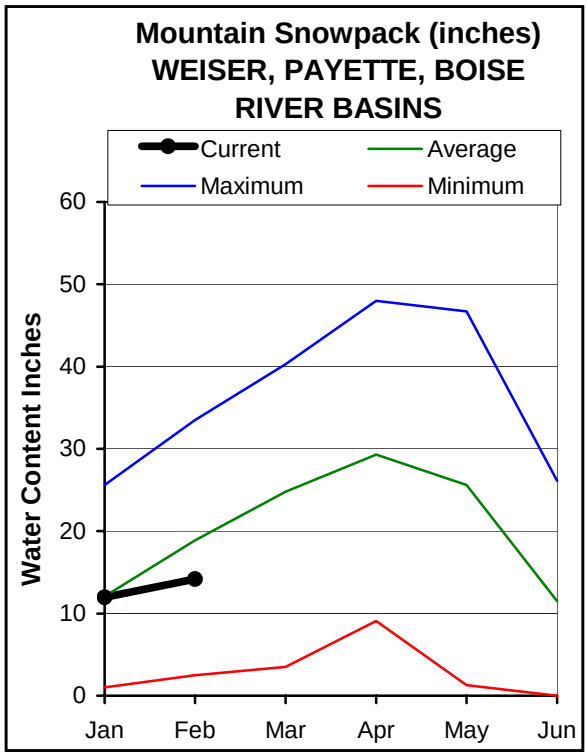
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Salmon River ab Salmon	9	61	81
Lemhi River	6	66	75
Middle Fork Salmon River	3	58	80
South Fork Salmon River	3	55	79
Little Salmon River	4	55	74
Salmon Basin Total	24	60	77

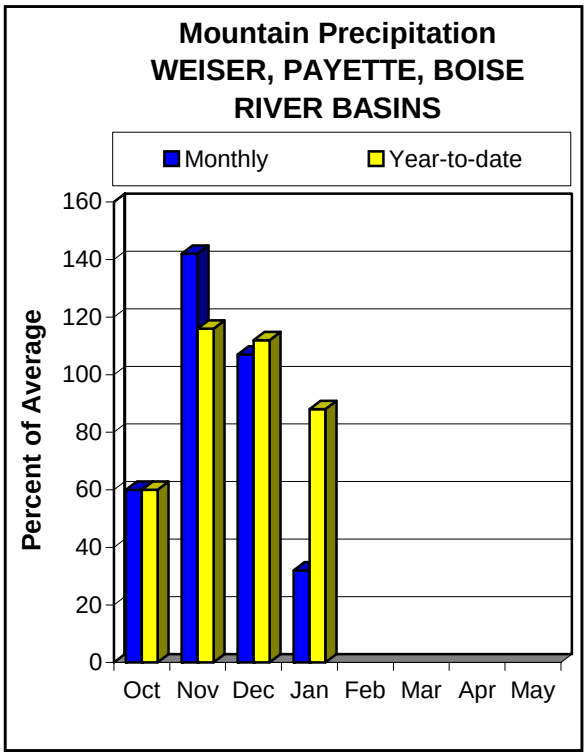
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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.

WEISER, PAYETTE, BOISE RIVER BASINS FEBRUARY 1, 2007





WATER SUPPLY OUTLOOK

If January's brisk temperatures weren't enough to make you wish for Hawaii, then the lack of precipitation should have you scanning the western horizon this February in hopes of a pineapple express weather event. Mountain precipitation was only one third of average for the month making January 2007 one of the drier Januarys on record, while the Boise Airport recorded its 2nd lowest precipitation amounts on record in January. Water year-to-date precipitation now stands at 89%, 84% and 81% for the Payette, Boise and Weiser basins respectively. Snowpacks are worse off than last month with the Payette Basin at 76% of average, followed by the Weiser with 74% and Boise with 72%. Cold temperatures prevented snow from melting but dry weather after the first week of January prevented much new accumulation. History shows that winters with similar February 1 snowpacks as this year often end up below average, but one similar year that offers hope is 1986 when February brought the pineapple express and nearly doubled the snowpack. Streamflow forecasts dropped from last month, and now call for 71% of average at the Boise River near Boise and 78% of average for the Payette River near Horseshoe Bend. Reservoir storage may be the saving grace this summer as the Payette system is currently 111% of average, 70% of capacity, and the Boise reservoir system is 107% of average, 65% of capacity. Water supplies SHOULD BE adequate based on the 50% Exceedance Forecasts, but if the 70% Exceedance volumes occur, then water supplies may be marginally adequate in the Boise Basin. Let's hope the Pacific High Pressure breaks down and allows more moisture into the western US and Idaho.

WEISER, PAYETTE, BOISE RIVER BASINS
Streamflow Forecasts - February 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
WEISER near Weiser (1)	FEB-JUL	286	395	480	74	573	724	650
	APR-SEP	194	265	320	76	380	478	420
SF PAYETTE at Lowman	APR-JUL	265	317	355	81	395	459	440
	APR-SEP	300	358	400	81	445	514	495
DEADWOOD RESERVOIR Inflow (1,2)	APR-JUL	79	95	107	80	119	139	134
	APR-SEP	84	101	114	80	127	148	142
LAKE FORK PAYETTE near McCall	APR-JUL	57	66	72	85	79	88	85
	APR-SEP	60	69	75	84	82	92	89
NF PAYETTE at Cascade (1,2)	APR-JUL	297	362	410	79	461	541	520
	APR-SEP	300	369	420	78	474	560	540
NF PAYETTE nr Banks (2)	APR-JUL	354	456	525	78	594	696	675
	APR-SEP	349	460	535	76	610	721	700
PAYETTE nr Horseshoe Bend (1,2)	APR-JUL	823	1144	1290	79	1436	1757	1640
	APR-SEP	808	1194	1370	78	1546	1932	1760
BOISE near Twin Springs (1)	APR-JUL	358	428	480	76	535	620	635
	APR-SEP	394	470	525	76	583	674	690
SF BOISE at Anderson Ranch Dam (1,2)	APR-JUL	238	305	355	66	409	496	540
	APR-SEP	260	331	385	66	443	535	580
MORES CREEK near Arrowrock Dam	APR-JUL	50	69	84	64	100	127	131
	APR-SEP	53	73	88	64	105	132	137
BOISE near Boise (1,2)	APR-JUN	635	781	890	71	1006	1188	1260
	APR-JUL	690	862	990	70	1127	1344	1410
	APR-SEP	770	953	1090	71	1236	1466	1530

