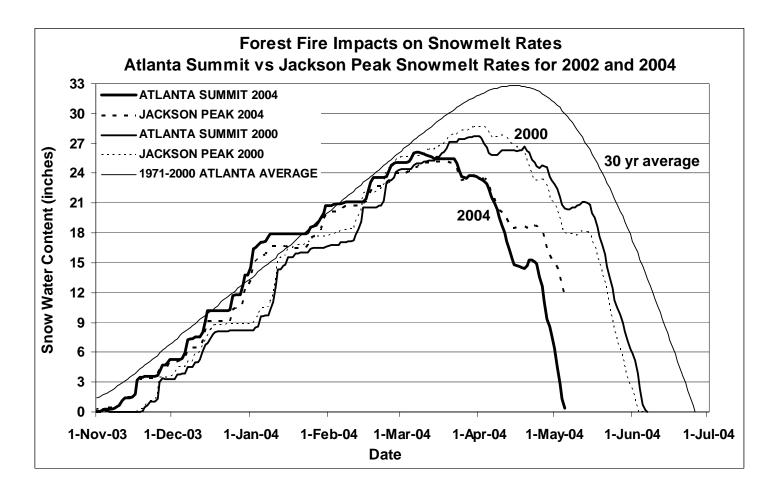


Idaho Water Supply Outlook Report June 1, 2004



In the year 2000, Atlanta Summit and Jackson Peak SNOTEL sites showed similar snowmelt rates and melt out dates as expected because they are in the same basin, at similar elevations and only 25 miles apart. However in 2004, the snow at Atlanta Summit melted at a significantly more rapid rate than the snow at Jackson Peak and it melted out nearly two full months earlier than the 30 year average melt out date. In early April, both sites held approximately 25 inches of snow water. By May 1st, Atlanta Summit held only 6.4 inches of snow water (2nd lowest value in last 55 years of data), whereas Jackson Peak still retained 15.2 inches. The difference in melt rates may be explained by a fire that burned much of the surrounding forest near the Atlanta Summit site and actually damaged some of the weather sensors in the summer of 2003. Previous years' fires across the state may have had similar effects on melt processes of local snowpacks resulting in more rapid melt and earlier melt out dates. Looking ahead to another dry summer and low water year, fire may play a large role in snow distribution and melt processes of the snowpack in years to come.

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

For more water supply and resource management information, or to subscribe to this publication Contact - - Your local Natural Resources Conservation Service Office

Natural Resources Conservation Service Snow Surveys 9173 West Barnes Drive, Suite C Boise, Idaho 83709-1574 (208) 378-5740

Internet Web Address 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, 2004

SUMMARY

Water shortages will be the most severe in central, southern and eastern Idaho. Water users should be prepared for possibly the lowest supplies yet of this five year drought in the Lemhi, Big Wood, Big Lost, Little Lost, parts of the Upper Snake and Bear basins. How severely the water shortages affect you depends on your use of water or water right. Streams are forecast at or near record low in the Lemhi, lower Big Wood, Big Lost, Little Lost and Bear basins. The Snake River near Heise is forecast at 46% of average, record low is 36% in 2001. However, when the projected streamflow is combined with the record low storage in Palisades and Jackson reservoirs, produces a Surface Water Supply Index (SWSI) of -3.9, which is record low for the 1971 to present SWSI analysis period. Elsewhere, shortages will be moderate in the Boise basin, and water supplies will be adequate in the Owyhee and Payette basins. The highest streamflow forecasts are 60-90% of average for Dworshak Reservoir inflow and Coeur d'Alene River.

SNOWPACK

Only the higher elevation snow measuring sites have snow. The snowpacks are 60% of average in the Panhandle Region and Clearwater basin and 54% in the Upper Snake which also includes a few snow measuring sites in Montana that are near average. The remaining snow in the Salmon, west-central, central and Bear basins is about 30% of average and is melted in the basins south of the Snake River.

PRECIPITATION

After March-April combined precipitation was at or near record low for 50 of the 70 Idaho SNOTEL sites, Mother Nature delivered record high May precipitation in the Clearwater basin. This is based on the 20 plus years of daily SNOTEL precipitation data. May precipitation amounts in the Clearwater ranged from 5-12 inches while average May amounts are 3-5 inches. In comparison to the amount of moisture provided by Idaho's mountainous snowpacks, Savage Pass SNOTEL in the Clearwater Basin provided 23 inches of snowmelt water for the April 1 - May 31 period. May precipitation ranged from 200-280% of average for several SNOTEL sites in central and north-central Idaho, while the rest of the state was in the 100-200% of average range.

Reservoir storage varies across the state with several full and several at or near record low levels. Magic Reservoir is 24% full, second lowest May 31 storage since 1917, only 1992 had less water because the irrigation water was nearly depleted by June 1. On May 31, Mackay Reservoir was storing only 13,000 acre-feet, 2nd lowest since storage started in 1926, only 1934 had less water. Bear Lake is 16% full, at the lowest level since the 1930s. Blackfoot Reservoir is 17% full, 21 % of average, lowest since 1934. Water rights will not fill in Jackson Lake and Palisades Reservoir whose combined capacity is 37% of capacity, half of average. Oakley and Salmon Falls reservoirs are about 25% of full. Bear Lake is 16% of capacity and will be empty in terms of usable water by mid-summer. On the positive side, water storage facilities that are full or near full include: Pend Oreille, Coeur D'Alene, Dworshak, Cascade, Mann Creek, Lucky Peak, Little Wood and Island Park.

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

Streamflow forecasts are now at or near record low volumes in the Lemhi, Big Wood, Big Lost and Little Lost basins. The lowest streamflow forecasts in the state this season were in the Bear River at 5% of average, but now Camas Creek and Magic Reservoir inflow are also forecast at 5% of average for the June-July period. The Big Lost, Little Lost and Lemhi rivers are also forecast near record low at about 20% of average. The June-September streamflow for the Snake River near Heise calls for 46% of average, record low is 36% in 2001. However, when combined with record low storage in Palisades and Jackson, produces a Surface Water Supply Index (SWSI) of -3.9, which is record low for the 1971 to present analysis period. Central and southeastern Idaho water users should be prepared for possibly the lowest supplies of this five year drought. Shortage will occur for the Upper Snake water users, severity depends on your water use or water right.

Previously the SWSI was only updated during the planning season January – May. Starting this year, this index will be updated the beginning of each month throughout the summer because of increased interest in its ability to monitor drought conditions. The monthly values will be posted on the Idaho NRCS Snow Survey Water Supply web page under 'Drought and Surface Water Supply Index' at this address: http://www.id.nrcs.usda.gov/snow/watersupply/swsi-main.html

Numerous graphs are available for users to access and visualize the wet and dry cycles for their basin of interest.

