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United States
Department of
Agriculture

Natural
Resources
Conservation
Service



Washington Basin Outlook Report May 1, 1996



Basin Outlook Reports

and Federal - State - Private Cooperative Snow Surveys

For more water supply and resource management information, contact:

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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.

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SNOW SURVEY JOINS WORLD WIDE WEB

NATURAL RESOURCES CONSERVATION SERVICE

Snow Survey and Water Supply Forecasting products are now available on the INTERNET. A few of our more popular (SNOTEL Update Reports, State Basin Outlook Reports, historic SNOTEL data, and products previously published in the Water Supply Outlook Report for the Western United States) are now available via our new Home Pages and our Anonymous FTP server.

The Universal Resource Locator (URL) for the Water Climate Center home page is:

<http://www.wcc.nrcs.usda.gov/>

The Universal Resource Locator (URL) for the Oregon/Washington Snow Survey home page is:

<http://www.europa.com/~gillen>

The address for the WCC Anonymous FTP server is:

<ftp.wcc.nrcs.usda.gov>

You can access the Anonymous FTP server using your INTERNET browser (Netscape, Mosaic, etc.) by changing the URL to:

<ftp://ftp.wcc.nrcs.usda.gov/>

We will continue to add more products and abilities to the Home Pages and Anonymous FTP server and welcome any comments and suggestions you might have.

Questions and comments should be directed to the NRCS Snow Survey and Water Supply Forecasting contact in your state or in Portland:

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Washington Water Supply Outlook

May 1996

General Outlook

There's nothing like an oddball spring to make a liar out of me. Last month I reported that readings at most of our SNOTEL sites had peaked, and were beginning their annual descent. Then April's cool temperatures and above normal precipitation slowed meltout to a dribble and increased snowpack. However, the increases were slight and may prolong normal spring runoff, but won't contribute much to the water supply.

Streamflow

Eastern Washington forecasts for spring - summer streamflow are for near to above normal. They vary from 125% of average for the Methow River near Pateros to 94% of normal for the American River near Nile. May - September forecasts for many Western Washington streams aren't as good. The Cedar River near Cedar Falls, 80%; the Green River, 86%; and the Skagit River, 98%. Other Washington streams include Mill Creek at Walla Walla, 104%; the Wenatchee River at Plain, 107%; the Baker River near Concrete, 85%; the Elwha River near Port Angeles, 60%; and the Colville River, 104%. April streamflows were once again above normal throughout the state. The Similkameen River at Nighthawk was the highest at 330% of normal; and the Cowlitz River below Mayfield Dam, with 126% of normal, was the lowest in the state. Other streamflows were the following percentage of normal: Lewis River, 151%; Okanogan River, 280%; Spokane River, 139%; Columbia River at the Canadian border, 158%; and Yakima River at Parker, 172%. Many of the above normal flows can be attributed to the above average precipitation during April, and to reservoir releases as managers prepare for spring runoff.

BASIN

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

Spokane.....	100
Colville-Pend Oreille.....	104-118
Okanogan-Methow.....	112-125
Wenatchee-Chelan.....	105-123
Yakima.....	94-115
Walla Walla.....	99-104
Cowlitz-Lewis.....	98-115
White-Green-Cedar.....	65-86
North Puget Sound.....	85-98
Olympic Peninsula.....	60-76

Snowpack

The May 1 statewide SNOTEL reading showed the snowpack at 90% of normal, up from 81% last month. Snowpack varied across the state, with the Olympic Peninsula River Basin reporting the lowest with 29% of average. The Entiat River Basin and Colockum Creek Basin were off the scale with over 700% normal snowpack remaining. Both of these basins have limited data collection points. Westside averages from SNOTEL and May 1 snow surveys include North Puget Sound River Basins with 84% of normal; White-Green-Cedar River Basins with 91%; and Lewis-Cowlitz Basins with 80% of normal. Snowpack along the east slopes of the Cascade Mountains include the Yakima with 101%, and the Wenatchee with 115%. Snowpack in the Spokane River Basin was at 68%; Pend Oreille River Basin, including Canadian data, had 108% of normal. Maximum snowcover in Washington was at Lyman Lake SNOTEL in the north-central Cascades, with a water content of 71.1 inches. This site would normally have 58.7 inches of water content on May 1. Snowpack did not change significantly from last month. Mid-elevation sites have begun normal meltout with about one-third of the sites reporting no snow-water-equivalent. However, high mountain snowpack remains near to above normal. April accumulations were minimal.

BASIN	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Spokane.....	85.....	68
Colville.....	Not Reported.....	NOT REPORTED
Pend Oreille.....	123.....	108
Okanogan.....	90.....	95
Methow.....	90.....	139
Wenatchee.....	85.....	115
Chelan.....	98.....	123
Yakima.....	78.....	101
Walla Walla.....	61.....	68
Cowlitz.....	83.....	98
Lewis.....	52.....	63
White.....	83.....	117
Green.....	67.....	66
North Puget Sound.....	78.....	84
Olympic Peninsula.....	25.....	29

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

Precipitation

During the month of April the National Weather Service and Natural Resources Conservation Service climate stations showed much above average precipitation accumulation across the state. Precipitation varied from a high of 266% of average at Fish Lake SNOTEL to a low of 44% of normal at the Yakima Airport. Basin-wide averages for the water year varied from 134% of normal in the White-Green-Cedar River Basins, to 205% of normal in the Olympic Peninsula River Basin. This season's above average precipitation and saturated soils should help sustain near average streamflows for the season. The drawback to these conditions is that we are experiencing higher than normal erosion which leads to increased turbidity and sedimentation in streams and rivers.

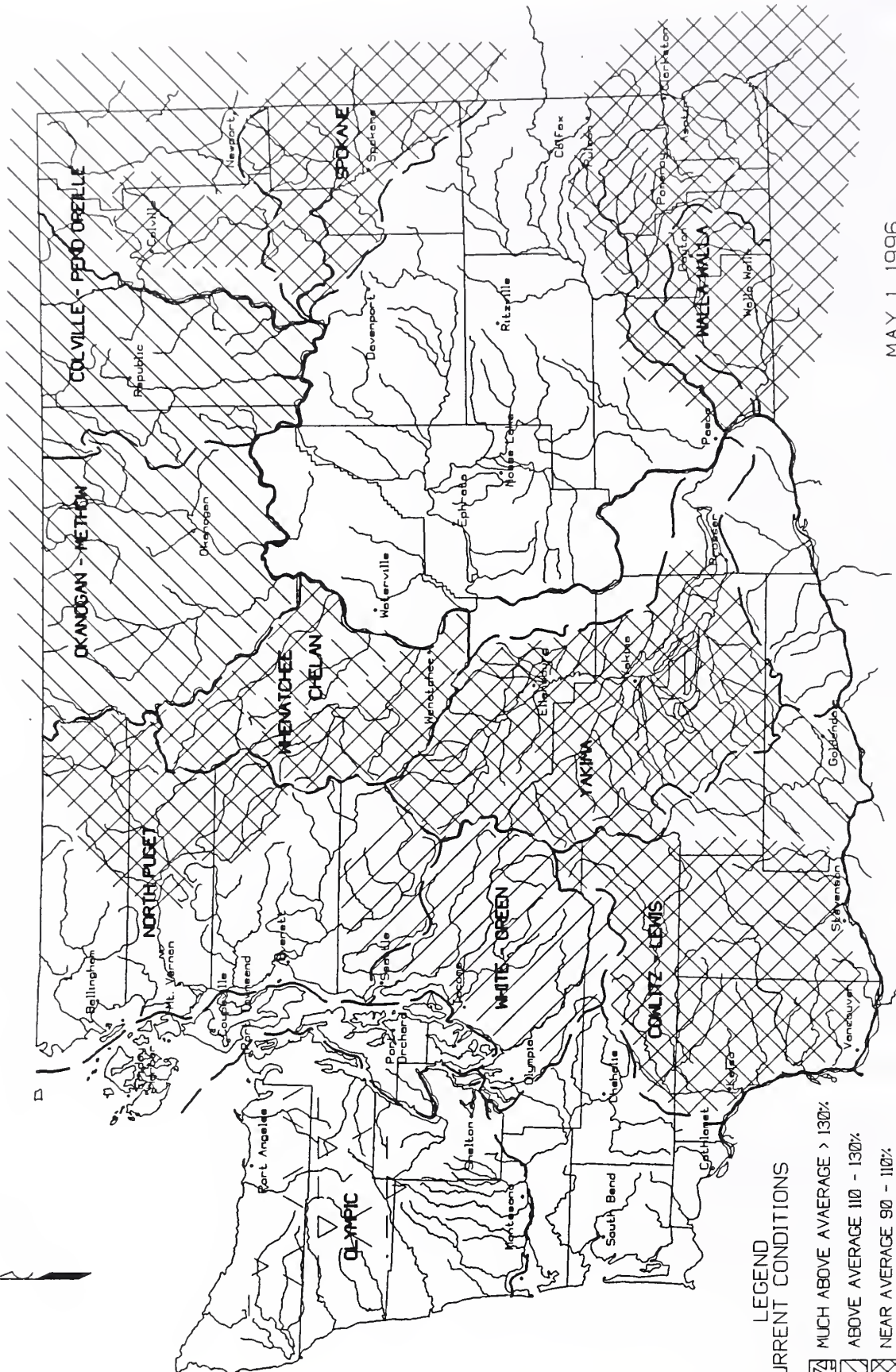
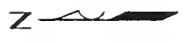
BASIN	APRIL PERCENT OF AVERAGE	WATER YEAR PERCENT OF AVERAGE
Spokane.....	186.....	139
Colville-Pend Oreille.....	150.....	126
Okanogan-Methow.....	150.....	115
Wenatchee-Chelan.....	149.....	142
Yakima.....	156.....	156
Walla Walla.....	179.....	134
Cowlitz-Lewis.....	190.....	149
White-Green-Cedar.....	134.....	143
North Puget Sound.....	152.....	145
Olympic Peninsula.....	205.....	117

Reservoir








Reservoir storage in Washington remained near to above average for May 1. Reservoir storage in the Yakima Basin was 1,019,800 acre feet, 130% of normal. Storage at other reservoirs included Roosevelt at 88% of average, and the Okanogan reservoirs with 134% of normal for May 1. The power generation reservoirs include the following: Coeur d'Alene Lake, 399,500 acre feet, or 162% of normal; Chelan Lake, 460,100 acre feet, 103% of average and 68% of capacity; and Ross Lake at 154% of average and 71% of capacity. Many reservoir operators in the state continue to release water in anticipation of spring runoff and flood control.

BASIN	PERCENT OF CAPACITY	PERCENT OF AVERAGE
Spokane.....	168.....	162
Colville-Pend Oreille.....	30.....	104
Okanogan-Methow.....	91.....	134
Wenatchee-Chelan.....	68.....	103
Yakima.....	96.....	130
North Puget Sound.....	71.....	154

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



LEGEND
CURRENT CONDITIONS

-  MUCH ABOVE AVERAGE > 130%
-  ABOVE AVERAGE 110 - 130%
-  NEAR AVERAGE 90 - 110%
-  BELOW AVERAGE 70 - 90%
-  MUCH BELOW AVERAGE < 70%
-  NOT FORECASTED
-  WATERSHED BOUNDARY

