FEDERAL - STATE COOPERATIVE

SNOW SURVEYS AND IRRIGATION WATER FORECASTS

FOR

U T A H

February 1, 1952

Report Prepared
by
Gregory L. Pearson - Hydraulic Engineer

Division of Irrigation
U. S. Soil Conservation Service
and
Utah Agricultural Experiment Station
Logan, Utah

Utah Agricultural Experiment Station Mimeographed Series No. 382

WATER SUPPLY OUTLOOK
FOR UTAH
FEBRUARY 1, 1952

The water stored in the snow pack on the mountain watersheds of Utah is higher than has ever been recorded at this time of year since snow surveying started in 1924, with the exception of the high snows at Timpanogas Divide in American Fork Canyon and the Widtsoe-Escalante Summit course on the East Fork of the Sevier River. The snow water content for all courses in the state varies from 160 percent to 292 percent of the February 1 average, and is at approximately the April 1 average or considerably more. No area should suffer from a water shortage during the coming summer, but unless precipitation is considerably below normal for the next two months many areas can expect the highest runoff they have had for a number of years.

Although relatively few key snow courses are measured regularly on February 1, these with additional special measurements made on other courses show that there has never been a time since snow surveying started in Utah that the entire state has had such a heavy snowpack lying on its watersheds at this time of year.

A series of snow courses running from the headwaters of the Strawberry River, Daniels Canyon above Heber City, Hobble Creek, and Spanish Fork River area south to the headwaters of the Price, Huntington and San Pitch Rivers now have more snow water than has ever been measured on April 1 with the exception of one or two years having from 130% to 135% of their April 1 averages. April 1 measurements this year should set new records on most of these courses even if precipitation is below normal for the next two months.

In all parts of the state, the low snows are particularly heavy, being more above average than are the high snows. Moisture in the soils underlying the snowpack is good.

In southern Utah on the headwaters of the Sevier, Virgin, Coal Creek and Beaver Rivers, although residual streamflow has been low as a result of last year's drought, the watershed soil mantle is wet from the melting of early fall snows. A year ago it was a powder dry. With a snowpack already varying from 90% of the April 1 average on the Beaver River to 130% on the Sevier and Virgin Rivers, water users in these areas can expect to replenish low reservoir supplies as well as have sufficient for their needs this coming summer.

Since at this time of year approximately 55% to 60% of the total seasons snowpack has already accumulated, and another 40% to 45% yet to come, if precipition occurs at a normal rate for the next two months, record or near record snow cover will be measured on April 1 throughout the state. This means that many areas can expect damage from high peak flows during the spring runoff season.

Table 1 - Utah snow surveys - about February 1, 1952

Drainage basin and Snow Course name	Snow course number	Location			Elev.	SNOW COVER MEASUREMENTS						
						Date of survey 1952	Snow Depth (inches) 1952	WATER CONTENT (INCHES)				
								About February 1			Past record	
		Sec.	Twp.	Range				1952	1951	1950	years of record	av. water content (inches)
					GREAT BASIN DRAINAGE							
Bear River System												
Salt River Summit (Wyo.)	1C	32	29N	118W*	7900	1-30	45.6	13.1	11.3	14.0	2	12.7
Spring Hollow (Lower)	4	26	12N	2E	7000	2-2	59.9	17.6	10.6	12.8	27	8.9
Spring Hollow (Upper)	5	35	12N	2E	8000	2-2	69.1	27.4	18.8	23.0	27	13.7
Mt. Logan	6	3	11N	2E	9000	2-2	89.6	30.0	24.6	28.3	27	16.8
Weber-Ogden Rivers												
Mt. Ogden	74	5	5N	1E	8600			N.R.	34.6		1	34.6
Jordan River and Great Salt Lake												
Silver Lake	16	35	2S	3E	8720	1-31	79.8	23.8	18.4	21.3	17	14.8
Farmington Canyon (Lower)	32	14	3N	4E	6950			N.R.	18.3		1	18.3
Provo River & Utah Lake												
Timpanogas Cave Camp	18	27	4S	2E	5500	2-1	26.8	8.4	3.2	5.3	10	4.3
South Fork R. S.	19	24	4S	2E	6100	2-1	39.0	12.3	4.6	7.6	14	6.1
Camp Altamont	20	29	4S	3E	7300	2-2	66.1	21.5	12.4	21.6	17	11.5
Timpanogas Divide	21	33	4S	3E	8200	2-2	84.2	29.8	20.8	32.5	17	15.9
Daniels-Strawberry Summit	27	20	2S[x]	12W[x]	8000	1-29	68.0	20.2	10.4	16.0	21	9.0
East Portal	33	36	7S	6E	7560	1-28	64.9	21.6	9.8	12.9	16	7.4
Strawberry Divide	33A	34-35	7S	6E	8000	1-29	91.7	30.9	17.4	19.5	16	12.8
Sevier River												
Gooseberry Reservoir	41	25	13S	5E	8700	1-29	77.2	27.8			1	8.6
Mammouth R.S.-Cot. cod Cr.	42	13-23	13S	5E	8800	1-29	78.6	28.8			1	8.2
Huntington-Horseshoe	43	12	14S	5E	9800	1-29	82.1	31.1				
Widtsoe-Escalante summit	53	22	34S	1W	9500	2-1	30.2	8.6	0.9	3.8	14	5.3
Widtsoe-Escalante #2	53A	22	34S	1W	9500	2-1	39.0	10.9	1.4		1	1.4

*6th Principal Meridian
xUintah Special Meridian

Table 1 - Utah snow surveys - about February 1, 1952

Drainage basin and Snow course name	Snow course number	Location			Elev.	SNOW COVER MEASUREMENTS						
						Date of Survey 1952	Snow depth (inches) 1952	WATER CONTENT (INCHES)				
								About February 1			Past record	
		Sec.	Twp.	Range				1952	1951	1950	years of record	av. water content (inches)
Sevier River (Con't)												
Panguitch Lake	55	4-5	36S	7W	8200	1-28	26.3	7.8				
Gravel Springs Junction	56	22	38S	6W	7500	1-29	35.6	10.3	N.S.		2	4.8
Harris Flat R.S.	57	24	38S	7W	7700	1-28	48.0	14.2			6	5.6
Duck Creek R. S.	58	11	38S	8W	8560	1-28	70.5	21.9	2.2		8	8.5
Cedar Breaks	59	2	37S	9W	10390	1-25	74.0	25.2	4.3		7	12.0
Big Flat	63B	18	29S	4W	10000	1-24	61.6	18.7	9.3		2	8.7
Beaver River												
Merchant's Valley	63	8-9	29S	5W	8200	1-24	38.8	9.4	3.4		3	6.6
Otter Lake	63A	1	29S	5W	9300	1-24	51.8	14.9	5.7		3	9.2
Big Flat	63B	18	29S	4W	10000	1-24	61.6	18.7	9.3		2	8.7
Coal Creek												
Cedar Breaks	59	2	37S	9W	10390	1-25	74.0	25.2	4.3		7	12.0
Webster Flat	61	20	37S	9W	9200	1-25	72.9	22.2				
COLORADO RIVER DRAINAGE												
Upper Green River												
King's Cabin (Upper)	39	22	1S	21E	8800	1-31	38.1	10.3	3.7		2	8.8
King's Cabin (Lower)	39A	23-26	1S	21E	8600	1-31	32.2	8.2	3.1		2	8.1
Duchesne River												
Lakefork Mountain	36	2-3	2N[x]	5W[x]	10500	2-1	49.6	14.2	6.7		1	6.7
Indian Canyon	40	2	11S	10E	9100	1-29	51.6	16.0	5.0	13.5	16	6.3
Price River												
Indian Canyon	40	2	11S	10E	9100	1-29	51.6	16.0	5.0	13.5	16	6.3
Gooseberry Reservoir	41	25	13S	5E	8700	1-29	77.2	27.8			1	8.6
Mammoth R. S.	42	13-23	13S	5E	8800	1-29	78.6	28.8			1	8.2
Staley Ranch	42A	32	12S	7E	7600	1-30	41.6	12.8	4.7	7.9	10	5.1

[x] Uintah Special Meridian

Table 1 - Utah snow surveys - about February 1, 1952

Drainage basin and Snow course name	Snow course number	Location			Elev.	SNOW COVER MEASUREMENTS						
						Date of Survey 1952	Snow depth (inches) 1952	WATER CONTENT (INCHES)				
								About February 1			Past record	
		Sec.	Twp.	Range				1952	1951	1950	years of record	av. water content (inches)
Upper Green River (Con't)												
Dry Valley Divide	42B	20	12S	8E	7800	1-30	50.8	16.4	7.5	7.7	10	6.4
Huntington-Horseshoe	43	12	14S	5E	9800	1-29	82.1	31.1				
Scofield Dam	76	22	12S	11W	9000	1-30	48.5	16.7		7.4	1	7.4
Mud Creek	77	4	14S	11W	8600	1-30	75.0	27.8	7.7	10.6	2	9.2
San Rafael River												
Huntington-Horshoe	43	12	14S	5E	9800	1-29	82.1	31.1				
Virgin River												
Gravel Springs Junction	56	22	38S	6W	7500	1-29	35.6	10.3	N.S.		2	4.8
Harris Flat R. S.	57	24	38S	7W	7700	1-28	48.0	14.2			6	5.6
Cedar Breaks	59	2	37S	9W	10390	1-25	74.0	25.2	4.3		7	12.0
Webster Flat	61	20	37S	9W	9200	1-25	72.9	22.2				

Table 2 - February 1 Snow Measurement Data Compared to April 1 Averages

Drainage Basin and Snow Course name	No.	Elev.	SNOW COVER MEASUREMENTS					
			Date of Survey 1952	Snow Depth (inches) 1952	Water Content (inches) About Feb. 1 1952	Average April 1 Water Content (inches)	Years of April 1 Record	February 1 Measurements as percent of April 1 average (%)
			GREAT BASIN DRAINAGE					
Bear River System								
Spring Hollow (Lower)	4	7000	2-2	59.9	17.6	14.2	27	124
Spring Hollow (Upper)	5	8000	2-2	89.1	27.4	24.5	28	112
Mt. Logan	6	9000	2-2	89.6	30.0	28.8	28	104
Jordan River & Great Salt Lake								
Silver Lake	16	8720	1-31	79.8	23.8	25.4	21	94
Provo River & Utah Lake								
Camp Altamont	20	7300	2-2	66.1	21.5	17.5	17	123
Timpanogas Divide	21	8200	2-2	84.2	29.8	25.3	17	118
Daniels-Strawberry Summit	23	8000	1-29	68.0	20.2	14.3	22	141
East Portal	33	7560	1-28	64.9	21.6	11.8	18	183
Strawberry Divide	33A	8000	1-29	91.7	30.9	20.3	18	152
Sevier River								
Gooseberry Reservoir	41	8700	1-29	77.2	27.8	18.8	24	148
Mammoth R.S. - Cottonwood Cr.	42	8800	1-29	78.6	28.8	20.1	23	143
Huntington-Horseshoe	43	9800	1-29	82.1	31.1	24.2	22	128
Widtsoe-Escalante	53	9500	2-1	30.2	8.6	8.6	20	100
Panguitch Lake	55	8200	1-28	26.3	7.8	6.5	17	120
Gravel Springs Junction	56	7500	1-29	35.6	10.3	5.3	15	195

Table 2 - February 1 Snow Measurement Data Compared to April 1 Average

Drainage basin and Snow Course name	No.	Elev.	SNOW COVER MEASUREMENTS					
			Date of Survey 1952	Snow Depth (inches) 1952	Water Content (inches) About Feb. 1 1952	Average April 1 Water Content (inches)	Years of April 1 Record	February 1 Measurements as percent of April 1 average (%)
Sevier River (Con't)								
Harris Flat R. S.	57	7700	1-28	48.0	14.2	9.4	21	151
Duck Creek R. S.	58	8560	1-28	70.5	21.9	16.6	17	132
Cedar Breaks	59	10390	1-25	74.0	25.2	24.6	17	102
Big Flat (Adjacent Drainage)	63B	10000	1-24	61.6	18.7	20.3	16	92
Beaver River								
Merchant's Valley	63	8200	1-24	38.8	9.4	10.9	21	86
Otter Lake	63A	9300	1-24	51.8	14.9	16.8	16	89
Big Flat	63B	10000	1-24	61.6	18.7	20.3	16	92
Coal Creek								
Cedar Breaks	59	10390	1-25	74.0	25.2	24.6	17	102
Webster Flat	61	9200	1-25	72.9	22.2	17.1	25	130
			COLORADO RIVER DRAINAGE					
Upper Green River								
King's Cabin (Upper)	39	8800	1-31	38.1	10.3	9.8	22	105
King's Cabin (Lower)	39A	8600	1-31	32.2	8.2	9.2	22	89
Duchesne River								
Lakefork Mountain	36	10500	2-1	49.6	14.2	10.2	21	139
Indian Canyon	40	9100	1-29	51.6	16.0	10.0	22	160
Price River								
Indian Canyon	40	9100	1-29	51.6	16.0	10.0	22	160
Gooseberry Reservoir	41	8700	1-29	77.2	27.8	18.8	24	148

Table 2 - February 1 Snow Measurement Data Compared to April 1 Averages

Drainage basin and Snow course name	No.	Elev.	SNOW COVER MEASUREMENTS					
			Date of Survey 1952	Snow Depth (inches) 1952	Water Content (inches) About Feb. 1 1952	Average April 1 Water Content (inches)	Years of April 1 Record	February 1 Measurements as percent of April 1 average (%)
Price River (Con't)								
Mammoth R.S. - Cottonwood Cr.	42	8800	1-29	78.6	28.3	20.1	23	143
Staley Ranch	42A	7600	1-30	41.6	12.8	6.4	16	200
Dry Valley Divide	42B	7800	1-30	50.8	16.4	10.2	17	161
Huntington-Horseshoe	43	9800	1-29	82.1	31.1	24.2	22	128
Scofield Dam	76	9000	1-30	48.5	16.7	12.7	3	131
Mud Creek	77	8600	1-30	75.0	27.8	17.4	3	160
San Rafael River								
Huntington-Horseshoe	43	9800	1-29	82.1	31.1	24.2	22	128
Virgin River								
Gravel Springs Junction	56	7500	1-29	35.6	10.3	5.3	15	195
Harris Flat R. S.	57	7700	1-28	48.0	14.2	9.4	21	151
Duck Creek R. S. (Adjacent Drainage)	58	8560	1-28	70.5	21.9	16.6	17	132
Cedar Breaks	59	10390	1-25	74.0	25.2	24.6	17	102
Webster Flat	61	9200	1-25	72.9	22.2	17.1	25	130

AGENCIES COOPERATING IN UTAH SNOW SURVEYS

U. S. Government Agencies

U. S Department of Agriculture
- Soil Conservation Service
- Forest Service

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

State of Utah

Utah Agricultural Experiment Station

State Engineer
- Little Bear River Commissioner
- Price River Commissioner
- Provo River Commissioner
- Sevier River Commissioner
- Spanish Fork River Commissioner
- Weber River Commissioner

