



Inited States Department of Agriculture

Natural Resources Conservation Service

Washington Basin Outlook Report June 1, 1995



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

For more water supply and resource management information, contact:

Local Natural Resources Conservation Service Field Office

or Scott Pattee Acting Water Supply Specialist Natural Resources Conservation Service W. 316 Boone Ave., Suite 450 Spokane, WA 99201-2348 (509) 353-2341

How forecasts are made

Most of the annual streamflow in the Western United States originates as snowfall that has accumulated high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are combined with snowpack data to prepare runoff forecasts. Streamflow forecasts are coordinated by Natural Resources Conservation Service and National Weather Service hydrologists. This report presents a comprehensive picture of water supply conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Snowpack data are obtained by using a combination of manual and automated SNOTEL measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation and temperature are monitored on a daily basis and transmitted via meteor burst telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

Forecast uncertainty originates from two sources: (1) uncertainty of future hydrologic and climatic conditions, and (2) error in the forecasting procedure. To express the uncertainty in the most probable forecast, four additional forecasts are provided. The actual streamflow can be expected to exceed the most probable forecast 50% of the time. Similarly, the actual streamflow volume can be expected to exceed the 90% forecast volume 90% of the time. The same is true for the 70%, 30%, and 10% forecasts. Generally, the 90% and 70% forecasts reflect drier than normal hydrologic and climatic conditions; the 30% and 10% forecasts reflect wetter than normal conditions. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty will become known and the additional forecasts will move closer to the most probable forecast.

The United States Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-5881 (voice) or (202) 720-7808 (TDD).

Washington Water Supply Outlook

JUNE 1995

June marks the end of another snow season in Washington. The snow has melted and run off to be cycled into the lives of Pacific Northwest populations. After several water-short years we have finally gained back a little ground. Though we aren't out of danger, the outlook is a little brighter.

This is the last monthly report for water-year '95. We will begin a new season in October and start reporting on January 1, 1996. Until then we will be maintaining, repairing and expanding our SNOTEL network so we may continue providing up-to-date and accurate climatic data.

Things to look for in water-year '96: New SNOTEL sites in Whatcom and King Counties, additional streamflow forecast points, additional manual snow courses, enhanced computer capabilities, and continued dedication to customer service.

I will be seeing some of you throughout the summer, but for those I don't, have a wonderful and happy summer.

Katt Pattar Hydrologic Pechnician

General Outlook

May was a warm and dry month bringing very little precipitation and melting snow at record paces. Temperatures were three to six degrees above normal. Snowpack averages plummeted while May streamflows along the east side of the Cascades rose to near flood stage. National Weather Service climatological stations indicated near to below average precipitation for the entire state. SNOTEL showed faster than normal meltout for May. SNOTEL sites with above average snow water equivalent a month ago melted out within near normal dates.

Snowpack

The June 1 statewide snowpack is slightly below normal. Continuous warm temperatures in May rapidly melted last months above average conditions. Only high elevation SNOTEL sites have snow remaining. The rapid snowmelt have made it almost impossible to calculate accurate basin averages. Available basin averages are: Spokane River Basin; 34%, Pend Oreille River Basin; 83%, Kettle River Basin; 63%, Okanogan; 94%, Methow River Basin; 107%, Chelan Lake Basin; 110%, Wenatchee; 90%, Yakima River Basin; 65%, Cowlitz River Basin; 95%, Lewis River Basin; 110%, White River Basin; 82%, Green River Basin; 60%, Snohomish River Basin; 46%, Skagit River Basin; 116%, and Baker River Basin; 47%. Basins not listed either have 0% averages or do not have adequate data available.

Precipitation

from National Weather Service stations showed precipitation at less than 50% of normal for the Olympic and North Puget Sound river basins The crest of the Cascades, the Yakima and the lower Columbia Basins had near normal precipitation. the state received below normal amounts of precipitation. Accumulated precipitation from October 1, 1994 remains above average for Eastern Washington with some central locations much above average. Most of the Westside is closer to normal. Year-to-date precipitation ranges from 137% of normal in the Wenatchee-Chelan River basins, to 97% in the Olympic Peninsula River basins. May basin reports range from 77% of normal in the Yakima River Basin to only 28% of average in the Olympic Peninsula River basins. SNOTEL sites in Washington showed high elevation water-year-precipitation values to be 116% of average on June 1.

	MAY	Z .	WATER	YEAR
BASIN	PERCENT OF AV	/ERAGE	PERCENT O	F AVERAGE
Colville-Pend	Oreille	53		107
Wenatchee-Chel Yakima	w	73		137
Cowlitz-Lewis.		64		118
	und ula			

Reservoir

Reservoir managers are reporting a positive outlook for this season. Reservoir storage in the Yakima Basin was 980,900 acre feet, 105% of June 1 normal and 150% of last year. Storage at other reservoirs included Roosevelt and Banks Lakes at 131% of average, and the Okanogan reservoirs at 132% of normal for June 1. The power generation reservoirs include the following: Coeur d'Alene Lake, 199,500 acre feet, or 71% of normal; Chelan Lake, 581,700 acre feet, 129% of average and 86% of capacity; and Ross Lake at 89% of average and 66% of capacity.

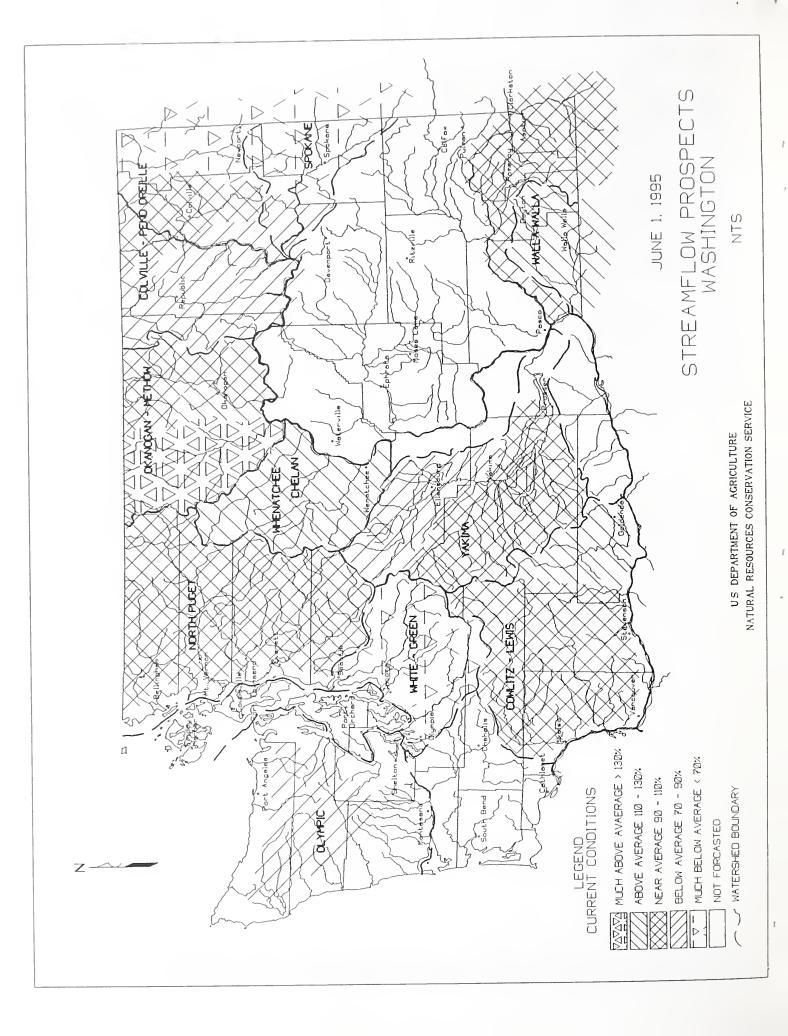
BASIN	PERCENT OF C	CAPACITY	PERCENT OF A	AVERAGE
Spokane		84		71
Colville-Pend Ores				
Okanogan-Methow		101	1	32
Wenatchee-Chelan.		86	1	.29
Yakima		92	. 1	.05
North Puget Sound		68		91

Streamflow

There is no happy medium when it comes to forecasted streamflows for Washington. The good news is that previous water-starved areas like the Yakima and Okanogan River basins are expected to have adequate water supplies this season. The bad news is that power generation and municipal water supply streams in the Spokane, Pend Orielle and White-Green River basins are forecasted at below to much below average. Highs and lows in the state are 158% of average for the Methow River near Pateros and 58% of normal for the Green River can be expected. All down slightly compared to last month June forecasts for some Western Washington streams include: Rex River near Cedar Falls, 59%; South Fork Tolt, 91%; and the Dungeness River, 82%. Some Eastern Washington streams include Mill Creek at Walla Walla, 127%; the Wenatchee River at Plain, 112%; and the Colville River, 103%. streamflows were near normal with a few exceptions. The Walla Walla near Milton Freewater had the highest May flows with 166% of average, and the Spokane at Long Lake with 63% of normal was the lowest in the state. Other streamflows were the following percentage of normal: the Cowlitz River, 90%; the Okanogan River, 125%; the Pend Oreille River, 72%; the Columbia at the Canadian border, 93%, the Skagit near Concrete, 104% and the Yakima River at Kiona, 146%.

