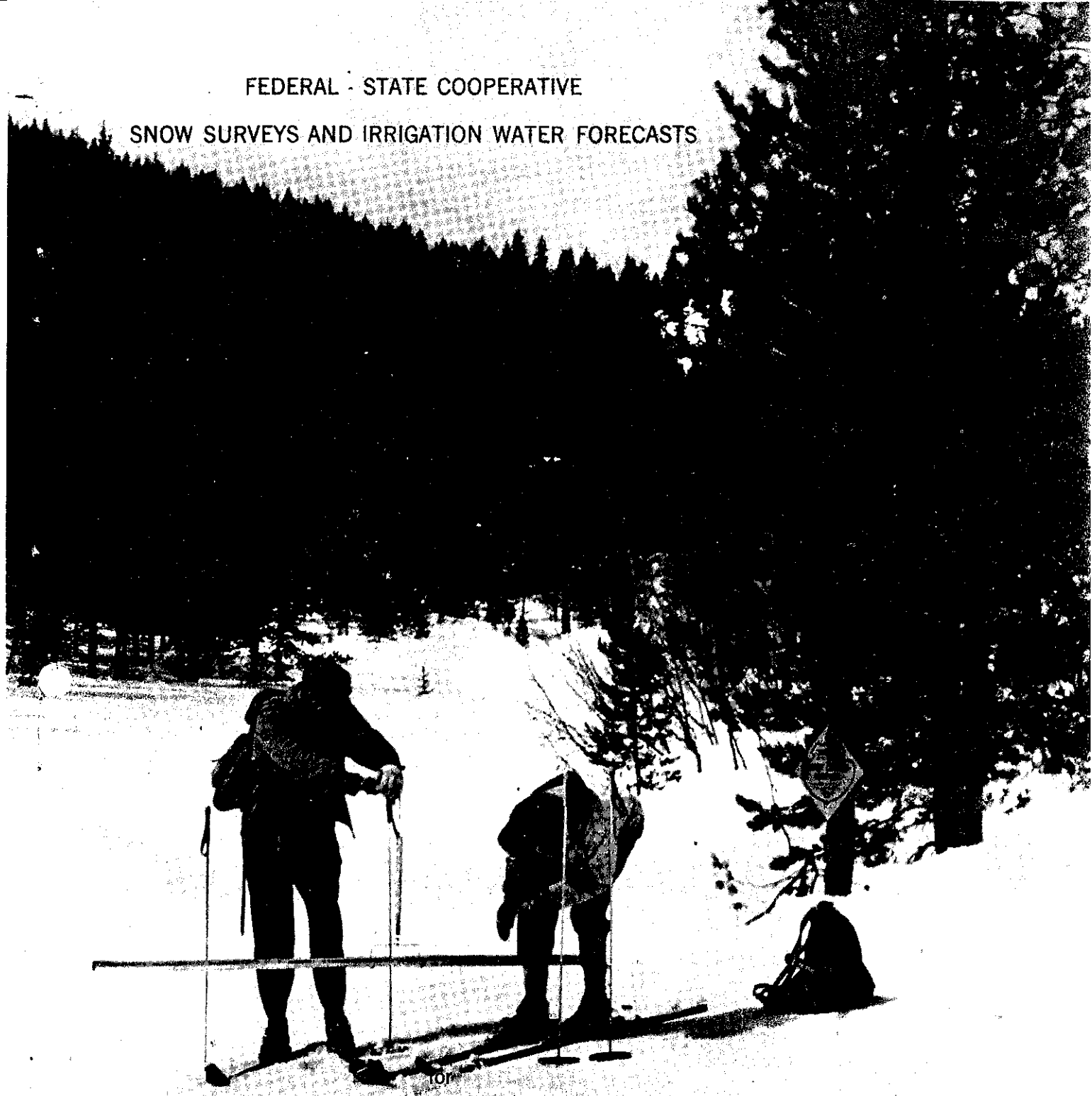
FEDERAL - STATE COOPERATIVE

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

FEB. 1, 1953

FEDERAL - STATE COOPERATIVE

SNOW SURVEYS AND IRRIGATION WATER FORECASTS

FOR

U T A H

February 1, 1953

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. 394

WATER SUPPLY OUTLOOK
FOR UTAH
FEBRUARY 1, 1953

The snowpack varies from 85 to 105% of average on the watersheds of all streams in the Great Basin in Utah from the San Pitch River northward to the streams in Cache Valley, and on the main watersheds of the Price, Huntington and Cottonwood Rivers in the Colorado River Basin. In the Uinta Basin a few measurements indicate a variation of from 65 to 85 percent of average. In Southern Utah on the Sevier, Virgin and Beaver Rivers and Coal Creek, surveys indicate 70 to 80 percent of average. Reservoir holdover storage is 75 percent of capacity. This compares with 48% of capacity for the 1942-51 ten year average.

Relatively few key snow courses have been measured regularly on the first of February. These, with some additional special measurements made on other courses give a partial coverage of the snowpack of the state.

Above normal snowfall for January on the watersheds of Northern Utah materially improved the low water supply prospects existing a month ago. At the higher elevations, which produce late season water supplies, the snowpack increase varied from 150 to 200 percent of average. At low elevations, the increase was generally below average due to snowmelt from warm weather and rains. In the Uintah Basin and in Southern Utah, the increase was generally below average.

In general, soils underlying the snowpack at elevations of 8,500 feet and higher are dry from last falls drought. At lower elevations, sufficient melting has taken place to partly prime the soil.

Although below normal runoff for the coming irrigation season is indicated for most parts of the state, particularly on the Sevier, Virgin Beaver and Coal Creeks in Southern Utah and in the Uintah Basin, the excessive amount of reservoir holdover storage from the heavy runoff of last year assures average or better water supplies in most areas. However, water users in the low prospect areas not having rights to reservoir storage waters are now faced with the outlook of short water supplies for next season.

Since another 40 to 45 percent of the average season's snowpack is yet to come during February and March, a considerable change may yet take place in the water supply for next summer. The first preliminary irrigation season water supply forecast will be issued next month.

Table 1 - Status of reservoir storage about February 1, 1953

Basin and stream	Reservoir	Usable capacity (1000 of acre feet)	1000 acre feet in storage February				
			1953	1952	1951	1950	10 year average 1942-51
Bear River System							
Bear River	Bear Lake	1421.0	1007.2	1010.1	1077.0	953.5	734.3
Little Bear River	Hyrum	15.3	15.0	10.3	10.3	10.4	10.2
Weber-Ogden Rivers							
Ogden River	Pine View	44.2	11.9	3.8	17.9	8.9	7.2
Weber River	East Canyon	28.7	14.6	14.6	16.1	14.7	17.9
Weber River	Echo	73.9	40.2	38.3	43.7	26.1	24.7
Provo River and Utah Lake							
Provo River	Deer Creek	147.3	126.6	117.1	128.0	119.1	71.4
Spanish Fork River	Strawberry*	270.0	221.9	123.5	113.6	91.0	76.0
Utah Lake	Utah Lake*	1149.0	945.2	718.1	645.5	650.0	498.6
Sevier River System							
Sevier River	Otter Creek	52.5	42.3	14.0	22.9	46.2	34.9
Sevier River	Piute	84.8	53.7	25.4	30.0	44.2	45.0
Sevier River	Sevier Bridge	236.0	191.6	52.0	105.8	152.7	166.1
Beaver River							
Beaver River	Rocky Ford	23.3	18.0	9.9	8.5	17.2	16.6
Duchesne River							
Lake Fork River	Moon Lake	35.8	No report		17.4	17.1	14.6
Price River							
Price River	Scofield	65.0	33.6	30.2	29.3	23.2	13.1

*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 2 - Utah Snow Surveys - about February 1, 1953

Drainage Basin and Snow Course Name	Snow Course Number	Location			Elev.	SNOW COVER MEASUREMENTS		WATER CONTENT (INCHES) ABOUT FEBRUARY 1					
		Sec.	Twp.	Range		Date of Survey 1953	Snow Depth Inches 1953	1953	1952	1951	years Feb.1 record	Av.water content inches	% of Av
GREAT BASIN DRAINAGE													
Bear River System													
Salt River Summit (Wyo.)	1C	32	29N	118W*	7900	2-1	42.0	10.8	13.1	11.3	3	12.8	xxx
Tony Grove Lake	2	5	13N	3E	8200	1-28	65.8	22.8	N.R	N.R	3	14.0	xxx
Tony Grove R.S.	3	11	13N	3E	6250	1-30	23.9	7.5	N.R	N.R	4	6.9	xxx
Spring Hollow (lower)	4	26	12N	2E	7000	1-31	29.6	8.9	17.6	10.6	28	9.2	97
Spring Hollow (upper)	5	35	12N	2E	8000	1-31	51.3	15.3	27.4	18.8	28	14.2	108
Mt. Logan	6	3	11N	2E	9000	1-31	55.2	18.2	30.0	24.6	28	17.3	105
Garden City Summit	9	34	14N	4E	8000	1-30	39.3	11.0	N.R	N.R	6	13.3	xxx
Monte Cristo	12	3	8N	4E	8960	1-30	50.7	14.5	No prev. Feb. 1 measurements				
Weber-Ogden Rivers													
Monte Cristo	12	3	8N	4E	8960	1-30	50.7	14.5	No prev. Feb. 1 measurements				
Dry Bread Pond	12A	3	7N	4E	8230	1-30	39.8	10.6	No prev. Feb. 1 measurements				
Parley's Canyon Summit	15	9&10	1S	3E	7500	1-30	42.0	12.2	N.R.	N.R	2	11.2	xxx
Silver Lake **	16	35	2S	3E	8725	1-29	48.2	14.5	23.8	18.4	18	15.3	95
Redden Mine (upper)	31	1	2S	6E	9000		No report		No prev. Feb. 1 measurements				
Redden Mine (lower)	31A	1	2S	6E	8500		No report		No prev. Feb. 1 measurements				
Mt. Ogden	74	5	5N	1E	8600	1-28	54.7	20.6	N.R	34.6	1	34.6	xxx
Beaver Creek-Skunk Creek	89	22	8N	3E	7150	1-30	29.8	7.8	New course				
Sagebrush Flat	89A	21	7N	3E	6300	1-30	15.8	4.4	New course				

** On adjacent drainage.

N.R. No record.

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

* 6th Principal Meridian

Table 2 - Utah Snow Surveys - about February 1, 1953 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location Sec.	Location Twp.	Location Range	Elev.	SNOW COVER MEASUREMENTS: Date of Survey 1953	Snow Depth Inches 1953	WATER CONTENT (INCHES) ABOUT FEBRUARY 1: 1953	1952	1951	years Feb.1 record	Av.water Content Inches	% of Av.
Jordan River & Great Salt Lake													
Lamb's Canyon	14	19	1S	3E	6600	1-26	31.6	8.9	N.R	N.R	8	9.4	95
Parley's Canyon Summit	15	9&10	1S	3E	7500	1-30	42.0	12.2	N.R	N.R	2	11.2	xxx
Silver Lake	16	35	2S	3E	8720	1-29	48.2	14.5	23.8	18.4	18	15.3	95
Mill D. South Fork	16A	18	2S	3E	7400	1-28	43.6	12.7	No prev. Feb. 1 measurements				
Farmington Canyon (lower)	32	14	3N	4E	6950	1-29	51.1	17.7	N.R	18.3	1	18.3	xxx
Farmington Canyon (upper)	32A	26	3N	4E	8000	1-29	63.3	21.1	N.R	20.3	1	20.3	xxx
Provo River & Utah Lake													
Timpanogas Cave Camp	18	27	4S	2E	5500	1-31	Patchy		8.4	3.2	11	4.7	--
South Fork R.S.	19	24	4S	2E	6100	1-30	18.7	6.2	12.3	4.6	15	6.5	95
Camp Altamont	20	29	4S	3E	7300	1-31	31.1	10.3	21.5	12.4	18	12.1	85
Timpanogas Divide	21	33	4S	3E	8200	1-31	45.4	14.5	29.8	20.8	18	16.7	87
Daniels-Strawberry Summit	23	20	2S[x]	12W[x]	8000	1-30	30.3	7.6	20.2	10.4	22	9.5	80
East Portal	33	36	7S	6E	7560	1-28	Snow course under water from Strawberry Reservoir						
Strawberry Divide	33A	34&35	7S	6E	8000	1-28	43.2	11.6	30.9	17.4	17	13.8	84

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

xUinta Special Meridian

N.R No record

Table 2 - Utah Snow Surveys - about February 1, 1953 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Location			Elev.	SNOW COVER MEASUREMENTS		WATER CONTENT (INCHES) ABOUT FEBRUARY 1					
		Sec.	Twp.	Range		Date of Survey 1953	Snow Depth Inches 1953	1953	1952	1951	years Feb.1 record	Av.water Content Inches	% of Av.
COLORADO RIVER DRAINAGE													
Duchesne River													
Lakefork Mountain	36	2&3	2N[x]	5W[x]	10500	1-28	24.6	5.8	14.2	6.7	2	10.4	xxx
Lakefork Mountain #2	36A	17	2N[x]	4W[x]	8900	1-28	21.0	4.8	New	course			
Lakefork Mountain #3	36B	29	2N[x]	4W[x]	8100	1-28	17.6	3.6	New	course			
Indian Canyon	40	2	11S	10E	9100	1-29	19.5	4.5	16.0	5.0	17	6.8	66
Price River													
Indian Canyon	40	2	11S	10E	9100	1-29	19.5	4.5	16.0	5.0	17	6.8	66
Gooseberry Reservoir	41	25	13S	5E	8700	1-27	41.4	12.0	27.8	N.R	2	18.1	xxx
Staley Ranch***	42A	32	12S	7E	7600	1-30	18.9	4.9	12.8	4.7	11	5.8	85
Dry Valley Divide***	42B	20	12S	8E	7800	1-30	23.3	6.4	16.4	7.5	11	7.4	87
Huntington-Horseshoe	43	12	14S	5E	9800	1-27	49.5	15.6	31.1	N.R	1	31.1	xxx
Mud Creek***	77	4	14S	11W	8600	1-30	33.9	9.0	27.8	10.6	3	15.4	xxx
San Rafael River													
Huntington-Horseshoe	43	12	14S	5E	9800	1-27	49.5	15.6	31.1	N.R	1	31.1	xxx
Virgin River													
Webster Flat	61	20	37S	9W	9200	1-20	28.4	7.9	22.2	N.R	1	22.2	xxx

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

x Uinta Special Meridian.

*** Telephone or telegraphic report.

N.R No report.