Municipalities:

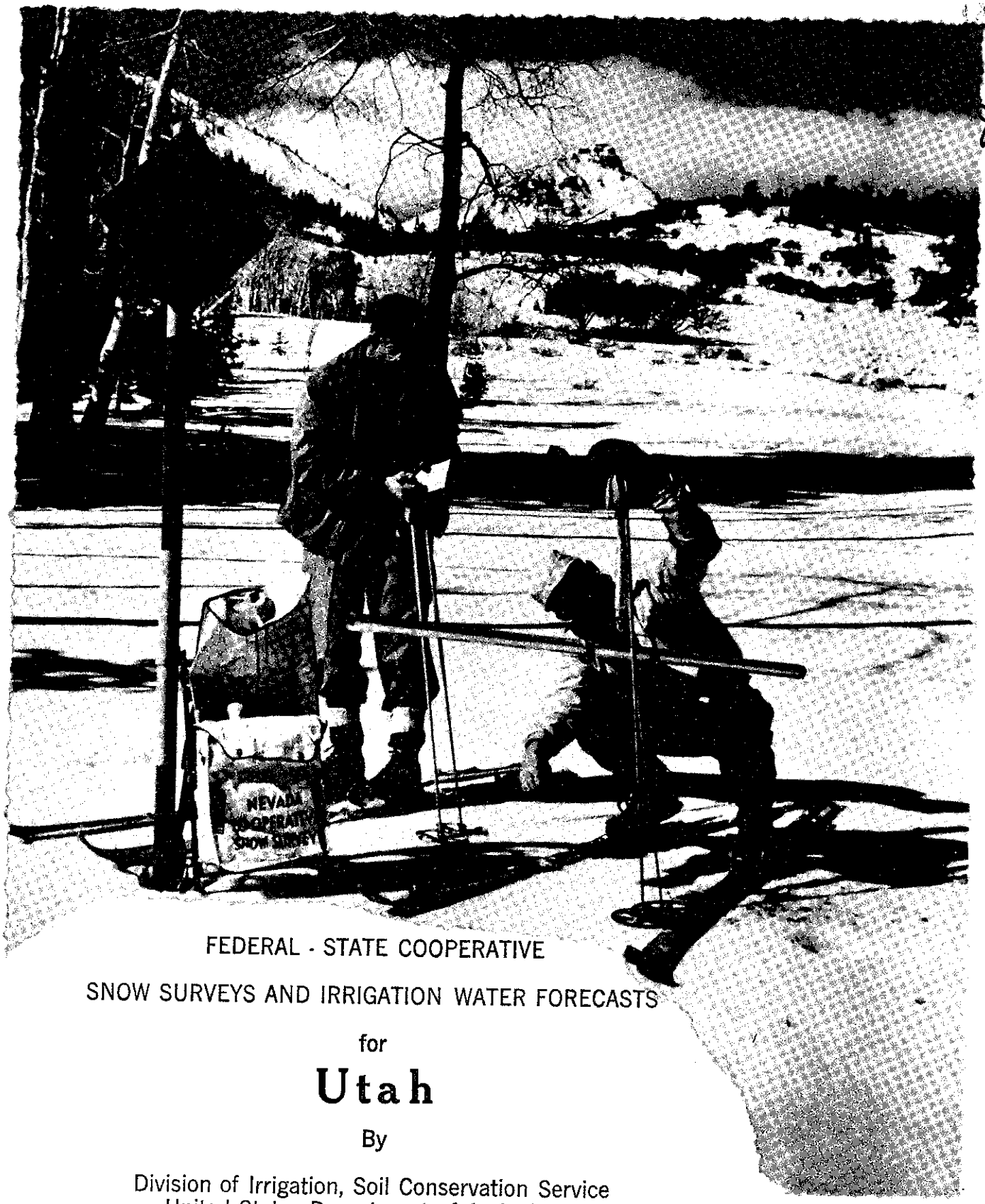
Ogden City Corporation
Provo City Corporation
Salt Lake City Corporation

Organized Public Agencies:

Beaver River Water-Users Association
Board of Canal Presidents - Jordan River
Coyote Irrigation Company
Emery Canal and Reservoir Company
Moon Lake Water-Users Association
Ogden River Water-Users Association
Strawberry Water-Users Association
Sevier River Water-Users Association
Provo River Water-Users Association
Weber Basin Water-Users Association

Public Utilities:

Utah Power and Light Company
Telluride Power and Light Company



FEDERAL - STATE COOPERATIVE

SNOW SURVEYS AND IRRIGATION WATER FORECASTS

for

Utah

By

Division of Irrigation, Soil Conservation Service
United States Department of Agriculture
and
Utah Agricultural Experiment Station

in cooperation with

U. S. Forest Service
U. S. Geological Survey
U. S. National Park Service
State Engineer of Utah
State and Local Irrigation Organizations.

As of

MAR. 1, 1952

FEDERAL - STATE COOPERATIVE

SNOW SURVEYS AND IRRIGATION WATER FORECASTS

FOR

U T A H

March 1, 1952

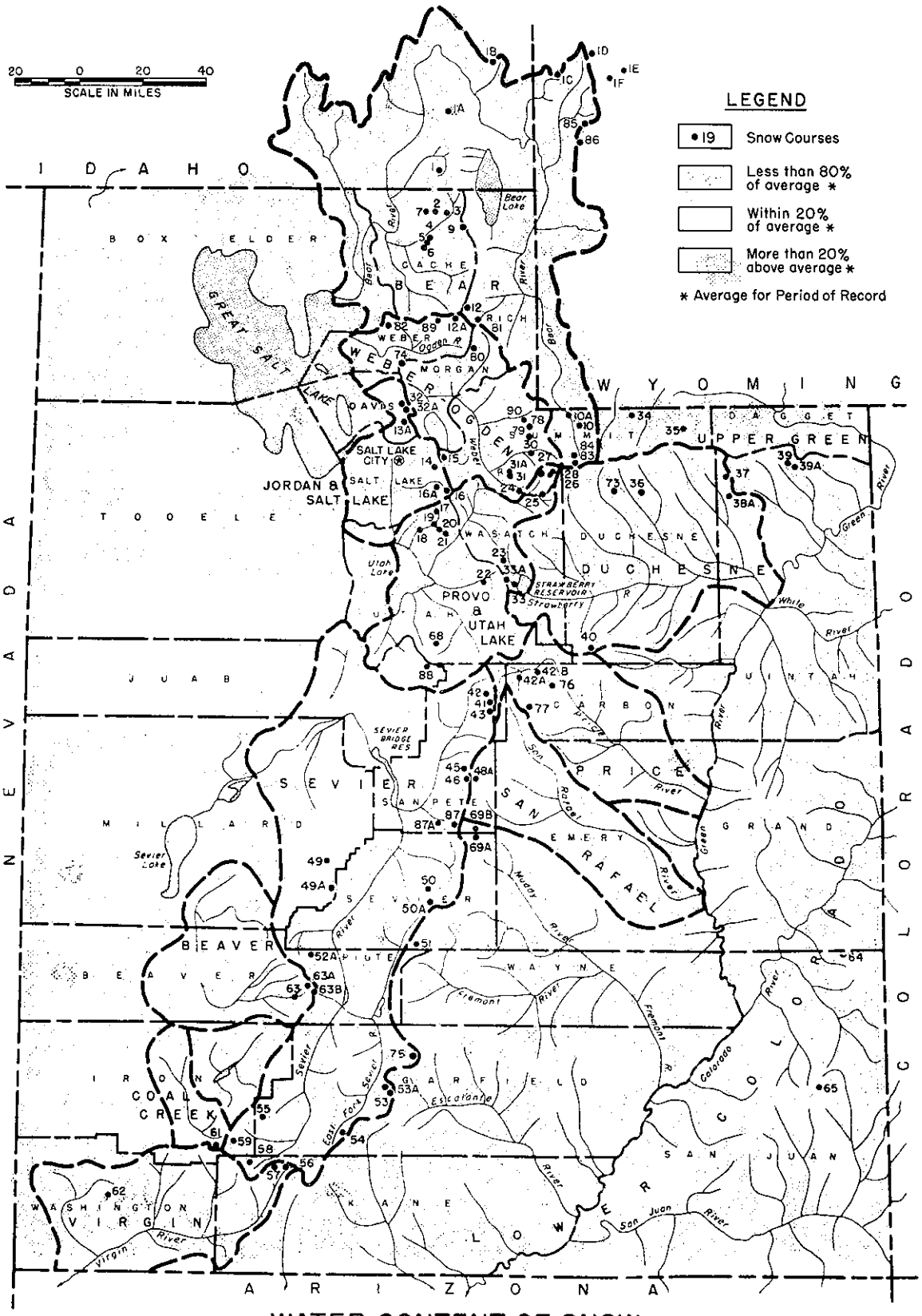
Report Prepared
by
Gregory L. Pearson - Hydraulic Engineer

Division of Irrigation
U. S. Soil Conservation Service
and
Utah Agricultural Experiment Station
Logan, Utah

Utah Agricultural Experiment Station Mimeographed Series No. 383

TABLE OF CONTENTS

	Page
Snow Course Location Map	I
Index to Snow Courses	Back of Map
Summary of Water Outlook for 1952	1-2
Preliminary Streamflow Forecasts - Table 1	3-5
Status of Reservoir Storage in Utah - Table 2	6
Utah Snow Survey Data - March 1, 1952 - Table 3	7-11
List of Cooperating Agencies in Utah Snow Surveys	12



WATER CONTENT OF SNOW
Based on Snow Surveys Made on UTAH WATERSHEDS
Approximately March, 1

PRELIMINARY
WATER SUPPLY OUTLOOK
FOR UTAH
MARCH 1, 1952

Above average water supply during the coming summer is assured for all parts of the state, the snowpack varying from 120 to 235 percent of average. Since new records have been set for the water content of many snow courses throughout the state there is no doubt that many areas will suffer damage from very heavy spring runoff. Low reservoir supplies in southern Utah will be replenished while low reserve storage space in northern reservoirs may be expected to intensify damage.

Increase in snowpack stored water was generally below normal throughout the state for the month of February. However, all parts of the state already have more than a normal water supply assured for next summer.

The heaviest snowpack lies on the watersheds of the Strawberry, southern tributaries of the Provo, the Spanish Fork rivers and south across the Price, San Rafael and San Pitch rivers. In these areas there is 170 to 235 percent of average snow stored water. It is 150 to 170 percent of average on the upper Provo, Weber-Ogden, Logan, the Wasatch front streams from Provo north and on the Bear River.

On the streams draining into the Uintah basin from the high Uintas, the snow cover varies from 140 percent of average on the Uinta and Whiterocks rivers to about 155 percent on the Duchesne and Lakefork rivers, as well as on Brush and Ashley Creeks above Vernal.

In southern Utah on the East Fork of the Sevier river, the Widtsoe-Escalante snow course has 121 percent of average. On the Cedar Mountain at the headwaters of the Virgin and main fork of the Sevier rivers, and of Coal Creek above Cedar City, the snows are at approximately 150 percent of normal. On the Beaver river they are at about 175 percent.

The LaSal mountain snow course in southeastern Utah has a water content of 180 percent of its April 1 average snow water.

The low elevation snows are particularly heavy for this time of year, and unless warmer temperatures reduce them considerably before the main snowpack runoff comes, the melting of these snows will add to the peak flows to come this spring. Moisture in the soils underlying the snowpack is average or above in most parts of the state.

Since streamflow this year is expected to equal or exceed anything that has been experienced for many years, precautions should be taken now to prevent as much damage as possible from high peak flows.

Storage in reservoirs other than those of the Sevier and Beaver rivers is 150 percent of the 1941-50 ten year average and is 63 percent of capacity. The reservoirs of the Sevier river have respectively 43 percent and 32 percent of the ten year average and of capacity. For the Rocky Ford reservoir on the Beaver river the figures are 66 percent and 52 percent.

The present high reservoir storage in northern Utah adds to the danger of damage from flood waters. This is particularly true for the Utah Lake and Jordan river areas and the Weber river since there is insufficient reserve storage space to receive the coming runoff.

Table 1 - Preliminary Streamflow Forecasts - March 1, 1952

Basin and stream	April-Sept. streamflow in 1000 acre feet					July-Sept. streamflow in 1000 acre feet				
		Measured runoff					Measured runoff			
	Forecast 1952	1951	1950	1949	10-year average 1941-50	Forecast 1952	1951	1950	1949	10-year average 1941-50
Bear River System										
Bear River at Harer, Idaho	420.0	408.0	504.4	237.3	280.7	85.0	82.4	99.2	49.6	52.7
Blacksmith Fork River near Hyrum, Utah	95.0	92.9	103.1	64.7	55.1	25.0	28.8	30.8	21.7	18.5
Little Bear near Paradise, Utah	65.0	51.8	65.3	51.7	44.9	5.5	5.3	6.1	4.1	3.9
Logan River near Logan, Utah	200.0		214.0	136.9	134.7	65.0		74.2	42.2	43.8
Weber-Ogden Rivers										
South Fork of Ogden River near Huntsville	95.0	94.9	96.6	77.2	63.6	11.0	10.8	12.2	9.9	8.9
Weber River near Oakley	170.0	147.8	175.6	137.6	129.6	35.0	31.4	38.4	24.2	24.9
Weber River near Coalville	195.0		201.2	157.8	137.3	30.0		34.6	18.0	18.6
Chalk Creek at Coalville	75.0		78.8	46.2	42.0	9.5		9.9	4.8	4.9
East Canyon Creek near Morgan	50.0		43.0	37.1	28.9	4.0		3.3	2.9	2.9
Jordan River & Salt Lake										
Big Cottonwood Creek near Salt Lake City	45.0	41.1	40.2	39.6	40.4	11.0	11.0	11.0	9.5	9.7

