

Idaho Water Supply Outlook Report June 1, 2007



**Jackson Lake with reflection of Mount Moran
Grand Teton National Park**

On May 17th the Bureau of Reclamation organized a tour of the Upper Snake River basin to compare snow amounts to previous years. While in the area our conversations with locals anecdotally confirmed what SNOTEL data showed quantitatively; that spring arrived a month early this year. Talking with a farmer pointed out a snowfree ridge, a fisherman shared about a hatch, and a hydrologist commented on how streams had already peaked; each person ended their sentence with "a month earlier than normal." The information in this month's water supply report repeats the same situation in basin after basin.

Basin Outlook Reports and Federal - State - Private Cooperative Snow Surveys

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

How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

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IDAHO WATER SUPPLY OUTLOOK REPORT

June 1, 2007

SUMMARY

The impacts of missing January, a critical precipitation month, and then combined with dry warm weather in spring is playing havoc with the environment. Rumor has it a fly hatch happened three weeks early in Yellowstone National Park. The Iris festival in Boise was canceled because of the early bloom. Snow depths in the mountains peaked March 1 rather than mid-March and snow water equivalent peaked in early March rather than early April. As a result, streams peaked in early to mid-May rather than late May or early June. Snowmelt peak streamflows were very low and streams are already receding to their typical summer levels much earlier than normal. Streamflow forecasts for the June-September period are low and now call for 10-45% of average across Idaho from the Clearwater basin south and 45-75% for the Panhandle Region except Kootenai River forecast at 105%. Many streams are currently flowing at the tenth percentile or less of their historic flow levels for June 1. These streams include the Salmon River at White Bird, Camas Creek near Blaine, Owyhee River near Rome, Bruneau River near Hot Springs, Salmon Falls Creek, Big Lost River at Howell Ranch, Teton River near Driggs, Lochsa River, and Boise River near Twin Springs.

Below normal snow in the second half of winter and lack of spring precipitation caused Idaho's summer water supply outlook to deteriorate. At several central Idaho SNOTEL sites, precipitation for the March-May period was the lowest since monthly mountain precipitation records start in 1982. Reservoir water users will have adequate irrigation supplies in the Owyhee, Salmon Falls and Oakley basins due to good storage levels from last year's runoff and conservation of water from sprinklers. Some shortages are expected in the Boise, Big Wood, Upper Snake and Bear River basins; severity depends on your water right and water source. Most severe surface irrigation shortages are expected in the Big Lost and Little Lost basins and other basins without storage facilities. The Little Lost River is forecast at a record low 5,900 acre-feet for June-September, the previous low of 8,800 acre-feet occurred in 1994.

SNOWPACK

Record setting fall rains in northern Idaho in November led to hopes of a good year, but this faded as winter storms failed to materialize. The only snow measuring stations with snow are in the Panhandle Region, Clearwater and Upper Snake basins. All central, southern and eastern Idaho snow measuring stations are snow-free except for Trinity Mountain, Vienna Mine and Deadwood Summit SNOTEL sites in central Idaho. Only 16 of the 126 snow measuring sites in or adjacent to Idaho have snow. Last, year 47 sites still had snow on June 1. Of the 126 SNOTEL sites in the Idaho monitoring area, normally 45 sites are melted by June 1. Snowpacks are 55-65% percent of average for the Kootenai, Priest, Pend Oreille and St. Joe basins and 40-50% of average in the North Fork Clearwater and Lemhi basin. The rest of the state is snow free except in the highest elevations.

PRECIPITATION

The water year started off promising with good fall rains and ample soil moisture prior to winter. However, lack of storms the second half of winter and record low precipitation amounts in central Idaho from March-May is turning Idaho's hillsides brown earlier than normal this spring. May precipitation was 60-70% of average in the Clearwater, Salmon, Weiser and Payette basins. Half of average May amounts fell in the Panhandle Region, Little Lost, Birch and Bear River basins. Elsewhere, May amounts ranged from a low of 22% of average in the Little Wood and Big Lost basins to 41% in the Willow, Blackfoot and Portneuf basins. Water year-to-date precipitation amounts range from average in the Panhandle Region, Clearwater and Oakley basins to only two-thirds of average in the Big Lost basin.

RESERVOIRS

Many reservoirs are 95-100% of capacity. Other reservoirs that did not fill or will not fill are Bear Lake, Blackfoot, Ririe, Salmon Falls, Oakley and Owyhee which are only 45-80% of capacity. Little Wood and American Falls reservoirs filled and drafting is occurring as inflows fail to meet downstream demands. Drafting at other reservoirs will start earlier than normal as result of minimal inflow. Most reservoirs will be at their minimal storage levels by summer's end making Idaho very dependent on ample snowfall next year.

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

Residual streamflow forecasts for the June 1–September 30 period took another turn for the worst and call for 10-45% of average for drainages south of the St. Joe basin. Below are streamflow forecasts for the June 1-September 30 period:

- Bear River at Stewart Dam at 15%
- Snake River near Heise at 32%
- Little Lost River at 23%
- Big Lost River below Mackay Reservoir at 24%
- Little Wood River near Carey at 34%
- Big Wood River below Magic Reservoir at 12%
- Boise River near Boise at 36%
- Payette River near Horshoebend at 42%
- Weiser River at 40%
- Salmon River at White Bird at 39%
- Clearwater River at Spalding at 44%
- Spokane River near Post Falls at 50%
- Pend Oreille Lake Inflow at 71%
- Kootenai River at Leonia at 105%
- Moyie River at 78%

Water users can expect very low streamflow levels on free flowing rivers above reservoirs. Now, with the typical dry summer season upon us, streams will remain low except for areas with isolated showers or until the arrival of fall rains. To remain current on these low flow conditions and possible record setting levels, recession streamflow graphs are updated and posted weekly or monthly on our Peak Streamflow Information page. These graphs compare current year flow with historic levels along with minimum, maximum and last year's levels: <http://www.id.nrcs.usda.gov/snow/watersupply/peakflow.html>.

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>. 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 water short.

RECREATION

If you missed the peak streamflows, you still have time to catch the recession flows. Many streams (see first paragraph) are already at or below the tenth percentile flow level for June 1. Low river flows means an early

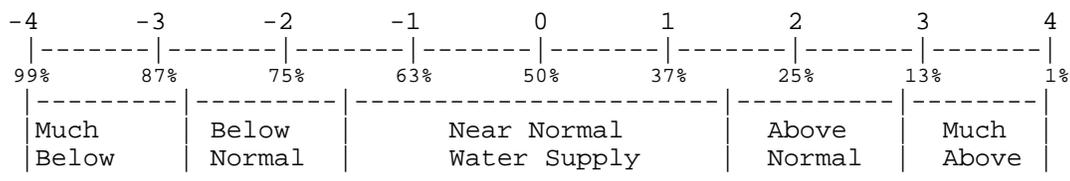
start for the fishing season. On the positive side, the Boise and Payette reservoir systems will provide ample water for floating this year until the storage is depleted or summer ends, whichever comes first. For those choosing to float the scenic upper Middle Fork Salmon River or fly into Indian Creek Landing Strip to start your journey, the Middle Fork Salmon River is expected to reach a gauge height of 2 feet in late June or early July. Several times a week or monthly in late summer, the Snow Survey Staff updates numerous graphs illustrating streamflow by Year, Season and Recession on our "Peak Streamflow for Individual Basins" web page: <http://www.id.nrcs.usda.gov/snow/watersupply/>.

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.

