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United States
Department of
Agriculture

Natural
Resources
Conservation
Service

Washington

Basin Outlook Report

February 1, 1995



Basin Outlook Reports

and Federal - State - Private Cooperative Snow Surveys

For more water supply and resource management information, contact:

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or

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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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Washington Water Supply Outlook

February 1995

General Outlook

January began with a promising cold snap but rapidly turned into what appeared to be the beginning of spring. Record rainfalls in some parts of the state heightened worries about flooding and early snowmelt. Warmer than normal temperatures and higher than normal mountain precipitation led many rivers across the state to flood stage levels. January snow surveys showed snowpack densities in excess of 40% in many Central and Western Washington locations. Average densities for this time of year should be 25-35%. A snow pack density of 50% is normally what we see at spring meltout. Water Year basin snowpacks are still near to above average across the state with precipitation ranging from 146% to 106% of normal.

Snowpack

The February 1 statewide SNOTEL reading showed the snowpack to be 135% of average. Snowpack varied over the state, with the Spokane-Pend Oreille River Basins SNOTEL reporting the lowest with 103% of average, and the White-Green-Cedar River Basins the highest at 154% of normal. Westside averages include the North Puget River Basins with 115% of average, the Olympic Basins with 142%, and the Lewis-Cowlitz Basins averaged 125% of normal. Snowpack along the east slopes of the Cascade Mountains include the Yakima with 146%, and the Wenatchee with 127%. Snowpack in the Okanogan-Methow was at 142%, and the Walla Walla River Basin had 135%. Maximum snow cover was at Morse Lake SNOTEL near Cayuse Pass, with a water content of 57.6 inches. This site would normally have 29.6 inches of water content on February 1 for an average of 195% of normal. High average in the state goes to Trough SNOTEL near Wenatchee with 228%, normal snowpack. Low average is at the Lost Horse SNOTEL on the Yakama Indian Nation with 71% of normal.

BASIN	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
Spokane.....	160.....	107
Colville.....	135.....	95
Pend Oreille.....	135.....	95
Okanogan.....	160.....	120
Methow.....	217.....	150
Wenatchee.....	199.....	139
Chelan.....	205.....	132
Yakima.....	223.....	153
Walla Walla.....	179.....	132
Cowlitz.....	207.....	139
Lewis.....	200.....	126
White.....	223.....	169
Green.....	241.....	111
North Puget Sound.....	238.....	131
Olympic Peninsula.....	238.....	112

Precipitation

January precipitation reported from National Weather Service stations showed Central and Southeastern Washington to be near normal with the westside and northern edge ranging from 120-150% of normal. Accumulated precipitation from October 1, 1994 is above average for the state. Precipitation ranges from 146% of normal in the Wenatchee-Chelan River Basins, to 106% in the Olympic Peninsula River Basins. Basin reports indicated a variation from 167% of average in the Wenatchee-Chelan River Basins to 69% in the North Puget Sound River Basins for January accumulations. SNOTEL sites in Washington showed high elevation water year precipitation values to be 128% of average. Maximum reportable precipitation was at the June Lake SNOTEL site near Mount St. Helens, with 119.6 inches since October 1. This puts June Lake at 122% of normal January accumulation and 147% of average for the year. At a glance, most Washington river basins are averaging over 180% of last years average.

BASIN	JANUARY PERCENT OF AVERAGE	WATER YEAR PERCENT OF AVERAGE
Spokane.....	85.....	111
Colville-Pend Oreille.....	98.....	116
Okanogan-Methow.....	129.....	130
Wenatchee-Chelan.....	167.....	146
Yakima.....	108.....	135
Walla Walla.....	91.....	139
Cowlitz-Lewis.....	100.....	129
White-Green-Cedar.....	79.....	116
North Puget Sound.....	69.....	114
Olympic Peninsula.....	88.....	106

Reservoir

Reservoir storage in Washington was generally below average for February 1. Reservoir storage in the Yakima Basin was 353,200 acre feet, 53% of normal. Storage at other reservoirs included Roosevelt at 104% of average, and the Okanogan reservoirs, 98% of normal for February 1. The power generation reservoirs include the following: Coeur d'Alene Lake, 116,500 acre feet, or 91% of normal; Chelan Lake, 266,200 acre feet, 59% of average and 39% of capacity, and Ross Lake at 80% of average and 59% of capacity.

BASIN	PERCENT OF CAPACITY	PERCENT OF AVERAGE
Spokane.....	49.....	91
Colville-Pend Oreille.....	68.....	93
Okanogan-Methow.....	57.....	98
Wenatchee-Chelan.....	39.....	59
Yakima.....	32.....	53
North Puget Sound.....	61.....	82

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

Streamflow

Forecasts for summer streamflow are for near to above average. They vary from 116% of average for the Yakima near Parker to 86% of normal for the Pend Oreille Lake inflow. February forecasts for some Western Washington streams include: Cedar River at Cedar Falls, 92%; Green River, 85%; and the Dungeness River, 92%. Some Eastern Washington streams include the Mill Creek at Walla Walla, 111%; the Wenatchee River at Peshastin, 109%; and the Colville River, 104%. January streamflows varied greatly throughout the state. The Grande Ronde at Troy, Oregon was the highest at 166% of average, and the Yakima at Cle Elum with 57% of normal was the lowest in the state. Other streamflows were the following percentage of normal: the Cowlitz River, 83%; the Okanogan River, 70%; the Spokane River, 120%; the Columbia at the Canadian border, 85%, and the Yakima River at Kiona, 88%.

BASIN

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

Spokane.....	90-94
Colville-Pend Oreille.....	83-104
Okanogan-Methow.....	107-122
Wenatchee-Chelan.....	105-125
Yakima.....	105-118
Walla Walla.....	105-111
Cowlitz-Lewis.....	108-113
White-Green-Cedar.....	85-94
North Puget Sound.....	98-107
Olympic Peninsula.....	92

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

UPDATE

NATURAL RESOURCES CONSERVATION SERVICE

We have a new name, but our job is the same.

In October 1994 the Secretary of Agriculture created the Natural Resources Conservation Service. Our Mission at NRCS is to work hand-in-hand with the American people to conserve all natural resources on private land.

The name more accurately reflects what we do, and it reflects a streamlined agency that provides quality service more efficiently.

Part of the streamlining process involves office consolidations, closures and moves. Please direct your questions to your local NRCS office.

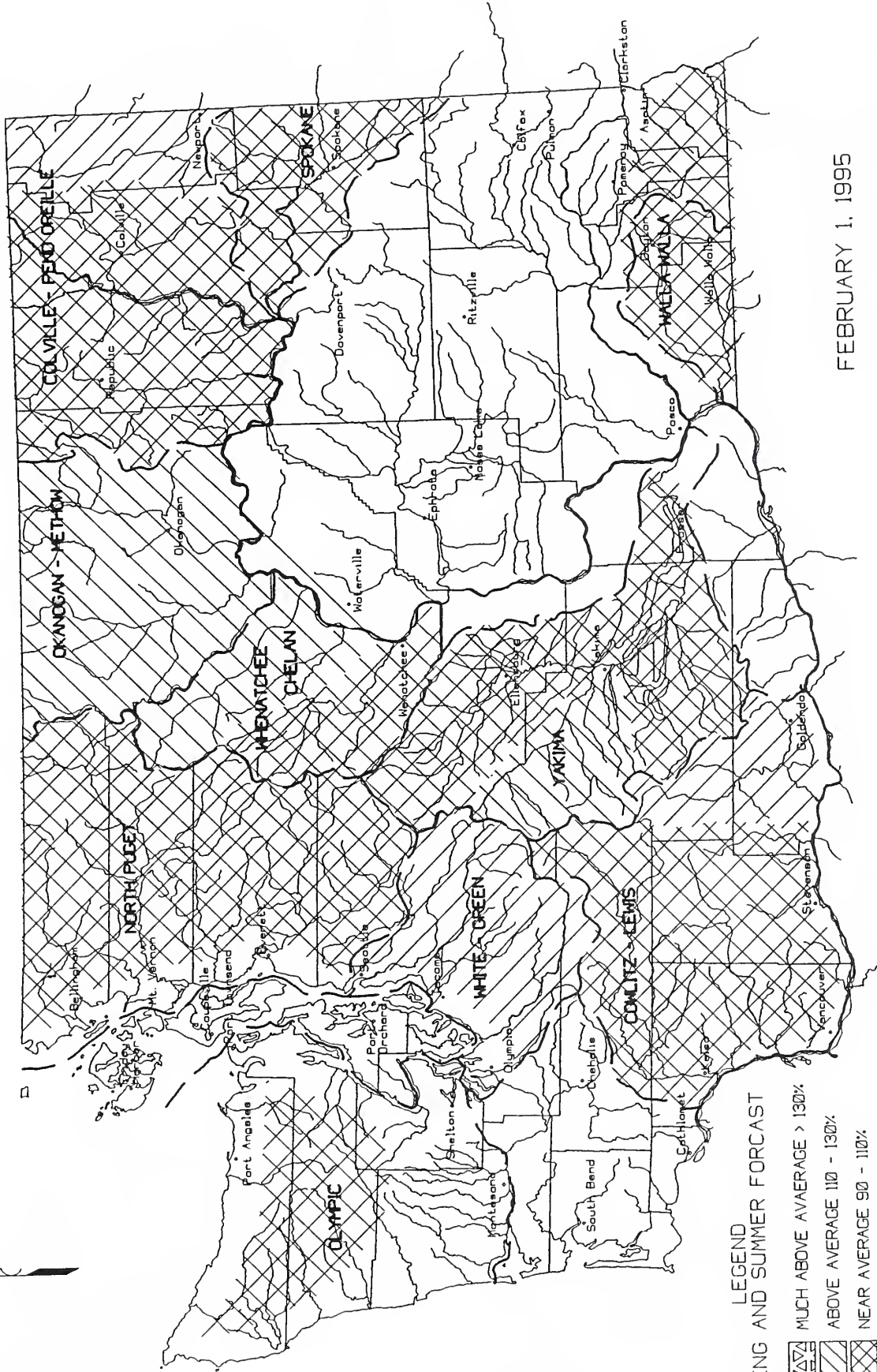
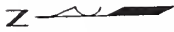
Within the NRCS Snow Survey Program, two offices have relocated. Please note the changes for the Data Collection Office, and the West National Technical Center. We've also listed the new modem phone numbers for the Centralized Forecasting System (CFS).

Natural Resources Conservation Service
Portland Data Collection Office
101 SW Main, Suite 1300
Portland, OR 97204-3225
Commercial - (503)414-3270








Natural Resources Conservation Service
Water Supply Forecasting Staff, WNTC
101 SW Main, Suite 1700
Portland, OR 97204-3225
Commercial - (503)414-3011

Centralized Forecasting System
2400 Baud - (503)414-3174
9600 Baud - (503)414-3185
System Status (taped message)
(503)414-3199

While our name has changed, some things will not. The Natural Resources Conservation Service will continue to build on 60 years of experience, on our scientific and technical expertise, and on our partnerships with conservation district and others.