Table 1. - Preliminary Streamflow Forecasts - March 1, 1952

Basin and stream	April - Sept. streamflow in 1000 acre feet					July-Sept. streamflow in 1000 acre feet				
		Measured runoff					Measured runoff			
	Forecast 1952	1951	1950	1949	10-year average 1941-50	Forecast 1952	1951	1950	1949	10-year average 1941-50
Provo River & Utah Lake										
American Fork River above Power Plant	50.0		41.2	42.2	36.2	11.0		10.2	9.7	8.7
Provo River below Forks[xx]	230.0		226.6	179.0	160.3	50.0		59.3	42.0	42.6
Sevier River										
Sevier River at Hatch	75.0	22.7	41.5	78.8	65.4	20.0	8.4	13.2	20.5	17.5
Sevier River near Kingston	60.0	7.6	17.3	69.2	48.3	12.0	3.2	4.3	9.1	7.2
Beaver River										
Beaver River near Beaver	59.0	18.1	16.2	39.1	34.4	12.5	5.0	4.0	8.8	7.7
Coal Creek										
Coal Creek near Cedar City	27.5		11.6	24.0	20.6	3.5		1.8	3.1	2.9
Upper Green River										
Ashley Creek near Vernal	75.0	48.6	75.7	73.2	66.1	21.0	19.4	22.4	19.7	19.9

xx Corrected for Storage and Weber Diversion

Table 1 - Preliminary Streamflow Forecasts - March 1, 1952

Basin and stream	April-Sept. streamflow in 1000 acre feet					July-Sept. streamflow in 1000 acre feet				
	Forecast 1952	Measured runoff				Forecast 1952	Measured runoff			
		1951	1950	1949	10-year average 1941-50		1951	1950	1949	10-year average 1941-50
Duchesne River										
Duchesne River near Tabiona	160.0	140.8	159.8	146.2	121.6	35.0	35.6	36.5	29.7	26.3
Lakefork River below Moon Lake[x]	100.0		90.2	95.4	81.7	30.0		23.9	23.9	23.7
Uintah River near Neola	125.0		108.2	129.8	114.4	50.0		37.7	46.7	44.4
Whiterocks near Whiterocks	80.0		77.1	82.7	75.3	25.0		23.7	23.0	23.7
Strawberry at Duchesne	140.0		99.6	110.4	74.5	30.0		20.1	19.5	15.6
Price River										
Price River near Heiner[x]	135.0		75.0	91.2	70.1	10.5		6.2	6.2	7.5
San Rafael River										
Cottonwood Creek near Orangeville, Utah	100.0		42.1	74.4	63.9	15.0		9.0	14.3	11.4
Huntington Creek near Huntington	85.0	56.6	51.3	68.5	58.6	20.0	19.8	18.4	21.7	16.7

x Corrected for storage

Table 2 - Status of reservoir storage about March 1, 1952

Basin and stream	Reservoir	Usable capacity (1000 of acre feet)	1000 acre feet in storage March 1				
			1952	1951	1950	1949	10-year average 1941-50
Bear River System							
Bear River	Bear Lake	1420.0	968.6	1060.0	953.5	950.1	675.7
Little Bear River	Hyrum	15.3	10.4	10.3	10.4	10.6	11.7
Weber-Ogden Rivers							
Ogden River	Pine View	44.2	1.9	17.5	10.4	1.6	5.1
Weber River	East Canyon	28.7	14.0	17.1	16.5	15.4	17.8
Weber River	Echo	73.9	35.1	45.2	29.8	12.5	22.8
Provo River and Utah Lake							
Provo River	Deer Creek	147.3	111.0	127.0	116.2	98.8	54.4
Spanish Fork River	Strawberry°	270.0	126.2	116.2	93.4	74.9	70.0
Utah Lake	Utah Lake°	850.2	772.9	696.1	702.5	639.2	
Sevier River System							
Sevier River	Otter Creek	52.5	18.2	28.2	50.2	25.1	38.4
Sevier River	Piute	84.8	33.0	39.0	60.0	44.0	54.3
Sevier River	Sevier Bridge	236.0	66.8	120.9	172.6	185.0	179.4
Beaver River							
Beaver River	Rocky Ford	23.3	12.0	10.2	19.5	13.3	18.2
Duchesne River							
Lake Fork River	Moon Lake	35.8	No Report	No Report	18.0	9.0	16.1
Price River							
Price River	Schofield	65.9	31.6	30.9	24.0	5.1	8.0 *

* Eight year record

o Figures for the Strawberry Reservoir obtained from the reports of the Spanish Fork River Commissioner. Utah Lake figures are from the report of the Utah Lake and Jordan River Water Commissioner. All other data contained in this table supplied by U.S.G.S.

Table 3 - Utah Snow Surveys - about March 1, 1952

Drainage Basin and Snow Course Name	Snow Course Number	Location			Elev.	SNOW COVER MEASUREMENTS									
						Date of Survey 1952	Snow Depth (inches) 1952	WATER CONTENT (INCHES) About March 1						Ave. April 1	March 1 as % of April 1 average
		Sec.	Twp.	Range				1952	1951	1950	years of record	av. water content (inches)	% of ave.		
						GREAT BASIN DRAINAGE									
Bear River System															
Franklin Basin (Idaho)	1	1&12	16S[x]	41E[x]	8200	2-23	85.8	30.5	28.6		2	24.2	***	26.3	116
Emigrant Summit (Idaho)	1A	21	12S[x]	42E[x]	7700			N.R						24.3	
Salt River Summit (Wyo.)	1C	32	29N	116W*	7900	2-29	53.8	15.8	15.1	17.1	4	11.1	***	17.5	90
Poison Meadows (Wyo.)	1D	29	30N	116W*	8500	2-26	81.4	25.8	29.7	26.7	1	29.7	***	31.0	83
Spring Hollow (Lower)	4	26	12N	2E	7000	3-1	55.9	21.1	13.4	15.0	26	12.6	167	14.2	149
Spring Hollow (Upper)	5	35	12N	2E	8000	3-1	96.4	30.5	21.6	23.6	27	19.4	157	24.7	123
Mt. Logan	6	3	11N	2E	9000	3-1	114.8	35.6	30.4	31.1	27	23.3	153	27.9	128
Garden City Summit	9	34	14N	4E	8000	2-29	65.2	21.2	20.8	25.5	5	19.7	***	18.7	113
Monte Cristo	12	3	8N	4E	8960	2-25	86.4	31.1	27.1	26.8	3	27.1	***	23.8	131
Girl Hollow	81	5	7N	5E	8400	2-26	81.3	29.4	29.5		1	29.5	***	35.4	***
Mirror Lake**	83	24	1S	9E	10300			N.R	24.7		1	24.7		32.4	
Machine Crossing	84	1	1S	9E	9300			N.R						20.4	
Big Park (Wyo.)	85	7	27N	117W*	8700	2-26	64.7	20.3	21.6		1	21.6	***	27.0	***
Weber Ogden Rivers:															
Monte Cristo	12	3	8N	4E	8960	2-25	86.4	31.1	27.1	26.8	3	27.1	***	23.8	131
Dry Bread Pond	12A	3	7N	4E	8230	2-25	69.0	24.1	18.8	21.6	4	20.1	***	20.3	119
Parley's Canyon Summit	15	9&10	1S	3E	7500	2-26	67.4	24.4	16.4		4	16.6	***	17.5	140
Beaver Creek R. S.	24	28	2S	7E	7500	3-1	49.8	14.9			3	8.5	***	7.6	196
Smith & Morehouse	30	25	1N	7E	7600	2-28	56.5	20.2	12.9		1	12.9	***	12.7	159
Redden Mine (Upper)	31	1	2S	6E	9000	2-27	75.7	27.5	18.0		1	18.0	***	20.0	137
Redden Mine (Lower)	31A	1	2S	6E	8500	2-27	74.0	26.4	16.4		1	16.4	***	19.0	139
Mt. Ogden	74	5	5N	1E	8600	2-29	85.5	32.0	27.5	23.0	2	29.1	***	31.2	***

xBoise Meridian
*6th Principal Meridian
**Previously shown as Bear Head

***Percentage not shown where records are not long enough to give a comparative figure

Table 3 - Utah Snow Surveys - about March 1 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location			Elev.	SNOW COVER MEASUREMENTS									
						Date of Survey 1952	Snow Depth (inches) 1952	WATER CONTENT (INCHES) About March 1						Ave. April 1	March 1 as % of April 1 Average
		Sec.	Twp.	Range				1952	1951	1950	years of record	av.water content (inches)	% of Ave.		
Weber Ogden Rivers: Con't															
Chalk Creek #1	78	17&20	2N	8E	8200	3-3	63.3	21.2	11.1		1	11.1	***	15.2	***
Chalk Creek #2	79	4	1N	8E	9100	3-3	93.5	32.7	21.0		1	21.0	***	27.4	***
Horse Ridge	80	1	6N	4E	8260	2-26	70.1	27.6	25.8		1	25.8	***	30.5	***
Girl Hollow	81	5	7N	5E	8400	2-26	81.3	29.4	29.5		1	29.5	***	35.4	***
Ben Lomond Peak	82	3	7N	1W	8000			N.R	39.0		1	39.0		44.3	
Beaver Creek-Skunk Creek	89	22	8N	3E	7150	2-25	57.0	18.9	New Course						
Chalk Creek #3	90	7	2N	8E	7500	2-27	36.0	10.7	New Course						
Jordan River & Great Salt Lake:															
Lamb's Canyon	14	19	1S	3E	6600			N.R	11.2	14.1	13	13.6		15.3	
Silver Lake	16	35	2S	3E	8720	2-28	88.0	30.6	24.2	25.7	17	20.6	149	25.4	119
Farmington Canyon (Lower)	32	14	3N	4E	6950	2-29	87.8	30.4	21.7		1	21.7	***	25.2	***
Farmington Canyon (Upper)	32A	26	3N	4E	8000	2-29	93.9	33.5	25.0		1	25.0	***	30.3	***
Provo River & Utah Lake:															
Timpanogas Cave Camp	18	27	4S	2E	5500	3-5	35.3	12.0	Hatchy	4.0	10	4.7	255	1.0	***
South Fork R.S.	19	24	4S	2E	6100	3-5	53.0	18.0	4.1	6.2	14	7.5	240	4.3	***
Camp Altamont	20	29	4S	3E	7300	3-5	84.4	29.3	14.7	24.0	17	15.9	184	17.5	167
Timpanogas Divide	21	33	4S	3E	8200	3-5	105.0	38.5	23.9	35.8	17	22.4	172	25.3	152
Daniels-Strawberry Summit	23	20	2S[x]	12W[x]	8000	2-27	70.4	23.9	12.6	17.4	21	13.2	181	14.3	167
Soapstone R.S.	25	9	3S	2E	7800	3-1	58.4	19.1	13.7	13.1	5	11.9	***	11.4	167

xUintah Special Meridian

***Percentage not shown where records are not long enough to give a comparative figure

Table 3 - Utah Snow Surveys - about March 1, 1952 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location			Elev.	SNOW COVER MEASUREMENTS									
						Date of Survey 1952	Snow Depth (inches) 1952	WATER CONTENT (INCHES) About March 1						Ave. April 1	March 1 as % of April 1 Average
		Sec.	Twp.	Range				1952	1951	1950	years of record	av. water content (inches)	% of Ave.		
Provo River & Utah Lake: Con't															
Trial Lake	26	5	2S	9E	9800	3-1	100.8	31.7	28.2	33.3	6	24.3	***	25.7	123
Lost Lake	28	33	1S	9E	9900	3-1	99.7	30.8	N.R	30.7	2	25.5	***	23.8	130
East Portal	33	36	7S	6E	7560	2-29	67.8	23.4	11.4	14.9	17	10.8	216	11.8	198
Strawberry Divide	33A	34-35	7S	6E	8000	2-29	93.6	34.4	21.2	22.7	16	17.3	199	20.3	170
Payson R. S.	68	30	10S	3E	8840	3-1	80.5	25.9	N.R	16.7	4	12.7	***	18.0	144
Mt. Baldy	87	19	19S	4E	9500	2-28	86.0	29.2						21.3	***
Beaver Dams	87A	27	19S	3E	8000	2-28	55.4	17.8						8.8	***
Sevier River:															
Gooseberry Reservoir	41	25	13S	5E	8700	2-29	77.9	29.6	17.4	20.6	8	18.2	***	18.8	158
Mammoth R.S.-Cottonwood Cr.	42	13-23	13S	5E	8800	2-29	82.1	30.6			6	19.0	***	20.1	152
Huntington-Horseshoe	43	12	14S	5E	9800	2-29	93.0	36.0	23.3	18.7	3	22.6	***	24.2	149
G.B.E.S. Headquarters	45	21	17S	4E	8700	2-28	71.3	25.8	10.8		14	12.5	206	15.9	162
G.B.E.S. Meadows	46	26-27	17S	4E	10000	2-28	96.4	34.7	19.4	19.9	2	19.6	***	23.8	146
Seeley Creek R.S. #2	48A	25	17S	4E	10000	2-28	65.7	25.8	N.R	N.R			***	14.9	173
Gooseberry R.S.	50	32	23S	2E	8400	3-1	44.1	12.3	6.8		1	6.8	***	9.8	126
Farnsworth Lake	50A	27	23S	2E	9900	3-1	60.1	18.7					***	13.0	***
Widtsoe-Escalante Summit	53	22	34S	1W	9500	2-29	61.7	9.3	1.6	4.4	15	7.7	121	8.6	108
Widtsoe-Escalante #2	53A	22	34S	1W	9500	2-29	42.1	12.5	2.2	6.3	2	4.2	***	4.6	***
Panguitch Lake	55	4-5	36S	7W	8200	2-29	28.8	8.6						6.5	132
Gravel Springs Junction	56	22	38S	6W	7500	2-26	32.4	11.0	2.7	5.3	3	5.7	***	5.3	208
Harris Flat R.S.	57	24	38S	7W	7700	2-26	45.7	14.9	4.7	10.0	8	10.6	***	9.4	159
Duck Creek R.S.	58	11	38S	8W	8560	2-26	66.3	22.1	7.1	16.9	7	14.1	***	16.6	133
Cedar Breaks	59	2	37S	9W	10590	2-25	78.9	27.3	11.7	19.7	7	18.5	***	24.6	111
Big Flat	63B	18	29S	4W	10000	3-5	95.1	27.8	18.6		4	14.3	***	20.3	137

