United States Department of Agriculture
Natural Resources Conservation Service

Idaho Water Supply Outlook Report
January 1, 2008

Happy New Year!

A good snowpack offers many joys from New Year's fresh tracks, to springtime whitewater and summer fishing and boating. This season's holiday storms delivered the gift of much needed snow; brightening the lives of recreationists and giving hope that irrigation water supplies may be replenished after a hot, dry summer.

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

January 1, 2008

SUMMARY

Late December storms throughout Idaho provided a much needed increase in the snowpack following the mild fall which brought more rain than snow to the mountains. Thanks to the well above normal precipitation and cold weather in December, snowpacks increased significantly from a month ago. However, because November had far below normal precipitation and snow accumulation, only the northern half of the state, including the Salmon, Weiser and Payette basins, managed to reach even a normal snowpack level for January first. Central and eastern Idaho mountain snowpacks are in the 80 – 90% of average range while most of southern Idaho south of the Snake River has a 70 to 80% snowpack. The Owyhee and Bear River basins are looking like significant areas of concern, having only reached snowpack levels about two-thirds of the normal amount for January 1. These areas with less than 70% of normal on January first have a low probability of reaching the average level by the peak season in April based on the last 27 years of SNOTEL records. With drought conditions still lingering from six out of the last seven already being low runoff years, the 2008 season is not starting out very optimistically across southern Idaho.

SNOWPACK

Snowpack conditions across Idaho vary from just barely above normal in the northern half of the state to well below average in the southeast and southwest corners. The highest individual basin snowpacks are in the Priest (108%), Selway (111%), Lochsa (116%) and Lemhi (111%), but overall the Clearwater is at 104% of average and the Salmon is at 102%. Elsewhere, only the Weiser and St. Joe basins hit the normal mark at 104% and 100% of average, respectively. Other areas in the near normal 90 to 100% range are the Payette and upper Henrys Fork basins. Moving southward, snowpacks show a gradual decline with the Boise, Wood, Lost, Birch, Medicine Lodge and upper Snake zone in the 80 to 90% range. Further south, the Oakley, Salmon Falls and Bruneau rivers are from 70 to 80% of normal and finally the Owyhee and Bear River areas are actually below 70% of average. Most of this season's storms have been moving through central and northern Idaho, and despite some significant rainfall in October, this southern border region of the state begins the year with a major deficit in the snowpack situation. With about 60 percent of the snow accumulation season still to come, 'concern' is a good word to describe conditions in southern Idaho but 'alarm' is not warranted at this time.

PRECIPITATION

It seemed as though a precipitation switch was turned on at the beginning of this new water year starting on October 1. The entire Pacific Northwest's SNOTEL network received above average precipitation for the month of October and some basins received double their normal October allotment! After one of the driest summers on record, the vegetation and soils greatly needed the rain to increase soil moisture before the onset of the winter snowpack to allow for more efficient runoff to streams and lakes in the springtime. Then the switch turned off again in November! November's monthly precipitation dropped off considerably and left us below average for all basins in Idaho, and the cumulative water year to date precipitation fell below average in Northern Idaho and parts of Southern Idaho. This dry month left us concerned but we kept in mind that La Nina is in place, which usually brings moist conditions to the Pacific Northwest. The middle of December showed up before we knew it and southern Idaho's precipitation for the month so far was only half of normal, while northern Idaho was faring well with above normal precipitation so far. To add salt to the wound, the early December storms that we did receive were warm, which meant rain in the mountains of Idaho that certainly did not help accumulate our much needed snowpack. However, holiday wishes must have been granted as things quickly turned around near the end of the calendar year. Cold, moisture laden Pacific storms rolled in and left December's precipitation for the month above average and built up the snowpack in the meantime. Most

of the water year to date precipitation climbed back to near normal levels also. It is too early in the season to make inferences about our current precipitation amounts and its relationship to our seasonal water supply, especially given the yo-yo like month to month variability. January is a critical snow accumulation month and it is imperative that the mountains stay cold and the precipitation is in the form of snow for our future water supplies. Fortunately, NOAA's Climate Prediction Center calls for above average precipitation and normal temperatures from January through March. By the end of January, we will have a better understanding of our water supply situation. Let's hope for some moist, cold storms!

RESERVOIRS

With only a couple exceptions reservoir storage across Idaho and the Upper Snake in Wyoming is lower than a year ago. In 2007 a marginal snowpack melted quickly during a warm spring and produced less than half the average runoff. Record summer heat created high irrigation demand that reservoirs were taxed to keep up with; the result is lower than normal carryover as we look towards 2008. Unlike 2007, we will not have the luxury of tapping into reservoir storage to help us through the irrigation season if snowpacks fail to accumulate this winter. The Upper Snake River system above American Falls is 58% of average, 37% of capacity. Storage is lower in the Southside Snake basins where storage is 21% of average, 15% of capacity owing mainly to Brownlee Reservoir at 10% of average, 9% of capacity. Boise, Weiser and Payette basin storage is the best in southern Idaho at 84% of average, 49% of capacity. Dworshak and Pend Oreille Lake have the best storage in the state with 101% and 133% of average respectively. Time will tell if reservoirs fill, but for now let's hope that the La Nina forecast for above average precipitation from January through March comes true.

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

The summer 2007 was hot and dry, and streamflows were far below normal for the season. As fall set in, October had abundant rainfall throughout the region, which was a welcome blessing and a very promising start to the new water year. Although most of the precipitation came as rain, the dry soils absorbed a large share and the streams only responded moderately and base flows increased to a more normal level before the snowpack began to build in late November and December. Overall, most areas in Idaho and the upper Snake had 80 to 100% of average streamflows for the October through December period. The exception is the southern border regions including the Owyhee, Bruneau, Salmon Falls, Oakley, Portneuf and Bear basins, which were in the 60 to 80% range. This low fall streamflow is a pattern that has been fairly common during the last six or so year drought cycle.

Streamflow forecasts for the 2008 summer are looking promising in most areas, a result of the plentiful snow received throughout Idaho in December. Forecasts range from 90 to 100% of average across most of Idaho and the upper snake, with the Weiser, Clearwater, Salmon and Payette the highest right near 100%, while the Panhandle, Henrys Fork and Snake near Heise are in the 90 to 95% range. That is good news for now considering the below average reservoir storage going into winter. The other central Idaho areas have slightly lower forecasts. Boise is at 84% while the Wood and Lost basins range from 70 to 80% of normal. Across southern Idaho, concern is building with below average snowpacks and similar forecasts. Willow, Blackfoot, Portneuf and Oakley Reservoir inflow are all forecast just 70 to 75% of average. And Salmon Falls and Owyhee basins are both projected less than 70% of average. The Bear River at Stewart Dam is the lowest forecast in the state at just half of normal. Water users across these areas south of the Snake River may have shortages this summer, even with more than half the snowpack season yet to come. At this writing (January 7), early January storms boosted snowpacks considerably, but the southern region still remains below 80%, and water users should monitor conditions closely over the next month as this deficit will be difficult to overcome by April.

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 at the joint west-wide Water Supply Outlook for the Western US at http://www.wcc.nrcs.usda.gov/wsf/westwide.html.

RECREATION

Although precipitation got off to a good start this fall, warm temperatures prevented it from falling in the frozen state at all but the highest elevations. We heard reports from eastern Idaho and Wyoming where anxious skiers were climbing for early season turns in October and November. Meanwhile those of us in much of the rest of Idaho were trying to satisfy our winter longings by watching the newest round of ski movies. Storms just before Christmas brought the gift we were all waiting for and allowed ski resorts to get into full swing for the holidays. Cold temperatures and light powder made for a snow riding paradise, on both machines and feet. The deepest snowpacks are currently found in northern Idaho and western Wyoming where some sites have close to 100 inches. Idaho's central mountains have accumulated a near average snowpack making for good recreation there, too. The current storm track looks encouraging for bringing more snow to the mountains. At this point it's tough to say what the summer whitewater season will be like. Currently average snowpacks are found in the Salmon, Selway, Lochsa and Clearwater basins and streamflow forecasts are in the 90 to 100% of average range; however it will take consistent precipitation over the next four months to keep forecasts there. Snowpacks in Owyhee (66%), Bruneau (73%) and Salmon Falls Creek (76%) basins are below average but will hopefully increase in the coming months. NOAA’s Climate Prediction Center calls for normal temperatures and above normal precipitation for January through March due to cool sea temperatures in the equatorial Pacific; these are signature conditions of La Nina which Idaho typically benefits from. Although snowpacks look very similar to the beginning of last January the La Nina conditions are a key difference. Last winter's El Nino conditions resulted in a dry January that snowpacks never recovered from. Let's hope La Nina doesn't let us down and the coming months bring more snow.

