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United States  
Department of  
Agriculture

Soil  
Conservation  
Service

Salt Lake City  
Utah



# WATER SUPPLY OUTLOOK FOR UTAH

in Cooperation with Utah State Department  
of Natural Resources

#255-7362



CURRENT REPORT RECORDS

DEC 7 '83

October 1, 1983

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

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 of 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 1,900 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 at 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: FRESH POWDER SNOW ON ELEPHANT MOUNTAIN, NEAR THE WEST FORK OF HYALITE CREEK, IN MONTANA.*

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, West Technical Service Center, Room 510, 511 N.W. Broadway, 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:

<u>STATE</u>	<u>ADDRESS</u>
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mexico)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4418 Federal Bldg., 125 South State St., Salt Lake City, Utah 84147
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 -- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 -- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 -- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.

# **WATER SUPPLY OUTLOOK FOR UTAH**

**and**

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

**Issued by**

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CHIEF  
SOIL CONSERVATION SERVICE  
WASHINGTON, D.C.**



**Released by**

**FRANCIS T. HOLT  
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SOIL CONSERVATION SERVICE  
SALT LAKE CITY, UTAH**

**In Cooperation with**

<b>UTAH STATE DEPARTMENT OF NATURAL RESOURCES</b>	
<b>DEE C. HANSEN</b>	<b>DANIEL F. LAWRENCE</b>
State Engineer	Director
Division of Water Rights	Division of Water Resources



**Report prepared by Snow Survey Staff**

**BOB L. WHALEY, Supervisor**

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Salt Lake City, Utah 84147**

As Of October 1, 1983

\* Utah's 1983 season generally involved too much water.  
\* Flooding occurred in many areas of the state causing  
\* damage that is still being repaired. Late runoff and  
\* a wetter than usual summer reduced irrigation water  
\* needs leaving reservoirs at 95% of capacity as of  
\* October 1st and soil moisture wetter than usual going  
\* into the 1984 water year. Streamflow has been higher  
\* than forecasts indicated even on June 1st and set new  
\* records in many cases.

Snow melt was delayed at least a month and did not begin this year until May 20th. June 1 measurements indicated new record snow packs at most snow courses and several still had snow on July 1 as reported by SNOTEL radio.

Again this year the July-September precipitation was heavier than usual (1 1/2 to 3 times average) reducing irrigation water needs, damaging some crops and at times causing local flooding.

Reservoir storage is again much better than usual for October 1st and stands at 160% of average and 95% of useable capacity. Last year at this time, storage was 138% of the 15 year average.

The following table is a comparison of forecasts made on May and June 1 with the provisional flow measured by the Geological Survey.

<u>Station</u>	<u>Forecast Period</u>	May 1 Forecast (1000 A. F.)	June 1 Forecast (1000 A. F.)	Measured Flow for the Period (1000 A. F.)
Woodruff	May-July	163	190	252*
Logan (combined)	May-July	96	132	154
th Fk nr Hyrum	May-July	44	66	76
ear nr Paradise	May-June	24	50	65

## BEAR RIVER

Bear nr Woodruff	May-July	163	190	252*
Logan nr Logan (combined)	May-July	96	132	154
Blacksmith Fk nr Hyrum	May-July	44	66	76
Little Bear nr Paradise	May-June	24	50	65

## WEBER-OGDEN RIVERS

Weber nr Oakley	May-June	111	116	138
Rockport Reservoir Inflow	May-June	116	123	154
Chalk Creek nr Coalville	May-June	44	46	58
Weber nr Coalville	May-June	122	129	167
Lost Creek nr Croydon	May-June	14.4	29	34*
East Cyn. Creek nr Morgan	May-June	19.0	44	43*
Echo Reservoir Inflow	May-June	160	166	190
Weber River nr Gateway	May-June	295	355	474*
South Fk Ogden nr Huntsville	May-June	47	88	81*
Pineview Reservoir Inflow	May-June	94	160	161

<u>Station</u>	<u>Forecast Period</u>	<u>May 1 Forecast (1000 A. F.)</u>	<u>June 1 Forecast (1000 A. F.)</u>	<u>Measured Flow for the Period (1000 A. F.)</u>
<u>PROVO-UTAH LAKE</u>				
Little Cottonwood Ck. nr SLC	May-July	48	50	61*
Big Cottonwood Ck. nr SLC	May-July	54	56	57
Parley's Ck. nr SLC	May-July	22	32	35*
Mill Ck. nr SLC	May-July	8.8	10.5	12.1*
Emigration Ck. nr SLC	May-July	5.4	12.0	10.4*
City Ck. nr SLC	May-July	12.5	17.3	19.7*
S. Willow Ck. nr Grantsville	May-July	4.0	4.0	3.9*
Vernon Ck. nr Vernon	May-June	1.9	1.9	3.5*
Provo River nr Hailstone	May-July	140	160	151
Strawberry Reservoir Inflow	May-July	63	72	141*
<u>UINTAH BASIN &amp; DAGGETT SCD'S</u>				
Duchesne nr Tabiona	May-July	138	142	132
Duchesne at Duchesne	May-July	250	257	278
Strawberry at Duchesne	May-July	76	89	162
Currant Creek nr Fruitland	May-July	22	26	49
Whiterocks nr Whiterocks	May-July	89	92	95e
<u>SEVIER RIVER INCL. BEAVER RIVER</u>				
Sevier at Hatch	May-July	105	110	125
Beaver nr Beaver	May-July	53	56	70*
Oak Creek nr Oak City	May-July	2.6	2.9	3.5*
Chicken Creek nr Levan	May-July	7.6	8.8	21*
Seven Mile Creek nr Fish Lake	May-July	8.2	8.3	23*
<u>SAN RAFAEL, MUDDY, VIRGIN, AND FREMONT RIVERS INCL. MILL CK. NR MOAB</u>				
Cottonwood Ck. nr Orangeville	May-July	79	81	151*
Ferron nr Ferron	May-July	71	78	73
Muddy Creek nr Emery	May-July	32	34	43
Mill Creek nr Moab	May-July	9.3	9.8	11.9*
Virgin nr Hurricane	May-July	116	156	122*
Coal Ck. nr Cedar City	May-July	35	50	48*