***Percentage not shown where records are not long enough to give a comparative figure

Table 3 - Utah Snow Surveys - about March 1, 1952 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location			Elev.	SNOW COVER MEASUREMENTS									
						Date of Survey 1952	Snow Depth (inches) 1952	WATER CONTENT (INCHES) About March 1						Ave. April 1	March 1 as % of April 1 Average
		Sec.	Twp.	Range				1952	1951	1950	years of record	av.water content (inches)	% of Ave.		
Beaver River:															
Merchant's Valley	63	8-9	29S	5W	8200	3-6	62.1	18.3	9.8		5	9.3	***	10.2	179
Otter Lake	63A	1	29S	5W	9300	3-6	79.6	24.4	13.7		4	12.0	***	16.8	145
Big Flat	63B	18	29S	4W	10000	3-5	95.1	27.8	18.6		4	14.3	***	20.3	137
Coal Creek:															
Cedar Breaks	59	2	37S	9W	10390	2-25	78.9	27.3	11.7	19.7	7	18.5	***	24.6	111
Webster Flat	61	20	37S	9W	9200	2-25	71.7	23.9	7.6		2	11.3	***	17.1	140
COLORADO RIVER DRAINAGE															
Upper Green River:															
Kings Cabin (Upper)	39	22	1S	21E	8800	2-28	39.8	12.3	8.1	14.6	2	11.2	***	9.8	126
Kings Cabin (Lower)	39A	23-26	1S	21E	8600	2-28	33.5	12.0	6.7	13.0	2	9.9	***	9.2	130
Duchesne River:															
Lakefork Mountain	36	2-3	2N[x]	5W[x]	10500			N.R	10.7	10.6	2	10.6		10.2	
Paradise Park	37	7	3N[x]	1E[x]	10500	2-28	48.0	12.6		16.5	1	16.5	***	11.8	107
Mosby Mountain (Lower)	38A	5	2N[x]	1E[x]	9500	2-28	44.7	12.3	6.9	15.2	2	11.1	***	10.4	118
Indian Canyon	40	2	11S	10E	9100	2-29	51.4	16.4	5.5	N.R	13	8.3	198	10.0	164
Mirror Lake	83	24	1S	9E	10300			N.R	24.7		1	24.7		32.4	
Price River:															
Indian Canyon	40	2	11S	10E	9100	2-29	51.4	16.4	5.5	N.R	13	8.3	198	10.0	164
Gooseberry Reservoir	41	25	13S	5E	8700	2-29	77.9	29.6	17.4	20.6	8	18.2	***	18.8	157
Mammoth R.S.-Cottonwood Cr.	42	13&23	13S	5E	8800	2-29	82.1	30.6			6	19.0	***	20.1	152

xUintah Special Meridian

***Percentage not shown where records are not long enough to give a comparative figure

Table 3 - Utah Snow Surveys - about March 1, 1952 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location			Elev.	SNOW COVER MEASUREMENTS									
						Date of Survey 1952	Snow Depth (inches) 1952	WATER CONTENT (INCHES) About March 1						Ave. April 1	March 1 as % of April 1 Average
		Sec.	Twp.	Range				1952	1951	1950	years of record	av. water content (inches)	% of ave.		
Price River: Con't															
Staley Ranch	42A	32	12S	7E	7600	2-29	44.3	14.8	5.5	7.9	11	6.3	235	6.4	232
Dry Valley Divide	42B	20	12S	8E	7800	2-29	54.6	19.2	6.9	15.1	11	9.1	211	10.2	188
Huntington-Horseshoe	43	12	14S	5E	9800	2-29	93.0	36.0	23.3	18.7	3	22.6	***	24.2	149
Scofield Dam	76	22	12S	11W	9000	2-29	53.2	19.8	7.7	13.3	2	10.5	***	12.7	156
Mud Creek	77	4	14S	11W	8600	2-29	74.8	29.8	15.8	14.0	2	14.9	***	17.4	170
San Rafael River:															
Huntington-Horseshoe	43	12	14S	5E	9800	2-29	93.0	36.0	23.3	18.7	3	22.6	***	24.2	149
Seeley Creek R.S.	48A	25	17S	4E	10000	2-28	65.7	25.8	N.R	N.R			***	14.9	173
Virgin River:															
Gravel Springs Junction	56	22	38S	6W	7500	2-26	32.4	11.0	2.7	5.3	3	5.7	***	5.3	208
Harris Flat R.S.	57	24	38S	7W	7700	2-26	45.7	14.9	4.7	10.0	8	10.6	***	9.4	159
Cedar Breaks	59	2	37S	9W	10390	2-25	78.9	27.3	11.7	19.7	7	18.5	***	24.6	111
Webster Flat	61	20	37S	9W	9200	2-25	71.7	23.9	7.6	15.0	2	11.3	***	17.1	140
Pine Valley	62	3	40S	15W	9150	2-19	58.3	21.1			1	23.8	***	18.9	112
Lower Colorado:															
LaSal Mountain	64	5	27S	24E	8800	2-29	51.2	16.0					***	8.9	180

***Percentage not shown where records are not long enough to give a comparative figure

AGENCIES COOPERATING IN UTAH SNOW SURVEYS

U. S. Government Agencies

U. S. Department of Agriculture
- Soil Conservation Service
- Forest Service

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

State of Utah

Utah Agricultural Experiment Station
State Engineer
- Little Bear River Commissioner
- Price River Commissioner
- Provo River Commissioner
- Sevier River Commissioner
- Spanish Fork River Commissioner
- Weber River Commissioner

Municipalities or Quasi-Municipalities

Provo City Corporation
Salt Lake City Corporation
Weber Basin Water Conservancy District

Organized Public Agencies:

Beaver River Water-Users Association
Board of Canal Presidents - Jordan River
Coyote Irrigation Company
Emery Canal and Reservoir Company
Moon Lake Water-Users Association
Ogden River Water-Users Association
Strawberry Water-Users Association
Sevier River Water-Users Association
Provo River Water-Users Association

Public Utilities:

Utah Power and Light Company
Telluride Power and Light Company

FEDERAL - STATE COOPERATIVE

SNOW SURVEYS AND IRRIGATION WATER FORECASTS

for

Utah

By

Division of Irrigation, Soil Conservation Service
United States Department of Agriculture
and
Utah Agricultural Experiment Station

in cooperation with

U. S. Forest Service
U. S. Geological Survey
U. S. National Park Service
State Engineer of Utah
State and Local Irrigation Organizations.

As of

APR. 1, 1952

FEDERAL - STATE COOPERATIVE

SNOW SURVEYS AND IRRIGATION WATER FORECASTS

FOR

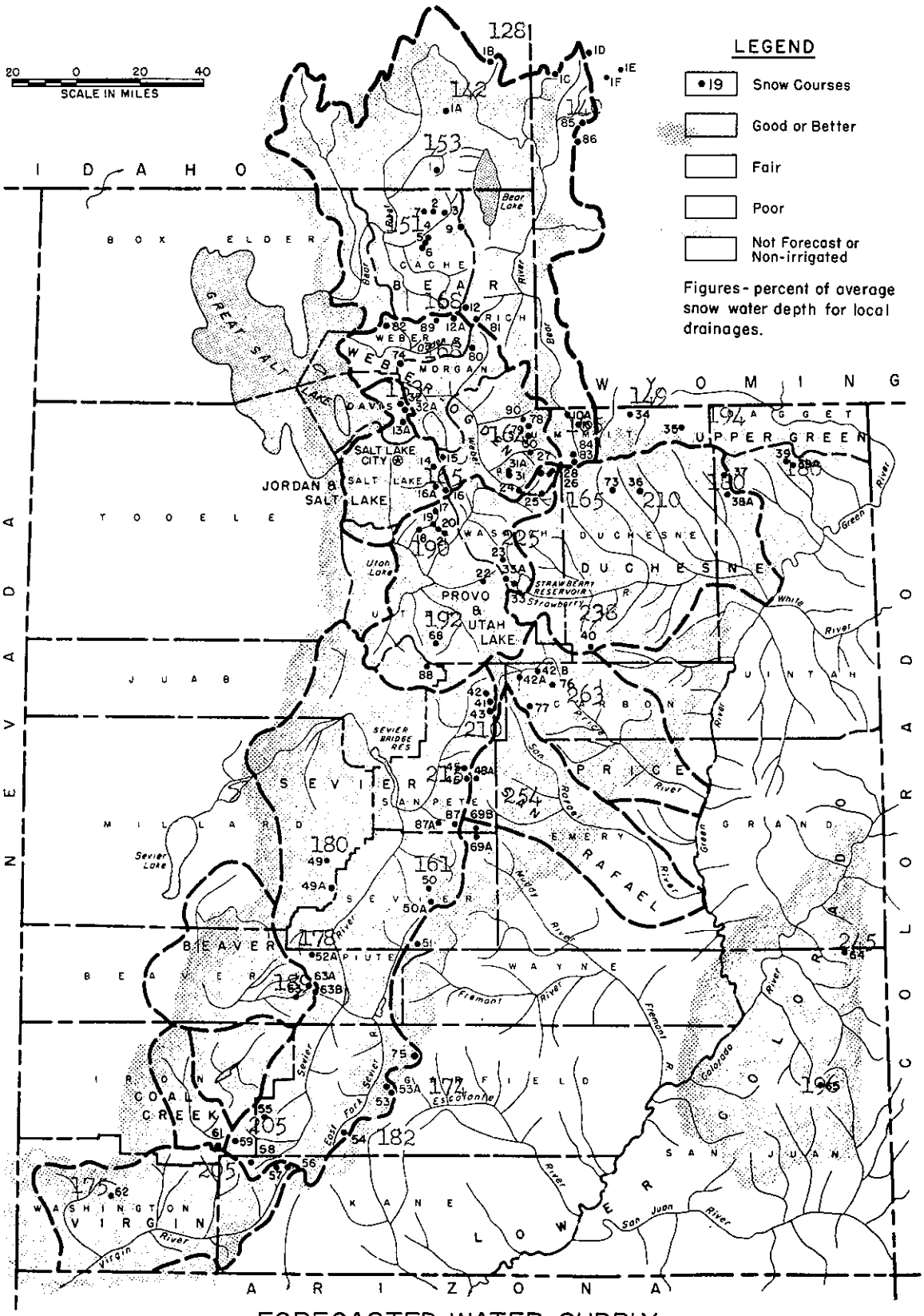
U T A H

April 1, 1952

Report Prepared
by
Gregory L. Pearson - Hydraulic Engineer

Division of Irrigation
U. S. Soil Conservation Service
and
Utah State Agricultural Experiment Station
Logan, Utah

Utah Agricultural Experiment Station Mimeographed Series No. 384



FORECASTED WATER SUPPLY
Based on Snow Surveys Made on UTAH WATERSHEDS
Approximately April 1

WATER SUPPLY OUTLOOK
FOR UTAH
APRIL 1, 1952

All parts of the state have an excellent water supply for the coming summer in snow storage on mountain watersheds. Forecast runoff expressed as a percent of the April-September ten year (1941-50) average varies from 125% on Ashley Creek in the Uintah Basin to 257% on the Price River. Since 55 of 69 snow courses having long time records have equaled or considerably exceeded previous record water content measurements, the great volume of snow water can be expected to produce record or near record peak flows on nearly all streams, with considerable damage to farmlands, homes and other structures in vulnerable areas. Where possible, reservoir storage is being reduced to allow a cushion for peak flows.

With the exception of the Logan river, runoff forecasts are in general increased over those issued a month ago. In other parts of the state, the increase in the snowpack during the month of March was from twice to ten times an average amount.

Heaviest runoff expressed as a percent of the 1941-50 ten year average April-September streamflow is expected to come from the watersheds of the Spanish Fork, San Pitch, San Rafael, Price, Strawberry and southern tributaries of the Provo. These streams will yield from 188% to 257% of average.

Of the streams draining into the Utah Lake and Jordan river area, in addition to the Spanish Fork mentioned above, the Provo river will yield about 175%, the American Fork about 150%, Big Cottonwood 119%, all of the ten year average flow. The snowpack on the streams in the Salt Lake area averages about 165% of their long time average.

On the Weber River, total inflow to the Echo Reservoir will be about 163% of its ten year average, and about 5% more than the 1950 flow. East Canyon Creek near Morgan should yield 195% to 200% of average, about 30% more than in 1950. Flow of the Ogden River will be 173% of average. The lowering of Echo, East Canyon and Pineview reservoirs will help in reducing peak flows during the runoff season. It should be noted that the peak flows in 1950, which caused considerable damage, were near the lower limit of what would be expected from the volume of water which came down the river from the snowpack. This was due to the cold, retarded spring that year which continued through the main runoff season. If melting conditions are average or above

we can expect higher peaks this year than in 1950. This statement of course applies to the other streams of northern Utah which experienced high flows two years ago.

The Bear River at Harer is expected to flow at 160% of the ten year average. In Cache valley, the Logan river's flow should be 145%. This flow is about 10% less than in 1950. The Blacksmith Fork river is set at 180%, or about the same as 1950. The Little Bear river is set at 158%, about 10% more than 1950.

In the Uintah Basin, forecast streamflow increases from 125% on Ashley Creek to 222% on the Strawberry river near Duchesne.

In southern Utah the water supply **picture** is at the opposite extreme from last year's drought condition. The main Sevier river at Hatch should produce 168% of its ten year average, and 197% near Kingston. The snowpack on the East Fork of the Sevier is 175% to 180% of the long time average. The Beaver river near Beaver should yield 189% of the ten year figure, Coal Creek near Cedar City 204%.

The snowpack on the main Virgin river is 205% of average, the Santa Clara 175%.

In southeastern Utah the LaSal mountain snow course has 245% of average snow water. At the course near Monticello it is 196% of average.

Moisture in the soils underlying the snowpack is average or above in most parts of the state.

Reservoir storage varies considerably over the state. The reservoirs of the Weber-Ogden system have only 16% of capacity, having been drawn down so that they can reduce peak streamflows. In the Sevier and Beaver river reservoirs, storage is 42% of capacity and 52% of the ten year average, reflecting the low water supplies of the last two years.

Average storage for Utah Lake, Deer Creek and Strawberry reservoirs is 85% of capacity and 155% of the ten year average. Utah Lake has 99% of capacity.

In eastern and central Utah, Moon Lake and Scofield reservoirs average 57% of capacity. On the Bear river, Bear Lake and Hyrum reservoirs average 67% of capacity.

Average for all reservoirs in the state is 69% of capacity and 124% of the ten year average.

Table 1 - Streamflow forecasts - April 1, 1952

Basin and stream	April-Sept. streamflow in 1000 acre feet					July-Sept. streamflow in 1000 acre feet				
		Measured runoff					Measured runoff			
	Forecast 1952	1951	1950	1949	10-year average 1941-50	Forecast 1952	1951	1950	1949	10-year average 1941-50
GREAT BASIN DRAINAGE										
Bear River System										
Bear River at Harer, Idaho	450.0	408.0	504.4	237.3	280.7	90.0	82.4	99.2	49.6	52.7
Blacksmith Fork River near Hyrum, Utah	100.0	92.9	103.1	64.7	55.1	30.0	28.8	30.8	21.7	18.5
Little Bear near Paradise, Utah	71.0	51.8	65.3	51.7	44.9	6.5	5.3	6.1	4.1	3.9
Logan River near Logan, Utah	195.0	178.5	214.0	136.9	134.7	56.0	53.3	74.2	42.2	43.8
Weber-Ogden Rivers										
South Fork of Ogden River near Huntsville	110.0	94.9	96.6	77.2	63.6	11.0	10.8	12.2	9.9	8.9
Weber River near Oakley	188.0	147.8	175.6	137.6	129.6	34.0	31.4	38.4	24.2	24.9
Chalk Creek at Coalville	80.0	43.5	78.8	46.2	42.0	10.0	6.2	9.9	4.8	4.9
Weber River near Coalville	212.0	150.4	201.2	157.8	137.3	30.0	232	34.6	18.0	18.6
East Canyon Creek near Morgan	57.0		43.0	37.1	28.9	4.0		3.3	2.9	2.9

Table 1 - Streamflow forecasts - April 1, 1952, continued

Basin and stream	April-Sept. streamflow in 1000 acre feet					July Sept. streamflow in 1000 acre feet				
	Forecast	Measured runoff					Measured runoff			
	1952	1951	1950	1949	10-year average 1941-50	Forecast 1952	1951	1950	1949	10-year average 1941-50
Jordan River & Salt Lake										
Big Cottonwood Creek near Salt Lake City	48.0	41.1	40.2	39.6	40.4	10.5	11.0	11.0	9.5	9.7
Provo River & Utah Lake										
American Fork River above Power Plant	54.0	39.6	41.2	42.2	36.2	13.0	10.2	10.2	9.7	8.7
Provo River below Forks[xx]	280.0		226.6	179.0	160.3	65.0		59.3	42.0	42.6
Sevier River										
Sevier River at Hatch	110.0	22.7	41.5	78.8	65.4	25.0	8.4	13.2	20.5	17.5
Sevier River near Kingston	95.0	7.6	17.3	69.2	48.3	15.0	3.2	4.3	9.1	7.2
Beaver River										
Beaver River near Beaver	65.0	18.1	16.2	39.1	34.4	13.0	5.0	4.0	8.8	7.7
Coal Creek										
Coal Creek near Cedar City	42.0		11.6	24.0	20.6	4.5		1.8	3.1	2.9