LEGEND
 SPRING AND SUMMER FORECAST

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

FEBRUARY 1, 1995

STREAMFLOW PROSPECTS
 WASHINGTON

NTS



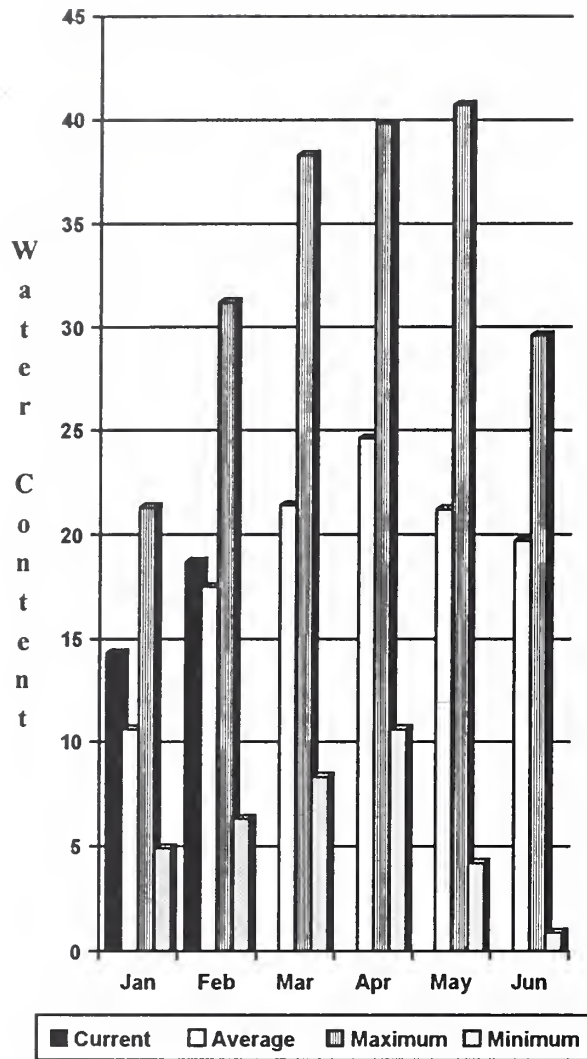
BASIN SUMMARY OF
SNOW COURSE DATA

FEBRUARY 1995

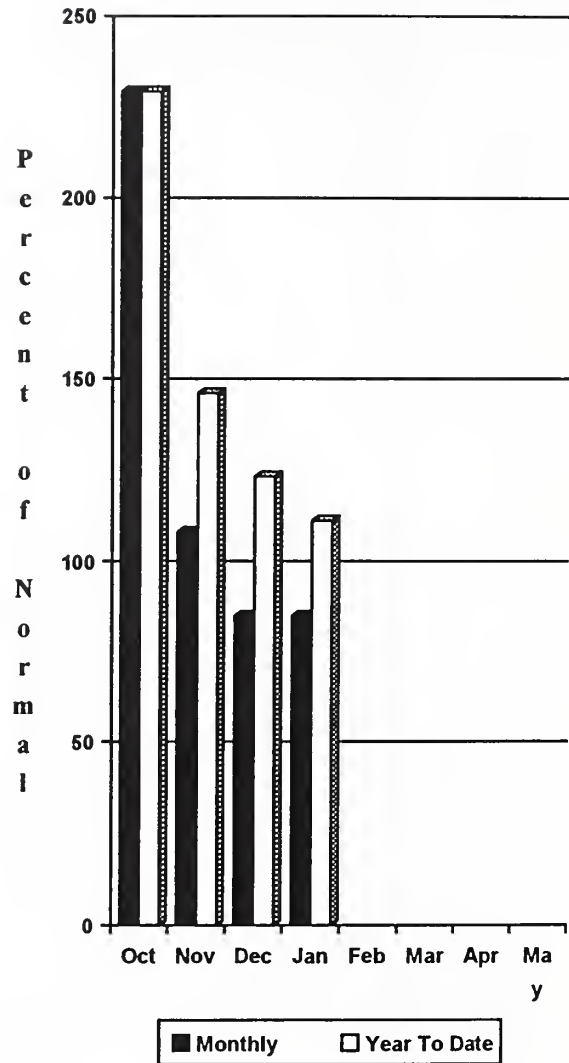
SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-90
PEND OREILLE RIVER							YAKIMA RIVER						
BENTON MEADOW	2370	1/31/95	14	4.7	3.7	4.8	AHTANUM R.S.	3100	2/02/95	26	36.4	4.0	5.8
BENTON SPRING	4920	1/31/95	45	15.9	10.8	12.9	BLEWETT PASS #2	4270	1/30/95	50	15.9	8.7	11.6
BUNCHGRASS MDWPILLOW	5000	2/01/95	---	25.1	16.3	18.8	BLEWETT PASS#2PILLOW	4270	2/01/95	---	16.8S	8.1	13.6
HOODOO BASIN	6050	2/02/95	91	29.7	19.6	33.4	BUMPING LAKE (NEW)	3400	1/25/95	43	12.9	8.2	14.2
HOODOO CREEK	5900	2/02/95	77	25.1	15.2	30.3	BUMPING RIDGE PILLOW	4600	2/01/95	---	22.9S	10.8	13.9
LOOKOUT PILLOW	5140	2/01/95	---	19.5	13.2	22.3	CAYUSE PASS	5300	2/01/95	---	89.9E	41.8	52.9
NELSON CAN.	3100	1/30/95	44	13.9	9.6	11.3	COLOCUM PASS	5370	2/01/95	---	16.0E	8.4	11.5
KETTLE RIVER							CORRAL PASS PILLOW						
BARNES CREEK CAN.	5300	2/04/95	46	15.1	14.2	13.6	6000	2/01/95	---	27.5S	12.8	21.3	
BIG WHITE MTN CAN.	5510	1/28/95	50	15.9	11.7	12.8	FISH LAKE	3370	1/25/95	88	27.1	19.1	21.1
BUTTE CREEK	4070	2/01/95	---	8.3E	---	6.4	FISH LAKE PILLOW	3370	2/01/95	---	31.6S	18.7	22.0
FARRON CAN.	4000	1/27/95	37	10.1	8.3	9.8	GREEN LAKE	6000	2/02/95	84	32.2	16.8	22.6
GOAT CREEK	3600	1/30/95	26	6.5	4.6	5.2	GREEN LAKE PILLOW	6000	2/01/95	---	21.2S	10.2	14.1
MONASHEE PASS CAN.	4500	2/04/95	32	10.0	7.7	9.4	GROUSE CAMP PILLOW	5380	2/01/95	---	22.1S	10.3	13.8
SUMMIT G.S.	4600	1/30/95	33	8.3	4.9	5.6	DOMMERIE FLATS	2200	1/27/95	30	9.0	.0	7.0
COLVILLE RIVER							LOST HORSE PILLOW						
BAIRD #2	3220	1/30/95	32	8.8	6.2	---	5000	2/01/95	---	15.8S	8.3	22.4	
TOGO	3370	2/01/95	---	8.6E	7.4	7.8	MORSE LAKE PILLOW	5400	2/01/95	---	57.6S	23.7	29.6
OMAK LAKE, TWIN LAKES							OLALLIE MDWS PILLOW						
MOSES MOUNTAIN (1)	4800	1/26/95	73	19.1	8.1	9.4	3960	2/01/95	---	45.6S	20.0	34.3	
MOSES MTN PILLOW	4800	2/01/95	---	13.9S	5.0	10.0	OLALLIE MEADOWS	3630	2/01/95	---	39.0E	13.3	29.3
MOSES MEADOWS (3)	3800	1/26/95	13	3.3	2.6	1.7	SASSE RIDGE PILLOW	4200	2/01/95	---	32.6S	15.3	21.6
MOSES PEAK (2)	6650	1/26/95	52	14.7	7.1	6.5	STAMPEDE PASS PILLOW	3860	2/01/95	---	48.7E	18.6	28.8
MOUNT TOLMAN	2000	1/26/95	8	2.8	6.3	3.1	TUNNEL AVENUE	2450	1/26/95	55	18.4	8.2	15.4
TWIN LAKES	2700	1/26/95	27	6.5	6.3	6.7	WHITE PASS ES PILLOW	4500	2/01/95	---	20.7S	11.4	15.5
SPOKANE RIVER							AHTANUM CREEK						
FOURTH OF JULY SUM	3200	1/31/95	18	6.4	3.0	7.2	AHTANUM R.S.	3100	2/02/95	26	36.4	4.0	5.8
LOST LAKE (d)	6110	2/01/95	---	36.0E	21.4	37.4	GREEN LAKE	6000	2/02/95	84	32.2	16.8	22.6
MOSQUITO RDG PILLOW	5200	2/01/95	---	26.9	15.1	25.2	GREEN LAKE PILLOW	6000	2/01/95	---	21.2S	10.2	14.1
SUNSET PILLOW	5540	2/01/95	---	16.9	15.1	24.8	LOST HORSE PILLOW	5000	2/01/95	---	15.8S	8.3	22.4
LOOKOUT PILLOW	5140	2/01/95	---	19.5	13.2	22.3	MILL CREEK						
NEWMAN LAKE							HIGH RIDGE PILLOW						
QUARTZ PEAK PILLOW	4700	2/01/95	---	21.0	13.5	14.0	4980	2/01/95	---	22.9S	12.3	16.0	
RAGGED RIDGE	3330	1/30/95	23	9.0	---	6.2	TOUCHET #2 PILLOW	5530	2/01/95	---	25.7	14.9	20.8
OKANOGAN RIVER							LEWIS - COWLITZ RIVERS						
ABERDEEN LAKE CAN.	4300	1/30/95	17	3.6	3.4	5.0	CAYUSE PASS	5300	2/01/95	---	89.9E	41.8	52.9
ENDERBY CAN.	6200	1/31/95	81	28.0	28.0	24.8	JUNE LAKE PILLOW	3200	2/01/95	---	35.2S	13.1	28.1
FREEZEOUT CK. TRAIL	3500	1/31/95	31	10.4	2.8	8.8	LONE PINE PILLOW	3800	2/01/95	---	28.2S	14.0	20.8
GREYBACK RES CAN.	5120	1/31/95	31	7.6	5.4	6.1	PARADISE PARK PILLOW	5500	2/01/95	---	56.0S	27.9	38.5
HAMILTON HILL CAN.	4890	2/05/95	31	9.4	6.2	10.8	PITTAIL PEAK PILLOW	5900	2/01/95	---	47.6S	20.8	30.4
HARTS PASS	6500	1/31/95	103	32.6	16.9	29.6	POTATO HILL PILLOW	4500	2/01/95	---	20.3S	10.6	16.4
HARTS PASS PILLOW	6500	2/01/95	---	35.5S	16.8	27.7	SHEEP CANYON PILLOW	4050	2/01/95	---	20.9S	11.0	25.2
ISINTOK LAKE CAN.	5500	1/30/95	24	5.4	3.2	5.6	SPENCER MDW PILLOW	3400	2/01/95	---	25.4S	12.9	20.0
LIGHTNING LAKE CAN.	4000	2/04/95	31	9.5	---	5.8	SPIRIT LAKE PILLOW	3100	2/01/95	---	2.4S	.8	6.4
LOST HORSE MTN CAN.	6300	2/01/95	30	7.0	3.6	6.5	SURPRISE LKS PILLOW	4250	2/01/95	---	36.3S	22.6	30.4
MCCULLOCH CAN.	4200	1/30/95	22	6.0	4.1	5.0	WHITE PASS ES PILLOW	4500	2/01/95	---	20.7S	11.4	15.5
MISSEZULA MTN CAN.	5090	2/03/95	32	9.6	4.4	6.9	WHITE RIVER						
MONASHEE PASS CAN.	4500	2/04/95	32	10.0	7.7	9.4	CAYUSE PASS	5300	2/01/95	---	89.9E	41.8	52.9
MT. KOBAY CAN.	5900	1/28/95	39	10.2	5.8	8.7	CORRAL PASS	6000	1/29/95	82	29.5	15.5	21.7
MUTTON CREEK #1	5700	2/01/95	55	14.7	7.1	9.2	CORRAL PASS PILLOW	6000	2/01/95	---	27.5S	12.8	21.3
POSTILL LAKE CAN.	4500	1/30/95	26	6.2	4.5	5.8	MORSE LAKE PILLOW	5400	2/01/95	---	57.6S	23.7	29.6
RUSTY CREEK	4000	2/01/95	31	8.6	3.7	5.0	GREEN RIVER						
SALMON MDWS PILLOW	4500	2/01/95	---	12.7S	5.4	5.9	COUGAR MTN. PILLOW	3200	2/01/95	---	13.8S	2.7	15.0
SILVER STAR MTN CAN.	6000	1/28/95	65	21.8	18.2	19.2	GRASS MOUNTAIN #2	2900	2/01/95	0	.0	.0	10.3
SUMMERLAND RES CAN.	4200	1/30/95	30	8.4	4.8	7.0	LESTER CREEK	3100	2/01/95	46	16.2	7.6	14.8
SUNDAY SUMMIT CAN.	4300	2/04/95	14	3.6	2.5	4.8	LYNN LAKE	4000	2/01/95	35	14.9	3.5	14.8
TROUT CREEK CAN.	4690	1/30/95	24	6.0	3.3	5.6	SAWMILL RIDGE	4700	2/01/95	64	26.1	12.3	23.9
WHITE ROCKS MTN CAN.	6000	2/01/95	62	19.8	12.3	15.7	STAMPEDE PASS PILLOW	3860	2/01/95	---	48.7E	18.6	28.8
METHOW RIVER							TWIN CAMP						
HARTS PASS	6500	1/31/95	103	32.6	16.9	29.6	4100	2/01/95	49	18.8	12.7	16.9	
HARTS PASS PILLOW	6500	2/01/95	---	35.5S	16.8	27.7	CEDAR RIVER						
MUTTON CREEK #1	5700	2/01/95	55	14.7	7.1	9.2	MT. GARDNER PILLOW	2860	2/01/95	---	12.5S	3.4	9.6
RUSTY CREEK	4000	2/01/95	31	8.6	3.7	5.0	TINKHAM CREEK PILLOW	3000	2/01/95	---	23.5S	11.0	12.9
SALMON MDWS PILLOW	4500	2/01/95	---	12.7S	5.4	5.9	MEADOWS PASS PILLOW	3240	2/01/95	---	17.7S	5.4	16.2
CHELAN LAKE BASIN							SNOQUALMIE RIVER						
CLOUDY PASS	6500	2/02/95	---	45.2	15.8	27.1	OLALLIE MDWS PILLOW	3960	2/01/95	---	45.6S	20.0	34.3
LYMAN LAKE	5900	2/02/95	139	53.5	29.0	40.5	OLALLIE MEADOWS	3630	2/01/95	---	39.0E	13.3	29.3
LYMAN LAKE PILLOW	5900	2/01/95	---	54.2S	27.1	39.0	SKYKOMISH RIVER						
LITTLE MDWS	5280	2/02/95	---	42.1	24.0	30.2	STAMPEDE PASS PILLOW	3860	2/01/95	---	48.7E	18.6	28.8
MINERS RIDGE	6200	2/01/95	---	39.3S	24.7	40.2	STEVENS PASS PILLOW	4070	2/01/95	---	40.3S	13.4	27.3
PARK CK RIDGE PILLOW	4600	2/01/95	---	33.0S	15.8	29.6	STEVENS PASS SAND SD	3700	1/31/95	90	30.6	15.4	23.9
RAINY PASS	4780	2/01/95	91	32.6	17.4	27.7	SKAGIT RIVER						
RAINY PASS PILLOW	4780	2/01/95	---	39.7S	19.8	24.5	BEAVER CREEK TRAIL	2200	2/01/95	31	12.2	1.4	9.7
ENTIAT RIVER							BEAVER PASS						
BRIEF	1600	1/28/95	32	9.8	5.6	6.0	3680	2/01/95	65	24.7	9.6	19.7	
POPE RIDGE PILLOW	3540	2/01/95	---	21.5S	9.8	13.9	BROWN TOP	6000	1/30/95	139	45.8	25.4	41.2
WENATCHEE RIVER							CLOUDY PASS						
BERNE-MILL CREEK (d)	3170	1/31/95	80	25.2	12.7	19.9	6500	2/02/95	---	45.2	15.8	27.1	
BLEWETT PASS #2	4270	1/30/95	50	15.9	8.7	11.6	DEVILS PARK	5900	1/30/95	91	32.4	17.6	30.3
BLEWETT PASS#2PILLOW	4270	2/01/95	---	16.8S	8.1	13.6	FREEZEOUT CK. TRAIL	3500	1/31/95	31	10.4	2.8	8.8
CHIWAUKUM G.S.	2500	1/31/95	46	12.8	7.3	8.7	HARTS PASS	6500	1/31/95	103	32.6	16.9	29.6
FISH LAKE PILLOW	3370	2/01/95	---	31.6S	18.7	22.0	HARTS PASS PILLOW	6500	2/01/95	---	35.5S	16.8	27.7
LYMAN LAKE	5900	2/02/95	139	53.5	29.0	40.5	KLESILKWA CAN.	3710	2/02/95	15	4.9	.0	9.3
LYMAN LAKE PILLOW	5900	2/01/95	---	54.2S	27.1	39.0	LIGHTNING LAKE CAN.	4000	2/04/95	31	9.5	---	5.8
MERRITT	2140	1/31/95	53	16.0	4.3	12.4	LYMAN LAKE	5900	2/02/95	139	53.5	29.0	40.5
MISSION RIDGE	5000	1/29/95	54	16.6	10.1	11.5	LYMAN LAKE PILLOW	5900	2/01/95	---	54.2S	27.1	39.0
STEVENS PASS PILLOW	4070	2/01/95	---	40.3S	13.4	27.3	MEADOWS CABIN	1900	2/02/95	6	2.3	.0	5.4
STEVENS PASS SAND SD	3700	1/31/95	90	30.6	15.4	23.9	NEW HOZOMEEN LAKE	2800	1/31/95	18	6.3	1.5	8.0
TROUGH #2	5310	2/01/95	---	14.6S	7.4	6.4	RAINY PASS	4780	2/01/95	91	32.6	17.4	27.7
UPPER WHEELER	4400	1/27/95	31	8.5	5.3	8.0	RAINY PASS PILLOW	4780	2/01/95	---	39.7S	19.8	24.5
UPPER WHEELER PILLOW	4400	2/01/95	---	13.0S	6.2	9.3	THUNDER BASIN	4200	2/02/95	50	17.6	11.6	25.3
STEMILT CREEK</													

