

**FEDERAL-STATE-PRIVATE
COOPERATIVE SNOW SURVEYS**



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WATER SUPPLY OUTLOOK FOR IDAHO

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

IDAHO STATE DEPARTMENT OF WATER ADMINISTRATION

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
JUNE 1, 1972

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO NUMBER ORC 221-3

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR IDAHO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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WASHINGTON, D. C.



Released by

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BOISE, IDAHO

In Cooperation with

R. KEITH HIGGINSON
DIRECTOR
DEPARTMENT OF WATER ADMINISTRATION

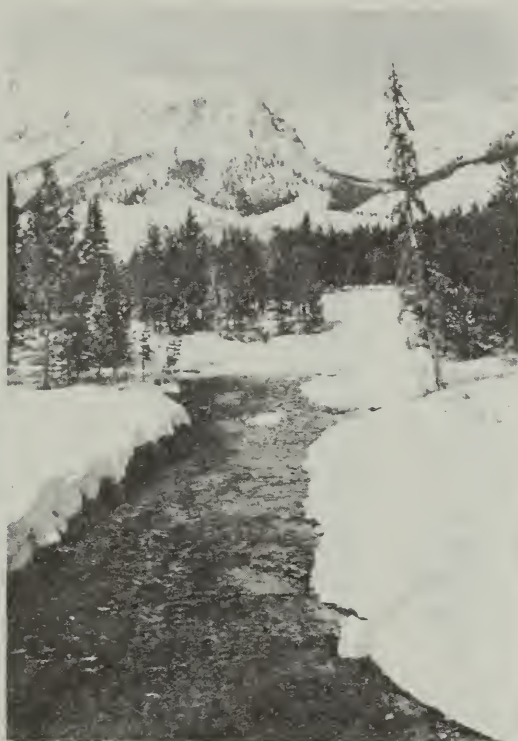


Report prepared by

JACK A. WILSON, Acting Snow Survey Supervisor

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SNOW SURVEY SECTION
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WATER SUPPLY OUTLOOK for IDAHO



JUNE 1, 1972

SNOW SURVEYS, SUPPLEMENTAL MEASUREMENTS AND CORRECTIONS

Key snow courses measured near the first of June indicate a heavy snowpack remains at high elevations. High elevation snow courses in southern Idaho show slightly less water content than June 1971; however, courses on the Clearwater and Spokane watersheds reported greater snow-water equivalent than last year. Cool temperatures in general retarded snowmelt allowing a more normal runoff and minimized the flood hazard in most areas. High water has been experienced on the Clearwater and Salmon drainages but would have been more damaging had it not been for the combination of light precipitation and cool temperatures. Precipitation during May ranged from slightly above normal on the Clearwater watershed, average on the Pend Oreille-Spokane drainages, to well below normal in the rest of the state.

The water supply outlook is good to excellent throughout Idaho. Reservoirs are now being filled for irrigation for the 1972 season.

This report carries supplemental and corrected measurements made earlier in the season.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ^b

JUNE 1, 1972 MEASUREMENTS

Atlanta Summit	7500	5/30	70	35.3	--	--
Bear Canyon	7920	5/30	T	T	--	--
Big Creek Summit	6600	5/30	58	31.4	27.8	--
Bogus Basin	6120	5/30	T	T	2.2	--
Brundage Mountain	7560	5/30	84	45.8	53.2	--
Copper Basin	7650	5/30	0	0.0	--	--
Crater Meadows	6100	5/31	83	56.4	42.8	--
Coolwater Mountain	6200	5/29	74	40.0	--	--
Deadwood Summit	7000	5/30	70	36.9	--	--
Elk Butte	5550	5/28	69	36.6	--	--
Galena	7300	5/30	T	T	--	--
Galena Summit	8795	5/30	46	23.2	25.3	--
Goat Lake	6600	5/28	106	56.0	43.0	--
Granite Peak	6000	5/28	116	57.4	46.0	--
Hemlock Butte	5500	5/31	112	58.0	42.4	--
Jackson Peak	7000	5/31	45	25.4	--	--
Lookout	5250	6/1	46	25.3	18.2	--
Lost Lake	6000	5/28	161	83.0	55.0	--
Mascot Mine	7900	5/30	0	0.0	--	--
Medicine Ridge	6150	5/28	121	61.0	45.4	--
Moores Creek Summit	6100	5/31	38	20.8	21.6	6.8
Orogrande Mountain	7800	5/29	106	49.2	--	--
Schweitzer Bowl	4500	5/31	0	0.0	0.0	--
Schweitzer Ridge	6100	5/31	62	34.8	39.2	--
Squaw Meadow	5800	6/1	33	17.5	--	--
Stickney Mill	7500	5/30	0	0.0	--	--
Swede Peak	7500	5/31	0	0.0	--	--
Trinity Mountain	7780	5/30	78	42.9	43.2	--
Vienna Mine	8900	5/30	94	46.8	--	--