<i>BASIN or REGION</i>	<i>SWSI Value</i>	<i>Most Recent Year With Similar SWSI Value</i>	<i>Agricultural Water Supply Shortage May Occur When SWSI is Less Than</i>
CLEARWATER	-2.7	2001	NA
SALMON	-3.2	2001	NA
WEISER	-2.7	2001	NA
PAYETTE	-2.0	2002	NA
BOISE	-2.2	2002	-2.2
BIG WOOD	-1.6	2003	-1.1
LITTLE WOOD	-3.2	2001	-2.2
BIG LOST	-3.7	2001	-0.3
LITTLE LOST	-4.0	2004	0.2
HENRYS FORK	-3.8	2001	-3.3
SNAKE (HEISE)	-3.2	2002	-1.6
OAKLEY	-0.7	1995	-1.1
SALMON FALLS	-1.1	2005	-1.1
BRUNEAU	-3.2	2000	NA
BEAR RIVER	-1.8	2006	-3.4

SWSI SCALE, PERCENT CHANCE OF EXCEEDANCE, AND INTERPRETATION

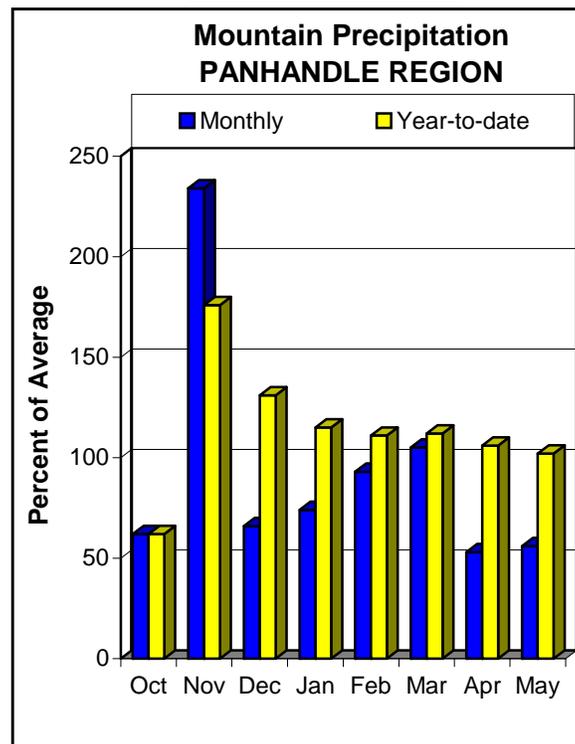
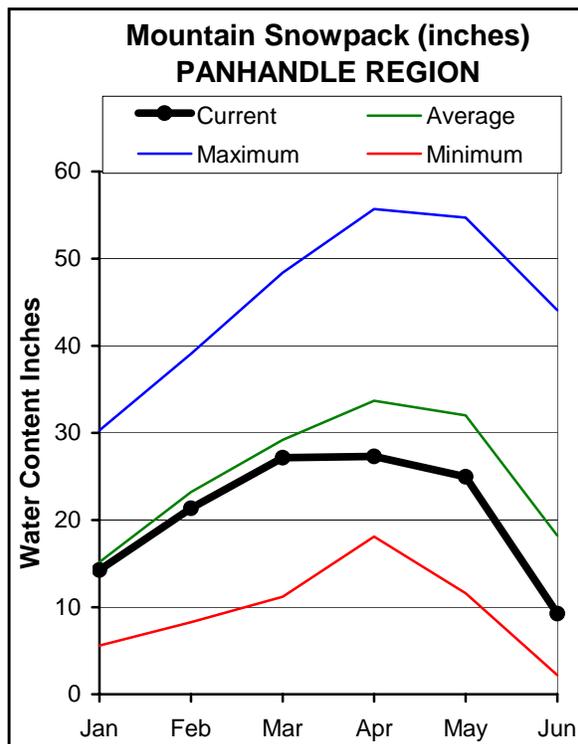
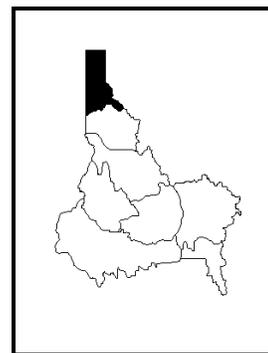


NA = Not Applicable

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

JUNE 1, 2007



WATER SUPPLY OUTLOOK

Warm and dry conditions prevailed in the Panhandle Region for the month of May as the region only received 56% of normal precipitation. The water year-to-date precipitation remains above average and the best in the state at 102% of average, mostly due to the wet autumn. The low snowpacks melted during May and are half of normal for this time of year. The snowpacks are better near the Canadian border in the Kootenai River headwaters at 59% of average and decrease as you move further south. Out of 18 SNOTEL sites in the Panhandle, only five sites have snow as of June 1, conversely historic averages reveal that only four sites normally are melted. The June-September streamflow volumes are forecast to flow below normal as a result of the low and rapidly melting snowpacks. The streamflow forecasts are better where the snow is greater; the Kootenai River at Leonia is forecast at 105% of average and the Spokane River near Post Falls is forecast at 50%. Coeur d'Alene Lake is storing 213,700 acre-feet and is 79% of average due to releases for downstream fish population but will soon fill to its normal summer level. Priest Lake is 79% of average, 90% of capacity and Pend Oreille Lake is 97% of average, 83% of capacity. Water supplies should be adequate, even though the dry spring did not help the water supply situation.

PANHANDLE REGION
Streamflow Forecasts - June 1, 2007

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		90%		50%		10%		
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	
KOOTENAI at Leonia (1,2)	JUN-JUL	3510	3930	4120	105	4310	4730	3920
	JUN-SEP	4530	5030	5260	105	5490	5990	5000
MOYIE RIVER at Eastport	JUN-JUL	78	98	111	77	124	144	145
	JUN-SEP	87	109	124	78	139	161	160
SMITH CREEK	JUN-JUL	20	30	36	72	42	52	50
	JUN-SEP	22	33	41	73	49	60	56
BOUNDARY CREEK	JUN-JUL	21	28	32	70	36	43	46
	JUN-SEP	26	32	37	71	42	48	52
CLARK FK at Whitehorse Rpds (1,2)	JUN-JUL	2490	3520	3990	71	4460	5490	5620
	JUN-SEP	3180	4330	4850	72	5370	6520	6750
PEND OREILLE Lake Inflow (2)	JUN-JUL	3070	3820	4330	71	4840	5590	6120
	JUN-SEP	3800	4630	5190	71	5750	6580	7280
PRIEST near Priest River (1,2)	JUN-JUL	127	181	205	71	230	285	290
	JUN-SEP	155	215	245	71	275	335	345
NF COEUR D'ALENE RIVER AT ENAVILLE	JUN-JUL	3.0	43	70	44	97	137	159
	JUN-SEP	30	73	103	52	133	176	198
ST. JOE at Calder	JUN-JUL	116	166	199	52	230	280	380
	JUN-SEP	168	220	255	57	290	340	450
SPOKANE near Post Falls (2)	JUN-JUL	116	235	320	47	405	525	675
	JUN-SEP	169	300	385	50	470	600	775
SPOKANE at Long Lake (2)	JUN-JUL	235	370	460	55	550	685	840
	JUN-SEP	385	530	625	59	720	865	1060

PANHANDLE REGION Reservoir Storage (1000 AF) - End of May					PANHANDLE REGION Watershed Snowpack Analysis - June 1, 2007				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of		
		This Year	Last Year	Avg			Last Yr	Average	
HUNGRY HORSE	3451.0	3229.0	3064.0	2588.0	Kootenai ab Bonners Ferry	12	79	57	
FLATHEAD LAKE		NO REPORT			Moyie River	4	140	47	
NOXON RAPIDS		NO REPORT			Priest River	2	35	64	
PEND OREILLE	1561.3	1299.2	1329.0	1333.1	Pend Oreille River	41	64	58	
COEUR D'ALENE	238.5	213.7	209.1	270.4	Rathdrum Creek	1	0	0	
PRIEST LAKE	119.3	124.0	154.6	138.5	Hayden Lake	0	0	0	
					Coeur d'Alene River	4	0	0	
					St. Joe River	4	60	56	
					Spokane River	7	54	30	
					Palouse River	1	0	0	