BASIN	PERCENT OF AVERAGE
	MOST PROBABLE FORECAST
	(50 PERCENT CHANCE OF EXCEEDANCE)

Spokane
Colville-Pend Oreille58-112
Okanogan-Methow95-158
Wenatchee-Chelan
Yakima83-118
Walla Walla90-127
Cowlitz-Lewis96-118
White-Green-Cedar58-91
North Puget Sound93-113
Olympic Peninsula82-83

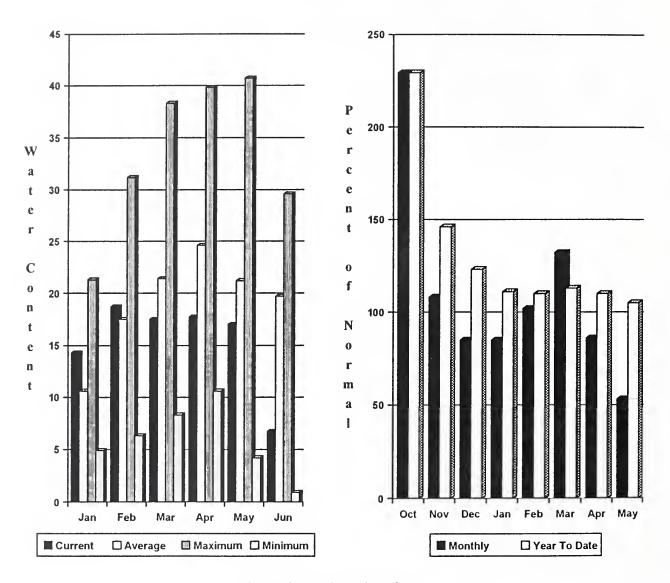


BASIN SUMMARY OF SNOW COURSE DATA

JUNE 1995

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90	SNOW COURSE		ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
PEND OREILLE RIVER							AHTANUM CREEK							
BUNCHGRASS MDWPILLO	₩ 5000	6/01/95		4.6	.0	15.4	GREEN LAKE	PILLOW	6000	6/01/95		11.5S	.0	3.8
HOODOO BASIN	6050	6/01/95		24.6E	8.8	32.9	LOST HORSE	PILLOW	5000	6/01/95		.05	.0	.0
HOODOO CREEK	5900	6/01/95		16.9E	3.6	31.9	MILL CREEK							
LOOKOUT PILLO	W 5140	6/01/95		.0	.0	10.0	HIGH RIDGE	PILLOW	4980	6/01/95		. OS	.0	.6
KETTLE RIVER							TOUCHET #2	PILLOW	5530	6/01/95		.0	.0	
BIG WHITE MTN CAN		5/29/95	12	5.8	. 6	8.9	LEWIS - COWLITZ		2000	C 100 10 F				
FARRON CAN		5/30/95	0	.0	.0	.3	JUNE LAKE	PILLOW	3200	6/01/95		.05	.0	.0
	REPORT						LONE PINE PARADISE PARK	PILLOW	3800 5500	6/01/95 6/01/95		9.3S 61.7S	5.1 43.6	9.4 48.1
OMAK LAKE, TWIN LAKES MOSES MTN PILLO	₩ 4800	6/01/95		.0s	.0	- 0		PILLOW	5900	6/01/95		35.35	19.2	37.5
SPOKANE RIVER	4000	0/01/93		.03	.0	• 0	POTATO HILL	PILLOW	4500	6/01/95		.05	.0	1.1
LOST LAKE (d) 6110	6/01/95		24.1E	. 0	41.6		PILLOW	4050	6/01/95		.05	.0	11.6
MOSQUITO RDG PILLO		6/01/95		2.5	. 0	16.0	SPENCER MDW	PILLOW	3400	6/01/95		.05	.0	.0
SUNSET PILLO		6/01/95		.6	.0	20.7		PILLOW	3100	6/01/95		.05	. 0	.0
LOOKOUT PILLO		6/01/95		.0	.0	10.0	SURPRISE LKS	P1LLOW	4250	6/01/95		17.0S	4.0	14.5
NEWMAN LAKE							WHITE PASS ES	PILLOW	4500	6/01/95		1.25	.0	4.6
QUARTZ PEAK PILLO	W 4700	6/01/95		.0	.0	.0	WHITE RIVER							
OKANOGAN RIVER							CORRAL PASS	PILLOW	6000	6/01/95		20.95	12.5	19.6
ENDERBY CAN		5/31/95	54	26.8	31.5	39.0	MORSE LAKE	PILLOW	5400	6/01/95		12.6S	8.7	21.4
ESPERON CK. UP CAN		5/31/95	0	.0		5.1	GREEN RIVER							
ESPERON CK. M1D CAN		5/31/95	0	.0		. 8	COUGAR MTN.	PILLOW	3200	6/01/95		.0s	. 0	.0
FREEZEOUT CK. TRAIL		5/30/95	0	.0	.0		GRASS MOUNTAIN	N #2	2900	5/29/95	0	.0	.0	
HARTS PASS	6500	5/30/95	57	33.9	16.0		LESTER CREEK		3100	5/29/95	0	.0	.0	
HARTS PASS PILLO		6/01/95		27.05	6.0	25.3 1.2	LYNN LAKE		4000	5/29/95	0	.0	.0	
IS1NTOK LAKE CAN LOST HORSE MTN CAN		5/31/95 5/29/95	0 4	.0 1.4		4.0	SAWMILL RIDGE STAMPEDE PASS		4700 3860	5/29/95 6/01/95	3	1.4 9.0s	.0	16.6 15.0
MT. KOBAU CAN		5/28/95	28	10.9	.0	5.0	TWIN CAMP	FILLOW	4100	5/29/95	0	.0	.0	15.0
SALMON MDWS PILLO		6/01/95		.05	.0	- 0	CEDAR RIVER		4100	3/29/93	U	.0	. 0	
SILVER STAR MTN CAN		5/28/95	4.3	21.7	12.2	16.9		PILLOW	2860	6/01/95		. 05	. 0	. 0
SUMMERLAND RES CAN		5/30/95	0	.0		.4	TINKHAM CREEK		3000	6/01/95		.05	.0	.0
WHITE ROCKS MTN CAN		5/31/95	8	3.7	.0	9.3	MEADOWS PASS		3240	6/01/95		.05	.0	.0
METHOW RIVER							SNOQUALMIE RIVER							
HARTS PASS	6500	5/30/95	57	33.9	16.0		OLALLIE MDWS	P1 LLOW	3960	6/01/95		14.25	6.0	30.0
" HARTS PASS PILLO	W 6500	6/01/95		27.0S	6.0	25.3	SKYKOMISH RIVER							
SALMON MDWS PILLO	W 4500	6/01/95		.05	.0	.0	STAMPEDE PASS	P1LLOW	3860	6/01/95		9.0S	.0	15.0
CHELAN LAKE BASIN							STEVENS PASS	P1LLOW	4070	6/01/95		.05	.0	5.7
LYMAN LAKE PILLO	W 5900	6/01/95		54.1S	17.5	43.3	SKAG1T RIVER							
MINERS RIDGE PILLO		6/01/95		31.1S	17.0	38.1	BEAVER CREEK 1	TRAIL	2200	5/30/95	0	.0	.0	
PARK CK RIDGE PILLO		6/01/95		6.2S	.0	5.2	BEAVER PASS		3680	5/30/95	20	10.7	.0	
RAINY PASS	4780	5/31/95	39	2.0	3.0		BROWN TOP	AM	6000	5/30/95	83	43.6	21.6	
RAINY PASS PILLON ENTIAT RIVER	W 4780	6/01/95		25.85	.5	20.4	DEVILS PARK	mn b T T	5900 3500	5/30/95	62 0	33.6	13.6	31.8
	w 3540	6/01/95		0.0	0		FREEZEOUT CK.	TRAIL	6500	5/30/95 5/30/95	57	.0 33.9	.0	
POPE RIDGE PILLON WENATCHEE RIVER	N 3340	0/01/93		.05	. 0	.0	HARTS PASS HARTS PASS	PILLOW	6500	6/01/95		27.0S	16.0 6.0	25.3
BLEWETT PASS#2P1LLO	W 4270	6/01/95		.05	.0	. 0		PILLOW	5900	6/01/95		54.1S	17.5	43.3
FISH LAKE PILLO		6/01/95	~ ~ ~	.05	.0	5.0	MEADOWS CABIN	LILL	1900	5/31/95	0	.0	.0	
LYMAN LAKE PILLOV		6/01/95		54.15	17.5	43.3	NEW HOZOMEEN I	LAKE	2800	5/30/95	0	.0	.0	÷-
STEVENS PASS PILLOW		6/01/95		.0s	.0	5.7	RAINY PASS		4780	5/31/95	39	2.0	3.0	
TROUGH #2 PILLOW		6/01/95		.05	. 0	6.0		PILLOW	4780	6/01/95		25.85	.5	20.4
UPPER WHEELER PILLOW		6/01/95		.05	. 0	.0	THUNDER BASIN		4200	5/31/95	8	3.8	. 8	
SQUILCHUCK CREEK N	NO REPORT						THUNDER BASIN	PILLOW	4200	6/01/95		4.99	. 0	6.0
STEM1LT CREEK							BAKER RIVER							
UPPER WHEELER PILLOW	N 4400	6/01/95		.0s	.0	.0	DOCK BUTTE	AM	3800	6/01/95	34	19.0	24.4	52.5
COLOCKUM CREEK							JASPER PASS	AM	5400	6/01/95	120	68.0		81.1
TROUGH #2 PILLOW	√ 5310	6/01/95		.0s	.0	6.0	MARTEN LAKE	AM	3600	6/01/95	66	36.0		65.5
YAKIMA RIVER							MT. BLUM	AM	5800	6/01/95	96	52.0	34.0	68.1
BLEWETT PASS#2PILLOV		6/01/95		.05	. 0	.0	ROCKY CREEK	AM	2100	6/01/95	0	.0		1.8
BUMPING RIDGE PILLOW		6/01/95		.05	.0	6.3	SCHREIBERS MOW		3400	6/01/95	24	13.0	18.6	41.4
CORRAL PASS PILLOV		6/01/95		20.95	12.5	19.6	SF THUNDER CK	AM	2200	6/01/95	0	.0		
FISH LAKE PILLOW GREEN LAKE PILLOW		6/01/95		.0S	.0	5.0	WATSON LAKES	AM NO.	4500	6/01/95	34	19.0	25.8	57.4
GROUSE CAMP PILLOW		6/01/95 6/01/95		11.5S		3.8	ELWHA RIVER		REPORT					
LOST HORSE PILLOW		6/01/95		.0S	.0	.0	MORSE CREEK DUNGENESS RIVER		REPORT REPORT					
MORSE LAKE PILLOV		6/01/95		12.6S	8.7	21.4	OUILCENE RIVER	NU I	VPLOK1					
OLALLIE MDWS PILLOW		6/01/95		14.2S	6.0	30.0	-	PILLOW	4050	6/01/95		10.75	. 0	. 0
SASSE RIDGE PILLOW		6/01/95		.45	.0	1.3	WYNOOCHEE RIVER		.000	5, 51, 55			. 0	
STAMPEDE PASS PILLOW		6/01/95		9.05	.0	15.0	(d) Denotes discon	ntinued s	site.					
WHITE PASS ES PILLOW		6/01/95		1.25	.0	4.6	,							
ŧ														