\* New record set in 1983

## RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average <sup>+</sup>
<u>GREAT BASIN</u> <u>Bear River</u>	Bear Lake	1421.0	1319.1	1240.5	1012.8
	Woodruff Narrows	57.3	57.3	59.3	--
	Woodruff Creek	4.0	4.0	2.2	--
<u>Beaver River</u>	Minersville (RkyFd)	26.0	18.3	10.4	4.9
<u>Little Bear</u>	Hyrum	15.3	15.2	10.4	7.4
	Porcupine	11.3	3.6	3.2	1.8 <sup>b</sup>
<u>Ogden</u>	Causey	6.9	5.0	2.8	1.8 <sup>b</sup>
	Pineview	110.1	90.6	77.8	52.7
<u>Provo</u>	Deer Creek	149.7	139.2	134.9	85.9 <sup>b</sup>
<u>Settlement Creek</u>	Settlement Creek	1.2	1.0	0.6	0.3 <sup>b</sup>
	Vernon Creek	0.6	0.6	--	0.1 <sup>b</sup>
<u>Sevier River</u>	Gunnison	18.2	13.8	8.7	3.9 <sup>b</sup>
	Otter Creek	52.5	48.4	35.1	16.8
	Piute	71.8	52.4	43.6	11.7
	Sevier Bridge	236.0	100.6	130.7	55.3
	Panguitch Lake	22.3	19.2	18.6	--
	Strawberry	270.0	271.7	235.0	132.0
<u>Spanish Fork</u>	Utah Lake	883.9	1152.3	936.3	516.6
<u>Weber</u>	East Canyon	48.1	39.8	36.8	31.6 <sup>b</sup>
	Echo	73.9	27.5	45.2	23.9
	Lost Creek	20.0	14.3	17.0	13.1 <sup>b</sup>
	Rockport	60.9	55.0	62.4	40.6
	Willard Bay	193.3	152.5	162.0	152.6 <sup>b</sup>
<u>COLORADO R. BASIN</u> <u>Ashley Creek</u>	Steinaker	33.3	22.1	22.2	16.1 <sup>b</sup>
	Red Fleet	26.0	22.0	18.1	--
	Blue Mesa	829.5	740.0	739.0	--
<u>Colorado</u>	Lake Powell	25002.0	24800.0	23005.0	--
	Flaming Gorge	3749.0	3675.0	3572.0	--
<u>Green</u>	Moon Lake	35.8	24.8	25.6	9.1
	Scofield	65.8	50.1	48.5	30.4
<u>Lakefork</u> <u>Price River</u>	Navajo	1696.0	1617.0	1506.0	--
	Ken's Lake	2.3	1.5	--	--
<u>San Juan</u>	Huntington North	3.9	2.9	2.9	1.2 <sup>b</sup>
	Joe's Valley	54.6	41.6	51.6	44.3 <sup>b</sup>
	Mill Site	16.7	10.3	10.3	2.8 <sup>b</sup>
<u>Strawberry</u>	Starvation	165.3	156.6	--	104.6 <sup>b</sup>
	Soldier Creek	951.4	97.0	--	--
<u>Uintah</u>	Bottle Hollow	11.3	11.1	11.4	10.1 <sup>b</sup>

b Average of past record in average period - less than 20 years

+ 1961-80 20 year average period

## UTAH PRECIPITATION DATA

1983 WATER YEAR

STATION NAME	OCT.-DEC.	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY-SEPT.	TOTAL
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## BEAR RIVER BASIN

BUG LAKE	12/28	6.66	1/26	1.30	2/22	2.49	3/26	3.43	4/26	5.18	5/27	5.91	6/30	2.06	9/28	6.60
BURTS-MILLER	12/29	5.02	1/28	0.58	2/24	1.11	3/28	2.85	4/27	3.25	5/28	3.50	6/28	2.60	9/27	5.56
CLARKSTON MTN															10/34	24.47
FRANKLIN BASIN	1/01	13.50	2/01	3.80	3/01	5.00	4/01	6.70	5/01	7.20	6/01	6.80	7/01	1.60	9/30	49.19
GARDEN CITY SMT	12/27	9.25	1/26	1.41	2/22	3.64	2/26	3.68	4/26	4.21	5/27	5.39	6/30	0.92	9/28	55.50
HAYDEN FORK	12/29	5.63	1/28	1.99	2/24	2.70	3/29	11.30	4/27	4.40	5/28	5.02	6/28	2.16	9/27	38.26
HERD HOLLOW																41.28
LILY LAKE	12/29	6.84	1/28	1.43	2/24	2.13	3/28	4.68	4/27	4.19	5/28	5.25	6/28	2.89	9/28	36.95
LITTLE BEAR UP	12/28	15.30	1/26	1.17	2/22	3.64	3/26	6.01	4/26	4.69	5/27	6.31	6/23	2.71	9/29	49.47
KLONDIKE NRWS	12/27	10.79	1/27	2.54	2/22	2.98	3/26	4.93	4/26	4.27	5/27	6.13	6/30	1.09	9/28	42.81
MONTE CRISTO	12/28	11.70	1/26	1.96	2/22	3.84	3/26	5.45	4/26	5.50	5/27	7.45	6/27	1.80	10/05	52.92
SALT RIVER SMT	12/29	7.87	1/27	2.12	2/25	2.12	3/30	3.31	4/26	4.19	5/31	4.06	6/30	1.10	9/30	31.75
STILLWATER CMP	12/29	6.48	1/28	1.15	2/24	1.89	3/28	3.65	4/27	3.35	5/28	4.06	6/28	2.07	9/27	28.89
TONY GROVE LK	12/27	14.04	2/01	4.00	3/01	5.10	3/26	6.44	4/26	7.06	5/27	9.03	6/30	1.20	9/30	57.58
TONY GROVE RS	12/27	8.53	1/26	1.41	2/22	2.79	3/26	3.70	4/26	3.47	5/27	5.20	6/30	0.77	9/28	35.56
WILLOW FLAT	12/27	14.53	1/27	1.91	2/23	3.62	3/27	5.30	4/26	5.56	5/27	7.72	6/30	2.28	9/30	51.21

