CONDENSED SUMMARY.

Average Natural Provo River In The Utah Valley 1905 To 1918 Inc.

	April	May	June	July	August	September.
Total	19457	27847	32582	14952	10157	10374
Maximum	797	1071	1402	715	356	359
Minimum	496	680	743	352	313	329
Mean	648	898	1086	482	328	345
Average of Maxima				757	391	408
Average of Minima				338	297	300
Acre Feet	38914	55694	65164	29904	20314	20748

Total Acre feet in the Six Months Period 230,738.

****

Typical Natural Provo River In The Utah Valley 1905 to 1918 Inc.

	April	May	June	July	August	September.
Total	17565	24815	28369	13841	9863	9992
Maximum	703	949	1117	620	336	338
Minimum	465	630	713	342	308	324
Mean	585	800	945	446	318	333
Acre Feet	35130	49630	56738	27682	19726	19984

Total Acre Feet in the Six Months Period 208,890.

****

Median Natural Provo River In The Utah Valley 1905 To 1918 Inc.

	April	May	June	July	August	September.
Total	18570	26565	27999	11731	9957	10159.
Maximum	791	1055	1217	468	366	374
Minimum	482	677	492	337	303	308
Mean	619	857	933	378	321	339
Acre Feet	37140	53130	55998	23462	19914	20318

Total Acre Feet In The Six Months Period 209,962.

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CONDENSED SUMMARY (Continued)

NATURAL PROVO RIVER UTAH VALLEY.

JULY.

Year	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
Tot.	7254		36488		24043		11760		10099		8651		22287	
Tot.		12466		20941		10172		10259		13173		12685		9043
Max.	266	2507	2162	1128	1672	556	430	456	494	452	319	1480	1492	381
Min.	201	310	542	324	388	287	309	296	270	401	232	370	416	249
Mean	234	402	1177	676	776	328	379	331	326	425	279	409	719	292
Ac.Ft.	14508		72976		48086		23520		20198		17302		44574	
Ac.Ft.		24932		41882		20344		20518		26346		25370		18086

Average Acre feet 29,904. Average of Maxima 757 c.f.s.
Max. " " 72,976. Average of Minima 338 C.F.S.
Min. " " 14,508. Mean . . . . . 482 c.f.s.

AUGUST:

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
Tot.	6269		14282		13461		8711		8356		7481		12757	
Tot.		10080		10529		10030		9805		11595		11084		7763
Max.	228	437	542	430	536	378	355	372	282	431	252	419	525	291
Min.	173	267	422	305	378	286	262	294	260	344	232	326	388	225
Mean	202	325	461	340	434	323	281	316	270	374	241	358	412	250
Ac.Ft.	12538		28564		26922		17422		16712		14962		25514	
Ac.FT.		20160		21058		20060		19610		23190		22168		15526

Average Acre Feet 20,314. Average of Maxima 391 c.f.s.
Max. " " 28,564. Average of Minima 297 c.f.s.
Min. " " 12,538. Mean . . . . . 328 c.f.s.

SEPTEMBER:

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
Tot.	4927		14171		16866		8713		8649		8162		12355	
Tot.		10886		9672		10057		10641		11045		11007		8079
Max.	190	389	578	433	763	367	326	398	310	388	308	426	465	373
Min.	148	295	412	295	420	309	274	312	265	333	227	331	346	233
Mean	164	363	457	322	562	335	290	355	288	368	272	367	412	269
Ac.FT.	9854		28342		33732		17426		17298		16324		24710	
Ac.Ft.		21772		19344		20114		21282		22090		22014		16158

Average Acre Feet 20,748. Average of Maxima 408 c.f.s.
Max. " " 33,732. Average of Minima 300 c.f.s.
Min. " " 9,854. Mean . . . . . 345 c.f.s.

CONDENSED SUMMARY (Continued)

	APRIL: 1889-1904			MAY: 1889-1904			JUNE: 1889-1904		
	Max.	Min.	Mean	Max.	Min.	Mean.	Max.	Min.	Mean.
Max.	1518	712	856	4150	1320	1926	3345	1454	2345
Min.	440	280	377	1132	461	957	875	155	399
Aver.	1000	435	624	2100	811	1301	1821	565	1121

	JULY:			AUGUST:			SEPTEMBER:		
	Max.	Min.	Mean.	Max.	Min.	Mean	Max.	Min.	Mean.
Max	1890	330	679	444	330	337	500	292	430
Min.	200	167	181	149	144	145	167	144	150
Aver.	668	237	331	259	212	227	288	209	238

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THE NATURAL PROVO RIVER UTAH VALLEY.

COMPARISON OF MEAN, 1905-1918 TO 1889-1904.

APRIL: 1889-1904	1905-1918	Plus	Minus.	JULY: 1889-1904	1905-1918	Plus	Minus.
624	648	24		331	482	151	

MAY:				AUGUST:			
1301	898	[illegible]	403	227	328	101	

JUNE:				SEPTEMBER:			
1121	1086		35	238	345	107	

****

COMPARISON OF MAXIMUM. 1905-1918 To 1889- 1904.

APRIL 1889-1904	1905-1918	Plus	Minus.	JULY: 1889-1904	1905-1918	Plus	Minus.
1518	1582	64		1890	2162	272	

MAY:				AUGUST:			
4150	1909		2241	444	525	81	

JUNE:				SEPTEMBER:			
3345	3656	311		500	763	263	

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CONDENSED SUMMARY (Continued)

THE NATURAL PROVO RIVER UTAH VALLEY.

COMPARISON OF MINIMUM. 1905- 1918 To 1889- 1904.

APRIL:				JULY:			
1889-1904	1905-1918.	Plus	Minus.	1889-1904	1905-1918	Plus	Minus.
280	274		6	167	201	34	
MAY:				AUGUST:			
461	224		237	144	173	29	
JUNE:				SEPTEMBER:			
155	276		121	144	148	4	

****

COMPARISON OF MINIMUM. 1905-1918 To 1889-1904. Excluding the Year 1905.

APRIL				JULY:			
1889-1904	1905-1918	Plus	Minus	1889-1904	1905 1918	Plus	Minus.
280	307	27		167	232	65	
MAY:				AUGUST:			
461	224		237	144	225	81	
JUNE:				SEPTEMBER:			
155	276		121	144	227	83	

****

COMPARISON OF PERIODS. 1905-1918 To 1889-1904.

	MEAN		ACRE FEET.	
	1889-1904	1905-1918	1889-1904	1905-1918
April	624	648	37,440	38,914
May	1301	898	80,662	55,694
June	1121	1086	67,260	65,164
July	331	482	20,522	29,904
August	227	328	14,074	20,314
September	238	345	14,280	20,748
Mean	640	631		
Totals			234,238	230,738
Plus	9		3,500	
Minus		9		3,500

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COMPARISON MONTHLY DISCHARGE. THE YEARS 1918 AND 1898.

	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER.
1898						
Max.	560	620	650	260	140	140
Min.	320	500	260	140	110	140
Mean	398	555	500	182	133	140
1918.						
Max.	577	782	1249	381	291	373
Min.	337	331	293	249	225	233
Mean	443	510	821	292	250	269
COMPARISON.						
Max	*17	*162	*599	*121	*151	*233
Min	*17	-169	* 33	*109	*115	* 93
Mean	*45	- 45	*321	*110	*117	*129

Symbols:

* 1918 Exceeds 1898 in Second Feet.
*
- 1918 is less than 1898 in Second feet.

Mean for the Six Months Period:

1898 is 318 C.FS.
1918 is 431 C.F.S.

Total Acre Feet for the Six Months Period:

1898 is 116,220 Acre Feet.
1918 157,208 Acre Feet.

Explanatory Note; This table is given as a comparison of Minimum years,or unusual years, in the two periods.

It will be observed that in the first period the year 1889 is the lowest year,and is not complete for the six months, for this reason the next lowest -- 1898, is selected. It will also be observed in the second period 1905 is the lowest year,and 1918 is the next lowest year,and conforms in place of magnitude to 1898 of the first period.

It is also desired to show the comparison of unusual years a considerable period of time apart,in this case twenty years,and to show the developement of the system and its behavior in a recent year durthe critical period.

It is well to note the August flow in the first period is 42 per cent of the mean,and the August flow in the second period is 58 per cent of the mean. And the August flow in the second period is 188 per cent of the August flow in the first period.

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T H E
AVERAGE NATURAL PROVO RIVER
IN THE UTAH LAKE VALLEY
1 9 0 5 TO 1 9 1 8 INC.

Compiled by T.F.Wentz.

1918.

Day	April	May	June	July	August	September
1	515	731	1057	715	356	349
2	538	719	1090	698	350	336
3	532	680	1148	689	344	336
4	509	689	1232	682	342	335
5	529	715	1325	684	336	346
6	524	736	1344	670	345	345
7	496	716	1402	636	341	344
8	502	780	1329	604	334	341
9	525	826	1267	563	327	350
10	557	886	1245	541	327	347
11	596	927	1188	526	327	349
12	611	921	1197	491	332	347
13	620	910	1193	477	323	343
14	647	881	1199	459	317	347
15	681	877	1162	446	315	352
16	694	866	1147	430	320	354
17	698	876	1131	419	315	353
18	709	893	1063	404	313	352
19	720	924	1062	399	313	337
20	696	990	1024	395	322	335
21	697	1027	1000	394	316	329
22	708	1026	995	383	330	329
23	722	1023	964	378	321	348
24	730	1071	905	371	317	345
25	752	1044	870	365	322	349
26	781	1046	849	358	323	359
27	796	1010	836	352	324	358
28	795	993	825	352	326	350
29	797	988	787	354	321	353
30	782	1006	743	360	329	354
31	...	1069	...	360	328	...
Total	19457	27847	32582	14952	10157	10374
Maximum	797	1071	1402	757	391	408
Minimum	496	680	743	328	297	300
Mean	648	898	1086	482	328	345
Maximum of Average				715	356	359
Minimum of Average				352	313	329

T.F.W./T.F.W.

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TYPICAL

NAATURAL PROVO RIVER.

IN THE UTAH LAKE VALLEY

1905 -- 1918.

Compiled By T.F.Wentz.

Day	April	May	June	July	August	September.
1	474	653	970	620	336	335
2	485	648	985	612	333	329
3	482	630	1011	608	321	329
4	472	634	1047	605	330	328
5	481	646	1086	606	326	334
6	478	656	1094	600	331	333
7	465	646	1117	584	329	333
8	468	675	1088	570	325	331
9	479	694	1062	550	322	336
10	493	719	1053	539	322	334
11	562	808	1034	448	315	335
12	569	805	1038	433	317	334
13	573	800	1036	426	313	332
14	586	788	1039	418	310	334
15	601	786	1023	412	309	337
16	607	781	1016	405	311	338
17	608	785	1009	400	309	337
18	613	793	978	392	308	337
19	618	807	978	389	308	329
20	607	835	960	388	312	328
21	657	929	828	362	312	324
22	663	929	826	357	318	324
23	669	928	813	354	314	333
24	673	949	787	351	312	332
25	683	937	772	348	314	334
26	696	938	763	345	315	338
27	702	922	757	342	315	338
28	702	914	752	342	317	334
29	703	912	734	343	314	336
30	696	920	713	346	318	336
31	...	948	...	346	317	...
Total	17565	24815	28369	13841	9863	9992
Max.	703	949	1117	620	336	338
Min.	465	630	713	342	308	324
Mean.	585	800	945	446	318	333

AVERAGE TEN DAY MINIMUM.

1-10	437	584	890	537	317	322
10-20	530	704	900	381	303	322
20-31	620	841	685	332	307	319.

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MEDIAN NATURAL PROVO RIVER AND MEDIAN ZONE 1905 - 1918.

	APRIL			MAY			JUNE.		
	Min. Zone Limit	Med.	Max. Zone Limit	Min. Zone Limit	Med.	Max. Zone Limit	Min. Zone Limit	Med.	Max. Zone Limit
1	474	482	490	574	677	780	1028	1062	1097
2	506	513	520	658	725	792	1003	1029	1056
3	474	512	550	704	717	730	946	953	960
4	488	509	530	718	734	750	992	998	1004
5	510	523	537	717	734	751	1089	1097	1105
6	500	515	531	718	730	742	1084	1141	1199
7	486	488	491	757	757	758	1200	1214	1229
8	511	511	511	743	771	799	1105	1119	1134
9	509	510	511	791	808	825	1186	1186	1187
10	551	551	551	867	876	885	1155	1169	1184
11	531	533	535	896	915	934	1109	1114	1119
12	511	531	551	896	944	983	1185	1217	1249
13	522	526	531	996	997	998	1106	1123	1140
14	551	564	577	896	896	896	1124	1132	1141
15	541	616	692	849	869	889	1117	1126	1136
16	522	607	692	757	759	762	1039	1068	1097
17	653	654	656	787	838	889	1014	1036	1058
18	610	651	692	793	797	802	881	931	982
19	615	653	692	842	860	878	842	894	946
20	644	673	702	788	885	983	876	886	897
21	720	726	732	808	903	998	794	846	898
22	740	750	761	809	879	949	764	811	859
23	762	779	796	789	813	838	720	739	759
24	789	791	793	789	799	809	681	701	721
25	741	769	797	840	865	891	647	649	652
26	693	698	703	980	1009	1039	583	599	615
27	703	711	720	929	985	1041	558	561	564
28	657	751	845	928	959	990	491	563	635
29	611	738	865	953	970	987	516	543	570
30	690	735	780	1002	1055	1109	455	492	529
31	...	...	...	1027	1039	1052	...	...	...
Maximum	789	791	865	1027	1055	1109	1200	1217	1249
Minimum	474	482	490	574	677	730	455	492	529
Mean	594	619	644	826	857	888	910	933	957

Note: In formulating this table Mean Inflow Curve is used.

T.F.W./T.F.W.

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MEDIAN NATURAL PROVO RIVER AND MEDIAN ZONE 1905 - 1918

	JULY			AUGUST			SEPTEMBER		
	Min. Zone Limit	Med.	Max Zone Limit	Min. Zone Limit	Med.	Max Zone Limit	Min. Zone Limit	Med.	Max. Zone Limit
1	456	468	480	355	366	377	313	314	315
2	424	436	448	329	340	348	304	308	313
3	408	420	433	348	350	352	312	312	313
4	392	411	431	348	350	353	312	312	312
5	393	416	439	335	343	352	312	315	319
6	394	415	436	323	343	363	311	318	326
7	380	404	428	323	328	333	311	315	320
8	381	406	432	319	326	333	311	315	320
9	382	401	420	310	314	318	317	337	357
10	322	372	422	310	321	332	310	327	344
11	338	354	381	303	310	318	317	327	337
12	339	340	342	301	317	333	316	326	336
13	351	362	373	299	308	318	316	324	333
14	345	360	375	294	306	318	335	337	339
15	361	373	385	311	314	317	338	356	375
16	344	360	377	304	310	317	353	368	384
17	356	382	408	301	309	317	367	374	382
18	346	374	403	308	312	316	367	372	378
19	347	362	380	302	305	308	365	365	366
20	348	363	378	306	315	324	357	361	366
21	349	365	381	309	316	323	340	345	351
22	349	365	382	316	319	323	339	344	350
23	380	386	392	301	304	307	350	353	356
24	379	381	383	299	303	307	338	343	348
25	351	354	358	306	310	315	338	343	349
26	351	354	358	306	310	315	348	348	349
27	324	337	351	315	322	330	349	356	363
28	341	346	351	315	326	337	345	354	363
29	348	350	352	314	320	327	345	346	347
30	348	362	376	314	320	326	342	344	347
31	348	351	355	314	320	326	...	...	...
Maximum	456	468	480	355	366	377	367	374	384
Minimum	322	337	342	294	303	307	304	308	312
Mean	364	378	394	314	321	328	333	339	345

T.F.W./T.F.W.

T A B U L A T I O N .

SHOWING DISTRIBUTION DURING THE SEASON OF 1918 THE AMOUNTS TO PROVO RESERVOIR COMPANY, STORAGE & TUNNEL AND AMOUNTS RECIEVED BY BLUE CLIFF AWARD AND WRIGHT AND DIXON WATER? THE AMOUNTS TO UTAH POWER & LIGHT CO. AND THE AMOUNTS TO THE DEFENDANTS IN THE UTAH VALLEY AND THE AWARD. PERCENTAGES ARE SHOWN HAD THE DECISION BEEN FOLLOWED AND NECESSARY CHANNEL FROM SPRING CREEK TO RIVER BEEN CONSTRUCTED.

	July 15	July 23	July 31	August 7	Aug. 15	Aug. 23	Sept. 6
Total River Utah Valley	386.96	334.89	290.03	295.14	298.00	267.21	278.04
Storage & Tunnel	45.58	39.18	39.88	39.	26.	29.	29.
Natural River Utah Valley	341.58	295.71	250.15	256.14	272.00	238.21	249.04
Total River Provo Canyon	347.71	308.98	257.57	263.30	249.14	231.06	234.30
Natural River Provo Canyon	302.33	269.80	217.69	224.30	223.14	202.06	205.30
Provo Res. Co. Stor.& Tun. W.	38.53	33.03	33.03	33.03	17.65	23.43	23.43
U.P.&.L.Co. Tun.W. & Springs.	12.47	11.77	11.77	13.21	13.21	13.21	13.21
Quantity in Provo Canyon to Pro rate		264.18	212.77	217.06	218.28	194.42	197.66
TO U.P.&.L.Co. on Pro Rate	229.00	201.83	162.60	165.84	166.77	148.54	151.00
U.P.&.L.Co. Tun.W.& Springs	12.47	11.77	11.77	13.21	13.21	13.21	13.21
P.R.Co.Stor. Thru Olm.Flume	10.	10.	10.	10.	10.	7.00	7.00
U.P.&.L.CO. to Timpanogus.	.....	1.68	3.63	3.75	3.70	3.05	4.60
Total Olmstead Flume	251.47	202.02	180.74	185.30	186.28	165.70	166.61
To P.Res. Co. on Pro Rate (Total B.Cliff.& W. & Dixon W.)	57.50	50.73	40.80	41.67	41.91	37.33	37.96
P.R.CO. Stor. & Tun.W.	38.53	33.03	33.03	33.03	17.65	23.43	23.43
P.R.CO.Thru.Olmstead Flume (Stor)	10.	10.	10.	10.	10.	7.00	7.00
Quantity Thru Provo Res. Canal	102.88	93.96	63.83	64.70	59.56	53.76	54.39
Timpanogus Can.Co.on Pro Rate	.....	11.62	9.37	9.55	9.60	8.55	8.70
Timpanogus Can.Co. By Stip. UP&L.	...	1.68	3.63	3.75	3.70	3.05	4.60
Timpanogus Can.Co. Total	14.83	13.30	13.30	13.30	13.30	11.60	13.30
Prov.Res. Co. by Blue Cliff	50.00	44.13	35.50	36.24	36.50	32.47	33.00
Provo Res. Co.by Wright & Dixon	7.50	6.60	5.30	5.43	5.41	4.86	4.96
Awarded Defendants in Utah Valley							
Exclusive John D.Dixon	237.62	217.65	217.65	217.65	217.65	217.65	214.78
Recieved by Defendants	274.08	244.98	216.20	220.44	228.44	206.45	216.65
Defendants Deficit	.....	.....	1.45	.....	.....	11.20	.....
Defendants Additional Quant.	36.46	27.33	.....	2.79	10.79	.....	1.87
Provo Reservoir Co. B.Cliff & Wright & Dixon Water and U.P.&L. Co Percentage of award recieved	100	88	71	72.4	73	65	66
Defendants percentage of award recieved	115	113	100	101	105	95	101

Note: The foregoing table is made up from daily sheets of distribution, a difference of one per cent in grand total exists on August 7 from table "Summary Of Total Measurements Utah Valley and Provo Canyon Showing Inflow In Valley And Canyon." This variance was occasioned by not knowing discharge of Waterworks of Provo City at time sheets were made. To avoid confusion it is deemed best to make the table correspond to the sheets rather than apply the small correction.

T.F.W./T.F.W.

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T A B U L A T I O N .

CLASS " A " RIGHTS IN THE UTAH LAKE VALLEY BY DECISION OF NOVEMBER 26,1917,AND AS MODIFIED AT SESSIONS OF 1918.

**** SUPERIMPOSED UPON PLATE VI.*****

	May 10 to June 20	June 20 to July 20	July 20 to Sept. 1.	Sept. 1 to Oct. 1	Oct. 1 to May 10.
Provo City:					
Farm Acres	36.12	32.68	29.40	29.40	29.40
Town Lots (Assumed)	10.00	10.00	10.00	7.14	7.14
Factory Race	16.50	16.50	16.50	16.50	16.50
Waterworks(Assumed)	6.00	6.00	6.00	6.00	6.00
Timpanogus Canal Co.	14.12	12.83	11.30	11.30	11.30
Provo Bench C.&.I.Co.	76.01	68.77	61.89	61.89	61.89
Upper East Union I.Co.	13.37	12.09	10.89	10.89	10.89
Little Dry Creek I.Co.	8.43	7.67	6.75	6.75	6.75
First Ward Pasture Co.	2.45	2.23	1.96	1.96	1.96
E.River Bottoms Water Co.	6.62	6.04	5.29	4.92	4.92
Ft.Field Irri. Co.	7.18	6.38	5.74	4.60	4.60
Lake Bottom Canal & Utah Idaho S.Co	15.93	14.16	12.75	10.19	10.19
West Uion, & Smith, & Carter	33.33	30.16	27.14	27.14	27.14
Faucett Field Ditch Co.	2.09	1.91	1.67	1.55	1.55
Barton & Young Ditch	1.08	.97	.86	.77	.77
Park & Nuttal Ditch	1.47	1.34	1.17	1.05	1.05
Baum, Young, Dixon and from City Creek	2.15	1.94	1.73	1.68	1.68
Spring Creek Users.	6.67	6.06	5.29	4.59	4.59
H.Heiselt & J.D.Dixon	2.55	2.55	2.55	2.55	2.55
Provo Reservoir Company.	50.00	50.00	50.00	50.00	50.00
Totals	312.07	290.28	268.88	260.87	260.87

11

TABLE OF COMBINATIONS.

CONTRIBUTIONS TO PROVO RIVER.

IN THE SEVERAL SECTIONS.

RUNOFF AND INFLOW.

Limits of Sections.	Stewart Ranch	Murdock Plant	Lower Midway Dam.	Wright Ranch.	Utah Lake.
	First Section	Second Section	Third Section	Fourth Section.	
MAY. "A"	A1	A2	A3	A4	
JUNE "B"	B1	B2 A1-1	B3 A2-2	A3-3 A2-2 B4	
JULY "C"	C1	C2 B1-1	C3 A1-1,2. B2-2	A2-2,3. B3-3. A1-1,2. B2-2. C4	
August "D"	D1	D2 C1-1.	D3 B1-1,2. C2-2.	A1-1,2,3. B2-2,3. C3-3. B1-1,2. C2-2. D4	
September "E"	E1	E2 D1-1.	E3 C1-1,2. D2-2.	B1-1,2,3. C2-2,3. D3-3. C1-1,2. D2-2. E4	
October "F"	F.1	F2 E1-1.	F3 D1-1,2. E2-2.	C1-1,2,3. D2-2,3. E3-3. D1-1,2. E2-2. F4	

Explanatory:

A1 is is runoff in May in First section, A2 in Second section ect.

Quantities underscored are excess in thrid section that goes to fourth section.

First Section Stewarts Ranch to Murdock Plant.
Second Section Murdock Plant to Lower Midway Dam.
Third Section Lower Midway Dam to Wright Ranch.
Fourth Section Wright Ranch to Utah Lake.

Superimposed upon PLATE XIII.

PROVO RIVER.

INFLOW CURVE

PARABOLIC.

DESIGNATED AS MEAN INFLOW CURVE.

Inflow between U.S.G.S. Gaging Station Provo Canyon and the several points of measurement of the diversions in the Utah Lake Valley.

Day.	April	May	June	July	August	September.
1	20	24	33	58	84	79
2	20	24	33	59	84	79
3	20	24	34	60	84	79
4	20	24	34	61	84	78
5	20	25	35	62	84	78
6	21	25	35	63	84	77
7	21	25	36	64	84	77
8	21	25	36	65	84	77
9	21	25	37	66	84	76
10	21	25	38	68	84	76
11	21	26	39	70	84	76
12	21	26	40	71	84	75
13	21	26	40	72	84	75
14	21	26	41	74	84	75
15	22	27	42	75	83	74
16	22	27	43	76	83	74
17	22	27	44	77	83	73
18	22	27	45	78	83	73
19	22	28	46	79	83	72
20	22	28	47	80	83	72
21	22	28	48	81	82	72
22	22	29	49	81	82	71
23	22	29	50	82	82	71
24	23	29	51	82	82	70
25	23	30	52	83	81	70
26	23	30	53	83	81	69
27	23	30	54	83	81	69
28	23	31	55	83	81	69
29	23	31	56	84	80	68
30	24	32	57	84	80	68
31	..	32	..	84	80	..

12-A

SUMMERY OF PRECIPITATION

FOR HEBER UTAH.

1893 To 1918 Inc.

Year Ending Sept.30.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apl.	May.	June.	Jul.	Aug.	Sept.	Total.
1893	....	....	....	1.80	2.95	3.35	2.15	0.76	0.02	0.27	0.68	0.28	
1894	0.73	1.90	3.95	3.65	1.60	1.65	0.41	0.54	0.79	0.62	1.16	2.47	19.47
1895	1.70	0.00	2.60	3.22	1.93	1.45	0.48	1.54	0.25	1.37	T	0.50	15.04
1896	0.40	2.20	1.70	2.10	0.95	2.46	2.40	1.85	0.09	3.35	0.55	1.44	19.49
1897	0.50	0.50	0.75	1.30	4.10	2.90	0.90	0.70	0.38	0.56	0.49	3.14	16.22
1898	1.50	1.00	1.20	1.40	0.50	3.30	1.25	7.04	0.83	0.25	0.64	0.08	18.99
1899	1.44	1.60	1.10	2.95	5.85	3.00	0.89	1.14	0.97	1.61	2.10	0.15	22.80
1900	3.20	0.85	1.55	1.06	1.50	0.34	2.53	0.16	0.20	0.25	0.31	1.20	13.15
1901	1.47	4.42	0.22	2.20	2.20	1.56	0.31	1.72	0.08	0.40	2.06	0.16	16.80
1902	1.70	1.40	1.50	0.50	1.03	1.46	1.88	0.49	0.37	0.15	0.50	0.45	11.43
1903	0.45	1.77	1.04	2.17	0.70	1.95	0.78	1.42	0.25	0.69	0.20	1.17	12.59
1904	0.76	1.90	1.33	2.10	3.00	3.48	0.96	2.01	0.73	0.29	0.88	0.16	17.60
1905	1.22	0.00	1.91	1.22	1.03	1.69	2.06	1.27	0.43	0.40	0.58	2.12	13.93
1906	0.31	0.73	0.80	3.10	1.58	3.93	1.23	2.61	1.10	0.97	3.11	0.85	20.32
1907	0.43	1.54	2.45	3.00	3.96	3.29	1.32	2.00	1.47	0.07	0.87	T	20.40
1908	1.03	0.33	2.71	0.84	0.78	1.58	0.50	2.58	1.42	1.57	1.46	2.32	17.12
1909	2.68	0.80	0.90	8.81	2.25	1.31	2.58	1.00	0.16	0.57	3.04	0.71	24.81
1910	0.20	2.86	4.43	1.10	2.09	0.95	0.46	0.31	0.08	1.01	0.11	1.25	14.85
1911	1.19	0.60	1.47	5.29	1.34	2.82	1.20	1.10	0.93	0.13	0.15	1.89	18.11
1912	1.03	1.73	0.78	1.36	0.88	3.97	1.40	1.23	0.66	0.58	1.19	1.57	16.38
1913	4.00	1.00	1.04	1.20	1.68	1.00	0.85	0.32	2.24	1.10	1.00	0.86	16.29
1914	2.00	1.91	1.21	4.90	1.42	1.15	1.85	0.15	1.81	1.34	0.50	0.58	18.82
1915	2.43	0.22	0.60	1.25	3.48	0.86	1.49	2.03	0.49	0.21	0.00	2.24	15.30
1916	0.05	1.03	1.62	4.06	1.95	3.05	0.74	0.10	0.13	1.05	1.45	1.43	16.66
1917	3.80	0.62	3.65	0.70	2.11	0.82	1.40	3.40	0.45	0.77	0.12	1.37	19.21
1918	0.05	0.67	0.30	3.53	2.21	2.73	1.32	0.85	0.78	1.05	0.55	2.26	16.30
THE PERIOD 1893 To 1918 Inc.													
Total	34.27	31.58	40.81	64.81	53.07	56.05	33.34	38.32	17.11	20.63	23.70	30.65	432.08
Max.	3.80	4.42	4.43	8.81	5.85	3.97	2.58	7.04	2.24	3.35	3.11	3.14	24.81
Min.	0.05	0.00	0.22	0.50	0.50	0.34	0.31	0.10	0.02	0.07	0.00	0.00	11.43
Mean	1.37	1.26	1.63	2.49	2.04	2.16	1.28	1.47	0.66	0.79	0.91	1.18	16.62
THE PERIOD 1893 To 1904 Inc.													
Total	13.85	17.54	16.94	24.45	26.31	26.90	14.94	19.37	4.96	9.81	9.57	11.20	183.58
Max.	3.20	4.42	3.95	3.65	5.85	3.48	2.53	7.04	0.97	3.35	2.10	3.14	22.80
Min.	0.40	0.00	0.22	0.50	0.50	0.34	0.31	0.16	0.02	0.15	0.00	0.08	11.43
Mean	1.26	1.59	1.54	2.03	2.19	2.24	1.24	1.61	0.41	0.82	0.80	0.93	15.29
THE PERIOD 1905 To 1918 Inc.													
Total	20.42	14.04	13.87	40.36	26.76	29.15	19.40	18.95	12.15	10.82	14.13	19.45	248.50
Max.	3.80	2.86	4.43	8.81	3.96	3.97	2.58	3.40	2.24	1.57	3.11	2.32	24.81
Min.	0.05	0.00	0.30	0.70	0.78	0.82	0.46	0.10	0.08	0.07	0.00	0.00	13.93
Mean	1.46	1.00	0.99	2.89	1.91	2.08	1.39	1.35	0.87	0.77	1.01	1.39	17.75
COMPARISON OF 1905- 1918 Inc. To 1893-1904 Inc.													
MEAN.	*.20	-.59	-.55	*.86	-.28	-.16	*.15	-.26	*.46	-.05	*.21	*.46	*2.46
Percent.	117	63	64	142	87	93	112	84	212	94	126	144	116

*Plus.
-Minus.

That is the Mean Precipitation during the Period of 1905-1918 Inc. is 116 percent of the Mean Precipitation during the period of 1893 -1904 inc.

T.F.W./T.F.W.

12-13

SUMMARY OF PRECIPITATION

FOR PROVO UTAH.

1889 To 1918 Inc.

Year Ending Sept. 30.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apl.	May.	Jun.	Jul.	Aug.	Sept.	Tot.
1889	...	...	...	...	...	...	...	...	...	...	0.00	0.50	.....
1890	1.12	1.15	2.88	1.04	0.50	0.60	0.00	1.00	...	...	....	....	.....
1891	0.00	0.00	....	1.15	1.65	0.56	....	....	....	0.50	0.31	0.76	.....
1892	0.43	T	2.90	1.30	1.10	1.57	1.50	1.40	0.41	0.10	0.20	0.15	11.06
1893	1.70	0.63	2.32	0.60	1.25	1.35	3.09	1.60	0.05	0.36	0.56	0.59	14.10
1894	0.36	0.63	0.44	2.35	1.50	1.30	0.40	0.10	0.50	0.03	0.60	0.39	8.60
1895	0.70	0.00	1.70	0.82	2.00	1.15	0.19	2.37	0.21	0.51	0.21	0.03	9.89
1896	0.20	1.61	1.37	....	0.18	1.75	1.00	1.80	2.00	2.43	0.63	....	.....
1897	0.47	0.70	0.20	1.20	2.05	2.60	....	....	0.77	0.58	0.66	2.19	.....
1898	....	....	1.04	0.82	0.64	0.87	0.72	5.47	1.55	0.35	0.31	0.00	.....
1899	1.34	1.08	0.80	1.54	2.89	2.45	0.39	1.37	0.60	0.75	1.00	0.00	14.21
1900	2.79	0.94	1.05	0.45	0.35	0.05	1.65	0.32	0.05	0.05	0.40	1.13	9.23
1901	0.66	3.50	0.12	0.22	2.06	1.09	0.29	0.39	0.18	T	3.00	0.20	11.71
1902	T	0.85	0.98	0.35	1.12	1.30	2.14	0.36	0.10	0.11	0.20	0.50	8.01
1903	0.68	1.55	1.28	2.65	0.65	1.80	0.51	2.69	0.30	0.39	0.42	0.72	13.64
1904	0.55	1.14	0.49	1.72	2.27	3.75	1.56	2.11	0.42	0.39	0.45	0.04	14.89
1905	1.56	0.00	1.05	1.42	2.30	2.22	2.07	1.85	0.33	0.25	0.20	3.00	16.25
1906	0.33	0.89	1.80	1.05	0.90	2.80	3.18	2.60	1.45	0.10	1.80	0.70	17.80
1907	0.20	3.20	2.75	3.30	3.10	2.80	1.30	2.80	1.70	0.30	1.95	0.40	23.80
1908	1.20	0.30	2.60	1.10	1.08	1.68	0.23	3.48	1.06	0.32	0.15	2.77	15.97
1909	3.25	1.20	0.75	4.93	1.63	1.24	2.84	1.12	0.25	0.47	2.03	1.31	21.02
1910	0.57	2.26	1.35	1.29	2.27	1.17	0.33	0.50	0.00	0.58	0.31	1.38	12.01
1911	1.72	1.15	1.85	2.85	1.65	1.65	0.75	1.60	2.65	0.20	0.05	1.63	17.75
1912	1.39	0.58	2.12	0.45	0.63	3.15	2.40	1.25	0.58	0.75	0.66	1.25	15.21
1913	4.75	1.18	1.05	1.20	1.70	2.53	1.50	0.25	2.00	0.46	0.43	1.99	19.04
1914	2.09	3.11	1.91	4.09	1.18	0.79	2.70	0.55	1.95	1.16	0.31	0.36	20.20
1915	2.10	1.11	0.62	1.01	4.13	1.15	2.55	2.81	0.65	0.17	0.00	1.87	18.17
1916	T	1.37	1.27	3.52	2.33	3.34	0.39	0.38	0.21	1.17	0.67	0.92	15.57
1917	4.21	0.55	2.87	1.22	1.00	1.00	2.36	3.25	0.42	1.91	0.14	1.29	20.22
1918	T.	0.95	0.85	4.62	1.64	1.09	1.06	0.92	0.45	1.71	0.62	2.42	16.33
THE PERIOD 1889 to 1918 Inc.													
Total.	34.37	31.63	40.41	48.26	45.75	48.80	37.10	44.54	20.84	16.10	18.27	28.49	364.68
Maximum	4.75	3.50	2.90	4.93	4.13	3.75	3.18	5.47	2.65	2.43	3.00	3.00	20.22
Minimum	0.00	0.00	0.12	0.22	0.18	0.05	0.00	0.10	0.00	0.00	0.00	0.00	8.01
Mean	1.27	1.13	1.44	1.72	1.58	1.68	1.37	1.65	0.77	0.58	0.63	1.02	15.20
THE PERIOD 1889 To 1904 Inc.													
Total	11.00	13.78	17.57	16.21	20.21	22.19	13.44	20.98	7.14	6.55	8.95	7.20	115.34
Maximum	2.79	3.50	2.90	2.65	2.89	3.75	3.09	5.47	2.00	2.43	3.00	2.19	14.89
Minimum	0.00	0.00	0.12	0.22	0.18	0.05	0.00	0.10	0.05	0.00	0.00	0.00	8.01
Mean	0.79	0.92	1.26	1.16	1.35	1.48	1.03	1.61	0.55	0.47	0.60	0.51	11.53
THE PERIOD 1905 to 1918 Inc.													
Total	23.37	17.85	22.84	32.05	25.54	26.61	23.66	23.56	13.70	9.55	9.32	21.29	249.34
Maximum	4.75	3.20	2.87	4.93	4.13	3.34	3.18	3.48	2.65	1.91	2.03	3.00	23.80
Minimum	0.00	0.30	0.62	0.45	0.63	0.79	0.23	0.25	0.00	0.10	0.00	0.36	12.01
Mean	1.80	1.37	1.63	2.29	1.82	1.90	1.69	1.68	0.98	0.68	0.67	1.52	17.81

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COMPARISON OF 1905-1918 TO 1889-1904Inc. Of "MEAN".

Mean Exceeds	1.01	0.45	0.37	1.13	0.47	0.42	0.66	0.07	0.43	0.21	0.07	1.01	6.30
Percentage	228	149	129	197	135	128	164	104	178	145	112	298	155*

* That is The Mean Precipitation during the period of 1905 to 1918 inc. is 155 per cent of the mean during the period of 1889 to 1904 inc.

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T.F.W./T.F.W.

12-C

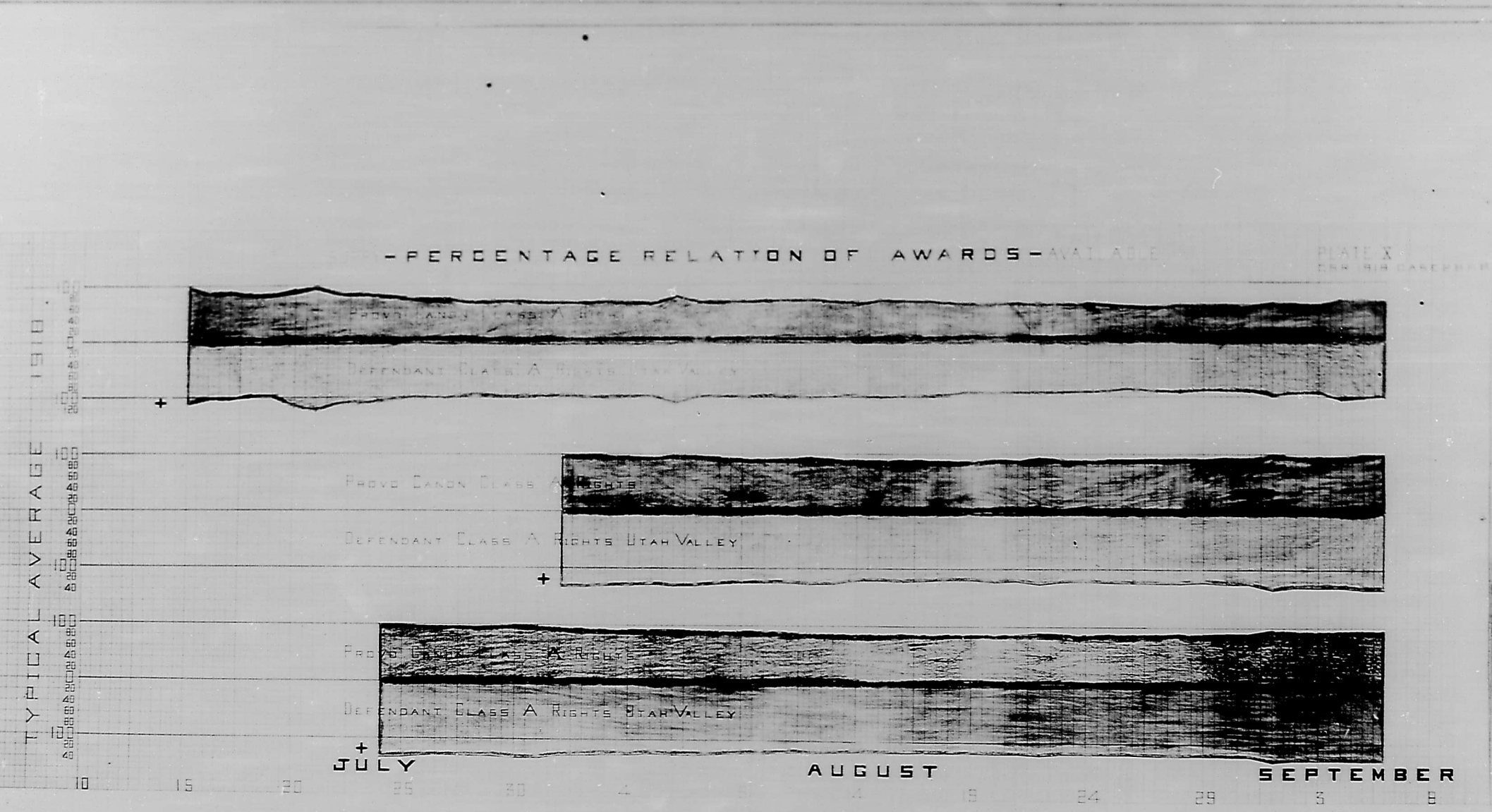
-PERCENTAGE RELATION OF AWARDS-
TYPICAL AVERAGE 1910
Provo Canon Class A Rights
Defendant Class A Rights Utah Valley
Provo Canon Class A Rights
Defendant Class A Rights Utah Valley
Provo Canon Class A Rights
Defendant Class A Rights Utah Valley
JULY
AUGUST
SEPTEMBER
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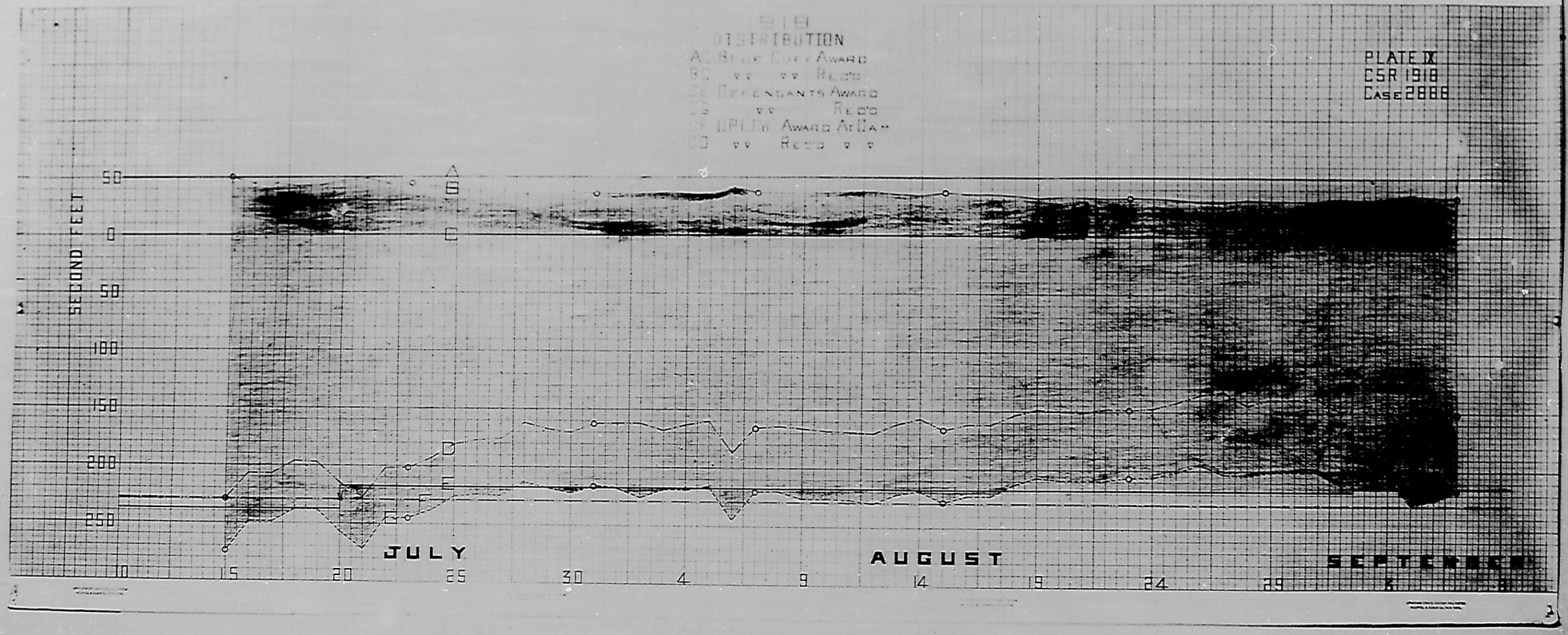
PLATE IX
CSR 1918
Case 2888



Provo Reservoir Co.
vs.
Provo City et al
2888 Civil

PERCENTAGE RELATION OF AWARDS.

Tabulation of Flow and Distribution of Provo River for TYPICAL PROVO RIVER. JULY & SEPTEMBER.

Table showing Typical Provo River Utah Valley, Mean Inflow Curve, and approximate Mean inflow in canyon and valley, approximate mean discharge of. U.P.& L.Co. Springs not subject to Pro Rate; quantity to pro rate in Provo Canyon, and percentage of awards to Provo Canyon Rights; and also quantity in the Utah Valley available to the Defendants diverting water at and below the mouth of Provo C Canyon and percentage of award to such Defendants. Shown from time some of Class "A" rights are not drawing 100 per cent.

Day.	Typical River Utah Valley	Mean Infw Curve	Infw in Can	Infw in Val.	U.P & L.CO. Spra.	cfs Can to Pro Rate	Blue Clif Pro Rata	Wrht & Dix. Pro Rata	U.P & L.Co. Pro Rata	Per Cent. of Awards Can. Rhts.	Timp. Pro Rata	cfs. to Utah Val. Def.	Per Cent of Award Val Rhts.
				July.									
	award						50.00	7.50	229.		13.30	218.	
24	351	82	41	41	8.00	302	50	7.5	229	100	13.30	291	134
25	348	83	"	42	"	298	49.7	7.5	228	99	13.2	291	134
26	344	"	"	"	"	294	49.0	7.4	224	98	13.	288	132
27	342	"	"	"	"	292	48.7	7.3	223	97	13	286	131
28	342	"	"	"	"	292	48.7	7.3	223	97	13	286	131
29	341	84	42	"	"	291	48.5	7.3	222	97	12.9	285	131
30	346	"	"	"	"	296	49.4	7.4	226	99	13.1	289	133
31	346	"	"	"	"	296	49.4	7.4	226	99	13.1	289	132
				September.									
	award						50.00	7.50	229		13.30	214.	
1	335	79	39	40	8.00	287	47.8	7.20	220	96	12.7	280	131
2	329	"	"	"	"	281	46.8	7.-	215	94	12.5	275	128
3	329	"	"	"	"	281	468	7-	215	94	12.5	275	128
4	328	78	39	39	"	281	46.8	7.	215	94	12.5	274	128
5	334	78	"	"	"	287	47.8	7.2	220	96	12.7	279	130
6	333	77	38	39	"	286	47.8	7-	219	96	12.7	278	130

Total 17

Computations made by

Observations made by

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

PERCENTAGE RELATION OF AWARDS.

Tabulation of Flow and Distribution of Provo River for TYPICAL PROVO RIVER. AUGUST.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.

Table showing Typical Provo River Utah Valley, Mean Inflow Curve, and approximate Mean inflow in valley and canyon. approximate Mean discharge of U.P.&.L.Co. Springs not subject to Pro Rate; Quantity to Pro Rate in Provo Canyon and percentage of awards to Provo Canyon Rights; and also quantity in the Utah Valley available to the Defendants diverting water at and below the Mouth of Provo Canyon and percentage of award to such Defendants.

							50.00	7.50	2.29		13.30	218.	
Day.	Typical River Utah Valley	Mean Infw Curve	Infw in Can.	Infw in Val.	U.P & L.Co. Sprs.	cfs. Can. to Pro Rate	Blue Clif Pro Rata 16.77%	Wght Est. & Dix. Pro Rata 2.57%	U.P & L.Co. Pro Rata 7.64	Per Cent. of Award Can Rigts.	Timp Can. to Co. Pro Rata 44%	cfs. Utah Val. Def.	Per Cent. of Award Val Rights
1	336	84	42	42	8.00	286	47.1	7.3	218	95	12.6	281	129
2	333	"	"	"	"	283	47.2	7.1	216	94	12.5	279	128
3	331	"	"	"	"	281	46.9	7.0	215	94	12.4	277	127
4	330	"	"	"	"	280	46.7	7.0	214	93	12.3	276	127
5	326	"	"	"	"	276	46.1	6.9	211	92	12.2	273	125
6	331	"	"	"	"	281	46.9	7.0	215	94	12.5	277	127
7	329	"	"	"	"	279	46.5	7.0	213	93	12.4	276	127
8	325	"	"	"	"	275	45.9	6.9	210	92	12.2	272	125
9	322	"	"	"	"	272	45.4	6.8	208	91	12.1	270	124
10	322	"	"	"	"	272	45.4	6.8	208	91	12.1	270	124
1	315	"	"	"	"	265	44.2	6.6	202	88	11.8	264	121
2	317	"	"	"	"	267	44.6	6.6	204	89	11.8	266	122
3	313	"	"	"	"	263	43.9	6.6	201	88	11.7	263	121
4	310	"	"	"	"	260	43.4	6.5	199	87	11.5	260	119
5	309	83	41	"	"	259	43.2	6.5	198	86	11.5	259	119
6	311	"	"	"	"	261	43.6	6.5	199	87	11.6	261	120
7	309	"	"	"	"	259	43.2	6.5	198	86	11.5	259	119
8	308	"	"	"	"	258	43.0	6.5	197	86	11.4	258	119
9	308	"	"	"	"	258	43.0	6.5	197	86	11.4	258	119
20	312	"	"	"	"	262	43.7	6.5	200	87	11.6	262	120
1	312	82	"	41	"	263	43.9	6.6	201	88	11.7	262	120
2	318	"	"	"	"	269	44.9	6.7	205	90	11.9	266	122
3	314	"	"	"	"	265	44.2	6.6	202	88	11.8	262	120
4	312	"	"	"	"	263	43.9	6.6	201	88	11.7	262	120
5	314	81	40	"	"	265	44.2	6.6	202	88	11.8	262	120
6	315	"	"	"	"	266	44.4	6.6	203	89	11.7	264	121
7	315	"	"	"	"	266	44.4	6.6	203	89	11.8	264	121
8	317	"	"	"	"	268	44.7	6.7	205	89	11.9	266	122
9	314	80	"	40	"	266	44.4	6.6	203	89	11.8	263	121
30	318	"	"	"	"	270	45.0	6.7	206	90	12.0	266	122
1	317	"	"	"	"	269	44.9	6.7	205	90	11.9	265	122
Max						286	47.7	7.3	218		12.6	281	129
Min						258	43.0	6.5	197		11.4	258.	119
Mean		11				269	44.8	6.7	205	90	11.8	266	122

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155 SOUTH STATE STREET **SALT LAKE CITY**

WARD CHAPELS AND STAKE HALLS

Wards	*Chapels*
1st	758 South 8th East
2nd	Corner 5th East and 7th South
3rd	119 East 7th South
4th	712 South West Temple
5th	748 South 2nd West
6th-7th	120 West 5th South
8th	3rd East and 5th South
9th	416 5th East
10th	480 8th East
11th	131 South 10th East
12-13th	363 East 2nd South
14th	151 West 1st South
15th	907 West 1st South
16th	131 North 5th West
17th	141 West 1st North
18th	107 "A" Street
19th	172 West 4th Nort..
20th	Corner 2nd Ave. and G Street
21st	Corner 1st Ave. and K Street
22nd	565 North 2nd West
23rd	14th North and 5th West
24th	710 North 1st West
25th	438 South 8th West
26th	Corner 8th South and Jeremy
27th	Corner 4th Ave. and P Street
28th	750 West 3rd North
29th	10th West and 3rd North
30th	1st West between 9th and 10th So.
31st	1140 9th East
32nd	[illegible] West and 3rd South
33rd	[illegible] East
34th	[illegible] West

Wards	*Chapels*
Center	5th No. and 16th West (Camp's L)
Central Park	3rd East and 27th South
East Mill Creek	27th East and 44th South
Emerson	1051 Emerson Ave.
Emigration	Corner 10th East and 7th So.
Ensign	Corner 9th Ave. and D St.
Forest Dale	Corner Ashton and Lake Sts.
Hawthorne	Corner 8th East and Roosevelt
Highland Park	2535 Douglas Ave.
Hillcrest	9th East and 31st South
Jefferson	Richards St. bet. W. T. and Main St. (Nearly to 15th So.)
LeGrand	Corner McClelland Ave. and Brooks
Liberty	1040 Denver St.
McKinley	1470 South State St.
Miller	33rd South bet. State and Main Sts.
Nibley Park	6th East and Warnick Ave.
Parleys	21st South and 21st East
Poplar Grove	12 West and Union Ave.
Richards	Garfield Ave. bet. 8th and 9th E.
Southgate	Cor. 27th So. bet. Main St. and W. T.
Sugar House	21st South and 12th East
University	1st and 2nd So. and Univ. St.
Wandamere	2952 South 7th East
Wasatch	15th East and Emerson
Waterloo	1621 5th East
Wells	1890 So. 5th East
Whittier	Cor. 2nd East and Kensington Ave.
[illegible]	3179 Highland Dr.
[illegible]	14th East and Thornton Ave.
Stake Tabernacle	42nd South and State Streets
Stake Hall	126 West 5th S.

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Temple

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

PERCENTAGE RELATION OF AWARDS.

Tabulation of Flow and Distribution of Provo River for AVERAGE PROVO RIVER. AUGUST & SEPT.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.

Table showing Average Natural Prove River Utah Valley, Mean Inflow Curve, and approximate Inflow in Valley and Canyon, approximate mean discharge of U.P.& L.Co. springs not subject to Pro Rate; quantity to Pro Rate in Provo Canyon and percentage of awards to Prove Canyon rights; also quantity in Utah Valley available to the defendants diverting at and below the mouth of Provo Canyon and percentage of awards to such defendants. Shown from the time some of Class "A" rights are not drawing 100 per cent of award.

Day.	Average River Utah Valley	Mean Infw. Curve	Infw. in Can.	Infw in Val.	U.P. & L.Co. Sprs.	cfs. Can. to Pro Rate	Blue Clif Pro Rata	Wrht & Mix. Pro Rata	U.P. & L.Co. Pro Rata	Per Cent of Awds. Can. Rhts.	Timp Pro Rata	cfs. to Utah Val. Def.	Per Cent of Awds. Val Rhts.
							August.						
Awards.						50.	7.50	229.00			1330	218.	
1	356	84	42	42	8.00	(306)	50.	7.50	229.	100	1330	298	134
2	350	"	"	"	"	300	50	7.50	229	100	1330	292	134
3	343	"	"	"	"	294	49.0	7.3	225	98	131	286	132
4	342	"	"	"	"	292	48.7	7.3	223	97	131	286	131
5	336	84	"	"	"	286	47.7	7.1	218	95	1312	281	129
6	345	"	"	"	"	295	49.2	7.4	225	98	131	288	132
7	341	"	"	"	"	291	48.5	7.3	222	97	129	285	131
8	334	"	"	"	"	284	47.4	7.1	217	95	126	280	128
9	327	"	"	"	"	277	46.2	6.9	212	92	123	274	126
10	327	84	"	"	"	277	46.2	6.9	212	92	123	274	126
1	327	"	"	"	"	277	46.2	6.9	212	92	123	274	126
2	332	"	"	"	"	282	47.0	7.0	215	94	125	276	128
3	323	"	"	"	"	273	45.5	6.8	208	91	121	269	128
4	317	"	"	"	"	267	44.5	6.7	204	89	118	266	122
5	315	83	"	41	"	266	44.3	6.7	203	89	118	263	121
6	320	"	"	"	"	271	45.2	6.8	207	90	120	267	123
7	315	"	"	"	"	266	44.3	6.7	203	89	118	264	121
8	313	"	"	"	"	264	44.0	6.6	202	88	116	262	120
9	313	"	"	"	"	264	44.0	6.6	202	88	116	262	120
20	322	"	"	"	"	273	45.5	6.8	208	91	121	270	124
1	316	82	41	41	"	267	44.5	6.7	204	89	118	265	122
2	330	"	"	"	"	281	46.8	7.0	214	94	125	276	127
3	321	"	"	"	"	272	45.3	6.8	208	91	121	269	123
4	317	"	"	"	"	268	44.7	6.7	205	89	119	266	122
5	322	81	40	"	"	273	45.5	6.8	208	91	121	270	124
26	323	"	"	"	"	274	45.7	6.8	209	91	121	271	124
7	324	"	"	"	"	275	45.8	6.8	210	92	122	272	125
8	326	"	"	"	"	277	46.2	6.9	212	92	123	273	125
9	321	80	40	40	"	273	45.5	6.8	208	91	121	269	123
30	329	"	"	"	"	281	46.8	7.0	214	94	125	275	126
Total	328	"	"	"	"	280	46.7	7.0	214	93	124	274	126
Max						300	50.	7.50	229.	100	1330	298	134
Min						264	44.0	6.6	202	88	1116	262	120
Mean						278	46.3	6.95	212	93	123	275	126
							September.						
Awards						50.	7.50	229.			1330	214	
1	349	79	39	40	8.00	301	50.	7.50	229.	100.	1330	291	136
2	336	"	39	40	"	288	48.0	7.20	220.	96	1218	281	131
3	336	"	39	40	"	288	48.0	7.20	220.	96	1218	281	131
4	335	78	39	39	"	288	48.0	7.20	220	96	128	280	131
5	346	"	39	39	"	299	49.9	7.50	228.	100	1313	289	135
6	345	77	38	39	"	298	49.7	7.5	228.	100	1312	288	135

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

PERCENTAGE RELATION OF AWARDS.