Spokane River Basin

Mountain Snowpack* (inches)



Precipitation* (% of normal)



*Based on selected stations

The February 1 forecasts for summer runoff within the Spokane River Basin are 103% of normal, compared to 77% last year at this time. The forecast is based on a basin snowpack that is 107% of average and precipitation that is 111% of normal for the water year. Precipitation for January was 85% of average. Streamflow on the Spokane River was 120% of average for January. February 1 storage in Coeur d'Alene Lake was 116,500 acre feet, 91% of normal, and 49% of capacity. Temperatures in the basin were 5 degrees above normal during January.

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

SPOKANE RIVER BASIN

Streamflow Forecasts - February 1, 1995

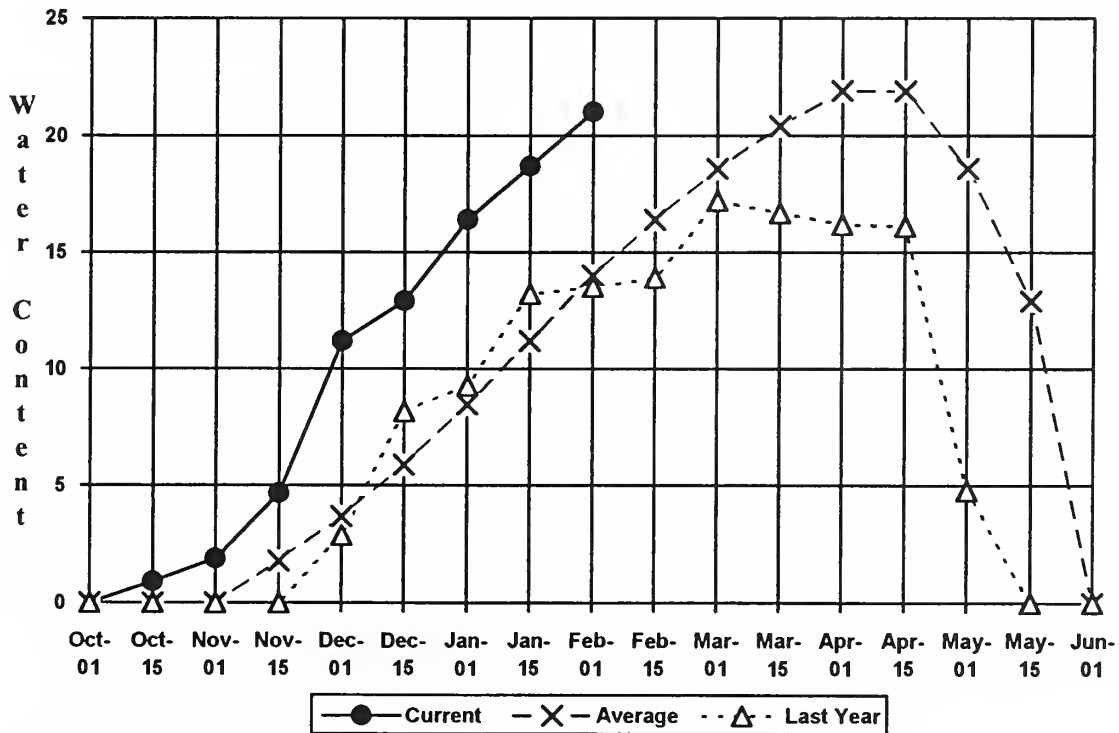
Forecast Point	Forecast Period	<<----- Drier ----- Future Conditions ----- Wetter ----->>								
		90%		70%		50% (Most Probable)		30%	10%	30-Yr Avg.
		(1000AF)	(1000AF)	(1000AF)	(1000AF)	(1000AF)	(1000AF)			
SPOKANE near Post Falls (2)	APR-SEP	1640	2290	2560	94	2830	3470	2730		
	APR-JUL	1530	2210	2470	94	2730	4130	2633		
SPOKANE at Long Lake	APR-JUL	1940	2350	2632	90	2910	3330	2936		
	APR-SEP	2120	2550	2842	90	3130	3560	3159		

SPOKANE RIVER BASIN					SPOKANE RIVER BASIN			
Reservoir Storage (1000 AF) - End of January					Watershed Snowpack Analysis - February 1, 1995			
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	116.5	53.5	127.8	Spokane River	11	160	107

* 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.

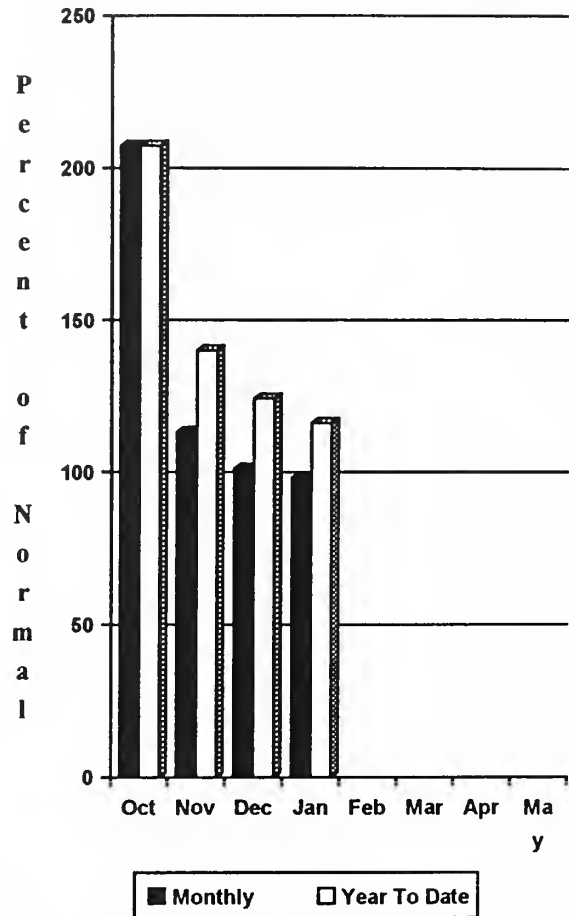
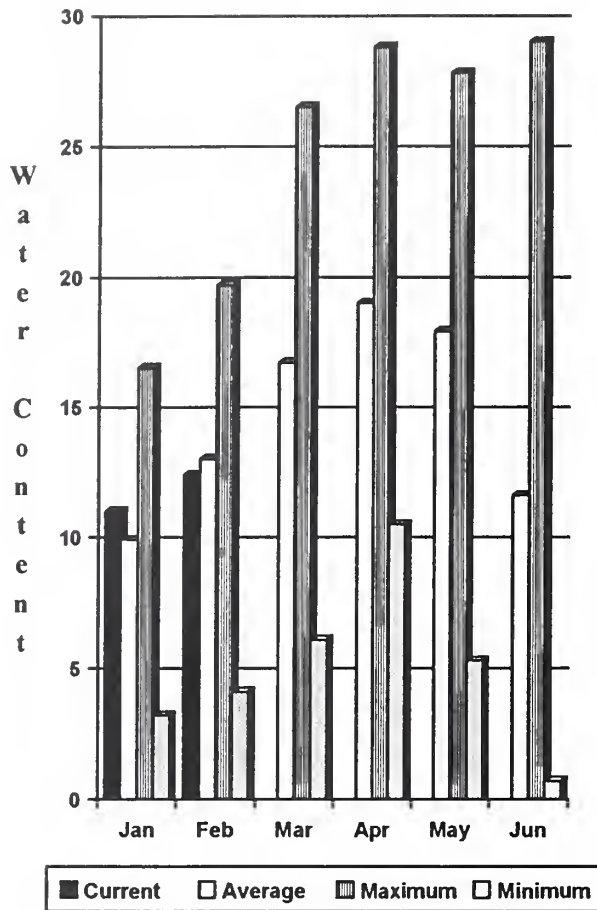
Quartz Peak SNOTEL Elevation 4700 ft.



Colville - Pend Oreille River Basins

Mountain Snowpack* (inches)

Precipitation* (% of normal)



*Based on selected stations

The forecast for the Kettle River streamflow is for 88% of normal, the Pend Oreille below Box Canyon, 83%, and the Priest River near the town of Priest River, 99% of normal for the summer runoff period. Forecast for the Columbia River at Birchbank is for runoff to be 97% of average. January streamflow was 85% of normal on the Pend Oreille River, 85% on the Columbia at the International Boundary, and 88% on the Kettle River. February 1 snow cover was 95% of normal on the Pend Oreille. Snowpack at Bunchgrass Meadow SNOTEL site contained 25.1 inches of water, compared to the average February 1 reading of 17.8 inches. Precipitation during January was 98% of average, bringing the water year-to-date to 116% of normal, down slightly from last month. Temperatures were 3 degrees above normal for January.