WEISER, PAYETTE, BOISE RIVER BASINS
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MANN CREEK	11.1	2.9	7.7	4.3
CASCADE	693.2	493.0	494.7	448.4
DEADWOOD	161.9	102.0	74.5	86.3
ANDERSON RANCH	450.2	306.9	239.5	283.6
ARROWROCK	272.2	230.6	231.0	201.1
LUCKY PEAK	293.2	93.0	88.3	106.6
LAKE LOWELL (DEER FLAT)	165.2	95.9	86.6	101.7

WEISER, PAYETTE, BOISE RIVER BASINS
Watershed Snowpack Analysis - February 1, 2007

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Mann Creek	1	48	78
Weiser River	3	45	74
North Fork Payette	8	56	75
South Fork Payette	5	53	76
Payette Basin Total	14	55	76
Middle & North Fork Boise	5	50	74
South Fork Boise River	9	49	71
Mores Creek	5	54	73
Boise Basin Total	16	50	72
Canyon Creek	2	42	70

* 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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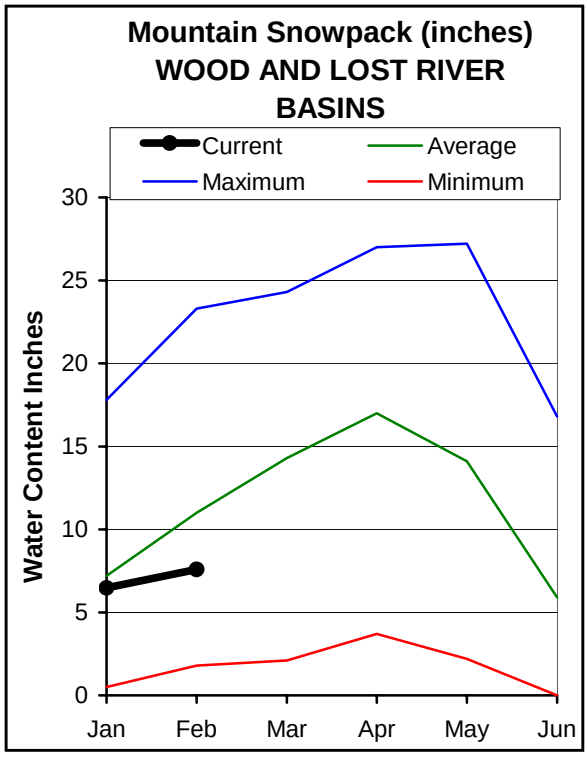
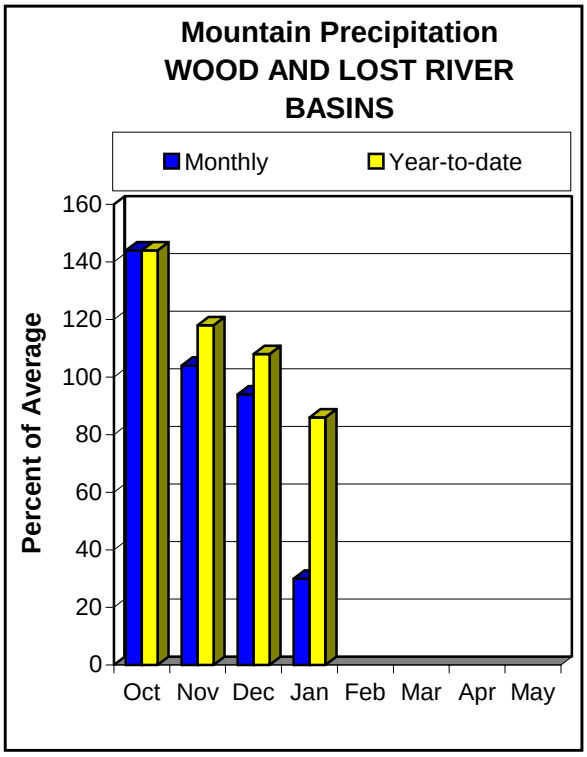
WOOD and LOST RIVER BASINS
FEBRUARY 1, 2007





WATER SUPPLY OUTLOOK

After receiving 140% of average precipitation in October, monthly precipitation amounts have been decreasing each month. January nearly bottomed-out with the Big Wood, Little Wood and Big Lost receiving only about 27% of their normal January precipitation allotment and about 40% of average in the Little Lost, Birch, Medicine Lodge, Beaver, and Camas basins. Fortunately for the snowpack, January temperatures did not follow the predicted El Nino pattern with warmer than normal temperatures. Instead the snow we had was put in “cold storage” for the month and little to no melting occurred. February 1 snow water is 60-70% of average, dropping from 80-95% of average a month ago. For the Wood and Lost basins, this is the lowest February 1 values since 1994. The current snowpack is about 40% of the average April 1 peak, which could mean trouble if El Nino gets both guns firing and gives us warm temperatures and dry weather for the next few months. The good news is that last year's higher than average snowpack and runoff has held reservoirs and groundwater levels up and may help water users dodge the El Nino bullets this summer. Little Wood Reservoir is 151% of average, 82% of capacity; Magic is 135% of average, 60% of capacity and Mackay 98% of average, 61% of capacity. Last month we discussed the remarkable rise in groundwater levels in the upper Big Lost Basin where summer flows are highly dependent on good groundwater levels. However, streamflow forecasts dropped from last month and are now only 72% of average for the Big Lost River below Mackay Reservoir. Wells in the Little Lost Basin did not increase, which may impact surface flows that are only forecast at 67% of average. The Little Wood River is forecast at 60% of average, Camas Creek at 41%, and Big Wood River below Magic Dam at 49%. The fate of this summer's water supplies now depends on temperature and precipitation for next few months.

