

F341
503

Federal-State Cooperative
Snow Surveys and Water Supply Forecasts
for
WYOMING



SOIL CONSERVATION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
AND
STATE ENGINEER OF WYOMING

Data included in this report were obtained by the agencies named above in cooperation with the U. S. Forest Service, Bureau of Reclamation, National Park Service, and other Federal, State and local organizations.

AS OF
MAR. 1, 1954

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY
AND WATER SUPPLY FORECAST REPORTS.

Forecasts by U. S. Weather Bureau of total annual streamflow October-September, inclusive, at more than 300 gaging stations are issued monthly January through May in the publication WATER SUPPLY FORECASTS FOR THE WESTERN UNITED STATES.

Weather Bureau forecasts of runoff presented in that bulletin are computed from procedures based on mathematical analysis of the relation between precipitation and runoff.

The Weather Bureau bulletins may be secured by writing to:

Hydrologist in Charge
River Forecast Center
U. S. Weather Bureau
712 Federal Office Building
Kansas City 6, Missouri

For current information on local river and flood conditions, reference should be made to the appropriate River District Office, listed below:

Meteorologist in Charge.....	Green River and
Weather Bureau Airport Station*	tributaries
Box 517	
Grand Junction, Colo.	
Meteorologist in Charge.....	Snake River and
Weather Bureau Airport Station	tributaries
Box 1718	
Boise, Idaho	
Meteorologist in Charge.....	Yellowstone River
Weather Bureau Airport Station	and tributaries
Box 1338	
Billings, Montana	
Climatologist.....	North Platte River
Weather Bureau Office	and tributaries
Box 1079	
Denver, 1. Colo.	

State of Wyoming

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND WATER FORECASTS
FOR
WYOMING

Report Prepared
by

George W. Peak
Snow Survey Leader

Issued

March 9, 1954

Soil Conservation Service
345 East 2nd Street
P. O. Box 699
Casper, Wyoming

B. H. Hopkins
State Conservationist
Soil Conservation Service

L. C. Bishop
State Engineer of Wyoming
Cheyenne, Wyoming

PRELIMINARY WATER SUPPLY OUTLOOK

FOR

WYOMING

March 1, 1954

* * * * *
*
* The water supply outlook for Wyoming ranges from normal in *
*
* the northwestern part of the state, to poor in the southern regions. *
*
* The snow pack in Yellowstone Park, Snake River Basin above the *
*
* state line, Wind River Basin, and the Shoshone River watershed is *
*
* close to normal, but the depth of the snow water decreases rapidly *
*
* at lower elevations, and will reduce the seasonal flow this summer. *
*
* Snow cover on the Big Horns is 142% of normal on the north *
*
* slope, but decreases rapidly to 60% in the central and southern *
*
* portions. *
*
* The North Laramie Mountains, North Platte Watershed, and *
*
* Laramie River Basin are considerably below normal. There has *
*
* been very little increase in the snow pack on most snow courses *
*
* and on some, there has been none. The seriousness of this situ- *
*
* ation will be aggravated by the deficit in soil moisture last *
*
* fall. The entire state was below normal in soil moisture as winter *
*
* came on, and though there has been some recharge from winter melt, *
*
* this soil deficit will reduce summer streamflow. *
*
* * * * *

The first part of the report deals with the general situation of the country and the progress of the work during the year. It is followed by a detailed account of the various expeditions and the results obtained. The report concludes with a summary of the work done and a list of the names of the persons who have taken part in it.

The first expedition was to the mountains of the north, where we found many new plants and animals. The second expedition was to the mountains of the south, where we found many new plants and animals. The third expedition was to the mountains of the west, where we found many new plants and animals. The fourth expedition was to the mountains of the east, where we found many new plants and animals.

The results of the work done during the year are as follows: We have discovered many new plants and animals, and we have also discovered many new facts about the life of the country. We have also discovered many new facts about the life of the country. We have also discovered many new facts about the life of the country.

The names of the persons who have taken part in the work are as follows: [List of names]

