



FEDERAL - STATE COOPERATIVE
SNOW SURVEYS and WATER SUPPLY FORECASTS
for
UTAH

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE,
and
STATE ENGINEER of UTAH and-UTAH AGRICULTURAL EXPERIMENT STATION
in cooperation with

U.S. Forest Service, U.S. National Park Service,
U.S. Geological Survey and
State and Local Irrigation Organizations

AS OF
JAN. 1, 1957

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS and WATER SUPPLY FORECASTS
for
U T A H

JANUARY 1, 1957

Report Prepared
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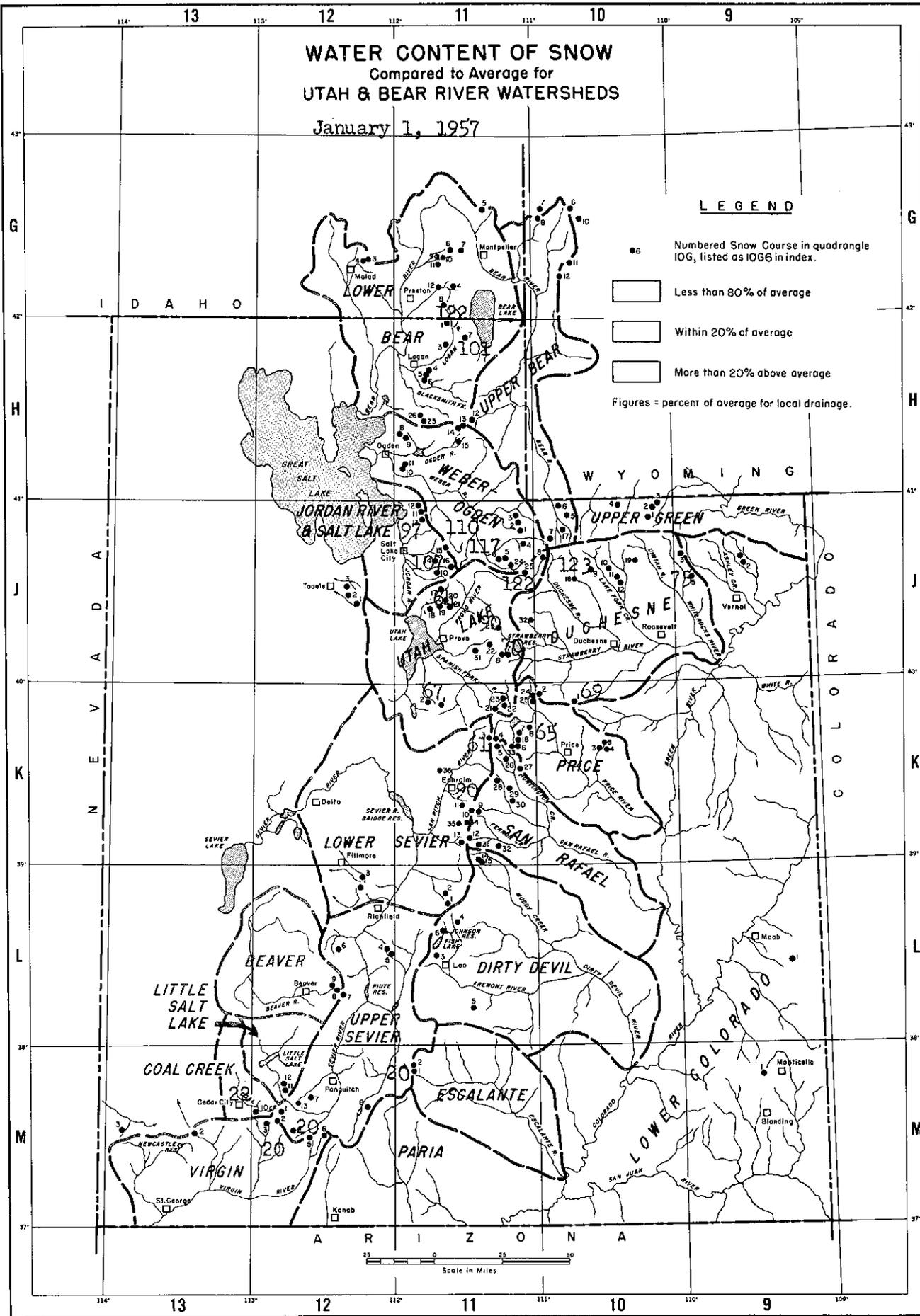
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Logan, Utah
(Mimeograph Series No. 430)

WATER CONTENT OF SNOW

Compared to Average for
UTAH & BEAR RIVER WATERSHEDS

January 1, 1957



LEGEND

- 6 Numbered Snow Course in quadrangle IOG, listed as IOG6 in index.
 - Less than 80% of average
 - ▨ Within 20% of average
 - ▩ More than 20% above average
- Figures = percent of average for local drainage.

FOR UTAH

January 1, 1957

 * The water stored in the snow pack as measured about the *
 * first of January varied from record or near record lows of *
 * about 20% of average in southern Utah, to 97% to 123% in *
 * the northern part. In the center of the State it is 60% to *
 * 90% of average. Soil Moisture is below average in most of *
 * the state. Storage in reservoirs from Utah Lake and *
 * Strawberry Reservoir northward is 106% of last year, 105% *
 * of average, and 44% of capacity. Reservoirs in the Uintah *
 * Basin and the south have 71% of last year, 22% of average *
 * and 10% of capacity. *

GENERAL OUTLOOK

Considering all aspects of the water supply picture, as of January 1, southern Utah - particularly on the Sevier River - has one of the worst, perhaps the worst, prospects in the history of the state.

The snow pack water is about 20% of average of the headwaters of the Main and East Forks of the Sevier River, the Escalante, Paria and Virgin Rivers and Coal Creek at Cedar City. Carry over storage in Otter Creek, Puite and Sevier Bridge reservoirs on the Sevier River and Rocky Ford on the Beaver River is the lowest it has been since the drought of the early '30s. A good share of what little moisture fell on the watersheds in October evaporated during the dry November which followed when no measurable precipitation was recorded at Duck Creek Ranger Station on the Main Sevier and at Webster Flat on the Virgin River. Only 0.20 inch was measured at Castle Valley on Mammoth Creek drainage of the Main Sevier, and 0.10 inch at Widtsoe-Escalante Summit on the East Fork of the Sevier and Escalante River. Because of the long continued drought of four years with no break, the base flow of the rivers is among the lowest 25% of years of record which means that inflow to the reservoirs during the winter months will be considerably less than an average amount and will also lower the water yield from the snowpack during the spring and summer months.

To illustrate just how poor the situation now is, just average snowfall for the rest of the winter can be expected to produce an April-September streamflow on the Sevier River at Kingston of only 20 to 25% of the 1938-52 average. If the current drought continues, this may well drop to 10 to 15%. Snowfall will have to be much above average to produce an adequate water supply.

Following the pattern of recent years, the water outlook becomes better the farther north one goes. On the San Pitch river in the center of the state, the snowpack water in the mountains above Ephraim is 90% of average but falls off to 61 to 70% on its northern tributaries and headwaters of

Huntington Creek, Price, Spanish Fork and Strawberry Rivers. On the Strawberry Reservoir drainage basin it is 70%, while on the American Fork it is down to 64%. In the Uintah Basin, it varies from 123% on the headwaters of the Duchesne to 75% on the Whiterocks and Ashley Creek.

From the Salt Lake City area to the Upper Provo River and northward, snow water varies from essentially average to 122%, with the best conditions on the upper Provo, Weber, Bear, Duchesne and Logan rivers. In most of this northern area, soil moisture is near or a little below average. On the streams near Salt Lake and the Upper Provo, it is average or a little above.

Most years about 35 to 40 percent of the total snowpack to be expected has accumulated by the first of January. This leaves the major portion yet to come, so that the water supply prospects may change considerably, either up or down, as the rest of the winter's snow accumulates.

Additional comparative data on the snowpack conditions are given on the map in the front of this bulletin and on page 3. Actual snow measurements are on pages 5, 6, and 7. Reservoir storage data is on page 4.

COMPARATIVE SNOW DATA

Summary of Snow Survey Data by Tributary Watersheds as of January 1, 1957

TRIBUTARY BASINS	No. of Courses Averaged	Years of Record	1957 Snow Water Expressed As Percent of		
			1956	1955 & 1938-52 Ave.	

GREAT BASIN

Logan River	3	3-6	61	--	115	*
Weber River above Echo Dam	6	1-21	103	176	117	*
East Canyon Creek	3	3-21	90	190	110	*
Salt Lake Area	6	3-21	89	120	107	*
American Fork River	3	1-21	44	103	64	*
Provo River above Vivian Park	3	1-25	76	188	111	*
Strawberry Reservoir Valley	3	17-25	58	156	70	
Mt. Nebo Area	1	4	90	168	67	*
Sevier River above Panguitch	2	2-4	23	50	20	*
East Fork Sevier River	2	6-18	20	26	20	*
San Pitch River	3	0-16	86	133	81	*
Coal Creek - Cedar City	2	2-3	26	60	22	*

COLORADO RIVER BASIN

Duchesne - Strawberry Rivers	6	1-25	63	165	88	*
Price River	5	0-17	44	161	65	*
Escalante River	2	6-18	20	26	20	*
Virgin River	3	2-4	24	53	20	*

*Several of the snow courses used in calculating these averages have only been measured for a few years on January 1, but have up to 33 years of record on April 1. The percent of average January 1 water content on these courses was calculated based on the percent of the April 1st water content of the snow that usually accumulates by January 1 on courses having such records, and that are similarly located as to elevation and exposure.

STATUS OF UTAH RESERVOIR STORAGE - JANUARY 1, 1957 (1)

BASIN and/or STREAM	RESERVOIR	USABLE CAPACITY 1000s AF	USABLE STORAGE - 1000 ACRE FEET			
			1957	1956	1955	15-Yr. Avg. 1938-52
GREAT BASIN						
<u>Bear River</u>	Bear Lake	1421.0	804.9	612.9	694.2	709.8
<u>Little Bear</u>	Hyrum	15.3	10.4	11.4	7.7	9.0(2)
<u>Ogden</u>	Pine View	43.6	0.0	10.3	4.9	9.3
<u>Weber</u>	East Canyon	28.7	12.0	7.7	2.7	15.0
	Echo	73.9	16.3	24.9	8.9	23.5
<u>Provo</u>	Deer Creek	144.7	72.1	82.1	65.8	67.3(3)
<u>Spanish Fork</u>	Strawberry	283.0	132.7	143.2	167.4	93.6
<u>Utah Lake</u>	Utah Lake	1149.0(4)	349.2	421.9	479.5	396.9
<u>Sevier River</u>	Otter Creek	52.5	6.4	8.4	9.0	28.1
	Piute	74.0	10.7	14.1	16.6	34.9
	Sevier Bridge	236.0	19.9	29.7	63.1	120.2
<u>Beaver River</u>	Rocky Ford	23.3	3.9	5.5	5.5	13.1
<u>COLORADO RIVER DRAINAGE</u>						
<u>Lake Fork</u>	Moon Lake	35.8	5.2	6.1	7.7	13.2
<u>Price River</u>	Scofield	65.8	2.4	4.4	7.7	11.7(5)

- (1) All data contained in this table supplied by the
U. S. Geological Survey
- (2) Average for 1939-53
- (3) Average for 1941-55
- (4) Active capacity taken at 3.1 feet above compromise
point
- (5) Average for 1943-52

UTAH SNOW SURVEYS - ABOUT JANUARY 1, 1957

DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS						
			1957		: Past Record			Previous	
			Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content: (In.)	Water Content: (In.)		1938-52 Average
<u>BEAR RIVER above</u>									
<u>Harer, Idaho</u>									
Trial Lake x	10J8	9800	12/28	35	11.7	--	--	--	1
Salt River Summit x	10G8	7900	No Survey			10.1	3.1	6.5**	8
CCC Camp x	10G7	7500	No Survey			7.2	3.0	4.6*	20
<u>BEAR RIVER below</u>									
<u>Harer, Idaho</u>									
Willow Flat	11G4	6100	12/31	26	7.5	--	--	--	0
Garden City Summit	11H7	7900	12/26	27	7.3	13.0	5.4	--	6
Franklin Basin R. S.	11G8	8200	1/1	38	11.6	19.3	--	--	3
Klondike Narrows	11H1	7400	1/1	29	8.3	12.6	5.2	--	3
Tony Grove R. S.	11H3	6250	12/26	17	3.7	4.7	3.8	--	5
Little Bear(upper)	11H25	6850	12/27	18	4.0	--	--	--	0
Little Bear(lower)	11H26	6100	12/27	13	2.7	--	--	--	0
<u>OGDEN RIVER</u>									
Ben Lomond(lower)	11H9	6000	12/27	18	5.1	1.3	--	--	1
Mt. Ogden	11H10	8600	12/28	24	7.4	15.9	9.6	--	3
Snow Basin	11H11	6500	12/28	17	4.0	5.4	5.5	--	3
<u>WEBER RIVER</u>									
Trial Lake x	10J8	9800	12/28	35	11.7	--	--	--	1
Smith & Morehouse	11J4	7600	12/27	26	6.0	4.6	3.5	--	3
Beaver Creek R. S.	11J24	7500	12/28	17	4.4	3.3	2.7	--	3
Chalk Creek #2	11J2	8200	12/27	31	7.1	7.9	--	--	2
Chalk Creek #3	11J3	7500	12/27	16	4.0	1.5	--	--	2
Silver Lake x	11J16	8725	1/1	34	9.4	20.8	7.0	11.1*	21
Parley's Canyon Summit	11J15	7500	12/28	30	8.8	8.2	4.4	--	3
Lamb's Canyon x	11J14	6600	1/2	29	6.6	5.6	2.8	5.6**	8
<u>PROVO RIVER & UTAH LAKE</u>									
Trial Lake	10J8	9800	12/28	35	11.7	--	--	--	1
Soapstone R. S.	11J25	7800	12/28	25	5.8	6.0	3.1	--	4
Daniels-Strawberry Summit	11J23	8000	12/31	18	4.5	8.1	2.4	5.0*	25
Strawberry Divide	11J8	8000	12/30	27	7.0	11.0	5.1	9.8*	17
East Portal	11J7	7560	12/30	13	2.6	4.7	1.8	5.3*	18
Payson R. S.	11K1	8050	12/31	21	5.2	5.8	3.1	--	4
Rock Bridge	11K2	6750	12/31	15	3.5	3.2	1.7	--	3
Timpanogas Divide	11J21	8200	12/29	28	7.5	19.0	6.9	10.7	21
Camp Altamont	11J20	7300	12/29	18	4.2	8.7	4.3	7.4	21
South Fork R. S.	11J19	6100	1/2	8	2.8	Trace	3.2	4.8*	15
Timpanogas Cave Camp	11J18	5500	1/2	Trace	Trace	0.0	2.0	3.0*	12

x - Adjacent Drainage.
more in the period.

* - Less than 15 year average, but 8 years or
more in the period.
** - Less than 8 years in the period. Average is
for total record when 8 years or more of record.

DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS						
			1957		: Past Record			Previous Yrs of Record	
			Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content: 1956	Water Content (In.) 1955		Average

JORDAN RIVER and
GREAT SALT LAKE

Silver Lake	11J16	8720	1/1	34	9.4	20.8	7.0	11.1*	21
Mill D. South Fork	11J10	7400	1/2	29	8.3	8.6	5.5	--	3
Lamb's Canyon	11J14	6600	1/2	29	6.6	5.6	2.8	5.6**	8
Parley's Canyon Summit	11J15	7500	12/28	30	8.8	8.2	4.4	--	3
Farmington Canyon (upper)	11J11	8000	12/29	34	10.5	12.4	4.8	--	3
Farmington Canyon (lower)	11J12	6950	12/30	26	6.8	8.1	3.8	--	5
Middle Canyon	12J3	7000	12/27	22	5.7	--	--	--	0

SEVIER RIVER above
Richfield

Midway Valley	12M2	9400	12/27	8	2.3	9.4	3.9	--	2
Duck Creek R. S.	12M4	8560	12/27	6	1.2	5.4	3.0	--	4
Harris Flat R. S.	12M5	7700	12/27	10	0.0	1.4	1.9	--	4
Long Valley Junction	12M6	7500	12/27	0	0.0	0.0	0.5	--	3
Castle Valley	12M13	9700	12/28	6	1.3	--	--	--	0
Panguitch Lake	12M7	8200	12/28	10	0.0	--	--	--	0
Bryce Canyon	12M8	8000	12/27	10	0.0	0.2	2.7	--	2
Widtsoe-Escalante Summit	11M1	9500	12/27	10	0.0	3.2	3.2	3.0*	18
Widtsoe-Escalante #2	11M2	9500	12/27	8	1.7	4.1	3.3	--	6

SEVIER RIVER below Richfield
(including SAN PITCH RIVER)

Gooseberry Reservoir	11K4	8700	12/27	19	4.8	--	--	--	0
G.B.R.C. Meadows	11K10	10000	12/28	31	8.4	10.5	6.5	--	5
G.B.R.C. Headqtrrs.	11K11	8700	12/28	24	5.6	6.1	4.1	5.2**	16

COAL CREEK

Midway Valley x	12M2	9400	12/27	8	2.3	9.4	3.9	--	2
Webster Flat x	12M3	9200	12/27	5	1.5	5.6	2.5	--	3
Urie Flat	12M10	8450	12/27	Trace	Trace	0.0	0.9	--	2

DUCHESNE RIVER

Trial Lake x	10J8	9800	12/28	35	11.7	--	--	--	1
Soapstone R. S. x	11J25	7800	12/28	25	5.8	6.0	3.1	--	4
Daniels-Strawberry Summit x	11J23	8000	12/31	18	4.5	8.1	2.4	5.0*	25
Strawberry Divide x	11J8	8000	12/30	27	7.0	11.0	5.1	9.8*	17
Last Portal x	11J7	7560	12/30	13	2.6	4.7	1.8	5.3*	18
Indian Canyon	10K1	9100	12/31	13	2.9	6.7	1.7	4.7*	17
Mosby Mountain (lower)	9J5	9500	12/28	15	3.0	--	--	--	0

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UTAH SNOW SURVEYS - ABOUT JANUARY 1, 1957

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DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS						
			1957		; Past Record				
			Date	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1938-52 Yrs of Average Record	Previous 1956	1955
<u>PEECE RIVER</u>									
Gooseberry Reservoir	11K4	8700	12/27	19	4.8	--	--	--	0
Mud Creek	11K6	8250	12/28	19	5.3	11.2	2.8	--	4
Mud Creek #2	11K33	8300	12/28	19	4.8	7.0	--	--	1
Staley Ranch	11K7	7600	12/28	8	1.8	3.3	1.0	2.6**	11
Dry Valley Divide	11K8	7800	12/28	12	2.1	7.0	2.0	3.4**	11
White River #3	11K25	7400	12/28	11	2.4	5.0	--	--	1
Indian Canyon x	10K1	9160	12/31	13	2.9	6.7	1.7	4.7*	17
<u>SAN RAFAEL RIVER</u>									
Gooseberry Reservoir x	11K4	8700	12/27	19	4.8	--	--	--	0
Switchback	11K26	8600	12/29	18	4.7	8.2	--	--	1
Stuart R. S.	11K27	7950	12/29	9	2.1	5.2	--	--	1
<u>ESCALANTE RIVER</u>									
Widtsoe-Escalante Summit	11M1	9500	12/27	00	0.0	3.2	3.2	3.0*	18
Widtsoe-Escalante #2 x	11M2	9500	12/27	8	1.7	4.1	3.3	--	6
<u>VIRGIN RIVER</u>									
Long Valley Junction	12M6	7500	12/27	00	0.0	0.0	0.5	--	3
Harris Flat R. S. x	12M5	7700	12/27	00	0.0	1.4	1.9	--	4
Duck Creek R. S. x	12M4	8560	12/27	6	1.2	5.4	3.0	--	4
Midway Valley x	12M2	9400	12/27	8	2.3	9.4	3.9	--	2
Webster Flat	12M3	9200	12/27	5	1.5	5.6	2.5	--	3

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AGENCIES COOPERATING IN UTAH SNOW SURVEYS

U. S. GOVERNMENT AGENCIES

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

U. S. Department of Commerce
Weather Bureau

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

STATE OF UTAH

Utah Agricultural Experiment Station
Utah 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

Salt Lake City Corporation

ORGANIZED PUBLIC AGENCIES

Beaver River Water-Users Association
Board of Canal Presidents - Jordan River
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