[xx]Corrected for Storage and Weber Diversion

Table 1 - Streamflow forecasts - April 1, 1952

Basin & Stream	April-Sept. streamflow in 1000 acre feet					July-Sept. streamflow in 1000 acre feet				
		Measured runoff					Measured runoff			
	Forecast 1952	1951	1950	1949	10-year average 1941-50	Forecast 1952	1951	1950	1949	10-year average 1941-50
COLORADO RIVER DRAINAGE										
Upper Green River										
Ashley Creek near Vernal	82.5	48.6	75.7	73.2	66.1	23.0	19.4	22.4	19.7	19.9
Duchesne River										
Duchesne River near Tabiona	180.0	140.8	159.8	146.2	121.6	40.0	35.6	36.5	29.7	26.3
Lakefork River below Moon Lake[x]	125.0	77.4	90.2	95.4	81.7	38.0	23.7	23.9	23.9	23.7
Uinta River near Neola	155.0	89.8	108.2	129.8	114.4	57.0	42.4	37.7	46.7	44.4
Whiterocks near Whiterocks	105.0	60.7	77.1	82.7	75.3	30.0	25.1	23.7	23.0	23.7
Strawberry at Duchesne	165.0	68.6	99.6	110.4	74.5	35.0	18.2	20.1	19.5	15.6
Price River										
Price River near Heiner[x]	180.0	58.0	75.0	91.2	70.1	18.0	5.4	6.2	6.2	7.5
San Rafael River										
Cottonwood Creek near Orangeville, Utah	150.0	49.4	42.1	74.4	63.9	18.0	12.0	9.0	14.3	11.4
Huntington Creek near Huntington	110.0	56.6	51.3	68.5	58.6	23.0	19.8	18.4	21.7	16.7

[x]Corrected for Storage

DETAILS OF WATER FORECAST BY DRAINAGE

Discussions of water supply for each area of the state covered by the Utah Cooperative snow surveys are listed below. The discussions are grouped by drainage basins.

BEAR RIVER DRAINAGE

Bear River at Harer, Idaho

Snow cover on the watersheds of the Bear River above Harer indicate a water supply which will be about 160% of the 10-year 1941-50 average. It will be about 10% more than last year, and 10% less than the 1950 flow.

The average April-September runoff of the Bear River at Harer for the 10-year period is 280,700 acre feet, of which 52,700 acre feet is the average runoff for the July-September months. For the coming season, it is expected that approximately 450,000 acre feet will run off during the April-September period, and 90,000 acre feet during July-September.

Bear Lake has 955,900 acre feet in storage at the present time. This is 67% of capacity and 133% of the 1941-50 10-year average.

Logan River

Snow cover on the Logan river watershed indicates a streamflow which will be about 10% more than last year and about 10% less than in 1950. Although low elevation snows are heavier this year than they were in 1950, the watershed soils are drier under the snowpack than then and will require more soil priming before runoff begins. The average snowpack for the whole watershed is almost identical to that of 1950.

The runoff forecast for the Logan river is set at 195,000 acre feet for the April-September period, and 56,000 acre feet for the July-September months. This compares with the 1941-50 10-year average of 134,700 and 43,800 acre feet for the respective periods.

Blacksmith Fork River

Surveys at the Mt. Logan, Garden City summit and Monte Cristo Ranger station snow courses located on the rim of the Blacksmith Fork watershed indicate a prospective water supply of 181% of the past ten year average, and about the same as in 1950.

The average runoff at the Blacksmith Fork river gaging station near Hyrum for the 10-year period 1941-50 is 55,100 acre feet during the April-September period and 18,500 acre feet during July-September. It is anticipated that the runoff during the coming season will be 100,00 acre feet and 30,00 acre feet for these periods.

Little Bear River

The snow courses at Monte Cristo Ranger Station and Dry Bread Pond furnish an index of the water supply of the Little Bear River. The 39.2 inches water content at Monte Cristo more than the 36.0 inches measured in 1950, and 0.4 inches less than the record of 39.6 inches measured in 1936. At Dry Bread Pond a new record was set when 31.3 inches of water were measured, previous high was 27.0 inches measured in 1950.

Streamflow at the Paradise gaging station is expected to be 71,000 acre feet for the April-September period and 6,500 for July-September. The ten year average flow at the station is 44,900 acre feet and 3,900 acre feet for the respective periods. Hyrum reservoir has 10,400 acre feet at the present time, which is essentially what it has had for the past four years on April 1.

Cub River, Maple Creek, High Creek, Summit Creek

The snow cover at Franklin Basin and Emigrant summit snow courses furnish an index for the runoff from these northern streams in Cache Valley. Streamflow will be higher than last year, and about the same as that of 1950. It will be 140% to 150% of the long time average flow. With normal or above melting temperatures, peak flows will be higher than in 1950.

Providence and Millville Creeks

The runoff of these streams is reflected in measurement of snow on the Mt. Logan snow courses. The snow cover at the 9,000 foot level set a new record this year of 43.8 inches water. The previous record being 42.3 inches measured in 1932. The 8,000 foot level was below the previous record, but essentially the same as that measured in 1950. At the 7,000 foot level, the record of 24.3 measured in 1932 was slightly exceeded by this years measurement of 24.5. Even with more snow this year than in 1950, runoff will probably be about the same, since soils underlying the snowpack are dryer than two years ago. Runoff will be 150% to 160% of average.

WEBER-OGDEN RIVER DRAINAGE

Ogden River

The water content of the Monte Cristo and Dry Bread Pond snow courses which reflect drainage for the south fork of the Ogden River near Huntsville, is 168% of the long time average. The average runoff of the South Fork during the ten year period of 1941-50 is 63,600 and 8,900 acre feet for April-September and July-September respectively. During the coming season the watershed is expected to yield a runoff of approximately 110,000 and 11,000 acre feet for the two periods.

Storage in Pine View reservoir has been drawn down to 3,000 acre feet to help reduce peak flows during the coming high runoff season.

Weber River

The prospective water supply of the Weber River is largely dependent upon the snow cover on the upper regions of the Weber River drainage and is reflected in the snow courses at Parley's Canyon summit, Beaver Creek, Smith and Morehouse, Redden Mine and Trial Lake. The new courses established on Chalk Creek and Lost Creek will also prove of real value when more years of record have accumulated for them. Snow surveys indicate a greater runoff this year than in 1950.

The combined inflow to Echo reservoir from the Weber River and Chalk Creek is forecast at 292,000 acre feet for the April-September period, and 40,000 acre feet for July-September. The 1941-50 ten year averages for these periods are respectively 179,300 and 23,400 acre feet.

East Canyon Creek at Morgan should produce 57,000 and 4,000 acre feet as compared to averages of 28,900 and 2,900 acre feet for the respective forecast periods.

Storage in East Canyon and Echo reservoirs has been reduced to 13,300 acre feet in Echo and 7,100 in East Canyon, allowing a cushioning effect for the high flows to come. If temperatures are average or above, we can expect higher peak flows this year than in 1950. The cushioning effect of the reservoirs at that time will be of real value in reducing flows to minimize damage.

JORDAN RIVER AND SALT LAKE DRAINAGE

Salt Lake Watersheds

Streams draining directly into Great Salt Lake from Farmington south to the Draper area should produce near record flows, since the snow courses in this area have all exceeded their previous record water content measurements made in 1936. Snow cover at 8,000 to 9,000 feet elevation is about 150% of average, the lower snows from 6,500 to 7,500 feet elevation ranging from 175% to 195% of average water dontent.

Big Cottonwood Creek

On Big Cottonwood Creek the measurement of snow at Silver Lake (Brighton) set a new record of 38.2 inches water compared to an average of 25.4 inches and the previous record of 35.5 inches measured in 1936. At Mill D South Fork it was 34.4 inches, a new record, and was 174% of average. The runoff measured at the gaging station near Salt Lake City over the 1941-50 period was 40,400 and 9,700 acre feet for the April-September and July-September periods. The runoff for the coming season is forecast at 48,000 and 10,500 acre feet for the respective periods.

PROVO RIVER AND UTAH LAKE DRAINAGE

Provo River

Every snow course on the Provo river set a new record water content, the courses averaging 153 to 249% of their average. While high elevation snows exceeded their previous records only a small amount, the medium and low elevation snows had as much as 140% to 150% more than previous high records.

Yield from snows at these elevations will be much heavier than usual.

The average runoff of the Provo river below the forks, corrected for diversions and storage above here, for the past ten years shows a yield of 160,300 and 42,600 acre feet for the April-September and July-September periods respectively. From the snow survey data just gathered, it is expected that 280,000 and 65,000 acre feet will be produced from these watersheds.

The Deer Creek reservoir on the Provo River on April 1 had 108,700 acre feet. This is 74% of capacity and 191% of the 1941-50 average.

American Fork River:

Snow cover varies from about 170% to over 250% of average for the courses on the American Fork drainage. All courses have set new records this year. It is expected that the yield at the gaging station above the power plant will be 54,000 and 13,000 acre feet for the April-September and July-September periods. This will be 149% of the ten year average flow.

Hobble, Payson and Santaquin Creeks, and Spanish Fork River:

Hobble Creek Summit, Strawberry Divide, Payson Ranger Station and the Gooseberry Reservoir snow courses provide the data for anticipating expected runoff from these watersheds. Measurements indicate record flows, since all these courses average from 192 to 214% of the average snow water content. Damage will undoubtedly occur along stream channels in vulnerable areas when this high snow pack melts and runs off.

Strawberry Reservoir:

The snow cover on the drainage basin of the Strawberry reservoir is 145% to 150% of the previous high measurements made in the last 18 to 22 years, and is from 214% to 249% of the average snowpack. The reservoir should about fill to capacity. On April 1 it had 131,000 acre feet as compared to the 1941-50 ten year average of 73,200 acre feet.

Utah Lake:

The storage in Utah Lake on April 1 was 842,400 acre feet, or 99% of the capacity of 850,200 acre feet. The preceding ten year average is 568,000 acre feet. With reserve storage space essentially gone, and a record snowpack on the watersheds of the streams draining into Utah Lake and the Jordan River, the Jordan River is sure to undergo severe flooding when the snowpack melts and runoff comes.

SEVIER RIVER SYSTEM

Sevier River Headwaters:

Water supply in snow storage on the watersheds of the main and east forks of the Sevier river is excellent. All snow courses on the main fork have equaled or exceeded previous records, the snowpack for the whole watershed being 205% of average. On the east fork it averages 174% to 182%. It is expected that the Sevier River at Hatch will yield 110,000 and 25,000 acre feet as compared to a 10 year average of 65,400 and 17,500 acre feet for the April-September and July-September periods respectively. At Kingston the yield will be about 95,000 and 15,000 acre feet, or approximately 197% of the ten year average.

Low reservoir storage supplies are sure to be replenished this year, with a good carry over for next season.

Salina Creek:

The Gooseberry Ranger Station snow course has 161% of average snow cover, and has set a new record water content this year. The Farnsworth Lake snow course established last year at high elevation (9,900 feet) had 24.8 inches water compared to last year's 13.0 inches of water.

Clear Creek:

As elsewhere throughout the state, the Kimberly Mine snow course set a new record this year of 29.0 inches of water. This is 178% of the long time average.

San Pitch River:

Snow cover water content measurements on the San Pitch headwaters above Fairview are about one-third higher than has ever been measured since snow surveying started in this area 24 years ago. It varies from 207% to 221% of average. Snow cover above Ephriam shows the same high water content as that above Fairview.

INDEPENDENT STREAMS WEST OF THE WASATCH RANGE

Fillmore Drainage:

Snow surveys on the Pine Creek and Pine Creek-Chalk Creek snow courses show a snowpack of 180% of average, with a new record of 20.6 inches water measured on the Pine Creek-Chalk Creek Course. Average is 11.4 inches, previous high being 17.2 inches of water measured in 1948. The Pine Creek course which only has three years previous record, had 28.4 inches of water.

Beaver River:

The gaging station near Beaver should record a streamflow of about 65,000 acre feet for the April-September period and 13,000 acre feet for July-September. This is 189% of the ten year (1941-50) average

of 34,400 and 7,700 acre feet for these periods. Both Rocky Ford and Three Creeks reservoirs will fill to capacity, with enough water going over the spillway to cause considerable concern in the Milford valley.

Coal Creek:

The Cedar Breaks and Webster Flat snow courses indicate a runoff in Coal Creek for the coming summer which will be about 205% of the 1941-50 ten year average flow. New record water contents were measured at these courses this year, the Webster Flat course being about 25% higher than the previous high measured in 1937. Forecast flow is 42,000 and 4,500 acre feet for the April-September and July-September flows. Ten year average runoff is 20,600 and 2,900 acre feet.

UPPER GREEN RIVER DRAINAGE

Black's Fork and Henry's Fork:

The snow cover at Hewinta Ranger Station measured 13.9 inches of water. The 19 year average is 9.3 inches. Runoff should be the highest it has been since 1936 when the record high measurement of 15.1 inches water was recorded.

Beaver Creek and Burnt Fork:

The Hole-in-the-Rock snow course set a new record when 10.7 inches of water was measured this year. Average is 5.5 inches. The previous high set in 1949 was 8.9 inches water.

Ashley Creek near Vernal:

The average snow cover at the two King's Cabin courses is 180% of average. Runoff is expected to be 82,500 acre feet for the April-September period and 23,000 acre feet for the July-September period. This is approximately 125% of the average for the past ten years.

DUCHESNE RIVER DRAINAGE

Duchesne River near Tabiona:

Snow surveys made at the courses on this watershed indicate a runoff of 148% of the 1941-50 ten year average. The runoff for the April-September period is forecast at 180,000 acre feet as compared with the ten year average of 121,600 acre feet; and for July-September the forecast is 40,000 acre feet as compared to 26,300 acre feet, the ten year average.

Lakefork River below Moon Lake Reservoir:

The snow cover at Brown Duck Lake on Lakefork mountain snow courses provides an index of the runoff of Lakefork river, corrected for storage in Moon Lake. The measurement at Brown Duck Lake shows a water content of 30.8 inches, which is 167% of the 3 year average, and 0.4 inches less than the record of 1949. Lakefork mountain has 21.7 inches which is 213% of the 21 year average. This is a new record, the previous high being 16.0 inches measured in 1950. The forecast flow for April-September is 125,000 acre feet compared to the nine year average of 81,700; and the July-September runoff is expected to be 38,000 acre feet compared to the average of 23,700.