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

COLVILLE - PEND OREILLE RIVER BASINS

Streamflow Forecasts - February 1, 1995

Forecast Point	Forecast Period	Future Conditions					30-Yr Avg. (1000AF)	
		Drier		Wetter		Chance Of Exceeding * (% AVG.)		
		90% (1000AF)	70% (1000AF)	30% (1000AF)	10% (1000AF)			
PEND OREILLE Lake Inflow (1,2)	APR-JUL	6980	9610	10800	82	12000	14600	13150
	APR-SEP	7720	10600	11900	83	13200	16100	14370
	APR-JUN	5850	8330	9455	83	10600	13100	11390
PRIEST nr Priest River (1,2)	APR-JUL	530	720	805	99	890	1080	814
	APR-SEP	570	770	860	99	950	1150	868
PEND OREILLE bl Box Canyon (1,2)	APR-JUL	7620	10000	11100	83	12200	14600	13380
	APR-SEP	8310	10900	12100	83	13300	15900	14590
	APR-JUN	6610	8670	9600	83	10500	12600	11570
CHAMOKANE CK nr Long Lake	MAY-AUG	2.0	6.2	9.0	96	11.8	16.0	9.4
COLVILLE at Kettle Falls	APR-SEP	79	113	136	104	159	193	131
	APR-JUL	73	105	126	105	147	179	120
	APR-JUN	70	98	117	105	136	165	111
KETTLE near Laurier	APR-SEP	1390	1780	1930	104	2080	2470	1854
	APR-JUL	1500	1700	1830	104	1960	2160	1761
	APR-JUN	1370	1540	1660	105	1780	1950	1585
COLUMBIA at Birchbank (1,2)	APR-JUL	28300	32300	34100	97	35900	39900	35140
	APR-SEP	35300	40200	42500	97	44800	49700	43810
	APR-JUN	20700	23600	24900	97	26200	29100	25670
COLUMBIA at Grand Coulee Dm (1,2)	APR-SEP	48200	56800	60700	94	64600	73200	64850
	APR-JUL	40600	47800	51100	94	54400	61600	54543
	APR-JUN	32100	37700	40200	94	42700	48300	42756

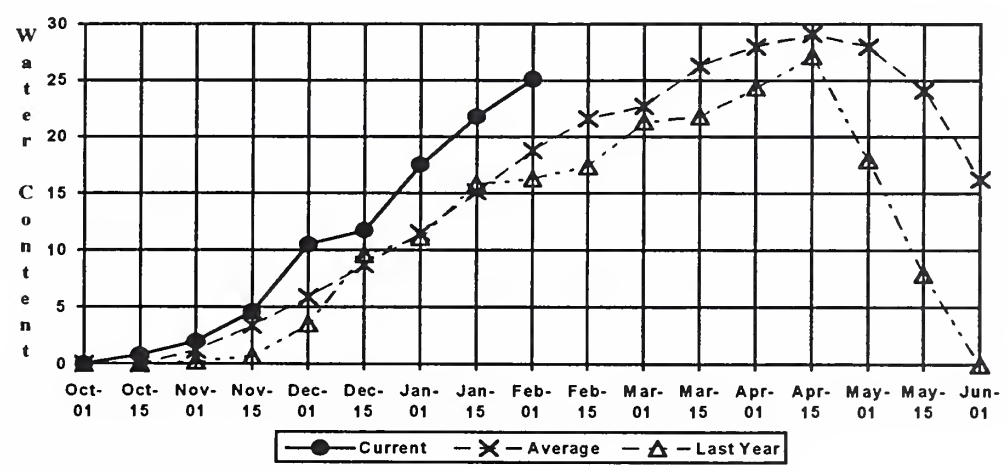
COLVILLE - PEND OREILLE RIVER BASINS Reservoir Storage (1000 AF) - End of January				COLVILLE - PEND OREILLE RIVER BASINS Watershed Snowpack Analysis - February 1, 1995				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ROOSEVELT		NO REPORT			Colville River	1	116	110
BANKS		NO REPORT			Pend Oreille River	68	135	95
					Kettle River	4	138	122

* 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.

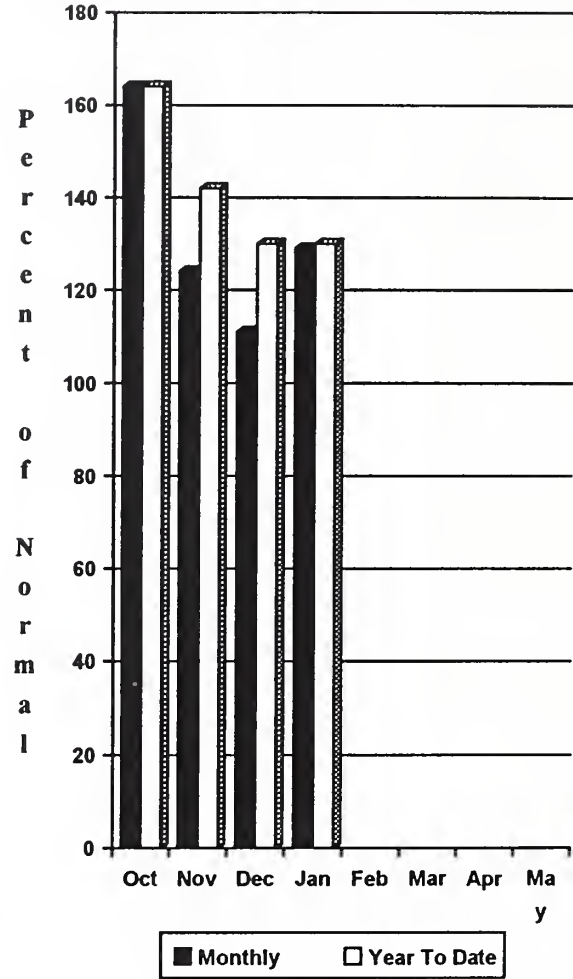
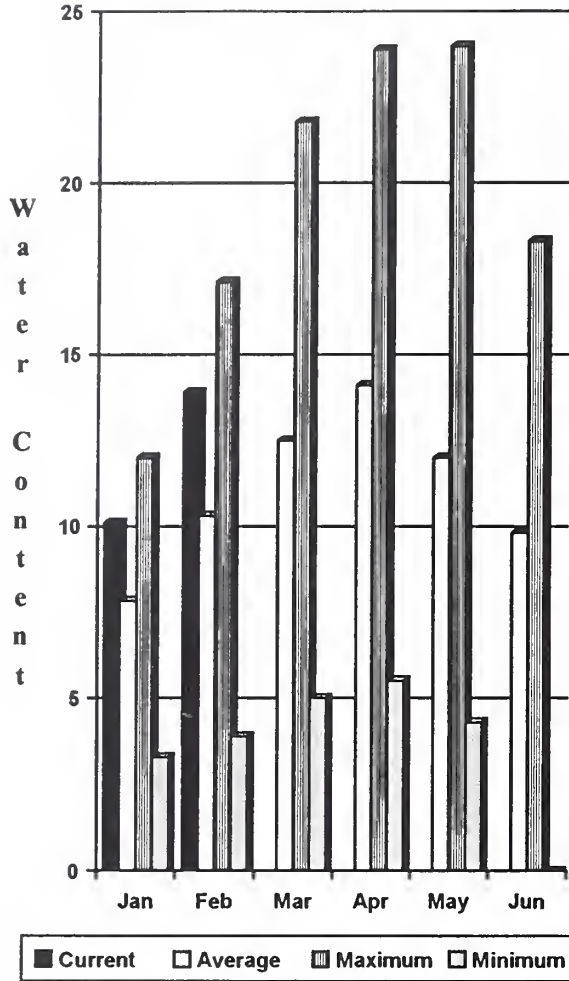
Bunchgrass Meadow SNOTEL Elevation 5000 ft.



Okanogan - Methow River Basins

Mountain Snowpack* (inches)

Precipitation* (% of normal)



*Based on selected stations

Summer runoff forecast for the Okanogan River is 107% of normal; the Similkameen River, 113%, the Methow River, 115%, and Salmon Creek, 122% of normal. February 1 snow cover on the Okanogan was 120% of normal, and the Methow, 150%. January precipitation in the Okanogan-Methow was 129% of normal, with water year-to-date at 130% of average. January streamflow on the Methow River was 180% of normal, 70% on the Okanogan River, and 65% on the Similkameen. Snow water content at the Harts Pass SNOTEL, elevation 6500 feet, was 35.3 inches; normal for this site is 27.7 inches. Temperatures were 2 degrees above normal for January. Storage in the Conconully Reservoir was 6200 acre feet, which is 48% of capacity and 98% of the February 1 average.

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

OKANOGAN - METHOW RIVER BASINS

Streamflow Forecasts - February 1, 1995

Forecast Point	Forecast Period	<<----- Drier ----- Future Conditions ----- Wetter ----->>						30-Yr Avg. (1000AF)				
		90% (1000AF)		70% (1000AF)		Chance Of Exceeding * (1000AF) (% AVG.)			30% (1000AF)		10% (1000AF)	
SIMILKAMEEN nr Nighthawk (1)	APR-SEP	995	1480	1580	113	1680	2150	1399				
	APR-JUL	1180	1380	1470	113	1560	1760	1304				
	APR-JUN	1020	1190	1260	113	1330	1500	1113				
OKANOGAN RIVER nr Tonasket (1)	APR-SEP	1350	1530	1740	107	1950	2390	1624				
	APR-JUL	980	1390	1570	107	1750	2160	1467				
	APR-JUN	875	1180	1320	107	1460	1770	1234				
SALMON CREEK near Conconully	APR-JUL	11.0	18.3	23	122	28	36	19.1				
	APR-SEP	11.9	19.3	24	122	30	37	20				
METHOW RIVER near Pateros	APR-SEP	780	1000	1080	115	1160	1380	942				
	APR-JUL	870	970	1040	119	1110	1210	873				
	APR-JUN	745	835	895	120	955	1050	746				

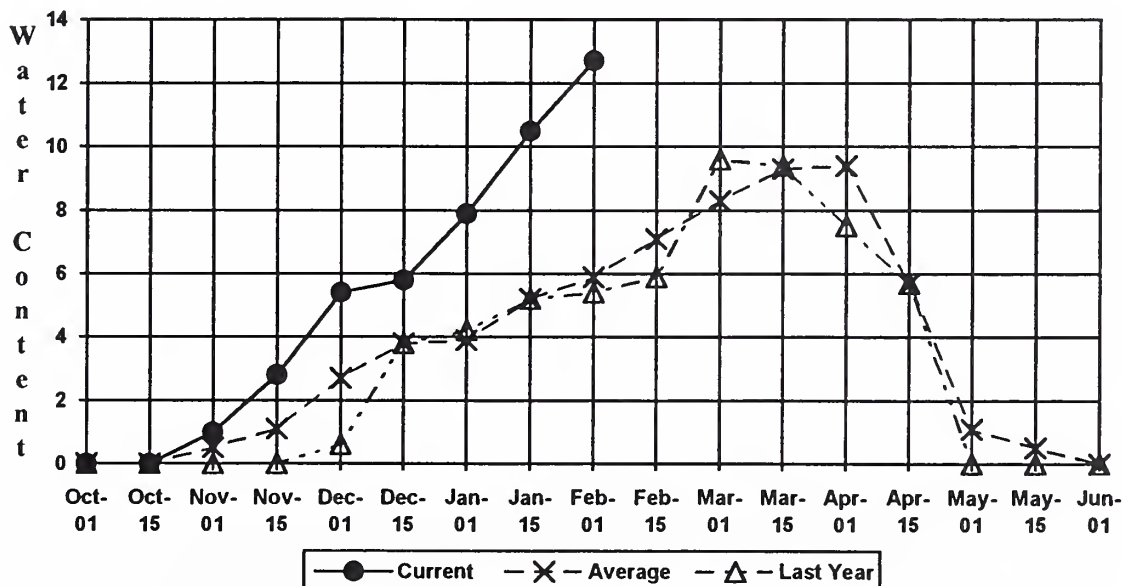
OKANOGAN - METHOW RIVER BASINS Reservoir Storage (1000 AF) - End of January				OKANOGAN - METHOW RIVER BASINS Watershed Snowpack Analysis - February 1, 1995				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
SALMON LAKE		NO REPORT			Okanogon River	19	163	123
CONCONULLY RESERVOIR		NO REPORT			Methow River	4	217	150

* 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.

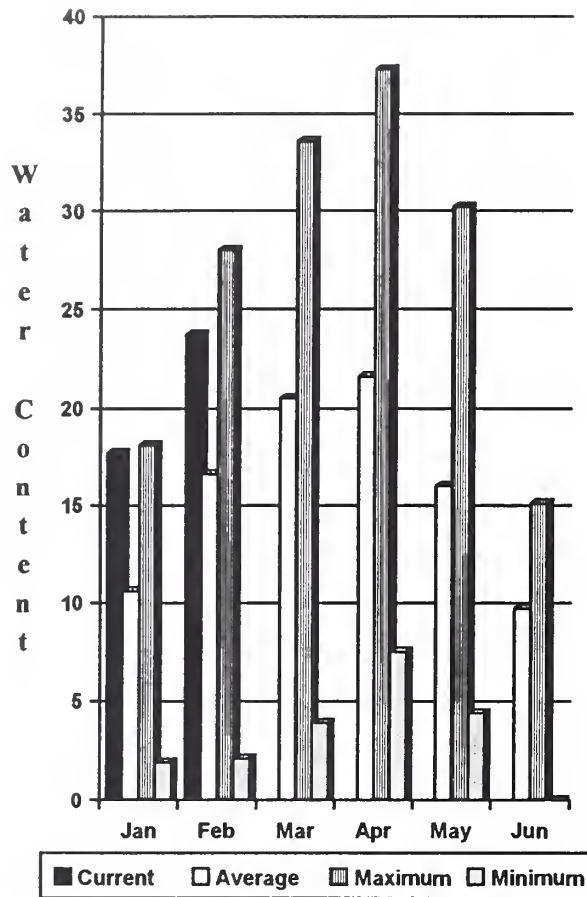
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural flow - actual flow may be affected by upstream water management.

Salmon Meadows SNOTEL Elevation 4500 ft.