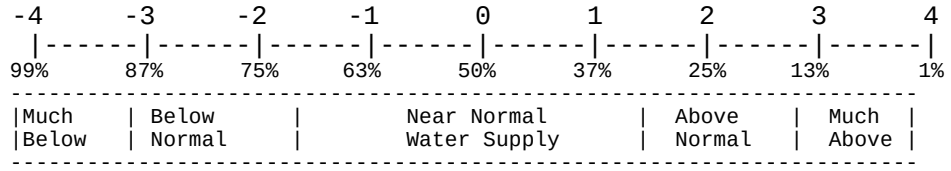
IDAHO SURFACE WATER SUPPLY INDEX (SWSI) As of January 1, 2008

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	-0.8	1983	NA
CLEARWATER	0.8	1993/2006	NA
SALMON	0.3	1998	NA
WEISER	0.3	2002	NA
PAYETTE	0.2	2003	NA
BOISE	-0.5	2003	-1.6
BIG WOOD	-0.8	1989/2005	-0.2
LITTLE WOOD	-0.1	1985/2005	-1.8
BIG LOST	-0.5	2005	-0.1
LITTLE LOST	-1.6	1991	0.3
HENRYS FORK	-0.1	1989	-3.3
SNAKE (HEISE)	-1.0	1989/1993	-1.7
OAKLEY	-1.0	2005	-1.0
SALMON FALLS	-1.9	2000	-1.4
BRUNEAU	-1.0	2004	NA
BEAR RIVER	-3.2	1992/1993	-3.2

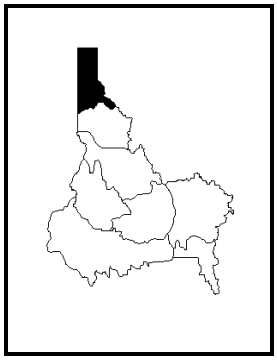
SWSI SCALE, PERCENT CHANCE OF EXCEEDANCE, AND INTERPRETATION

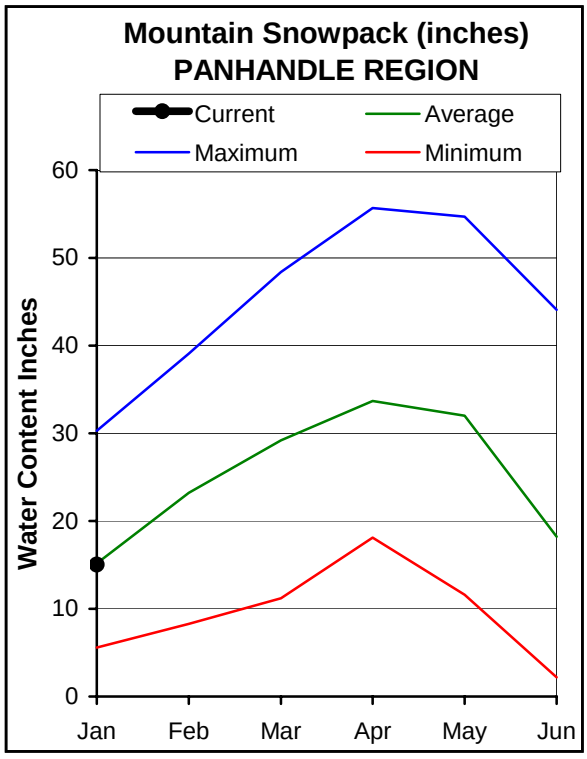


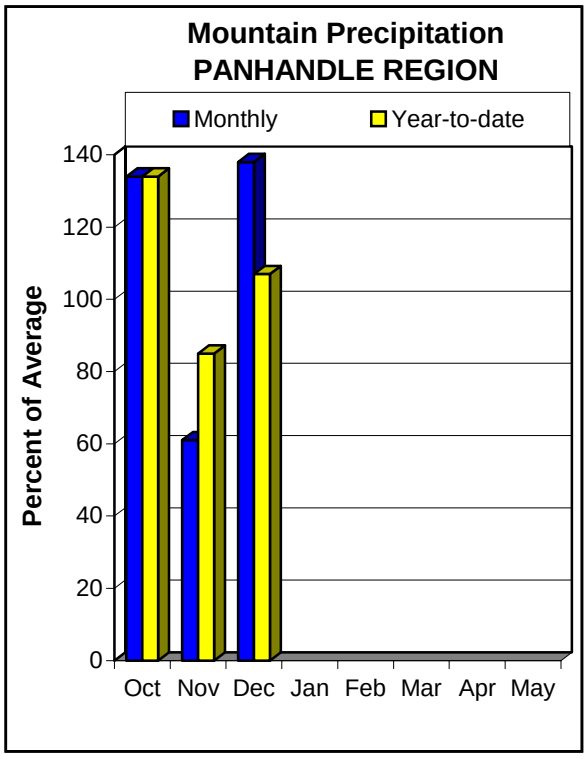
NA = Not Applicable

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
JANUARY 1, 2008







WATER SUPPLY OUTLOOK

La Nina conditions in the Pacific resulted in forecasts for an above average winter in the Panhandle. Fall precipitation got off to a good start when October brought 134% of average precipitation. Even though November was drier than average eventually the fall rains turned to snow in December and the La Nina forecast rang true. December had 138% of average monthly precipitation bringing water year to date precipitation since October 1 to 107% of average. The snowpack furthest ahead of average in the state can be found in the headwaters of the Palouse River basin at Sherwin SNOTEL, currently at 137% of average. Across the rest of the region January 1 snowpacks are 99% of average, a good start to the year despite more rain than snow during November. Although fall rains failed to build an early snowpack, soil moisture sensors indicate the soil profile is wet, and possibly frozen; this will feed streams with earlier snowmelt instead of it being absorbed by the soil. Snowpack percentages are expected to increase to normal as the storm track is set up to bring more snow to the region in early January. As of December 31, Pend Oreille Lake is storing 133% of average, 58% of capacity. Coeur d'Alene Lake contains 65% of average, 30% of capacity, while Priest Lake has 86% of average and 40% of capacity. Streamflow forecasts range from 85-110% of average for the region. It's still early in the winter but so far the signs look good for the Panhandle.

PANHANDLE REGION
Streamflow Forecasts - January 1, 2008

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Kootenai R At Leonia	APR-JUL	5182	6198	6660	95	7122	8138	7040
	APR-SEP	5946	7138	7680	95	8222	9414	8120
Moyie River At Eastport Id	APR-JUL	302	360	400	99	440	498	405
	APR-SEP	314	374	415	99	456	516	420
Smith Creek Near Porthill, Idaho	APR-JUL	101	121	135	110	149	169	123
	APR-SEP	104	127	142	110	157	180	129
Boundary Creek Nr Porthill Id	APR-JUL	107	124	135	110	146	163	123
	APR-SEP	114	131	142	110	153	170	129
Clark Fork At Whitehorse Rapids	APR-JUL	9154	9681	9920	88	10159	10686	11300
	APR-SEP	10031	10628	10900	87	11172	11769	12500
PEND OREILLE Lake Inflow (2)	APR-JUL	7045	9519	11200	88	12881	15355	12700
	APR-SEP	7756	10461	12300	89	14139	16844	13900
Priest River Near Priest River, Id	APR-JUL	410	654	765	94	876	1120	815
	APR-SEP	446	700	815	94	930	1184	870
Nf Coeur D'alene River At Enaville,	APR-JUL	395	577	700	95	823	1005	740
	APR-SEP	427	611	735	94	859	1043	780
St. Joe River At Calder, Id	APR-JUL	668	884	1030	90	1176	1392	1140
	APR-SEP	773	962	1090	91	1218	1407	1200
Spokane River Near Post Falls, Id	APR-JUL	1671	2087	2370	93	2653	3069	2550
	APR-SEP	1828	2216	2480	94	2744	3132	2650
SPOKANE at Long Lake (2)	APR-JUL	1609	2247	2680	94	3113	3751	2850
	APR-SEP	1791	2463	2920	95	3377	4049	3070