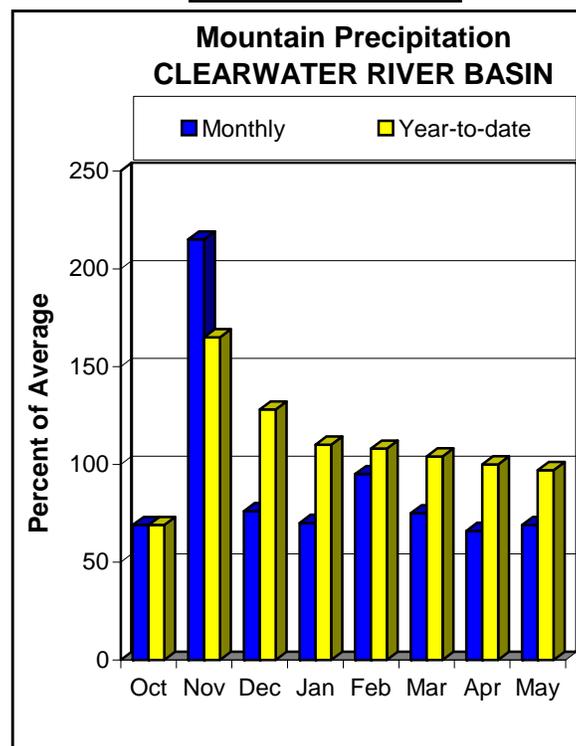
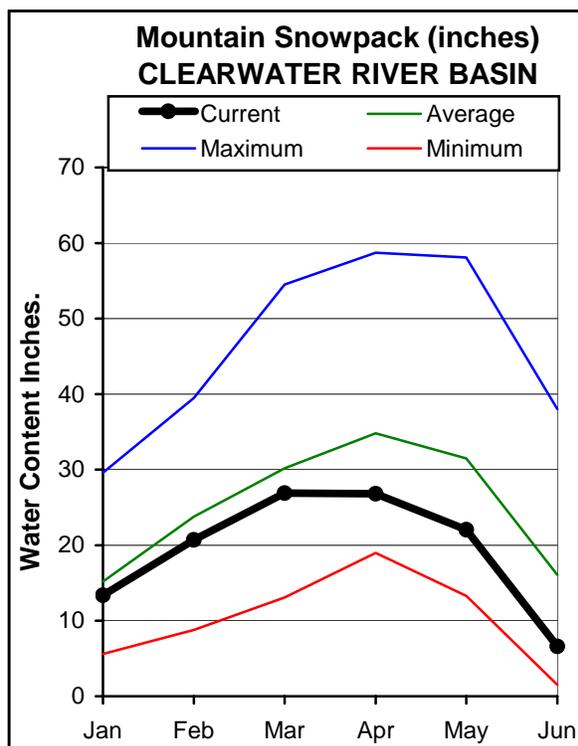
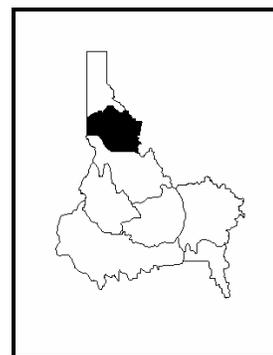
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

JUNE 1, 2007



WATER SUPPLY OUTLOOK

The water year started looking optimistic with a very wet autumn and a decent snowpack in early winter, but spring arrived early deteriorating the water supply outlook. The snowpack is grim and currently only 40% of normal for June 1. The North Fork Clearwater basin snowpack is 48% of normal, while the Lochsa drainage is reporting bare ground at all its snow measuring sites. To add insult to injury, May precipitation was 69% of normal. The precipitation for the water year looks good at 97% average because of the fall rains and is the second highest in the state behind the Panhandle Region. With the lack of snow in the mountain and reduced flood control storage demands, Dworshak reservoir is storing 109% of average, 95% capacity. Dworshak Reservoir inflow forecast is for only 44% of normal for June-September. Similarly, the Selway and Lochsa rivers are forecast at only about 40% of average. Peak flows have occurred and streams are receding. The Clearwater River at Spalding is forecast at 44% of average, 7th lowest since records start in 1926. Runoff started early with observed runoff at Spalding at 128% of average in March and 80% in April and May leaving little snow and less to come the rest of the summer.

CLEARWATER RIVER BASIN
Streamflow Forecasts - June 1, 2007

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)				
		90% (1000AF)		70% (1000AF)		Chance Of Exceeding * 50% (1000AF) (% AVG.)			30% (1000AF)		10% (1000AF)	
SELWAY near Lowell	JUN-JUL	150	270	355	38	440	560	945				
	JUN-SEP	225	360	450	43	540	675	1050				
LOCHSA near Lowell	JUN-JUL	99	186	245	37	305	390	655				
	JUN-SEP	162	255	320	44	385	480	735				
DWORSHAK RESV INFLOW (1,2)	JUN-JUL	154	305	390	41	475	660	960				
	JUN-SEP	200	400	495	44	590	805	1120				
CLEARWATER at Orofino (1)	JUN-JUL	295	550	750	38	950	1390	1970				
	JUN-SEP	400	845	975	44	1200	1700	2220				
CLEARWATER at Spalding (1,2)	JUN-JUL	475	845	1150	39	1450	2120	2960				
	JUN-SEP	605	1130	1470	44	1810	2570	3370				

CLEARWATER RIVER BASIN Reservoir Storage (1000 AF) - End of May					CLEARWATER RIVER BASIN Watershed Snowpack Analysis - June 1, 2007				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of		
		This Year	Last Year	Avg			Last Yr	Average	
DWORSHAK	3468.0	3308.2	3133.5	3040.7	North Fork Clearwater	8	64	48	
					Lochsa River	2	0	0	
					Selway River	4	9	6	
					Clearwater Basin Total	14	55	40	

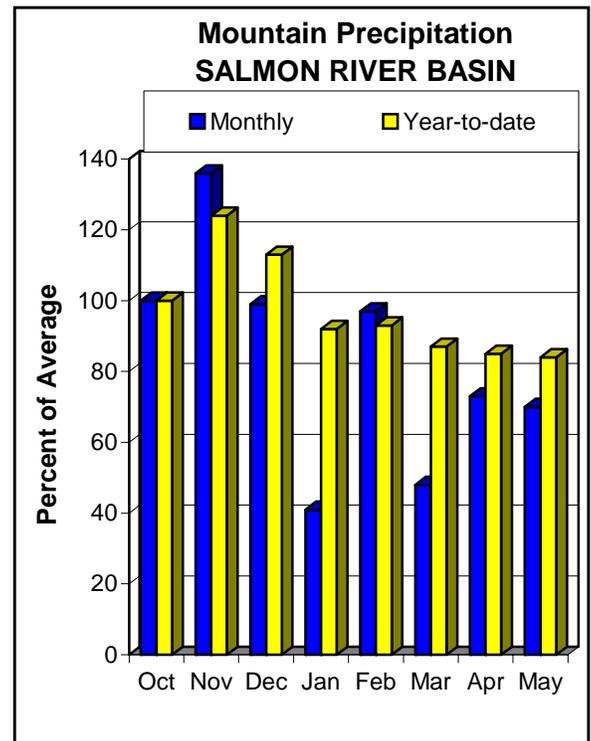
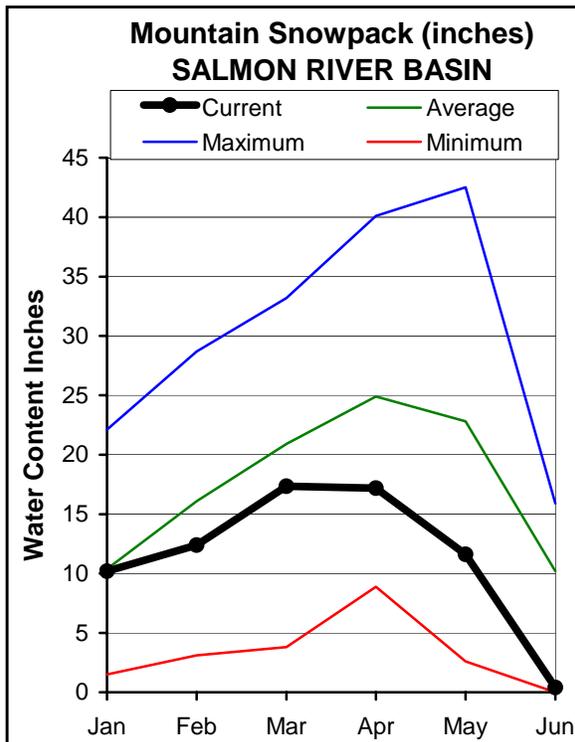
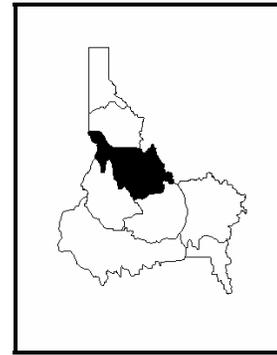
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The average is computed for the 1971-2000 base period.