RECREATION

Snowmelt streamflow peaks have occurred in Idaho, nearly a month earlier than normal in some basins. Hot temperatures in early June may produce one more slight rise in headwater streams north of the Snake River and in the Upper Snake basin, but without additional precipitation the increases will not be very great. Headwater streams will return to baseflow levels earlier than normal and remain below normal for the rest of summer. Cascade Reservoir is full while Anderson Ranch Reservoir is 89% full. These reservoirs will provide good flows for boating through August or into September. Drafting of reservoirs is occurring in other reservoirs as outflows exceed inflows. Most southern and central Idaho reservoirs will be at their minimum storage levels by the end of summer.

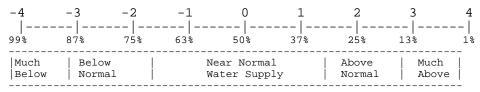
IDAHO SURFACE WATER SUPPLY INDEX (SWSI) As of June 1, 2004

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
CLEARWATER	-1.9	2000	NA
SALMON	-2.9	2001	NA
WEISER	-1.5	2000	NA
PAYETTE	-2.7	2002	NA
BOISE	-2.1	2002	-2.1
BIG WOOD	-3.7	2001	-1.0
LITTLE WOOD	-2.7	2002	-2.0
BIG LOST	-3.9	1992	-0.5
LITTLE LOST	-3.9	1994	0.0
SNAKE (HEISE)	-3.9	2001	-2.0
OAKLEY	-2.5	2001	-1.0
SALMON FALLS	-3.2	2002	-1.0
BRUNEAU	-2.5	2003	NA
BEAR RIVER	-3.9	2003	-3.8

SWSI SCALE, PERCENT CHANCE OF EXCEEDANCE, AND INTERPRETATION

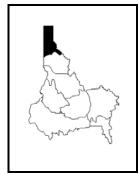


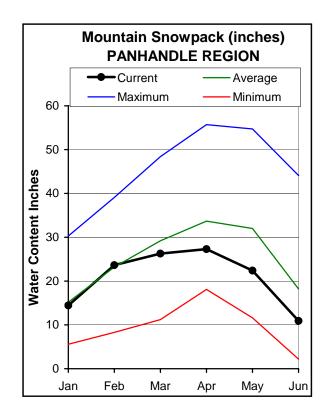
NA = Not Applicable

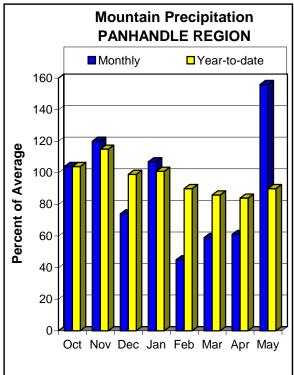
Note: The Percent Chance of Exceedance is an indicator of how often a range of SWSI values might be expected to occur. Each SWSI unit represents about 12% of the historical occurrences. As an example of interpreting the above scale, the SWSI can be expected to be greater than -3.0, 87% of the time and 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.

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PANHANDLE REGION JUNE 1, 2004







WATER SUPPLY OUTLOOK

Monthly precipitation in May was 156% of average and above average for the first time since January. Water year to date precipitation increased to 90% of average, which is the same as last year. The remaining snow varies but is about 60% of average and the lowest June 1 snowpack in the Panhandle Region since 2001. Coeur d'Alene Lake is 96% of its summer level. The Spokane basin snowpack is 39% of average, 81% of last year. Residual streams are projected at 70% of average for the Spokane River and should be enough to maintain water levels in Coeur d'Alene Lake through Labor Day. The Pend Oreille basin snow is 64% of average, the lake is 84% of its summer level, and the June-September inflow is projected at 68% of average. Other streamflow tributaries, such as Smith, Boundary and Moyie rivers are forecast at 60-70% of average. With streams peaking earlier and lack of mountain snow to sustain streamflows this summer, streams will return to below average baseflows for the rest of summer. Water supplies will be less than last year, but should still be adequate to mitigate drought effects especially when compared to southern Idaho.

PANHANDLE REGION Streamflow Forecasts - June 1, 2004

=======================================					une 1, 200				
							===== Wetter		
Forecast Point	Forecast Period	90% (1000AF	70% (1000 <i>A</i>	5 ! AF)	50% (Most (1000AF)	Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
KOOTENAI at Leonia (1,2)	JUN-JUL JUN-SEP	2166 3042	2317 3237	, į	2420 3370	62 67	2610 3600	3030 4100	3920 5000
MOYIE RIVER at Eastport	JUN-JUL JUN-SEP	90 99	96 106	!	100 110	69 69	113 125	133 147	145 160
SMITH CREEK	JUN-JUL JUN-SEP	25 26	29 31	!	32 35	64 63	38 43	48 54	50 56
BOUNDARY CREEK	JUN-JUL JUN-SEP	23 26	26 29		27 31	59 60	31 36	38 42	46 52
CLARK FK at Whitehorse Rpds (1,2)	JUN-JUL JUN-SEP	3361 4105	3616 4412	!	3790 4620	67 68	 4260 5140	5290 6290	5620 6750
PEND OREILLE Lake Inflow (2)	JUN-JUL JUN-SEP	3656 4399	3926 4721	!	4110 4940	67 68	 4620 5500	5370 6330	6120 7280
PRIEST near Priest River (1,2)	JUN-JUL JUN-SEP	176 211	190 228	!	200 240	69 70	 225 270	280 330	290 345
COEUR D'ALENE at Enaville	JUN-JUL JUN-SEP	74 105	114 148	!	141 178	89 90	 168 206	206 251	159 198
ST. JOE at Calder	JUN-JUL JUN-SEP	162 210	210 260	!	245 295	65 66	 280 330	330 380	380 450
SPOKANE near Post Falls (2)	JUN-JUL JUN-SEP	270 345	390 475	!	475 560	70 72	 560 645	680 775	675 775
SPOKANE at Long Lake (2)	JUN-JUL JUN-SEP	400 585	535 730	!	625 825	74 78	 715 925	850 1065	840 1060
PANHANI Reservoir Storage (100	EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE	======= of May	======	:====	 	Watershed Si	' PANHANDLE REG nowpack Analys:	ION	. 2004
	 Usable		====== ble Stora		 	========	 Numbe:		======================================
Reservoir	Capacity	This Year	Last Year	Avg		rshed	of Data Si	tes Last 1	_
HUNGRY HORSE	3451.0		2988.0	2588.0	!		ers Ferry 8	======================================	49
FLATHEAD LAKE	1791.0	1593.0	1547.0	1499.2	 Moyie	e River	1	0	0
NOXON RAPIDS	335.0	322.0	332.7	313.6	 Pries	st River	2	59	73
PEND OREILLE	1561.3	1318.7	1222.7	1333.1	Pend	Oreille Rive	er 45	65	64
COEUR D'ALENE	238.5	228.5	216.5	270.4	 Ratho	drum Creek	1	0	0
PRIEST LAKE	119.3	121.6	136.0	138.5	Hayde	en Lake	0	0	0
					Coeu	r d'Alene Riv	ver 4	74	10
					st.	Joe River	4	79	66