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
HUNGRY HORSE	3451.0	2676.0	2962.0	2420.9
FLATHEAD LAKE	1791.0	1158.0	1344.0	1192.7
NOXON RAPIDS	335.0	321.1	324.4	315.8
PEND OREILLE	1561.3	898.5	649.6	673.4
COEUR D'ALENE	238.5	71.2	116.3	110.1
PRIEST LAKE	119.3	48.0	52.7	55.7

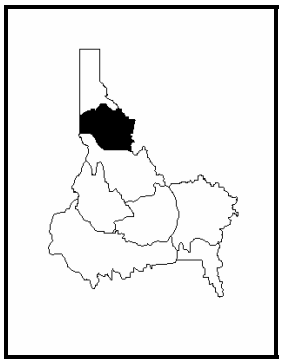
PANHANDLE REGION
Watershed Snowpack Analysis - January 1, 2008

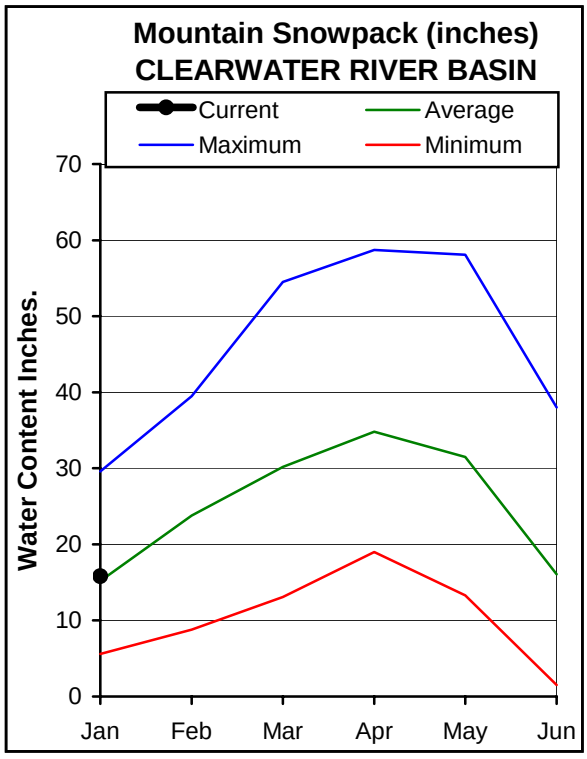
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Kootenai ab Bonners Ferry	15	86	88
Moyie River	4	84	83
Priest River	4	108	108
Pend Oreille River	61	107	90
Rathdrum Creek	2	100	101
Hayden Lake	0	0	0
Coeur d'Alene River	6	104	98
St. Joe River	4	114	100
Spokane River	10	105	96
Palouse River	1	157	135

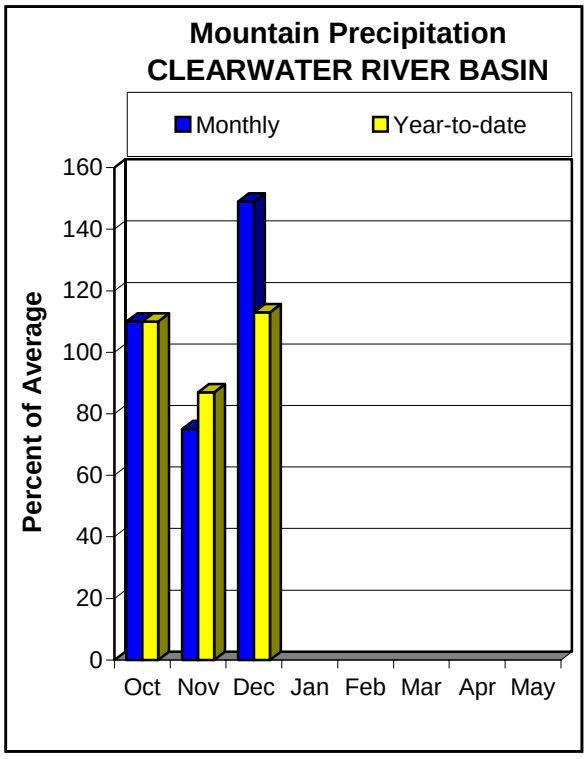
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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

CLEARWATER RIVER BASIN
JANUARY 1, 2008







WATER SUPPLY OUTLOOK

The mountains of the Clearwater Basin have benefited from the La Nina conditions in Pacific. Water year to date precipitation for the basin as of January 1 stands at 113% of average. December provided 149% of average monthly precipitation and boosted the basin-wide snowpack to 104% of average, more than doubling the December 1 snowpack percentage. The Lochsa Basin snowpack is the best in the state at 116% of average, followed closely by the Selway basin at 111%. Snowpacks in the North Fork Clearwater Basin are average. Cool Creek SNOTEL at 6280 feet elevation in the North Fork Clearwater basin has one of the deepest snowpacks in the state accumulating to nearly 100 inches on New Years Eve. If melted, those 100 inches of depth would equate to almost 22 inches of water. This is average for this site at this time of year and shows what a perfect reservoir the winter snowpack in the mountains creates. If the La Nina storm track continues to dump snow in these mountains the river running season is sure to be a good one. Dworshak Reservoir is about 65% full, which is 101% of average for this time of year. Based on the current snowpack and storage in Dworshak, streamflow forecasts are for average amounts this summer assuming near average future precipitation. If La Nina really kicks in we could see well above average conditions by next month.

CLEARWATER RIVER BASIN
Streamflow Forecasts - January 1, 2008

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Selway R nr Lowell	APR-JUL	1536	1842	2050	100	2258	2564	2060
	APR-SEP	1639	1949	2160	100	2371	2681	2170
Lochsa R nr Lowell	APR-JUL	1145	1374	1530	100	1686	1915	1530
	APR-SEP	1225	1454	1610	100	1766	1995	1610
Dworshak Reservoir Inflow	APR-JUL	1510	2260	2610	99	2960	3710	2640
	APR-SEP	1650	2420	2770	99	3120	3890	2800
Clearwater R at Orofino	APR-JUL	3120	4170	4650	100	5130	6180	4650
	APR-SEP	3290	4400	4900	100	5400	6510	4900
Clearwater R at Spalding	APR-JUL	4990	6680	7440	100	8200	9890	7430
	APR-SEP	5270	7040	7850	100	8660	10400	7850

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
DWORSHAK	3468.0	2253.1	2604.8	2228.2

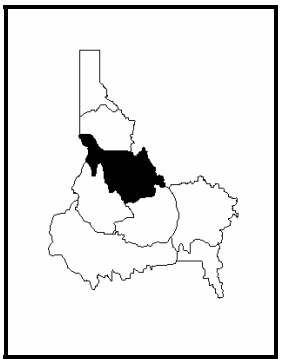
CLEARWATER RIVER BASIN
Watershed Snowpack Analysis - January 1, 2008

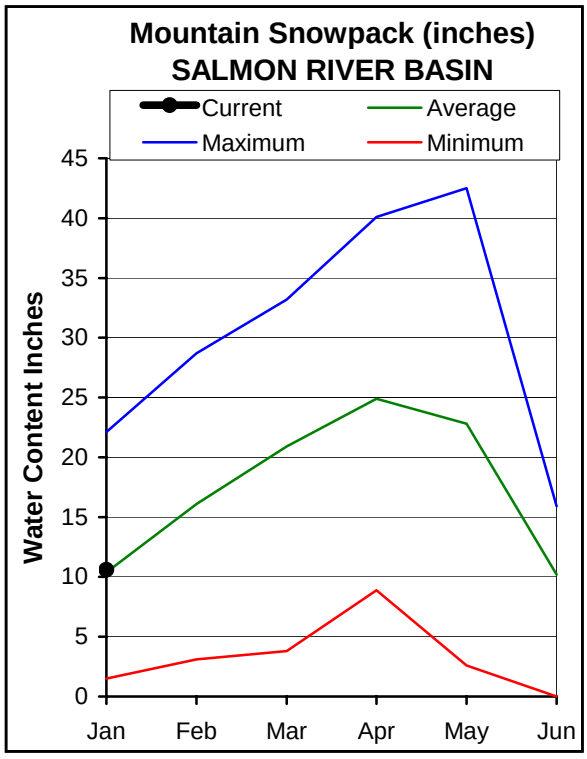
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
North Fork Clearwater	9	111	99
Lochsa River	3	134	116
Selway River	4	133	111
Clearwater Basin Total	16	118	104