Strawberry River at Duchesne:

Snow cover indicates the highest runoff that has occurred on the Strawberry river since 1922. It is probable that considerable damage may occur in the vicinity of Duchesne when the spring runoff comes. The April-September runoff is forecast at 165,000 acre feet, or 222% of the ten year (1941-50) average of 74,500. For the July-September period the watershed is expected to produce 35,000 acre feet. Average is 15,600 acre feet.

Uinta River at Neola:

Average runoff at the Neola station has been 114,400 acre feet during April-September for the years 1941-50, and 44,400 acre feet for July-September. This year the forecast amount is 155,000 and 57,000 acre feet for these periods.

Whiterocks River at Whiterocks:

The snow courses at Paradise Park and Mosby mountain reflect runoff conditions for the Whiterocks river. This year's surveys show a water content of 180% of average, both courses setting new records. The runoff at the Whiterocks station during the last ten years has averaged 75,300 acre feet during the April-September period and 23,700 during the months of July-September. The forecast for this year is 105,000 and 30,000 acre feet respectively for the two periods.

PRICE RIVER DRAINAGE

Price River near Heiner:

A record snow pack lies on the watershed of the Price river, with all courses, both high and low elevations having set new records. The snowpack varies from 207% to 280% of average, and is from one third to one half more than previous high measurements. The forecast flow for April-September is 180,000 acre feet as compared to 70,100 acre feet for the 1941-50 ten year average. Late season supplies will also be excellent, with about 18,000 acre feet this year as compared to an average of 7,500 acre feet.

This season's runoff will be higher than any recorded since measurements began at the gaging station at Heiner.

SAN RAFAEL RIVER DRAINAGE

Huntington Creek at Huntington:

Runoff of Huntington Creek this year will be approximately 188% of the ten year average. The 1941-50 average runoff at the gaging station has been 58,600 and 16,700 acre feet respectively for the April-September and July-September periods. Flow this year will be about 110,000 acre feet for the April-September period and 23,000 acre feet during the later part of the season.

Cottonwood Creek at Orangeville:

The average April-September runoff from Cottonwood Creek is 63,900 acre feet, and the snow measurement this year indicates that the flow will be 150,000 for the period. The July-September period has an average of 11,400. 18,000 acre feet is the forecast for 1952.

LOWER COLORADO DRAINAGE

LaSal Mountain Area:

Excellent water supplies are in prospect for this area, since water content at the snow course is 245% of the 21 year average. Water content this year was 21.8 inches. Average is 8.9 inches. Previous high, measured in 1949 was 18.2 inches.

Blue Mountain Area:

The Buckboard flat snow course has 196% of its 22 year average. The March 29 survey disclosed a water content of 26.6 inches, compared to the average of 13.6 inches and the previous high of 26.3 inches measured in 1949.

VIRGIN RIVER DRAINAGE

The snow courses at Long Valley Junction, Harris Flat Ranger Station, Duck Creek Ranger Station, Cedar Breaks and Webster Flat furnish an index of the amount of water that will flow out of the Virgin River watershed. Since all of these courses have equaled or exceeded all previous water content measurements, a record streamflow is sure to result during the coming runoff season. The snowpack for the watershed is 205% of average. Soils underlying the snowpack are very moist.

Santa Clara near Central:

As elswhere in the state this year, a new record was set on the Pine Mountain snow course. It was measured at 33.1 inches of water, and compares with the 15 year average of 18.9 inches. This indicates a flow of 175% of average.

Table 2 - Status of reservoir storage about April 1, 1952

Basin and stream	Reservoir	Usable capacity (1000 of acre feet)	1000 acre feet in storage April 1				
			1952	1951	1950	1949	10-year average 1941-50
Bear River System							
Bear River	Bear Lake	1420.0	1,023.0 ~~955.9~~	1043.0	1022.0	984.4	720.0
Little Bear River	Hyrum	15.3	~~10.4~~ 15.8	10.4	10.6	10.8	12.6
Weber-Ogden Rivers							
Ogden River	Pine View	44.2	16.5 ~~3.0~~	10.5	5.8	4.8	9.2
Weber River	East Canyon	23.7	18.3 ~~7.1~~	18.0	20.1	9.9	19.7
Weber River	Echo	73.9	~~13.3~~ 46.2	48.2	43.9	14.0	33.1
Provo River and Utah Lake							
Provo River	Deer Creek	147.3	119.6 ~~108.7~~	127.0	120.7	102.3	56.8
Spanish Fork River	Strawberry°	270.0	227.5 ~~131.0~~	119.2	97.2	77.9	73.2
Utah Lake	Utah Lake°	850.2	953.3 ~~842.4~~	730.0	735.6	697.9	568.0
Sevier River System							
Sevier River	Otter Creek	52.5	50.0 ~~24.6~~	28.0	53.8	31.4	43.4
Sevier River	Piute	84.8	71.3 ~~43.9~~	45.5	67.1	55.0	64.6
Sevier River	Sevier Bridge	236.0	~~85.5~~ 236.0	129.8	185.4	204.4	195.9
Beaver River							
Beaver River	Rocky Ford	23.3	21.1 ~~13.1~~	11.3	20.5	17.3	19.9
Duchesne River							
Lake Fork River	Moon Lake	35.8	21.1 ~~22.7~~	20.5	20.0	10.2	17.8
Price River							
Price River	Scofield	65.0	50.9 ~~33.0~~	31.8	25.7	6.5	11.8

°Figures for the Strawberry Reservoir obtained from the reports of the Spanish Fork River Commissioner. Utah Lake figures are from the report of the Utah Lake and Jordan River Water Commissioner. All other data contained in this table supplied by U. S. G. S.

Table 3 - Utah Snow Surveys - about April 1, 1952

Drainage Basin and Snow Course Name	Snow Course Number	Location Sec.	Location Twp.	Location Range	Elev.	SNOW COVER MEASUREMENTS Date of Survey 1952	Snow Depth Inches 1952	WATER CONTENT (INCHES) ABOUT APRIL 1 1952	1951	1950	years April 1 record	av. water content inches	% of Av.	Highest Recorded Water Content inches	year
GREAT BASIN DRAINAGE															
Bear River System															
Franklin Basin (Idaho)	1	1&12	16S[x]	41E[x]	8200	3-31	98.3	40.2	32.8	41.3	28	26.3	153	41.3	1950
Emigrant Summit (Idaho)	1A	21	12S[x]	42E[x]	7700	3-27	92.1	34.5	27.8	32.7	16	24.3	142	43.4	1936
Slug Creek Divide (Idaho)	1B	10&15	10S[x]	44E[x]	7300	3-28	63.0	20.2	17.5	24.2	16	15.8	128	28.0	1936
Salt River Summit (Wyo.)	1C	32	29N	118W*	7900	3-29	59.0	19.5	18.0	22.3	4	17.5	xxx	22.3	1950
Poison Meadows(Wyo.) **	1D	29	30N	116W*	8500	3-29	94.0	31.0	39.0	34.7	4	31.0	xxx	39.0	1951
Snyder Basin R. S. (Wyo.)**	1E	15	29N	114W*	8040	3-27	55.0	18.0	22.1	19.2	15	13.4	134	23.4	1943
Piney-LaBarge**	1F	19	29N	114W*	8820	3-27	71.0	25.0	24.8	24.4	15	17.9	140	29.7	1943
Tony Grove Lake	2	5	13N	3E	8200	3-29	115.6	47.6	52.0	N.R	26	34.0	140	54.9	1943
Tony Grove R. S.	3	11	13N	3E	6250	3-29	47.6	17.6	15.1	14.0	23	9.8	180	23.5	1936
Spring Hollow (Lower)	4	26	12N	2E	7000	3-29	64.5	24.5	14.6	19.8	27	14.2	172	24.3	1932
Spring Hollow (Upper)	5	35	12N	2E	8000	3-29	96.7	34.6	30.4	34.7	28	24.5	141	36.5	1932
Mt. Logan	6	3	11N	2E	9000	3-29	105.8	43.8	37.4	41.9	28	28.8	152	42.3	1932
Garden City Summit	9	34	14N	4E	8000	3-28	71.9	26.6	24.4	28.9	21	18.7	142	33.9	1936
Head of Bear River	10	15	2N	10E	8600	3-29	44.7	13.2	6.3	13.6	17	8.1	163	14.2	1936
Goodman Ranch	10A	19	3N	10E	7900	3-29	33.0	9.9	4.8	10.3	14	4.7	210	10.3	1950
Monte Cristo	12	3	8N	4E	8960	4-2	101.3	39.2	31.4	36.0	19	23.8	165	39.6	1936
Lost Lake	28	33	1S	9E	9900	3-29	104.2	38.1	32.2	35.7	19	23.8	160	35.7	1950
Girl Hollow	81	5	7N	5E	8400	4-1	101.0	36.1	35.4		1	35.4	xxx		
Mirror Lakexx	83	24	1S	9E	10300	3-29	117.1	42.4	32.4		1	32.4	xxx		
Machine Crossing	84	1	1S	9E	9300	3-27	73.8	24.8	20.4		1	20.4	xxx		
Big Park (Wyo.)	85	7	27N	117W*	8700	3-29	76.9	27.2	27.5		1	27.5	xxx		
Kelly Ranger Station (Wyo.)	86	13	26N	118W*	8200	3-29	66.1	22.9	22.5		1	22.5	xxx		

x Boise Meridian
* 6th Principal Meridian

xx Previously shown as Bear Head
** On Adjacent Drainage

xxxPercentage not shown where record is not long enough to give a comparative figure

Table 3 - Utah Snow Surveys - about April 1, 1952 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location Sec.	Location Twp.	Location Range	Elev.	SNOW COVER MEASUREMENTS: Date of Survey 1952	Snow Depth Inches 1952	WATER CONTENT (INCHES) ABOUT APRIL 1: 1952	1951	1950	years April 1 Record	Av. Water Content Inches	% of Av.	Highest Recorded Water Content inches	year
Weber-Ogden Rivers															
Monte Cristo	12	3	8N	4E	8960	4-2	101.3	39.2	31.4	36.0	19	23.8	165	39.6	1936
Dry Bread Pond	12A	3	7N	4E	8230	4-2	80.1	31.3	21.1	27.0	14	18.2	172	27.0	1950
Parley's Canyon Summit	15	9&10	1S	3E	7500	3-26	87.8	31.3	18.0	21.6	18	17.5	179	24.8	1949
Silver Lake**	16	35	2S	3E	8725	3-26	113.7	38.2	31.9	32.8	21	25.4	150	35.5	1936
Beaver Creek R. S.	24	28	2S	7E	7500	3-29	51.6	18.6	8.0	11.2	20	7.6	245	14.0	1936
Trial Lake**	26	5	2S	9E	9800	3-29	108.2	39.3	33.9	38.0	21	25.7	153	38.0	1950
Smith & Morehouse	30	25	1N	7E	7600	3-29	65.3	24.3	14.9	19.5	23	12.7	191	19.5	1950
Redden Mine (Upper)	31	1	2S	6E	9000	3-28	89.9	34.5	21.2	30.9	22	20.0	172	30.9	1950
Redden Mine (Lower)	31A	1	2S	6E	8500	3-27	88.9	34.0	20.3	29.3	22	19.0	179	29.3	1950
Mt. Ogden	74	5	5N	1E	8600	3-28	116.1	48.8	32.8	30.7	4	31.2	xxx	36.7	1948
Chalk Creek #1	78	17&20	2N	8E	8200	3-31	72.5	25.6	15.2		1	15.2	xxx		
Chalk Creek #2	79	4	1N	8E	9100	3-31	106.8	39.2	27.4		1	27.4	xxx		
Chalk Creek #3	90	7	2N	8E	7500	3-31	45.7	14.5	New	Course					
Horse Ridge	80	1	6N	4E	8260	4-1	96.5	35.5	30.5		1	30.5	xxx		
Girl Hollow	81	5	7N	5E	8400	4-1	101.0	36.1	35.4		1	35.4	xxx		
Ben Lomond Peak	82	3	7N	1W	8000	3-29	123.6	48.8	44.3		1	44.3	xxx		
Beaver Creek-Skunk Creek	89	22	8N	3E	7150	4-2	61.7	24.0	New	Course					
Jordan River & Great Salt Lake															
Barnard Creek	13A	34	3N	1E	8000	3-28	108.4	41.7	26.6	30.3	16	27.3	153	41.7	1936
Lamb's Canyon	14	19	1S	3E	6600	4-4	73.3	29.6	14.1	18.2	17	15.3	193	22.7	1936
Silver Lake	16	35	2S	3E	8720	3-26	113.7	38.2	31.9	32.8	21	25.4	150	35.5	1936
Mill D. South Fork	16A	18	2S	3E	7400	4-3	92.6	34.4	21.6	20.7	17	19.8	174	31.6	1936
Farmington Canyon (Lower)	32	14	3N	4E	6950	3-26	110.9	40.2	25.2		1	25.2	xxx		
Farmington Canyon (Upper)	32A	26	3N	4E	8000	3-26	122.1	42.2	30.3		1	30.3	xxx		

**On Adjacent Drainage

xxxPercentage not shown where record is not long enough to give a comparative figure.