Precipitation* (% of normal)



*Based on selected stations

The June 1 forecasts for summer runoff on the Spokane River at Long Lake are 73% of normal, no significant change from last month. The forecast is based on a basin snowpack that is 34% of average and precipitation that is 105% of normal for the water year. Precipitation for May was only 53% of average. Streamflow on the Spokane River was 63% of average for May. June 1 storage in Coeur d'Alene Lake was 199,500 acre feet, 71% of normal, and 84% of capacity. Temperatures in the basin were 2.6 degrees above normal during May.

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

SPOKANE RIVER BASIN

Streamflow Forecasts - June 1, 1995

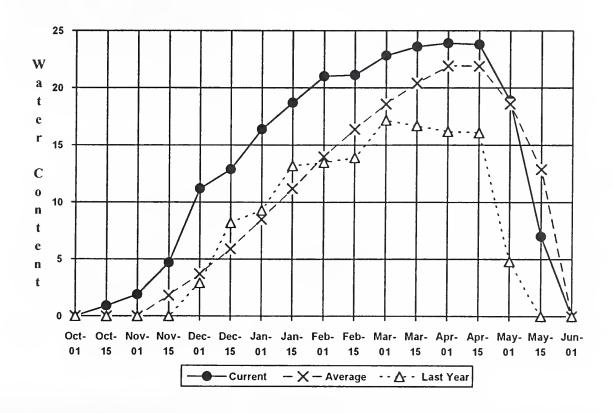
Forecast Point	Forecast Period	90%	70%	= Chance Of 50% (Most	Exceeding '	30%	10%	
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)
SPOKANE near Post Falls (2)	JUN-SEP	315	450	540	68	630	765	794
	JUN-JUL	235	350	430	62	510	625	697
SPOKANE at Long Lake	JUN-JUL	370	490	570	66	650	770	861
	JUN-SEP	560	700	793 	73	l 890	1030	1083
SPOKA	NE RIVER BASIN		*********			SPOKANE RIVER	BASIN	
Reservoir Storage (1000 AF) - End	of May		1	Watershed	Snowpack Analys	sis - June	1, 1995
	Usable !	*** Usab	le Storage *	**	=========	Numbe	r This	Year as % of
Reservoir	Capacity	This	Last	Wate	ershed	of		
	1	Year	Year A	vg I		Data Si	tes Last	Yr Average
COEUR D'ALENE	238.5	199.5	230.5 28	0.5 Spok	ane River	8	0	34
000011 0 100110	230.3		200.0 20	o.o. ppok		v	0	34

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

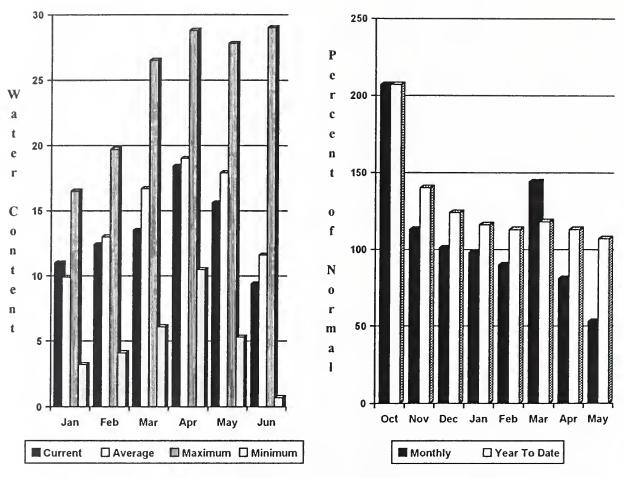
The average is computed for the 1961-1990 base period.

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

Quartz Peak SNOTEL Elevation 4700 ft.



Precipitation* (% of normal)



*Based on selected stations

The forecast for the Kettle River streamflow is for 112% of normal, the Pend Oreille below Box Canyon, 60%. The forecast for the Priest River near the town of Priest River is 58% of normal for the summer runoff period. Forecasts for points on the Columbia River at Birchbank are 89%, and at Grand Coulee Dam, 83% of average. May streamflow was 72% of normal on the Pend Oreille River, 93% on the Columbia at the International Boundary, and 108% on the Kettle River. June 1 snow cover was 81% of normal for the Pend Oreille Basin, and 63% of normal on the Kettle River. Snowpack at Bunchgrass Meadows SNOTEL site contained 4.6 inches of water, compared to the average June 1 reading of 15.4 inches. Precipitation during May was 53% of average, bringing the water year-to-date to 107% of normal. Temperatures were slightly 3.5 degrees above normal for May.