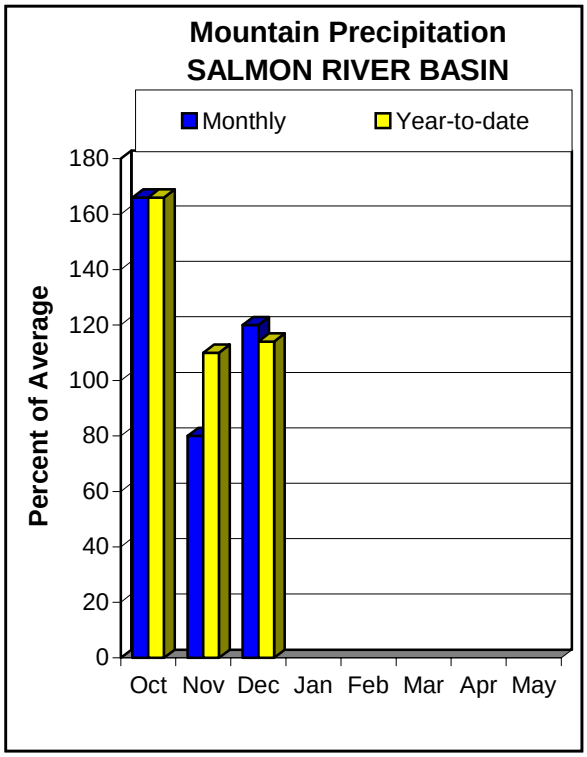
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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

SALMON RIVER BASIN
JANUARY 1, 2008







WATER SUPPLY OUTLOOK

October monthly precipitation for the Salmon basins was 166% of average. Since then the basin continued to have above average precipitation for the water year. As of January 1 precipitation is 114% of average since the beginning of October. Early snowpacks survived a drier than average November and remain slightly above average. The Lemhi drainage has the best snowpack at 111% of average while the lowest snowpack is found in the Salmon River above Salmon at 92% of average. Although it's still very early, an average snowpack is great news for a drainage that was literally scorched by summer heat. Wildfires such as the Shower Bath, Red Bluff, East Zone Complex and Krassel Complex burned more than 500,000 acres in the basin, and fires were responsible for closing the Main and Middle Fork Salmon rivers to whitewater running for much of August. Streamflow forecasts for this summer range from 90% of average for the Salmon above Salmon to 100% for the Salmon at Whitebird. The Middle Fork is forecast for 99% of average. Hopefully a long winter will ward off large fires from this watershed next summer.

SALMON RIVER BASIN
Streamflow Forecasts - January 1, 2008

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Salmon R at Salmon	APR-JUL	405	675	795	93	915	1180	855
	APR-SEP	480	785	925	93	1060	1370	1000
Lemhi R nr Lemhi	APR-JUL	42	63	79	92	97	127	86
	APR-SEP	54	78	97	92	118	152	105
MF Salmon R at MF Lodge	APR-JUL	443	641	775	99	909	1107	785
	APR-SEP	498	713	860	98	1007	1222	875
Salmon R at White Bird	APR-JUL	3450	5040	5770	99	6500	8090	5850
	APR-SEP	3860	5600	6390	99	7180	8920	6480

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

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

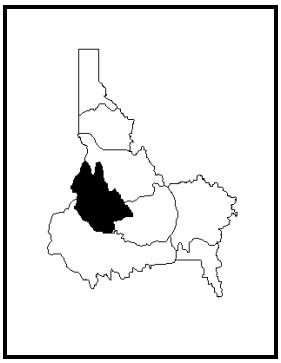
SALMON RIVER BASIN
Watershed Snowpack Analysis - January 1, 2008

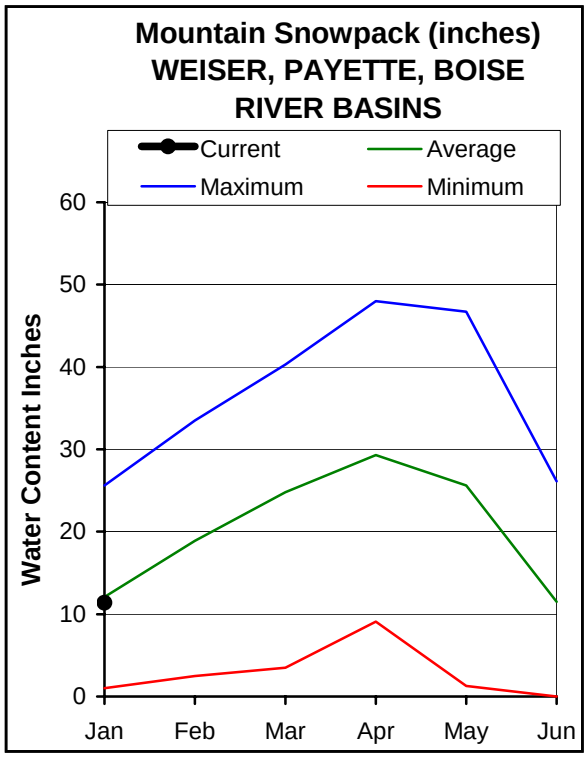
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Salmon River ab Salmon	9	93	92
Lemhi River	6	128	111
Middle Fork Salmon River	3	95	98
South Fork Salmon River	3	100	107
Little Salmon River	4	105	105
Salmon Basin Total	24	106	102

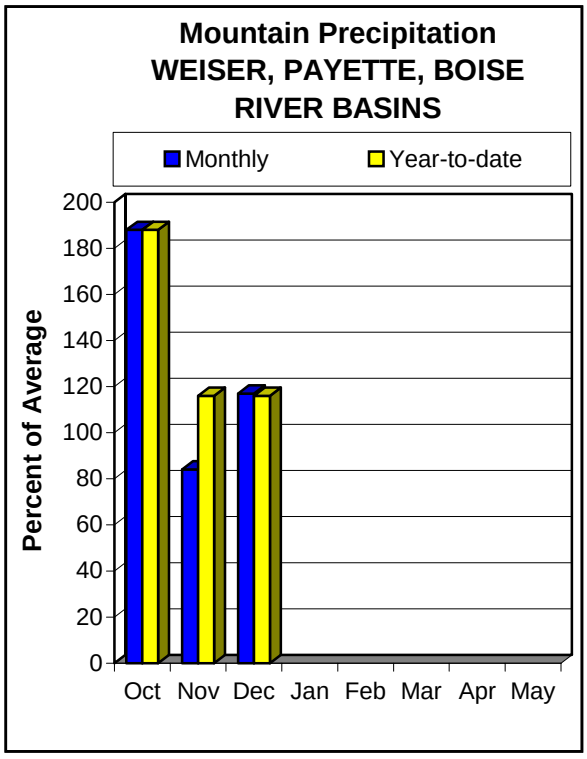
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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

WEISER, PAYETTE, BOISE RIVER BASINS JANUARY 1, 2008







WATER SUPPLY OUTLOOK

Abundant autumn rains and recent snow storms leaves the water year to date precipitation balance above average in the Boise (112%), Weiser (125%) and Payette River Basins (119%). The current snowpack as of January 1 for these west-central mountains is 95% of average overall. The Weiser and Payette have average snowpacks, but the Boise Basin is lagging with only 87% of normal snow. The snow was only slightly above half of average on December 15th indicating that all of those holiday storms greatly improved the water supply situation and made some happy winter sports enthusiasts! Last year, we had similar precipitation and snowpacks but January precipitation failed to bring moisture to the northwest. If the present storm track continues, however, we are on our way to a great start for streamflow and water supply. We are at a slight disadvantage as compared to last year for reservoir storage. Our earlier 2007 spring snowmelt and dry summer increased the demand for water consumption; whereas the 2006 above average snowpack left most reservoirs near full with ample carry-over storage for the summer of 2007. As of December 31, 2007, the Boise Reservoir system was just 73% of average and on the same date last year, the reservoirs were at 105% of average. On the other hand, we are at a slight advantage over last year as far as climate is concerned. NOAA's Climate Prediction Center calls for above average precipitation thanks to the friend of the northwest, La Nina. With all of this information in mind, the Payette and Weiser rivers are forecast to flow about 100% of average and the Boise River near 85% due to the snowpack in this basin not as abundant as in the Payette and Weiser basins.