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

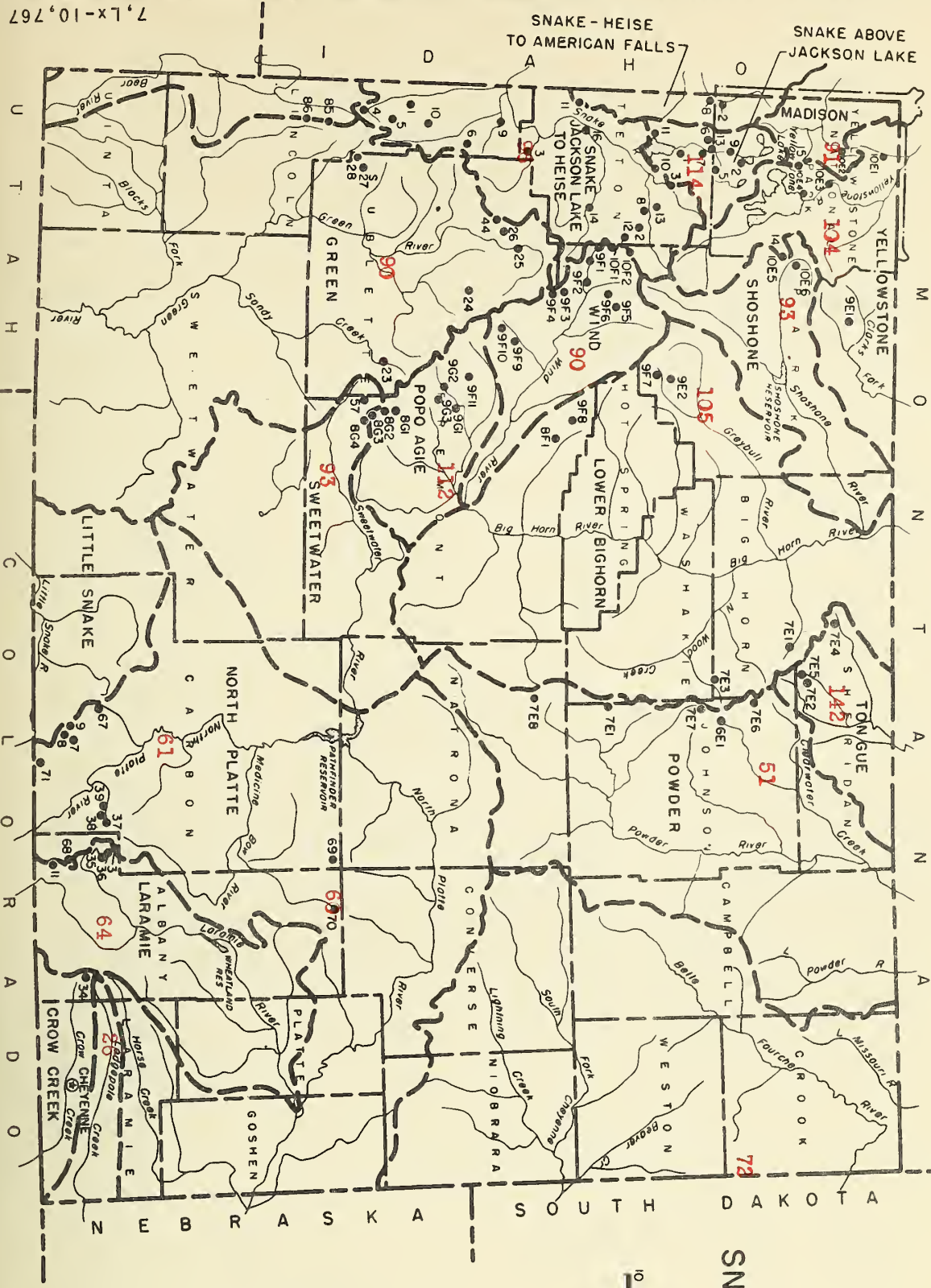
Summary of Snow Survey Data by Watersheds as of March 1, 1954

BASIN	: NO. OF	: YEARS	1954 SNOW WATER EXPRESSED		
	: COURSES	: OF	AS PERCENTAGE OF		
	: AVERAGED	: RECORD	1953	1952	Average
SNAKE RIVER BASIN ABOVE JACKSON LAKE --	11	2-35	97	90	114
JACKSON LAKE TO HEISE	18	4-18	102	84	96
UPPER YELLOWSTONE IN YELLOWSTONE PARK --	7	2-17	102	83	104
MADISON RIVER IN YELLOWSTONE PARK --	2	13-20	104	63	91
LOWER YELLOWSTONE-SHOSHONE RIVER	2	5-11	93	81	93
LOWER YELLOWSTONE-WIND RIVER	14	4-17	97	95	90
LOWER YELLOWSTONE-POPO AGIE RIVER --	6	5-17	120	81	112
LOWER YELLOWSTONE-OWL CREEK	2	5	--	--	--
LOWER YELLOWSTONE-GREYBULL RIVER --	2	2-5	105	163	105
LOWER YELLOWSTONE-TONGUE RIVER	3	3-4	127	140	142
LOWER YELLOWSTONE-CLEAR CREEK ON THE POWDER RIVER --	1	3	58	53	51
LOWER YELLOWSTONE-CRAZY WOMEN CREEK ON THE POWDER RIVER --	1	1	90	--	--
NORTH PLATTE ABOVE SEMINOE RESERVOIR --	14	4-8	68	44	61
NORTH PLATTE-SWEETWATER RIVER	3	5-17	118	75	93
LARAMIE RIVER BASIN	9	5-17	60	47	64
POLE MOUNTAIN	1	17	20	18	26
NORTH LARAMIE MOUNTAINS	2	4-5	49	67	60
CHEYENNE RIVER	1	10	56	49	72
UPPER COLORADO-GREEN RIVER	10	2-18	98	86	90

MEMORANDUM FOR THE RECORD

DATE	INITIALS	DESCRIPTION	INITIALS	DESCRIPTION
11-1-54
11-2-54
11-3-54
11-4-54
11-5-54
11-6-54
11-7-54
11-8-54
11-9-54
11-10-54
11-11-54
11-12-54
11-13-54
11-14-54
11-15-54
11-16-54
11-17-54
11-18-54
11-19-54
11-20-54
11-21-54
11-22-54
11-23-54
11-24-54
11-25-54
11-26-54
11-27-54
11-28-54
11-29-54
11-30-54

A GEOGRAPHIC ANALYSIS OF THE WYOMING WATERSHED FOR MARCH 1, 1954.
 1954 is given as a percentage of the average water content for the past record.