COLVILLE - PEND OREILLE RIVER BASINS

Streamflow Forecasts - June 1, 1995

***************************************			- Drios	Dituro C	onditions -	====== Wette		.========
		i					i	l
Forecast Point	Forecast	•						
	Period	90% (1000AF)	70% (1000AF)	50% (Most	Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
		(1000AF)	(1000AF)	(1000AF)		(1000Ar)		(1000AF)
PEND OREILLE Lake 1nflow (1,2)	JUN-JUL	2540	3660	4170	65	4680	5800	6449
	JUN-SEP	3180	4430	4990	65	5550	6800	7669
PRIEST nr Priest River (1,2)	JUN-JUL	20	125	l I 173	58	l 220	325	298
,,,,,	JUN-SEP	52	157	205	58	255	360	351
PEND OREILLE bl Box Canyon (1,2)	JUN-JUL	1480	3160	l I 3920	60	l I 4680	6360	6543
2	JUN-SEP	2020	3870	4710	61	5550	7400	7754
CHAMOKANE CK nr Long Lake	MAY-AUG	5.5	8.3	l l 10.3	110	 12.3	15.1	9.4
	JUL-AUG	3.2	3.5	3.6	109	3.7	4.0	3.3
COLVILLE at Kettle Falls	JUN-SEP	29	37	l 42	103	I I 48	55	41
	JUN-JUL	20	26	31	102	J 35	41	30
KETTLE near Laurier	JUN-SEP	750	870	I I 950	112	1030	1150	851
	JUN-JUL	690	785	850	112	915	1010	758
COLUMBIA at Birchbank (1,2)	JUN-JUL	17400	19500	20500	89	I I 21500	23600	22910
	JUN-SEP	24300	27100	28300	90	29500	32300	31580
COLUMBIA at Grand Coulee Dm (1,2)	JUN-SEP	29700	33600	 35300	85	 37000	40900	41706
	JUN-JUL	21500	24700	26100	83	27500	30700	31400
COLVILLE - PEND C				!		- PEND OREILLE		
Reservoir Storage (100	00 AF) - End	of May		- I	Watershed Sr	nowpack Aralys	is - June 1	., 1995

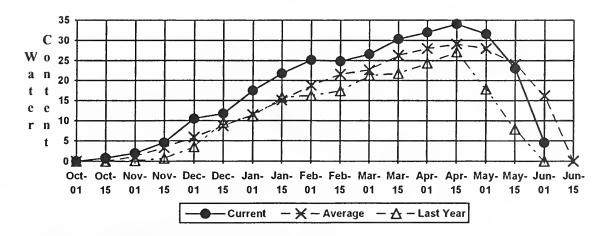
COI	LVILLE - PEND OREILLE RIVE	COLVILLE - PEN	ER BASINS					
Reservoi	ir Storage (1000 AF) - End	of May			Watershed Snowpa	ck Aralysis -	June 1, 1	995
		=======						
	Usable	*** Us	sable Stor	age ***		Number	This Yea	ras % of
Reservoir	Capacity	This	Last	I	Watershed	of		
	1	Year	Year	Avg		Data Sites	Last Yr	Average
ROOSEVELT	5232.0	3608.3	4532.3	2851.0 J	Colville River	0	0	0
				1				
BANKS	715.0	685.5	689.6	418.0	Pend Oreille River	41	428	83
				ı				
				1	Kettle River	2	967	63
				1				

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

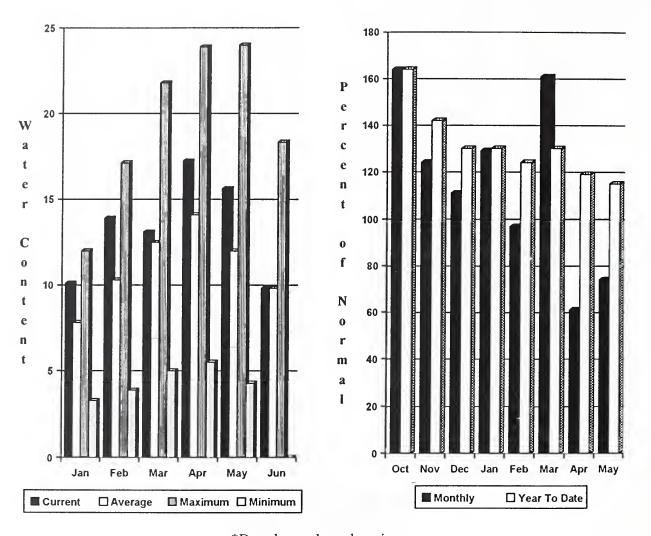
The average is computed for the 1961-1990 base period.

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

Bunchgrass Meadow SNOTEL Elevation 5000 ft.



Precipitation* (% of normal)



*Based on selected stations

Summer runoff forecast for the Okanogan River is 100% of normal; the Similkameen River, 95%, the Methow River, 158%; and Salmon Creek, 129% of normal. June 1 snow cover on the Okanogan was 94% of normal, and the Methow, 107%. May precipitation in the Okanogan-Methow was 74% of normal, with water year-to-date at 115% of average. May streamflow for the Methow River was 155% of normal, 125% for the Okanogan River, and 125% for the Similkameen. Snow water content at the Harts Pass SNOTEL, elevation 6500 feet, was 27 inches. Normal for this site is 25.3 inches. Temperatures were 3.5 degrees above normal for May. Storage in the Salmon Creek Reservoirs near Conconully was 23,800 acre feet, which is 101% of capacity and 132% of the June 1 average.

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

OKANOGAN - METHOW RIVER BASINS

Streamflow Forecasts - June 1, 1995

Forecast Point	Forecast	İ	Drier ====	== Future Co = Chance Of I				 -
	Period	90% (1000AF)	70% (1000AF)	50% (Most (1000AF)	Probable) (% AVG.)	30% (1000A	10% F) (1000AF)	30-Yr Avg. (1000AF)
SIMILKAMEEN nr Nighthawk (1)	JUN-SEP JUN-JUL	740 640	755 655	810 710	95 94	810 710		850 755
OKANOGAN RIVER nr Tonasket (1)	JUN-SEP JUN-JUL	1000 805	950 800	1005 835	100 98	1 1010 1 835		1005 848
SALMON CREEK near Conconully	JUN-JUL JUN-SEP	4.9 5.5	9.1 10.1	11.9 13.2	128 129	14.7		9.3 10.2
METHOW RIVER near Pateros	JUN-SEP JUN-JUL JUN-JUN	760 670 460	830 730 510	878 773 545	158 159 152	925 815 580		555 486 359
OKANOGAN - ME Reservoir Storage (10				 			RIVER BASINS lysis - June	

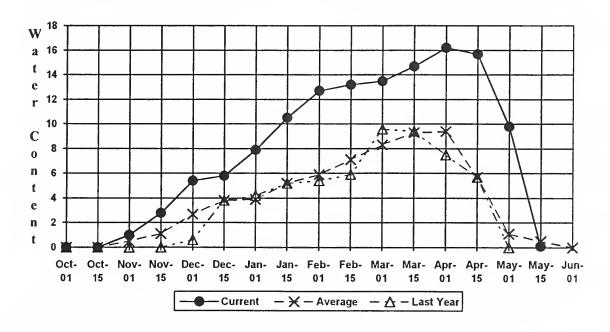
Reservoir Storage (100	Watershed Snowpack Analysis - June 1, 1995								
									=======
		*** Usab1	_	***	1		Number	This Year	as % of
Reservoir	Capacityl	This	Last		f	Watershed	of		
	1	Year	Year	Avg	1		Data Sites	Last Yr	Average
00-30-30-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-					-				=======
SALMON LAKE		NO REPORT			1	Okanogan River	6	181	94
					1				
CONCONULLY RESERVOIR		NO REPORT			1	Methow River	2	450	107
					1				

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

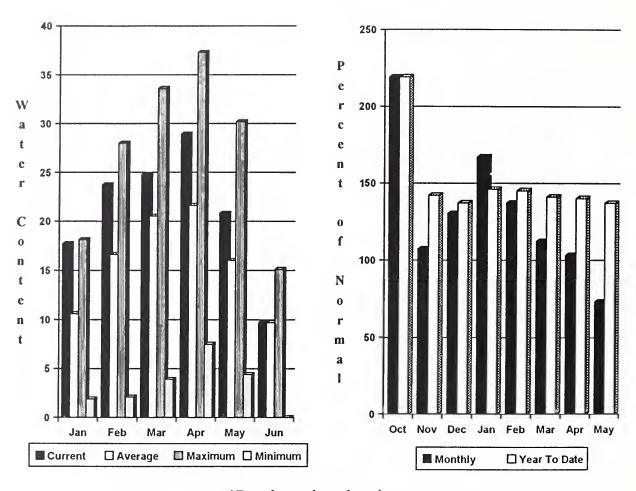
The average is computed for the 1961-1990 base period.