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

SALMON RIVER BASIN

JUNE 1, 2007



WATER SUPPLY OUTLOOK

As of June 1, the snowpack in the Salmon River basin is only at 11% of normal. The Lemhi drainage has the most snow at 43% of normal while much of the Salmon watershed has already melted out. On average, 17 out of 22 SNOTEL sites normally have snow on June 1, but currently only 4 sites have measurable snow. In other low snow years, spring rains has helped the water supply situation, but this May only 70% of normal precipitation fell. Precipitation since October 1 is below average at 84%. The Salmon River at White Bird, Lemhi River near Lemhi, and Middle Fork Salmon River residual streamflow forecasts for June through September reflect the low snow year and are projected at 30-40% of average. Peak streamflow has already occurred for the season and streams are on the recession for the rest of summer. The Middle Fork Salmon River at the Middle Fork Lodge is predicted to reach a gauge height of 2 feet or a flow of 815 cfs by the end of June or early July for those considering whether to float the upper reach or fly into the Indian Creek landing strip. Streamflow levels will be low earlier this year, so plan accordingly.

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SALMON RIVER BASIN
Streamflow Forecasts - June 1, 2007

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Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)				
		90%		70%		50%			30%		10%	
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)		(1000AF)	(1000AF)		
SALMON at Salmon (1)	JUN-JUL	80	148	178	34	210	275	530				
	JUN-SEP	189	280	320	48	360	450	670				
Lemhi River nr Lemhi	JUN-JUL	9.8	13.0	15.4	30	18.0	22	52				
	JUN-SEP	19.9	25	29	41	33	40	71				
MF Salmon at MF Lodge	JUN-JUL	44	102	142	32	182	240	445				
	JUN-SEP	87	160	210	40	260	335	530				
SALMON at White Bird (1)	JUN-JUL	385	710	965	30	1220	1790	3220				
	JUN-SEP	615	1210	1510	39	1810	2480	3850				

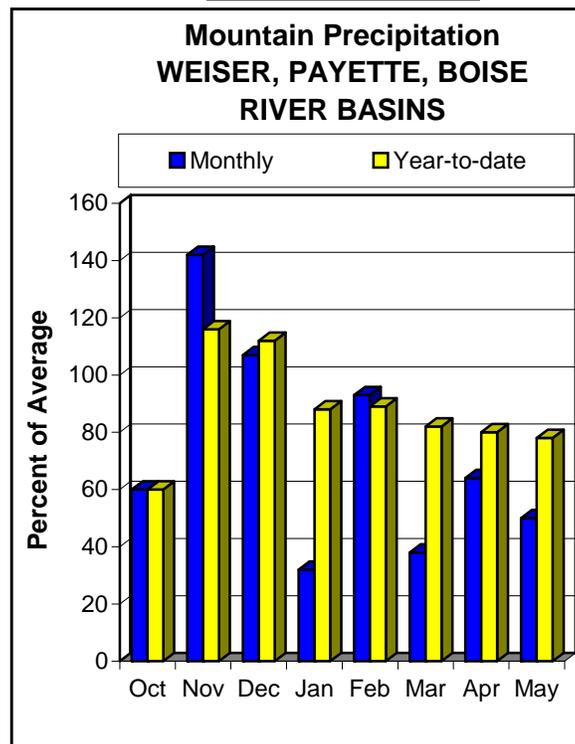
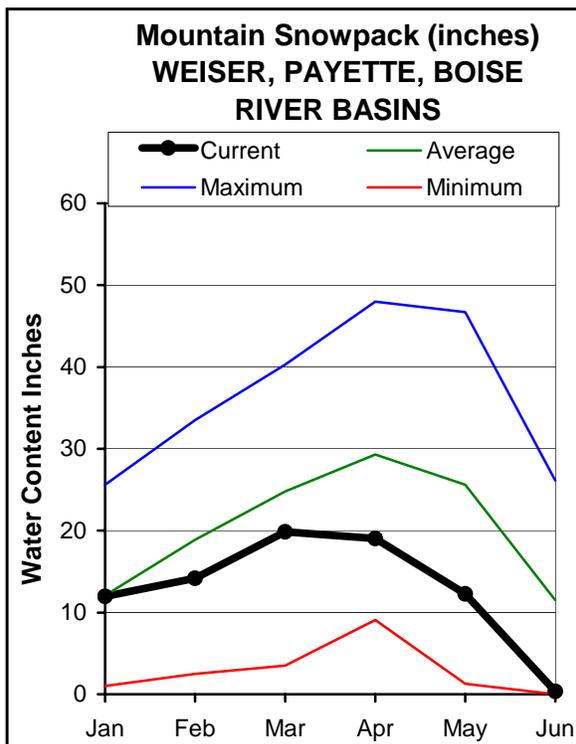
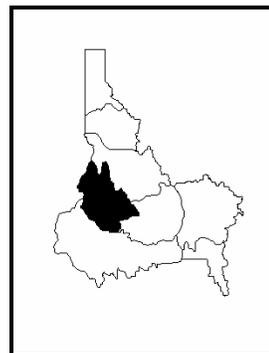
SALMON RIVER BASIN Reservoir Storage (1000 AF) - End of May				SALMON RIVER BASIN Watershed Snowpack Analysis - June 1, 2007				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					Salmon River ab Salmon	8	1	1
					Lemhi River	6	71	43
					Middle Fork Salmon River	3	1	1
					South Fork Salmon River	3	1	1
					Little Salmon River	4	0	0
					Salmon Basin Total	23	15	11

* 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 JUNE 1, 2007



WATER SUPPLY OUTLOOK

Summer arrived a month early. Out of 26 total SNOTEL sites in the Weiser, Payette and Boise basins only Deadwood Summit, Vienna Mine, and Trinity Mountain are still measuring snow as of June 1. In an average year 13 sites would still have snow. When compared with historical records the June 1 snowpack is fifth lowest since 1982 for the Boise and Payette basins. Precipitation this spring continues to be well below average. May precipitation was 50% of average, worse than April but better than March. Precipitation since October 1 is 78% of average for the three basins. Spring precipitation was very low; in fact March through May precipitation at Atlanta, Banner Summit and Dollarhide Summit SNOTEL sites was the lowest on record since 1982. Peak streamflows occurred in mid-May and now the recreational boating season is in full swing. With the arrival of record heat, the rivers will be the place to find relief. June-September streamflow is forecast at 40% of average for the Weiser River, 36% for the Boise River near Boise and 42% for the Payette River near Horseshoe Bend. Arrowrock Reservoir, currently 111% of average, 78% of capacity, is being drafted to meet irrigation demand. Lucky Peak and Anderson Ranch remain near full. Surface water supply shortages are expected for some users in the Boise basin. Supplies should be adequate for the Payette basin as Cascade Lake and Deadwood Reservoirs are both full and will provide good river running flows through the summer; the same is true for Anderson Ranch Reservoir and the South Fork Boise River.