MAY 1, 1996

STREAMFLOW PROSPECTS WASHINGTON

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

NTS

BASIN SUMMARY OF SNOW COURSE DATA

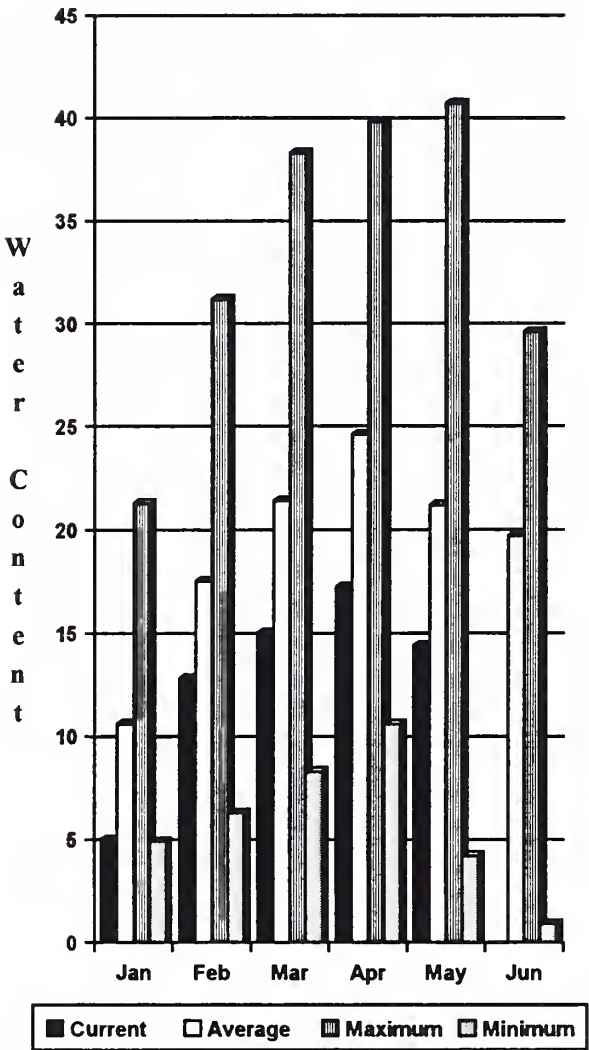
MAY 1, 1996

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							YAKIMA RIVER							
BENTON MEADOW	2370	5/02/96	0	.0	.0	.0	BIG BOULDER CREEK	3200	5/01/96	---	7.8E	--	7.7	
BENTON SPRING	4920	5/02/96	12	5.1	10.2	13.6	BLEWETT PASS#2PILLOW	4270	5/01/96	---	2.8S	9.7	4.9	
BOYER MOUNTAIN	5250	4/30/96	29	11.7	26.4	23.6	BUMPING LAKE	3450	5/01/96	---	9.7E	--	7.5	
BUNCHGRASS MEADOWS	5000	4/29/96	55	22.0	--	26.8	BUMPING RIDGE PILLOW	4600	5/01/96	---	16.9S	23.7	18.9	
BUNCHGRASS MDWPILLOW	5000	4/29/96	---	22.0	31.6	26.9	CAYUSE PASS	5300	5/01/96	---	103.7E	114.0	88.1	
LOOKOUT PILLOW	5140	5/01/96	---	24.6	23.2	29.3	CORRAL PASS PILLOW	6000	5/01/96	---	33.9S	37.8	29.5	
NELSON CAN.	3100	4/26/96	14	5.7	11.8	7.2	FISH LAKE	3370	5/01/96	---	23.7E	23.8	22.4	
KETTLE RIVER							FISH LAKE PILLOW	3370	5/01/96	---	26.5S	27.1	25.0	
BARNES CREEK CAN.	5300	4/28/96	54	22.6	19.0	20.5	GREEN LAKE PILLOW	6000	5/01/96	---	20.8S	29.6	19.7	
BIG WHITE MTN CAN.	5510	4/29/96	50	20.1	23.5	19.9	GROUSE CAMP PILLOW	5380	5/01/96	---	11.5S	23.2	9.2	
CARMI CAN.	4100	4/29/96	1	.2	1.1	1.7	LOST HORSE PILLOW	5000	5/01/96	---	8.6S	18.1	8.2	
GRAYSTOKE LAKE CAN.	5940	4/30/96	36	12.9	15.0	18.1	MORSE LAKE PILLOW	5400	5/01/96	---	52.3S	75.9	44.4	
MONASHEE PASS CAN.	4500	4/28/96	32	13.0	11.3	12.8	OLALLIE MDWS PILLOW	3960	5/01/96	---	34.4S	46.1	51.0	
TRAPPING CK LOW CAN.	3050	4/29/96	0	.0	.0	.0	SASSE RIDGE PILLOW	4200	5/01/96	---	24.7S	35.5	24.1	
TRAPPING CK UP CAN.	4460	4/29/96	1	.2	.4	5.6	STAMPEDE PASS PILLOW	3860	5/01/96	---	31.8S	47.5	39.1	
COLVILLE RIVER							TUNNEL AVENUE	2450	5/01/96	---	12.1E	11.1	12.7	
OMAK LAKE, TWIN LAKES	NO REPORT						WHITE PASS ES PILLOW	4500	5/01/96	---	15.0S	23.8	18.7	
MOSES MTN PILLOW	4800	5/01/96	---	10.6S	13.7	7.3	AHTANUM CREEK							
SPOKANE RIVER							GREEN LAKE PILLOW	6000	5/01/96	---	20.8S	29.6	19.7	
FOURTH OF JULY SUM	3200	5/01/96	0	.0	.0	.0	LOST HORSE PILLOW	5000	5/01/96	---	8.6S	18.1	8.2	
LOST LAKE (d)	6110	5/01/96	---	57.8E	47.5	57.1	MILL CREEK							
MOSQUITO RDG PILLOW	5200	5/01/96	---	30.6	30.5	34.7	HIGH RIDGE PILLOW	4980	5/01/96	---	4.5S	14.3	12.4	
SUNSET PILLOW	5540	5/01/96	---	25.0	22.2	36.5	TOUCHET #2 PILLOW	5530	5/01/96	---	22.6	30.1	27.3	
LOOKOUT PILLOW	5140	5/01/96	---	24.6	23.2	29.3	LEWIS - COWLITZ RIVERS							
NEWMAN LAKE							CAYUSE PASS	5300	5/01/96	---	103.7E	114.0	88.1	
QUARTZ PEAK PILLOW	4700	5/01/96	---	5.4	18.9	18.6	JUNE LAKE PILLOW	3200	5/01/96	---	2.7S	24.8	19.6	
OKANOGAN RIVER							LONE PINE PILLOW	3800	5/01/96	---	18.4S	31.4	26.4	
ABERDEEN LAKE CAN.	4300	5/01/96	---	.0E	.0	1.7	PARADISE PARK PILLOW	5500	5/01/96	---	66.2S	81.2	61.8	
BLACKWALL PEAK CAN.	6370	5/01/96	---	36.5	--	36.3	PIGTAIL PEAK PILLOW	5900	5/01/96	---	57.0S	51.1	47.7	
BRENDA MINE CAN.	4800	4/25/96	27	10.7	13.5	9.8	POTATO HILL PILLOW	4500	5/01/96	---	14.5S	20.6	17.0	
BROOKMERE CAN.	3200	4/29/96	12	4.2	2.0	5.1	SHEEP CANYON PILLOW	4050	5/01/96	---	5.7S	19.4	34.7	
ENDERBY CAN.	6200	4/30/96	94	37.0	36.6	42.9	SPENCER MDW PILLOW	3400	5/01/96	---	9.1S	19.2	17.2	
ESPERON CK. UP CAN.	5410	4/27/96	37	13.8	18.3	17.5	SPIRIT LAKE PILLOW	3100	5/01/96	---	.0S	4.2	.3	
ESPERON CK. MID CAN.	4690	4/27/96	28	11.3	14.2	11.9	SURPRISE LKS PILLOW	4250	5/01/96	---	32.8S	46.3	36.1	
FREEZEOUT CK. TRAIL	3500	4/30/96	1	.6	4.4	7.0	WHITE PASS ES PILLOW	4500	5/01/96	---	15.0S	23.8	18.7	
GREYBACK RES CAN.	5120	4/29/96	23	8.3	9.0	7.7	WHITE RIVER							
HAMILTON HILL CAN.	4890	4/30/96	23	9.1	6.3	12.6	CAYUSE PASS	5300	5/01/96	---	103.7E	114.0	88.1	
HARTS PASS	6500	4/30/96	118	48.0	49.4	45.1	CORRAL PASS PILLOW	6000	5/01/96	---	33.9S	37.8	29.5	
HARTS PASS PILLOW	6500	5/01/96	---	58.7S	56.4	42.0	MORSE LAKE PILLOW	5400	5/01/96	---	52.3S	75.9	44.4	
ISINTOK LAKE CAN.	5500	4/26/96	17	4.9	6.3	6.3	GREEN RIVER							
LIGHTNING LAKE CAN.	4000	4/29/96	31	11.5	8.7	11.5	COUGAR MTN. PILLOW	3200	5/01/96	---	.0S	.0	9.3	
MCCULLOCH CAN.	4200	4/30/96	0	.0	1.6	2.4	STAMPEDE PASS PILLOW	3860	5/01/96	---	31.8S	47.5	39.1	
MISSZULA MTN CAN.	5090	5/01/96	14	4.4	5.6	7.0	CEDAR RIVER							
MISION CREEK CAN.	5800	5/01/96	---	19.4E	--	21.8	MT. GARDNER PILLOW	2860	5/01/96	---	.0S	.0	10.8	
MONASHEE PASS CAN.	4500	4/28/96	32	13.0	11.3	12.8	TINKHAM CREEK PILLOW	3000	5/01/96	---	7.7S	10.7	16.7	
MT. KOBAY CAN.	5900	4/28/96	33	11.7	18.9	13.3	MEADOWS PASS PILLOW	3240	5/01/96	---	.0S	.0	21.0	
MUTTON CREEK #1	5700	5/01/96	---	12.5E	10.5	9.6	SNOQUALMIE RIVER							
OYAMA LAKE CAN.	4400	4/29/96	10	3.3	5.7	3.1	OLALLIE MDWS PILLOW	3960	5/01/96	---	34.4S	46.1	51.0	
POSTILL LAKE CAN.	4500	4/30/96	19	7.2	7.5	6.4	SKYKOMISH RIVER							
SALMON MDWS PILLOW	4500	5/01/96	---	1.2S	9.8	1.1	STAMPEDE PASS PILLOW	3860	5/01/96	---	31.8S	47.5	39.1	
SILVER STAR MTN CAN.	6000	4/27/96	80	32.2	33.3	29.7	STEVENS PASS PILLOW	4070	5/01/96	---	25.4S	35.2	32.1	
SUMMERLAND RES CAN.	4200	4/25/96	15	5.0	5.3	6.3	SKAGIT RIVER							
SUNDAY SUMMIT CAN.	4300	4/29/96	0	.0	.0	.8	BEAVER CREEK TRAIL	2200	5/01/96	0	.0	1.0	4.1	
TROUT CREEK CAN.	4690	4/28/96	9	2.7	2.2	4.8	BEAVER PASS	3680	5/01/96	35	13.7	30.9	28.1	
WHITE ROCKS MTN CAN.	6000	5/01/96	50	19.9	25.5	22.4	BROWN TOP AM	6000	5/01/96	138	53.1	67.6	61.7	
METHOW RIVER							DEVILS PARK	5900	4/30/96	109	46.2	48.6	45.0	
HARTS PASS	6500	4/30/96	118	48.0	49.4	45.1	FREEZEOUT CK. TRAIL	3500	4/30/96	1	.6	4.4	7.0	
HARTS PASS PILLOW	6500	5/01/96	---	58.7S	56.4	42.0	HARTS PASS	6500	4/30/96	118	48.0	49.4	45.1	
MUTTON CREEK #1	5700	5/01/96	---	12.5E	10.5	9.6	HARTS PASS PILLOW	6500	5/01/96	---	58.7S	56.4	42.0	
SALMON MDWS PILLOW	4500	5/01/96	---	1.2S	9.8	1.1	KLESILKWA CAN.	3710	4/28/96	0	.0	.0	8.3	
CHELAN LAKE BASIN							LIGHTNING LAKE CAN.	4000	4/29/96	31	11.5	8.7	11.5	
LYMAN LAKE PILLOW	5900	5/01/96	---	71.1S	80.7	58.7	LYMAN LAKE PILLOW	5900	5/01/96	---	71.1S	80.7	58.7	
MINERS RIDGE PILLOW	6200	5/01/96	---	55.6S	58.0	51.3	MEADOWS CABIN	1900	5/01/96	0	.0	.0	1.1	
PARK CK RIDGE PILLOW	4600	5/01/96	---	44.8S	35.1	33.6	NEW HOZOMEEN LAKE	2800	4/30/96	0	.0	.0	4.5	
RAINY PASS	4780	5/01/96	73	28.6	44.6	40.6	RAINY PASS	4780	5/01/96	73	28.6	44.6	40.6	
RAINY PASS PILLOW	4780	5/01/96	---	50.0S	52.0	36.8	RAINY PASS PILLOW	4780	5/01/96	---	50.0S	52.0	36.8	
ENTIAI RIVER							THUNDER BASIN	4200	5/01/96	41	15.0	22.2	30.5	
POPE RIDGE PILLOW	3540	5/01/96	---	12.7S	14.5	1.6	THUNDER BASIN PILLOW	4200	5/01/96	---	25.8S	28.8	30.5	
WENATCHEE RIVER							BAKER RIVER							
BLEWETT PASS#2PILLOW	4270	5/01/96	---	2.8S	9.7	4.9	SCHREIBERS MDW AM	3400	5/01/96	---	47.0E	51.0	56.2	
FISH LAKE PILLOW	3370	5/01/96	---	26.5S	27.1	25.0	WATSON LAKES AM	4500	5/01/96	---	56.0E	55.0	67.2	
LYMAN LAKE PILLOW	5900	5/01/96	---	71.1S	80.7	58.7	ELMHA RIVER							
STEVENS PASS PILLOW	4070	5/01/96	---	25.4S	35.2	32.1	HURRICANE	4500	4/27/96	7	1.3	12.2	21.9	
TROUGH #2 PILLOW	5310	5/01/96	---	19.9S	13.8	2.5	MORSE CREEK							
UPPER WHEELER PILLOW	4400	5/01/96	---	3.3S	14.0	4.8	COX VALLEY	4500	4/27/96	47	16.1	38.0	39.1	
SQUILCHUCK CREEK							DUNGENESS RIVER							
STEMILT CREEK	NO REPORT						DEER PARK	5200	4/28/96	3	1.0	13.2	18.7	
UPPER WHEELER PILLOW	4400	5/01/96	---	3.3S	14.0	4.8	QUILCENE RIVER							
COLOCKUM CREEK							MOUNT CRAG PILLOW	4050	5/01/96	---	14.7S	37.5	22.4	
TROUGH #2 PILLOW	5310	5/01/96	---	19.9S	13.8	2.5	WYNOOCHEE RIVER							
							CARROL PASS	3650	5/01/96	18	8.0	--	26.9	