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

Salmon Meadows SNOTEL Elevation 4500 ft.



Precipitation* (% of normal)



*Based on selected stations

Precipitation during May was 73% of normal in the Wenatchee - Chelan River Basin and 137% for the year-to-date. Runoff for the Entiat River is forecast to be 121% of normal for the summer. The June-September forecast for the Chelan River is 109%, the Wenatchee River 112% of normal, and 105% for the Stehekin. Icicle Creek is forecast to be 111% of normal this summer. Streamflow for May on the Chelan River was 150% of average, and on the Wenatchee River it was 137% of normal. June 1 snowpack in the Wenatchee Basin was 90% of average, which is 309% of last year. The Chelan Basin was 110% of average, and Stemilt Creek reports no snow, which is normal. Pope Ridge SNOTEL on the Entiat River melted out on May 19th, about normal for this site. Reservoir storage in Lake Chelan was 581,700 acre feet, or 129% of June 1 average and 86% of capacity. Lyman Lake SNOTEL had the most snow-water in the basin with 54.1 inches of water. This site would normally have 43.3 inches.

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

WENATCHEE - CHELAN RIVER BASINS

Streamflow Forecasts - June 1, 1995

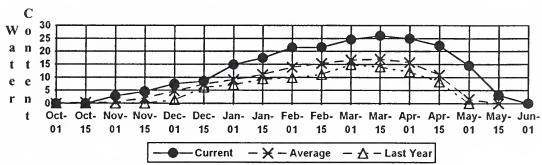
	<<===== Drier ===== Future Conditions ====== Wetter ====>>								
Forecast Point	Forecast	 =======		= Chance Of F	Exceeding * ==				
Forecast Forme	Period	90%	70%	50% (Most		30%	10%	30-Yr Avg.	
	101100	(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)	
CHELAN RIVER near Chelan	JUN-SEP	645	740	 805	109	870	965	738	
	JUN-SEP	645	740	805	109	870	965	738	
	JUN-JUN	315	385	430	110	475	545	390	
STEHEKIN near STEHEKIN	JUN-SEP	465	530	l I 573	105	615	680	548	
	JUN-JUL	345	400	434	103 I	470	520	422	
	JUN-JUN	182	225	251	97	280	320	259	
ENTIAT RIVER near Ardenvoir	JUN-SEP	149	164	l I 175	121	186	200	145	
	JUN-JUL	124	140	150	120 i	160	176	125	
	JUN-JUN	83	96	105	120	114	128	87	
WENATCHEE at Plain	JUN-JUL	565	635	l 1 678	113	725	790	600	
	JUN-SEP	665	745	804	112	860	945	718	
	JUN-JUN	355	405	440	112	475	525	391	
STEMILT nr Wenatchee (miners in)	MAY-SEP	111	138	156	113	174	200	138	
ICICLE CREEK nr Leavenworth	APR-SEP	290	360	410	111	460	530	370	
	APR-JUL	265	330	377	111	420	490	340	
	APR-JUN	210	265	300	111	335	390	270	
COLUMBIA R. bl Rock Island Dam (2)	JUN-SEP			39300	87			45171	
(2)	JUN-JUL			29300	85			34423	

WENATCHEE - C Reservoir Storage (10		WENATCHEE - CHELAN RIVER BASINS Watershed Snowpack Analysis - June 1, 1995						
Reservoir	Watershed	Number of Data Sites		ar as % of Average				
CHELAN LAKE	676.1	581.7	492.7	450.6	Chelan Lake Basin	4	335	110
					Entiat River	1	0	0
					Wenatchee River	6	309	90
					Squilchuck Creek	0	0	0
					Stemilt Creek	1	0	0
				! !	Colockum Creek	1	0	0

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

The average is computed for the 1961-1990 base period.

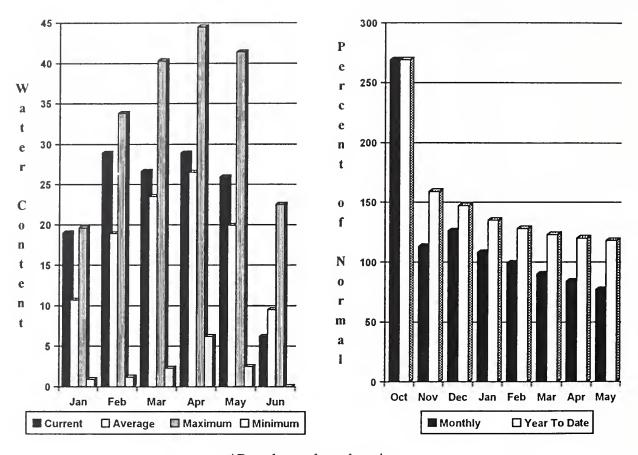
Pope Ridge SNOTEL Elevation 3540 ft.



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

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

Precipitation* (% of normal)



*Based on selected stations

June 1 reservoir storage for the five major reservoirs was 980,900 June 1 summer acre feet, 105% of average and 92% of capacity. streamflow forecasts are for near normal in the Yakima Basin. Forecasts for the Yakima River at Cle Elum are for 88% of normal. Naches River, 103%; the Yakima River at Parker, 96%; Ahtanum Creek, 100%, and the Tieton River, 110%. The Klickitat River near Glenwood is forecast for 118% of normal flow this summer. May streamflows for the Yakima River at Parker are 119% of normal, 119% for the Yakima near Cle Elum, and 125% for the Naches River. June 1 snowpack was 65% based upon 11 snow course and SNOTEL readings within the Yakima Basin. Green Lake SNOTEL in the Ahtanum Creek Basin showed 303% of normal May precipitation was 77% of normal and 118% for the water year-to-date. Temperatures were 2 degrees above normal for May. Volume forecasts for the Yakima Basin are for natural flow. they may differ from the U.S. Bureau of Reclamation's forecast for the total water supply available, which includes irrigation return flow.

YAKIMA RIVER BASIN

Streamflow Forecasts - June 1, 1995

		<<===== Drier ====== Future Conditions ====== Wetter =====>>										
Forecast Point	Forecast Period	======= 90% (1000AF)	70%	50% (Most			10% (1000AF)	30-Yr Avg. (1000AF)				
KEECHELUS LAKE INFLOW	JUN-JUL											
RECHELOS LAKE INFLOW	JUN-SEP	35	46	53	85	i 60	71	62				
	JUN-JUN	20	27	31	86	36	42	36				
KACHESS LAKE INFLOW	JUN-JUL	26	33	1 38	84	l 43	50	45				
	JUN-SEP	29	37	1 43	83	1 49	57	52				
	JUN-JUN	19.0	24	28	85	32	37	33				
CLE ELUM LAKE 1NFLOW	JUN-JUL	144	168	185		200	225	201				
	JUN-SEP	174	205	223	93	245	270	239				
	JUN-JUN	94	115	129	94	143	164	137				
YAKIMA at Cle Elum	JUN-JUN	158	193	216	86	240	275	251				
	JUN-JUL	230	280	314	87	350	400	361				
	JUN-SEP	295	350	[393 [88	435 	490	444				
BUMPING LAKE INFLOW	JUN-SEP	61	74	J 82	107	91	104	77				
	JUN-JUL	48	60	l 68	104	76	87	65				
	JUN-JUN	32	42	48	108	55	64	45				
AMERICAN RIVER near Nile	JUN-SEP	59	66	71	109	76	83	65				
	JUN-JUL	50	57	62	111	67	74	56				
	JUN-JUN	34	39	43	110	47	52	39				
RIMROCK LAKE INFLOW	JUN-SEP	132	148	158	110	169	184	143				
	JUN-JUL	99	110	118	112	126	137	105				
	JUN-JUN	60	68	1 74 1	110	80	88	67				
NACHES near Naches	JUN-SEP	340	400	I 437	103	475	535	424				
	JUN-JUL	280	325	359	103	390	440	347				
	JUN-JUN	184	225	250	103	275	315	243				
AHTANUM CREEK nr Tampico (2)	MAY-SEP	30	35	I 38	100	41	47	38				
	MAY-JUL	26	31	34	100	37	42	34				
	MAY-JUN	22	25	j 28	100	31	34	28				
YAKIMA near Parker	JUN-SEP	665	805	901	96 j	995	1140	938				
	JUN-JUL	525	640	718	96 J	795	910	749				
	JUN-SEP	665	805	901	96 I	995	1140	938				
KL1CK1 TAT near Glenwood	JUN-JUN	38	44	49	124	53	59	39				
	JUN-SEP	66	76	J 83	118	89	99	70				
VALTUR			.=======	, 								
Reservoir Storage (1					Watershed Sn	'AKIMA R1VER BAS Jowpack Analysis	- June 1,					
	 Usable		e Storage **			Number		======== ear as % of				
Reservoir	Capacity	This	Last	Water	shed	of		========				
	1	Year	Year Av	/g		Data Site						