WYOMING
 SNOW COURSES
 FEBRUARY 1951
 SCALE IN MILES
 0 10 20 30 40 50 60

LEGEND
 ● 30 Snow Course

STATUS OF RESERVOIR STORAGE

WYOMING AND SOUTH DAKOTA

March 1, 1954

BASIN and STREAM	RESERVOIR	USEABLE CAPACITY 1000s AF	ACTIVE STORAGE - 1000s ACRE FEET					10-Yr. Av 1942-51
			1954	1953	1952	1951		
Snake River	Jackson	847	373	420	594	596	515	
North Platte River	Minatare	58	27	22	29	26	26*	
North Platte River	Seminole	957	190	576	606	527	445	
North Platte River	Pathfinder	1011	841	799	806	871	569	
North Platte River	Alcova*	190	166	155	159	170	109	
North Platte River	Guernsey	40	9.7	43	33	37	39.5	
North Platte River	Lake Alice	14	10.3	2.8	0	0	---	
Laramie River	Wheatland	95	10.4	26	54	39	39	
Belle Fourche	Belle Fourche	185	109	52	88	81	116	
Shoshone River	Buffalo Bill	440	153	151	237	296	297	
Wind River	Boysen	758	362	541	122	--	--	
Wind River	Pilot Butte	31.6	12	12.4	9.3	8.4	12.7	
Wind River	Bull Lake	152	77	61	67	90	62	
Cheyenne River	Angostura	160*	31	109	112	28	--	
Cheyenne River	Deerfield	15.1	15.4	13.5				
Cheyenne River	Keyhole	190	8.7	8.3				
Grand River	Shadehill	84	82	78				
Green River	Big Sandy		3.8					

* Total Capacity

* * * * *

VALLEY PRECIPITATION
In Percent of Normal

Basin	Sept.-Dec.	Jan.	Febr.
Wind River	58	88	49
Shoshone River	88	241	112
Big Horn River	72	51	48
Powder River	62	102	79
North Platte	57	63	50
Laramie River	35	42	40

WYOMING SNOW SURVEYS, MARCH 1, 1954

DRAINAGE BASIN and SNOW COURSE		SNOW COVER MEASUREMENTS								Years of Record
		State	Elev.	1954			Past Record			
				Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content 1953	Water Content 1952	Aver.	
<u>SNAKE RIVER BASIN ABOVE JACKSON LAKE</u>										
Arizona	Wyo.	6850	2/27	57	17.5	18.7	20.0	15.2	35	
Astor Creek	Wyo.	7700	2/26	90	31.0	30.7	34.5	25.3	35	
Base Camp*	Wyo.	6900	2/27	60	18.8	20.5	19.2	19.6	3	
Coulter Creek	Wyo.	7600	2/26	73	25.2	22.0	23.8	18.9	35	
Glade Creek	Wyo.	7200	2/26	62	19.9	20.6	23.5	19.6	35	
Huckleberry Divide	Wyo.	7300	2/27	55	17.0	19.5	21.0	16.7	35	
Lewis Lake Divide	Wyo.	7900	2/26	116	41.2	39.8	45.8	35.4	35	
Moran	Wyo.	6800	2/27	42	13.0	12.4	12.8	10.3	35	
Moran Bay	Wyo.	6800	2/27	61	19.4	22.8	20.3	17.2	35	
Snake River Station	Wyo.	6780	2/26	60	18.9	20.0	20.3	17.1	35	
Thumb Divide	Wyo.	7900	2/26	73	22.5	N.R.	25.5	23.2	2	
<u>JACKSON LAKE TO HEISE</u>										
Afton Ranger Station	Wyo.	6200	2/26	14	3.8	3.2	7.3	4.8	18	
Blackrock	Wyo.	8600	2/27	64	19.3	18.1	19.8	18.4	18	
Blind Bull Summit	Wyo.	8750	3/4	83	28.4	25.0	29.2	29.4	6	
Bryan Flat	Wyo.	6250	2/26	35	9.4	9.6	13.4	9.4	18	
CCC Camp	Wyo.	7500	2/25	32	9.5	9.4	13.5	10.2	18	
Deadman Ranch	Wyo.	6534	3/4	34	10.4	11.5	11.9	10.1	18	
East Rim Divide	Wyo.	7950	2/26	36	8.9	11.4	12.0	10.4	14	
Four Mile Meadows	Wyo.	7770	2/27	42	11.4	11.2	13.4	11.2	18	
Greys Boundary	Wyo.	5800	2/27	33	10.2	10.6	16.1	10.8	18	
Gros Ventre Summit	Wyo.	8750	2/25	41	8.0	9.2	10.9	11.5	6	
Grover Park Divide	Wyo.	7500	2/26	29	7.9	10.2	14.0	10.2	18	
Poison Meadows	Wyo.	8500	3/2	75	25.3	20.1	25.8	24.6	6	
Salt River Summit	Wyo.	7900	2/25	39	11.8	12.2	15.9	14.4	6	
Snow King Mountain	Wyo.	7600	2/26	39	10.4	9.7	11.7	10.4	4	
Teton Pass No. 2	Wyo.	8500	2/25	82	28.6	30.2	38.9	32.5	9	
Togwotee Pass	Wyo.	9600	2/27	84	26.3	24.4	25.9	23.7	18	
Turpin Meadows	Wyo.	6930	2/27	39	10.8	11.1	10.2	9.1	18	
Yellow Jacket	Wyo.	7675	3/4	28	6.5	5.4	5.7	5.8	14	
<u>UPPER YELLOWSTONE IN YELLOWSTONE PARK</u>										
Canyon	Wyo.	7750	3/1	47	15.1	13.9	16.2	13.6	8	
Cooke City	Mont.	7400	2/28	33	9.8	8.5	9.3	6.8	17	
Crevice Mountain	Mont.	8400	2/28	32	7.4	7.9	11.7	8.3	15	
Lake Camp	Wyo.	7850	3/1	38	9.5	8.8	12.8	9.1	17	
Lupine Creek	Wyo.	7300	3/1	38	10.4	8.7	13.7	8.5	15	
Sylvan Pass	Wyo.	7100	3/1	46	11.5	13.1	14.5	13.3	11	
Thumb Divide	Wyo.	7900	2/26	73	22.5	N.R.	25.5	23.2	2	