## WEBER - GOLDEN RIVER BASINS

BEN LOMOND TRL	12/28	19.41	1/26	1.22	2/22	5.42	3/26	10.28	4/26	4.57	5/27	6.90	6/27	2.06	10/05	7.69
BEN LOMOND PK	1/01	26.20	2/01	4.20	3/01	7.20	4/01	16.00	5/01	10.10	6/01	4.70	7/01	5.90	10/31	15.00
CAUSEY DAM	12/28	6.77	1/26	0.82	2/22	2.10	3/26	3.34	4/26	2.58	5/27	3.72	6/27	1.39	10/05	10.62
CHALK CREEK 1	1/01	11.80	2/01	2.60	3/01	4.00	3/28	6.50	4/27	4.95	5/28	6.50	6/30	2.00	9/26	31.34
CHALK CREEK 2	1/01	7.80	2/01	1.30	3/01	2.70	3/28	4.25	4/27	4.88	5/28	4.81	6/30	1.90	9/26	49.29
CHALK CREEK 3	12/29	7.61	1/28	0.68	2/24	1.97	3/28	3.87	4/27	3.35	5/28	4.66	6/30	1.90	9/26	36.12
DRY BREAD POND	1/01	9.30	2/01	1.40	3/01	2.60	4/01	4.10	5/01	4.60	6/01	4.60	7/01	2.50	9/30	33.09
FARMINGTON GS	12/28	13.38	1/26	2.27	2/22	8.25	3/26	9.65	4/26	4.68	5/27	4.60	7/20	2.38	10/13	38.80
FARMINGTON LWR	12/28	13.40	1/26	2.18	2/22	8.94	3/26	11.17	4/26	4.50	5/27	6.50	7/20	2.48	10/13	4.87
FRANCIS CANYON																58.58
GUILDFERS PEAK															30.65	
HORSE RIDGE	12/28	12.70	1/26	1.57	2/22	3.91	3/26	5.03	4/26	5.06	5/27	7.39	7/21	2.97	10/04	37.20
LOST CREEK	12/28	4.91	1/26	0.47	2/22	2.82	3/26	1.17	4/26	2.06	5/27	4.14	7/21	2.02	10/04	49.23
PARLEY CYN SMT	12/28	10.73	1/28	2.16	2/25	4.26	3/29	7.34	4/27	4.78	5/31	5.89	7/01	2.28	9/30	24.61
PORCUPINE																44.71
REDDEN MINE LW	12/29	10.43	1/28	1.71	2/24	3.14	3/28	5.55	4/27	3.31	5/28	6.32	6/30	0.63	9/26	46.68
FARMINGTON UP	1/01	18.20	2/01	4.90	3/01	8.93	4/31	3.50	5/01	5.30	6/01	9.20	7/01	3.50	10/01	40.17
SAGEBRUSH FLAT	12/28	5.11	1/26	1.03	2/18	3.26	3/31	4.26	2.00	5/27	2.03	6/27	1.15	10/05	67.80	
																27.25

NOTE: BLANK SPACES INDICATE NO READING TAKEN. NEXT READING IS CUMULATIVE (EXCEPT AS NOTED \*)

\*: GAGE MOLESTED, DATA FOR THIS PERIOD LOST

## UTAH PRECIPITATION DATA

1983 WATER YEAR

STATION NAME	OCT.-DEC.	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY-SEPT.	TOTAL								
SERGEANT LAKES	12/29	8.46	1/23	1.92	2/24	3.09	3/28	4.31	4/27	2.71	5/28	6.03	6/28	44.10	9/26	7.69	51.79
SH+MOREHOUSE															9/33	7.91	37.36

## UTAH-LAKE JORDAN RIVER BASIN

BEAVER DIVIDE	1/01	8.60	2/01	1.40	3/01	4.30	3/29	6.37	4/29	3.31	5/28	4.65	6/20	1.50	9/23	9.69	38.82
CLEAR CR RDG 2	12/27	10.21	1/25	1.13	2/22	2.95	3/28	5.86	4/27	2.32	5/25	4.40	6/22	1.51	9/30	6.80	35.23
DANIEL-STR SMT	12/27	10.54	1/26	1.43	2/22	3.92	3/27	5.49	4/28	3.01	5/25	4.14	6/27	1.27	9/28	8.58	38.38
DESERT PEAK															10/03		6.21
DUTCHMAN RS	12/29	14.65	1/29	2.50	2/26	4.50	3/31	8.15	4/30	4.30	5/28	4.25	6/28	1.76	9/29	16.28	56.09
EAST PORTAL	12/30	9.60	1/31	2.11	3/01	5.09	3/30	3.35	4/29	2.90	6/01	3.89	7/01	1.15	10/01	8.53	36.62
HOBBLE CR SMT	12/27	12.10	1/26	1.20	2/22	4.04	3/27	6.07	4/27	2.42	5/25	5.02	6/28	0.78	9/30	8.49	40.12
LAKE CREEK															6/27	32.40	
LAMBS CANYON	12/28	8.42	1/28	1.78	2/25	2.80	3/29	5.47	4/27	3.94	5/31	5.81	7/01	2.67	9/30	7.95	40.35
MIDDLE CANYON	12/31	14.70	1/30	1.33	2/27	2.62	3/26	8.00	5/01	5.20	5/26	5.84	5/28	1.20	10/01	9.30	39.34
PAYSON RS	1/01	11.08	1/31	2.90	2/25	2.44	3/31	5.05	4/27	2.57	5/27	4.96	6/23	0.70	9/30	8.82	38.52
ROCKY BASIN-SC	12/31	13.73	2/03	1.19	3/01	5.40	3/30	11.05	4/28	5.20	6/06	7.89	6/30	1.19	10/03	10.40	55.00
CLEAR CREEK #1	1/01	12.00	2/01	1.60	3/01	3.20	4/01	7.30	5/01	2.10	6/01	3.50	7/01	1.20	10/31	5.90	36.80
SOAPSTONE RS	12/29	8.45	1/30	1.70	2/25	2.74	3/29	4.74	4/29	3.12	5/28	3.37	6/28	1.42	9/28	7.71	33.25
TIMPANOOGOS DIV	12/29	18.95	1/29	2.45	2/26	4.05	3/31	8.45	4/30	3.85	5/28	3.50	6/28	2.20	9/29	16.15	59.60
TRAIL LAKE	12/29	13.94	1/30	2.53	2/24	4.15	3/29	7.13	4/29	4.81	5/28	4.57	6/28	2.03	9/28	6.18	45.34
VERNON CREEK	12/31	12.20	1/30	2.75	2/27	4.65	3/26	5.95	5/01	3.12	5/30	4.47	6/29	1.35	10/01	7.85	42.34