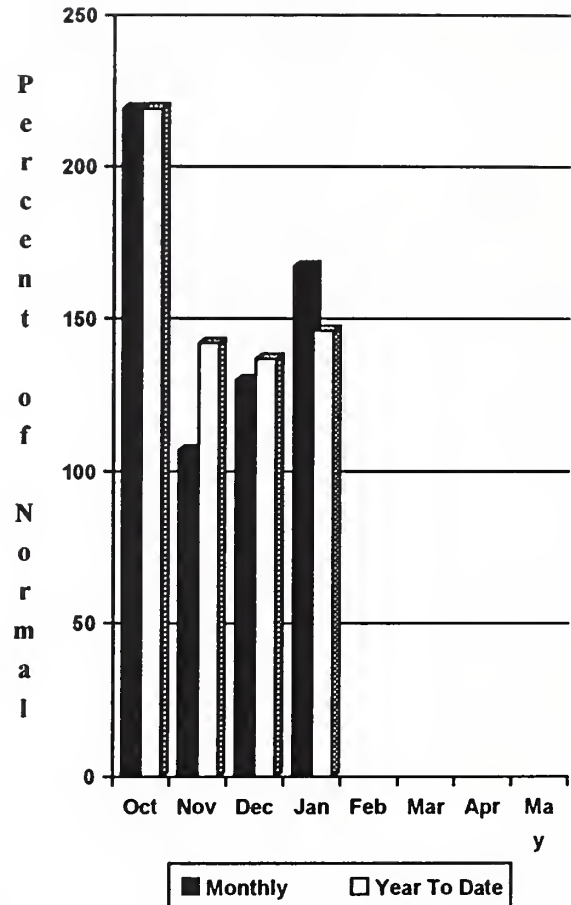


Wenatchee - Chelan River Basins

Mountain Snowpack* (inches)



Precipitation* (% of normal)



*Based on selected stations

Precipitation during January was 167% of normal in the basin and 146% for the year to date. Runoff for the Entiat River is forecast to be 125% of normal for the summer. The April-September forecast for the Chelan River is for 114%, for the Wenatchee River it is 109%, and 107% on the Stehekin. Icicle Creek is forecast to be 109% of normal this summer. Streamflow for January on the Chelan River was 90% of average and on the Wenatchee River it was 69% of normal. February 1 snowpack in the Wenatchee Basin was 139% of average, which is 199% of last year. The Chelan Basin was 132% of average along with Trough SNOTEL on Colockum Ridge at 228% and Stemilt Creek at 136% of normal. Snowpack on the Entiat River was at 157% of average. Reservoir storage in Lake Chelan was 266,200 acre feet or 59% of February 1 average and 39% of capacity. Lyman Lake SNOTEL had the most snow water with 54.2 inches of water. This site would normally have 39 inches.

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

WENATCHEE - CHELAN RIVER BASINS

Streamflow Forecasts - February 1, 1995

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	APR-SEP	1090	1260	1327	114	1400	1570	1160
	APR-JUL	1060	1150	1209	118	1270	1360	1024
	APR-JUN	815	890	940	116	990	1070	812
STEHEKIN near STEHEKIN	APR-SEP	770	840	885	107	930	1000	827
	APR-JUL	670	725	760	108	795	850	701
	APR-JUN	510	555	586	109	615	660	538
ENTIAT RIVER near Ardenvoir	APR-SEP	240	265	283	125	300	325	227
	APR-JUL	220	240	257	125	270	295	206
	APR-JUN	87	107	120	71	133	153	169
WENATCHEE at Plain	APR-SEP	1070	1180	1250	105	1320	1430	1190
	APR-JUL	1010	1080	1136	106	1190	1270	1072
	APR-JUN	820	880	916	106	955	1010	864
WENATCHEE R. at Peshastin	APR-SEP	1210	1550	1780	109	2010	2350	1636
	APR-JUL	1120	1420	1630	110	1840	2140	1485
	APR-JUN	915	1160	1325	110	1490	1740	1204
STEMILT nr Wenatchee (miners in)	MAY-SEP	103	130	149	108	168	196	138
ICICLE CREEK nr Leavenworth	APR-SEP	280	355	405	109	455	530	370
	APR-JUL	260	330	375	110	420	490	340
	APR-JUN	205	260	297	110	335	390	270
COLUMBIA R. bl Rock Island Dam (2)	APR-SEP	54200	62300	67800	96	73300	81400	70485
	APR-JUL	45800	52700	57350	96	62000	68900	59736
	APR-JUN	36100	41500	45130	96	48800	54100	47007

WENATCHEE - CHELAN RIVER BASINS Reservoir Storage (1000 AF) - End of January

WENATCHEE - CHELAN RIVER BASINS Watershed Snowpack Analysis - February 1, 1995

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	266.2	258.9	450.6	Chelan Lake Basin	5	205	132
					Entiat River	2	203	157
					Wenatchee River	12	199	136
					Squilchuck Creek	0	0	0
					Stemilt Creek	2	192	136
					Colockum Creek	0	0	0

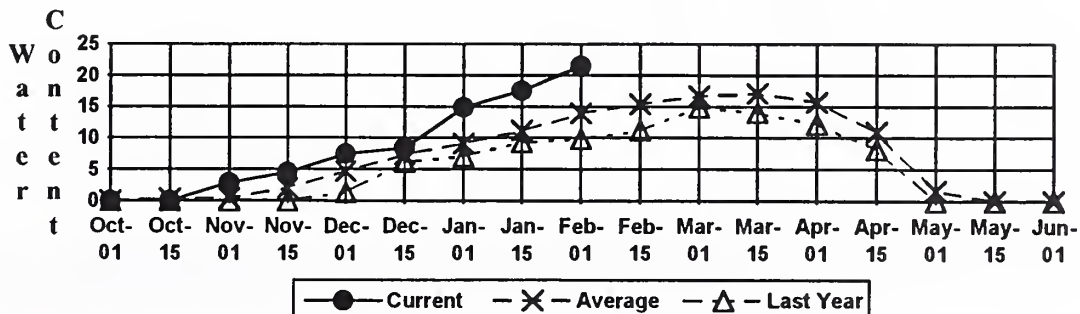
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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.

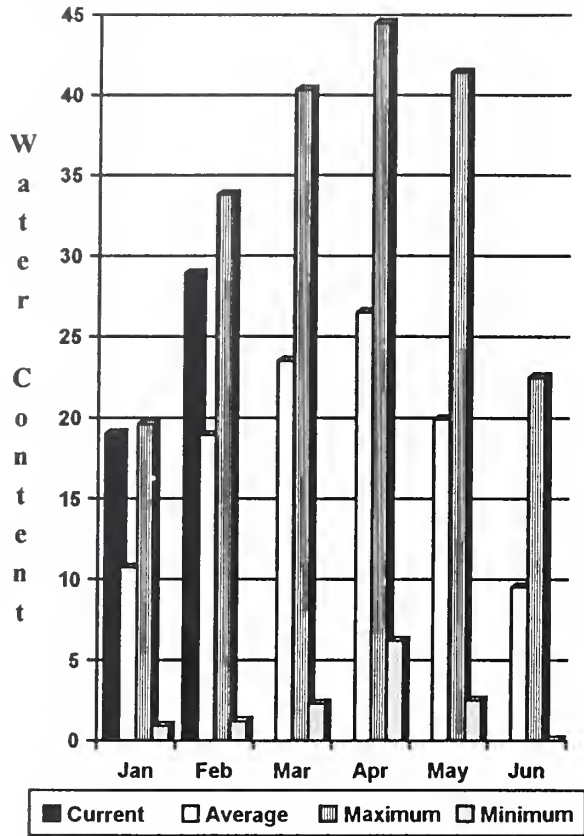
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Pope Ridge SNOTEL Elevation 3540 ft.

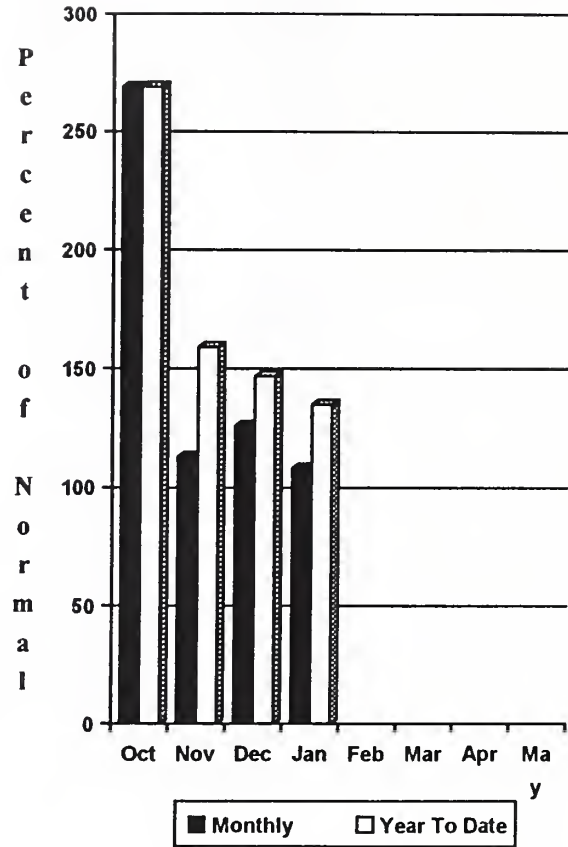


Yakima River Basin

Mountain Snowpack* (inches)



Precipitation* (% of normal)



*Based on selected stations

February 1 reservoir storage for the five major reservoirs was 339,700 acre feet, 53% of average. February 1 summer streamflow forecasts are for near to above normal in the Yakima Basin. Forecasts for the Yakima River at Cle Elum are for 107% of normal. Naches River, 113%; the Yakima River at Parker, 105%, Ahtanum Creek, 111%, and the Tieton River, 118%. The Klickitat River near Glenwood is forecast at 89% of normal flows this summer. January streamflows dropped off considerably from last month, with the Yakima River at Parker 77% of normal, 57% for the Yakima near Cle Elum, and 94% for the Naches River. February 1 snowpack was 153% based upon 21 snow courses and SNOTEL readings within the Yakima basin. Snow surveys also reported 211% of average snowpack for Ahtanum Creek. January precipitation was 108% of normal and 135% for the water year-to-date. Temperatures were 2.5 degrees above average for January. 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 - February 1, 1995

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.)	
KEECHELUS LAKE INFLOW	APR-JUL	110	124	134	108	144	158	124
	APR-SEP	127	135	146	108	157	166	135
	APR-JUN	99	110	118	108	126	137	109
KACHESS LAKE INFLOW	APR-JUL	102	114	122	110	130	142	111
	APR-SEP	108	121	130	110	139	150	118
	APR-JUN	93	103	109	110	115	125	99
CLE ELUM LAKE INFLOW	APR-JUL	390	425	446	109	470	505	409
	APR-SEP	420	460	490	109	520	560	448
	APR-JUN	325	355	375	109	395	425	345
YAKIMA at Cle Elum	APR-JUN	665	725	770	107	815	875	721
	APR-JUL	765	840	890	107	940	1010	832
	APR-SEP	845	925	980	107	1030	1110	915
BUMPING LAKE INFLOW	APR-SEP	118	145	155	114	166	190	136
	APR-JUL	117	131	140	113	149	163	124
	APR-JUN	96	109	118	113	127	140	104
AMERICAN RIVER near Nile	APR-SEP	116	129	137	116	145	158	118
	APR-JUL	110	121	129	118	137	148	109
	APR-JUN	88	98	106	115	113	123	92
RIMROCK LAKE INFLOW	APR-SEP	230	265	280	118	295	330	238
	APR-JUL	205	225	237	118	250	265	200
	APR-JUN	161	177	188	116	199	215	162
NACHES near Naches	APR-SEP	755	890	940	113	990	1120	832
	APR-JUL	735	800	845	112	890	955	755
	APR-JUN	630	690	729	112	770	825	651
AHTANUM CREEK nr Tampico (2)	APR-SEP	32	44	51	111	59	70	46
	APR-JUL	29	40	47	111	54	64	42
	APR-JUN	25	34	40	111	46	55	36
YAKIMA near Parker	APR-SEP	1780	1970	2102	105	2230	2630	1994
	APR-JUL	1620	1790	1905	106	2020	2190	1805
	APR-JUN	1440	1590	1689	106	1790	1930	1597
KLICKITAT near Glenwood	APR-JUN	79	92	100	91	108	121	110
	APR-SEP	95	113	125	89	137	156	140

YAKIMA RIVER BASIN Reservoir Storage (1000 AF) - End of January					YAKIMA RIVER BASIN Watershed Snowpack Analysis - February 1, 1995			
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	71.6	38.8	96.0	Yakima River	20	214	147
KACHESS	239.0	70.9	42.3	170.0	Ahtanum Creek	2	204	150
CLE ELUM	436.9	103.1	35.3	251.0				
BUMPING LAKE	33.7	15.4	5.9	9.0				
RIMROCK	198.0	78.7	35.2	115.0				