SUPPLEMENTAL MEASUREMENTS

NOVEMBER 1, 1971

Boulder Creek	5500	11/1	11	1.8	2.3	--
Fourth of July Summit	3100	11/1	8	0.8	--	--
Lookout	5250	11/1	22	3.4	--	--
Pierce Ranger Station	3170	11/2	9	1.3	0.0	--

NOVEMBER 15, 1971

Pierce Ranger Station	3170	11/16	6	0.8	0.0	--
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(b) 1953-67, 15 year period. #Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ^b

SUPPLEMENTAL MEASUREMENTSDECEMBER 1, 1971

Bogus Basin	6120	12/2	33	7.3	8.8	--
Boulder Creek	5500	11/29	26	5.0	4.1	--
China Hat	6300	11/30	12	1.6	--	--
Crumarine Creek	3340	11/30	12	2.2	1.0	--
East Twin	4050	11/30	13	2.7	1.2	--
Emigrant Summit	7350	12/1	33	6.6	7.5	--
Giveout	6840	12/1	21	3.0	3.9	--
Howard Creek	3450	11/30	7	1.6	1.0	--
Lower Pebble	5800	12/3	23	4.5	--	--
Midway	2200	11/24	0	0.0	0.0	--
Moscow Mountain	4400	11/30	20	4.9	2.1	--
Pebble Creek	6550	12/3	23	5.2	--	--
Pierce Ranger Station	3170	12/1	13	3.0	1.4	--
Somsen Ranch	7000	11/30	26	4.3	4.8	--
West Twin	4250	11/30	14	3.4	1.6	--

DECEMBER 15, 1971

Bogus Basin	6120	12/15	69	14.8	--	--
Bogus Basin Road	5360	12/15	39	7.6	--	--
Pierce Ranger Station	3170	12/15	50	8.1	1.8	--
Trinity Mountain	7780	12/8	50	11.8	--	--

JANUARY 15, 1972

Bad Bear	5500	1/18	58	16.8	12.1	--
Bogus Basin	6120	1/14	69	23.0	24.0	--
Bogus Basin Road	5360	1/14	38	10.4	6.9	--
Buck Meadows	5600	1/14	95	25.2	--	--
Horse Creek Helispot	4100	1/15	65	16.7	--	--
Moore's Creek Summit	6100	1/18	96	27.5	28.6	--
Mount Baldy	9000	1/14	55	13.5	19.4	11.0
Pierce Ranger Station	3170	1/15	54	15.5	7.8	--

FEBRUARY 15, 1972

Bad Bear	5500	2/16	66	21.6	--	--
Bogus Basin	6120	2/15	91	33.5	--	--
Bogus Basin Road	5360	2/15	41	13.0	--	--
Galena	7300	2/15	63	19.4	21.2	--
Galena Summit	8795	2/15	76	24.2	26.6	--
Moore's Creek Summit	6100	2/16	113	37.5	36.5	--
Mount Baldy	9000	2/14	61	18.0	22.5	15.4
Pierce Ranger Station	3170	2/15	64	19.8	10.8	9.4