PRIVATE AGENCIES

Kaiser Steel Corporation



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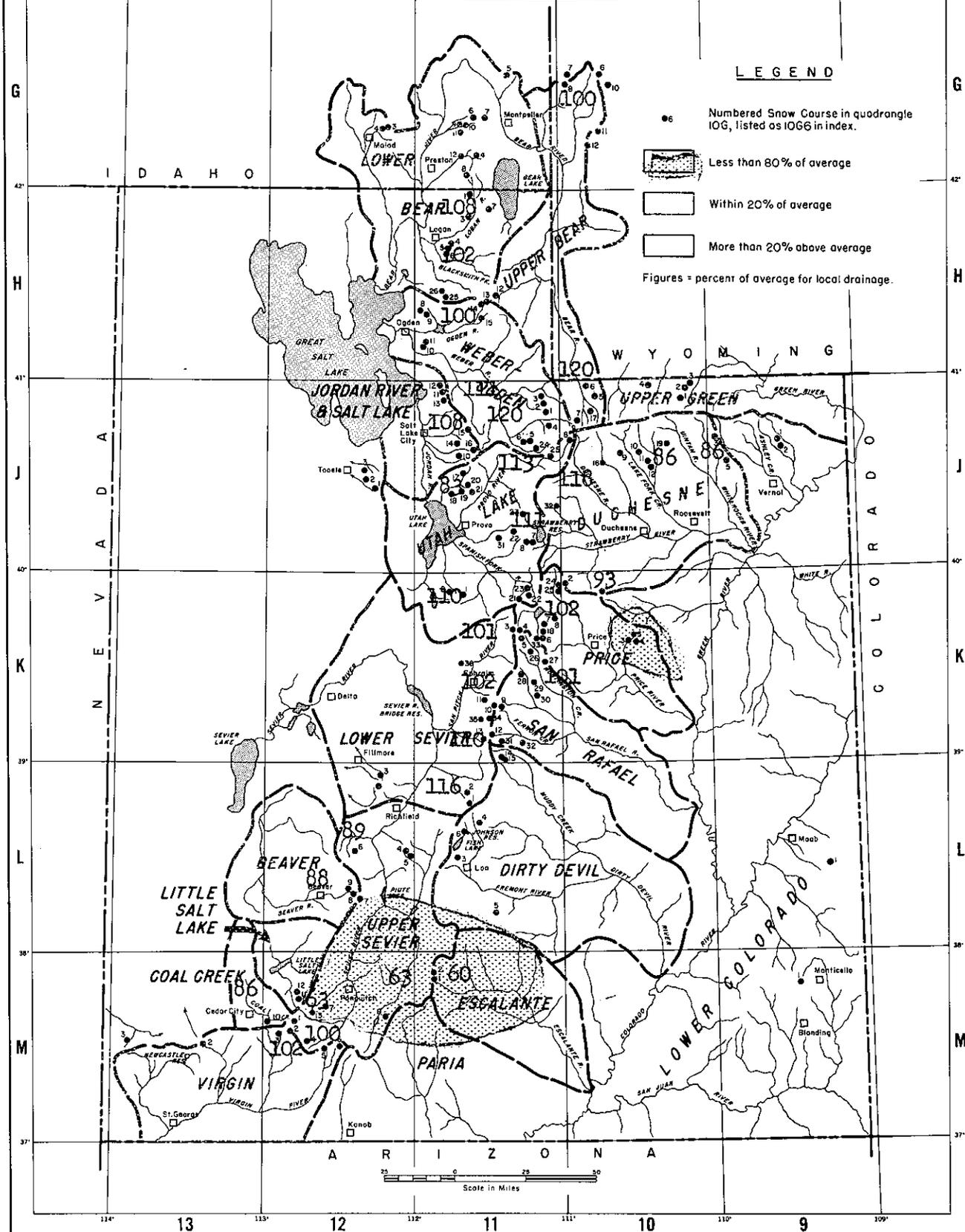
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WATER CONTENT OF SNOW

Compared to Average for
UTAH & BEAR RIVER WATERSHEDS

February 1, 1957



WATER SUPPLY OUTLOOK

for UTAH

FEBRUARY 1, 1957

 * Central and northern Utah has prospects of a fair to good water *
 * supply for next summer. In southwestern Utah, in spite of the *
 * heavy January storms, prospects are still poor, particularly on *
 * the Sevier River above Piute Dam. Soil moisture is below average *
 * in most of the State. Storage in reservoirs from Utah Lake and *
 * Strawberry Reservoir northward is 101% of last year, 108% of *
 * average, and 47% of capacity. Reservoirs in the Uintah Basin and *
 * the south have 74% of last year, 28% of average and 14% of capacity*

GENERAL OUTLOOK

January storms produced snowpack increases of 100 to over 300 percent of average on all Utah watersheds. On Thomas Fork and Smith's Fork of the Bear River in Idaho and Wyoming the increase was only 50%.

The January storms produced some peculiar results which could only be discovered by going to the water producing parts of the watersheds and there measuring the water in the snowpack. The most outstanding example of this occurred on the main Fork of the Sevier River. At Duck Creek Ranger Station, the snow water increased during the month from 1.2 inches to 12.4 inches for an increase of 11.2 inches. This is 300 percent of an average amount. Only a short distance to the north - 10 to 13 miles - on the Mammoth Creek and Panguitch Lake drainages, the snowpack increase varied from 120 to 150% of average. The result of this large variation in such a short distance is that along a narrow belt extending from the vicinity of Midway Valley past Duck Creek Ranger Station and Harris Flat to Long Valley Junction on U. S. Highway 89, the snow water is now at an average amount, while just to the north of here, it is only 63%. The surveys also show that while the snow at Harris Flat and Long Valley Junction is $2\frac{1}{2}$ to 4 times more than last year at this time, it is only 9% more at Duck Creek and 19% less at Midway Valley.

Because of this peculiar snowpack variation, the very dry soils and record low base streamflow as reported by the U. S. Geological Survey, the April-September yield of the Sevier at Hatch is forecast at 77 percent of the 1938-52 average. At Kingston it is expected to be 43%.

On the East Fork of the Sevier and Escalante rivers, the outlook is also poor. Here, the snowpack is, respectively, 63 and 60 percent of average. The Beaver River and Coal Creek at Cedar City are forecast at 65% and 69%, respectively.

Starting on the headwaters of Salina Creek in south central Utah where the snowpack is 115%, and moving to the north, water users served by the tributaries of the San Pitch, San Rafael, Price River below Scofield reservoir, Spanish Fork and American Fork rivers can expect 80% to 88% of average water supply. In the Sunnyside-Drager-ton area, the outlook is the worst it has been in the recent drought years, since snow cover is only 50 to 65% of what it was a year ago, soils are dry, and stream base flow has receded to the lowest point of record.

In the Uintah Basin, the Strawberry river is expected to flow at 67%. The northern tributaries follow the pattern of recent years, decreasing from 101% on the Duchesne river to 83% on Ashley Creek.

The Weber and upper Bear rivers have the best water yield prospects in the state, varying from 105% to 112% of average. Forecasts for the streams in the Salt Lake area, the Ogden river, the streams in Cache Valley and the northern tributaries of the Bear river in Idaho and Wyoming vary from 85% to 102% of their 1938-52 April-September averages.

UTAH STREAMFLOW FORECASTS - FEBRUARY 1, 1957

The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts.

BASIN, STREAM and STATION	Seasonal Streamflow in Thousands of Acre Feet						
	Forecast Runoff 1957	% 15-Yr. Avg.	Fore- cast Period	Measured Runoff			15 - Yr. Average 1938-52
				1955	1954	1953	

GREAT BASIN

BEAR RIVER SYSTEM

Bear River near Evanston, Wyo.	155	109	Apr-Sept.	74	55	113	142
Bear River near Randolph, Utah	116	100	Apr-Sept.	26.4	15.3	67	116(1)
Smith's Fork near Border, Wyo.	102	89	Apr-Sept.	78	89	99	114(2)
Bear River at Harer, Idaho	248	88	Apr-Sept.	116	100	184	281
Little Bear River Near Paradise, Utah	38	86	Apr-Sept.	40	20.7	34	44
Logan River near Logan, Utah (3)	135	102	Apr-Sept.	99	86	121	133
Blacksmith Fork near Hyrum, Utah (4)	53	88	Apr-Sept.	46	39	50	60

WEBER-OGDEN RIVERS

Weber River near Oakley, Utah	138	108	Apr-Sept.	98	82	117	128
Weber River near Coalville, Utah (5)	155	112	Apr-Sept.	97	67	112	138
Chalk Creek at Coalville, Utah	44	105	Apr-Sept.	18.6	13.2	28.1	42

- (1) Average runoff for 12 years, 1944-1955.
- (2) Average runoff for 13 years, 1943-1955.
- (3) Includes U.P.& L. Co. tailrace and Logan, Hyde Park & Smithfield Canal.
- (4) Above Utah Power and Light Company's dam.
- (5) Includes diversion by Weber-Provo canal.

UTAH STREAMFLOW FORECASTS - FEBRUARY 1, 1957

4.

	Seasonal Streamflow in Thousands of Acre Feet							
	Forecast Runoff 1957	% 15-Yr. Avg.	Fore- cast Period	Measured Runoff			15 - Yr. Average 1938-52	
				1955	1954	1953		
<u>WEBER-OGDEN RIVERS - Continued</u>								
East Canyon Creek near Morgan, Utah (6)	31	106	Apr-Sept.	14.1	6.6	22.9	29.2	
South Fork Ogden River Near Huntsville, Utah	56	86	Apr-Sept.	48	36	60	65	
<u>PROVO RIVER & UTAH LAKE</u>								
Spanish Fork at Thistle, Utah	38	84	Apr-Sept.	30	20.5	29.7	45	
Hobble Creek near Springville, Utah	19	76	Apr-Sept.	10.3	8.6	17.1	25 (7)	
Provo River at Vivian Park, Utah(8)	165	99	Apr-Sept.	109	98	125	166	
American Fork near American Fork, Utah	29	80	Apr-Sept.	26.4	22.0	32	36	
<u>JORDAN RIVER & SALT LAKE</u>								
Little Cottonwood Creek near Salt Lake City, Utah	35	87	Apr-Sept.	34	29.3	42	40	
Big Cottonwood near Salt Lake City	39	98	Apr-Sept.	34	25.1	42	40	
Parley's Creek near Salt Lake City, Utah	15	99	Apr-Sept.	7.5	4.4	16.1	15.2	
<u>SEVIER RIVER</u>								
Sevier River at Hatch, Utah	45	77	Apr-Sept.	24	42	23.4	58 (9)	
Sevier River near Kingston, Utah	20	43	Apr-Sept.	7.5	14.9	8.1	46	
<u>BEAVER RIVER</u>								
Beaver River near Beaver, Utah	22	65	Apr-Sept.	16.4	17.4	14.8	34	

- (6) Observed flow plus change in storage in East Canyon reservoir.
 (7) For ten years 1946-1955
 (8) 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, minus diversion thru Duchesne tunnel, plus diversion thru Salt Lake aqueduct.
 (9) Average runoff for 15 years, 1940-1954.

UTAH STREAMFLOW FORECASTS - FEBRUARY 1, 1957

	Seasonal Streamflow in Thousands of Acre Feet						
	Forecast	%	Fore-	Measured Runoff			15 - Yr.
	Runoff	15-Yr.	cast	1955	1954	1953	Average
	1957	Avg.	Period				1938-52
<u>COAL CREEK</u>							
Coal Creek near Cedar City, Utah	14	69	Apr-Sept.	10.1	14.9	8.1	20.4
COLORADO RIVER BASIN							
<u>UPPER GREEN RIVER</u>							
Ashley Creek near Vernal, Utah	54	83	Apr-Sept.	40	44	44	65
<u>DUCHESNE RIVER</u>							
Duchesne River near Tabiona, Utah (10)	123	101	Apr-Sept.	89	66	97	122
Rock Creek near Mountain Home, Utah	108	99	Apr-Sept.	80	68	91	109
Strawberry River at Duchesne, Utah	55	67	Apr-Sept.	49	35	47	82
Lakefork River below Moon Lake, Utah (11)	72	93	Apr-Sept.	58	48	62	77 (11)
Uinta River near Neola, Utah	96	86	Apr-Sept.	71	72	75	111
Whiterocks River near Whiterocks, Utah	62	86	Apr-Sept	47	45	50	72
<u>PRICE RIVER</u>							
Price River near Scofield, Utah (12)	38	88	Apr-Sept.	26.6	14.1	33	43
Price River near Heiner, Utah (12)	54	70	Apr-Sept.	45	26.3	47	77
<u>SAN RAFAEL RIVER</u>							
Hunting Creek near Huntington, Utah	50	81	Apr-Sept.	36	32	57	62
Cottonwood Creek near Orangeville, Utah	54	84	Apr-Sept.	35	32	51	64
Ferron Creek near Ferron, Utah	36	86	Apr-Sept.	25.6	23.9	35	42 (13)

- (10) Observed flow plus diversion through Duchesne tunnel.
(11) Observed flow plus change in storage in Moon Lake reservoir.
Average runoff for 14 years, 1942-1955.
(12) Observed flow plus change in storage in Scofield reservoir.
(13) Average runoff for 8 years, 1948-1955.

STATUS OF UTAH RESERVOIR STORAGE - FEBRUARY 1, 1957 (1)

BASIN and/or STREAM	RESERVOIR	USABLE CAPACITY 1000s AF	USABLE STORAGE - 1000 ACRE FEET			
			1957	1956	1955	15-Yr. Avg. 1938-52
GREAT BASIN						
<u>Bear River</u>	Bear Lake	1121.0	828.4	663.1	704.7	706.0
<u>Little Bear</u>	Hyrum	15.3	10.4	10.7	10.2	10.2(2)
<u>Ogden</u>	Pine View	43.6	0.6	20.9	4.7	7.2
<u>Weber</u>	East Canyon	28.7	13.1	10.0	3.6	16.0
	Echo	73.9	19.3	33.3	14.3	22.9
<u>Provo</u>	Deer Creek	144.7	76.3	86.1	66.5	65.5(3)
<u>Spanish Fork</u>	Strawberry	283.0	136.6	147.9	170.2	97.1
<u>Utah Lake</u>	Utah Lake	1149.0(4)	392.1	486.1	529.5	447.8
<u>Sevier River</u>	Otter Creek	52.5	9.2	12.1	12.4	31.1
	Piute	74.0	17.0	22.1	24.0	43.2
	Sevier Bridge	236.0	28.0	40.4	73.5	136.4
<u>Beaver River</u>	Rocky Ford	23.3	5.6	7.3	7.0	14.8
COLORADO RIVER DRAINAGE						
<u>Lake Fork</u>	Moon Lake	35.8	6.7	7.7	9.2	15.1
<u>Price River</u>	Scofield	65.8	3.7	5.9	9.0	13.1(5)

- (1) All data contained in this table supplied by U. S. Geological Survey.
(2) Average for 1939-53
(3) Average for 1942-55
(4) Active capacity taken at 3.1 feet above compromise point.
(5) Average for 1943-52

COMPARATIVE SNOW DATA

7.

Summary of Snow Survey Data by Tributary Watersheds as of February 1, 1957

TRIBUTARY BASINS	No. of Courses Averaged	Years of Record	1956 Snow Water Expressed as Percent of		
			1955	1954	& 1938-52 Avg.
<u>GREAT BASIN</u>					
Logan River	4	3-10	77	153	108*
Blacksmith Fork	4	4-10	80	143	102*
Ogden River, South Fork	2	4	74	138	100*
Weber River above Echo Dam	7	3-22	93	159	120*
East Canyon Creek	3	6-22	83	127	111*
Salt Lake Area	4	4-22	83	121	108*
American Fork Ricer	2	22	72	89	83 *
Provo River above Vivian Park	5	4-26	80	162	113*
Strawberry Reservoir Valley	3	21-26	88	157	111*
Mt. Nebo Area	1	3	116	159	110*
Sevier River above Panguitch	5	1-13	104	94	85*
East Fork Sevier River	3	6-19	92	52	60*
Salina Creek	2	0	--	--	116*
San Pitch River	4	6-18	86	143	102*
Beaver River	3	6-7	65	--	88*
Coal Creek-Cedar City	2	2-5	83	100	86*
<u>COLORADO RIVER BASIN</u>					
Duchesne-Strawberry Rivers	6	4-21	82	164	110*
Lakefork River	2	4-6	44	80	86*
Whiterocks River	2	4	51	106	86*
Price River	5	6-21	86	157	102*
Huntington Creek	4	2-6	86	162	101*
Escalante River	2	6-19	63	52	60*
Virgin River	3	5-13	150	104	102*

* Several of the snow courses used in calculating these averages have only been measured for a few years on February 1, but have up to 31 years of record on April 1. The percent of average February 1 water content on these courses was calculated based on the percent of the April 1st water content of the snow that usually accumulates by February 1 on courses having such records and that are similarly located as to elevation and exposure.

UTAH SNOW SURVEYS - ABOUT FEBRUARY 1, 1957

DRAINAGE BASIN and SNOW COURSE	SNOW COVER MEASUREMENTS							
	1957				: Past Record			
	No.	Elev.	Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content (In.)		Prevs. 1938-52 Yrs. of Average Record
					1956	1955		

GREAT BASIN DRAINAGE

BEAR RIVER above
Harer, Idaho

Trial Lake	10J8	9800	1/31	65	18.0	-	-	-	4
Poison Meadows	10G6	8500		No survey		-	-	-	0
Piney LaBarge	10G10	8820	2/1	49	11.9	-	-	-	0
Big Park	10G11	8700		No survey					0
Kelly R.S.	10G12	8200		No survey					0
Salt River Summit x	10G8	7900	1/30	39	10.0	14.8	5.2	11.4**	8
CCC Camp	10G7	7500	1/30	33	7.8	10.5	5.0	7.6	21

BEAR RIVER below
Harer, Idaho

Garden City Summit	11H7	7900	1/30	46	12.3	16.5	7.6	12.8**	10
Strawberry Mink Divide	11G10	6800	1/28	46	13.5	18.2	-	-	1
Strawberry Creek	11G9	5800	1/28	32	7.6	9.7	-	-	1
Christensen Ranch	11G11	5600	1/28	29	5.7	6.4	-	-	1
Willow Flat	11G4	6100	1/29	38	10.7	13.0	-	-	1
Cub River R.S.	11G12	5400	1/29	26	5.8	7.1	-	-	1
Franklin Basin R.S.	11G8	8200	1/28	57	17.5	26.0	11.1	-	3
Klondike Narrows	11H1	7400	1/28	47	12.9	19.0	8.1	-	3
Tony Grove R.S.	11H3	6250	1/30	30	7.4	7.5	5.6	7.0**	8
Dry Bread Pond x	11H13	8230	2/1	42	11.3	17.5	8.3	-	4
Beaver Creek- Skunk Creek x	11H14	7150	2/1	33	8.2	9.9	5.8	-	4
Little Bear (upper)	11H25	6350	1/29	32	7.7	-	-	-	0
Little Bear (lower)	11H26	6100	1/29	24	5.7	-	-	-	0
Oxford Mountain	12G3	6800	1/30	24	5.8	7.4	7.9	-	2
Dry Creek Flat	12G4	6350	1/30	18	4.6	5.2	6.8	-	2

OGDEN RIVER

Dry Bread Pond	11H13	8230	2/1	42	11.3	17.5	8.3	-	4
Beaver Creek- Skunk Creek	11H14	7150	2/1	33	8.2	9.9	5.8	-	4
Sagebrush Flat	11H15	6300	2/1	20	5.3	3.8	4.1	-	4
Ben Lomond (lower)	11H9	6000	1/30	34	9.2	8.5	-	-	1
Mt. Ogden	11H10	8600	1/29	51	13.2	30.0	16.5	-	5
Snow Basin	11H11	6500	1/29	37	8.8	11.1	7.9	-	3

x - Adjacent Drainage.

* - Less than 15 year average, but 8 years or more in the period.

** - Less than 8 years in the period. Average is for total record when 8 years or more of record.

UTAH SNOW SURVEYS - ABOUT FEBRUARY 1, 1957

DRAINAGE BASIN and SNOW COURSE	SNOW COVER MEASUREMENTS								
	1957					: Past Record			
	No.	Elev.	Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content: (In.)	Water Content: (In.)	1938-52 Average	Prevs. Yrs. of Record
<u>WEBER RIVER</u>									
Trial Lake	10J8	9800	1/31	65	18.0	-	-	-	4
Smith & Morehouse	11J4	7600	1/29	40	10.6	9.8	5.8	-	3
Beaver Creek R.S.	11J24	7500	1/31	29	7.5	6.5	3.3	-	6
Chalk Creek #2	11J2	8200	1/30	44	10.7	12.9	6.7	-	3
Chalk Creek #3	11J3	7500	1/30	29	6.4	5.3	3.3	-	3
Silver Lake x	11J16	8725	1/28	60	14.7	29.0	12.4	15.4	22
Parley's Canyon Summit	11J15	7500	1/30	50	13.2	12.9	10.0	-	6
Lamb's Canyon x	11J14	6600	1/28	46	11.2	11.6	8.5	9.5**	11
<u>PROVO RIVER and UTAH LAKE</u>									
Trial Lake	10J8	9800	1/31	65	18.0	-	-	-	4
Soapstone R.S.	11J25	7800	1/31	38	10.0	11.3	4.2	-	6
Daniels-Strawberry Summit	11J23	8000	1/29	48	11.2	13.4	7.0	9.6	26
Strawberry Divide	11J8	8000	1/29	64	16.5	18.3	10.2	13.8	21
East Portal	11J7	7560	1/29	38	8.1	9.0	5.4	8.5	21
Clear Creek Ridge #2	11K22	8000	1/31	48	11.3	8.9	-	-	1
Clear Creek Ridge #3	11K23	6600	1/31	25	6.0	6.4	-	-	1
Payson R. S.	11K1	8050	1/28	56	13.2	11.4	8.3	-	3
Rock Bridge	11K2	6750	1/28	40	8.8	7.2	5.7	-	3
Timpanogas Divide	11J21	8200	1/30	60	15.1	24.3	15.6	17.4	22
Camp Altamont	11J20	7300	1/30	40	9.6	11.5	11.9	12.2	22
South Fork R.S.	11J19	6100	1/30	17	3.7	2.4	6.5	6.4*	19
Timpanogas Cave Camp	11J18	5500	1/30	11	2.0	0.0	3.6	4.9*	14
<u>JORDAN RIVER and GREAT SALT LAKE</u>									
Silver Lake	11J16	8720	1/28	60	14.7	29.0	12.4	15.4	22
Mill D. South Fork	11J10	7400	1/28	51	12.2	14.8	11.8	-	4
Lamb's Canyon Summit	11J14	6600	1/28	46	11.2	11.6	8.5	9.5**	11
Parley's Canyon x	11J15	7500	1/30	50	13.2	12.9	10.0	-	6
Farmington Canyon (upper)	11J11	8000	Delayed Data			21.0	13.9	-	4
Farmington Canyon (lower)	11J12	6950	Delayed Data			13.7	12.6	-	6
Middle Canyon	12J3	7000	1/31	32	8.2	7.5	7.9	-	2

x - Adjacent Drainage.

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** - Less than 8 years in the period. Average is for total record when 8 years or more of record.