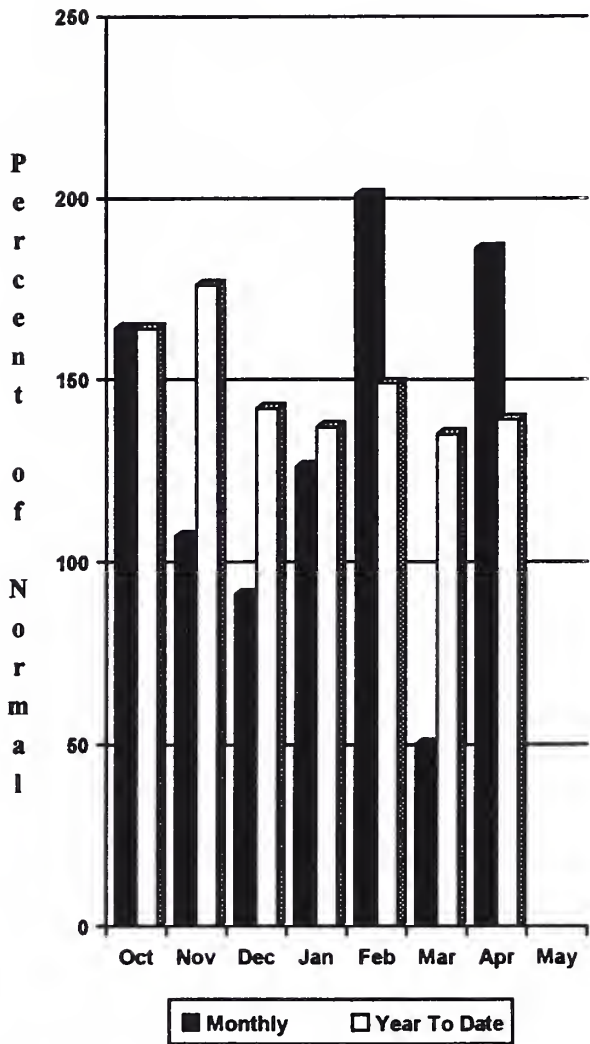
(d) Denotes discontinued site

Spokane River Basin

Mountain Snowpack* (inches)



Precipitation* (% of normal)



*Based on selected stations

The May 1 forecasts for summer runoff within the Spokane River Basin are for average flows. The forecast is based on a basin snowpack that is 68% of average and precipitation that is 139% of normal for the water year. April precipitation was 186% of average. Streamflow on the Spokane River was 139% of average for April. May 1 storage in Coeur d'Alene Lake was 399,500 acre feet, 162% of normal, and 168% of capacity.

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

SPOKANE RIVER BASIN

Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		Drier		50% (Most Probable)		Wetter		
		90% (1000AF)	70% (1000AF)	50% (1000AF)	10% (% AVG.)	30% (1000AF)	10% (1000AF)	
SPOKANE near Post Falls (2)	MAY-SEP	1469	1690	1840	100	1990	2211	1846
	MAY-JUL	1375	1592	1740	100	1888	2105	1749
SPOKANE at Long Lake	MAY-JUL	1588	1815	1970	100	2125	2352	1975
	MAY-SEP	1809	2042	2200	100	2358	2591	2198

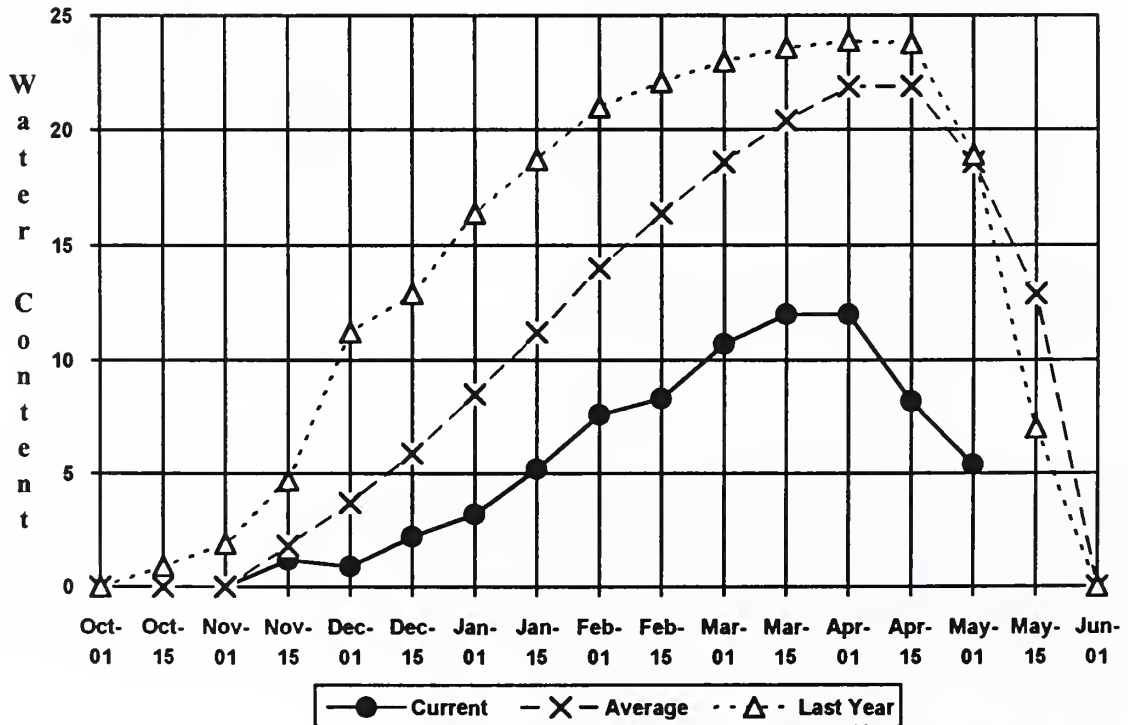
SPOKANE RIVER BASIN Reservoir Storage (1000 AF) - End of April					SPOKANE RIVER BASIN Watershed Snowpack Analysis - May 1, 1996			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
COEUR D'ALENE	238.5	399.5	140.5	246.7	Spokane River	11	85	68

* 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.

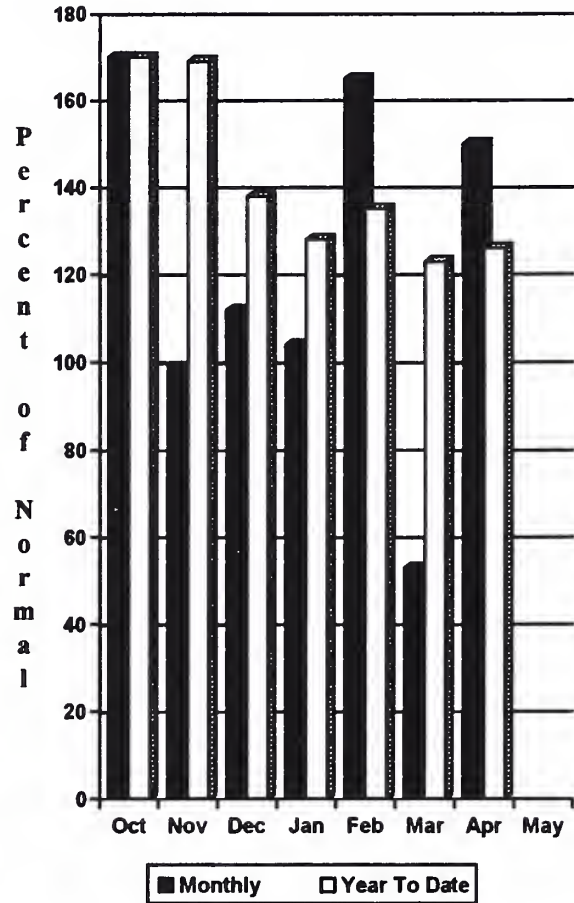
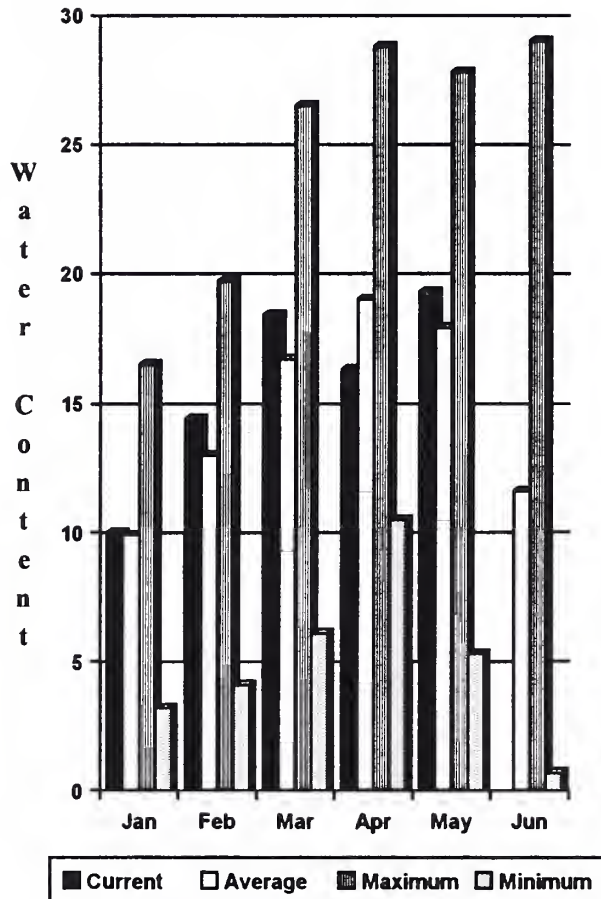
Quartz Peak SNOTEL Elevation 4700 ft.



Colville - Pend Oreille River Basins

Mountain Snowpack* (inches)

Precipitation* (% of normal)



*Based on selected stations

Forecasts for the basin are all near to above average. Spring and summer forecast for the Kettle River streamflow is for 121% of normal; the Pend Oreille, below Box Canyon, 115%; and Priest River, near the town of Priest River, 110% of normal. Forecast for the Columbia River at Birchbank is for runoff to be 115% of normal. April streamflow was 155% of normal on the Pend Oreille River; 158% on the Columbia at the International Boundary; and 198% on the Kettle River. May 1 snowcover was 108% of normal for the Pend Oreille Basin, 88% for the Kettle River Basin. The Colville River Basin was not reported this month. Precipitation during April was 150% of average, bringing the water year-to-date to 126% of normal.