## DUCHESSNE-GREEN RIVER BASIN

ASHLEY TWIN LK											- GAGE MOLESTED -							
ATWOOD LAKE	1/05	9.50	1/31	0.70	2/28	1.10	4/01	3.50	5/01	2.80	6/01	3.80	6/30	2.30	9/30	10.80	34.50	
BLACKS FK JCT	12/29	5.40	1/01	2.24	1.77	3/28	3.06	4/27	3.53	5/28	3.63	6/29	2.38	9/27	4.95	25.73		
BROWN DUCK RDG	12/30	10.66	1/30	1.38	2/24	2.00	3/29	5.59	4/29	4.04	5/28	3.25	7/14	3.32	9/30	8.30	38.54	
BUCK PASTURE											- DELAYED -							
BURNT CREEK	12/29	6.26	1/28	0.34	2/28	0.40	3/30	3.80	4/29	2.60	6/01	4.90	6/29	2.55	9/29	5.55	26.40	
CHEPETA-WROCK																		
CURRENT CREEK	12/27	8.28	1/26	0.92	2/22	2.78	3/27	4.40	4/28	1.77	5/25	2.09	6/27	1.64	9/30	7.48	27.76	
E FK BLACKS FK	12/29	5.98	1/28	1.09	2/24	1.67	3/28	3.78	4/27	4.02	5/28	3.89	6/29	2.63	9/27	5.28	28.34	
FIVE POINT LK	1/01	12.60	2/02	1.50	3/01	2.70	4/01	3.60	5/01	3.40	6/01	3.00	7/01	2.10	9/30	6.80	35.90	
GRIZZLY RIDGE	12/29	11.60	1/28	0.30	2/28	1.85	3/30	5.25	4/29	2.40	6/01	4.60	6/29	3.10	9/29	6.85	35.95	
HENRYS FORK																		
HICKERSON PARK	12/30	5.99	1/28	0.53	2/24	0.73	3/28	7.34	4/27	4.06	5/28	6.88	6/29	2.95	9/29	5.25	33.73	
NEWINTA GS	12/29	6.38	1/28	1.33	2/24	1.90	3/28	4.29	4/27	4.34	5/28	3.95	6/29	2.82	9/22	4.54	29.55	
INDIAN CANYON	12/27	9.93	1/26	1.34	2/22	2.21	3/27	5.23	4/27	2.92	5/25	3.18	6/21	0.68	9/29	5.95	31.44	

NOTE: BLANK SPACES INDICATE NO READING TAKEN, NEXT READING IS CUMULATIVE EXCEPT AS NOTED \*

\*\*: GAGE MOLESTED, DATA FOR THIS PERIOD LOST

## UTAH PRECIPITATION DATA

1983 WATER YEAR

STATION NAME	OCT.-DEC.	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY-SEPT.	TOTAL
JACKSON PARK	12/30 10.02	1/29 0.92	2/24 1.70	3/29 5.31	4/29 3.98	5/28 4.48		9/28 4.43	30.64
KIDNEY LAKES	12/30 9.05	1/29 0.56	2/24 1.23	3/29 4.53	4/29 2.26	5/29 5.88	6/30 4.05	9/28 6.79	43.23
KINGS CABIN UP	12/30 13.90	1/01 1.50	2/24 2.12	3/29 5.98	4/29 4.25	5/28 3.47	7/14 3.48	10/01 8.80	32.35
LAKEFORK BASIN	12/30 8.96	1/29 0.95	2/24 1.62	3/29 4.49	4/29 3.22	5/28 3.49	7/14 4.16	9/29 7.93	43.50
LAKEFORK MTN 1	12/30 14.20	1/01 3.20	3/01 4.93	4/01 8.20	5/01 8.70	6/01 7.20	7/01 3.50	10/01 12.20	34.82
LIGHTNING LAKE	12/30 10.22	1/29 3.69	2/24 1.61	3/29 5.37	4/29 3.69	5/28 5.33	6/30 4.60	9/21 6.87	62.10
MOSBY MOUNTAIN	12/30 14.21	1/29 3.86	2/24 1.91	3/29 5.35	4/29 3.35	5/28 5.30	5/31 3.75	9/28 7.05	36.38
PARADISE PARK	12/30 9.90	1/29 0.55	2/24 1.02	3/29 5.70	4/29 2.74	5/28 4.84	6/30 3.60	9/21 3.63	41.78
REYNOLDS PARK	12/30 7.51	1/29 2.20	2/24 1.92	3/29 3.63	4/29 1.91	5/28 1.87	6/30 1.87	9/20 6.69	45.00
ROCK CREEK	12/30 9.67	1/28 3.38	2/24 1.43	3/28 6.07	4/27 4.43	5/28 7.50		8/20 4.30	27.60
SHADOW LAKE	12/29 5.58	1/28 1.48	2/24 2.19	3/28 4.82	4/27 2.56	5/28 5.07	6/29 3.11	9/29 11.10	41.08
SPIRIT LAKE	12/30 9.58	1/29 0.55	2/24 1.02	3/29 5.70	4/29 2.74	5/28 4.84	6/30 3.60	9/21 3.63	29.63
STEEL CRK PARK	12/30 9.90	1/29 0.55	2/24 1.02	3/29 5.70	4/29 2.74	5/28 4.84	6/29 3.60	9/21 3.63	31.98
TROUT CREEK	12/30 6.80	2/01 2.70	3/01 3.20	3/28 5.31	4/25 2.69	5/25 4.31	6/30 1.00	9/26 7.60	44.28
WFK DUCHE SNE									