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

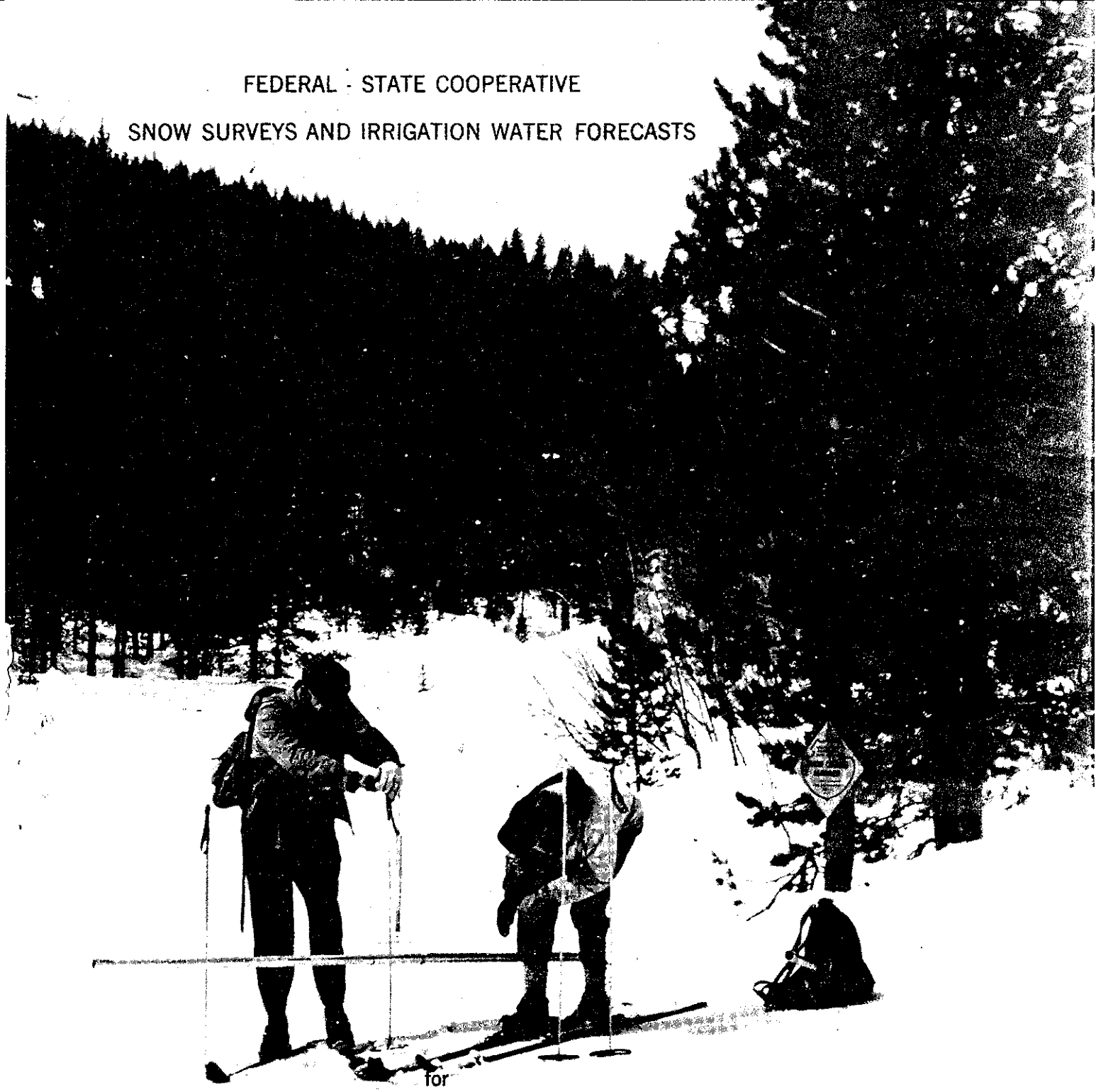
Beaver River Water-Users Association
Board of Canal Presidents - Jordan River
Coyote Irrigation Company
Emery Canal and Reservoir Company
Moon Lake Water-Users Association
Ogden River Water-Users Association
Strawberry Water Users Association
Sevier River Water-Users Association
Provo River Water Users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

Public Utilities

Utah Power and Light Company
Telluride Power and Light Company

FEDERAL - STATE COOPERATIVE

SNOW SURVEYS AND IRRIGATION WATER FORECASTS



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As of

MAR. 1, 1953

FEDERAL - STATE COOPERATIVE

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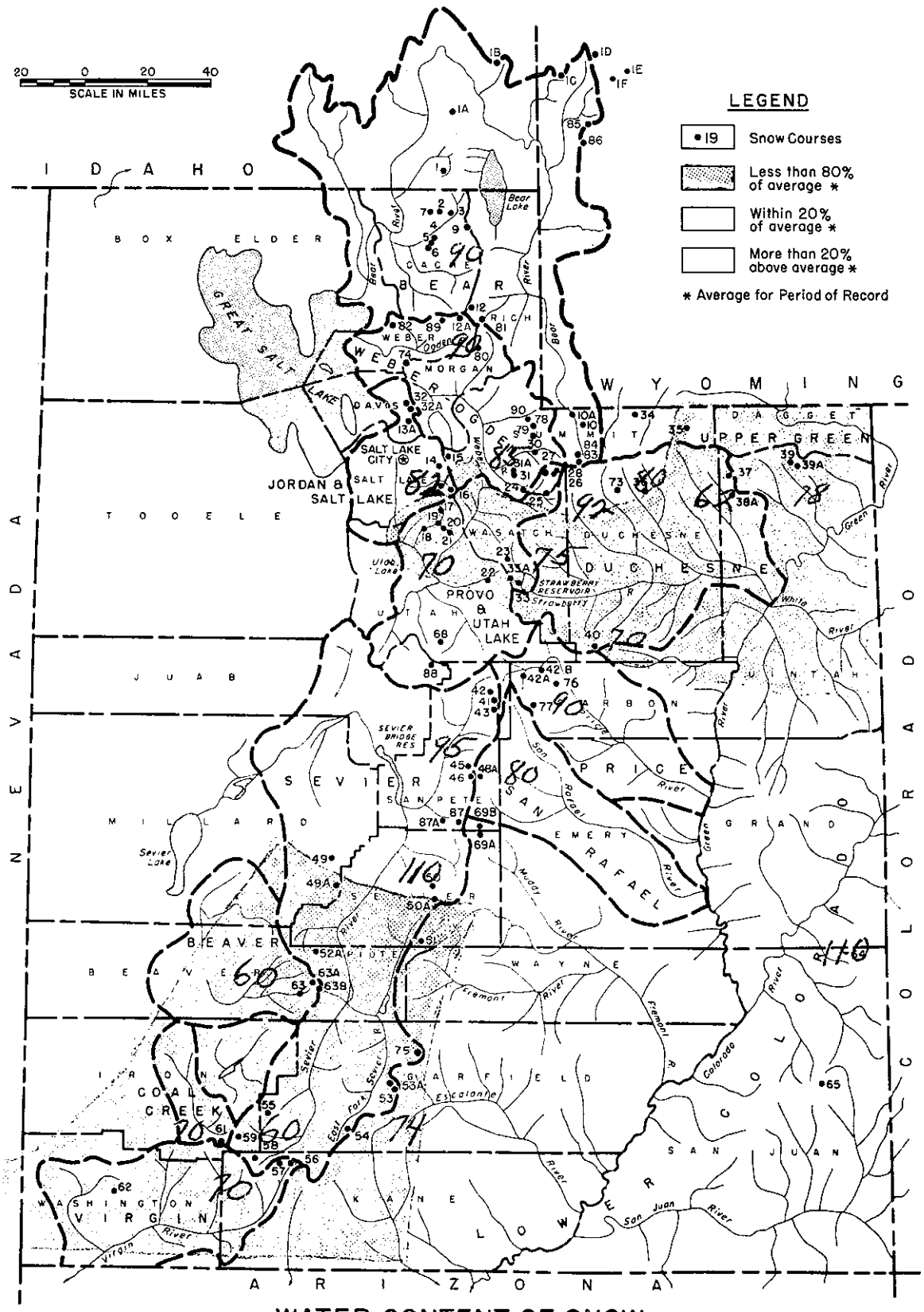


WATER CONTENT OF SNOW
Based on Snow Surveys Made on
UTAH WATERSHEDS
Approximately March, 1

WATER SUPPLY OUTLOOK
FOR UTAH
MARCH 1, 1953

Below average irrigation season streamflow is now in prospect for all parts of the state, with runoff on the main and east forks of the Sevier, the Virgin, Beaver and Escalante rivers and Coal Creek near Cedar City expected to be about the same as it was in 1950, the first year of the two year drought. Another belt of low snowpack runs from the American Fork river eastward across the Strawberry Valley into the Uinta Basin where the snows vary from 60 to 80 percent of average. The rest of the state has a snowpack varying from 80 percent to approximately average. Soils are extremely dry and will absorb some snowmelt before runoff begins. Holdover storage in 13 reporting reservoirs is 77 percent of capacity. This is 150 percent of the average amount there was in those reservoirs during the 1942-51 ten year period.

In southern Utah on the main and east forks of the Sevier, the Virgin, Beaver and Escalante rivers, Panguitch Creek and Coal Creek near Cedar City, waterusers are faced with practically the same water supply prospects that existed in 1950, the first year of their two year drought. Runoff prospects are comparable, with storage in Otter Creek, Piute and Rocky Ford reservoirs being almost identical to that of 1950. These reservoirs average 81 percent of capacity. Their 1942-51 average was 72 percent of capacity. Water users below the Sevier bridge reservoir are much better off, since it has 215,000 acre feet in storage out of a 236,000 acre feet capacity.

On the northern part of the Sevier river system runoff prospects are more favorable. From Salina Creek northward across the tributaries of the San Pitch, the snowpack is essentially average. However, the dry soils will absorb some of the snowmelt, reducing runoff ten to fifteen percent. Comparable conditions exist on the Price and San Rafael rivers and the La Sal mountain area of southeastern Utah.

In the Uinta Basin, the low snowpack and dry soils indicate a runoff which varies from 53 percent of the 1941-50 average flow on the Strawberry river at Duchesne to 70 percent on the Duchesne river near Tabiona. In the eastern part of the Basin on Ashley Creek and the Whiterocks river, the forecast if for 60 percent.

70 to 75 percent of the ten year average flow is expected on the Provo, American Fork, and Weber rivers and the Cottonwood Creeks near Salt Lake. Deer Creek, and Strawberry Reservoirs and Utah Lake have respectively 80, 83, and 83 percent of capacity holdover storage compared to the ten year average expressed as percent of capacity of 46, 29 and 48 percent. Holdover storage in the reservoirs of the Weber-Ogden rivers is not this good. Echo, East Canyon and Pineview reservoirs have respectively 54, 55 and 31 percent of capacity compared to the ten year average percents of 36, 64 and 15.

The unusually warm weather during the winter has melted a considerable portion of the low snow and thus has decreased irrigation season runoff prospects from lower elevation watersheds. The dry soils at higher elevations further decreases the expected runoff from the higher elevation snow. Watersheds where these factors are important this year are given below, with the percent of the 1942-51 runoff to be expected following them: East Canyon Creek near Morgan, 55 percent; Chalk Creek at Coalville, 61 percent; South Fork of Ogden River near Huntsville, 70 percent; Little Bear River near Paradise, 60 percent; Blacksmith Fork River near Hyrum, 64 percent.

On the Logan River near Logan, 78 percent of the ten year average is expected and on the Bear River at Harer, 64 percent.

In reading the above percentages, it should be remembered that these are computed on the basis of the average 1941-50 runoff. In Northern Utah these were generally years of above normal runoff. An example of the influence this has is shown in the case of the Bear River where the percent is listed as 64 percent. When compared to the 1924 to 1951 runoff period - the period of snow surveys in Utah - the forecast changes to 77 percent. The actual runoff forecasts in thousands of acre feet are shown in Table 1 of this report.

The snowpack usually reaches its maximum accumulation about April 1, at which time all snow courses in the state will be measured and the major forecast issued.

Table 1 - Streamflow forecasts - March 1, 1953

Basin and stream	April-Sept. streamflow in 1000 acre feet					July-Sept. streamflow in 1000 acre feet				
		Measured runoff					Measured runoff			
	Forecast 1953	1952	1951	1950	10-year average 1941-50	Forecast 1953	1952	1951	1950	10-year average 1941-50
Bear River System					GREAT BASIN DRAINAGE					
Bear River at Harer, Idaho	180.0	520.7	408.0	504.4	280.7	30.0	78.3	82.4	99.1	57.7
Blacksmith Fork River near Hyrum, Utah	35.0	108.8	93.2	103.1	55.1	13.0	30.9	29.1	30.8	18.5
Little Bear near Paradise, Utah	27.0	77.0	51.8	65.3	44.9	2.5	6.0	5.3	6.1	3.9
Logan River near Logan, Utah	105.0	168.6	178.5	214.0	134.7	35.0	49.4	53.3	74.2	43.8
Weber-Ogden Rivers										
South Fork of Ogden River near Huntsville	45.0	112.3	94.9	96.6	63.6	7.5	12.2	10.8	12.2	8.9
Weber River near Oakley	90.0	192.4	147.8	175.6	129.6	15.0	34.6	31.4	38.4	24.9
Chalk Creek at Coalville	25.5	85.4	43.5	78.8	42.0	3.0	8.6	6.2	9.9	4.9
Weber River near Coalville	98.0	258.3	150.4	201.2	137.3	8.5	33.5	23.2	34.6	18.6
East Canyon Creek near Morgan	16.0	67.2	29.0	43.0	28.9	2.2	5.4	2.7	3.3	2.9

Table 1 - Streamflow forecasts - March 1, 1953, continued

Basin and stream	April-Sept. streamflow in 1000 acre feet					July-Sept. streamflow in 1000 acre feet				
		Measured runoff					Measured runoff			
	Forecast 1953	1952	1951	1950	10-year average 1941-50	Forecast 1953	1952	1951	1950	10-year average 1941-50
Jordan River & Salt Lake										
Big Cottonwood Creek near Salt Lake City	29.5	58.3	41.1	41.6	40.4	5.5	14.4	11.0	11.0	9.7
Provo River & Utah Lake										
American Fork River above Power Plant	27.0		39.6	41.2	36.2	6.0		10.2	10.2	8.7
Provo River below Forks xx	120.0	340.9	188.8	215.6	159.2	34.0	65.5	44.4	48.8	41.6
Sevier River										
Sevier River at Hatch	33.0	100.8	22.4	41.5	65.4	12.0	23.3	8.4	13.2	17.5
Sevier River near Kingston	21.0	85.1	7.6	17.3	48.3	5.0	14.0	3.2	4.3	7.2
Beaver River										
Beaver River near Beaver	18.0		18.1	16.2	34.4	4.5		5.0	4.0	7.7
Coal Creek										
Coal Creek near Cedar City	12.0		6.3	11.6	20.6	2.1		1.5	1.8	2.9

xx Corrected for Storage and Weber Diversion

Table 1 - Streamflow forecasts - March 1, 1953 - continued

Basin & Stream	April-Sept. streamflow in 1000 acre feet					July-Sept. streamflow in 1000 acre feet				
		Measured runoff					Measured runoff			
	Forecast 1953	1952	1951	1950	10-year average 1941-50	Forecast 1953	1952	1951	1950	10-year average 1941-50
COLORADO RIVER DRAINAGE										
Upper Green River										
Ashley Creek near Vernal	40.0		48.6	75.7	66.1	15.0		19.4	22.4	19.9
Duchesne River										
Duchesne River near Tabiona	85.0		140.8	159.8	121.6	18.0		35.6	36.5	26.3
Lakefork River below Moon Lake x	55.0		77.4	90.2	81.7	17.0		23.7	23.9	23.7
Uinta River near Neola	75.0		90.1	108.2	114.4	30.0		42.4	37.7	44.4
Whiterocks near Whiterocks	45.0		60.7	77.1	75.3	15.0		25.1	23.7	23.7
Strawberry at Duchesne	40.0		68.6	99.6	74.5	8.0		18.2	20.1	15.6
Price River										
Price River near Heiner x	55.0	230.7	58.0	75.0	70.1	5.5	17.9	5.4	6.2	7.5
San Rafael River										
Cottonwood Creek near Orangeville, Utah	48.0		49.4	42.1	63.9	11.0		12.0	9.0	11.4
Huntington Creek near Huntington	47.0	139.5	56.6	51.3	58.6	14.5	33.6	19.8	18.4	16.7

x Corrected for Storage

Table 2 – Status of reservoir storage about March 1, 1953

Basin and stream	Reservoir	Usable capacity (1000 of acre feet)	1000 acre feet in storage March 1				
			1953	1952	1951	1950	10 year average 1942-51
Bear River System							
Bear River	Bear Lake	1421.0	1002.9	968.6	1060.0	953.5	744.0
Little Bear River	Hyrum	15.3	13.5	10.3	10.3	10.6	10.4
Weber-Ogden Rivers							
Ogden River	Pine View	44.2	13.9	1.5	17.5	10.4	6.6
Weber River	East Canyon	28.7	15.9	14.3	17.1	16.4	18.5
Weber River	Echo	73.9	40.1	35.1	45.2	29.8	26.5
Provo River and Utah Lake							
Provo River	Deer Creek	147.3	117.6	111.0	124.1	116.2	67.1
Spanish Fork River	Strawberry*	270.0	224.3	126.2	116.2	93.4	78.5
Utah Lake	Utah Lake*	1149.0	951.2	769.1	696.1	702.5	550.0
Sevier River System							
Sevier River	Otter Creek	52.5	46.4	18.4	27.9	50.2	39.2
Sevier River	Piute	84.8	60.5	33.4	39.0	60.0	53.8
Sevier River	Sevier Bridge	236.0	215.0	66.8	120.0	172.6	183.3
Beaver River							
Beaver River	Rocky Ford	23.3	19.7	12.0	10.2	19.4	18.1
Duchesne River							
Lake Fork River	Moon Lake	35.8			18.9	18.0	16.0
Price River							
Price River	Scofield	65.0	48.3	31.6	30.9	24.0	14.2

*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, 1953

Drainage Basin and Snow Course Name	Snow Course Number	Elev.	SNOW COVER MEASUREMENTS										
					WATER CONTENT (INCHES) ABOUT MARCH 1								
			Date of Survey 1953	Snow Depth Inches 1953	1953	1952	1951	years March 1 record	Av. water content inches	% of Av.	Estimated March 1 Av. water cont.xx Inches	% Av.
Bear River System				GREAT BASIN DRAINAGE								
Franklin Basin (Idaho)	1	8200	No	report		30.5	28.6	3	26.3	xxx		
Emigrant Summit (Idaho)	1A	7700	No	report						xxx		
Salt River Summit (Wyo.)	1C	7900		38.0	12.2	15.8	15.1	5	14.8	xxx		
Poison Meadows (Wyo.)**	1D	8500	2-27	70.0	20.1	25.8	29.7	2	27.8	xxx		
Tony Grove Lake	2	8200	3-4	111.0	30.9	N.R	N.R	3	22.6	xxx	28.4	109
Tony Grove R. S.	3	6250	2-27	28.5	9.3	N.R	N.R	4	11.2	xxx		
Spring Hollow (lower)	4	7000	2-28	33.2	11.1	21.1	13.5	27	13.0	85		
Spring Hollow (upper)	5	8000	2-28	55.6	17.5	30.5	21.6	28	19.8	88		
Mt. Logan	6	9000	2-28	60.6	22.3	35.6	30.4	28	23.7	94		
Garden City Summit	9	8000	2-27	43.3	14.1	21.2	20.8	6	20.0	xxx	15.6	90
Monte Cristo	12	8960	No	report		31.1	27.1	4	28.1	xxx		
Lost Lake **	28	9900	2-28	49.9	18.2	30.8	N.R	3	27.3	xxx	19.6	93
Big Park (Wyo.)	85	8700	2-27	46.7	14.2	20.3	21.6	2	21.0	xxx		
Kelly Ranger St. (Wyo.)	86	8200	No	report		N.R	18.8	1	18.8	xxx		
Weber-Ogden Rivers												
Monte Cristo	12	8960	No	report		31.1	27.1	4	28.1	xxx		
Dry Bread Pond	12A	8230	2-24	40.5	13.9	24.1	18.8	5	20.9	xxx	15.2	91
Parley's Canyon Summit	15	7500	2-27	45.2	14.7	24.4	16.4	5	18.2	xxx	15.8	93
Silver Lake **	16	8725	2-26	53.0	16.8	30.6	24.2	18	21.2	79		
Beaver Creek R.S.	24	7500	2-28	22.0	7.0	14.9	N.R	4	10.1	xxx	7.3	96

xx Estimated from April 1 average based on percent of April 1 average which occurs on March 1 on courses at similar elevations and exposures having long records as of this date.