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

COLVILLE - PEND OREILLE RIVER BASINS
Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		Drier		50% (Most Probable)		Wetter		
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
PEND OREILLE Lake Inflow (1,2)	MAY-JUL	10745	12089	12700	115	13311	14655	11070
	MAY-SEP	12030	13522	14200	116	14878	16370	12290
PRIEST nr Priest River (1,2)	MAY-JUL	530	640	690	110	740	850	627
	MAY-SEP	590	700	750	110	800	910	680
PEND OREILLE bl Box Canyon (1,2)	MAY-JUL	10365	12039	12800	114	13561	15235	11220
	MAY-SEP	11605	13458	14300	115	15142	16995	12430
	MAY-JUN	8667	10065	10700	114	11335	12733	9410
CHAMOKANE CK nr Long Lake	MAY-AUG	5.15	8.04	10.00	106	11.96	14.85	9.40
COLVILLE at Kettle Falls	MAY-SEP	64	78	87	104	97	111	84
	MAY-JUL	54	67	76	104	85	98	73
	MAY-JUN	47	59	67	105	75	87	64
KETTLE near Laurier	MAY-SEP	1642	1802	1910	121	2018	2178	1582
	MAY-JUL	1600	1737	1830	123	1923	2060	1489
	MAY-JUN	1427	1539	1615	123	1691	1803	1314
COLUMBIA at Birchbank (1,2)	MAY-JUL	33232	35479	36500	114	37521	39768	32090
	MAY-SEP	42536	45399	46700	115	48001	50864	40760
	MAY-JUN	23514	25086	25800	114	26514	28086	22620
COLUMBIA at Grand Coulee Dm (1,2)	MAY-SEP	62123	66302	68200	118	70098	74277	57921
	MAY-JUL	50213	53642	55200	116	56758	60187	47614
	MAY-JUN	38263	40833	42000	117	43167	45737	35827

COLVILLE - PEND OREILLE RIVER BASINS
Reservoir Storage (1000 AF) - End of April

COLVILLE - PEND OREILLE RIVER BASINS
Watershed Snowpack Analysis - May 1, 1996

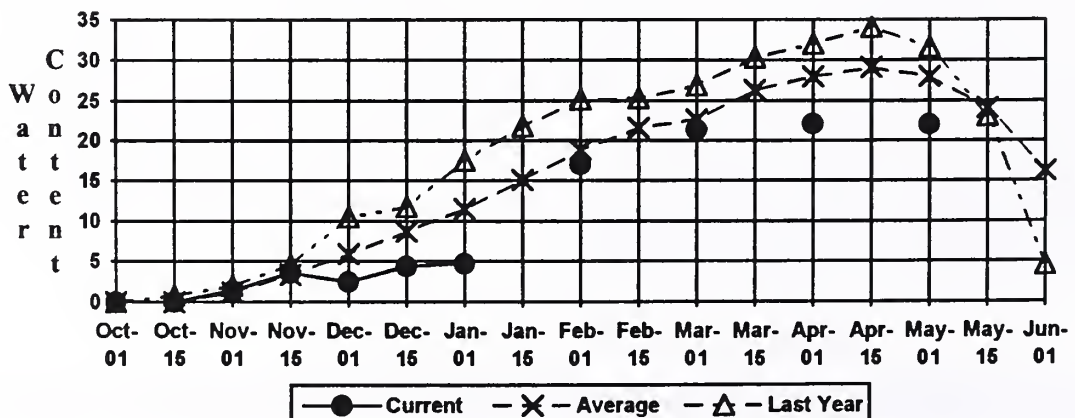
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ROOSEVELT	5232.0	1149.2	2861.9	1310.0	Colville River	0	0	0
BANKS	715.0	660.9	608.0	435.0	Pend Oreille River	87	123	108
					Kettle River	8	96	87

* 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.

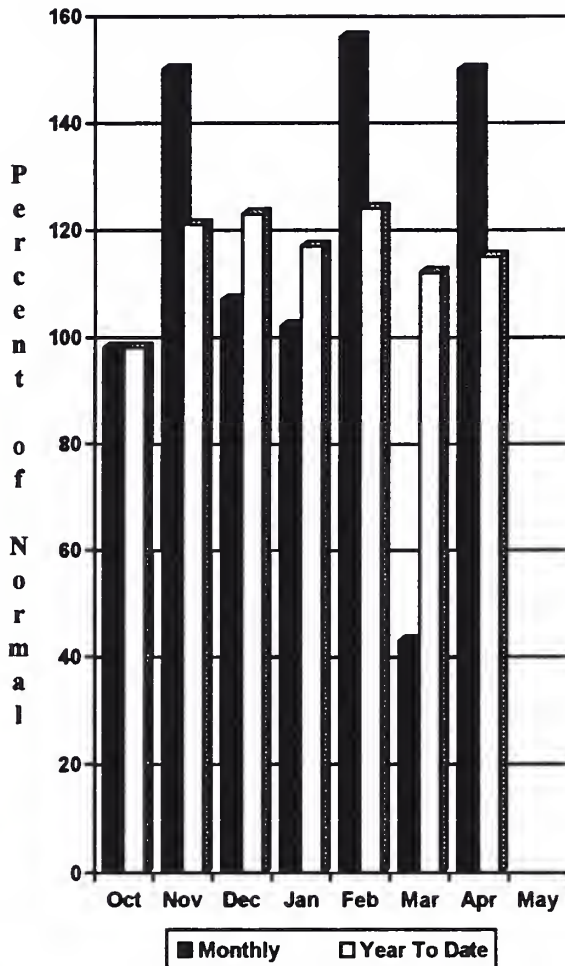
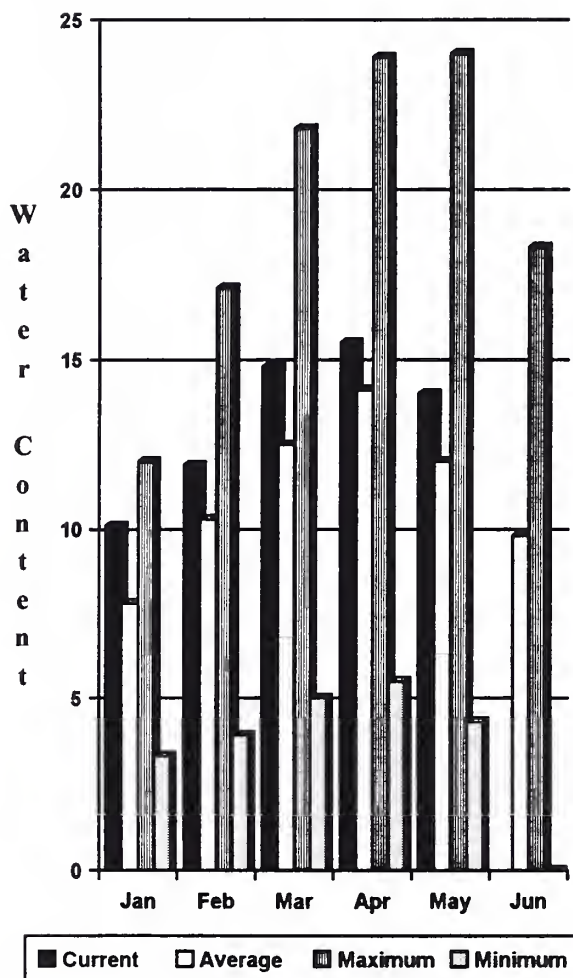
Bunchgrass Meadow SNOTEL
Elevation 5000 ft.



Okanogan - Methow River Basins

Mountain Snowpack* (inches)

Precipitation* (% of normal)



*Based on selected stations

Summer runoff forecast for the Okanogan River is 112% of normal; the Similkameen River, 112%; the Methow River, 125%; and Salmon Creek, 116% of normal. May 1 snowcover in the Okanogan Basin was 95% of normal, and in the Methow, 139%. April precipitation in the Okanogan-Methow was 150% of normal, with water year-to-date at 115% of average. April streamflow on the Methow River was 224% of normal; 280% on the Okanogan River; and 330% on the Similkameen. Snow-water-content at Harts Pass SNOTEL, elevation 6,500 feet, was 58.7 inches. Normal for this site is 42 inches. Storage in the Conconully Reservoirs was 21,500 acre feet, which is 91% of capacity and 134% of the May 1 average.

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

OKANOGAN - METHOW RIVER BASINS

Streamflow Forecasts - May 1, 1996

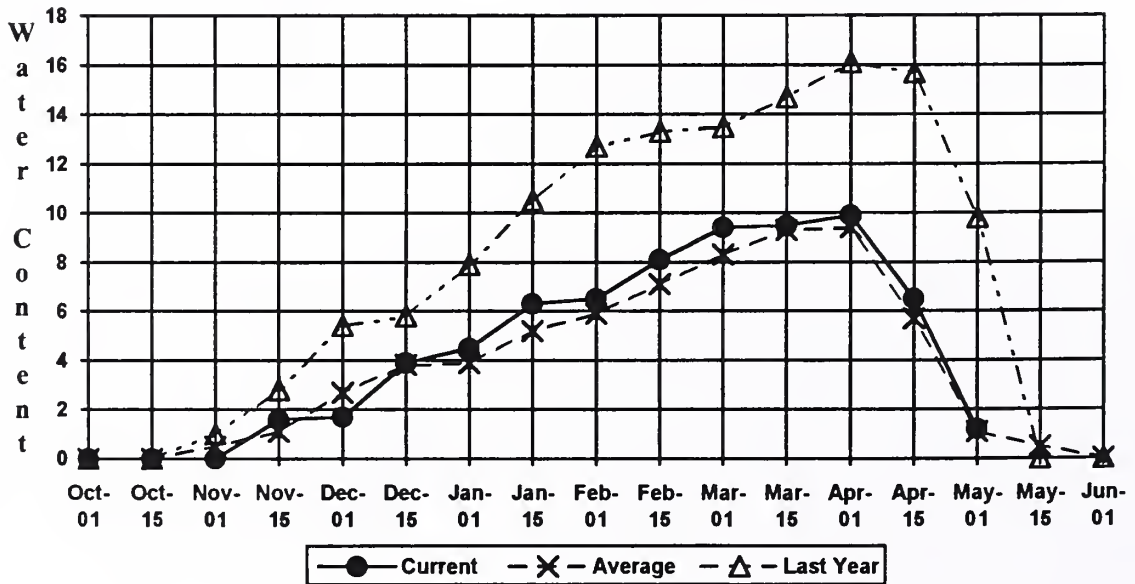
Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		Drier		Chance Of Exceeding *		Wetter		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
SIMILKAMEEN nr Nighthawk (1)	MAY-SEP	1210	1375	1450	112	1525	1690	1300
	MAY-JUL	1136	1283	1350	112	1417	1564	1205
	MAY-JUN	930	1071	1135	112	1199	1340	1014
OKANOGAN RIVER nr Tonasket (1)	MAY-SEP	1128	1494	1660	112	1826	2192	1485
	MAY-JUL	1020	1343	1490	112	1637	1960	1328
	MAY-JUN	863	1116	1230	112	1344	1597	1095
SALMON CREEK near Conconully	MAY-JUL	10.9	16.9	21	116	25	31	18.0
	MAY-SEP	11.5	17.7	22	116	26	33	18.9
METHOW RIVER near Pateros	MAY-SEP	963	1027	1070	125	1113	1177	854
	MAY-JUL	906	963	1001	127	1039	1096	786
	MAY-JUN	751	804	840	128	876	929	659

OKANOGAN - METHOW RIVER BASINS					OKANOGAN - METHOW RIVER BASINS				
Reservoir Storage (1000 AF) - End of April					Watershed Snowpack Analysis - May 1, 1996				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of		
		This Year	Last Year	Avg			Last Yr	Average	
SALMON LAKE	10.5	8.3	9.4	8.0	Okanogan River	26	90	95	
CONCONULLY RESERVOIR	13.0	13.1	10.2	8.0	Methow River	3	94	137	

* 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.

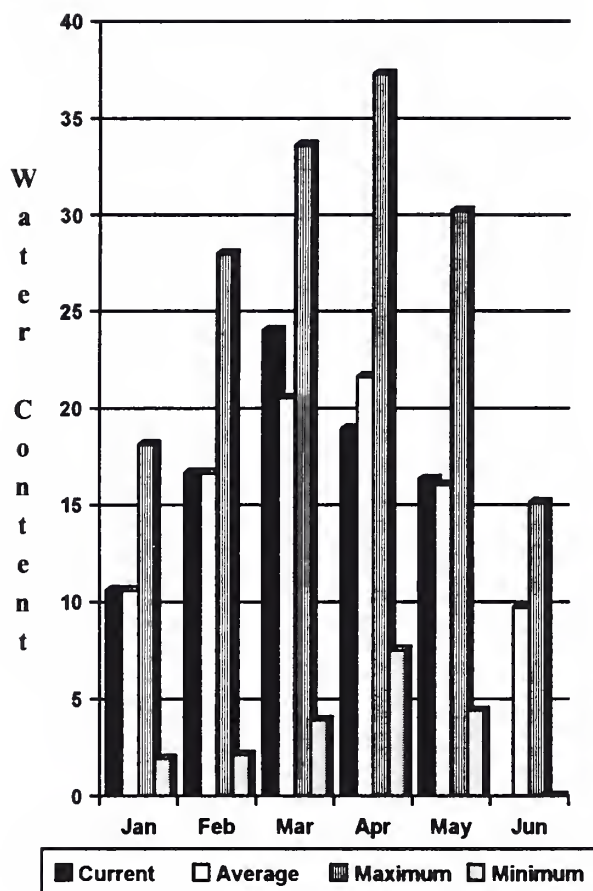
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural flow - actual flow may be affected by upstream water management.

Salmon Meadows SNOTEL Elevation 4500 ft.