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

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)				
		90%		70%		50%			30%		10%	
		(1000AF)	(1000AF)	(1000AF)	(1000AF)	(1000AF)	(1000AF)		(1000AF)	(1000AF)	(1000AF)	(1000AF)
WEISER near Weiser (1)	JUN-JUL	11.0	25	34	31	44	71	110				
	JUN-SEP	25	44	55	40	67	97	139				
SF PAYETTE at Lowman	JUN-JUL	67	79	87	36	96	109	245				
	JUN-SEP	104	119	130	43	141	159	300				
DEADWOOD RESERVOIR Inflow (1,2)	JUN-JUL	7.6	17.5	22	33	26	36	66				
	JUN-SEP	10.7	23	28	38	33	45	74				
LAKE FORK PAYETTE near McCall	JUN-JUL	13.8	17.3	20	44	23	27	45				
	JUN-SEP	15.3	19.2	22	46	25	30	48				
NF PAYETTE at Cascade (1,2)	JUN-JUL	31	58	78	36	98	142	215				
	JUN-SEP	35	66	87	37	108	155	235				
NF PAYETTE nr Banks (2)	JUN-JUL	37	53	92	35	131	188	265				
	JUN-SEP	41	65	106	37	147	210	290				
PAYETTE nr Horseshoe Bend (1,2)	JUN-JUL	106	205	260	37	315	445	710				
	JUN-SEP	158	290	350	42	410	540	830				
BOISE near Twin Springs (1)	JUN-JUL	37	71	87	31	103	137	280				
	JUN-SEP	70	112	131	39	150	192	335				
SF BOISE at Anderson Ranch Dam (1,2)	JUN-JUL	21	54	69	31	84	117	225				
	JUN-SEP	35	73	91	35	109	147	260				
MORES CREEK near Arrowrock Dam	JUN-JUL	3.3	5.9	8.0	25	10.5	14.7	32				
	JUN-SEP	6.8	10.5	13.4	36	16.7	22	37				
BOISE near Boise (1,2)	JUN-JUL	59	128	159	28	190	260	565				
	JUN-SEP	129	210	245	36	280	360	680				

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

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

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
MANN CREEK	11.1	8.6	11.0	10.5	Mann Creek	1	0	0
CASCADE	693.2	679.0	621.0	588.6	Weiser River	3	0	0
DEADWOOD	161.9	164.3	165.2	139.0	North Fork Payette	7	0	0
ANDERSON RANCH	450.2	431.2	440.6	388.7	South Fork Payette	4	1	1
ARROWROCK	272.2	213.3	243.1	191.9	Payette Basin Total	12	1	0
LUCKY PEAK	293.2	292.7	254.0	242.3	Middle & North Fork Boise	5	6	5
LAKE LOWELL (DEER FLAT)	165.2	97.0	104.3	133.5	South Fork Boise River	6	5	5
					Mores Creek	2	0	0
					Boise Basin Total	10	4	4
					Canyon Creek	1	0	0

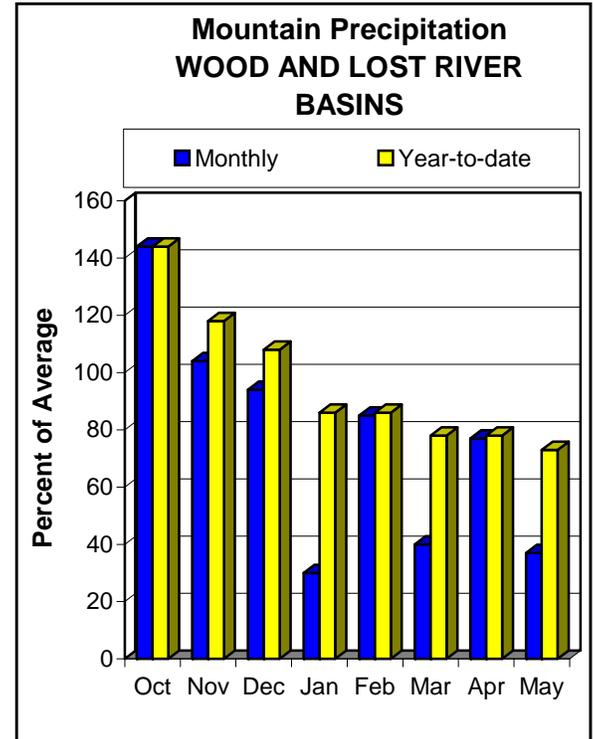
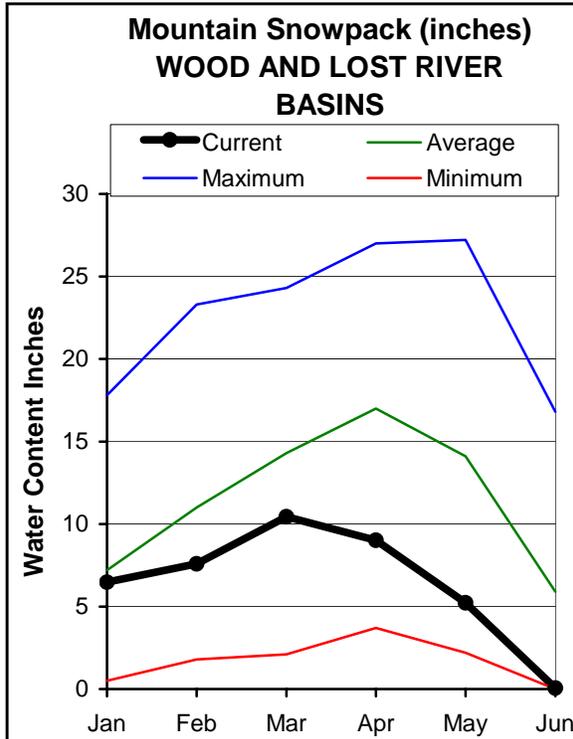
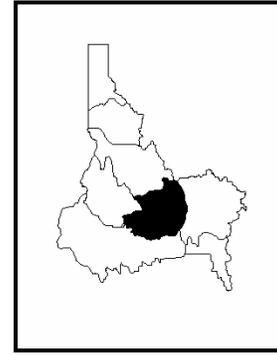
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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.

WOOD and LOST RIVER BASINS

JUNE 1, 2007



WATER SUPPLY OUTLOOK

At SNOTEL sites measuring the Wood and Lost River snowpack the only flakes to survive until June 1 are at Vienna Mine, but you'll have to take our word for it because they'll be melted by June 2nd. In an average year 11 of the 23 SNOTEL sites would still be measuring snow. Simply put, its one of the lowest June 1 snowpacks since SNOTEL records started. May precipitation was 37% of average, the sixth consecutive month with below average amounts. Water year-to-date precipitation since October 1 dropped further and is now 73% of average. Peak streamflows on the Big Wood and Big Lost rivers and Camas Creek, occurred about a month early and were about three-quarters of median values. Camas Creek has been receding for almost two and a half months and as of June 1 it is trickling at only about 7 cfs. This is an unusually low amount; in fact it is half of what is referred to statistically as the tenth percentile flow. The ten percentile flow (14 cfs) has only occurred for 10% of the June 1 values since measurements began on Camas Creek in 1912. June through September streamflow volumes are forecast between 10-35% for the Big and Little Wood basins and at about 24% for the Big and Little Lost basins. Storage in Mackay, Magic and Little Wood reservoirs ranges from 65-85% of capacity and drafting has begun for this season. The Surface Water Supply Index (SWSI) which combines streamflow and reservoir volumes indicates that the Big Wood, Little Wood, Big Lost and Little Lost basins will all experience irrigation shortages. SWSI values for the Little Lost basin are the lowest (-4.1) for the analysis period of 1971-2006. In the Big Lost basin only 2004 and 1992 had SWSI values less than this year.

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

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		90%		50%		10%		
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	
BIG WOOD at Hailey (1)	JUN-JUL	15.0	24	29	20	34	48	144
	JUN-SEP	26	41	48	27	56	76	177
BIG WOOD ab Magic Reservoir	JUN-JUL	5.0	9.0	12.0	12	25	44	102
	JUN-SEP	5.0	10.0	14.0	12	29	50	116
CAMAS CREEK near Blaine	JUN-JUL	0.3	0.4	0.5	4	1.2	2.9	13.2
	JUN-SEP	0.6	0.9	1.5	11	2.7	4.9	14.0
BIG WOOD below Magic Dam (2)	JUN-JUL	5.0	8.0	12.0	11	28	50	114
	JUN-SEP	7.0	10.0	16.0	12	32	55	130
LITTLE WOOD R ab High Five Ck	JUN-JUL	2.8	5.0	6.8	21	8.9	12.6	33
	JUN-SEP	6.3	10.1	13.3	34	16.9	23	39
LITTLE WOOD near Carey (2)	JUN-JUL	2.6	4.2	6.7	21	11.5	18.5	32
	JUN-SEP	5.5	8.0	13.3	34	18.6	26	39
BIG LOST at Howell Ranch	JUN-JUL	11.0	17.0	23	20	29	40	114
	JUN-SEP	17.0	26	34	25	43	57	139
BIG LOST bl Mackay Reservoir	JUN-JUL	7.7	12.6	20	21	27	38	96
	JUN-SEP	11.0	20	30	24	40	54	127
LITTLE LOST bl Wet Creek	JUN-JUL	2.8	4.0	5.0	28	6.1	7.9	18.1
	JUN-SEP	2.6	4.4	5.9	23	7.6	10.6	26