UTAH SNOW SURVEYS - ABOUT FEBRUARY 1, 1957

DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS						
			1957				Past Record		
			Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content: (In.)	Water Content: (In.)	1938-52 Average	Prevs. Yrs. of Record
<u>SEVIER RIVER above Richfield</u>									
Midway Valley	12M2	9400	1/29	58	13.3	16.5	12.8	-	2
Duck Creek R.S.	12M4	8560	2/2	47	12.4	11.4	9.4	10.3*	13
Harris Flat R.S.	12M5	7700	1/30	32	6.9	2.7	8.1	6.8**	11
Long Valley Jct. x	12M6	7500	1/30	20	4.3	1.0	5.3	-	5
Castle Valley	12M13	9700	2/1	31	6.9	-	-	-	0
Panguitch Lake	12M7	8200	1/31	12	2.2	1.8	4.0	-	4
Bryce Canyon	12M8	8000	1/30	19	2.8	1.2	5.0	4.0**	8
Widtsoe-Escalante Summit	11M1	9500	1/29	19	3.2	5.6	7.4	5.8*	19
Widtsoe-Escalante #2	11M2	9500	1/29	25	4.4	6.4	7.2	-	6
Big Flat x	12L7	10000	1/31	49	10.7	17.0	-	-	6
Kimberly Mine (upper)	12L6	8900	1/28	47	9.5	-	-	-	7
<u>SEVIER RIVER below RICHFIELD including SAN PITCH RIVER</u>									
Farnsworth Lake	11L1	9900	2/2	47	12.6	-	-	-	1
Gooseberry R. S.	11L2	8400	2/2	34	8.2	-	-	-	1
Huntington-H orseshoex	11K5	9800	1/30	57	16.6	18.5	12.0	-	6
Gooseberry Reservoir x	11K4	8700	1/30	50	13.2	16.8	8.9	-	6
G.B.R.C. Meadows	11K10	10000	1/31	61	16.6	19.1	10.9	-	6
G.B.R.C. Headqtrrs.	11K11	8700	1/31	43	10.1	11.5	7.5	9.5*	18
Middle Fork	11K34	9600	2/3	60	14.6	16.1	-	-	1
Thistle Flat	11K35	8500	2/4	45	11.5	11.2	-	-	1
Mt. Baldy R.S.	11K12	9500	2/1	59	14.9	-	-	-	0
Beaver Dams	11K13	8000	2/1	35	8.4	-	-	-	0
<u>BEAVER RIVER</u>									
Big Flat	12L7	10000	1/31	49	10.7	17.0	-	-	6
Otter Lake	12L8	9300	1/31	44	9.4	14.4	-	-	6
Merchant's Valley	12L9	8200	1/31	30	6.4	9.7	9.1	-	7
<u>COAL CREEK</u>									
Midway Valley x	12M2	9400	1/29	58	13.3	16.5	12.8	-	2
Webster Flat x	12M3	9200	1/29	48	10.0	11.5	10.5	-	5
Urie Flat	12M10	8450	1/29	26	5.3	3.6	5.9	-	2

x - Adjacent Drainage.

* - Less than 15 year average, but 8 years or more in the period.

** - Less than 8 years in the period. Average is for total record when 8 years or more of record.

DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS						
			1957			: Past Record			
			Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content (In.)			Prevs. Yrs. of Record
			1956	1955	Average				

COLORADO RIVER DRAINAGE

DUCHESNE RIVER

Trial Lake	10J8	9800	1/31	65	18.0	-	-	-	4
Soapstone R.S. x	11J25	7800	1/31	38	10.0	11.3	4.2	-	6
Daniels-Strawberry Smt	11J23	8000	1/29	48	11.2	13.5	7.0	9.6	26
Strawberry Divide x	11J8	8000	1/29	64	16.5	18.3	10.2	13.8	21
East Portal x	11J7	7560	1/29	38	8.1	9.0	5.4	8.5	21
Indian Canyon	10K1	9100	1/31	33	6.6	11.0	6.0	7.1*	21
Lakefork Mountain	10J10	10500	2/1	31	6.6	13.5	7.4	-	6
Lakefork Mountain #2	10J11	8900	2/1	21	4.2	10.5	5.8	-	4
Lakefork Mountain #3	10J12	8100	2/1	20	3.6	6.7	5.0	-	4
Paradise Park	9J3	10500	2/3	28	7.4	14.8	6.5	-	4
Mosby Mountain(lower)	9J5	9500	2/3	27	5.9	11.3	6.0	-	4

PRICE RIVER

Huntington-Horseshoe	11K5	9800	1/30	57	16.6	18.5	12.0	-	6
Gooseberry Reservoir	11K4	8700	1/30	50	13.2	16.8	8.9	-	6
Mud Creek	11K6	8250	1/30	46	12.8	15.1	5.4	-	7
Mud Creek #2	11K33	8300	1/30	45	11.4	11.2	-	-	1
Staley Ranch	11K7	7600	1/30	27	6.4	5.2	3.1	5.9*	15
Dry Valley Divide	11K8	7800	1/30	33	8.0	10.3	4.4	7.6*	15
White River #1	10K2	8600	1/26	45	9.9	14.0	-	-	1
White River #2	11K24	7600	1/26	34	7.0	8.7	-	-	1
White River #3	11K25	7400	1/26	32	7.0	7.2	-	-	1
Indian Canyon x	10K1	9100	1/31	33	6.6	11.0	6.0	7.1*	21
Grassy Trail Creek Left Fork	10K3	7970	1/25	24	3.4	6.5	-	-	1
Spatafore Canyon	10K4	8150	No survey			6.7	-	-	1
Corral	10K5	8200	1/25	21	4.2	6.4	-	-	1

SAN RAFAEL RIVER

Huntington-Horseshoe	11K5	9800	1/30	57	16.6	18.5	12.0	-	6
Gooseberry Reservoir	11K4	8700	1/30	50	13.2	16.8	8.9	-	6
Switchback	11K26	8600	1/29	49	12.4	13.1	7.1	-	2
Stuart R. S.	11K27	7950	1/29	29	6.6	8.2	3.5	-	2
Red Pine Ridge	11K28	9400	1/31	50	13.8	13.4	-	-	1
Joe's Valley	11K29	8800	1/31	30	6.8	8.5	-	-	1
Wilberg Ranch	11K30	7800	1/31	14	2.7	3.2	-	-	1
Buck Flat	11K31	9400	2/1	42	10.6	11.9	-	-	1
Rush Pond	11K38	9800	2/1	41	9.6	12.6	-	-	1
Wrigley Creek	11K32	9000	2/1	31	6.8	8.7	-	-	1

- x - Adjacent Drainage.
- * - Less than 15 year average, but 8 years or more in the period.
- ** - Less than 8 years in the period. Average is for total record when 8 years or more of record.

UTAH SNOW SURVEYS - ABOUT FEBRUARY 1, 1957

DRAINAGE BASIN and SNOW COURSE	SNOW COVER MEASUREMENTS									
	No.	Elev.	1957		Past Record				Prevs. 1938-52 Yrs. of Average Record	
			Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content(In.)				
<u>MUDDY RIVER</u>										
Black Fork	11K14	9200	Delayed Data		9.8	-	-	-	1	
Dill's Camp	11K15	9200	Delayed Data		10.1	-	-	-	1	
Mt. Baldy R. S. x	11K12	9500	2/1	59	11.9	-	-	-	1	
<u>FREMONT RIVER</u>										
Farnsworth Lake x	11L1	9900	2/2	47	12.6	-	-	-	1	
<u>ESCALANTE RIVER</u>										
Widtsoe-Escalante Summit	11M1	9500	1/29	19	3.2	5.6	7.4	5.8*	19	
Widtsoe-Escalante #2	11M2	9500	1/29	25	4.4	6.4	7.2	-	6	
<u>VIRGIN RIVER</u>										
Long Valley Jct.	12M6	7500	1/30	20	4.3	1.0	5.3	-	5	
Harris Flat R. S. x	12M5	7700	1/30	32	6.9	2.7	8.1	6.8**	11	
Duck Creek R. S. x	12M4	8560	2/2	47	12.4	11.4	9.4	10.3*	13	
Midway Valley x	12M2	9400	1/29	58	13.3	16.5	12.8	-	2	
Webster Flat	12M3	9200	1/29	48	10.0	11.5	10.5	-	5	

x - Adjacent Drainage.

* - Less than 15 year average, but 8 years or more in the period

** - Less than 8 years in the period. Average is for total record when 8 years or more of record.

AGENCIES COOPERATING IN UTAH SNOW SURVEYS

U. S. GOVERNMENT AGENCIES

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

U. S. Department of Commerce
Weather Bureau

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

STATE OF UTAH

Utah Agricultural Experiment Station
Utah 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

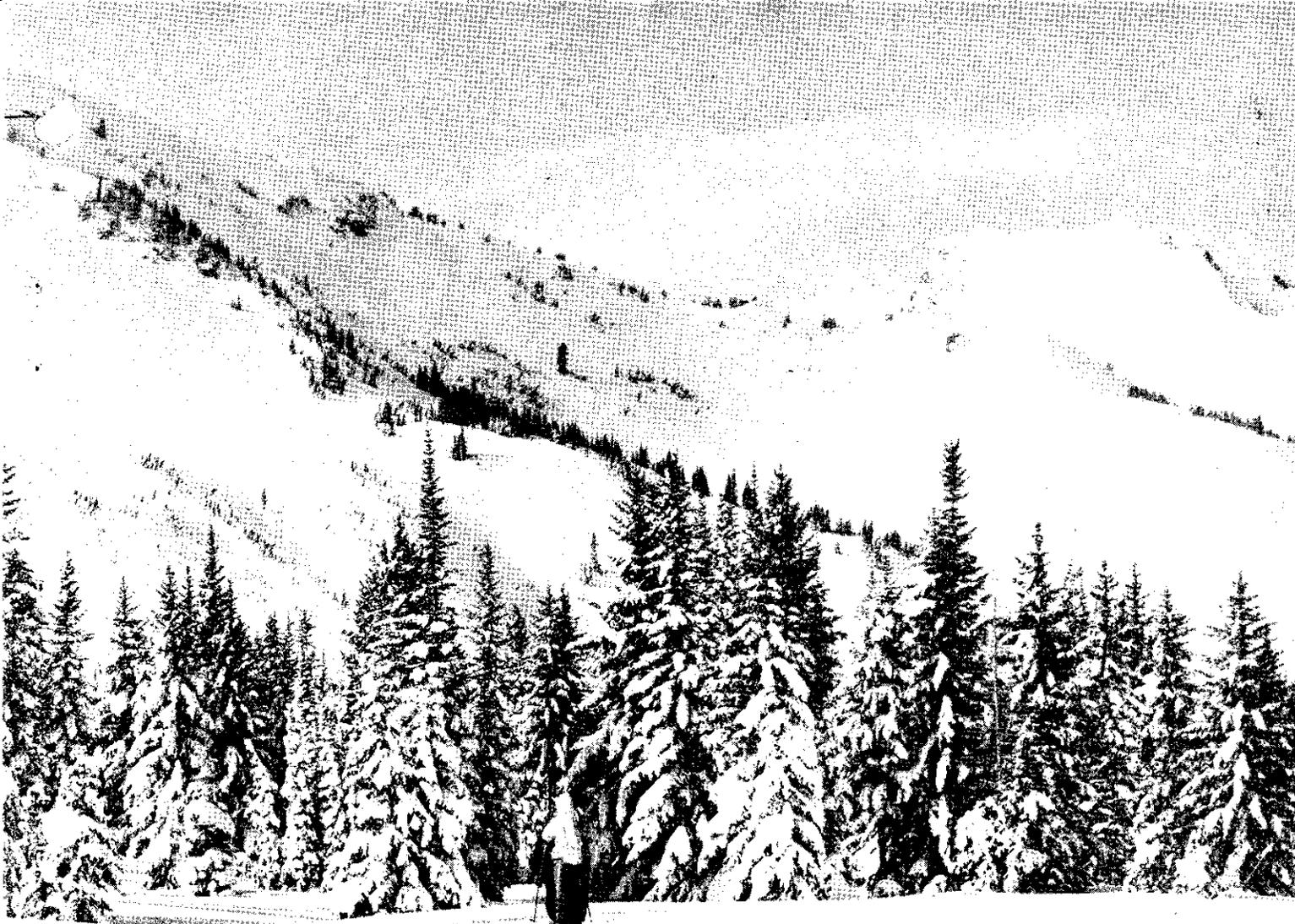
Salt Lake City Corporation

ORGANIZED PUBLIC AGENCIES

Beaver River Water-Users Association
Board of Canal Presidents - Jordan River
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

PRIVATE AGENCIES

Kaiser Steel Corporation



FEDERAL - STATE COOPERATIVE
SNOW SURVEYS and WATER SUPPLY FORECASTS
for
UTAH

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,
and
STATE ENGINEER of UTAH and UTAH AGRICULTURAL EXPERIMENT STATION
in cooperation with

U. S. Forest Service, U. S. National Park Service,
U. S. Geological Survey and
State and Local Irrigation Organizations

AS OF
MAR. 1, 1957

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS and WATER SUPPLY FORECASTS
for
UTAH

MARCH 1, 1957

Report Prepared
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Utah Agricultural Exp. Station
Logan, Utah
(Mimeograph Series No. 432)

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WATER SUPPLY OUTLOOK

for UTAH

MARCH 1, 1957

 * Fair to good water supplies are expected for *
 * central, northern and southeastern Utah. Light *
 * snowfall during February brought sharp decreases *
 * in forecasts for the southwestern drought areas, *
 * particularly at the Sevier River below Piute Dam *
 * gaging station where only 29% of average flow is *
 * expected. Storage in reservoirs from Utah Lake *
 * and Strawberry Reservoir northward is 102% of *
 * last year, 108% of average, and 50% of capacity. *
 * Reservoirs in the Uintah Basin and the south *
 * have 79% of last year, 33% of average and 19% *
 * of capacity. *

GENERAL OUTLOOK

February storms caused changes in the snowpack which were quite variable on the northern and central watersheds, the increases varying from 50% to 110% of average. Increases on the South and East Forks of the Sevier in the southwest varied from 33 to 65% of average.

At present, the water outlook is poorest for users served by the Sevier, Escalante, Paria and Fremont rivers, and Parowan Creek. Most of the watershed areas of these drainages have a snow cover which is only 50 to 55% of an average amount.

The water which will be measured during the coming April-September period at the gaging station below Piute Dam is expected to be 22,000 acre feet, or 29% of the 15 year average(1938-52). This is about 10% more than last year. Since the combined storage in Otter Creek, Piute and Sevier Bridge reservoirs on March 1 was approximately 21,000 acre feet less than a year ago, the over-all water outlook on the Sevier is actually poorer now than then. Distribution of water along the river will be such that the effect of less water this year will be felt by the users below Sevier Bridge, while those who are served by Piute can look forward to more water this year. This is because last year they had to repay water which had been obtained two years ago from the lower users. However, they will still have much less than is needed. The prospect for water from the East Fork and Otter Creek reservoir is for slightly less than last year.

The April-September forecast flows for Coal Creek at Cedar City is 56%, Beaver River - 59%, and April-June flow on the Virgin river is 62%.

Starting on the headwaters of Salina Creek in south central Utah and moving northward we find that the snowpack increases for the month changed the outlook but very little from that expected a month ago, with most forecasts changing by less than 5%.

The San Rafael and San Pitch tributaries, the Spanish Fork and Price river below Scofield reservoir are forecast at 78 to 88%. In the Uintah Basin the forecasts vary from 74% on Ashley Creek at the eastern side to 99% on the Duchesne river at the west.

From the Provo river northward to the tributaries of the Bear river in Idaho and Wyoming, forecasts vary from 79 to 109%, with above average flows forecast on the Logan, upper Weber and Bear rivers.

UTAH STREAMFLOW FORECASTS - MARCH 1, 1957

The following summerized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts.

BASIN, STREAM and STATION	Seasonal Streamflow in Thousands of Acre Feet						
	Forecast Runoff 1957	% 15-Yr. Avg.	Fore- cast Period	Measured Runoff			15-Yr. Average 1938-55
				1955	1954	1953	
GREAT BASIN							
<u>BEAR RIVER SYSTEM</u>							
Bear River near Evanston, Wyo.	148	104	Apr-Sept.	74	55	113	142
Bear River near Randolph, Utah	112	97	Apr-Sept.	26.4	15.3	67	116(1)
Smith's Fork near Border, Wyoming	107	94	Apr-Sept.	78	89	99	114(2)
Bear River at Harer, Idaho	266	95	Apr-Sept.	116	100	184	281
Little Bear River near Paradise, Utah	39	89	Apr-Sept.	40	20.7	34	44
Logan River near Logan, Utah (3)	138	104	Apr-Sept.	99	86	121	133
Blacksmith Fork near Hyrum, Utah (4)	54	90	Apr-Sept.	46	39	50	60
<u>WEBER-OGDEN RIVERS</u>							
Weber River near Oakley, Utah	134	105	Apr-Sept.	98	82	117	128
Weber River near Coalville, Utah (5)	150	109	Apr-Sept.	97	67	112	138
Chalk Creek at Coalville, Utah	44	105	Apr-Sept.	18.6	13.2	28.1	42

- (1) Average runoff for 12 years, 1944-1955.
- (2) Average runoff for 13 years, 1943-1955.
- (3) Includes U.P.&L. Co. tailrace and Logan, Hyde Park & Smithfield Canal.
- (4) Above Utah Power and Light Company's dam.
- (5) Includes diversion by Weber-Provo canal.

UTAH STREAMFLOW FORECASTS - MARCH 1, 1957

4

BASIN, STREAM and STATION	Seasonal Streamflow in Thousands of Acre Feet						
	Forecast Runoff 1957	% 15-Yr. Avg.	Fore- cast Period	Measured Runoff			15-Yr. Average 1938-52
				1955	1954	1953	
<u>WEBER-OGDEN RIVERS - Continued</u>							
East Canyon Creek near Morgan, Utah(6)	26	89	Apr-Sept.	14.1	6.6	22.9	29.8
South Fork Ogden River near Huntsville, Utah	57	88	Apr-Sept.	48	36	60	65
<u>PROVO RIVER & UTAH LAKE</u>							
Spanish Fork at Thistle, Utah	35	78	Apr-Set.	30	20.5	29.7	45
H obble Creek near Springville, Utah	19	76	Apr-Sept.	10.3	8.6	17.1	25(7)
Provo River at Vivian Park, Utah(8)	145	87	Apr-Sept.	109	98	125	166
American Fork near American Fork, Utah	31	86	Apr-Sept.	26.4	22.0	32	36
<u>JORDAN RIVER & SALT LAKE</u>							
Little Cottonwood Creek near Salt Lake City, Utah	35	87	Apr-Sept.	34	29.3	42	40
Big Cottonwood near Salt Lake City	37	92	Apr-Sept.	34	25.1	42	40
Parley's Creek near Salt Lake City, Utah	12	79	Apr-Sept.	7.5	4.4	16.1	15.2
<u>SEVIER RIVER</u>							
Sevier River at Hatch, Utah	30	52	Apr-Sept	24	42	23.4	58(9)
Sevier River near Kingston, Utah	11	23	Apr-Sept.	7.5	14.9	8.1	46

Sevier River Forecast continued on next page.

- (6) Observed flow plus change in storage in East Canyon reservoir.
- (7) For ten years 1946-1955.
- (8) 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, minus diversion thru Duchesne tunnel, plus diversion thru Salt Lake Aqueduct.
- (9) Average runoff for 15 years, 1940-1954.

UTAH STREAMFLOW FORECASTS - MARCH 1, 1957

BASIN, STREAM and STATION	Seasonal Streamflow in Thousands of Acre Feet						
	Forecast Runoff 1957	% 15-Yr. Avg. Period	Fore- cast Apr-Sept.	Measured Runoff			15-Yr. Average 1938-52
				1955	1954	1953	
East Fork Sevier River near Kingston, Utah (10)	10	35	Apr-Sept.	8.6	10.3	7.5	28.8
Sevier River below Piute Dam (11)	22	29	Apr-Sept.	16.1	27.0	17.1	75
<u>BEAVER RIVER</u>							
Beaver River near Beaver, Utah	20	59	Apr-Sept.	16.4	17.4	14.8	34
<u>COAL CREEK</u>							
Coal Creek near Cedar City, Utah	11.5	56	Apr-Sept.	10.1	14.9	8.1	20.4
COLORADO RIVER BASIN							
<u>UPPER GREEN RIVER</u>							
Ashley Creek near Vernal, Utah	48	74	Apr-Sept.	40	44	44	65
<u>DUCHESNE RIVER</u>							
Duchesne River near Tabiona, Utah (12)	121	99	Apr-Sept.	89	66	97	122
Rock Creek near Mountain Home, Utah	100	92	Apr-Sept.	80	68	91	109
Strawberry River at Duchesne, Utah	50	61	Apr-Sept.	49	35	47	82
Lakefork River below Moon Lake, Utah (13)	69	90	Apr-Sept.	58	48	62	77(13)
Uinta River near Neola, Utah	87	78	Apr-Sept.	71	72	75	111
Whiterocks River near Whiterocks, Utah	55	76	Apr-Sept.	47	45	50	72

- (10) Observed flow plus change in storage in Otter Creek Reservoir
(11) Observed flow plus change in storage in Otter Creek and
Piute Reservoirs.
(12) Observed flow plus diversion through Duchesne tunnel.
(13) Observed flow plus change in storage in Moon Lake reservoir.
Average runoff for 14 years, 1942-1955.