WEISER, PAYETTE, BOISE RIVER BASINS
Streamflow Forecasts - January 1, 2008

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Weiser R nr Weiser	FEB-JUL	225	495	650	100	825	1290	650
	APR-SEP	142	310	405	96	515	800	420
SF Payette R at Lowman	APR-JUL	264	342	400	91	463	564	440
	APR-SEP	305	391	455	92	524	635	495
Deadwood Reservoir Inflow	APR-JUL	68	108	127	95	146	186	134
	APR-SEP	71	115	135	95	155	199	142
Lake Fork Payette R nr McCall	APR-JUL	62	76	86	101	97	113	85
	APR-SEP	64	78	89	100	100	118	89
NF Payette R at Cascade	APR-JUL	265	440	520	100	600	775	520
	APR-SEP	272	456	540	100	624	808	540
NF Payette R nr Banks	APR-JUL	448	583	675	100	767	902	675
	APR-SEP	472	614	710	101	806	948	700
Payette R nr Horseshoe Bend	APR-JUL	930	1400	1610	98	1820	2290	1640
	APR-SEP	1020	1500	1720	98	1940	2420	1760
Boise R nr Twin Springs	APR-JUL	270	465	555	87	645	840	635
	APR-SEP	290	495	590	86	685	890	690
SF Boise R at Anderson Ranch Dam	APR-JUL	176	380	470	87	560	765	540
	APR-SEP	187	400	495	85	590	805	580
Mores Ck nr Arrowrock Dam	APR-JUL	51	82	108	82	137	186	131
	APR-SEP	52	84	110	80	140	190	137
Boise R nr Boise	APR-JUN	595	930	1080	86	1230	1570	1260
	APR-JUL	630	1040	1230	87	1420	1830	1410
	APR-SEP	645	1100	1300	85	1500	1950	1530

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MANN CREEK	11.1	0.9	2.5	3.3
CASCADE	693.2	455.1	480.7	456.4
DEADWOOD	161.9	63.6	100.8	82.5
ANDERSON RANCH	450.2	152.2	307.7	296.8
ARROWROCK	272.2	170.9	199.3	173.1
LUCKY PEAK	293.2	89.2	86.9	95.5
LAKE LOWELL (DEER FLAT)	165.2	79.7	97.4	98.4

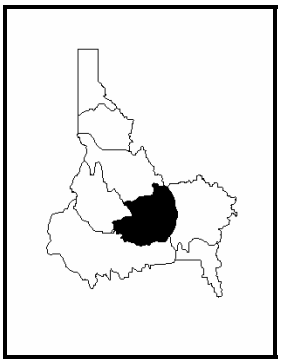
WEISER, PAYETTE, BOISE RIVER BASINS
Watershed Snowpack Analysis - January 1, 2008

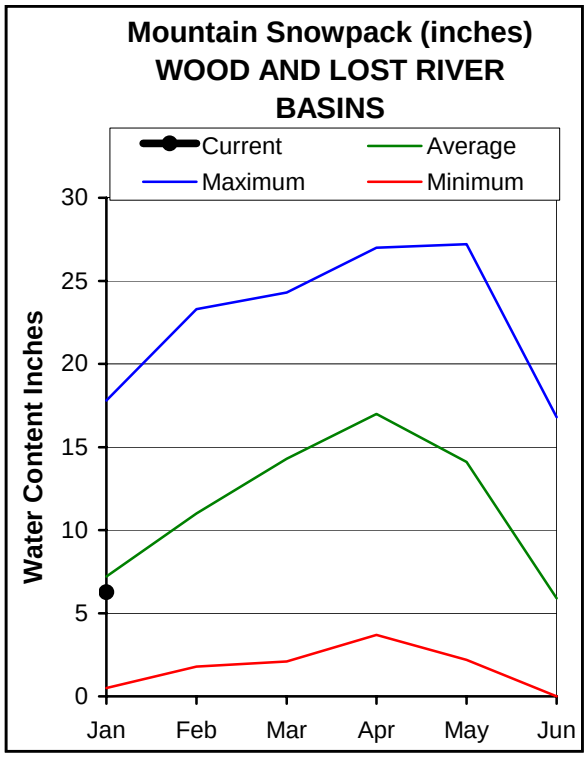
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Mann Creek	1	88	92
Weiser River	3	124	104
North Fork Payette	8	99	99
South Fork Payette	5	91	94
Payette Basin Total	14	94	96
Middle & North Fork Boise	5	85	83
South Fork Boise River	9	92	88
Mores Creek	5	91	88
Boise Basin Total	16	91	87
Canyon Creek	2	75	80

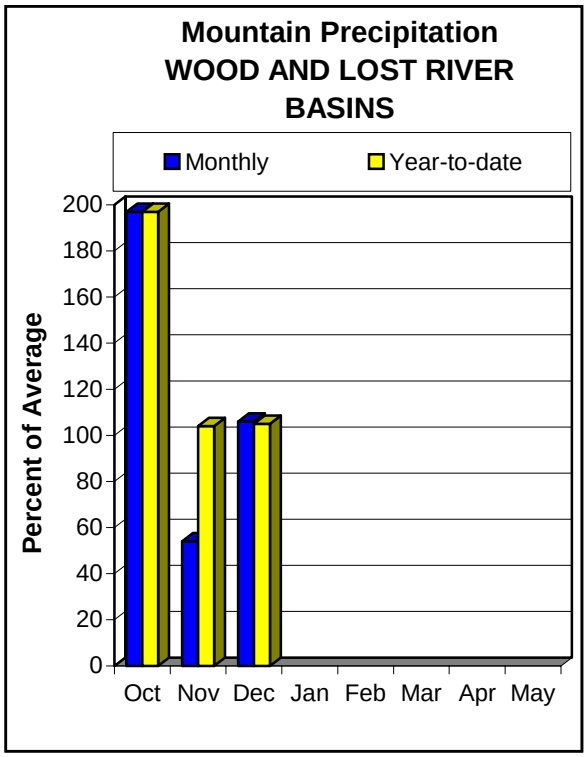
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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

WOOD and LOST RIVER BASINS
JANUARY 1, 2008







WATER SUPPLY OUTLOOK

The recent storm track has favored the mountains to the north and west of the Wood and Lost river basins, but the water year to date precipitation has managed to stay average to above average especially in the highest of elevations. The precipitation is good news, but those good fall rains will be partially consumed by the soils before contributing to runoff due to our unusually dry summer. Achieving an adequate snowpack is especially important this year considering the soil moisture deficit and the fact that we do not have the carry-over reservoir storage that we did for 2007. The Big Wood basin has the best snow at 90%; while the Big Lost, Little Wood, Little Lost have snow near 80% of normal. These basins are perhaps the most challenging to forecast water supplies because of the additional variable of surface water disappearing into the volcanic earth and an inconsistent relationship between snowpack and streamflow. For instance, history shows that an April 1 snowpack of 108% of average in the Big Lost basin has produced streamflow at the Big Lost near Mackay ranging from 46% to 135% of average! As of January 1, the Big Lost, Little Wood and the Big Wood near Hailey are forecast to flow near 80% of normal for April through September and the Little Lost and Big Wood below Magic Dam are forecast to flow closer to 70% of average.