WOOD AND LOST RIVER BASINS Reservoir Storage (1000 AF) - End of May					WOOD AND LOST RIVER BASINS Watershed Snowpack Analysis - June 1, 2007			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
MAGIC	191.5	140.7	181.7	154.1	Big Wood ab Hailey	7	1	1
LITTLE WOOD	30.0	19.6	27.6	27.4	Camas Creek	2	0	0
MACKAY	44.4	37.3	38.8	34.9	Big Wood Basin Total	9	1	1
					Fish Creek	0	0	0
					Little Wood River	4	0	0
					Big Lost River	4	0	0
					Little Lost River	3	0	0
					Birch-Medicine Lodge Cree	2	0	0
Camas-Beaver Creeks	2	0	0					

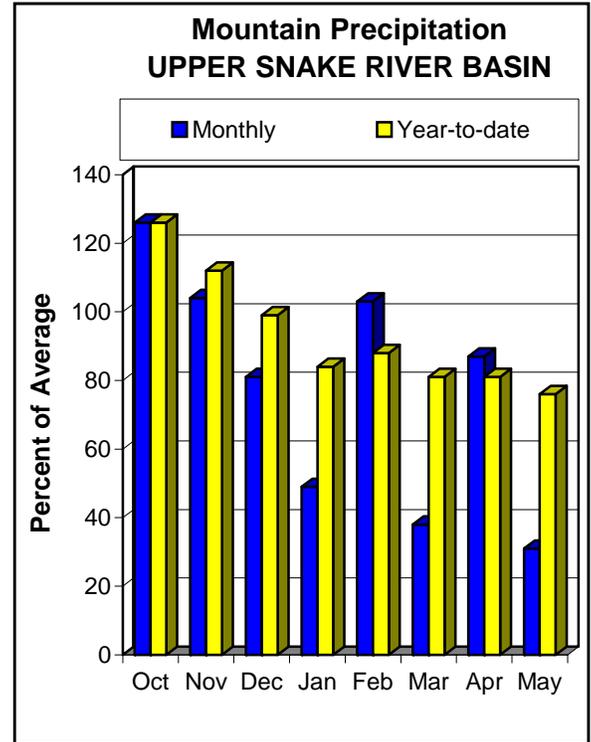
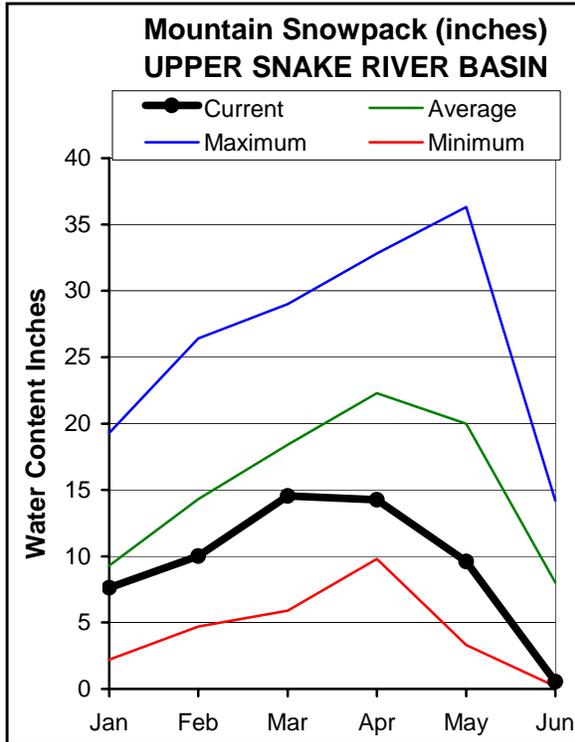
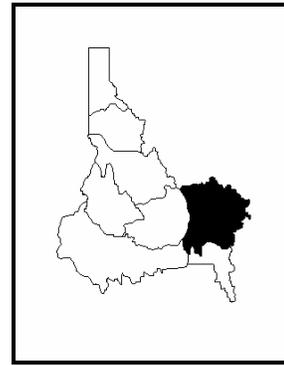
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

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

UPPER SNAKE BASINS

JUNE 1, 2007



WATER SUPPLY OUTLOOK

A combination of lack of precipitation in January (49% of average) and a warm, dry month of May led to a snowpack of only 7% of normal for June 1. In a normal year, snow would remain until late June or early July. Hopes of ample spring precipitation did not pan out as May brought in only 33% of normal leaving the basin at 76% of normal for the water year. Lewis Lake Divide SNOTEL site received 6.1 inches of precipitation March-May and was the driest since the site was installed in the early 1980s. In contrast, in 1991 the site received 21.5 inches of precipitation in March-May, highest on record. Average March-May precipitation is 13.9 inches. The lack of winter snow and spring precipitation is taking its toll on both rivers and reservoirs. Most of the rivers in the Upper Snake basin are forecast at 30-45% of the normal for the June-September period. Two exceptions are the Henrys Fork near Ashton at 63% of normal, its second lowest amount since 1971 and the Portneuf River near Topaz forecast at 55%. Irrigation supplies will be marginally adequate given the low streamflow projections even with the eight major upper Snake Reservoirs at 81% of capacity, 101% average. Palisades Reservoir is 80% of capacity, 108% of average while Jackson Lake is 99% of capacity, 146% of average. American Falls Reservoir, which is now being drafted, is 77% of average, 87% full. The reservoir storage is the good news but the lack of spring precipitation has resulted in earlier demands. Reservoirs will be low by the summer's end. Some irrigation shortages are expected depending upon your water source and water right. Based on the SWSI (Surface Water Supply Index), which includes reservoir storage and projected streamflow for June-September, the Snake River near Heise's summer outlook will be the 5th driest for the 1971-2006 period, similar to the 2002 season.

UPPER SNAKE RIVER BASIN
Streamflow Forecasts - June 1, 2007

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)				
		90%		70%		50%			30%		10%	
		(1000AF)	(1000AF)	(1000AF)	(1000AF)	(1000AF)	(1000AF)		(1000AF)	(1000AF)	(1000AF)	(1000AF)
		Chance Of Exceeding *										
		(1000AF) (% AVG.)										
HENRYS FORK near Ashton (2)	JUN-JUL	99	119	133	54	148	172	245				
	JUN-SEP	220	250	275	63	300	335	440				
HENRYS FORK near Rexburg (2)	JUN-JUL	265	325	370	45	415	475	830				
	JUN-SEP	525	610	665	52	720	805	1280				
FALLS RIVER nr Ashton (2)	JUN-JUL	44	60	72	36	86	108	199				
	JUN-SEP	86	110	127	47	146	176	270				
TETON RIVER NEAR DRIGGS	JUN-JUL	18.0	24	29	27	34	43	108				
	JUN-SEP	35	47	56	37	66	83	153				
TETON near St. Anthony	JUN-JUL	57	72	83	35	95	114	240				
	JUN-SEP	98	119	134	42	150	175	320				
SNAKE at Flagg Ranch	JUN-JUL	31	52	74	26	96	128	285				
	JUN-SEP	51	88	113	34	138	175	335				
SNAKE nr Moran (1,2)	JUN-JUL	44	83	116	24	149	220	490				
	JUN-SEP	64	117	157	27	197	285	580				
PACIFIC CREEK at Moran	JUN-JUL	10.0	11.0	24	24	37	56	100				
	JUN-SEP	13.0	18.0	32	30	46	65	106				
SNAKE ab resv nr Alpine (1,2)	JUN-JUL	162	310	390	27	470	650	1470				
	JUN-SEP	220	430	535	29	640	880	1840				
GREYS above Palisades	JUN-JUL	44	58	67	36	76	90	188				
	JUN-SEP	66	89	105	43	121	144	245				
SALT near Etna	JUN-JUL	21	29	52	32	75	109	162				
	JUN-SEP	38	65	96	40	127	172	240				
SNAKE nr Irwin (1,2)	JUN-JUL	215	435	555	29	675	945	1950				
	JUN-SEP	360	660	795	32	930	1230	2500				
SNAKE near Heise (2)	JUN-JUL	310	460	590	29	720	915	2050				
	JUN-SEP	485	705	860	33	1010	1240	2650				
WILLOW CREEK nr Ririe (2)	JUN-JUL	0.3	1.7	3.2	16	5.3	9.2	20				
BLACKFOOT RESV INFLOW	JUN-JUN	1.5	2.5	3.9	13	7.8	13.4	31				
SNAKE nr Blackfoot (1,2)	JUN-JUL	275	680	865	32	1050	1450	2670				
	JUN-SEP	535	1100	1350	37	1600	2160	3690				
PORTNEUF at Topaz	JUN-JUL	12.8	15.6	17.6	48	19.8	23	37				
	JUN-SEP	23	27	30	55	33	38	55				