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

** On adjacent drainage.

Table 3 - Utah Snow Surveys - about March 1, 1953 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Elev.	SNOW COVER MEASUREMENTS: Date of Survey 1953	Snow Depth Inches 1953	WATER CONTENT (INCHES) ABOUT MARCH 1: 1953	1952	1951	years March 1 record	Av. water content inches	% of Av.	Estimated March 1 av. water cont.xx inches	% Av.
Weber-Ogden Rivers, Cont'd												
Trial Lake**	26	9800	2-28	53.0	19.0	31.7	28.2	7	25.3	xxx	21.0	90
Smith & Morehouse	30	7600	2-27	31.0	9.8	20.2	12.9	2	16.6	xxx	11.3	87
Redden Mine (upper)	31	9000	2-26	41.1	13.5	27.5	18.0	2	22.8	xxx	16.7	81
Redden Mine (lower)	31A	8500	2-26	38.2	12.4	26.4	16.4	2	21.4	xxx	15.7	79
Mt. Ogden	74	8600	2-27	55.9	22.3	32.0	35.2	3	30.1	xxx		
Chalk Creek #1	78	8200	2-27	34.6	11.5	21.2	11.1	2	16.2	xxx		
Chalk Creek #2	79	9100	2-27	46.7	16.3	32.7	21.0	2	26.8	xxx		
Chalk Creek #3	90	7500	2-27	21.7	5.2	10.7	N.R	1	10.7	xxx		
Ben Lomond Peak	82	8000	2-26	75.4	29.4	40.6	39.0	2	39.8	xxx		
Beaver Creek-Skunk Creek	89	7150	2-24	31.2	8.0	18.9		1	18.9	xxx		
Sagebrush Flat	89A		2-24	14.1	2.8	New	Course					
Jordan River & Great Salt Lake												
Lamb's Canyon	14	6600	2-27	39.7	11.5	N.R	11.2	14	13.4	86		
Silver Lake**	16	8720	2-26	53.0	16.8	30.6	24.2	18	21.2	79		
Mill D. South Fork	16A	7400	2-25	52.0	16.5	N.R.	N.R	0		xxx		
Farmington Canyon (lower)	32	6950	2-27	55.8	19.2	30.4	21.7	2	26.0	xxx		
Farmington Canyon (upper)	32A	8000	2-26	64.6	23.6	33.5	25.0	2	29.2	xxx		

xx Estimated from April 1 average based on percent of April 1 average which occurs on March 1 on courses at similar elevations and exposures having long records as of this date.

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

** On adjacent drainage.

Table 3 - Utah Snow Surveys - about March 1, 1953 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Elev.	SNOW COVER MEASUREMENTS		WATER CONTENT (INCHES) ABOUT MARCH 1							
			Date of Survey 1953	Snow Depth Inches 1953	1953	1952	1951	years March 1 record	Av. water Content Inches	% of Av.	Estimated March 1 Av. water con. xx Inches	% Av.
Provo River & Utah Lake												
Timpanogas Cave Camp	18	5500	No	snow		14.5	patchy	11	5.6			
South Fork R. S.	19	6100	2-28	19.2	6.5	18.0	4.1	15	8.2	79		
Camp Altamont	20	7300	2-28	29.5	10.1	29.3	14.7	18	16.7	60		
Timpanogas Divide	21	8200	2-28	44.6	16.4	38.5	23.9	18	23.3	70		
Daniels-Strawberry Summit	23	8000	2-27	31.8	9.5	23.9	12.6	22	13.7	69		
Soapstone R.S.	25	7800	2-25	35.1	9.7	19.1	13.7	6	13.1	xxx	10.5	92
Trial Lake	26	9800	2-28	53.0	19.0	31.7	28.2	7	25.3	xxx	21.0	90
Lost Lake	28	9900	2-28	49.9	18.2	30.8	N.R	3	27.3	xxx	19.6	93
East Portal	33	7560	course	under water		23.4	11.4	18	11.5			
Strawberry Divide	33A	8000	2-26	45.8	14.7	34.4	21.2	17	18.3	80		
Payson R. S.	68	8840	No	report		25.9	N.R	5	15.4			
Sevier River												
Gooseberry Reservoir	41	8700	No	report		29.6	17.4	9	19.4			
Huntington-Horseshoe	43	9800	No	report		36.0	23.3	4	26.0			
G.B.R.C. Headquarters	45	8700	2-27	43.7	13.4	25.8	10.8	15	13.4	100		
G.B.R.C. Meadows	46	10000	2-27	55.9	18.7	34.7	19.4	3	24.7	xxx	20.0	93
Seeley Creek R.S. #2**	48A	10000	2-27	30.5	9.6	25.8	N.R	1	25.8	xxx	12.6	76

xx Estimated from April 1 average, based on percent of April 1 average which occurs on March 1 on courses at similar elevations and exposures having long records as of this date.

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

** On adjacent drainage.

Table 3 - Utah Snow Surveys - about March 1, 1953

Drainage Basin and Snow Course Name	Snow Course Number	Elev.	SNOW COVER MEASUREMENTS: Date of Survey 1953	Snow Depth Inches 1953	WATER CONTENT ABOUT MARCH 1: 1953	1952	1951	Years March 1 record	Av. water content inches	% of Av.	Estimated March 1 Av. water cont.xx inches	%Av.
Sevier River, Cont'd												
Gooseberry R. S. ***	50	8400	3-4	31.3	10.2	12.3	6.8	2	9.6	xxx	9.0	113
Farnsworth Lake ***	50A	9900		No report		18.7	N.R	1	18.7			
Widtsoe-Escalante Summit	53	9500	3-4	22.0	5.8	9.3	1.6	16	7.8	74		
Widtsoe-Escalante #2***	53A	9500	3-4	28.2	7.2	12.5	2.2	3	7.0	xxx		
Bryce Canyon	54	8000		No report		N.R	0.8	7	5.6			
Panguitch Lake ***	55	8200	3-3	14.2	3.4	8.6	N.R	1	8.6	xxx		
Long Valley Junction* ***	56	7500	3-2	No snow		11.0	2.7	4	7.0	xxx		
Harris Flat R.S. ***	57	7700	3-2	21.5	5.2	14.9	4.7	9	11.8	44		
Duck Creek R. S. ***	58	8560	3-2	30.9	7.5	22.1	7.1	8	15.1	50		
Cedar Breaks	59	10390	2-25	46.3	14.9	27.3	11.8	8	19.6	xxx	21.5	70
Big Flat **	63B	10000	2-27	35.5	10.6	27.5	18.6	5	17.2	62		
Mt. Baldy R. S.	87	9500	3-3	57.3	17.5	29.2	N.R	1	29.2	xxx		
Beaver Dams	87A	8000	3-3	36.6	10.3	17.8	N.R	1	17.8	xxx		
Beaver River												
Merchants Valley	63	8200	2-27	28.5	6.5	18.3	9.8	6	10.5	62		
Otter Lake	63A	9300	2-27	33.6	8.2	24.4	13.5	5	14.5	56		
Big Flat	63B	10000	2-27	35.5	10.6	27.5	18.6	5	17.2	62		
Coal Creek												
Cedar Breaks	59	10390	2-25	46.3	14.9	27.3	11.8	8	19.6	xxx	21.5	70
Webster Flat	61	9200	2-25	33.5	10.7	23.9	7.6	3	15.5	xxx	16.0	67

* Previously shown as Gravel Springs Junction

** On Adjacent drainage

*** Telephone or telegraphic report

xx Estimated from April 1 average bases on percent of April 1 average which occurs on March 1 on courses at similar elevations and exposures having long records as of this date.

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

Table 3 - Utah Snow Surveys - about March 1, 1953 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Elev.	SNOW COVER MEASUREMENTS: Date of Survey 1953	Snow Depth Inches 1953	WATER CONTENT (INCHES) ABOUT MARCH 1: 1953	1952	1951	Years March 1 record	Av. water content inches	% of Av.	Estimated March 1 Av. water cont.xx inches	%Av.
			COLORADO		RIVER	DRAINAGE						
Upper Green River												
King's Cabin (upper)	39	8800	3-4	30.1	7.2	12.3	7.8	3	11.6	xxx	8.6	84
King's Cabin (lower)	39A	8600	3-4	25.9	6.0	12.0	6.8	3	10.6	xxx	8.2	73
Duchesne River												
Lost Lake	28	9900	2-28	49.9	18.2	30.8	N.R	3	27.3	xxx	19.6	93
Lakefork Mountain	36	10500	3-2	33.8	6.9	N.R	10.7	2	10.6	xxx	8.6	80
Lakefork Mountain #2	36A	8900	3-2	24.8	5.8	New	course					
Lakefork Mountain #3	36B	8100	3-2	21.4	5.2	New	course					
Paradise Park	37	10500	3-3	29.6	6.4	12.6	N.R	2	14.6	xxx	10.0	64
Mosby Mountain (lower)	38A	9500	3-3	25.3	5.3	12.3	6.9	3	11.5	xxx	8.8	60
Indian Canyon	40	9100	2-25	22.6	6.2	16.4	5.5	14	8.9	70		
Price River												
Indian Canyon	40	9100	2-25	22.6	6.2	16.4	5.5	14	8.9	70		
Gooseberry Reservoir	41	8700	No report			29.6	17.4	9	19.4			
Staley Ranch	42A	7600	2-27	25.2	6.8	14.8	5.5	12	7.0	97		
Dry Valley Divide	42B	7800	2-27	28.8	8.0	19.2	6.9	12	9.9	81		
Huntington Horseshoe	43	9800	No report			36.0	23.3	4	26.0			
Mud Creek	77	8600	2-27	44.2	17.9	29.8	15.8	3	19.9	xxx		

xx Estimated from April 1 average based on percent of April 1 average which occurs on March 1 on courses at similar elevations and exposures having long records as of this date.

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

x Uinta Special Meridian

Table 3 - Utah Snow Surveys - about March 1, 1953 - continued

Drainage Basin and Snow Course Name	Snow Course Number	Elev.	SNOW COVER MEASUREMENTS									
			Date of Survey 1953	Snow Depth Inches 1953	WATER CONTENT ABOUT MARCH 1							
					1953	1952	1951	years March 1 record	Av.water content inches	% of Av.	Estimated March 1 Av.water cont.xx inches	% Av.
San Rafael River												
Huntington-Horseshoe	43	9800		No report		36.0	23.3	4	26.0			
Seeley Creek R. S.	48A	10000	2-27	30.5	9.6	25.8	N.R	1	25.8	xxx	12.6	76
Virgin River ***												
Long Valley Junction x	56	7500	3-2	No snow		11.0	2.7	4	7.0	xxx		
Harris Flat R.S. ***	57	7700	3-2	21.5	5.2	14.9	4.7	9	11.8	44		
Duck Cr. R. S. ***	58	8560	3-2	30.9	7.5	22.1	7.1	8	15.1	50		
Cedar Breaks	59	10390	2-25	46.3	14.9	27.3	11.8	8	19.6	xxx	21.5	70
Webster Flat	61	9200	2-25	33.5	10.7	23.9	7.6	3	15.5	xxx	16.0	67
Pine Valley	62	9150		No report		21.1	N.R	1	21.1			
Lower Colorado River												
LaSal Mountain ***	64	8800	3-4	41.2	10.0	16.0	N.R	1	16.0	xxx		

x Previously shown as Gravel Springs J nction.

*** Telephone or Telegraphic report

xx Estimated from April 1 average based on percent of April 1 average which occurs on March 1 on courses at similar elevations and exposures having long records as of this date.

** On adjacent drainage.

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

INDEX OF SNOW COURSE LOCATIONS

Drainage Basin and Snow Course Name	Snow Course Number	Section	Township	Range	Elev.
GREAT BASIN DRAINAGE					
Bear River System					
Franklin Basin (Idaho)	1	1&12	16S[x]	41E[x]	8200
Emigrant Summit (Idaho	1A	21	12S[x]	42E[x]	7700
Slug Creek Divide (Idaho)	1B	10&15	10S[x]	44E[x]	7300
Salt River Summit (Wyo.)	1C	32	29N	118W*	7900
Poison Meadows (Wyo.)**	1D	29	30N	116W*	8500
Snyder Basin R.S. (Wyo.)**	1E	15	29N	114W*	8040
Piney-LaBarge**	1F	19	29N	114W*	8820
Tony Grove Lake	2	5	13N	3E	8200
Tory Grove R. S.	3	11	13N	3E	6250
Spring Hollow (lower)	4	26	12N	2E	7000
Spring Hollow (upper)	5	35	12N	2E	8000
Mt. Logan	6	3	11N	2E	9000
Smithfield Spring	7	2	13N	2E	7000
Garden City Summit	9	34	14N	4E	8000
Head of Bear River	10	15	2N	10E	8600
Goodman Ranch	10A	19	3N	10E	7900
Monte Cristo	12	3	8N	4E	8960
Lost Lake**	28	33	1S	9E	9900
Girl Hollow	81	5	7N	5E	8400
Mirror Lake xx	83	24	1S	9E	10300
Machine Crossing	84	1	1S	9E	9300
Big Park (Wyo.)	85	7	27N	117W*	8700
Kelly Ranger St. (Wyo.)	86	13	26N	118W*	8200
Weber-Ogden Rivers					
Monte Cristo	12	3	8N	4E	8960
Dry Bread Pond	12A	3	7N	4E	8230
Parley's Canyon Summit	15	9&10	1S	3E	7500
Silver Lake**	16	35	2S	3E	8725
Beaver Creek R. S.	24	28	2S	7E	7500
Trial Lake**	26	5	2S	9E	9800
Smith & Morehouse	30	25	1N	7E	7600
Redden Mine (Upper)	31	1	2S	6E	9000
Redden Mine (Lower)	31A	1	2S	6E	8500
Mt. Ogden	74	5	5N	1E	8600
Chalk Creek #1	78	17&20	2N	8E	8200
Chalk Creek #2	79	4	1N	8E	9100
Chalk Creek #3	90	7	2N	8E	7500
Horse Ridge	80	1	6N	4E	8260
Girl Hollow	81	5	7N	5E	8400
Ben Lomond Peak	82	3	7N	1W	8000
Beaver Creek-Skunk Creek	89	22	8N	3E	7150
Sagebrush Flat	89A	21	7N	3E	6300
Jordan River&Great Salt Lake					
Barnard Creek	13A	34	3N	1E	8000
Lamb's Canyon	14	19	1S	3E	6600
Silver Lake	16	35	2S	3E	8720
Mill D. South Fork	16A	18	2S	3E	7100
Farmington Canyon (lower)	32	14	3N	4E	6950
Farmington Canyon (upper)	32A	26	3N	4E	8000

** On adjacent drainage. * 6th Principal Meridian. [x]Boise Meridian.
xx Previously shown as Bear Head

INDEX OF SNOW COURSE LOCATIONS (Cont'd)