## PRICE - SAN RAFAEL RIVER BASIN

BLACKS FLAT-UM	12/29 5.55	1/29 1.46	2/23 1.98	3/29 4.49	4/26 2.64	5/25 2.64	6/21 0.46	10/01 5.61	25.62
BLACKBOARD FLAT	12/29 12.30	1/28 1.40	2/24 3.30	3/28 6.25	4/29 4.10	5/25 1.65	6/30 1.95	9/29 7.70	38.65
BUCK FLAT	12/29 10.44	1/28 3.03	2/23 3.16	3/29 7.41	4/25 2.99	5/25 4.69	7/13 1.65	9/28 6.95	40.32
CAMP JACKSON	12/29 13.10	1/28 1.70	2/24 3.80	3/28 8.60	4/29 2.35	5/25 1.20	6/30 0.95	9/29 9.20	40.90
DILLS CAMP	12/29 9.80	1/28 2.83	2/23 2.17	3/29 5.78	4/25 2.76	5/25 4.38	7/01 0.90	9/28 7.23	35.85
FISH LAKE	12/29 4.80	1/29 0.95	2/23 1.96	3/29 3.89	4/26 1.93	5/25 2.91	6/21 0.58	10/31 10.67	27.69
GOOSEBERRY RES	12/28 12.19	1/27 2.06	2/22 4.25	3/28 8.65	4/25 2.48	5/25 6.51	9/28 9.60		45.74
LASAL MN UPR	12/30 12.15	1/27 1.80	2/24 4.40	3/29 7.70	4/30 4.20	5/26 3.65	6/30 2.28	9/26 9.35	45.53
MUD CREEK	12/28 7.25	1/27 1.26	2/22 0.84	3/28 6.08	4/25 1.54	5/25 4.88		9/28 7.46	29.31
ORANGE OLSEN	12/28 6.16	1/27 1.60	2/22 1.49	3/28 3.03	4/25 0.80	5/25 1.45		9/26 6.96	21.49
RED PINE RIDGE	12/28 12.10	1/27 2.30	3/01 3.60	3/28 6.18	4/25 2.58	5/25 2.70	7/01 0.18	9/26 7.02	36.66
STUART RS OLD	12/28 5.58	1/27 1.12	2/22 2.29	3/28 4.94	4/25 1.59	5/25 2.50		9/27 7.26	25.28
WHITE RIVER #1	12/27 8.43	1/26 1.36	2/22 3.22	3/28 4.95	4/27 1.39	5/25 3.68	6/22 0.49	9/28 7.79	31.31
SEELEY CK. R.S	12/30 17.43	1/30 3.61	2/24 2.70	3/01 3.20	3/28 5.31	4/25 2.69	5/25 4.31	6/30 1.00	10/01 7.60

## SEVIER - BEAVER RIVER BASINS

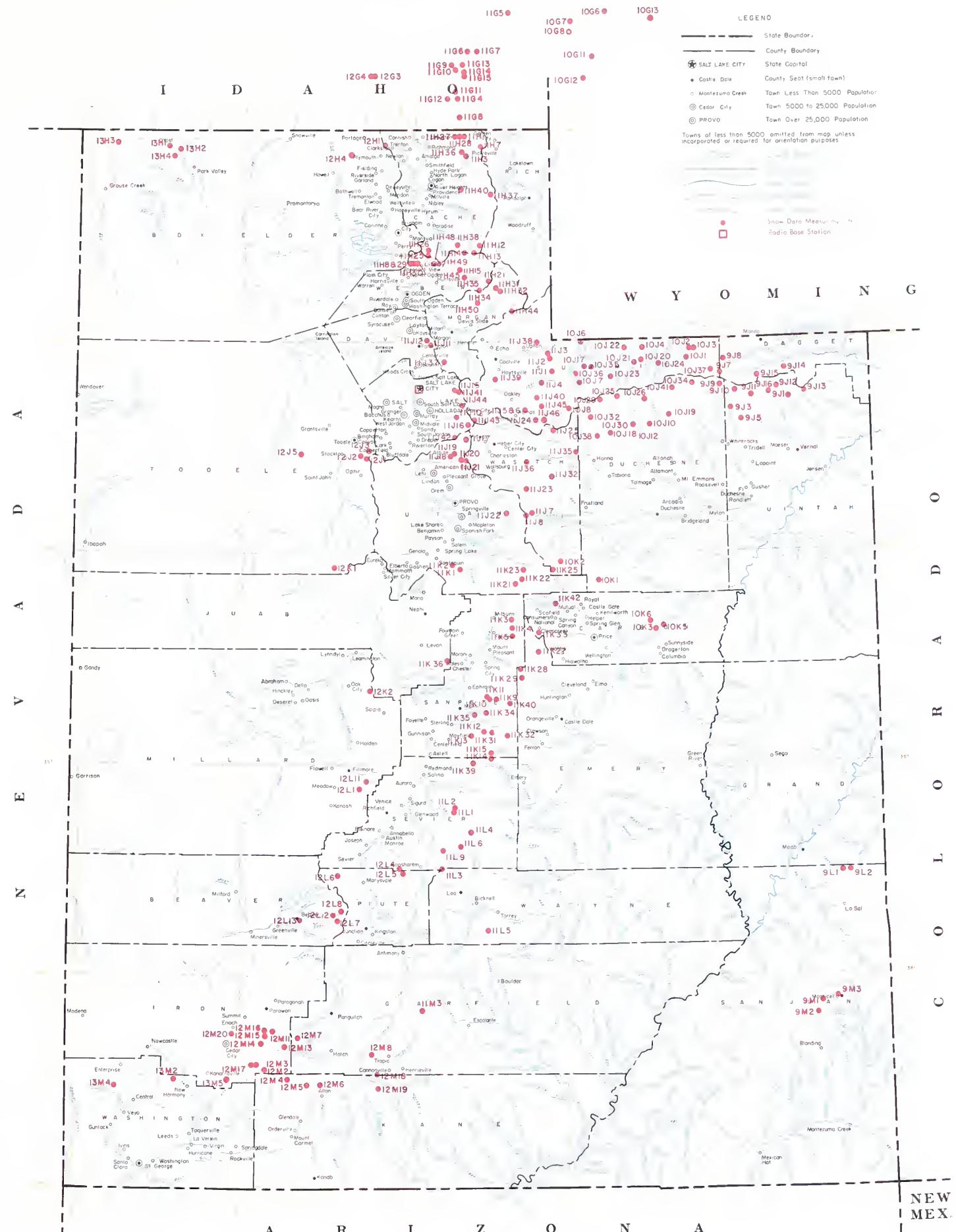
BEAVER DAMS	12/29 8.45	1/28 3.62	2/23 2.95	3/28 6.26	4/25 3.22	5/25 6.42	7/01 0.40	9/30 8.13	39.45
BIG FLAT	12/31 9.37	1/31 2.87	2/25 3.75	3/30 9.27	4/27 3.36	5/26 4.58	6/29 1.70	9/30 6.75	41.65
BOX CREEK	12/29 10.20	1/31 2.49	3/01 3.30	3/29 4.04	4/26 4.20	5/25 4.84	7/13 5.06	10/01 7.05	41.18
CASTLE VALLEY	12/30 10.85	1/30 2.67	2/24 2.24	3/30 9.12	4/26 2.19	5/26 3.17	6/21 1.13	9/28 6.87	38.24
DUCK CREEK	12/30 17.43	1/30 3.61	2/24 1.95	3/29 11.29	4/26 1.97	5/26 2.93		9/26 8.76	47.94