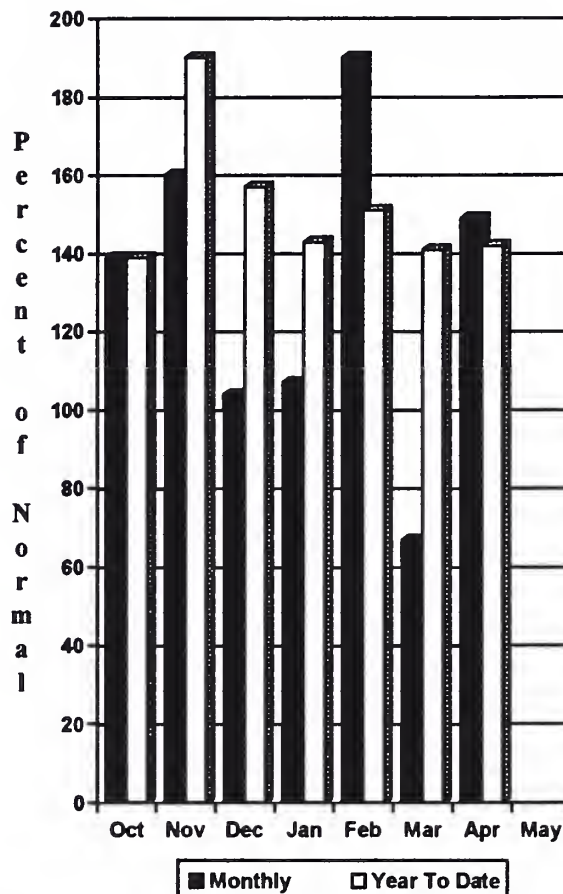


Wenatchee - Chelan River Basins

Mountain Snowpack* (inches)



Precipitation* (% of normal)



*Based on selected stations

Precipitation during April was 149% of normal in the basin and 142% for the year-to-date. Runoff for the Entiat River is forecast to be 123% of normal for the summer. The May-September forecast for the Chelan River is for 106% of normal; for the Wenatchee River, 107%; and 109% for the Stehekin. Icicle Creek and Stemilt Creek are both forecast to be near normal this summer. Streamflow for April on the Chelan River was 183% of average; on the Wenatchee River it was 170% of normal. May 1 snowpack in the Wenatchee Basin was 115% of average. The Chelan Basin was 123% of average, and Stemilt Creek Watershed was down to 69% of normal. Snowpack in the Entiat River Basin was much above normal. Reservoir storage in Lake Chelan was 460,100 acre feet or 103% of the May 1 average and 68% of capacity. Lyman Lake SNOTEL had the most snow water with 71.1 inches of water. This site normally has 58.7 inches; last year it had 80.7 inches on May 1.

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

WENATCHEE - CHELAN RIVER BASINS

Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		Drier		Wetter				
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	30% (1000AF)	10% (1000AF)	Chance Of Exceeding * (% AVG.)	
CHELAN RIVER near Chelan	MAY-SEP	989	1055	1100	106	1145	1211	1041
	MAY-JUL	877	938	980	108	1022	1083	905
	MAY-JUN	639	705	750	108	795	861	693
STEHEKIN near STEHEKIN	MAY-SEP	742	788	820	109	852	898	751
	MAY-JUL	613	659	690	110	721	767	625
	MAY-JUN	428	477	510	110	543	592	462
ENTIAT RIVER near Ardenvoir	MAY-SEP	233	246	255	123	264	277	208
	MAY-JUL	209	222	231	123	240	253	188
	MAY-JUN	162	175	185	123	195	208	150
WENATCHEE at Plain	MAY-SEP	990	1064	1115	107	1166	1240	1042
	MAY-JUL	893	951	990	107	1029	1087	925
	MAY-JUN	694	739	770	108	801	846	716
STEMILT nr Wenatchee (miners in)	MAY-SEP	103	130	148	107	166	193	138
ICICLE CREEK nr Leavenworth	APR-SEP	269	341	390	105	439	511	370
	APR-JUL	249	315	360	106	405	471	340
	APR-JUN	197	249	285	106	321	373	270
COLUMBIA R. bl Rock Island Dam (2)	MAY-SEP	66798	71027	73900	117	76773	81002	62987
	MAY-JUL	54320	57821	60200	115	62579	66080	52239
	MAY-JUN	40973	43609	45400	115	47191	49827	39509

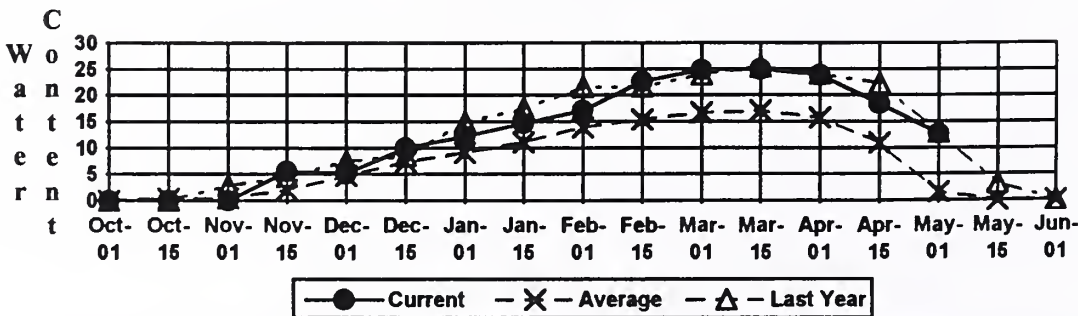
WENATCHEE - CHELAN RIVER BASINS Reservoir Storage (1000 AF) - End of April					WENATCHEE - CHELAN RIVER BASINS Watershed Snowpack Analysis - May 1, 1996			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
CHELAN LAKE	676.1	460.1	296.7	448.8	Chelan Lake Basin	4	98	123
					Entiat River	1	88	794
					Wenatchee River	7	85	115
					Squilchuck Creek	0	0	0
					Stemilt Creek	1	24	69
					Colockum Creek	1	144	796

* 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.

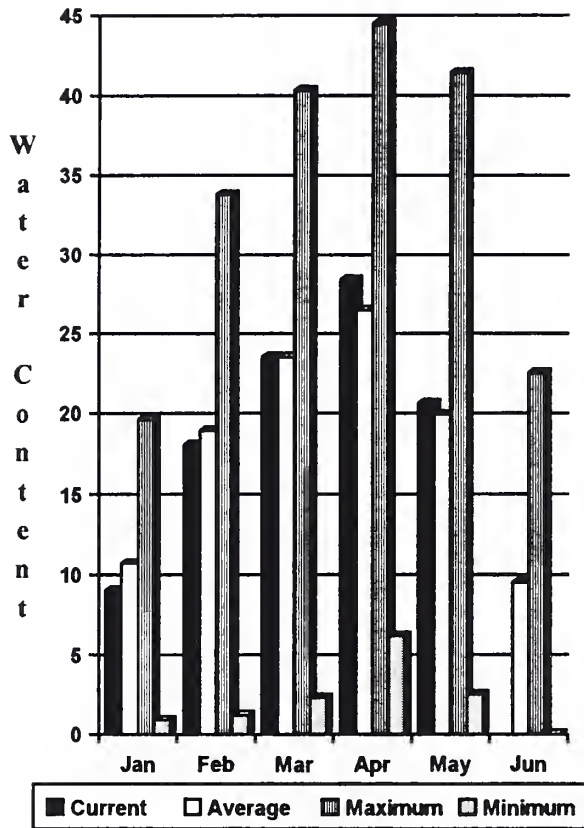
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural flow - actual flow may be affected by upstream water management.

Pope Ridge SNOTEL Elevation 3540 ft.

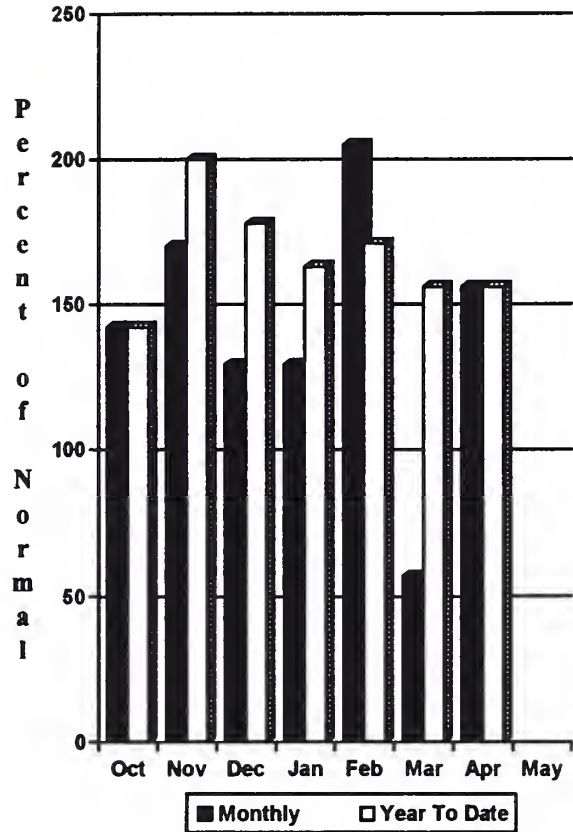


Yakima River Basin

Mountain Snowpack* (inches)



Precipitation* (% of normal)



*Based on selected stations

May 1 reservoir storage for the five major reservoirs was 1,019,800 acre feet, 130% of average. May 1 summer streamflow forecasts are for near normal in the Yakima Basin. Forecasts for the Yakima River at Cle Elum are for 96% of normal; Naches River, 96%; the Yakima River at Parker, 98%; Ahtanum Creek, 105%; and the Tieton River, 102%. The Klickitat River near Glenwood is forecast at 115% of normal flows this summer. April streamflows within the basin were; the Yakima River at Parker, 172% of normal; the Yakima near Cle Elum, 221%; and the Naches River at Naches, 163%. May 1 snowpack was 101%, based upon 14 snow courses and SNOTEL readings within the Yakima Basin. Precipitation was 156% of normal for April and 156% for the water year-to-date. Volume forecasts for the Yakima Basin are for natural flow. As such, they may differ from the U.S. Bureau of Reclamation's forecast for the total water supply available which includes irrigation return flow.

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

YAKIMA RIVER BASIN
 Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	<<----- Drier ----- Future Conditions ----- Wetter ----->>						30-Yr Avg. (1000AF)
		90%		50% (Most Probable)		10%		
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	
KEECHELUS LAKE INFLOW	MAY-JUL	75	85	91	95	98	108	96
	MAY-SEP	82	95	103	96	111	124	107
	MAY-JUN	60	70	77	95	84	94	81
KACHESS LAKE INFLOW	MAY-JUL	81	87	92	107	97	104	86
	MAY-SEP	83	92	97	105	103	111	92
	MAY-JUN	68	75	79	107	83	90	74
CLE ELUM LAKE INFLOW	MAY-JUL	339	357	370	109	383	401	339
	MAY-SEP	372	395	410	109	425	448	378
	MAY-JUN	266	286	300	109	314	334	276
YAKIMA at Cle Elum	MAY-JUN	476	514	540	99	566	604	546
	MAY-JUL	581	622	650	99	678	719	657
	MAY-SEP	623	675	710	96	745	797	740
BUMPING LAKE INFLOW	MAY-SEP	96	107	114	97	121	132	117
	MAY-JUL	90	98	104	98	110	118	106
	MAY-JUN	72	79	84	98	89	96	86
AMERICAN RIVER near Nile	MAY-SEP	81	90	96	94	102	111	102
	MAY-JUL	74	82	88	95	93	101	92
	MAY-JUN	58	67	72	96	78	86	75
RIMROCK LAKE INFLOW	MAY-SEP	182	197	208	102	219	234	204
	MAY-JUL	152	163	171	102	179	190	167
	MAY-JUN	117	126	132	102	138	147	129
NACHES near Naches	MAY-SEP	571	624	660	96	696	749	686
	MAY-JUL	524	567	597	98	627	670	609
	MAY-JUN	429	468	495	98	522	561	505
AHTANUM CREEK nr Tampico (2)	MAY-SEP	32	37	40	105	43	49	38
	MAY-JUL	28	33	36	106	39	44	34
	MAY-JUN	24	27	30	107	33	36	28
YAKIMA near Parker	MAY-SEP	1377	1480	1550	98	1620	1723	1580
	MAY-JUL	1235	1327	1390	100	1453	1545	1390
	MAY-SEP	1377	1480	1550	98	1620	1723	1580
KLiCKITAT near Glenwood	MAY-JUN	86	94	100	115	106	114	87
	MAY-SEP	116	127	135	115	143	154	117

YAKIMA RIVER BASIN Reservoir Storage (1000 AF) - End of April					YAKIMA RIVER BASIN Watershed Snowpack Analysis - May 1, 1996			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
KEECHELUS	157.8	151.6	130.4	119.0	Yakima River	14	78	101
KACHESS	239.0	235.2	154.5	197.0	Ahtanum Creek	1	70	106
CLE ELUM	436.9	412.8	303.3	308.0				
BUMPING LAKE	33.7	29.4	8.5	15.0				
RIMROCK	198.0	190.8	159.5	144.0				