UTAH STREAMFLOW FORECASTS - MARCH 1, 1957

BASIN, STREAM and STATION	Seasonal Streamflow in Thousands of Acre Feet						
	Forecast Runoff 1957	% 15-Yr. Avg.	Fore- cast Period	Measured Runoff			15-Yr. Average
				1955	1954	1953	1938-52
<u>PRICE RIVER</u>							
Price River near Scofield, Utah (14)	38	88	Apr-Sept.	26.6	14.1	33	43
Price River near Heiner, Utah (14)	54	70	Apr-Sept.	45	26.3	47	77
<u>SAN RAFAEL RIVER</u>							
Huntington Creek near Huntington, Utah	49	79	Apr-Sept.	36	32	57	62
Cottonwood Creek near Orangeville, Utah	53	83	Apr-Sept.	35	32	51	64
Ferron Creek near Ferron, Utah	36	86	Apr-Sept.	25.6	23.9	35	42(15)
<u>VIRGIN RIVER</u>							
Virgin River at Virgin, Utah	37	62	Apr-Sept.	23.6	44	19.0	60

(14) Observed flow plus change in storage in Scofield reservoir.

(15) Average runoff for 8 years, 1948-1955.

STATUS OF UTAH RESERVOIR STORAGE -- MARCH 1, 1957 (1)

BASIN and/or STREAM	RESERVOIR	USABLE CAPACITY 1000s AF	USABLE STORAGE -- 1000 ACRE FEET			
			1957	1956	1955	15-Yr. Avg. 1938-52
GREAT BASIN						
<u>Bear River</u>	Bear Lake	1421.0	850.5	694.1	728.6	714.3
<u>Little Bear</u>	Hyrum	15.3	11.4	10.6	10.3	10.5 (2)
<u>Ogden</u>	Pine View	43.6	6.3	18.2	3.4	6.8
<u>Weber</u>	East Canyon	28.7	14.6	11.6	4.9	16.8
	Echo	73.9	24.4	31.3	18.8	25.0
<u>Provo</u>	Deer Creek	144.7	82.4	83.9	69.6	73.9 (3)
<u>Spanish Fork</u>	Strawberry	270.0	138.9	149.9	173.1	99.0
<u>Utah Lake</u>	Utah Lake	1149.0(4)	433.1	535.4	575.1	498.2
<u>Sevier River</u>	Otter Creek	52.5	13.6	15.3	16.0	35.3
	Piute	74.0	20.1	28.8	29.5	51.5
	Sevier Bridge	236.0	40.1	50.6	85.5	152.6
<u>Beaver River</u>	Rocky Ford	23.3	7.4	8.2	8.7	16.6
COLORADO RIVER DRAINAGE						
<u>Lake Fork</u>	Moon Lake	35.8	8.5	9.6	10.7	16.6
<u>Price River</u>	Scofield	65.8	4.6	6.9	10.2	14.2 (5)

- (1) All data contained in this table supplied by U. S. Geological Survey.
(2) Average for 1939-53.
(3) Average for 1942-55.
(4) Active capacity taken at 3.1 feet above compromise point.
(5) Average for 1943-52.

COMPARATIVE SNOW DATA

7

Summary of Snow Survey Data by Tributary Watersheds as of March 1, 1957

TRIBUTARY BASINS	No. of Courses Averaged	Years of Record	1956 Snow Water Expressed as percent of		
			1955	1954	& 1938-52 Avg
<u>GREAT BASIN</u>					
Smith's Fork Bear River(Wyo.)	4	2-21	74	151	108*
Strawberry-Mink Creeks(Idaho)	2	2	71	111	-
Cub River (Idaho)	1	6	71	166	110*
Logan River	4	3-10	77	130	102*
Blacksmith Fork, Little Bear	5	5-10	80	121	95*
Malad River (Idaho)	2	2	53	57	-
Ogden River (So. Fork)	3	5-9	79	133	97*
Weber River above Echo Dam	9	4-22	80	129	101*
East Canyon Creek	3	9-22	81	100	95*
Farmington Area	2	6	74	91	-
Salt Lake Area	4	4-22	81	97	96*
Tooele Area	1	3	97	79	-
American Fork River	3	2-22	87	85	86*
Provo River above Vivian Park	7	6-26	80	134	103*
Strawberry Reservoir Valley	3	21-26	98	135	105*
H obble Creek	1	4	116	134	108*
Payson Creek	1	9	100	89	92*
Sevier River above Panguitch	5	5-14	97	77	71*
East Fork Sevier River	4	2-20	88	68	50*
Clear Creek above Sevier	1	12	97	88	75*
Salina Creek	2	4-6	100	82	95*
Mt. Pleasant Area	2	7-12	99	118	98*
Ephraim Area	2	7-19	93	104	94*
Mayfield Area	2	5	88	91	103*
Chalk Creek - Fillmore	2	3	92	60	91*
Beaver River	3	8-16	77	91	80*
Coal Creek - Cedar City	3	3-11	84	92	78*
<u>COLORADO RIVER BASIN</u>					
Duchesne River above Tabiona	3	10-26	80	161	109*
Strawberry River	4	2-26	88	121	97*
Lakefork River	2	4-6	50	75	80*
Whiterocks - Uintah Rivers	2	6-7	56	82	74*
Ashley Creek	4	6-8	60	88	75*
Price River	5	7-19	91	112	98*
San Rafael	3	5-12	96	114	94*
Escalante River	2	7-20	71	62	53*
Virgin River	4	7-14	112	97	83*
Southeastern Utah(near Moab)	1	5	112	110	96*
Southeastern Utah(near Monticello)	1	1	106	-	91*

* Several of the snow courses used in calculating these averages have only been measured for a few years on March 1, but have up to 33 years of record on April 1. The percent of average March 1 water content on these courses was calculated based on the percent of the April 1st water content of the snow that usually accumulates by March 1 on courses having such records and that are similarly located as to elevation and exposure.

DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS						
			1957		Past Record				
			Date of Survey (In.)	Snow Depth (In.)	Water Content: (In.)	Water Content: (In.)	1938-52 Average	Prevs. Yrs. of Record	
GREAT BASIN DRAINAGE									
<u>BEAR RIVER above</u>									
<u>Harer, Idaho</u>									
Trial Lake x	10J8	9800	2/26	80	23.6	35.3	11.9	24.0**	11
Monte Cristo R. S.	11H12	8960	2/28	67	20.9	--	16.8	--	7
Poison Meadows x	10G6	8500	3/2	85	25.9	40.3	16.4	25.5**	9
Piney LaBarge x	10G10	8820	3/1	54	16.0	24.4	--	--	2
Eig Park	10G11	8700	3/3	58	15.6	25.1	13.3	--	6
Kelly R. S.	10G12	8200	3/3	53	14.2	22.3	--	--	2
Salt River Summit x	10G8	7900	2/27	49	14.6	18.2	7.9	13.8**	9
CCC Camp x	10G7	7500	2/27	40	11.4	13.2	7.6	9.8	21
<u>BEAR RIVER below</u>									
<u>Harer, Idaho</u>									
Garden City Summit	11H7	7900	2/26	55	16.2	21.0	13.7	18.4**	10
Slug Creek Divide	11G5	7300	No Report			--	--	--	2
Strawberry Mink Divide	11G10	6800	2/26	52	17.8	23.5	12.0	--	2
Strawberry Creek	11G9	5800	2/26	27	8.6	13.5	8.6	--	2
Christensen Ranch	11G11	5600	2/26	21	6.6	8.9	7.9	--	2
Willow Flat	11G4	6100	2/25	36	11.7	17.6	11.9	--	2
Cub River R. S.	11G12	5400	2/25	17	4.7	8.9	9.1	--	2
Franklin Basin R.S.	11G8	8200	2/27	73	24.0	33.7	14.4	--	6
Klondike N arrows	11H1	7400	2/27	55	17.2	23.4	11.4	--	3
Tony Grove R. S.	11H3	6250	2/26	28	9.2	10.6	10.4	10.5**	8
Monte Cristo R.S.	11H12	8960	2/28	67	20.9	--	16.8	--	7
Dry Bread Pond x	11H13	8230	2/28	55	15.7	21.6	11.8	18.3**	9
Beaver Creek - Skunk Creek	11H14	7150	2/28	37	11.5	13.4	8.0	--	5
Little Bear(upper)	11H25	6850	2/25	29	9.7	11.8	--	--	1
Little Bear(lower)	11H26	6100	2/25	19	6.2	8.5	--	--	1
Oxford Mountain	12G3	6800	2/27	21	6.6	9.6	8.0	--	2
Dry Creek Flat	12G4	6350	2/27	8	3.2	8.3	9.9	--	2
<u>OGDEN RIVER</u>									
Monte Cristo R.S. x	11H12	8960	2/28	67	20.9	--	16.8	--	7
Dry Bread Pond	11H 13	8230	2/28	55	15.7	21.6	11.8	18.3**	9
Beaver Crk-Skunk Crk	11H14	7150	2/28	37	11.5	13.4	8.0	--	5
Sagebrush Flat	11H15	6300	2/28	9	2.8	5.5	7.3	--	4
Ben Lomond(lower)	11H9	6000	2/26	28	9.4	11.6	--	--	1
Mt. Ogden	11H10	8600	2/26	57	18.4	32.7	22.6	--	7
Snow Basin	11H11	6500	2/26	29	9.2	14.3	12.9	--	3

x - Adjacent Drainage.

or more in the period.

is for total record when 8 years or more of record.

* - Less than 15 year average, but 8 years

** - Less than 8 years in the period. Average

DRAINAGE BASIN and SNOW COURSE		No.	Elev.	SNOW COVER MEASUREMENTS					
				1957	: Past Record				
			Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content: (In.)	Water Content (In.)	1938-52 Average Record	Prevs. Yrs. of Record
<u>WEBER RIVER</u>									
Trial Lake x	10J8	9800	2/26	80	23.6	35.3	11.9	24.0**	11
Smith & Morehouse	11J4	7600	2/23	35	12.1	12.6	10.2	--	6
Redden Mine(upper)	11J5	9000	2/22	51	15.6	23.5	12.8	--	6
Redden Mine(lower)	11J6	8500	2/22	48	15.0	21.2	11.9	--	6
Peaver Creek R.S.	11J24	7500	2/26	29	9.2	9.0	6.6	8.5**	8
Chalk Creek #1	11J1	9100	2/21	61	18.1	--	13.8	--	4
Chalk Creek #2	11J2	8200	2/21	41	13.0	14.8	9.3	--	6
Chalk Creek #3	11J3	7500	2/21	26	8.1	7.3	6.6	--	5
Silver Lake x	11J16	8725	2/26	70	20.7	28.1	21.8	20.7	22
Parley's Canyon Sumt.	11J15	7500	2/27	52	15.4	16.6	14.1	16.5**	9
Lamb's Canyon x	11J14	6600	2/27	42	11.8	15.6	12.4	13.5	16
<u>PROVO RIVER and UTAH LAKE</u>									
Trial Lake	10J8	9800	2/26	80	23.6	35.3	11.9	24.0**	11
Soapstone R. S.	11J25	7800	2/26	43	12.8	14.8	8.0	12.0**	10
Daniels-Strawberry Summit	11J23	8000	2/28	47	14.6	17.0	11.8	13.6	26
Strawberry Divide	11J8	8000	2/27	60	19.9	21.6	15.1	18.1*	21
East Portal	11J7	7560	2/27	37	11.3	9.7	7.6	11.6*	22
Hobble Creek Summit	11J22	7300	2/27	44	14.0	12.1	10.4	--	4
Packard Canyon	11J31	6400	2/27	29	10.4	9.7	8.3	--	2
Clear Creek Ridge #1	11K21	9200	2/26	53	16.4	17.1	--	--	1
Clear Creek Ridge #2	11K22	8000	2/26	50	14.3	12.5	11.8	--	2
Clear Creek Ridge #3	11K23	6600	2/26	18	7.0	7.4	6.6	--	2
Payson R. S.	11K1	8050	2/25	47	15.2	15.2	17.1	16.0**	9
Rock Bridge	11K2	6750	2/25	27	7.7	9.6	12.7	--	3
Dutchman R. S.	11J17	7500	2/28	47	16.8	18.7	17.6	--	2
Timpanogas Divide	11J21	8200	2/28	64	21.6	27.0	23.1	23.2	22
Camp Altamont	11J20	7300	2/28	37	12.1	13.4	17.6	16.6	22
South Fork R. S.	11J19	6100	2/28	0	0.0	3.6	9.2	7.9*	19
Timpanogas Cave Camp	11J18	5500	2/28	0	0.0	2.1	6.3	5.1*	15
<u>JORDAN RIVER and GREAT SALT LAKE</u>									
Silver Lake	11J16	8720	2/26	70	20.7	28.1	21.8	20.7	22
Mill D. South Fork	11J10	7400	2/26	52	16.4	20.1	18.2	--	4
Lamb's Canyon	11J14	6600	2/27	42	11.8	15.6	12.4	13.5*	16
Parley's Canyon Sumt.	11J15	7500	2/27	52	15.4	16.6	14.1	16.5**	9
Farmington Cyn(upper)	11J11	8000	2/23	54	17.8	26.4	18.4	--	6
Farmington Cyn(lower)	11J12	6950	3/2	45	14.8	18.2	17.4	--	6
Middle Canyon	12J3	7000	2/28	28	9.3	9.6	11.7	--	3

x - Adjacent Drainage.
or more in the period.

* - Less than 15 year average, but 8 years
in the period. Avg.

** - Less than 8 years in the period. Avg.
is for total record when 8 years or more of record.

UTAH SNOW SURVEYS - ABOUT MARCH 1, 1957

10

DRAINAGE BASIN and SNOW COURSE		No.	Elev.	SNOW COVER MEASUREMENTS					
				1957	Past Record				
			Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content (In.)		Prevs. 1938-52 Yrs. of Average Record	
						1956	1955		
<u>SEVIER RIVER above</u>									
<u>RICHFIELD</u>									
Cedar Breaks	12M1	10390	2/27	44	14.2	20.6	---	19.1**	15
Midway Valley	12M2	9400	2/27	54	17.0	20.6	19.4	---	15
Duck Creek R. S.	12M4	8560	2/27	40	14.6	13.2	12.5	13.8**	15
Harris Flat R. S.	12M5	7700	2/27	18	7.6	4.5	9.8	9.7**	14
Long Valley Jcnctn. x	12M6	7500	2/27	T	T	T	5.0	4.7**	8
Castle Valley	12M13	9700	2/26	26	8.0	---	---	---	0
Panguitch Lake	12M7	8200	2/26	4	1.4	2.5	4.9	---	5
Bryce Canyon	12M8	8000	2/28	7	2.4	1.6	3.0	5.3**	10
Widtsoe-Escalante									
Summit	11M1	9500	2/25	14	4.2	7.0	7.8	7.9	20
Widtsoe-Escalante #2	11M2	9500	2/25	23	5.8	7.1	8.2	---	7
Fish Lake	11L3	8700	2/20	18	3.9	6.4	---	---	2
Box Creek	12L4	9800	2/21	34	8.8	11.9	---	---	1
Squaw Springs	12L5	9300	2/21	24	6.1	6.4	---	---	1
Big Flat x	12L7	10000	2/27	55	14.9	18.2	16.3	15.7**	8
Kimberly Mine (upper)	12L6	8900	2/25	38	11.0	11.3	12.5	12.5	12
<u>SEVIER RIVER below Richfield</u>									
<u>including SAN PITCH RIVER</u>									
Farnsworth Lake	11L1	9900	2/26	46	14.2	14.4	16.2	---	4
Gooseberry R. S.	11L2	8400	2/26	30	8.7	8.6	11.4	---	6
Huntington-Horseshoe	11K5	9800	2/27	60	20.5	19.1	17.8	---	7
Gooseberry Reservoir	11K4	8700	2/27	54	17.0	18.7	14.2	19.8*	12
G.B.R.C. Meadows	11K10	10000	2/28	64	20.5	22.4	18.5	---	7
G.B.R.C. Headquarters	11K11	8700	2/28	45	13.1	14.0	13.5	14.2*	19
Middle Fork	11K34	9600	3/4	79	22.2	19.8	---	---	1
Thistle Flat	11K35	8500	3/4	61	16.2	14.3	---	---	1
Mt. Baldy R. S.	11K12	9500	3/1	67	20.0	21.7	18.8	---	5
Beaver Dams	11K13	8000	3/1	31	9.5	11.2	12.5	---	5
Rees' Flat	11K36	7300	2/19	34	10.0	---	---	---	0
Pine Creek	12L1	8700	2/20	33	10.0	11.1	17.2	---	3
Bear Canyon	12L3	7200	2/20	21	6.8	7.2	11.1	---	3
<u>BEAVER RIVER</u>									
Big Flat	12L7	10000	2/25	55	14.9	18.2	16.3	15.7**	8
Otter Lake	12L8	9300	2/25	46	12.9	15.3	12.8	13.9**	9
Merchant's Valley	12L9	8200	2/25	26	8.3	12.3	10.1	9.8**	10
<u>PAROWAN CREEK</u>									
Yankee Reservoir	12M11	8700	2/28	18	5.4	---	---	---	2
Ed Ward Flat	12M12	8300	2/28	7	2.9	5.8	---	---	3

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or more in the period.

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UTAH SNOW SURVEYS - ABOUT MARCH 1, 1957

DRAINAGE BASIN and SNOW COURSE	No.	Elev. of	SNOW COVER MEASUREMENTS						
			1957				: Past Record		
			Date Survey (In.)	Snow Depth (In.)	Water Content: (In.)	Water Content (In.)	1938-52 Average Record	Prevs. Yrs. of Record	
<u>COAL CREEK</u>									
Cedar Breaks x	12M1	10390	2/27	44	14.2	20.6	---	19.1**	11
Midway Valley x	12M2	9400	2/27	54	17.0	20.6	19.4	---	3
Webster Flat x	12M3	9200	2/27	42	14.0	13.7	14.4	---	7
Urle Flat	12M10	8450	2/27	12	4.9	5.0	8.3	---	2
<u>ENTERPRISE to NEW HARMONY</u>									
Long Flat	12M2	8200	3/1	4	1.3	2.8	6.1	---	2
Rattlesnake Springs	13M3	6500	3/1	1	0.7	T	6.7	---	2
COLORADO RIVER DRAINAGE									
<u>UPPER GREEN RIVER in Utah</u>									
King's Cabin(upper)	9J1	8800	3/1	32	7.4	11.7	8.3	10.8**	8
King's Cabin(lower)	9J2	8600	3/1	27	6.6	9.6	6.7	9.4**	8
<u>DUCHESNE RIVER</u>									
Trial Lake x	10J8	9800	2/26	80	23.6	35.3	11.9	24.0**	11
Soapstone R. S. x	11J25	7800	2/26	43	12.8	14.8	8.0	12.0**	10
Daniels-Strawberry Summit x	11J23	8000	2/28	47	14.6	17.0	11.8	13.6	26
Strawberry Divide x	11J8	8000	2/27	60	19.9	21.6	15.1	18.1*	21
East Portal x	11J7	7560	2/27	37	11.3	9.7	7.6	11.6*	22
White River #1 x	10K2	8600	2/26	42	13.2	16.5	10.4	---	2
Indian Canyon	10K1	9100	2/26	32	8.4	12.3	9.9	9.0*	19
Lakefork Mountain	10J10	10500	2/27	38	8.2	14.9	10.0	---	6
Lakefork Mountain #2	10J11	8900	2/27	22	5.3	12.0	7.8	---	4
Lakefork Mountain #3	10J12	8100	2/27	19	4.0	8.4	7.1	---	4
Paradise Park	9J3	10500	2/28	37	8.3	15.9	9.7	---	6
Mosby Mountain(lower)	9J5	9500	2/28	31	6.9	11.6	8.9	---	7
<u>BRICE RIVER</u>									
Huntington-H orseshoe	11K5	9800	2/27	60	20.5	19.1	17.8	---	7
Gooseberry Reservoir	11K4	8700	2/27	54	17.0	18.7	14.2	19.8*	12
Mud Creek	11K6	8250	2/28	48	15.8	22.4	10.2	---	7
Mud Creek #2	11K33	8300	2/28	45	14.1	14.0	9.2	---	2
Staley Ranch	11K7	7600	2/28	28	8.8	8.0	7.0	7.2*	16
Dry Valley Divide	11K8	7800	2/28	34	9.8	12.3	8.7	10.0*	16

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UTAH SNOW SURVEYS - ABOUT MARCH 1, 1957

DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS						
			Date of Survey	1957		: Past Record			Prevs. 1938-52 Yrs. of Average Record
				Snow Depth (In.)	Water Content: (In.)	Water Content (In.)	1956	1955	
<u>PRICE RIVER - Continued</u>									
White River #1	10K2	8600	2/26	42	13.2	16.5	10.4	--	2
White River #2	11K24	7600	2/26	32	9.2	10.4	8.1	--	2
White River #3	11K25	7400	2/26	30	9.2	9.7	7.6	--	2
Indian Canyon x	10K1	9100	2/26	32	8.4	12.3	9.9	9.0*	19
Grassy Trail Creek - Left Fork	10K3	7970	2/25	26	6.6	6.4	--	--	1
Corral	10K5	8200	2/25	23	6.7	6.2	--	--	1
<u>SAN RAFAEL RIVER</u>									
Huntington-Horseshoe	11K5	9800	2/27	60	20.5	19.1	17.8	--	7
Gooseberry Reservoir	11K4	8700	2/27	54	17.0	18.7	14.2	19.8*	12
Switchback	11K26	8600	2/27	50	17.0	17.4	12.7	--	2
Stuart R. S.	11K27	7950	2/27	28	8.2	9.8	6.6	--	2
Red Pine Ridge	11K28	9400	2/28	56	17.0	16.8	9.3	--	2
Joe's Valley	11K28	8800	2/28	35	8.7	8.5	--	--	1
Wilberg Ranch	11K30	7800	2/28	11	2.5	3.4	2.2	--	2
Seeley Creek R.S.#2	11K9	10000	2/28	39	12.2	13.7	11.3	--	5
Buck Flat	11K31	9400	3/1	50	14.9	15.6	--	--	1
Rush Pond	11K38	9800	3/1	47	13.6	16.2	--	--	1
Wrigley Creek	11K32	9000	3/1	37	9.6	10.8	--	--	1
<u>MUDDY RIVER</u>									
Black Fork	11K14	9200	3/2	37	10.3	12.8	--	--	1
Dill's Camp	11K15	9200	3/2	41	10.7	13.1	--	--	1
Mt. Baldy R.S. x	11K12	9500	3/1	67	20.0	21.7	18.8	--	5
<u>FREMONT RIVER</u>									
Farnsworth Lake x	11L1	9900	2/26	46	14.2	14.4	16.2	--	4
Fish Lake	11L3	8700	2/20	18	3.9	6.4	--	--	2
Johnson Valley	11L6	8850	2/20	21	4.6	7.1	--	--	1
Black's Flat - U. M. Creek	11L4	9250	2/20	27	6.8	9.6	--	--	1
<u>ESCALANTE RIVER</u>									
Widtsoe-Escalante Summit	11M1	9500	2/25	14	4.2	7.0	7.8	7.9*	20
Widtsoe-Escalante #2	11M2	9500	2/25	23	5.8	7.1	8.2	--	7

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UTAH SNOW SURVEYS - ABOUT MARCH 1, 1957

DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS						
			1957		: Past Record				
			Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content (In.)	1956	1955	Average Record

VIRGIN RIVER

Long Valley Junction	12M6	7500	2/27	2T		T	5.0	4.7**	8
Harris Flat R. S. x	12M5	7700	2/27	18	7.6	4.5	9.8	9.7**	14
Duck Creek R. S. x	12M4	8560	2/27	40	14.6	13.2	12.5	13.8**	13
Midway Valley x	12M2	9400	2/27	54	17.0	20.6	19.4	--	3
Cedar Breaks x	12M1	10390	2/27	44	14.2	20.6	--	19.1**	11
Webster Flat	12M3	9200	2/27	42	14.0	13.7	14.4	--	7

LOWER COLORADO RIVER

(Southeastern Utah)

LaSal Mountain(upper)	9I2	9600	2/21	48	15.8	13.2	--	--	1
LaSal Mountain	9L1	8800	2/21	34	9.9	8.8	9.0	--	5
Buckboard Flat	9M1	9000	2/19	40	12.5	11.8	--	--	1
Camp Jackson	9M2		2/20	40	13.4	10.5	--	--	1

x - Adjacent Drainage.

or more in the period.