NOTE: PLANK SPACES INDICATE NO READING TAKEN. NEXT READING IS CUMULATIVE (EXCEPT AS NOTED \*)  
 #: GAGE MOLESTED, DATA FOR THIS PERIOD LOST

UTAH PRECIPITATION DATA

1983 WATER YEAR

STATION NAME	OCT.-DEC.	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY-SEPT.		TOTAL		
		1/29	9.85	1/29	2.59	2/23	3.65	3/29	8.38	4/26	4.16	5/25	7.10	6/28	0.82	10/01	3.85	45.50
FARNSWORTH LK	12/29	9	85	1/27	3.18	2/22	4.24	3/28	3.21	4/25	3.40	5/25	5.19	5/30	2.50	9/30	7.04	43.13
GBRC HEADQTRS	12/28	10	37	1/27	3.18	2/22	4.24	3/28	3.21	4/30	16.65	5/31	3.10	6/30	0.38	9/30	4.54	31.77
GBRC MAJORS	12/31	7	10							4/25	4.17	5/25	8.03	6/30	1.00	9/30	9.95	51.72
GBRC MEADOWS	12/28	9	90	1/27	3.21	2/22	5.39	3/28	10.07	4/30	17.70	5/31	4.35	6/30	0.48	9/30	5.77	35.20
GBRC OAKS	12/31	6	90							4/26	3.04	5/25	5.58	7/01	1.00	9/30	7.98	35.40
GOOSEBERRY RS	12/29	7	65	1/29	1.66	2/23	2.31	3/29	6.18	4/26	3.04	5/25	5.58	7/01	1.00	9/30	7.98	35.40
KIMBERLY MINE	12/31	13	36	1/31	1.81	2/25	3.43	3/30	8.39	4/27	4.59	5/26	5.13	6/29	1.09	9/21	5.45	43.25
MAMMOTH RS	1/01	10	50	2/01	1.80	3/01	4.60	4/01	4.30	5/01	2.80	6/31	3.60	7/01	1.80	9/30	8.10	37.50
MERCHANT VALLEY	12/31	10	85	1/21	2.59	2/25	3.21	3/30	7.14	4/27	3.74	5/26	4.15	6/29	2.03	9/30	8.18	41.89
MIDWAY VALLEY	1/01	19	00	2/01	4.20	3/01	5.80	4/01	14.10	5/01	6.00	5/26	4.00	6/22	2.13	9/30	10.40	65.63
MT BALDY RS	12/29	8	17	1/28	3.45	2/23	2.47	3/28	8.16	4/25	6.98	5/25	8.19	9/29	8.75	46.17		
OAK CREEK	12/31	6	67	1/21	2.44	2/25	4.19	3/31	8.71	4/27	3.60	5/26	5.01	6/28	0.86	9/29	7.16	38.64
PANGUITCH LAKE	12/30	7	50	1/30	1.44	2/24	1.37	3/30	5.00	4/26	1.39	5/26	2.01	9/28	6.45	25.16		
PICKLE KEG SPG	12/29	12	50	2/01	4.00	2/23	3.94	4/01	8.00	5/01	3.60	6/01	5.40	7/01	0.50	9/30	7.60	45.54
PINE CREEK	12/31	12	78	1/31	3.55	2/25	4.11	3/31	9.69	4/27	5.76	5/26	8.01	9/28	6.79	50.89		
REEFS FLAT	12/31	10	25	1/31	3.33	2/25	3.31	3/31	7.39	4/27	2.00	5/27	4.68	9/28	5.67	36.63		
SHINGLE MILL	1/04	10	43	1/27	1.64	3/01	4.45	3/28	6.24	4/28	3.30	5/25	5.74	9/29	6.77	48.57		
WIDTSEE-ESCL 3	12/29	5	23	1/29	2.63	2/23	1.60	3/29	9.78	4/26	0.98	5/25	2.12	6/21	1.40	9/28	4.06	27.80
<b>COAL CREEK - VIRGIN - ESCALANTE RIVER BASINS</b>																		
KOLOB CRYSTAL	12/30	17	50	2/01	4.40	3/01	4.00	4/01	10.80	5/01	7.50	6/31	1.00	7/31	0.70	9/30	6.60	52.50
LITTLE GRASSY	12/30	9	73	1/30	1.29	2/24	3.35	3/30	10.74	4/26	2.98	5/26	1.42	6/30	0.39	10/12	6.70	36.59
LONG FLAT	12/30	8	90	1/30	1.50	2/24	1.62	3/30	9.22	4/26	2.40	5/26	1.71	6/30	0.70	9/30	6.40	32.45
TALL POLES	12/28	9	60	1/27	1.30	2/24	3.45	3/29	6.60	4/26	3.50	5/26	3.50	6/30	1.60	10/13	6.30	35.95
WEBSTER FLAT	12/30	13	30	1/30	4.73	2/24	2.81	3/30	18.36	4/26	2.78	5/26	3.06	6/22	1.74	9/30	8.09	53.87
YANKEE RESVR	12/30	8	45	1/30	1.35	2/24	1.91	3/30	5.65	4/26	2.90	5/26	3.64	6/30	1.28	10/13	5.74	30.92