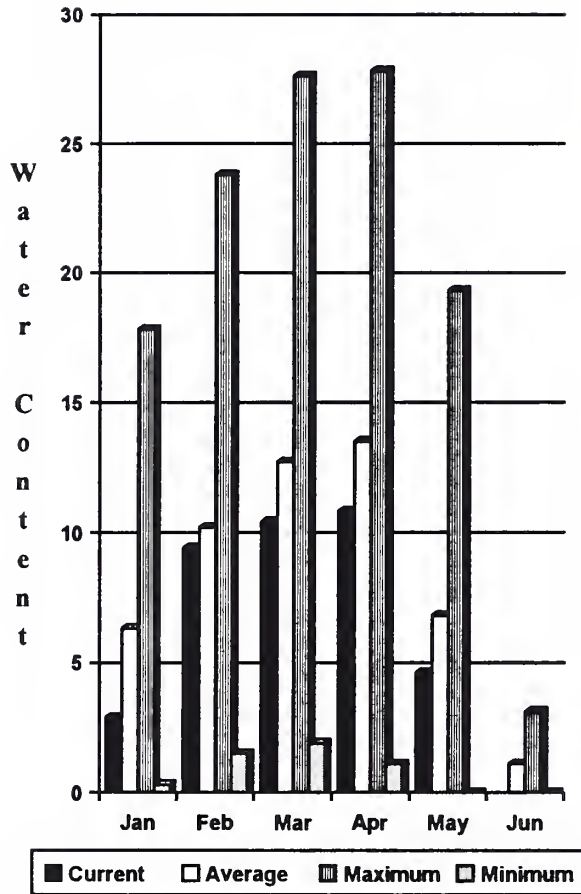
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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

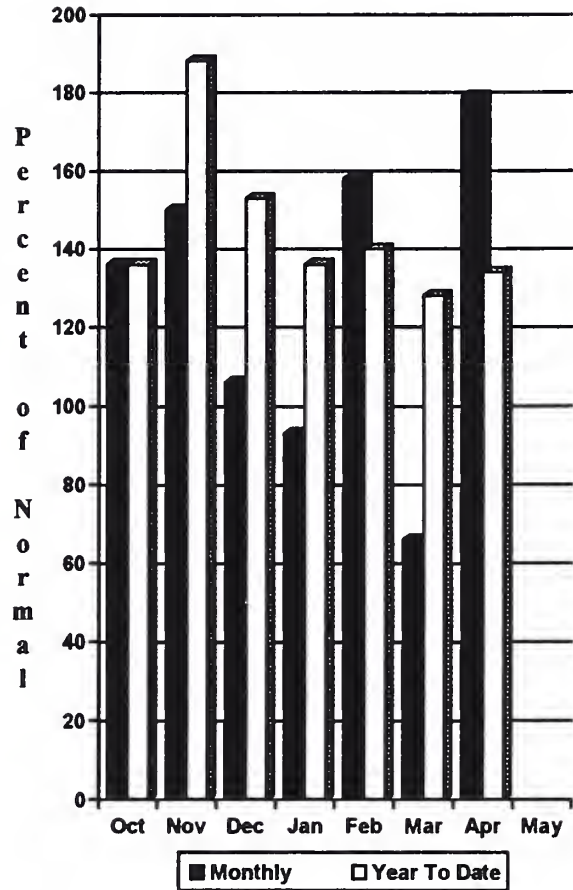
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural flow - actual flow may be affected by upstream water management.

Walla Walla River Basin

Mountain Snowpack* (inches)



Precipitation* (% of normal)



*Based on selected stations

April precipitation was 179% of average, bringing the year-to-date precipitation to 134% of normal. May 1 snowpack was 68% of average. The forecast is for 99% of average streamflow in the Walla Walla River for the coming summer; for the Grande Ronde at Troy, 104%; and 104% for Mill Creek. April streamflow was 240% of normal for the South Fork Walla Walla River; 154% for the Snake River; and 148% for the Grande Ronde River near Troy. The Touchet SNOTEL site had 22.6 inches of snow-water-equivalent. The normal May 1 reading for this site is 27.3 inches.

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

WALLA WALLA RIVER BASIN

Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		Drier		Wetter		Chance Of Exceeding *		
		90% (1000AF)	70% (1000AF)	30% (1000AF)	10% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	
GRANDE RONDE at Troy (1)	MAY-JUL	666	834	910	104	986	1154	872
	MAY-SEP	738	925	1010	104	1095	1282	970
SNAKE blw Lower Granite Dam (1,2)	MAY-JUL	13810	16072	17100	101	18128	20390	16940
	MAY-SEP	16695	19312	20500	104	21688	24305	19650
MILL CREEK at Walla Walla	MAY-SEP	4.62	6.51	7.80	104	9.09	10.98	7.50
	MAY-JUL	4.43	6.32	7.60	104	8.88	10.77	7.30
	MAY-JUN	4.39	6.18	7.40	104	8.62	10.41	7.10
SF WALLA WALLA nr Milton Freewater	MAY-JUL	31	34	37	99	39	42	37
	MAY-SEP	43	47	50	99	53	57	50
COLUMBIA R. at The Dalles (2)	MAY-SEP	83045	89865	94500	110	99135	105955	85635
	MAY-JUL	66944	72634	76500	107	80366	86056	71413
	MAY-JUN	52591	57002	60000	108	62998	67409	55578

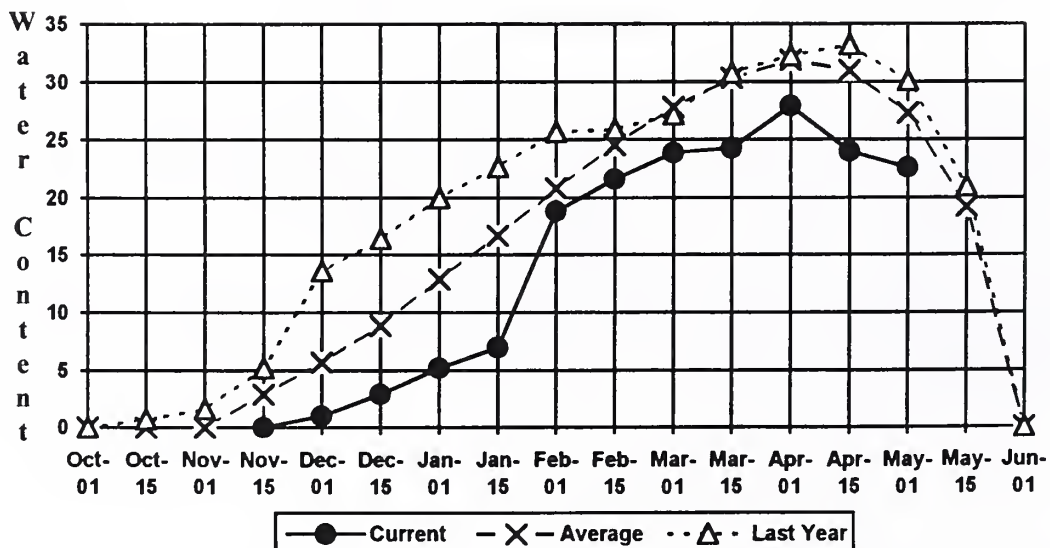
WALLA WALLA RIVER BASIN				WALLA WALLA RIVER BASIN				
Reservoir Storage (1000 AF) - End of April				Watershed Snowpack Analysis - May 1, 1996				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					Mill Creek	2	61	68

* 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.

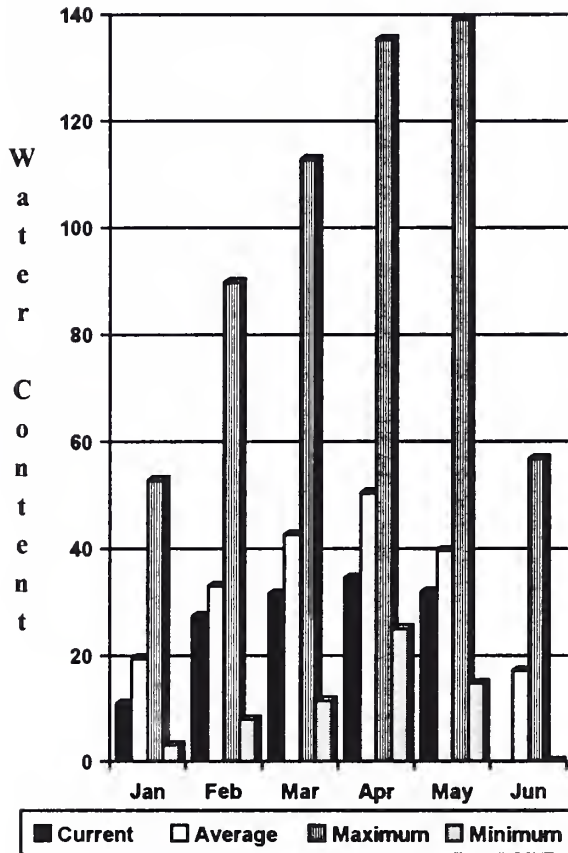
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural flow - actual flow may be affected by upstream water management.

Touchet #2 SNOTEL Elevation 5530 ft.

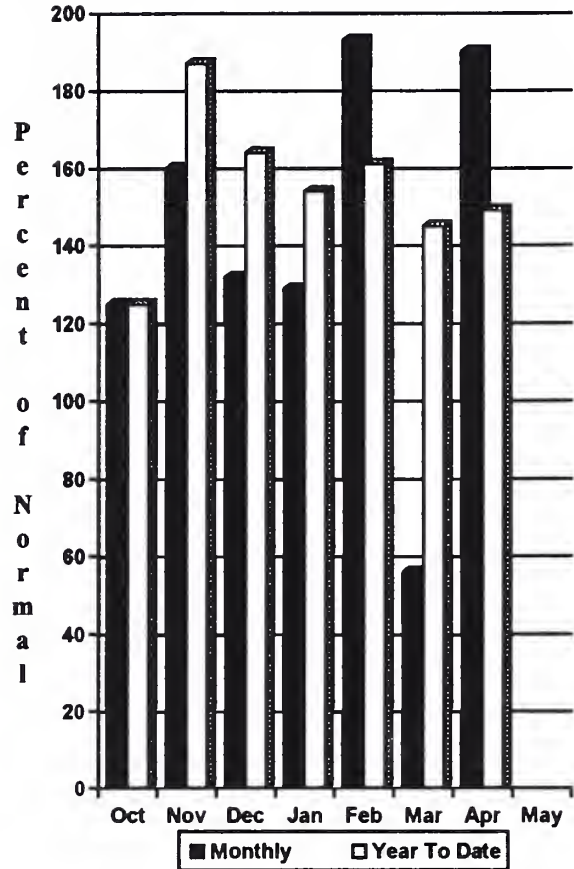


Cowlitz - Lewis River Basins

Mountain Snowpack* (inches)



Precipitation* (% of normal)



*Based on selected stations

The forecast for summer runoff in the Lewis River Basin is 98% of normal; the Cowlitz River at Castle Rock is forecast for 109% of normal runoff. April streamflow for the Cowlitz River was 126% of average, and 151% for the Lewis River. April precipitation was 190% of normal, 149% of average for the water year. May 1 snowcover for the Cowlitz River Basin was 98%, and the Lewis River Basin was 63% of average. The Paradise Park SNOTEL recorded the most water content for the basin with 66.2 inches of water. Normal May 1 water content is 61.8 inches. June Lake SNOTEL, elevation 3200 feet, reported 20.9 inches of precipitation for the month, 190% of normal. June Lake has collected over 206 inches of precipitation since October 1. These near record events have contributed greatly to this year's major flooding of the Lewis and Cowlitz Rivers.

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

COWLITZ - LEWIS RIVER BASINS

Streamflow Forecasts - May 1, 1996

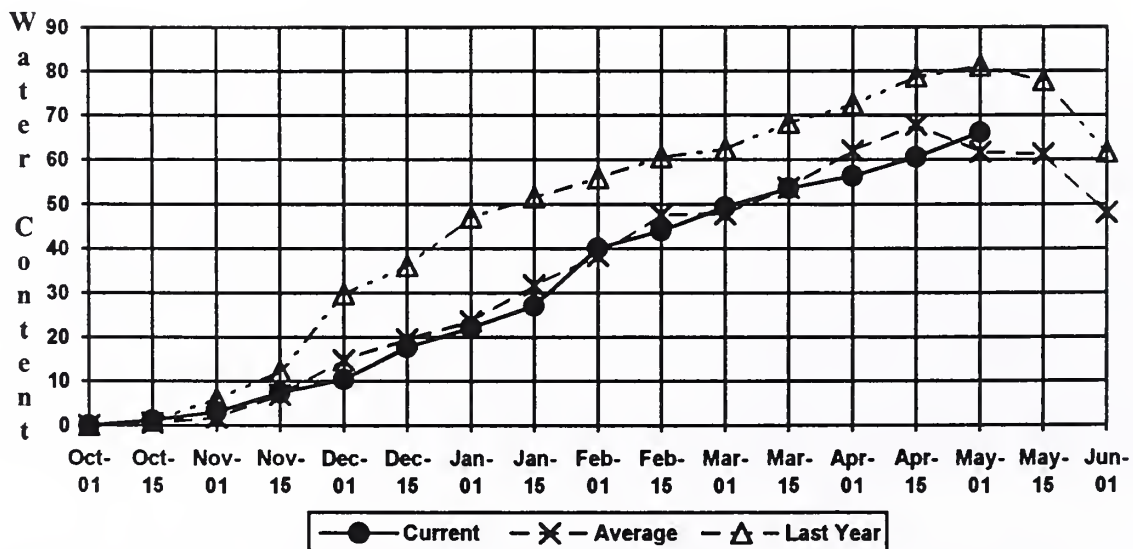
Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<----- Drier ----->>		----->>		Wetter ----->>		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
LEWIS RIVER at Ariel (2)	MAY-JUL	506	609	680	98	751	854	696
	MAY-JUN	422	508	566	98	624	710	578
	MAY-SEP	618	744	830	98	916	1042	848
COWLITZ R. bl Mayfield Dam (2)	MAY-SEP	800	1264	1580	103	1896	2360	1531
	MAY-JUL	674	1064	1330	103	1596	1986	1292
	MAY-JUN	539	855	1070	103	1285	1601	1038
COWLITZ R. at Castle Rock (2)	MAY-SEP	1213	1807	2210	109	2613	3207	2021
	MAY-JUL	1000	1494	1830	109	2166	2660	1679
	MAY-JUN	800	1199	1470	109	1741	2140	1349
KLICKITAT near Glenwood	MAY-JUN	86	94	100	115	106	114	87
	MAY-SEP	116	127	135	115	143	154	117

COWLITZ - LEWIS RIVER BASINS Reservoir Storage (1000 AF) - End of April				COWLITZ - LEWIS RIVER BASINS Watershed Snowpack Analysis - May 1, 1996			
Reservoir	Usable Capacity	*** Usable Storage ***		Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year Avg			Last Yr	Average
				Cowlitz River	7	83	98
				Lewis River	4	52	63

* 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.