AVERAGE PROVO RIVER. AUGUST & SEPT.

Tabulation of Flow and Distribution of Provo River for .....

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.

Table showing Average Natural Provo River Utah Valley, Mean Inflow Curve, and approximate inflow in Valley and Canyon, approximate mean discharge of U.P.& L.Co. springs not subject to Pro Rate; quantity to Pro Rate in Provo Canyon and percentage of awards to Provo Canyon rights; also quantity in Utah Valley available to the defendants diverting at and below the mouth of Provo Canyon and percentage of awards to such defendants. Shown from the time some of Class "A" rights are not drawing 100 per cent of award.

Day.	Average River Utah Valley	Mean Infw. Curve	Infw. in Can.	Infw in Val.	U.P. & L.Co. Sprs.	cfs. Can. to Pro Rate	Blue Clif Pro Rata	Wrht & Mix. Pro Rata	U.P. & L.Co. Pro Rata	Per Cent of Awds. Can. Rhts.	Timp Pro Rata	cfs. to Utah Val. Def.	Per Cent of Awds. Val Rhts.
					August.								
Awards.						50.	7.50	229.00			13.30	218.	
1	356	84	42	42	8.00	(306)	50.	7.50	229.	100	13.30	292.	134
2	350	"	"	"	"	300	50	7.50	229	100	13.30	286	132
3	344	"	"	"	"	294	49.0	7.3	225	98	13.	288	132
4	342	"	"	"	"	292	48.7	7.3	223	97	13.	286	131
5	336	84	"	"	"	286	47.7	7.1	218	95	12.7	281	129
6	345	"	"	"	"	295	49.2	7.4	225	98	13.1	288	132
7	341	"	"	"	"	291	48.5	7.3	222	97	12.9	285	131
8	334	"	"	"	"	284	47.4	7.1	217	95	12.6	280	128
9	327	"	"	"	"	277	46.2	6.9	212	92	12.3	274	126
10	327	84	"	"	"	277	46.2	6.9	212	92	12.3	274	126
1	327	"	"	"	"	277	46.2	6.9	212	92	12.3	274	126
2	332	"	"	"	"	282	47.0	7.0	215	94	12.5	276	128
3	323	"	"	"	"	273	45.5	6.8	208	91	12.1	269	128
4	317	"	"	"	"	267	44.5	6.7	204	89	11.8	266	122
5	315	83	"	41	"	266	44.3	6.7	203	89	11.8	263	121
6	320	"	"	"	"	271	45.2	6.8	207	90	12.0	264	123
7	315	"	"	"	"	266	44.3	6.7	203	89	11.8	264	121
8	313	"	"	"	"	264	44.0	6.6	202	88	11.6	262	120
9	313	"	"	"	"	264	44.0	6.6	202	88	11.6	262	120
20	322	"	"	"	"	273	45.5	6.8	208	91	12.1	270	124
1	316	82	41	41	"	267	44.5	6.7	204	89	11.8	265	122
2	330	"	"	"	"	281	46.8	7.0	214	94	12.5	276	127
3	321	"	"	"	"	272	45.3	6.8	208	91	12.1	269	123
4	317	"	"	"	"	268	44.7	6.7	205	89	11.9	266	122
5	322	81	40	"	"	273	45.5	6.8	208	91	12.1	270	124
26	323	"	"	"	"	274	45.7	6.8	209	91	12.1	271	124
7	324	"	"	"	"	275	45.8	6.8	210	92	12.2	272	125
8	326	"	"	"	"	277	46.2	6.9	212	92	12.3	273	125
9	321	80	40	40	"	273	45.5	6.8	208	91	12.1	269	123
30	329	"	"	"	"	281	46.8	7.0	214	94	12.5	277	126

1	356	84	42	42	8.00	(306)	50.	7.50	229.	100	13.30	291.	134
2	350	"	"	"	"	300	50	7.50	229	100	13.30	291	134
3	344	"	"	"	"	294	49.0	7.3	225	98	13.	286	132
4	342	"	"	"	"	292	48.7	7.3	223	97	13.	286	131
5	336	84	"	"	"	286	47.7	7.1	218	95	12.7	281	129
6	346	"	"	"	"	295	49.2	7.4	225	98	13.1	288	132
7	341	"	"	"	"	291	48.5	7.3	222	97	12.9	285	131
8	334	"	"	"	"	284	47.4	7.1	217	95	12.6	280	128
9	327	"	"	"	"	277	46.2	6.9	212	92	12.3	274	126
10	327	84	"	"	"	277	46.2	6.9	212	92	12.3	274	126
1	327	"	"	"	"	277	46.2	6.9	212	92	12.3	274	126
2	332	"	"	"	"	282	47.0	7.0	215	94	12.5	278	128
3	323	"	"	"	"	273	45.5	6.8	208	91	12.1	269	128
4	317	"	"	"	"	267	44.5	6.7	204	89	11.8	266	122
5	315	83	"	41	"	266	44.3	6.7	203	89	11.8	263	121
6	320	"	"	"	"	271	45.2	6.8	207	90	12.0	264	123
7	315	"	"	"	"	266	44.3	6.7	203	89	11.8	264	121
8	313	"	"	"	"	264	44.0	6.6	202	88	11.6	262	120
9	313	"	"	"	"	264	44.0	6.6	202	88	11.6	262	120
20	327	"	"	"	"	273	45.5	6.8	208	91	12.1	270	124
1	316	82	41	41	"	267	44.5	6.7	204	89	11.8	265	122
2	330	"	"	"	"	281	46.8	7.0	214	94	12.5	276	127
3	321	"	"	"	"	272	45.3	6.8	208	91	12.1	269	123
4	317	"	"	"	"	268	44.7	6.7	205	89	11.9	266	122
5	322	81	40	"	"	273	45.5	6.8	208	91	12.1	270	124
26	323	"	"	"	"	274	45.7	6.8	209	91	12.1	271	124
7	324	"	"	"	"	275	45.8	6.8	210	92	12.2	272	125
8	326	"	"	"	"	277	46.2	6.9	212	92	12.3	273	125
9	321	80	40	40	"	273	45.5	6.8	208	91	12.1	269	123
30	329	"	"	"	"	281	46.8	7.0	214	94	12.5	275	126
Tot 31	328	"	"	"	"	280	46.7	7.0	214	93	12.4	274	126
Max						300	50.	7.50	229.	100	13.30	291.	134
Min						264	44.0	6.6	202	88	11.6	262	120
Mean						278	46.3	6.95	212	93	12.3	275	126
Sept Summary							50.	7.50	229.		13.30	314	
1	349	79	39	40	8.00	301	50.	7.50	229.	100.	13.30	291	136
2	336	"	39	40	"	288	48.0	7.20	220.	96	12.8	281	131
3	336	"	39	40	"	288	48.0	7.20	220.	96	12.8	281	131
4	335	78	39	39	"	288	48.0	7.20	220	96	12.8	280	131
5	346	"	39	39	"	299	49.9	7.50	228.	100	13.3	289	135
6	345	79	38	39	"	298	49.7	7.5	228	100	13.2	288	135

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for July & September 1918.

Table showing measurements of Provo River in Utah Valley and distribution to defendants in Utah Valley, U.P.&L. Co. under its award of 229 Sec. ft. and jointly & Provo Res. Co. by its Blue Cliff award and Wright estate and Dixon water.
Actual measurements and distribution are underscored, balance interpolated by daily discharge of River as observed at U.S.G.S. station.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	Disch. at U.S.G.S. Station	Total River Provo Canyon		Jointly & Pro Rata		Blue Cliff Pro Rata	Wright Dixon Pro Rata	Canyon Rights Percentage	U.P.&L. Co. Per Rata		Jointly Pro Rata	Defendants Percentage	Defendants Received
5	340.					50.	7.50	100	229			115	274.08
6	299	316		271		45	6.80	90	207		11.90	105	249
7	299	316		271		45	6.8	90	207		11.9	105	249
8	284	301		256		42	6.5	86	196		11.2	100	238
9	285	303		258		43	6.5	86	197		11.3	100	238
20	304	326		281		47	7.2	94	215		12.3	118	257
1	320	342		297		49	7.4	99	227		13.1	125	272
2	287	309		264		44	6.6	88	202		11.6	113	245
3	287	308.98		264.18		44.13	6.60	88	201.83		11.62	113	244.98
4	272	292		252		42	6.3	84	193		11.1	109	238
5	254	272		237		39	5.9	79	181		10.4	104	226
6	242	262		232		38	5.7	77	177		10.2	103	224
7	24.2	256		231		38	5.7	77	176		10.2	103	225
8	220	232		212		35	5.3	71	162		9.4	98	213
9	223	233		218		36	5.4	73	167		9.6	100	218
30	226	232		222		37	5.5	74	170		9.8	102	222
31	214	217.69		212.77		35.50	5.30	71	162.60		9.37	100	216.20
September.													
1	192	203		195		32	4.9	65	149	~~9.6~~	8.6	99	212
2	186	196		188		31	4.7	63	144	~~8.3~~	8.3	95	207
3	183	192		184		31	4.6	62	141	~~8.1~~	8.1	95	204
4	211	218		210		35	5.2	70	160	~~9.2~~	9.2	106	228
5	206	213		205		34	5.1	69	157	~~9.1~~	9.1	104	224
6	198	205.30		197.66		33.00	4.96	66	151.00	~~8.70~~	8.70	101	216.65

Fractional parts disregarded. This Table is plotted upon Plate IX

Total 16

Computations made by ....

Observations made by ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for August 1918.

Table showing Measurements of Provo River in Utah Valley and distribution to defendants in Utah Valley, up to Lighthouse under its award of 279 sec. feet, and quantity of Provo Reservoir Company by its Blue Cliff award and Wright Estate and Dixon water.
Actual measurements and distribution are undetermined. Balance interpolated by daily discharge of River as observed at USGS Station.

This Table is plotted upon Plate IX

Fractional parts disregarded.

NAME	Time (Disch at USGS Sta.)	G. H. (Total River Provo Canyon)	Disc.	Dec'd Net (Quantity to Per Rate)	Tran. Loss	Tran. Gain (Blue Cliff Per Rata)	Dec'd at St. (Wright Dixon Per Rata)	P. Cent Added (Canyon Pt Percentage)	Amt. Added (Up to L Per Rata)	Ent. Tot.	Correction at Station Add. (Timpanogos Per Rata)	Ded. (Defendants Percentage)	G. H. (Defendants Received)
1	214	217		212		35	5.3	71	162		9.4	100	218
2	214	217		212		35	5.3	71	162		9.4	101	219
3	223	225		219		36	5.5	73	168		9.6	104	226
4	217	219		213		35	5.3	71	163		9.4	101	219
5	214	216		209		35	5.2	70	160		9.2	100	216
6	251	252		245		41	6.1	82	187		10.8	112	244
7	223	224.30		217.06		36.24	5.43	72.4	165.84		9.55	101	220.44
8	221	222		215		36	5.4	72	164		9.5	101	220
9	220	225		218		36	5.4	72	166		9.6	104	226
10	218	225		219		36	5.5	73	168		9.6	104	226
11	220	227		221		37	5.5	74	169		9.7	104	227
12	221	228		222		37	5.5	74	170		9.7	106	230
13	209	216		211		35	5.3	71	162		9.3	102	222
14	204	211		206		34	5.1	69	157		9.1	101	219
15	208	223.14		218.28		36.50	5.41	73	166.77		9.6	105	228.44
16	201	216		211		35	5.3	71	162		9.3	102	223
17	200	215		210		35	5.3	71	162		9.3	102	223
18	192	208		202		34	5	67	154		8.9	98	213
19	185	201		195		32	4.9	65	149		8.6	95	207
20	188	204		197		33	4.9	65	150		8.7	96	209
21	189	205		198		33	4.9	66	151		8.7	96	209
22	186	202		194		32	4.8	65	148		8.5	96	209
23	186	202.06		194.42		32.47	4.86	65	148.54		8.55	95	206.45
24	186	201		193		32	4.8	64	147		8.5	95	206
25	180	194		186		31	4.6	62	142		8.2	92	201
26	171	185		177		29	4.4	59	135		7.7	90	195
27	179	182		174		29	4.3	58	133		7.7	93	203
28	183	196		188		31	4.7	63	144		8.3	94	204
29	178	190		182		30	4.5	61	139		8.	92	201
30	178	190		182		30	4.5	61	139		8.	92	201
31	178	189		181		30	4.5	60	138		8.	92	201
Total 17													

Computations made by .... Observations made by ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for April 1905–1918.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
To Use observed Discharge in reed Measur Inflow Curve for purpose of "Box Hydrograph"													

Date	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
1	274	596	438	360	490	635	530	474	926	449	438	594	536	467
2	274	506	520	360	550	635	570	440	1150	468	395	655	536	468
3	274	558	608	360	640	635	615	474	754	469	414	738	448	468
4	274	374	654	360	690	635	530	488	612	557	434	690	382	434
5	258	374	746	325	570	870	510	537	652	598	447	660	431	434
6	275	375	747	326	531	686	641	500	634	660	427	610	484	434
7	275	375	701	361	471	591	491	486	535	642	437	569	574	434
8	275	419	609	361	471	636	511	511	517	622	450	580	650	418
9	275	463	609	361	491	709	511	509	517	583	443	603	856	418
10	306	551	797	361	511	731	551	570	517	627	410	672	814	435
1	356	551	941	361	511	849	531	504	535	696	417	777	814	504
2	322	551	991	361	511	893	471	475	594	646	417	916	899	504
3	322	463	1306	399	531	871	457	451	635	646	415	770	899	522
4	322	463	1446	439	551	871	431	425	716	706	438	757	942	577
5	323	508	1582	480	692	850	412	415	758	876	464	769	857	541
6	357	508	1582	522	807	777	452	442	698	1069	498	850	692	488
7	357	598	1417	656	922	732	412	403	719	1018	505	912	653	469
8	357	692	1252	610	1197	777	357	426	846	921	505	938	615	435
9	357	692	1092	610	1372	872	340	440	891	921	548	920	615	435
20	357	644	942	702	1247	944	340	410	761	968	558	811	596	419
1	325	692	796	748	997	1102	307	403	720	1130	587	773	732	402
2	357	740	796	796	852	1102	322	395	761	1128	606	712	943	402
3	357	836	796	892	832	1017	340	389	762	1129	573	713	1073	402
4	358	789	797	845	923	1073	358	397	722	1019	545	793	1175	436
5	358	741	797	797	873	1198	393	417	681	1068	557	860	1357	436
6	431	693	797	703	923	1348	453	417	680	1018	512	998	1483	470
7	431	645	845	703	1173	1448	473	411	720	1018	525	1023	1307	420
8	431	599	993	657	1248	1423	493	427	845	877	546	1141	1042	352
9	431	599	993	611	1223	1423	533	453	1036	877	579	1215	865	336
30	509	554	944	568	1074	1324	554	452	1224	878	690	1113	780	337

Total 16

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for May 1905 – 1918

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
To U&SL. observed discharge is added mean Difference Curve for "Box Hydrograph"													

Day	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
1	470	554	944	524	1024	1249	574	472	937	792	588	983	780	338
2	470	554	944	658	874	1124	514	462	889	792	544	982	998	354
3	509	554	846	704	924	946	554	445	800	730	479	857	824	346
4	470	600	750	798	1124	996	434	445	718	880	418	855	824	331
5	396	695	751	751	1350	920	515	436	717	973	357	965	783	397
6	360	791	705	895	1350	875	575	427	718	1023	300	1076	742	464
7	360	779	705	799	1425	757	715	432	758	996	284	1147	783	487
8	360	743	659	799	1525	897	695	480	842	1049	277	1280	825	470
9	414	791	659	895	1525	947	735	517	931	1216	252	1319	825	543
10	396	937	659	995	1795	1105	785	563	885	1275	245	1357	867	543
1	397	984	800	896	1916	1451	696	640	934	1338	235	1250	956	479
2	361	1362	896	848	1626	1426	736	669	983	1007	230	1163	1000	489
3	361	1410	1046	996	1476	1376	696	657	946	998	224	1075	1090	404
4	361	1174	896	896	1426	1426	761	656	889	1040	224	954	1310	371
5	362	985	753	849	1452	1372	837	589	763	1166	273	889	1633	356
6	328	939	953	849	1477	1127	762	685	680	1217	271	757	1909	372
7	362	889	899	897	1377	1107	787	738	639	1184	319	678	1909	372
8	416	793	1047	897	1327	932	787	802	619	1345	467	622	1839	618
9	474	842	1313	898	1378	878	763	900	722	1344	421	612	1840	544
20	494	1078	1708	1098	1503	760	788	983	720	1342	382	668	1840	491
1	553	1174	2068	998	1578	808	738	1048	639	1482	384	644	1767	491
2	595	1271	2249	949	1679	809	719	1010	579	1623	347	644	1328	564
3	637	1317	2249	949	1679	784	789	838	619	1623	327	690	1325	495
4	659	1317	2369	1099	1629	809	789	782	760	1843	297	698	1325	623
5	638	1318	2190	950	1480	810	840	826	891	1694	314	668	1252	741
6	638	1656	1710	1050	1430	980	840	902	1039	1482	363	637	1142	782
7	681	1414	1480	1100	1580	925	840	929	1041	1283	340	592	1201	740
8	726	1367	1316	1051	1831	881	741	928	990	1413	320	572	1102	662
9	771	1463	1206	1001	1741	953	676	892	987	1483	320	644	1097	602
30	683	1368	1152	1002	1712	1132	702	1109	896	1343	398	736	1196	660
1	662	1130	1152	1052	1742	1027	742	1978	854	1485	438	899	1146	660

Total 19

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow ~~and Distribution~~ of Provo River for June 1905 - 1918.

	NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.

To most observed discharge is added Mean Inflow Curve for ~~Provo~~ ~~Hydrograph~~ "Provo"

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
1	796	1369	1153	1103	1683	1028	933	1203	733	1485	499	1018	1097	701
2	912	1131	1318	1003	1863	983	983	1305	715	1485	777	1078	1054	655
3	960	946	1774	1054	2344	929	884	1491	697	1556	749	931	1057	695
4	1007	992	1834	1004	2884	862	959	1800	657	1696	575	926	1150	904
5	1089	993	2015	1105	3445	790	1115	1917	587	1557	651	1085	1279	951
6	961	1039	2195	1055	3585	885	1215	1895	523	1346	591	1239	1199	1084
7	915	1468	2316	1006	3656	1061	1286	2008	506	1286	612	1229	1200	1084
8	1105	1134	2376	1056	3316	526	1216	2212	472	1060	576	1158	1320	1084
9	1252	949	2197	1007	2627	467	1187	2179	456	961	579	1186	1441	1243
10	1155	1042	1898	1008	2568	390	1188	2122	422	828	600	1258	1772	1184
1	918	951	1324	1109	2509	391	1119	1700	406	829	762	1237	2193	1185
2	803	1424	1720	1380	2390	375	1040	1402	406	828	784	1185	1766	1249
3	823	1616	2080	1380	2330	392	1140	1288	423	872	618	1106	1571	1089
4	828	1914	1720	1490	2331	411	1141	1391	389	916	597	1124	1447	1090
5	782	1618	1547	1602	2152	394	1362	1136	367	918	500	1117	1686	1091
6	760	1523	1328	1843	2153	378	1163	950	370	919	500	1039	1939	1097
7	695	1524	1219	1724	2214	344	1144	858	363	1014	491	1058	2180	1010
8	653	1287	1220	1495	2155	330	1045	678	388	830	533	982	2404	881
9	571	1192	1386	1331	2396	346	946	623	373	831	511	958	2555	842
20	513	1097	1607	1222	2157	317	897	662	362	876	512	950	2403	758
1	494	1006	1728	1333	1978	288	898	671	345	794	508	909	2332	719
2	515	961	1909	1389	1799	319	859	764	335	755	442	877	2328	681
3	496	912	1970	1445	1800	320	720	786	328	695	411	759	2254	605
4	478	913	1501	1281	1861	276	721	786	336	630	386	681	2245	569
5	479	964	1337	1282	1802	292	687	805	337	611	377	652	2400	499
6	449	1011	1338	1338	1923	278	583	795	373	540	326	615	1961	461
7	389	1200	1394	1339	1774	294	564	666	478	558	364	525	1822	339
8	373	1105	1615	1285	1805	280	465	635	709	465	355	491	1631	340
9	357	632	1796	1231	1746	296	466	570	752	434	346	516	1570	300
30	358	587	1857	1127	1687	282	392	529	552	420	347	455	1519	293

Total 20

Computations made by _____ Observations made by _____

Provo Reservoir Co.
vs.
Provo City et al
2888 Civil

Tabulation of Flow and Distribution of Provo River for April 1905-1918.

Day	NAME 1905	1906	1907	Time 1908	G. H. 1909	Disc. 1910	Dec'd Net 1911	Trans. Loss 1912	Trans. Gain 1913	Dec'd at St. 1914	P. Cent Added 1915	Amt. Added 1916	Est. Tot. 1917	Correction at Station Add.	Ded.
1	254	576	418	340	470	615	510	454	906	429	418	574	516	447	20
2	254	486	500	340	530	615	550	420	1130	448	375	635	516	448	20
3	254	530	588	340	620	615	595	454	734	449	394	718	428	448	20
4	254	354	634	340	670	615	510	468	592	537	414	670	362	414	20
5	238	354	726	305	550	850	490	517	632	578	427	640	411	414	20
6	254	354	726	305	570	665	620	479	613	639	406	584	463	413	21
7	254	354	680	340	450	570	470	465	514	621	416	548	553	413	21
8	254	398	588	340	450	615	490	490	496	601	429	559	629	397	21
9	254	442	588	340	470	688	490	488	496	562	422	572	835	397	21
10	285	530	726	340	490	710	530	529	496	606	389	651	793	414	21
1	335	530	920	340	490	828	510	483	574	665	396	756	793	483	21
2	301	530	970	340	490	872	450	454	573	625	396	895	878	483	21
3	301	442	1288	378	510	850	430	430	614	625	394	749	878	501	21
4	301	442	1395	418	530	850	410	404	695	685	417	736	921	556	21
5	301	486	1560	458	670	828	390	393	736	854	442	747	835	519	22
6	335	486	1560	500	785	755	430	390	676	1047	476	828	670	466	22
7	335	576	1395	634	900	710	390	381	697	996	483	890	631	447	22
8	335	670	1230	588	1175	755	335	404	824	899	483	916	593	413	22
9	335	670	1070	588	1350	850	318	388	869	899	526	898	593	413	22
10	335	622	920	680	1275	922	318	388	739	946	536	789	574	399	22
1	353	670	774	726	975	1080	285	381	698	108	565	751	710	380	22
2	335	718	774	774	830	1080	300	373	739	1106	584	690	921	380	22
3	335	814	774	870	810	995	318	367	740	1107	551	691	1051	380	22
4	335	766	774	822	900	1050	335	374	699	946	522	760	1152	413	22
5	335	718	774	774	850	1175	370	394	658	1045	534	837	1334	413	23
6	408	670	774	680	900	1325	430	394	657	995	491	975	1460	447	23
7	408	622	822	680	1150	1425	450	388	697	995	502	1000	1284	397	23
8	408	576	970	634	1225	1450	470	404	822	854	523	1118	1019	329	23
9	408	576	970	588	1200	1400	510	420	1013	854	556	1192	842	313	23
10	485	530	920	544	1000	1380	530	428	1200	854	666	1089	756	313	24

19457
797
496
648

Observations made by

Observations made by

Provo Reservoir Co.
vs.
Provo City et al } **2888 Civil**

Tabulation of Flow and Distribution of Provo River for April 1905-1918.

Day	NAME 1905	1906	Time 1907	G. H. 1908	Disc. 1909	Dec'd Net 1910	Trans. Loss 1911	Trans. Gain 1912	Dec'd at St. 1913	P. Cent Added 1914	Amt. Added 1915	Est. Tot. 1916	Correction at Station Add. 1917	Ded. Jordan Canal Loss 1918	G. H. Flow
1	254	576	418	340	470	615	510	454	906	429	418	574			
2	254	486	500	340	530	615	550	420	1130	448	375	635	516	447	20 515
3	254	530	588	340	620	615	595	454	734	449	394	718	516	448	20 538
4	254	354	634	340	670	615	510	468	592	537	414	670	428	448	20 532
5	238	354	726	305	550	850	490	517	632	578	427	640	362	414	20 509
6	254	354	726	305	510	665	620	479	613	639	406	589	411	414	20 529
7	254	354	680	340	450	570	470	465	514	621	416	548	463	413	21 524
8	254	398	588	340	450	615	490	490	496	601	429	559	553	413	21 496
9	254	442	588	340	470	688	490	488	496	562	422	572	629	397	21 502
10	285	530	726	340	490	710	530	529	496	606	389	651	835	397	21 525
1	335	530	920	340	490	828	510	483	514	665	396	756	793	414	21 557
2	301	530	970	340	490	872	450	454	573	625	396	895	793	483	21 596
3	301	442	1285	378	510	850	430	430	614	625	394	749	878	483	21 611
4	301	442	1395	418	530	850	410	404	695	685	417	736	878	501	21 620
5	301	486	1560	458	670	828	390	393	736	854	442	742	921	556	21 647
6	335	486	1560	500	785	755	430	390	676	1047	476	828	835	519	22 631
7	335	576	1395	634	900	710	390	381	697	996	483	890	670	466	22 694
8	335	670	1230	588	1175	755	335	404	824	899	483	916	631	447	22 698
9	335	670	1070	588	1350	850	318	388	869	899	526	898	593	413	22 709
10	335	622	920	680	1275	922	318	388	739	946	536	789	593	413	22 720
1	353	670	774	726	975	1080	285	381	698	1108	565	751	574	397	22 696
2	335	718	774	774	830	1080	300	373	739	1106	584	690	710	380	22 699
3	335	814	774	870	810	995	318	367	740	1107	551	691	921	380	22 708
4	335	766	774	822	900	1050	335	374	699	996	522	760	1051	380	22 722
5	335	718	774	774	850	1175	370	394	658	1045	534	837	1152	413	23 730
6	408	670	774	680	900	1325	430	394	657	995	491	975	1334	413	23 752
7	408	622	822	680	1150	1425	450	388	647	995	502	1000	1460	447	23 781
8	408	576	970	634	1225	1450	470	404	822	854	523	1118	1284	397	23 796
9	408	576	970	588	1200	1400	510	420	1013	854	556	1192	1019	329	23 795
30	485	530	920	544	1000	1300	530	428	1200	854	666	1089	842	313	23 797
													756	313	24 772

19457
797
496
648

21

Total

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al
2888 Civil

Tabulation of Flow and Distribution of Provo River for May 1905-1916

NAME		Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Est. Tot.	Correction at Station		
												Add.	Ded.	G. H.
1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	Above Provo Power Canal
446	530	920	500	1000	1225	550	448	913	768	564	959	756	314	24	131
446	530	920	634	850	1100	490	438	865	768	520	858	974	330	24	719
485	530	822	680	900	922	530	421	776	706	455	833	800	322	24	680
446	576	726	774	1100	972	410	421	694	856	394	831	800	307	24	689
521	670	726	726	1325	895	490	411	692	948	332	940	758	372	25	715
535	766	680	870	1325	850	550	402	693	998	275	1051	717	439	25	736
5	354	680	774	1400	732	690	407	733	971	259	1122	758	462	25	716
5	718	634	774	1500	872	670	465	817	1024	252	1265	800	445	25	780
	766	634	870	1500	922	710	492	906	1191	227	1294	800			
	912	634	970	1770	1080	760	538	860	1250						

vs.

Provo City et al — **2888 Civil**

Tabulation of Flow and Distribution of Provo River for May 1905-1916.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Est. Tot.	Corrections at Station Add.	Corrections at Station Ded.	G. H.
1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918		
446	530	920	500	1000	1225	550	448	913	768	564	959			Above Heber Conn.	Above
46	530	920	634	850	1100	490	438	865	768	520	858	756	314	24	931
85	530	822	680	900	922	530	421	776	706	455	833	974	330	24	719
6	576	726	774	1100	972	410	421	694	856	394	831	800	322	24	680
	670	726	726	1325	895	490	411	692	948	332	940	758	307	24	689
	766	680	870	1325	850	550	402	693	998	275	1051	717	372	25	715
354		680	774	1400	732	690	407	733	971	259	1122	758	439	25	736
18		634	774	1500	872	670	465	817	1044	252	1265	800	462	25	
6		634	870	1500	922	710	492	906	1191	227					
		634	970	1770	1080	760	538	860	1258						

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for May 1905-1916

Day	NAME 1905	1906	1907	Time 1908	G. H. 1909	Disc. 1910	Dec'd Net 1911	Tran. Loss 1912	Tran. Gain 1913	Dec'd at St. 1914	P. Cent Added 1915	Amt. Added 1916	Ent. Tot. 1917	Correction at Station Add. 1918	Ded.	G. H.
														Weir Above Conn		River
1	446	530	920	500	1000	1225	550	448	913	768	564	959	756	314	24	731
2	446	530	920	634	850	1100	490	438	865	768	520	858	974	330	24	719
3	485	530	822	680	900	922	530	421	776	706	455	833	800	322	24	680
4	446	576	726	774	1100	972	410	421	694	256	394	831	800	307	24	689
5	311	670	726	726	1325	895	490	411	692	948	332	940	758	372	25	715
6	335	766	680	870	1325	850	550	402	693	998	275	1051	717	439	25	736
7	335	354	680	774	1400	732	690	407	733	971	259	1122	758	462	25	716
8	335	718	634	774	1500	872	670	465	817	1024	252	1265	800	445	25	780
9	389	766	634	870	1500	922	710	492	906	1191	227	1294	800	518	25	826
10	371	912	634	970	1770	1080	760	538	860	1250	220	1332	842	518	25	886
1	371	958	774	870	1890	1425	670	614	908	1312	209	1224	930	463	26	927
2	335	1336	870	822	1600	1400	710	643	957	1081	204	1137	974	463	26	921
3	335	1384	1020	970	1450	1350	670	631	910	972	198	1049	1064	378	26	910
4	335	1098	870	870	1400	1400	735	630	863	1014	198	929	1284	345	26	881
5	335	958	726	822	1425	1350	810	562	736	1139	246	862	1606	329	27	877
6	301	912	726	822	1450	1100	735	658	653	1190	244	730	1882	345	27	866
7	335	862	870	870	1350	1080	760	711	612	1257	292	657	1882	345	27	876
8	389	766	1020	870	1300	895	760	775	592	1318	440	595	1812	591	27	893
9	446	814	1285	870	1350	850	735	872	694	1316	393	584	1812	516	28	924
20	466	1050	1680	1070	1475	732	760	955	692	1314	354	640	1812	463	28	990
1	525	1146	2040	970	1550	780	710	1020	611	1454	356	616	1739	463	28	1027
2	566	1242	2220	920	1650	780	690	981	550	1594	318	615	1299	535	29	1026
3	608	1288	2220	920	1650	755	760	809	590	1594	298	661	1296	466	29	1023
4	630	1288	2340	1070	1600	780	760	753	931	1814	268	669	1296	594	29	1071
5	608	1288	2160	920	1450	780	810	796	861	1664	284	638	1222	711	30	1044
6	608	1626	1680	1020	1400	950	810	872	1009	1452	333	607	1112	752	30	1046
7	651	1384	1450	1070	1550	895	810	899	1011	1253	310	562	1171	710	30	1010
8	695	1336	1285	1020	1800	850	710	897	959	1382	289	541	1071	631	31	993
9	740	1432	1175	970	1710	922	645	861	956	1452	289	613	1066	571	31	935
30	651	1336	1120	970	1680	1100	670	1077	864	1311	366	704	1164	628	32	1004
1	630	1098	1120	1020	1710	995	710	1946	822	1452	406	867	1114	628	32	1069
Tot.																27847
Max																1071
Min																680
Mean																898
Total																

Computations made by ..... **Observations made by** .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River.

Tabulation of Flow and Distribution of Provo River for June 1905-1916.

Day	NAME 1905	1906	1907	Time 1908	G. H. 1909	Disc. 1910	Dec'd Net 1911	Tran. Loss 1912	Tran. Gain 1913	Dec'd at St. 1914	P. Cent Added 1915	Amt. Added 1916	Ent. Tot. 1917	Correction at Station Add. 1918	Ded. Spring Creek	G. H. Provo
1	763	1336	1120	1070	1650	995	900	1170	700	1452	466	985	1064	668	33	1057
2	879	1098	1285	990	1830	950	950	1272	682	1452	744	1045	1023	622	33	1090
3	926	912	1740	1020	2310	895	850	1457	663	1522	715	897	1023	661	34	1148
4	973	958	1800	990	2850	828	925	1766	623	1662	541	892	1116	870	34	1232
5	1054	958	1980	1070	3410	755	1080	1882	549	1522	616	1050	1224	916	35	1325
6	926	1004	2160	1020	3550	850	1180	1860	488	1311	556	1204	1164	1049	35	1344
7	879	1432	2280	990	3620	1025	1250	1972	470	1250	576	1193	1164	1045	36	1402
8	1069	1098	2340	1020	3280	490	1180	2176	436	1024	540	1122	1284	1045	36	1329
9	1215	912	2160	990	3590	430	1150	2142	419	924	542	1149	1404	1206	37	1267
10	1117	1004	1860	990	3530	352	1150	2084	384	790	562	1220	1734	1146	38	1245
1	879	912	1285	1070	2470	352	1080	1661	367	790	723	1198	2154	1146	39	1155
2	763	1384	1680	1340	2350	335	1000	1362	366	785	744	1145	1726	1209	40	1197
3	763	1576	2040	1340	2790	352	1100	1248	383	532	578	1066	1531	1049	40	1193
4	786	1876	1680	1450	2290	370	1100	1350	348	875	556	1083	1406	1049	41	1199
5	740	1576	1505	1560	2110	352	1320	1094	325	876	458	1075	1644	1049	42	1162
6	717	1480	1285	1800	2110	335	1120	907	327	876	457	996	1996	1054	43	1147
7	651	1480	1175	1680	2170	300	1100	814	319	970	449	1014	2136	966	44	1131
8	608	1242	1175	1450	2110	285	1000	633	343	785	478	937	2359	836	45	1063
9	525	1146	1340	1285	2350	300	900	577	327	785	465	912	2509	796	46	1062
20	466	1050	1560	1195	2110	270	850	615	315	829	465	903	2356	711	47	1024
1	446	958	1680	1285	1930	241	850	623	297	746	460	861	2284	671	48	1000
2	466	912	1860	1340	1750	270	810	715	286	706	393	528	2279	632	49	995
3	446	862	1920	1395	1750	270	670	738	278	645	361	709	2204	555	50	964
4	427	862	1450	1230	1810	225	670	735	255	579	335	630	2194	518	51	905
5	427	912	1285	1230	1750	240	595	753	285	559	325	600	2045	447	52	870
6	446	958	1285	1285	1870	225	530	652	320	487	273	562	1908	348	53	849
7	335	1146	1340	1285	1720	240	510	612	424	504	310	471	1765	285	54	836
8	318	1050	1560	1230	1750	225	410	580	654	410	300	436	1576	285	55	825
9	301	576	1740	1175	1690	240	410	514	696	378	290	460	1514	244	56	787
30	301	530	1800	1070	1630	225	335	472	495	363	290	398	1462	236	57	743
Tot.																32587
Max																1402
min																743
Mean																1086

23

Total

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al } **2888 Civil**

Natural Provo River Utah Valley.

Tabulation of Flow and Distribution of Provo River for JULY.

	NAME		Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
Day.	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	River.
	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		
1	266	544	1738	1128	1672	307	389	456	494	431	318	480	1492	296	715
2	251	545	1919	1079	1563	323	375	417	424	448	318	464	1373	275	698
3	251	546	1980	1080	1564	324	361	400	408	433	316	461	1256	271	689
4	251	547	1981	1031	1615	310	362	392	392	443	319	431	1203	271	682
5	250	548	2162	1032	1516	326	393	378	393	467	319	439	1062	294	684
6	250	549	2103	1033	1467	327	394	364	364	452	288	436	1055	215	670
7	250	506	1984	1034	1318	328	370	316	360	436	281	428	1012	294	636
8	249	507	1745	935	1119	299	381	318	333	438	286	432	1143	271	604
9	248	420	1571	888	1020	300	382	306	321	424	284	430	1014	268	563
10	247	422	1463	890	972	302	309	308	322	425	284	426	397	297	541
1	247	338	1410	796	974	334	326	304	311	441	263	414	809	381	526
2	246	339	1246	765	830	305	342	314	313	427	278	409	732	331	491
3	244	340	1192	734	651	351	373	319	300	428	283	396	644	327	477
4	243	342	1249	704	493	338	375	327	297	444	283	400	590	345	459
5	258	385	1145	673	459	339	361	325	303	430	281	401	537	344	446
6	241	344	1046	642	478	340	377	327	293	430	281	402	521	302	430
7	239	345	947	611	443	356	408	313	289	413	279	411	506	301	419
8	238	346	822	580	444	342	409	309	303	404	276	403	488	286	404
9	221	347	853	549	428	343	380	313	313	401	282	392	472	287	399
20	219	348	806	518	446	344	381	336	303	402	278	378	457	311	395
1	219	349	761	484	447	345	430	329	300	435	275	381	428	327	394
2	218	349	715	452	430	330	430	320	313	422	277	382	429	295	383
3	218	392	716	421	416	331	398	313	316	408	274	380	418	297	378
4	216	392	670	389	431	346	383	306	313	409	266	379	416	285	371
5	216	351	671	358	417	332	399	310	309	410	266	381	416	269	365
6	201	351	671	358	432	302	384	296	287	405	262	380	418	265	358
7	204	351	627	324	402	287	384	304	299	407	261	375	432	266	352
8	207	351	627	341	402	317	354	305	289	406	244	421	418	249	352
9	210	352	584	342	403	348	385	307	285	404	244	414	464	354	354
30	213	310	542	376	388	348	400	307	282	418	233	389	574	259	360
1	223	310	542	394	403	348	355	320	270	432	232	370	596	249	360
		✓	✓										✓		
Tot.	7254	12466	36488	20941	24043	10172	11760	10259	10099	~~[illegible]~~ / 13173	8651	12655	22279	~~[illegible]~~ / 9043	14952
Max	266	507	2162	1128	1672	356	430	456	494	452	319	480	1492	381	715
Min	201	310	542	324	388	287	309	296	270	401	232	370	416	249	352
Mean	234	402	1177	676	776	328	379	331	326	425	279	409	719	292	482

Average of Maxima 757

" of Minima 338

Total 24

F.W.

Computations made by .... **Observations made by** ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Natural Provo River Utah Valley

Tabulation of Flow and Distribution of Provo River for JULY.

Day.	NAME		Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	1905 ✓	1906 ✓	1907 ✓	1908 ✓	1909 ✓	1910 ✓	1911 ✓	1912	1913 ✓	1914 ✓	1915 ✓	1916 ✓	1917 ✓	1918	River.
1	266	544	1738	1128	1672	307	389	456	494	431	318	480	1492	296	715
2	251	545	1919	1079	1563	323	375	417	424	448	318	464	1373	275	698
3	251	546	1980	1080	1564	324	361	400	408	433	316	461	1256	271	689
4	251	547	1981	1031	1615	310	362	392	392	443	319	431	1203	271	682
5	250	548	2162	1032	1516	326	393	378	393	467	319	439	1062	294	654
6	250	549	2103	1033	1467	327	394	364	364	452	288	436	1055	295	670
7	250	506	1984	1034	1318	328	370	316	360	436	281	428	1012	294	636
8	249	507	1745	935	1119	299	381	318	333	438	286	432	1143	271	604
9	248	420	1571	888	1020	300	382	306	321	424	284	430	1074	268	563
10	247	422	1463	890	972	302	309	308	322	425	284	426	897	297	541
1	247	338	1410	796	974	334	326	304	311	441	263	414	809	381	526
2	246	339	1246	765	830	305	342	314	313	427	278	409	732	331	491
3	244	340	1192	734	651	351	373	319	300	428	283	396	644	327	477
4	243	342	1249	704	493	338	375	327	297	444	283	400	590	345	459
5	258	385	1145	673	459	339	361	325	303	430	281	401	537	344	446
6	241	344	1046	642	478	340	377	327	293	430	281	402	521	302	430
7	239	345	947	611	443	356	408	313	289	413	279	411	506	301	419
8	238	346	822	580	444	342	409	309	303	404	276	403	488	286	404
9	221	347	853	549	428	343	380	313	313	401	282	392	472	288	399
20	219	348	806	518	446	344	381	336	303	402	278	378	457	311	395
1	219	349	761	484	447	345	430	329	300	435	275	381	428	327	394
2	218	349	715	452	430	330	430	320	313	422	277	382	429	295	383
3	218	392	716	421	416	331	398	313	316	408	274	380	418	297	378
4	216	392	670	389	431	346	383	306	313	409	266	379	416	285	371
5	216	351	671	358	417	332	399	310	309	410	266	381	416	269	365
6	201	351	671	358	432	302	384	296	287	405	262	380	418	265	358
7	204	351	627	324	402	287	384	304	299	407	261	375	432	266	352
8	207	351	627	341	402	317	354	305	289	406	244	421	418	249	352
9	210	352	584	342	403	348	385	307	285	404	244	414	464	354	354
30	213	310	542	376	388	348	400	307	282	418	233	389	574	259	360
1	223	310	542	394	403	348	355	320	270	432	232	370	596	249	360
Tot.	7254	12466 ✓	36488 ✓	20941	24043	10172	11760	10259	10099	13173 ~~13144~~	8651	12655	22[illegible] ✓	9043 ~~9144~~	14952
Max	266	507	2162	1128	1672	356	430	456	494	452	319	480	1492	381	715
Min	201	310	542	324	388	287	309	296	270	401	232	370	416	249	352
Mean	234	402	1177	676	776	328	379	331	326	425	279	409	719	292	482

Average of Maxima 757
" of Minima 338

Total — ✓ F.W.

Computations made by .... **Observations made by** ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Natural Provo River Utah Valley.

Tabulation of Flow and Distribution of Provo River for August.

Day	NAME		Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
1	225	310	542	394	378	378	355	328	270	416	234	377	525	250	356
2	219	352	542	359	418	348	287	329	271	431	235	365	492	251	350
3	228	352	502	332	403	348	287	327	266	415	243	368	443	261	344
4	199	352	542	332	403	348	287	353	279	414	245	364	412	256	342
5	201	352	502	309	378	363	275	335	281	398	245	400	410	254	336
6	202	310	502	376	433	363	287	323	273	397	244	419	412	291	345
7	203	310	462	430	450	333	287	323	273	395	246	389	412	264	341
8	204	310	462	394	418	333	287	319	273	396	243	389	381	262	334
9	206	310	462	332	403	318	275	307	273	395	239	372	412	267	327
10	208	310	462	332	403	333	275	301	275	395	240	366	412	266	327
1	225	268	462	376	418	318	275	303	272	369	245	364	413	268	327
2	226	268	462	430	433	333	275	301	280	366	242	363	401	269	332
3	212	268	424	412	403	318	275	299	274	361	241	375	407	258	323
4	198	268	424	376	403	318	275	294	264	357	243	359	406	253	317
5	200	267	423	358	377	312	274	311	264	354	243	356	407	265	315
6	216	267	423	324	467	319	274	304	260	353	247	366	410	258	320
7	218	267	423	324	402	317	274	301	261	353	242	359	411	258	315
8	189	267	423	308	417	317	274	316	260	348	252	349	412	247	313
9	220	267	423	308	432	302	262	312	263	348	244	343	415	240	313
20	197	432	423	324	417	302	262	306	264	344	241	337	415	243	322
1	194	350	422	323	416	301	273	309	264	345	232	336	414	244	316
2	195	436	422	323	536	316	273	300	263	352	232	333	400	240	330
3	194	397	422	307	466	301	273	300	265	361	236	338	399	240	321
4	193	350	422	307	448	286	285	299	281	362	238	334	397	240	317
5	191	349	468	306	465	315	284	299	272	352	238	344	396	234	322
6	190	349	468	306	465	315	284	299	269	366	243	345	392	225	323
7	173	349	468	306	483	315	284	333	268	364	243	330	391	232	324
8	186	349	468	306	465	315	284	349	268	367	240	337	390	236	326
9	174	348	467	305	446	314	283	327	268	375	240	330	390	231	321
30	190	348	498	305	576	314	283	327	267	373	241	326	389	230	329
1	189	348	467	305	499	314	283	326	274	373	244	351	388	230	328
Tot.	6269	10080	14282	10529	13941	10030	8711	9805	8356	11595	7481	11084	12757	7763	10157
Max	228	437	542	430	536	378	355	372	282	431	252	419	525	291	356
Min.	173	267	422	305	377	286	262	294	260	344	232	326	388	225	313
Mean	202	325	461	340	434	323	281	316	270	374	241	358	412	250	328

Average of Maxima 391
" " Minima 297

Total 25

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Natural Provo River Utah Valley.

Tabulation of Flow and Distribution of Provo River for September.

Day	NAME 1905		Time 1907	G. H. 1908	Disc. 1909	Dec'd Net 1910	Tran. Loss 1911	Tran. Gain 1912	Dec'd at St. 1913	P. Cent Added 1914	Amt. Added 1915	Ent. Tot. 1916	Correction at Station Add. 1917	Ded. 1918	G. H. Mean
1	190	389	466	304	763	313	28r	315	284	378	27	358	377	243	349
r	162	389	466	304	638	313	28r	315	304	370	237	329	346	237	336
3	162	389	466	304	613	313	305	317	292	364	234	339	360	233	336
4	162	388	465	303	57r	312	294	312	29r	374	261	331	359	261	335
5	163	388	578	303	637	312	294	319	298	363	257	333	354	255	346
6	162	387	577	302	611	311	280	326	286	364	267	333	383	246	345
7	163	387	495	302	611	311	280	320	286	368	257	341	446	250	344
8	163	387	495	302	611	311	280	320	298	363	252	335	408	247	341
9	163	386	494	317	635	310	29r	387	296	361	252	357	391	264	350
10	163	344	494	301	570	310	29r	39r	288	347	281	426	390	263	347
1	164	344	494	317	570	310	279	398	293	337	294	397	440	25r	349
r	163	343	493	316	569	309	278	371	289	336	285	389	453	254	347
3	164	343	493	316	569	309	291	375	294	333	282	370	403	257	343
4	163	385	462	316	569	339	291	377	310	335	279	371	403	255	347
5	164	384	461	315	568	338	290	386	296	388	277	375	402	277	35r
6	164	384	461	315	568	353	290	385	295	387	273	384	411	28r	354
7	164	383	460	314	567	367	289	392	294	387	273	382	410	263	353
8	164	383	460	314	567	367	289	385	291	386	272	378	411	262	352
9	164	382	412	297	456	366	288	377	283	365	272	389	408	260	337
20	164	382	412	297	438	366	288	357	280	385	271	383	407	255	335
21	164	340	459	297	421	351	275	367	277	378	269	368	390	253	329
r	151	339	458	296	420	350	274	364	287	385	275	362	389	255	321
3	152	339	458	296	507	350	287	356	291	371	265	397	432	373	345
4	151	338	457	295	454	349	326	353	285	377	266	374	464	334	345
5	165	338	457	328	489	349	299	350	282	370	280	382	461	330	349
6	164	295	456	433	603	348	285	349	281	375	308	377	465	290	359
7	164	337	456	379	583	363	310	349	284	391	301	365	453	288	358
8	148	337	456	397	503	363	310	345	275	372	287	370	457	286	350
9	189	338	455	396	56r	347	309	345	273	366	285	35r	439	275	353
30	188	338	455	396	607	347	284	342	265	379	287	350	443	276	354
Tot.	4927	10886	14171	9672	16866	10057	7713	10641	8649	11045	8162	11007	12385	8079	10374
Max	190	389	578	433	763	367	326	398	310	388	308	426	465	373	359
Min	148	295	412	295	420	309	274	312	265	333	227	331	346	233	329
Mean	164	363	457	322	562	335	290	355	288	368	272	367	412	269	345

average of Maxima 406
" " Minima 300

Total

Computations made by F.W.

Observations made by

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

~~Tabulation of Flow and Distribution of Provo River for~~ April 1889-1904.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.

April.

Year.	Max	Min	Mean
1889			
1890	1240	500	840
91	930	280	478
92	440	330	377
93	928	380	638
94	1084	564	687
95	1050	444	683
96	1518	390	629
97	1320	712	856
98	972	390	566
99	1052	582	855
1900			
01	788	302	392
02			
03			
04	680	353	486
Total.	12002	5227	7487
Max	1518	712	856
Min	440	280	377
average ~~Mean~~	1000	435	624

Loss & Inflow assumed to be equal.

27

Total

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for May 1889-1904

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.

MAY.

Year.	Max.	Min	Mean
1889			
1890	2180	1316	1926
91	1704	851	1226
92	1780	774	1079
93	2340	564	1237
94	1860	851	1449
95	1760	968	1216
96	4150	581	1166
97	2600	1320	1856
98	1132	812	957
99	1454	652	1169
1900			
01	2093	587	1181
02	~~3153~~	~~461~~	
03			
04	2153	461	1145
Totals.	25206	9737	15607
Max	4150	1320	1926
Min	1132	461	957
average.	2100	811	1301

Loss & Influx assumed & Legend.

28

Total

Computations made by ..... Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for June 1889-1904.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.

JUNE.

Year	Max	Min	Mean
1889			
1890	2260	440	1184
91	1470	851	1190
92	1626	1316	1511
93	2260	774	1580
94	1940	380	1110
95	968	292	542
96	3345	444	1558
97	1472	360	796
98	1212	287	823
99	3310	1454	2345
1900	1310	155	404
01	875	224	399
02			
03			
04	1625	371	1131
Totals.	23673	7348	14573
Max	3345	1454	2345
Min	875	155	399
Average.	1821	565	1121

Loss & Inflow assumed to be Equal.

29

Total

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for July 1899-1904.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.

July.

USGS. Station

Year.	Max.	Min	Mean.
1889			
1890	440	280	314
1891	1240	200	423
1892	1240	200	441
1893	1006	280	431
1894	440	240	312
1895	292	220	261
1896	728	292	384
1897	360	265	295
1898	387	167	202
1899	1890	330	679
1900	200	175	181
01	240	224	239
02			
03	235	203	218
04			256
Totals.	8698	3076	4636
Max	1890	330	679
Min	200	167	181
Average	668	237	331

Mean Loss. 39. Difference.

Available Summary.

Max	1851	291	640
Min	161	128	142
Average ~~Mean~~	629	198	292

30

Total

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for August 1889-1904

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.

August.

year.	Max	Min	Mean.
1889	149	144	145
1890	280	240	252
91	280	200	260
92	280	174	201
93	280	240	249
94	330	240	247
95	220	192	215
96	444	292	311
97	225	225	225
98	167	146	162
99	350	330	337
1900	175	155	170
01	240	224	238
02			
03	203	168	187
04			210
Totals.	3623	2970	3409
Max.	444	330	337
Min.	149	144	145
Average	259	212	227

Mean Loss Difference 24.

Summary.

max	420	306	313
min	125	120	121
average	235	188	203

Total 31

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for September 1889-1904

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.

September.

Year.	Max	Min	Mean.
1889	194	144	150
1890	280	240	244
91	440	280	314
92	240	200	201
93	280	240	258
94	500	240	430
95	254	192	209
96	339	292	309
97	415	225	260
98	167	107	167
99			
1900	200	155	176
01	240	240	240
02			
03	218	168	195
04			175
Totals.	3747	2723	3328
Max	500	292	430
Min.	167	144	150
Average.	288	209	238.

Less effluent 37

Summary.

max	473	265	403
Min	140	117	123
Mean	261	182	211

32

Total

Computations made by .....

Observations made by .....

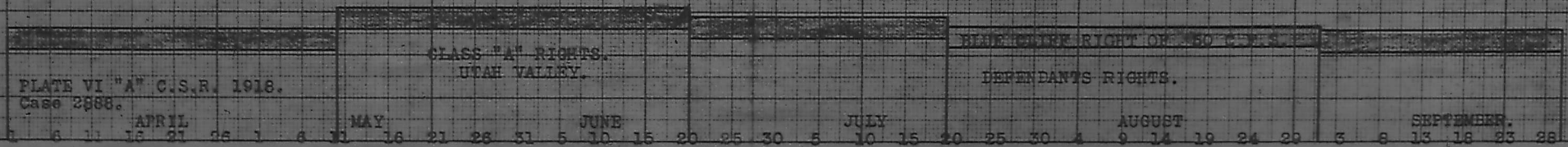


PLATE VI "A" C.S.R. 1918.
Case 2888.

HYDROGRAPH

TYPICAL NATURAL PROVO RIVER

1905-1918

PLATE VI. C.S.R. 1918. Case 2888.

GEOMETRIC MEAN

AVERAGE NATURAL

AVERAGE TEN DAY MINIMUM.

APRIL MAY JUNE JULY AUGUST SEPTEMBER.