Table 3 - Utah Snow Surveys - about April 1, 1952 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location Sec.	Location Twp.	Location Range	Elev	SNOW COVER MEASUREMENTS: Date of Survey 1952	Snow Depth Inches 1952	WATER CONTENT (INCHES) ABOUT APRIL 1: 1952	1951	1950	years April 1 Record	av. water content inches	% of Av.	Highest Recorded Water Content inches	year
Provo River & Utah Lake															
Dutchman R. S.	17	27	3S	3E	7500	4-1	87.0	35.8	22.6	26.6	21	18.2	197	28.7	1936
Timpanogas Cave Camp	18	27	4S	2E	5500	3-29	40.4	14.5	N.S	N.S	17	1.0	---	5.6	1944
South Fork R. S.	19	24	4S	2E	6100	3-29	55.1	22.1	Patchy	5.5	17	4.3	---	11.4	1942
Camp Altamont	20	29	4S	3E	7300	3-29	84.1	35.5	14.6	26.8	17	17.5	203	26.8	1950
Timpanogas Divide	21	33	4S	3E	8200	3-29	107.4	43.6	25.4	40.0	17	25.3	172	40.0	1950
Hobble Creek Summit	22	20	7S	5E	7300	3-27	84.3	29.5	14.9	17.4	16	13.5	218	20.7	1936
Daniels-Strawberry Summit	23	20	2S[x]	12W[x]	8000	3-27	89.0	31.8	12.8	20.3	22	14.3	222	22.4	1949
Soapstone R. S.	25	9	3S	2E	7800	3-29	64.5	24.0	13.7	16.0	21	11.4	211	19.2	1943
Trial Lake	26	5	2S	9E	9800	3-29	108.2	39.3	33.9	38.0	21	25.7	153	38.0	1950
Washington-Long Lake	27	1	2S	8E	10300			N.R	39.3	39.0	19	29.4		43.5	1936
Lost Lake	28	33	1S	9E	9900	3-29	104.2	38.1	32.2	35.7	19	23.8	160	35.7	1950
East Portal	33	36	7S	6E	7560	3-28	73.4	29.4	11.0	17.4	18	11.8	249	19.2	1936
Strawberry Divide	33A	34-35	7S	6E	8000	3-28	107.0	43.4	22.5	26.0	18	20.3	214	31.7	1936
Payson R. S.	68	30	10S	3E	8840	3-28	94.1	34.5	13.4	21.9	8	18.0	192	21.9	1950
Mirror Lake** xx	83	24	1S	9E	10300	3-29	117.1	42.4	32.4		1		xxx		
Sevier River															
Gooseberry Reservoir	41	25	13S	5E	8700	3-28	106.5	41.5	17.7	22.9	24	18.8	221	29.0	1936
Mammoth R. S.-Cottonwood Cr.	42	13&23	13S	5E	8800	3-28	109.9	42.0	18.6	23.8	23	20.1	209	31.2	1936
Huntington-Horseshoe	43	12	14S	5E	9800	3-28	124.1	50.0	22.4	21.6	22	24.2	207	37.6	1936
G.B.R.C. Headquarters	45	21	17S	4E	8700	3-27	96.2	34.6	11.3	18.1	22	15.9	218	23.5	1936
G.B.R.C. Meadows	46	26-27	17S	4E	10000	3-28	125.2	50.6	21.2	25.6	22	23.8	213	32.6	1936
Seeley Creek R.S. #2**	48A	25	17S	4E	10000	3-27	94.3	37.8	13.0	11.6	22	14.9	254	20.8	1936
Pine Creek-Chalk Creek	49	14	22S	4W	8500	3-28	71.0	20.6	3.6	9.2	21	11.4	180	17.2	1948
Pine Creek	49A	24	22S	4W	8700	3-28	83.1	28.4	6.2	11.3	3	4.6	xxx	16.4	1949

x Uinta Special Meridian
xx Previously shown as Bear Head
** On Adjacent Drainage

xxxPercentage not shown where records are not long enough to give a comparative figure

Table 3 - Utah Snow Surveys - About April 1, 1952 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location			Elev	SNOW COVER MEASUREMENTS									
						Date of Survey 1952	Snow Depth Inches 1952	WATER CONTENT (INCHES) ABOUT APRIL 1						Highest Recorded Water Content	
		Sec.	Twp.	Range				1952	1951	1950	Years April 1 Record	av. water content inches	% of Av.	inches	years
Sevier River, Cond't															
Gooseberry R. S.	50	32	23S	2E	8400	3-28	59.5	15.8	7.4	10.1	22	9.8	161	14.4	1948
Farnsworth Lake	50A	27	23S	2E	9900	3-28	82.0	24.8	13.0		1	13.0	xxx		
Fish Lake	51	35	26S	1E	8700	3-28	57.9	18.0	4.7	8.1	22	5.8	310	9.5	1949
Kimberly Mine	52A	11	27S	5W	8900	3-25	83.2	29.0	8.0	14.3	17	16.3	178	24.4	1937
Widtsoe-Escalante Summit	53	22	34S	1W	9500	3-28	48.2	15.0	0.4	3.0	20	8.6	174	19.6	1949
Widtsoe-Escalante #2	53A	22	34S	1W	9500	3-28	57.9	18.2	2.8	6.4	2	4.6	xxx	6.4	1950
Bryce Canyon	54	36	36S	4W	8000	3-25	44.5	12.4	N.S	N.S	12	6.8	182	13.6	1937
Panguitch Lake	55	4-5	36S	7W	8200	3-27	42.6	14.2	N.S	2.4	17	6.5	218	11.4	1937-1944
Long Valley Junction*	56	22	38S	6W	7500	3-28	38.1	14.1	N.S	N.S	15	5.3	266	13.7	1937
Harris Flat R. S.	57	24	38S	7W	7700	3-26	57.5	21.1	N.S	8.7	21	9.4	224	21.2	1937
Duck Creek R. S.	58	11	38S	8W	8560	3-26	87.4	32.7	7.2	15.5	17	16.6	197	28.9	1937
Cedar Breaks	59	2	37S	9W	10390	3-26	116.3	44.7	10.2	19.1	17	24.6	182	41.2	1937
Big Flat**	63B	18	29S	4W	10000	4-1	96.2	35.0	14.9	15.5	16	20.3	172	28.4	1949
Mt. Baldy R. S.	87	19	19S	4E	9500	3-26	117.8	40.5	21.3		1	21.3	xxx		
Beaver Dams	87A	27	19S	3E	8000	3-26	76.0	24.6	8.8		1	8.8	xxx		
Beaver River															
Merchants Valley ***	63	8-9	29S	5W	8200	4-1	61.8	22.7	5.2	8.6	21	10.9	208	18.2	1949
Otter Lake ***	63A	1	29S	5W	9300	3-31	87.8	31.2	10.5	12.3	16	16.8	186	25.2	1949
Big Flat ***	63B	18	29S	4W	10000	4-1	96.2	35.0	14.9	15.5	16	20.3	172	28.4	1949
Coal Creek															
Cedar Breaks	59	2	37S	9W	10390	3-26	116.3	44.7	10.2	19.1	17	24.6	182	41.2	1937
Webster Flat	61	20	37S	9W	9200	3-26	99.9	37.3	6.6	14.1	25	17.1	218	30.0	1937

*Previously shown as Gravel Springs Junction
**On Adjacent Drainage
***Telegraphic report

xxx Percentage not shown where records are not long enough to give a comparative figure

Table 3 - Utah Snow Surveys - About April 1, 1952 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location Sec.	Location Twp.	Location Range	Elev.	SNOW COVER MEASUREMENTS Date of Survey 1952	Snow Depth Inches 1952	WATER CONTENT (INCHES) ABOUT APRIL 1 1952	1951	1950	years April 1 Record	Av. Water Content Inches	% of Av.	Highest Recorded Water Content inches	year
			COLORADO		RIVER	DRAINAGE									
Upper Green River															
Hewinta R. S.	34	33	3N	13E	9500	3-28	51.8	13.9	9.9	11.6	19	9.3	149	15.1	1936
Hole-In-The-Rock***	35	13	2N	15E	9150	4-1	37.7	10.7	5.4	5.7	20	5.5	194	8.9	1949
Kings Cabin (Upper)	39	22	1S	21E	8800	3-30	58.9	18.4	8.2	13.1	22	9.8	188	17.6	1932
Kings Cabin (Lower)	39A	23-26	1S	21E	8600	3-30	52.5	15.9	6.6	13.1	22	9.2	173	16.3	1932
Duchesne River															
Lost Lake	28	33	1S	9E	9900	3-29	104.2	38.1	32.2	35.7	19	23.8	160	35.7	1950
Lakefork Mountain	36	2-3	2N[x]	5W[x]	10500	3-28	71.7	21.7	10.6	16.0	21	10.2	213	16.0	1950
Paradise Park***	37	7	3N[x]	1E[x]	10500	4-1	67.1	20.7	7.4	19.9	20	11.8	175	19.9	1950
Mosby Mountain (Lower) ***	38A	5	2N[x]	1E[x]	9500	4-1	62.4	19.4	8.8	17.0	22	10.4	186	17.0	1950
Indian Canyon	40	2	11S	10E	9100	3-31	68.3	23.8	7.7	15.6	22	10.0	238	20.1	1949
Brown Duck Lake***	73	2	2N[x]	6W[x]	10300	4-1	83.5	30.8	17.8	23.7	8	18.4	167	31.2	1949
Mirror Lake xx	83	24	1S	9E	10300	3-29	117.1	42.4	32.4		1		xxx		
Price River															
Indian Canyon	40	2	11S	10E	9100	3-31	68.3	23.8	7.7	15.6	22	10.0	238	20.1	1949
Gooseberry Reservoir	41	25	13S	5E	8700	3-28	106.5	41.5	17.7	22.9	24	18.8	221	29.0	1936
Mammoth R.S.-Cottonwood Cr.	42	13-23	13S	5E	8800	3-23	109.9	42.0	18.6	23.8	23	20.1	209	31.2	1936
Staley Ranch	42A	32	12S	7E	7600	3-29	50.8	17.9	2.8	8.5	16	6.4	280	12.8	1944
Dry Valley Divide	42B	20	12S	8E	7800	3-29	64.8	25.2	7.8	15.0	17	10.2	247	17.4	1949
Huntington-Horseshoe	43	12	14S	5E	9800	3-28	124.1	50.0	22.4	21.6	22	24.2	207	37.6	1936
Scofield Dam	76	22	12S	11W	9000	3-29	62.5	24.1	8.0	15.2	3	12.7	xxx	15.2	1950
Mud Creek	77	4	14S	11W	8600	3-29	97.1	38.3	15.7	18.3	3	17.4	xxx	18.3	1949-1950

xUinta Special Meridian ***Telephone or telegraphic report

xx Previously shown as Bear Head xxx Percentage not shown where records are not long enough to give a comparative figure

Table 3 - Utah Snow Surveys - about April 1, 1952 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location Sec.	Location Twp.	Location Range	Elev.	SNOW COVER MEASUREMENTS: Date of Survey 1952	Snow Depth Inches 1952	WATER CONTENT (INCHES) ABOUT APRIL 1: 1952	1951	1950	years April 1 Record	Av. Water Content Inches	% of Av.	Highest Recorded Water Content inches	year
San Rafael River															
Huntington-Horseshoe	43	12	14S	5E	9800	3-28	124.1	50.0	22.4	21.6	22	24.2	207	37.6	1936
Seeley Creek R. S.	48A	25	17S	4E	10000	3-27	94.3	37.8	13.0	11.6	22	14.9	254	20.8	1936
Muddy River															
Black Fork	69A	34	20S	4E	9200			N.R	14.4	18.0	6	14.4		18.0	1950
Dill's Camp	69B	27	20S	4E	9200			N.R	10.3	12.2	5	11.8		16.4	1949
Mt. Baldy R. S.**	87	19	19S	4E	9500	3-26	117.8	40.5	21.3		1		xxx		
Virgin River															
Long Valley Junction x	56	22	38S	6W	7500	3-28	38.1	14.1	N.S	N.S	15	5.3	266	13.7	1937
Harris Flat R. S.	57	24	38S	7W	7700	3-26	57.5	21.1	N.S	8.7	21	9.4	224	21.2	1937
Duck Cr. R. S.	58	11	38S	8W	8560	3-26	87.4	32.7	7.2	15.5	17	16.6	197	28.9	1937
Cedar Breaks	59	2	37S	9W	10390	3-26	116.3	44.7	10.2	19.1	17	24.6	182	41.2	1937
Webster Flat	61	20	37S	9W	9200	3-26	99.9	37.3	6.6	14.1	25	17.1	218	30.0	1937
Pine Valley	62	3	40S	15W	9150	3-31	83.2	33.1	6.4	14.8	15	18.9	175	27.6	1941
Lower Colorado River															
LaSal Mountain ***	64	5	27S	24E	8800	4-1	62.2	21.8	4.9	12.5	21	8.9	245	18.2	1949
Buckboard Flat	65	36	33S	22E	9000	3-29	73.0	26.6	6.6	13.1	22	13.6	196	26.3	1949
MARCH DATA RECEIVED AFTER BULLETIN WAS DISTRIBUTED															
Ben Lomond Peak	82	3	7N	1W	8000	3-8	112.9	40.6							

**On Adjacent Drainage

x Previously shown as Gravel Springs Junction

***Telephone report

xxxPercentage not shown where record is not long enough to give a comparative figure

AGENCIES COOPERATING IN UTAH SNOW SURVEYS

U. S. Government Agencies

U. S. Department of Agriculture
- Soil Conservation Service
- Forest Service

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

State of Utah

Utah Agricultural Experiment Station

State Engineer
- Little Bear River Commissioner
- Price River Commissioner
- Provo River Commissioner
- Sevier River Commissioner
- Spanish Fork River Commissioner
- Weber River Commissioner

Municipalities or Quasi-Municipalities

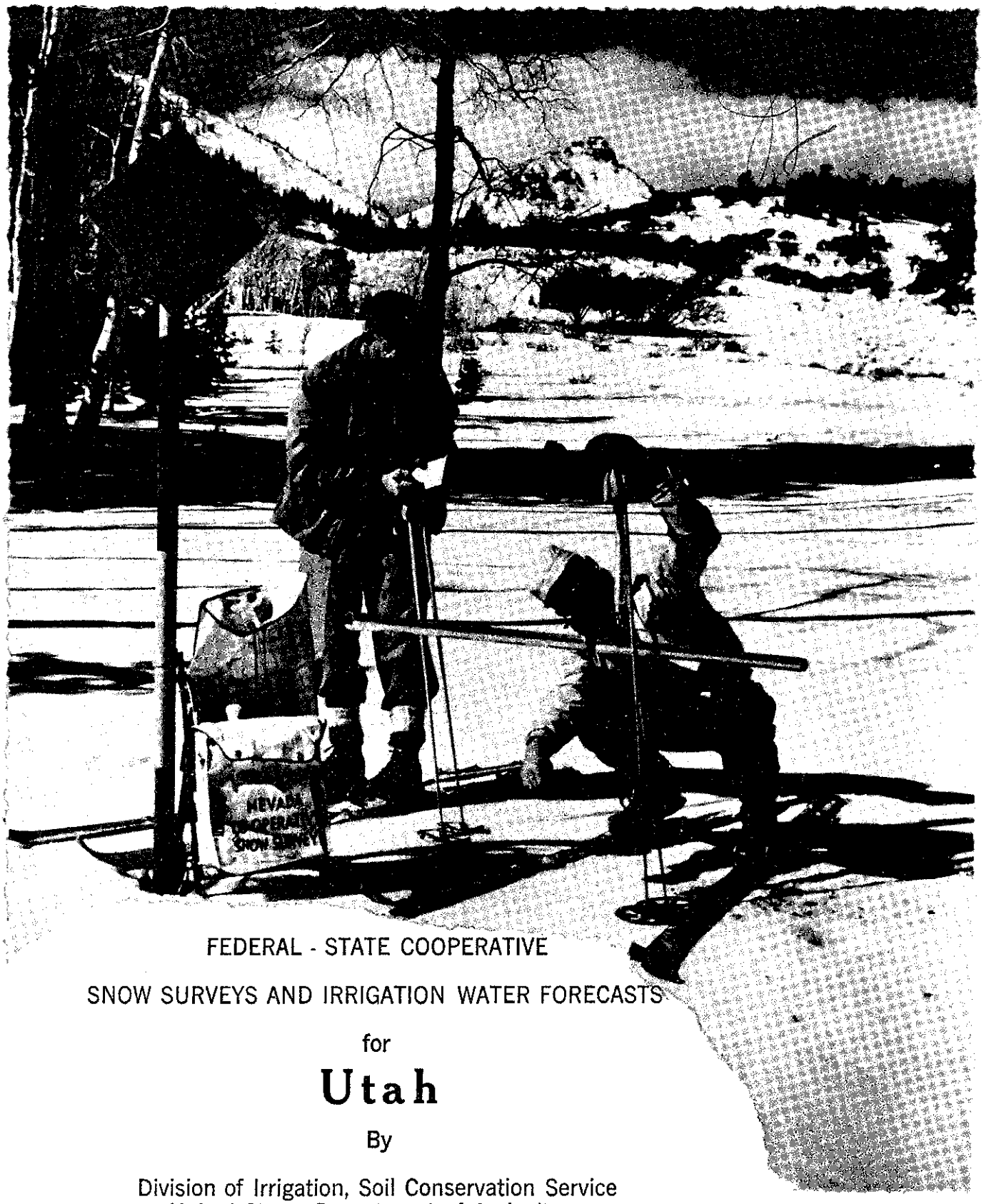
Provo City Corporation
Salt Lake City Corporation
Weber Basin Water Conservancy District

Organized Public Agencies

Beaver River Water-Users Association
Board of Canal Presidents - Jordan River
Coyote Irrigation Company
Emery Canal and Reservoir Company
Moon Lake Water-Users Association
Ogden River Water-Users Association
Strawberry Water Users Association
Sevier River Water-Users Association
Provo River Water Users Association

Public Utilities

Utah Power and Light Company
Telluride Power and Light Company



FEDERAL - STATE COOPERATIVE

SNOW SURVEYS AND IRRIGATION WATER FORECASTS

for

Utah

By

Division of Irrigation, Soil Conservation Service
United States Department of Agriculture
and
Utah Agricultural Experiment Station

in cooperation with

U. S. Forest Service
U. S. Geological Survey
U. S. National Park Service
State Engineer of Utah
State and Local Irrigation Organizations.