WOOD AND LOST RIVER BASINS
Streamflow Forecasts - February 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
BIG WOOD at Hailey (1)	APR-JUL	107	144	173	68	204	255	255
	APR-SEP	123	165	197	68	232	289	290
BIG WOOD ab Magic Reservoir	APR-JUL	36	68	95	50	127	182	190
	APR-SEP	41	75	104	51	138	196	204
CAMAS CREEK near Blaine	APR-JUL	11.0	26	41	41	59	90	100
	APR-SEP	11.0	26	41	41	59	90	101
BIG WOOD below Magic Dam (2)	APR-JUL	106	126	139	48	152	172	290
	APR-SEP	114	134	148	49	162	182	305
LITTLE WOOD R ab High Five Ck	MAR-JUL	26	41	52	61	65	86	85
	MAR-SEP	29	45	57	62	71	94	92
	APR-JUL	22	35	46	59	59	80	78
	APR-SEP	25	39	51	60	65	87	85
LITTLE WOOD near Carey (2)	MAR-JUL	30	46	59	62	74	98	96
	MAR-SEP	32	50	64	62	80	106	104
	APR-JUL	24	39	52	60	67	91	87
	APR-SEP	27	43	57	61	73	99	94
BIG LOST at Howell Ranch	APR-JUL	82	110	132	76	156	194	173
	APR-SEP	94	126	151	77	178	222	197
BIG LOST bl Mackay Reservoir	APR-JUL	50	76	98	70	122	163	141
	APR-SEP	68	99	124	72	152	197	172
LITTLE LOST bl Wet Creek	APR-JUL	13.5	17.8	21	68	25	30	31
	APR-SEP	16.4	22	26	67	31	38	39

WOOD AND LOST RIVER BASINS
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MAGIC	191.5	115.0	56.6	85.0
LITTLE WOOD	30.0	24.6	19.2	16.3
MACKAY	44.4	27.1	28.7	27.7

WOOD AND LOST RIVER BASINS
Watershed Snowpack Analysis - February 1, 2007

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Big Wood ab Hailey	8	48	69
Camas Creek	5	46	73
Big Wood Basin Total	13	47	70
Fish Creek	3	38	60
Little Wood River	8	41	62
Big Lost River	6	42	59
Little Lost River	3	61	69
Birch-Medicine Lodge Cree	2	67	71
Camas-Beaver Creeks	4	48	64

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

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

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
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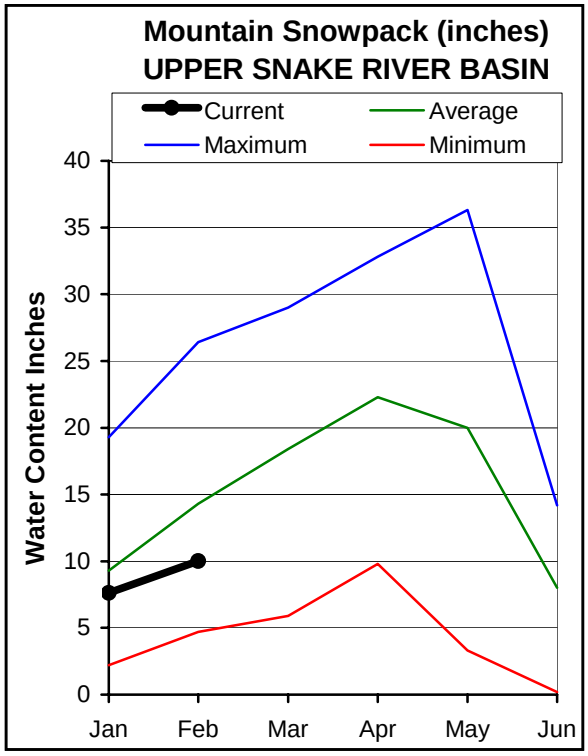
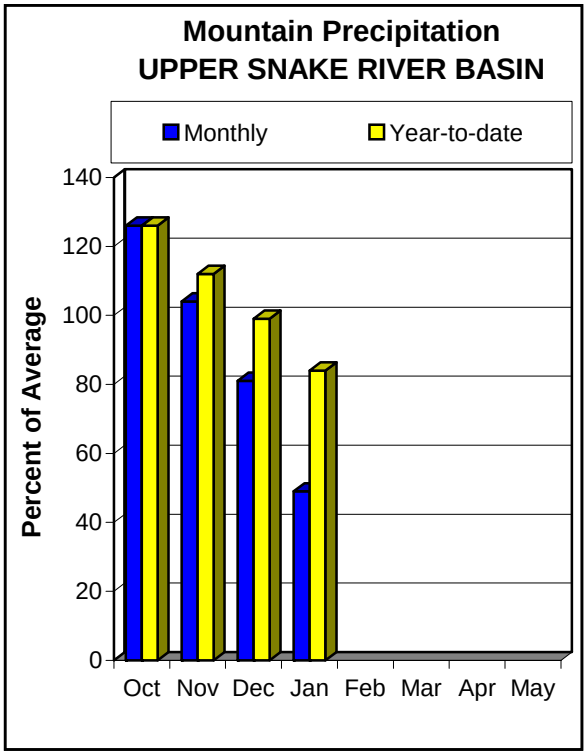
UPPER SNAKE BASINS
FEBRUARY 1, 2007





WATER SUPPLY OUTLOOK

January precipitation was below average for the entire Upper Snake basin at 49%. Water year-to-date precipitation is 84% of average, only the Bear River basin is lower at 77%. Storm tracks in the first half of winter favored SNOTEL sites in the Henrys Fork and Upper Snake above Palisades producing a snowpack that is 71% of average, while lower elevation basins of Willow, Blackfoot, Portneuf are slightly less. The decrease in percentages during January is not from snow melting but because of the lack of January precipitation. The SNOTEL station with the best snow is 78% of normal at Snake River Station (in Yellowstone National Park) while Lewis Lake Divide, which represents the higher elevation in the Park, is 69% of normal. The site with the lowest snowpack is East Rim Divide SNOTEL in Wyoming along the divide of the Hoback and Green rivers at 62% of normal. Several sites, including Lewis Lake Divide, Two Ocean Plateau and Pine Creek Pass are among the many SNOTEL sites that are showing a strikingly similar snowpack trend to 2005, another mild El Nino year. The good news is that soil moisture under the snowpack is abundant and will allow more efficient runoff of the snow melt water in the spring. Streams are forecast at 54% of average for the Blackfoot River, 64% for American Falls Reservoir inflow, 75% for Snake River near Heise and 79% for Henrys Fork near Rexburg. Based on the Surface Water Supply Index, which combines reservoir storage and streamflow projections, surface water supplies will be marginally adequate if runoff volumes at Heise are much less than 70% of average.