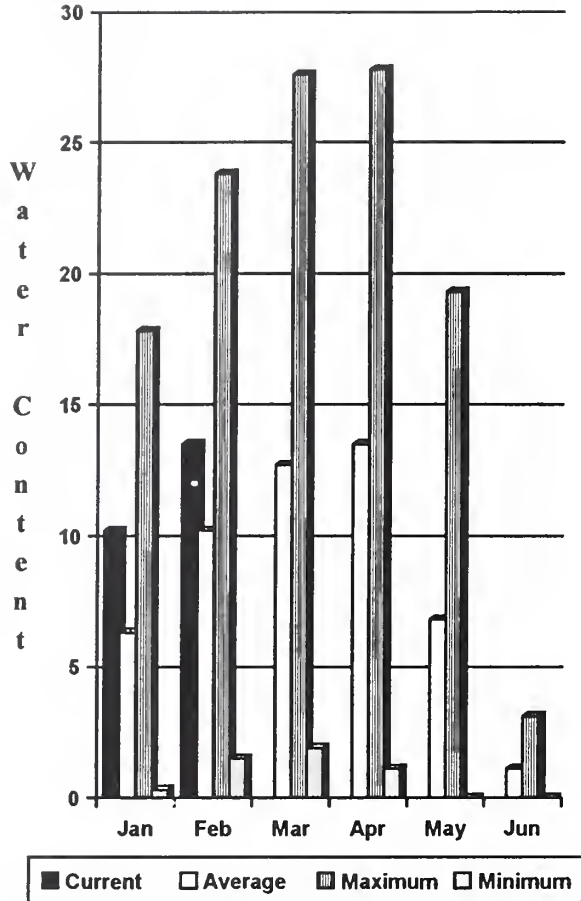
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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

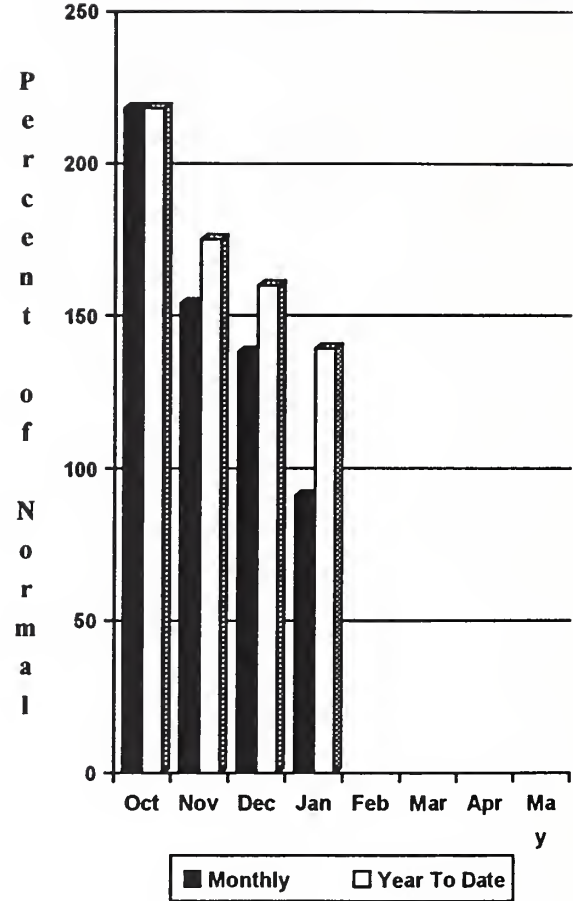
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural flow - actual flow may be affected by upstream water management.

Walla Walla River Basin

Mountain Snowpack* (inches)



Precipitation* (% of normal)



*Based on selected stations

January precipitation was 91% of average, bringing the year-to-date precipitation to 139% of normal. February 1 snowpack was at 132% of normal. The forecast is for 109% of average streamflow in the Walla Walla River for the coming summer, for the Grande Ronde at Troy, 105%, and 111% for Mill Creek. January streamflow was 158% of normal on the Walla Walla River, 80% for the Snake River, and 166% on the Grande Ronde River near Troy. The Touchet SNOTEL site had 25.7 inches of water equivalent, the normal February 1 reading for this site is 20.8 inches. Temperatures were 2 degrees above average for January.

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

WALLA WALLA RIVER BASIN

Streamflow Forecasts - February 1, 1995

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)	MAR-JUL	990	1380	1560	106	1740	2130	1471
	APR-SEP	865	1220	1380	105	1540	1890	1312
SNAKE blw Lower Granite Dam (1,2)	APR-JUL	11300	17700	20600	95	23500	29900	21650
	APR-SEP	12600	19800	23100	95	26400	33600	24360
MILL CREEK at Walla Walla	APR-SEP	10.9	15.7	19.0	111	22	27	17.1
	APR-JUL	10.8	15.6	18.9	112	22	27	16.9
	APR-JUN	10.7	15.5	18.7	112	22	27	16.7
SF WALLA WALLA nr Milton Freewater	APR-JUL	48	54	58	109	62	68	53
COLUMBIA R. at The Dalles (2)	APR-SEP	71100	84400	93400	94	102000	116000	98982
	APR-JUL	60700	72000	79670	94	87400	98700	84760
	APR-JUN	49400	58600	64790	94	71000	80200	68925

WALLA WALLA RIVER BASIN Reservoir Storage (1000 AF) - End of January					WALLA WALLA RIVER BASIN Watershed Snowpack Analysis - February 1, 1995			
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	179	132

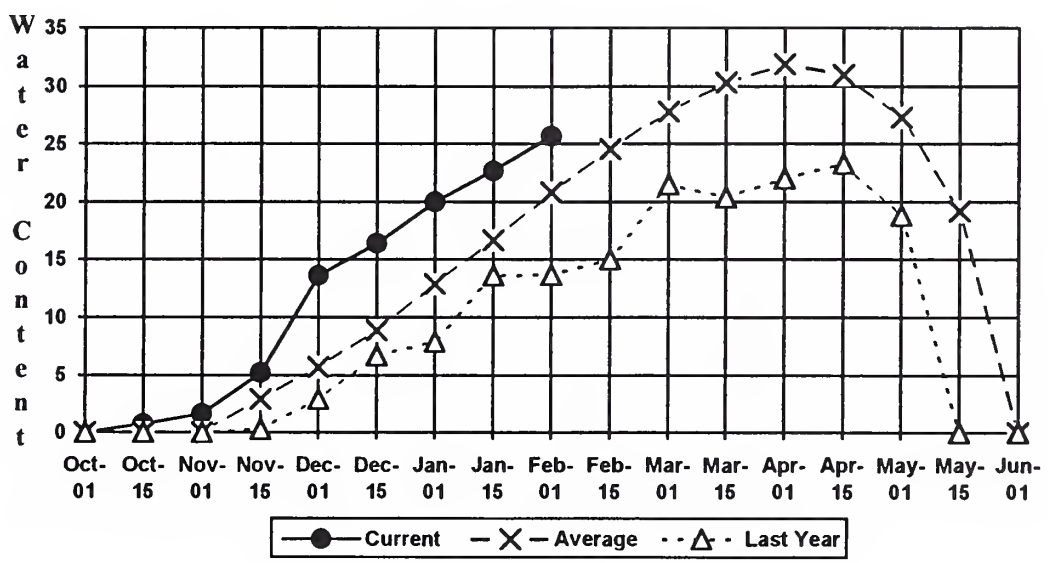
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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.

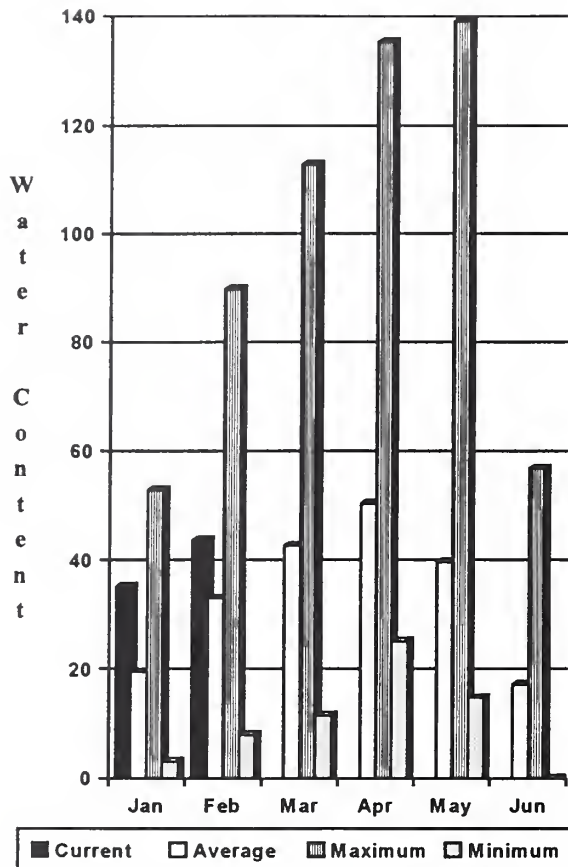
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Touchet #2 SNOTEL Elevation 5530 ft.

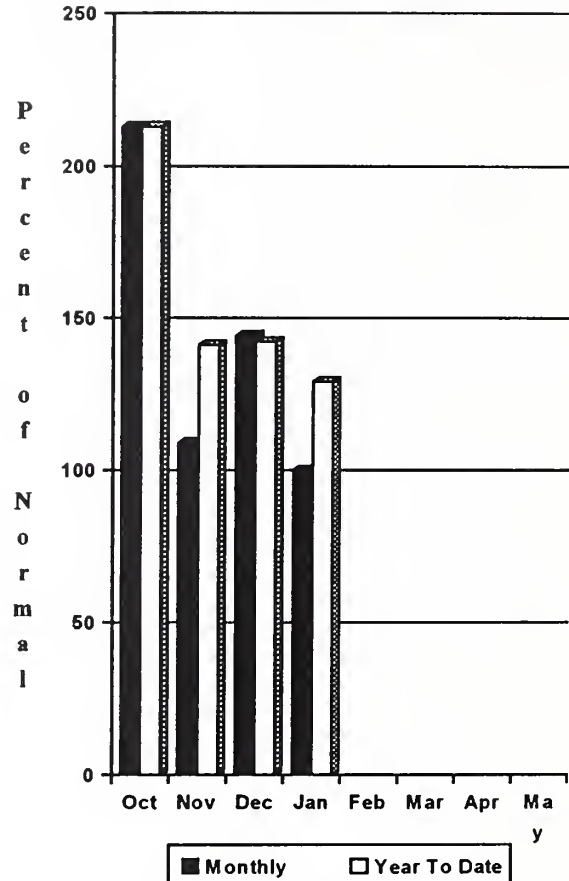


Cowlitz - Lewis River Basins

Mountain Snowpack* (inches)



Precipitation* (% of normal)



*Based on selected stations

The forecast for summer runoff in the Lewis River is 108% of normal. The Cowlitz River is forecast for 113% of normal runoff. January streamflow on the Cowlitz River was 83% of average, and 94% on the Lewis River. January precipitation was normal, bringing the precipitation down slightly to 129% of average for the water year. February 1 snow cover for the Cowlitz River was 139%. The Lewis River took a nose dive and dropped from 198% last month to 126% of average on February 1. The Paradise Park SNOTEL recorded the most water content for the basin with 56 inches of water. Normal February 1 water content is 38.5 inches. Temperatures were 4 degrees above normal for January. June Lake SNOTEL ended the month with a new record of 112.9 inches of precipitation for the year, beating its previous best of 109.9 inches in 1983.