1 6 11 16 21 26 1 6 11 16 21 26 31 5 10 15 20 25 30 5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28

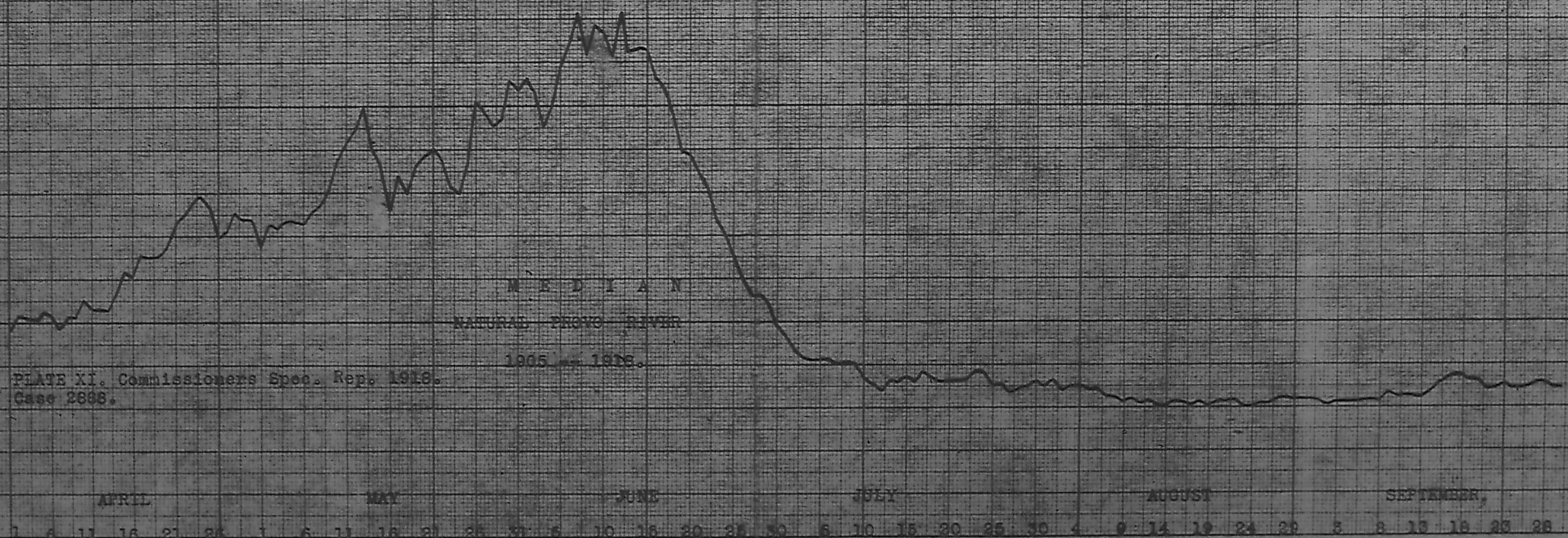
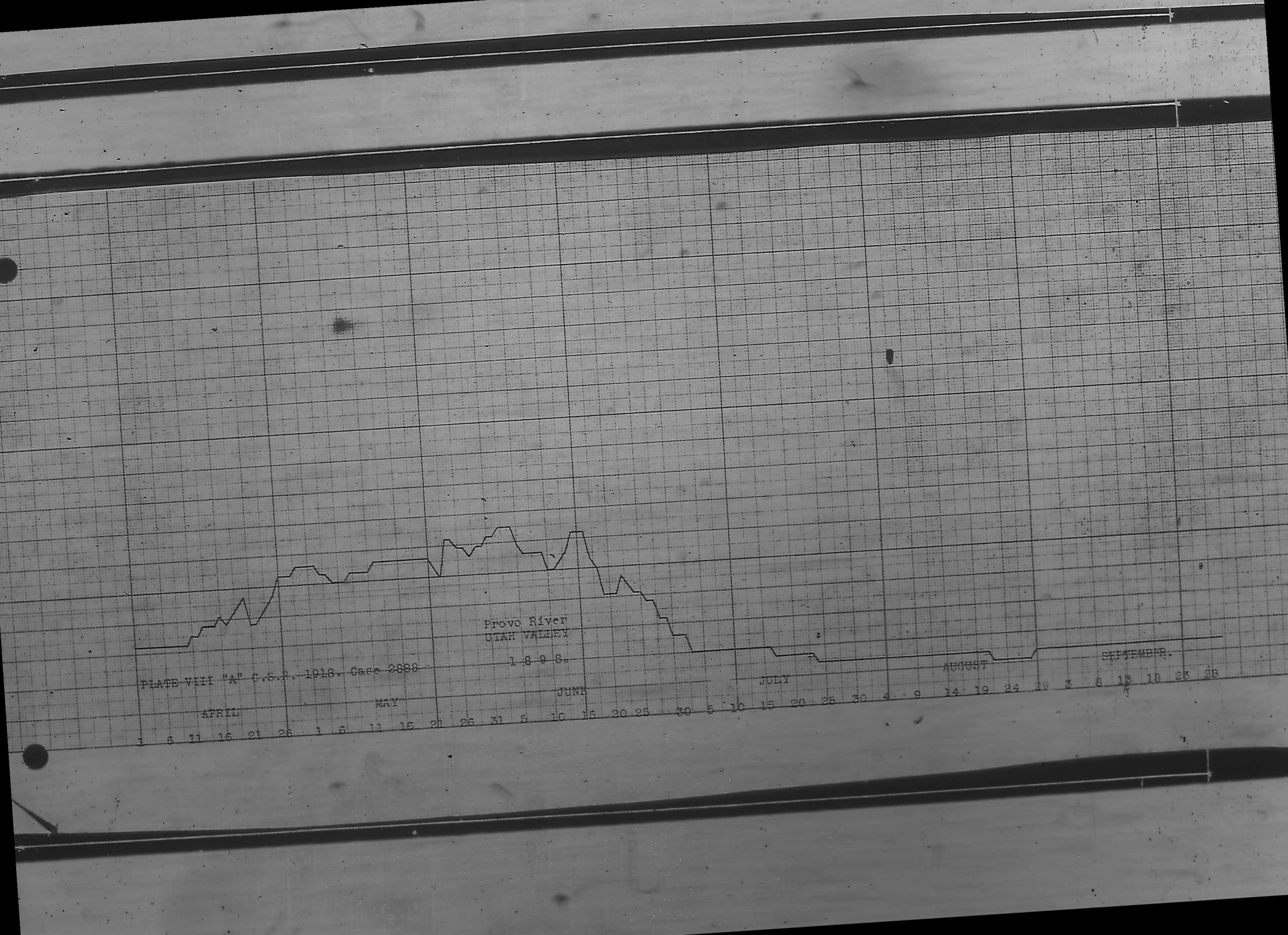


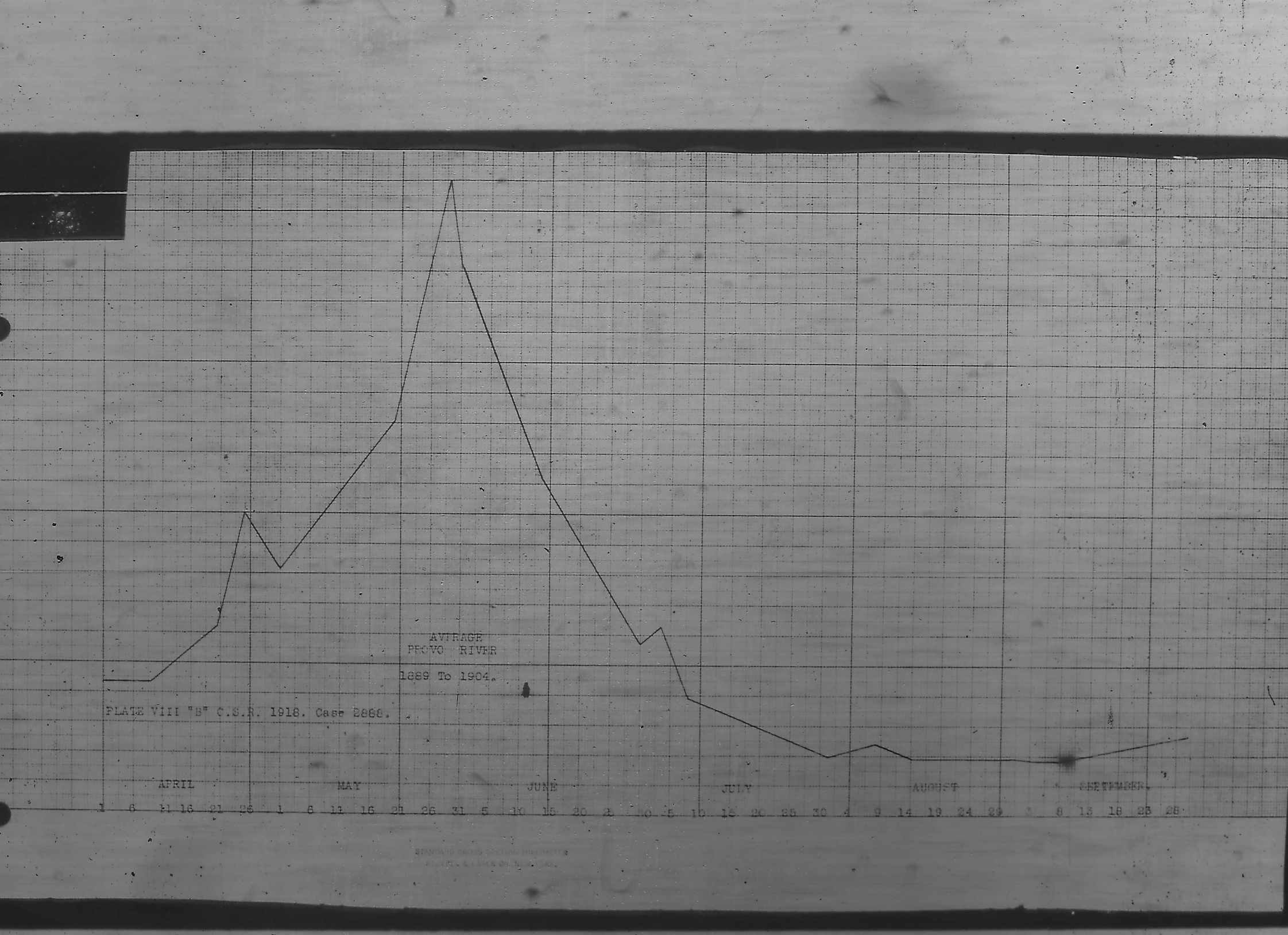
PLATE XI. Commissioners Spec. Rep. 1918.
Case 2888.

THE AVERAGE NATURAL PROVO RIVER

1905 to 1918

PLATE 1, C.S.R. 1918. Case 2888.


Provo River
UTAH VALLEY
1 8 9 8.
PLATE VIII "A" C.S.P. 1918. Case 2888
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER.
1 6 11 16 21 26 1 6 11 16 20 26 31 5 10 15 20 25 30 5 10 15 20 26 30 4 9 14 19 24 29 3 8 13 18 23 28


AVERAGE
PROVO RIVER
1889 To 1904.
PLATE VIII "B" C.S.R. 1918. Case 2866.
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER

NATURAL
PROVO RIVER
1 9 0 5
Plate VIII "C" C.S.R. 1918. Case 2888.
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
1 6 11 16 21 26 1 6 11 16 20 26 30 5 10 15 20 25 30 5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28

STANDARD CROSS SECTION MILLIMETER
KEUFFEL & ESSER Co. NEW YORK.

Plate VIII "D". C.S.J.R. 1918.
Case 2888.

NATURAL
PROVO RIVER
1907.
PLATE VIII "E" U.S.R. 1918.
Case 2868.
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER.
1 6 11 16 21 26 1 6 11 16 21 26 31 5 10 15 20 25 30 5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28

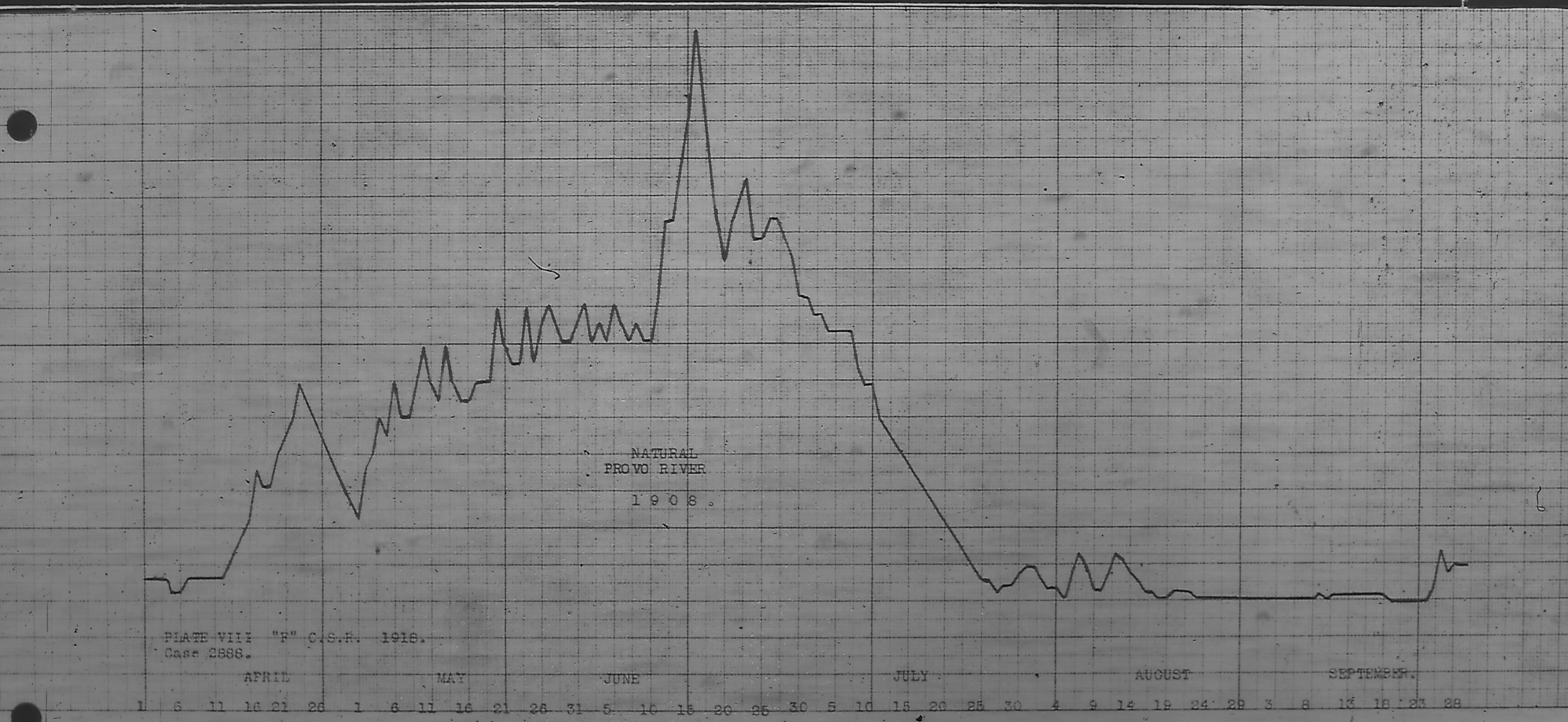
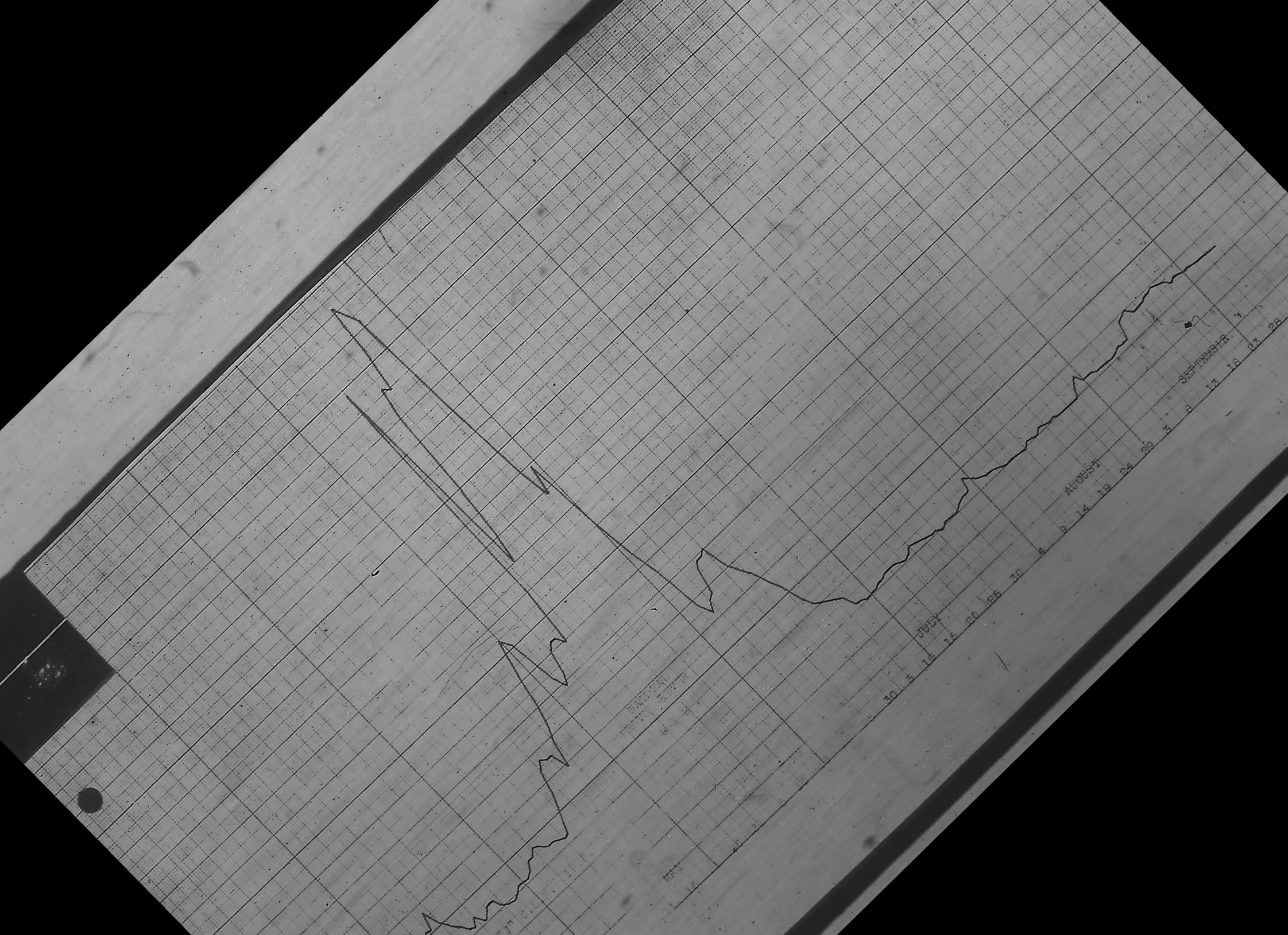


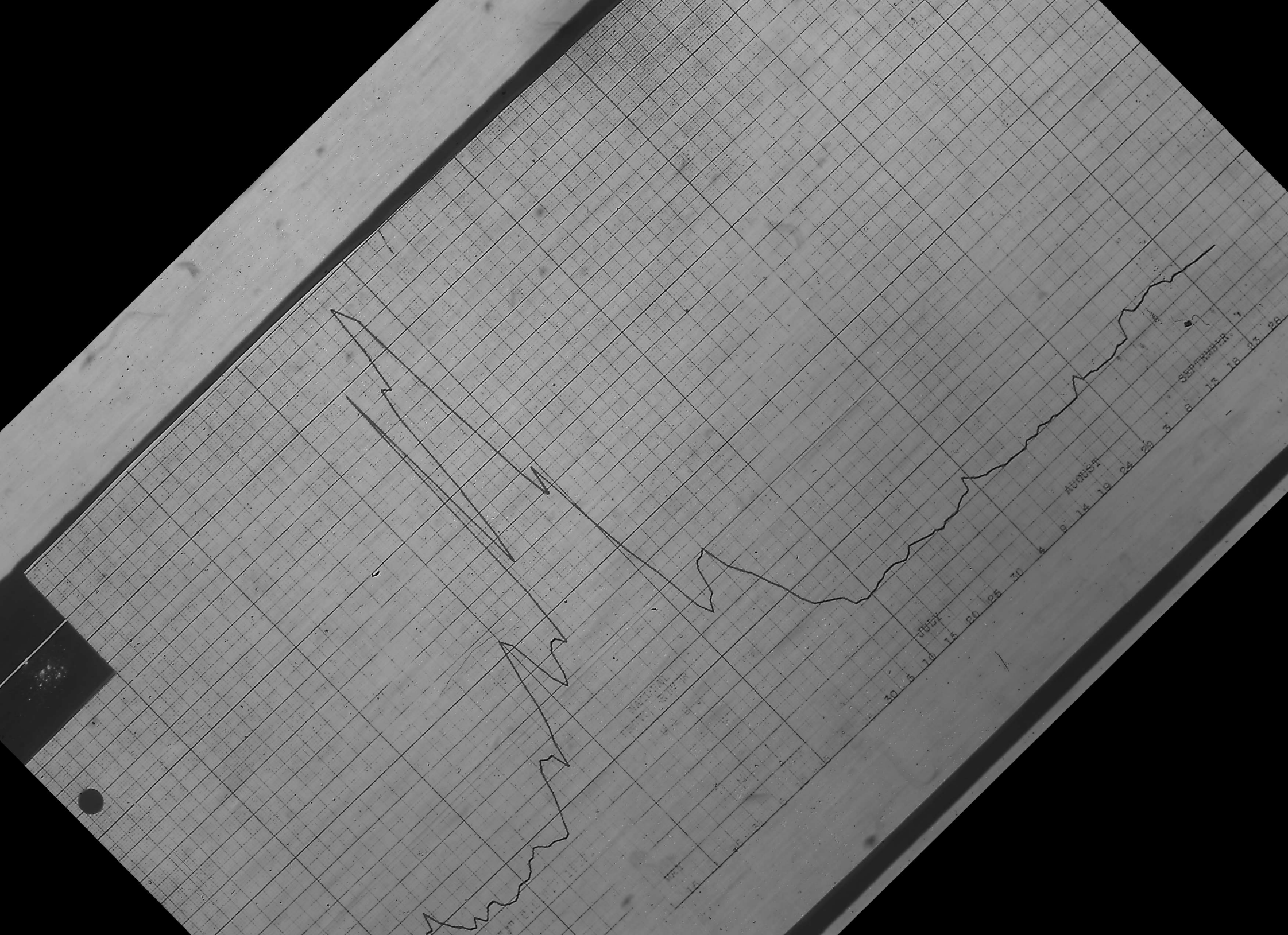
PLATE VIII "F" C.S.R. 1918.
Case 2888.

PLATE VIII "G" C.S.R. 1918.
Case 2888.

NATURAL
PROVO RIVER
1910
PLATE VIII "H" C.S.R. 1916.
Case 2888.
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
1 6 11 16 21 26 1 6 11 16 21 26 31 5 10 15 20 30 5 10 15 20 25 30 4 9 14 19 24 3 8 13 18 23 28

NATURAL
PROVO RIVER
1911.
PLATE VIII "I" C.S.P. 1918.
Case 2888.
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER.
1 6 11 16 21 26 1 6 11 16 21 26 31 5 10 15 20 25 30 5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28


JULY
AUGUST
SEPTEMBER


JULY
AUGUST
SEPTEMBER

JULY
AUGUST
SEPTEMBER
30 5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28

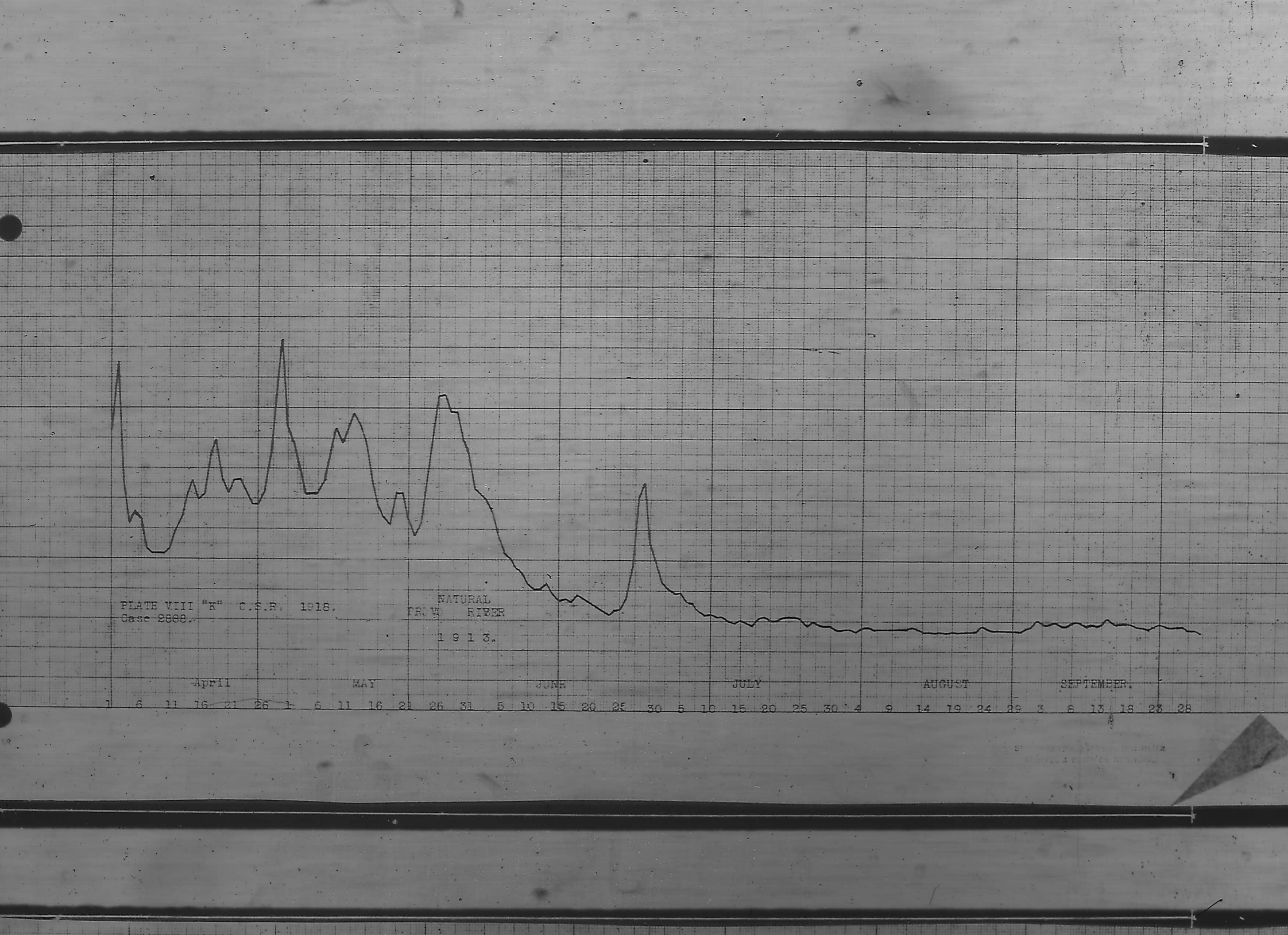


PLATE VIII "K" C.S.R. 1918.
Case 2888.
NATURAL
PROW RIVER
1913.
April
MAY
JUNE
JULY
AUGUST
SEPTEMBER.
1 6 11 16 21 26 1 6 11 16 21 26 31 5 10 15 20 25 30 5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28

PLATE VIII "L" C.S.P. 1918.
Case 2888.

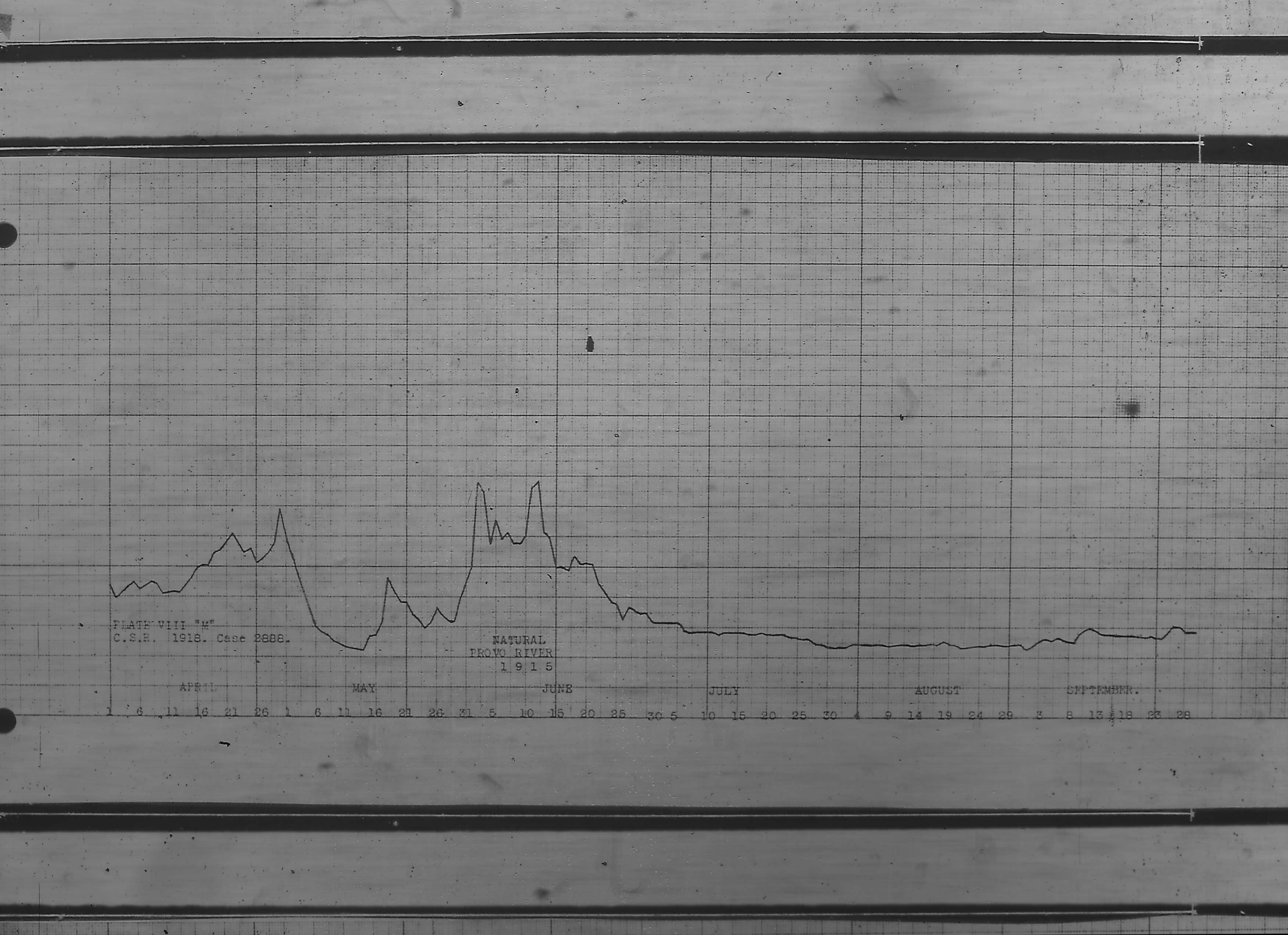


PLATE VIII "M"
C.S.R. 1918. Case 2888.
NATURAL
PROVO RIVER
1 9 1 5
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER.
1 6 11 16 21 26 1 6 11 16 21 26 31 5 10 15 20 25 30 5 10 15 20 25 30 4 9 14 19 24 29 3 8 13 18 23 28

PLATE VIII "N" C.S.R. 1918.
Case 2888.

PLATE VIII "C" C.S.R. 1918. Case 2888.

PLATE VIII "P" C.S.R. 1918. Case 2888.

AVERAGE NATURAL
PROVO RIVER
INFLOW CURVE

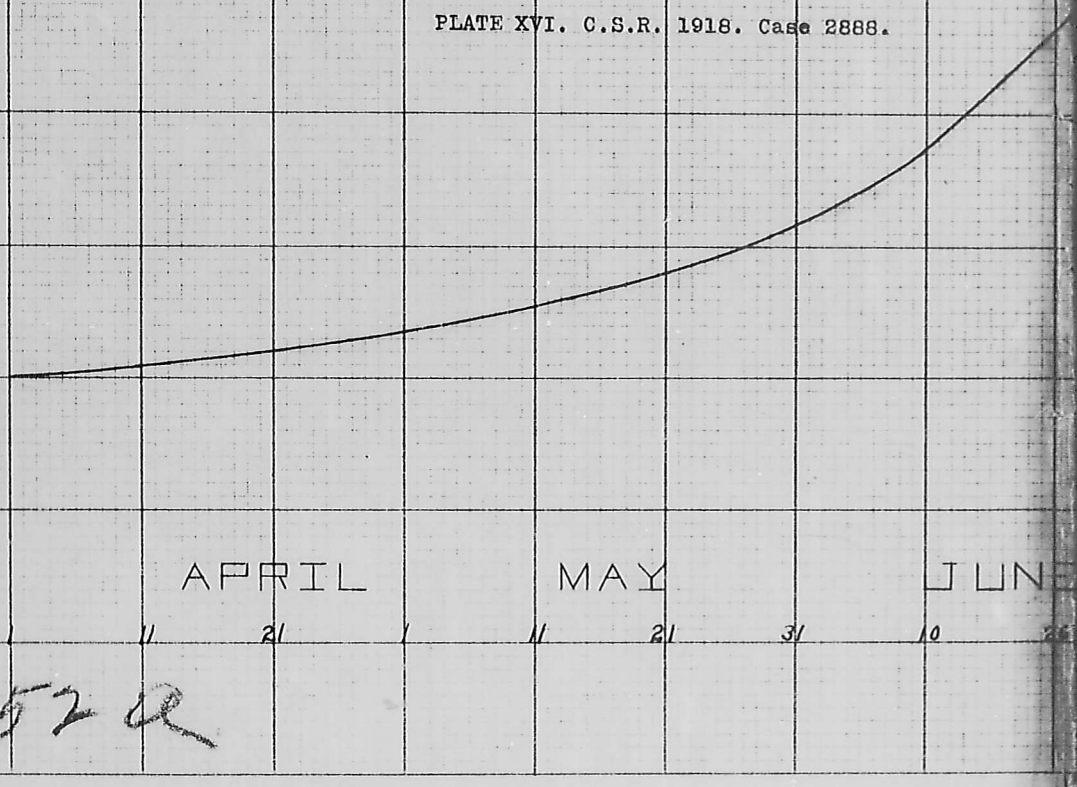
Deducted

By

T. F. Wentz

1916

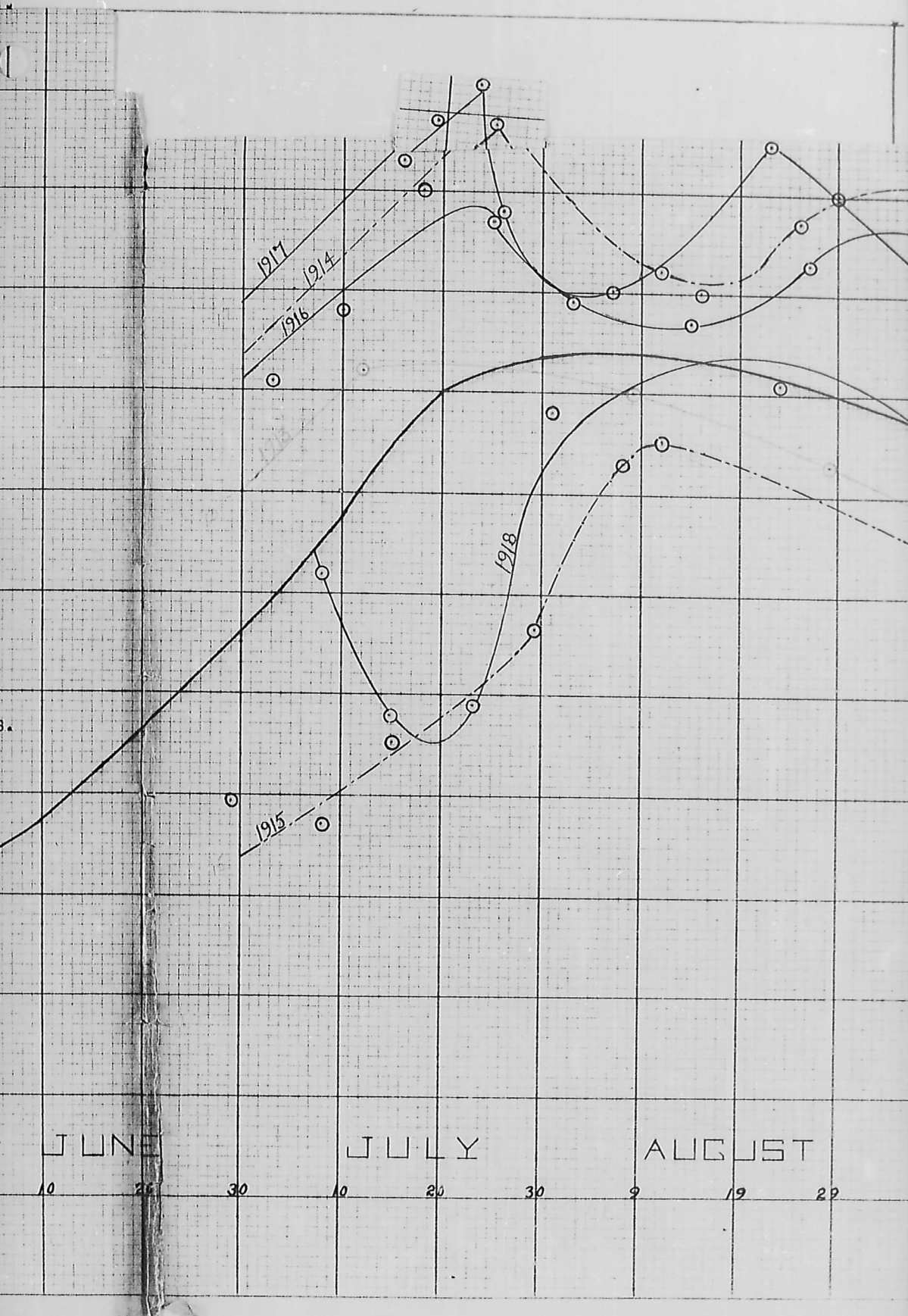
PLATE XVI. C.S.R. 1918. Case 2888.

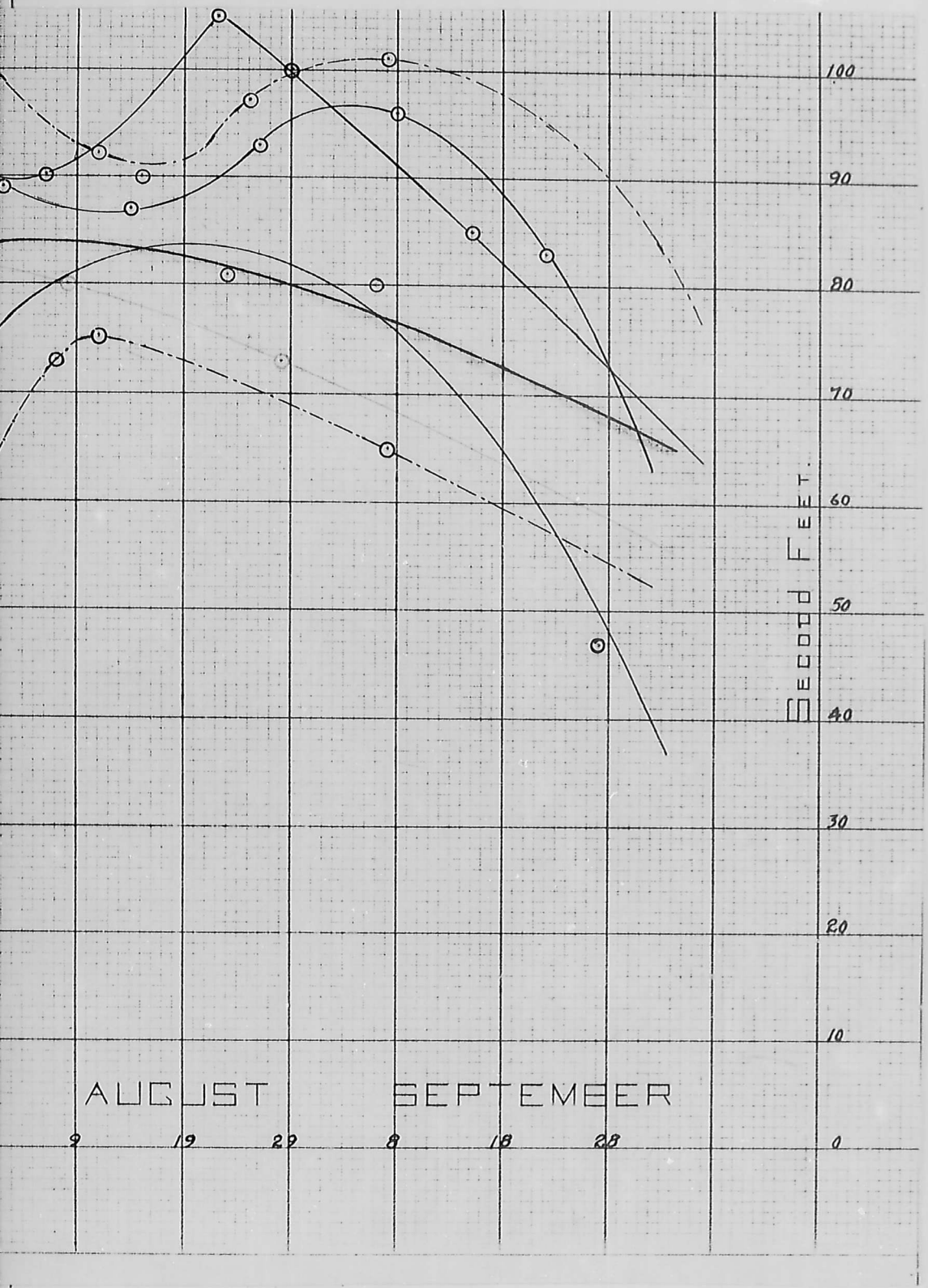


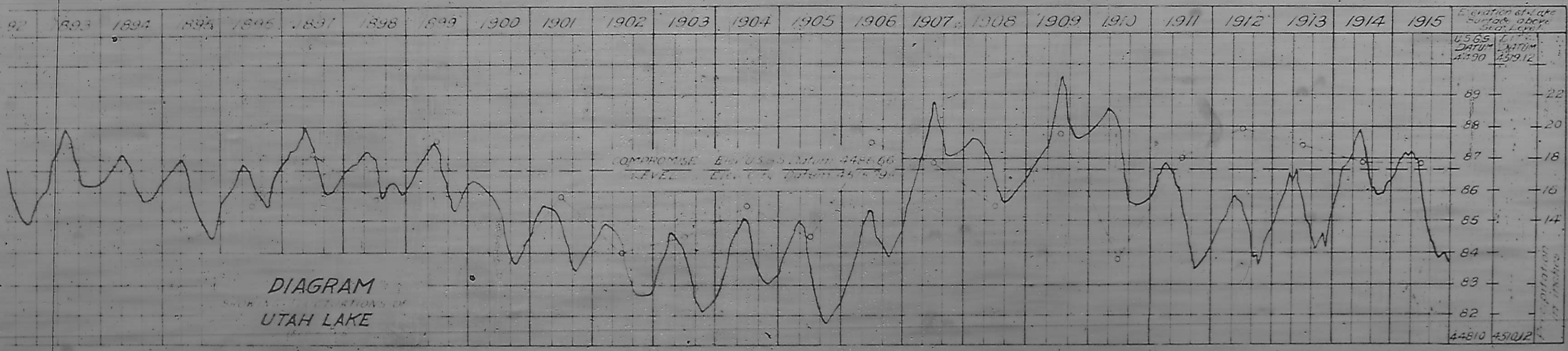
APRIL MAY JUN

1 11 21 1 11 21 31 10

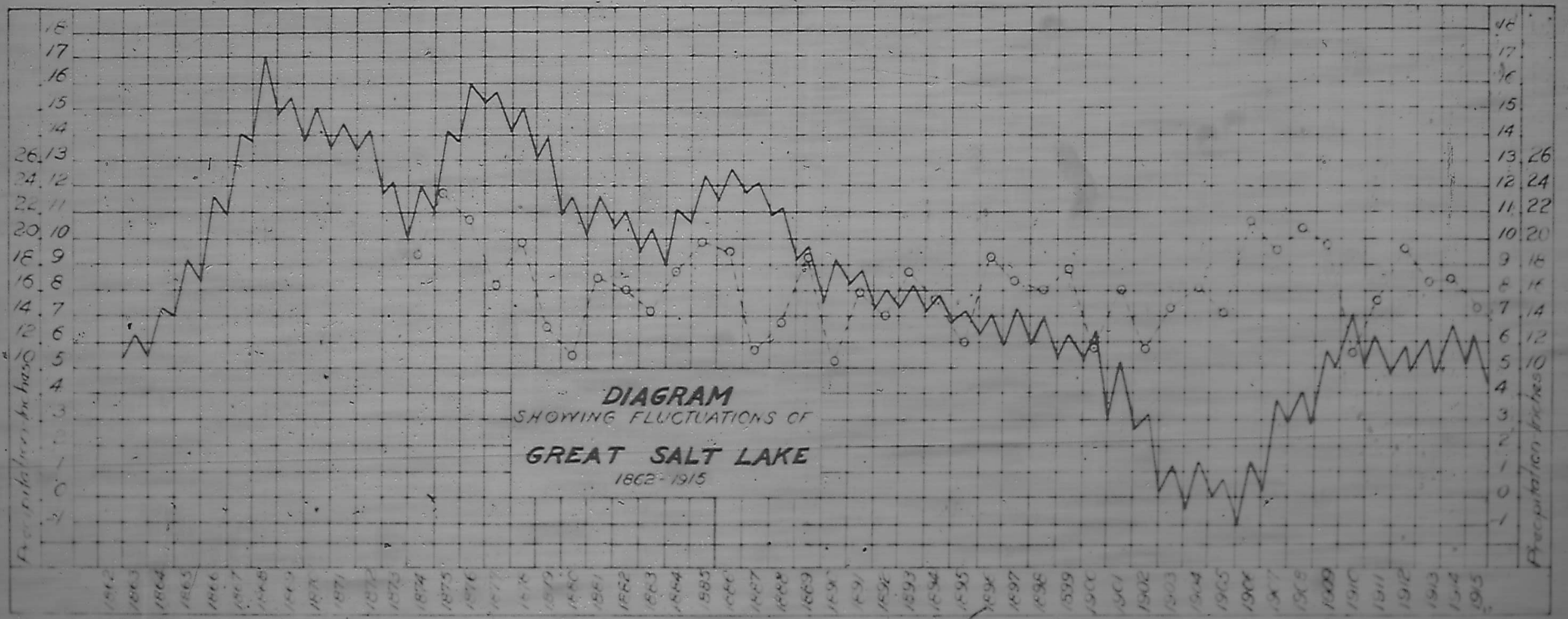
52 R


1917
1914
1916
1918
1915
JUNE
JULY
AUGUST
10
20
30
10
20
30
9
19
29

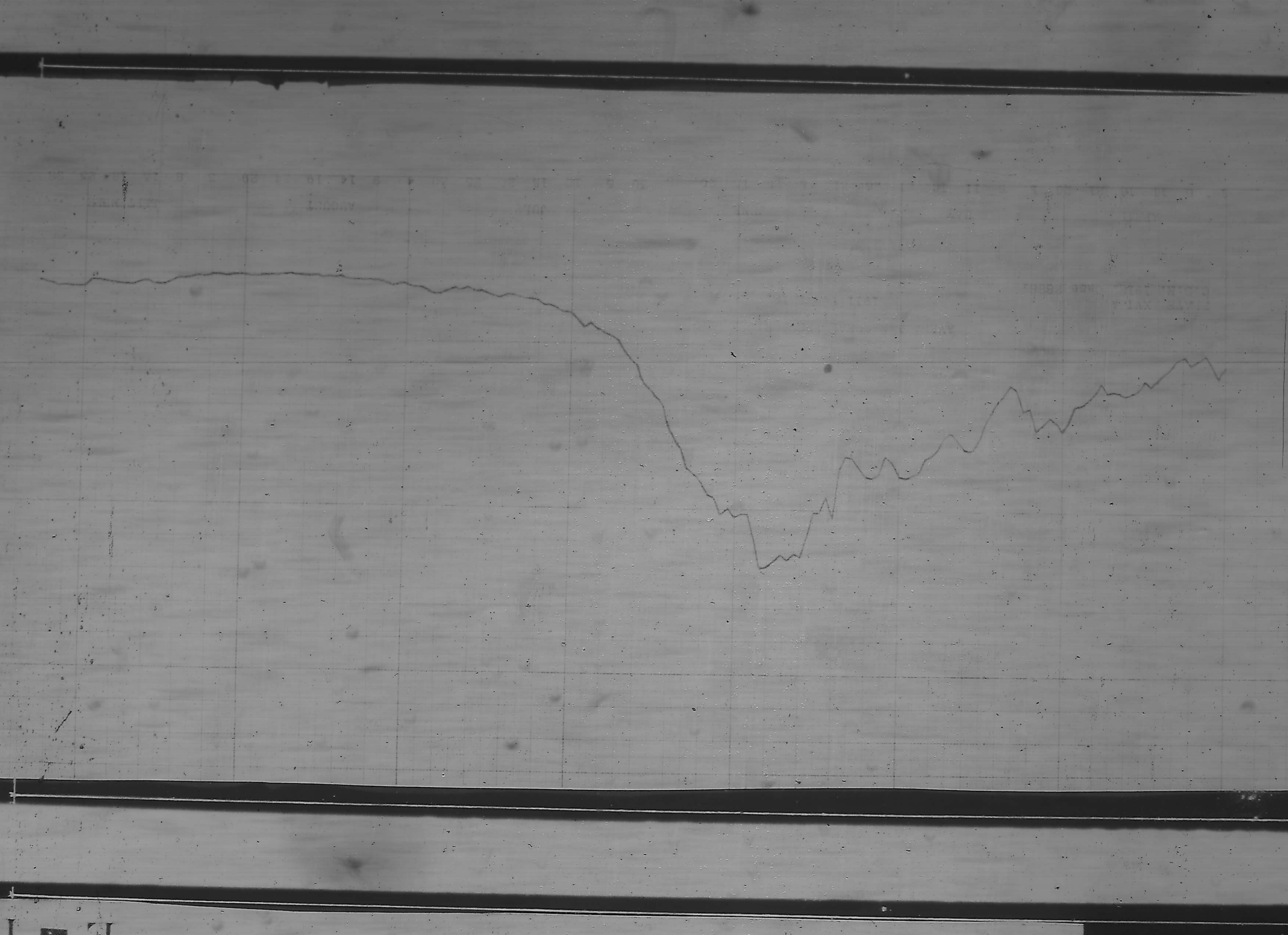

100
90
80
70
60
50
40
30
20
10
0
Second Feet
AUGUST
SEPTEMBER
9
19
29
8
18
28

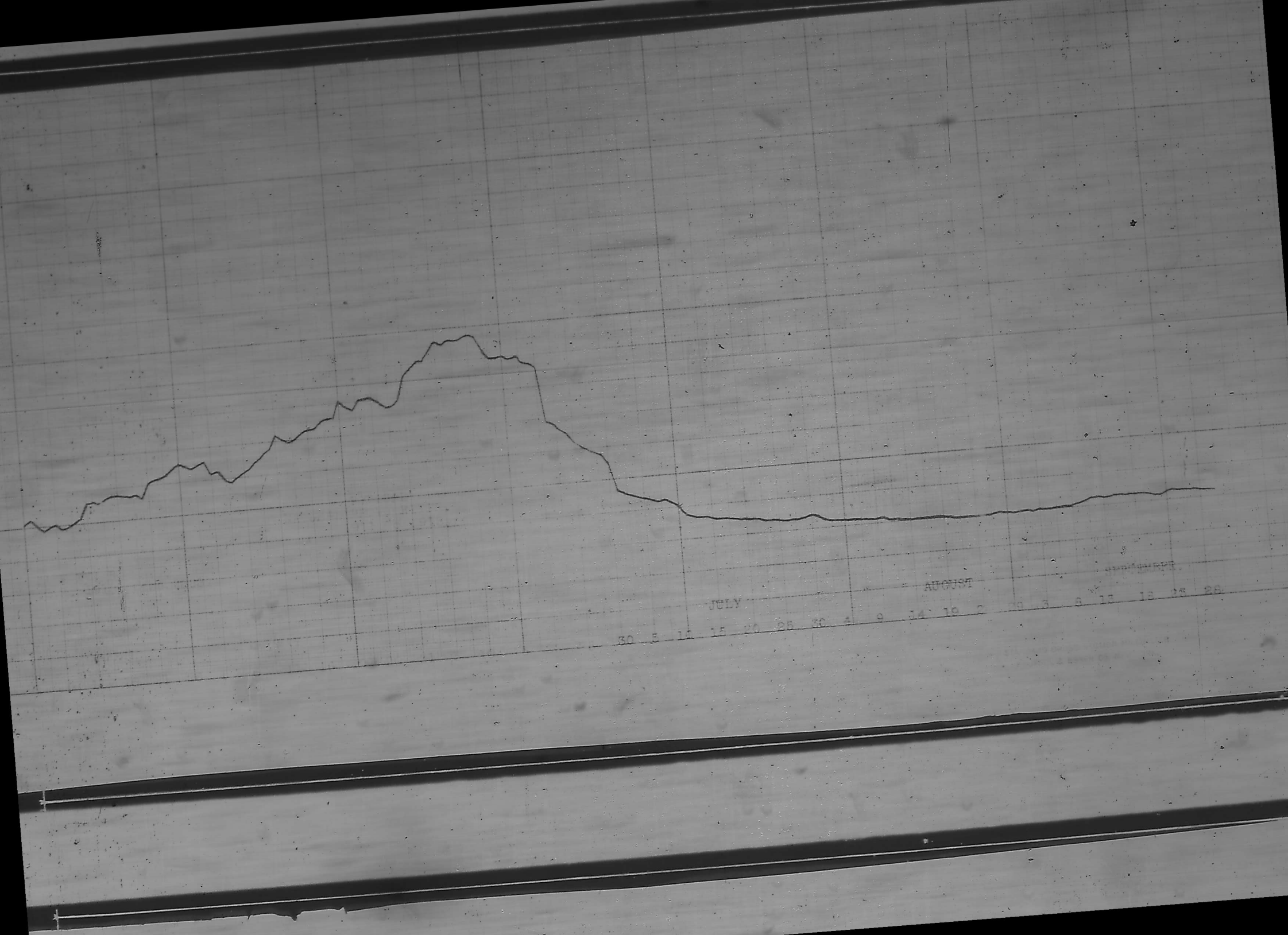

1892
1893
1894
1895
1896
1897
1898
1899
1900
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
Elevation of lake surface above sea Level
U.S.G.S. DATUM 4490
U.S. DATUM 4591.12
89
88
87
86
85
84
83
82
22
20
18
16
14
12
COMPROMISE LEVEL
DIAGRAM
UTAH LAKE
4481.0
4510.12

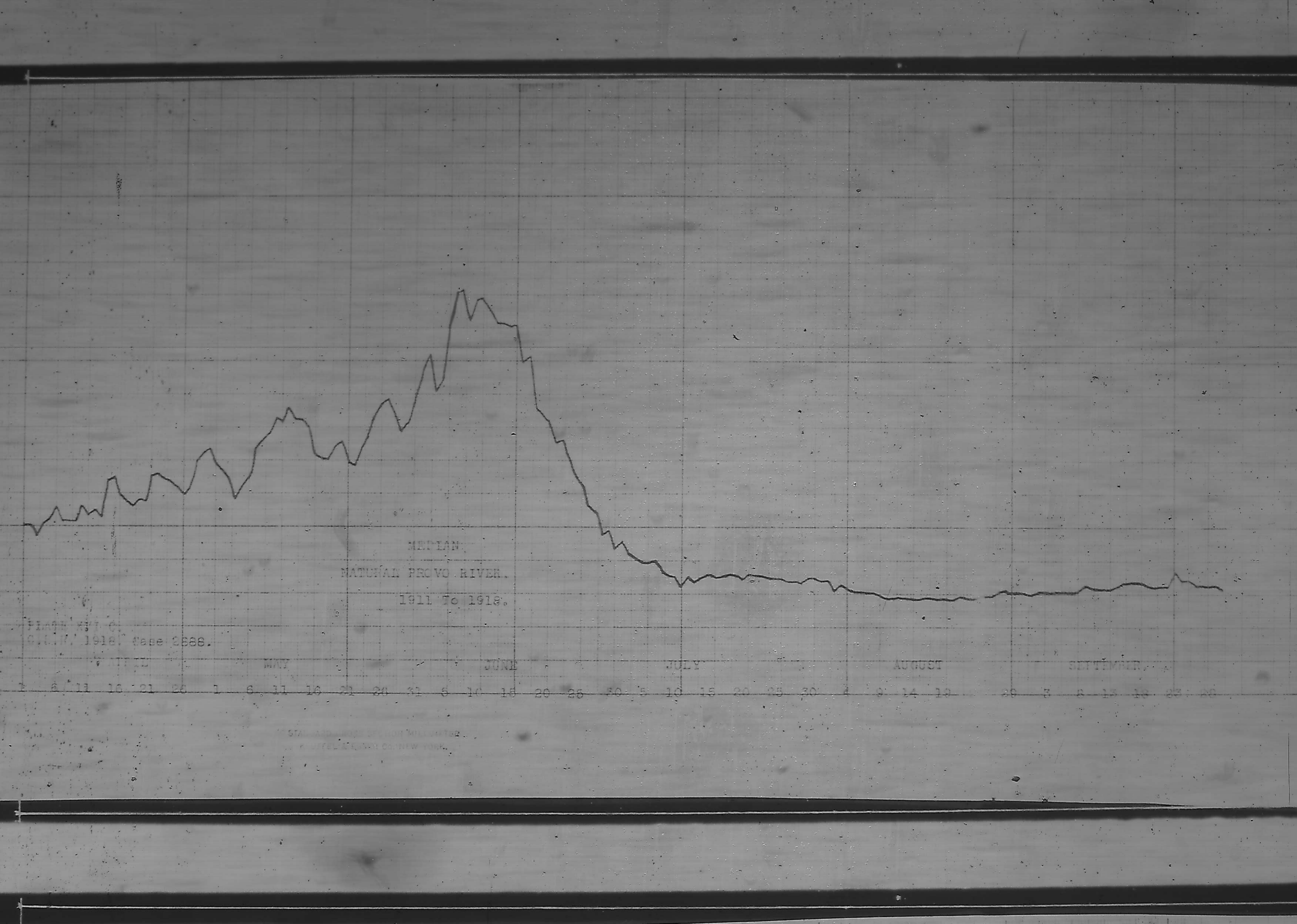
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900
1901
DIAGRAM
SHOWING FLUCTUATIONS OF
UTAH LAKE



Datum of CCC of gage = 4208.27' above Sealevel




JULY
AUGUST
30 5 10 15 20 25 30 4 9 14 19


MEDIAN
NATUHAN PROVO RIVER.
1911 To 1918.
MAY
JUNE
JULY
AUGUST
SEPTEMBER

P R O V O R I V E R .

U. S. G. S. FOURTEENTH ANNUAL REPORT, PAGE 123-124.

The gagings of this stream have been continued at the point in Provo canyon about 6 miles from the city. For a description of this river reference should be made to page 72 of the Eleventh Annual Report, part 2, and for the fluctuations of discharge to Pl. XCIV of the Twelfth Annual Report. The data obtained since the publication of these volumes are given in the following table and are shown upon the accompanying diagram forming the upper half of Fig. 19:

DISCHARGE OF PROVO RIVER.

(Drainage area, 640 square miles.)