UPPER SNAKE RIVER BASIN
Streamflow Forecasts - February 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
HENRYS FORK near Ashton (2)	APR-JUL	351	417	465	82	516	595	570
	APR-SEP	506	586	645	84	706	801	765
HENRYS FORK near Rexburg (2)	APR-JUL	943	1108	1220	78	1332	1497	1560
	APR-SEP	1266	1453	1580	79	1707	1894	2010
FALLS RIVER nr Ashton (2)	APR-JUL	237	281	310	82	339	383	380
	APR-SEP	279	330	365	81	400	451	450
TETON RIVER NEAR DRIGGS	APR-JUL	85	107	123	75	141	169	165
	APR-SEP	112	139	159	76	181	215	210
TETON near St. Anthony	APR-JUL	211	262	300	74	341	404	405
	APR-SEP	263	322	365	76	411	483	480
SNAKE at Flagg Ranch	APR-JUL	325	375	410	87	450	505	470
	APR-SEP	355	410	450	87	490	555	515
SNAKE nr Moran (1,2)	APR-JUL	510	596	655	80	714	800	815
	APR-SEP	565	660	725	80	790	885	905
PACIFIC CREEK at Moran	APR-JUL	97	118	133	78	148	169	171
	APR-SEP	104	126	141	79	156	178	178
SNAKE ab resv nr Alpine (1,2)	APR-JUL	1370	1720	1870	79	2020	2370	2370
	APR-SEP	1606	1994	2170	80	2346	2734	2730
GREYS above Palisades	APR-JUL	167	210	240	71	270	313	340
	APR-SEP	202	251	285	72	319	368	395
SALT near Etna	APR-JUL	105	170	215	63	260	325	340
	APR-SEP	153	229	280	67	331	407	420
SNAKE nr Irwin (1,2)	APR-JUL	1686	2218	2460	74	2702	3234	3330
	APR-SEP	2009	2608	2880	74	3152	3751	3870
SNAKE near Heise (2)	APR-JUL	1971	2363	2630	74	2897	3289	3560
	APR-SEP	2349	2796	3100	75	3404	3851	4160
WILLOW CREEK nr Ririe	MAR-JUL	19.3	36	51	58	68	98	88
BLACKFOOT RESV INFLOW	APR-JUN	44	56	65	54	75	90	120
SNAKE nr Blackfoot (1,2)	APR-JUL	2201	2895	3210	70	3525	4219	4600
	APR-SEP	2921	3615	3930	70	4245	4939	5620
PORTNEUF at Topaz	MAR-JUL	41	53	63	71	73	90	89
	MAR-SEP	51	67	79	73	92	113	109
AMERICAN FALLS RESV INFLOW (1,2)	APR-JUL	610	1570	2000	62	2430	3390	3240
	APR-SEP	839	1796	2230	64	2664	3621	3510

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
HENRYS LAKE	90.4	82.8	86.5	83.2
ISLAND PARK	135.2	113.0	92.5	102.2
GRASSY LAKE	15.2	12.1	8.1	11.8
JACKSON LAKE	847.0	635.2	403.4	490.1
PALISADES	1400.0	984.0	858.5	1040.3
RIRIE	80.5	40.8	40.8	35.8
BLACKFOOT	348.7	168.4	87.8	220.1
AMERICAN FALLS	1672.6	1207.1	1139.1	1125.4

UPPER SNAKE RIVER BASIN
Watershed Snowpack Analysis - February 1, 2007

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Henrys Fork-Falls River	10	51	68
Teton River	8	50	65
Henrys Fork above Rexburg	18	51	67
Snake above Jackson Lake	9	56	72
Gros Ventre River	3	66	71
Hoback River	5	60	67
Greys River	5	55	70
Salt River	5	57	71
Snake above Palisades	28	57	71
Willow Creek	7	47	69
Blackfoot River	4	52	68
Portneuf River	6	47	66
Snake abv American Falls	47	54	70

* 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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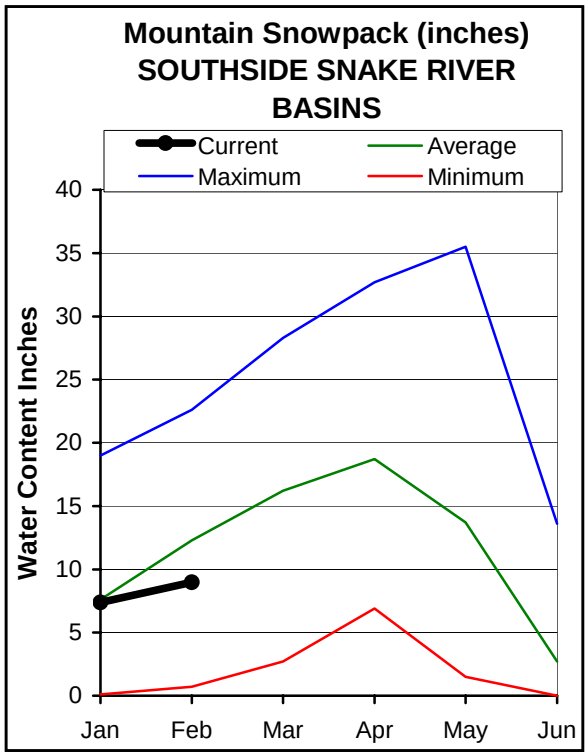
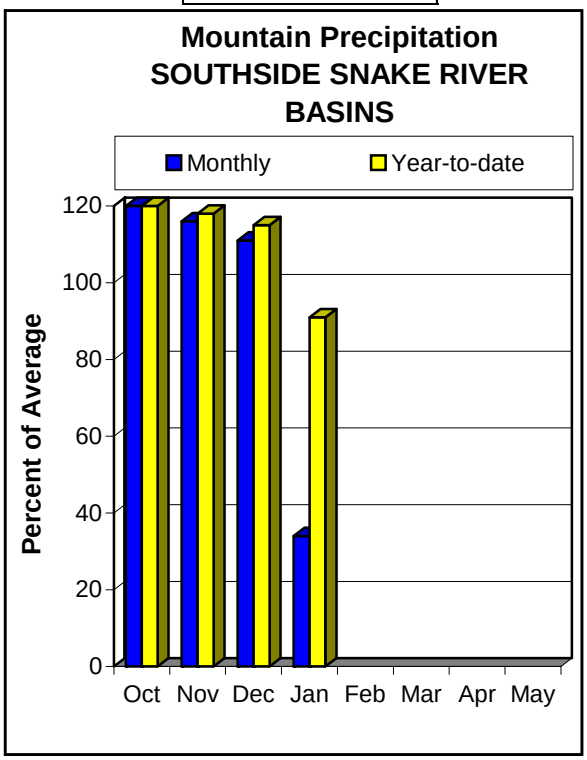
SOUTHSIDE SNAKE RIVER BASINS
FEBRUARY 1, 2007