Spokane River

Palouse River

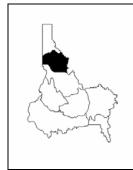
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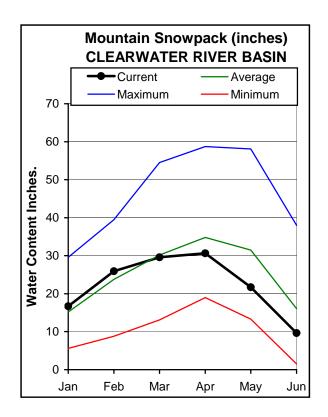
_______ * 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

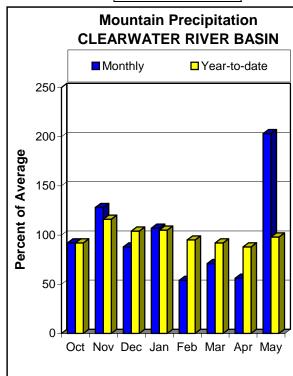
⁽¹⁾ - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

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

CLEARWATER RIVER BASIN JUNE 1, 2004







WATER SUPPLY OUTLOOK

Record high precipitation fell in May at nearly all the Clearwater basin SNOTEL sites. This is based on the 20 plus years of daily SNOTEL precipitation data. May precipitation, which was the highest in the state at 200% of average, helped, but streams are receding with the return of sunny weather and lack of mountainous snow to sustain the flows. May precipitation amounts ranged from 5-12 inches while average May amounts are 3-5 inches. Water year to date precipitation amounts increased to 97% of average from 88% a month ago. The greatest amounts fell east of Pierce in the North Fork Clearwater and Lochsa basins. As a result, the rain and remaining snow in the Lochsa and North Fork Clearwater rivers exceeded their previous peaks in May. The Clearwater River at Orofino peaked at 50,000 cfs May 28, which is similar in magnitude to last year's peak. The end of May precipitation was enough for the Selway River to match its pervious snowmelt generated peak of 18,000 cfs on May 6. The remaining snowpack on June 1 is about half of average and two-thirds of last year. Dworshak Reservoir is nearly full after being at 80% of capacity a month ago. Residual inflows for Dworshak Reservoir are projected at 65% of average, slightly less than last year. The Selway and Lochsa are forecast at 57% of average. Streamflow hydrographs are on the downhill side and will decrease to below normal summer levels with snow at only half of average.

CLEARWATER RIVER BASIN Streamflow Forecasts - June 1, 2004

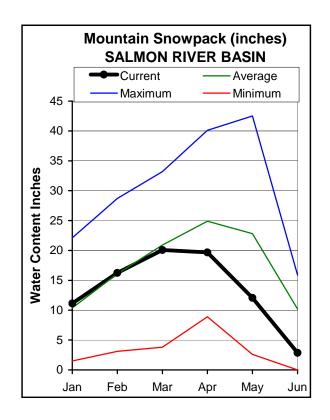
=======================================	=========	========	========	.=====	=======	· ==========	=====	======	======	=====	:=======
		<<====	= Drier ===	:===]	Future Co	onditions ==	=====	Wetter	====>>		
Forecast Point	Forecast	 ======	========	== Cha	Chance Of Exceeding * =========						
rereduce remie	Period	90%	70%			Probable)		30%	10%	3	80-Yr Avg.
		(1000AF)	, ,	į	(1000AF)	(% AVG.)	(1	.000AF)	(1000AF) j	(1000AF)
SELWAY near Lowell	JUN-JUL	365	460		525	56	=====	590	685		945
	JUN-SEP	420	525		600	57		675	780		1050
LOCHSA near Lowell	JUN-JUL	290	340		370	57		400	450		655
	JUN-SEP	335	385		420	57		455	505		735
DWORSHAK RESV INFLOW (1,2)	JUN-JUL	471	563		625	65		720	935		960
	JUN-SEP	445	670		775	69 		880	1100		1120
CLEARWATER at Orofino (1)	JUN-JUL	715	1080		1240	63		1400	1770		1970
	JUN-SEP	820	1210		1390	63		1570	1960		2220
CLEARWATER at Spalding (1,2)	JUN-JUL	1311	1650		1880	64		2240	3030		2960
	JUN-SEP	1556	1927		2180	65		2570	3420		3370
CI FADUATI	======== ER RIVER BASI	=======		.=====	======= !		************	R RIVER	DACIN		
Reservoir Storage (1	000 AF) - End	of May				Watershed Sno	owpack	Analys:	is - June		
	Usable	*** Usab	le Storage				=====	Number			======= ır as % of
Reservoir	Capacity	This	Last		Water	rshed		of			
=======================================		Year =======	Year =======	Avg	 =======	=========		Data Sit		st Yr =====	Average
DWORSHAK	3468.0	3366.1	3089.5 30	40.7	North	n Fork Clearw	ater	8	7	4	67
					Lochs	sa River		2	;	2	2
					 Selwa	ay River		4	2:	1	23
					 Clear	rwater Basin '	Total	14	6)	57
					1						

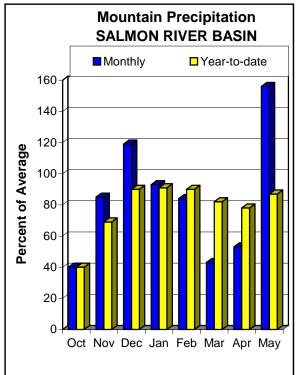
^{* 90%, 70%, 30%,} and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

SALMON RIVER BASIN JUNE 1, 2004







WATER SUPPLY OUTLOOK

May precipitation was 156% of average. Big Creek Summit and Banner Summit SNOTEL sites received record high May precipitation for the 20 plus years of daily SNOTEL data. This helped produce another rise in streamflow but was too little too late as the majority of snow has already melted. Water year to date precipitation increased from 77% of average a month ago to 87% on June 1. The remaining Salmon basin snowpack is about 30% of average except in the Lemhi basin where the Montana sites are doing better. Deadwood Summit SNOTEL has 10 inches of snow water, average is 26 inches. Last year it had 30 inches of snow water on June 1. The rain produced another peak May 29 on the Middle Fork Salmon River at 4.8 feet, slightly higher than its earlier peak on May 6. The Salmon River at White Bird peaked at 36,000 cfs May 29, the lowest spring peak since 2001 when the snow was only half of average. June-September streamflow forecasts range from 19% of average for the Lemhi River to 40% for the Middle Fork and main Salmon rivers. As a result of the lack of high elevation snow, streams will remain low the rest of summer, especially on the Lemhi River. River runners and water users should plan accordingly for low summer streamflow conditions which will mirror the 2001 streamflow levels.