218.0 |

378.0

27.0

167.0

Ahtanum Creek

The average is computed for the 1961-1990 base period.

KACHESS

CLE ELUM

R1MROCK

BUMPING LAKE

197.1 99.3

426.3 277.3

29.1

127.0

27.1

188.0

239.0

436.9

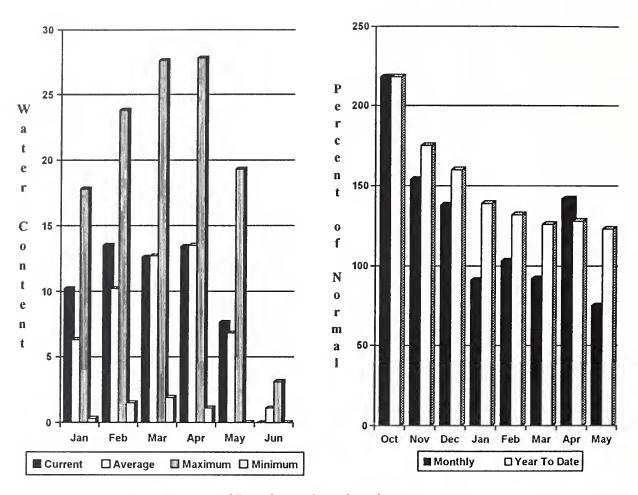
33.7

198.0

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

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

Precipitation* (% of normal)



*Based on selected stations

May precipitation was 75% of average, bringing the year-to-date precipitation to 123% of normal in the Walla Walla River Basin. By June 1 snowpack was melted out. The forecast is for 101% of average streamflow in the Walla Walla River for the coming summer, 90% for the Grande Ronde at Troy, and 127% for Mill Creek. May streamflow was 166% of normal for the Walla Walla River, 99% for the Snake River, and 143% on the Grande Ronde River near Troy. Temperatures were near normal for May.

WALLA WALLA RIVER BASIN

Streamflow Forecasts - June 1, 1995

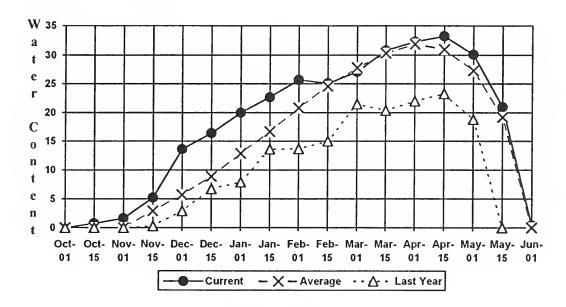
		====>>	1					
Forecast Point	Forecast	 =======						
	Period	90% (1000AF)	70% (1000AF)		Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
GRANDE RONDE at Troy (1)	JUN-JUL	290	380	420	90	460	550	466
	JUN-SEP	350	455	505	90	555	665	564
SNAKE blw Lower Granite Dam (1,2)	JUN-JUL	7170	8280	8790	91	9300	10400	9678
	JUN-SEP	9350	10800	11400	92	12000	13500	12390
41LL CREEK at Walla Walla	MAY-SEP	6.3	8.2	9.5	127	10.8	12.7	7.5
	MAY-JUL	6.1	8.0	9.3	127	10.6	12.5	7.3
	MAY-JUN	6.0	7.8	9.0	127	10.2	12.0	7.1
SF WALLA WALLA nr Milton Freewater	MAY-JUL	32	35	1 37	101	40	43	37
COLUMBIA R. at The Dalles (2)	JUN-SEP	38300	45200	1 1 49800	83	54400	61300	59652
	JUN-JUL	27100	32800	36700	81	40600	46300	45431
:4;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;				! ========	ا ==========	.=========		
WALLA WALL	A RIVER BAS	lN		1	WAL	LA WALLA RIVE	R BASIN	

WALLA WALLA RIVER BASIN Reservoir Storage (1000 AF) - End of May						WALLA WALLA RIVER BASIN Watershed Snowpack Analysis - June 1, 1995					
Reservoir		*** Usabl This Year	_	*** Avg	į į	Watershed	Number of Data Sites	This Year Last Yr	as % of Average		
					1 1	Mill Creek	1	0	0		

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

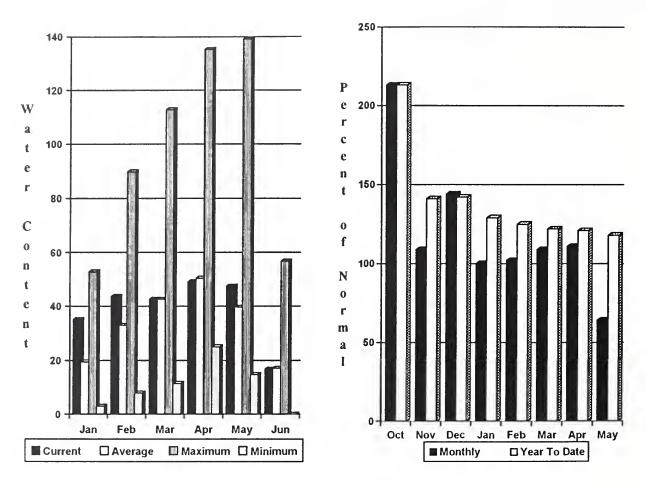
The average is computed for the 1961-1990 base period.

Touchet #2 SNOTEL Elevation 5530 ft.



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

Precipitation* (% of normal)



*Based on selected stations

The Lewis River is forecast for 105% of normal flows this summer. The Cowlitz River is forecast for 96% of normal runoff. May streamflow on the Cowlitz River was 90% of average, and 79% on the Lewis River. May precipitation was 64% of normal, bringing the precipitation down slightly to 118% of average for the water year. June 1 snow cover for the Cowlitz River Basin was 95% and the Lewis River Basin had 110% of average. The Paradise Park SNOTEL recorded the most water content for the basin with 61.7 inches of water. Normal June 1 water content is 48.1 inches. Temperatures were 3.5 degrees above normal for May.

COWLITZ - LEWIS RIVER BASINS

Streamflow Forecasts - June 1, 1995

		<<====== 	Drier ====	== Future C	onditions		= Wetter	====>>	1
Forecast Point	Forecast	_======		Chance Of	Exceeding	* =====			I
	Period	90%	70%	50% (Most	Probable)	1	30%	10%	30-Yr Avg.
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)		(1000AF)	(1000AF)	(1000AF)
LEWIS RIVER at Arie1 (2)	MAY-SEP	680	805	890	105	1	975	1100	848
	MAY-JUL	555	660	730	105	1	800	905	696
	MAY-JUN	465	550	610	106	!	670	755	578
COWLITZ R. bl Mayfield Dam (2)	JUN-SEP	865	930	945	96	i	945	945	982
	JUN-JUL	54	645	710	96	1	710	710	743
COWLITZ R. at Castle Rock (2)	JUN-SEP	1140	1140	1140	88	i	1140	1140	1298
	JUN-JUL	10.0	805	840	88	1	840	840	956
KLICKITAT near Glenwood	JUN-JUN	38	4 4	49	124	i	53	59	39
	JUN-SEP	66	76	83	118	1	89	99	70
=======================================				 					
COWLITZ - LEWI				1				ER BASINS	
Reservoir Storage (1000) AF) - End	of May		1	Watershed	Snowpad	ck Analys:	is - June :	1, 1995
***************************************		*** !!1	- (+	:========			Numbe	This	Year as % of
Reservoir	Usable		e Storage *		rshed		of		1ear as % or
Reservoir	Capacityl	This Year	Last Year A	•	rsneu		Data Si		

The average is computed for the 1961-1990 base period.