* Adjacent Basin

WYOMING SNOW SURVEYS, MARCH 1, 1954

DRAINAGE BASIN and SNOW COURSE		State	Elev.	SNOW COVER MEASUREMENTS						Year of Record
				Date of Survey	1954 Snow Depth (In.)	Water Content (In.)	Past Record			
						1953	1952	Aver.		
<u>MADISON RIVER IN YELLOWSTONE PARK</u>										
Norris Basin	Wyo.	7500	3/1	34	9.8	--	--	8.1	13	
West Yellowstone	Mont.	6700	3/1	36	10.4	10.0	16.5	10.3	20	
<u>LOWER YELLOWSTONE - SHOSHONE RIVER</u>										
East Entrance	Wyo.	7000	3/1	36	10.8	10.9	13.0	10.7	5	
Sylvan Pass	Wyo.	7100	3/1	46	11.5	13.1	14.5	13.3	11	
<u>LOWER YELLOWSTONE - WIND RIVER</u>										
Brooks Lake	Wyo.	9200	2/24	65	22.0	22.4	25.1	20.7	17	
Burroughs Creek	Wyo.	8800	2/25	42	13.2	15.2	10.5	15.6	5	
Dinwoody	Wyo.	10000	2/23	37	9.5	11.8	12.2	13.3	5	
Dry Creek	Wyo.	9500	2/23	20	4.5	6.9	5.9	7.3	5	
DuNoir	Wyo.	8750	2/24	26	7.2	7.4	6.6	9.1	13	
Geyser Creek	Wyo.	8500	2/25	24	6.9	7.2	6.8	8.8	5	
Hobbs Park	Wyo.	10000	2/28	54	17.0	13.9	19.7	18.6	5	
Little Warm	Wyo.	9500	2/25	50	14.9	14.8	15.0	18.3	5	
Mosquito R.S.	Wyo.	9500	2/28	30	7.7	7.0	7.9	7.3	10	
St. Lawrence R. S.	Wyo.	9000	2/27	23	5.5	6.0	8.1	6.2	10	
Sheridan R.S.	Wyo.	7500	2/24	27	7.6	8.2	7.3	6.6	17	
T Cross Ranch	Wyo.	8000	2/26	32	7.2	7.5	4.9	6.4	13	
Togwotee Pass	Wyo.	9600	2/27	84	26.3	24.4	25.9	27.8	4	
Trout Creek	Wyo.	8400	2/28	21	4.5	6.8	6.6	6.0	5	
<u>LOWER YELLOWSTONE - POPO AGIE RIVER</u>										
Blue Ridge	Wyo.	9500	3/1	54	13.0	10.2	14.5	9.9	14	
Grannier Meadows	Wyo.	9000	3/1	53	13.5	11.1	16.6	11.5	17	
Hobbs Park	Wyo.	10000	2/28	54	17.0	13.9	19.7	18.6	5	
Mosquito R.S.	Wyo.	9500	2/28	30	7.7	7.0	7.9	7.3	10	
Sawmill Glade	Wyo.	8500	3/1	38	7.2	6.5	8.0	6.2	14	
South Pass	Wyo.	9000	3/1	55	14.6	12.3	23.1	11.5	13	
<u>LOWER YELLOWSTONE - OWL CREEK</u>										
Beavers Mill	Wyo.	8900	--	--	--	7.5	5.8	7.2	5	
Owl Creek	Wyo.	8700	--	--	--	2.3	5.5	5.0	5	

INSERT

DRAINAGE BASIN and SNOW COURSE	State	Elev.	SNOW COVER MEASUREMENTS							Years of Record
			1954			Past Record				
			Date of Survey	Snow Depth (In.)	Water Content (In.)	1953	1952	Aver.	Water Content (In.)	

LOWER YELLOWSTONE - OWL CREEK

Beavers Mill	Wyo.	8900	3/4	30	9.4	7.5	5.8	7.2	5
Owl Creek	Wyo.	8700	3/4	21	5.8	2.3	5.5	5.0	5
Average of 1954 Water Content expressed as percentage-----					-15.2	155%	135%	125%	5

Soldier Park	Wyo.	8700	3/5	15	1.9	3.3	3.6	3.7	3
--------------	------	------	-----	----	-----	-----	-----	-----	---