Month.	Maximum.	Minimum.	Mean	Total for month.	Run-off	
					Depth	Per square mile
1889	Sec.ft.	Sec.ft.	Sec.ft.	Acre Feet	Inches	Sec.ft.
July 27-31	150	149	150	9,225	.27	.23
August	149	144	145	8,917	.26	.23
September	174	144	150	8,925	.26	.23
October	200	174	180	11,070	.32	.28
November	280	200	224	13,328	.39	.35
December	630	240	384	23,616	.69	.60
1890						
January	700	200	305	18,751	.55	.48
February	564	280	377	20,923	.61	.59
March	700	240	519	31,918	.93	.81
April	1,240	500	840	49,980	1.46	1.32
May	2,180	1,316	1,926	118,450	3.47	3.01
June	2,260	440	1,184	70,448	2.06	1.85
July	440	280	314	19,311	.56	.49
August	280	240	252	15,498	.45	.39
September	280	240	244	14,518	.43	.48
October	330	280	304	18,696	.55	.48
November	330	280	303	18,028	.53	.47
December	330	240	293	18,020	.53	.46
Per annum	2,260	200	572	414,541	12.13	.89

DISCHARGE OF PROVO RIVER --Continued.

Month	Maximum.	Minimum.	Mean	Total for month.	Runoff	
					Depth	Per square mile.
1891	Sec.ft.	Sec.ft.	Sec.ft.	Acre feet.	Inches.	Sec.ft.
January	280	240	255	15,682	.46	.40
February	500	280	311	17,240	.50	.48
March	1,316	280	492	30,258	.89	.77
April	930	280	478	28,430	.83	.75
May	1,704	851	1,226	75,399	2.21	1.92
June	1,470	851	1,190	70,805	2.07	1.86
July	1,240	200	423	26,014	.76	.67
August	280	200	260	15,990	.47	.41
September	440	280	314	18,683	.55	.49
October	380	330	364	23,386	.68	.57
November	380	380	380	22,610	.67	.60
December	380	330	343	21,094	.62	.54
Per annum	1,704	200	503	365,591	10.71	.79
1892.						
January	330	330	330	20,295	.59	.52
February	380	330	351	20,182	.59	.55
March	440	330	361	22,201	.65	.57
April	440	330	377	22,431	.66	.59
May	1,780	774	1,079	66,358	1.95	1.68
June	1,626	1,316	1,511	89,905	2.64	2.37
July	1,240	200	441	27,121	.80	.69
August	280	174	201	12,361	.36	.31
September	240	200	201	11,959	.35	.31
October	280	280	241	14,821	.43	.38
November	280	240	279	16,600	.49	.44
December	330	240	257	15,805	.45	.40
Per annum	1,780	174	469	340,039	9.96	.73

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DISCHARGE OF PROVO RIVER --Continued.

Month	Maximum.	Minimum.	Mean.	Total for month.	Run-off Depth	Run-off Per square Mile
1893	Sec.ft.	Sec.ft.	Sec.ft.	Acre feet.	Inches.	Sec.ft.
January	280	240	252	15,498	.45	.39
February	280	240	271	15,041	.44	.42
March	774	280	326	20,049	.59	.51
April	928	380	638	37,961	1.11	1.00
May	2,340	564	1,237	76,076	2.23	1.93
June	2,260	774	1,579	93,951	2.75	2.47
July	1,006	280	400	24,600	.72	.63
August	280	240	250	15,375	.45	.39
September	280	240	260	15.470	.45	.41
October	380	280	348	21,402	.63	.54
November	440	380	388	23,086	.68	.61
December	440	380	413	25,400	.75	.65
Per annum	2,340	240	530	383,909	11.25	.83

FIFTH BIENNEAL REPORT OF THE STATE ENGINEER, UTAH. 1905-1906. Page 330.

DISCHARGE MEASUREMENTS

Of Provo River, near Provo, Utah, for 1894.

Date.	Hydrographer.	Gage height.	Discharge.
		Feet.	Second feet.
December 24.	S. Fortier	4.40	390

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DAILY GAGE HEIGHT.
Of Provo River, at mouth of Canyon, for 1894.

Day.	Jan.	Feb.	Mar.	Apr.	May	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.40	4.40	4.50	4.70	5.30	6.50	4.50	4.10	4.10		4.50	4.30
2	4.40	4.40	4.50	4.70	5.20	6.50	4.50	4.10	4.40		4.40	4.300
3	4.40	4.40	4.50	4.70	5.10		4.30	4.10	4.40		4.40	4.30
4	4.40	4.40	4.50	4.70	5.10		4.30	4.10	4.40		4.40	4.30
5	4.40	4.40	4.50	4.70	5.10		4.50	4.10	4.40		4.40	4.30
6	4.40	4.40	4.50	4.70	5.10		4.40	4.10	4.50		4.40	4.30
7	4.40	4.40	4.50	4.70	5.20		4.50	4.10	4.50		4.40	4.30
8	4.40	4.40	4.50	4.60	5.40		4.30	4.10	4.50		4.40	4.30
9	4.40	4.40	4.50	4.60	5.50		4.30	4.10	4.50		4.40	4.30
10	4.40	4.40	4.50	4.70	5.60	4.90	4.30	4.10	4.50		4.40	4.30
11	4.40	4.40	4.50	4.70	5.60	5.90	4.30	4.10	4.60		4.40	4.30
12	4.40	4.40	4.50	4.80	5.80	5.80	4.30	4.10	4.60		4.40	4.30
13	4.40	4.40	4.50	4.90	5.90	5.60	4.30	4.10	4.50		4.40	4.40
14	4.40	4.40	4.50	4.90	6.20	5.60	4.20	4.10	4.50		4.40	4.40
15	4.40	4.40	4.60	4.80	6.40	5.30	4.30	4.10	4.50		4.40	4.40
16	4.40	4.40	4.60	4.80	6.40	5.30	4.20	4.10			4.40	4.40
17	4.40	4.40	4.60	4.70	6.40	5.30	4.20	4.10			4.40	4.40
18	4.40	4.40	4.60	4.70	6.20	4.90	4.20				4.40	4.40
19	4.40	4.40	4.60	4.70	6.10	4.90	4.20				4.40	4.40
20	4.40	4.40	4.60	4.70	6.20	4.80	4.20				4.40	4.40
21	4.40	4.40	4.60	4.80	6.10	4.80	4.20				4.40	4.50
22	4.40	4.40	4.60	4.90	6.10	4.60	4.10	4.10			4.40	4.50
23	4.40	4.40	4.60	5.00	6.00	4.50	4.10				4.30	4.50
24	4.40	4.50	4.60	5.00	6.00	4.60	4.10				4.30	4.40
25	4.40	4.50	4.60	5.10	6.10	4.60	4.10				4.30	4.20
26	4.40	4.50	4.60	5.30	6.20	4.50	4.10	4.10	, ,,	4.40	4.30	4.20
27	4.40	4.50	4.60	5.40	6.20	4.50	4.10	4.20		4.40	4.30	4.10
28	4.40	4.50	4.70	5.40	6.30	4.50	4.10	4.30		4.40	4.30	4.10
29	4.40		4.80	5.40	6.40	4.50	4.10	4.20		4.40	4.30	4.20
30	4.40		4.80	5.30	6.40	4.40	4.10	4.20		4.40	4.30	4.20
31	4.40		4.70		6.40		4.10	4.10		4.40		4.20

ESTIMATED MONTHLY DISCHARGE

Of Provo River, near Provo, Utah, for 1894.

(Drainage area, 640 square miles.)

Month.	Discharge in Second-Feet. Maximum.	Minimum.	Mean.	Total in Acre Feet.	Run-off. Sec. ft. per Sq. Mile.	Depth in Inches.
Jan.	380	380	380	23,365	0.59	0.68
Feb.	440	380	391	21,715	0.61	0.63
March	630	440	485	29,575	0.75	0.87
April	1,084	564	687	40,880	1.07	1.19
May	1,860	851	1,449	89,095	2.26	2.61
June	1,940	380	1,110	66,050	1.73	1.93
July	440	240	312	19,184	0.48	0.55
*Aug.	330	240	247	15,187	0.38	0.44
*Sept.	500	240	430	25,587	0.67	0.75
*Oct.	440	380	380	23,365	0.59	0.68
Nov.	440	330	375	22,315	0.59	0.66
Dec.	440	240	341	20,967	0.53	0.61
The year	1,940	240	549	397,285	0.85	11.60

*Estimated.

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BULLETIN 140; pages 234-235.

PROVO STATION, ON PROVO RIVER. 1895.

This locality is in the canyon, about 6 miles from the city of Provo, as described in Bulletin 131, page 59. The observer is Henry V. Smith, a farmer, living about 1 1/2 miles from the gage. Observations are made each morning. The gage is inclined and fastened to stakes set in the ground. The station is equipped with a cable, a boat, and also a suspended car, so that either boat or car can be used. From the measurements made during 1895, and those of previous years, Professor Fortier has constructed a rating table which is fairly applicable to the observations.

List of discharge measurements made on Provo River in Provo Canyon, Utah.

No.	Date.	Hydrographer.	Meter number.	Gage height (feet).	Mean velocity (feet per second).	Discharge (Second feet).
	1894					
14	Dec.24	S. Fortier	103	4.40	2.53	390
	1895					
15	June 15	J. L. Rhead	106	4.80	3.69	680
16	July 20	A. P. Davis	55	4.10	2.19	270

Rating table of Provo River in Provo Canyon, Utah, for 1895.

Gage height.	Discharge.	Gage height.	Discharge	Gage height.	Discharge.
Feet.	Second feet.	Feet	Second feet.	Feet.	Second feet.
3.70	146	4.60	509	5.50	1,204
3.80	168	4.70	580	5.60	1,282
3.90	192	4.80	651	5.70	1,361
4.00	220	4.90	728	5.80	1,440
4.10	254	5.00	800	5.90	1,520
4.20	292	5.10	880	6.00	1,600
4.30	338	5.20	968	6.10	1,680
4.40	389	5.30	1,050	6.20	1,760
4.50	444	5.40	1,130		

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Daily gage height of Provo River in Provo Canyon, Utah

for 1895, in feet.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.30	4.30	4.40	4.60	5.30	5.20	4.20	4.00	3.90	4.10	4.10	4.30
2	4.30	4.30	4.40	4.60	5.30	5.10	4.20	4.00	3.90	4.10	4.10	4.30
3	4.30	4.30	4.40	4.60	5.20	4.90	4.20	4.00	3.90	4.10	4.20	4.30
4	4.40	4.30	4.40	4.50	5.20	4.80	4.20	4.00	3.90	4.10	4.20	4.30
5	4.40	4.20	4.30	4.50	5.20	4.80	4.10	4.00	3.90	4.10	4.20	4.30
6	4.60	4.20	4.30	4.50	5.20	4.80	4.10	4.00	3.90	4.10	4.20	4.30
7	4.30	4.20	4.30	4.50	5.30	5.00	4.00	4.00	3.90	4.10	4.20	4.30
8	4.30	4.30	4.30	4.50	5.30	4.90	4.00	4.00	3.90	4.10	4.20	4.20
9	4.30	4.20	4.30	4.60	5.40	4.80	4.10	4.00	3.90	4.10	4.20	4.20
10	4.30	4.20	4.30	4.60	5.40	4.80	4.10	4.00	3.90	4.10	4.20	4.20
11	4.30	4.20	4.30	4.70	5.50	4.70	4.10	4.00	3.90	4.10	4.20	4.20
12	4.30	4.20	4.30	4.70	5.50	4.70	4.20	4.00	3.90	4.10	4.20	4.20
13	4.30	4.20	4.30	4.70	5.60	4.80	4.20	4.00	3.90	4.10	4.20	4.20
14	4.30	4.20	4.30	4.80	5.90	4.80	4.10	4.00	3.90	4.10	4.20	4.20
15	4.30	4.20	4.20	4.90	6.00	4.80	4.10	4.00	4.00	4.10	4.20	4.20
16	4.30	4.20	4.20	4.90	6.20	4.70	4.10	4.00	4.00	4.10	4.20	4.20
17	4.30	4.20	4.20	4.90	5.90	4.60	4.10	4.00	4.00	4.10	4.20	4.20
18	4.30	4.20	4.30	4.90	5.90	4.60	4.10	4.00	4.00	4.10	4.20	4.20
19	4.30	4.20	4.30	4.90	5.90	4.50	4.10	4.00	4.00	4.10	4.20	4.20
20	4.30	4.30	4.30	4.90	5.90	4.50	4.10	4.00	4.00	4.10	4.20	4.20
21	4.30	4.30	4.40	4.90	5.80	4.40	4.10	4.00	4.00	4.10	4.20	4.30
22	4.30	4.30	4.40	5.10	5.70	4.40	4.10	4.00	4.00	4.10	4.20	4.20
23	4.30	4.30	4.40	5.10	5.60	4.30	4.10	4.00	4.00	4.10	4.20	4.20
24	4.30	4.40	4.50	5.10	5.60	4.30	4.10	4.00	4.00	4.10	4.30	4.20
25	4.20	4.40	4.50	5.10	5.50	4.30	4.10	4.00	4.00	4.10	4.30	4.20
26	4.20	4.40	4.60	5.10	5.40	4.30	4.10	4.00	4.00	4.10	4.30	4.20
27	4.20	4.40	4.60	5.10	5.40	4.30	4.10	3.90	4.00	4.10	4.30	4.20
28	4.20	4.40	4.90	5.20	4.30	5.20	4.10	3.90	4.00	4.10	4.30	4.20
29	4.30		5.20	5.20	5.20	4.20	4.10	3.90	4.10	4.10	4.30	4.20
30	4.30		5.20	5.30	5.20	2.20	4.10	3.90	4.10	4.10	4.30	4.20
31	4.30		4.60		5.20		4.00	3.90		4.10		4.20

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A continuous record has been kept of Provo River since July of 1889. The average flow for the driest months of past years are as follows:

	Second feet.
September, 1889	145
September 1890	244
September, 1891	314
August, 1892	201

The following is the record for 1895:

ESTIMATED DISCHARGE OF PROVO RIVER IN PROVO CANYON, UTAH

(Drainage area, 640 square miles.)

Month	Discharge in second feet.			Total for month in acre feet.	Run-off	
	Maximum.	Minimum	Mean.		Depth in inches.	Second feet per square mile
1895.						
January	508	292	341	20,967	0.61	0.53
February	389	292	326	18,105	0.62	0.51
March	968	292	421	25,886	0.76	0.66
April	1,050	444	683	40,641	1.19	1.07
May	1,760	968	1,216	74,769	2.19	1.90
June	968	292	542	32,251	0.94	0.85
July	292	220	261	16,048	0.47	0.41
August	220	192	215	13,220	0.39	0.34
September	254	192	209	12,436	0.37	0.33
October	254	254	254	15,618	0.46	0.40
November	338	292	300	17,851	0.53	0.47
December	338	292	303	18,631	0.54	0.47
Per annum	1,760	192	423	306,423	9.07	0.66

U. S. G. S. EIGHTEENTH ANNUAL REPORT, PAGES 325,326,327.

PROVO STATION ON PROVO RIVER.

This station is described in Bulletin 131, page 59, and in Bulletin No. 140, page 234. It is located in the canyon about 6 miles from the city of Provo, Utah. It is latitude 40° 19' and longitude 111° 40'. It may be found on the Salt Lake sheet of the Topographic Atlas. The observer is Mr. Henry V. Smith, a farmer. The gage is inclined and fastened to stakes set in the ground. The bench mark is a stone firmly bedded in a bank near the wagon road, about 100 feet southwest of the gage. It is marked "B. M." in black paint, and is 6.95 feet above the zero of the gage. The record of daily gage heights for 1896 is given in Water Supply and Irrigation Paper No. 11, page 79.

LIST OF DISCHARGE MEASUREMENTS MADE ON PROVO RIVER NEAR PROVO, UTAH.

No.	Date.	Hydrographer.	Meter number.	Gage height (feet).	Area of section (square feet)	Mean velocity (feet per sec.)	Discharge (second feet.)
	1894						
14	Dec.24	S. Fortier	103	4.40	154	2.53	390
	1895						
15	June 15	J. L. Rhead	106	4.80	185	3.69	680
16	July 20	A. P. Davis	55	4.10	124	2.19	270
	1896						
17	Sept.7	S. Fortier	10	4.21	117	2.36	275
18	Nov. 7	C.C.Babb	63	4.25	122	2.20	269

RATING TABLE FOR PROVO RIVER NEAR PROVO, UTAH, for 1896.

Gage height	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet	Sec.feet.	Feet.	Sec.feet.	Feet.	Sec. feet.	Feet.	Sec.feet.
3.00	61	4.40	390	5.80	1,440	7.20	2,715
3.10	69	4.50	444	5.90	1,518	7.30	2,815
3.20	77	4.60	511	6.00	1,600	7.40	2,920
3.30	88	4.70	581	6.10	1,686	7.50	3,025
3.40	99	4.80	652	6.20	1,775	7.60	3,130
3.50	112	4.90	728	6.30	1,865	7.70	3,235
3.60	128	5.00	801	6.40	1,955	7.80	3,345
3.70	145	5.10	881	6.50	2,045	7.90	3,455
3.80	168	5.20	970	6.60	2,135	8.00	3,565
3.90	193	5.30	1,050	6.70	2,230	8.10	3,680
4.00	221	5.40	1,130	6.80	2,325	8.20	3,800
4.10	256	5.50	1,206	6.90	2,420	8.30	3,920
4.20	292	5.60	1,283	7.00	2,515	8.40	4,025
4.30	339	5.70	1,360	7.10	2,615	8.50	4,150

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ESTIMATED MONTHLY DISCHARGE OF PROVO RIVER AT PROVO, UTAH

(Drainage area 640 square miles.)

Month.	Discharge in second feet			Total in acre feet.	Run-off.	
	Maximum.	Minimum.	Mean		Depth in inches.	Second feet per square mile.
1896.						
January	444	256	322	19,798	0.58	0.50
February	339	292	298	17,141	0.50	0.46
March	728	292	398	24,471	0.71	0.62
April	1,518	390	629	37,428	1.09	0.98
May	4,150	581	1,166	71,694	2.10	1.82
June	3,345	444	1,558	92,707	2.72	2.44
July	728	292	384	23,611	0.69	0.60
August	444	292	311	19,122	0.56	0.49
September	339	292	309	18,387	0.54	0.48
October	339	339	339	20,844	0.61	0.53
November	511	339	421	25,041	0.73	0.66
December	390	390	390	23,980	0.70	0.61
Per annum	4,150	292	544	394,224	11.53	0.85

U. S. G. S. NINETEENTH ANNUAL REPORT, PART IV. Pages 441-442.

P R O V O R I V E R .

A second power project in Utah has recently been completed on Provo River. Water is diverted about 10 miles above in the canyon and is brought down, not in a pipe, as on Ogden River, but in a flume of semielliptical form, patented by Mr. Guy Sterling, similar to the Santa Ana flume, in southern California. A number of improvements have been introduced in this later construction, especially in the iron braces and methods of tightening them. At the mouth of the canyon where the power works are located a head of something over 300 feet is attained. The object of this plant is the development of electric power to be used in the mines southwest of Provo.

RATING TABLE FOR PROVO RIVER AT PROVO CANYON, UTAH, for 1897.

Gage height	Discharge	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	Sec.feet.	Feet.	Second ft.	Feet.	Second ft.	Feet.	Second ft.
4.0	225	4.7	636	5.4	1,168	6.1	1,720
4.1	265	4.8	712	5.5	1,244	6.2	1,820
4.2	310	4.9	788	5.6	1,320	6.3	1,940
4.3	360	5.0	864	5.7	1,396	6.4	2,120
4.4	415	5.1	940	5.8	1,472	6.5	2,350
4.5	485	5.2	1,016	5.9	1,548	6.6	2.600
4.6	560	5.3	1,092	6.0	1,625		

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ESTIMATED MONTHLY DISCHARGE OF PROVO RIVER AT PROVO CANYON, UTAH.

(Drainage area, 640 square miles.)

Month	Discharge in second feet. Maximum.	Minimum.	Mean	Total in acre feet.	Run-off Depth in inches.	Second feet per square mile.
1897						
January			a400	24,595	0.71	0.62
February			a500	27,769	0.81	0.78
March			a415	25,518	0.75	0.65
April	1,320	712	856	50,935	1.50	1.34
May	2,600	1,320	1,856	114,122	3.35	2.90
June	1,472	360	796	47,365	1.38	1.24
July	360	265	295	18,139	0.53	0.46
August	225	225	225	13,835	0.40	0.35
September	415	225	260	15,471	0.46	0.41
October	485	415	449	27,608	0.81	0.70
November	485	360	433	25,765	0.75	0.68
December	415	360	372	22,874	0.67	0.58
The year			571	413,996	12.12	0.89

a Approximate.

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P R O V O R I V E R .

ESTIMATED MONTHLY DISCHARGE OF PROVO RIVER AT PROVO, UTAH.

(Drainage area, 640 square miles.)

Month.	Discharge in second feet.			Total in acre feet.	Run-off	
	Maximum.	Minimum.	Mean.		Depth in inches.	Second feet per square mile.
1898						
January	336	259	283	17,401	0.51	0.44
February	390	287	307	17,050	0.50	0.48
March	390	390	390	23,980	0.70	0.61
Aprid	972	390	566	33,679	0.98	0.88
May	1,132	812	957	58,844	1.73	1.50
June	1,212	287	823	48,972	1.44	1.29
July	287	167	202	12,421	0.37	0.32
August	167	146	162	9,961	0.29	0.25
September	167	167	167	9,937	0.29	0.26
October	250	167	210	12,912	0.38	0.33
November	287	250	281	16,721	0.49	0.44
December	287	250	279	17,155	0.51	0.44
The year	1,212	146	386	279,033	8.19	0.60

NOTE: Gage heights for 1898 are given in Water-Supply and Irrigation paper No. 28, page 152; measurements, page 153; rating table 154; results for 1897 in Water-Supply and Irrigation Paper No. 16, page 162, and in the Nineteenth Annual Report, Part IV, pages 441 to 442.

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U.S.G.S.

TWENTY-FIRST ANNUAL REPORT, PART IV. Pages. 398-399.

PROVO RIVER.

This river rises on the western slope of the Uinta Mountains, and after receiving a number of tributaries entere what is known as Heber Valley, where considerable irrigation is practiced. After crossing this valley it passes through the Wasatch Mountains in a picturesque canyon, and finally enters Utah Valley, where its summer flow is completely diverted for irrigation purposes. Its flood waters discharge into Utah Lake. The station, which was established July 27, 1889, is at Provo, Utah. Measurements are made by W. B. Dougall and J. S. Baker.

ESTIMATED MONTHLY DISCHRAGE OF PROVO RIVER AT PROVO, UTAH.

(Drainage area, 640 square miles.)

Month.	Discharge in second-feet. Maximum.	Minimum.	Mean	Total in Acre feet.	Run-off Second feet per Square mile.	Depth in Inches.
1899						
January	287	287	287	17,647	0.45	0.52
February	287	190	267	14,828	0.42	0.43
March	1,052	336	564	34,679	0.88	1.01
April	1,052	582	855	50,876	1.34	1.50
May	1,454	652	1,169	71,879	1.83	2.11
June	3,310	1,454	2,345	139,537	3.66	4.07
July	1,890	330	679	41,750	1.06	1.22
August.	350	330	337	20,721	0.53	0.61
September 1 to 23	330	330	330	19,636	0.52	0.58
October 1 to 21	370	370	370	22,750	0.58	0.67

NOTE: Gage heights and discharge measurements for 1899 are given in Water-Supply and Irrigation Paper No. 38, page 339; rating tables in Papgr No. 39, page 453.

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PROVO RIVER.

This river rises on the western slope of the Uinta Mountains and after receiving a number of tributaries enters what is known as Heber Valley, where considerable irrigation is practiced. After crossing this valley it passes through the Wasatch Mountains ina picturesque canyon, and finally enters Utah Valley, where its summer flow is completely diverted for irrigation purposes. Its flood waters discharge into Utah Lake. The gaging station, which was established July 27, 1889, is near Provo, Utah.

ESTIMATED MONTHLY DISCHARGE OF PROVO RIVER NEAR PROVO, UTAH.

(Drainage area, 640 square miles.)

Month.	Discharge in second feet. Maximum.	Minimum.	Mean.	Total in acre feet.	Run-off/ Second feet per square mile.	Depth in inches.
1900						
May 21 to 31			1,240	27,055	1.94	0.79
June	1,310	155	404	24,040	0.63	0.70
July	200	175	181	11,129	0.28	0.32
August	175	155	170	10,453	0.27	0.31
September	200	155	176	10,473	0.28	0.31
October	255	200	218	13,404	0.34	0.39
November	788	255	359	21,362	0.56	0.62
December 1 to 8			316	5,014	0.49	0.14

NOTE: Gage heights for 1900 are given in Water-Supply Paper No. 51 page 417; discharge measurements page 416; rating table in Paper No. 52, page 521.

WATER-SUPPLY PAPER NO. 51. PAGES 416-417.

PROVO RIVER NEAR PROVO, UTAH.

This station, established July 27, 1889, is in the canyon about 6 miles from Provo, and above the head of most of the irrigation canals of Utah Valley. The observer is Henry V. Smith. The station is described in Water-Supply Paper No. 38, page 338. The results of measurements for 1899 will be found in the Twenty-first Annual Report Part IV, page 399. During 1900 the following measurements were made by C. C. Babb and W. P. Hardesty:

May 22: Gage height, 5.65 feet; discharge, 834 second-feet.

July 13: Gage height, 4.23 feet; discharge, 174 second-feet.

September 5: Gage height, 4.16 feet; discharge, 162 second-feet.

November 14: Gage height, 4.50 feet; discharge, 257 second-feet.

DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER NEAR PROVO, UTAH, FOR 1900.

Day.	May.	June.	July	Aug.	Sept.	Oct.	Nov.	Dec.
1		6.2	4.3	4.2	4.2	4.3	4.5	4.8
2		5.9	4.3	4.2	4.1	4.3	4.5	4.8
3		5.7	4.3	4.2	4.1	4.3	4.5	4.8
4		5.5	4.3	4.2	4.1	4.3	4.5	4.7
5		5.4	4.3	4.2	4.1	4.3	4.5	4.6
6		5.3	4.3	4.2	4.1	4.3	4.5	4.6
7		5.2	4.3	4.2	4.1	4.3	4.5	4.6
8		5.2	4.2	4.2	4.1	4.3	4.5	4.6
9		5.1	4.2	4.2	4.2	4.3	4.5	
10		5.1	4.2	4.2	4.2	4.3	4.5	
11		4.1	4.2	4.2	4.2	4.3	4.5	
12		4.9	4.2	4.1	4.2	4.3	4.5	
13		4.9	4.2	4.1	4.2	4.3	4.5	
14		4.8	4.2	4.1	4.2	4.3	4.5	
15		4.7	4.2	4.1	4.2	4.3	4.5	
16		4.6	4.2	4.1	4.2	4.3	4.8	
17		4.5	4.2	4.1	4.2	4.3	4.8	
18		4.5	4.2	4.1	4.2	4.3	4.8	
19		4.4	4.2	4.2	4.2	4.4	5.0	
20		4.4	4.2	4.2	4.2	4.4	5.6	
21	5.5	4.4	4.2	4.2	4.2	4.4	5.6	
22	5.7	4.4	4.2	4.2	4.2	4.4	5.6	
23	5.7	4.4	4.2	4.2	4.2	4.4	5.2	
24	6.0	4.3	4.2	4.2	4.3	4.5	5.0	
25	6.0	4.3	4.2	4.2	4.3	4.5	4.8	
26	6.1	4.3	4.2	4.2	4.3	4.5	4.8	
27	6.6	4.3	4.2	4.2	4.3	4.5	4.8	
28	6.5	4.3	4.2	4.2	4.3	4.5	4.8	
29	6.5	4.3	4.2	4.2	4.3	4.5	4.8	
30	6.4	4.3	4.2	4.2	4.3	4.5	4.8	
31	6.3		4.2	4.2		4.5		

RATING TABLE FOR PROVO RIVER, NEAR PROVO, UTAH. 1900.

Gage height (in feet)	Discharge in second feet.
4.0	140
4.2	175
4.4	225
4.6	285
4.8	355
5.0	430
5.2	530
5.4	645
5.6	788
5.8	962
6.0	1,136
6.2	1,310
6.4	1,484
6.6	1,658

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ESTIMATED MONTHLY DISCHARGE OF PROVO RIVER NEAR PROVO, UTAH.

(Drainage area, 640 square miles.)

Month.	Discharge in second-feet.			Total in Acre feet.	Run-off.	
	Maximum.	Minimum.	Mean		Second feet per square Mile.	Depth in Inches
1901.						
January	353	279	314	19,307	0.49	0.56
February	1,658	258	471	26,158	.74	.77
March	411	302	333	20,475	.52	.60
April	788	302	392	23,326	.61	.68
May	2,093	587	1,181	72,617	1.85	2.13
June	875	224	399	23,742	.62	.69
July	240	224	239	14,696	.37	.43
August	240	224	238	14,634	.37	.43
September	240	240	240	14,281	.38	.42
October	302	240	257	15,802	.40	.46
November 1-16	279	279	279	8,854	.44	.26

NOTE: Gage heights and discharge measurements for 1901 are given in Water-Supply Paper No. 66, page 123; rating table on page 176 of same paper.

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WATER-SUPPLY PAPER NO. 66, PAGES 123, 124 and 176.

PROVO RIVER NEAR PROVO, UTAH.

This station, established July 27, 1889, is in the canyon about 6 miles from Provo, and above the head of most of the irrigation canals of Utah Valley. The station is described in Water-Supply Paper No. 51, page 416. The results of measurements for 1900 will be found in the Twenty-second Annual Report, Part IV, page 416. During 1901 the following measurements were madeby G. L. Swendsen:

April 6: Gage height, 4.70 feet; discharge, 353 second-feet.
June 29: Gage height, 4.10 feet; discharge 285 second-feet.
August 13: Gage height, 4.10 feet; discharge, 211 second-feet.
July 22: Gage height, 4.20 feet; discharge, 223 second-feet.
November 11: Gage height, 4.10 feet; discharge, 224 second-feet.

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DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER AT PROVO, UTAH for 1901.

Day	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.50	4.50	4.90	4.50	5.40	5.70	4.20	4.10	4.20	4.20	4.40	
2	4.50	4.50	4.90	4.50	5.30	5.50	4.20	4.10	4.20	4.20	4.20	
3	4.50	4.50	4.80	4.50	5.30	5.40	4.20	4.10	4.20	4.30	4.40	
4	4.50	4.50	4.80	4.50	5.30	5.30	4.20	4.20	4.20	4.20	4.40	
5	4.50	4.50	4.80	4.50	5.30	5.20	4.20	4120	4.20	4.20	4.40	
6	4.50	4.50	4.80	4.50	5.40	5.10	4.20	4.20	4.20	4.20	4.40	
7	4.50	5.50	4.70	4.50	5.40	5.10	4.20	4.20	4.20	4.20	4.40	
8	4.50	4.50	4.70	4.50	5.30	5.10	4.20	4.20	4.20	4.20	4.40	
9	4.50	4.50	4.60	4.50	5.30	5.10	4.20	4.20	4.20	4.20	4.40	
10	4.50	4.50	4.60	4.50	5.30	5.10	4.20	4.20	4.20	4.20	4.40	
11	4.60	4.40	4.60	4.50	5.60	5.00	4.20	4.20	4.20	4.20	4.40	
12	4.60	4.30	4.50	4.50	5.90	4.90	4.20	4.20	4.20	4.20	4.40	
13	4.60	4.30	4.50	4.50	6.20	4.80	4.20	4.20	4.20	4.30	4.40	
14	4.60	4.30	4.50	4.60	6.40	4.70	4.20	4.20	4.20	4.30	4.40	
15	4.50	4.50	4.60	4.70	6.40	4.70	4.20	4.20	4.20	4.30	4.40	
16	4.50	4.80	4.60	4.70	6.50	4.60	4.20	4.20	4.20	4.30	4.40	
17	4.40	5.00	4.60	4.60	6.60	4.60	4.20	4.20	4.20	4.30		
18	4.40	6.00	4.60	4.60	6.60	4.50	4.20	4.20	4.20	4.30		
19	4.40	6.60	4.60	4.70	7.10	4.50	4.20	4.20	4.20	4.30		
20	4.50	6.60	4.60	4.70	7.00	4.50	4.20	4.20	4.20	4.30		
21	4.50	5.50	4.60	4.90	6.80	4.50	4.20	4.20	4.20	4.30		
22	4.60	4.90	4.60	5.00	6.50	4.50	4.20	4.20	4.20	4.30		
23	4.60	4.90	4.60	5.00	6.00	4.50	4.20	4.20	4.20	4.30		
24	4.70	4.90	4.60	5.10	6.00	4.40	4.20	4.20	4.20	4.30		
25	4.70	4.90	4.50	5.10	6.10	4.40	4.20	4.20	4.20	4.30		
26	4.70	4.90	4.50	5.10	6.30	4.30	4.20	4.20	4.20	4.30		
27	4.70	4.80	4.50	5.20	6.50	4.20	4.20	4.20	4.20	4.50		
28	4.70	4.80	4.50	5.60	6.50	4.20	4.20	4.20	4.20	4.50		
29	4.60		4.50	5.50	6.40	4.10	4.20	4.20	4.20	4.50		
30	4.60		4.50	5.40	6.30	4.20	4.20	4.20	4.20	4.40		
31	4.50		4.50		6.00	4.20	4.10	4.20		4.40		

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RATING TABLE, PROVO RIVER NEAR PROVO, UTAH. 1901.

Gage height, in feet.	Discharge in second-feet.
4.2	240
4.4	279
4.6	327
4.8	381
5.0	445
5.2	536
5.4	645
5.6	788
5.8	962
6.0	1,136
6.2	1,310
6.4	1,484
6.6	1,658
6.8	1,832
7.0	2,006

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/ PROVO RIVER NEAR PROVO, UTAH

The gaging station on Provo River, established July 27, 1889, is located in the canyon, about 6 miles from Provo and above the head of most of the irrigation canals of Utah Valley. The diversion works of the company which develop power at the mouth of Provo Canyon for electric transmission to the mines west of Provo, are located about 5 miles above the station. The gage is inclined and fastened to stakes set in the ground. The bench mark is a stone firmly bedded in the bank near the wagon road, about 100 feet southwest of the gage. It is marked "B. M." in black paint, and is 6.95 feet above gage datum. The channel is straight for some distance above and below the station. The bed of the river is gravel and not liable to change. The equipment consists of a cable, car, and tagged wire.

DISCHARGE MEASUREMENTS OF PROVO RIVER NEAR PROVO, UTAH.

Date.	Hydrographer.	Gage height.	Discharge.
1902.			
January 26	G. L. Swendsen	4.00	204
March 10	do	4.35	230
April 14	do	4.50	395
May 5	do	4.60	414
July 26	do	4.10	202
September 20	do	4.00	172
November 17	do	3.95	165
December 27	do	4.00	178

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WATER-SUPPLY PAPER NO. 100. Pages 142, 143 and 144.

PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH.

This station was established July 27, 1889, by Samuel Fortier. It is located about 6 miles north of Provo and above the head of most of the irrigation canals of Utah Valley. The diversion works of the company which develop power at the mouth of Provo Canyon for electric transmission to the mines west of Provo are located about 5 miles above the station. The Heber branch of the Denver and Rio Grande Railway passes within 20 feet of the new gage rod. The station is one-eighth mile above the county bridge. The old gage is an inclined rod set on the left bank. The new gage is a vertical aspen stick set on the right bank 90 feet northeast of the old gage. Both gages read 4.80 feet when the new gage was installed, but the zero of the new gage is 0.10 foot above the zero of the old gage. The gage is read twice each day by L. T. Walter. Discharge measurements are made by means of a cable and car located at the gage. Instead of using a tagged wire, the cable has been marked with white paint every 3 feet. The initial point for soundings is the first white mark on the cable south of the vertical post which supports the cable on the right bank. The channel is straight for 200 feet above and for 100 feet below the station. The right bank is steep and rocky and has an elevation of about 10 feet above the zero of the gage. The left bank is sloping and has an elevation of about 7 feet above the zero of the gage. It is liable to overflow at flood stages. The bed of the stream is composed of boulders and is permanent. The current is swift and at flood stages has a velocity that is too high for accurate measurement. There is one channel up to the point where the river overflows the left bank. Above this stage there are two channels. The bench mark is a cross chiseled in a limestone rock about 1 foot square, which bears south 15° E. and is 100 feet distant from the old gage. Its elevation is 6.98 feet above the zero of the old (inclined) gage. The letters "B. M." are chiseled in the rock.

The observations of this station during 1903 have been made under the direction of G. L. Swendsen, district hydrographer.

DISCHARGE MEASUREMENTS OF PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH, IN 1903.

Date.	Hydrographer.	Gage height.	Discharge.
		Feet.	Second-feet.
January 19,	G. L. Swendsen,	4.02	182
April 4	C. Tanner	4.66	381
May 27	do	4.75	393
June 5	do	6.10	1,197
July 9	do	4.28	220
August 3	do	4.20	193
September 20	do	4.20	182
October 21	do	4.20	215

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MEAN DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH, for 1903.

Day	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1		4.35	4.25	4.15	4.35	4.40	4.55
2		4.35		4.15	4.40	4.40	4.55
3		4.35	4.20	4.15	4.40	4.40	4.55
4		4.30	4.20	4.10		4.40	4.55
5			4.20	4.10	4.40	4.40	4.55
6		4.30	4.20		4.40	4.40	
7	6.10	4.30	4.20	4.10	4.40	4.40	4.55
8	5.90	5.40	4.20	4.15	4.35		4.55
9	5.97	4.30		4.15	4.35	4.45	4.55
10	5.90	4.25	4.20	4.20	4.35	4.45	4.55
11	5.73	4.30	4.20	4.30	4.35	4.55	4.55
12	5.77		4.20	4.30	4.35	4.55	4.55
13	5.67	4.30	4.20		4.35	4.80	
14		4.30	4.25	4.30	4.35	4.70	4.50
15	5.60	4.30	4.20	4.30	4.40		4.50
16	5.47	4.30		4.25	4.40	4.65	4.45
17	5.42	4.30	4.20	4.25	4.40	4.65	4.45
18	5.37	4.30	4.20	4.20		4.65	4.40
19	5.30		4.20	4.20	4.40	4.60	4.40
20	5.22	4.30	4.20		4.40	4.60	
21		4.30	4.20	4.20	4.40	4.55	4.45
22	5.05	4.30	4.20	4.25	4.40		4.45
23	5.00	4.30		4.25	4.35	4555	4.50
24	4.85	4.30	4.15	4.25	4.35	4.55	4.50
25	4.70	4.30	4.15	4.25		4.55	4.50
26	4.60		4.15	4.25	4.35	4.55	4.50
27	4.55	4.30	4.15		4.35	4.55	
28		4.30	4.20	4.25	4.35	4.55	4.50
29	4.50	4.27	4.20	4.30	4.40		4.50
30	4.35	4.25		4.30	4.40	4.55	4.45
31		4.25	4.10		4.40		4.45

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RATING TABLE FOR PROVO RIVER AT MOUTH OF CANYON NEAR PROVO, UTAH, for 1903.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	Second-ft.	Feet.	Second-ft.	Feet.	Second-ft.	Feet.	Second-ft.
4.0	155	4.6	332	5.2	620	5.8	980
4.1	168	4.7	375	5.3	670	5.9	1,050
4.2	188	4.8	420	5.4	730	6.0	1,120
4.3	218	4.9	465	5.5	790	6.1	1,195
4.4	253	5.0	515	5.6	850		
4.5	291	5.1	565	5.7	915		

Table uncertain owing to change of gage and an obstruction in the river during the latter part of the year.

ESTIMATED MONTHLY DISCHARGE OF PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH, for 1903.

Month.	Discharge in second feet			Total in acre-feet.
	Maximum.	Minimum.	Mean.	
June 7-30	1,195	235	685	32,608
July	235	203	218	13,404
August	203	168	187	11,498
September	218	168	195	11,603
October	253	235	245	15,064
November	420	253	306	18,208
December	311	253	292	17,954
The period				120,339

Sunday discharges estimated.

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WATER-SUPPLY PAPER nO. 133, Pages 261, 262, 263 and 264.

PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH.

This station was established July 27, 1889, by Samuel Fortier. It is located about 6 miles north of Provo, about 1,000 feet above Olmsted Station, on the Denver and Rio Grande Railroad, and 1,200 feet above the power house of the Telluride Power Company, and above the head of most of the irrigation canals of Utah Valley. The diversion works of the company, which develop power at the mouth of Provo Canyon for electric transmission to the mines west of Provo, are located about 5 miles above the station. The Heber branch of the Denver and Rio Grande Railway passes within 20 feet of the new gage rod. The station is one-eighth mile above the county bridge. The old gage is an inclined rod set on the left bank. The new gage is a vertical aspen stick set on the right bank 90 feet northeast of the old gage. Both gages read 4.80 feet when the new gage was installed, but the zero of the new gage is 0.10 feet above the zero of the old gage. During 1904 the gage was read twice each day by E. A. Briscoe. Discharge measurements are made by means of a cable and car located at the gage. Instead of using a tagged wire, the cable has been marked with white paint every 3 feet. The initial point for soundings is the first white mark on the cable south of the vertical post which supports the cable on the right bank. The channel is straight for 200 feet above and for 100 feet below the station. The right bank is steep and rocky and has an elevation of about 10 feet above the zero of the gage. The left bank is sloping and has an elevation of about 7 feet above the zero of the gage. It is liable to overflow at flood stages. The bed of the stream is composed of bowlders and is permanent. The current is swift, and at flood stages has a velocity that is too high for accurate measurement. There is one channel up to the point where the river overflows the left bank. Above this stage there are two channels. Bench mark No. 1 is a cross chiseled in a limestone rock about 1 foot square, which bears south 15° E. and is 100 feet distant from the

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WATER-SUPPLY PAPER nO. 133, Pages 261, 262, 263 and 264.

PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH.

This station was established July 27, 1889, by Samuel Fortier. It is located about 6 miles north of Provo, about 1,000 feet above Olmsted Station, on the Denver and Rio Grande Railroad, and 1,200 feet above the power house of the Telluride Power Company, and above the head of most of the irrigation canals of Utah Valley. The diversion works of the company, which develop power at the mouth of Provo Canyon for electric transmission to the mines west of Provo, are located about 5 miles above the station. The Heber branch of the Denver and Rio Grande Railway passes within 20 feet of the new gage rod. The station is one-eighth mile above the county bridge. The old gage is an inclined rod set on the left bank. The new gage is a vertical aspen stick set on the right bank 90 feet northeast of the old gage. Both gages read 4.80 feet when the new gage was installed, but the zero of the new gage is 0.10 feet above the zero of the old gage. During 1904 the gage was read twice each day by E. A. Briscoe. Discharge measurements are made by means of a cable and car located at the gage. Instead of using a tagged wire, the cable has been marked with white paint every 3 feet. The initial point for soundings is the first white mark on the cable south of the vertical post which supports the cable on the right bank. The channel is straight for 200 feet above and for 100 feet below the station. The right bank is steep and rocky and has an elevation of about 10 feet above the zero of the gage. The left bank is sloping and has an elevation of about 7 feet above the zero of the gage. It is liable to overflow at flood stages. The bed of the stream is composed of bowlders and is permanent. The current is swift, and at flood stages has a velocity that is too high for accurate measurement. There is one channel up to the point where the river overflows the left bank. Above this stage there are two channels. Bench mark No. 1 is a cross chiseled in a limestone rock about 1 foot square, which bears south 15° E. and is 100 feet distant from the

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old gage. Its elevation is 6.98 feet above the zero of the old (inclined) gage. The letters "B. M." are chiseled in the rock. Bench mark No. 2 is a United States Geological Survey standard bench mark plate cemented into the top of the south abutment of the highway bridge one-eighth mile southwest of the station. Its elevation is 4.75 feet above the zero of the gage. Bench mark No. 3 bears north 7° 45' west 126 feet from the north post of the station. It is a cross chiseled on top of a bowlder projecting about 1 foot above the ground. Its elevation is 11.21 feet above the zero of the gage.

The observations at this station during 1904 have been made under the direction of G. L. Swendsen, district engineer.

DISCHARGE MEASUREMENTS OF PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH, IN 1904.

Date.	Hydrographer.	Area of section.	Mean velocity.	Gage height.	Discharge.
		Square feet.	Ft. per Sec.	Feet.	Second-feet.
January 5	C. Tanner	115	2.48	4.50	285
February 10	do	93	2.07	4.22	192
March 12	do	132	2.72	4.65	358
March 23	W. P. Hardesty	128	3.09	4.70	395
April 16	C. Tanner	170	3.63	5.15	617
May 19	do	253	3.50	6.25	1,390
June 15	H. S. Kleinschmidt	251	5.50	6.25	1,365
June 18	do	200	5.27	5.70	1,058
July 12	do	95	2.50	4.30	237
July 12	do	101	2.47	4.30	244
July 26	do	81	2.31	4.04	187
October 31	W. Swendsen	76	2.06	4.00	156
December 7	do	52	1.76	3.92	91
December 20	do	61	1.79	3.98	109

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MEAN DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH, FOR 1904.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.40	4.55	4.73	4.71	a 4.88	6.30	4.59	4.09	3.99	3.74	3.98	4.12
2	4.40	4.40	4.81	4.66	4.87	6.28	4.53	4.02	4.02	3.70	3.97	4.20
3	4.40	4.40	4.75	4.70	4.95	6.58	4.48	4.00	4.08	3.76	4.00	4.02
4	4.40	4.40	4.63	4.77	5.17	6.40	4.43	4.00	4.01	3.78	3.98	4.05
5	4.40	4.45	4.65	4.71	4.97	6.33	4.46	4.03	3.99	3.84	3.95	4.00
6	4.40	a 4.45	a 4.65	4.68	4.99	6.22	4.54	4.00	4.02	3.80	3.96	3.90
7	4.40	a 4.40	4.66	4.66	5.00	6.09	4.47	4.03	3.99	3.85	3.94	3.95
8	4.40	4.40	4.73	4.65	5.04	6.36	4.47	4.01	4.01	3.80	3.90	4.00
9	4.40	4.45	4.96	4.67	5.09	6.43	4.27	4.07	4.00	3.89	3.97	3.95
10	4.40	4.40	4.79	4.69	5.39	6.46	4.28	4.01	3.98	3.94	3.98	4.00
11	4.40	4.46	4.84	4.79	5.53	6.49	4.23	4.01	4.00	3.82	3.95	4.02
12	4.45	4.51	4.65	4.89	5.64	6.54	4.21	4.04	3.99	3.90	3.92	4.10
13	4.47	4.52	4.61	4.95	5.69	6.51	4.18	4.04	4.18	3.86	3.99	4.10
14	4.50	4.49	4.60	5.07	5.74	6.51	4.18	4.07	3.73	3.86	4.02	4.08
15	4.30	4.49	4.69	5.10	5.84	6.29	4.02	4.17	3.74	3.90	4.00	4.09
16	4.30	4.62	4.67	5.17	5.92	6.00	4.13	4.16	3.71	4.00	4.00	4.10
17	a 4.32	4.65	4.63	5.00	5.98	5.97	4.12	4.11	3.77	4.04	4.00	4.10
18	4.35	4.53	4.64	5.07	6.15	5.84	4.00	4.10	3.83	3.92	4.17	4.00
19	4.22	4.52	4.64	5.02	6.37	a 4.84	4.10	4.09	3.81	3.96	4.00	4.02
20	4.27	4.56	4.71	5.25	6.21	5.85	4.09	4.11	3.85	3.90	4.10	3.95
21	4.22	4.59	4.69	5.24	6.15	5.81	4.11	4.08	3.89	3.97	4.00	4.00
22	4.30	4.70	4.63	5.10	6.25	5.50	4.11	4.05	3.86	3.92	4.00	4.10
23	4.30	5.28	4.65	5.05	6.44	5.40	4.09	4.03	3.89	3.92	4.01	4.11
24	4.45	5.29	4.67	4.88	6.80	5.23	4.25	4.00	3.89	3.97	4.00	4.12
25	4.45	5.53	4.67	4.95	7.26	5.12	4.18	4.05	a 3.89	3.95	4.05	4.10
26	4.35	5.38	4.64	4.93	7.23	5.01	4.10	4.05	3.89	3.96	4.07	3.98
27	4.40	4.97	4.60	4.96	7.13	4.96	4.07	4.03	3.86	3.95	4.10	4.05
28	4.35	4.90	4.62	5.03	6.86	4.85	4.21	4.03	3.85	3.97	4.20	4.08
29	4.40	4.77	5.23	5.01	5.49	4.77	4.06	4.08	3.75	3.97	4.05	3.98
30	4.40		5.02	4.98	6.40	4.69	4.07	4.05	3.71	3.96	4.05	3.92
31	4.40		4.83		6.35		4.02	3.99		3.94		4.25

a Interpolated.

RATING TABLE FOR PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH,

FROM JANUARY 1 to DECEMBER 31, 1904.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	Second-ft.	Feet.	Second-ft.	Feet.	Second-ft.	Feet.	Second-ft.
3.60	68	4.30	220	5.40	775	6.40	1,490
3.65	73	4.40	253	5.50	841	6.50	1,565
3.70	79	4.50	290	5.60	910	6.60	1.640
3.75	86	4.60	331	5.70	980	6.70	1,715
3.80	94	4.70	376	5.80	1,050	6.80	1,790
3.85	103	4.80	425	5.90	1,120	6.90	1,865
3.90	113	4.90	477	6.00	1,192	7.00	1,945
3.95	124	5.00	532	6.10	1,265	7.10	2,025
4.00	136	5.10	589	6.20	1,340	7.20	2,105
4.20	190	5.30	711				

The above table is applicable only for open-channel conditions. It is based upon 17 discharge measurements made during 1903 and 1904. It is well defined between gage heights 4 feet and 6.25 feet. The table has been extended beyond these limits.

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ESTIMATED MONTHLY DISCHARGE OF PROVO RIVER AT MOUTH OF CANYON NEAR PROVO, UTAH, FOR 1904.

(Drainage area, 640 square miles.)

Month.	Discharge in second-feet.			Total in acre-feet.	Run-off			Rainfall in Inches.[a]
	Maximum.	Minimum.	Mean.		Second-feet per sq.mile.	Depth in Inches.	Per cent of rainfall.	
January	290	196	244	15,000	0.381	0.439	23	1.91
February	861	253	373	21,560	.583	.629	24	2.64
March	667	331	388	23,860	.606	.699	19	3.62
April	680	353	486	28,920	.759	.847	67	1.26
May	2,153	461	1,145	70,410	1.79	2.06	100	2.06
June	1,625	371	1,131	67,300	1.77	1.98	347	.57
July	326	136	202	12,420	.316	.364	107	.34
August	182	134	149	9,162	.233	.269	41	.66
September	184	80	117	6,962	.183	.204	204	.10
October	146	79	114	6,948	.177	.204	15	1.39
November	190	113	139	8,271	.217	.242		0.00
December	205	113	149	9,162	.233	.269	18	1.48
The year	2,153	79	386	279,900	.604	8.20	51	16.03

a Mean at Provo and Heber.

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ESTIMATED MONTHLY DISCHARGE OF TELLURIDE POWER COMPANY'S FLUME NEAR PROVO, UTAH, FOR 1904.

Month.	Discharge in second-feet. Maximum.	Minimum.	Mean.	Total in acre-feet.
May 15-31 a	65	0	42.7	1,440
June	85	20	38.5	2,291
July	76	0	53.9	3,314
August	82	36	61.1	3,757
September	90	32	58.4	3,475
October	81	58	71.6	4,403
November	77	48	63.0	3,759
December	81	31	56.0	3,443
The period				25,870

a Flow began May 15.

NOTE: To get total flow of Provo River at head of diversiondams, the flume dischage should be added to that of the gaging station given above.

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PROVO RIVER BASIN.

DESCRIPTION OF BASIN.

Provo River has its source in the Uinta Mountains and flows westward in a steep, narrow canyon, until it reaches Heber or Provo Valley, through which it winds in a well-defined channel. Leaving the valley, it flows southwestward, cutting through the Wasatch Range in another steep, narrow, and extremely rough canyon, and finally discharging its surplus waters into Utah Lake.

In the mountain regions the principal rock is a compact limestone. Except in Heber Valley there is but little soil in any portion of the basin. Small groves of fir and aspen are, however, scattered over almost the entire area, and there is a light growth of underbrush. There are no extensive forests, meadows, or marshes. In the canyons the stream receives numerous short and swift tributaries, deriving their principal supply from springs, but a part also from the melting of the snow, which covers portions of the high mountains during the entire year. The highest peaks reach elevations of about 13,000 feet.

Heber Valley, which comprises an area of about 20 square miles, is an irrigated farming district, composed of a deposit of loose bowlders, gravel, and soil, very porous. Most of the water comes from the main stream, though a part is received from small creeks which enter the valley from the south. The most important of these is Daniels Creek, into which some water is diverted from Strawberry River, a tributary of Green River, by three small canals in low passes at the head of the creek.

There are a few lakes at the head of the river, but they are so small that they probably have little effect in regulating the flow. There is no storage on the stream at present, but a few possibilities exist which will doubtless be developed in the future, as the entire stream, after being used at the mouth of the canyon for the development of power, is now utilized on lands in the vicinity of Utah Lake, and the supply is altogether insufficient.

PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM, NEAR PROVO, UTAH.

This station was established March 1, 1905. It is located about three-fourths of a mile up the river from Upper Falls, a station on the Provo Canyon branch of the Rio Grande Western Railway, about 4 miles above the mouth of the canyon and 800 feet south of the canyon road, in J. W. Slick's pasture. It is about one-half mile above the Telluride Power Company's dam and above all diversions into Utah Lake Valley. The object of the station is the collection of data concerning the amount of water passing from the river into this valley.

The channel has a slight uniform curvature for about 200 feet above and 300 feet below the station, describing approximately the arc of a circle. Both banks are sufficiently high to prevent overflow; the left bank is formed by the Rio Grande Western Railway grade. The bed of the stream is composed of well-compacted rock and soil, is comparatively smooth, and is not liable to shift, but a slight growth of moss occurs from the time of the spring flood until freezing weather. The velocity is low near the right bank, but increases uniformly to a point near the left. The discharge may vary from 100 to 1,400 second-feet. Conditions of free flow exist except for a very shoft distance near the left bank.

Discharge measurements are made by means of a cable and car. The cable is marked at 4-foot intervals, beginning at the north support, which is the initial point for soundings.

Daily gage readings are made, without expense to the Geological Survey, by the Telluride Power Company, the observationsbeing under the direction of E. A. Briscoe, an engineer at the power house about 4 miles below the station. The gage is of the inclined type and consists of a 4-by-4 inch by 16-foot fir, bolted to a vertical cedar post embedded in the bank at the water's edge and to a box-elder stump at the shore end, about 25 feet upstream from the cable on the left bank. It is graduated with saw cuts and paint to read vertically The gage is referred to bench marks as follows: (1) A 4-inch iron

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pipe with a metallic cap, set 3 1/2 feet in the ground at a point 12 feet from the north cable post, under a fence; this has an elevation of 7.31 feet above gage datum and is so stamped on the top. (2) A projecting point, marked with black paint, on a limestone ledge in a railroad cut about a foot above the track and 22 feet upstream from the line of the gage; elevation, 17.18 feet above datum of gage.

DISCHARGE MEASUREMENTS OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM, NEAR PROVO, UTAH, IN 1905.

Date.	Hydrographer.	Width.	Area of section.	Mean Velocity.	Gage height.	Discharge.
		Feet	Sq.feet.	Feet per second	Feet.	Second-feet.
January 28[a]	H.S.Kleinschmidt	70	144	1.51	3.73	217
March 3[b]	W. G. Swendsen	69	130	2.26	3.93	294
May 13	do	71	132	2.35	4.05	309
June 14	Hoyt & Swendsen	75	223	3.68	5.30	820
June 22	Do	71	166	2.82	4.43	469
August 28[c]	A. B. Larson	67	94	1.46	3.62	136
September 27[c]	W. G. Swendsen	67	85	1.64	3.57	139

a Measurement by wading 35 feet above cable.

b Measurement by wading approximately at present cable station

c Growing moss changed conditions.

DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM, NEAR PROVO, UTAH, FOR 1905.