As of

MAY 1, 1952

FEDERAL - STATE COOPERATIVE

SNOW SURVEYS AND IRRIGATION WATER FORECASTS

FOR

U T A H

May 1, 1952

Report Prepared
by
Gregory L. Pearson - Hydraulic Engineer

Division of Irrigation
U. S. Soil Conservation Service
and
Utah Agricultural Experiment Station
Logan, Utah

Utah Agricultural Experiment Station Mimeographed Series No. 385

WATER SUPPLY OUTLOOK
FOR UTAH
MAY 1, 1952

Snow surveys made about the first of May showed an extremely dangerous peak streamflow potential still existing in the snowpack. Snow densities are as much as 10% to 15% higher than last year. Since these densities average about 50% throughout the state, and as much as 55% on the headwaters of the Weber, Provo, Strawberry and Spanish Fork Rivers, and at the head of Big and Little Cottonwood Creeks above Salt Lake and with a record snowpack still on the watersheds, the possibility of streamflow peaks exceeding all previous records is very real. It is probable that only extended below normal temperatures can prevent it.

At this time only the lower elevation watersheds have melted enough of their snowpacks to have reached or be nearing their peak streamflow. The high elevation snows are just now beginning to come.

Above normal temperatures during the latter part of April quickly reduced the low and intermediate elevation snows, as illustrated by the loss of water at the Soapstone Ranger Station on the Provo river at an elevation of 7800 feet. A special survey on April 20 showed 20.1 inches water content. On April 30 it was 10.9 inches, or a loss of 9.2 inches of water in ten days.

In general, there is very little comparative May 1 snow data. The best estimate of present conditions can be made by comparing the data in this bulletin with that contained in the April 1 report.

Table 1 - Utah Snow Surveys - about May 1, 1952

Drainage Basin and Snow Course Name	Snow Course Number	Location			Elev.	SNOW COVER MEASUREMENTS							
						Date of Survey 1952	Snow Depth (inches) 1952	WATER CONTENT (INCHES)				Past Record	
								About May 1			Snow Density 5/1/52 %	Years May 1 Record	Av. Water Content Inches
		Sec.	Twp.	Range				1952	1951	1950			
GREAT BASIN DRAINAGE													
Bear River System													
Snyder Basin R. S. (Wyo.)	1E	15	29N	114W*	8040	4-20	44.0	16.6	19.0	14.5	37.7	15	8.8
Piney-LaBarge**	1F	19	29N	114W*	8820	4-20	55.2	22.6	26.5	22.2	40.9	16	14.0
Tony Grove R. S.	3	11	13N	3E	6250	5-3	No Snow						xxx
Spring Hollow (Lower)	4	26	12N	2E	7000	5-7	Patchy		N.S	N.S		13	8.2
Spring Hollow (Upper)	5	35	12N	2E	8000	5-7	56.7	28.0	27.3	32.2	49.3	24	24.7
Mt. Logan	6	3	11N	2E	9000	5-7	64.9	33.8	32.4	37.6	52.1	25	27.9
Monte Cristo	12	3	8N	4E	8960	4-28	73.0	36.1	26.3		49.4	1	26.3
Girl Hollow	81	5	7N	5E	8400	4-28	71.1	35.0	28.8	35.2	49.2	2	32.0
Mirror Lake	83	24	1S	9E	10300	4-30	96.9	42.9	34.2		44.3	1	34.2
Big Park (Wyo.)	85	7	27N	117W*	8700	4-27	67.7	28.9					xxx
Weber-Ogden Rivers													
Monte Cristo	12	3	8N	4E	8960	4-28	73.0	36.1	26.3		49.4	1	26.3
Dry Bread Pond	12A	3	7N	4E	8230	4-28	45.3	22.2	12.2		49.0	1	12.2
Parley's Canyon Summit	15	9&10	1S	3E	7500	4-28	42.2	22.2	2.9		52.6	1	2.9
Silver Lake**	16	35	2S	3E	8725	5-3	67.2	36.7	26.6		54.6	1	26.6
Beaver Creek R. S.	24	28	2S	7E	7500	4-30	Patchy		N.S				
Trial Lake**	26	5	2S	9E	9800	4-30	78.5	42.0	34.1	N.R	53.5	4	30.7
Smith & Morehouse	30	25	1N	7E	7600	4-30	27.8	13.5	4.8		48.6	1	4.8
Redden Mine (Upper)	31	1	2S	6E	9000	4-28	55.7	27.8	16.8		49.9	1	16.8
Redden Mine (Lower)	31A	1	2S	6E	8500	4-28	54.8	26.0	14.2		47.4	1	14.2
Mt. Ogden	74	5	5N	1E	8600	5-3	74.7	39.5	28.8		52.9	1	28.8

*6th Principal Meridian
**On Adjacent Drainage

xxxNo Previous May 1 Measurements

Table 1 - Utah Snow Surveys - about May 1, 1952 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location			Elev.	SNOW COVER MEASUREMENTS							
						Date of Survey 1952	Snow Depth (inches) 1952	WATER CONTENT (INCHES)					
								About May 1			Snow Density 5/1/52 %	Past Record	
		Sec.	Twp.	Range				1952	1951	1950		Years May 1 Record	av. water inches
Weber-Ogden (Con't)													
Chalk Creek #1	78	17&20	2N	8E	8200	4-29	41.6	19.2	9.0		46.2	1	9.0
Chalk Creek #2	79	4	1N	8E	9100	4-29	76.1	36.2	26.4		47.6	1	26.4
Chalk Creek #3	90	7	2N	8E	7500	4-29	No Snow		New Course				
Horse Ridge	80	1	6N	4E	8260	4-28	62.2	32.1			51.6		xxx
Girl Hollow	81	5	7N	5E	8400	4-28	71.1	35.0	28.8	35.2	49.2	2	32.0
Ben Lomond Peak	82	3	7N	1W	8000	4-26	91.5	46.6	29.5		50.9	1	29.5
Beaver Creek-Skunk Creek	89	22	8N	3E	7150	4-28	23.1	11.7	New Course		50.6		
Jordan River & Great Salt Lake													
Lamb's Canyon	14	19	1S	3E	6600	5-2	29.0	13.0	N.S		44.8		
Parley's Canyon Summit	15	9&10	1S	3E	7500	4-28	42.2	22.2	2.9		52.6	1	2.9
Silver Lake	16	35	2S	3E	8720	5-3	67.2	36.7	26.6		54.6	1	26.6
Mill D. South Fork	16A	18	2S	3E	7400	5-2	41.4	20.4			49.3		xxx
Farmington Canyon (Lower)	32	14	3N	4E	6950	4-26	72.8	37.0	15.9		50.8	1	15.9
Farmington Canyon (Upper)	32A	26	3N	4E	8000	4-26	103.3	45.0	30.9		43.6	1	30.9
Provo River & Utah Lake													
Camp Altamont	20	29	4S	3E	7300	4-30	33.2	17.8			53.6		xxx
Timpanogas Divide	21	33	4S	3E	8200	4-30	64.7	35.3	15.4	29.7	54.5	10	19.8
Daniels-Strawberry Summit	23	20	2S[x]	12W[x]	8000	4-30	44.4	22.2			50.0		xxx
Soapstone R. S.	25	9	3S	2E	7800	4-30	22.2	10.9	Patchy	N.R.	49.1		
Trial Lake	26	5	2S	9E	9800	4-30	78.5	42.0	34.1	N.R.	53.5	4	30.7
East Portal	33	36	7S	6E	7560	5-1	32.6	Free Water Standing 10" deep in snowxxx					
Strawberry Divide	33A	34-35	7S	6E	8000	5-1	63.1	35.1			55.6		xxx
Mirror Lake	83	24	1S	9E	10300	4-30	96.9	42.9	34.2		44.3	1	34.2

xUinta Special Meridian
xxxNo Previous May 1 Measurements

Table 1 - Utah Snow Surveys - about May 1, 1952 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location			Elev.	SNOW COVER MEASUREMENTS							
						Date of Survey 1952	Snow Depth (inches) 1952	WATER CONTENT (INCHES)			Snow Density 5/1/52 %	Past Record	
								About May 1				Years May 1 Record	Av. Water Content (Inches)
		Sec.	Twp.	Range				1952	1951	1950			
Sevier River													
G.B.R.C. Headquarters	45	21	17S	4E	8700	4-30	53.9	25.5			47.3		xxx
G.B.R.C. Meadows	46	26-27	17S	4E	10000	4-30	96.2	46.6			48.4		xxx
Seeley Creek R. S. #2**	48A	25	17S	4E	10000	4-30	68.2	32.2			47.2		xxx
Long Valley Junction	56	22	38S	6W	7500	5-1	No Snow						xxx
Harris Flat R. S.	57	24	38S	7W	7700	5-1	Trace						xxx
Duck Creek R. S.	58	11	38S	8W	8560	5-1	40.5	20.7	N.S		51.1		
Big Flat**	63B	18	29S	4W	10000	5-1	75.6	34.2			45.2		xxx
Beaver River													
Merchants Valley	63	8-9	29S	5W	8200	5-2	23.4	9.3			39.7		xxx
Otter Lake	63A	1	29S	5W	9300	5-1	61.1	28.1			45.9		xxx
Big Flat	63B	18	29S	4W	10000	5-1	75.6	34.2			45.2		xxx
Coal Creek													
Webster Flat	61	20	37S	9W	9200	4-30	57.1	28.1			49.2		xxx
COLORADO RIVER DRAINAGE													
Upper Green River													
Kings Cabin (Upper)	39	22	1S	21E	8800	4-29	35.8	13.6			38.0		xxx
Kings Cabin (Lower)	39A	23-26	1S	21E	8600	4-29	32.5	11.6			35.7		xxx
Duchesne River													
Lakefork Mountain	36	2-3	2N[x]	5W[x]	10500	4-29	47.4	18.7			39.5		xxx
Indian Canyon	40	2	11S	10E	9100	4-30	38.1	16.3			42.8		xxx
Mirror Lake	83	24	1S	9E	10300	4-30	96.9	42.9	34.2		44.3	1	34.2

**On Adjacent Drainage
xUinta Special Meridian
xxxNo Previous May 1 Measurements

Table 1 - Utah Snow Surveys - about May 1, 1952 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location			Elev.	Date of Survey 1952	SNOW COVER MEASUREMENTS						
							Snow Depth Inches 1952	WATER CONTENT (INCHES)					
								About May 1			Snow Density 5/1/52 %	Past Record	
		Sec.	Twp.	Range				1952	1951	1950		Years May 1 Record	Av. Water Content Inches
Price River													
Indian Canyon	40	2	11S	10E	9100	4-30	38.1	16.3			42.8		xxx
Staley Ranch	42A	32	12S	7E	7600	5-1	No Snow						xxx
Dry Valley Divide	42B	20	12S	8E	7800	5-1	18.2	8.7			47.8		xxx
Mud Creek	77	4	14S	11W	8600	5-1	59.8	30.7			51.3		xxx
San Rafael River													
Seeley Creek R. S.	48A	25	17S	4E	10000	4-30	68.2	32.2			47.2		xxx
G.B.R.C. Meadows**	46	26-27	17S	4E	10000	4-30	96.2	46.6			48.4		xxx
Virgin River													
Long Valley Junction	56	22	38S	6W	7500	5-1	No Snow						xxx
Harris Flat R. S.	57	24	38S	7W	7700	5-1	Trace						xxx
Duck Creek R. S.	58	11	38S	8W	8560	5-1	40.5	20.7	N.S.		51.1		
Webster Flat	61	20	37S	9W	9200	4-30	57.1	28.1			49.2		xxx
SUMMARY OF SPECIAL SURVEYS MADE DURING APRIL													
Parley's Canyon Summit	15	9&10	1S	3E	7500	4-19	64.5	30.3	8.9				
Silver Lake (Brighton)	16	35	2S	3E	8725	4-17	103.6	45.2					
Trial Lake	26	5	2S	9E	9800	4-20	95.4	40.6	32.5				
Mirror Lake	83	24	1S	9E	10300	4-20	109.0	44.4					
Soapstone R. S.	25	9	3S	2E	7800	4-20	45.0	20.1					
Monte Cristo	12	3	8N	4E	8960	4-19	77.4	42.0					
Dry Bread Pond	12A	3	7N	4E	8230	4-19	62.2	30.5					
Beaver Creek-Skunk Creek	89	22	8N	3E	7150	4-19	41.8	19.5					
Spring Hollow (Lower)	4	26	12N	2E	7000	4-19	47.8	22.5					
Spring Hollow (Upper)	5	35	12N	2E	8000	4-19	94.8	36.4					
Mt. Logan	6	3	11N	2E	9000	4-19	104.6	43.1	32.9				

**On Adjacent Drainage
xxxNo Previous May 1 Measurements

AGENCIES COOPERATING IN UTAH SNOW SURVEYS

U. S. Government Agencies

U. S. Department of Agriculture
- Soil Conservation Service
- Forest Service

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

State of Utah

Utah Agricultural Experiment Station
State Engineer
- Little Bear River Commissioner
- Price River Commissioner
- Provo River Commissioner
- Sevier River Commissioner
- Spanish Fork River Commissioner
- Weber River Commissioner

Municipalities or Quasi-Municipalities

Provo City Corporation
Salt Lake City Corporation
Weber Basin Water Conservancy District

Organized Public Agencies

Beaver River Water-Users Association
Board of Canal Presidents - Jordan River
Coyote Irrigation Company
Emery Canal and Reservoir Company
Moon Lake Water-Users Association
Ogden River Water-Users Association
Strawberry Water Users Association
Sevier River Water-Users Association
Provo River Water Users Association

Public Utilities

Utah Power and Light Company
Telluride Power and Light Company