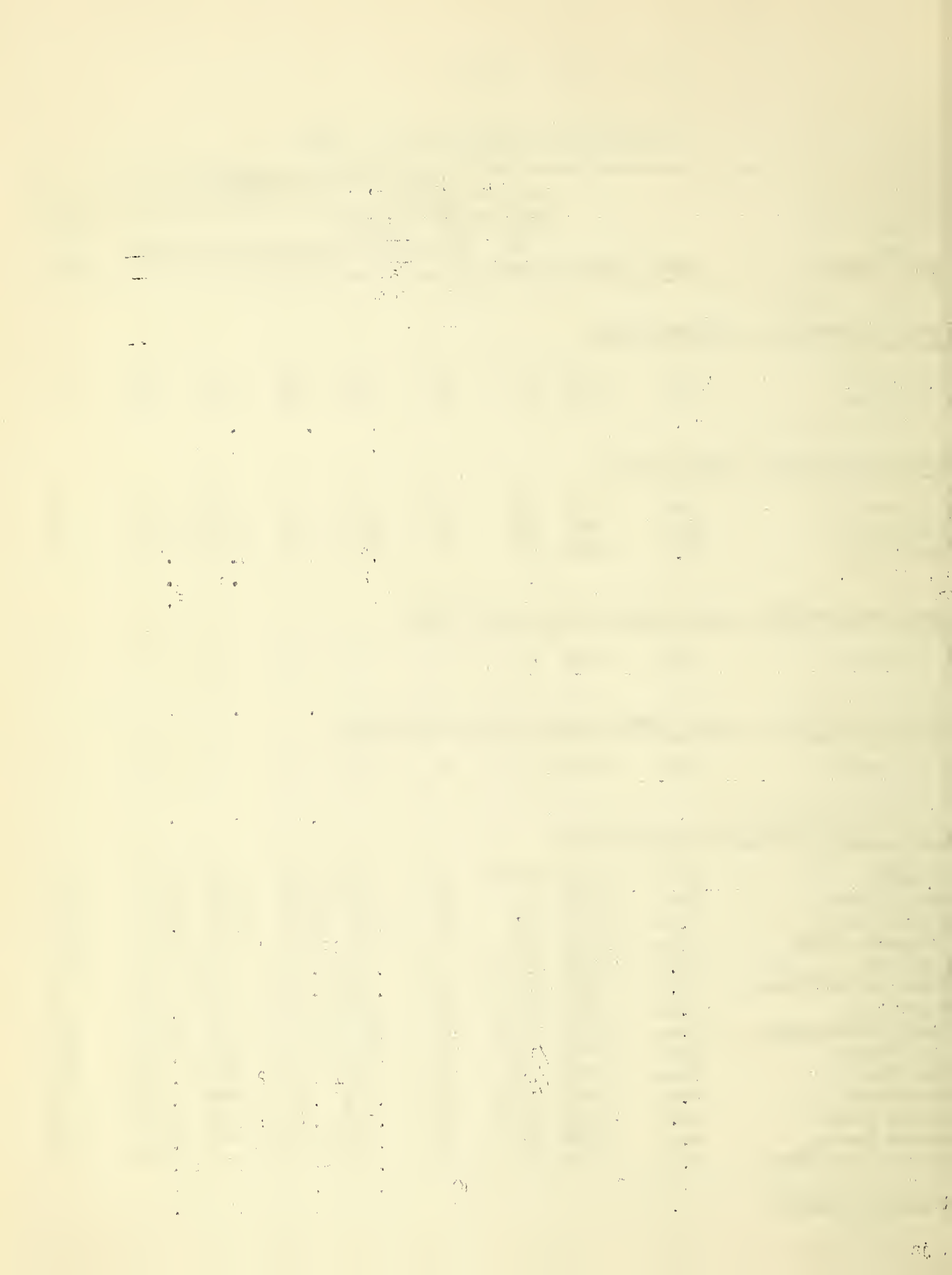
LOWER YELLOWSTONE - CRAZY WOMEN CREEK ON THE POWDER RIVER

North Powder	Wyo.	8500	3/5	24	5.4	6.0	--	6.0	1
--------------	------	------	-----	----	-----	-----	----	-----	---

NORTH PLATTE ABOVE SEMINOE RESERVOIR

Albany*	Wyo.	9400	2/27	30	6.6	13.0	15.1	13.8	5
Bottle Creek	Wyo.	8200	3/1	38	9.2	11.7	17.8	11.4	16
Cameron Pass	Colo.	10300	3/4	39	11.7	15.9	23.6	16.4	17
Columbine Lodge	Colo.	9300	3/1	45	11.1	19.2	27.7	18.8	18
Fox Park*	Wyo.	9200	2/26	7	1.4	6.3	7.6	6.0	17
North Barrett Creek	Wyo.	9400	2/25	35	9.9	14.4	18.5	14.3	17
North Gate	Colo.	8500	3/1	20	3.5	5.0	7.5	5.8	4
North French Creek	Wyo.	10200	2/25	51	16.3	18.8	28.2	23.1	16
Old Battle	Wyo.	9800	3/1	56	16.0	20.2	35.6	25.7	17
Park View	Colo.	9200	3/1	26	4.9	6.5	14.2	7.8	18
Ryan Park	Wyo.	8400	2/25	20	4.4	8.7	11.8	8.7	17
Spring Creek	Wyo.	9000	2/25	28	7.9	--	19.9	17.0	4
Webber Spring	Wyo.	9000	3/1	40	8.8	13.4	23.1	14.7	16
Willow Creek Pass*	Colo.	9500	3/1	33	7.0	9.2	20.4	10.4	16