WATER SUPPLY OUTLOOK

The Southside Snake basins received only 34% of their average monthly precipitation in January, decreasing water year-to-date precipitation to 91% of average for the region as whole. January precipitation was lowest on the west side of Idaho with the Owyhee basin receiving only a quarter of average. Where snow existed at the start of January, it remained through the month due to cold temperatures, but the dry weather did not add much to the pack; this resulted in snow water contents ranging from 47-79% of average on February 1 from the Owyhee basin across to the Oakley basin. The Owyhee basin snowpack is the lowest in the state and an aerial snow survey on January 29 indicted that most sites had less than one foot of snow. The only standout along the southern tier of Idaho is Howell Canyon SNOTEL, east of Oakley, which has snow that is 95% of average. We've fielded a lot of questions about why this site is 20% ahead of Magic Mountain SNOTEL located 35 miles to the west. After a close look at the data it appears that while this may be an anomalous year, the values appear valid. The storms earlier this season, and last winter, had tracks that favored Howell Canyon. Historical data showed that Howell Canyon and Magic Mountain had similar snowpacks from 2003-2005, but that Howell Canyon outpaced Magic in 2006, 2002 and 1997, as well as this winter. Another theory is that forest thinning near the site may have impacted how the snow lays in the area; this is still being investigated. Reservoirs are in good shape with Wildhorse, Salmon Falls and Oakley at 125-141% of average. Owyhee and Brownlee reservoirs are 95% and 107% of average, about 70% full. Streams are forecast at only 42% of average for Owyhee Reservoir inflow, 68% for the Bruneau River, 59% for Salmon Falls Creek and 70% for Oakley Reservoir inflow. A full water allotment of 50,000 acre-feet for Oakley Reservoir users is almost guaranteed since only 10,000 acre-feet are needed and will be obtained if streamflow is 30% of average. Salmon Falls Reservoir users need runoff that is greater than 60% of average to ensure a full allotment.

SOUTHSIDE SNAKE RIVER BASINS
Streamflow Forecasts - February 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
OAKLEY RESERVOIR INFLOW	MAR-JUL	12.2	18.7	24	71	30	40	34
	MAR-SEP	13.2	20	26	70	32	43	37
SALMON FALLS CREEK nr San Jacinto	MAR-JUN	28	42	52	58	64	83	89
	MAR-JUL	30	44	55	59	68	88	93
	MAR-SEP	32	46	58	59	71	92	98
BRUNEAU near Hot Spring	MAR-JUL	87	128	160	68	196	255	235
	MAR-SEP	92	135	169	68	207	269	250
OWYHEE near Gold Creek (2)	MAR-JUL	4.3	8.9	13.1	41	18.0	27	32
	MAR-SEP	4.1	8.6	12.6	41	17.4	26	31
OWYHEE nr Owyhee (2)	APR-JUL	21	38	53	65	70	99	82
OWYHEE near Rome	FEB-JUL	99	190	270	41	363	525	655
	FEB-SEP	113	208	290	43	385	550	675
OWYHEE RESV INFLOW (2)	FEB-JUL	93	192	280	40	384	567	700
	FEB-SEP	108	213	305	42	413	603	730
	APR-SEP	50	119	182	42	259	397	430
SUCCOR CK nr Jordan Valley	FEB-JUL	3.9	7.2	10.0	52	13.3	19.0	19.3
Reynolds Creek nr Tollgate	MAR-JUL	2.9	4.4	5.6	58	7.0	9.2	9.7

SOUTHSIDE SNAKE RIVER BASINS
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
OAKLEY	75.6	39.9	30.6	28.2
SALMON FALLS	182.6	73.8	42.4	55.7
WILDHORSE RESERVOIR	71.5	48.6	40.5	38.9
OWYHEE	715.0	466.9	594.0	438.3
BROWNLEE	1420.0	1113.9	1192.4	1176.3

SOUTHSIDE SNAKE RIVER BASINS
Watershed Snowpack Analysis - February 1, 2007

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Raft River	2	48	85
Goose-Trapper Creeks	3	49	79
Salmon Falls Creek	7	48	71
Bruneau River	8	40	62
Reynolds Creek	6	49	68
Owyhee Basin Total	20	36	47

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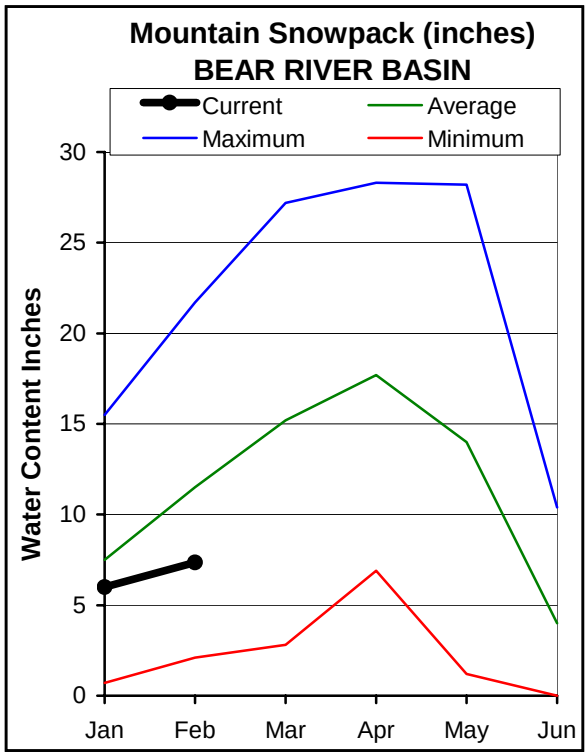
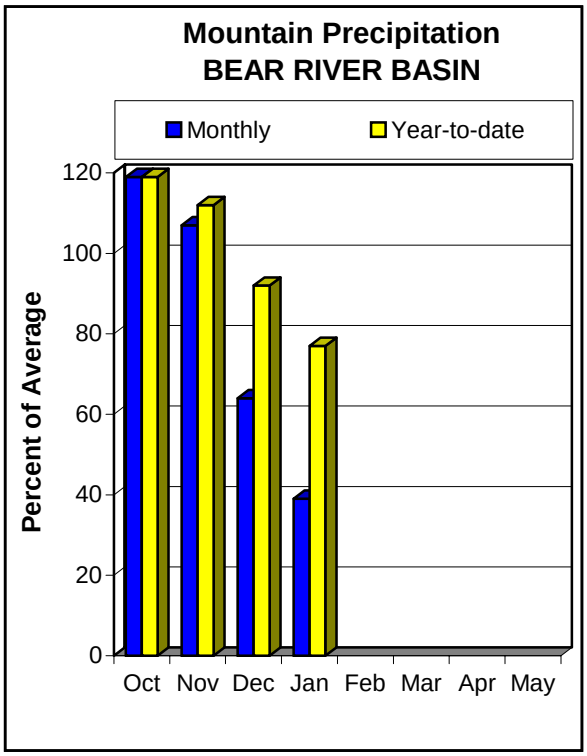
BEAR RIVER BASIN
FEBRUARY 1, 2007