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AGENCIES COOPERATING IN UTAH SNOW SURVEYS

U. S. GOVERNMENT AGENCIES

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

U. S. Department of Commerce
Weather Bureau

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

STATE OF UTAH

Utah Agricultural Experiment Station
Utah 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

Salt Lake City Corporation

ORGANIZED PUBLIC AGENCIES

Beaver River Water-Users Association
Board of Canal Presidents - Jordan River
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

PRIVATE AGENCIES

Kaiser Steel Corporation



FEDERAL - STATE COOPERATIVE
SNOW SURVEYS and WATER SUPPLY FORECASTS
for
UTAH

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE,
and
STATE ENGINEER of UTAH and UTAH AGRICULTURAL EXPERIMENT STATION
in cooperation with

U. S. Forest Service, U. S. National Park Service,
U. S. Geological Survey and
State and Local Irrigation Organizations

AS OF
APR. 1, 1957

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS and WATER SUPPLY FORECASTS

for

U T A H

APRIL 1, 1957

Report Prepared

by

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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.

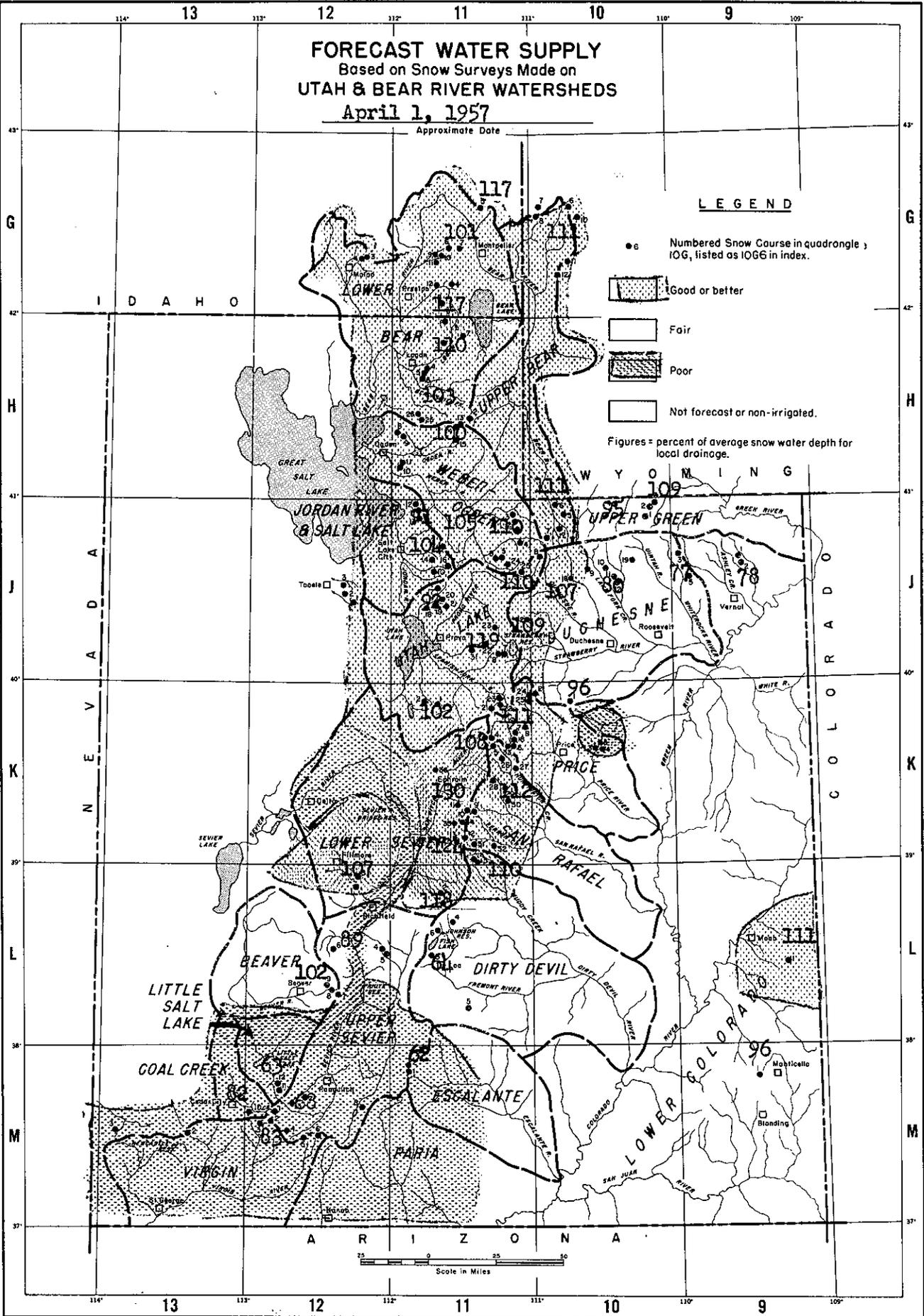
Fair - Subnormal runoff prospects, with some deficiency in meeting demands of current season when holdover storage is not available. If holdover storage available, adequate supply for current demands assured by some depletion of holdover storage.

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.

FORECAST WATER SUPPLY

Based on Snow Surveys Made on
UTAH & BEAR RIVER WATERSHEDS
 April 1, 1957

Approximate Date



WATER SUPPLY OUTLOOK

for UTAH

APRIL 1, 1957

* Most of the state has a fair to good water supply*
outlook for this summer. Seriously short supplies
are still expected for users served by the Sevier and
Virgin rivers and the smaller streams originating in
the same area. Reservoir storage for 14 major reser-
voirs is 49% of capacity and compares to an average
*of 51%. *

GENERAL OUTLOOK

Snowpack increases on the state's watersheds resulting from the storms of March were near average to over 300% of average. The only place where the snowpack change was appreciably below average was on the Virgin and South Fork of the Sevier rivers at the Webster Flat, Duck Creek and Panguitch Lake snow courses. At Webster Flat and Duck Creek, the increases were 25 to 30% less than an average amount, while at Panguitch Lake the snowpack not only failed to increase its usual amount but lost nearly all it had by melting. The result was that only 4 percent of the average April 1st snowpack remained.

Although the higher elevation snowpack increase was 10-35% above average, it was not enough to offset the effect of the below average amounts at the intermediate and lower elevations. The result is that the forecasts for the April thru September streamflow for the Sevier River at Hatch and Kingston have been lowered and now stand at, respectively, 48 and 17% of average. Coal Creek at Cedar City is forecast at 64%, and the Virgin River at 60%.

On the East Fork of the Sevier River, the water outlook has improved, the forecast being raised so that 49% is now expected. There has been no change since last month in the forecast below Piute Dam, the increase on the East Fork being offset by the decrease on the South Fork. The forecast below Piute Dam is for 29%.

On the Beaver River the water outlook is now much better and is expected to be 82% of average.

Starting at a line drawn from the Fillmore area past Salina in the Great Basin and over the mountains to Emery in the Colorado river drainage and then moving northward to the northern boundaries of the Bear River tributaries in Idaho and Wyoming (leaving out the Uintah Basin), the outlook is for streamflow to vary from 91% to 115% of average. The lowest forecast of 91% is on the South Fork of the Ogden River, while the highest of 115% is expected on the Logan River.

In the Uintah Basin, forecast flows have changed but very little from that expected on March 1 for the streams from the Duchesne river eastward to Ashley Creek. From the Duchesne where 101% is anticipated there is a steady decrease in forecasts to 74% on Ashley Creek. At the western end of the Basin on the Strawberry river the snowfall for the month was one and a half to two and a half times the usual amount. As a result, the forecast flow has jumped from 61% forecast on March 1 to 83% now.

In southeastern Utah the snowpack is 11% above the usual amount on the LaSal Mountains near Moab and 4% below on the Blue Mountains near Monticello.

The storms which hit the state's watersheds the last of March and first few days of April, and which followed most of the snow surveys, give good reason to expect that the water outlook will not become worse as the month progresses as has happened during April in recent years, particularly in central and southern Utah. On the contrary, late surveys made April 3rd and 4th on the mountains above Ephraim City on the San Pitch river, and Cottonwood Creek, tributary of the San Rafael river, show that enough water fell in these storms to assure an average water supply for that area even though a very dry spring should develop. If average precipitation occurs during the rest of the month, it is certain that the May 1 surveys on most of the central and perhaps on many other watershed of the state will show that very substantial increases will have to be made in the forecasts.

The surveys made April 3rd of the G. B. R. C. Meadows and Headquarters courses on Ephraim Creek and on April 4th of the Seeley Creek Ranger Station course on Cottonwood Creek, tributary of the San Rafael River, show that in only three years have comparable measurements been made since the first surveys were made in 1930. Comparative data follows:

Snow Course	Snow Water in Inches, About April 1					
	1957	1952	1949	1936	1938-52 15-yr. Avg.	27- yr. Avg.
G.B.R.C. Meadows	32.4	50.6	31.3	32.6	26.2	24.7
G.P.R.C. Headquarters	23.8	34.6	20.1	23.5	17.5	16.5
Seeley Creek R. S.	22.3	37.8	20.3	20.8	16.8	15.3

Storage in reservoirs from Utah Lake and Strawberry reservoir northward is 104% of last year, 108% of average, and 53% of capacity. Reservoirs in the Uintah Basin and the south have 80% of last year, 34% of average and 22% of capacity.

The tables on pages 2 to 5 give forecast streamflow in acre feet. Reservoir storage data is given on page 6.

UTAH STREAMFLOW FORECASTS - APRIL 1, 1957

The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts.

BASIN, STREAM and STATION	Seasonal Streamflow in Thousands of Acre Feet						
	Forecast Runoff 1957	% 15-Yr. Avg.	Fore cast Period	Measured Runoff			15-Yr. Average 1938-52
				1956	1955	1954	
GREAT BASIN							
<u>BEAR RIVER SYSTEM</u>							
Bear River near Evanston, Wyo.	142	100	Apr-Sept.	124	74	55	142
Bear River near Randolph, Utah	108	93	Apr-Sept.	94	26.4	15.3	116(1)
Smith's Fork near Border, Wyoming	111	97	Apr-Sept.	152	78	89	114(2)
Bear River at Harer, Idaho	270	96	Apr-Sept.	311	114	104	281
Little Bear River near Paradise, Utah	43	98	Apr-Sept.	38	40	20.7	44
Logan River near Logan, Utah(3)	153	115	Apr-Sept.	155	99	86	133
Blacksmith Fork near Hyrum, Utah(4)	58	97	Apr-Sept.	73	46	39	60
<u>WEBER-OGDEN RIVERS</u>							
Weber River near Oakley, Utah	131	102	Apr-Sept.	145	98	82	128
Weber River near Coalville, Utah(5)	146	106	Apr-Sept.	136	97	67	138
Chalk Creek at Coalville, Utah	44	105	Apr-Sept.	35	18.6	13.2	42

(1) Average runoff for 12 years, 1944-1955.

(2) Average runoff for 13 years, 1943-1955.

(3) Includes U.P.&L. Co. tailrace and Logan, Hyde Park & Smithfield Canal.

(4) Above Utah Power and Light Company's dam.

(5) Includes diversion by Weber-Provo canal.

UTAH STREAMFLOW FORECASTS - APRIL 1, 1957

BASIN, STREAM and STATION	Seasonal Streamflow in Thousands of Acre Feet						
	Forecast Runoff 1957	% 15-Yr. Avg.	Fore cast Period	Measured runoff			15-Yr. Average 1938-52
				1956	1955	1954	
<u>WEBER-OGDEN RIVERS - Continued</u>							
East Canyon Creek near Morgan, Utah(6)	33	114	Apr-Sept.	16.9	14.1	6.6	29.2
South Fork Ogden River near Huntsville, Utah	59	91	Apr-Sept.	63	48	36	65
<u>PROVO RIVER & UTAH LAKE</u>							
Spanish Fork at Thistle, Utah	45	100	Apr-Sept.		30	20.5	45
Hobble Creek near Springville, Utah	25	100	Apr-Sept.		10.3	8.6	25(7)
Provo River at Vivian Park, Utah (8)	156	94	Apr-Sept.	133	109	98	166
American Fork near American Fork, Utah	35	97	Apr-Sept.	32	26.4	22.0	36
<u>JORDAN RIVER & SALT LAKE</u>							
Little Cottonwood Creek near Salt Lake City, Utah	38	95	Apr-Sept.	37	34	29.3	40
Big Cottonwood near Salt Lake City	39	98	Apr-Sept.	35	34	25.1	40
Parley's Creek near Salt Lake City, Utah	16	105	Apr-Sept.	8.4	7.5	4.4	15.2
<u>SEVIER RIVER</u>							
Sevier River at Hatch, Utah	28	48	Apr-Sept.	25.8	23.8	42	58(9)
Sevier River near Kingston, Utah	8	17	Apr-Sept.	5.3	7.5	14.9	46

Sevier River Forecast continued on next page.

- (6) Observed flow plus change in storage in East Canyon reservoir.
- (7) For ten years 1946-1955.
- (8) 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, minus diversion thru Duchesne tunnel, plus diversion thru Salt Lake Aqueduct.
- (9) Average runoff for 15 years, 1940-1954.

UTAH STREAMFLOW FORECASTS - APRIL 1, 1957

4

BASIN, STREAM and STATION	Seasonal Streamflow in Thousands of Acre Feet						
	Forecast Runoff 1957	% 15-Yr. Avg.	Fore cast Period	Measured 1956	Runoff 1955	Runoff 1954	15-Yr. Average 1938-52
East Fork Sevier River near Kingston, Utah(10)	14	49	Apr-Sept.	7.9	8.6	10.3	28.8
Sevier River below Piute Dam (11)	22	29	Apr-Sept.	13.1	16.1	27.0	75
<u>BEAVER RIVER</u>							
Beaver River near Beaver, Utah	28	82	Apr-Sept.	20.2	16.4	17.4	34
<u>COAL CREEK</u>							
Coal Creek near Cedar City, Utah	13.0	64	Apr-Sept.		10.1	14.9	20.4
COLORADO RIVER BASIN							
<u>UPPER GREEN RIVER</u>							
Ashley Creek near Vernal, Utah	48	74	Apr-Sept.	49	40	44	65
<u>DUCHESNE RIVER</u>							
Duchesne River near Tabiona, Utah(12)	123	101	Apr-Sept.	121	89	66	122
Rock Creek near Mountain Home, Utah	94	86	Apr-Sept.	111	80	68	109
Strawberry River at Duchesne, Utah	68	83	Apr-Sept.	59	49	35	82
Lakefork River below Moon Lake, Utah(13)	65	84	Apr-Sept.	82	58	48	77(13)
Uinta River near Neola, Utah	86	77	Apr-Sept.	90	71	72	111
Whiterocks River near Whiterocks, Utah	55	76	Apr-Sept.	54	47	45	72

(10) Observed flow plus change in storage in Otter Creek Reservoir.

(11) Observed flow plus change in storage in Otter Creek and Piute Reservoirs.

(12) Observed flow plus diversion through Duchesne tunnel.

(13) Observed flow plus change in storage in Moon Lake reservoir.

Average runoff for 14 years, 1942-1955.

UTAH STREAMFLOW FORECASTS - APRIL 1, 1957

5.

BASIN, STREAM and STATION	Seasonal Streamflow in Thousands of Acre Feet						
	Forecast	%	Fore	Measured Runoff			15-Yr.
	Runoff	15-Yr.	cast	1956	1955	1954	Average
	1957	Avg.	Period				1938-52
<u>PRICE RIVER</u>							
Price River near Scofield, Utah (14)	44	102 ^a	Apr-Sept.	28.7	26.6	11.1	43
Price River near Heiner, Utah (14)	72	94	Apr-Sept.	48	45	26.3	77
<u>SAN RAFAEL RIVER</u>							
Huntington Creek near Huntington, Utah	60	97	Apr-Sept.	44	36	32	62
Cottonwood Creek near Orangeville, Utah	65	102	Apr-Sept.	41	35	32	64
Ferron Creek near Ferron, Utah	45	107	Apr-Sept.	31	25.6	23.9	42(15)
<u>VIRGIN RIVER</u>							
Virgin River at Virgin, Utah	36	60	Apr--June		23.6	44	60

(14) Observed flow plus change in storage in Scofield reservoir.

(15) Average runoff for 8 years, 1948-1955.

STATUS OF UTAH RESERVOIR STORAGE - APRIL 1, 1957 (1)

BASIN and/or STREAM	RESERVOIR	USABLE CAPACITY 1000s AF	USABLE STORAGE - 1000 ACRE FEET			
			1957	1956	1955	15-Yr. Avg. 1938-52
GREAT BASIN						
<u>Bear River</u>	Bear Lake	1421.0	894.7	724.0	753.3	750.5
<u>Little Bear</u>	Hyrum	15.3	12.0	11.5	12.2	11.6 (2)
<u>Ogden</u>	Pine View	43.6	15.0	4.3	4.6	10.7
<u>Weber</u>	East Canyon	28.7	18.2	15.5	6.3	18.4
	Echo	73.9	36.6	36.8	27.2	33.7
<u>Provo</u>	Deer Creek	144.7	80.5	81.6	78.9	70.6 (3)
<u>Spanish Fork</u>	Strawberry	270.0	141.8	152.6	175.9	102.6
<u>Utah Lake</u>	Utah Lake	1149.0 (4)	474.6	576.0	630.3	547.9
<u>Sevier River</u>	Otter Creek	52.5	16.6	19.2	22.4	40.4
	Piute	74.0	16.2	21.7	38.2	61.7
	Sevier	236.0	52.6	66.8	103.6	169.1
<u>Beaver River</u>	Rocky Fort	23.3	8.1	9.3	10.8	18.3
COLORADO RIVER DRAINAGE						
<u>Lake Fork</u>	Moon Lake	35.8	9.8	11.3	11.9	18.3
<u>Price River</u>	Scofield	65.8	6.0	8.7	11.5	14.2

- (1) All data contained in this table supplied by U.S. Geological Survey.
(2) Average for 1939-53.
(3) Average for 1941-55.
(4) Active capacity taken at 3.1 feet above compromise point.