SALMON RIVER BASIN Streamflow Forecasts - June 1, 2004

		<<=====	Drier ====	== F	uture Co	nditions =	=====	Wetter	=====	>>		
Forecast Point	Forecast	 =======		= Cha	nce Of E	xceeding *	======	.=====	=====	==		
	Period	90%	70%	50	% (Most	Probable)		30%	10%	İ	30-Y	r Avg.
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	[(1	L000AF)	(1000	AF)	(1	.000AF)
SALMON at Salmon (1)	JUN-JUL	======================================	141	==== 	145	27	====== 	161	===== 19	===== 9	=====	====== 530
	JUN-SEP	213	226	İ	235	35	į	260	31	5		670
Lemhi River nr Lemhi	JUN-JUL	7.5	8.9		10.0	19	 	11.1	12.	9		52
	JUN-SEP	14.5	16.8		18.5	26	į	20	2	3		71
MF Salmon at MF Lodge	JUN-JUL	88	128		155	35	 	182	22	2		445
	JUN-SEP	133	185		220	42	į	255	30			530
SALMON at White Bird (1)	JUN-JUL	965	1057		1120	35	 	1300	169	0		3220
	JUN-SEP	1323	1446		1530	40		1740	220	0		3850
		=======		 :=====		=======	 ======	:=====	=====	=====	.====	======
	RIVER BASIN			[RIVER B				
Reservoir Storage (10	00 AF) – End 	of May				Watershed S	nowpack	: Analys	is - J	une 1,	2004	:
	Usable	*** Usabl	Le Storage *	**				Numbe	er	This Y	ear a	s % of
Reservoir	Capacity	This	Last		Water	shed		of				=====
	 =========	Year =======	Year A	ra=== 	=======	:=======		Data Si		Last Y ======		werage ======
					Salmo	n River ab	Salmon	8		30		25
					Lemhi	River		6		86		76
					Middl	e Fork Salm	on Rive	er 3		26		30

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

South Fork Salmon River

23

Little Salmon River
Salmon Basin Total

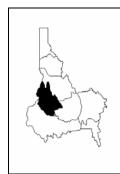
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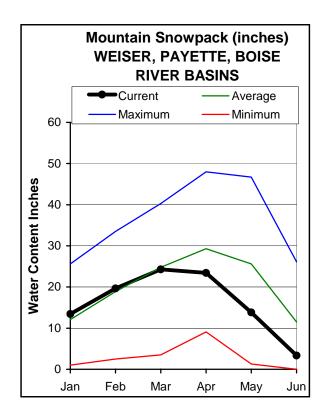
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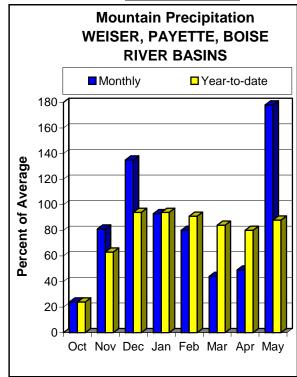
^{(1) -} The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

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

WEISER, PAYETTE, BOISE RIVER BASINS JUNE 1, 2004







WATER SUPPLY OUTLOOK

May precipitation was 178% of average in these west-central mountains. May monthly totals range from 2-7 inches while monthly averages are 2-4 inches. Only Banner Summit and Big Creek Summit SNOTEL sites set new records for May precipitation for the 20 plus years of daily SNOTEL data. Water year to date precipitation is 88% of average, about 10% less than last year. Remaining snow is 16% of average in the Payette basin and 34% in the Boise basin. Recent rains helped to keep inflows higher and fill Cascade Reservoir. Deadwood Reservoir may come close to filling. June-September streamflow forecast for the Payette River near Horseshoe Bend is for 46% of average, about half of last year, but will provide adequate water supplies for its users along with fish flow water. However, the Boise Reservoir system will not fill. Lucky Peak and Arrowrock water users will have adequate supplies, but Anderson Ranch irrigators will see only about 70 percent of their normal supplies. Boise River near Boise is forecast at 38% of average for June-September. Lucky Peak Reservoir should remain full through mid-to late July and then drafting will occur.

WEISER, PAYETTE, BOISE RIVER BASINS

Streamflow Forecasts - June 1, 2004

		Streamilov 								
						onditions ==				
Forecast Point	Forecast Period	90% (1000AF)	70% 70%	5 F)	0% (Most (1000AF)	Exceeding * = Probable) (% AVG.)	3 (10	0% 00AF) (10% (1000AF)	30-Yr Avg. (1000AF)
WEISER near Weiser (1)	JUN-JUL JUN-SEP	22 41	52 74	==== === 	66 89	60 64		80 104	110 137	110 139
SF PAYETTE at Lowman	JUN-JUL JUN-SEP	70 107	87 125		99 138	40 46		111 151	128 169	245 300
DEADWOOD RESERVOIR Inflow (1,2)	JUN-JUL JUN-SEP	12.9 17.0	23 28		28 33	42 45		33 38	43 49	66 74
LAKE FORK PAYETTE near McCall	JUN-JUL JUN-SEP	12.9 11.0	18.0 18.0		21 23	47 48		24 28	29 35	45 48
NF PAYETTE at Cascade (1,2)	JUN-JUL JUN-SEP	56 86	74 110		86 126	40 49		117 159	183 234	215 260
NF PAYETTE nr Banks (2)	JUN-JUL JUN-SEP	64 101	85 130		100 150	38 48		139 190	194 255	265 315
PAYETTE nr Horseshoe Bend (1,2)	JUN-JUL JUN-SEP	221 327	253 368		275 395	39 46		330 455	460 585	710 855
BOISE near Twin Springs (1)	JUN-JUL JUN-SEP	87 125	98 139		105 148	38 44		125 169	166 215	280 335
SF BOISE at Anderson Ranch Dam (1,2)	JUN-JUL JUN-SEP	56 70	62 79		66 84	29 32		80 101	111 139	225 260
MORES CREEK near Arrowrock Dam	JUN-JUL JUN-SEP	10.0 12.6	13.4 16.5		15.7 19.1	49 52	1	8.0 22	21 26	32 37
BOISE near Boise (1,2)	JUN-JUL JUN-SEP	160 227	175 247		185 260	33 38		215 295	285 375	565 680
WEISER, PAYETTE, Reservoir Storage (1000	BOISE RIVE AF) - End	R BASINS of May		 ======	======= 	WEISER, P. Watershed Sn.	AYETTE, owpack	BOISE F Analysis	RIVER BASIN s - June 1,	2004
Reservoir	Usable Capacity	*** Usabi This				======== rshed	======	Number of	This Y	======================================
=======================================	- i	Year	Year	Avg	İ	=========		ata Site	es Last Y	r Average
MANN CREEK	11.1	11.0	11.0	10.5	!	Creek		1	0	0
CASCADE	693.2	693.0	636.8	588.6	Weise	er River		3	0	0
DEADWOOD	164.0	147.1	126.6	139.0	North	h Fork Payett	е	7	8	9
ANDERSON RANCH	450.2	402.4	331.1	388.7	South	h Fork Payett	е	4	22	24
ARROWROCK	272.2	173.1	247.6	191.9	Payet	tte Basin Tot	al	12	15	16
LUCKY PEAK	293.2	291.8	274.6	242.3	Midd	le & North Fo	rk Bois	e 5	27	23
LAKE LOWELL (DEER FLAT)	165.2	116.5	122.6	133.5	 South	n Fork Boise	River	6	45	42
					Mores	s Creek		2	0	0
					Boise	e Basin Total		10	39	34