WATER SUPPLY OUTLOOK

Bear River basin monthly precipitation has decreased every month since the water year began in October. The trend continued in January with the basin receiving only 39% of average for the month. Water year-to-date precipitation stands at 77% of average, lowest in the state and down 15 percentage points from January 1. Unfortunately, the snowpack also decreased and is now 64% of average for the entire Bear River basin, lowest since 2003. In order to bring the snowpack to normal by April 1, precipitation that is 160% of average for February and March is needed. In other years with a similar snowpack as this year, the highest the snowpack rebounded to by April 1 was 76% of average in 2000. The other handful of years the snow season ended with the pack around 60% of average. Water users should be prepared for low runoff volumes as forecasts decrease from 80% of average in the headwaters of the Bear River to 53% for Bear River at Stewart Dam. The better news is storage in Bear Lake which may provide some relief for the low runoff. It is storing 532,200 acre-feet, 37% of capacity, 59% of average. Montpelier Reservoir is 52% of capacity, 124% of average. The Surface Water Supply Index which combines reservoir and streamflow projections indicates that water supplies could be similar to 2002. Water users will be watching the weather forecasts the next few months to see if the second half of winter turns out better than the first half.

BEAR RIVER BASIN
Streamflow Forecasts - February 1, 2007

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Bear River nr UT-WY State Line	APR-JUL	61	79	92	81	106	129	113
	APR-SEP	65	85	100	80	116	142	125
Bear River ab Reservoir nr Woodruff	APR-JUL	30	60	85	63	115	168	136
	APR-SEP	29	60	87	61	119	176	142
Big Creek nr Randolph	APR-JUL	0.3	1.1	2.0	41	3.1	5.2	4.9
Smiths Fork nr Border	APR-JUL	37	53	65	63	78	101	103
	APR-SEP	46	64	78	65	93	119	121
Bear River at Stewart Dam	APR-JUL	27	77	125	53	184	295	234
	APR-SEP	29	85	139	53	206	332	262
Little Bear River at Paradise	APR-JUL	5.8	13.0	19.5	42	27	41	46
Logan R Abv State Dam Nr Logan	APR-JUL	32	49	63	50	79	105	126
Blacksmith Fk Abv Up&L Dam Nr Hyrum	APR-JUL	10.1	18.2	25	52	33	46	48

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BEAR LAKE	1421.0	532.2	394.8	906.1
MONTPELIER CREEK	4.0	2.1	3.0	1.7

BEAR RIVER BASIN
Watershed Snowpack Analysis - February 1, 2007

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Smiths & Thomas Forks	4	54	71
Bear River ab WY-ID line	11	49	65
Montpelier Creek	2	52	67
Mink Creek	1	44	61
Cub River	1	37	59
Bear River ab ID-UT line	18	48	64
Malad River	1	38	58

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

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

(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.

Streamflow Adjustment List for All Forecasts Published in Idaho Water Supply Outlook Report: streamflow forecasts are projections of runoff volumes that would occur without influences from upstream reservoirs or diversions. These values are referred to as natural, unregulated or adjusted flows. To make these adjustments, changes in reservoir storage, diversions, and inter-basin transfers are added or subtracted from the observed (actual) streamflow volumes. The following list documents the adjustments made for each forecast point**. (Revised Dec. 2005).**

Panhandle River Basins

Kootenai R at Leonia, ID
+ Lake Koocanusa (Storage Change)

Boundary Ck nr Porthill, ID – No Corrections

Moyie R at Eastport, ID – No Corrections

Smith Creek nr Porthill, ID – No Corrections

Clark Fork R at Whitehorse Rapids, ID
+ Hungry Horse (Storage Change)
+ Flathead Lake (Storage Change)
+ Noxon Rapids Resv (Storage Change)

Pend Oreille Lake Inflow, ID
+ Pend Oreille R at Newport, WA
+ Hungry Horse (Storage Change)
+ Flathead Lake (Storage Change)
+ Noxon Rapids (Storage Change
+ Pend Oreille Lake (Storage Change)
+ Priest Lake (Storage Change)

Priest R nr Priest R, ID
+ Priest Lake (Storage Change)

NF Coeur d'Alene R at Enaville, ID - No Corrections

St. Joe R at Calder, ID - No Corrections

Spokane R nr Post Falls, ID
+ Coeur d'Alene Lake (Storage Change)

Spokane R at Long Lake, WA
+ Coeur d'Alene Lake (Storage Change)
+ Long Lake, WA (Storage Change)

Clearwater River Basin

Selway R nr Lowell - No Corrections

Lochsa R nr Lowell - No Corrections

Dworshak Resv Inflow, ID
+ Clearwater R nr Peck, ID
- Clearwater R at Orofino, ID
+ Dworshak Resv (Storage Change)

Clearwater R at Orofino, ID - No Corrections

Clearwater R at Spalding, ID
+ Dworshak Resv (Storage Change)

Salmon River Basin

Salmon R at Salmon, ID - No Corrections

Lemhi R nr Lemhi, ID – No Corrections

MF Salmon R at MF Lodge, ID – No Corrections

Salmon R at White Bird, ID - No Corrections

Weiser, Payette, Boise River Basins

Weiser R nr Weiser, ID - No Corrections

SF Payette R at Lowman, ID - No Corrections

Deadwood Resv Inflow, ID
+ Deadwood R blw Deadwood Resv nr Lowman
+ Deadwood Resv (Storage Change)

Lake Fork Payette R nr Mccall, ID – No Corrections

NF Payette R at Cascade, ID
+ Cascade Resv (Storage Change)
+ Payette Lake (Storage Change)

NF Payette R nr Banks, ID
+ Cascade Resv (Storage Change)
+ Payette Lake (Storage Change)