(b) 1953-67, 15 year period. #Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ^b

SUPPLEMENTAL MEASUREMENTSMARCH 15, 1972

Fourth of July Summit	3100	3/16	24	9.4	11.9	--
Galena	7300	3/16	65	24.8	26.4	--
Galena Summit	8795	3/16	86	31.2	32.6	--
Lookout	5250	3/16	124	53.8	45.2	36.2
Mount Baldy	9000	3/16	70	24.5	23.6	19.0
Pierce Ranger Station	3170	3/15	55	23.4	13.4	11.4
Prairie	4900	3/15	23	8.6	9.3	--
Sherwin	3200	3/14	66	22.8	15.4	--

APRIL 15, 1972

Above Burke	4100	4/19	80	35.7	--	--
Bad Bear	5500	4/14	45	20.3	15.2	--
Bogus Basin	6120	4/13	86	34.7	37.2	--
Galena	7300	4/18	56	23.5	26.8	--
Galena Summit	8795	4/18	92	34.6	36.2	--
Lookout	5250	4/17	124	57.1	48.7	--
Moore's Creek Summit	6100	4/14	111	48.2	45.4	31.5
Pierce Ranger Station	3170	4/17	37	16.0	5.7	5.0
Prairie	4900	4/15	0	0.0	T	--

MAY 1, 1972

Jackson Peak	7000	5/5	96	44.7	--	32.9*
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MAY 15, 1972

Atlanta Summit	7500	5/16	89	42.2	40.7	--
Bogus Basin	6120	5/12	51	24.7	16.3	--
Galena	7300	5/15	19	9.0	--	--
Galena Summit	8795	5/15	66	30.6	--	--
Lookout	5250	5/15	84	47.0	39.5	--
Moore's Creek Summit	6100	5/16	72	39.0	29.4	--
Trinity Mountain	7780	5/17	94	48.5	51.2	--

(b) 1953-67, 15 year period. #Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

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DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ^b

CORRECTIONS TO PREVIOUSLY PUBLISHED 1972 DATAJANUARY 1, 1972

Deadwood Airstrip	5440	12/27	46	11.3	14.7	5.6*
Pebble Creek	6550	1/3	40	11.8	--	--

FEBRUARY 1, 1972

Deadwood Airstrip	5440	1/27	52	16.6	15.5	10.3*
Deadwood Dam	5290	1/27	52	16.5	18.5	11.0
Moser	5950	1/28	34	8.8	10.0	--
Secesh Summit	6600	1/31	100	32.1	--	--
Squaw Meadow	5800	1/31	105	30.5	--	--
Sweeney	4435	2/1	31	8.0	5.2	5.0*

MARCH 1, 1972

Atlanta Summit	7500	3/7	128	46.7	42.1	28.6*
Pebble Creek	6550	3/2	60	23.3	17.6	12.1

APRIL 1, 1972

Aspen Grove	6600	3/30	38	16.8	15.5	--
Deadwood Dam	5290	3/27	44	18.8	27.1	17.0
Hemlock Butte	5500	3/30	188	77.2	62.5	52.1*
Taylor Mountain	6500	3/29	40	15.9	11.6	--

MAY 1, 1972

Medicine Ridge	6150	4/28	165	77.1	63.0	--
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(b) 1953-67, 15 year period. #Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

Agencies and Organizations Cooperating in Idaho Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests, and
Water Resources, British Columbia
Department of Resources and Development,
Water Resources Division

States:

Idaho State Department of Water Administration
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of
State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U. S. Army Engineers

U. S. Department of Agriculture
Forest Service
Agriculture Research Service

U. S. Department of Commerce
NOAA, National Weather Service

U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Water Resources Division, Geological Survey
Indian Service
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

The Montana Power Company
Washington Water Power Company
Idaho Power Company
Utah Power and Light Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Boise Project Board of Control
Little Wood River Irrigation District
Jordan Valley Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Twin Lakes Irrigation Company
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control

PRIVATE CORPORATIONS

Amalgamated Sugar Company

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

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