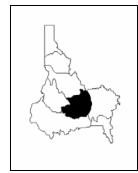
^{* 90%, 70%, 30%,} and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

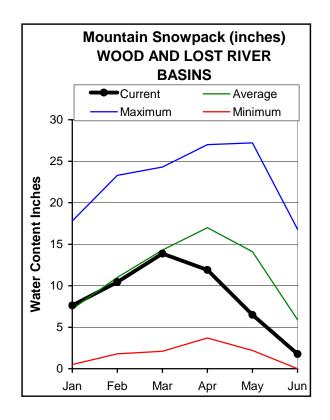
Canyon Creek

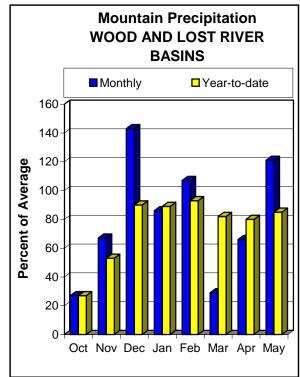
⁽¹⁾ - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

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

WOOD and LOST RIVER BASINS JUNE 1, 2004







WATER SUPPLY OUTLOOK

May precipitation was 121% of average, barely increased streamflows and was not enough to make up for the record dry March 1 - April 30 period. Streams have peaked and are well below average for this time of year. Water year to date precipitation is 85% of average, slightly less than last year. The only remaining snow is in the Big Wood basin above Hailey and is 34% of average which is less than half of last year and about the same as 2002. Magic Reservoir is 24% full, 30% of average and its irrigators will be out of water later this month. The 46,400 acre-feet in Magic Reservoir is the second lowest May 31 storage since 1917, only 1992 had less water because the irrigation water was depleted by June 1. The Big Wood River streamflow forecasts call for 22% of average at Hailey, 5% at Bellevue and Camas Creek, and 7% for Magic Reservoir inflow, record low. The Surface Water Supply Index (SWSI) for the Big Wood basin is -3.7, only 1992 was lower for the SWSI analysis period of 1971-present because the reservoir was empty by June 1. The Big Lost River basin water supply is just as low with Mackay Reservoir storing only 13,000 acre-feet on May 31, 2nd lowest since storage started in 1926, only 1934 had less water. Streamflow forecasts are for record low values with the Big Lost River at Howell Ranch forecast at only 19% of average. It is not uncommon for the Big Lost River to go sub-surface downstream of the Howell gage, however, this is the first time locals can remember the river water remaining sub-surface during the snowmelt peak runoff season. The SWSI is -3.9 indicating this year will be the driest since the current drought started and the 1971 to present SWSI analysis period. Mackay Reservoir irrigators will be out of water by mid-June. Little Lost water users are in similar shape with the river forecast at 25% of average, record low, and a SWSI of -3.9. This season will be the driest year yet during this five year drought and some of the driest since the 1930s.

WOOD AND LOST RIVER BASINS Streamflow Forecasts - June 1, 2004

=======================================	:=======	========	========	========	:=======	=========		========
		<<=====	Drier ====	== Future Co	onditions =:	===== Wette	· ====>>	
				a	- 11 4			
Forecast Point	Forecast				_			
	Period	90%	70%	50% (Most		30%	10%	30-Yr Avg.
		(1000AF)	(1000AF)	, , , ,	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
BIG WOOD at Hailey (1)	JUN-JUL	 18.0	27	 31	22	====================================	 47	144
bic wood at harrey (1)	JUN-SEP	29	42	48	27	l 55	71	177
				i		i	. –	
BIG WOOD near Bellevue	JUN-JUL	0.0	2.0	5.0	5	9.0	16.0	101
	JUN-SEP	0.0	3.0	6.0	5	10.0	18.0	114
				İ		j		
CAMAS CREEK near Blaine	JUN-JUL	0.0	0.2	0.6	5	1.2	2.4	13.2
	JUN-SEP	0.0	0.4	0.8	6	1.4	2.7	14.0
BIG WOOD below Magic Dam (2)	JUN-JUL	5.0	7.0	8.0	7	23	46	114
	JUN-SEP	6.0	8.0	9.0	7	25	48	130
		4.0	6.3		0.5	10.0	12.6	22
LITTLE WOOD R ab High Five Ck	JUN-JUL	4.0	6.3	8.1	25	10.2	13.6	33
	JUN-SEP	6.1	9.1	11.5	30	14.1	18.6	39
LITTLE WOOD near Carey (2)	JUN-JUL	5.0	6.7	 7.9	25	 12.7	19.5	32
LITTLE WOOD Hear Carey (2)	JUN-SEP	7.5	9.9	11.5	30	17.1	25	32
	OON-SEP	7.5	9.9	1 11.5	30	1/.1	25	39
BIG LOST at Howell Ranch	JUN-JUL	17.0	20	22	19	33	50	114
BIO LODI de Howell Fallen	JUN-SEP	23	27	30	22	43	62	139
	0011 021	23	2.				02	237
BIG LOST below Mackay Reservoir (2)	JUN-JUL	15.9	19.5	22	23	33	48	97
• , ,	JUN-SEP	23	27	j 30	23	43	61	128
				İ		İ		
LITTLE LOST blw Wet Creek	JUN-JUL	3.4	4.1	4.6	25	6.6	9.5	18.1
	JUN-SEP	5.1	6.2	7.0	27	9.8	14.0	26
				İ		İ		
=======================================	:======		========	=========		=========		========

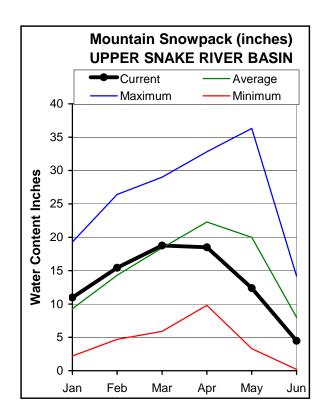
Reservoir	WOOD AND LOST RIVER BAS Storage (1000 AF) - End				WOOD AND LOST RIVER BASINS Watershed Snowpack Analysis - June 1, 2004					
Reservoir	Usable Capacity 	*** Usa This Year	able Stora Last Year	ge *** Avg	Watershed	Number of Data Sites	This Yea: ======= Last Yr	r as % of ====== Average		
MAGIC	191.5	46.4	83.5	154.1	Big Wood ab Hailey	7	45	34		
LITTLE WOOD	30.0	26.9	29.3	27.4	Camas Creek	2	0	0		
MACKAY	44.4	13.0	26.5	34.9	Big Wood Basin Total	9	45	34		
					Fish Creek	0	0	0		
					Little Wood River	4	0	0		
					Big Lost River	4	0	0		
					Little Lost River	3	88	34		
					Birch-Medicine Lodge C	ree 2	88	40		
				 	Camas-Beaver Creeks	2	0	0		