WOOD AND LOST RIVER BASINS
Streamflow Forecasts - January 1, 2008

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Big Wood R at Hailey	APR-JUL	75	164	215	84	273	426	255
	APR-SEP	88	187	245	85	310	480	290
Big Wood R ab Magic Reservoir	APR-JUL	23	96	145	76	194	267	190
	APR-SEP	28	106	159	78	212	290	205
Camas Ck nr Blaine	APR-JUL	19.0	50	80	80	117	184	100
	APR-SEP	19.0	51	81	80	118	186	101
Big Wood R bl Magic Dam	APR-JUL	25	138	215	74	290	405	290
	APR-SEP	34	150	230	75	310	425	305
Little Wood R ab High Five Creek	MAR-JUL	27	50	70	82	93	134	85
	MAR-SEP	29	54	75	82	100	143	92
Little Wood R nr Carey	MAR-JUL	21	54	76	79	98	131	96
	MAR-SEP	25	60	83	80	106	141	104
Big Lost R at Howell Ranch	APR-JUL	75	114	145	84	180	238	173
	APR-SEP	83	126	161	82	200	265	197
Big Lost R bl Mackay Res	APR-JUL	37	82	112	79	142	187	141
	APR-SEP	48	101	138	80	175	230	172
Little Lost R nr Howe	APR-JUL	12.8	18.5	23	74	28	36	31
	APR-SEP	14.7	22	27	69	33	43	39

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MAGIC	191.5	17.1	110.3	79.7
LITTLE WOOD	30.0	9.4	21.3	14.1
MACKAY	44.4	17.4	21.9	23.7

WOOD AND LOST RIVER BASINS
Watershed Snowpack Analysis - January 1, 2008

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Big Wood ab Hailey	8	102	92
Camas Creek	5	80	85
Big Wood Basin Total	13	95	90
Fish Creek	0	0	0
Little Wood River	5	93	82
Big Lost River	5	100	79
Little Lost River	3	95	79
Birch-Medicine Lodge Cree	2	115	94
Camas-Beaver Creeks	4	78	62

* 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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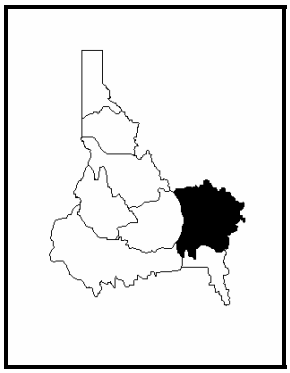
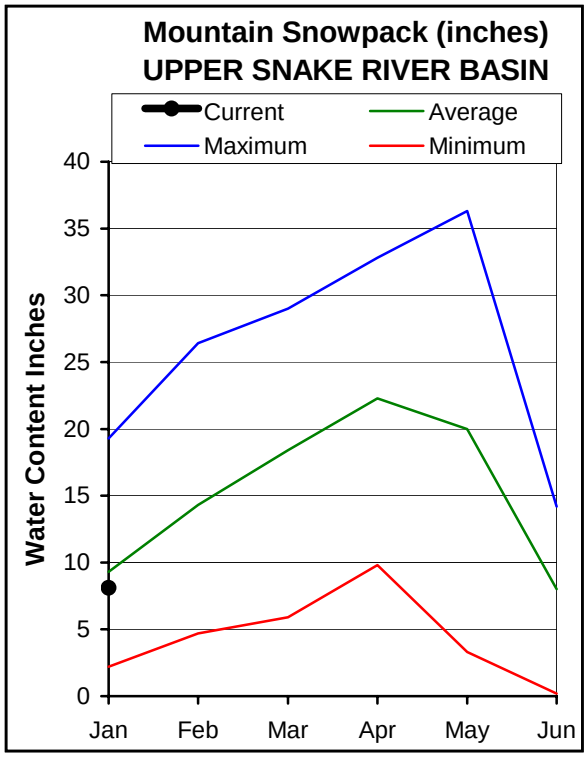
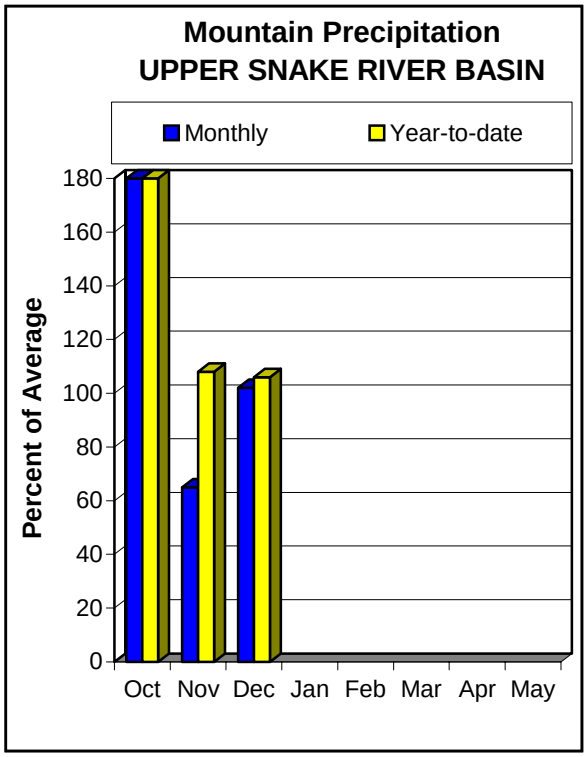
(2) - The value is natural flow - actual flow may be affected by upstream water management.

UPPER SNAKE BASINS
JANUARY 1, 2008







WATER SUPPLY OUTLOOK

The snowpack and precipitation as of January 1, 2008 looks strikingly similar to last year; the snow is near 85% of normal and the water year to date precipitation is slightly above average. The snowpacks are better, the further upstream and north. The best snowpack is in the Gros Ventre basin near the Wind River Range at 106% of normal; around 92% in the Upper Snake above Jackson Lake in Yellowstone National Park, Henrys Fork and Falls River drainages, then decreases to 89% in the Henrys Fork above Rexburg. The least amount of snow in the upper Snake basin is located in the Greys, Hoback and Salt River drainages around 70% of normal. Last year, we had more of a cushion because of the above average reservoir carry-over storage from the 2006 runoff. However, this year we may be helped by La Nina conditions, which will favor the northwest and re-hydrate the Upper Snake basin. Historical analysis shows that an April 1 snowpack of 106% of average is needed to achieve at least 88% of average runoff at the Snake at Heise. That streamflow value is the magic number that will contribute the minimum amount of water for adequate irrigation demand (3,650,000 Acre-Feet for April through September). Based on our current snowpack and climate variables, the Snake at Heise, Snake near Moran, the Teton and Henrys Fork Rivers are forecast to flow near 90% of average; 80% in the Greys near Alpine and 71% in the Salt River near Etna. The streams would be forecast higher had the summer not been so dry, but some of the good fall rains will be used by the soils to satisfy their moisture deficit and will not contribute to runoff. Let's hope the La Nina holds true and keeps bringing us the moisture that we greatly need.

UPPER SNAKE RIVER BASIN
Streamflow Forecasts - January 1, 2008

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Henrys Fork nr Ashton	APR-JUL	374	464	530	93	601	713	570
	APR-SEP	535	640	720	94	805	935	765
Henrys Fork nr Rexburg	APR-JUL	1160	1330	1450	93	1570	1740	1560
	APR-SEP	1540	1730	1860	93	1990	2180	2010
Falls R nr Ashton	APR-JUL	274	324	360	95	398	457	380
	APR-SEP	325	383	425	94	469	538	450
Teton R nr Driggs	APR-JUL	86	119	145	88	174	220	165
	APR-SEP	111	153	185	88	220	277	210
Teton R nr St. Anthony	APR-JUL	235	315	375	93	440	545	405
	APR-SEP	290	380	450	94	525	645	480
Snake River At Flagg Ranch	APR-JUL	300	385	440	89	495	580	495
	APR-SEP	333	424	485	89	546	637	545
Snake R Nr Moran	APR-JUL	450	645	750	92	815	1010	815
	APR-SEP	505	720	830	92	910	1120	905
Pacific Ck At Moran	APR-JUL	119	155	180	105	205	240	171
	APR-SEP	128	165	190	107	215	252	178
Snake R Nr Alpine	APR-JUL	1373	1990	2270	96	2550	3167	2370
	APR-SEP	1584	2283	2600	95	2917	3616	2730
Greys R Nr Alpine	APR-JUL	171	230	285	84	310	370	340
	APR-SEP	199	270	335	85	360	430	395
Salt R Nr Etna	APR-JUL	89	179	280	82	300	390	340
	APR-SEP	169	275	345	82	415	520	420
Snake R nr Irwin	APR-JUL	2120	2780	3080	93	3380	4040	3330
	APR-SEP	2470	3210	3550	92	3890	4630	3870
Snake R nr Heise	APR-JUL	2430	2910	3230	91	3550	4030	3560
	APR-SEP	2860	3400	3770	91	4140	4680	4160
Willow Ck nr Ririe	MAR-JUL	24	48	70	80	96	141	88
Blackfoot R ab Res nr Henry	APR-JUN	24	43	58	80	76	106	73
Portneuf R at Topaz	MAR-JUL	39	56	69	78	84	108	89
	MAR-SEP	50	70	86	79	104	132	109
Snake R At Neeley	APR-JUL	1040	2230	2770	86	3310	4500	3240
	APR-SEP	1130	2420	3000	86	3580	4870	3510