Payette R nr Horseshoe Bend, ID
+ Cascade Resv (Storage Change)
+ Deadwood Resv (Storage Change)
+ Payette Lake (Storage Change)

Boise R nr Twin Springs, ID - No Corrections

SF Boise R at Anderson Ranch Dam, ID
+ Anderson Ranch Resv (Storage Change)

Boise R nr Boise, ID
+ Anderson Ranch Resv (Storage Change)
+ Arrowrock Resv (Storage Change)
+ Lucky Peak Resv (Storage Change)

Wood and Lost River Basins

Big Wood R at Hailey, ID - No Corrections

Big Wood R abv Magic Resv, ID
+ Big Wood R nr Bellevue, ID
+ Willow Ck

Camas Ck nr Blaine – No Corrections

Big Wood R blw Magic Dam nr Richfield, ID
+ Magic Resv (Storage Change)

Little Wood R abv High Five Ck, ID – No Corrections

Little Wood R nr Carey, ID
+ Little Wood Resv (Storage Change)

Big Lost R at Howell Ranch, ID - No Corrections

Big Lost R blw Mackay Resv nr Mackay, ID
+ Mackay Resv (Storage Change)

Little Lost R blw Wet Ck nr Howe, ID - No Corrections

Upper Snake River Basin

Henrys Fork nr Ashton, ID
+ Henrys Lake (Storage Change)
+ Island Park Resv (Storage Change)

Henrys Fork nr Rexburg, ID
+ Henrys Lake (Storage Change)
+ Island Park Resv (Storage Change)
+ Grassy Lake (Storage Change)
+ Diversions from Henrys Fk btw Ashton to St. Anthony, ID
+ Diversions from Henrys Fk btw St. Anthony to Rexburg, ID
+ Diversions from Falls R abv nr Ashton, ID
+ Diversions from Falls R nr Ashton to Chester, ID

Falls R nr Ashton, ID
+ Grassy Lake (Storage Change)
+ Diversions from Falls R abv nr Ashton, ID

Teton R nr Driggs, ID - No Corrections

Teton R nr St. Anthony, ID
- Cross Cut Canal into Teton R
+ Sum of Diversions for Teton R abv St. Anthony, ID

Snake R nr Moran, WY
+ Jackson Lake (Storage Change)

Pacific Ck at Moran, WY – No Corrections

Snake R abv Palisades, WY
+ Jackson Lake (Storage Change)

Greys R abv Palisades, WY – No Corrections
Salt R abv Palisades, WY – No Corrections
Snake R nr Irwin, ID
+ Jackson Lake (Storage Change)
+ Palisades Resv (Storage Change)
Snake R nr Heise, ID
+ Jackson Lake (Storage Change)
+ Palisades Resv (Storage Change)
Willow Ck nr Ririe, ID
+ Ririe Resv (Storage Change)
Blackfoot Resvervoir Inflow, ID
+ Blackfoot Reservoir releases
+ Blackfoot Resv (Storage Change
Snake R nr Blackfoot, ID
+ Palisades Resv (Storage Change)
+ Jackson Lake (Storage Change)
+ Diversions from Snake R btw Heise and Shelly
+ Diversions from Snake R btw Shelly and Blackfoot
Portneuf R at Topaz, ID - No Corrections
American Falls Resv Inflow, ID
+ Snake River at Neeley
+ All Corrections made for Henrys Fk nr Rexburg, ID
+ Jackson Lake (Storage Change)
+ Palisades Resv (Storage Change)
+ Diversions from Snake R btw Heise and Shelly
+ Diversions from Snake R btw Shelly and Blackfoot

Southside Snake River Basins
Oakley Resv Inflow, ID
+ Goose Ck abv Trapper Ck
+ Trapper Ck nr Oakley
Salmon Falls Ck nr San Jacinto, NV - No Corrections
Bruneau R nr Hot Springs, ID - No Corrections
Owyhee R nr Gold Ck, NV
+ Wildhorse Resv (Storage Change)
Owyhee R nr Owyhee, NV
+ Wildhorse Resv (Storage Change)
Owyhee R nr Rome, OR – No Corrections
Owyhee Resv Inflow, OR
+ Owyhee R blw Owyhee Dam, OR
+ Owyhee Resv (Storage Change)
+ Diversions to North and South Canals
Succor Ck nr Jordan Valley, OR - No Corrections
Snake R at King Hill, ID - No Corrections
Snake R nr Murphy, ID - No Corrections
Snake R at Weiser, ID - No Corrections
Snake R at Hells Canyon Dam, ID
+ Brownlee Resv (Storage Change)

Bear River Basin
Bear R nr UT-WY Stateline, UT – No Corrections
Bear R abv Resv nr Woodruff, UT – No Corrections
Smiths Fork nr Border, WY - No Corrections
Bear R blw Stewart Dam nr Montpelier, ID
+ Bear R blw Stewart Dam
+ Rainbow Inlet Canal

Reservoir Capacity Definitions (Units in 1,000 Acre-Feet, KAF)
Different agencies use various definitions when reporting reservoir capacity and contents. Reservoir storage terms include dead, inactive, active, and surcharge storage. This table lists these volumes for each reservoir, and defines the storage volumes NRCS uses when reporting capacity and current reservoir storage. In most cases, NRCS reports usable storage, which includes active and inactive storage. **(Revised Dec. 2005)**