* Adjacent Basin



WYOMING SNOW SURVEYS, MARCH 1, 1954

DRAINAGE BASIN and SNOW COURSE		SNOW COVER MEASUREMENTS								Years of Record
		State	Elev.	Date of Survey	1954		Past Record			
					Snow Depth (In.)	Water Content (In.)	1953	1952	Aver.	
<u>NORTH PLATTE - SWEETWATER RIVER</u>										
Grannier Meadows	Wyo.	8800	3/1	53	13.5	11.1	16.6	11.5	17	
Larson Creek	Wyo.	9000	2/24	18	4.2	4.0	9.5	11.9	5	
South Pass	Wyo.	9040	3/1	55	14.6	12.3	16.8	11.3	14	
<u>LARAMIE RIVER</u>										
Albany	Wyo.	9400	2/27	30	6.6	13.0	15.1	13.8	5	
Brooklyn Lake	Wyo.	10200	3/1	45	12.7	22.6	25.5	19.7	17	
Deadman Hill	Colo.	10200	3/4	39	9.8	9.5	17.1	11.2	17	
Fox Park	Wyo.	9200	2/26	7	1.4	6.3	7.6	6.0	17	
Hairpin Turn	Wyo.	9500	3/1	25	6.0	11.1	13.6	9.3	16	
Libby Lodge	Wyo.	8700	3/1	24	5.9	10.0	13.0	8.4	16	
McIntyre	Colo.	9100	3/1	31	6.4	7.8	13.4	10.4	5	
Pole Mountain #2 *	Wyo.	8700	3/1	7	1.1	5.6	6.2	4.2	17	
Roach	Colo.	9800	3/4	45	12.6	--	22.2	15.1	13	
<u>POLE MOUNTAIN</u>										
Pole Mountain	Wyo.	8700	3/1	7	1.1	5.6	6.2	4.2	17	
<u>NORTH LARAMIE MOUNTAINS</u>										
Box Elder	Wyo.	9000	2/23	19	3.9	9.5	5.2	4.9	4	
LaBonte	Wyo.	8450	2/28	17	3.8	6.2	6.3	8.0	5	
<u>CHEYENNE RIVER</u>										
Upper Spearfish	S.Dak.	6500	2/25	18	4.1	7.3	8.4	5.7	10	
<u>UPPER COLORADO - GREEN RIVER</u>										
Big Park	Wyo.	8700	3/2	51	15.2	14.2	20.3	18.8	3	
Blind Bull	Wyo.	8750	3/4	83	28.4	25.0	29.2	29.4	6	
Deadman Ranch*	Wyo.	6534	3/4	34	10.4	11.5	11.9	10.1	18	
Dutch Joe	Wyo.	8700	2/24	23	5.6	6.4	9.4	7.9	2	
East Rim Divide	Wyo.	7950	2/26	36	8.9	11.4	12.0	10.4	14	
Gros Ventre	Wyo.	8750	2/25	41	10.0	9.2	10.9	11.5	6	
Kendall R.S.	Wyo.	7900	2/24	29	6.6	12.8	10.3	10.6	12	
Loomis Park	Wyo.	8500	2/28	50	16.8	16.9	17.5	15.4	12	
Mulligan Park	Wyo.	8900	3/1	30	7.0	9.8	9.2	9.9	12	
Poison Meadows	Wyo.	8500	3/2	75	25.3	20.1	25.8	24.6	6	