Day.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.85	3.9	3.85	4.4	5.15	4.0	3.9	3.7	3.65	3.75	3.9
2	4.1	4.0	3.85	4.4	5.4	3.95	3.85	3.6	3.65	3.75	3.9
3	3.9	4.0	3.85	4.5	5.5	3.95	3.9	3.6	3.65	3.75	3.9
4	3.9	4.1	3.85	4.4	5.6	3.95	3.8	4.6	3.64	3.75	3.9
5	3.9	4.05	3.8	4.2	5.77	3.95	3.8	3.6	3.65	3.75	3.85
6	3.85	4.05	3.85	4.1	5.5	3.95	3.8	3.6	3.65	3.75	3.65
7	3.85	4.0	3.85	4.1	5.4	3.95	3.8	3.6	3.65	3.75	3.6
8	3.85	3.95	3.85	4.1	5.8	3.95	3.8	3.6	3.55	3.8	3.55
9	3.8	3.9	3.95	4.25	6.1	3.95	3.8	3.6	3.65	3.8	3.55
10	3.8	3.9	3.95	4.2	5.9	3.95	3.8	3.6	3.6	4.0	3.6
11	3.8	3.9	4.1	4.2	5.4	3.95	3.85	3.6	3.6	4.0	3.6
12	5.8	3.9	4.0	4.1	5.15	3.95	3.85	3.6	3.6	3.8	3.6
13	5.9	3.9	4.0	4.1	5.15	3.95	3.8	3.6	3.6	3.85	3.6
14	5.1	3.9	4.0	4.1	5.2	3.95	3.75	3.6	3.6	3.85	3.6
15	4.7	3.9	4.0	4.1	5.1	4.0	3.75	3.6	3.6	3.85	3.8
16	4.1	3.9	4.1	4.0	5.05	3.95	3.8	3.6	3.5	3.85	3.8
17	3.8	3.85	4.1	4.1	4.9	3.95	3.8	3.6	3.5	3.85	3.8
18	3.8	3.85	4.1	4.25	4.8	3.95	3.7	3.6	3.6	3.9	3.8
19	3.8	3.85	4.1	4.4	4.6	3.9	3.8	3.6	3.6	3.9	3.8
20	3.8	3.9	4.1	4.45	4.45	3.9	3.7	3.6	3.6	3.9	3.8
21	3.8	3.9	4.15	4.6	4.4	3.9	3.7	3.6	3.6	3.9	3.7
22	3.8	4.0	4.1	4.7	4.45	3.9	3.7	3.55	3.6	4.9	3.7
23	3.8	3.95	4.1	4.8	4.4	3.9	3.7	3.55	3.65	3.9	3.7
24	3.8	3.9	4.1	4.85	4.35	3.9	3.7	3.55	3.65	3.85	3.8
25	3.8	3.9	4.1	4.8	4.35	3.9	3.7	3.6	3.65	3.85	4.8
26	3.8	3.85	4.3	4.8	4.4	3.85	3.7	3.6	3.65	3.85	3.8
27	3.85	4.0	4.3	4.9	4.1	3.85	3.65	3.6	3.65	3.85	3.8
28	3.9	3.9	4.3	5.0	4.05	3.85	3.7	3.55	3.65	3.9	3.8
29		3.9	4.3	5.1	4.0	3.85	3.65	3.7	3.7	3.9	3.8
30	47	3.95	4.5	4.9	4.0	3.85	3.7	3.7	3.7	3.9	3.8
31		3.9		4.85		3.9	3.7		3.75		3.8

NOTE: Ice jam February 12, 13 and 14. Open-channel conditions during the remainder of the winter months.

DAILY DISCHARGE, IN SECOND FEET, OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM, NEAR PROVO, UTAH, FOR 1905.

Day.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	254	269	254	446	763	301	245	163	159	193	244
2	335	301	254	446	879	285	237	135	159	194	245
3	269	301	254	485	926	285	243	136	160	195	245
4	268	335	254	446	973	285	212	136	160	194	245
5	269	318	238	371	1,054	284	211	137	160	194	230
6	254	318	254	335	926	284	210	137	160	194	170
7	254	301	254	335	879	283	209	138	160	194	156
8	254	285	254	335	1,069	282	208	138	132	210	143
9	238	269	254	389	1,215	281	207	139	161	210	143
10	238	269	285	371	1,117	280	206	139	147	273	157
11	238	269	335	371	879	280	221	140	147	273	157
12	238	269	301	335	763	279	220	140	147	210	157
13	238	269	301	335	763	278	203	141	147	226	157
14	238	269	301	335	786	277	187	141	147	227	158
15	238	269	301	335	640	292	187	142	148	227	216
16	238	269	335	301	717	275	200	142	148	227	216
17	238	254	335	335	651	274	200	143	148	227	216
18	238	254	335	339	608	273	168	143	142	242	216
19	238	254	335	446	524	256	197	144	148	242	216
20	238	269	335	466	466	255	167	144	148	243	216
21	238	269	353	525	446	255	166	146	149	243	187
22	238	301	335	566	466	254	165	132	149	243	187
23	238	285	335	608	446	254	164	133	163	243	187
24	238	269	335	630	427	253	163	133	163	228	217
25	238	269	335	608	427	253	162	147	163	228	217
26	238	254	408	608	446	236	161	147	163	229	218
27	254	301	408	651	335	236	144	147	164	229	218
28	269	269	408	695	318	237	158	132	164	244	218
29		269	408	740	301	237	146	173	178	244	218
30		285	485	651	301	238	162	173	178	244	218
31		209		630		245	162		193		218

NOTE: Discharge February 12-16 assumed as 238 second-feet, on account

of ice conditions. A rating table was used to obtain daily discharge February 1 to July 4. The daily discharge July 5 to December 31 was obtained by indirect methods, as applied to shifting channels. The effect produced by the existence of moss at this station seems to be about the same as by a shifting of the bed i. e., the moss seems to collect sediment and make a soft coating over thebed of the stream, but does not affeat flow near surface.

ESTIMATED MONTHLY DISCHARGE OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM, NEAR PROVO, UTAH, FOR 1905.

Month.	Discharge in second-feet.			Total in acre feet.
	Maximum.	Minimum.	Mean.	
February	335	238	249	13,830
March	335	254	279	17,160
April	485	238	319	18,980
May	740	301	468	28,780
June	1,215	301	687	40,880
July	301	236	267	16,420
August	245	144	190	11,680
September	173	132	143	8,509
October	193	132	157	9,654
November	273	193	226	13,450
December	245	143	200	12,300
The period				191,600

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PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH.

This station was established July 27, 1889. It is located about 6 miles north of Provo about 1,000 feet above Olmstead Station, on the Provo Canyon branch of the Rio Grande Western Railway, and 1,200 feet above the power house of the Telluride Power Company.

The station was originally established to determine the total flow of the Provo above all diversions to Utah Lake Valley; but since that time a small canal has been taken out about 3 miles above the station and the system of the Telluride Power Company has been extended by a new flume line of sufficient capacity to divert the entire normal flow of the stream. The power plant of the Telluride Power Company has been rebuilt at a point about 1,200 feet below the station, the tailrace discharging directly into the canals at the mouth of the canyon. Practically no water now passes the station except the flood discharge and a small portion of the side drainage between the power company's dam and the gaging station, the greater part of the side drainage being diverted into the flume at various points along the line. The station is thus of little importance, but it is maintained at an extremely low cost, since the gage readings are made by the Telluride Power Company and the discharge curve is so well defined that but few more measurements are necessary.

The channel is straight for about 200 feet above and 100 feet below the station. The right bank is steep and rocky and does not overflow; the left is somewhat low and sloping and is liable to overflow at extreme flood stages. The bed of the stream is composed of bowlders and soil and is very rough, but permanent. The velocity is high, ranging from 4 to 6 feet per second. Ice forms near the banks and appears also as drift or floating ice. It is, however, limited in quantity and probably never piles up or gorges. There is no anchor or needle ice at any time.

Discharge measurements are made by means of a cable and car. The cable is marked at 3-foot intervals with white paint. The initial point for soundings is the first white mark on the cable south of the

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vertical post that supports the cable on the right bank. A guy line is stretched across the stream about 40 feet above the station and is found useful at all stages.

The original gage was of the inclined type and consisted of a piece of Oregon fir attached to vertical posts embedded in the left bank about 2 feet below the line of the cable. The present gage, daily readings of which are made under the direction of E. A. Briscoe, an engineer at the power plant, is a vertical piece of aspen driven into the stream bed and supported at the top by a horizontal piece buried in the bank. It is located on the right bank about 30 feet above the line of the cable. Simultaneous readings on the two gages are found to be equal, but the zero of the new gage is 0.10 feet above that of the old one. The bench marks are as follows: (1) A cross chiseled in a limestone rock about 1 foot square, 100 feet S. 15° E. from the old gage; elevation above old gage datum, 6.98 feet. (2) A standard United States Geological Survey metallic plug, cemented in the top of the south abutment of the highway bridge about one-eighth mile below the station; elevation above zero of gage, 4.75 feet. (3) A cross chiseled on the top of a bowlder projecting 1 foot above the ground, 126 feet N. 75° W. from the north post supporting the cable; elevation above zero of gage, 11.21 feet.

Information in regard to this station is contained in the following publications of the United States Geological Survey (Ann-Annual Report; Bull= Bulletin; WS= Water-Supply Paper.):

Description: Ann 14,ii,p 123; 18,iv,pp 325-326; Bull 131,p 59; 140,p 234; WS 16,p 162; 28,p 146; 38,pp 338-339; 51,p 416; 66,p 123; 85,p 88; 100,pp 140-141, 142-143; 133,pp 261-262.

Discharge: Ann 18,iv,p 326; Bull 131,p 92; 140,0 234; WS 16,p 162 28,p 339; 38,p 339; 51,p 416; 100,p 141; 66,p 123; 85,p 88; 100,p 143; 133,p 262;

Discharge, monthly: Ann 11,ii,p 104; 12,ii,pp354, 361; 13,iii p 97; 14,ii,pp 123-124; 18,iv,p 327; 19,iv,p 442; 20,iv,pp 458, 468; 21,iv,p 399; 22,iv,p 416; Bull 140,p 235; WS 75,p 195; 100,pp 142, 144; 133,p 264.

Discharge, yearly: Ann 13,iii,p 99; 20,iv, p 61.

Gage heights: Bull 131, p 60; 140,p 234; WS 11,p 79; 16,p 162; 28,p 152; 38,p 339; 51,p 417; 66,p 124; 100, p 141; 143-144; 133, p 263.

Hydrographic: Ann 12,ii,p 340; 14,ii,p 125; 18,iv,p 328; 19,iv,p 468; 21,iv,p 399; 22,iv, p 417;

Rainfall and run-off relation: Ann 20,iv,p 459.

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Rating tables: Ann 18,iv,p 326; 19,iv,p 441; Bull 131,p 59; 140,p 234; WS 28,p 154; 39,p 456; 52,p 521; 66,p 176; 100,pp 144; 133, p 263.
Water powers: Ann 19,iv, p 441.

DAILY MEASUREMENTS OF PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH, IN 1905

Date	Hydrographer.	Width.	Area of section.	Mean velocity.	Gage height.	Discharge.
		Feet.	Square feet.	Feet per second.	Feet.	Second feet.
March 4	Henry Kleinschmidt	73	116	2.58	4.50	300
May 24,	W. G. Swendsen	75	138	3.52	4.95	485
August 29[a]	A. B. Larsen	32	41	.62	3.55	25

a Measurement made 100 feet above regular station.

STATION RATING TABLE FOR PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH, FROM JANUARY 1, TO DECEMBER 31, 1905.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet	Second-ft.	Feet.	Second-ft.	Feet.	Second-ft.	Feet.	Second-ft.
3.40	12	4.20	177	5.00	532	5.80	1,059
3.50	20	4.30	212	5.10	589	5.90	1,120
3.60	31	4.40	250	5.20	649	6.00	1,192
3.70	46	4.50	290	5.30	711	6.10	1,265
3.80	64	4.60	332	5.40	775	6.20	1,340
3.90	87	4.70	377	5.50	841	6.30	1,415
4.00	114	4.80	425	5.60	910	6.40	1,490
4.10	144	4.90	477	5.70	980		

NOTE: The above table is applicable only for open-channel conditions. It is based on discharge measurements made during 1903-1905. It is well defined between gage heights 3.5 feet and 6.3 feet.

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DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH, for 1905.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.1	4.21	4.51	4.4	4.78	5.39	4.05	3.65	3.58	3.66	3.51	3.81
2	3.98	4.42	4.56	4.34	4.8	5.63	3.93	3.54	3.5	3.75	3.56	3.81
3	4.12	4.6	4.58	4.37	5.77	5.7	3.87	3.69	3.44	3.76	3.59	3.68
4	4.3	4.52	4.65	4.32	4.78	5.95	3.95	3.53	3.57	3.68	3.52	3.8
5	4.22	4.51	4.46	4.3	4.5	5.87	3.83	3.61	3.67	3.68	3.56	3.62
6	4.14	4.02	4.66	4.3	4.34	5.77	4.0	3.55	3.7	3.71	3.56	3.77
7	4.2	4.21	4.18	4.35	4.22	5.65	3.95	3.53	4.6	3.71	3.52	3.8
8	4.4	4.28	4.0	4.34	4.4	5.86	3.93	3.56	3.58	3.66	3.55	3.68
9	4.1	4.11	3.98	4.24	4.47	6.33	3.83	3.5	3.63	3.69	3.55	3.49
10	4.1	4.14	3.91	4.6	4.5	5.97	3.65	3.51	3.64	3.7	4.04	3.45
11	4.1	4.08	3.88	4.68	4.49	5.65	3.63	3.55	3.48	3.61	3.92	3.45
12	4.38	4.08	4.2	4.35	4.28	5.19	3.6	3.55	- --	3.63	4.05	3.48
13	4.1	4.01	4.14	4.25	4.3	5.75	3.6	3.53	-- --	3.6	4.03	3.51
14	4.12	4.0	4.0	4.4	4.28	5.75	3.7	3.49	- --	3.62	3.96	3.47
15	4.05	4.05	4.3	4.44	4.29	5.53	3.67	3.52	- --	3.64	3.98	3.68
16	4.07	4.09	4.52	4.45	4.4	5.5	3.63	3.57	- --	3.63	4.0	3.6
17	3.79	4.2	4.5	4.52	4.45	5.23	3.6	3.5	- --	3.59	3.99	3.62
18	3.78	4.1	4.4	4.52	4.43	5.0	3.63	3.45	- --	3.64	3.89	3.62
19	4.02	4.12	4.5	4.51	4.76	4.87	3.65	3.63	- --	3.65	3.91	- --
20	4.1	4.15	4.57	4.51	4.77	4.78	3.62	3.61	- --	3.58	3.76	- --
21	3.56	4.14	4.18	4.56	4.89	4.71	3.5	3.53	- --	3.61	3.89	- --
22	4.04	4.11	4.45	4.5	5.06	4.77	3.5	3.46	- --	3.63	3.82	- --
23	4.14	4.15	4.43	- --	5.1	4.85	3.5	3.55	- --	3.57	3.88	- -
24	4.13	4.25	4.49	4.4	5.09	4.7	3.55	3.68	- --	3.57	3.8	- --
25	4.05	4.22	4.43	4.45	5.0	4.43	3.6	3.59	3.51	3.55	3.74	- --
26	4.08	4.21	4.43	4.75	5.02	4.17	3.6	3.59	3.52	3.6	3.93	
27	4.06	4.42	4.49	4.94	5.1	4.2	3.58	3.56	3.49	3.61	3.9	
28	4.03	4.5	4.48	4.84	5.2	4.15	3.57	3.57	3.55	3.59	3.95	
29	4.03	- --	4.43	4.72	5.22	4.05	3.6	- --	3.85	3.58	3.95	
30	4.08	- --	4.43	4.78	5.15	3.93	3.6	- --	3.78	3.65	3.91	
31	4.13	- --	4.34	- --	5.1	- --	- --	- --	- --	3.64		

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DAILY DISCHARGE, IN SECOND-FEET, OF TELLURIDE POWER COMPANY'S FLUME NEAR PROVO, UTAH, FOR 1905.

Day.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	24	52	40	40	45	79	163	130	136	173
2	29	40	62	35	62	88	141	130	124	184
3	23	41	78	40	70	85	117	130	125	170
4	29	38	77	29	68	82	126	145	124	178
5	36	36	49	24	75	74	148	150	127	183
6	41	36	57	59	61	106	131	130	130	175
7	43	34	66	41	62	80	139	127	130	163
8	33	45	68	24	59	75	142	130	127	155
9	37	55	63	70	75	80	137	135	129	167
10	44	50	49	39	96	69	137	127	162	169
11	46	26	59	32	95	52	133	130	170	170
12	27	78	65	39	99	87	136	130	160	150
13	38	60	66	53	101	80			160	171
14	25	51	62	48	90	88			155	168
15	43	55	54	50	98	85		130	153	188
16	49	55	43	42	97	85		131	160	185
17	41	48	59	58	100	79		128	160	183
18	56	36	70	48	94	89		126	160	187
19	62	83	45	42	92	105		129	161	
20	41	66	55	48	85	124		135		
21	56	60	38	45	87	130		126		
22	62	65	40	41	87	131		158		
23	49		50	42	87	117		150		
24	47	85	44	37	84	123		158		
25	38	75	48	68	81	114	133	161		
26	40		36	81	80	150	124	141		
27	39		65	45	80	146	122	135		
28	32	50	48	47	80	121	119	142		
29	44	37	32	40	77		157			
30	53	33	44	64	78		137			
31	54		30						160	

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PROVO STATION, ON PROVO RIVER.

The Provo River, rising in the Wasatch Mountains, southeasterly from Salt Lake City, Utah, flows westerly through open valleys, and finally cuts a deep canyon, discharging upon the lands east of Utah Lake. Near and below the mouth of the canyon its waters are diverted by numerous canals on both sides of the stream. A gaging station was established in the canyon above the heads of these canals, at a point about 6 miles from Provo City, observations being begun on July 27, 1889. The channel at this point is nearly straight for several hundred feet; the bottom of the river is rocky and does not appear to change. The bank on the north side is sufficiently high to confine all of the waters, but on the south side a rise of 2 feet above low water causes the stream to spread over a rocky bar. Measurements can be made with great accuracy during low water, but at times of flood the results are not so good. The station is equipped with a cable, tag wire, and boat, from which measurements are made. The gage is inclined. The bench mark is on a stone firmly bedded in a bank near the wagon road, about 100 feet southwest of the gage. It is marked "B. M." in black paint, and is 6.95 feet above the zero of the gage. This station was inspected October 24 by Mr. Arthur P. Davis, who found for a gage height of 4.38 a discharge of 338 second-feet. The observer lives at some distance from this point, and there are some doubts whether his readings of heights are entirely reliable. They are given as reported, together with the rating table constructed from measurements made in preceding years.

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RATING TABLE OF PROVO RIVER AT PROVO, UTAH.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge
	Sec.feet.		Sec.feet.		Sec.feet.		Sec.feet.
3.70	144	4.70	564	5.70	1,316	6.70	2,100
3.80	154	4.80	630	5.80	1,394	6.80	2,180
3.90	174	4.90	700	5.90	1,470	6.90	2,260
4.00	200	5.00	774	6.00	1,550	7.00	2,340
4.10	240	5.10	851	6.10	1,626	7.10	2,420
4.20	280	5.20	928	6.20	1,704	7.20	2,500
4.30	330	5.30	1,006	6.30	1,780	7.30	2,580
4.40	380	5.40	1,084	6.40	1,860	7.40	2,660
4.50	440	5.50	1,160	6.50	1,940		
4.60	500	5.60	1,240	6.60	2,020		

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DAILY GAGE HEIGHT OF PROVO RIVER ABOVE PROVO, UTAH, FOR 1893.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.20	4.10	4.20	5.20	4.70	5.80	5.00	4.20	4.10	4.20	4.40	4.40
2	4.20	4.10	4.20	5.00	4.70	6.10	5.30	4.20	4.10	4.20	4.40	4.40
3	4.20	4.10	4.20	5.20	4.70	6.30	5.20	4.20	4.10	4.20	4.40	4.50
4	4.20	4.10	4.20	5.20	4.70	6.30	4.90	4.20	4.10	4.20	4.40	4.50
5	4.20	4.10	4.20	5.20	4.70	6.40	4.80	4.20	4.10	4.20	4.40	4.50
6	4.20	4.10	4.20	5.10	4.80	6.60	4.70	4.20	4.10	4.20	4.40	4.50
7	4.20	4.20	4.20	5.10	5.00	6.70	4.60	4.20	4.10	4.20	4.40	4.50
8	4.20	4.20	4.20	5.00	5.10	6.80	4.40	4.10	4.10	4.20	4.40	4.50
9	4.20	4.20	4.20	4.90	5.20	6.80	4.30	4.10	4.10	4.20	4.40	4.50
10	4.10	4.20	4.20	4.80	5.30	6.90	4.30	4.10	4.10	4.30	4.40	4.50
11	4.10	4.20	4.20	4.70	5.40	6.80	4.30	4.10	4.10	4.30	4.40	4.50
12	4.10	4.20	4.20	4.70	5.40	6.60	4.30	4.10	4.10	4.30	4.40	4.50
13	4.10	4.20	4.20	4.60	5.50	6.40	4.30	4.10	4.10	4.40	4.40	4.50
14	4.10	4.20	4.20	4.50	5.80	6.40	4.30	4.10	4.10	4.40	4.40	4.50
15	4.10	4.20	4.20	4.40	6.00	6.50	4.30	4.10	4.10	4.40	4.40	4.40
16	4.10	4.20	4.20	4.50	6.40	6.40	4.30	4.10	4.10	4.40	4.40	4.40
17	4.10	4.20	4.20	4.50	6.70	6.30	4.30	4.10	4.20	4.40	4.40	4.40
18	4.10	4.20	4.20	4.50	7.00	6.10	4.20	4.10	4.20	4.40	4.40	4.40
19	4.10	4.20	4.20	4.50	6.70	5.90	4.20	4.10	4.20	4.40	4.40	4.40
20	4.10	4.20	4.20	4.50	6.60	5.70	4.20	4.10	4.20	4.40	4.40	4.40
21	4.10	4.20	4.30	4.40	6.10	5.70	4.20	4.10	4.20	4.40	4.40	4.40
22	4.10	4.20	4.30	4.40	5.90	5.50	4.20	4.10	4.20	4.40	4.40	4.40
23	4.10	4.20	4.40	4.50	5.80	5.50	4.20	4.10	4.20	4.40	4.40	4.50
24	4.10	4.20	4.40	4.80	5.70	5.40	4.20	4.10	4.20	4.40	4.40	4.50
25	4.10	4.20	4.30	4.90	5.60	5.40	4.20	4.10	4.20	4.40	4.40	4.50
26	4.10	4.20	4.40	4.40	5.20	5.50	5.40	4.10	4.20	4.40	4.40	4.50
27	4.10	4.20	4.60	5.10	5.50	5.20	4.20	4.10	4.20	4.50	4.40	4.50
28	4.10	4.20	4.60	5.00	5.60	5.20	4.20	4.10	4.20	4.40	4.50	4.40
29	4.10		4.60	4.70	5.70	5.00	4.20	4.10	4.20	4.40	4.50	4.40
30	4.10		4.90	4.70	5.70	4.00	4.20	4.10	4.20	4.40	4.50	4.40
31	4.10		5.00		5.80		4.20	4.10		4.40		4.40

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DAILY GAGE HEIGHT OF PROVO RIVER ABOVE PROVO, UTAH, FOR 1894.

Day.	Jan.	Feb.	Mar.	Apr.	May.	Junè.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.40	4.40	4.50	4.70	5.30	6.50	4.50	4.10	4.10		4.50	4.30
2	4.40	4.40	4.50	4.70	5.20	6.50	4.50	4.10	4.40		4.40	4.30
3	4.40	4.40	4.50	4.70	5.10		4.30	4.10	4.40		4.40	4.30
4	4.40	4.40	4.50	4.70	5.10		4.30	4.10	4.40		4.40	4.30
5	4.40	4.40	4.50	4.70	5.10		4.30	4.10	4.40		4.40	4.30
6	4.40	4.40	4.50	4.70	5.10		4.40	4.10	4.50		4.40	4.30
7	4.40	4.40	4.50	4.70	5.20		4.50	4.10	4.50		4.40	4.30
8	4.40	4.40	4.50	4.60	5.40		4.30	4.10	4.50		4.40	4.30
9	4.40	4.40	4.50	4.60	5.50		4.30	4.10	4.50		4.40	4.30
10	4.40	4.40	4.50	4.70	5.60	5.90	4.30	4.10	4.50		4.40	4.30
11	4.40	4.40	4.50	4.70	5.60	5.90	4.30	4.10	4.50		4.40	4.30
12	4.40	4.40	4.50	4.80	5.80	5.80	4.30	4.10	4.60		4.40	4.30
13	4.40	4.40	4.50	4.90	5.90	5.60	4.30	4.10	4.50		4.40	4.40
14	4.40	4.40	4.50	4.90	6.20	5.60	4.20	4.10	4.50		4.40	4.40
15	4.40	4.40	4.60	4.80	6.40	5.30	4.30	4.10	4.50		4.40	4.40
16	4.40	4.40	4.60	4.80	6.40	5.30	4.20	4.10			4.40	4.40
17	4.40	4.40	4.60	4.70	6.40	5.30	4.20	4.10			4.40	4.40
18	4.40	4.40	4.60	4.70	6.20	4.90	4.20				4.40	4.40
19	4.40	4.40	4.60	4.70	6.10	4.90	4.20				4.40	4.40
20	4.40	4.40	4.60	4.70	6.20	4.80	4.20				4.40	4.40
21	4.40	4.40	4.60	4.80	6.10	4.80	4.20				4.40	4.50
22	4.40	4.40	4.60	4.90	6.10	4.60	4.10	4.10			4.40	4.50
23	4.40	4.40	4.60	5.00	6.00	4.50	4.10				4.30	4.50
24	4.40	4.50	4.60	5.00	6.00	4.60	4.10				4.30	4.40
25	4.40	4.50	4.60	5.10	6.10	4.60	4.10			4.40	4.30	4.20
26	4.40	4.50	4.60	5.30	6.20	4.50	4.10	4.10		4.40	4.30	4.20
27	4.40	4.50	4.60	5.40	6.20	4.50	4.10	4.20		4.40	4.30	4.10
28	4.40	4.50	4.70	5.40	6.30	4.50	4.10	4.30		4.50	4.30	4.10
29	4.40		4.80	5.40	6.40	4.50	4.10	4.20		4.40	4.30	4.20
30	4.40		4.80	5.30	6.40	4.40	4.10	4.20		4.40	4.30	4.20
31	4.40		4.70		6.40		4.10	4.10		4.40		4.20

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GAGE HEIGHTS OF PROVO RIVER AT PROVO CANYON, UTAH. FOR 1896.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.20	4.30	4.20	4.50	4.80	7.30	4.50	4.40	4.20	4.30	4.30	
2	4.10	4.20	4.20	4.50	4.80	7.30	4.40	4.40	4.20	4.30	4.30	
3	4.10	4.20	4.20	4.50	4.80	7.80	4.30	4.40	4.20	4.30	4.30	
4	4.10	4.20	4.20	4.50	4.90	7.60	4.30	4.30	4.20	4.30	4.30	
5	4.20	4.20	4.20	4.50	5.00	7.30	4.30	4.30	4.20	4.30	4.30	
6	4.20	4.20	4.20	4.50	5.20	6.90	4.30	4.30	4.20	4.30	4.30	4.40
7	4.20	4.20	4.20	4.50	5.40	6.90	4.30	4.30	4.20	4.30	4.30	
8	4.20	4.20	4.20	4.50	5.40	6.90	4.20	4.20	4.20	4.30	4.60	
9	4.20	4.20	4.20	4.40	5.30	6.80	4.20	4.20	4.20	4.30	4.60	
10	4.20	4.20	4.20	4.40	5.30	6.80	4.20	4.20	4.20	4.30	4.60	
11	4.20	4.20	4.20	4.30	5.30	6.60	4.20	4.20	4.20	4.30	4.60	
12	4.20	4.20	4.20	5.30	5.20	6.50	4.20	4.20	4.20	4.30	4.50	4.40
13	4.20	4.30	4.20	5.80	5.20	6.50	4.20	4.20	4.20	4.30	4.50	
14	4.20	4.30	4.20	5.90	4.90	6.20	4.20	4.20	4.20	4.30	4.50	
15	4.20	4.30	4.30	5.80	4.70	6.00	4.30	4.20	4.20	4.30	4.40	
16	4.20	4.20	4.30	5.30	4.70	5.80	4.30	4.20	4.20	4.30	4.40	
17	4.30	4.20	4.30	4.70	4.70	5.60	4.30	4.20	4.20	4.30	4.40	
18	4.30	4.20	4.40	4.70	4.70	5.00	4.30	4.20	4.20	4.30	4.40	
19	4.40	4.20	4.40	4.60	4.70	4.80	4.20	4.20	4.20	4.30	4.40	4.40
20	4.40	4.20	4.40	4.60	4.70	4.60	4.20	4.20	4.30	4.30	4.40	
21	4.50	4.20	4.50	4.60	4.70	4.60	4.30	4.20	4.30	4.30	4.40	
22	4.50	4.20	4.60	4.60	4.70	4.90	4.20	4.20	4.30	4.50	4.50	
23	4.40	4.20	4.60	4.60	4.70	4.80	4.80	4.20	4.30	4.30	4.50	
24	4.30	4.20	4.60	4.60	5.90	4.80	4.70	4.20	4.30	4.30	4.50	
25	4.30	4.20	4.70	4.60	5.60	4.70	4.50	4.20	4.30	4.30	4.50	
26	4.30	4.20	4.70	4.70	6.00	4.60	4.50	4.20	4.30	4.30	4.50	4.40
27	4.30	4.20	4.80	4.70	6.20	4.60	4.50	4.20	4.30	4.30	4.40	
28	4.30	4.20	4.90	4.70	6.50	4.60	4.50	4.20	4.30	4.30	4.40	
29	4.30	4.20	4.60	4.70	7.00	4.60	4.50	4.20	4.30	4.30		
30	4.30		4.60	4.80	7.80	4.50	4.50	4.20	4.30	4.30		
31	4.30		4.60		8.50		4.50	4.20		4.30		

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PROVO STATION ON PROVO RIVER.

This station, described in the Eighteenth Annual Report, Part IV, page 325, is located in the canyon about 6 miles from the city of Provo, Utah. The observer is Henry V. Smith, a farmer. The gage is inclined and fastened to stakes set in the ground. The bench mark is a stone firmly bedded in a bank near the wagon road, about 100 feet southwest of the gage. It is makred "B. M." in black paint, and is 6.95 feet above the zero of the gage. The banks are medium high. The channel is straight for some distance above and below the station. The bed of the river is gravelly and the velocity is medium swift. The following discharge measurements were made in 1897 by W. B. Dougall:

May 7, gage height, 6.25 feet; discharge, 1,818 second-feet.

May 14, gage height, 6.05 feet; discharge, 1,681 second-feet.

May 24, gage height, 6.53 feet; discharge, 2,454 second-feet.

June 4, gage height, 5.35 feet; discharge, 1,167 second-feet.

June 21, gage height, 4.60 feet; discharge, 564 second-feet.

August 7, gage height, 4.10 feet; discharge, 306 second-feet.

November 26, gage height, 4.40 feet; discharge, 436 second-feet.

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DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER AT PROVO CANYON, UTAH,
for 1897.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1					5.60	5.80	4.30	4.00	4.00	4.40	4.50	4.40
2	4.40				5.70	5.80	4.30	4.00	4.00	4.40	4.50	4.40
3					5.80	5.60	4.30	4.00	4.00	4.40	4.50	4.50
4				4.80	5.90	5.50	4.20	4.00	4.00	4.40	4.50	4.40
5				4.80	5.90	5.40	4.20	4.00	4.00	4.40	4.50	4.40
6		4.60	4.40	4.80	6.00	5.20	4.20	4.00	4.00	4.40	4.50	4.40
7				4.80	6.10	5.10	4.20	4.00	4.00	4.40	4.50	4.40
8				4.80	6.10	5.10	4.20	4.00	4.00	4.40	4.50	4.30
9	4.40			4.80	6.20	5.10	4.20	4.00	4.00	4.40	4.50	4.30
10				4.80	6.20	5.10	4.20	4.00	4.00	4.40	4.50	4.30
11				5.00	5.90	5.00	4.20	4.00	4.10	4.40	4.50	4.30
12				5.00	5.80	5.00	4.20	4.00	4.10	4.40	4.50	4.30
13		4.60	4.40	5.00	6.00	5.00	4.20	4.00	4.10	4.40	4.50	4.30
14				5.00	6.00	5.00	4.20	4.00	4.10	4.40	4.30	4.30
15				5.00	6.20	4.90	4.20	4.00	4.10	4.40	4.30	4.30
16				5.00	6.10	4.90	4.20	4.00	4.10	4.40	4.30	4.30
17				5.00	6.10	4.90	4.20	4.00	4.10	4.50	4.30	4.30
18				5.40	6.20	4.90	4.10	4.00	4.10	4.50	4.30	4.30
19		4.80		5.40	6.30	4.90	4.10	4.00	4.10	4.50	4.30	4.30
20		4.60	4.40	5.60	6.30	4.80	4.10	4.00	4.10	4.50	4.30	4.30
21				5.60	6.40	4.80	4.10	4.00	4.10	4.50	4.40	4.30
22				5.40	6.50	4.60	4.10	4.00	4.10	4.50	4.40	4.30
23	4.30			5.00	6.50	4.50	4.10	4.00	4.10	4.50	4.40	4.30
24				5.00	6.60	4.40	4.10	4.00	4.10	4.50	4.40	4.30
25				5.10	6.60	4.30	4.10	4.00	4.10	4.40	4.50	4.30
26				5.20	6.50	4.30	4.10	4.00	4.10	4.50	4.40	4.30
27		4.40		5.30	6.50	4.30	4.10	4.00	4.10	4.50	4.40	4.30
28				5.40	6.40	4.30	4.10	4.00	4.10	4.50	4.40	4.30
29				5.50	6.40	4.30	4.10	4.00	4.20	4.50	4.40	4.30
30	4.30			5.60	6.10	4.30	4.10	4.00	4.40	4.50	4.40	4.30
31					6.00		4.10	4.00		4.50		4.30

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WATER- SUPPLY PAPER NO. 28, Pages 152, 153 and 154.

DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER AT PROVO, UTAH, FOR 1898

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.30	4.20	4.40	4.40	5.30	5.40	4.20	3.80	3.80	3.80	4.10	4.20
2	4.30	4.20	4.40	4.40	5.20	5.50	4.20	3.80	3.80	3.80	4.10	4.20
3	4.30	4.20	4.40	4.40	5.10	5.50	4.00	3.80	3.80	3.80	4.10	4.20
4	4.30	4.20	4.40	4.40	5.10	5.50	4.00	3.80	3.80	3.80	4.10	4.20
5	4.30	4.20	4.40	4.40	5.00	5.30	4.00	3.80	3.80	3.80	4.10	4.20
6	4.30	4.20	4.40	4.40	5.00	5.20	4.00	3.80	3.80	3.80	4.20	4.20
7	4.30	4.20	4.40	4.40	5.00	5.20	4.00	3.80	3.80	3.80	4.20	4.20
8	4.30	4.20	4.40	4.40	5.10	5.20	4.00	3.80	3.80	3.80	4.20	4.20
9	4.10	4.20	4.40	4.40	5.10	5.20	4.00	3.80	3.80	3.80	4.20	4.20
10	4.10	4.20	4.40	4.40	5.10	5.00	4.00	3.80	3.80	3.80	4.20	4.20
11	4.10	4.20	4.40	4.50	5.10	5.00	4.00	3.80	3.80	3.80	4.20	4.20
12	4.10	4.20	4.40	4.50	5.20	5.10	4.00	3.80	3.80	3.80	4.20	4.20
13	4.10	4.20	4.40	4.60	5.20	5.20	4.00	3.80	3.80	3.80	4.20	4.20
14	4.10	4.20	4.40	4.60	5.20	5.40	4.00	3.80	3.80	3.80	4.20	4.20
15	4.10	4.20	4.40	4.60	5.20	5.40	4.00	3.80	3.80	3.80	4.20	4.20
16	4.10	4.20	4.40	4.70	5.20	5.40	4.00	3.80	3.80	4.10	4.20	4.20
17	4.10	4.20	4.40	4.60	5.20	5.10	3.90	3.80	3.80	4.10	4.20	4.20
18	4.10	4.20	4.40	4.70	5.20	5.00	3.90	3.80	3.80	4.10	4.20	4.10
19	4.10	4.20	4.40	4.80	5.20	4.70	3.90	3.80	3.80	4.10	4.20	4.10
20	4.10	4.20	4.40	4.90	5.20	4.70	3.90	3.80	3.80	4.10	4.20	4.10
21	4.10	4.20	4.40	4.60	5.20	4.70	3.90	3.80	3.80	4.10	4.20	4.10
22	4.10	4.20	4.40	4.60	5.10	4.90	3.90	3.70	3.80	4.10	4.20	4.10
23	4.20	4.30	4.40	4.70	5.00	4.80	3.90	3.70	3.80	4.10	4.20	4.10
24	4.20	4.40	4.40	4.80	5.40	4.70	3.80	3.70	3.80	4.10	4.20	4.10
25	4.20	4.40	4.40	4.90	5.40	4.70	3.80	3.70	3.80	4.10	4.20	4.10
26	4.20	4.40	4.40	5.10	5.30	4.60	3.80	3.70	3.80	4.10	4.20	4.10
27	4.20	4.40	4.40	5.10	5.20	4.60	3.80	3.70	3.80	4.10	4.20	4.10
28	4.20	4.40	4.40	5.10	5.20	4.40	3.80	3.70	3.80	4.10	4.20	4.10
29	4.20		4.40	5.20	5.30	4.40	3.80	3.80	3.80	4.10	4.20	4.20
30	4.20		4.40	5.20	5.30	4.20	3.80	3.80	3.80	4.10	4.20	4.20
31	4.20		4.40		5.40		3.80	3.80		4.10		4.20

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LIST OF DISCHARGE MEASUREMENTS. 1898.

Date.	Stream.	Locality.	Hydrographer.	Gage height.	Discharge
May 23	Provo River	Provo, Utah.	W. B. Dougall	4.85	704
June 6	do	do	do	5.20	938
Sept. 15	do	do	do	3.85	192

RATING TABLES. PROVO RIVER, PROVO, UTAH. 1898

Gage height.	Discharge.
Feet.	Sec.-ft.
3.6	128
3.7	146
3.8	167
3.9	190
4.0	216
4.1	250
4.2	287
4.3	336
4.4	390
4.5	447
4.6	510
4.7	582
4.8	652
4.9	732
5.0	812
5.1	892
5.2	972
5.3	1,052
5.4	1,132
5.5	1,212
5.6	1,292

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RATING TABLE FOR PROVO RIVER, PROVO UTAH, 1898

(Continued)

Gage height.	Discharge.
Feet	Second-feet.
5.7	1,374
5.8	1,454
5.9	1,535
6.0	1,616
6.1	1,697
6.2	1,780
6.3	1,865

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WATER-SUPPLY PAPER NO. 38; PAGES 338, 339 and 340.

PROVO RIVER AT PROVO, UTAH.

This river rises on the western slope of the Uinta Mountains and after receiving a number of tributaries enters what is known as Heber Valley, where considerable irrigation is practiced. After crossing this valley it passes through the Wasatch Mountains in a picturesque canyon, finally entering Utah Valley, where its summer flow is completely diverted for irrigation purposes. Its flood waters discharge into Utah Lake. The gaging station, established July 27, 1889, is located in the canyon, about 6 miles from Provo and above the head of most of the irrigation canals of Utah Valley. The diversion works of the company which develop power at the mouth of Provo Canyon for electtic transmission to the mines west of Provo, are located about 5 miles above the station. The gage is inclined and fastened to stakes set in the ground. The bench mark is a stone firmly bedded in the bank near the wagon road, about 100 feet southwest of the gage. It is marked "B. M." in black paint, and is 6.95 feet above gage datum. The channel is straight for some distance above and below the station. The bed of the river is gravel and not liable to change. The equipment consists of a cable, car and tagged wire. The results of measurements may be found as follows: 1896, Eighteenth Annual Report, Part IV, page 226; 1897, Nineteenth Annual Report, Part IV, page 442; 1898 Twentieth Annual Report, Part IV, page 468; The following measurements of discharge were made by W. B. Dougall and J. S. Baker in 1899:

May 8, gage height, 4.70 feet; discharge, 496 second-feet.

June 29, gage height, 6.70 feet; discharge, 1,745 second-feet.

July 13, gage height, 5.22 feet; discharge, 535 second-feet.

August 16, gage height, 4.69 feet; discharge, 340 second-feet.

September 4, gage height, 4.60 feet; discharge, 352 second-feet.

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DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER AT PROVO, UTAH, for 1899

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.
1	4.20	4.20	4.30	4.90	5.20	5.80	6.50	4.60	4.60	4.80
2	4.20	4.20	4.30	4.80	5.20	5.80	6.90	4.60	4.60	4.80
3	4.20	4.20	4.30	4.80	5.20	4.80	6.30	4.60	4.60	4.80
4	4.20	4.20	4.30	4.80	5.20	6.20	6.20	4.60	4.60	4.80
5	4.20	4.00	4.30	4.80	5.20	6.40	6.10	4.60	4.60	4.80
6	4.20	4.00	4.30	4.80	5.20	6.70	5.90	4.60	4.60	4.80
7	4.20	4.00	4.30	4.70	4.80	6.70,	5.70	4.60	4.60	4.80
8	4.20	4.00	4.30	4.70	4.90	6.80	5.60	4.60	4.60	4.80
9	4.20	4.00	4.30	4.90	5.00	6.80	5.50	4.70	4.60	4.80
10	4.20	3.90	4.30	4.90	5.30	6.90	5.40	4.70	4.60	4.80
11	4.20	3.90	4.40	5.00	5.40	7.10	5.30	4.70	4.60	4.80
12	4.20	4.20	4.30	5.00	5.70	7.10	5.20	4.70	4.60	4.80
13	4.20	4.20	4.40	5.00	5.70	7.10	5.20	4.70	4.60	4.80
14	4.20	4.20	4.40	5.10	5.70	7.20	5.20	4.70	4.60	4.80
15	4.20	4.20	4.40	5.10	5.70	7.20	5.20	4.70	4.60	4.80
16	4.20	4.20	4.40	5.10	5.60	7.20	5.10	4.70	4.60	4.80
17	4.20	4.20	4.50	5.10	5.50	7.20	5.10	4.70	4.60	4.80
18	4.20	4.20	4.50	5.10	5.50	7.60	5.10	4.70	4.60	4.80
19	4.20	4.20	4.80	5.20	5.50	7.70	5.00	4.70	4.60	4.80
20	4.20	4.20	5.00	5.30	5.50	7.90	5.00	4.60	4.60	4.80
21	4.20	4.20	5.00	5.30	5.50	7.90	5.00	4.60	4.60	4.80
22	4.20	4.20	5.00	5.30	5.30	8.00	5.00	4.60	4.60	
23	4.20	4.20	5.00	5.30	5.30	7.60	4.90	4.60	4.60	
24	4.20	4.20	5.30	5.30	5.30	7.60	4.90	4.60	(a)	
25	4.20	4.20	5.30	5.30	5.60	7.40	4.90	4.60	(a)	
26	4.20	4.20	5.00	5.30	5.80	7.40	4.80	4.60	(a)	
27	4.20	4.20	5.00	5.20	5.80	7.20	4.80	4.60	(a)	
28	4.20	4.20	5.00	5.20	5.80	7.10	4.80	4.60	(a)	
29	4.20		5.00	5.20	5.80	6.70	4.80	4.60	(a)	
30	4.20		5.00	5.20	5.80	6.60	4.60	4.60	(a)	
31	4.20		5.00		5.80		4.60	4.60		

(a) No reading. Station discontinued October 21.

UTAH LAKE.

This freshwater lake receives the surplus waters and seepage of a number of streams that receive their water supply from the Wasatch Mountains, the principal ones being Currant Creek, Spanish Fork, Hobble Creek, Provo River, and American Fork. The ordinary flow of these streams is diverted, on their appearance from the canyons, to irrigate the lands of Utah Valley. A gaging station has been maintained on Provo River, as described on page 338 of this report. A number of miscellaneous measurements were made during 1899 on the other tributaries as well as on the canals diverting waters from the same during the last season. On May 11 Spanish Fork, at the second bridge in the canyon, was discharging 679 second-feet; May 10, Hobble Creek, at the second bridge in the canyon, above Springville, was discharging 244 second-feet; American Fork, on May 9, was carrying 106 second feet, with a gage height of 0.1 foot, on a temporary gage established that day. The following table shows the discharge of a number of canals in Utah County as determined by J. S. Baker:

DISCHARGE OF CANALS IN UTAH COUNTY, UTAH,

SOURCE PROVO RIVER. FOR 1899.

Date	Stream.	Source.	Discharge.	Remarks.
			Sec.ft.	
June 22,	Boxelder Creek	Mountain springs.	31.46	
Aug. 16	Timpanogas canal	Provo river	10.40	
Aug. 16	Timpanogas canal	Provo River	7.84	9,500 feet below last measure-
Aug. 17	Little Dry Creek canal	Provo River	4.64	ment.
Aug. 17	Tanner's race	Provo River	16.94	
Aug. 17	Lake Bottom canal	Provo River	7.14	
Aug. 17	West Union Canal	Provo River	55.98	
Aug. 17	Provo Bench Canal	Provo River	53.65	
Aug. 17	Provo Bench Canal	Provo River	57.96	1 1/2 miles above last
Aug. 17	Park & Nuttall's ditch	Provo River	11.84	measurement.
Aug. 17	Upper East Union canal	Provo River	28.27	
Aug. 17	Upper East Union canal	Provo River	27.52	1 mile below
Aug. 18	City race	Provo River	12.40	last measure-
Aug. 18	Factory race	Provo River	51.44	ment.
Aug. 18,	East Union Canal	Provo River	18.22	
Aug. 18	Bomb & Richard-son's canal	Provo River	1.00	Estimated.

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DISCHARGE OF CANALS IN UTAH COUNTY, UTAH

SOURCE PROVO RIVER, 1898. (Continued)

Date.	Stream.	Source.	Discharge	Remarks.
			Sec. ft.	
Aug. 18	Stubbs & Furgeson's canal	Provo River	5.00	By floats.
Aug. 18	Richmond & Penrod's canal	Provo River	4.00	Estimated.

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WATER-SUPPLY PAPER NO. 52, PAGES 498, 499, 501, 502 and 503.

IRRIGATION IN UTAH VALLEY, UTAH.[1]

Introduction.

During the latter half of the month of August, 1899, data were obtained for a brief report on the irrigation systems of Utah Valley. Information regarding the history, the area irrigated, etc., was given by the presidents and directors of canal companies, by water masters, and by those most closely connected with irrigation along the various streams. In many cases the statements were from memory, although in most cases they were from records. Frequently it was necessary, owing to lack of time in which to make observations, to accept approximate estimates from those who contributed the information. In view of these facts the data are necessarily incomplete and in some cases are inaccurate, but they give, in a general way, the facts as they existed.

Utah Valley is in the north-central portion of the State, between the high Wasatch Range on the east and the low Lake Mountains on the west. There are about 150,000 acres of irrigable land in Utah County, most of it in Utah Valley. In 1890 there were 40, 195 acres cultivated, and 36,486 acres irrigated; in 1899 there were about 65,000 acres irrigated. Utah Lake occupies, when at a mean elevation or "compromise line," about 84,000 acres in the northwestern part of the valley. The agricultural land lies along the eastern and southern sides. The upper lands consist of gravel, sand, and loam, while the lower lands bordering the lake are sandy loams and in many places adjacent to the lake are marshy.

Water for irrigation is supplied by Provo River, Spanish Fork, American Fork, Hobble Creek, Peteetnetr Creek, Current Creek, Summit Creek, Rock Canyon Creek, Goshen Warmsprings Creek, Salem Pond, Smith Brothers' spring, Mapleton Union or North reservoir, South Mapleton reservoir, and Mount Nebo reservoir. The principal facts in regard to these sources of supply are given in the following table and on succeeding pages:

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1 Report of J. S. Baker.

STREAMS IRRIGATING LANDS IN UTAH VALLEY IN 1899

Name of stream.	Drainage area.	Length.	Measurement. Date.	Measurement. Discharge.	Number of canals diverting water.	Area irrigated.
	Sq.mi.	Miles.	1899	Sec.ft.		Acres.
Provo River	1,000	90	June 29	1,745	16	a 20,000
Do			July 13	535		
Do			Aug.16	340		
Spanish Fork	670	45	Aug. 22	139	5	17,708
American Fork	66	18	May 9	131	3	a 15,000
Do			Aug. 25	57		
Hobble Creek	160	25	Aug. 21	47	7	5,250
Peteetnetr Creek	30	10	May 1	21.3	17	1,400
Do			May 15	121.8		
Do			June 1	65.2		
Do			June 15	29.7		
Do			July 1	23.3		
Do			July 15	21.3		
Do			Aug. 1	17.0		
Do			Aug. 15	15.6		
Current Creek	12	12			7	2,500
Summit Creek		8	Aug. 23	14.6	b 8 to 14	1,200
Rock Canyon Creel			Do	a4.0		400
Goshen Warmsprings Creek			do	5.5	3	825
Spring Lake Creek			do	2.9		150
Salem Pond			Aug. 22	5.0	1	600
Smith Brothers' spring			Aug --	.9		c40

a Approximate.
b Some canals discontinue in low-water season.
c Orchard and vineyard.

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The methods of irrigation throughout the entire valley are flooding for small grains and grasses and the furrow method for orchards and vegetables. The water is distributed on a time basis.

PROVO RIVER.

Provo River is the largest stream entering Utah Valley. It has its source in the summit of the Uinta Mountains, on the boundary line between Summit and Wasatch counties, and very near the sources of Bear, Weber, and Duchesne rivers. For about 18 miles it flows through a precipitous canyon, which in cases of heavy rainfall yields a large run-off. The river is therefore subject to great fluctuation. At the upper end of Provo Canyon is a large valley of the same name. This valley is useful to the lower irrigators as an underground storage reservoir. A part of the water of the river is applied to the land of the valley during the early part of the season, and reaches the river again by seepage shortly after the commencement of the low-water period, thus increasing the flow during that season. Indeed, it has been suggested by the people of Provo that the irrigators of the upper valley be paid to irrigate the uncultivated lands of that valley so as to still further increase, by seepage, the flow of the river below at a time when water is most needed. Since 1883 there have been but four years in which Provo River has carried a sufficient quantity of water to supply the needs of the irrigators below.

The water of the river is allotted as follows: Blue Cliff canal, Timpanogas canal, Provo Bench canal, one-eighth; Robert's ditch, Park & Nuttall's ditch, Bomb & Richardson's ditch, Richmond & Penrod's ditch, Stubbs & Fergeson's ditch, West Union Canal, two-fifteenths; Upper East Union canal, one-twelfth; Lake Bottom canal, one-fifteenth; Wast Union canal, Factory race, City race, and Tanners, forty-three hundredths; and Little Dry Creek canal, one-fifteenth.

BLUE CLIFF CANAL.-- This is the first canal diverting water from Provo River. It heads about 2 1/2 miles above the mouth of Provo Canyon, on the north side of the stream. The greater part of it was

built by the labor of the owners, but small portions were built under contract. In connection with this canal there is contemplated a reservoir on Provo Bench, three-fourths of a mile northwest from the mouth of Provo Canyon, with an area of 20 acres, a depth of 10 feet, and a capacity of 200 acre-feet.

TIMPANOGAS CANAL.-- This is the second canal diverting water from the river. It was built entirely by the labor of the appropriators. Measurements made July 9,1897, by water commissioner, Mr. A. L. Booth, of Provo, show a discharge of 7.27 second-feet. An annual tax of 50 cents per share, to pay the water master and general expenses of operating, is levied on the stock of the company. Considerable trouble has been experienced by frequent breaks in the embankment, which have deprived the irrigators of the use of water for a considerable length of time. Measurements for seepage loss were made August 16, 1899 one near the head and one 9,500 feet below. At the upper point the discharge was 10.40 second-feet; at the lower point it was 7.83 second-feet, showing a loss of 2.57 second-feet, or 24.6 per cent of the discharge at the head. This is equal to a loss of 2.6 per cent per 1,000 feet.

PROVO BENCH CANAL. -- This is the third canal diverting water from the river. It heads near the mouth of the canyon, on the west side of the stream. The diverting dam is made of two large logs buried to their tops, horizontally, in the bed of the stream, at right angles to the current. The lower log which is 10 feet farther downstream is the higher. On top of the logs planks are spiked transversely. An apron of 2-inch plank extends from the crest of the dam 20 feet downstream. On top of the crest and extending along it is a plank 10 inches high, placed on edge. The gates are two in number, each 7 feet high, 6 feet wide, and of 2-inch plank. They are operated by a rack and pinion and hand lever. The original water rights were acquired by appropriation, but later the canal was enlarged and water to fill it was purchased. Measurements for seepage on this canal were made

August 17, 1899. The loss from that source and from evaporation was 4.31 second-feet (equal to 7.4 per cent of the amount at the head) in a distance of 1.5 miles. There are five small ditches diverting water from the river and from what is known as City Creek. Two of them--Robert's ditch and Park & Nuttall's ditch,- are on the west side of the river, and three of them--Bomb & Richardson's, Richmond & Penrod's, and Stubbs & Furgeson's--are on the east side of the river. Measurements of these ditches were made August 17 and 18, 1899, the results of which are given in the table on page 502.

WEST UNION CANAL-- This canal is the fourth one diverting water from Provo River. It heads 1 mile below the mouth of Provo Canyon, on the west side of the stream. It was constructed in 1875-76 by day labor. In 1897 the West Union Canal Company consolidated with the Enterprise Canal Company under the name of the East Union Canal Company, and the canal was enlarged so as to carry the supply of both companies. The water has a rental value of $2 per share per annum. Measurements made on July 9, 1897, showed a discharge of 29.3 second-feet, and those made on August 4, 1897, a discharge of 30.6 second-feet. The interest in the canal is separate from that in the land; water rights do not go with the land, but are bought and sold as other property. Each owner can sell or tent his proportion of the water if he does not care to use it, but if he does not sell or rent it the company can do so and the revenue goes into the treasury of the company.

UPPER EAST UNION CANAL.-- This is the fifth canal diverting water from the river, and the uppermost from City Creek, an old river channel through which irrigation water for the city of Provo is taken to the four canals serving it. The construction of the Upper East Union canal was begun in 1871 and was completed in 1874. It was built by day labor of the appropriators and by contract. The water rights were acquired by original appropriation. One share of stock in the company covers the right to the use of enough water to irrigate 1 acre of land. The canal was designed to carry 30 second-feet of water. On July 9, 1897, there were 32.35 second-feet flowing in it, and

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on August 4, 1897, 21.45 second-feet. Measurements made in 1899 will be found in the table on page 503. The loss in seepage on August 17, 1899, in a distance of 1 mile, was 0.75 second-foot, or 2.65 per cent of the amount at the head of the canal.

LAKE BOTTOM CANAL.-- Tgis is the sixth canal diverting water from the river, and the lowest from the west side. It is taken out about 4 miles below the mouth of Provo Canyon. It was constructed in 1861, by the labor of the appropriators. Measurements were made July 9, 1897, near the head of the canal, and showed a discharge of 15.78 second-feet; those made August 4, 1897, showed a discharge of 12 second-feet. A large amount of water seeps into this canal from the irrigated land above, which consists of a deep gravel deposit. Being supplemented by seepage water it is not so subject to shortage as are the canals above.

EAST UNION CANAL. -- This is the seventh canal diverting water from Provo River. It is supplied through City Creek. It is nearly parallel to the Upper East Union canal, at an average distance of five-eighths of a mile. It was constructed in 1857, by the labor of the appropriators The capacity was designed to be 27 second-feet. In 1874, upon the petition of the owners, the canal was placed under the contract of the city of Provo, for the reason that most of the land under it was within the city. The water rights are valued at from $60 to $70 per acre for farms and $125 per acre for city lots.

FACTORY RACE.-- This race is the eighth canal diverting water from the river. It is supplied through City Creek. It was enlarged in 1872, when an additional amount of water was appropriated. Its capacity is about 67 second-feet. Lake the East Union Canal, it was placed under municipal control in 1874. About three-fifths of the water of this canal is used by the Provo mills for power purposes; the remainder is used for irrigation.

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TANNER'S RACE.-- This is the tenth canal diverting water from the river. Some of the water is used for power purposes, but after having passed the mills it is again used for irrigation. The capacity of the canal is about 27 second-feet. It was taken under the control of the city of Provo in 1874,

LITTLE DRY CREEK canal. -- This is the last and the oldest canal diverting water from Provo River. Its headworks are near the northwestern part of the city of Provo. It was constructed in 1852, by the labor of the appropriators. On July 9, 1897, a measurement was made which showed a discharge of 12.5 second-feet; on August 5, 1897, another measurement was made which showed a discharge of 8.8 second-feet. Measurement made in 1899 will be found in the table on page 503.

DATA REGARDING PROVO RIVER CANALS.

Name of canal.	Year of appropriation.	Capital stock.	Number of shares.	Value of shares.	Dimensions of canal.		
					Length.	Width.	Depth.
					Miles.	Feet.	Feet.
Blue Cliff Canal a	1884	$50,000	2,000	$25	7	6	2
Timpanogas canal	1878	4,125	165	25	6		
Provo Bench canal	1866				9.5		
Robert's ditch b							
Park & Nuttall's ditch b							
Bomb & Richardson's ditch b							
Richmond & Penrod's ditch b							
Stubbs & Ferguson's ditch b							
West Union canal	1876	24,000	1,200	20	10		
Upper East Union canal	1872	17,220	1,722	10	7.5		
Lake Bottom Canal	1858				7		
East Union canal c	1857				5.5		
Factory race	(d)				4.5	12	3.5
City race c					5		
Tanner's race c	1856				6		
Little Dry Creek canal	1852	4,000	400	10	4		

a In course of construction.
b Data not ascertained.
c Under control of city of Provo.
d Time of first appropriation not learned; second appropriation in 1872.