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
HENRYS LAKE	90.4	75.2	84.5	82.5
ISLAND PARK	135.2	74.6	108.7	96.1
GRASSY LAKE	15.2	13.0	11.8	11.6
JACKSON LAKE	847.0	306.3	635.7	481.7
PALISADES	1400.0	428.2	933.7	1036.5
RIRIE	80.5	37.3	38.6	34.5
BLACKFOOT	348.7	79.5	162.0	215.3
AMERICAN FALLS	1672.6	706.7	1066.9	986.6

UPPER SNAKE RIVER BASIN
Watershed Snowpack Analysis - January 1, 2008

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Henrys Fork-Falls River	10	114	93
Teton River	7	103	83
Henrys Fork above Rexburg	17	112	89
Snake above Jackson Lake	9	115	92
Gros Ventre River	2	120	106
Hoback River	5	92	69
Greys River	4	90	71
Salt River	3	86	74
Snake above Palisades	21	105	84
Willow Creek	7	85	88
Blackfoot River	3	83	76
Portneuf River	3	94	73
Snake abv American Falls	37	104	86

* 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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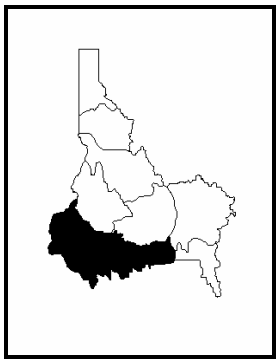
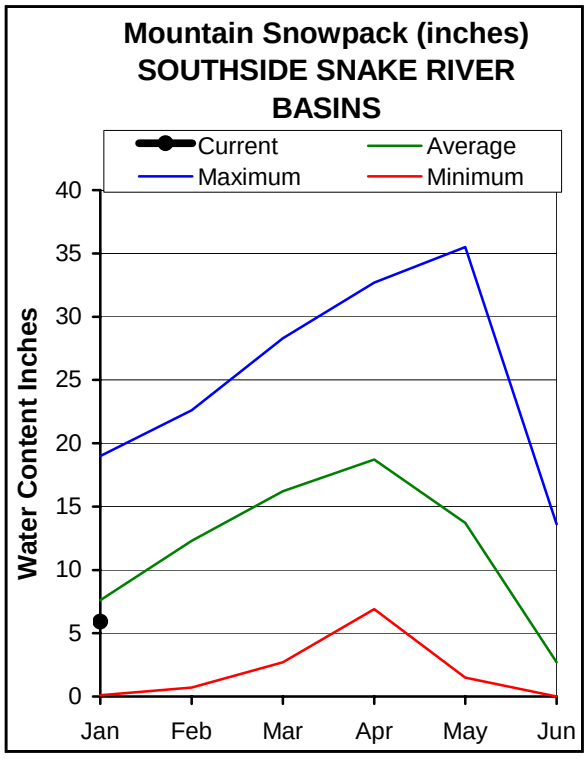
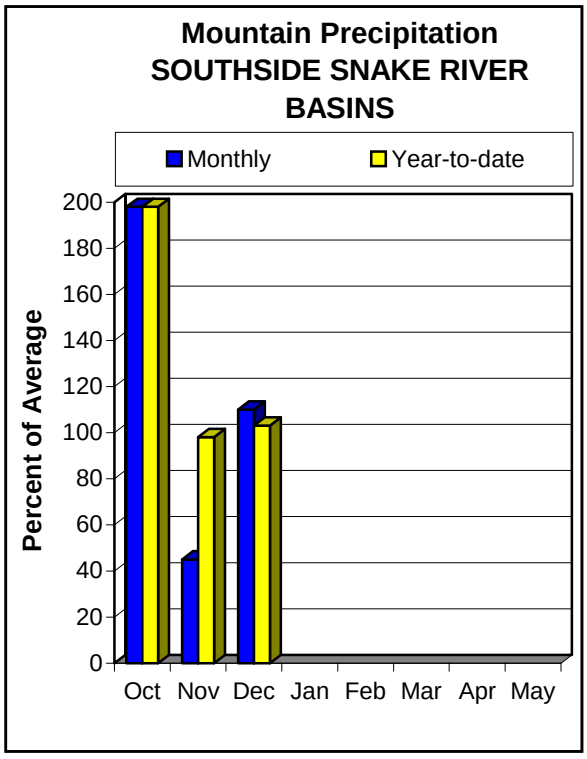
(2) - The value is natural flow - actual flow may be affected by upstream water management.

SOUTHSIDE SNAKE RIVER BASINS
JANUARY 1, 2008







WATER SUPPLY OUTLOOK

Overall, the Southside Snake Basins have the lowest snowpacks in the state of Idaho. The snow ranges from near 65% of normal in the Owyhee Basin, around 75% of normal in the Bruneau and Salmon Falls Basins and up to 82% in the Oakley Basin. Howell Canyon SNOTEL, located at Pomerelle ski area, is helping the Oakley Basin percentages out since it has 94% of average snow and the other Oakley sites are only near 70% of average. January is a critical month in snowpack accumulation and we will be eagerly watching the snowpack and weather conditions in hopes that we do not have a repeat of last January: cold and dry. Our water supplies desperately depend on an average snowpack supplemented with good spring rains this year. The snowpack is below normal at this time, but the water year to date precipitation is near average. Unfortunately, our summer was unusually dry and will cause the soils to soak up some of that fall moisture instead of contributing to spring runoff. Last year we had ample reservoir carry-over storage from 2006 that we do not have this year. The good news is that NOAA's Climate Prediction Center calls for normal temperatures and above normal precipitation for January through March due to La Nina conditions in the equatorial Pacific. As of January 1, our streamflow forecasts south of the Snake River range from near 73% in the Oakley Reservoir basin, the Bruneau and Owyhee River near Rome, OR, to 65% of normal on Salmon Falls Creek near San Jacinto, NV, and only 51% for the Owyhee near Gold Creek, NV.