Paridise SNOTEL Elevation 5120 ft.

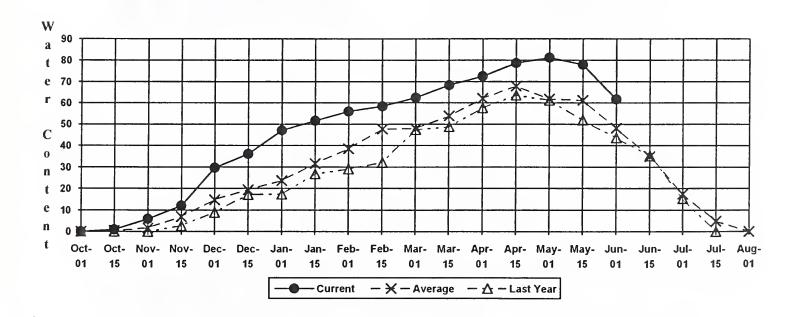
Cowlitz River

Lewis River

156

289

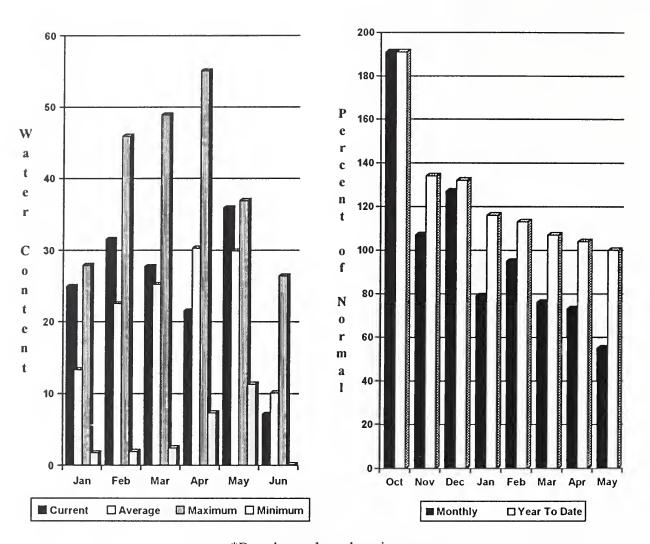
110



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

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

Precipitation* (% of normal)



*Based on selected stations

Summer runoff is forecast to be 58% of normal for the Green River, 62% for the Cedar River near Cedar Falls, 59% for the Rex River, 91% for the South Fork of the Tolt River, and 60% for the Cedar River at Cedar Falls. June 1 snowpack was 82% of normal in the White River Basin and 60% in the Green River Basin. The Cedar River Basin was not reported this month. Water content on June 1 at the Morse Lake SNOTEL near Chinook Pass on the White River, at an elevation of 5400 feet, was 12.6 inches. This site has a June 1 average of 21.4 inches. May precipitation was 55% of normal, bringing the water year-to-date to 100% of average. The National Weather Service reported temperatures at Stampede Pass to be 5.7 degrees above average for May.

WHITE - GREEN - CEDAR RIVER BASINS

Streamflow Forecasts - June 1, 1995

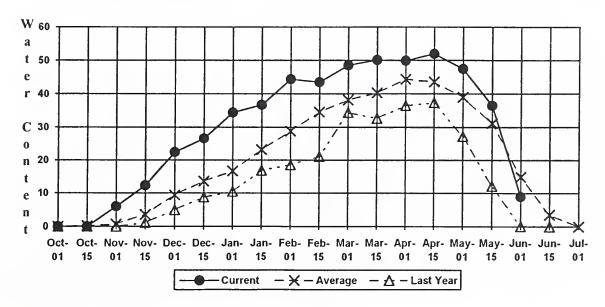
		<<======	Drier ====	== Future C	= Future Conditions ====== Wetter =====>>				
Forecast Point	Forecast	=======		= Chance Of	Exceeding * =		======		
	Period	90%	70%	50% (Most	Probable)	30%	10%	30-Yr Avg.	
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	(1000AF)	
GREEN RIVER below Howard Hanson Dam	JUN-JUL	15.0	33	45	58 I	58	76	78	
Siedii III II	JUN-SEP	27	48	62	58	75	96	106	
	JUN-JUN	7.0	22	32	58	42	57	55	
CEDAR RIVER near Cedar Falls	JUN-JUL	8.0	14.0	1 19.0	64 I	23	30	29	
ADMINITED TOOLS FOR THE STATE OF THE STATE O	JUN-SEP	10.0	18.0	1 23	62	28	36	37	
	JUN-JUN	4.7	9.5	12.8	64	16.1	21	20	
REX RIVER near Cedar Falls	JUN-JUL	0.4	3.4	I 5.4	59 I	7.4	10.4	9.2	
	JUN-SEP	0.9	4.7	7.2	59 j	9.7	13.5	12.3	
	JUN-JUN	0.4	2.6	4.0	59	5.4	7.6	6.8	
EDAR RIVER at Cedar Falls	JUN-JUL	5.0	9.0	13.0	60 I	16.0	21	21	
	JUN-SEP	8.0	11.0	13.0	60	15.0	18.0	22	
	JUN-JUN	3.2	8.2	11.6	60	15.0	20	19.4	
OUTH FORK TOLT near Index	JUN-JUL	3.9	4.9	5.6	89 1	6.3	7.3	6.3	
	JUN-SEP	6.3	7.4	8.1	91	8.8	9.9	8.9	
	JUN-JUN	2.4	3.2	3.8	90	4.4	5.2	4.2	
	=========			 ===========	ا =============				
WHITE - GREEN				1		- GREEN RIVE			
Reservoir Storage (1000	AF) - End	of May		I	Watershed Sn	owpack Analys	is - June 1	, 1995	

WHITE - GREEN RIVER BASINS Reservoir Storage (1000 AF) - End of May						WHITE - GREEN RIVER BASINS Watershed Snowpack Analysis - June 1, 1995					
Reservoir		Usable Capacity 	*** Usablo This Year	e Storage Last Year	*** Avg	 Watershed 	Number of Data Sites	This Yea ====== Last Yr	r as % of ====== Average		
						White River	2	158	82		
						Green River	2	0	60		
						' Cedar River 	0	0	0		

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

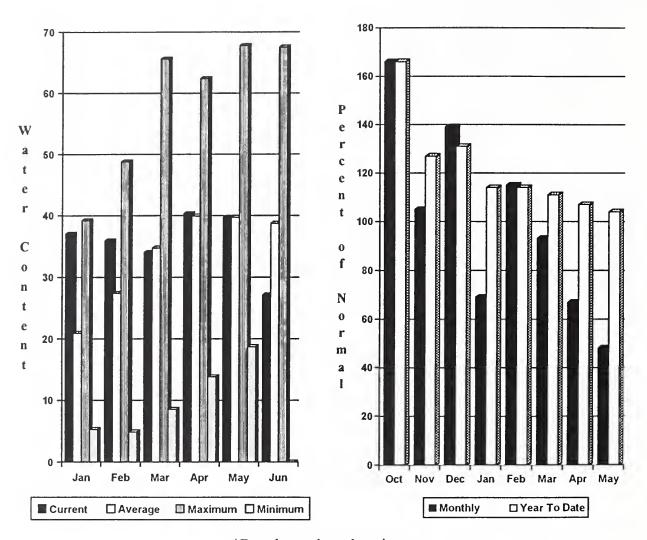
- (1) The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) The value is natural flow actual flow may be affected by upstream water management.

Stampede Pass SNOTEL Elevation 3860 ft.



 $_{\it i}$ The average is computed for the 1961-1990 base period.

Precipitation* (% of normal)



*Based on selected stations

Forecast for the Skagit River streamflow is for 113% of normal for the May streamflow in the Skagit River was 104% spring and summer period. of average. Other forecast points include the Baker River at 96% and Thunder Creek at 93% of average. Basin-wide precipitation for May was 48% of average, bringing water year-to-date to 104% of normal. snow cover in the Skagit River Basin was 116%, the Baker River Basin was 47% and the Snohomish River Basin was 46% of average. Rainy Pass SNOTEL, at 4780 feet, had 25.8 inches of water content. Normal June 1 water content is 20.4 inches. June 1 reservoir storage showed Ross Lake at 89% of normal and 66% of capacity. May temperatures were 3.5 degrees above normal.