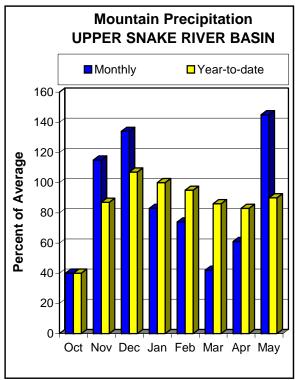
______ * 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

UPPER SNAKE RIVER BASIN JUNE 1, 2004







WATER SUPPLY OUTLOOK

May mountain precipitation was 145% of average in the Upper Snake. The above average precipitation helped but will not change the water supply picture much as the remaining snow cannot sustain current streamflow levels. The last time monthly precipitation was greater than 145% of average in the Upper Snake basin was September 2002. Water year to date precipitation is 90% of average, slightly better than last year. The better precipitation is not noticeable due to the five year cumulative drought effects. The remaining snowpack in the Henrys Fork sounds encouraging at 60% of average, however, of the five measuring sites with snow, two are just outside the Henrys Fork basin in Montana and reporting a near average June 1 snowpack. The snowpack above Palisades Reservoir is 42% of average. Residual streamflow forecasts range from 30-50% of average for most streams. The June-September streamflow for the Snake River near Heise is for 46% of average, record low was 36% in 2001. However, when combined with record low storage in Palisades and Jackson, produces a Surface Water Supply Index (SWSI) of -3.9, which is record low for the 1971 to present analysis period. Water rights in American Falls, Palisades and Jackson will not fill and much less rental water is available in the rental pool this year when compared to last year. How severe the water shortages are depends upon your water use or water right.

UPPER SNAKE RIVER BASIN Streamflow Forecasts - June 1, 2004

			ow Foreca							
Downer Police		<<====	== Drier	=====	Future Co		:==== We	etter ===	===>>	=======
Forecast Point	Forecast Period	===== 90% (1000AF	70%	\$ 5	0% (Most	Exceeding * = Probable) (% AVG.)	309 (1000	k 1	==== 10%	30-Yr Avg. (1000AF)
HENRYS FORK near Ashton (2)	 JUN-JUL	110	:======= 122	==== ===	130	======== 53	14	======= 45	======= 170	245
inducto Forde field Falleon (2)	JUN-SEP	182	199		210	48		35	265	440
HENRYS FORK near Rexburg (2)	JUN-JUL	374	407	!	430	52		75	535	830
immute rotat near nearest (2)	JUN-SEP	573	616	!	645	50 I)5	785	1280
FALLS near Squirrel (1,2)	JUN-JUL	27	32	1	35	17		53	92	205
	JUN-SEP	52	58		63	23		33	125	275
TETON near Driggs	JUN-JUL	24	27		30	28		39	53	108
33	JUN-SEP	44	50)	54	35	(56	83	153
TETON near St. Anthony	JUN-JUL	68	79) j	86	36	10	06	136	240
_	JUN-SEP	118	134	<u> </u>	145	45	17	70	205	320
SNAKE near Moran (1,2)	JUN-JUL	121	143	3	157	32	20)2	302	490
	JUN-SEP	166	192	2	210	36	26	50	365	580
PACIFIC CREEK at Moran	JUN-JUL	23	27	7	30	30	4	40	54	100
	JUN-SEP	29	34	1	38	36	4	18	62	106
SNAKE above Palisades (2)	JUN-JUL	430	475	5	505	34	59	95	725	1470
	JUN-SEP	673	734	1	775	42	87	75 1	1015	1840
GREYS above Palisades	JUN-JUL	65	73	3	79	42	9	93	113	188
	JUN-SEP	102	113	3	120	49	13	35	158	245
SALT near Etna	JUN-JUL	46	55	5	61	38	-	77	101	162
	JUN-SEP	87	100)	108	45	12	27	154	240
PALISADES RESERVOIR INFLOW (1,2)	JUN-JUL	619	685	5	730	37	8	50 1	1120	1950
	JUN-SEP	966	1058		1120	45	126		1560	2500
SNAKE near Heise (2)	JUN-JUL	663	736	5	785	38	92	15 1	1105	2050
	JUN-SEP	1037	1140)	1210	46	136	50 1	1590	2650
WILLOW CREEK nr Ririe (2)	JUN-JUL	1.6	2.9		4.0	20		. 3	7.6	20
SNAKE nr Blackfoot (1,2)	APR-JUL	761	811		845	18	102		1435	4600
	APR-SEP	1205	1268	!	1310	23	149		1900	5620
	JUN-JUL	701	787		845	32	102		1435	2670
	JUN-SEP	1148	1244		1310	36	149		1900	3690
PORTNEUF at Topaz	JUN-JUL	7.5	9.0	!	10.0	27	14		19.0	37
	JUN-SEP	15.0	16.8		18.1	33		22	27	55
AMERICAN FALLS RESV INFLOW (1,2)	JUN-JUL	562	763		900	54	115		1705	1660
	JUN-SEP	971	1220		1390	67	164		2195	2070
			=======	:======						
UPPER SNAF Reservoir Storage (100	KE RIVER BAS 00 AF) — End					UPF Watershed Sr	ER SNAKE Iowpack Ar			2004
					' :=======		-			
Dogovaroje	Usable		ble Stora	ge ***	T-7-1	achod	1	Number		ear as % of
Reservoir	Capacity	This	Last	7	water	rshed	Det	of		
	ا ==========	Year ======	Year ======	Avg ======	 : ======			ta Sites ======		r Average =======
HENRYS LAKE	90.4	76.8	78.8	89.2	Henry	s Fork-Falls	River	7	159	66
ISLAND PARK	135.2	136.2	132.0	132.8		n River		2	483	21
GRASSY LAKE	15.2	9.8	13.6	14.4	Henry	ys Fork above	Rexburg	9	165	59
JACKSON LAKE	847.0	454.9	615.3	572.6	Snake	e above Jacks	on Lake	5	90	46
PALISADES	1400.0	366.6	809.6	1033.6	Gros	Ventre River	•	2	108	64
RIRIE	80.5	45.7	45.2	70.3	Hobac	ck River		5	142	39
BLACKFOOT	348.7	59.9	94.7	287.8	Greys	s River		4	177	41
AMERICAN FALLS	1672.6	1030.4	1051.8	1476.1	Salt	River		3	0	2
					Snake	e above Palis	ades	18	117	42

Willow Creek Blackfoot River

Snake abv American Falls

Portneuf River

2

30

0

134

0

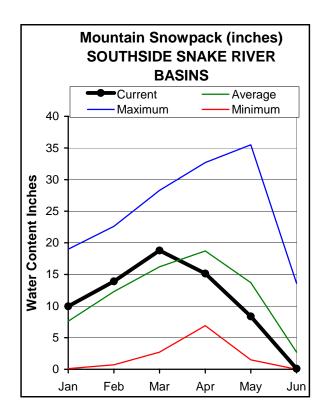
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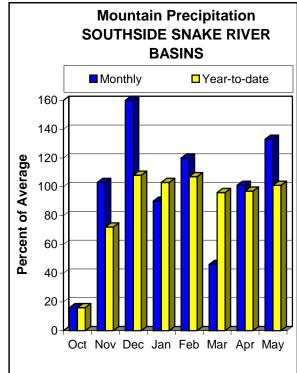
^{* 90%, 70%, 30%,} and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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