UTAH SNOW SURVEYS - ABOUT APRIL 1, 1957

DRAINAGE BASIN and SNOW COURSE	SNOW COVER MEASUREMENTS								
	No.	Elev.	1957			: Past Record			Prevs. 1938-52 Yrs. of Record
			Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content (In.)	Water Content (In.)	1956	

GREAT BASIN DRAINAGE

BEAR RIVER above
Harer, Idaho

Trial Lake x	10J8	9800	3/28	80	28.4	33.6	25.3	27.7	26
Hayden Fork	10J7	9300	3/22	55	16.3	20.8	17.6	-	5
Stillwater Camp	10J17	8550	3/22	46	12.8	13.1	11.3	-	2
Goodman Ranch	10J6	7900	3/22	30	8.0	4.7	7.3	5.6*	19
Monte Cristo R. S.	11H12	8960	3/29	70	25.7	31.6	26.9	26.3	24
Poison Meadows x	10G6	8500	4/2	94	30.3	47.0	22.5	31.5**	9
Piney LaBarge x	10G10	8820	4/2	60	20.4	26.2	16.4	18.5	20
Big Park	10G11	8700	Delayed Data			26.1	16.6	-	6
Kelly R. S.	10G12	8200	Delayed Data			23.0	15.3	-	6
Salt River Summit x	10G8	7900	3/28	54	18.6	18.5	12.1	16.6**	9
CCC Camp x	10G7	7500	3/28	46	15.8	12.1	10.8	11.2	21

BEAR RIVER below
Harer, Idaho

Garden City Summit	11H7	7900	3/29	56	21.3	20.7	14.6	20.0	26
Emigrant Summit	11G6	7700	3/28	72	24.6	28.0	18.6	24.3	21
Emigration Canyon (mouth)	11G7	6500	3/28	38	13.2	9.0	8.7	-	4
Slug Creek Divide	11G5	7300	3/27	55	17.9	17.2	11.8	15.3	21
Strawberry Mink Divide	11G10	6800	3/27	60	21.4	22.0	19.7	-	2
Strawberry Creek	11G9	5800	3/27	28	10.4	10.6	12.3	-	2
Christensen Ranch	11G11	5600	3/28	18	7.3	5.0	10.1	-	2
Willow Flat	11G4	6100	3/29	38	15.2	13.8	15.8	-	2
Cub River R. S.	11G12	5400	3/29	10	4.8	4.5	10.8	-	2
Franklin Basin R. S.	11G8	8200	3/26	81	31.6	31.8	23.8	26.9	33
Klondike Narrows	11H1	7400	3/26	58	22.3	21.4	18.8	-	3
Tony Grove R. S.	11H3	6250	3/29	24	9.5	8.4	11.2	9.6*	31
Mt. Logan	11H6	9000	3/28	83	30.5	34.8	27.6	29.6	33
Spring Hollow(upper)	11H5	8000	3/28	84	28.1	31.5	23.3	26.1	33
Spring Hollow(lower)	11H4	7000	3/28	43	16.1	11.8	15.8	14.1	33
Monte Cristo R. S.	11H12	8960	3/29	70	25.7	31.6	26.9	26.3	24
Dry Bread Pond x	11H13	8230	3/29	53	19.0	20.3	20.1	19.2	19
Beaver Crk-Skunk Crk. x	11H14	7150	3/29	38	14.1	9.5	14.6	-	5
Little Bear(upper)	11H25	6850	3/27	28	10.7	7.4	-	-	1
Little Bear(lower)	11H26	6100	3/27	16	6.4	3.1	-	-	1
Oxford Mountain	12G3	6800	3/27	23	8.5	6.6	9.1	-	2
Dry Creek Flat	12G4	6350	3/27	3	1.4	3.9	9.4	-	2

x - Adjacent Drainage. * - Less than 15 year average, but 8 years or more in the period. ** - Less than 8 years in the period. Average is for total record when 8 years or more of record.

DRAINAGE BASIN and SNOW COURSE		SNOW COVER MEASUREMENTS							
		No.	Elev.	1957		: Past Record			
				Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content (In.) : 1956	1955	Avg.
<u>OGDEN RIVER</u>									
Monte Cristo R. S. x	11H12	8960	3/29	70	25.7	31.6	26.9	26.3	24
Dry Bread Pond	11H13	8230	3/29	53	19.0	20.3	20.1	19.2	19
Beaver Crk-Skunk Crk.	11H14	7150	3/29	38	14.1	9.5	14.6	-	5
Sagebrush Flat	11H15	6300	3/29	0	0.0	0.0	4.2	-	4
Ben Lomond Peak	11H8	8000	3/27	81	30.5	32.9	27.5	-	6
Ben Lomond(lower)	11H9	6000	3/27	32	12.4	9.8	16.6	-	3
Mt. Ogden	11H10	8600	4/1	78	27.9	27.8	21.0	30.7**	9
Snow Basin	11H11	6500	4/1	31	11.9	9.8	14.8	15.4**	8
<u>WEBER RIVER</u>									
Trial Lake x	10J8	9800	3/28	80	28.4	33.6	25.3	27.7	26
Smith & Morehouse	11J4	7600	3/26	49	14.7	10.9	11.6	14.2	28
Redden Mine(upper)	11J5	9000	3/27	62	21.8	21.8	20.8	21.9	27
Redden Mine(lower)	11J6	8500	3/27	59	19.7	20.7	19.4	20.9	27
Beaver Creek R. S.	11J24	7500	3/28	28	10.5	5.8	9.1	8.8*	25
Chalk Creek #1	11J1	9100	3/25	71	24.1	29.2	22.0	-	6
Chalk Creek #2	11J2	8200	3/25	52	16.6	16.2	14.1	-	6
Chalk Creek #3	11J3	7500	3/25	29	10.2	Patchy	8.5	-	5
Silver Lake x	11J16	8725	3/28	76	26.6	27.9	27.9	27.3	26
Parley's Cyn. Summit	11J15	7500	4/1	61	20.4	15.4	16.2	19.0	23
Lamb's Canyon x	11J14	6600	3/29	50	16.6	11.2	15.9	15.7	22
<u>PROVO RIVER and UTAH LAKE</u>									
Trial Lake	10J8	9800	3/28	80	28.4	33.6	25.3	27.7	26
Soapstone R. S.	11J25	7800	3/28	44	14.8	13.0	11.2	13.1	26
Daniels-Strawberry Summit	11J23	8000	3/29	47	17.1	13.2	15.5	15.8	27
Strawberry Divide	11J8	8000	3/28	65	24.3	19.9	18.0	21.7	23
East Portal	11J7	7560	3/28	40	14.3	8.3	11.1	13.2	23
Hobble Creek Summit	11J22	7300	3/28	44	17.0	9.9	11.8	14.3	21
Packard Canyon	11J31	6400	3/28	28	12.1	6.2	7.8	-	2
Clear Creek Ridge #1	11K21	9200	3/27	60	21.4	16.8	20.5	-	2
Clear Creek Ridge #2	11K22	8000	3/27	52	17.9	12.4	14.1	-	2
Clear Creek Ridge #3	11K23	6600	3/27	14	6.5	5.2	6.6	-	2
Payson R. S.	11K1	8050	3/26	59	21.0	13.4	19.1	20.5*	14
Rock Bridge	11K2	6750	3/26	40	14.6	6.6	15.2	-	4
Dutchman R. S.	11J17	7500	Delayed Data			14.6	19.8	20.2	26
Timpanogas Divide	11J21	8200	3/29	65	24.8	27.2	27.8	26.7	22
Camp Altamont	11J20	7300	3/29	42	16.5	9.6	18.5	18.4	22
South Fork R. S.	11J19	6100	3/29	0	0.0	0.0	7.2	4.9	22
Timpanogas Cave Camp	11J18	5500	3/29	0	0.0	0.0	4.0	2.1	22

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DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS						
			Date of Survey	1957		: Past Record			Prevs. Yrs. of Record
				Snow Depth (In.)	Water Content: (In.)	1956	1955	1938-52 Avg.	
<u>JORDAN RIVER and GREAT SALT LAKE</u>									
Silver Lake	11J16	8720	3/28	76	26.6	27.9	27.9	27.3	26
Mill D. South Fork	11J10	7400	3/28	62	21.7	16.2	22.8	20.4	22
Lamb's Canyon	11J14	6600	3/29	50	16.6	11.2	15.9	15.7	22
Parley's Cyn. Summit x	11J15	7500	4/1	61	20.4	15.4	16.2	19.0	23
Farmington Canyon (upper)	11J11	8000	3/22	79	26.4	27.1	23.4	-	6
Farmington Canyon (lower)	11J12	6950	3/29	53	19.9	16.0	21.5	-	6
Barnard Creek	11J13	8000	3/23	69	23.6	24.7	21.6	27.3	21
Rocky Basin-Settlement Canyon	12J1	8900	4/4	92	29.0	20.6	26.3	-	3
Bevan's Cabin	12J2	6450	4/3	34	9.9	4.9	13.4	-	2
Middle Canyon	12J3	7000	3/28	34	12.6	8.3	13.3	-	3
<u>SEVIER RIVER ABOVE Richfield</u>									
Cedar Breaks	12M1	10390	3/27	58	21.1	19.2	20.4	25.0	22
Midway Valley	12M2	9400	3/27	63	22.6	20.0	19.4	-	3
Duck Creek R. S.	12M4	8560	3/28	42	16.6	9.6	11.5	17.4	22
Harriet Flat R. S.	12M5	7700	3/28	14	6.7	0.0	8.5	9.4	26
Long Valley Jct. x	12M6	7500	3/28	0	0.0	0.0	0.0	5.5*	20
Castle Valley	12M13	9700	3/26	38	11.6	9.4	*	--	-
Panguitch Lake	12M7	8200	3/26	1.4	0.3	0.0	3.0	6.8	27
Bryce Canyon	12M8	8000	3/31	0	0.0	0.0	3.5	5.5	21
Widtsoe-Escalante Summit	11M1	9500	3/27	16	5.7	3.6	7.4	9.3	25
Widtsoe-Escalante #2	11M2	9500	3/27	28	8.4	6.1	10.0	-	7
Fish Lake x	11L3	8700	3/21	19	5.4	6.4	8.4	8.4	26
Box Creek	12L4	9800	3/22	55	14.2	10.0	10.4	-	3
Squaw Springs	12L5	9300	3/22	35	9.1	5.3	6.1	-	3
Big Flat x	12L7	10000	3/29	66	22.6	16.5	17.6	20.8	21
Kimberly Mine (upper)	12L6	8900	3/25	54	16.2	11.2	14.6	18.3	22
<u>SEVIER RIVER below Richfield (including SAN PITCH RIVER)</u>									
Farnsworth Lake	11L1	9900	3/26	71	21.6	16.1	18.4	-	6
Gooseberry R. S.	11L2	8400	3/26	49	13.4	8.3	12.4	11.6	27
Huntington Horseshoe x	11K5	9800	3/28	73	28.1	19.2	18.2	26.3	27
Gooseberry Reservoir x	11K4	8700	3/28	66	23.5	17.7	15.9	20.8	29
Mammoth R. S. Cottonwood Creek	11K3	8800	3/29	64	23.0	18.8	17.7	21.9	28

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or more in the period.

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** - Less than 8 years in the period. Average
is for total record when 8 years or more of record.

DRAINAGE BASIN and SNOW COURSE		SNOW COVER MEASUREMENTS							
		No.	Elev.	1957		: Past Record		1938-52 Avg.	Prevs. Yrs. of Record
				Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content (In.) : 1956		
<u>SEVIER RIVER below Richfield</u> (including SAN PITCH RIVER) - Continued									
G.B.R.C. Meadows	11K10	10000	4/3	104	32.4	24.0	22.1	26.2	27
G.B.R.C. Headquarters	11K11	8700	4/3	82	23.8	13.7	15.0	17.5	27
Middle Fork	11K34	9600	3/29	82	27.5	21.8	-	-	1
Thistle Flat	11K35	8500	3/29	59	19.9	13.8	-	-	1
Mt. Baldy R. S.	11K12	9500	4/1	90	28.8	22.1	21.5	-	6
Beaver Dams	11K13	8000	4/1	48	14.7	10.2	12.3	-	6
Rees' Flat	11K36	7300	3/27	48	15.1	13.1	-	-	1
Pine Creek	12L1	8700	3/21	44	16.4	12.3	19.1	15.3**	8
Bear Canyon	12L3	7200	3/21	23	8.4	5.4	11.4	-	3
<u>BEAVER RIVER</u>									
Big Flat	12L7	10000	3/29	66	22.6	16.5	17.6	20.8	21
Otter Lake	12L8	9300	3/25	58	18.1	13.5	13.5	17.5	21
Merchant's Valley	12L9	8200	3/25	35	12.0	8.1	10.8	12.1	26
<u>PAROWAN CREEK</u>									
Yankee Reservoir	12M11	8700	3/28	28	8.6	7.3	10.0	13.2*	13
Ed Ward Flat	12M12	8300	3/28	11	4.1	2.9	7.9	10.3*	13
<u>COAL CREEK</u>									
Cedar Breaks x	12M1	10390	3/27	58	21.1	19.2	20.4	25.0	22
Midway Valley x	12M2	9400	3/27	63	22.6	20.0	19.4	-	3
Webster Flat x	12M3	9200	3/27	42	15.8	11.0	14.7	19.8	30
Urie Flat	12M10	8450	3/27	13	5.7	0.0	6.2	-	3
<u>ENTERPRISE to NEW HARMONY</u>									
Long Flat	13M2	8200	3/29	0	0.0	-	7.8	-	1
Rattlesnake Springs	13M3	6500	3/29	0	0.0	0.0	6.4	-	2
<u>COLORADO RIVER DRAINAGE</u>									
<u>UPPER GREEN RIVER in Utah</u>									
Hewinta R. S.	10J4	9500	3/21	35	9.4	9.5	8.3	9.9*	23
Hole-in-the-Rock	10J1	9150	3/28	28	7.0	4.4	6.1	6.4	26
Middle Beaver Creek	10J2	8550	3/28	18	5.2	4.5	5.4	-	3
Hole-in-the-Rock R.S.	10J3	8300	3/28	0	0.0	T	3.2	-	3
King's Cabin(upper)	9J1	8800	4/1	40	9.5	10.0	10.4	11.4	27
King's Cabin(lower)	9J2	8600	4/1	35	8.1	8.3	7.9	10.4	27

x - Adjacent Drainage.

or more in the period.

* - Less than 15 year average, but 8 years

** - Less than 8 years in the period. Average

is for total record when 8 years or more of record.

DRAINAGE BASIN and SNOW COURSE		SNOW COVER MEASUREMENTS								
		No.	Elev.	1957		: Past Record				
				Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content (In.) 1938-52 Avg.	Prevs. Yrs. of Record	1955	1956
<u>DUCHESNE RIVER</u>										
Trial Lake x	10J8	9800	3/28	80	28.4	33.6	25.3	27.7	26	
Soapstone R. S. x	11J25	7800	3/28	44	14.8	13.0	11.2	13.1	26	
Daniels-Strawberry Summit x	11J23	8000	3/29	47	17.1	13.2	15.5	15.8	27	
Strawberry Divide x	11J8	8000	3/28	65	24.3	19.9	18.0	21.7	23	
East Portal x	11J7	7560	3/28	40	14.3	8.3	11.1	13.2	23	
White River #1 x	10K2	8600	3/31	44	15.0	15.1	14.0	-	2	
Currant Creek	11J32	7800	Delayed Data			8.7	-	-	1	
Indian Canyon	10K1	9100	3/27	34	11.0	9.1	11.0	11.4	27	
Rock Creek	10J18	7900	Delayed Data			6.6	7.8	-	2	
Brown Duck Lake	10J9	10300	Delayed Data			21.5	-	20.6*	12	
Jackson Park	10J19	11300	Delayed Data			17.5	-	-	1	
Lakefork Mountain	10J10	10500	3/29	37	10.4	15.0	13.8	13.0	26	
Lakefork Mountain #2	10J11	8900	3/29	20	4.4	7.9	11.2	-	4	
Lakefork Mountain #3	10J12	8100	3/29	16	3.9	5.2	10.2	-	4	
Paradise Park	9J3	10500	4/2	48	11.0	15.9	13.4	13.7*	25	
Mosby Mtn. (lower)	9J5	9500	4/2	40	9.2	-	11.7	12.4	26	
<u>PRICE RIVER</u>										
Huntington Horseshoe	11K5	9800	3/28	73	28.1	19.2	18.2	26.3	27	
Gooseberry Reservoir	11K4	8700	3/28	66	23.5	17.7	15.9	20.8	29	
Mammoth R. S. Cottonwood Creek x	11K3	8800	3/29	64	23.0	18.8	17.7	21.9	28	
Mud Creek	11K6	8250	3/28	56	22.6	17.5	13.7	19.4**	8	
Mud Creek #2	11K33	8300	3/28	49	17.7	10.7	11.2	-	2	
Staley Ranch	11K7	7600	3/28	29	10.6	-	5.7	6.6*	20	
Dry Valley Divide	11K8	7800	3/28	38	13.7	9.5	11.3	10.8	22	
White River #1	10K2	8600	3/31	44	15.0	15.1	14.0	-	2	
White River #2	11K24	7600	3/31	29	8.9	7.2	9.5	-	2	
White River #3	11K25	7400	3/31	29	9.4	5.6	9.6	-	2	
Indian Canyon x	10K1	9100	3/27	34	11.0	9.1	11.0	11.4	27	
Grassy Trail Creek - Left Fork	10K3	7970	Delayed Data			0.0	11.4	-	2	
Corral	10K5	8200	Delayed Data			0.0	11.0	-	2	
<u>SAN RAFAEL RIVER</u>										
Huntington-H orseshoe	11K5	9800	3/28	73	28.1	19.2	18.2	26.3	27	
Gooseberry Reservoir x	11K4	8700	3/28	66	23.5	17.7	15.9	20.8	29	
Switchback	11K26	8600	3/27	59	22.8	16.4	14.8	-	2	
Stuart R. S.	11K27	7950	3/27	31	11.1	6.8	7.7	-	2	
Red Pine Ridge	11K28	9400	3/28	64	23.3	16.1	13.8	-	2	
Joe's Valley	11K29	8800	3/28	40	12.8	7.8	-	-	1	

x - Adjacent Drainage.

or more in the period.

* - Less than 15 year average, but 8 years

** - Less than 8 years in the period. Average

is for total record when 8 years or more of record.

DRAINAGE BASIN and SNOW COURSE	No.	Elev.	SNOW COVER MEASUREMENTS						
			1957				: Past Record		
			Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content: (In.)	Water Content (In.) 1938-52 Avg.	Prevs. Yrs. of Record	
<u>SAN RAFAEL RIVER - Continued</u>									
Wilberg Ranch	11K30	7800	3/28	6	1.8	0.0	0.0	-	2
Seeley Creek R. S. #2	11K9	10000	4/4	70	22.3	12.8	11.3	16.8	27
Buck Flat	11K31	9400	3/29	57	20.4	14.8	-	-	1
Rush Pond	11K38	9800	3/29	53	17.8	14.3	15.4	-	2
Wrigley Creek	11K32	9000	3/29	38	11.9	8.6	-	-	1
<u>MUDDY RIVER</u>									
Black Fork	11K14	9200	3/30	44	15.1	12.5	14.4	15.0**	10
Dill's Camp	11K15	9200	3/30	47	15.6	11.5	-	13.1**	8
Mt. Baldy R. S. x	11K12	9500	4/1	90	28.8	22.1	21.5	-	6
<u>FREMONT RIVER</u>									
Farnsworth Lake x	11L1	9900	3/26	71	21.6	16.1	18.4	-	6
Fish Lake	11L3	8700	3/21	19	5.4	6.4	8.4	8.4	26
Johnson Valley	11L6	8850	3/21	26	7.7	6.0	6.2	-	2
Black's Flat - U. M. Creek	11L4	9250	3/21	33	10.0	9.7	9.5	-	3
Donkey Reservoir	11L5	9800	4/3	43	9.0	5.3	5.8	-	3
<u>ESCALANTE RIVER</u>									
Widtsoe-Escalante Summit	11M1	9500	3/27	16	5.7	3.6	7.4	9.3	25
Widtsoe-Escalante #2	x11M2	9500	3/27	28	8.4	6.1	10.0	-	7
<u>VIRGIN RIVER</u>									
Long Valley Junction	12M6	7500	3/28	0	0.0	0.0	0.0	5.5*	20
Harris Flat R. S. x	12M5	7700	3/28	14	6.7	0.0	8.5	9.4	26
Duck Creek R. S. x	12M4	8560	3/28	42	16.6	9.6	11.5	17.4	22
Midway Valley x	12M2	9400	3/27	63	22.6	20.0	19.4	-	3
Cedar Breaks x	12M1	10390	3/27	58	21.1	19.2	20.4	25.0	28
Webster Flat	12M3	9200	3/27	42	15.8	11.0	14.7	19.8	30
<u>LOWER COLORADO RIVER</u> (Southeastern Utah)									
LaSal Mtn. (upper)	9I2	9600	4/1	60	22.7	12.0	-	-	1
LaSal Mountain	9I1	8800	4/1	36	12.8	5.8	10.0	11.5	26
Buckboard Flat	9M1	9000	4/2	52	14.7	8.4	14.0	15.3	27
Camp Jackson	9M2		Delayed Data			6.0	-	-	1

x - Adjacent Drainage.

or more in the period.

* - Less than 15 year average, but 8 years

** - Less than 8 years in the period. Average

is for total record when 8 years or more of record.

AGENCIES COOPERATING IN UTAH SNOW SURVEYS

U. S. GOVERNMENT AGENCIES

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

U. S. Department of Commerce
Weather Bureau

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

STATE OF UTAH

Utah Agricultural Experiment Station
Utah State Engineer
Little Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioner
Spanish Fork River Commissioner
Weber River Commissioner
Utah Water & Power Board

MUNICIPALITIES OR QUASI-MUNICIPALITIES

Salt Lake City Corporation

ORGANIZED PUBLIC AGENCIES

Beaver River Water-Users Association
Board of Canal Presidents - Jordan River
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

PRIVATE AGENCIES

Kaiser Steel Corporation



FEDERAL - STATE COOPERATIVE
SNOW SURVEYS and WATER SUPPLY FORECASTS
for
UTAH

UNITED STATES DEPARTMENT of AGRICULTURE---SOIL CONSERVATION SERVICE,
and
STATE ENGINEER of UTAH and-UTAH AGRICULTURAL EXPERIMENT STATION
in cooperation with

U. S. Forest Service, U. S. National Park Service,
U. S. Geological Survey and
State and Local Irrigation Organizations

■■■■■■ AS OF ■■■■■■
MAY 1, 1957

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS and WATER SUPPLY FORECASTS

for
U T A H

MAY 1, 1957

Report Prepared
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(Mimeograph Series #434)

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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.