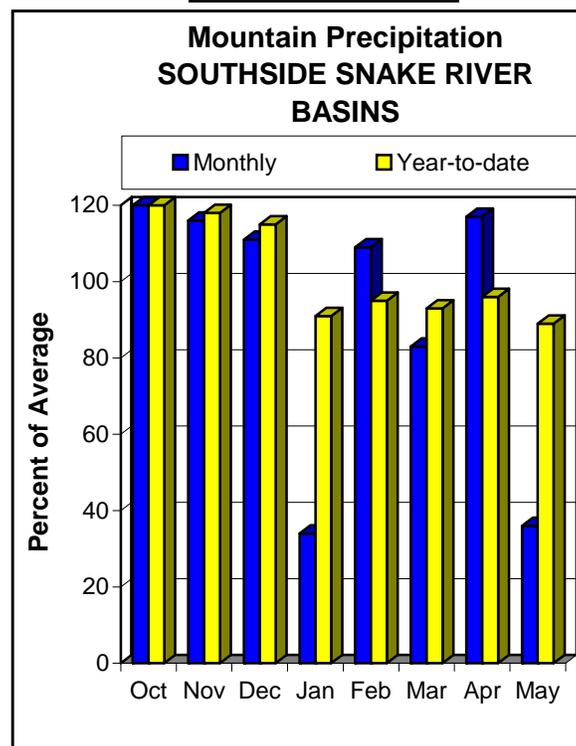
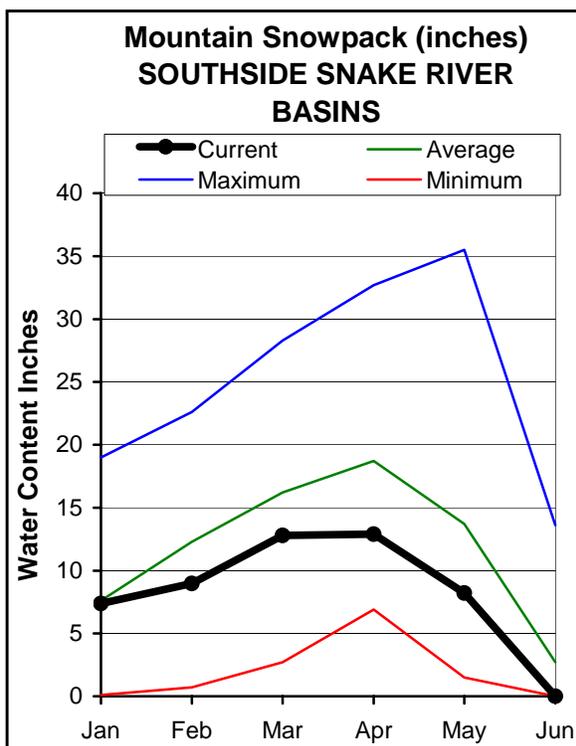
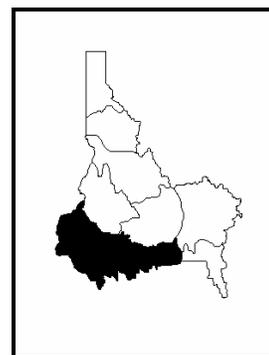
UPPER SNAKE RIVER BASIN Reservoir Storage (1000 AF) - End of May					UPPER SNAKE RIVER BASIN Watershed Snowpack Analysis - June 1, 2007			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
HENRYS LAKE	90.4	86.8	86.6	89.2	Henry's Fork-Falls River	7	0	0
ISLAND PARK	135.2	131.7	134.2	132.8	Teton River	2	0	0
GRASSY LAKE	15.2	15.3	13.9	14.4	Henry's Fork above Rexburg	9	0	0
JACKSON LAKE	847.0	838.3	802.1	572.6	Snake above Jackson Lake	5	13	11
PALISADES	1400.0	1113.9	1068.8	1033.6	Gros Ventre River	2	34	22
RIRIE	80.5	64.1	81.2	70.3	Hoback River	5	29	9
BLACKFOOT	348.7	192.5	218.1	287.8	Greys River	4	12	5
AMERICAN FALLS	1672.6	1285.6	1611.0	1476.1	Salt River	3	0	0
					Snake above Palisades	17	15	9
					Willow Creek	2	0	0
					Blackfoot River	2	0	0
					Portneuf River	3	0	0
					Snake abv American Falls	28	10	7

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

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

SOUTHSIDE SNAKE RIVER BASINS JUNE 1, 2007



WATER SUPPLY OUTLOOK

There are 22 SNOTEL sites in the four Southside Snake basins and as of June 1 none of them have snow. In this situation we could write something like "it's the lowest amount of snow ever recorded" and we would be correct, however it would be misleading. Once a site hits zero it can't go lower. The historical record shows that no snow on June 1 is relatively common; it's the 9th time since 1982 that it has occurred in the Salmon Falls and Bruneau basins and the 8th year in a row there has been no snow at sites in the Oakley Basin. In an average year, 8 of the 22 SNOTEL sites would still have snow. Its last month's news that these basins had a poor winter, this month's news is that it is still dry. May precipitation was 36% of average, the second lowest monthly total this water year. Precipitation since October 1 stands at 89% of average. Streamflow forecasts are for 35% of average in the Oakley basin, 25% for Salmon Falls Creek, 32% for the Bruneau River and 37% for Owyhee Reservoir inflow. The streamflow volume for the Bruneau River is the fifth lowest amount since 1971. Lack of spring rain and increasing irrigation demand has started to draw down reservoirs across the region. Oakley reservoir is 60% full, 101% of average; Salmon Falls is 49% full, 88% of average; Brownlee is 99% full, 111% of average; Owyhee is 67% full, 79% of average. Irrigators in the Owyhee, Salmon Falls and Oakley basins will have adequate irrigation supplies this year due to the good reservoir storage.

SOUTHSIDE SNAKE RIVER BASINS
Streamflow Forecasts - June 1, 2007

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)		
		90%		70%		50%			10%	
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)		(1000AF)	(1000AF)
OAKLEY RESERVOIR INFLOW	JUN-JUL	0.8	1.3	2.0	24	2.8	4.3	8.2		
	JUN-SEP	1.6	2.9	3.9	35	5.1	7.1	11.3		
SALMON FALLS CREEK nr San Jacinto	JUN-JUL	1.4	2.4	3.6	15	5.1	7.8	24		
	JUN-SEP	3.2	5.3	7.1	25	9.1	12.6	28		
BRUNEAU near Hot Spring	JUN-JUL	9.3	14.8	19.3	24	24	33	82		
	JUN-SEP	15.7	23	29	32	36	46	92		
OWYHEE near Rome	JUN-JUL	6.4	10.8	16.4	23	23	35	71		
	JUN-SEP	15.6	26	34	37	43	60	91		
OWYHEE RESV INFLOW (2)	JUN-JUL	9.0	17.2	23	28	60	113	82		
	JUN-SEP	17.0	29	41	37	86	151	112		
SUCCOR CK nr Jordan Valley	JUN-JUL	0.2	0.5	0.7	29	1.0	1.5	2.4		
Reynolds Creek nr Tollgate	JUN-JUL	0.2	0.3	0.6	29	0.8	1.3	1.9		

SOUTHSIDE SNAKE RIVER BASINS Reservoir Storage (1000 AF) - End of May					SOUTHSIDE SNAKE RIVER BASINS Watershed Snowpack Analysis - June 1, 2007			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
OAKLEY	75.6	45.4	63.7	45.0	Raft River	1	0	0
SALMON FALLS	182.6	89.1	132.5	101.2	Goose-Trapper Creeks	3	0	0
WILDHORSE RESERVOIR	71.5	55.6	74.0	58.4	Salmon Falls Creek	5	0	0
OWYHEE	715.0	482.6	718.6	614.6	Bruneau River	5	0	0
BROWNLEE	1420.0	1405.4	1387.4	1263.0	Reynolds Creek	5	0	0
					Owyhee Basin Total	7	0	0