Drainage Basin and Snow Course Name	Snow Course Number	Sec.	Twp.	Range	Elev.
Provo River & Utah Lake					
Dutchman R. S.	17	27	3S	3E	7500
Timpanogas Cave Camp	18	27	4S	2E	5500
South Fork R. S.	19	24	4S	2E	6100
Camp Altamont	20	29	4S	3E	7300
Timpanogas Divide	21	33	4S	3E	8200
Hobble Creek Summit	22	20	7S	5E	7300
Daniels-Strawberry Summit	23	20	2S[x]	12W[x]	8000
Soapstone R. S.	25	9	3S	2E	7800
Trial Lake	26	5	2S	9E	9800
Washington-Long Lake	27	1	2S	8E	10300
Lost Lake	28	33	1S	9E	9900
East Portal	33	36	7S	6E	7560
Strawberry Divide	33A	34&35	7S	6E	8000
Payson R. S.	68	30	10S	3E	8840
Mirror Lake**	83	24	1S	9E	10300
Mt. Nebo	88	28&29	11S	2E	9060
Sevier River					
Gooseberry Reservoir	41	25	13S	5E	8700
Mammoth R. S.-Cottonwood Cr.	42	13&23	13S	5E	8800
Huntington-Horseshoe	43	12	14S	5E	9800
G. B. R. C. Headquarters	45	21	17S	4E	8700
G. B. R. C. Meadows	46	26&27	17S	4E	10000
Seeley Creek R. S. #2**	48A	25	17S	4E	10000
Pine Creek-Chalk Creek	49	14	22S	4W	8500
Pine Creek	49A	24	22S	4W	8700
Gooseberry R. S.	50	32	23S	2E	8400
Farnsworth Lake	50A	27	23S	2E	9900
Fish Lake	51	35	26S	1E	8700
Kimberly Mine	52A	11	27S	5W	8900
Widtsoe-Escalante Summit	53	22	34S	1W	9500
Widtsoe-Escalante #2	53A	22	34S	1W	9500
Bryce Canyon	54	36	36S	4W	8000
Panguitch Lake	55	4&5	36S	7W	8200
Long Valley Junction*	56	22	38S	6W	7500
Harris Flat R. S.	57	24	38S	7W	7700
Duck Creek R. S.	58	11	38S	8W	8560
Cedar Breaks	59	2	37S	9W	10390
Big Flat**	63B	18	29S	4W	10000
Poison Creek	75				9100
Mt. Baldy R.S.	87	19	19S	4E	9500
Beaver Dams	87A	27	19S	3E	8000
Beaver River					
Merchants Valley	63	8&9	29S	5W	8200
Otter Lake	63A	1	29S	5W	9300
Big Flat	63B	18	29S	4W	10000
Coal Creek					
Cedar Breaks	59	2	37S	9W	10390
Webster Flat	61	20	37S	9W	9200

** On adjacent drainage
x Boise Meridian
* Previously shown as Gravel Springs Junction

Drainage Basin and Snow Course Name	Snow Course Number	Sec.	Twp.	Range	Elev.
COLORADO RIVER DRAINAGE					
Upper Green River					
Hewinta R. S.	34	33	3N	13E	9500
Hole in The Rock	35	13	2N	15E	9150
King's Cabin (upper)	39	22	1S	21E	8800
King's Cabin (lower)	39A	23&26	1S	21E	8600
Duchesne River					
Lost Lake	28	33	1S	9E	9900
Lakefork Mountain	36	2&3	2N[x]	5W[x]	10500
Lakefork Mountain #2	36A	17	2N[x]	4W[x]	8900
Lakefork Mountain #3	36B	29	2N[x]	4W[x]	8100
Paradise Park	37	7	3N[x]	1E[x]	10500
Mosby Mountain (lower)	38A	5	2N[x]	1E[x]	9500
Indian Canyon	40	2	11S	10E	9100
Brown Duck Lake	73	2	2N[x]	6W[x]	10300
Mirror Lake xx	83	24	1S	9E	10300
Price River					
Indian Canyon	40	2	11S	10E	9100
Gooseberry Reservoir	41	25	13S	5E	8700
Mammoth R.S.-Cottonwood Cr.	42	13&23	13S	5E	8800
Staley Ranch	42A	32	12S	7E	7600
Dry Valley Divide	42B	20	12S	8E	7800
Huntington-Horseshoe	43	12	14S	5E	9800
Scofield Dam	76	22	12S	11W	9000
Mud Creek	77	4	14S	11W	8600
San Rafael River					
Huntington-Horseshoe	43	12	14S	5E	9800
Seeley Creek R.S.	48A	25	17S	4E	10000
Muddy River					
Black Fork	69A	34	20S	4E	9200
Dill's Camp	69B	27	20S	4E	9200
Mt. Baldy R.S.**	87	19	19S	4E	9500
Virgin River					
Long Valley Junction	56	22	38S	6W	7500
Harris Flat R.S.	57	24	38S	7W	7700
Duck Cr. R. S.	58	11	38S	8W	8560
Cedar Breaks	59	2	37S	9W	10390
Webster Flat	61	20	37S	9W	9200
Pine Valley	62	3	40S	15W	9150
Lower Colorado River					
LaSal Mountain	64	5	27S	24E	8800
Buckboard Flat	65	36	33S	22E	9000

** On Adjacent drainage
x Boise Meridian

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

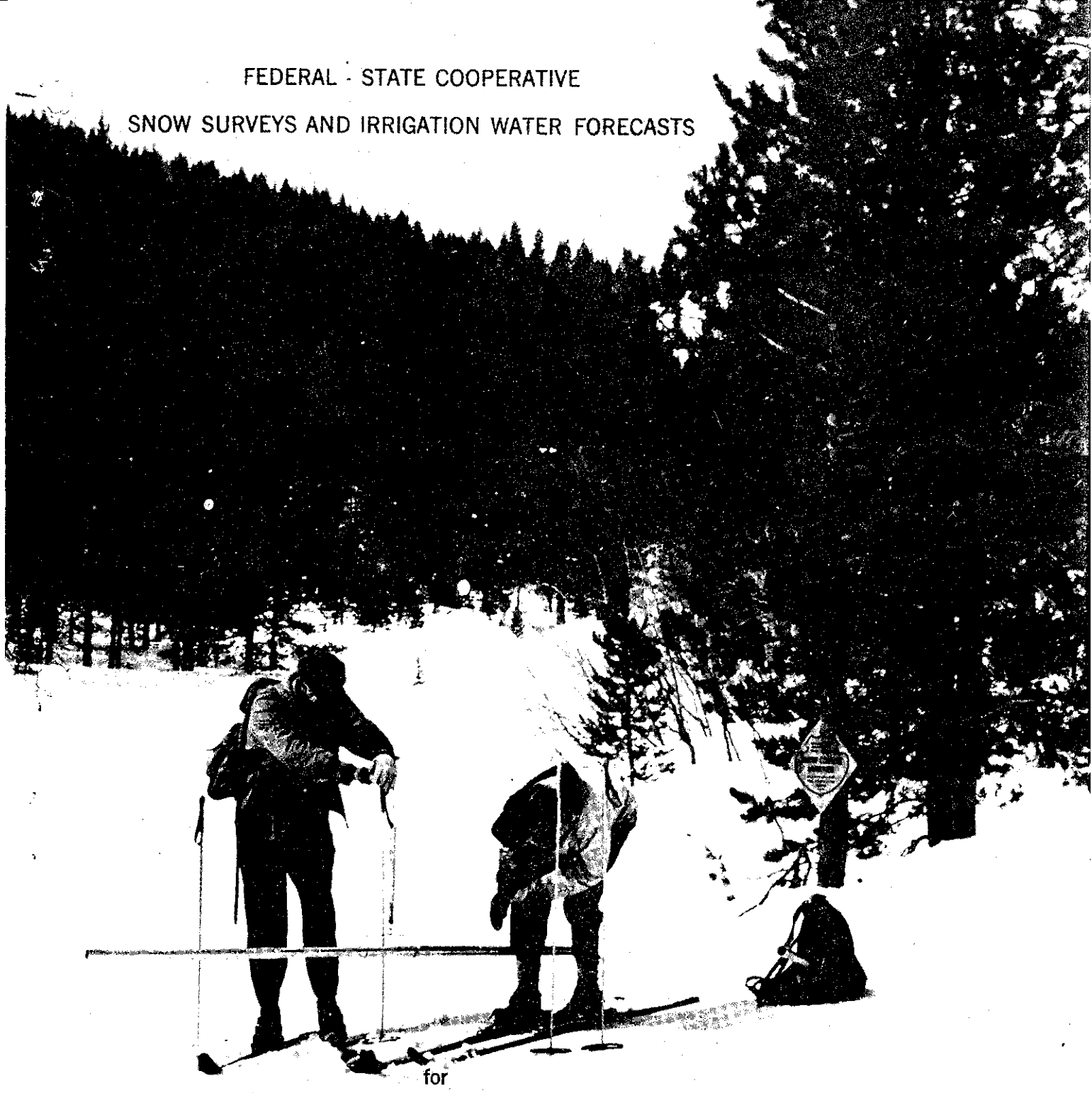
Beaver River Water-Users Association
Board of Canal Presidents - Jordan River
Coyote Irrigation Company
Emery Canal and Reservoir Company
Moon Lake Water-Users Association
Ogden River Water-Users Association
Strawberry Water Users Association
Sevier River Water-Users Association
Provo River Water Users 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, 1953

FEDERAL - STATE COOPERATIVE

SNOW SURVEYS AND IRRIGATION WATER FORECASTS

FOR

U T A H

April 1, 1953

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. 396

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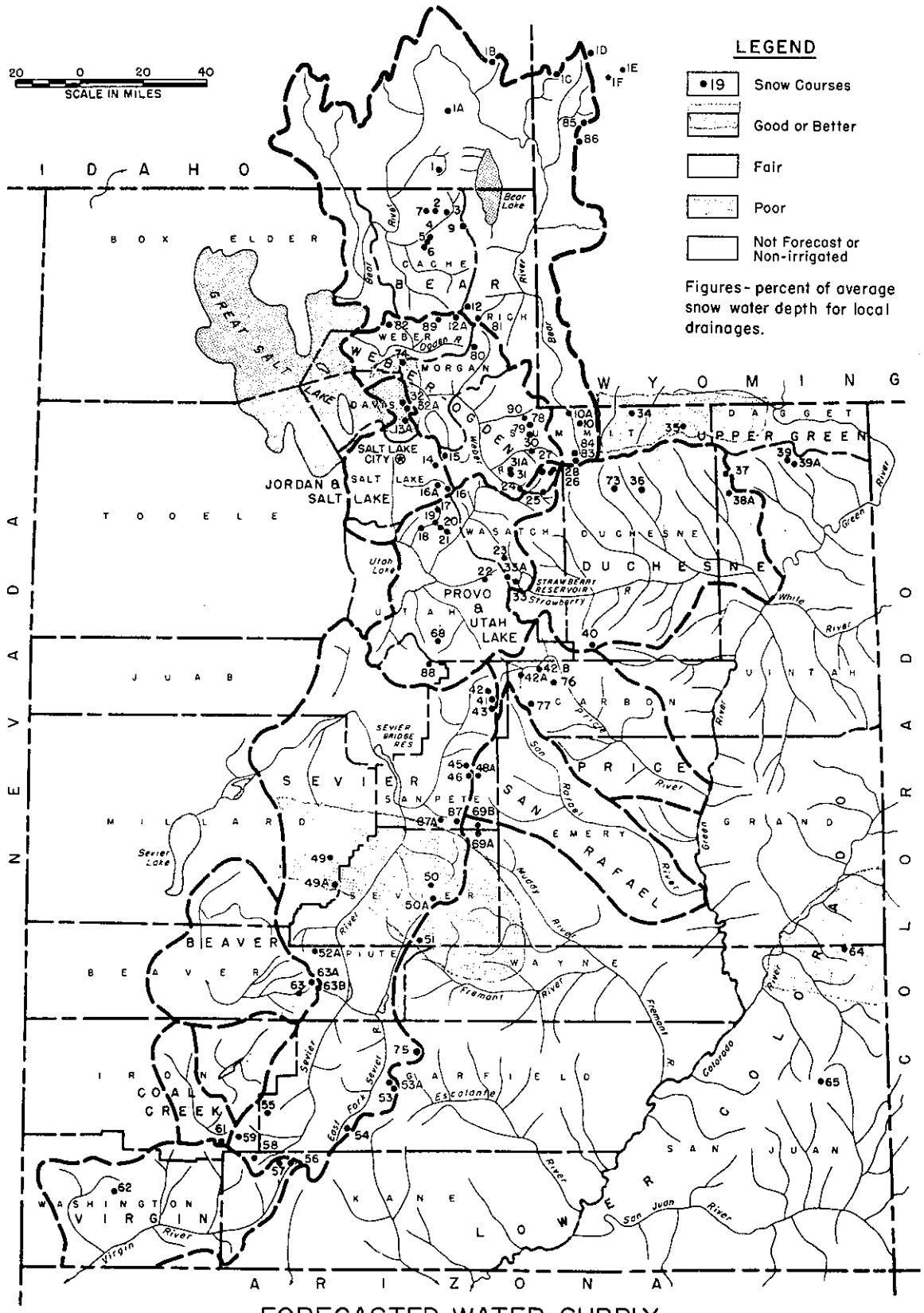
Definition of Terms on Map Following

Good - Runoff prospects normal or better, with sufficient flow for all demands of current season, and in the case of holdover reservoirs, for replacements of evaporation and other natural reservoir losses.

Fair - Subnormal runoff prospects, with some deficiency in meeting demands of current season when holdover storage is not available. If holdover storage available, adequate supply for current demands assured by some depletion of holdover storage.

Poor - Greatly subnormal runoff prospects with considerable deficiency of water for demands in current season when holdover storage not available. If holdover storage available, runoff prospects are considered poor if very heavy depletions of holdover storage are necessary to meet current demands.



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

WATER SUPPLY OUTLOOK
FOR UTAH
APRIL 1, 1953

With the exception of a narrow belt of normal runoff prospects running across the state from the Salina Creek-Fishlake area to the La Sal mountain area near Moab, the Farmington - Bountiful area and the area draining into Wyoming from the high Uintas, all other parts of the state can expect below average irrigation season streamflow. Runoff of the main and east forks of the Sevier River above Piute reservoir, the Beaver and Virgin rivers and Coal Creek near Cedar City will be of severe drought proportions comparable to that of 1951, with runoff expectancies varying from 20% to 45% of the 1941-50 average. On the Strawberry and Whiterocks rivers and Ashley Cr. in the Uintah Basin, prospects are for 50% to 60% of average runoff. Runoff of all other streams in the state will vary from about 60% to 80% of the ten year average. Holdover storage in 14 reporting reservoirs is 79% of capacity. This is 156% of 1941-50 ten year average. Water users depending on natural flow rights will experience a definite shortage while those in Central and Northern Utah having storage rights will have ample water during the irrigation season.

In southern Utah, water users depending on the natural flow of the main and east forks of the Sevier, the Escalante, Paria, Virgin, Santa Clara and Beaver rivers, and Panguitch and Kanab creeks and Coal Creek near Cedar City are faced with severe drought conditions comparable to those of 1951. Percents of the 1941-50 April-September streamflow expected this year are as follows: Sevier River at Hatch 46%, at Kingston 21%, Beaver River 36%, and Coal Creek near Cedar City 34%.

For water users on the Sevier River having storage rights in Otter Creek and Piute reservoirs, the situation is somewhat better, since these reservoirs average 88% of capacity and 112% of the 1941-50 average. It is essentially the same as in 1950, the first year of the recent two year drought. With less inflow into these reservoirs than in 1950, more careful planning in water utilization will be necessary this year.

Water users on the lower Sevier River are much better off, since the Sevier Bridge reservoir has 236,000 acre feet in storage, which is at capacity. It is 120% of the 1941-50 average.

Inflow to the Sevier River from tributary streams from Clear Creek at Sevier northward to the San Pitch River will vary from 85% to 105% of their long time averages. Flow of the tributary streams of the San Pitch River will be from 85% to 90% of average.

On the Price River April-September inflow to the Scofield reservoir should be from 80% to 85% of the long time average. Inflow to the river below the reservoir will be much less. however, with the result that at the gaging station near Heiner, only 68% of the 1941-50 ten year average flow is expected. Water users having natural flow rights will experience a shortage, while those having storage rights in Scofield reservoir will have ample supplies. The reservoir is filled to 78% of capacity and is 432% of its 1941-50 average.

Runoff of Huntington Creek and Cottonwood Creek on the San Rafael is forecast at 60% to 65% of the ten year average.

In the Uintah Basin, April-September runoff of the Strawberry River is forecast at 54% of the ten year average, Duchesne River 62%, Lakefork River 67%, Uinta River 63%, Whiterocks River 53%, and Ashley Creek 57%

Snow cover in the Monticello-Blanding area is 75% of the long time average.