NORTH PUGET SOUND RIVER BASINS

Streamflow Forecasts - June 1, 1995

		<<=====	== Drier	=====	Future Co	onditions ==	===== Wetter	====>>	
Forecast Point	Forecast Period	90% (1000AF)	70%	1 5	0% (Most	Exceeding * = Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
THUNDER CREEK near Newhalem	JUN-JUL	131	143		152	95	161	173	160
	JUN-SEP	215	230	1	240	93	250	265	259
	JUN-JUN	58	69	1	76	95 [83	94	80
SKAGIT RIVER at Newhalem (2)	MAY-SEP	1910	2100		2222	113	2350	2530	1963
	MAY-JUL	1640	1790	1	1896	118	2000	2150	1608
	MAY-JUN	1170	1300	!	1393	117	1480	1610	1188
BAKER RIVER near Concrete	JUN-JUL	430	455	1	475	97 I	495	520	490
	JUN-SEP	665	680	i	690	96	700	715	717
	JUN-JUN	171	199	į	218	97	235	265	225
		========	.===±===:	 ========	-±666666	 			
NORTH PUGET Reservoir Storage (1	SOUND RIVER BA				 		PUGET SOUND RI		, 1995
	Usable	*** Usab	le Stora	ge ***			Numbe	r This	Year as % of
Reservoir	Capacity 	This Year	Last Year	Avg	Wate:	rshed	of Data Si	tes Last	Yr Average
0SS	1404.1	925.3	1184.5	1033.9	I Snoho	omish River	3	387	46
D1ABLO RESERVO1R	90.6	88.6	85.3	86.1	' Skagi	it River	4	374	116

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

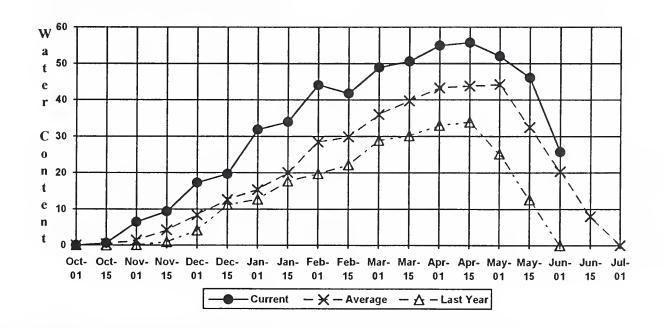
The average is computed for the 1961-1990 base period.

GORGE RESERVOIR

NO REPORT

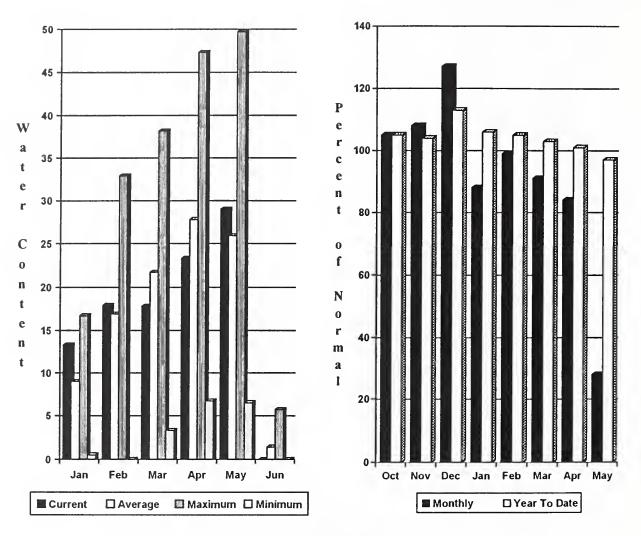
Rainy Pass SNOTEL Elevation 4780 ft.

Baker River



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

Precipitation* (% of normal)



*Based on selected stations

June forecasts of runoff for streamflow in the basin are for 82% of average for the Dungeness River and 83% of normal for the Elwha River. May precipitation was only 28% of average. Precipitation has accumulated at 97% of normal for the water year. May precipitation at Quillayute was 1.21 inches, which is much below normal at 23% of average. Snowcover in the Olympic Basin was not reported this month, but is assumed to be melted out. Temperatures at Quillayute were 3 degrees above normal for May.

OLYMPIC PENINSULA RIVER BASINS

Streamflow Forecasts - June 1, 1995

		<<=====	Drier ====	== Future C	Conditions ==	===== Wetter	====>>	
Forecast Point	Forecast			Chance Of	Exceeding * =		.=======	
	Period	90% (1000AF)	70% (1000AF)		Probable)		10% (1000AF)	30-Yr Avg (1000AF
DUNGENESS RIVER nr Sequim	MAY-SEP MAY-JUL	92 75	106 86	115	82 I 83 I	124 100	138 111	140 112
	MAY-JUN	50	59	66	84	73	82	79
ELWHA RIVER nr Port Angeles	MAY-SEP	275 225	320 260	353 284	83 83	385 310	430 345	427 342
	MAY-JUL	223	260	284	83	310	343	342

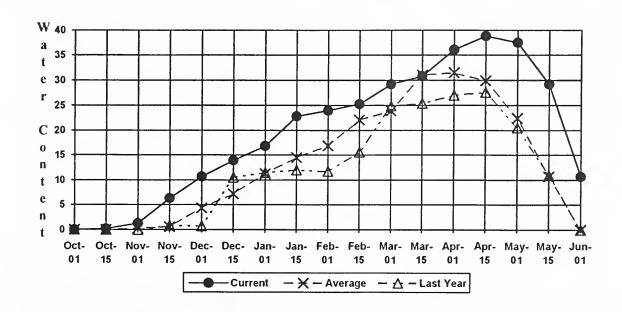
	OLYMPIC PENINSULA RIVER BA Reservoir Storage (1000 AF) - End	OLYMPIC PENINSULA RIVER BASINS Watershed Snowpack Analysis - June 1, 1995						
Reservoir	Usable Capacity 	*** Usa This Year	ble Storage Last Year	≥ *** 	Watershed	Number of Data Sites	This Yea	r as % of Average
					Elwha River	0	0	0
					Morse Creek	0	0	0
					Dungeness River	0	0	0
					Quilcene River	1	0	0
				1 1	Wynoochee River	0	0	0

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

The average is computed for the 1961-1990 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 flow actual flow may be affected by upstream water management.

Mount Crag SNOTEL Elevation 4050 ft.





In addition to basin outlook reports, a Water Supply Forecast for the Western United States is published by the Natural Resources Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Natural Resources Conservation Service, West National Technical Center, 101 SW Main Street, Suite 1700, Portland, OR 97204-3225.

Issued by

Released by

Paul W. Johnson

Chief

Natural Resources Conservation Service

U.S. Department of Agriculture

Lynn A. Brown

State Conservationist

Natural Resources Conservation Service

Spokane, Washington

The Following Organizations Cooperate With the Natural Resources Conservation Service in Snow Survey Work*:

Canada Ministry of the Environment

Investigations Branch, Victoria, British Columbia

State Washington State Department of Ecology

Washington State Department of Natural Resources

Federal Department of the Army

Corps of Engineers

U.S. Department of Agriculture

Forest Service

U.S. Department of Commerce

NOAA, National Weather Service

U.S. Department of Interior

Bonneville Power Administration

Bureau of Reclamation Geological Survey National Park Service Bureau of Indian Affairs

Local City of Tacoma

City of Seattle

Chelan County P.U.D.

Pacific Power and Light Company

Puget Sound Power and Light Company

Washington Water Power Company

Snohomish County P.U.D. Colville Confederated Tribes

Spokane County
Yakama Indian Nation

Private Okanogan Irrigation District

Wenatchee Heights Irrigation District Newman Lake Homeowners Association

^{*}Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.



Rock Pointe Tower II, Suite 450 W. 316 Boone Avenue Spokane, WA 99201-2349



3 U. S. DEPT. OF AGRICULTURE NATIONAL AGRICUL. LIBRARY CURRENT SERIAL RECORDS BELTSVILLE, MD 20705



Washington Basin Outlook Report

Natural Resources Conservation Service Spokane, WA