* Adjacent Basin

INDEX TO WYOMING SNOW COURSES

Name	Wyoming Number	Elev.	Location		Record Began	Measuring Dates ^a	Measured By ^b	Name	Wyoming Number	Elev.	Location		Record Began	Measuring Dates ^a	Measured By ^b		
			Sec. Lat.	Twp. Range Long.							Sec. Lat.	Twp. Range Long.					
MISSOURI RIVER DRAINAGE																	
YELLOWSTONE																	
Canyon	10E3	7750	44°44'	110°30'	1938	1,2,3,4,5	4	Brooklyn Lake	3	10200	11	16N	79W	1936	2,3,4,5	1	
Lake Camp	10E4	7850	44°34'	110°24'	1937	1,2,3,4,5	4	Fox Park	11	9200	21	13N	78W	1936	2,3,4,5	1	
Lodgepole	9E1	8200	32	56N	106W	1910	4,5	1	Libby Lodge #2	35	8700	29	16N	78W	1936	2,3,4,5	1
Lupine Creek	10E1	7300	44°54'	110°37'	1938	1,2,3,4,5	2	Hairpin Turn #2	36	9500	24	16N	79W	1936	2,3,4,5	1	
WIND RIVER																	
Brooks Lake #3	10F2	9200	23	44N	110W	1939	2,3,4,5	4	CROW CREEK								
Burroughs Creek	9F6	8800	15	43N	107W	1918	2,3,4,5	4	Pole Mountain #2	34	8700	35	15N	72W	1936	2,3,4,5	1
Dinwoodie	9F10	10000	9	38N	105W	1918	2,3,4,5	4	COLORADO RIVER DRAINAGE								
Dry Creek	9F9	9500	34	4N	105W	1918	2,3,4,5	4	GREEN RIVER								
DuNoir	9F2	8750	27	42N	108W	1910	2,3,4,5	4	Dutch Joe Ranger Sta.	23	8700	32	37N	104W	1936	4,5	1
Geysers Creek	9F3	8500	12	41N	108W	1918	2,3,4,5	4	Mulligan Park	24	8900	17	35N	108W	1936	3,4,5	1
Little Warm	9F4	9500	24	41N	108W	1918	2,3,4,5	4	Kendall Ranger Station	25	7900	23	38N	110W	1936	3,4,5	1
Sheridan R.S.	9F1	7500	3	42N	109W	1939	2,3,4,5	1	Loomis Park	26	8500	14	37N	111W	1936	3,4,5	1
T-Cross Ranch	9F5	8000	1	43N	107W	1910	2,3,4,5	4	Snyder Basin Ranger Sta.	27	8040	15	29N	114W	1937	4,5	1
Topotsee Pass	10F1	9600	29	44N	110W	1936	2,3,4	5	Piney-LaBarge	28	8820	19	29N	114W	1937	4,5	1
PAPA AGIE RIVER																	
Blue Ridge	8G2	9500	23	31N	101W	1939	2,3,4,5	1	East Rim Divide	44	7950	32	37N	111W	1936	3,4	1
Hobbs Park	9G2	10000	22	2S	3W	1918	2,3,4,5	4	COLUMBIA RIVER DRAINAGE								
Mosquito Park R.S.	9G3	9500	23	2S	3W	1910	2,3,4,5	4	SNAKE RIVER BASIN								
Sawmill Glade	8G1	8500	3	31N	101W	1939	2,3,4,5	1	Above Jackson Lake								
South Pass	8G3	9000	13	30N	101W	1939	2,3,4,5	1	Arizona	1	6850	3	46N	113W	1919	2,3,4,5	5
St. Lawrence R.S.	9F11	9000	26	1N	4W	1910	2,3,4,5	4	Aster Creek	2	7700	44°17'	110°37'	1919	2,3,4,5	5	
Trout Creek	9G1	8100	5	2S	2W	1918	2,3,4,5	4	Base Camp	3	6900	20	46N	113W	1917	2,3,4,5	5
BIG HORN RIVER																	
Beavers Mill	9F8	8900	6	43N	102W	1918	2,3,4,5	4	Coulter Creek	5	7600	44°09'	110°33'	1919	2,3,4,5	2	
Owl Creek	8F1	8700	36	43N	101W	1918	2,3,4,5	4	Glade Creek	6	7200	44°08'	110°44'	1919	2,3,4,5	5	
Tensleep R.S.	7E3	8300	30	49N	86W	1935	4,5	1	Huckleberry Divide	7	7300	32	48N	115W	1919	2,3,4,5	5
Timber Creek	9E2	8800	25	47N	103W	1918	4,5	1	Lewis Lake Divide	9	7900	44°13'	110°10'	1919	2,3,4,5	5	
Ranger Creek	7E1	8800	32	53N	88W	1935	4,5	1	Moran	10	6800	82°17'	45N	111W	1919	2,3,4,5	5
Wood River	9F7	8000	28	46N	103W	1939	2,3,4,5	1	Moran Bay	11	6800	14	45N	116W	1919	2,3,4,5	5
MADISON RIVER																	
Norris Basin	10E2	7500	44°44'	110°42'	1936	3,4	2,7	Jackson Lake to Heise									
Thumb Divide	15	7900	44°22'	110°35'	1916	2,3,4,5	5	Afton Ranger Station	1	6200	30	32N	118W	1936	1,2,3,4,5	1	
SHOSHONE RIVER																	
Sylvan Pass	10E5	7100	12	52N	110W	1936	1,2,3,4,5	2	Blackrock	2	8600	4	44N	111W	1936	2,4	5
East Entrance	10E6	7000	17	52N	109W	1918	1,2,3,4,5	2	Bryan Flat	3	6250	9	38N	115W	1936	1,2,3,4,5	1
TONGUE RIVER																	
Burgess R.S.	7E4	7900	36	56N	89W	1950	3,4,5	4	CCC Camp	4	7500	9	29N	118W	1936	1,2,3,4,5	1
Dome Lake	7E5	8800	11	53N	87W	1950	3,4,5	4	Cottonwood Lake	5	7500	25	31N	118W	1936	3,4	1
Big Goose	7E2	7700	4	53N	86W	1935	4,5	1	Deadman Ranch	6	6534	28	35N	116W	1936	1,2,3,4,5	4
POWDER RIVER																	
Red Fork	7F1	7000	18	43N	85W	1936	4,5	4	Four Mile Meadows	8	7770	35	45N	112W	1936	2,4	5
Sour Dough	6E1	8500	17	49N	84W	1936	4,5	1	Oreys Boundary	9	5800	33	37N	118W	1936	1,2,3,4,5	1
Soldier Park	7E6	8700	36	51N	85W	1950	3,4,5	4	Grover Park Divide	10	7500	27	33N	118W	1936	1,2,3,4,5	1
Muddy Pass	7E7	9700	11	48N	85W	1950	3,4,5	4	Teton Pass #2	11	8500	24	44N	118W	1936	1,2,3,4	1
North Powder	7E8	8500	5	47N	85W	1951	3,4,5	4	Togotsee Pass	12	9600	29	44N	110W	1936	2,3,4	5
SWEETWATER																	
Grannier Meadows	8G4	9000	19	30N	100W	1937	2,3,4,5	4,6	Turpin Meadows	13	6930	14	45N	112W	1936	2,4	5
Larsen Creek	57	9000	12	30N	103W	1949	2,3,4,5	4	Yellowjacket	14	7675	33	42N	112W	1936	3,4,5	1
NORTH PLATTE																	
Bottle Creek	7	8200	24	14N	85W	1936	2,3,4,5	1	Snow King Mountain	16	7600	4	40N	117W	1919	Semi-Mo.	1
Webber Spring	8	9000	27	14N	85W	1936	2,3,4,5	1	Heise to American Falls								
Old Battle	9	9800	29	14N	85W	1936	2,3,4,5	1	Bechler Ranger Station	2	6100	44°09'	111°03'	1936	1,2,3,4,5	2	
North French Creek	37	10200	27	16N	80W	1938	2,3,4,5	1	Grassy Lake	8	7265	6	48N	117W	1910	1,2,3,4,5	5
North Barratt Creek #2	38	9100	30	16N	80W	1936	2,3,4,5	1	BEAR RIVER								
Ryan Park #2	39	8100	34	16N	81W	1936	2,3,4,5	1	Big Park	85	8700	7	27N	117W	1951	3,4	4
Spring Creek	67	9000	32	15W	85W	1949	2,3,4,5	4	Kelly Ranger Station	86	8200	13	26N	118W	1951	3,4	4
Albany	68	9100	18	14N	78W	1949	2,3,4,5	4									
LaBonte	69	8450	11	27N	74W	1949	2,3,4,5	4									
Boxelder	70	9000	31	30N	75W	1950	2,3,4,5	4									
Pearl	71	8700	8	12N	82W	1951	2,3,4,5	4									