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DUTY OF WATER OF PROVO RIVER CANALS IN 1899

Name of canal.	Measurements. Date.	Discharge.	Length of irrigation period.	Area irrigated.	Duty of water. Amount used. Sec.-ft.	Amount used. Acre-feet.	Depth.
		Sec.ft.		Acres. b	Sec.-ft. b	Acre-feet. b	Feet.
Blue Cliff canal a	1899	41.66	Apr.1 to Sept.1	2,700	41.66	12,643	4.68
Timpanogas canal	Aug.16	(c10.40) (d 7.84)	Apr. 15 to Sept. 15	650	7.84	2,379	3.66
Provo Bench canal	Aug.17	(53.65) (e57.96)	Apr. 1 to Sept. 1	4,000	53.65	16,281	4.07
Robert's ditch	do	2.80	Apr.15 to Sept. 15.				
Park & Nuttall's ditch	do	11.84	do				
Bomb & Richardson's ditch	Aug.18	f1.00	do				
Richmond & Penrod's ditch	do	f4.00	do	g1,200	10.00	3,035	2.52
Stubbs & Fergeson's ditch	do	f5.00	do				
West Union canal	Aug.17	55.98	do	3,500	55.98	16,988	4.85
Upper East Union canal	do	(c28.27) (d27.52)					
do	May 8	29.28	Apr.15 to Sept.15.	680			
Lake Bottom canal	Aug.17	7.14	do				
East Union canal	Aug.18	18.22	do				
Factory race	do	51.44	do	h300			
City race	do	12.40	do	380			
Tanner's race i	Aug.17	16.94	do	490			
Little Dry Creek canal	do	4.64	do	400	4.64	1,408	3.52

a Not yet completed.
b Calculated.
c Near head.
d Near laterals.
e One-half mile above first measurement.
f Float measurement
g These three canals irrigate low land.
h Acreage reported by Walter Scott of Provo; three-fifths of the stream used for power.
i Irrigates city property almost exclusively.

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WATER-SUPPLY PAPER NO. 212, PAGES 37, 38 and 39.

PROVO RIVER BASIN.

DESCRIPTION OF BASIN.

Provo River has its source in the uinta Mountains and flows west-ward in a steep, narrow canyon until it reaches Heber or Provo Valley, through which it winds in a well-defined channel. Leaving the valley, it flows southwestward, cutting through the Wasatch Range in another steep, narrow, and extremely rough canyon, and finally discharging its surplus waters into Utah Lake.

In the mountain regions the principal rock is a compact limestone. Except in Heber Valley there is but little soil in any portion of the basin. Small groves of fir and aspen are, however, scattered over almost the entire area, and there is a light growth of underbrush. There are no extensive forests, meadows, or marshes. In the canyons the stream receives numerous short and swift tributaries, deriving their principal supply from springs, but a part also from the melting of the snow, which covers portions of the high mountains during the entire year. The highest peaks reach elevations of about 13,000 feet.

Heber Valley, which comprises an area of about 20 square miles, is an irrigated farming district, composed of a deposit of loose bowlders, gravel, and soil, very porous. Most of the water comes from the main stream, though a part is received from small creeks which enter the valley from the south. The most important of these is Daniels Creek, into which some water is diverted from Strawberry River, a tributary of Green River, by three small canals in low passes at the head of the creek.

There are a few lakes at the head of the river, but they are so small that they probably have little effect in regulating the flow. There is no storage on the stream at present, but a few possibilities exist which will doubtless be developed in the future, as the entire stream, after being used at the mouth of the canyon for the development of power, is now utilized on lands in the vicinity of Utah Lake,

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and the supply is altogether insufficient.

PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM, NEAR PROVO, UTAH.

This station was established March 1, 1905. It is located about three-fourths of a mile up the river from Upper Falls, a station on the Provo Canyon branch of the Rio Grande Western Railway, about 4 miles above the mouth of the canyon and 800 feet south of the canyon road, in J. W. Slick's pasture. It is about one-half mile above the Telluride Power Company's dam and above all diversions into Utah Lake Valley. The object of the station is the collection of data concerning the amount of water passing from the river into this valley. The conditions at this station and the bench marks are described in Water-Supply Paper No. 176, page 50.

DISCHARGE MEASUREMENTS OF PROVO RIVER ABOVE TELLURIDE POWER Company's DAM, NEAR PROVO, UTAH, IN 1906.

Date.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906		Feet.	Sq.-feet.	Feet.	Sec.-feet.
February 14,	W.G.Swendsen	69	113	3.80	222
May 10	H.S.Kleinschmidt	76	222	5.30	886
June 3	Thos. Grieve, jr.	80	244	5.40	993
June 13,	do	96	396	7.00	1,762
July 7	do	71	156	4.20	402

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DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER ABOVE TELLURIDE COMPANY'S DAM, NEAR PROVO, UTAH, FOR 1906.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.8	3.8	4.0	4.65	4.5	6.2	4.45	3.85	4.0	3.9	4.1	3.8
2	4.0	3.8	3.9	4.4	4.8	5.7	4.45	4.9	4.05	3.9	4.05	3.8
3	4.1	3.7	3.9	4.55	4.5	5.35	4.45	3.9	4.05	3.8	4.05	3.8
4	3.8	3.7	3.95	4.1	4.6	5.4	4.45	3.95	4.05	3.8	4.0	4.1
5	3.85	3.7	3.85	4.1	4.8	5.4	4.4	3.9	4.05	3.8	4.0	4.15
6	3.9	3.65	3.8	4.1	5.0	5.5	4.4	4.85	4.0	3.9	4.05	4.0
7	3.9	3.5	3.85	4.15	4.1	6.4	4.35	3.8	4.0	3.9	4.0	4.0
8	4.25	3.7	3.85	4.25	4.9	5.7	4.3	3.8	4.0	3.9	4.0	4.0
9	4.25	3.6	3.9	4.35	5.0	5.3	4.15	3.8	4.0	3.9	3.95	4.0
10	5.0	3.7	3.95	4.5	5.3	5.5	4.1	3.8	3.95	3.9	3.95	4.05
11	4.0	3.85	4.0	4.0	4.5	5.35	3.95	3.75	3.95	3.9	3.95	4.1
12	3.75	3.75	4.8	4.5	6.2	6.3	3.9	3.75	3.95	3.9	3.9	4.15
13	3.8	3.75	4.5	4.35	6.3	6.7	3.9	3.75	3.95	3.9	3.9	4.3
14		3.8	4.2	4.3	5.1	7.1	3.95	3.7	4.0	3.9	3.95	4.1
15	4.1	3.9	4.1	4.4	5.4	6.7	4.0	3.7	4.0	3.9	3.95	3.9
16	3.95	4.0	3.8	4.45	5.3	6.5	3.95	3.7	4.0	3.85	3.95	3.9
17	4.0	3.9	3.9	4.6	5.2	6.5	3.95	3.7	4.0	3.85	4.0	4.0
18	3.95	3.9	3.95	4.8	5.0	6.0	3.9	3.7	4.0	3.8	4.0	4.0
19	4.6	4.1	3.8	4.8	5.1	5.8	3.9	3.75	4.0	3.8	3.8	4.0
20	4.6	4.0	3.9	4.75	5.6	5.6	3.9	4.08	4.0	3.8	3.7	4.0
21	4.5	4.0	3.95	4.8	5.8	5.4	3.9	3.95	3.95	3.8	3.9	3.9
22	3.75	4.0	4.1	4.9	6.0	5.3	3.9	3.15	3.9	3.8	3.9	3.9
23	3.9	3.9	4.2	5.1	6.1	5.2	4.0	4.0	3.95	3.8	4.0	3.9
24	3.95	3.9	4.55	5.0	6.1	5.2	4.0	3.95	3.9	3.8	4.0	4.0
25	3.9	3.9	4.85	4.9	6.1	5.3	3.95	3.9	3.9	3.8	4.0	4.0
26	3.8	3.9	4.5	4.8	6.8	5.4	3.95	3.95	3.85	3.8	4.0	4.4
27	3.8	3.85	4.4	4.7	6.3	5.8	3.95	3.9	3.9	3.85	3.9	4.45
28	3.8	3.95	4.4	4.6	6.2	5.6	3.9	3.9	3.9	3.85	3.9	4.2
29	3.8		4.3	4.6	6.4	4.65	3.9	3.95	3.9	3.9	3.9	4.1
30	3.7		4.4	4.55	6.2	4.5	3.8	3.9	3.9	3.9	3.8	4.0
31	3.65		4.5		5.7		3.8			3.9		4.05

NOTE: Ice conditions January 1-15. River assumed to be clear of ice after January 15.

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RATING TABLE FOR PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM, NEAR PROVO, UTAH, FOR 1906.

Gage height.	Dis-charge.	Gage height.	Dis-charge.	Gage height.	Dis-charge.	Gage height.	Dis-charge.	Gage height.	Dis-charge
Feet.	Sec.-ft.	Feet.	Sec.-ft.	Feet.	Sec.-ft.	Feet.	Sec.-ft.	Feet.	Sec-ft.
3.50	100	4.30	442	5.10	814	5.80	1,146	6.50	1,480
3.60	142	4.40	486	5.20	862	5.90	1,194	6.60	1,526
3.70	184	4.50	530	5.30	912	6.00	1,242	6.70	1,576
3.80	226	4.60	576	5.40	958	6.10	1,288	6.80	1,626
3.90	268	4.70	622	5.50	1,004	6.20	1,336	6.90	1,776
4.00	310	4.80	670	5.60	1,050	6.30	1,384	7.00	1,826
4.10	354	4.90	718	5.70	1,098	6.40	1,432	7.10	1,876
4.20	398	5.00	766						

NOTE:--The above table is applicable only for open-channel conditions. It is based upon 5 discharge measurements made during 1906 and is fairly well defined.

MONTHLY DISCHARGE OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM, NEAR PROVO, UTAH, FOR 1906.

Month.	Discharge in second-feet. Maximum.	Minimum.	Mean.	Total in acre-feet.
January 16-31	576	163	303	9,620
February	354	100	238	13,200
March	694	226	370	22,800
April	814	354	556	33,100
May	1,630	354	999	61,400
June	1,880	530	1,110	66,000
July	508	226	337	20,700
August	376	184	251	15,400
September	332	247	297	17,700
October	268	226	249	15,300
November	354	184	290	17,300
December	508	226	327	20,000
The Period				313,000.

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PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH.

This station was established July 27, 1889, and was discontinued June 30, 1906. It was located about 6 miles north of Provo, about 1,000 feet above Olmstead station, on the Provo Canyon branch of the Rio Grande Western Railway, and 1,200 feet above the power house of the Telluride Power Company. The conditions at this station and the bench marks are described in Water-Supply Paper No. 176, page 53, where are given also references to publications that contain data for previous years.

DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER AT MOUTH OF CANYON, NEAR PROVO, UTAH, FOR 1906.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	3.35	3.60	4.05	4.90	4.95		17	3.91	3.95	4.05	4.92	5.52	6.15
2	3.80	3.68	3.90	4.70	4.80		18	4.05	3.90	4.05	5.15	5.40	5.95
3	3.62	3.60	3.85	4.55	4.82		19	5.15	4.12	3.95	5.12	5.50	5.92
4	3.70	3.52	3.88	4.45	5.00	5.80	20	4.90	4.08	4.10	5.10	5.92	5.90
5	3.66	3.55	3.82	4.28	5.18	6.02	21	4.38	4.20	4.02	5.25	6.10	5.75
6	3.61	3.56	3.85	4.28	5.32	6.50	22	4.00	4.08	4.25	5.40	6.20	5.68
7	3.31	3.55	3.80	4.35	5.32	6.12	23	3.92	3.95	4.60	5.40	6.25	5.55
8	3.60	3.55	3.95	4.42	5.40	5.80	24	4.04	3.88	4.95	5.40	6.30	5.50
9	3.46	3.54	4.02	4.65	5.42	5.68	25	3.95	4.00	5.28	5.30	6.32	5.25
10	3.65	3.70	4.15	4.85	5.65	5.90	26	3.91	3.92	5.50	5.20	6.08	5.05
11	3.65	3.55	4.05	4.90	5.82	6.15	27	3.91	3.90	4.90	5.00	6.42	5.10
12	3.70	3.61	5.15	4.82	6.25	6.50	28	3.75	3.98	4.82	4.95	6.58	5.18
13	3.78	3.50	4.68	4.70	6.50	7.02	29	3.55		4.70	4.95	6.60	5.10
14	4.00	3.70	4.40	4.55	5.90	6.78	30	3.62		4.65	4.90	6.18	5.08
15	3.99	3.95	4.22	4.60	5.72	6.45	31	3.69		4.45		5.92	
16	4.12	4.05	4.08	4.80	5.55	6.15							

NOTE: Slight ice conditions during January.

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WATER-SUPPLY PAPER NO. 250; PAGES 62, 63, 64, 65, 66 and 67. 1907-1908.

PROVO RIVER BASIN.

Provo River rises in the Uinta Mountains and flows westward in a steep, narrow canyon until it reaches Heber or Provo Valley, through which it winds in a well-defined channel. Leaving the valley it flows southwestward, cutting through the Wasatch Range in another steep, narrow, and extremely rough canyon, and finally discharging its surplus waters into Utah Lake.

In the mountain regions the principal rock is a compact limestone. Except in Heber Valley little soil is found in any part of the basin. Small groves of fir and aspen are, however, scattered over almost the entire area, and there is a light growth of underbrush. No extensive forests, meadows, or marshes exist. In the canyons the stream receives numerous short and swift tributaries which derive their principal supply from springs, but a part also from the melting of the snow that covers portions of the mountains during the entire year. The highest peaks reach elevations of about 13,000 feet above sea level.

Heber Valley, comprising an area of about 20 square miles, is an irrigated farming district. The surface is covered with loose bowlders, gravel, and very porous soil. Most of the water is taken from the main stream, but a part is diverted from small creeks that enter the valley from the south. The most important of these is Daniels Creek, into which some water is diverted from Strawberry River, a tributary of Green River, by three small canals in low passes at the head of the creek.

At the head of the river are a few lakes, but they are so small that they probably have little effect in regulating the flow. No storage is used on the stream at present, but a few favorable sites will doubtless be developed in the future, as the entire flow, after being used by a power plant at the mouth of the canyon, is now utilized in the vicinity of Utah Lake, and the supply is altogether insufficient.

122 The wettest year since records have been kept in this basin was

1907, when the discharge at the station of the Telluride Power Company's dam was 477,000 acre-feet. The driest year was 1905, when at the same station the discharge was 192,000 acre-feet.

The following stations have been maintained in this basin:

Provo River above Telluride Power Company's dam, near Provo, Utah, 1905-1908.

Provo River at mouth of canyon, near Provo, Utah, 1889-1906.

Provo River at Denver and Rio Grande Railroad Btidge, near Provo, Utah, 1905.

Provo River at San Pedro, Los Angeles and Salt Lake Railroad bridge, near Provo, Utah, 1903-4.

PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM NEAR PROVO, UTAH.

This station, which was established February 1, 1905, to determine the total flow of the river into this valley, takes the place of the station at the mouth of the canyon, which has been maintained since 1889. It is located about one-half mile below Forks station, on the Provo Canyon branch of the Denver and Rio Grande Railroad, about 4 miles above the mouth of the canyon.

The station is below South Fork and all other tributaries and above all diversions into Utah Lake Valley. Some water is diverted for irrigation in Heber Valley above the station.

Little ice forms at this station. The gage heights have been somewhat affected by backwater from the diversion down below. This dam was raised about July 12, 1908, and the station had to be moved upstream a wuarter of a mile, as near the forks as possible, but it is still toonear the dam and results since that time have not been satisfactory.

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DISCHARGE MEASUREMENTS OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM, NEAR PROVO, UTAH, IN 1906-1908

Date.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
1906		Feet.	Sq.ft.	Feet.	Sec.-ft.
February 14	W.G.Swendsen	69	113	3.80	222
May 10	H.S.Kleinschmidt	76	222	5.30	886
June 3	Thomas Grieve, jr.	80	244	5.40	993
June 13	do	96	296	7.00	1,760
July 7	do	71	156	4.20	402
1907					
June 18	G. T. Burridge	84	282	5.90	1,300
July 6	do	102	390	7.45	1,880
July 26	La Rue and Burridge	76	188	4.93	642
August 20	do	70	138	4.15	349
1908.					
July 22	E.C.LaRue	76	197	a5.02	245
September 5 b	Do	72	110	2.13	229
October 30 b	do	74	170	3.05	390

a Affected by backwater.

b At new station, established July 24, 1909.

DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM, NEAR PROVO, UTAH, FOR 1907.
(Telluride Power Company, observer)

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.05	3.9	4.3	4.3	5.4	5.8	6.85	4.4	4.25	4.2	4.2	4.2
2	3.9	4.0	4.24	4.5	5.4	6.1	7.15	4.4	4.25	4.25	4.2	4.2
3	3.9	4.3	4.3	4.7	5.2	6.9	7.25	4.3	4.25	4.25	4.2	4.2
4	4.0	4.9	4.3	4.8	5.05	7.0	7.2	4.4	4.25	4.2	4.2	4.2
5	4.05	5.1	4.35	5.0	4.0	7.3	7.5	4.35	4.5	4.2	4.2	4.2
6	4.1	4.9	4.2	5.05	4.95	7.65	7.45	4.35	4.5	4.2	4.2	4.2
7	4.0	4.5	4.2	4.9	4.9	7.8	7.2	4.25	4.35	4.25	4.2	4.2
8	3.9	4.4	4.15	4.75	4.85	7.9	6.8	4.25	4.3	4.2	4.2	4.2
9	3.9	4.3	4.35	4.7	4.8	7.6	6.55	4.25	4.35	4.2	4.2	4.2
10	3.85	4.45	4.2	5.0	4.8	7.1	6.35	4.2	4.3	4.2	4.2	4.2
11	3.9	4.5	4.3	5.4	5.1	6.1	6.2	4.2	4.3	4.2	4.2	4.2
12	3.95	4.4	4.3	5.5	5.35	6.85	5.95	4.2	4.3	4.2	4.2	4,2
13	3.9	4.45	4.3	6.1	5.6	7.4	5.8	4.15	4.3	4.25	4.2	4.2
14	3.9	4.5	4.2	6.3	5.3	6.8	5.9	4.15	4.25	4.2	4.2	4.2
15	3.9	4.45	4.15	6.6	5.0	6.5	5.7	4.15	4.25	4.2	4.2	4.2
16	3.95	4.45	4.05	6.6	5.0	6.1	5.55	4.15	4.2	4.2	4.2	4.2
17	4.0	4.1	4.45	6.3	5.35	5.95	5.3	4.15	4.2	4.2	4.2	4.2
18	4.0	4.05	4.6	6.0	5.65	5.9	5.1	4.15	4.2	4.2	4.2	4.15
19	3.95	4.1	4.75	5.75	6.15	6.2	5.1	4.15	4.15	4.2	4.2	4.15
20	3.8	4.1	4.85	5.4	6.8	6.6	5.0	4.15	4.15	4.2	4.2	4.15
21	3.7	4.1	5.05	5.1	7.45	6.8	4.95	4.15	4.2	4.2	4.2	4.2
22	3.7	4.3	4.8	5.1	7.7	7.1	4.85	4.15	4.2	4.2	4.2	4.2
23	3.65	4.5	4.7	5.1	7.7	7.2	4.8	4.15	4.2	4.2	4.2	4.2
24	3.7	4.3	4.5	5.1	7.9	6.4	4.75	4.15	4.2	4.2	4.2	4.2
25	3.95	4.25	4.5	5.1	7.6	6.1	4.7	4.2	4.2	4.2	4.2	4.2
26	4.0	4.3	4.5	5.15	6.8	6.1	4.7	4.2	4.2	4.2	4.2	4.2
27	4.05	4.3	4.55	5.2	6.4	6.2	4.65	4.2	4.2	4.2	4.2	4.4
28	4.1	4.25	4.4	5.5	6.1	6.6	4.6	4.2	4.2	4.2	4.2	4.3
29	3.95		4.4	5.5	5.9	6.95	4.5	4.2	4.2	4.2	4.2	4.25
30	3.95		4.35	5.4	5.8	7.0	4.45	4.3	4.2	4.2	4.2	4.0
31	3.9		4.2		5.85		4.45	4.25		4.2		4.2

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DAILY GAGE HEEGHT, IN FEET, OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM, NEAR PROVO, UTAH, for 1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec
1	4.2	3.75	4.25	4.1	4.5	5.75	5.7	2.65	2.1	2.7	3.0	2.8
2	4.2	3.9	4.2	4.1	4.8	5.5	5.65	2.4	2.1	2.7	3.0	2.8
3	4.15	4.1	4.2	4.1	4.9	5.65	5.6	2.3	2.1	2.85	3.0	3.0
4	4.2	4.15	4.2	4.1	5.1	5.5	5.55	2.35	2.15	2.9	3.0	3.0
5	4.0	4.1	4.35	4.05	5.0	5.7	5.5	2.1	2.1	3.0	3.0	2.9
6	3.9	4.05	4.25	4.05	5.3	5.65	5.55	2.55	2.1	3.0	3.0	2.9
7	3.8	4.1	4.15	4.1	5.1	5.5	5.5	2.8	2.1	2.85	3.0	2.8
8	3.8	4.1	4.1	4.1	5.15	5.6	5.35	2.6	2.1	2.9	3.0	2.85
9	4.0	4.1	4.1	4.1	5.3	5.55	5.25	2.3	2.2	2.9	2.9	2.9
10	4.2	4.1	4.1	4.1	5.5	5.55	5.2	2.3	2.15	2.95	3.0	2.9
11	4.0	4.05	4.15	5.1	5.35	5.75	5.0	2.55	2.2	2.95	2.95	2.9
12	4.1	4.1	4.15	4.15	5.25	6.2		2.8	2.2	3.0	2.9	2.8
13	4.0	4.1	4.15	4.2	5.5	6.25		2.7	2.2	3.0	2.9	2.9
14	4.1	4.0	4.2	4.3	5.35	6.4		2.5	2.2	3.0	2.9	2.9
15	4.15	4.0	4.3	4.4	5.25	6.65		2.4	2.2	3.0	2.9	2.9
16	4.1	4.05	4.3	4.5	5.25	7.0		2.25	2.2	3.65	2.9	2.9
17	4.1	4.1	4.4	4.8	5.35	6.8		2.2	2.15	3.4	2.9	2.9
18	4.1	4.05	4.4	4.7	5.35	6.4		2.15	2.15	3.1	2.9	2.8
19	4.1	4.05	4.35	4.75	5.3	6.1		2.1	2.15	3.1	2.9	3.6
20	4.1	4.15	4.2	4.9	5.7	5.9		2.2	2.15	3.2	2.9	3.0
21	4.1	4.05	4.15	5.0	5.55	6.1		2.2	2.15	3.15	2.9	3.6
22	4.1	4.05	4.1	5.15	5.4	6.25		2.2	2.15	3.15	3.0	3.6
23	4.1	4.1	4.1	5.3	5.45	6.35		2.15	2.15	3.0	2.9	2.7
24	4.15	4.1	4.1	5.2	5.5	6.0		2.15	2.3	3.0	3.0	2.8
25	4.15	4.05	4.1	5.1	5.4	6.0	2.4	2.1	2.9	3.1	2.95	2.8
26	4.1	4.05	4.1	4.9	5.6	6.1	2.2	2.1	2.7	3.0	2.95	2.8
27	4.05	4.05	4.15	4.9	5.7	6.1	2.2	2.1	2.7	3.0	2.95	2.8
28	4.1	4.1	4.15	4.8	5.6	6.0	2.3	2.1	2.7	3.0	2.45	2.7
29	4.0	4.4	4.1	4.7	5.55	5.9	2.35	2.1	2.7	3.0	2.3	2.6
30	4.0		4.05	4.6	5.5		2.5	2.1	2.7	3.0	2.6	2.7
31	3.9		4.05		5.6		2.6	2.1				2.6

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NOTE(To preceding table): There was little or no ice during 1907 or 1908. Gage heights July 12 to 24, 1908, were affected by backwater from the diversion dam and have been omitted. Gage heights for the two months previous are liable to be somewhat in error on this account. Gage heights beginning July 25 are for the new station above the old one.

RATING TABLES FOR PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM NEAR PROVO, UTAH.

JANUARY 1, 1906 TO JULY 11, 1908.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge
Feet.	Sec.-ft.	Feet.	Sec.-ft.	Feet.	Sec.-ft.	Feet.	Sec.-ft.
3.50	153	4.60	544	5.60	1,020	6.60	1,560
3.60	181	4.70	588	5.70	1,070	6.70	1,620
3.70	210	4.80	634	5.80	1,120	6.80	1,680
3.80	240	4.90	680	5.90	1,175	6.90	1,740
3.90	272	5.00	726	6.00	1,230	7.00	1,800
4.00	305	5.10	774	6.10	1,285	7.20	1,920
4.10	340	5.20	822	6.20	1,340	7.40	2,040
4.20	378	5.30	870	6.30	1,395	7.60	2,160
4.30	418	5.40	920	6.40	1,450	7.80	2,280
4.40	458	5.50	970	6.50	1,505	8.00	2,400
4.50	500						

NOTE:-- This table is not applicable for ice or obstructed-channel conditions below gage height 5.5 feet. It is based on 14 discharge measurements made during 1905-1907, and is fairly well defined between gage heights 3.7 feet and 5.5 feet. Above gage height 5.5 feet the rating curve is drawn to average the three measurements, two of which were probably made when the gage was affected by backwater from the diversion dam of the power flume. It isnnot the normal curve but probably gives the best average results.

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JULY 25 TO DECEMBER 31, 1908.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
Feet.	Sec.-ft.	Feet.	Sec.-ft.	Feet.	Sec.-ft.	Feet.	Sec.-ft.
2.00	210	2.50	292	3.00	382	3.50	475
2.10	225	2.60	310	3.10	400	3.60	495
2.20	241	2.70	328	3.20	419		
2.30	258	2.80	346	3.30	438		
2.40	275	2.90	364	3.40	457		

NOTE:- This table is not applicable for ice conditions. It is based on 2 discharge measurements made during 1908, and is not well defined. The rating curve is not a normal one as the measurement of October 30 was probably affected by backwater, but it is believed to represent average conditions as they existed during the period.

MONTHLY DISCHARGE OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM NEAR PROVO, UTAH, FOR 1906-1908.

Month.	Discharge in second-feet. Maximum.	Minimum.	Mean.	Run-off (total in acre-feet).	Accuracy.
1906 a					
January			274	16,800	C.
February	340	153	250	13,900	B.
March	657	240	360	22,100	B.
April	774	340	527	31,400	B.
May	1,680	340	973	59,800	B.
June	1,860	500	1,090	64,900	B.
July	479	240	331	20,400	B.
August	359	210	260	16,000	B.
September	322	256	295	17,600	B.
October	272	240	258	15,900	B.
November	340	210	289	17,200	B.
December	479	240	320	19,700	B.
The year	1,860	153	436	316,000	

a These discharges supersede those published in Water-Supply Paper 212, p. 39. Gage heights for 1906 are given in Water-Supply Paper 212, p. 38.

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MONTHLY DISCHARGE OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM NEAR PROVO, UTAH, FOR 1906-1908 (continued)

Month. 1907	Discharge in second-feet. Maximum.	Minimum.	Mean.	Run-off (total in acre-feet).	Accuracy
January	340	196	280	17,200	C.
February	774	272	450	25,000	B.
March	750	322	460	28,300	B.
April	1,560	418	897	53,400	B.
May	2,340	634	1,170	71,900	C.
June	2,340	1,120	1,650	98,200	C.
July	2,100	479	1,120	68,900	C.
August	458	359	387	23,800	B.
September	500	359	400	23,800	B.
October	398	378	381	23,400	B.
November	378	378	378	22,500	B.
December	458	305	378	23,200	B.
The year	2,340	196	663	480,000	
1908					
January	378	240	329	20,200	C.
February	458	225	330	19,000	B
March	458	322	372	22,900	B.
April	870	322	515	30,600	B.
May	1,070	500	886	54,500	C
June	1,800	970	1,230	73,200	C.
July a	1,070		579	35,600	C.
August	346	225	260	16,000	B.
September	364	225	253	15,100	B.
October	504	328	386	23,700	B.
November	382	258	364	21,700	C.
December	495	310	365	22,400	C.
The year	1,800	225	489	355,000	

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a Discharges interpolated July 12 to 24.

PROVO RIVER AT MOUTH OF CANYON NEAR PROVO, UTAH.

This station, which was located about 6 miles above Provo and 1,200 feet above the power house of the Telluride Power Company, was established July 27, 1889, to determine the amount of water available at the mouth of the canyon for irrigating lands near Utah Lake, and was discontinued June 30, 1906. The station established February, 1905, 4 miles above the mouth of the canyon and above the dam of the Telluride Power Company, now furnishes the necessary data, the discharge being practically the same at the two points.

The discharge of the Telluride Power Company's flume has been added to that at the station to give the total of the river. Discharges were omitted from the 1906 report but are included here for comparative purposes. No discharge measurements were made in 1906.

RATING TABLE FOR PROVO RIVER AT MOUTH OF CANYON NEAR PROVO, UTAH, FOR 1905 AND 1906.

Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge
Feet.	Sec.-ft.	Feet.	Sec.-ft.	Feet.	Sec.-ft.	Feet.	Sec.-ft.
3.30	7	4.20	177	5.10	589	6.00	1,192
3.40	12	4.30	212	5.20	649	6.10	1,265
3.50	20	4.40	250	5.30	711	6.20	1.340
3.60	31	4.50	290	5.40	775	6.30	1,415
3.70	46	4.60	332	5.50	841	6.40	1,490
3.80	64	4.70	377	5.60	910	6.50	1,565
3.90	87	4.80	425	5.70	980	6.60	1,640
4.00	114	4.90	477	5.80	1,050		
4.10	144	5.00	532	5.90	1,120		

NOTE: -- This table is not applicable for ice or obstructed-channel conditions. It is based on discharge measurements made during 1903-1905, and is well defined between gage heights 3.5 feet and 6.3 feet.

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DAILY DISCHARGE, IN FEET, OF TELLURIDE POWER COMPANY'S FLUME NEAR PROVO, UTAH, FOR 1906.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.
1	187	203	182	169	151	a138	16	165	189	152	179	169	136
2	168	204	185	150	160	a138	17	183	194	230	213	158	136
3	168	199	202	143	152	a137	18	198	205	179	156	142	123
4	182	218	146	182	173	133	19	150,	186	177	166	143	139
5	189	200	194	238	185	145	20	125	202	158	142	142	134
6	154	199	194	187	145	33.3	21	152	154	172	140	153	139
7	182	201	195	171	161	126	22	193	182	172	112	150	152
8	147	200	181	189	177	158	23	191	192	166	145	146	142
9	140	192	190	164	174	143	24	188	190	162	142	146	132
10	142	192	171	197	148	122	25	184	164	168	148	157	142
11	180	194	188	154	167	143	26	188	163	145	143	157	152
12	189	182	183	165	145	147	27	203	184	164	172	132	150
13	184	195	58	163	155	129	28	192	195	164	133	166	145
14	180	195	190	181	193	139	29	205		127	142	139	149
15	155	194	178	163	177	148	30	223		152	179	145	166
							31	197		167		142	

a Interpolated.

NOTE:-- These discharges are the mean of two readings, at 8 a.m. and 5 p.m. these being the hours at which the gage on the river was read. They are based on the electric output of the plant.

MONTHLY DISCHARGE OF PROVO RIVER AT MOUTH OF CANYON NEAR PROVO, UTAH, for 1906.

Month.	Discharge in second-feet.			Run-off (total in acre feet.)	Accuracy
	Maximum.	Minimum.	Mean.		
January	769	157	279	17,200	B.
February	340	214	264	14,700	B
March	986	228	421	25,900	B.
April	920	392	637	37,900	B.
May	1,790	585	1,200	73,800	B.
June	2,090	712	1,240	73,800	B
The period				243,000	

NOTE:-- Gage heights for 1906 are given in Water-Supply Paper 212, p.39.

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WATER-SUPPLY PAPER NO. 270, PAGES 71, 72 and 73.

PROVO RIVER BASIN.

Description.

ProvoRiver rises in the Uinta Mountains and flows westward in a steep, narrow canyon until it reaches Heber or Provo Valley, through which it winds in a well-defined channel. Leaving the valley it flows southwestward, cutting through the Wasatch Range in another steep, narrow, and extremely rough canyon, and finally discharging its surplus waters into Utah Lake.

In the mountain regions the principal rock is a compact limestone. Except in Heber Valley little soil is found in any part of the basin. Small groves of fir and aspen are, however, scattered over almost the entire area, and there is a light growth of underbrush. No extensive forests, meadows, or marshes exist. In the canyons the stream receives numerous short and swift tributaries which derive their principal supply from springs, but a part also from the melting of the snow that covers portions of the mountains during the entire year. The highest peaks reach elevations of about 13,000 feet above sea level.

Heber Valley, comprising an area of about 20 square miles, is an irrigated farming district. The surface is covered with loose bowlders, gravel, and very porous soil. Most of the water is taken from the main stream, but a part is diverted from small creeks that enter the valley from the south. The most important of these is Daniels Creek, into which some water is diverted from Strawberry River, a tributary of Green River, by three small canals in low passes at the head of the creek.

At the head of the river are a few lakes, but they are so small that they probably have little effect in regulating the flow. No storage is used on the stream at present, but a few favorable sites will doubtless be developed in the future, as the entire flow, after being used by a power plant at the mouth of the canyon, is now utilized in the vicinity of Utah Lake, and the supply is altogether insufficient.

The wettest year since records have been kept in this basin was

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1907, when the discharge at the station of the Telluride Power Company's dam was 477,000 acre-feet. The driest year was 1905, when at the same station the discharge was 192,000 acre-feet.

The following stations have been maintained in this basin:

Provo River above Telluride Power Company's dam near Provo, Utah, 1905-1909.

Provo River at mouth of canyon, near Provo, Utah, 1889-1906.

Provo River at Denver and Rio Grande Railroad bridge, near Provo, Utah, 1905.

Provo River at San Pedro, Los Angeles and Salt Lake Railroad bridge, near Provo, Utah, 1903-4.

PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM NEAR PROVO, UTAH.

This station, which was established February 1, 1905, to determine the amount of water available for irrigation in Utah Valley, is located about 1 mile above the Telluride Power Company's dam and about 4 miles above the mouth of the canyon and about 11 miles from Provo.

The station is below all tributaries, South Fork entering about one-fourth mile above the station. Some water is diverted above the station for irrigation in Heber Valley, and all the normal low-water flow is diverted for irrigation below the station. The Telluride Power Company diverts water about 1 mile below the station for power development, but returns it to the river at the mouth of the canyon.

The equipment consists of a cable and car and an inclined staff gage. The gage datum was changed July 24, 1908, when the station was established at a point one-fourth mile above the old site.

The records are not affected by ice nor by artificial control above, but there seems to be some back water effect either from the dam below the station or from some unknown cause, and the records since the dam was raised in July 1908, have not been satisfactory.

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DISCHARGE MEASUREMENTS OF PROVO RIVER, ABOVE TELLURIDE POWER COMPANY'S DAM, NEAR PROVO, UTAH, IN 1909.

Date.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
		Feet.	Sq.ft.	Feet.	Sec-ft.
April 10	W. M. O'Neill	75	166	2.89	517
May 11	E. S. Fuller	73	350	5.70	1,950
May 14	La Rue & Towne	82	280	4.80	1,370
June 17	E. S. Fuller	106	424	6.52	2,120
June 20	E. C. La Rue	101	449	6.41	2,140
October 24	Henshaw and Porter	74	140	2.60	370

DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM NEAR PROVO, UTAH, FOR 1909.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.6	2.35	2.35	2.85	4.0	5.3	5.5	2.4	3.4	2.8	2.7	2.75
2	2.6	2.4	2.35	3.0	3.7	5.6	5.3	2.55	3.15	2.75	2.6	3.1
3	2.6	2.4	2.4	3.2	3.8	6.4	5.3	2.5	3.1	2.8	2.5	2.7
4	2.6	2.45	2.4	3.3	4.2	7.3	5.4	2.5	3.0	2.8	2.5	2.6
5	2.7	2.45	2.5	3.05	4.65	8.2	5.2	2.4	3.15	2.85	2.7	2.55
6	3.9	2.2	2.5	2.95	4.65	8.4	5.1	2.6	3.1	2.75	2.7	2.4
7	3.7	2.2	2.55	2.8	4.8	8.5	4.8	2.65	3.1	2.8	2.65	2.5
8	3.0	2.55	2.55	2.8	5.0	8.3	4.4	2.55	3.1	2.7	2.65	2.7
9	3.0	2.3	2.4	2.85	5.0	7.2	4.2	2.5	3.15	2.75	2.6	2.85
10	3.0	2.3	2.25	2.9	5.5	7.1	4.1	2.5	3.0	2.7	3.0	2.6
11	4.2	2.35	2.2	2.9	5.7	7.0	4.0	2.55	3.0	2.7	2.7	2.5
12	3.3	2.6	2.2	2.9	5.2	6.8	3.8	2.6	3.0	2.75	2.6	2.55
13	3.2	2.6	2.2	2.95	4.9	6.7	3.4	2.5	3.0	2.6	2.55	2.7
14	5.0	2.5	2.2	3.0	4.8	6.7	2.8	2.5	3.0	2.65	2.7	2.6
15	5.0	2.45	2.6	3.3	4.85	6.4	2.7	2.4	3.0	2.7	2.6	2.4
16	3.5	2.5	2.55	3.55	4.9	6.4	2.75	2.7	3.0	2.6	2.65	2.3
17	3.2	2.5	2.6	3.8	4.7	6.5	2.65	2.5	3.0	2.65	2.65	2.0
18	3.1	2.45	2.75	4.35	4.6	6.4	2.65	2.55	3.0	2.6	2.6	2.2
19	3.0	2.5	2.75	4.7	4.7	6.8	2.6	2.6	2.7	2.6	2.7	2.4
20	3.3	2.5	2.75	4.55	4.95	6.4	2.65	2.55	2.65	2.6	2.85	2.4
21	3.35	2.5	2.65	3.95	5.1	6.1	2.65	2.55	2.6	2.6	2.45	2.35
22	3.4	2.4	2.6	3.65	5.3	5.8	2.6	2.9	2.6	2.6	3.0	2.5
23	3.3	2.4	2.6	3.6	5.3	5.8	2.55	2.7	2.85	2.6	2.85	2.5
24	3.0	2.5	2.7	3.8	5.2	5.9	2.6	2.65	2.7	2.6	2.85	2.55
25	2.7	2.45	2.7	3.7	4.9	5.8	2.55	2.7	2.8	2.55	2.85	2.6
26	2.7	2.4	2.75	3.8	4.8	6.0	2.6	2.7	2.9	2.55	2.85	2.5
27	2.6	2.3	2.7	4.3	5.1	5.75	2.5	2.75	2.85	2.6	2.85	2.5
28	2.4	2.35	2.8	4.45	5.55	5.8	2.5	2.7	2.65	2.55	2.6	2.5
29	2.4		2.8	4.4	5.4	5.7	2.5	2.65	2.8	2.5	2.55	2.4
30	2.4		2.85	4.0	5.35	5.6	2.45	2.85	2.9	2.5	2.7	2.5
31	2.5		2.8		5.4		2.5	2.8		2.7		2.4

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PROVO RIVER ABOVE TELLURIDE POWER CO.'S DAM NEAR PROVO, UTAH.

This station, which is located about 1 mile above the Telluride Power Co.'s dam and about 4 miles above the mouth of the canyon, and about 11 miles from Provo, was established February 1, 1905, to determine the amount of water available for irrigation in Utah Valley.

The station is below all tributaries, South Fork entering one-fourth mile above the station. Some water is diverted above the station for irrigation in Heber Valley, and all the normal low-water flow is diverted for irrigation below the station. The Telluride Power Co., diverts water about a mile below the station for power development, but returns it to the river at the mouth of the canyon.

The equipment consists of a cable and car and an inclined staff gage. The gage datum was changed July 24, 1908, when the station was established at a point one-fourth mile above the old site.

The relation between gage height and discharge is not affected by ice or by artificial control above.

The most recent information regarding conditions at this station indicates that there is no backwater from the dam below, but that the channel has become very unstable, requiring the use of many discharge rating curves. Results obtained at this station for 1909-10 are not good.

DISCHARGE MEASUREMENTS OF PROVO RIVER AT TELLURIDE POWER CO.'S DAM, UTAH, IN 1910.

Date.	Hydrographer.	Width.	Area of section.	Gage height.	Discharge.
		Feet.	Sq.-ft.	Feet.	Sec.-ft.
Apr. 9	E. S. Fuller	78	181	3.10	695
17	C. C. Jacobs	72	184	3.25	704
July 18	Fuller and Canfield	74	87.9	2.00	244

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DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER NEAR PROVO, UTAH,

FOR 1910.

(Frank Dusenberry, observer)

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.2	2.3	2.3	3.0	4.25	3.8	1.95	2.1	1.9	2.1	2.1	2.25
2	3.7	2.35	2.8	3.0	4.0	3.7	2.0	2.0	1.9	2.1	2.1	2.2
3	2.85	1.8	3.1	3.1	3.65	3.6	3.0	3.0	1.9	2.05	2.15	2.2
4	2.65	1.9	3.3	3.0	3.75	3.45	1.95	2.0	1.9	2.05	2.15	2.25
5	2.4	2.0	3.3	3.5	3.6	3.3	2.0	2.05	1.9	2.05	2.15	2.25
6	2.3	2.15	3.3	3.1	3.5	3.5	2.0	2.05	1.9	2.05	2.15	2.25
7	2.5	2.0	3.0	2.9	3.25	3.85	2.0	1.95	1.9	2.1	2.1	2.2
8	2.55	2.25	2.9	3.0	3.55	2.7	1.9	1.95	1.9	2.05	2.15	2.2
9	2.6	2.25	3.0	3.15	3.65	2.55	1.9	1.9	1.9	2.05	2.2	2.2
10	2.5	2.35	2.8	3.2	3.95	2.35	1.9	1.95	1.9	2.05	2.15	2.25
11	2.55	2.35	2.7	3.45	4.65	2.35	2.0	1.9	1.9	2.1	2.15	2.4
12	2.5	2.25	2.65	3.55	4.6	2.3	1.9	1.95	1.9	2.1	2.15	2.4
13	2.4	2.4	2.7	3.5	4.5	2.35	2.05	1.9	1.9	2.1	2.15	2.3
14	2.7	2.4	3.0	3.5	4.6	2.4	2.0	1.9	2.0	2.1	2.15	2.2
15	2.6	2.9	3.15	3.45	4.5	2.35	2.0	1.9	2.0	2.1	2.2	2.15
16	2.45	2.4	3.25	3.3	4.0	2.3	2.0	1.9	2.05	2.1	2.2	2.2
17	2.3	2.2	3.3	3.2	3.95	2.2	2.05	1.9	2.1	2.1	2.15	2.3
18	2.2	2.4	3.2	3.3	3.6	2.15	2.0	1.9	2.1	2.15	2.2	2.25
19	2.15	2.3	3.4	3.5	3.5	2.2	2.0	1.85	2.1	2.2	2.25	2.25
20	2.4	2.3	3.3	3.65	3.25	2.1	2.0	1.85	2.1	2.2	2.2	2.3
21	2.45	2.4	3.5	3.95	3.35	2.0	2.0	1.85	2.05	2.2	2.2	2.25
22	2.45	2.45	3.65	3.95	3.35	2.1	1.95	1.9	2.05	2.15	2.25	2.2
23	2.55	2.4	4.0	3.8	3.3	2.1	1.95	1.85	2.05	2.15	2.3	2.15
24	2.55	2.5	3.6	3.9	3.35	1.95	2.0	1.8	2.05	2.1	2.3	2.15
25	2.65	2.5	3.5	4.15	3.35	2.0	1.95	1.9	2.05	2.1	2.25	2.3
26	2.35	2.3	3.4	4.45	3.7	1.95	1.85	1.9	2.05	2.15	2.25	2.2
27	2.3	2.4	3.35	4.65	3.6	2.0	1.8	1.9	2.1	2.1	2.25	2.2
28	2.35	2.4	3.4	4.7	3.5	1.95	1.9	1.9	2.1	2.1	2.25	2.2
29	2.3		3.45	4.6	3.65	2.0	2.0	1.9	2.05	2.1	2.25	2.15
30	2.1		3.2	4.4	4.0	1.95	2.0	1.9	2.05	2.1	2.25	2.15
31	2.25		3.0		3.8		2.0	1.9		2.1		2.2

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DAILY DISCHARGE, IN SECOND-FEET OF PROVO RIVER NEAR PROVO. UTAH,
FOR 1909-1910.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1909												
1	240	285	285	470	1,000	1,650	1,570	250	640	450	410	430
2	240	300	285	530	850	1,830	1,460	290	515	430	370	570
3	240	300	300	620	900	2,310	1,460	275	490	450	335	410
4	240	318	300	670	1,100	2,850	1,510	275	450	450	335	370
5	270	318	335	550	1,325	3,410	1,410	250	515	470	410	352
6	760	240	335	510	1,325	3,550	1,360	305	490	430	410	300
7	670	240	352	450	1,400	3,620	1,210	322	490	450	390	335
8	375	352	352	450	1,500	3,280	1,010	290	490	410	390	410
9	375	270	300	470	1,500	2,590	910	275	515	430	370	470
10	375	270	255	490	1,770	2,530	860	275	450	410	530	370
11	910	285	240	490	1,890	2,470	810	290	450	410	410	335
12	495	370	240	490	1,600	2,350	715	305	450	430	370	352
13	455	370	240	510	1,450	2,290	535	275	450	370	352	410
14	1,310	335	240	530	1,400	2,290	375	275	450	390	410	370
15	1,500	318	370	670	1,425	2,110	340	250	450	410	370	300
16	760	335	352	785	1,450	2,110	358	340	450	370	390	270
17	620	335	370	900	1,350	2,170	322	275	450	390	390	185
18	570	318	430	1,175	1,300	2,110	322	290	450	370	370	240
19	530	355	430	1,350	1,350	2,350	305	305	340	370	410	300
20	670	335	430	1,275	1,475	2,110	322	290	322	370	470	300
21	710	335	390	975	1,550	1,930	322	290	305	370	318	285
22	710	300	370	830	1,650	1,750	305	410	305	370	530	335
23	670	300	370	810	1,650	1,750	290	340	392	370	470	335
24	530	335	410	900	1,600	1,810	305	322	340	370	470	352
25	410	318	410	850	1,450	1,750	290	340	375	352	470	370
26	410	300	430	900	1,400	1,870	305	340	490	352	470	335
27	370	270	410	1,150	1,550	1,720	275	358	470	370	470	335
28	300	285	450	1,225	1,800	1,750	275	340	390	352	370	335
29	300		450	1,200	1,710	1,690	275	322	450	335	352	300
30	300		470	1,000	1,680	1,630	260	392	490	335	410	335
31	335		450		1,710		275	375		410		300

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DAILY DISCHARGE, IN SECOND-FEET, OF PROVO RIVER NEAR PROVO, UTAH FOR 1909-1910 (continued)

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1910.												
1	1,200	335	335	615	1,225	995	225	270	210	270	270	318
2	950	352	530	615	1,100	950	240	240	210	270	270	300
3	550	180	665	665	922	895	240	240	210	255	285	300
4	470	210	755	615	972	828	225	240	210	255	285	318
5	370	240	755	850	895	755	240	255	210	255	285	318
6	335	285	755	665	850	850	240	255	210	255	285	318
7	410	240	615	570	732	1,025	240	225	210	270	270	300
8	430	318	570	615	872	490	240	225	210	255	285	300
9	450	318	615	688	922	430	210	210	210	255	300	300
10	410	352	530	710	1,080	352	210	225	210	255	285	318
11	430	352	490	828	1,425	352	240	210	210	270	285	370
12	410	318	470	872	1,400	335	210	225	210	270	285	370
13	370	370	490	850	1,350	352	255	210	210	270	285	335
14	490	370	615	850	1,400	370	240	210	240	270	285	300
15	450	570	688	828	1,350	352	240	210	240	270	300	285
16	390	370	732	755	1,100	335	240	210	255	270	300	300
17	335	300	755	710	1,080	300	255	210	270	270	285	335
18	300	370	710	755	895	285	240	210	270	285	300	318
19	285	335	805	850	850	300	240	195	270	300	318	318
20	370	335	755	922	732	270	240	195	270	300	300	335
21	390	370	850	1,080	780	240	240	195	255	300	300	318
22	390	390	922	1,080	780	270	225	210	255	285	318	300
23	430	370	1,100	995	755	270	225	195	255	285	335	285
24	430	410	895	1,050	780	225	240	180	255	270	335	285
25	470	410	850	1,175	780	240	225	210	255	270	318	335
26	352	335	805	1,325	950	225	195	210	255	285	318	300
27	335	370	780	1,425	895	240	180	210	270	270	318	300
28	352	370	805	1,450	850	225	210	210	270	270	318	300
29	335		828	1,400	922	240	240	210	255	270	318	285
30	270		710	1,300	1,100	225	240	210	255	270	318	285
31	318		615		995		240	210		270		300

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NOTE:--(To table on preceding page)Daily discharge during 1909 and 1910 determined from a set of 3 parallel curves drawn through discharge measurements made during 1909-1910 and 1911; curve 1, used Jan. 1 to 14, 1909, and June 8 to July 13, 1909; curve 2 used Jan. 15 to June 7, 1909, and Oct. 25 to Dec. 31, 1909; curve 3 used Jan. 1 to Dec. 31, 1910. July 14 to October 24,1909, indirect method used.

MONTHLY DISCHARGE OF PROVO RIVER NEAR PROVO, UTAH, FOR 1909-1910.

(Drainage area, 640 square miles.)

Month.	Discharge in second-feet.				Run-off		
	Maximum.	Minimum.	Mean.	Per square mile.	Depth in inches on drainage area.	Total in acre-feet.	Accuracy.
1909							
January	1,500	240	537	0.839	0.97	33,000	D.
February	370	240	310	.484	.50	17,200	D.
March	470	240	366	.556	.64	21,900	D.
April	1,350	450	774	1.21	1,35	46,100	C.
May	1,890	850	1,460	2.28	2.63	89,800	C.
June	3,620	1,630	2,250	3.52	3.93	134,000	C.
July	1,570	260	656	1.02	1.18	40,300	C.
August	410	250	307	.480	.55	18,900	C.
September	640	305	444	.694	.77	26,400	C.
October	470	335	395	.617	.71	24,300	B.
November	530	318	407	.636	.71	24,200	C.
December	570	185	345	.539	.62	21,200	C.
The year	3,620	185	687	1.07	14.56	497,000	
1910							
January	1,200	270	435	0.680	0.78	26,700	C.
February	570	180	341	.533	.56	18,900	C.
March	1,100	335	703	1.10	1.27	43,200	C.
April	1,450	570	904	1.41	1.57	53,800	B
May	1,425	732	992	1.55	1.79	61,000	C.
June	1,025	225	441	.690	.77	26,200	C.
July	255	180	230	.359	.41	14,100	B.
August	270	180	217	.339	.39	13,300	C.
September	270	210	238	.372	.42	14,200	C.
October	300	255	271	.423	.49	16,700	C.
November	335	270	299	.467	.52	17,800	C.
December	370	285	311	.486	.56	19,100	C.
The year	1,450	180	449	.702	9.53	325,000	

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PROVO RIVER AT FORKS, UTAH.

LOCATION: At Forks, Utah, 12 miles above Provo, in the NE 1/4 Sec. 26, T. 5 S., R. 3 E. It is about 600 feet above the mouth of South Fork of Provo River, about 1 mile below the mouth of North Fork, and about 1 1/2 miles above the Telluride Power Co.'s dam.

RECORDS AVAILABLE: October 22 to December 31, 1911. Records have been obtained on Provo River since February 1, 1905. The discharge of the South Fork added to that obtained at this station gives the total flow of Provo River.

DRAINAGE AREA: 600 square miles.

GAGE: Inclined staff on left bank driven into the bed of the stream, and firmly braced.

CHANNEL: Not liable to shift; bed of stream composed of small gravel. One channel during all stages. Both banks are fairly high and not liable to overflow.

DISCHARGE MEASUREMENTS: Made from cable and car 10 feet below gage.

WINTER FLOW: No ice forms at this station.

COOPERATION: Station maintained in cooperation with Telluride Power Co. and State of Utah.

Estimates withheld owing to lack of sufficient measurements.

The following discharge measurement was made by Dort and Gilkison by wading at gage:

October 31, 1911: Gage height, 0.84 feet; discharge, 228 second-feet.

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DAILY GAGE HEIGHT, INFEET, OF PROVO RIVER AT FORKS, UTAH, FOR 1911.

(Frank Dusenberry, observer.)

Day.	Nov.	Dec.	Day.	Nov.	Dec.	Day.	Nov.	Dec.
1		0.75	11		0.9	21	1.0	0.7
2		.75	12		.95	22	1.0	.7
3		.75	13		.9	23	1.0	.7
4		.75	14		.85	24	.95	.7
5		.75	15		.85	25	.9	.7
6		.75	16	1.05	.9	26	.95	.7
7		.8	17	1.0	.95	27	.95	.7
8		.85	18	1.0	.95	28	.8	.8
9		.8	19	1.0	.9	29	.7	.8
10		.85	20	1.0	.75	30	.7	.8
						31	...	.8

PROVO RIVER NEAR PROVO, UTAH.

LOCATION: About 1 mile above Telluride Power Co.'s dam, one-fourth mile below mouth of the South Fork, and 1 1/4 miles below the mouth of the North Fork, in the NW 1/4 SW. 1/4 Sec. 26, T. 5 S., R. 3 E.

RECORDS AVAILABLE: February 1, 1905 to December 31, 1911, when it was discontinued and new stations were established on the main river and the South Fork to obtain better conditions for measuring. A station was maintained at the mouth of canyon from 1889 to 1906.

DRAINAGE AREA: 640 square miles.

GAGE: Vertical staff installed June 15, 1909, by the Telluride Power Co., to replace vertical gage which was set July 24, 1908, and washed out June 14, 1909. Datum of gage set June 15, 1909, probably the same as that of gage installed July 24, 1908, but there is no record to this

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effect. The gage installed February 1, 1905, was an inclined staff on the left bank.

CHANNEL: One channel at all stages except at low water, when a bar near the left bank divides the current of the stream.

DISCHARGE MEASUREMENTS: From car and cable.

WINTER FLOW: No ice form at this station.

DIVERSIONS: A little water is diverted in Heber Valley near the head of the river.

ACCURACY: Law because of shifting channel.

COOPERATION: Station maintained in cooperation with Telluride Power Co.

DISCHARGE MEASUREMENTS OF PROVO RIVER ABOVE TELLURIDE POWER CO'S DAM NEAR PROVO, UTAH, IN 1911.