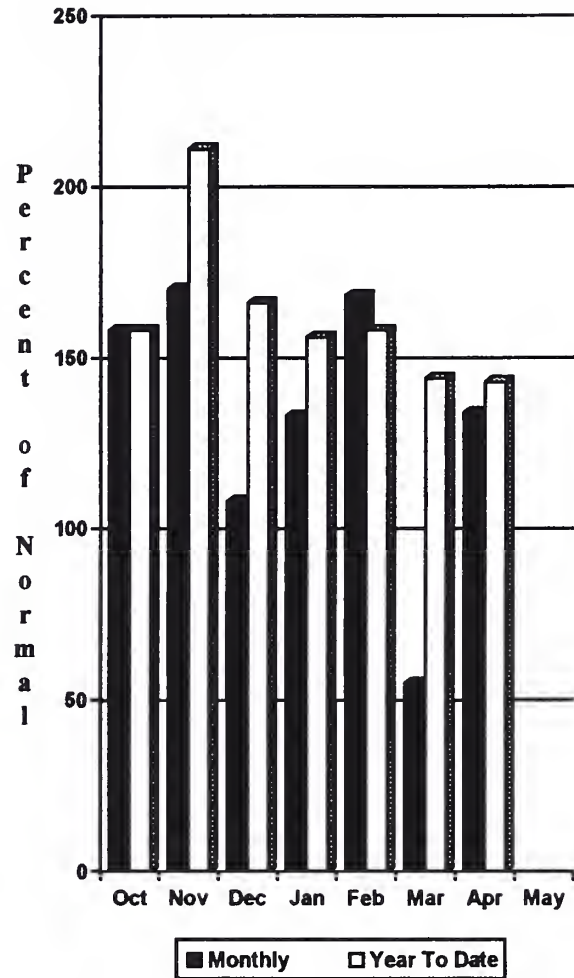
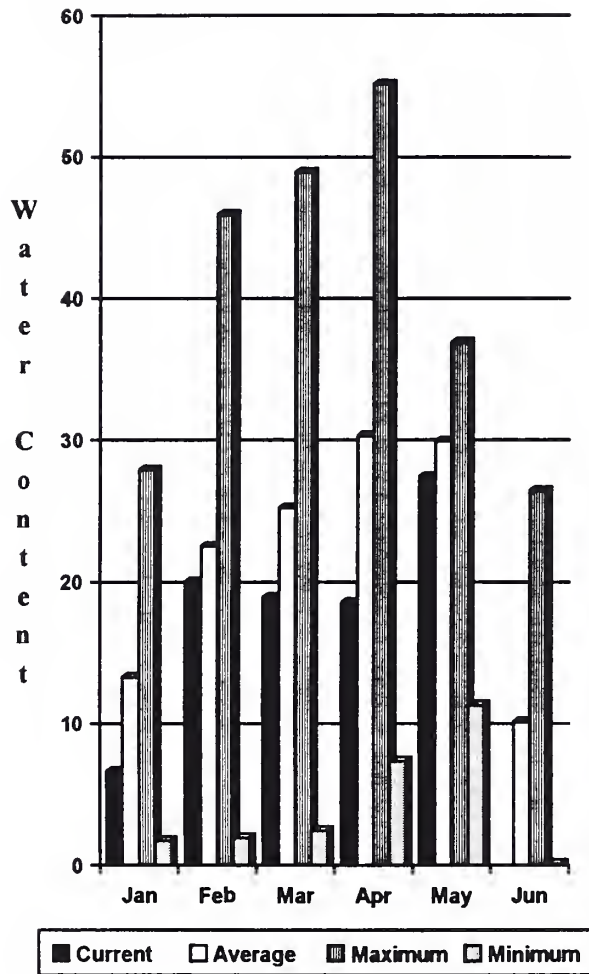
Paradise SNOTEL Elevation 5120 ft.



White - Green - Cedar River Basins

Mountain Snowpack* (inches)

Precipitation* (% of normal)



*Based on selected stations

Summer runoff is forecast to be 86% of normal for the Green River; and 80% for the Cedar River near Cedar Falls; 65% for the Rex River; 83% for the South Fork of the Tolt River; and 82% for the Cedar River at Cedar Falls. All forecasts in the basin are down slightly from last month. May 1 snowpack was 117% of normal in the White River Basin, 66% in the Green River Basin. Very little snow remains below 3500 feet elevation in the Cedar River Basin. Water content on May 1 at the Morse Lake SNOTEL, at an elevation of 5,400 feet, was 52.3 inches. This site has a May 1 average of 44.4 inches and usually carries snow well into June. April precipitation was 134% of normal, bringing the water year-to-date to 143% of average for the Basin.

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

WHITE - GREEN - CEDAR RIVER BASINS

Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<< Drier >>		Chance Of Exceeding *		>> Wetter <<		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
GREEN RIVER below Howard Hanson Dam	MAY-JUL	109	131	146	86	161	183	170
	MAY-SEP	129	153	170	86	187	211	198
	MAY-JUN	94	113	126	86	139	158	147
CEDAR RIVER near Cedar Falls	MAY-JUL	31	39	44	78	49	57	56
	MAY-SEP	36	45	51	80	57	66	64
	MAY-JUN	26	33	37	78	41	47	47
REX RIVER near Cedar Falls	MAY-JUL	7.3	10.4	12.6	66	14.8	17.9	19.2
	MAY-SEP	9.3	12.3	14.3	65	16.3	19.3	22
	MAY-JUN	6.7	9.2	10.9	65	12.6	15.1	16.8
CEDAR RIVER at Cedar Falls	MAY-JUL	13.2	32	44	82	57	75	54
	MAY-SEP	9.0	31	45	82	60	81	55
	MAY-JUN	20	33	43	82	52	65	52
SOUTH FORK TOLT near Index	MAY-JUL	6.5	8.0	9.0	79	10.0	11.5	11.4
	MAY-SEP	8.3	10.2	11.5	83	12.8	14.7	13.9
	MAY-JUN	5.45	6.66	7.48	80	8.30	9.51	9.30

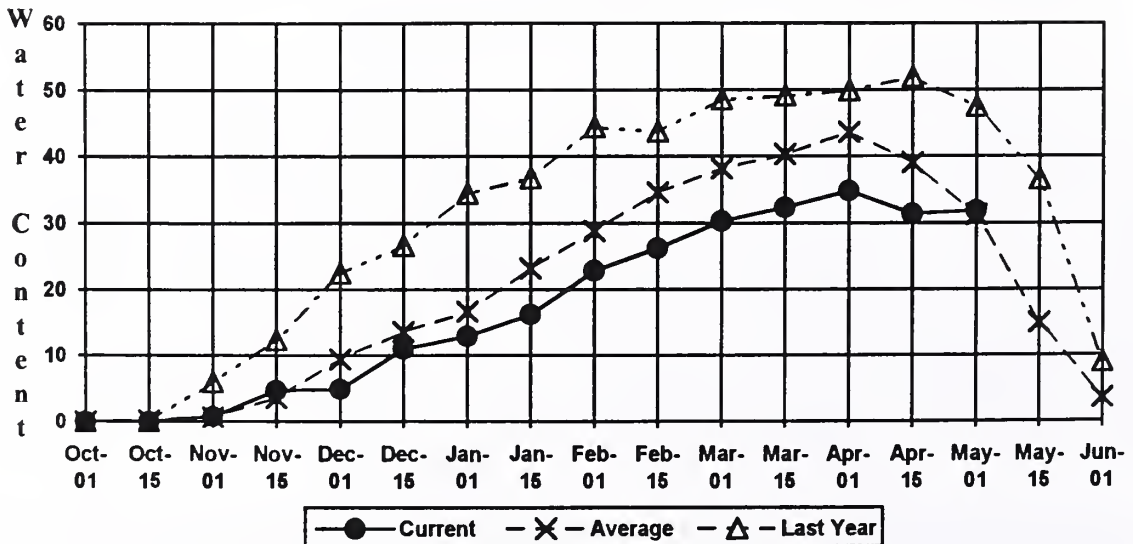
WHITE - GREEN RIVER BASINS Reservoir Storage (1000 AF) - End of April				WHITE - GREEN RIVER BASINS Watershed Snowpack Analysis - May 1, 1996				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					White River	3	83	117
					Green River	2	67	66
					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.

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

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

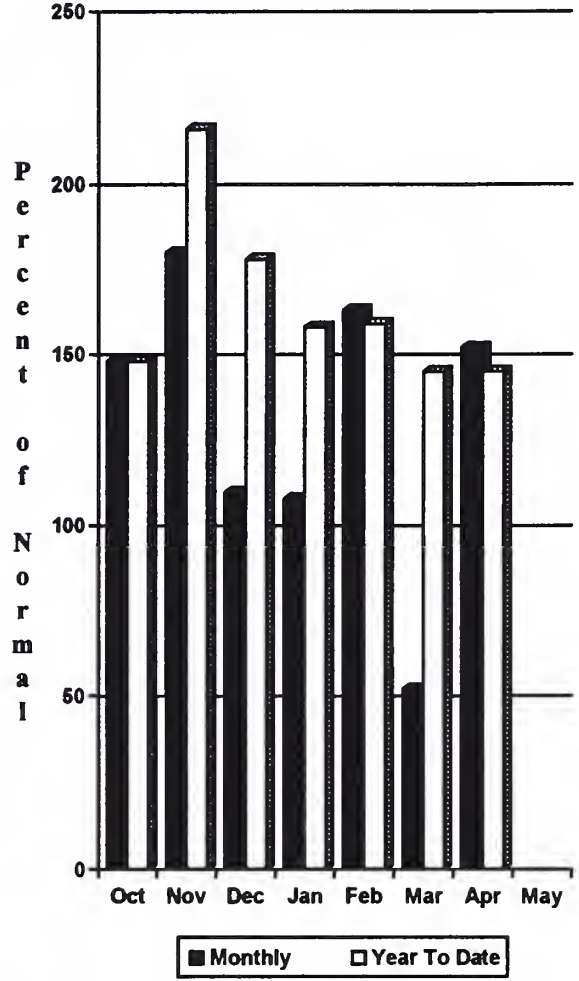
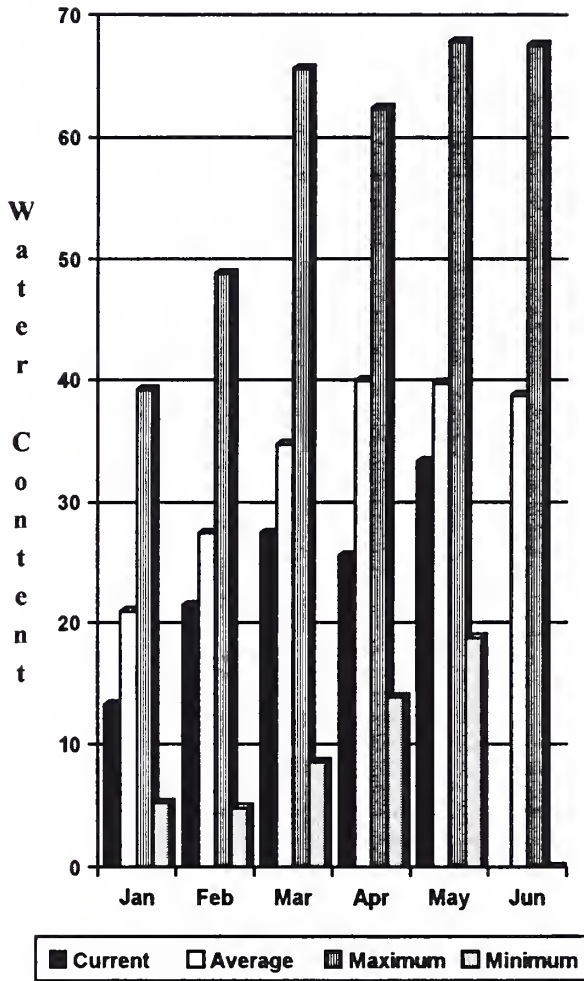
Stampede Pass SNOTEL Elevation 3860 ft.