Basin/ Reservoir	Dead Storage	Inactive Storage	Active Storage	Surcharge Storage	NRCS Capacity	NRCS Capacity Includes
Panhandle Region						
Hungry Horse	39.73	--	3451.00	--	3451.0	Active
Flathead Lake	Unknown	--	1791.00	--	1791.0	Active
Noxon Rapids	Unknown	--	335.00	--	335.0	Active
Pend Oreille	406.20	112.40	1042.70	--	1561.3	Dead+Inactive+Active
Coeur d'Alene	--	13.50	225.00	--	238.5	Inactive+Active
Priest Lake	20.00	28.00	71.30	--	119.3	Dead+Inactive+Active
Clearwater Basin						
Dworshak	--1452.00		2016.00	--	3468.0	Inactive+Active
Weiser/Boise/Payette Basins						
Mann Creek	1.61	0.24	11.10	--	11.1	Active
Cascade	--	46.70	646.50	--	693.2	Inactive+Active
Deadwood	--	--	161.90	--	161.9	Active
Anderson Ranch	24.90	37.00	413.10	--	450.1	Inactive+Active
Arrowrock	--	--	272.20	--	272.2	Active
Lucky Peak	--	28.80	264.40	13.80	293.2	Inactive+Active
Lake Lowell	7.90	5.80	159.40	--	165.2	Inactive+Active
Wood/Lost Basins						
Magic	Unknown	--	191.50	--	191.5	Active
Little Wood	--	--	30.00	--	30.0	Active
Mackay	0.13	--	44.37	--	44.4	Active
Upper Snake Basin						
Henrys Lake	--	--	90.40	--	90.4	Active
Island Park	0.40	--	127.30	7.90	135.2	Active+Surcharge
Grassy Lake	--	--	15.18	--	15.2	Active
Jackson Lake	Unknown	--	847.00	--	847.0	Active
Palisades	44.10	155.50	1200.00	--	1400.0	Dead+Inactive+Active
Ririe	4.00	6.00	80.54	10.00	80.5	Active
Blackfoot	--	--	348.73	--	348.7	Active
American Falls	--	--	1672.60	--	1672.6	Active
Southside Snake Basins						
Oakley	0	--	75.60	--	75.6	Active
Salmon Falls	48.00	5.00	182.65	--	182.6	Active+Inactive
Wildhorse	--	--	71.50	--	71.5	Active
Owyhee	406.83	--	715.00	--	715.0	Active
Brownlee	0.45	444.70	975.30	--	1420.0	Inactive+Active
Bear River Basin						
Bear Lake	5.0 MAF	119.0	1302.00	--	1421.0	Active+Inactive: includes 119 that can be released
Montpelier Creek	0.21	--	3.84	--	4.0	Dead+Active

Interpreting Water Supply Forecasts

Introduction
Each month, five forecasts are issued for each forecast point and each forecast period. Unless otherwise specified, all streamflow forecasts are for streamflow volumes that would occur naturally without any upstream influences. Water users need to know what the different forecasts represent if they are to use the information correctly when making operational decisions. The following is an explanation of each of the forecasts.

90 Percent Chance of Exceedance Forecast. There is a 90 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 10 percent chance that the actual streamflow volume will be less than this forecast value.

70 Percent Chance of Exceedance Forecast. There is a 70 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 30 percent chance that the actual streamflow volume will be less than this forecast value.

50 Percent Chance of Exceedance Forecast. There is a 50 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 50 percent chance that the actual streamflow volume will be less than this forecast value. Generally, this forecast is the middle of the range of possible streamflow volumes that can be produced given current conditions.

30 Percent Chance of Exceedance Forecast. There is a 30 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 70 percent chance that the actual streamflow volume will be less than this forecast value.

10 Percent Chance of Exceedance Forecast. There is a 10 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 90 percent chance that the actual streamflow volume will be less than this forecast value.

*Note: There is still a 20 percent chance that actual streamflow volumes will fall either below the 90 percent exceedance forecast or above the 10 percent exceedance forecast.

These forecasts represent the uncertainty inherent in making streamflow predictions. This uncertainty may include sources such as: unknown future weather conditions, uncertainties associated with the various prediction methodologies, and the spatial coverage of the data network in a given basin.

30-Year Average. The 30-year average streamflow for each forecast period is provided for comparison. The average is based on data from 1971-2000. The % AVG. column compares the 50% chance of exceedance forecast to the 30-year average streamflow; values above 100% denote when the 50% chance of exceedance forecast would be greater than the 30-year average streamflow.

AF - Acre-feet, forecasted volume of water are typically in thousands of acre-feet.

These forecasts are given to users to help make risk-based decisions. Users can select the forecast corresponding to the level of risk they are willing to accept in order to minimize the negative impacts of having more or less water than planned for.

To Decrease the Chance of Having Less Water than Planned for
A user might determine that making decisions based on a 50 percent chance of exceedance forecast is too much risk to take (there is still a 50% chance that the user will receive less than this amount). To reduce the risk of .having less water than planned for, users can base their operational decisions on one of the forecasts with a greater chance of being exceeded such as the 90 or 70 percent exceedance forecasts.

To Decrease the Chance of Having More Water than Planned for
A user might determine that making decisions based on a 50 percent chance of exceedance forecast is too much risk to take (there is still a 50% chance that the user will receive more than this amount). To reduce the risk of having more water than planned for, users can base their operational decisions on one of the forecasts with a lesser chance of being exceeded such as the 30 or 10 percent exceedance forecasts.

Using the forecasts - an Example
Using the 50 Percent Exceedance Forecast. Using the example forecasts shown below, there is a 50% chance that actual streamflow volume at the Boise River near Twin Springs will be less than 685 KAF between April 1 and July 31. There is also a 50% chance that actual streamflow volume will be greater than 685 KAF.

Using the 90 and 70 Percent Exceedance Forecasts. If an unexpected shortage of water could cause problems (such as irrigated agriculture), users might want to plan on receiving 610 KAF (from the 70 percent exceedance forecast). There is a 30% chance of receiving *less* than 610 KAF.

Alternatively, if users determine the risk of using the 70 percent exceedance forecast is too great, then they might plan on receiving 443 KAF (from the **90** percent exceedance forecast). There is 10% chance of receiving less than 443 KAF.

Using the 30 or 10 Percent Exceedance Forecasts. If an unexpected excess of water could cause problems (such as operating a flood control reservoir), users might plan on receiving 760 KAF (from the 30 percent exceedance forecast). There is a 30% chance of receiving *more* than 760 KAF.

Alternatively, if users determine the risk of using the 30 percent exceedance forecast is too great, then they might plan on receiving 927 KAF (from the 10 percent exceedance forecast). There is a 10% chance of receiving more than 927 KAF.

Users could also choose a volume in between any of these values to reflect their desired risk level.

Weiser, Payette, Boise River Basins
Streamflow Forecasts – January 2006

Forecast Point	Forecast Period	Chance of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000 AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SF PAYETTE RIVER at Lowman	APR-JUL	329	414	471	109	528	613	432
	APR-SEP	369	459	521	107	583	673	488
BOISE RIVER near Twin Springs (1)	APR-JUL	443	610	685	109	760	927	631
	APR-SEP	495	670	750	109	830	1005	690

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

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Tom Perkins, Senior Forecast Hydrologist,
NRCS, National Water and Climate Center, Portland, Oregon

Cooperative funding for printing provided by
Idaho Department of Water Resources

Numerous other agencies provide funding and/or
cooperative support for the collection, operation
and maintenance of the Snow Survey Program.
Their cooperation is greatly appreciated.