## SNOW COURSES AND RELATED DATA MEASURING SITES

# UTAH

1981



# INDEX TO UTAH, BEAR & UPPER COLORADO RIVER BASINS

## GREAT BASIN DRAINAGE

NO.	STATE	NAME	SEC.	RGE.	ELEV.	NO.	STATE	NAME	SEC.	RGE.	ELEV.	NO.	STATE	NAME	SEC.	RGE.	ELEV.	
<b>UPPER BEAR RIVER (above Hager, Idaho)</b>																		
10G11	W	Big Park	7	27N	8,700	11125P	U	Spoonstone R.S.	9	35	8E	7,800	911PST	U	UPPER GREEN RIVER IN UTAH (above Duchesne River) (continued)	22	15	
10I6P	W	Burnt Fork-Miller Ranch	19	3N	7,900	11119	U	South Fork R.S.	24	45	2E	6,100	10137P	U	King's Cabin (upper)	21E	8,720	
10G2P	W	CCC Camp x	9	29N	7,500	11118	U	Timpanogos Cove Comp	27	45	2E	5,500	10127P	U	Middle Beaver Creek	17E	10,650	
10I3P	W	Gold Hill	15	1N	9E	10,000	1112P	U	Timpanogos Divide	33	45	3E	8,140	911P	U	Reynolds Park	16E	8,650
10I7P	W	Hodgen Creek	25	1N	9E	9,400	10385T	U	Tell Lake	5	25	3E	9,960	911P	U	Spirit Lake Park	10E	10,400
10G12	W	Kid's Ranger Station	13	26N	8,100	11126P	U						9120PST	U	Steel Creek Park	17	10,300	
10I3P	W	Lily Lake	34	8N	8,700	11127P	U						9120PST	U	Tour Creek	2N	13E	
10G13	W	Monte Cristo R.S.	4	4E	8,700	11128P	U						9120PST	U	Windy Park	9	20E	
10G14	W	Polson Meadows x	29	30N	8,500	11129P	U						9120PST	U		15	9,400	
10G15	W	Salt River Summit x	32	28N	8,100	11130P	U						9120PST	U		2	15	
10G16	W	Shallow Basin x	15	29N	8,150	11131P	U						9120PST	U		20E	9,400	
10G17	W	Stillwater Camp	32	2N	10E	8,550	12K1P	U						9120PST	U			
<b>LOWER BEAR RIVER (below Hager, Idaho)</b>																		
11H37ST	U	Bug Lake	1B	11N	5E	7,950	11135	U	Bevan's Cabin	24	45	4W	6,450	1041P	U	DUCHESENE RIVER	13	4N
11G11	U	Christensen Ranch	27	13S	8N	8,500	1212P	U	Desert Peak	15	45	7W	9,250	1041P	U	Arwood Lake	4W	10,840
11G12	U	Chenoweth Creek	5	8N	8,700	1213P	U	Middle Canyon #2	21	15	3E	7,500	1041P	U	Brown Duck Ridge	6W	10,600	
12H1P	U	Clarkston Mountain	29	14N	8N	7,900	1214P	U	Middle Canyon	8	45	3W	7,000	1041P	U	Chepalo-Whirocks Lakes	8	11W
12H2P	U	Cub River Ranger Station	5	15S	4E	8,400	1215P	U	Mill D South Fork	25	15	2E	6,950	11122PST	U	Current Creek	20	2N
12H3P	U	Dry Boilin	30	13S	42E	7,900	1216P	U	Rocky Basin-Settlement Canyon	18	25	3E	7,400	11123PST	U	Daniels-Strawberry Summit	26	15
12H4P	U	Dry Creek Flat	31	13S	42E	7,900	1217P	U	Snowbird (Brighton)	30	45	3W	8,200	11124PST	U	East Portal	20	25
12G6	U	East Grant Summit	21	12S	42E	7,350	1218P	U	Silver Lake (Grid Valley)	35	35	3E	8,725	11125PST	U	Five Point Lake	36	75
12G7	U	Emigration Canyon (mouth)	24	12S	42E	6,500	1219P	U	Vernon Creek	21	10S	5W	7,500	10426P	U	Indian Canyon	28	15
12G8P	U	Franklin Basin	14	16S	41E	6,500	1220P	U						10427P	U	Kidney Lake	5W	11,000
12G9P	U	Garden City Summit	34	&	35	14N	1211P	U						10428P	U	Lakefork Basin	13	4N
12H1P	U	Hero Hollow	3	11N	45E	7,600	12M18	U	Duck Creek R.S.	23	35	8W	9,580	10429P	U	Lakefork Mountain #3	2	3
12H2P	U	Horseshoe Basin	31	16N	42E	8,000	12M19P	U	Farview	11	38S	8W	8,700	9,190	U	Lightning Lake	34	4N
12H3P	U	Klondike Narrows	10	16N	3E	7,400	12M19P	U	Harris Flat	24	38S	7W	7,700	9,190	U	Moby Mountain	33	3N
12H4P	U	Liberty Springs	7	15S	42E	8,240	12M19P	U	Hightop Mountain	36	25S	1E	11,400	10430P	U	Paradise Park	21	2N
12H5P	U	Little Bear (lower)	16	8N	42E	8,000	12M19P	U	Kimberly Mine	11	27S	5W	9,300	10431P	U	Rock Creek	29	1W
12G3	U	Little Bear (upper)	22	8N	42E	8,200	12M19P	U	Midway Valley	26	37S	5W	9,800	10432P	U	Shadow Lake	24	4S
12G4	U	Oxford Mountain	32	13S	42E	8,500	12M19P	U	Panguitch Lake	29	38S	4W	9,100	10433P	U	Strawberry Divide	22	1W
12G5	U	Slag Creek Divide	15	10S	44E	7,225	12L5	U	Rainbow Point	3	27S	2W	9,300	10434P	U	West Fork of the Duchesne	22	1W
1H27	U	Sleep Hollow 1	7	14N	3E	8,500												
1H28	U	Sleep Hollow 2	9	14N	3E	7,350	11K1P	U										
1G9P	U	Strawberry Creek	14	13S	41E	5,800	11K1P	U	Beaver Race Track	22	19S	3E	8,000	10435P	U	Corral	32	15S
1H36P	U	Strawberry Mink Divide	5	13N	44N	8,400	11K1P	U	Farnsworth Lake	34	25S	2E	9,600	10436P	U	Dry Valley Divide Alternative	14	15S
1H37P	U	Tony Grove Lake	11	13N	3E	8,250	11K1P	U	Parkview	21	17S	4E	8,700	10437P	U	Grassy Trail Creek-Left Fork	14S	15S
1H38P	U	Willow Flat	2	15S	41E	6,100	11K1P	U	Ree's Flat	27	17S	4E	10,000	11K25P	U	Mud Creek	23	13S
<b>RATT RIVER</b>																		
13H20	U	Clear Creek Meadows	26	8N	3E	9,050	11K3P	U	Shingle Mill	19	13S	5E	8,000	11K31PST	U	SAN RAFAEL RIVER	23	19S
13H21	U	George Peak	4	14N	3E	9,000	11K3P	U	Thistle Flat	9	17S	3W	7,760	11K32P	U	Buck Flat	25	13S
13H22	U	One Mile Summit	17	14N	3E	7,330	11K3P	U	Wetmore	4	17S	3W	9,000	11K33P	U	Gooseberry Reservoir	25	13S
13H23	U	VIP Point	17	14N	3E	7,670	12L1P	U	Wetmore	20	15S	4W	7,300	11K34P	U	Huntington-Horseshoe	25	13S
<b>OGDEN RIVER</b>																		
1H114M	U	Beaver Creek-Skunk Creek	22	8N	3E	7,150	12L13	U	Wetmore	21	25S	7W	6,020	11K35P	U	Orange Olsen	25	13S
1H144P	U	Ben Lomond Peak	3	7N	1W	8,000	12L17P	U	Wetmore	7	25S	4W	10,290	11K36P	U	Red Pine Ridge	25	13S
1H130P	U	Ben Lomond Trail	2	7N	1W	6,000	12L18P	U	Wetmore	5	25S	3W	6,200	11K37P	U	Seelye Creek	25	13S
1H130PST	U	Causey Dam	34	7N	3E	5,500	12L19P	U	Wetmore	12	25S	2W	6,000	11K38P	U	Stuart R.S.	25	13S
1H134P	U	Dry Bread Pond	19	8N	4E	8,350	12L19P	U	Wetmore	19	13S	5E	8,000	11K39P	U	Upper Lee's Valley	27	13S
1H134P	U	Guiders' Rock	21	6N	4E	8,400	12L19P	U	Wetmore	19	13S	5E	8,000	11K40P	U	Wrigley Creek	27	13S
1H134P	U	Middle Fork Ogden	16	7N	2E	8,250	12M14	U	Wetmore	10	35S	3E	9,200	11K41P	U	MUDGY RIVER	34	20S
1H134P	U	Powder Mountain Hideaway	6	7N	2E	8,300	12M15P	U	Wetmore	10	35S	3E	9,200	11K42P	U	Dill's Camp	27	20S
1H134P	U	Powder Mountain Sundown	1	7N	1E	8,400	12M15P	U	Wetmore	12	25S	2W	9,200	11K43P	U	Blackard Flat	27	20S
1H134P	U	Sagebrush Flat	21	7N	3E	6,300	12M16	U	Wetmore	23	35S	3E	9,200	11K44P	U	Black's Flat-U.M. Creek	33	24S
<b>WEBER RIVER</b>																		
1H124	U	Beaver Creek R.S.	28	7E	7,500	12M17	U	Wetmore	26	35S	3E	9,200	11L14P	U	Bucko's Fork G.S.-cast Fork	33	24S	
1H125P	U	Chalk Creek 1	4	1N	8E	9,100	12M17	U	Wetmore	10	35S	3E	9,200	11L15P	U	Donkey Reservoir	33	24S
1H126P	U	Chalk Creek 2	29	2N	8E	7,500	12M17	U	Wetmore	11	35S	3E	9,200	11L16P	U	Fish Lake	35	24S
1H126P	U	East Singing Lake	7	2N	8E	7,500	12M17	U	Wetmore	12	35S	3E	9,200	11L17P	U	SOUTHEASTERN UTAH DRAINAGES	33	24S
1H126P	U	Fanning Canyon (lower)	6	25S	8E	9,750	13MM4MP	U	Wetmore	2	38S	3E	8,000	9,190	U	Bucko's Fork G.S.-cast Fork	33	24S
1H126P	U	Fanning Canyon (upper)	15	3N	1E	6,950	13MM2MPST	U	Wetmore	23	35S	3E	8,000	9,190	U	LaSal Mountain (upper)	33	24S
1H126P	U	Francis Canyon	29	5N	6E	8,000	12M20	U	Wetmore	26	35S	3E	8,000	9,190	U	LaSal Mountain (lower)	33	24S
1H126P	U	Hardscrab	22	2N	2E	6,700	12M20	U	Wetmore	10	35S	3E	8,000	9,190	U	Monticello Park	33	24S
1H126P	U	Hone Ridge	22	2N														