Date.	Hydrographer.	Gage height.	Discharge.
		Feet.	Sec.-feet.
Feb. 20	A. B. Purton	2.35	298
July 19	Dort and Pharis	2.38	275
19	Gilkison and Pharis	2.38	290
Oct. 22	J. C. Dort	2.10	260

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DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER ABOVE TELLURIDE POWER CO.'S DAM NEAR PROVO, UTAH, FOR 1911.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.2	4.0	2.3	2.95	3.05	3.8	2.4	2.2	1.85	2.1	2.15	2.1
2	2.15	3.1	2.35	3.05	2.9	3.9	2.35	1.95	1.85	2.4	2.15	2.1
3	2.5	2.9	2.3	3.15	3.0	3.7	2.3	1.95	1.9	2.25	2.2	2.1
4	2.25	2.75	2.3	2.95	2.7	3.85	2.3	1.95	1.9	2.1	2.2	2.1
5	2.4	2.9	2.4	2.9	2.9	4.15	2.4	1.9	1.9	2.1	2.2	2.15
6	2.3	3.0	2.45	3.2	3.05	4.35	2.4	1.95	1.85	2.05	2.2	2.15
7	2.25	2.7	2.5	2.85	3.35	4.5	2.35	1.95	1.85	2.05	2.2	2.2
8	2.25	2.5	2.75	2.9	3.3	4.35	2.35	1.95	1.85	2.15	2.25	2.25
9	2.3	2.6	3.4	2.9	3.4	4.3	2.35	1.9	1.9	2.1	2.25	2.2
10	2.5	2.55	3.65	3.0	3.5	4.3	2.10	1.9	1.9	2.25	2.4	2.25
11	2.2	2.7	3.95	2.95	3.3	4.15	2.15	1.9	1.85	2.2	2.5	2.3
12	2.2	2.6	2.9	2.8	3.4	4.0	2.2	1.9	1.85	2.2	2.35	2.35
13	2.25	2.4	2.75	2.75	3.3	4.2	2.3	1.9	1.9	2.2	2.25	2.25
14	2.25	2.4	2.65	2.7	3.45	4.2	2.3	1.9	1.9	2.2	2.3	2.25
15	2.3	2.3	2.7	2.65	3.6	4.65	2.25	1.9	1.9	2.2	2.4	2.25
16	2.35	2.25	2.75	2.75	3.45	4.25	2.3	1.9	1.9	2.2	2.45	2.3
17	2.25	2.25	2.7	2.65	3.50	4.2	2.4	1.9	1.9	2.15	2.4	2.35
18	2.2	2.1	2.75	2.5	3.5	4.0	2.4	1.9	1.9	2.15	2.4	2.35
19	2.1	2.05	2.4	2.45	3.45	3.8	2.3	1.85	1.9	2.15	2.4	2.3
20	2.2	2.15	2.6	2.45	3.5	3.7	2.3	1.85	1.9	2.15	2.4	2.15
21	2.3	2.3	2.75	2.35	3.4	3.7	2.45	1.8	1.85	2.1	2.4	2.1
22	2.1	2.3	2.7	2.4	3.35	3.6	2.45	1.8	1.85	2.1	2.4	2.1
23	2.35	2.15	2.8	2.45	3.5	3.3	2.35	1.8	1.9	2.1	2.4	2.1
24	2.3	2.3	3.15	2.5	3.5	3.3	2.3	1.85	2.05	2.1	2.35	2.1
25	4.75	2.4	2.95	2.6	3.6	3.15	2.35	1.85	1.95	2.1	2.3	2.0
26	3.0	2.4	2.6	2.75	3.6	3.00	2.3	1.85	1.9	2.1	2.35	2.1
27	2.7	2.2	2.7	2.8	3.6	2.95	2.3	1.85	2.0	2.1	2.35	2.1
28	2.55	2.2	2.65	2.85	3.4	2.7	2.2	1.85	2.0	2.1	2.25	2.2
29	2.8		2.75	2.95	3.25	2.7	2.3	1.85	2.0	2.15	2.05	2.2
30	3.7		2.8	3.0	3.3	2.5	2.35	1.85	2.25	2.15	2.05	2.2
31	5.75		2.85		3.4		2.2	1.85		2.15		2.2

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DAILY DISCHARGE, IN SECOND-FEET, OF PROVO RIVER ABOVE TELLURIDE POWER CO.'S DAM NEAR PROVO, UTAH, FOR 1911.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	300	1,000	270	510	550	900	300	240	172	240	285	270
2	285	570	285	550	490	950	285	172	172	335	285	270
3	410	490	270	595	530	850	270	172	185	318	300	270
4	318	430	270	510	410	925	270	172	185	270	300	270
5	370	490	300	490	490	1,080	300	160	185	270	300	285
6	335	530	318	620	550	1,180	300	172	172	255	300	285
7	318	410	335	470	690	1,250	285	172	172	255	300	300
8	318	335	430	490	670	1,180	285	172	172	285	318	318
9	335	370	710	490	710	1,150	285	160	185	285	318	300
10	410	352	830	530	760	1,150	210	160	185	318	370	318
11	300	410	975	510	670	1,080	225	160	172	300	410	335
12	300	370	490	450	710	1,000	240	160	172	300	352	352
13	318	300	430	430	670	1,100	270	160	185	300	318	318
14	318	300	390	410	735	1,100	270	160	185	300	335	318
15	335	270	410	390	810	1,320	255	160	185	300	370	318
16	352	255	430	430	755	1,120	270	160	185	300	390	335
17	318	255	410	390	760	1,100	300	160	185	285	370	352
18	300	210	430	335	760	1,000	300	160	185	285	370	352
19	270	198	300	318	735	900	270	148	185	285	370	335
20	300	225	370	318	760	850	270	148	185	285	370	285
21	335	270	430	285	710	850	318	160	172	270	370	270
22	270	270	410	300	690	810	318	160	172	270	370	270
23	352	225	450	318	760	670	285	160	185	270	370	270
24	335	270	595	335	760	670	270	172	225	270	352	270
25	1,480	300	510	370	810	595	285	172	198	270	335	270
26	615	300	370	430	810	530	270	172	185	270	352	270
27	490	240	410	450	810	510	270	172	210	270	352	270
28	430	240	390	470	710	410	240	172	210	270	318	300
29	530		430	510	645	410	270	172	210	285	255	300
30	950	144	450	530	670	335	285	172	285	285	255	300
31	1,920		470		710		240	172		295		300

NOTE: (To Daily Discharge table on preceding page.) Daily Discharge determined from two poorly defined rating curves, one applicable Jan. 1 to 30 and Oct. 3 to Dec. 31; the other Jan. 31 to Aug. 20. Indirect method for shifting channels used Aug. 21 to Oct. 3, 1911.

MONTHLY DISCHARGE OF PROVO RIVER ABOVE TELLURIDE POWER CO.'S DAM NEAR PROVO, UTAH, FOR 1911.

(Drainage area, 640 square miles.)

Month.	Discharge in second-feet. Maximum.	Minimum.	Mean.	Per square mile.	Run-off Depth in inches on drainage area.	Total in acre-feet.	Accuracy.
January	1,920	270	458	0.716	0.83	28,200	D.
February	1,000	198	353	.552	.57	19,600	D.
March	975	270	438	.684	.79	26,900	D.
April	620	285	441	.689	.77	26,200	D.
May	810	410	686	1.07	1.23	42,200	D.
June	1,320	335	899	1.40	1.56	53,500	D.
July	318	210	275	.430	.50	16,900	D.
August	240	148	167	.261	.30	10,300	D.
September	285	172	189	.295	.33	11,200	D.
October	335	240	283	.442	.51	17,400	D.
November	410	255	336	.523	.58	19,900	D.
December	352	270	299	.467	.54	18,400	D.
The year	1,920	148	402	.628	8.51	291,000	

SOUTH FORK OF PROVO RIVER AT FORKS, UTAH.

LOCATION: At Forks, Utah, 12 miles above Provo, in the NW. 1/4 SE 1/4 Sec. 25, T. 5 S., R. 3 E., at a point about 150 feet above the confluence of the South Fork with Provo River.

RECORDS AVAILABLE: Station established October 22, 1911; records begun November 17, 1911. The discharge of the South Fork added to that of Provo River at Forks will give the total flow of Provo River available for

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diversion at the Telluride Power Co.'s dam.

DRAINAGE AREA: 30 square miles.

GAGE: Vertical staff driven into the stream bed at the right bank 150 feet above the mouth and 40 feet southeast of the Denver & Rio Grande Railroad tracks.

CHANNEL: Probably permanent; well-defined control 30 feet below the gage composed of gravel and small bowlders. One channel at all stages. The left bank is liable to overflow in extreme floods.

DISCHARGE MEASUREMENTS: Made by wading about 30 feet below the gage.

WINTER FLOW: No ice forms at this station.

COOPERATION: Maintained in cooperation with Telluride Power Co.

The following discharge measurement was made by Dort and Gilkison by wading below gage.

October 31, 1911; Gage height, 2.36 feet; discharge, 35.3 second-feet.

DAILY GAGE HEIGHT, IN FEET, OF SOUTH FORK OF PROVO RIVER AT FORKS, UTAH, FOR 1911
(Frank Dusenberry, observer.)

Day.	Nov.	Dec.	Day.	Nov.	Dec.	Day.	Nov.	Dec.
1		2.25	11		2.35	21	2.35	2.25
2		2.25	12		2.35	22	2.35	2.25
3		2.25	13		2.3	23	2.35	2.25
4		2.25	14		2.3	24	2.35	2.25
5		2.3	15		2.3	25	2.35	2.30
6		2.3	16		2.3	26	2.35	2.30
7		2.3	17	2.35	2.3	27	2.35	2.30
8		2.3	18	2.35	2.3	28	2.35	2.30
9		2.3	19	2.35	2.3	29	2.25	2.30
10		2.35	20	3.25	2.25	30	2.25	2.30
						31		2.30

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PROVO RIVER AT FORKS, UTAH.

LOCATION: In the S.W. 1/4 N.E. 1/4 Sec. 26, T. 5 S., R. 3 E., Salt Lake base and meridian, at Forks, Utah, 12 miles up Provo Canyon from Provo, Utah, on the highway and railroad from Provo to Heber, and about 1 1/2 miles above the dam of the Utah Power & Light Co. About 600 feet above the mouth of South Fork of Provo River, which enters on the left, and about 1 mile below the mouth of North Fork, entering on the right.

RECORDS AVAILABLE: November 16, 1911, to September 30, 1912. Records have been obtained on Provo River since 1890 By adding the discharge of the South Fork to that obtained at this station the total flow of Provo River will be obtained.

DRAINAGE AREA: 600 square miles.

GAGE: Sloping gage on the left bank, 10 feet upstream from the cable.

CHANNEL: Velocity moderate and uniformly distributed across the section; bed of stream composed of small gravel and likely to shift during meddum of high stages. One channel at all stages. Both banks are fairly high and not liable to overflow.
The maximum depth of the water at gage height 1 foot is 1.7 feet.

DISCHARGE MEASUREMENTS: Made from cable and car.

WINTER FLOW: Ice forms at this station, but ordinarily has no effect on relation of gage height to discharge.

DIVERSIONS: Somw water is used for irrigation in Heber Valley above the station. Station is above all diversions in the visinity of Provo.

ARTIFICIAL CONTROL: None.

ACCURACY: Records fair. Drift lodging on the bents of the wagon bridge

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below the gage may at times cause backwater.

COOPERATION: Maintained in cooperation with the Utah Power & Light Co.

/ DISHHARGE MEASUREMENTS OF PROVO RIVER AT FORKS, UTAH, YEAR ENDING SEPTEMBER 30, 1912.

Date.	Hydrographer.	Gage height.	Discharge.	Date.	Hydrographer.	Gage height.	Discharge.
1911		Feet.	Sec.-ft.	1912		Feet.	Sec.-ft.
Oct. 31	Dort and Gilkison	0.84	228	Apr.24	J.C.Dort	1.05	337
				May 21	Pharis and Gilkison	2.66	997
				May 24	G.M.Gilkison	2.07	736
1912							
Jan. 20	G.M.Gilkison	.85	256	31	Dort and Pharis	3.23	1,400
Mar. 2	J. C. Dort	.82	287	June 7	J. C. Dort	3.85	1,940
Apr. 3	do	1.30	437	July 4	do	1.10	332

DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER AT FORKS, UTAH, FOR YEAR ENDING SEPT. 30, 1912.
(Frank Dusenberry, observer)

Day.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1		0.75	0.8	0.8	0.85	1.30	1.28	2.86	1.30	0.90	0.86
2		.75	.8	.75	.80	1.20	1.25	3.01	1.18	.90	.86
3		.75	.75	.7	.75	1.30	1.20	3.25	1.13	1.04	.85
4		.75	.75	.8	.75	1.34	1.20	3.60	1.10	.98	.85
5		.75	.9	.8	.75	1.47	1.17	3.72	1.05	.92	.88
6		.75	.9	.8	.95	1.37	1.14	3.70	1.00	.88	.90
7		.8	1.0	.75	1.15	1.33	1.16	3.82	.90	.88	.88
8		.85	.9	.7	1.15	1.40	1.33	4.03	.90	.86	.88
9		.8	1.0	.8	1.15	1.40	1.40	4.00	.85	.82	1.10
10		.85	1.05	.8	1.15	1.55	1.52	3.95	.85	.80	1.10
11		.9	1.1	.8	1.1	1.38	1.71	3.50	.83	.79	1.10
12		.95	1.1	.8	1.1	1.30	1.78	3.15	.86	.78	1.05
13		.9	1.1	.8	1.1	1.23	1.75	3.01	.94	.78	1.05
14		.85	1.15	.8	1.1	1.15	1.52	3.15	.96	.78	1.07
15		.85	1.1	.8	.95	1.12	1.58	2.80	.95	.83	1.10
16	1.05	.9	1.1	.85	3.0	1.11	1.82	2.45	.95	.81	1.10
17	1.0	.95	1.1	.85	3.0	1.08	1.95	2.25	.90	.80	1.12
18	1.0	.95	1.1	.85	1.1	1.15	2.10	1.83	.88	.85	1.10
19	1.0	.9	1.15	.85	1.2	1.10	2.33	1.70	.89	.84	1.08
20	1.0	.75	.85	.85	1.55	1.10	2.50	1.80	.96	.82	1.02
21	1.0	.7	.85	.85	1.1	1.08	2.62	1.82	.93	.83	1.05
22	1.0	.7	.8	.85	1.1	1.05	2.55	2.05	.90	.80	1.04

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DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER AT FORKS, UTAH, FOR YEAR ENDING SEPT. 30, 1912. (Continued)

Day.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
23	1.0	.7	.8	.85	1.13	1.03	2.18	2.10	.87	.80	1.02
24	.95	.7	.8	.85	1.0	1.05	2.05	2.10	.84	.80	1.01
25	.9	.7	.85	.8	1.1	1.12	2.15	2.15	.85	.80	1.00
26	.95	.7	.85	.8	1.1	1.12	2.33	1.90	.80	.80	1.00
27	.95	.7	.85	.85	1.1	1.10	2.39	1.80	.82	.92	1.00
28	.8	.8	.85	.85	1.2	1.15	2.38	1.72	.82	.95	.99
29	.7	.8	.85	.85	1.3	1.20	2.30	1.55	.83	.90	.99
30	.7	.8	.85		1.3	1.22	2.72	1.43	.83	.90	.98
31		.8	.8		1.3		3.81		.87	.90	

NOTE: Snowslide Mar. 16.

DAILY DISCHARGE, IN SECOND-FEET, OF PROVO RIVER AT FORKS, UTAH, FOR YEAR ENDING SEPT. 30, 1912.

Day.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1		215	236	251	287	424	417	1,130	396	256	255
2		215	236	241	274	390	407	1,230	355	266	255
3		215	226	229	261	424	390	1,410	338	309	252
4		215	226	263	261	438	390	1,710	328	290	252
5		217	264	256	261	487	380	1,820	312	272	260
6		217	264	256	314	442	371	1,800	296	260	266
7		229	290	243	374	435	377	1,910	266	260	260
8		241	264	231	374	460	435	2,110	266	255	260
9		229	290	258	374	460	460	2,070	252	244	328
10		241	306	258	374	518	506	2,010	252	238	328
11		253	320	258	358	453	582	1,600	246	235	328
12		269	320	261	358	424	610	1,310	255	232	312
13		256	320	261	358	400	598	1,200	278	232	312
14		243	334	261	358	374	598	1,300	284	232	318
15		243	334	261	358	374	598	1,050	281	246	328
16	284	256	322	277	321	361	626	867	281	241	328
17	271	269	322	277	328	352	679	776	266	238	335
18	271	269	322	278	358	374	742	598	260	252	328
19	271	258	337	279	390	358	840	542	263	249	322
20	271	222	256	279	442	358	922	580	284	244	302
21	274	211	256	279	358	352	985	588	275	246	312
22	274	211	246	279	358	343	948	680	266	238	309
23	274	211	246	282	368	337	776	700	258	238	302
24	261	211	246	282	328	343	721	700	249	238	209
25	248	211	258	269	358	364	763	720	252	238	296
26	261	211	261	271	358	364	840	620	238	238	296
27	261	213	261	284	358	358	867	580	244	272	296
28	226	236	261	284	390	374	863	548	244	281	293
29	204	236	264	284	424	390	826	462	246	266	293
30	204	236	264		424	397	1,040	440	246	266	290
31		236	251		424		1,900		258	266	

NOTE: Discharge determined from two fairly well defined curves, one ap-

plicable Mar. 1 to June 8 and the other June 20 to Sept. 30. Indirect method for shifting channels used Nov. 16 to Feb. 29, and June 9-19. Discharge interpolated Mar. 16.

MONTHLY DISCHARGE OF PROVO RIVER AT FORKS, UTAH, FOR YEAR ENDING SEPT. 30, 1912.

(Drainage area, 600 square miles.)

Month.	Discharge in second-feet. Maximum.	Minimum.	Mean.	Per square mile.	Run-off Depth in inches on drainage area.	Total in acre-feet.	Accuracy.
November 16-30	284	204	257	0.428	0.24	7,600	B.
December	269	211	232	.387	.45	14,300	B.
January	337	226	277	.462	.53	17,000	C.
February	284	229	265	.442	.48	15,200	B.
March	442	261	351	.585	.67	21,600	A.
April	518	337	398	.663	.74	23,700	A.
May	1,900	371	687	1.14	1.31	42,200	A.
June	2,110	440	1,100	1.83	2.04	65,400	B.
July	396	238	275	.458	.53	16,900	A.
August	309	232	253	.422	.49	15,600	A.
September	335	252	297	.495	.55	17,700	A.
The period						257,000	

SOUTH FORK OF PROVO RIVER AT FORKS, UTAH.

LOCATION: In the NW. 1/4 SE. 1/4 sec. 26, T. 5 S., R. 3 E., Salt Lake base and meridian, at Forks, Utah, 12 miles up Provo Canyon from Provo, on highway and railroad from Provo to Heber. It is at a point about 150 feet above the confluence of the South Fork with Provo River.

RECORDS AVAILABLE: November 17, 1911, to September 30, 1912.

DRAINAGE AREA: 30 square miles.

GAGE: Vertical staff gage driven into the stream bed at right bank, 150 feet above the mouth and 40 feet southeast of the Denver & Rio Grande Railroad Co.'s tracks.

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CHANNEL: One channel at all stages. The left bank is liable to overflow in extreme floods.

DISCHARGE MEASUREMENTS: Made by wading about 30 feet below the gage.

WINTER FLOW: No ice forms at this tation.

DIVERSIONS: None.

ACCURACY: Poor, owing to backwater caused by growth of weeds and by high water on Provo River.

COOPERATION: Gage heights furnished by the Utah Power & Light Co.

The discharge of the South Fork added to that of Provo River at Forks represents the total flow of Provo River available for diversion at the Utah Power & Lights Co.'s dam, 2 miles downstream.

DISCHARGE MEASUREMENTS OF SOUTH FORK OF PROVO RIVER AT FORKS, UTAH, IN YEAR ENDING SEPT. 30, 1912.

Date.	Hydrographer.	Gage height.	Discharge.	Date.	Hydrographer.	Gage height.	Discharge
1911		Feet.	Sec.-ft.	1912		Feet.	Sec.-ft
Oct. 31	Dort and Gilkison	2.36	35.3	Apr. 24	J. C. Dort	2.13	29.0
				May 21	Gilkison and Pharis	2.30	35.0
				May 31	Dort and Pharis	2.78	44.9
1912							
Jan. 30	G.M.Gilkison	2.20	30.0	June 7	J.C.Dort	3.63	63.4
Mar. 2	J. C. Dort	2.18	27.7	July 4	do	2.15	30.4
Apr. 3	Dort and Gilkison	2.19	30.4				

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DAILY GAGE HEIGHT, IN FEET, OF SOUTH FORK OF PROVO RIVER AT FORKS, UTAH,
FOR YEAR ENDING SEPT. 30, 1912.
(Frank Dusenberry, observer)

Day.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1		2.25	2.3	2.2	2.2	2.20	2.18	2.50	2.20	2.20	2.24
2		2.25	2.3	2.2	2.2	2.20	2.18	2.60	2.20	2.20	2.24
3		2.25	2.3	2.2	2.1	2.20	2.18	2.87	2.15	2.20	2.28
4		2.25	2.3	2.2	2.1	2.19	2.18	3.35	2.15	2.20	2.26
5		2.3	2.25	2.2	2.1	2.20	2.17	3.60	2.15	2.20	2.26
6		2.3	2.25	2.2	2.2	2.20	2.17	3.50	2.15	2.20	2.28
7		2.3	2.3	2.2	2.2	2.20	2.15	3.00	2.15	2.22	2.28
8		2.3	2.3	2.2	2.2	2.20	2.15	3.75	2.15	2.24	2.28
9		2.3	2.3	2.2	2.2	2.20	2.20	4.00	2.15	2.20	2.30
10		2.35	2.3	2.2	2.2	2.22	2.21	4.05	2.15	2.20	2.40
11		2.35	2.3	2.2	2.2	2.19	2.20	3.55	2.15	2.20	2.30
12		2.35	2.3	2.2	2.2	2.18	2.25	3.15	2.15	2.22	2.30
13		2.3	2.3	2.2	2.2	2.18	2.23	2.95	2.15	2.20	2.40
14		2.3	2.3	2.2	2.2	2.18	2.20	3.00	2.15	2.20	2.32
15		2.3	2.3	2.2	2.2	2.15	2.20	2.72	2.15	2.30	2.30
16		2.3	2.3	2.2	2.2	2.15	2.20	2.50	2.15	2.22	2.28
17	2.35	2.3	2.3	2.2	2.2	2.15	2.22	2.40	2.15	2.22	2.29
18	2.35	2.3	2.3	2.2	2.2	2.18	2.24	2.30	2.15	2.24	2.30
19	2.35	2.3	2.3	2.2	2.2	2.48	2.21	2.30	2.15	2.22	2.28
20	2.35	2.25	2.2	2.2	2.2	2.18	2.25	2.30	2.15	2.22	2.28
21	2.35	2.25	2.2	2.2	2.2	2.15	2.30	2.30	2.15	2.25	2.28
22	2.35	2.25	2.2	2.2	2.2	2.18	2.25	2.30	2.12	2.23	2.29
23	2.35	2.25	2.25	2.2	2.2	2.18	2.23	2.40	2.12	2.23	2.28
24	2.35	2.25	2.2	2.2	2.2	2.18	2.21	2.30	2.12	2.22	2.29
25	2.35	2.3	2.25	2.2	2.2	2.15	2.22	2.25	2.13	2.22	2.29
26	2.35	2.3	2.25	2.2	2.2	2.15	2.22	2.20	2.13	2.22	2.30
27	2.35	2.3	2.25	2.2	2.2	2.15	2.22	2.20	2.15	2.23	2.30
28	2.35	2.3	2.2	2.2	2.2	2.15	2.28	2.20	2.18	2.42	2.30
29	2.35	2.3	2.2	2.2	2.2	2.15	2.29	2.20	2.18	2.24	2.29
30	2.25	2.3	2.2		2.2	2.18	2.35	2.20	2.18	2.25	2.30
31		2.3	2.2		2.2		2.81		2.20	2.25	

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DAILY DISCHARGE, IN SECOND-FEET, OF SOUTH FORK OF PROVO RIVER AT FORKS, UTAH FOR YEAR ENDING SEPT. 30, 1912.
(Frank Dusenberry, observer)

Day.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1		32	34	30	28	30	31	40	32	33	35
2		32	34	30	28	30	31	42	32	33	35
3		32	34	30	26	30	31	47	30	33	36
4		32	34	30	26	30	31	56	30	33	36
5		34	32	30	26	30	31	62	30	33	36
6		34	32	30	29	30	31	60	30	33	37
7		34	34	30	29	30	30	62	30	33	37
8		34	34	30	29	30	30	66	30	34	37
9		34	34	29	29	30	32	72	30	33	37
10		35	34	29	29	31	32	74	30	33	42
11		35	34	29	29	30	32	61	30	33	38
12		35	34	29	29	30	33	52	30	34	38
13		34	34	29	29	30	33	48	30	33	42
14		34	34	29	29	30	32	50	30	33	39
15		34	34	29	29	29	32	44	30	36	38
16		34	34	29	29	29	32	40	30	34	37
17	35	34	34	29	29	29	32	38	30	34	38
18	35	34	34	29	29	30	33	35	30	35	38
19	35	34	34	29	29	30	32	35	30	34	37
20	35	32	30	29	29	30	33	35	30	34	37
21	35	32	30	29	29	29	35	35	31	35	37
22	35	32	30	29	29	30	33	35	30	34	38
23	35	32	32	29	29	30	33	38	30	34	37
24	35	32	30	29	30	31	32	35	30	34	38
25	35	34	32	29	30	32	33	30	30	34	38
26	35	34	32	29	30	30	32	32	30	34	38
27	35	34	32	29	30	30	32	32	31	34	38
28	35	34	30	29	30	30	34	32	32	42	38
29	32	34	30	28	30	30	35	32	32	35	38
30	32	34	30		30	31	37	32	32	35	38
31		34	30		30		46		33	35	

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NOTE: Discharge determined by the use of several fairly well defined curves, for short periods and by indirect method for shifting channels.

MONTHLY DISCHARGE OF SOUTH FORK OF PROVO RIVER AT FORKS, UTAH, FOR YEAR ENDING SEPT. 30, 1912.

(Drainage area, 30 square miles.)

Month.	Discharge in second-feet.				Run-off.		Accuracy.
	Maximum.	Minimum.	Mean.	Per square mile.	Depth in inches on drainage area	Total in acre-feet.	
November 17-30	35	32	34.6	1.15	0.16	901	B.
December	35	32	33.5	1.12	1.29	2,000	B
January	34	30	32.6	1.09	1.26	2,000	B.
February	30	28	29.2	.973	1.05	1,080	B
March	30	26	28.9	.964	1.11	1,780	B
April	31	29	30.0	1.00	1.12	1.790	B
May	46	30	32.7	1.09	1.26	2,010	A.
June	74	32	45.2	1.51	1.08	2,090	B.
July	33	30	30.5	1.02	1.18	1,880	B.
August	42	33	34.1	1.14	1.31	2,100	B.
September	42	35	37.6	1.25	1.40	2,240	A.
The period						21,200	

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WATER-SUPPLY PAPER NO. 360; PAGES 80, 81, 82, 83 and 84. 1913.

PROVO RIVER AT FORKS, UTAH.

LOCATION: In the S.W.1/4 NE 1/4 sec. 26, T. 5 S., R. 3 E., at Forks, 12 miles up Provo Canyon from Provo, on the highway and railroad from Provo to Heber, and about 1 1/2 miles above the dam of the Utah Power & Light Co. About 600 feet above the mouth of South Fork of Provo River, which enters on the left, and about 1 mile below the mouth of North Fork, entering on the right.

RECORDS AVAILABLE: November 16, 1911, to September 30, 1913. Records have been maintained on the Provo River since 1890. By adding the discharge of the South Fork to that obtained at this station, the total flow of Provo River will be obtained.

DRAINAGE AREA: 600 square miles.

GAGE Sloping gage on the left bank, 10 feet upstream from the cable.

CHANNEL: AND CONTROL: Velocity moderate and uniformly distributed across the section; bed of stream composed of small gravel and likely to shift during medium or high stages. One channel at all stages. Both banks are fairly high and not liable to overflow. The maximum depth of the water at gage height 1 foot is 1.7 feet.

DISCHARGE MEASUREMENTS: Made from Cable and Car.

WINTER FLOW: Ice forms at this station, but ordinarily has no effect on discharge relation.

DIVERSIONS: Some water is used for irrigation in Heber Valley above the station. Station is above all diversions in the vicinity of Provo.

REGULATION: None.

ACCURACY: Records good; Drift that lodges on the bents of the wagon bridge below the gage may at times cause backwater.

COOPERATION: Gage heights and some discharge measurements furnished by the Utah Power & Light Co.

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DISCHARGE MEASUREMENTS OF PROVO RIVER AT FORKS, UTAH, DURING THE YEAR ENDING SEPT. 30, 1913.

Date.	Made by--	Gage height. Feet.	Discharge. Sec.-ft.	Date.	Made by--	Gage height. Feet.	Discharge. Sec.-ft.
Nov.21	G.H.Russell	1.17	343	June 23	W.R.King	0.96	256
Apr. 1	Leonard Tanner	2.18	738	23	do	.94	247
21	do	2.04	682	July 5	H.L.Stoner	1.10	292
May 29	W.R.King	2.64	933	Aug. 7	do	.88	218
June 3	Lynn Crandall	1.96	645	20	Lynn Crandall	.87	204
19	W. R. King	1.01	292				

DAILY GAGE HEIGHT, IN FEET, OF PROVO RIVER AT FORKS, UTAH, FOR THE YEAR ENDING SEPT. 30, 1913. (Frank Dusenberry, observer)

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1	0.94	1.38	1.14	1.00	0.89	0.89	2.50	2.5	2.00	1.40	0.84	0.92
2	.94	1.30	1.11	.97	.91	.87	2.90	2.4	1.95	1.20	.85	1.00
3	.94	1.35	1.05	.89	.89	.85	2.10	2.2	1.90	1.15	.83	.96
4	.98	1.34	1.15	1.01	.89	1.00	1.75	2.0	1.80	1.10	.89	.96
5	1.08	1.34	1.07	.8	.93	.89	1.85	2.0	1.60	1.10	.90	.98
6	1.08	1.35	.98	.81	.89	.94	1.80	1.95	1.45	1.00	.89	.94
7	1.04	1.32	.93	1.45	.89	.96	1.55	2.1	1.40	.98	.89	.95
8	1.02	1.3	.97	1.0	.94	.98	1.50	2.3	1.30	.95	.89	1.00
9	1.06	1.28	.95	1.1	.89	1.00	1.50	2.5	1.25	.90	.89	.99
10	1.08	1.26	1.05	1.0	.89	1.00	1.50	2.4	1.15	.90	.90	.96
11	1.06	1.40	1.02	1.0	.90	1.00	1.55	2.5	1.10	.89	.89	.98
12		1.30	1.02	.96	.85	1.15	1.70	2.6	1.10	.89	.92	.97
13	1.06	1.24	1.06	.96	.83	1.25	1.80	2.5	1.15	.90	.90	.99
14	1.05	1.23	1.07	1.0	.85	1.10	2.00	2.4	1.05	.89	.86	1.05
15	1.05	1.21	1.09	1.0	.85	.99	2.10	2.1	.99	.89	.86	1.00
16	1.04	1.22	1.13	1.0	.87	.98	1.95	1.9	1.00	.85	.85	1.00
17	1.04	1.18	1.11	.97	.87	1.10	2.00	1.8	.97	.84	.85	1.00
18	1.04	1.18	1.03	.97	.84	1.10	2.30	1.75	1.05	.90	.85	.99
19	1.03	1.18	1.13	.97	.8	1.15	2.40	2.0	1.00	.95	.86	.96
20	1.04	1.18	1.06	1.0	.85	1.10	2.10	2.0	.99	.93	.87	.95
21	1.18	1.18	.97	.98	.85	1.10	2.00	1.8	.96	.93	.87	.94
22	1.10	1.18	.86	1.0	.86	1.05	2.10	1.65	.95	.98	.87	.98
23	1.08	1.15	.84	1.0	.81	1.15	2.10	1.75	.95	1.00	.88	1.00
24	1.08	1.15	.84	1.0	.84	1.05	2.00	2.1	.98	.99	.95	.98
25	1.08	1.15	.94	.88	.86	1.00	1.90	2.4	.98	.99	.91	.97
26	1.10	1.10	.84	.93	.96	1.05	1.90	2.7	1.10	.90	.90	.97
27	1.50	1.12	1.04	.91	.95	1.00	2.00	2.7	1.40	.95	.90	.98
28	1.70	1.12	.96	.93	.92	1.05	2.30	2.6	2.0	.92	.90	.95
29	1.45	1.11	.94	.95		1.15	2.70	2.6	2.1	.90	.90	.94
30	1.43	1.14	1.00	.92		1.60	3.00	2.4	1.6	.89	.90	.91
31	1.48		.97	.88		2.20		2.3		.85	.93	

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DAILY DISCHARGE, IN SECOND-FEET, OF PROVO RIVER AT FORKS, UTAH, FOR THE YEAR ENDING SEPT. 30, 1913.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1	278	423	342	296	263	263	874	874	660	394	203	222
2	278	396	331	287	269	258	1,090	828	640	324	205	242
3	278	413	312	263	263	252	700	740	620	307	200	232
4	290	410	345	299	263	296	560	660	580	290	215	232
5	322	410	318	238	275	263	600	660	500	290	217	237
6	322	413	290	241	263	278	580	640	447	260	215	227
7	309	403	275	268	263	284	482	700	430	255	215	229
8	302	386	287	296	278	290	565	784	296	247	215	242
9	315	389	281	328	263	296	464	874	379	234	215	239
10	322	382	312	296	263	296	464	828	345	234	217	232
11	315	430	302	296	266	296	484	874	328	232	215	237
12	315	396	302	284	252	384	540	922	328	232	222	234
13	315	376	315	284	246	379	580	874	345	234	217	239
14	312	372	318	296	252	328	660	828	312	232	208	255
15	312	365	325	296	252	293	700	700	293	232	208	242
16	309	269	339	296	258	290	640	620	296	222	205	242
17	309	355	331	287	258	328	660	580	287	217	205	242
18	309	355	306	287	249	328	784	560	312	232	205	239
19	306	355	338	287	238	345	828	660	296	242	208	232
20	309	355	315	296	252	328	700	660	284	237	210	229
21	355	355	287	290	252	328	660	580	266	234	210	227
22	328	355	255	296	255	312	700	520	255	247	210	237
23	322	345	249	296	241	345	700	560	247	250	212	242
24	322	345	249	296	249	312	660	700	255	247	229	237
25	322	345	278	260	255	296	620	828	255	244	220	234
26	328	328	249	275	284	312	620	974	290	222	217	234
27	464	335	309	269	281	296	660	974	394	234	217	237
28	540	335	284	275	272	312	784	922	624	224	217	229
29	447	331	278	281		345	974	922	666	220	217	227
30	440	342	296	272		500	1,160	828	466	217	217	220
31	457		287	260		740		784		205	224	

NOTE:-- Discharge determined from three fairly well defined rating curves applicable respectively, Oct. 1, 1912 to June 19, 1913, June 23 to July 15, and Aug. 1 to Sept. 30. Indirect methods for shifting channels used June 20-22, July 16-31.

MONTHLY DISCHARGE OF PROVO RIVER AT FORKS, UTAH, FOR YEAR ENDING SEPT. 30, 1913

Month.	Discharge in second-feet. Maximum.	Minimum.	Mean.	Run-off (Total in Acre-feet.)	Accuracy.
October	540	278	337	20,700	A.
November	430	328	373	22,200	A.
December	345	249	300	18,400	B.
January	328	238	284	17,500	B.
February	284	238	260	14,400	B.
March	740	252	327	20,100	A.
April	1,160	464	680	40,500	A
May	974	520	757	46,500	A.
June	666	247	393	23,400	A.

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(continued on next page)

MONTHLY DISCHARGE OF PROVO RIVER AT FORKS, UTAH, FOR YEAR ENDING SEPT. 30,1913. (Continued).

Month.	Discharge in second-feet. Maximum.	Minimum.	Mean.	Run-off (total in acre-feet).	Accuracy.
July	394	205	248	15,200	B.
August	224	200	213	13,100	A.
September	242	220	235	14,000	B.
The year	1,160	200	368	266,000	

SOUTH FORK OF PROVO RIVER AT FORKS, UTAH.

LOCATION: In the SE. 1/4 sec. 26, T/ 5 S., R. 3 E., at Forks, and about 12 miles northeast of Provo.

RECORDS AVAILABLE: October 22, 1911, to September 30, 1913.

DRAINAGE AREA: 30 square miles.

GAGE: Vertical staff nailed to cottonwood tree about one-fourth mile above confluence with Provo River. Previous to June 15, 1913, a vertical staff on right bank about 1,000 feet below present gage.

CHANNEL AND CONTROL: One channel at all stages. Left bank likely to overflow in extreme floods; shifts frequently.

DISCHARGE MEASUREMENTS: Made by wading.

WINTER FLOW: Discharge relation not affected by ice.

ACCURACY: Records only fair owing to shifting channel. Effect of backwater, which was noticeable at former gage, has been eliminated at new gage.

COOPERATION: Gage-height records and some discharge measurements furnished by Utah Power & Light Co.

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DISCHARGE MEASUREMENTS OF SOUTH FORK OF PROVO RIVER AT FORKS, UTAH, DURING THE YEAR ENDING SEPT. 30, 1913.

Date	Made by	Gage height. Feet.	Discharge. Sec.-ft.	Date.	Made by	Gage height. Feet.	Discharge Sec.-ft.
Nov.21	G.H.Russell	2.21	33.7	June 23	W.R.King	a2.50	30.6
Apr. 1	Leonard Tanner	2.18	33.5	23	do	b2.10	30.1
21	do	2.30	38.0	July 5	H.L.Stoner	2.53	28.9
May 29	W.R.King	2.35	35.2	Aug. 7	do	2.49	27.6
June 3	Lynn Crandall	c2.53	44.1	20	Lynn Crandall	2.50	27.9

a Refers to new gage. b Refers to old gage.
c Refers to new gage established June 3; old gage read 2.25 feet.

DAILY GAGE HEIGHT, IN FEET, OF SOUTH FORK OF PROVO RIVER AT FORKS, UTAH FOR THE YEAR ENDING SEPT. 30. 1913. (Frank Dusenberry, observer)

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1	2.29	2.28	2.2	2.17	2.15	2.12	2.14	2.35	2.30	2.50	2.55	2.57
2	2.3	2.25	2.2	2.17	2.15	2.10	2.35	2.32	2.30	2.50	2.55	2.57
3	2.3	2.3	2.2	2.17	2.15	2.10	2.20	2.30	2.28	2.49	2.55	2.56
4	2.3	2.28	2.2	2.17	2.15	2.10	2.15	2.24	2.23	2.49	2.50	2.55
5	2.35	2.27	2.2	2.17	2.15	2.10	2.15	2.20	2.32	2.49	2.49	2.58
6	2.3	2.27	2.2	2.22	2.15	2.10	2.16	2.21	2.20	2.50	2.49	2.55
7	2.4	2.27	2.2	2.75	2.15	2.10	2.15	2.22	2.20	2.50	2.49	2.51
8	2.3	2.27	2.2	2.17	2.15	2.10	2.15	2.23	2.20	2.50	2.50	2.51
9	2.32	2.27	2.2	2.17	2.14	2.10	2.15	2.20	2.20	2.50	2.50	2.53
10	2.3	2.25	2.2	2.17	2.13	2.10	2.15	2.20	2.20	2.51	2.50	2.52
11	2.3	2.3	2.2	2.17	2.13	2.10	2.15	2.27	2.20	2.51	2.50	2.52
12	2.3	2.28	2.2	2.17	2.13	2.10	2.18	2.30	2.20	2.51	2.52	2.52
13	2.3	2.25	2.18	2.17	2.14	2.12	2.20	2.32	2.20	2.51	2.52	2.52
14	2.3	2.25	2.2	2.17	2.15	2.10	2.22	2.30	2.15	2.50	2.51	2.54
15	2.3	2.24	2.2	2.17	2.15	2.10	2.24	2.32	2.50	2.50	2.51	2.53
16	2.3	2.23	2.2	2.17	2.14	2.10	2.25	2.25	2.48	2.53	2.51	2.52
17	2.3	2.2	2.2	2.17	2.14	2.10	2.28	2.22	2.50	2.52	2.52	2.51
18	2.3	2.22	2.18	2.17	2.14	2.10	2.35	2.22	2.50	2.51	2.51	2.51
19	2.29	2.22	2.2	2.15	2.14	2.10	2.38	2.25	2.50	2.59	2.51	2.51
20	2.36	2.22	2.18	2.15	2.14	2.10	2.32	2.25	2.50	2.55	2.50	2.51
21	2.35	2.22	2.17	2.15	2.14	2.10	2.30	2.22	2.50	2.55	2.50	2.50
22	2.3	2.22	2.18	2.17	2.14	2.10	2.32	2.20	2.50	2.55	2.50	2.52
23	2.3	2.21	2.17	2.15	2.14	2.10	2.35	2.21	2.50	2.60	2.50	2.51
24	2.3	2.2	2.17	2.15	2.14	2.10	2.34	2.23	2.50	2.56	2.50	2.51
25	2.29	2.2	2.17	2.15	2.14	2.10	2.30	2.27	2.50	2.55	2.50	2.51
26	2.3	2.2	2.17	2.15	2.14	2.10	2.30	2.35	2.50	2.55	2.50	2.51
27	2.35	2.21	2.17	2.15	2.14	2.10	2.30	2.39	2.51	2.55	2.50	2.51
28	2.35	2.2	2.17	2.15	2.10	2.10	2.32	2.40	2.51	2.55	2.50	2.50
29	2.3	2.2	2.17	2.15		2.10	2.35	2.32	2.51	2.55	2.50	2.50
30	2.3	2.22	2.17	2.15		2.10	2.37	2.32	2.50	2.55	2.50	2.50
31	2.3		2.17	2.15		2.12		2.31		2.55	2.50	

NOTE: Gage heights before June 15 refer to old gage.

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DAILY DISCHARGE, IN SECOND-FEET, OF SOUTH FORK OF PROVO RIVER AT FORKS, UTAH, FOR THE YEAR ENDING SEPT. 30, 1913.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept
1	38	37	34	33	32	31	32	39	40	29	30	31
2	38	36	34	33	32	30	40	37	42	28	30	31
3	38	38	34	33	32	30	34	36	43	28	30	30
4	38	37	34	33	32	30	32	34	43	28	28	30
5	40	37	34	33	32	30	32	32	47	28	28	31
6	38	37	34	35	32	30	33	33	41	28	28	30
7	42	37	34	34	32	30	32	33	40	28	28	28
8	38	37	34	33	32	30	32	33	40	28	28	28
9	39	37	34	33	32	30	32	32	40	28	28	29
10	38	36	34	33	32	30	32	32	39	28	28	29
11	38	38	34	33	32	30	32	34	39	28	28	29
12	38	37	34	33	32	30	35	35	38	28	29	29
13	38	36	33	33	32	31	34	36	38	28	29	29
14	38	36	34	33	32	30	35	35	36	28	28	30
15	38	36	34	33	32	30	36	36	32	28	28	29
16	38	35	34	33	32	30	36	33	31	29	28	29
17	38	34	34	33	32	30	37	32	32	29	29	28
18	38	35	33	33	32	30	40	32	31	28	28	28
19	38	35	34	32	32	30	41	34	31	32	28	28
20	40	35	33	32	32	30	39	32	31	30	28	28
21	40	35	33	32	32	30	38	31	31	30	28	28
22	38	35	33	33	32	30	39	30	31	30	28	29
23	38	34	33	32	32	30	40	30	31	32	28	28
24	38	34	33	32	32	30	39	31	30	30	28	28
25	38	34	33	32	32	30	38	33	30	30	28	28
26	38	34	33	32	32	30	37	35	30	30	28	28
27	40	34	33	32	32	30	37	37	30	30	28	28
28	40	34	33	32	30	30	38	37	30	30	28	28
29	38	34	33	32		30	39	34	30	30	28	28
30	38	35	33	32		30	40	36	29	30	28	28
31	38		33	32		31		38		30	28	

NOTE: Discharge determined from two rating curves, one applicable Oct. 1,1912, to April 21, 1913, and the other July 5 to Sept.30,1913. Methods devised for shifting channels used for April 22 to July 4, 1913.

MONTHLY DISCHARGE OF SOUTH FORK OF PROVO RIVER AT FORKS,UTAH, FOR THE YEAR ENDING SEPT. 30, 1913.

MONTH.	Discharge in second-feet. Maximum.	Minimum.	Mean.	Run-off (total in acre-feet).	Accuracy.
October	42	38	38.5	2,370	A.
November	38	34	35.6	2,120	A.
December	34	33	33.5	2,060	B.
January	35	32	32.7	2,010	B
February	32	30	31.9	1,770	B.
March	31	30	30.1	1,850	B.
April	41	32	36.0	2,140	C
May	39	30	33.9	2,080	C.
June	47	29	35.2	2,090	C.
July	32	28	29.1	1,790	B.
August	30	28	28.3	1,740	B.
September	31	28	28.8	1,710	B.
The year	47	28	32.8	23,700	

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PROVO RIVER AT FORKS, UTAH.

LOCATION: In sec. 26, T. 5 S., R. 3 E., at Forks, about 600 feet above mouth of South Fork of Provo River, which enters on the left, about one mile below the mouth of North Fork, entering on the right, a mile above the Utah Power & Light Co.'s dam, and 12 miles up Provo Canyon from Provo, on the highway and railroad from Provo to Heber.

DRAINAGE AREA: 600 square miles.

RECORDS AVAILABLE: November 17, 1011, to September 30, 1914; also at various other stations on Provo River since 1890.

GAGE: Inclined staff on left bank, 10 feet upstream from cable.

DISCHARGE MEASUREMENTS: Made from cable or by wading.

CHANNEL AND CONTROL: One channel at all stages; both banks fairly high and not likely to overflowl maximum depth of water 1.7 feet at gage height 1 foot; bed of stream composed of small gravel and likely to shift. Point of zero flow, gage height 0.5 feet.

WINTER FLOW: Discharge relation not affected by ice, though ice forms at station.

DIVERSIONS: Station is below diversions for irrigation in Heber Valley and above those in vicinity of Provo.

REGULATION: None known.

ACCURACY: Results considered good.

COOPERATION: Gage readings and some discharge measurements furnished by Utah Power & Light Co.

DISCHARGE MEASUREMENTS OF PROVO RIVER AT FORKS, UTAH, DURING THE YEAR ENDING SEPT. 30, 1914.

Date.	Made by	Gage height.	Dis-charge.	Date.	Made by	Gage height.	Dis-charge
		Feet	Sec-ft.			Feet.	Sec.-ft
Oct. 20	Caleb Tanner	1.14	300	May 9	Utah Power & Light Company engineer	3.12	8,210
Jan. 5	C.W.Bennett	1.02	264				
Feb.27	Pharis and Stoner	.99	256	June 13	E.A.Porter	2.50	188
May 5	M.D.Anderson	2.55	978	July 9	do	1.07	298

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DAILY DISCHARGE, IN SECOND-FEET, OF PROVO RIVER AT FORKS, UTAH, FOR THE YEAR ENDING SEPT. 30, 1914.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept
1	227	275	305	324	290	307	394	722	1,400	306	291	273
2	234	290	290	290	275	430	412	722	1,400	322	306	265
3	237	341	290	324	242	290	412	659	1,470	306	291	259
4	242	307	257	290	234	290	500	808	1,610	306	291	262
5	376	207	275	275	275	307	540	900	1,470	338	276	251
6	307	290	290	275	229	324	600	950	1,260	322	276	251
7	290	290	275	250	257	376	580	922	1,200	306	276	251
8	290	290	307	260	260	358	560	974	974	306	276	248
9	307	290	290	257	239	394	520	1,140	874	291	276	240
10	307	290	275	239	234	412	560	1,210	740	291	276	226
11	307	290	275	200	255	412	620	1,260	740	306	276	223
12	324	324	275	255	260	394	580	1,030	740	291	273	220
13	324	358	257	237	260	394	580	922	784	291	268	217
14	341	341	275	260	260	412	640	974	828	306	265	220
15	341	307	275	485	257	412	808	1,090	828	291	262	248
16	324	307	290	376	229	448	1,000	1,140	828	291	262	248
17	324	290	290	376	257	524	950	1,200	922	273	262	248
18	307	290	290	394	260	456	954	1,260	740	262	256	248
19	307	307	275	448	290	466	854	1,260	740	259	256	226
20	307	324	234	324	307	430	900	1,260	784	259	262	248
21	290	307	224	307	358	412	1,060	1,400	700	306	262	240
22	307	290	290	324	466	394	1,060	1,540	660	291	262	248
23	307	255	247	307	358	394	1,060	1,540	600	276	270	234
24	290	275	229	290	324	394	950	1,760	540	276	270	240
25	290	324	260	307	324	376	1,000	1,610	520	276	259	234
26	290	341	275	760	324	412	950	1,400	447	273	273	240
27	290	376	290	466	260	430	950	1,200	464	276	273	248
28	290	324	241	324	290	394	808	1,330	370	276	276	240
29	290	307	260	247		412	808	1,400	338	276	276	234
30	290	290	324	262		394	808	1,260	322	291	273	248
31	275		275	275		412		1,400		306	273	

NOTE: Discharge determined from several well-defined rating curves and by indirect method for shifting control.

MONTHLY DISCHARGE OF PROVO RIVER AT FORKS, UTAH, FOR THE YEAR ENDING SEPT. 30, 1914.

Month.	Discharge in second-feet. Maximum.	Minimum.	Mean.	Run-off (total in acre-feet).	Accuracy.
October	341	227	298	18,300	B.
November	358	255	307	18,300	A
December	324	224	275	16,900	A.
January	760	200	322	19,800	A.
February	466	229	281	15,600	A.
March	524	290	396	24,300	B.
April	1,060	394	744	44,300	B
May	1,760	659	1,170	71,900	A
June	1,610	322	843	50,200	A.
July	338	259	292	18,000	A.
August	306	256	272	16,700	B.
September	273	217	243	14,500	B.
The year	1,760	200	454	329,000	

SOUTH FORK OF PROVO RIVER AT FORKS, UTAH.

LOCATION: In the SE. 1/4 sec. T. 5 S., R. 3 E., at Forks, about a quarter of a mile above confluence of South Fork with Provo River and 12 miles up Provo Canyon from Provo, on highway and railroad from Provo to Heber.

DRAINAGE AREA: 30 square miles.

RECORDS AVAILABLE: November 17, 1911, to September 30, 1914.

GAGE: Vertical staff nailed to cottonwood tree on right bank, June 15, 1913 , to September 30, 1914; original gage, a vertical staff 150 feet above mouth of stream, November 17, 1911, to June 14, 1913.

DISCHARGE MEASUREMENTS: Made from foot log or by wading.

CHANNEL AND CONTROL: One channel at all stages; both banks high and not likely to overflow; stream bed is composed of gravel and shifts oc-

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casionally.

WINTER FLOW: Discharge relation not affected by ice; open-channel rating curves used.

DIVERSIONS: Below all diversions and tributaries.

REGULATION: None known.

ACCURACY: Results poor, because of shifting channel.

The discharge at this station added to that of Provo River at Forks gives the total flow of Provo River available for diversion at the Utah Power & Light Co.'s dam, 1 mile below.

DISCHARGE MEASUREMENTS OF SOUTH FORK OF PROVO RIVER AT FORKS, UTAH, During the year ending SEPT. 30, 1914.

Date.	Made by	Gage height.	Discharge.	Date.	Made by	Gage height.	Discharge
		Feet.	Sec.-ft.			Feet.	Sec.-ft.
Jan. 5	C. W. Bennett	2.51	29.8	May 9	Utah Power & Light Co.	2.70	51.5
Feb. 28	Pharis and Stoner	2.53	27.1	June 13	E.A.Porter	2.53	47.2
May 5	M.D.Anderson	2.68	47.6	July 9	do	2.56	40.7

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DAILY DISCHARGE, IN SECOND-FEET, OF SOUTH FORK OF PROVO RIVER AT FORKS, UTAH, FOR THE YEAR ENDING SEPT. 30, 1914.

Day.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.
1	28	28	29	28	28	28	35	46	52	41	40	41
2	28	28	28	28	28	28	36	46	52	41	41	41
3	28	29	28	28	28	28	37	47	52	41	41	41
4	29	28	28	28	28	28	37	48	52	41	41	41
5	28	28	30	28	28	28	38	48	52	41	41	41
6	28	28	28	28	28	28	39	48	51	41	41	42
7	28	28	28	28	28	28	41	49	50	40	40	43
8	28	28	28	28	28	28	41	50	50	40	41	41
9	28	28	28	28	28	28	42	51	40	40	41	43
10	28	28	28	28	28	29	46	50	50	40	41	44
11	28	28	28	28	28	28	45	52	50	41	41	42
12	28	28	28	28	28	28	45	51	48	40	41	41
13	28	29	28	28	28	28	45	51	48	40	41	41
14	28	28	28	28	28	28	45	50	48	40	41	41
15	28	28	28	30	28	28	46	49	48	40	41	41
16	28	28	28	31	28	28	47	50	48	40	40	41
17	28	28	28	30	28	29	46	57	48	40	40	41
18	28	28	28	29	28	28	45	58	45	40	41	41
19	28	28	28	30	28	28	45	56	45	40	40	42
20	28	28	28	29	28	28	46	54	45	40	40	41
21	28	30	28	29	28	28	48	54	46	40	40	42
22	28	28	28	29	28	28	46	54	46	40	41	42
23	28	28	28	29	28	28	47	54	45	40	41	43
24	28	28	28	28	28	28	46	54	39	40	41	43
25	28	28	28	28	28	28	45	54	39	40	41	43
26	28	28	28	32	28	29	45	52	40	40	40	43
27	28	28	28	30	24	30	45	53	40	40	40	42
28	28	28	28	29	28	31	46	52	40	40	40	42
29	28	28	28	28		32	46	52	40	40	40	43
30	28	29	28	28		33	46	51	41	40	40	43
31	28		28	28		34		53		40	40	

NOTE: discharge determined from several rather poorly defined rating curves and by indirect method for shifting channels.

MONTHLY DISCHARGE OF SOUTH FORK OF PROVO RIVER AT FORKS, UTAH, FOR THE YEAR ENDING SEPT. 30, 1914.

Month.	Discharge in second-feet. Maximum.	Minimum.	Mean.	Run-off (total in acre-feet).	Accuracy.
October	29	28	28.1	1,730	C.
November	30	28	28.2	1,680	C.
December	30	28	28.1	1,730	C.
January	32	28	28.7	1,760	C.
February	28	24	27.9	1,550	C.
March	34	28	28.7	1,760	C.
April	48	35	43.6	2,500	C.
May	58	46	51,4	3,160	C.
June	52	39	46.6	2,770	C.
July	41	40	40.2	2,470	C.
August	41	40	40.6	2,500	C.
September	43	41	41.9	2,490	C.
The year	58	24	36.2	26,200	

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DAILY DISCHARGE IN SECOND-FEET OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM NEAR PROVO, UTAH, FOR 1906.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	226	226	310	576	530	1,336	486	226	310	268	354	226
2	310	226	268	486	530	1,098	486	268	310	268	310	226
3	354	184	268	530	530	912	486	268	310	226	310	226
4	226	184	268	354	576	958	486	268	310	226	310	354
5	226	184	226	354	670	958	486	268	310	226	310	354
6	268	142	226	354	756	1,004	486	226	310	268	310	310
7	268	100	226	354	354	1,432	442	226	310	268	310	310
8	398	184	226	398	718	1,098	442	286	310	268	310	310
9	398	142	268	442	766	912	354	226	310	268	268	310
10	766	184	268	530	912	1,004	354	226	268	268	268	310
11	310	226	310	530	958	912	268	184	268	268	268	354
12	184	184	670	530	1,336	1,384	268	184	268	268	268	354
13	226	184	530	442	1,384	1,576	268	184	268	268	268	442
14	290	226	398	442	1,098	1,876	268	184	310	268	268	354
15	354	268	354	486	958	1,576	310	184	310	268	268	268
16	268	310	226	486	912	1,480	268	184	310	226	268	268
17	310	268	268	576	862	1,480	268	184	310	226	268	310
18	268	268	268	670	766	1,242	268	184	310	226	310	310
19	576	354	226	670	814	1,146	268	184	310	226	310	310
20	576	310	268	622	1,050	1,050	268	354	310	226	226	310
21	530	310	268	670	1,146	958	268	268	268	226	184	268
22	184	310	354	718	1,242	912	268	354	268	226	268	268
23	268	268	398	814	1,288	862	310	310	268	226	268	268
24	268	268	530	766	1,288	862	310	268	268	226	310	310
25	268	268	670	718	1,288	912	268	268	268	226	310	310
26	226	268	530	670	1,626	958	268	268	226	226	310	486
27	226	226	486	622	1,384	1,146	268	268	268	226	268	486
28	226	268	486	576	1,336	1,050	268	268	268	226	268	398
29	226		442	576	1,432	576	258	268	268	268	268	354
30	184		486	530	1,336	530	226	268	268	268	226	310
31	184		530		1,098		226	268		268		310

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DAILY DISCHARGE IN SECOND-FEET OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM NEAR PROVO, UTAH, FOR 1907.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	306	272	418	418	920	1,120	1,680	458	387	387	387	387
2	272	305	378	500	920	1,285	1,860	458	387	387	387	387
3	272	418	418	588	822	1,740	1,920	418	387	387	387	387
4	305	680	418	634	726	1,800	1,920	458	387	387	387	387
5	305	774	418	726	726	1,980	2,100	418	500	387	387	387
6	340	680	378	726	680	2,160	2,040	418	500	387	387	387
7	305	500	378	680	680	2,280	1,920	378	418	387	387	387
8	272	458	340	588	634	2,340	1,680	378	418	387	387	387
9	272	500	418	588	634	2,160	1,505	378	418	387	387	387
10	240	458	378	726	634	1,860	1,395	378	418	387	387	387
11	272	500	418	920	774	1,285	1,340	378	418	387	387	387
12	272	458	418	970	870	1,680	1,175	378	418	387	387	387
13	272	458	378	1,285	1,020	2,040	1,120	340	418	387	387	387
14	272	500	378	1,395	870	1,680	1,175	340	387	387	387	387
15	272	458	340	1,500	726	1,505	1,070	340	387	387	387	387
16	272	458	305	1,560	726	1,285	970	340	387	387	387	387
17	305	340	458	1,395	870	1,175	870	340	387	387	387	387
18	305	305	544	1,230	1,020	1,175	744	340	387	387	387	340
19	272	340	588	1,070	1,285	1,340	774	340	340	387	387	340
20	240	340	634	920	1,680	1,560	726	340	340	387	387	340
21	210	340	726	774	2,040	1,680	680	340	387	387	387	387
22	210	418	634	774	2,220	1,860	634	340	387	387	387	387
23	181	500	588	774	2,220	1,920	634	340	387	387	387	387
24	210	418	500	774	2,340	1,450	588	340	387	387	387	387
25	272	378	500	774	2,160	1,285	588	387	387	387	387	387
26	305	418	500	774	1,680	1,285	588	387	387	387	387	387
27	305	418	500	822	1,450	1,340	544	387	387	387	387	458
28	340	378	458	970	1,285	1,560	544	387	387	387	387	418
29	272		458	970	1,175	1,740	500	387	387	387	387	387
30	272		418	920	1,120	1,800	458	418	387	387	387	305
31	272		378		1,120		458	387		387		387

DAILY DISCHARGE IN SECOND-FEET OF PROVO RIVER ABOVE TELLURIDE POWER COMPANY'S DAM NEAR PROVO, UTAH, FOR 1908.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	378	210	378	340	500	1,070	1,070	310	225	328	382	346
2	378	272	378	340	634	970	1,020	275	225	328	382	346
3	340	340	378	340	680	1,020	1,020	258	225	346	382	382
4	378	340	378	340	774	970	970	258	225	364	382	364
5	305	340	418	305	726	1,070	970	225	225	382	382	364
6	272	305	378	305	870	1,020	970	292	225	382	382	264
7	240	340	340	340	774	970	970	346	225	346	382	346
8	240	340	340	340	774	1,020	870	310	225	364	382	346
9	305	340	340	340	870	970	822n	258	241	364	364	364
10	378	340	340	340	970	970	822	258	225	364	382	364
11	305	305	340	340	870	1,070	726	292	241	364	364	364
12	340	340	340	340	822	1,340	694	346	241	382	364	346
13	305	340	340	378	970	1,340	662	328	241	382	364	364
14	340	305	378	418	870	1,450	630	292	241	382	364	364
15	340	305	418	458	822	1,560	598	275	241	382	364	364
16	340	305	418	500	822	1,800	566	241	241	495	364	364
17	340	340	458	634	870	1,680	534	241	241	457	364	364
18	340	305	458	588	870	1,450	502	225	241	400	364	346
19	340	305	418	588	870	1,285	470	225	225	400	364	495
20	340	340	378	680	1,070	1,175	438	241	225	419	364	382
21	340	305	340	726	970	1,285	403	241	225	400	364	495
22	340	305	340	774	920	1,340	371	241	225	400	382	495
23	340	340	340	870	920	1,395	339	225	225	382	364	328
24	340	340	340	822	1,070	1,230	307	225	225	382	382	346
25	340	305	340	774	920	1,230	275	225	258	400	364	346
26	340	305	340	680	1,020	1,285	275	225	364	382	364	346
27	305	305	340	680	1,070	1,285	241	225	310	382	364	346
28	340	340	340	634	1,020	1,230	258	225	328	382	275	328
29	305	458	340	588	970	1,175	258	225	328	382	258	310
30	305		305	544	970	1,070	292	225	328	382	310	328
31	272		305		1,020		310	225		382		310

By the Committee on irrigation which was adopted as follows:-

Gentlemen:- In acordance with your instructions of July 12th,1886, your Committee on Irrigation held a meeting with parties interested in the waters of Provo River on July 15th, 1886, and agreed to continue for the season the agreement and understanding entered into between the City Officials and representatives of the various companies and parties interested in the waters of Provo River, and reported to the City Council by its representatives on Jan. 14th, 1884, and appointed Peter M. Wentz to act in connection with the Watermaster to measure and destribute the water in acordance with the various claims as submitted. Their labors marked exhibit and made a part of this report, will show with what success we have met.