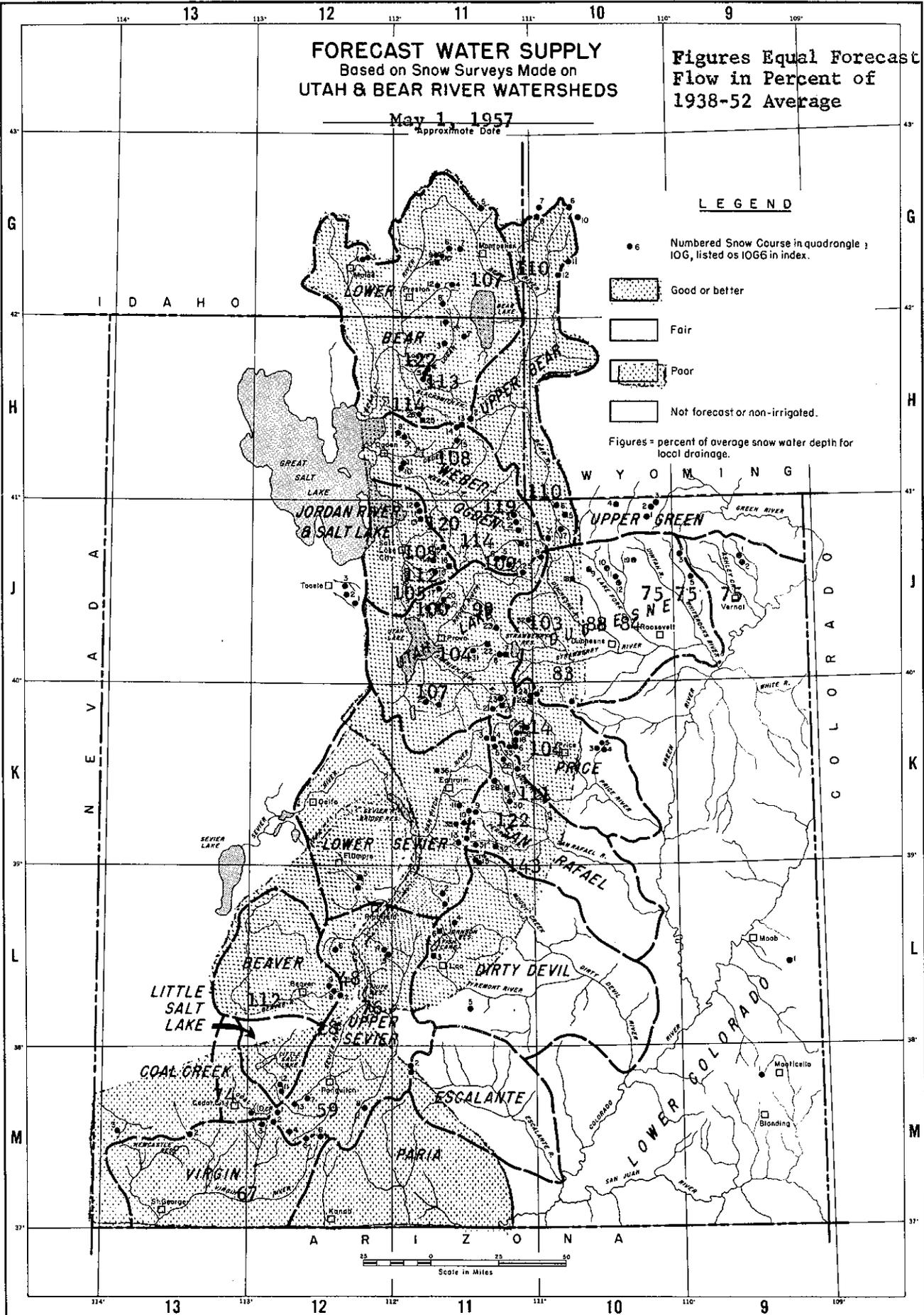
Poor - Greatly subnormal runoff prospects with considerable deficiency of water for demands in current season when holdover storage not available. If holdover storage available, runoff prospects are considered poor if very heavy depletions of holdover storage are necessary to meet current demands.

FORECAST WATER SUPPLY

Based on Snow Surveys Made on
UTAH & BEAR RIVER WATERSHEDS

May 1, 1957
Approximate Date

Figures Equal Forecast
Flow in Percent of
1938-52 Average



WATER SUPPLY OUTLOOK

for UTAH

MAY 1, 1957

* Although this year's streamflow is expected to be *
* one and one half to three times as much as last year, *
* the water outlook for the main Sevier and Virgin rivers *
* and smaller streams originating in the same general area *
* is poor. Fair supplies are anticipated for the eastern *
* part of the Uintah Basin and the tributaries of the *
* Fremont and Escalante Rivers which come from the Boulder *
* Mountain. All the rest of the state can expect a good *
* water supply. *

GENERAL OUTLOOK

Below average melting conditions during April, combined with snowfall for the month which varies from about average to near 300% of average has resulted in abnormally high snowpack conditions for May 1 on central and northern Utah streams. Unless relatively cool weather conditions prevail for the next six weeks many of these streams can expect very high flows. Principally, these will be streams which produce their water from the higher elevations, such as the Weber River at Oakley where as much or more water can be expected to pass the gaging station during the heavy melt period as has occurred during recent high water years. Other streams in northern Utah on which high water may be expected are the Provo River near Hallstone and the Logan river. On the Logan River there have only been five of the last 33 years when the May 1 snowpack has equaled or exceeded the present one. Forecast runoff for the streams from the Utah Lake drainage northward to the tributaries of the Bear River in Utah, Idaho and Wyoming ranges from average to 122% of average.

Farther south in the state, water users served by the tributary streams of the San Pitch River from the vicinity of Mt. Pleasant south to the Mayfield Gunnison Area and by streams in the Colorado drainage from the Price river south across Huntington, Cottonwood, Ferron and Muddy Creeks will have the best water supply they have had since 1952, the year of the floods, and one of the best of the past 30 years. Forecast streamflow here varies from 104% to 143% of average.

This month's survey at the Gooseberry Ranger Station snow course (elev. 8400 ft.) on the Salina Creek drainage found more snow water than had ever before been found at any time of year since the course was first measured in 1930. This month's survey found 17.2 inches of water and compares with the previous record of 15.8 inches set on the April 1 survey in 1952. The average April 1st amount for the previous 27 years of record is 10.6 inches water. The Farnsworth Lake snow course just south of the Gooseberry Ranger Station course and at an elevation of 9900 ft. had 29.9 inches of water. This course has a short record, having only been measured since 1951.

The greatest amount previously recorded here was 24.8 inches on the April 1 survey, 1952. Ordinarily, courses at these elevations will lose from 2 to 6 inches of water during April.

A special survey of the Pine Creek snow course (elev. 8700 ft.) in the mountains east of Fillmore was made on April 8. The previous record of 28.4 inches of water measured in April, 1952 was slightly exceeded when 28.7 inches water was found. Between the 8th and 29th of the month another 4 inches of water was caught in the raingage, although melt had reduced the snowpack water to 28.2 inches. High water streamflow here will be comparable to 1952 and could easily exceed the record of that year if much above average melt temperatures prevail.

At the Kimberly Mine course (elev. 8900 ft.) on the Clear Creek drainage above Sevier, the survey of March 25 found 16.2 inches of water which was 89% of the 18.2 inch average value. One month later, on April 25, an additional 10.15 inches of water had been caught in the raingage, while the snow course had 21.8 inches of water. The difference of 4.55 inches had melted and gone into the soil.

The above values are given as examples to stress the fact that this central Utah area embracing the tributary streams of the Sevier River below Piute Dam, the streams in the Fillmore area, the Fremont River and U. M. Creek, Otter Creek serving the Koosharem-Greenwich Valley, the San Pitch, San Rafael and Price Rivers will all produce an excellent water supply.

In contrast to the excellent outlook for the tributary streams of the Sevier River below Piute reservoir, south of here a poor outlook is still the prospect along the Sevier at Hatch and Kingston. The Sevier at Hatch is forecast at 59% of average, while at Kingston 28% is expected. On the East Fork the outlook is better, principally because of the heavier snowpack on the headwater of Otter Creek and the Monroe Mountain. Forecast for the East Fork Sevier River near Kingston is for 76% of average. Combined flow of the two Forks, as measured at the gaging station below Piute Dam is forecast at 48%.

While the outlook for users who are served by the Sevier river itself is poor, as contrasted to those having rights on the smaller tributaries, yet the outlook is much better than it was a year ago. This year the amounts measured at the various gaging stations are expected to be from 1.5 to 3 times that of last year.

In the Uintah Basin, the water outlook is very similar to that of last year. At the western end the outlook is good, and decreases to generally fair in the east where some shortages can be expected. A dry summer would cause serious shortages because of the lack of adequate reservoir storage. Forecasts here range from 103% to 75% of the 1938-52 fifteen year average April-September flow.

Forecast April-September flow for Coal Creek at Cedar City is 75% of average, while the April-June amount for the Virgin River is set at 67%. In this area, as well as in the other parts of the state, the delayed melting

conditions of April will help to hold streamflow up longer than usual during the summer months than would normally be expected for the total volume of water that will be realized.

The Beaver River has the best prospect it has had since 1952 and is forecast at 112% of average.

UTAH STREAMFLOW FORECASTS - MAY 1, 1957

The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period.

Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts.

BASIN, STREAM and STATION	Seasonal streamflow in Thousands of Acre Feet						
	Forecast	%	Fore	Measured Runoff			15-Yr.
	Runoff	15-Yr.	cast	1956	1955	1954	Average
	1957	Av.	Period				1938-52
GREAT BASIN							
<u>BEAR RIVER SYSTEM</u>							
Bear River near Evanston, Wyo.	156	110	Apr-Sept.	124	74	55	142
Bear River near Randolph, Utah	125	108	Apr-Sept.	94	26.4	15.3	116(1)
Smith's Fork near Border, Wyoming	125	110	Apr-Sept.	152	78	89	114(2)
Bear River at Harer, Idaho	300	107	Apr-Sept.	311	114	104	281
Little Bear River near Paradise, Utah	50	114	Apr-Sept.	38	40	20.7	44
Logan River near Logan, Utah (3)	162	122	Apr-Sept.	155	99	86	133
Blacksmith Fork near Hyrum, Utah (4)	68	113	Apr-Sept.	73	46	39	60
<u>WEBER-OGDEN RIVERS</u>							
Weber River near Oakley, Utah	140	109	Apr-Sept.	145	98	82	128
Weber River near Coalville, Utah (5)	157	114	Apr-Sept.	136	97	67	138
Chalk Creek at Coalville, Utah	50	119	Apr-Sept.	35	18.6	13.2	42

- (1) Average runoff for 12 years, 1944-1955.
- (2) Average runoff for 13 years, 1943-1955.
- (3) Includes U.P. & L. Co. tailrace and Logan, Hyde Park & Smithfield Canal.
- (4) Above Utah Power and Light Company's dam.
- (5) Includes diversion by Weber-Provo Canal.

BASIN, Stream and STATION	Seasonal Streamflow in Thousands of Acre Feet						
	Forecast	%	Fore	Measured		Runoff	15-Yr.
	Runoff	15-Yr.	cast	1956	1955	1954	Average
	1957	Av.	Period				1938-52
<u>WEBER-OGDEN RIVERS - Continued</u>							
East Canyon Creek near Morgan, Utah (6)	35	120	Apr-Sept.	16.9	14.1	6.6	29.2
South Fork Ogden River near Huntsville, Utah	70	108	Apr-Sept.	63	48	36	65
<u>PROVO RIVER & UTAH LAKE</u>							
Spanish Fork at Thistle, Utah	48	107	Apr-Sept.		30	20.5	45
Hobble Creek near Springville, Utah	26	104	Apr-Sept.		10.3	8.6	25(7)
Provo River at Vivian Park, Utah (8)	164	99	Apr-Sept.	133	109	98	166
American Fork near American Fork, Utah	36	100	Apr-Sept.	32	26.4	22.0	36
<u>JORDAN RIVER & SALT LAKE</u>							
Little Cottonwood Creek Near Salt Lake City, Utah	42	105	Apr-Sept.	37	34	29.3	40
Big Cottonwood near Salt Lake City	45	112	Apr-Sept.	35	34	25.1	40
Parley's Creek near Salt Lake City, Utah	16	105	Apr-Sept.	8.4	7.5	4.4	15.2
<u>SEVIER RIVER</u>							
Sevier River at Hatch, Utah	34	59	Apr-Sept.	25.8	23.8	42	58(9)
Sevier River near Kingston, Utah	13	28	Apr-Sept.	5.3	7.5	14.9	46

Sevier River Forecast continued on next page.

- (6) Observed flow plus change in storage in East Canyon reservoir.
- (7) For ten years 1946-1955.
- (8) 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, minus diversion thru Duchesne tunnel, plus diversion thru Salt Lake Aqueduct.
- (9) Average runoff for 15 years, 1940-1954.

UTAH STREAMFLOW FORECASTS - MAY 1, 1957

4.

BASIN, STREAM and STATION	Seasonal Streamflow in Thousands of Acre Feet						
	Forecast Runoff 1957	% 15-Yr. Av.	Fore cast Period	Measured 1956	Runoff 1955	Runoff 1954	15-Yr. Average 1938-52
East Fork Sevier River near Kingston, Utah (10)	22	76	Apr-Sept.	7.9	8.6	10.3	28.8
Sevier River below Piute Dam (11)	36	48	Apr-Sept.	13.1	16.1	27.0	75
<u>BEAVER RIVER</u>							
Beaver River near Beaver, Utah	38	112	Apr-Sept.	20.2	16.4	17.4	34
<u>COAL CREEK</u>							
Coal Creek near Cedar City, Utah	15	74	Apr-Sept.		10.1	14.9	20.4
COLORADO RIVER BASIN							
<u>UPPER GREEN RIVER</u>							
Ashley Creek near Vernal, Utah	49	75	Apr-Sept.	49	40	44	65
<u>DUCHESNE RIVER</u>							
Duchesne River near Tabiona, Utah (12)	126	103	Apr-Sept.	121	89	66	122
Rock Creek near Mountain Home, Utah	96	88	Apr-Sept.	111	80	68	109
Strawberry River at Duchesne, Utah	68	83	Apr-Sept.	59	49	35	82
Lakefork River below Moon Lake, Utah (13)	65	84	Apr-Sept.	82	58	48	77(13)
Uinta River near N eola, Utah	83	75	Apr.-Sept.	90	71	72	111
Whiterocks River near Whiterocks, Utah	54	75	Apr-Sept.	54	47	45	72

- (10) Observed flow plus change in storage in Otter Creek Reservoir.
 (11) Observed flow plus change in storage in Otter Creek and Piute Reservoirs.
 (12) Observed flow plus diversion through Duchesne tunnel.
 (13) Observed flow plus change in storage in Moon Lake reservoir.
 Average runoff for 14 years, 1942-1955.

UTAH STREAMFLOW FORECASTS - MAY 1, 1957

BASIN, STREAM and STATION	Seasonal Streamflow in Thousands of Acre Feet						
	Forecast Runoff 1957	% 15-Yr. Av.	Fore cast Period	Measured 1956	Runoff 1955	Runoff 1954	15-Yr. Average 1938-52
<u>PRICE RIVER</u>							
Price River near Scofield, Utah (14)	49	114	Apr-Sept.	28.7	26.6	14.1	43
Price River near Heiner, Utah (14)	80	104	Apr-Sept.	48	45	26.3	77
<u>SAN RAFAEL RIVER</u>							
Huntington Creek near Huntington, Utah	69	111	Apr-Sept.	44	36	32	62
Cottonwood Creek near Orangeville, Utah	78	122	Apr-Sept.	41	35	32	64
Ferron Creek near Ferron, Utah	60	143	Apr-Sept.	31	25.6	23.9	42 (15)
<u>VIRGIN RIVER</u>							
Virgin River at Vergin, Utah	40	67	Apr-June		23.6	44	60

- (14) Observed flow plus change in storage in Scofield reservoir.
(15) Average runoff for 8 years, 1948-1955.

STATUS OF UTAH RESERVOIR STORAGE - MAY 1, 1957 (1)

BASIN and/or STREAM	RESERVOIR	USABLE CAPACITY 1000s AF	USABLE STORAGE - 1000 ACRE FEET			
			1957	1956	1955	15-Yr. Av. 1938-52
GREAT BASIN						
<u>Bear River</u>	Bear Lake	1421.0	946.0	822.3	790.8	825.0
<u>Little Bear</u>	Hyrum	15.3	15.3	15.6	15.3	14.6 (2)
<u>Jordan</u>	Pine View	43.6	17.8	32.9	19.4	32.1
<u>Weber</u>	East Canyon	28.7	24.7	20.2	11.6	24.7
	Echo	73.9	43.7	53.9	41.3	54.7
<u>Provo</u>	Deer Creek	144.7	83.3	93.7	90.1	81.3 (3)
<u>Spanish Fork</u>	Strawberry	270.0	147.2	169.9	182.8	115.5
<u>Utah Lake</u>	Utah Lake	1149.0 (4)	520.8	581.2	649.1	587.0
<u>Sevier River</u>	Otter Creek	52.5	18.0	20.6	25.3	46.2
	Piute	74.0	16.6 74.6	13.6	36.1	63.3
	Sevier	236.0	62.1	70.6	108.0	173.8
<u>Beaver River</u>	Rocky Ford	23.3	8.2	9.1	10.1	18.6
COLORADO RIVER DRAINAGE						
<u>Lake Fork</u>	Moon Lake	35.8	9.4	12.3	13.5	17.4
<u>Price River</u>	Scofield	65.8	9.3	14.2	14.8	21.8

- (1) All data contained in this table supplied by U. S. Geological Survey.
(2) Average for 1939-53.
(3) Average for 1941-55.
(4) Active capacity taken at 3.1 feet above compromise point.

APRIL PRECIPITATION DATA

(Measured at or near snow courses)⁽¹⁾

DRAINAGE BASIN and RAIN GAGE LOCATION	Elev.	Date of Reading 1957	Precip- itation 1957 (Inches)	April Precipitation from Date of April 1 Snow Survey to Approximately May 1		Past Record	
				1956 (In.)	1955 (In.)	Years of Record	Av. for Period (In.)

GREAT BASIN DRAINAGE

Bear River above
Harer, Idaho

Trial Lake *	9800	5/1	5.60	2.50	3.05	5	2.55
Stillwater Camp	8550	5/1	4.60	-	-	0	-

Bear River below
Harer, Idaho

Willow Flat	6100	4/29	6.45	1.80	-	1	1.80
Klondike N arrows	7400	4/29	4.80	2.15	3.70	2	2.92
Dry Bread Pond	8230	5/2	6.60	0.60	2.20	4	2.16
Little Bear(upper)	6850	5/1	5.80	-	-	0	-

Ogden River

Dry Bread Pond	8230	5/2	6.60	0.60	2.20	4	2.16
Sagebrush Flat	6300	5/2	4.30	1.30	-	1	1.30
Ben Lomond(lower)	6000	5/1	6.00	1.60	4.50	2	3.05

Weber River

Trial Lake *	9800	5/1	5.60	2.50	3.05	5	2.55
Smith & Morehouse	7600	5/3	5.20	1.80	2.90	2	2.35
Chalk Creek #2	8200		-	1.20	2.45	4	1.95
Silver Lake (Brighton) * (2)	8725	4/30	6.42	3.92	3.29	26**	3.80
Parley's Cyn. Summit	7500	4/29	6.20	2.80	4.40	4	4.28
Mt. Dell Dam * (2)	5500	4/30	5.15	1.80	2.59	22**	2.65

(1) Precipitation from non-recording raingages located on or near snow courses and measured monthly, except that supplied by U.S. Weather Bureau, which was measured daily, as noted.

(2) Data measured daily and supplied by U.S. Weather Bureau. Mt. Dell Dam data figured from date of Lamb's Canyon snow survey.

* Adjacent Drainage.

** Period of Snow Surveys.

APRIL PRECIPITATION DATA
(Measured at or near snow courses) (1)

DRAINAGE BASIN and RAINGAGE LOCATION		April Precipitation from Date of April 1 Snow Survey to Approximately May 1					
		Elevo	Date of Reading 1957	Precip- itation 1957 (Inches)	Past Record		Av. for Record Period (In.)
1956 (In.)	1955 (In.)				Years of Record		
<u>Provo River and Utah Lake</u>							
Trial Lake	9800	5/1	5.60	2.50	3.05	5	2.55
Soapstone R. S.	7800	5/1	4.70	2.00	2.50	2	2.25
Daniels Strawberry Smt.	8000	4/29	4.70	2.10	1.45	2	1.78
Strawberry Reservoir -							
East Portal (2)	7606	4/27	2.17	2.17	0.80	10	1.98
H obble Creek Summit	7300	4/30	3.40	2.70	0.70	2	1.70
Clear Creek Ridge #2	8000	4/26	4.10	1.20	-	1	1.20
Payson Ranger Station	8050	4/25	6.10	2.80	2.60	2	2.76
Timpanogas Divide(2)	8200	4/29	4.40	3.05	2.48	18	3.62
Dutchman R. S.	7500	4/29	3.40	2.90	-	1	2.90
<u>Jordan River and Great Salt Lake</u>							
Silver Lake(Brighton(3)	8725	4/30	6.42	3.92	3.29	26**	3.80
Mt. Dell Dam (3)	5500	4/30	5.15	1.80	2.59	22**	2.65
Parley's Canyon Smt.	7500	4/29	6.20	2.80	4.40	4	4.28
Farmington Rice (4)	7000	4/27	6.92	3.32	5.88	17	4.80
Farmington Flats (4)	7500	4/27	8.90	2.96	5.70	4	4.68
Middle Canyon-Tooele	7000	4/30	8.70	-	-	0-	-
<u>Sevier River above Richfield</u>							
Webster Flat *	9200	4/30	7.00	2.70	1.40	5	2.26
Duck Creek R. S.	8560	4/25	3.20	1.70	1.00	4	1.53
Castle Valley	9700	4/26	6.10	-	-	0	-
Panguitch Lake (5)	8200	4/26	1.70	-	0.45	4	0.86
Widtsoe-Escalante #2	9500	4/25	5.10	1.90	-	1	1.90
Widtsoe R. S.	7600	4/25	2.10	0.75	-	18**	0.94
Box Creek	9800	4/24	6.10	2.00	-	1	2.00
Kimberly Mine(upper)	8900	4/25	10.15	-	-	0	-

- (1) Precipitation from non-recording raingages located on or near snow courses and measured monthly, except that supplied by U.S. Weather Bureau, which was measured daily, as noted.
- (2) Data measured monthly, supplied by U. S. Weather Bureau.
- (3) Data measured daily and supplied by U.S. Weather Bureau. Mt. Dell Dam data figured from date of Lamb's Canyon snow survey.
- (4) Data supplied by U. S. Forest Service.
- (5) U. S. Weather Bureau raingage measured by SCS personnel.