SOUTHSIDE SNAKE RIVER BASINS
Streamflow Forecasts - January 1, 2008

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Oakley Reservoir Inflow	MAR-JUL	11.3	19.3	26	77	34	47	34
	MAR-SEP	12.3	21	28	76	36	50	37
OAKLEY RESV STORAGE	FEB-28	24	26	28	89	30	32	31
	MAR-31	28	31	33	92	35	38	36
	APR-30	31	35	38	93	41	45	41
Salmon Falls Ck nr San Jacinto	MAR-JUN	29	47	62	70	79	107	89
	MAR-JUL	30	49	64	69	82	111	93
	MAR-SEP	35	55	71	72	89	121	98
Bruneau R nr Hot Springs	MAR-JUL	88	138	178	76	225	300	235
	MAR-SEP	98	151	194	78	240	320	250
Owyhee R nr Gold Creek	MAR-JUL	7.7	14.6	21	66	29	44	32
	MAR-SEP	7.3	13.8	20	65	28	42	31
Owyhee R nr Owyhee	APR-JUL	5.2	36	57	70	78	109	82
Owyhee R nr Rome	FEB-JUL	183	338	470	72	624	889	655
	FEB-SEP	202	364	500	74	658	930	675
Owyhee R blw Owyhee Dam	FEB-JUL	175	310	510	73	785	1190	700
	FEB-SEP	60	240	525	72	810	1240	730
	APR-SEP	4.0	103	262	61	421	655	430
SNAKE RIVER at King Hill (1,2)	APR-JUL	410	1360	1790	61	2220	3170	2940
SNAKE RIVER near Murphy (1,2)	APR-JUL	470	1430	1870	61	2310	3270	3090
Reynolds Ck at Tollgate	MAR-JUL	3.1	5.6	7.7	79	10.1	14.3	9.7
SNAKE RIVER at Weiser (1,2)	APR-JUL	745	2890	3860	67	4830	6980	5770
SNAKE RIVER at Hells Canyon Dam (1,2	APR-JUL	1090	3430	4500	73	5570	7910	6210
SNAKE blw Lower Granite Dam (1,2)	APR-JUL	5230	12700	16100	75	19500	27000	21600

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
OAKLEY	75.6	23.0	38.5	25.7
SALMON FALLS	182.6	27.0	72.8	52.6
WILDHORSE RESERVOIR	71.5	28.6	48.0	37.8
OWYHEE	715.0	173.9	448.1	398.1
BROWNLEE	1420.0	129.5	1261.4	1303.0

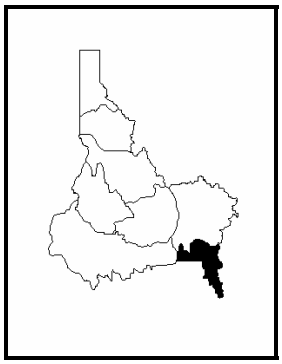
SOUTHSIDE SNAKE RIVER BASINS
Watershed Snowpack Analysis - January 1, 2008

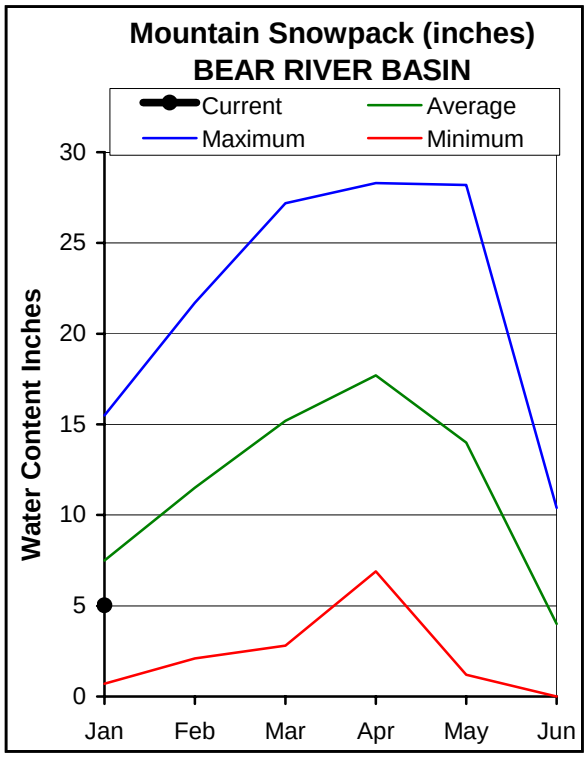
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Raft River	1	70	94
Goose-Trapper Creeks	3	72	82
Salmon Falls Creek	6	84	76
Bruneau River	5	88	73
Reynolds Creek	6	82	77
Owyhee Basin Total	8	93	66

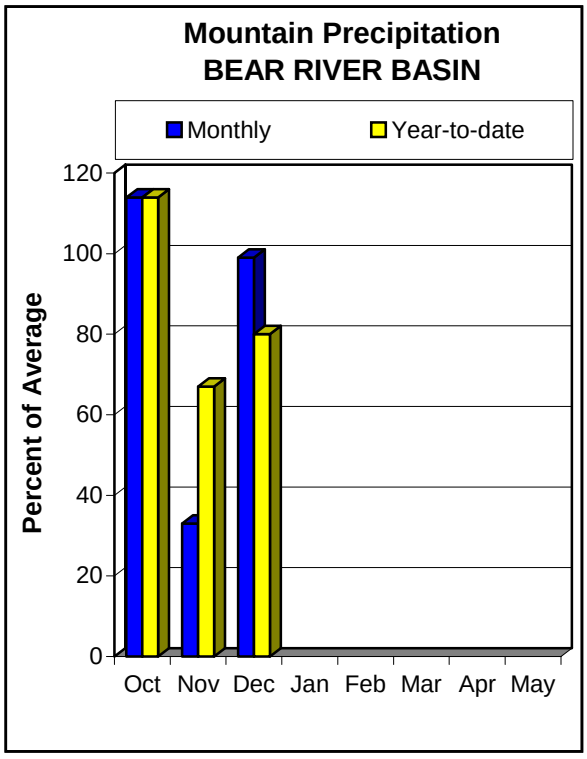
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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

BEAR RIVER BASIN
JANUARY 1, 2008







WATER SUPPLY OUTLOOK

Sadly the Bear basin is picking up where it left off last spring. Despite near average or better precipitation in October and December, the total since the water year began October 1 is just 80% of average, the lowest in the state. Snowpacks are 66% of average, second lowest in the state but still better than the Owyhee basin. Bear Lake dropped over 178,000 acre-feet since this time last year. After three winters of increasing storage it was hard to watch as storage was drafted this past summer. Bear Lake currently contains 345,000 acre-feet or 24% of capacity. The Bear River at Stewart Dam is forecast for about half its average flows. Forecasts for the Bear River near the Utah – Wyoming border and above the reservoir near Woodruff are the most promising at 84% of average. The Little Bear River at Paradise is forecast for 65%. The January 1 surface water supply index which combines reservoir storage and forecasted streamflow from April to September indicates that just enough water will be available to meet surface water demands. Considering the below average snowpack and reservoir storage that is 38% of average, the SWSI results are good news. Hopefully January will bring a wallop of new snow to the basin and reverse these low numbers by next month.

BEAR RIVER BASIN
Streamflow Forecasts - January 1, 2008

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Bear River nr UT-WY State Line	APR-JUL	56	79	95	84	111	134	113
	APR-SEP	61	87	105	84	123	149	125
Bear River ab Reservoir nr Woodruff	APR-JUL	52	89	114	84	139	176	136
	APR-SEP	57	95	120	85	145	183	142
Big Creek nr Randolph	APR-JUL	1.3	2.8	3.8	78	4.8	6.3	4.9
Smiths Fork nr Border	APR-JUL	43	65	80	78	95	117	103
	APR-SEP	52	77	94	78	111	136	121
Bear River at Stewart Dam	APR-JUL	50	88	120	51	157	221	234
	APR-SEP	58	100	135	52	176	245	262
Little Bear River at Paradise	APR-JUL	12.3	22	30	65	39	56	46
Logan R Abv State Dam Nr Logan	APR-JUL	43	65	83	66	103	136	126
Blacksmith Fk Abv Up&L Dam Nr Hyrum	APR-JUL	16.7	27	35	73	44	60	48

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BEAR LAKE	1421.0	345.1	523.2	907.5
MONTPELIER CREEK	4.0	1.0	2.0	1.7

BEAR RIVER BASIN
Watershed Snowpack Analysis - January 1, 2008

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Smiths & Thomas Forks	3	77	63
Bear River ab WY-ID line	9	84	65
Montpelier Creek	1	77	60
Mink Creek	1	88	74
Cub River	1	98	77
Bear River ab ID-UT line	15	86	67
Malad River	1	124	86

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

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow 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 Nov. 2007).**

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
Portneuf R at Topaz, ID - No Corrections
Snake River at Neeley, ID
+ Snake River at Neeley (observed)
+ 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 Rome, OR – No Corrections
Owyhee R blw Owyhee Dam, OR
+ Owyhee R blw Owyhee Dam, OR (observed)
+ Owyhee Resv (Storage Change)
+ Diversions to North and South Canals
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 Nov. 2007)**

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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