Water users depending on natural flow rights on the streams draining into Utah Lake will experience some shortage of late season irrigation water, since these streams are forecast to flow at about 70% of the ten year average. Those having reservoir storage rights, however, have a good water supply assured because of the holdover water from last year's heavy runoff. Strawberry reservoir has 227,500 acre feet of water, which is 84% of capacity and 311% of the 1941-50 average. Deer Creek contains 81% of its capacity and 210% of average.

Water users below Utah Lake depending on storage in it have ample water supply prospects, since it has 953,300 acre feet of water, which is 155% of the 1941-50 average.

In the Salt Lake area, the cottonwood Creeks are expected to yield 80% to 85% of the ten year average.

April-September forecast runoff on the Weber-Ogden river streams is as follows: Weber River near Oakley 71%, near Coalville 72%, Chalk Creek at Coalville 50%, East Canyon Creek near Morgan 69%, South Fork Ogden River near Huntsville 71%. For the reservoirs on these streams, the percent of capacity is listed first, with percent of the ten year average second. Echo 62%, 140%; East Canyon 64%, 93%; Pineview 37%, 180%.

On the Bear River system, April-September forecast runoff is as follows: Bear River at Harer 57%, Little Bear River near Paradise 60%, Blacksmith Fork near Hyrum 58%, and Logan River near Logan 76%. Bear Lake has 1,023,000 acre feet in storage. This is 72% of capacity and 142% of the ten year average

The unusually warm weather during the winter melted a considerable portion of the low snows and thus decreased irrigation season runoff prospects from lower elevation watersheds. At the higher elevations, soils are still generally quite dry, or only surface damp from early melting. Priming of these soils with some of the snow water will be necessary before runoff begins.

In reading the above percentages, it should be remembered that these are computed on the basis of the average 1941-50 runoff. In northern Utah these were generally years of above normal runoff. An example of the influence this has is shown in the case of Big Cottonwood Creek near Salt Lake where the forecast percent is shown as 82%. When compared to the 1931-50 twenty year average this changes to 92%. These lower percents will be felt most during the late summer months when streamflows will be considerably less than water users have become accustomed to. The actual early and late season runoff forecasts in thousands of acre feet are shown in Table 1 of this report.

Table I - Streamflow Forecasts - April 1, 1953

Basin, Stream and Station	SEASONAL STREAMFLOW IN THOUSANDS OF ACRE FEET						
	Forecast Runoff 1953	% 10 yr. Ave.	Forecast period	Measured Runoff 1952	1951	1950	10 yr. average 1941-50
GREAT BASIN							
Bear River System							
Bear River at Harer, Idaho	160.0	57	Apr.-Sept.	521	408	504	281
	25.0	43	Jul.-Sept.	78	82	99	58
Little Bear River near Paradise, Utah	27.0	60	Apr.-Sept.	77	52	65	45
	2.5	64	Jul.-Sept.	6.0	5.3	6.1	3.9
Logan River near Logan, Utah(1)	102.0	76	Apr.-Sept.	169	178	214	135
	32.0	73	Jul.-Sept.	49	53	74	44
Blacksmith Fork near Hyrum, Utah(2)	32.0	58	Apr.-Sept.	109	93	103	55
	12.5	68	Jul.-Sept.	30.9	29.1	30.8	18.5
Weber-Ogden Rivers							
Weber River near Oakley, Utah	92.0	71	Apr.-Sept.	192	148	176	130
	15.0	60	Jul.-Sept.	34.6	31.4	38.4	24.9
Weber River (3) near Coalville, Utah	99.0	72	Apr.-Sept.	258	150	201	137
	8.5	46	Jul.-Sept.	33.5	23.2	34.6	18.6
Chalk Creek at Coalville, Utah	21.0	50	Apr.-Sept.	85	44	79	42
	2.8	57	Jul.-Sept.	8.6	6.2	9.9	4.9
East Canyon Creek near Morgan, Utah(4)	20.0	69	Apr.-Sept.	67	29	43	28.9
	2.5	86	Jul.-Sept.	5.4	2.7	3.3	2.9
S. Fork Ogden River near Huntsville, Utah	45.0	71	Apr.-Sept.	112	9[illegible]	97	64
	7.5	84	Jul.-Sept.	12.2	10.8	12.2	8.9

(1) Includes U.P.&L.Co. tailrace and Logan, Hyde Park and Smithfield Canal.
(2) Above Utah Power and Light Company's Dam.
(3) Includes diversion by Weber-Provo Canal.
(4) Observed flow plus change in storage in East Canyon Reservoir.

Table I - Streamflow Forecasts - April 1, 1953 - continued

Basin, Stream and Station	SEASONAL STREAMFLOW IN THOUSANDS OF ACRE FEET						
	Forecast Runoff 1953	% 10 yr. Ave.	Forecast period	Measured Runoff 1952	1951	1950	10 yr. average 1941-50
Provo River & Utah Lake							
Provo River at Vivian Park, Utah(5)	115.0	72	Apr.-Sept.	341	189	216	159
	32.0	77	Jul.-Sept.	66	44	49	42
American Fork near American Fork, Utah	25.0	69	Apr.-Sept.		40	41	36.3
	5.5	63	Jul.-Sept.		10.2	10.2	8.7
Jordan River & Salt Lake							
Big Cottonwood near Salt Lake City, Utah	33.0	82	Apr.-Sept.	58	41	42	40
	7.0	72	Jul.-Sept.	14.4	11.0	11.0	9.7
Sevier River							
Sevier River at Hatch, Utah	30.0	46	Apr.-Sept.	101	22.4	42	65
	10.0	57	Jul.-Sept.	23.3	8.4	13.2	17.5
Sevier River near Kingston, Utah	10.0	21	Apr.-Sept.	85	7.6	17.3	48
	4.0	56	Jul.-Sept.	14.0	3.2	4.3	7.2
Beaver River							
Beaver River near Beaver, Utah	12.5	36	Apr.-Sept.		18.1	16.2	34.4
	3.0	39	Jul.-Sept.		5.0	4.0	7.7
Coal Creek							
Coal Creek near Cedar City, Utah	7.0	34	Apr.-Sept.		6.3	11.6	20.6
	1.7	59	Jul.-Sept.		1.5	1.8	2.9

(5) Observed flow plus flow at South Fork Provo River at Vivian Park plus change in storage in Deer Creek Reservoir minus diversion by Weber-Provo Canal.

Table I - Streamflow Forecasts - April 1, 1953 - continued

Basin, Stream and Station	SEASONAL STREAMFLOW IN THOUSANDS OF ACRE FEET						
	Forecast Runoff 1953	% 10 yr. Ave.	Forecast period	Measured Runoff 1952	1951	1950	10 yr. Ave. 1941-50
COLORADO RIVER BASIN							
Upper Green River							
Ashley Creek near Vernal, Utah	38.0	57	Apr.-Sept.		49	76	66
	12.5	63	Jul.-Sept.		19.4	22.4	19.9
Duchesne River							
Duchesne River near Tabiona, Utah	75.0	62	Apr.-Sept.	211.1	141	160	122
	17.0	65	Jul.-Sept.	45.1	35.6	36.5	26.3
Strawberry River at Duchesne, Utah	40.0	54	Apr.-Sept.		69	100	74
	7.5	48	Jul.-Sept.		18.2	20.1	15.6
Lakefork River below Moon Lake, Utah (6)	55.0	67	Apr.-Sept.		77	90	82
	16.0	68	Jul.-Sept.		23.7	23.9	23.7
Uinta River near Neola, Utah	72.0	63	Apr.-Sept.		90	108	114
	30.0	68	Jul.-Sept.		42.4	37.7	44.4
Whiterocks River near Whiterocks, Utah	40.0	53	Apr.-Sept.		61	77	75
	14.0	59	Jul.-Sept.		25.1	23.7	23.7
Price River							
Price River near Heiner, Utah (7)	48.0	68	Apr.-Sept.	231	5[illegible]	75	70
	4.5	60	Jul.-Sept.	17.9	5.4	6.2	7.5
San Rafael River							
Huntington Creek near Huntington, Utah	38.0	65	Apr.-Sept.	139	57	51	59
	11.0	66	Jul.-Sept.	33.6	19.8	18.4	16.7
Cottonwood Creek near Orangeville, Utah	37.5	59	Apr.-Sept.		49	42	64
	7.0	61	Jul.-Sept.		12.0	9.0	11.4

(6) Observed flow plus change in storage in Moon Lake Reservoir.
(7) Observed flow plus change in storage in Scofield Reservoir.

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. Franklin Basin has 88% of its 29 year average snow water. Emigrant Summit has 86% of its 17 year average snow water. Runoff of these streams will be about the same as it was six years ago, in 1947.

Providence and Millville Creeks

The runoff of these streams is reflected in the measurement of snow on the Mt. Logan snow courses. Since these streams have westerly facing watersheds, the warm winter has reduced the low elevation snows considerably, with runoff expectancy being reflected best by the course at the 7,000 foot level. Runoff should be about 80% of the long time average.

WEBER - OGDEN RIVER DRAINAGE

Ogden River

Forecast runoff for the April-September and July-September periods is respectively 71% and 84% of the 1941-50 ten year averages. The average for April-September is 63,600 acre feet and for July-September it is 8,900 acre feet. During the coming season the watershed is expected to yield a runoff of approximately 45,000 and 7,500 acre feet for the two periods.

Pineview reservoir has 16,500 acre feet in storage. This is 37% of capacity and 180% of the 1941-50 average.

Weber River

The combined inflow to Echo reservoir from the Weber River and Chalk Creek is forecast at 120,000 acre feet for the April-September period, and 11,300 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 near Morgan should produce about 20,000 and 2,500 acre feet as compared to averages of 28,900 and 2,900 acre feet for the respective forecast periods.

Echo reservoir has 46,200 acre feet in storage. This is 62% of capacity and 140% of the ten year average.

East Canyon has 18,300 acre feet, or 64% of capacity. It is 93% of the ten year average.

JORDAN RIVER AND SALT LAKE DRAINAGE

Salt Lake Watersheds

Snow cover on the Wasatch Front watersheds from Ogden south to Salt Lake, while considerably below that of recent years, is near the long time average, varying from 85% of average at the lower elevation courses to 107 percent at the higher elevations. Since soils are dryer than usual, runoff will probably be a little below average, but not seriously so.

Big Cottonwood Creek

Runoff for the coming season is forecast at 33,000 acre feet for the April-September period. This is 82% of the 1941-50 ten year average flow, and 92% of the 1931-50 twenty year average flow. 7,000

acre feet are forecast for runoff during the July-September period. These figures compare with the 1941-50 average runoff of 40,400 and 9,700 acre feet.

PROVO RIVER AND UTAH LAKE DRAINAGE

Provo River

There is considerable variability of the snow cover on the Provo River this year. It varies from 70% to 100 % of average.

The average runoff of the Provo River below the forks at Vivian Park, corrected for diversions and storage above here, shows a ten year average for the April-September and July-September periods of 159,200 and 41,600 acre feet respectively. From the snow data just gathered, it is expected that 115,000 and 32,000 acre feet will be measured during the respective periods this year. This represents 72% and 77% of the ten year average runoff.

Deer Creek reservoir on March 31 had 119,600 acre feet in storage. This is 81% of capacity and 210% of the 1941-50 average.

American Fork River

Snow cover on the South Fork of the American Fork River is poorer than in the North Fork. It varies from 60% to 70% of average, while in the North Fork the lower snows are about 75%, with higher snows near average. It is expected that the yield at the gaging station above the power plant will be 25,000 and 5,500 acre feet for the April-September and July-September periods. This represents 69% and 63% respectively of the 1941-50 ten year average flow.

Hobble, Payson and Santaquin Creeks, and Spanish Fork River

Hobble Creek Summit, Strawberry Divide, Payson R. S. and the Gooseberry reservoir snow courses provide the data for anticipating expected runoff from these watersheds. Measurements indicate that these streams will experience a runoff which will be from 70% to 80% of the long time average runoff.

Strawberry Reservoir

The snow cover on the drainage basin of the Strawberry reservoir varies from 70% to 82% of the long time average. Storage in the reservoir is the greatest it has ever been this time of year, as a result of holdover storage from last year. On March 31 it contained 227,500 acre feet. This is 84% of capacity and 311 % of the 1941-50 average.

Utah Lake

On March 31 Utah Lake had 953,300 acre feet in storage. This is 83% of capacity and 155% of the 1941-50 average contents.

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 extremely low, about halfway between the conditions existing in 1950 and 1951. It is expected that the Sevier River at Hatch will yield about 30,000 and 10,000 acre feet as compared to the 1941-50 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 10,000 and 4,000 acre feet. The averages here are 48,300 and 7,200 acre feet.

On March 31 there was 50,000 acre feet of water in Otter Creek Reservoir. This is 95% of capacity and 115% of the ten year average. In Piute reservoir there was 71,300 acre feet. This is 84% of capacity and 110% of the 1941-50 ten year average.

Salina Creek

The Gooseberry Ranger Station snow course has a snow water content of 10.9 inches, or 108% of its 23 year average.

Clear Creek

The Kimberly Mine snow course had 14.4 inches of water, which is 85% of its 18 year average.

San Pitch River

Snow cover water content measurements on the San Pitch headwaters above Fairview and Ephraim are from 80% to 90% of the long time average water content. There has been considerable melting of the lower snows during March. Because of soil moisture depletion from last falls drought, soils at the higher elevations will absorb some of the snowmelt, with runoff from this area being about 80% of average.

INDEPENDENT STREAMS WEST OF THE WASATCH RANGE

Beaver River

Runoff prospects on the Beaver River are poorer now than they were at this time in either 1950 or 1951, and are the poorest they have been since 1934. The gaging station near Beaver should record a streamflow of about 12,500 acre feet for the April-September period and 3,000 acre feet for July-September. This represents 36% and 39% of the ten year (1941-50) averages of 34,400 and 7,700 acre feet for these periods. On March 31 there was 21,100 acre feet in storage in Rocky Ford reservoir. This is 91% of capacity and 106% of the ten year average.

Coal Creek

Runoff prospects for Coal Creek near Cedar City are only slightly better than in 1951. It is expected that 7,000 acre feet will be measured at the gaging station during April-September, and 1,700 acre feet during July-September. This is respectively 34% and 59% of the ten year average flow for these periods.

Whiterocks River at Whiterocks

The snow courses at Paradise Park and Mosby Mountain, together with the soil moisture conditions, indicate a runoff this year which will be almost the same as in 1946, the first year after the last World War. The forecast runoff for this year is 40,000 and 14,000 acre feet for the April-September and July-September periods. This represents 53% and 59% of the 1941-50 averages of 75,300 and 23,700 acre feet for these two periods.

PRICE RIVER DRAINAGE

Price River near Heiner

Considerable variation in the snowpack exists on the watershed above Heiner. The high elevation snows about Scofield reservoir are from 80% to 90% of average, while the lower elevation snows from Scofield north and east to the head of Indian Canyon vary from just patchy snow to 60% of average. The runoff at Heiner is forecast at 48,000 acre feet, or 68% of the 1941-50 average of 70,100 acre feet for April-September. Forecast runoff for July-September is 4,500 acre feet, or 60% of the average of 7,500.

Scofield reservoir on March 31 had 50,900 acre feet in storage. This is 78% of capacity and 432% of the 1941-50 average of 11,800 acre feet.

Water users having reservoir storage rights will have ample water supplies for the coming season, while those dependent on natural flow rights will experience a definite shortage of irrigation water.

SAN RAFAEL RIVER DRAINAGE

Huntington Creek at Huntington

Runoff of Huntington Creek this year will be approximately 38,000 acre feet, or 65% of the ten year average of 58,600 acre feet for the April-September period. This is little more than the runoff of 1948. For the July-September period, runoff will be about 11,000 acre feet, compared to 16,700 acre feet for the 1941-50 period.

Cottonwood Creek at Orangeville

The average April-September runoff from Cottonwood Creek was 63,900 acre feet for the ten years of 1941-50. Snow Surveys indicate that the runoff this year will be 37,500 acre feet, or 59% of the average. The July-September runoff is forecast at 7,000 acre feet compared to the average of 11,400.

LOWER COLORADO DRAINAGE

La Sal Mountain Area

Average water supplies are in prospect for this area, since water content at the snow course was 98% of the 22 year average, 9.3 inches of water were measured this year. Average is 9.5 inches.

Blue Mountain Area

The Buckboard Flat snow course has 74% of its 23 year average. 10.5 inches of water were measured, compared to the average of 14.2 inches.

VIRGIN RIVER DRAINAGE

Virgin River

The snow courses at Long Valley Junction, Harris Flat R. S., Duck Creek R. S., Cedar Breaks and Webster Flat furnish an index to the amount of water that will flow out of the Virgin River watershed. These courses indicate a runoff of about 40% of average, and just slightly more than in 1951, the second and more severe year of the recent two year drought.

Santa Clara near Central

A real water supply deficiency is in prospect here, as on the main Virgin River, with runoff prospects being just slightly better than in 1951. The water content at the Pine Valley Mountain snow course was 7.8 inches, only 39% of the 16 year average of 19.8 inches.