* Adjacent Drainage.

** Period of Snow Surveys.

APRIL PRECIPITATION DATA
(Measured at or near snow courses)⁽¹⁾

DRAINAGE BASIN and RAINGAGE LOCATION	Elev.	Date of Reading 1957	Precip- itation 1957 (Inches)	Past Record			Av. for Record Period (In.)
				1956 (In.)	1955 (In.)	Years of Record	
<u>Sevier River below Richfield including San Pitch River</u>							
Farnsworth Lake	9900	4/26	11.20	2.00	-	1	2.00
Gooseberry R. S. (2)	7800	4/26	7.65	-	-	9**	2.68
Gooseberry Reservoir	8700	4/29	4.85	1.80	2.10	3	1.83
G.B.R.C. Meadows (3)	10000	5/1	5.61	3.91	3.49	21	3.53
G.B.R.C. Hdqrs. (3)	8700	5/2	3.81	4.00	3.67	26**	3.37
G.B.R.C. Oaks (3)	7655	5/2	2.77	2.95	2.17	31	1.99
Beaver Dams	8000	5/3	4.70	1.60	-	1	1.60
Pine Creek (4)	8700	4/29	4.00	-	-	0	-
<u>Beaver River</u>							
Big Flat	10000	4/27	6.00	-	1.80	3	2.07
Beaver Canyon P.H. (5)	7275	4/30	6.43	2.23	0.78	17	1.92
<u>Parowan Creek</u>							
Yankee Reservoir	8700	4/29	6.25	-	-	0	-
<u>Coal Creek</u>							
Webster Flat *	9200	4/30	7.00	2.70	1.40	5	2.26

- (1) Precipitation from non-recording raingages located on or near snow course and measured monthly, except that supplied by U. S. Weather Bureau, which was measured daily, as noted.
- (2) U. S. Weather Bureau raingage measured by SCS personnel.
- (3) Data supplied by U. S. Forest Service.
- (4) In 1957, precipitation is measured from special survey of 4/8/57 which is reported on page 18.
- (5) Data measured daily and supplied by U. S. Weather Bureau. Data figured from date of Merchant Valley snow survey.
- * Adjacent Drainage.
- ** Period of Snow Surveys.

APRIL PRECIPITATION DATA
(Measured at or near snow courses)⁽¹⁾

DRAINAGE BASIN and RAINGAGE LOCATION	Elev.	April Precipitation from Date of April 1 Snow Survey to Approximately May 1		Past Record			Av. for Record Period (In.)
		Date of Reading 1957	Precip- itation 1957 (Inches)	1956 (In.)	1955 (In.)	Years of Record	

COLORADO RIVER DRAINAGE

Upper Green River

King's Cabin(upper)	8800	5/3	2.60	1.35	1.75	5	1.66
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Duchesne River

Trial Lake *	9800	5/1	5.60	2.50	3.05	5	2.55
Soapstone R. S. *	7800	5/1	4.70	2.00	2.50	2	2.25
Daniels-Strawberry Summit *	8000	4/29	4.70	2.10	1.45	2	1.78
Strawberry Reservoir - East Portal * (2)	7560	4/27	2.17	2.17	0.80	10	1.98
White River #1 *	8600	4/27	3.50	-	-	0	-
Currant Creek	7800	5/4	2.52	1.25	-	1	1.25
Rock Creek	7900	4/29	0.95	1.65	-	1	1.65
Moon Lake (2)	8150	4/30	1.65	1.60	0.10	21	1.29
Lakefork Mountain	10500	5/1	3.25	2.50	0.20	3	1.30
Paradise Park	10500	5/2	3.30	1.50	1.00	2	1.25

Price River

Gooseberry Reservoir	8700	4/29	4.85	1.80	2.10	3	1.89
Clear Creek Ridge #2	*8000	4/26	4.10	1.20	-	1	1.20
Mud Creek #2	8300	4/29	3.30	-	-	0	-
Clear Creek (3)	8300	4/30	4.23	1.37	0.92	21	1.84
White River #1	8600	4/27	3.50	-	-	0	-

(1) Precipitation from non-recording raingages located on or near snow course and measured monthly, except that supplied by U. S. Weather Bureau, which was measured daily, as noted.

(2) Data measured monthly, supplied by U. S. Weather Bureau.

(3) Data measured daily and supplied by U. S. Weather Bureau.

* Adjacent Drainage.

AIR ILL PRECIPITATION DATA
(Measured at or near snow courses)⁽¹⁾

DRAINAGE BASIN and RAINGAGE LOCATION		April Precipitation from Date of April 1 Snow Survey to Approximately May 1					
		Elev. 1957	Date of Reading 1957	Precip- itation 1957 (Inches)	Past Record		Av. for Record Period (In.)
1956 (In.)	1955 (In.)				Years of Record		
<u>San Rafael River</u>							
Gooseberry Reservoir	*8700	4/29	4.85	1.80	2.10	3	1.83
Stuart R. S.	7950	4/26	3.40	0.65	0.50	2	0.58
Red Pine Ridge	9400	4/29	5.90	2.20	4.75	2	3.48
G.B.R.C. Meadows *(4)	10000	5/1	5.61	3.91	3.49	21	3.53
Buck Flat	9400	4/30	6.50	1.90	-	1	1.90
<u>Fremont River</u>							
Farnsworth Lake *	9900	4/26	11.20	2.00	-	1	2.00
Black's Flat -U.M.Crk.	9250	4/23	6.45	1.10	-	1	1.10
<u>Escalante River</u>							
Widtsoe-Escalante #2	9500	4/25	5.10	1.90	-	1	1.90
<u>Virgin River</u>							
Duck Creek R. S.	8560	4/25	3.20	1.70	1.00	4	1.53
Webster Flat	9200	4/30	7.00	2.70	1.40	5	2.26
<u>Lower Colorado River (Southeastern Utah)</u>							
Buckboard Flat	9000	5/2	4.55	1.25	-	1	1.25

(1) Precipitation from non-recording raingages located on or near snow course and measured monthly, except that supplied by U. S. Weather Bureau, which was measured daily, as noted.

(4) Data supplied by U. S. Forest Service.

* Adjacent Drainage.

DRAINAGE BASIN and SNOW COURSE	SNOW COVER MEASUREMENTS								
	1957					: Past Record			
	No.	Elev.	Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1956	1955	1938-52 Avg.

GREAT BASIN DRAINAGE

BEAR RIVER above
Harer, Idaho

Trial Lake x	10J8	9800	5/1	88	34.3	37.5	27.0	30.3*	9
Hayden Fork	10J7	9300	5/1	52	21.8	17.0	14.0	-	3
Stillwater Camp	10J17	8550	5/1	34	13.0	4.0	Patchy	-	2
Goodman Ranch	10J6	7900	5/1	12	4.6	0.0	0.0	-	2
Monte Cristo R. S.	11H12	8960	5/2	70	31.4	24.5	28.8	26.1*	6
Poison Meadows x	10G6	8500	4/28	95	36.8	40.0	-	-	1
Piney LaBarge x	10G10	8820	4/27	59	25.6	18.6	6.6	13.2**	20
Big Park	10G11	8700	4/25	70	25.1	23.3	18.3	21.4*	5
Kelly R. S.	10G12	8200	4/26	59	20.3	18.0	-	-	1
Salt River Summit x	10G8	7900	4/29	44	17.7	6.9	9.9	-	4
CCC Camp x	10G7	7500	4/29	31	13.3	Trace	7.5	4.4*	7

BEAR RIVER below
Harer, Idaho

Garden City Summit	11H7	7900	4/30	46	20.6	10.1	13.7	12.4*	5
Strawberry Mink Divide	11G10	6800	4/30	45	19.9	6.1	-	-	1
Strawberry Creek	11G9	5800	4/30	0	0.0	0.0	-	-	1
Christensen Ranch	11G11	5600	4/30	0	0.0	0.0	-	-	1
Willow Flat	11G4	6100	4/29	13	6.4	0.0	-	-	1
Cub River R. S.	11G12	5400	4/29	0	0.0	0.0	-	-	1
Franklin Basin R.S.	11G8	8200	4/29	83	37.2	-	28.8	-	1
Klondike Narrows	11H1	7400	4/29	43	18.4	9.8	15.6	-	2
Tony Grove R.S.	11H3	6250	4/30	0	0.0	0.0	-	-	1
Mt. Logan	11H6	9000	4/30	97	39.4	28.6	31.3	26.4**	30
Spring Hollow(Upper)	11H 5	8000	4/30	88	31.4	24.6	28.6	23.4**	30
Spring Hollow(lower)	11H4	7000	4/30	28	11.6	-	10.0	6.8**	17
Monte Cristo R. S.	11H12	8960	5/2	70	31.4	24.5	28.8	26.1*	6
Dry Bread Pond x	11H13	8230	5/2	46	21.2	8.0	19.5	13.5*	6
Beaver Crk-Skunk Crk.x	11H14	7150	5/2	14	6.8	0.0	8.4	4.1*	5
Little Bear(upper)	11H25	6850	5/1	0	0.0	-	-	-	0
Little Bear(lower)	11H26	6100	5/1	0	0.0	-	-	-	0
Oxford Mountain	12G3	6800		No Report		0.0	2.6	-	2
Dry Creek Flat	12G4	6350		No Report		0.0	0.0	-	2

x - Adjacent Drainage.

* - Average is for 5 to 9 years of record.

** - Less than 15 years in the period. Average is for total record of up to 15 years nearest the period, when 10 years or more of record.

DRAINAGE BASIN and SNOW COURSE	SNOW COVER MEASUREMENTS								
			1957		Past Record				
	No.	Elev.	Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	Water Content (In.)	1938-52 Avg.	Prevs. Yrs. of Record
<u>OGDEN RIVER</u>									
Monte Cristo R. S. x	11H12	8960	5/2	70	31.4	24.5	28.8	26.1*	6
Dry Bread Pond	11H13	8230	5/2	46	21.2	8.0	19.5	13.5*	6
Beaver Crk-Skunk Crk.	11H14	7150	5/2	14	6.8	0.0	8.4	4.1*	5
Sagebrush Flat	11H15	6300	5/2	0	0.0	0.0	0.0	-	4
Ben Lomond Peak	11H8	8000	5/1	77	33.5	21.6	31.0	29.3*	6
Ben Lomond (lower)	11H9	6000	5/1	0	0.0	0.0	6.6	-	3
Mt. Ogden	11H10	8600	4/29	78	31.0	20.8	24.8	26.5*	6
Snow Basin	11H11	6500	4/29	10	4.4	0.0	8.2	-	3
<u>WEBER RIVER</u>									
Trial Lake x	10J8	9800	5/1	88	34.3	37.5	27.0	30.3*	9
Smith & Morehouse	11J4	7600	5/3	29	12.6	0.0	4.6	4.6*	6
Redden Mine (upper)	11J5	9000	4/23	74	25.8	14.8	21.6	16.4*	6
Redden Mine (lower)	11J6	8500	4/23	71	24.0	14.7	17.6	14.2*	6
Beaver Creek R. S.	11J24	7500	4/25	12	3.8	0.0	0.0	0.0*	6
Chalk Creek #1	11J1	9100	4/24	83	30.4	26.4	19.4	24.3*	6
Chalk Creek #2	11J2	8200	4/24	55	19.4	7.8	8.5	10.2*	6
Chalk Creek #3	11J3	7500	4/24	26	7.7	0.0	0.0	0.0*	5
Silver Lake x	11J16	8725	5/3	68	29.9	28.1	22.9	25.6*	6
Parley's Cnyn. Summit	11J15	7500	4/29	43	17.8	3.1	11.9	9.2*	6
Lambs Canyon	11J14	6600	5/3	18	5.8	0.0	10.6	5.4*	6
<u>PROVO RIVER and UTAH LAKE</u>									
Trial Lake	10J8	9800	5/1	88	34.3	37.5	27.0	30.3*	9
Soapstone R. S.	11J25	7800	4/25	39	13.1	Patchy	6.7	3.0*	7
Daniels-Strawberry Summit	11J23	8000	4/29	35	14.2	0.0	8.3	6.5*	5
H obble Creek Summit	11J22	7300	4/30	22	9.1	0.0	4.7	-	2
Packard Canyon	11J31	6400	4/30	0	0.0	0.0	0.0	-	2
Clear Creek Ridge #1	11K21	9200	4/26	57	24.0	13.8	16.0	-	2
Clear Creek Ridge #2	11K22	8000	4/26	37	14.8	4.7	10.9	-	2
Clear Creek Ridge #3	11K23	6600	4/26	0	0.0	0.0	0.0	-	2
Payson R. S.	11K1	8050	4/25	55	22.5	4.8	17.0	-	3
Rock Bridge	11K2	6750	4/25	20	7.3	0.0	9.2	-	2
Dutchman R. S.	11J17	7500	4/29	27	11.6	Patchy	13.2	-	2
Timpanogas Divide	11J21	8200	4/29	53	23.4	17.8	21.6	18.8**	17
Camp Altamont	11J20	7300	4/29	21	8.2	0.0	10.2	-	4

x - Adjacent Drainage.

* - Average is for 5 to 9 years of record.

** - Less than 15 years in the period. Average is for total record of up to 15 years nearest the period, when 10 years or more of record.

DRAINAGE BASIN and SNOW COURSE	SNOW COVER MEASUREMENTS								
			1957		: Past Record				
	No.	Elev.	Date of Survey	Snow Depth (In.)	Water Content: (In.)	Water Content (In.)	Water Content (In.)	1938-52 Avg.	Prevs. Yrs. of Record
<u>JORDAN RIVER and GREAT SALT LAKE</u>									
Silver Lake	11J16	8720	5/3	68	29.9	28.1	22.9	25.6*	6
Mill D. South Fork	11J10	7400	5/3	34	11.6	Patchy	18.7	11.0*	5
Lamb's Cnyn. Summit	11J14	6600	5/3	18	5.8	0.0	10.6	5.4*	6
Parley's Cnyn. Summit	11J15	7500	4/29	43	17.8	3.1	11.9	9.2*	6
Farmington Canyon (upper)	11J11	8000	4/27	88	33.7	20.9	26.6	29.1*	6
Farmington Canyon (lower)	11J12	6950	4/27	53	19.5	3.4	19.1	17.2*	6
Rocky Basin-Settlement Canyon	12J1	8900	5/1	83	35.6	15.8	24.3	-	3
Bevan's Cabin	12J2	6450	5/1	6	2.4	0.0	0.0	-	2
Middle Canyon	12J3	7000	4/30	37	15.4	0.0	10.3	-	3
<u>SEVIER RIVER above RICHFIELD</u>									
Cedar Breaks	12M1	10390	4/30	68	27.1	17.3	12.9	16.7*	5
Midway Valley	12M2	9400	4/30	68	26.8	17.4	14.2	-	3
Duck Creek R. S.	12M4	8560	4/25	27	9.5	0.0	2.0	4.2*	6
Harris Flat R. S.	12M5	7700	4/25		Trace	0.0	0.0	0.0*	5
Long Valley Junction	x12M6	7500	4/25	0	0.0	0.0	0.0	-	3
Castle Valley	12M13	9700	4/26	33	11.7				
Panguitch Lake	12M7	8200	4/26	0	0.0	0.0	0.0	-	4
Widtsoe-Escalante Summit	11M1	9500	4/25	13	4.0	0.0	1.5	-	4
Widtsoe-Escalante #2	11M2	9500	4/25	29	7.8	2.9	5.8	-	4
Fish Lake x	11L3	8700	4/23	33	8.1	Patchy	-	-	1
Box Creek	12L4	9800	4/24	53	17.2	9.4	-	-	1
Squaw Springs	12L5	9300	4/24	24	7.4	0.0	-	-	1
Big Flat x	12L7	10000	4/27	78	26.6	21.0	15.9	19.4*	5
Kimberly Mine (upper)	12L6	8900	4/25	63	21.8	-	-	-	1
<u>SEVIER RIVER below Richfield including SAN PITCH RIVER</u>									
Farnsworth Lake	11L1	9900	4/26	90	29.9	16.7	19.2	-	4
Gooseberry R. S.	11L2	8400	4/26	53	17.2	Patchy	8.5	-	4
Huntington-Horseshoe	x11K5	9800	4/29	82	33.6	17.6	20.4	22.7*	6
Gooseberry Reservoir	x11K4	8700	4/29	62	25.5	12.5	14.6	17.6*	9

x - Adjacent Drainage.

* - Average is for 5 to 9 years of record.

** - Less than 15 years in the period. Average is for total record of up to 15 years nearest the period, when 10 years or more of record.

DRAINAGE BASIN and SNOW COURSE	SNOW COVER MEASUREMENTS									
	1957			Past Record						
	No.	Elev.	Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	Water Content (In.)	1938-52 Av.	Prevs. Yrs. of Record	
<u>SEVIER RIVER below Richfield - Continued</u> (including SAN PITCH RIVER)										
G.B.R.C. Meadows	11K10	10000	5/1	88	37.0	24.4	24.2	28.2*	5	
G.B.R.C. Hdqrs.	11K11	8700	5/2	57	25.0	9.9	11.6	12.6*	5	
Middle Fork	11K34	9600	Delayed Report			22.1	-	-	1	
Thistle Flat	11K35	8500	Delayed Report			7.9	-	-	1	
Mt. Baldy R. S.	11K12	9500	5/3	84	32.9	21.6	20.8	-	4	
Beaver Dams	11K13	8000	5/3	28	11.3	0.0	7.0	-	4	
Pine Creek	12L1	8700	4/29	66	28.2	-	-	-	0	
<u>BEAVER RIVER</u>										
Big Flat	12L7	10000	4/27	78	26.6	21.0	15.9	19.4*	5	
Otter Lake	12L8	9300	4/27	60	20.7	15.1	10.9	14.4*	5	
Merchant's Valley	12L9	8200	4/27	30	10.2	0.0	3.1	2.5*	5	
<u>PAROWAN CREEK</u>										
Yankee Reservoir	12M11	8700	4/29	29	10.6	4.7	3.8	-	2	
Ed Ward Flat	12M12	8300	4/29	7	2.4	0.0	0.0	-	2	
<u>COAL CREEK</u>										
Cedar Breaks x	12M1	10390	4/30	68	27.1	17.3	12.9	16.7*	5	
Midway Valley x	12M2	9400	4/30	68	26.8	17.4	14.2	-	3	
Webster Flat	12M3	9200	4/30	40	17.4	3.3	7.0	9.1*	5	
Urie Flat	12M10	8450	4/30	0	0.0	0.0	0.0	-	2	
<u>COLORADO RIVER DRAINAGE</u>										
<u>UPPER GREEN RIVER</u> in UTAH										
King's Cabin(upper)	9J1	8800	5/3	24	7.7	6.6	4.1	5.8*	5	
King's Cabin(lower)	9J2	8600	5/3	20	6.7	3.5	1.0	3.7*	5	
<u>DUCHESNE RIVER</u>										
Trial Lake x	10J8	9800	5/1	88	34.3	37.5	27.0	30.3*	9	
Soapstone R. S. x	11J25	7800	4/25	39	13.1	Patchy	6.7	3.0*	7	
Daniels-Strawberry Summit x	11J23	8000	4/29	35	14.2	0.0	8.3	6.5*	5	
White River #1 x	10K2	8600	4/27	42	17.2	9.4	-	-	1	

x - Adjacent Drainage.

* - Average is for 5 to 9 years of record.

** - Less than 15 years in the period. Average is for total record of up to 15 years nearest the period, when 10 years or more of record.

DRAINAGE BASIN and SNOW COURSE	SNOW COVER MEASUREMENTS								
	1957				Past Record				
	No.	Elev.	Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	Water Content (In.)	1938-52 Av.	Prev. Yrs. of Record
<u>ESCALANTE RIVER</u>									
Widtsoe-Escalante Summit	11M1	9500	4/25	13	4.0	0.0	1.5	-	4
Widtsoe-Escalante #2	x11M2	9500	4/25	29	7.8	2.9	5.8	-	4
<u>VIRGIN RIVER</u>									
Long Valley Junction	12M6	7500	4/25	0	0.0	0.0	0.0	-	3
Harris Flat R. S. x	12M5	7700	4/25		Trace	0.0	0.0	0.0*	5
Duck Creek R. S. x	12M4	8560	4/25	27	9.5	0.0	2.0	4.2*	6
Midway Valley x	12M2	9400	4/30	68	26.8	17.4	14.2	"	3
Cedar Breaks x	12M1	10390	4/30	68	27.1	17.3	12.9	16.7*	5
Webster Flat	12M3	9200	4/30	40	17.4	3.3	7.0	9.1*	5

x - Adjacent Drainage.

* - Average is for 5 to 9 years of record.

** - Less than 15 years in the period. Average is for total record of up to 15 years nearest the period, when 10 years or more of record.

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AGENCIES COOPERATING IN UTAH SNOW SURVEYS

U. S. GOVERNMENT AGENCIES

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

U. S. Department of Commerce
Weather Bureau

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

STATE OF UTAH

Utah Agricultural Experiment Station
Utah State Engineer
Little Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioner
Spanish Fork River Commissioner
Weber River Commissioner
Utah Water & Power Board

MUNICIPALITIES OR QUASI-MUNICIPALITIES

Salt Lake City Corporation

ORGANIZED PUBLIC AGENCIES

Beaver River Water-Users Association
Board of Canal Presidents - Jordan River
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

PRIVATE AGENCIES

Kaiser Steel Corporation