# **Agencies Cooperating in Utah Snow Surveys**

## **U. S. GOVERNMENT AGENCIES**

U. S. Department of Agriculture  
Soil Conservation Service  
Forest Service  
U. S. Department of Commerce  
NOAA, National Weather Service  
U. S. Department of Interior  
Bureau of Reclamation  
Geological Survey  
National Park Service

## **STATE AGENCIES**

Utah State University  
Utah State Department of Natural Resources  
Division of Wildlife Resources  
Division of Water Resources  
Division of Water Rights  
Bear River Commissioner  
Price River Commissioner  
Provo River Commissioner  
Sevier River Commissioners  
Spanish Fork River Commissioner  
Utah Lake and Jordan River Commissioner

## **MUNICIPALITIES**

Manti  
Salt Lake City

## **ORGANIZED PUBLIC AGENCIES**

Beaver River Water Users Association  
Board of Canal Presidents - Jordan River  
Central Utah Conservancy District  
Emery Canal and Reservoir Company  
Moon Lake Water Users Association  
Ogden River Water Users Association  
Provo River Water Users Association  
Strawberry Water Users Association  
Sevier River Water Users Association  
Weber River Water Users Association  
Weber Basin Conservancy District

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
FEDERAL BLDG., - ROOM 4012  
125 SOUTH STATE ST.  
SALT LAKE CITY, UTAH 84138  

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