SOUTHSIDE SNAKE RIVER BASINS JUNE 1, 2004







WATER SUPPLY OUTLOOK

For two months in a row, these basins south of the Snake River have received average or better precipitation. Precipitation in May was 133% of average and is average since the water year started. The remaining snow at measuring stations in these basins just melted. Streams increased with the May precipitation, but remain below average. Storage levels in Salmon Falls and Oakley reservoirs are slightly better than last year, but will decrease to their minimum levels as inflows are only projected at 28% of average for Salmon Falls Creek. The Oakley Reservoir inflow forecast is higher at 62% of average because of recent rains increasing the flow and the stream still receding. Owyhee Reservoir is in good shape at 62% of average, and will provide adequate irrigation water. The reservoir has 160,000 acre-feet more than a year ago. The inflow forecast for Owyhee Reservoir calls for 40% of average for the June-July period. Bruneau River is forecast at 32% of average, low but similar to the past few years. The spring precipitation helped the rangeland areas of southern Idaho, but the surface water supplies will remain low and similar to the past few years in the Bruneau, Salmon Falls and Oakley basins.

______ SOUTHSIDE SNAKE RIVER BASINS

Streamflow Forecasts - June 1, 2004

	=======	======== 	Drier ===	====]	======= Future Co	nditions ==	====== Wette	=====>>	========
Forecast Point	Forecast Period	90% (1000AF)	70% (1000AF)	50	0% (Most (1000AF)	Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	 30-Yr Avg. (1000AF)
OAKLEY RESV INFLOW	JUN-JUL JUN-SEP	2.62 4.4	4.00 6.1	= ===: 	5.10 7.3	62 65	=====================================	8.41 10.9	8.20 11.3
SALMON FALLS CREEK nr San Jacinto	JUN-JUL JUN-SEP	5.2 6.9	6.2 8.4		6.8 9.4	28 34	8.9 12.4	12.9 16.4	24 28
SALMON FALLS RESV STORAGE	JUL-31	1.9	10.0		15.5	22	21	29	71
BRUNEAU near Hot Spring	JUN-JUL JUN-SEP	10.9 15.7	19.1 25		26 33	32 36	 34 42	48 57	82 92
OWYHEE near Gold Creek (2)	JUN-JUL JUN-SEP	0.00	0.00		0.01 0.01	1 4	0.27 0.28	1.27 1.35	1.53 0.28
OWYHEE near Rome	JUN-JUL JUN-SEP	12.5 22	19.4 30		25 37	35 41	 31 44	42 56	71 91
OWYHEE RESV INFLOW (2)	JUN-JUL JUN-SEP	11.4 31	23 39		33 45	40 40	 45 51	66 61	82 112
SUCCOR CK nr Jordan Valley	JUN-JUL	1.85	2.18	 	2.40	100	 2.62 	2.95	2.40
SOUTHSIDE SNA Reservoir Storage (100	KE RIVER BA 10 AF) – End	SINS of May			 	SOUTHS Watershed Sr	SIDE SNAKE RIV nowpack Analy:	VER BASINS sis - June 1	•
Reservoir	Usable Capacity	*** Usabl This Year	le Storage Last Year	*** Avg	 Water 	shed	Numbe of Data S:	er This ====: ites Last	Year as % of Yr Average
OAKLEY	74.5	20.7		===== 45.0	====== Raft		 1	0	0

27.9 101.2 Goose-Trapper Creeks

Owyhee Basin Total

31.6 58.4 Salmon Falls Creek

222.6 614.6 Bruneau River

5

5

3

0

160

160

0

5

5

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

OWYHEE

BROWNLEE

SALMON FALLS

WILDHORSE RESERVOIR

1419.3 1408.9 1405.6 1263.0

182.6

71.5

715.0

41.7

29.8

380.2

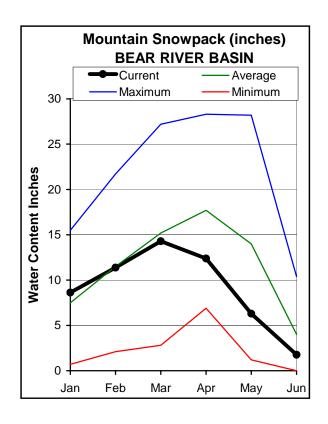
_______ * 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

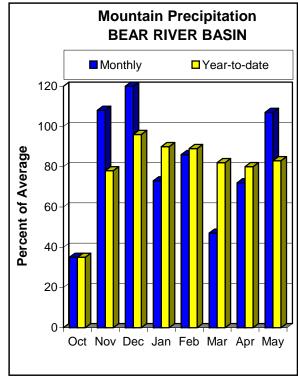
^{(1) -} The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

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

BEAR RIVER BASIN JUNE 1, 2004







WATER SUPPLY OUTLOOK

May finally brought some well needed precipitation to the Bear River basin. May precipitation was 107% of average with Franklin Basin SNOTEL site boasting the highest precipitation total of 5.8 inches for May, average is 3.8 inches. However, due to lack of precipitation the previous four months, the water year to date precipitation is still only 83% of average, slightly better than last year. The snowpack is melted except in the higher elevation areas. Spring Creek Divide SNOTEL site is the only site over 9,000 feet in elevation out of four that still retains snow and is 70% of average (10.5 inches of snow water equivalent). Last year there was 4.7 inches of snow water on June 1. This means that the snow supply is essentially gone and the only input will be from summer precipitation which typically declines after May. Observed streamflow for the Bear River near Stewart Dam dropped 9,000 acre-feet from April to a dismal 500 acre-feet for May; this value is only 1% of the 76,000 acre-feet May average. Other tributaries around Bear Lake increased storage in the lake by 1,000 acre-feet during May. Bear Lake has 221,000 acre-feet which is 16% of capacity, 21% of average, however, 119,000 acre-feet is considered inactive or non-usable water. Bear Lake water users should now be prepared for the most severe shortages since the 1930s with streamflow at only about 5% of average again and 190,000 acre-feet less water in Bear Lake than last year. Montpelier Creek Reservoir is 65% of capacity and 79% of average which is also less than last year.