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

COWLITZ - LEWIS RIVER BASINS

Streamflow Forecasts - February 1, 1995

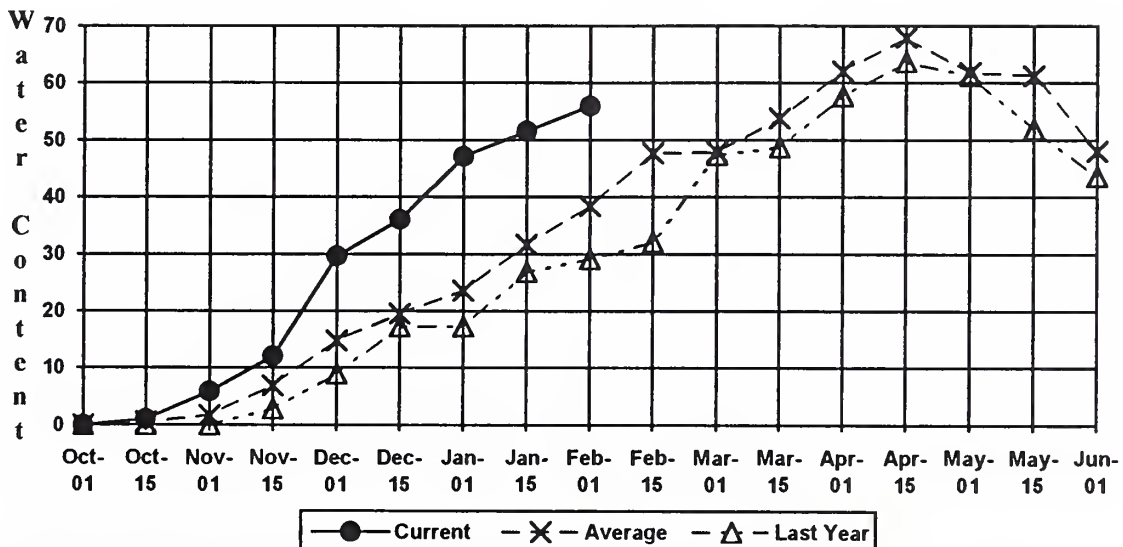
Forecast Point	Forecast Period	<<----- Drier ----- Future Conditions ----- Wetter ----->>						30-Yr Avg. (1000AF)
		Chance Of Exceeding *		Chance Of Exceeding *		Chance Of Exceeding *		
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	30% (1000AF)	10% (1000AF)	10% (1000AF)	
LEWIS RIVER at Ariel (2)	APR-SEP	710	1120	1300	108	1490	1890	1204
	APR-JUL	735	975	1135	108	1300	1530	1051
	APR-JUN	655	865	1008	108	1150	1360	933
COWLITZ R. b1 Mayfield Dam (2)	APR-SEP	1390	1890	2220	113	2560	3050	1970
	APR-JUL	1230	1660	1956	113	2250	2680	1731
	APR-JUN	1050	1420	1670	113	1920	2290	1477
COWLITZ R. at Castle Rock (2)	APR-SEP	2100	2620	2980	112	3340	3860	2667
	APR-JUL	1830	2290	2600	112	2910	3370	2325
	APR-JUN	1570	1970	2235	112	2500	2900	1995
KLICKITAT near Glenwood	APR-JUN	79	92	100	91	108	121	110
	APR-SEP	95	113	125	89	137	156	140

COWLITZ - LEWIS RIVER BASINS				COWLITZ - LEWIS RIVER BASINS			
Reservoir Storage (1000 AF) - End of January				Watershed Snowpack Analysis - February 1, 1995			
Reservoir	Usable Capacity	*** Usable Storage This Year	*** Last Year Avg	Watershed	Number of Data Sites	This Year as % of Last Yr Average	
				Cowlitz River	7	207	139
				Lewis River	4	200	126

* 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.

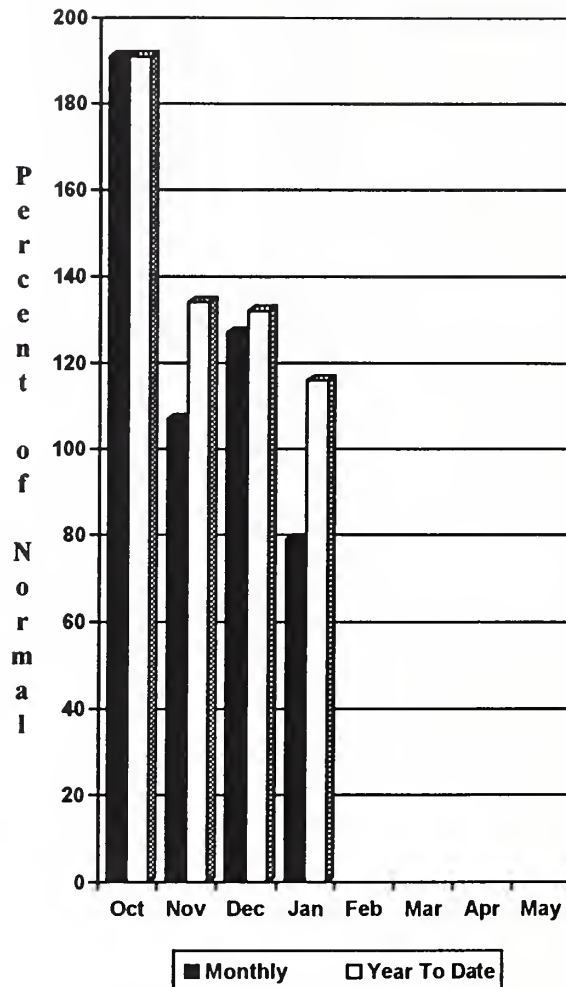
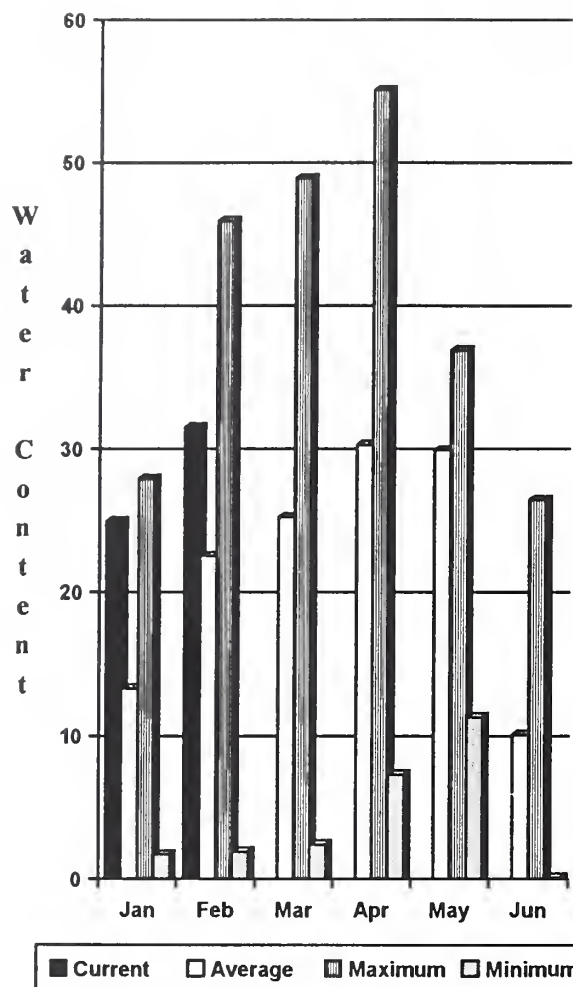
Paradise SNOTEL Elevation 5120 ft.



White - Green - Cedar River Basins

Mountain Snowpack* (inches)

Precipitation* (% of normal)



*Based on selected stations

Summer runoff is forecast to be 85% of normal for the Green River and 92% for the Cedar River near Cedar Falls, for the Rex River 88%, the South Fork of the Tolt River at 94% and for the Cedar River at Cedar Falls, 88%. February 1 snowpack was 169% of normal in the White River Basin and 111% in the Green River Basin. Water content on February 1 at the Morse Lake SNOTEL, at an elevation of 5400 feet, was 57.6 inches. This site has a February 1 average of 29.6 inches. January precipitation was 79% of normal, bringing the water year-to-date to 116% of average. National Weather Service reported temperatures at Stampede Pass to be 1.5 degrees above average for January.

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

WHITE - GREEN - CEDAR RIVER BASINS

Streamflow Forecasts - February 1, 1995

Forecast Point	Forecast Period	<<----- Drier ----->>		Future Conditions		----- Wetter ----->>		30-Yr Avg. (1000AF)
		90%	70%	Chance Of Exceeding *		30%	10%	
		(1000AF)	(1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	(1000AF)	(1000AF)	
GREEN RIVER below Howard Hanson Dam	APR-JUL	161	196	220	86	245	280	257
	APR-SEP	182	220	242	85	265	300	285
	APR-JUN	144	177	200	85	225	255	234
CEDAR RIVER near Cedar Falls	APR-JUL	52	64	71	93	79	91	77
	APR-SEP	58	70	79	92	87	99	85
	APR-JUN	47	57	64	94	71	81	68
REX RIVER near Cedar Falls	APR-JUL	16.0	21	24	89	27	32	27
	APR-SEP	19.0	23	26	88	29	34	30
	APR-JUN	16.0	20	22	89	25	29	25
CEDAR RIVER at Cedar Falls	APR-JUL	44	61	73	89	85	102	82
	APR-SEP	45	62	73	88	84	101	83
	APR-JUN	45	61	71	89	81	97	80
SOUTH FORK TOLT near Index	APR-JUL	10.9	12.9	14.2	93	15.5	17.5	15.2
	APR-SEP	13.2	15.3	16.7	94	18.1	20	17.8
	APR-JUN	9.4	11.3	12.5	95	13.7	15.6	13.1

WHITE - GREEN RIVER BASINS Reservoir Storage (1000 AF) - End of January					WHITE - GREEN RIVER BASINS Watershed Snowpack Analysis - February 1, 1995			
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	223	169
					Green River	7	241	111
					Cedar River	0	0	0

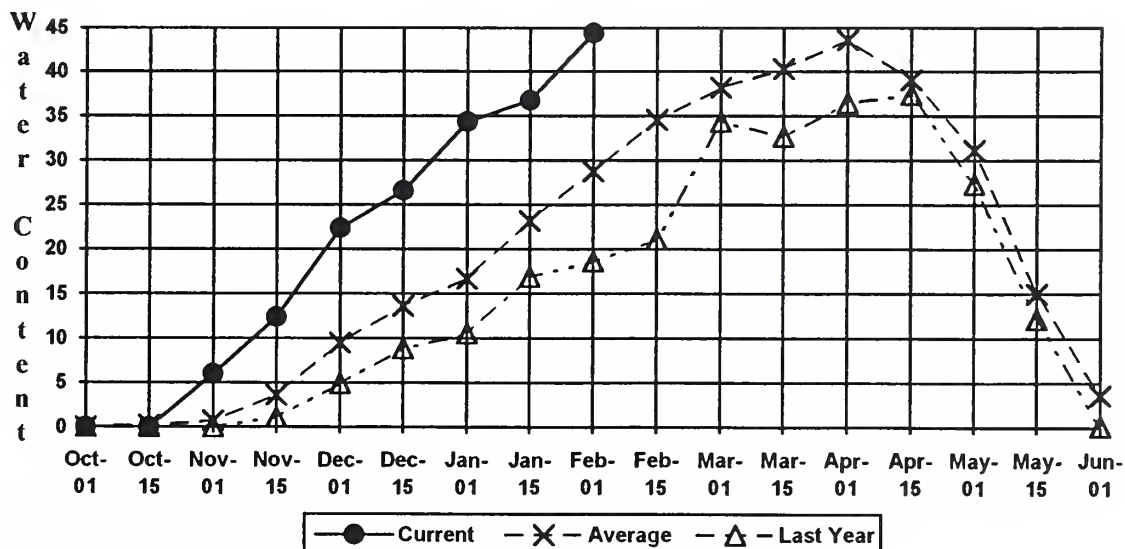
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

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

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

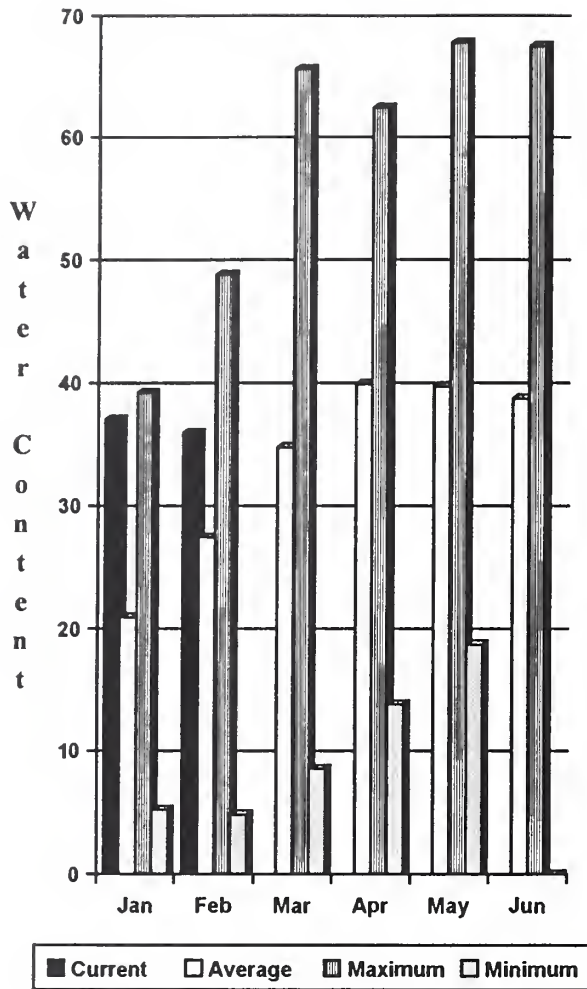
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Stampede Pass SNOTEL Elevation 3860 ft.