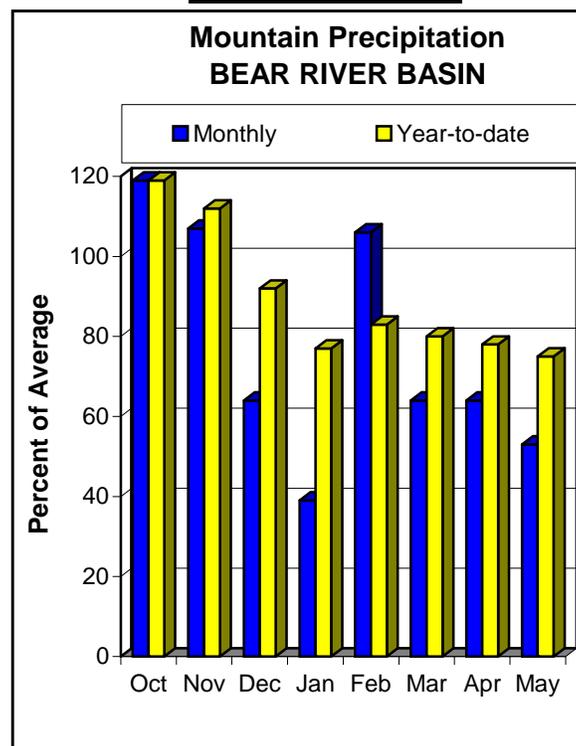
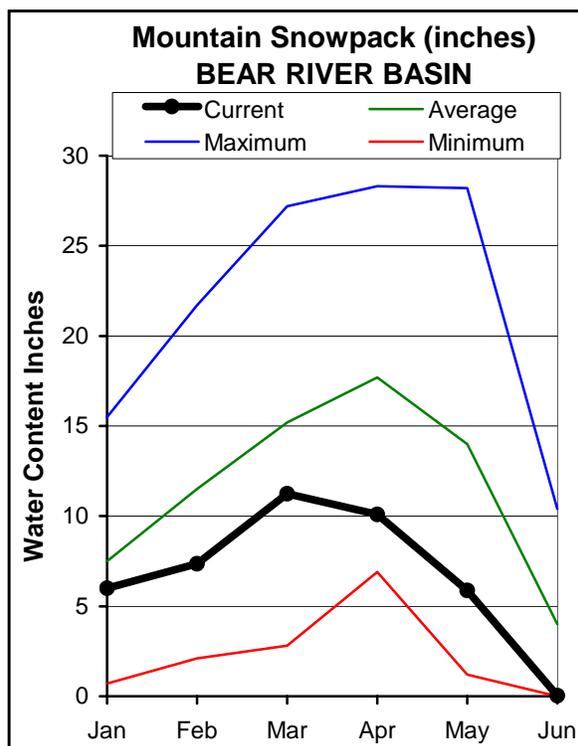
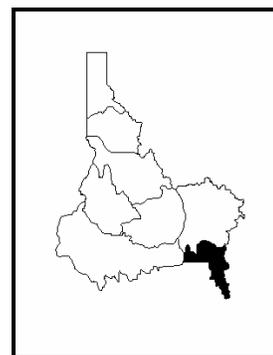
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BEAR RIVER BASIN

JUNE 1, 2007



WATER SUPPLY OUTLOOK

The combined snow water measurement for the 15 SNOTEL sites in the Bear River basin on June 1 is 0.3 inches and by the time this sentence is typed it will probably be melted. This is by no means an unusual June 1 snowpack though; since 1989 there has been three years when no snow was recorded including 1992, 1994 and 2001. Monthly precipitation in the Bear basin was only 53% of average for May; much better than the Southside Snake River basins to its east which saw only 36% of average. Precipitation since October 1 stands at 75% of average. Bear Lake is 46% full, 63% of average and should provide adequate water for this season, slightly better than last year based on the Surface Water Supply Index (SWSI). Observed streamflow at Bear River at Stewart Dam is forecast at 15% of average for June-September. Unfortunately the gains made in drought recovery in Bear Lake storage over the past couple of years will be at least partially undone by summer's end.

BEAR RIVER BASIN
Streamflow Forecasts - June 1, 2007

Forecast Point	Forecast Period	<<==== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		90%		50%		10%		
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	
Bear River nr UT-WY State Line	APR-JUL	60	68	74	66	80	88	113
	JUN-JUL	8.1	16.4	22	31	28	36	70
	APR-SEP	63	72	79	63	86	95	125
	JUN-SEP	10.9	20	27	33	34	43	82
Bear River ab Reservoir nr Woodruff	APR-JUL	25	43	56	41	69	87	136
	JUN-JUL	2.0	3.8	5.1	8	13.6	26	64
	APR-SEP	28	46	59	42	72	90	142
	JUN-SEP	3.4	6.0	8.5	12	17.5	31	71
Big Creek nr Randolph	APR-JUL	1.3	1.5	1.6	34	1.8	2.0	4.9
	JUN-JUL	0.3	0.4	0.7	29	1.1	1.8	2.3
Smiths Fork nr Border	APR-JUL	40	44	46	45	48	52	103
	APR-SEP	48	53	56	46	59	64	121
	JUN-JUL	12.8	16.4	18.9	31	21	25	61
	JUN-SEP	22	27	30	39	33	38	77
Bear River at Stewart Dam	APR-JUL	19.0	29	37	16	46	61	234
	APR-SEP	19.0	29	38	15	48	64	262
	JUN-JUL	2.0	2.0	4.0	4	24	54	110
	JUN-SEP	3.0	5.0	6.0	4	29	63	138
Little Bear River at Paradise	APR-JUL	14.4	16.0	17.1	37	18.3	20	46
	JUN-JUL	0.6	1.8	2.9	24	4.3	6.8	11.9
Logan R Abv State Dam Nr Logan	APR-JUL	59	63	66	52	69	73	126
	JUN-JUL	14.8	22	27	39	33	43	70
Blacksmith Fk Abv Up&L Dam Nr Hyrum	APR-JUL	18.3	19.9	21	44	22	24	48
	JUN-JUL	4.6	6.9	8.8	44	10.9	14.4	20

BEAR RIVER BASIN Reservoir Storage (1000 AF) - End of May					BEAR RIVER BASIN Watershed Snowpack Analysis - June 1, 2007			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BEAR LAKE	1421.0	658.5	586.6	1052.3	Smiths & Thomas Forks	3	2	2
MONTPELIER CREEK	4.0	3.2	4.0	3.3	Bear River ab WY-ID line	10	1	1
					Montpelier Creek	1	0	0
					Mink Creek	1	0	0
					Cub River	1	0	0
					Bear River ab ID-UT line	15	1	0
					Malad River	1	0	0

* 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 Reservoir 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 volumes for each reservoir, and defines the storage volumes NRCS uses when reporting capacity and current storage. In most cases, NRCS reports usable storage, which includes active and inactive storage. **(Revised Dec. 2005)**

<u>Basin/ Reservoir</u>	<u>Dead Storage</u>	<u>Inactive Storage</u>	<u>Active Storage</u>	<u>Surcharge Storage</u>	<u>NRCS Capacity</u>	<u>NRCS Capacity Includes</u>
<u>Panhandle Region</u>						
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
<u>Clearwater Basin</u>						
Dworshak	---	1452.00	2016.00	---	3468.0	Inactive+Active
<u>Weiser/Boise/Pavette Basins</u>						
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
<u>Wood/Lost Basins</u>						
Magic	Unknown	---	191.50	---	191.5	Active
Little Wood	---	---	30.00	---	30.0	Active
Mackay	0.13	---	44.37	---	44.4	Active
<u>Upper Snake Basin</u>						
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
<u>Southside Snake Basins</u>						
Oakley	---	---	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
<u>Bear River Basin</u>						
Bear Lake	5.0 MAF	119.00	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)	(% 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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