a. Numerals 1,2,3,4 and 5 refer to January 1, February 1, March 1, April 1, and May 1.

b. Numerals refer to Agency that secures the snow survey, as follows:

1. U. S. Forest Service
2. U. S. National Park Service
3. U. S. Indian Service
4. Soil Conservation Service
5. U. S. Bureau of Reclamation
6. State Engineer of Wyoming
7. Montana Experiment Station

INDEX TO SOUTH DAKOTA SNOW COURSES

Name	South Dakota Number	Elev.	Location			Record Began	Measuring Dates ^a	Measured By ^b
			Sec.	Twp.	Range			
CHEYENNE RIVER								
Upper Spearfish	1	6500	21	3N	1E	1944	2,3,4	1
Upper Castle	2	6800	24	2N	1E	1944	2,3,4	1
Deerfield	3	6010	23	1N	2E	1944	2,3,4	2

a. Numerals 2,3,4 refer to February 1, March 1, and April 1 respectively.

b. Numerals refer to Agency that secures the snow survey as follows:

1. U. S. Forest Service
2. U. S. Soil Conservation Service

The data included in this report were obtained by the Soil Conservation Service in cooperation with the agencies named below:

STATE

State Engineer of Wyoming

FEDERAL

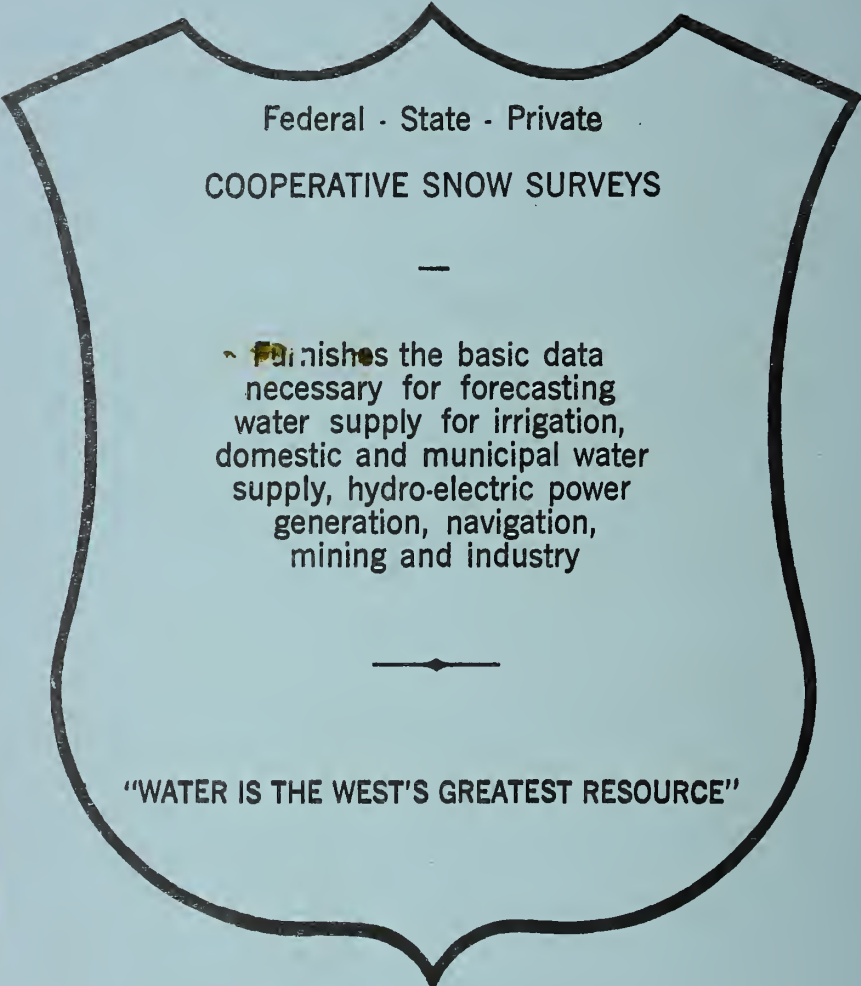
U. S. Department of Agriculture
Forest Service

U. S. Department of Commerce
Weather Bureau

U. S. Department of the Interior
Bureau of Reclamation
National Park Service
Geological Survey

PRIVATE

Wheatland Irrigation District



Federal - State - Private
COOPERATIVE SNOW SURVEYS

Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

"WATER IS THE WEST'S GREATEST RESOURCE"