Table 2 - Status of Reservoir Storage about April 1, 1953

Basin and Stream	Reservoir	Usable capacity (1000 of acre ft.)	1000 acre feet in storage April 1				
			1953	1952	1951	1950	10 yr. average 1941-50
Bear River System							
Bear River	Bear Lake	1421.0	1023.0	955.9	1043.0	1022.0	720.0
Little Bear River	Hyrum	15.3	15.8	10.4	10.3	10.6	12.6
Weber-Ogden Rivers							
Ogden River	Pine View	44.2	16.5	3.6	10.5	5.8	9.2
Weber River	East Canyon	28.7	18.3	6.9	19.0	19.8	19.7
Weber River	Echo	73.9	46.2	13.3	48.2	43.9	33.1
Provo River and Utah Lake							
Provo River	Deer Creek	147.3	119.6	108.7	124.1	117.8	56.8
Spanish Fork River	Strawberry*	270.0	227.5	131.0	119.2	97.2	73.2
Utah Lake	Utah Lake*	1149.0	953.3	843.3	730.0	735.6	568.0
Sevier River System							
Sevier River	Otter Creek	52.5	50.0	24.6	31.6	53.8	43.4
Sevier River	Piute	84.8	71.3	43.9	45.5	67.1	64.6
Sevier River	Sevier Bridge	236.0	236.0	86.5	129.8	185.4	195.9
Beaver River							
Beaver River	Rocky Ford	23.3	21.1	14.7	11.6	20.5	19.9
Duchesne River							
Lake Fork River	Moon Lake	35.8	21.1	22.7	20.5	20.0	17.8
Price River							
Price River	Scofield	65.0	50.9	33.8	32.2	25.0	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, 1953

Drainage Basin, Snow Course and Number		Elev	SNOW COVER MEASUREMENTS: Date of Survey 1953	Snow Depth (In.) 1953	WATER CONTENT (INCHES) ABOUT APRIL 1: 1953	1952	1951	Yrs. Apr. 1 Rcd.	Ave. Wa. Cont. (In.)	% of Ave.
			GREAT BASIN DRAINAGE							
Bear River System										
Franklin Basin(Ida)	(1)	8200	4-3	54.2	23.7	40.2	32.8	29	26.8	88
Emigrant Summit(Ida)	(1A)	7700	3-27	56.9	21.4	34.5	27.8	17	24.9	86
Slug Creek Divide(Ida)	1B)	7300	3-30	35.0	11.8	20.2	17.5	17	16.1	73
Salt River Summit(Wyo)	1C)	7900	3-28	36.7	13.1	19.5	18.0	5	17.9	73
Poison Meadows(Wyo)**	(1D)	8500	3-25	80.0	25.0	31.0	39.0	5	31.0	81
Snyder Basin R.S. Wyoming**	(1E)	8040		41.0	13.8	18.0	22.1	16	13.7	101
Piney-LaBarge**	(1F)	8820		49.0	15.4	25.0	24.8	16	18.3	84
Tony Grove Lake	(2)	8200	4-3	80.0	35.5	47.6	52.0	27	34.5	103
Tony Grove R.S.	(3)	6250	3-30	18.8	6.7	17.6	15.1	24	10.1	66
Spring Hollow (lower)	(4)	7000	3-28	31.3	11.3	24.5	14.6	28	14.6	77
Spring Hollow (upper)	(5)	8000	3-28	67.3	22.3	34.6	30.4	29	24.8	90
Mt. Logan	(6)	9000	3-28	66.5	26.0	43.8	37.4	29	29.3	89
Garden City Summit	(9)	8000	3-30	41.0	14.5	26.6	24.4	22	19.1	76
Head of Bear River	(10)	8600	3-27	28.5	8.1	13.2	6.3	18	8.4	96
Goodman Ranch	(10A)	7900	3-27	18.2	6.2	9.9	4.8	15	5.0	124
Monte Cristo	(12)	8960	3-27	61.4	23.4	39.2	31.4	20	24.6	95
Lost Lake	(28)	9900	3-25	67.5	21.0	36.1	32.2	20	24.5	86
Mirror Lake	(83)	10300	3-25	71.9	23.3	42.4	32.4	2	37.4	xx
Machine Crossing	(84)	9300	3-25	49.8	16.3	24.8	20.4	2	22.6	xx
Big Park (Wyo)	(85)	8700	3-24	55.5	18.0	27.2	27.0	2	27.1	xx
Kelly Ranger Station (Wyo)	(86)	8200	3-24	50.2	16.0	22.9	22.5	2	22.7	xx
Weber-Ogden Rivers										
Monte Cristo	(12)	8960	3-27	61.4	23.4	39.2	31.4	20	24.6	95
Dry Bread Pond	(12A)	8230	3-27	43.7	16.2	31.3	21.1	15	18.4	88
Parley's Canyon Summit	(15)	7500	3-31	48.8	18.3	31.3	18.0	19	18.2	101
Silver Lake**	(16)	8725	3-30	66.0	24.8	38.2	31.9	22	25.9	96
Beaver Cr. R.S.	(24)	7500	3-25	21.8	7.4	18.6	8.0	21	8.1	91
Trial Lake **	(26)	9800	3-25	71.0	21.8	39.3	33.9	22	26.3	83
Smith and Morehouse	(30)	7600	3-30	32.1	10.2	24.3	14.9	24	13.2	77
Redden Mine(upper)	(31)	9000	4-1	43.2	16.2	34.5	21.2	23	20.7	78
Redden Mine(lower)	(31A)	8500	4-1	42.0	14.6	34.0	20.3	23	19.6	74

** On adjacent drainage. xx Percentage not shown where record is not long enough to give a comparative figure.

Table 3 - Utah Snow Surveys - about April 1, 1953 - continued

Drainage Basin, Snow Course and Number		Elev	SNOW COVER MEASUREMENTS: Date of Survey 1953	Snow Depth (In.) 1953	WATER CONTENT (INCHES) ABOUT APRIL 1: 1953	1952	1951	Yrs. Apr. 1 Rcd.	Ave. Wa. Cont. (In.)	% of Av.
Weber-Ogden Rivers Cont'd										
Mt. Ogden	(74)	8600	3-26	67.9	27.1	48.8	32.1	5	34.7	xx
Chalk Cr. #1	(78)	8200	3-26	42.4	13.4	25.6	15.2	2	20.4	xx
Chalk Cr. #2	(79)	9100	3-26	62.4	20.1	39.2	27.4	2	33.3	xx
Chalk Cr. #3	(90)	7500	3-26	21.4	6.3	14.5	N.R	1	14.5	xx
Ben Lomond Peak	(82)	8000	3-30	83.0	36.4	48.8	44.3	2	46.5	xx
Beaver Cr. Skunk Cr.	(89)	7150	3-27	30.6	11.0	24.0	N.R	1	24.0	xx
Sagebrush Flat	(89A)	6300	3-27	6.6	2.3	New	Course			
Jordan River & Great Salt Lake										
Barnard Cr.	(13A)	8000	3-25	75.8	30.1	41.7	26.6	17	28.2	107
Lamb's Canyon	(14)	6600	3-28	42.6	13.9	29.6	14.1	18	16.1	86
Silver Lake	(16)	8720	3-30	66.0	24.8	38.2	31.9	22	25.9	96
Mill D. South Fork	(16A)	7400	3-30	58.1	21.6	34.4	21.6	18	20.6	105
Farmington Canyon (lower)	(32)	6950	3-26	66.0	25.7	40.2	25.2	2	32.7	xx
Farmington Canyon (upper)	(32A)	8000	3-26	83.6	30.8	42.2	30.3	2	36.2	xx
Provo River and Utah Lake										
Dutchman R.S.	(17)	7500	3-29	38.2	13.9	35.1	22.6	22	18.9	74
Timpanogas Cave Camp	(18)	5500		No snow		14.5	N.S	18	1.8	—
South Fork R.S.	(19)	6100	3-27	7.7	3.3	22.1	Patchy	18	5.3	62
Camp Altamont	(20)	7300	3-28	32.5	11.5	35.5	14.6	18	18.4	63
Timpanogas Divide	(21)	8200	3-28	49.2	17.8	43.6	25.4	18	26.3	68
Hobble Cr. Summit	(22)	7300	3-27	31.0	10.8	29.5	14.9	17	14.5	74
Daniels-Strawberry Summit	(23)	8000	3-27	32.4	10.6	31.8	12.8	23	15.1	70
Soapstone R.S.	(25)	7800	3-25	39.8	11.9	24.0	13.7	22	11.9	100
Trial Lake	(26)	9800	3-25	71.0	21.8	39.3	33.9	22	26.3	83
Lost Lake	(28)	9900	3-25	67.5	21.0	36.1	32.2	20	24.5	86
East Portal	(33)	7560	3-29	34.0	10.1	29.4	11.0	19	12.7	80
Strawberry Divide	(33A)	8000	3-29	48.5	17.6	43.4	22.5	19	21.5	82
Payson R. S.	(68)	8840	3-24	42.3	14.9	34.5	13.4	9	19.9	75
Mirror Lake **	(83)	10300	3-25	71.9	23.3	42.4	32.4	2	37.4	xx

** On adjacent drainage. xx Percentage not shown where records are not long enough to give a comparative figure.

Table 3 – Utah Snow Surveys – about April 1, 1953 – continued

Drainage Basin, Snow Course and Number	Elev	SNOW COVER MEASUREMENTS: Date of Survey 1953	Snow Depth (In.) 1953	WATER CONTENT (INCHES) ABOUT APRIL 1: 1953	1952	1951	Yrs. Apr. 1 Rcd.	Ave. Wa. Cont. (In.)	% of Av
Sevier River									
Gooseberry Reservoir (41)	8700	4-2	45.7	17.4	41.5	17.7	25	19.7	88
Mammoth R. S.– Cottonwood Creek (42)	8800	4-2	45.4	17.7	42.0	18.6	24	21.0	84
Huntington-Horseshoe (43)	9800	4-2	55.3	20.8	50.0	22.0	23	25.3	82
G.B.R.C. Headquarters (45)	8700	3-30	42.6	14.5	34.6	11.2	23	16.8	86
G.B.R.C. Meadows (46)	10000	4-1	61.6	21.7	50.6	21.2	23	25.0	87
Seeley Creek R.S.#2** (48A)	10000	4-1	32.9	10.1	37.8	13.0	23	15.8	64
Pine Cr.-Chalk Cr. (49)	8500		No report		20.6	3.6	22	11.8	—
Pine Cr. (49A)	8700		No report		28.4	16.2	4	18.1	—
Gooseberry R. S. (50)	8400	3-27	33.0	10.9	15.8	7.4	23	10.1	108
Farnsworth Lake (50A)	9900	3-27	50.6	17.4	24.8	13.0	2	18.9	xx
Fish Lake (51)	8700	3-23	31.2	6.2	18.0	4.7	22	6.4	97
Kimberly Mine (52A)	8900	3-26	42.4	14.4	29.0	8.0	18	17.0	85
Widtsoe-Escalante Summit (53)	9500	3-27	12.5	2.7	15.0	0.4	21	8.8	31
Widtsoe-Escalante#2 (53A)	9500	3-27	25.6	6.9	18.2	2.8	3	9.1	xx
Bryce Canyon (54)	8000	3-31	No snow		12.4	No snow	13	7.2	—
Panguitch Lake (55)	8200	3-25	4.3	1.3	14.2	No snow	18	6.9	19
Long Valley Jct.* (56)	7500	3-26	No snow		14.1	No snow	16	5.8	—
Harris Flat R.S. (57)	7700	3-26	4.7	1.4	21.1	No snow	22	9.9	14
Duck Cr. R. S. (58)	8560	3-26	17.7	6.4	32.7	7.2	18	17.5	37
Cedar Breaks (59)	10390	4-2	41.3	14.9	44.7	10.2	18	25.8	58
Big Flat** (63B)	10000	3-30	43.2	12.8	35.0	14.9	17	21.2	60
Mt. Baldy R.S. (87)	9500	3-31	58.6	19.9	41.0	21.3	2	31.2	xx
Beaver Dams (87A)	8000	3-30	28.9	9.8	24.6	8.8	2	16.7	xx
Beaver River									
Merchants Valley (63)	8200	3-30	18.2	5.3	22.7	5.2	22	11.4	46
Otter Lake (63A)	9300	3-30	36.3	10.0	31.2	10.5	17	17.7	56
Big Flat (63B)	10000	3-30	43.2	12.8	35.0	14.9	17	21.2	60
Coal Creek									
Cedar Breaks (59)	10390	4-2	41.3	14.9	44.7	10.2	18	25.8	58
Webster Flat (61)	9200	4-2	17.3	6.9	37.3	6.6	26	17.8	39

* Previously shown as Gravel Springs Junction. ** On adjacent drainage.

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

Table 3 - Utah Snow Surveys - about April 1, 1953

Drainage Basin, Snow Course and Number		Elev	Date of Survey 1953	Snow Depth (In.) 1953	Water Content (Inches) About April 1 1953	1952	1951	Yrs. Apr. 1 Red.	Ave. Wat. Cont. (In.)	% of Ave.
			COLORADO RIVER DRAINAGE							
Upper Green River										
Hewinta R. S.	(34)	9500	3-26	34.5	10.0	13.9	9.9	20	9.6	104
Hole-In-The-Rock	(35)	9150	3-18	22.5	5.5	10.7	5.4	21	5.7	96
Kings Cabin(upper)	(39)	8800	4-1	24.8	8.0	18.4	8.2	23	10.2	78
Kings Cabin(lower)	(39A)	8600	4-1	17.4	5.3	15.9	6.6	23	9.5	56
Duchesne River										
Lost Lake	(28)	9900	3-25	67.5	21.0	36.1	32.2	20	24.5	86
Lakefork Mountain	(36)	10500	3-30	35.4	9.3	21.7	10.6	22	10.7	87
Lakefork Mountain #2	(36A)	8400	3-30	15.0	4.3	New	Course			
Lakefork Mountain #3	(36B)	8100	3-30	2.9	0.5	New	Course			
Paradise Park	(37)	10500	3-31	35.3	8.3	20.7	7.4	21	12.3	67
Mosby Mountain(lower	(38A)	9500	3-31	25.1	5.9	19.4	8.8	23	10.8	55
Indian Canyon	(40)	9100	3-31	17.5	5.3	23.8	7.7	23	10.6	50
Brown Duck Lake	(73)	10300	3-26	43.0	14.2	30.8	18.8	11	16.9	84
Mirror Lake	(83)	10300	3-25	71.9	23.3	42.4	32.4	2	37.4	xx
Price River										
Indian Canyon	(40)	9100	3-31	17.5	5.3	23.8	7.7	23	10.6	50
Gooseberry Reservoir	(41)	8700	4-2	45.7	17.4	41.5	17.7	25	19.7	88
Mammoth R. S.- Cottonwood Creek	(42)	8800	4-2	45.4	17.7	42.0	18.6	24	21.0	84
Staley Ranch	(42A)	7600	3-31	Patchy		18.0	2.8	17	7.0	—
Dry Valley Div.	(42B)	7800	3-31	22.3	6.5	25.2	7.8	18	11.1	59
Huntington-Horseshoe	(43)	9800	4-2	55.3	20.8	50.0	22.0	23	25.3	82
Scofield Dam	(76)	9000		No report		24.1	8.0	4	15.6	—
Mud Creek	(77)	8600	3-31	49.6	18.8	38.3	15.7	4	22.6	—
San Rafael River										
Huntington-Horseshoe	(43)	9800	4-2	55.3	20.8	50.0	22.0	23	25.3	82
Seeley Creek R. S.	(48A)	10000	4-1	32.9	10.1	37.8	13.0	23	15.8	64
Muddy River										
Black Fork	(69A)	9200	4-1	43.4	13.4	N.R	14.4	6	14.4	93
Dill's Camp	(69B)	9200	4-1	37.1	9.0	N.R	10.2	5	11.8	76
Mt.Baldy R.S.**	(87)	9500	3-31	58.6	19.9	41.0	21.3	2	31.2	xx
Virgin River										
Long Valley Jct. x	(56)	7500	3-26	No snow		14.1	N.S	16	5.8	—
Harris Flat R.S.	(57)	7700	3-26	4.7	1.4	21.1	N.S	22	9.9	14
Duck Cr. R. S.	(58)	8560	3-26	17.7	6.4	32.7	7.2	18	17.5	37
Cedar Breaks	(59)	10390	4-2	41.3	14.9	44.7	10.2	18	25.8	58
Webster Flat	(61)	9200	4-2	17.3	6.9	37.3	6.6	26	17.8	39
Pine Valley	(62)	9150	3-27	19.6	7.8	33.1	6.4	16	19.8	39
Lower Colorado River										
LaSal Mountain	(64)	8800	4-6	30.0	9.3	21.8	5.1	22	9.5	98
Buckboard Flat	(65)	9000	3-28	33.1	10.5	26.6	6.7	23	14.2	74

** On adjacent drainage. x Previously shown as Gravel Springs Junction.

xx Percentage not shown where record is not long enough to give a comparative record.