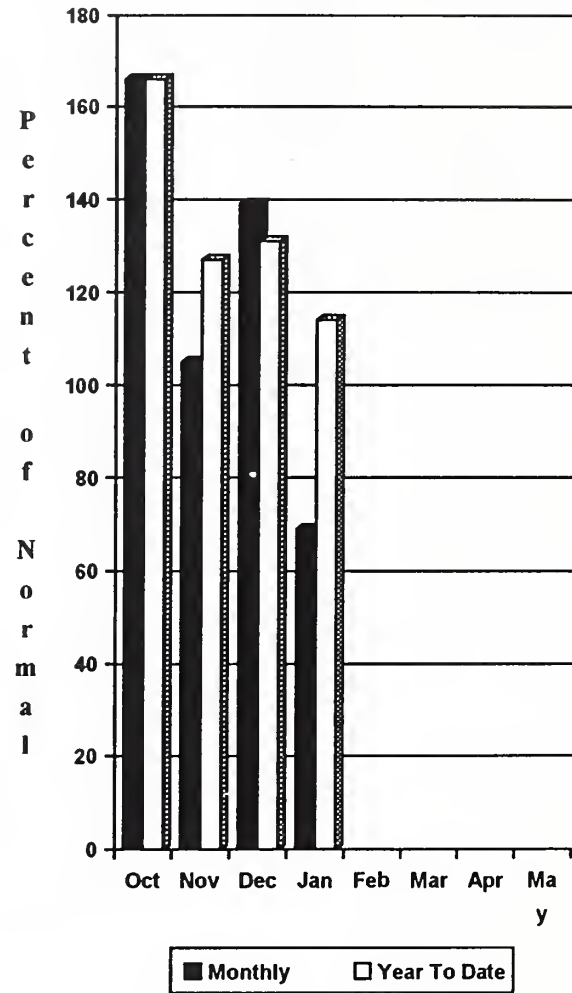


North Puget Sound River Basins

Mountain Snowpack* (inches)



Precipitation* (% of normal)



*Based on selected stations

Forecast for the Skagit River streamflow is for 107% of normal for the spring and summer period. January streamflow in the Skagit River was 96% of average. Other forecast points include the Baker River at 106% and Thunder Creek at 98%. Believe it or not, basin wide precipitation for January was only 69% of average, however water year to date still remains at 114% of normal. February 1 snow cover in the Skagit River was 120%, the Baker River, 109% and the Snohomish River had 142% of average. Rainy Pass SNOTEL, at 4780 feet, had 44.1 inches of water content. Normal February 1 water content is 24.5 inches. February 1 reservoir storage showed Ross Lake at 80% normal and 59% of capacity. January temperatures were 2 degrees above normal.

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

NORTH PUGET SOUND RIVER BASINS

Streamflow Forecasts - February 1, 1995

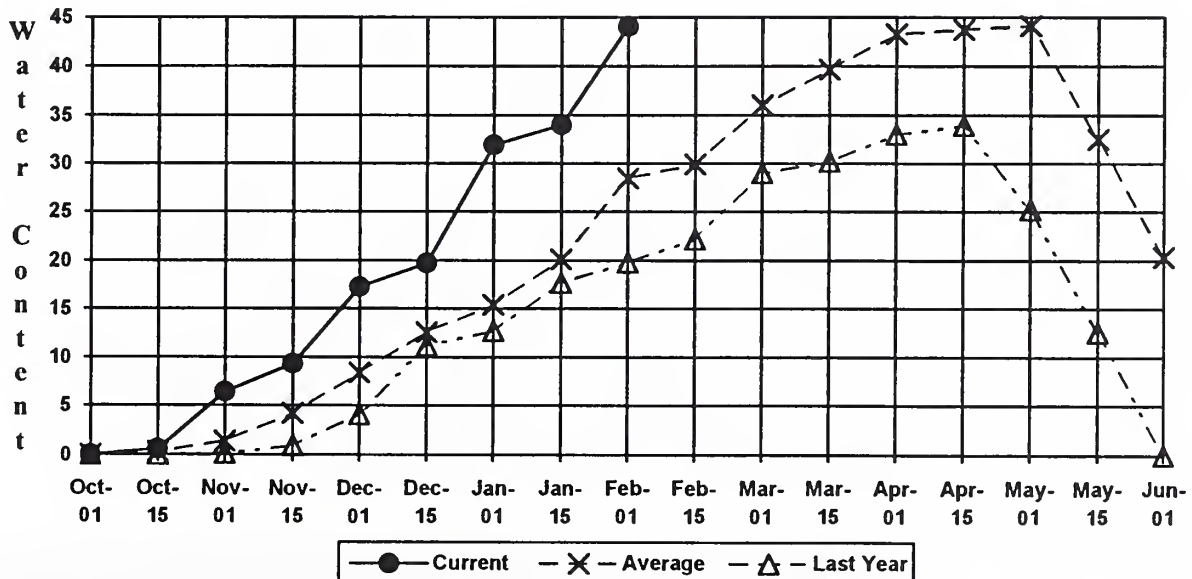
Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		Drier		Wetter		Chance Of Exceeding *		
		90% (1000AF)	70% (1000AF)	30% (1000AF)	10% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	
THUNDER CREEK near Newhalem	APR-JUL	194	210	221	96	235	250	230
	APR-SEP	290	310	321	98	335	350	328
	APR-JUN	122	139	151	101	162	179	149
SKAGIT RIVER at Newhalem (2)	APR-SEP	1850	2140	2340	107	2540	2830	2185
	APR-JUL	1560	1810	1976	108	2140	2390	1830
	APR-JUN	1210	1400	1523	108	1650	1840	1410
BAKER RIVER near Concrete	APR-JUL	765	840	888	106	940	1010	836
	APR-SEP	975	1060	1126	106	1190	1280	1064
	APR-JUN	530	595	637	104	680	745	611

NORTH PUGET SOUND RIVER BASINS Reservoir Storage (1000 AF) - End of January					NORTH PUGET SOUND RIVER BASINS Watershed Snowpack Analysis - February 1, 1995			
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	824.9	917.9	1033.9	Snohomish River	5	253	142
DIABLO RESERVOIR	90.6	87.4	87.2	84.2	Skagit River	12	218	122
GORGE RESERVOIR	9.8	8.0	8.1	7.9	Baker River	2	297	109

* 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.

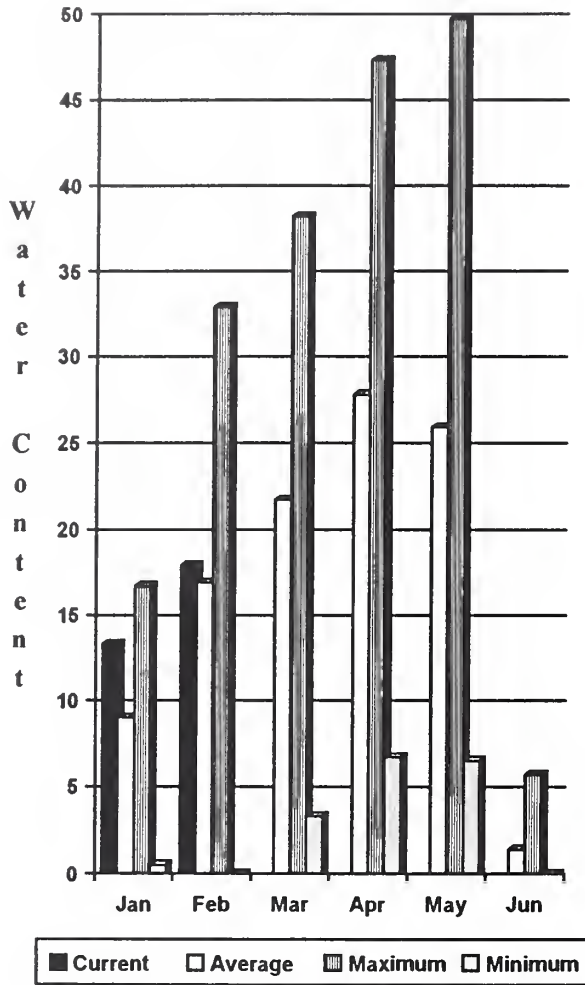
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
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Rainy Pass SNOTEL Elevation 4780 ft.

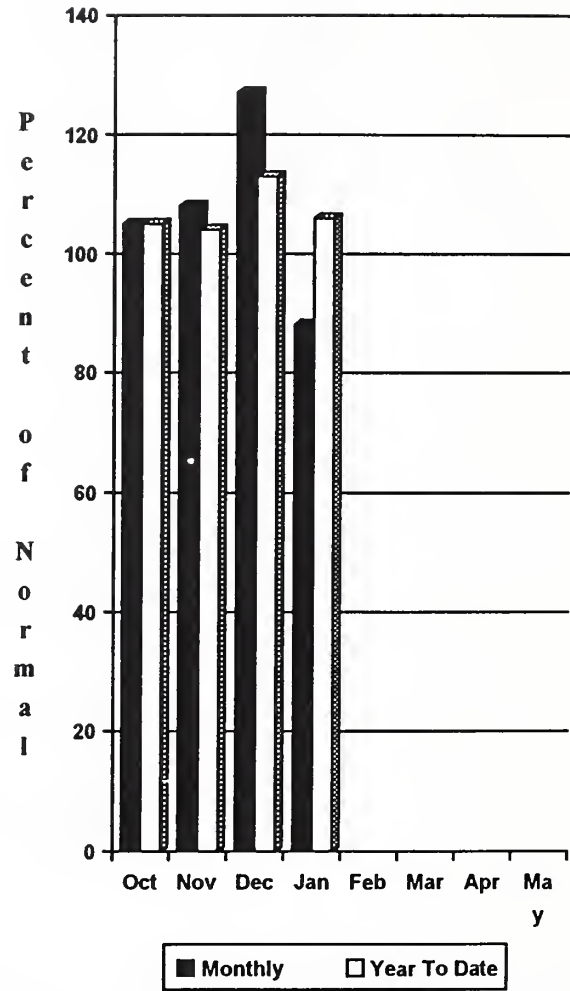


Olympic Peninsula River Basins

Mountain Snowpack* (inches)



Precipitation* (% of normal)



*Based on selected stations

February forecasts of runoff for streamflow in the basin are for 92% of average for both the Dungeness and Elwha Rivers. The Big Quilcene can expect near normal runoff this summer. January precipitation was 88% of average. Precipitation has accumulated at 106% of normal for the water year. January precipitation at Quillayute was 14.1 inches, which is near normal at 97% of average. Average February 1 snow cover in the Olympic Basin was well above normal at 106%. The Mount Crag SNOTEL near Quilcene had 24 inches of snow water equivalent on February 1. Normal for this site is 16.9 inches. Temperatures at Quillayute were 4.3 degrees above normal for January.

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

OLYMPIC PENINSULA RIVER BASINS

Streamflow Forecasts - February 1, 1995

Forecast Point	Forecast Period	<<----- Drier ----->>		Future Conditions		<----- Wetter ----->>		30-Yr Avg. (1000AF)
		90%	70%	Chance Of Exceeding *		30%	10%	
		(1000AF)	(1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	(1000AF)	(1000AF)	
DUNGENESS RIVER nr Sequim	APR-SEP	115	134	147	92	160	179	160
	APR-JUL	95	110	120	92	131	146	131
	APR-JUN	71	82	90	92	98	109	98
ELWHA RIVER nr Port Angeles	APR-SEP	350	420	462	92	505	570	502
	APR-JUL	300	350	388	93	425	480	417

OLYMPIC PENINSULA RIVER BASINS Reservoir Storage (1000 AF) - End of January				OLYMPIC PENINSULA RIVER BASINS Watershed Snowpack Analysis - February 1, 1995				
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	632	88
					Morse Creek	1	249	114
					Dungeness River	1	262	81
					Quilcene River	1	203	142
					Wynoochee River	0	0	0

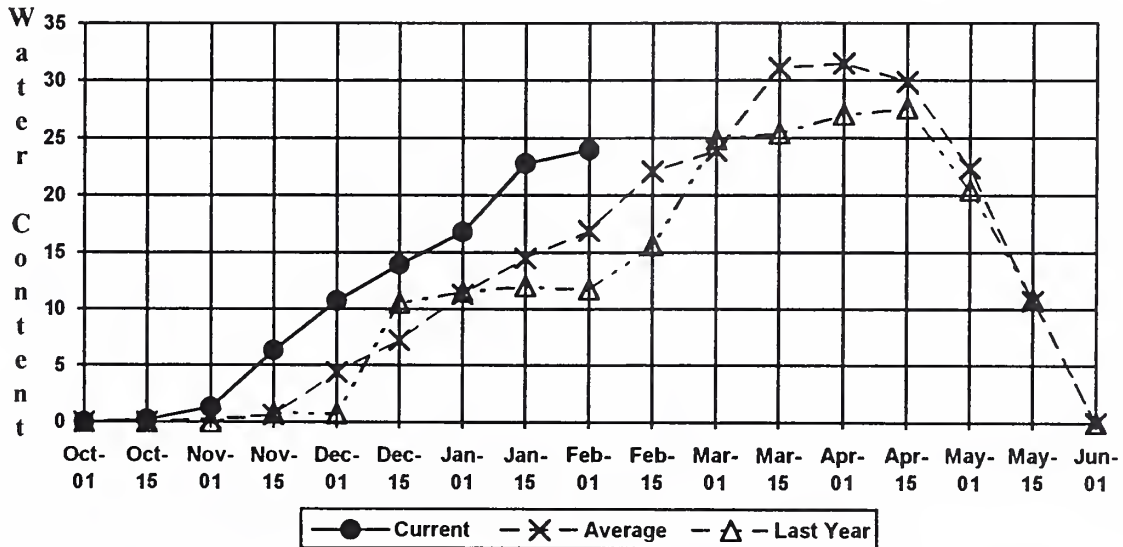
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Mount Crag SNOTEL Elevation 4050 ft.



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.

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

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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
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