BEAR RIVER BASIN
Streamflow Forecasts - June 1, 2004

	=======	======== 	======= = Drier =	=====	Future Co	onditions =	:======: 7	Wetter	=====>> 	========
Forecast Point	Forecast	 =======	=======	==== Ch	ance Of F	Exceeding *	=======	======	======	
2020000 20210	Period	90% (1000AF)	70% (1000AF	5	0% (Most	Probable) (% AVG.)	30	0%	10% (1000AF)	30-Yr Avg. (1000AF)
				=== ===			======	======	=======	
Bear River nr UT-WY State Line	APR-SEP	46	50	ļ	53	42		60	69	125
	JUN-SEP	16.0	18.4	-	20	24		27	36	82
Bear River ab Reservoir nr Woodruff	APR-SEP	28	33		36	25		49	67	142
Smiths Fork nr Border	APR-JUL	40	44		46	45		48	52	103
	APR-SEP	48	53	j	56	46	İ	59	64	121
	JUN-JUL	14.9	19.0	ĺ	21	34	ļ	23	27	61
Bear River at Stewart Dam	APR-JTJL	5.0	10.0	ļ	15.0	6		21	31	234
Bear River at Stewart Dam	APR-JUL APR-SEP	5.0	11.0		17.0	7		24	36	234 262
	JUN-JUL	3.0	4.0	-	5.0	5	}	25	55	110
	JUN-SEP	4.0	6.0		7.0	5		30	63	138
	OON DEL	1.0	0.0		7.0	J	İ	30	03	130
BEAR RIV	======== ÆR BASIN	=======	======	======	:====== 	=======	BEAR RIV	====== VER BAS	====== IN	=========
Reservoir Storage (1000	AF) - End	of May			j	Watershed S	nowpack i	Analysi	s - June 1	, 2004
	Usable	*** Usabl		e ***	ļ			Number	This	Year as % of
Reservoir	Capacity	This	Last		Water	rshed		of	=====	========
		Year 	Year 	Avg	 :		Da	ata Sit	es Last 	Yr Average
BEAR LAKE	1421.0	221.0	411.9	1052.3	Smith	ns & Thomas	Forks	3	223	64
MONTPELIER CREEK	4.0	2.6	3.5	3.3	 Bear	River ab WY	-ID line	10	223	20

1 0

1

0

223

0

0

15

0

1

1

Montpelier Creek

Bear River ab ID-UT line 15

Mink Creek
Cub River

Malad River

^{* 90%, 70%, 30%,} and 10% chances of exceeding are the probabilities that the actual volume 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 volume - actual volume may be affected by upstream water management.

Interpreting Streamflow Forecasts

Introduction

Each month, five forecasts are issued for each forecast point and each forecast period. Unless otherwise specified, all streamflovy 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.

Most Probable (50 Percent Chance of Exceeding) Forecast. This forecast is the best estimate of streamflow volume that can be produced given current conditions and based on the outcome of similar past situations, There is a 50 percent chance that the streamflow volume will exceed this forecast value. There is a 50 percent chance that the streamflow volume will be less than this forecast value.

The most probable forecast will rarely be exactly right, due to errors resulting from future weather conditions and the forecast equation itself. This does not mean that users should not use the most probable forecast; it means that they need to evaluate existing circumstances and determine the amount of risk they are willing to take by accepting this forecast value.

To Decrease the Chance of Having Too Little Water

If users want to make sure there is enough water available for their operations, they might determine that a 50 percent chance of the streamflow volume being lower than the most probable forecast is too much risk to take. To reduce the risk of not having enough water available during the forecast period, users can base their operational decisions on one of the forecasts with a greater chance of being exceeded (or possibly some point in-between). These include:

70 Percent Chance of Exceeding Forecast. There is a 70 percent chance that the streamflow volume will exceed this forecast value.

There is a 30 percent chance the streamflow volume will be less than this forecast value.

90 Percent Chance of Exceeding Forecast. There is a 90 percent

chance that the streamflow volume will exceed this forecast value.

There is a 10 percent chance the streamflow volume will be less than this forecast value.

To Decrease the Chance of Having Too Much Water

If users want to make sure they don't have too much water, they might determine that a 50 percent chance of the streamflow being higher than the most probable forecast is too much of a risk to take. To reduce the risk of having

too much water available during the forecast period, users can base their operational decisions on one of the forecasts with a smaller chance of being exceeded. These include:

30 Percent Chance of Exceeding Forecast. There is a 30 percent chance that the streamflow volume will exceed this forecast value. There is a 70 percent chance the streamflow volume will be less than this forecast value. 10 Percent Chance of Exceeding Forecast. there is a 10 percent chance that the streamflow volume will exceed this forecast value. There is a 90 percent chance the streamflow volume will be less than this forecast value.

Using the forecasts - an example

Using the Most Probable Forecast. Using the example forecasts shown below, users can reasonably expect 36,000 acre-feet to flow past the gaging station on the Mary's River near Death between March I and July 31.

Using the Higher Exceedence Forecasts. If users anticipate a somewhat drier trend in the future (monthly and seasonal weather outlooks are available from the National Weather Service every two weeks), or if they are operating at a level where an unexpected shortage of water could cause problems, they might want to plan on receiving only 20,000 acre-feet (from the 70 percent chance of exceeding forecast). In seven out of ten years with similar conditions, streamflow volumes will exceed the 20,000 acre-foot forecast.

If users anticipate extremely dry conditions for the remainder of the season, or if they determine the risk of using the 70 percent chance of exceeding forecast is too great, then they might plan on receiving only 5000 acre-feet (from the 90 percent chance of exceeding forecast). Nine out of ten years with similar conditions, streamflow volumes will exceed the 5000 acre-foot forecast.

Using the Lower Exceedance Forecasts. If users expect wetter future conditions, or if the chance that five out of every ten years with similar conditions would produce streamflow volumes greater than 36,000 acre-feet was more than they would like to risk, they might plan on receiving 52,000 acre-feet (from the 30 percent chance of exceeding forecast) to minimize potential flooding problems. Three Out of ten years with similar conditions, streamflows will exceed the 52,000 acre-foot forecast.

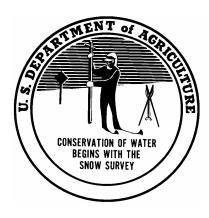
In years when users expect extremely wet conditions for the remainder of the season and the threat of severe flooding and downstream damage exists, they might choose to use the 76,000 acre-foot (10 percent chance of exceeding) forecast for their water management operations. Streamflow volumes will exceed this level only one year out of ten.

WEISER, PAYETTE, BOISE RIVER BASINS Streamflow Forecasts

		<<=====	Drier ====	== Future Co	onditions =	===== Wetter	====>>			
Forecast Point	Forecast	========	=======	Chance Of Exc	ceeding * ==:	=========	=====			
	Period	90%	70%	50% (Most	Probable)	30%	10%	30-Yr Avg.		
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(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			

For more information concerning streamflow forecasting ask your local NRCS field office for a copy of "A Field Office Guide for Interpreting Streamflow Forecasts" or visit our Web page.

OFFICIAL BUSINESS



Issued by
Bruce I. Knight, Chief
Natural Resources Conservation Service
Washington, DC

Released by Richard Sims, State Conservationist Natural Resources Conservation Service Boise, Idaho

Prepared by
Snow Survey Staff
Ron Abramovich, Water Supply Specialist
Philip Morrisey, Hydrologist
James Montesi, Hydrologist
Kelly Vick, Data Analyst
Bill Patterson, Electronics Technician
Jeff Graham, Electronics Technician

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