North Puget Sound River Basins

Mountain Snowpack* (inches)

Precipitation* (% of normal)



*Based on selected stations

Forecast for the Skagit River streamflow is for 98% of normal for the spring and summer periods. April streamflow in the Skagit River was 129% of average. Other forecast points included the Baker River at 85%, and Thunder Creek at 97%. Basin-wide precipitation for April was 152% of average, sustaining the water year-to-date at 145% of normal. May 1 snowcover in the Skagit River Basin was 93%; the Baker River Basin was not reported; and the Snohomish River Basin was 75% of average. Rainy Pass SNOTEL, at 4,780 feet, had 50 inches of water content; normal May 1 water content is 36.8 inches. May 1 reservoir storage showed Ross Lake at 154% normal and 71% of capacity. Unlike many westside river basins, the Skagit River is largely supplied by high elevation snowpack which remains well above normal.

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

NORTH PUGET SOUND RIVER BASINS

Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		Drier		Wetter		Chance Of Exceeding *		
		90% (1000AF)	70% (1000AF)	30% (1000AF)	10% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	
THUNDER CREEK near Newhalem	MAY-JUL	178	192	202	97	212	226	209
	MAY-SEP	279	292	300	97	308	321	308
	MAY-JUN	104	116	125	97	134	146	129
SKAGIT RIVER at Newhalem (2)	MAY-SEP	1613	1796	1920	98	2044	2227	1963
	MAY-JUL	1324	1473	1575	98	1677	1826	1608
	MAY-JUN	939	1071	1160	98	1249	1381	1188
BAKER RIVER near Concrete	MAY-JUL	483	534	568	81	602	653	703
	MAY-SEP	659	734	786	85	838	913	930
	MAY-JUN	332	380	413	86	446	494	478

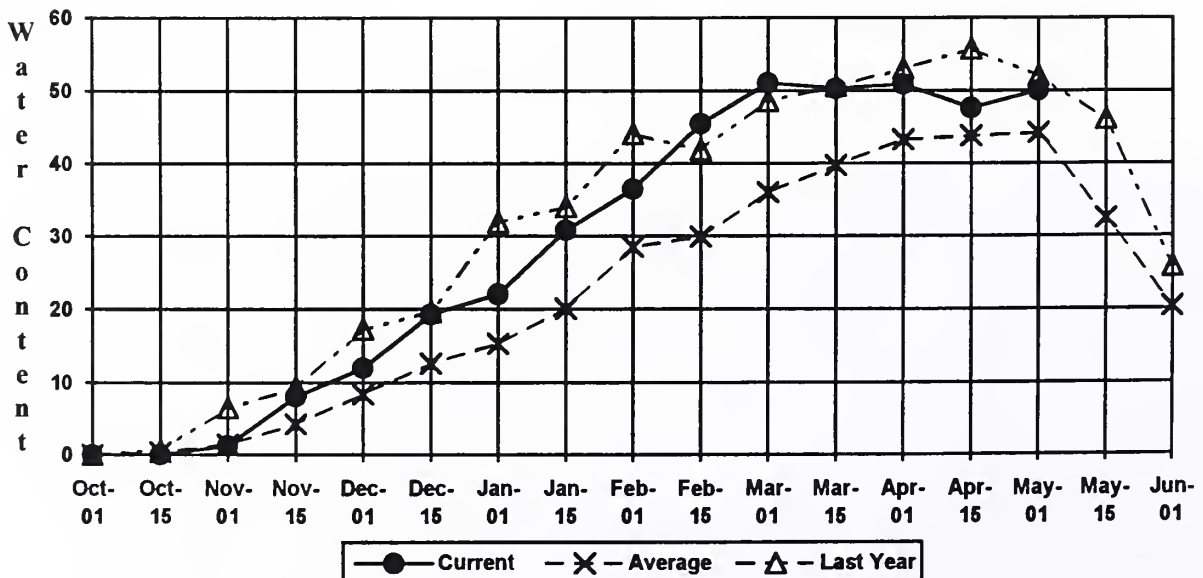
NORTH PUGET SOUND RIVER BASINS Reservoir Storage (1000 AF) - End of April				NORTH PUGET SOUND RIVER BASINS Watershed Snowpack Analysis - May 1, 1996				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ROSS	1404.1	992.7	557.8	644.4	Snohomish River	3	71	75
DIABLO RESERVOIR	90.6	87.0	87.5	---	Skagit River	13	86	94
GORGE RESERVOIR		NO REPORT			Baker River	2	97	83

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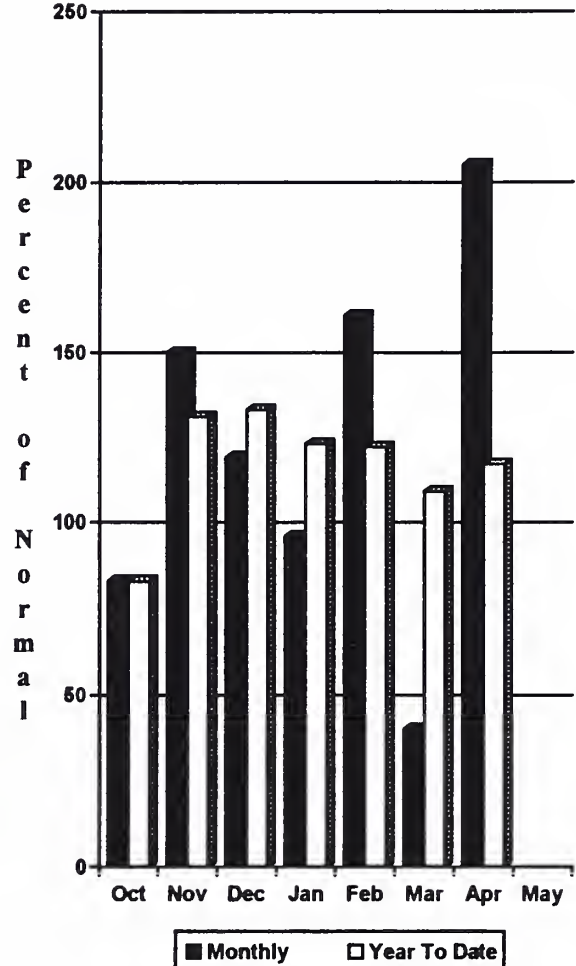
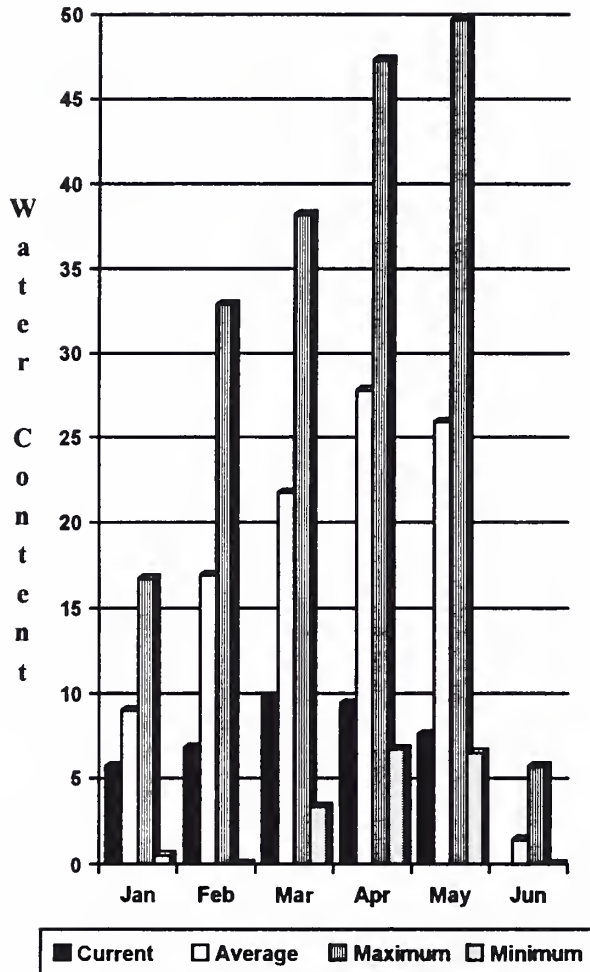
Rainy Pass SNOTEL Elevation 4780 ft.



Olympic Peninsula River Basins

Mountain Snowpack* (inches)

Precipitation* (% of normal)



*Based on selected stations

The May forecasts for streamflow runoff in the Dungeness River Basin is for 76% of average; the Elwha River is forecasted for 60% of average. The Big Quilcene can expect below normal runoff this summer as well. The Olympics received a well deserved and long overdue 205% of normal precipitation last month; total accumulation is 109% of normal for the water year. April precipitation at Quillayute was 13.3 inches, which is 110% of normal. Average May 1 snowcover in the Olympic Basin was much below average at 29%. The Mount Crag SNOTEL near Quilcene had 14.7 inches of snow-water-equivalent on May 1. Normal for this site is 22.4 inches.

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

OLYMPIC PENINSULA RIVER BASINS

Streamflow Forecasts - May 1, 1996

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		Drier		50% (Most Probable)		Wetter		
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
DUNGENESS RIVER nr Sequim	MAY-SEP	83	97	106	76	115	129	140
	MAY-JUL	67	78	85	76	92	103	112
	MAY-JUN	45	54	61	77	68	77	79
ELWHA RIVER nr Port Angeles	MAY-SEP	180	225	256	60	287	332	427
	MAY-JUL	148	184	209	61	234	270	342

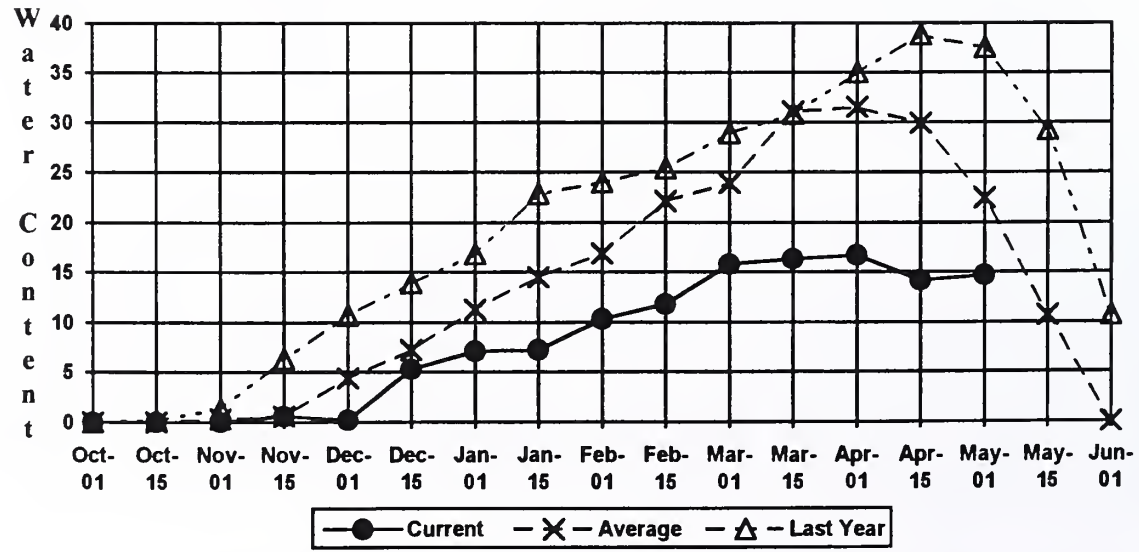
OLYMPIC PENINSULA RIVER BASINS Reservoir Storage (1000 AF) - End of April				OLYMPIC PENINSULA RIVER BASINS Watershed Snowpack Analysis - May 1, 1996				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
					Elwha River	1	11	6
					Morse Creek	1	42	41
					Dungeness River	1	8	5
					Quilcene River	1	39	66
					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.

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

Mount Crag SNOTEL Elevation 4050 ft.



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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
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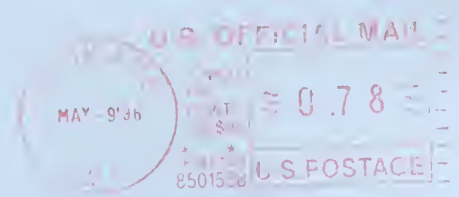
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