INDEX OF SNOW COURSE LOCATIONS

Drainage Basin and Snow Course Name	Snow Course Number	Section	Township	Range	Elev.
GREAT BASIN DRAINAGE					
Bear River System					
Franklin Basin (Idaho)	1	1&12	16S[x]	41E[x]	8200
Emigrant Summit (Idaho)	1A	21	12S[x]	42E[x]	7700
Slug Creek Divide (Idaho)	1B	10&15	10S[x]	44E[x]	7300
Salt River Summit (Wyo.)	1C	32	29N	118W*	7900
Poison Meadows (Wyo.)**	1D	29	30N	116W*	8500
Snyder Basin R. S. (Wyo.)**	1E	15	29N	114W*	8040
Piney-LaBarge**	1F	19	29N	114W*	8820
Tony Grove Lake	2	5	13N	3E	8200
Tony Grove R. S.	3	11	13N	3E	6250
Spring Hollow (lower)	4	26	12N	2E	7000
Spring Hollow (upper)	5	35	12N	2E	8000
Mt. Logan	6	3	11N	2E	9000
Smithfield Spring	7	2	13N	2E	7000
Garden City Summit	9	34	14N	4E	8000
Head of Bear River	10	15	2N	10E	8600
Goodman Ranch	10A	19	3N	10E	7900
Monte Cristo	12	3	8N	4E	8960
Lost Lake**	28	33	1S	9E	9900
Girl Hollow	81	5	7N	5E	8400
Mirror Lake xx	83	24	1S	9E	10300
Machine Crossing	84	1	1S	9E	9300
Big Park (Wyo.)	85	7	27N	117W*	8700
Kelly Ranger St. (Wyo.)	86	13	26N	118W*	8200
Weber-Ogden Rivers					
Monte Cristo	12	3	8N	4E	8960
Dry Bread Pond	12A	3	7N	4E	8230
Parley's Canyon Summit	15	9&10	1S	3E	7500
Silver Lake**	16	35	2S	3E	8725
Beaver Creek R. S.	24	28	2S	7E	7500
Trial Lake**	26	5	2S	9E	9800
Smith & Morehouse	30	25	1N	7E	7600
Redden Mine (Upper)	31	1	2S	6E	9000
Redden Mine (Lower)	31A	1	2S	6E	8500
Mt. Ogden	74	5	5N	1E	8600
Chalk Creek #1	78	17&20	2N	8E	8300
Chalk Creek #2	79	4	1N	8E	9100
Chalk Creek #3	90	7	2N	8E	7500
Horse Ridge	80	1	6N	4E	8360
Girl Hollow	81	5	7N	5E	8400
Ben Lomond Peak	82	3	7N	1W	8000
Beaver Creek-Skunk Creek	89	22	8N	3E	7150
Sagebrush Flat	89A	21	7N	3E	6300
Jordan River & Gr. Salt Lake					
Barnard Creek	13A	34	3N	1E	8000
Lamb's Canyon	14	19	1S	3E	6600
Silver Lake	16	35	2S	3E	8720
Mill D. South Fork	16A	18	2S	3E	7400
Farmington Canyon (lower)	32	14	3N	4E	6950
Farmington Canyon (upper)	32A	26	3N	4E	8000

** On adjacent drainage. * 6th Principal Meridian. [x]Boise Meridian

xx Previously shown as Bear Head.

INDEX OF SNOW COURSE LOCATIONS (Cont'd)

Drainage Basin and Snow Course Name	Snow Course Number	Sec.	Twp.	Range	Elev.
Provo River & Utah Lake					
Dutchman R. S.	17	27	3S	3E	7500
Timpanogas Cave Camp	18	27	4S	2E	5500
South Fork R. S.	19	24	4S	2E	6100
Camp Altamont	20	29	4S	3E	7300
Timpanogas Divide	21	33	4S	3E	8200
Hobble Creek Summit	22	20	7S	5E	7300
Daniels-Strawberry Summit	23	20	2S[x]	12W[x]	8000
Soapstone R. S.	25	9	3S	2E	7800
Trial Lake	26	5	2S	9E	9800
Washington-Long Lake	27	1	2S	8E	10300
Lost Lake	28	33	1S	9E	9900
East Portal	33	36	7S	6E	7560
Strawberry Divide	33A	34&35	7S	6E	8000
Payson R. S.	68	30	10S	3E	8840
Mirror Lake**	83	24	1S	9E	10300
Mt. Nebo	88	28&29	11S	2E	9060
Sevier River					
Gooseberry Reservoir	41	25	13S	5E	8700
Mammoth R.S.-Cottonwood Cr.	42	13&23	13S	5E	8800
Huntington-Horseshoe	43	12	14S	5E	9800
G.B.R.C. Headquarters	45	21	17S	4E	8700
G.B.R.C. Meadows	46	26&27	17S	4E	10000
Seeley Creek R. S. #2**	48A	25	17S	4E	10000
Pine Creek-Chalk Creek	49	14	22S	4W	8500
Pine Creek	49A	24	22S	4W	8700
Gooseberry R. S.	50	32	23S	2E	8400
Farnsworth Lake	50A	27	23S	2E	9900
Fish Lake	51	35	26S	1E	8700
Kimberly Mine	52A	11	27S	5W	8900
Widtsoe-Escalante Summit	53	22	34S	1W	9500
Widtsoe-Escalante #2	53A	22	34S	1W	9500
Bryce Canyon	54	36	36S	4W	8000
Panguitch Lake	55	4&5	36S	7W	8200
Long Valley Junction*	56	22	38S	6W	7500
Harris Flat R. S.	57	24	38S	7W	7700
Duck Creek R. S.	58	11	38S	8W	8560
Cedar Breaks	59	2	37S	9W	10390
Big Flat**	63B	18	29S	4W	10000
Mt. Baldy R. S.	87	19	19S	4E	9500
Beaver Dams	87A	27	19S	3E	8000
Beaver River					
Merchants Valley	63	8&9	29S	5W	8200
Otter Lake	63A	1	29S	5W	9300
Big Flat	63B	18	29S	4W	10000
Coal Creek					
Cedar Breaks	59	2	37S	9W	10390
Webster Flat	61	20	37S	9W	9200

** On adjacent drainage. x Boise Meridian.

* Previously shown as Gravel Springs Junction.

INDEX OF SNOW COURSE LOCATIONS (Cont'd)

Drainage Basin and Snow Course Name	Snow Course Number	Sec.	Twp.	Range	Elev.
	COLORADO RIVER DRAINAGE				
Upper Green River					
Hewinta R. S.	34	33	3N	13E	9500
Hole in The Rock	35	13	2N	15E	9150
King's Cabin (upper)	39	22	1S	21E	8800
King's Cabin (lower)	39A	23&26	1S	21E	8600
Duchesne River					
Lost Lake	28	33	1S	9E	9900
Lakefork Mountain	36	2&3	2N[x]	5W[x]	10500
Lakefork Mountain #2	36A	17	2N[x]	4W[x]	8900
Lakefork Mountain #3	36B	29	2N[x]	4W[x]	8100
Paradise Park	37	7	3N[x]	1E[x]	10500
Mosby Mountain (lower)	38A	5	2N[x]	1E[x]	9500
Indian Canyon	40	2	11S	10E	9100
Brown Duck Lake	73	2	2N[x]	6W[x]	10300
Mirror Lake xx	83	24	1S	9E	10300
Price River					
Indian Canyon	40	2	11S	10E	9100
Gooseberry Reservoir	41	25	13S	5E	8700
Mammoth R.S.-Cottonwood Cr.	42	13&23	13S	5E	8800
Staley Ranch	42A	32	12S	7E	7600
Dry Valley Divide	42B	20	12S	8E	7800
Huntington-Horseshoe	43	12	14S	5E	9800
Scofield Dam	76	22	12S	11W	9000
Mud Creek	77	4	14S	11W	8600
San Rafael River					
Huntington-Horseshoe	43	12	14S	5E	9800
Seeley Creek R. S.	48A	25	17S	4E	10000
Muddy River					
Black Fork	69A	34	20S	4E	9200
Dill's Camp	69B	27	20S	4E	9200
Mt. Baldy R.S.**	87	19	19S	4E	9500
Virgin River					
Long Valley Junction	56	22	38S	6W	7500
Harris Flat R.S.	57	24	38S	7W	7700
Duck Creek R. S.	58	11	38S	8W	8560
Cedar Breaks	59	2	37S	9W	10390
Webster Flat	61	20	37S	9W	9200
Pine Valley	62	3	40S	15W	9150
Lower Colorado River					
LaSal Mountain	64	5	27S	24E	8800
Buckboard Flat	65	36	33S	22E	9000

** On adjacent drainage.
x Boise Meridian

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
- Weather Bureau

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

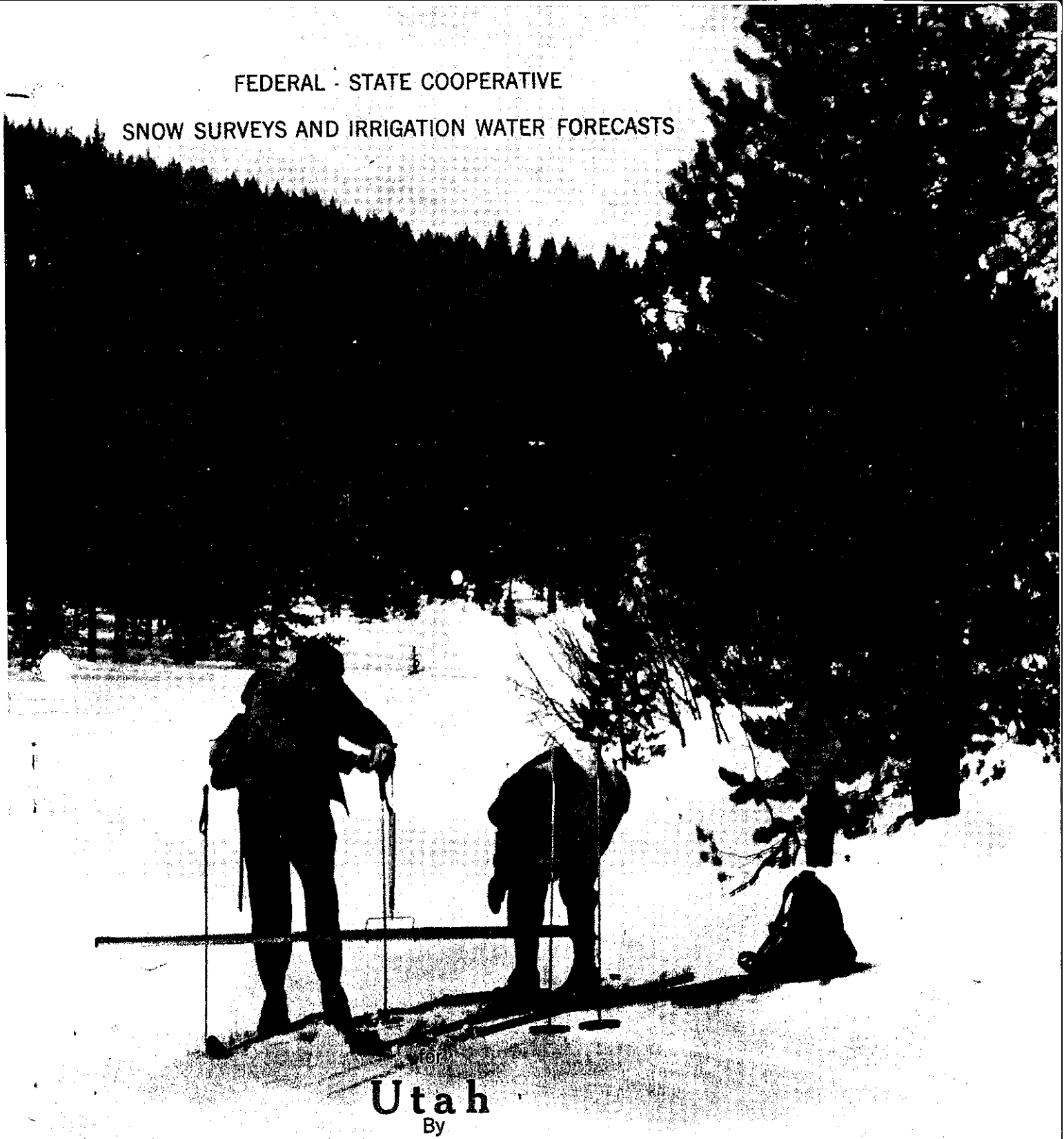
Beaver River Water-Users Association
Board of Canal Presidents - Jordan River
Coyote Irrigation Company
Emery Canal and Reservoir Company
Moon Lake Water-Users Association
Ogden River Water-Users Association
Strawberry Water Users Association
Sevier River Water-Users Association
Provo River Water Users 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, 1953

FEDERAL - STATE COOPERATIVE

SNOW SURVEYS AND IRRIGATION WATER FORECASTS

FOR

U T A H

May 1, 1953

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. 397

WATER SUPPLY OUTLOOK
FOR UTAH
May 1, 1953

Snow surveys made about the first of May show that the cool temperatures of April have delayed snowmelt much more than usual. This means that late season runoff prospects are better than they were a month ago.

Examples which show how much more slowly snowmelt has progressed this year compared to the two preceding years are as follows. This year Dry Bread snow course, elevation 8230, near the head of Blacksmith Fork and the South Fork of the Ogden River lost only 3.3 inches of water during April whereas in 1951 and 1952 approximately 9 inches of water were lost. Parley's Canyon Summit snow course near Salt Lake City, elevation 7500, had 3.4 inches less water in the snow at the end of the month than at the beginning. Nine inches were lost from the snowpack during April in 1952, and 15 inches in 1951.

In general, there is very little comparative May 1 snow data. After a few more years record has been collected, the snow data combined with April precipitation data now being collected at key snow courses, will make it possible to issue revised runoff forecasts as of the first of May.

Table 1 - Status of Reservoir Storage about May 1, 1953

BASIN AND STREAM	RESERVOIR	USABLE CAPACITY (Thousand Acre Feet)	THOUSAND ACRE FEET IN STORAGE ABOUT MAY FIRST				
			1953	1952	1951	1950	10 yr.Av. 1941-50
Bear River System							
Bear River	Bear Lake	1421.0	1026.2	1033.4	1148.0	1117.0	798.2
Little Bear River	Hyrum	15.3	15.5	15.5	10.9	10.4	14.9
Weber-Ogden Rivers							
Ogden River	Pine View	44.2	35.0*	34.4	26.7	21.9	31.0
Weber River	East Canyon	28.7	25.3	25.3	26.5	23.9	24.9
Weber River	Echo	73.9	64.1	53.5	55.4	67.4	55.3
Provo River and Utah Lake							
Provo River	Deer Creek	147.3	116.8	122.6	132.0	131.6	68.1
Spanish Fork River	Strawberry**	270.0	255.1		134.4	112.9	86.4
Utah Lake	Utah Lake**	1149.0	946.2	992.2	761.6	746.7	584.7
Sevier River System							
Sevier River	Otter Creek	52.5	51.8	39.9	32.4	53.8	48.3
Sevier River	Piute	84.8	58.8	61.4	39.4	54.3	66.0
Sevier River	Sevier Bridge	236.0	220.5	134.4	124.0	160.1	199.8
Beaver River							
Beaver River	Rocky Ford	23.3	22.0*	19.2	11.2	19.2	20.2
Duchesne River							
Lake Fork River	Moon Lake	35.8	23.0*	26.6	15.6	18.0	16.9
Price River							
Price River	Scofield	65.0	54.0	43.5	37.1	32.9	18.5

* Contents estimated.

** 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 2 - Utah Snow Surveys - about May 1, 1953

DRAINAGE BASIN and SNOW COURSE NAME	Snow Course Number	Elev.	SNOW COVER MEASUREMENTS: Date of Survey 1953	Snow Depth (In) 1953	Water Cont. (In.) 1953	Same Approx. Date 1952	Same Approx. Date 1951	Past Record Yrs. of Rcd.	Past Record Avg. Water Cont. (In.)
Bear River System		GREAT BASIN DRAINAGE							
Snyder Basin R. S.** (Wyo.)	1E	8040	5-4	26.6	10.7	16.6	19.0	17	8.7
Piney-LaBarge**	1F	8820	5-4	38.6	14.7	22.6	26.5	17	14.5
Tony Grove Lake	2	8200	5-1	72.1	34.6	N.R	N.R		
Tony Grove R.S.	3	6250	5-1	N.S	N.S	N.R			
Spring Hollow (lower)	4	7000	4-30	7.9	3.1	Patchy	N.R	14	7.6
Spring Hollow (upper)	5	8000	4-30	65.4	24.2	28.0	27.3	25	24.8
Mt. Logan	6	9000	4-30	65.1	26.9	33.8	32.4	25	28.1
Garden City Summit	9	8000	4-29	29.4	13.0	N.R	15.8	1	15.8
Monte Cristo	12	8960	4-27	50.3	22.6	36.1	26.3	2	31.2
Mirror Lake **	83	10300	4-28	62.6	23.6	42.9	34.2	2	38.6
Machine Crossing	84	9300	4-28	28.5	10.9	N.R	N.R		
Big Park (Wyo.)	85	8700	4-26	43.9	16.7	28.9	N.R	1	28.9
Weber-Ogden Rivers									
Monte Cristo	12	8960	4-27	50.3	22.6	36.1	26.3	2	31.2
Dry Bread Pond	12A	8230	4-27	29.3	12.9	22.2	12.2	2	17.2
Parley's Canyon Summit ***	15	7500	5-4	32.5	14.8	22.2	2.9	2	12.5
Silver Lake **	16	8725	4-30	59.1	23.9	36.7	26.6	2	31.6
Beaver Cr. R. S.	24	7500	4-28	N.S	N.S	Patchy	N.S		
Trial Lake **	26	9800	4-28	55.9	21.2	42.0	34.1	5	32.9
Smith & Morehouse***	30	7600	4-29	12.0	4.7	13.5	4.8	2	9.2
Redden Mine (Upper)***	31	9000	5-1	39.8	14.4	27.8	16.8	2	22.3
Redden Mine (Lower)***	31A	8500	5-1	34.8	12.6	26.0	14.2	2	20.1
Mt. Ogden	74	8600	5-1	76.0	27.4	39.5	28.8	2	34.2
Chalk Cr. #1	78	8200	4-29	29.2	10.9	19.2	9.0	2	14.1
Chalk Cr. #2	79	9100	4-29	50.4	19.9	36.2	26.4	2	31.3
Chalk Cr. #3	90	7500	4-29	N.S	N.S	Patchy	N.R		
Ben Lomond Peak	82	8000	4-30	73.4	33.8	46.6	29.5	2	38.0
Beaver Cr.-Skunk Cr.	89	7150	4-27	1.6	0.6	11.7	N.R	1	11.7
Sagebrush Flat	89A	6300	4-27	N.S	N.S	N.R	N.R		
Jordan River & Great Salt Lake									
Lamb's Canyon	14	6600	4-27	24.4	8.6	13.0	N.S	2	6.5
Silver Lake	16	8720	4-30	59.1	23.9	36.7	26.6	2	31.6
Mill D. South Fork	16A	7400	4-29	38.8	16.0	20.4	N.R	1	20.4
Farmington Canyon (lower)	32	6950	4-27	55.8	25.2	37.0	15.9	2	26.4
Farmington Canyon (upper)	32A	8000	4-27	87.0	34.1	45.0	30.9	2	37.9
Parleys Canyon Summit***	15	7500	5-4	32.5	14.8	22.2	2.9	2	12.5

** On adjacent drainage.

*** Telephone or telegraphic report.

Table 2 - Utah Snow Surveys - about May 1, 1953

DRAINAGE BASIN and SNOW COURSE NAME	Snow Course Number	Elev.	SNOW COVER MEASUREMENTS: Date of Survey 1953	Snow Depth (In.) 1953	Water Cont. (In.) 1953	Water Cont. (In.) Same Approx. Date 1952	Water Cont. (In.) Same Approx. Date 1951	Past Record Yrs. of Rcd.	Past Record Avg. Water Cont. (In.)
Provo River and Utah Lake									
Camp Altamont	20	7300	5-5	Patches		17.8	N.R	1	17.8
Timpanogas Divide***	21	8200	5-5	27.0	12.6	35.3	15.4	11	21.2
Daniels-Strawberry Summit	23	8000	4-29	5.0	1.9	22.2	N.R	1	22.2
Soapstone R. S.	25	7800	4-28	9.4	3.6	10.9	patchy	3	3.6
Trial Lake	26	9800	4-28	55.9	21.2	42.0	34.1	5	32.9
Mirror Lake**	83	10300	4-28	62.6	23.6	42.9	34.2	2	38.6
Sevier River									
Gooseberry Res.	41	8700	4-29	42.0	16.4	N.R	N.R	5	21.9
Huntington-Horseshoe	43	9800	4-29	56.5	22.0	N.R	N.R	2	32.0
G.B.R.C. Headquarters	45	8700	5-1	40.8	13.7	25.5	N.R	1	25.5
G.B.R.C. Meadows	46	10000	5-1	71.2	26.3	46.6	N.R	1	46.6
Widtsoe-Escalante Summit***	53	9500	5-4	trace		N.R	N.R		
Widtsoe-Escalante #2 ***	53A	9500	5-4	trace		N.R.	N.R.		
Panguitch Lake	55	8200	4-29	N.S	N.S	N.R.			
Harris Flat R. S.	57	7700	4-29	N.S	N.S	trace	N.R		
Duck Cr. R. S.	58	8560	4-29	3.2	0.9	20.7	N.S	1	20.7
Cedar Breaks	59	10390	5-6	26.0	9.4	N. R.	N.S	2	12.6
Big Flat**	63B	10000	4-30	38.5	10.4	34.2	N.R	1	34.2
Mt. Baldy R. S.***	87	9500	5-4	63.5	23.9	N.R	N.R		
Beaver Dams***	87A	8000	5-4	15.7	6.2	N.R	N.R		
Beaver River									
Merchants Valley***	63	8200	4-30	trace		9.3	N.R	1	9.3
Otter Lake***	63A	9300	4-30	31.0	7.4	28.1	N.R	1	28.1
Big Flat ***	63B	10000	4-30	38.5	10.4	34.2	N.R	1	34.2
Coal Creek									
Cedar Breaks	59	10390	5-6	26.0		N.R	N.S	2	12.6
Webster Flat	61	9200	5-6	trace		28.1	N.R	1	28.1

*** Telephone or telegraphic report.

** On adjacent drainage

Table 2 - Utah Snow Surveys - about May 1, 1953

DRAINAGE BASIN and SNOW COURSE NAME	Snow Course Number	Elev.	SNOW COVER MEASUREMENTS: Date of Survey 1953	Snow Depth (In.) 1953	Water Cont. (In.) 1953	Same Approx. Date 1952	Same Approx. Date 1951	Past Record: Yrs. of Rcd.	Past Record: Avg. Water Cont. (In.)
COLORADO RIVER DRAINAGE									
Upper Green River									
Kings Cabin *** (upper)	39	8800	5-4	6.6	1.8	13.6	N.R	1	13.6
Kings Cabin *** (lower)	39A	8600	5-4	3.3	1.1	11.6	N.R	1	11.6
Duchesne River									
Lakefork Mountain	36	10500	5-1	21.9	6.1	18.7	N.R	1	18.7
Indian Canyon	40	9100		no	report	16.3	N.R	1	16.3
Mirror Lake	83	10300	4-28	62.6	23.6	42.9	34.2	2	38.6
Trial Lake **	26	9800	4-28	55.9	21.2	42.0	34.1	5	32.9
Price River									
Indian Canyon	40	9100		no	report	16.3	N.R.	1	16.3
Gooseberry Res.	41	8700	4-29	42.0	16.4	N.R	N.R	5	21.9
Staley Ranch	42A	7600	5-1	N.S	N.S	N.S	N.R		
Dry Valley Div.	42B	7800	5-1	N.S	N.S	8.7	N.R	1	8.7
Huntington-Horseshoe	43	9800	4-29	56.5	22.0	N.R	N.R	2	32.0
Mud Creek	77	8600		no	report	30.7	N.R	1	30.7
San Rafael River									
Huntington-Horseshoe	43	9800	4-29	56.5	22.0	N.R.	N.R	2	32.0
Virgin River									
Harris Flat R.S.	57	7700	4-29	N.S	N.S	trace	N.R		
Duck Cr. R. S.	58	8560	4-29	3.2	0.9	20.7	N.S	2	10.3
Cedar Breaks	59	10390	5-6	26.0	9.4	N.R	N.S	2	12.6
Webster Flat	61	9200	5-6	trace		28.1	N.R	1	28.1

** On adjacent drainage

*** Telephone or telegraphic report

INDEX OF SNOW COURSE LOCATIONS

Drainage Basin and Snow Course Name	Snow Course Number	Section	Township	Range	Elev.
GREAT BASIN DRAINAGE					
Bear River System					
Franklin Basin (Idaho)	1	1&12	16S[x]	41E[x]	8200
Emigrant Summit (Idaho)	1A	21	12S[x]	42E[x]	7700
Slug Creek Divide (Idaho	1B	10&15	10S[x]	44E[x]	7300
Salt River Summit (Wyo.)	1C	32	29N	118W*	7900
Poison Meadows (Wyo.)**	1D	29	30N	116W*	8500
Snyder Basin R. S. (Wyo.)**	1E	15	29N	114W*	8040
Piney-LaBarge**	1F	19	29N	114W*	8820
Tony Grove Lake	2	5	13N	3E	8200
Tony Grove R. S.	3	11	13N	3E	6250
Spring Hollow (lower)	4	26	12N	2E	7000
Spring Hollow (upper)	5	35	12N	2E	8000
Mt. Logan	6	3	11N	2E	9000
Smithfield Spring	7	2	13N	2E	7000
Garden City Summit	9	34	14N	4E	8000
Head of Bear River	10	15	2N	10E	8600
Goodman Ranch	10A	19	3N	10E	7900
Monte Cristo	12	3	8N	4E	8960
Lost Lake**	28	33	1S	9E	9900
Girl Hollow	81	5	7N	5E	8400
Mirror Lake xx	83	24	1S	9E	10300
Machine Crossing	84	1	1S	9E	9300
Big Park (Wyo.)	85	7	27N	117W*	8700
Kelly Ranger St. (Wyo.)	86	13	26N	118W*	8200
Weber-Ogden Rivers					
Monte Cristo	12	3	8N	4E	8960
Dry Bread Pond	12A	3	7N	4E	8230
Parley's Canyon Summit	15	9&10	1S	3E	7500
Silver Lake**	16	35	2S	3E	8725
Beaver Creek R. S.	24	28	2S	7E	7500
Trial Lake**	26	5	2S	9E	9800
Smith & Morehouse	30	25	1N	7E	7600
Redden Mine (Upper)	31	1	2S	6E	9000
Redden Mine (Lower)	31A	1	2S	6E	8500
Mt. Ogden	74	5	5N	1E	8600
Chalk Creek #1	78	17&20	2N	8E	8200
Chalk Creek #2	79	4	1N	8E	9100
Chalk Creek #3	90	7	2N	8E	7500
Horse Ridge	80	1	6N	4E	8260
Girl Hollow	81	5	7N	5E	8400
Ben Lomond Peak	82	3	7N	1W	8000
Beaver Cr.-Skunk Cr.	89	22	8N	3E	7150
Sagebrush Flat	89A	21	7N	3E	6300
Jordan River & Great Salt Lake					
Barnard Creek	13A	34	3N	1E	8000
Lamb's Canyon	14	19	1S	3E	6600
Silver Lake	16	35	2S	3E	8720
Mill D. South Fork	16A	18	2S	3E	7400
Farmington Canyon (lower)	32	14	3N	4E	6950
Farmington Canyon (upper)	32A	26	3N	4E	8000

** On adjacent drainage. * 6th Principal Meridian. x Boise Meridian

xx Previously shown as Bear Head

INDEX OF SNOW COURSE LOCATIONS (Cont'd)

Drainage Basin and Snow Course Name	Snow Course Number	Sec.	Twp.	Range	Elev.
Provo River & Utah Lake					
Dutchman R. S.	17	27	3S	3E	7500
Timpanogas Cave Camp	18	27	4S	2E	5500
South Fork R. S.	19	24	4S	2E	6100
Camp Altamont	20	29	4S	3E	7300
Timpanogas Divide	21	33	4S	3E	8200
Hobble Creek Summit	22	20	7S	5E	7300
Daniels-Strawberry Summit	23	20	2S[x]	12W[x]	8000
Soapstone R. S.	25	9	3S	2E	7800
Trial Lake	26	5	2S	9E	9800
Washington-Long Lake	27	1	2S	8E	10300
Lost Lake	28	33	1S	9E	9900
East Portal	33	36	7S	6E	7560
Strawberry Divide	33A	34&35	7S	6E	8000
Payson R. S.	68	30	10S	3E	8840
Mirror Lake**	83	24	1S	9E	10300
Mt. Nebo	88	28&29	11S	2E	9060
Sevier River					
Gooseberry Reservoir	41	25	13S	5E	8700
Mammoth R. S.-Cottonwood Cr.	42	13&23	13S	5E	8800
Huntington-Horseshoe	43	12	14S	5E	9800
G. B. R. C. Headquarters	45	21	17S	4E	8700
G. B. R. C. Meadows	46	26&27	17S	4E	10000
Seeley Creek R. S. #2**	48A	25	17S	4E	10000
Pine Creek-Chalk Creek	49	14	22S	4W	8500
Pine Creek	49A	24	22S	4W	8700
Gooseberry R. S.	50	32	23S	2E	8400
Farnsworth Lake	50A	27	23S	2E	9900
Fish Lake	51	35	26S	1E	8700
Kimberly Mine	52A	11	27S	5W	8900
Widtsoe-Escalante Summit	53	22	34S	1W	9500
Widtsoe-Escalante #2	53A	22	34S	1W	9500
Bryce Canyon	54	36	36S	4W	8000
Panguitch Lake	55	4&5	36S	7W	8200
Long Valley Junction*	56	22	38S	6W	7500
Harris Flat R. S.	57	24	38S	7W	7700
Duck Creek R. S.	58	11	38S	8W	8560
Cedar Breaks	59	2	37S	9W	10390
Big Flat **	63B	18	29S	4W	10000
Mt. Baldy R. S.	87	19	19S	4E	9500
Beaver Dams	87A	27	19S	3E	8000
Beaver River					
Merchants Valley	63	8&9	29S	5W	8200
Otter Lake	63A	1	29S	5W	9300
Big Flat	63B	18	29S	4W	10000
Coal Creek					
Cedar Breaks	59	2	37S	9W	10390
Webster Flat	61	20	37S	9W	9200

** On adjacent drainage

x Boise Meridian

* Previously shown as Gravel Springs Junction.

INDEX OF SNOW COURSE LOCATIONS (Cont'd)

Drainage Basin and Snow Course Name	Snow Course Number	Sec.	Twp.	Range	Elev.
	COLORADO RIVER DRAINAGE				
Upper Green River					
Hewinta R. S.	34	33	3N	13E	9500
Hole in the Rock	35	13	2N	15E	9150
King's Cabin (upper)	39	22	1S	21E	8800
King's Cabin (lower)	39A	23&26	1S	21E	8600
Duchesne River					
Lost Lake	28	33	1S	9E	9900
Lakefork Mountain	36	2&3	2N[x]	5W[x]	10500
Lakefork Mountain #2	36A	17	2N[x]	4W[x]	8900
Lakefork Mountain #3	36B	29	2N[x]	4W[x]	8100
Paradise Park	37	7	3N[x]	1E[x]	10500
Mosby Mountain (lower)	38A	5	2N[x]	1E[x]	9500
Indian Canyon	40	2	11S	10E	9100
Brown Duck Lake	73	2	2N[x]	6W[x]	10300
Mirror Lake xx	83	24	1S	9E	10300
Price River					
Indian Canyon	40	2	11S	10E	9100
Gooseberry Reservoir	41	25	13S	5E	8700
Mammoth R. S.-Cottonwood Cr.	42	13&23	13S	5E	8800
Staley Ranch	42A	32	12S	7E	7600
Dry Valley Divide	42B	20	12S	8E	7800
Huntington-Horseshoe	43	12	14S	5E	9800
Scofield Dam	76	22	12S	11W	9000
Mud Creek**	77	4	14S	11W	8600
San Rafael River					
Huntington-Horseshoe	43	12	14S	5E	9800
Seeley Creek R. S.	48A	25	17S	4E	10000
Muddy River					
Black Fork	69A	34	20S	4E	9200
Dill's Camp	69B	27	20S	4E	9200
Mt. Baldy R. S. **	87	19	19S	4E	9500
Virgin River					
Long Valley Junction	56	22	38S	6W	7500
Harris Flat R. S.	57	24	38S	7W	7700
Duck Cr. R. S.	58	11	38S	8W	8560
Cedar Breaks	59	2	37S	9W	10390
Webster Flat	61	20	37S	9W	9200
Pine Valley	62	3	40S	15W	9150
Lower Colorado River					
LaSal Mountain	64	5	27S	24E	8800
Buckboard Flat	65	36	33S	22E	9000

** On adjacent drainage. x Boise Meridian

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
- Weather Bureau

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

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