A meeting of the above parties was held on July 5th, 1887, and the same parties apointed to continue the measurement and distribution for the year 1887. We also recommend that the Committee continue its labors.

R. Farrer, Chairman.

To the representatives of the various Canal interests in the Waters of Provo River, Gentlemen :-

We herewith submit a report of the measurements of the waters in the different Canals and ditches taking water from Provo River. Commencing July 16, 1886, went first to Timpanogos Ditch and found as follows: Width of opening in dam 48 inches,depth of water at stake above dam 4 inches, amount of cubic feet per minute 154.56, the dam was rather defective, going away just as we were measuring depth, Proportion due said ditch is 1/50 of the River, allowing the amount in the River to be 10,000 cubic feet, Timpanogos as should have 200, and I think if our measurement had not been hurried it would have been developed very near that amount.

Hooper Ditch had very full head of water Dam above gatehead had been closed and made tight with straw had no wier dam and it was impossible to make a satisfactory measurement. We reduced its flow to about what it had been placed at 3 days before by the Watermaster and Superintendants.

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By the Committee on irrigation which was adopted as follows:-

Gentlemen:- In accordance with your instructions of July 13th, 1886, your Committee on Irrigation held a meeting with parties interested in the waters of Provo River on July 15th, 1886, and agreed to continue for the season the agreement and understanding entered into between the City Officials and representatives of the various companies and parties interested in the waters of Provo River, and reported to the City Council by its representatives on Jan. 14th, 1884, and appointed Peter M. Wentz to act in connection with the Watermaster to measure and destribute the water in accordance with the various claims as submitted. Their labors marked exhibit and made a part of this report, will show with what success we have met.

A meeting of the above parties was held on July 5th, 1887, and the same parties apointed to continue the measurement and distribution for the year 1887. We also recommend that the Committee continue its labors.

R. Farrer, Chairman.

To the representatives of the various Canal interests in the Waters of Provo River, Gentlemen :-

We herewith submit a report of the measurements of the waters in the different Canals and ditches taking water from Provo River, commencing July 16, 1886, went first to Timpanogos Ditch and found as follows: Width of opening in dam 48 inches, depth of water at stake above dam 4 inches, amount of cubic feet per minute 154.56, the dam was rather defective, going away just as we were measuring depth, Proportion the said ditch is 1/50 of the River, allowing the amount in the River to be 10,000 cubic feet, Timpanogos as should have 200, and I think if our measurement had not been hurried it would have been developed very near t at amount.

Hooper Ditch had very full head of water Dam above gatehead had been closed and made tight with straw but no wise defective it was impossible to make a satisfactory measurement. We reduced its flow to about what it had been placed at 3 days before by the Watermaster and Superintendants.

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Upper East Union. This ditch has a gate that for all practical purposes answers for a wier dam and measures as follows:- Width of opening 58 inches depth at stake 11 inches, amount of water in cubic feet per minute 850.86, amount due 1/2 of the River.

Provo Bench and Irrigation Co. Canal had no wier dam at this date(July 16th, 1886,) our imperfect measurement indicates that this Canal carries a little more than its proportion.

Enterprise Canal, no wier dam at this date estimated to have a little more than its proportion, July 17, 1886, Lower East Union. This ditch has a wier dam and measures width of opening 60 inches, depth at stake 11 inches, amount of water in cubic feet per minute 880.20. Factory Race no weir dam estimated to have its full proportion. City Race no weir dam, Estimated to have its proportion. Tanner Rance,- Dam our of repair, no measurement. Fair proportion. The foregoing was reported to a meeting of Gentlemen representing the different Irrigation Companies, and the Committee on Irrigation of Provo City, together with a recommendation that all ditches and canals be immediately supplied with weir dams, said meeting was held at the Court House, July 17, 1886, at 5 oclock P. M.

July 21, 1886, made the following measurement.

Upper East Union,- Width 58 inches, depth 12 inches, amount of water per minute in cubic feet increased same day 100 feet. Timpanogos,- Width 48 inches, depth 6 1/4 amount in cubic feet per minute 301.44, Hooper,- width of opening 48 inches, depth 12 inches cubic feet per minute 803.04. Provo Bench Canal and Irrigation Co. weir dam opening 87 inches, depth 14 3/4 inches, cubic feet per minute 1982.73. Enterprise,- no weir dam estimated to amount the same as Hooper,- 803.04. Lake Bottom Canal,- no weir dam estimated same as Hooper and enterprise 803.04.

July 22, 1886, City Rance,- width of opening 60 inches depth 8 3/4 inches contents per minute 624.00. Factory Race- width of opening-inches, depth 21 3/4 inches cubic feet per minute 3421.32 waste by small ditch 50.00 total of Factory 3471.32 Tanner Race -

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width 84 inches depth 7 1/2 inches, cubic feet per minute 693.00, waste by ditch above Lower East Union - width of opening 60 inches, depth 13 1/2, flow per minute in cubic feet 1198.20, Little Dry Creek - no weir dam estimated at 500 cubic feet 500.00 River Bottom a claim of nine hundred and nintoen ten thousandths, 919/1000) under which sundry parties take out water in places the amount of which it is impossible to measure, and very difficult to even guess at, I believe there has been used this season, at a very low estimate 1500.00 cubic feet under the River Bottom claim. Then these measurements of July 21, and 22, as follows:- Upper East Union 1131.24- Timpanogos 301.44 - Hooper 803.04 - Provo Bench Canal and Irrigation Co. 1982.75 - Enterprise 803.04 City Race 624.00 - Facroty Race 3471.32 - Tanner Race 940.00 - East Union 1198.20 - Little Dry Creek 500.00 - River Bottom 1500.00 Total in all 14055.05. Taking 14000. cubic feet as the total of the river then each Canal and ditch should have as follows according to claims submitted Jan. 14, 1884, Upper East Union 1166 2/3 - Timpanogos 280 - Hooper 933 1/3 - Provo Bench Canal 1750 - Enterprise 933 1/3 - Lake Bottom 933 1/3 - City Race 1120 - Factory Race 2100- Tanner Race 1400- East Union 1400- Little Dry Creek 700- River Bottom 1286- 14,002 2/3.

Immediately proceeded to regulate the flow of water in all of the Canals except those under the supervision of the Watermaster in accordance with the above proportion, The water, those that had too much of it was turned off. There were some changes at different times in some few Canals, owing some times to natural causes and perhaps sometimes to the dams and gates being tampered with by individuals unauthorized, I, in company with the city watermaster examined and measured the Races and Canals which are under the control of Provo City on the 27, of July, and examined all of the others at different dates up to the 16, of Aug. when the water of the River was so much increased and the waters of irrigation ditches so decreased that I thought it necessary to continue longer, all of which I respectfully submit.

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To the representatives of the Various Canals also interested in the Waters of Provo River 1886.

Gentlemen : We herewith submit a report of the measurements of the water in the diferent canals and ditches taking water from Provo River, Commencing July 16th, 1886 went first to Timpanogos Ditch and found as follows width of opening in dam 48 inches depth of water at stake above dam 4 inches, amount of cubic feet per minute 154.56 the dam was rather defective giving way just as we were measuring depth proportion due said ditch is 1/50 of the river allowing the amount in the river to be 10,000 cubic feet. Timpanogos should have 200 and I think if our measurement had not been hurried it would have developed very near that amount.

Hooper Ditch had a very full head of water Dam above headgate had been closed and made tight with straw had no wier dam and it was impossible to make a satisfactory measurement we reduced its flow to about what it had been placed at 3 days before by the watermaster and superintendants.

Uper East Union, This ditch has a gate that for all practical purposes answers for a wier dam and measures as follows. Width of opening 58 inches depth at stake 11 inches amount of water in cubic feet per minute 850.86 amount due 1/12 of the river.

Provo Bench and Irrigation Companyes Canal had no wier dam at this date (July 16 1886) our imperfect measurement indicates that this canal carries a little more than its proportion.

Enterprise Canal. No wier dam at this date Estimated to have a little more than its proportion.

July 17th 1886.

Lower East Union. This ditch has a wier dam and measures Width of opening 60 inches depth at stake 11 inches. amount of water in cubic feet per minute 880.20.

Factory Race no wier dam estimated to have its full proportion.

City Race no wier dam estimated to have its proportion.

Tanner's Race Dam out of repair no measurement fair proportion.

The foregoing was reported to a meeting of gentlemen re-

presenting the diferent Irrigation Companies and the Committee on irrigation of Provo City, together with a recomendation that all Ditches and Canals be immediately suplied with wier dams, said meeting was held at the Court House July 17th, 1886 at 5 oclock P. M.

July 21st 1886 made the following measurement

Uper East Union, Width 58 inches depth 12-1/2 inches amount of water per minute in cubic feet 1031.24 increased same day 100 ft.

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1131 24

Timpanogos width 48 inches depth 6-1/4 amount of cubic feet per minute 301.44

Hooper width of opening 48 inches, depth 12 inches, cubic feet per minute 803.04.

Provo Bench Canal Co Weir Dam opening 87 inches, depth 14-3/4 inches cubic feet per minute 1982.73.

Enterprise, No wier Dam Estimated to carry about the same as Hooper 803.04.

July 22, 1886, City Race width of openings 60 inches depth 8-3/4 inches contents per minute 624.00.

Factory Race width of opening 84 inches depth 21-3/4 inches cubic feet per minute 3421.32

Waste by small ditch - - - - 50

Factory Total - - 3471.32

Tanners Race Width 84 inches depth 7-1/2

Cubic feet per minute 693.00

Waste by ditch above dam 250.

Total of Tanner's 943.00

Lower East Union Width of opening 60 inches depth 13-1/2 flow per minute in cubic feet 1198.20

Little Dry Creek no wier dam estimated at 500 cubic feet.

River Bottom a claim of nine hundred and ninteen ten thousandths (919/10,000) under which Sundry persons take out water in diverse places, the amount of which it is impossible to measure, and very dificult to even guess at. I believe these has been used this season at a very low estimate 1500 cubic feet under the River Bottom Claim

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Then the measurements of July 21st and 22nd are as follows:

Uper East Union	1131.24
Timpanogos	301.44
Hooper	803.04
Provo Bench C. & I Co	1982.73
Enterprse	803.04
Lake Bottom	803.04
City Race	624.00
Factory Race	3471.32
Tanner's Race	940.00
East Union	1198.20
Little Dry Creek	500.00
River Bottom	1500.00
	14058.05 Total of all.

Taking 14000 cubic feet as the total of the river then each canal and ditch should have as follows according to claims submitted Jan. 14th 1884.

Uper East Union	1166-2/3
Timpanogos	280
Hooper	933-1/3
Provo Bench Canal	1750
Enterprise	933-1/3
Lake Bottom	933-1/3
City Race	1120
Factory Race	2100
Tanner's Race	1400
East Union	1400
Little Dry Creek	700
River Bottom	1286
	14002-2/3

I immediately proceeded to regulate the flow of water in all of the canals except those under the supervission of the watermaster in accordance with the above proportion. the water in those that

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had too little was increased, and from those that had to much it was turned off. These were some changes at diferent times in some few canals owing sometimes to natural causes and perhaps sometimes to the dams and gates being tampered with by individuals unauthorized. I, in company with the City Watermaster, examined and measured the Races and canls which are under the control of Provo City on the 27th of July. And examined all of the others at diferent dates up to the 16th of August.

When the water of the river was so much increased and the wants of Irrigation districts so decreased that I thought it unnecessary to continue longer, all of which I respectfully submit.

P. M. Wentz.

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To the Committee on distribution of the waters of Provo River for the season of 1887, Roger Farrer chairman,

Gentlemen :-

Having been employed by you on the 5th day of July 1887 to measure the water of Provo River in the various canals and ditches taking water therefrom and with the assistance of the City Watermaster, on the part of the city, and superintendants of other and independant canals and ditches to distribute thesame acording to claims submitted Jan 14th, 1884, I hereby report to you my findings and measurements.

On the 6th day of July 1887 went in company with City Watermaster (Gee) N. Barrett, of Uper East Union, Thatcher Hallett of Timpanogos to the head of Timpanogos Ditch in mouth of Provo Canyon all agreed that the flow of water in the river was as much as fifteen thousand cubic feet per minute.

Timpanogos had a small stream evidently not its proportion Supt. Hallett agreed to turn in more and have dame ready for measuring next day. Provo Bench Canal and Irrigation Co carried a large stream they have substantial head-gates provided with locks and a permanent dam built of timbers and plank, there were some willow brush on top of dam which we took off thereby reducing the stream about four (4) inches, Supt Knight agreed to have the weir ready for measuring next day.

Hooper Ditch July 6th, 1887, Large stream, Dam above headgate composed of rock, brush and straw, more water than Co claimed, opened dam and let some go down the river, No weir dam, no representative of the co present.

Uper East Union July 6th 1887, represented by N. Barrett Supt. Width of weir 58 inches, depth 11-1/2 inches flow 908.86 cubic feet per minute.

Enterprise Canal July 6th, 1887 width of wier 72 inches, depth at stake 10-7/8 inches 14.42X72 - 1008.24 cubic feet per minute.

Lake Bottom July 6th, 1887, Found wier dam in the river bottom not far from Carterville, with no visible means of turning

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water off or on. Am satisfied that it did not have its proportion of water at the dam but saw several streams coming in below the dam which would I think make up its quota if not more. The dam should be placed lower down the stream.

Tanner's Race July 7th, 1887, Impossible to measure, no gate in the Davis Ditch (just above) Estimated at 1100 cubic feet per minute.

Factory Race July 7th 1887 width of wier 84 inches, depth 17-1/2 29.45X84 - 2473.80.

City Race July 7th, 1887, width of wier 60 inches, depth 6 inches 5.90X60 - 354.00

East Union July 7th, 1887 Dam and stake all out of place, impossible to measure.

Little Dry Creek no wier dam estimated to have its proportion of water 1/20.

River Bottom, This claim is 919-10,000 of the river and is taken out on both sides of the river by quite a large number of persons, as to measuring it, I think it is unterly impossible and difficult even to guess at.

Uper East Union July 7th, 1887, width 58 inches, depth 12 inches - 16, 73X58 - 970.34 cubic feet per minute, nearly as much as capable of carrying.

Timpanogos July 7th, 1887 no board for wier dam no representative of the company. flow of water estimated at 3.00 cubic feet per minute.

Provo Bench Canal July 7th, 1887, assisted by Mr. N. Barrett measured as follows: Width 110-1/2 inches depth 11-3/4 inches 16.20X110-1/2 - 1790.10 cubic feet per minute.

Hooper ditch July 7th 1887 no dam full proportion of water.

It will be seen here that although we have been over the whole ground that it is impossible to tell whether our first estimate of the river was correct or not, as some of the ditches were without dams and impossible to measure, but my opinion is that it was very little if any too high.

Tanner's Race July 11th 1887, Width 84 inches, depth 8-1/2

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inches 10,16X84 = 855,64 waste 40,00 - 895,64 cubic feet per minute.

City Race July 11th 1887 width 60 inches, depth 9 inches, 10.86X60 = 651.60 cubic feet per minute.

Factory Race July 11th, 1887 width 84 inches depth 19 inches 33.29X84 = 2796.36 cubic feet per minute.

East Union July 11th 1887 width 60 inches depth 19-3/4 inches 35.27X60 = 2116.20 cubic feet per minute.

Uper East Union July 11th 1887 width 58 inches, depth 12-1/4 inches 17,26X58= 1001.08 cubic feet per minute.

Timpanogos Ditch July 11th, 1887. Width 47-1/2 inches, depth 7-1/4 inches 7.84X47-1/2 = 372.40 cubic feet per minute. Hallet agreed to turn off to 6-1/4 inches which would be 280.25 cubic feet per minute.

Hooper July 11th, 1887 Assisted by G. W. Gee present J. W. Turner James Smith and Shadrack Holdaway, Width 48-3/4 inches, Depth 12-1/2 inches 17,78X48-3/4 = 866.77 cubic feet per minute levy above the dam too low, when the board was put in the water run over impossible to measure more correctly.

Enterprise Canal July 11th 1887, Width 72 inches depth 9-3/4 inches 12,23X72 = 880.56 cubic feet per minute.

Tanners Race July 12th 1887 width 84 inches depth 8-3/4 inches 10,40X84 = 873.60 waste under gate Davis Ditch 40.00 - 913.60 cubic feet per minute.

Tanners Race at 6 P.M. July 12th 1887 width 84 inches, Depth 8-1/2 inches 9.96X84 = 836.64 waste 40.00 - 876.64 cubic feet per minute.

Provo Bench Canal July 14th, 1887. Width 110-1/2, Depth 11-3/8 inches 15.43X110-1/2 = 1705.01.

Timpanogos Ditch July 14th 1887. Width 47-1/2 Depth 6-1/4 inches 6.28X47-1/2 = 298.30 cubic feet per minute.

Hooper July 14th 1887. width 48-3/4 Depth 31-1/4 inches 19.42X48-3/4 = 946.72.

Enterprise July 14th, 1887 Width 72 inches Depth 9-1/2

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inches 11, 31X72= 814.32 cubic feet per minute, had not its full proportion but Mr. Samuel Carter had just been turning off water at waste-gate, he said by the requestof John Carter Sen. On account of the Canal being cloged below with sweet clover, causing the water to run over onto said John Carter's land.

Tanner's Race July 15th, 1887.

Width of Dam 84 inches, Depth 9-3/4 inches 12.23 84- 1027.32 cubic feet per minute. Waste at Davis gate 40.00- 1067.32.

City Race July 15th, 1887. Width 60 inches Depth 9-1/8 inches 11.08X60= 664.80 cubic feet per minute.

Factory Race July 15th, 1887. Width 84 inches Depth 23-1/2 inches 45.71X84 - 3839.64 cubic feet per minute.

East Union July 15th 1887 Width 60 inches Depth 15-1/2 inches 24.56X60 = 1473.60 cubic feet.

Little Dry Creek July 15 1887 no Dam.

Lake Bottom July 15th Several streams coming in below wier dam estimated to have its proportion

Hooper Ditch July 23rd 1887 water about 1-1/2 inches below what it should be. I tightened up the waste gate with moss and mud the best I could but it was still a little below, no one of the co. present.

Tanner's Race July 26th 1887 Width 84 inches Depth 11-3/4 inches 16.20X84= 1360.80, besides a waste estimated at 275.00, 1635.80.

City Race July 26th 1887 Width 60 inches Depth 6-3/4 inches 7.05X60= 423.00 cubic feet.

Factory Race July 26th, 1887 Width 84 inches Depth 17-3/8 29.14X84=2447.76 cubic feet per minute.

East Union July 26th 1887 width 60 inches Depth 15-5/8 inches 24.86X60=1491.60

Upper East Union July 26th 1887 Width 58 inches Depth 12-3/4 inches 18.18X58= 1054.44

Timpanogos Ditch July 26th 1887 Width 47-1/2 Depth 4-7/8

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inches 4.32X47-1/2 = 205.20 . G. W. Gee repaired the dam and increased the flow to a bout 300 feet.

Hooper Ditch July 26th 1887 Width 48-3/4 Depth 13-3/8 inches 19.69X48-3/4= 959.88

Provo Bench Canal July 26th 1887 Could not find the stake estimated to have its proportion.

Little Dry Creek July 27th 1887 No wier Dam. less than its proportion of water, but no means of turning more in.

Enterprise Canal July 27th 1887 in the morning had not its full proportion In the evening Called on Samuel Carter he had been tightening the dam with dirt had more water but not quite up to the mark.

Lake Bottom July 27th 1887, Plenty of water coming in below the wier dam.

River Bottom July 27th, 1887. This in measureable claim has never yet complained of a scarcity of water.

Provo Bench Canal July 29th 1887. Went with J. A. Loveless to wier dam. He put in new stake leveled with spirit level Width 110-1/2 inches Depth 11-7/8 inches 16.46X110-1/2= 1818.83 cubic feet per minute.

Hooper July 29th 1887 width 48-3/4 inches Depth 13-1/4 inches 19.42X48-3/4= 946.72 cubic with some water running around the Dam

Provo Bench Canal August 1st 1887 Width 110-1/2 inches Depth 12-1/8 inches 16.99X110-1/2= 1877.39 cubic feet per minute turned off at head gate so as to reduce it full 1 inch at a point about 40 paces below, where canal was about 20 feet in width, Did not go back to wier that day.

Hooper Ditch August 1st 1887 Width 48-3/4 Depth 12-3/4 inches 18.32X48-3/4= 893.10 Turned off to 12-1/8 reducing it about 60 feet.

Timpanogos August 1st 1887 Width 47-1/2 Depth 6-3/8 inches 6.47X47-1/2= 307.52-1/2- just a little too much, but so little did not go to the head (about 1/2 or 3/4 of a mile) to turn it off. also it would be dificult to get it nearer on account of the imperfect means of turning off or on.

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Upper East Union August 1st 1887. Width 58-inches Depth 12-3/4 inches and running over a little into the road above wier, to the south 18.32X58=1062.56 turned off to 10-7/8 on stake- to 836.36 cubic feet per minute.

Tanner's Race August 2nd 1887

Width 84 inches Depth 10 inches 12.71X84=1067.64 Waste at Davis Ditch and old waste way - to 300 feet making total of Tanner's Race 1367.64 feet per minute.

Factory Race Augt. 2nd 1887. Width 84 inches Depth 14-3/4 22.79X84= 1914.36 cubic feet per minute.

City Race Augt 2nd 1887. Width 60 inches Depth 4-1/2 inches 3.83X60=229.80 cubic feet per minute.

East Union Augt. 2nd 1887. Width 60 inches Depth 10-1/16 inches 12.83X60= 769.80 cubic feet per minute.

Enterprise Canal August 2nd 1887. Remains about the same as when last measured a little scant if any diference.

Lake Bottom Augt 2nd 1887 Well supplied below the wier.

River Bottom Augt 2nd 1887 unknowable.

Wednesday August 10th 1887.

Went out with City Watermaster (G. W. Gee) 1st to Tanner's Race, Contents or flow 1262.24 cubic feet per minute.

Factory Race Augt 10th 1887 Flow 1585.08 cubic feet per minute.

City Race August 10th 1887 Flow 270.00 cubic feet per minute.

East Union August 10th 1887 Flow 1003.80 cubic feet per minute.

Uper East Union August 10th 1887 Flow 821.28 cubic feet per minute.

Hooper August 10th 1887 Found it 13-1/4 inches on stake- to 932.16 reduced it to 12-1/4= 828.48 cubic feet per minute.

Provo Bench Canal August 10th 1887 Flow 1491.27 cubic feet per minute.

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Hooper Ditch August 20th 1887, 9 O'clock A. M. Found the Ditch full of water and runing over into Knights field on the west side. Measured at stake 11-1/2 inches without the wier board in. I opened the waste gate and reduced it about one-half in depth. then put in wier board and gave them 12 inches on the stake which is 800.00 cubic feet per minute the amount of this claim, 1/15 judging the river at this time to flow at the rate of 12,000 cubic feet per minute.

All of the foregoing is respectfully submitted this 16th day of February 1888.

Provo City Utah

P. M. Wentz.

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Tabulation of Flow and Distribution of Provo River for 1887.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
Copy of Record by O. M. Wentz													
	7-6-87	7-7-87	7-11-87	7-15-87		7-26-87	7-29-87	8-1-87	8-1-87	8-10-87	8-20-87		
Upper & Union	908.86	920.34											
Enterprise	1008.24												
Canal Race		1100.	895.64	1067.32		1635.8			1367.64	126.424			
Dairy Race		2473.80	2796.36	3839.64		2447.76			1914.36	1516.85			
City Race		3 5/8	651.60	664.8		423.			2-19.80	270.			
East Union			2116.20	1493.6		1491.60			769.99	2003.80			
Mill & Dry Creek													
River Bottoms		919											
Provo Bench		1790.16					1615.83	1617.39		1491.27			
Horse Ditch			866.77			959.81	946.72	873.18		826.45	800.		
Upper R. Union			1001.08			1054.44		826.32		821.21			
Total given										~~12000~~ 12.000			

T. F. W. T. C. T. 9-18-87

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Total

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for 1895.

J. E. Booth observer.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	7-2-95		7-8-95		7-28-95		8-31-95						
Provo Bench	3113.50		2465.		2391								
McClellan & Park	400		350		100								
Harper	1480.		1227		1082								
City Giles	4200.												
W. Union	1402		1844		1587								
City Waterworks	600.												
Stewart Ditch	65.												
Boyce	85												
Enterprise Canal	1165		1032		900								
Roberts			200										
Total	12510.5												
Timpanogos			600		600								
Waterworks			500										
City Race			3844		4132								
Total			11030.										
River Bottoms			1000 est.		500								
			12030.										
Roberts					60								

7-28-95 River Down't 11081 ft (11352)

8-31-95 Total River 11200 →

USGS.	220	260	192
Loss →	~~30~~	~~71~~	~~15~~
	5	56	00

West Pt Field
Lake Bottoms
Spr Creek assumed 15.

T.F.W.
T.C.T.
1-18-18

Total 165

Computations made by ______ Observations made by ______

To the City Council of Provo City,

Gentlemen :-

I herewith present to your honorable body my report as Water Commissioner for 1895.

You will see that the same is somewhat lengthy and in detail. I do not think previous Commissioners have left a record of their work and findings and I believe the facts which I found to exist are of sufficient importance to be worthy of preserving. I make the report therefore full which I trust will be worthy of a place in your vault and can be used for future reference and comparison.

Yours truly,

J. E. Booth,

WaterCOMMIONER for 1895.

To the City Council of Provo City.

Gentlemen :-

The following is a report of my work as water commissioner appointed for the year 1895 and also my recommendations as to what is needed to avoid furthermore complicated difficulties.

July 1st, 1895.

At the request of Silas L. Allred Watermaster of Provo City a meeting convened at the County Court House, Provo City, Utah, County, Utah, at which meeting were present represented: Provo City by S. L. Allred, Watermaster, Andrew Knudsen and A. Halliday Committee of the City Council on Irrigation.

Provo Bench Canal Co. by Jas. A. Lovelass, Prest.

Upper East Union by James Gray Prest.

Enterprise Canal Co. by J. E. Booth Prest. and

J. A. Warner Supt.

Union or Hooper Canal Co. by George Baum and Sam Carter.

River Bottom by J. E. Booth and George Baum.

J. E. Booth was elected chairman of the meeting and James

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A. Loveless was elected Secy. On motion of Jas. A. Loveless the several Canals agreed on a division of the waters of Provo River on the basis of the agreement made in January 1884 as recorded in the Provo City records of that date. - Carried -

Said division is a s follows:-

Timpanogos one fifthtieth (1/50). Upper East Union one twelfth (1/12). East Union one tenth (1/10). Factory Race three twentieths (3/20). Tanners Race one tenth (1/10). Holdaways Race two twenty-fifths (2/25). Little Dry Creek one twentieth (1/20). Lake Bottom Canal Co. one fifteenth (1/15). Enterprise Canal Co. one fifteenth (1/15). Hooper Canal Co. one fifteenth (1/15). Provo Bench Canal Co. one eighth (1/8). and the River Bottom nine hundred and nineteen ten-thousandths (919/10,000).

J. E. Booth was appointed as a Commissioner to measure the water and make the division thereon in the presence of the Watermasters if they desire to be present. Costs to be apportioned in proportion to water distributed.

On motion of Andrew Knudsen the questions of a meeting of all the canal interests was left to Provo City to fix time and place.

July 2nd, 1895.

Commissioner J. E. Booth met several of the Watermasters of Provo at the Government measuring point at the mouth of Provo Canyon and found the water registering 4.2 and the board put in by the Govt. which indicated a flow of about 17000 cubic feet of water per minute. The Provo Bench Canal by A. B. Walker Watermaster protested against any measurements or division thereof so long as there was 15000 feet or more of water in the river per minute. The commissioners did not acknowledge the right of the protest and proceeded to the measurement.

The weirs were in an imperfect condition and the Commissioners was satisfied that there was more water in the canal than the measurement showed.

The following are the measurements shown by the weirs where the bad weirs were and estimate of other ways where there were no

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weirs.

Provo Bench Canal Co. - - - - - - - -	3113.5 feet
McCulloughs and Parks. - - - - - - - -	400.
Hoopers - - - - - - - - - - - - - -	1480.
City Gate. - - - - - - - - - - - - -	4200.
Upper East Union - - - - - - - - - -	1402.
City Water Works - - - - - - - - - -	600.
Stewart Ditch. - - - - - - - - - - -	65.
Boyce. - - - - - - - - - - - - - - -	85.
Enterprise Canal. - - - - - - - - - -	1165.
Total - - - - - - -	1,2510.5

The Commissioner thereupon gave notice that there would be a meeting on July 6th of the several interests to take in consideration the situation as to whether the companies would put in proper gates or risk the commissioners judgment on the matter of the divisions.

July 6th, 1895.

Water interests met pursuant to a call from the Commissioner. Present, Provo City, Knudson and Halliday. Factory. Reed Smoot. Provo Bench Thorn and Walker. Union. S. Carter. Enterprise J. A. Warner. Upper East Union. James Gray. River Bottoms. McCullough. for Roberts, Parks and himself.

Reed Smoot appointed Secretary.

Chairman Booth stated that on the 1st of July we had a meeting and it was agreed that the water be divided in some way as recorded on records of Provo City as in year of 1884. He was appointed to measure water and most of water rights were represented.

The water was measured but was satisfied there was an error. Visited the several Canals. At present it was impossible to make an accurate measurement until some work was done. should decide to leave it with some set of men to divide it as to their judgment or have all parties interested prepare some accurate ways of measurement. The upper East Union and Timpanogos had too much

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water. Hooper had a little too much. City and Enterprise did not have enough.

William Walker of Provo Bench protested against any measurement when there was 15,000 feet claiming the City interests of 43/100 of 15,000 feet was all they were entitled to and no interest whatever in any over the 15,000 feet.

Commissioner advised that the Provo Bench Canal Co. turn to the City some 350 feet of water and Mr. Walker refused. He told the City Watermaster he was justified in going and taking the water which Commissioner does not know whether he did or not.

It was moved and seconded that we accept the report.

Mr. Knudsen thought it was too late to put in a river dam to measure and thought that the City would be satisfied with the judgment of a commissioner of commissioners and made a motion to that effect,- Carried-

Mr. Knudsen stated: The question of claim of Provo Bench Canal that the City was only entitled to 43/100 of the water up to 15,000 ft. and nothing over, was not so understood by the City or any of the City interest nor would they agree to it. Mr Knudsen moved that each Canal be required to put in river dams on or before June 1st 1896 acceptable to a committee appointed at some future meeting. Seconded and Carried. It was agreed that the representatives of the interests meeting Monday and Thursday evening until further orders at the head of the Enterprise Canal on motion of Knudsen the several Canal interests are invited to appoint a member of the Company to from a Committee to elect a commission to confer with a similar committee from Wahsatch County for the purpose of mutually protecting their water interests at and near the head of the river and that said Committee meet Tuesday 16th.

July 8, 1895.

On this day the water in the several Canals as near as I could ascertain was as follows:-

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Enterprise Canal, - - - - - - - -1032 feet.

per minute 200 ft of which belonged to River Bottom.

Hooper or Union	1227 feet
McCullough and Parks	350 "
Provo Bench	2465 "
Roberts	200 "
Timpanogos	600 "
Water Works System	500 "
City Race	3844 "
Upper East Union	1844 "
Total	11030 "

River measurement indicated 14400 so our detail measurements seem to be too small. There is probably 1000 feet in River Bottom.

July 9, 1895.

Turned from Provo Bench about 100 feet and from Upper East Union 300 feet. 100 feet from Timpanocos turned to the City 1000 feet and reduced Hooper and McCullough in favor of Enterprise.

July 12th, 1895.

More water in the river this morning so no further changes made. Provo Bench Canal Co. claims to irrigate 4186 acres and North Union with 1/3 of the water irrigates 1749 acres.

July 28, 1895.

River down to 11000 feet.

Provo Bench has	2391	is entitled to	1375.
Roberts	"	60	"	"	"	200
Hooper	"	1082	"	"	"	733
McCullough	"	100	"	"	"	350
City	"	4132	"	"	"	4730
Upper E. U.	"	1587	"	"	"	918
Timpanocos	"	600	"	"	"	220
River Bottom	"	500	"	"	"	800
Enterprise	"	900	"	"	"	700

July 30th, 1895.

The Commissioner ordered the following changes made by the

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Watermaster of Provo City. Take from Provo Bench 300 feet.

Roberts 75 feet, McCullough 150 feet, Hooper 100 feet. Timpanocos 100 feet. Upper East Union 200 feet the same to be given to Provo City and River Bottoms.

At the meeting of the Water interests held at the Court House on the day of July 1895, A Holliday, J. A. Loveless and J. E. Booth were appointed a Committee to confer with the persons and companies among water interest in Provo River in Wahsatch and Summit Counties and in pursuance of said appointment on August 7, 1895. A Halliday and J. E. Booth attended a meeting in Heber City of which meeting the following is an abridged account of the proceedings Meeting was held in the Court House, Heber City, Wahsatch County, Utah, Aug. 7, 1895, 2 P. M.

J. E. Booth of Provo was elected Chairman and Edward Clyde of Heber Secretary.

Persons and Co. Represented	Names of Representatives.
Provo City	A. Halliday
Canal Co's of Provo	J. E. Booth
Charleston Irrigation Co.	Joseph R. Murdock.
Sage Brush " "	Wm. Dable
Midway " "	A. Wooten
Spring Creek " "	J. E. Moulton
Wahsatch Canal Co.	(Wm. Buys and (Jas. E. D. Clyde
Heber North Field Irrig. Co.	John Crook
Sunrise " "	(Peter Duncan ((John Jones
Timpanocos Irrig Co.	(A. C. Hatch ((Edward Buys
South Kamas " ".	(W.J. Race ((G. O. Ellis and (Thomas Davis.
Washington Canal Co.	(David Mitchell ((E. Webb.

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Brown and Paul	Erastus Brown
Walker Ditch	W. H. Walker.
Gines "	Samuel Gines
Larsen "	(I. M. Reed (Ellis
White Irrigation Ditch	E. B. White
Bates "	John Bates
Simpers "	John Bates
Branch Creek	Duncan I Jones
Rol Jones Interest	Erastus Brown
W. H. Walker Jr.	W. J. Walker Jr.

The Chairman stated the object of the meeting to be to consider the several water interests of Provo River.

Abram Halliday made explanation of the position taken by Provo City and other Provo Interests.

John Crook moved that it is the sense of the meeting to endeavor to settle the water interests of Provo River in a friendly manner and submit it in the Courts of a friendly suit for a decree.

A. Wooten moved that there be a commission of three appointed to formulate a plan of this settlement and A. Hatch moved for an amend by adding: and that they report progress at 8 o'clock this evening,- carried as amended. J. E. Booth, Wm. Buys and A. C. Hatch were selected and the meeting adjourned till 8 o'clock this evening.

The Committee met at A. C. Hatch's office and adopted the following report, to-wit:

Your Committee appointed by this meeting to formulate a plan on which to act to accomplish the object contemplated by the motions passed report that we have considered the same and recommend that:

A Commission consisting of three persons one of whom shall be an officer authorized to administer oaths be selected whose duty it shall be to give notice of the time and place or places to each party in interest, that they will hear such evidence as may be offered, in relation to appropriation of water as to amount and time of said

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appropriation.

On the said offer of testimony and before it is given the person or Company so offering shall sign an agreement to pay the expenses of said commission or so much thereof as said commission shall approtion to the after said signing of said agreement the said Commission shall take said testimony so offered relating to the following points:

The name of the claimant. The amount of the first appropriation of water. The amount of theland irrigated.

The time and amount of increase of said appropriation to the present. Said testimony shall be taken under oath. Persons interested and who are entitled to give evidence may contest claims of other parties.

After all the testimony is so taken said commission therefrom shall make its findings of fact, which said finding shall be submitted to a subsequent meeting of the water interests and when approved by a majority shall be used as a basis on which to ask the proper court for a decree setting said water rights and all parties accepting the same shall pledge themselves to mutually protect said interests against all persons who are subsequent claimants or who will not join in this settlement or accept said award or finding of fact when agreed on by a majority of the interests pepresented in said Provo River.

8 P. M.- Meeting reassembeled.

J. C. Moulton was elected Secretary as Mr. Clyde could not be present.

The report was presented and amended in two particulars and adopted unamimously as above recorded.

J. R. Murdock moved that the compensation of the commission be not to exceed $400 each per day, with legal mileage and expense of necessary stationery.

On motion it was decided to have the three localities name one of the commissioners.

On motion of J. R. Murdock it is ordered that the said commission consist of regularly admitted attorneys at Law in practice. Mr.

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Dillon vote No. On motion of A. Halliday the said commission when elected may act if two of them are present and any two may be a quorum.

On motion of A. Wooten the meeting should select two of their three Commissioners and that the people of Woodland shall name at some future time subject to the approval of the other two Commissioners and whey so named and approved shall be the third commissioner. The Woodland people voted against it. The last named motion was passed.

On motion of A. Halliday J. E. Booth was named as one of the commissioners and John Crook named Mr. A. C. Hatch and they two Booth and Hatch were selected as two of the said Commissioners.

Minutes were read and approved and meeting adjourned subject to the call of the commission.

Aug. 13th. 1895.

This day commissioner visited seir and canals. Found at Government measurement 12,000 feet.

The Hooper and McCullough ditches had more than their share of water; all the canals were short of their needs. The Commissioner ordered that the Hooper Canal and McCullough ditch be each reduced 1/2 inch on their surface which was done.

August 31, 1895.

The Commissioners met with the Water Master at the mouth of Provo Canyon and found in the river 11,200 feet of water.

The Timpanocos, McCullough, Provo Bench, Roberts and Upper East Union had more than their share of water and the City had not enough.

The Commissioner thereupon made an order that the water be now divided according to the agreement as fixed in January 1884 the same to apply for the balance of this irrigation season.

The several Water Masters reported afterwards to the commissioner that a division had been made in accordance with the said order and that the same was unanimously accepted.

I as said Commissioner desire to call your attention to

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the slovenly and unsatisfactory gates at the place of measurements at the several conals with only one exception, and that difficulty will exist in regard to division of the waters of Provo River so long as there are no improvements in said gates and places for measurement the worse the gate the better the opportunity to get more water and there has therefore been a premium on negligence in this regard. I recommend that for economy and satisfaction a proper stone gateway be built at or near the present upper place of division and that it contains gate-ways ona level and divided in proportion to width to the several interests having each company take care of its own water below the point of division.

Provo City in my opinion has spent much more time and means on brush dams tham would have been reqmired toplace in proper gates.

I also call your attention to the fact that certain parties have taken some steps to further interfere with the water-rights in Provo River by surveying lakes for reservoirs at the head-waters of the River, and I respectfully recommend that steps be taken at once to protect the accrued right you possess.

Yours Respectfully,
J. E. Booth,
Water Commissioner for the
year 1895.

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Provo City, Utah, Nov. 16,1897.

Report of water measurements for Provo City 1897.

July 2nd River measurements showed 15,568 cubic feet per minute.

July 3rd City weirs showed 4,519 a shortage of over 2000 feet the weirs were not in proper shape for a correct measurement. The nest few days were spent putting them in good shape and on July 9th according to a mutual understanding we took further measurements. The River showing 13,721 cubic feet per minute.

July 10 the city weirs and water works showed 5063 cubic feet per min. A shortage of 8,37 feet in afternoon went to mouth of Canyon with Commissioner Booth and Will Johnson had trouble with James A. Loveless failed to turn any off of Provo Bench Canal, turned some from Timpanogos and upper East Union.

July 11 being Sunday went to mouth of Canyon with James Markman, Pulled a sufficient amount of Provo Bench canal dam out to make up our shortage. James A. Loveless appeared soon after but all was over and he did not molest our water.

The City weirs and waterwork showing the morning of July 12 6,210. A surplus of 310 feet per minute for the next 10 days the water was very irregular on account of the Provo Bench people tightening their dam and some unknown parties breaking ours, until,

July 20 when the commissioner with several others took measurements and found 12,652 cubic feet in the River. The City weirs and waterworks showed 5,072 cubic feet a shortage of 342 feet July 21 in connection with James Markman went to River bed near the waterworks and turned into City Creek 400 feet as measured later by commissioner Booth, giving Provo City her proportion again, which continued quite regularly until about July 27 when it began to decrease and on July 30 took the Commissioner and made further measurements finding 12,286 cubic feet in river, Provo Bench canal with some others had more than their share. We turned water from the Provo Bench Canal Park Ditch, Roberts' ditch and the Upper East Union Canal and on July 31 the City weirs and waterworks showed 5,770 cubic feet, giving Provo City 488 feet more than 43/100 of

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river which is Provo City's proportion. On August 1st the Provo Bench Canal people replaced their dam under protest of Will Johnson who was there in the interest of Provo City, the same evening myself, James Markman, Wallace Conover, Joseph Meldrum and Wm. Johnson went to A. B. Walker and others whose names I did not know there and after considerable trouble succeeded in tearing out the dam they had placed there, and entered into an agreement with A. B. Walker watermaster of Provo Bench Canal to let the water alone until Monday Aug. 2nd when we made further measurements finding 11,682 cubic feet per minute in river.

August 4th another measurement was made finding 12,807 cubic feet in River. The City weirs and waterworks on same day showed 5,888 cubic feet or 381 cubic feet more than 43/100 of River. We accounted for this overplus at this measurement. Because the Timpanogos Canal was broken giving their water all to City Creek.

There was but little change until Aug 28th when I met A. B. Walker watermaster of Provo Bench Canal at the mouth of Canyon according to appointment when he called off the agreement entered into Aug 1st and next day they tightened their dam. We went immediately and tore it out which was kept up alternately nearly every day until about sept 5 when the River began to increase and contensions for the water practically ceased.

William J. Taylor.
Watermaster Provo City.

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Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for ~~1889~~ 1897.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
Aug 4, ~~1889~~ 1897. by W. J. Taylor.													
Total of River 12,807 Cubic feet per minute.											(213,45)		
July 7, 1897 Taco Rivers				15568							(259.50.)		
July 9, "	"	"		13721							(228.7)		
July 20, "				12652							(210.80)		
July 30 "				12286.							(204.8)		
Aug 4.				12.807.							213,45)		

T.F.W. T.S.T. 9-16-18

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Total

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for ~~July~~ 3, 1897.

Abstract of Record & 92. Brot. with measurements assumed and added as shown.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Est. Tot.	Correction at Station Add.	Ded.	G. H.
	7-2-97		7-9-97		7-20-97		7-30-97		7-30-97		8-4-97		
Prov City & Waterworks			5728		5149.40		4x76.65		4848.90		530x.50		
City Dams at											399.00		
Weir at Mouth Canyon													
Below Provo River Bottoms													
& Little Dry Creek	4329												
Waste & Underflows	1500	est.											
Waterworks									500.00		500.00		
Provo Bench	3199		2555		2188.92x		2188.92x		1817.04		1970.84		
West Union	1970		1876		1969.00		1917.12x		1758.7x		1837.44		
Lake Bottom	1126	est	1126x		400.00		400x		400x		720.00		
Dry Gulch	886		436		357.12x		386.40		297.32x		0-0		
Upper & Union	2008		1915		1518.48		1358.00		1273.00		1278.36		
Roberts	150		145		150		150.00		109.00		77.28		
Park	400		153		19166		249.50		115.00		166.50		
River Bottoms			913										
Subtotal	15568	(2594)											
Fort Field	~~180~~ 180x		180x		180x		180x		180x		180x		
Up Creek Users	~~500~~ 300x		300x		300x		300x		300x		300x		
River Bed x assumed					728.00		1260.00		1260.00		555.00		
Miners Inch.			15327		13137.58		12666.59		12803.94		13295.94x		
Users.	360		320		265		265		265		225		
Loss ~~Gain~~	107		65		44		54		52		41		
Underflow											3		
	2/7.		2/5.		2/9.		2/11.		2/13.		2/22.		

Total 199

(Copy of record of A.L.Booth., Commissioner for 1897.)

Minutes of a meeting of the representives of the parties interested in the waters of Provo River held July 1,1897, at Provo City, Utah, at the call of Thomas Beesely chairman of the committee on irrigation of the Provo City Counsil, asking the representives of the several irrigation companies and persons owning water interested in Provo River to meet. The following named parties were present in the following capacities:

Thomas Beesely, Myron Tanner, and Myron C.Newell, committee on irrigation and William J.Taylor Watermaster of Provo City. James A.Loveless president Provo Bench Canal Co. John G.Jones, president Upper East Union. John E.Booth, president West Union Canal Co.. J.H.Clinger, Vice-president Lake Bottom Canal Co.. Fred Ferguson from Provo River Bottoms.

Meeting was called to order by Thomas Beesely. Myron Tanner was elected chairman and J.E.Booth secretary. On account of several parties and interest not being represented the meeting took a recess to 11 a.m. 11 a.m. Meeting resumed, A.B.Walker and P.M.Wentz of Provo Bench came in. J.A.Loveless placed in nomination for commissioner to measure and distribute the waters of Provo River Earnest D.Partridge; Myron C.Newell placed in nomination A.L.Booth for the same position. A.L.Booth recieved a majority of the votes, and on motion of J.A.Loveless A.L.Booth was elected unanimously.

On motion of Thomas Beesely the commissioner was instructed to measure and distribute the waters of Provo River in accordance with the facts and figures agreed upon as shown by the City Records of Provo City January 14,1884. The vote was unamimous in favor except the Provo Bench Co. voted no.

On motion of J.A.Loveless the chairman of the committee on irrigation was instructed to notify the commissioner that he should prepare and submit to an adjourned meeting to be called by said chairman a report for the year, carried.

On motion of M.C.Newell the expense of said commissioner be paid by the parties in interest in proportion to the waters claimed and distributed under said agreement of January 1884.

The Commissioner was instructed to meet with the several Superintendants for distribution of water on Friday July 2,1897, at 11 a.m at the mouth of the canyon. The meeting adjourned till Saturday July 3, at 1 p.m.

J.E.Booth.

Copied by A.L.Booth from the original minutes.

(Copy of record of A.L Booth, continued.)

Proportion of River to be distributed to the several parties.

Provo City:	East Union 1/10	0.1000	
	City Race 2/25	0.0800	
	Factory Race 3/20	0.1500	
	Tanner Race 1/10	0.1000	) 0.4300
Provo Bench Canal Co.	1/8		0.1250
West Union Canal Co	2/15		0.1333 1/3
Lake Bottom Canal Co.	1/15		0.0666 2/3
Timpanogus	1/50		0.0200
Upper East Union	1/12 & 200 cubic feet per minute		0.0833 1/3
Little Dry Creek	1/20		0.0500
River Bottom parties			0.0716 2/3
			1.0000

The 200 cu ft per minute for the Faucett Field belongs in with the U.E.U. 1/12

Roberts claims 100 ft. per minute but is not entitled to that much in low water. It is a part of River Bottoms.

Park owns none except by sufferance. It belongs to River Bottoms. McCullough is the same.

Carters 200 ft. is run down the West Union Canal, and comes out of the River Bottom.

(Copy of Record of A.L.Booth, continued.)

In accordance with the instructions of the meeting appointing Friday July 2, as the time for the commissioner to measure and distribute the waters of Provo River. A.L.Booth, said commissioner proceeded to the mouth of Provo Canyon and there met the following

W.D.Lewis and S.Carter for the West Union Canal Co.
I.B.Lott Faucett Field.
Fred Ferguson for River Bottom Parties
A.B.Walker, Provo Bench Canal & Irrigation Co.
W.J. Taylor Provo City.
John G.Jones, Upper East Union
George Meldrum Jr. Timpanogus.

The amount in the river was estimated at 16900 cubic feet per minute, and that proportion would give the following amounts.

Provo City	7267	Cubic feet
Provo Bench C.&.I.Co.	2112	" "
West Union	2253	" "
Lake Bottom	1126.7	
Timpanogus	338	
Upper E. U.	1407.3	
Little Dry Creek	845	
River Bottom	1551	
	1690000	

July 2

The measurements made showed the following amounts

City Stream (Including River Bottom & L.D.C.)	4329	Cu ft
" " Waste at weir and waterworks (estimated)	1500	" "
Provo Bench Canal	3199	" "
West Union	1970	" "
Lake Bottom (Estimated)	1126	" "
Timpanogus	886	" "
Upper East Union	2008	" "
Roberts 150 Park 400	550	
	15568	

This showed that the estimate in the river was too large. A partial adjustment was made and an apportionment was fixed to measure and distribute the water on Friday July 9,1897. When the weirs would be put in those ditches where they are not now, and others repaired which are defective.

Saturday July 3, In company with W.J.Taylor City Watermaster, Nels Johnson, and James Markham the city waters were measured and found to be as follows.

1/10	In the East Union Ditch	1175.28
2/25	City Race	792
3/20	Factory Race	1195.08
1/10	Tanner Race	1357.53
		4519.89

(Copy of Record of A.L.Booth, continued.)

July 9th 1897. I measure the waters of the several canals, as follows, and in the presence of the persons named.

City	J.W.Taylor (Waterworks included)	5728
Provo B.C.&.I.Co.	T.J.Patten	2555
West Union	W.D.Lewis and S.Carter	1876
Timpanogus	George Meldrum Jr.	436
Upper E Union	I.B.Lott	1915
River Bed,	Fred Ferguson and P Boyce	913
S.K.Roberts Ditch		145
David Parks Ditch and D.Park		153
Total		13721

All of these were weir measurements except the water in the river bed which was calculated by measureing the depth at distances of from 1 to 2 feet on the bottom, and timeing the flow by floats: and the S.K.Roberts ditch which was calculated where it runs in a flume across the waste ditch of the P.B.C.&.I Company.

July 10 1897 with W.J.Taylor and Nels Johnson I measure the City water at the vardous weirs and found the following amounts

Factory Race	1374.48
East Union	976.91
City Race	873.60
Tanner Race	738.15
Little Dry Creek (Est)	600.00
	4563.14

Showing with the 500 feet estimated for the waterworks a decrease of 665 from the measurement yesterday in bulk. This was accounted for by the streams being taken out along the river Bottoms.

Inbthe afternoon of July 10,1897 in company with W.J.Taylor and Nels Johnson I went to the mouth of the canyon and there found I.B. Lott and S.Carter. The intention was to take from those who had too much and give to those who were lacking. James A.Loveless on behalf of the Provo B.C.& I.Co. came a few minutes later and forbade any and every one to touch the dam placed in the river by that company. The measurements yesterday showed 2555 feet in the canal. The entire amount in all the streams was 13721 feet per minute, 1/8 of that, the proportion I had been informed belonged to the Provo Bench Canal & Irrigation Comapny would give 1715 as their share. I had also been informed that the Lake Bottom Canal obtained its water from springs below, and that it had a sufficient supply,and as there was no representive of that canal present I also divided the 1/15 or 915 feet proportionately among the canals taken out above, 1/8 of this would give 114 feet which added to the amount before mentioned makes 1829 feet to be given to the Provo Bench Canal & Irrigation Company. That canal had 726 more than the 1/8,and we went to the dam to turn some of the surplus down the river. Mr. Loveless said he was there ready to fight, to prevent one particle of the water from being turned out of his companys canal-- that if it were done it must be after he was crippled, and that the first man who took a rock from the dam would get hurt. Now I had not, so far as I could learn from the minutes of the meeting which appointed me commissioner, been constituted an officer to cripple anyone, nor did I understand it to be one of my duties to get hurt by being the first one to start removing a portion of the dam, and I was not quite prepared even to indulge in a fair fight on account of the difficulty. I therefore informed the parties that some 700 feet per minute more than 1/8 of the river was going the canal of the company which Mr. Loveless represented,and if they desired it they must tear out the obstruction themselves. All seemed t to think they did not want to risk personal injuries and when no one would make a move I considered my duty at an end for the immediate present. Thus did one man thwart the purposes of five others.

(Copy of record of A.L.Booth, continued)

We went down and turned some out of the timpanogus,until a measurement showed that there therein 319 feet or about 90 feet more than 1/50 of the amount. Mr. George Meldrum was present at the measurement. We also turned from the Upper East Union until the measurement showed 1477 feet 1/12 of the river & 1/12 of 915 would have given 1229 feet, but as there had been some contention regarding 200 feet claimed by the Faucett Field I left that amount in the Upper East Union Canal, and there was also some 48 feet above the 1/12 as explained above. We took no measurement of the increase of the city supply, as we knew there could not be enough to make up therir deficiency as shown yesterday.

July 20,1897.

Went and measured the river and found the following amounts, the persons named being present.

Provo Bench Canal		2188.92	feet per	minute.
West Union Canal		1969.00	" "	"
D.Parks Ditch		191.66	" "	"
River Bed		728.00	" "	"
City and Waterworks,	J.W.Taylor and James Markham	5149.40	" "	"
Upper East Union		1518.48	" "	"
Timpanogus	George Meldrum Jr.	357.12	" "	"
Lake Bottom Canal	At Dugway, Geo Scott, Geo. I.Taylor		" "	"
Lake Bottom Canal	at Meadgate (240)			
S.K.Roberts Ditch		150.00	" "	"
		12652.58		

The River Bed and Lake Bottom Canal measurements were made without weirs by measureing the depth of the water at distances of 2 feet, and the flow was obtained by timing a floating objectx at different parts of the stream.
The proper portion of the river on the basis obtained would give:

Provo Bench Canal	1/8	1581	ft per min.
West Union Canal	2/15	1687	" " "
River Bed or Bottoms	0.0919	1162	" " "
City Ditch & Waterworks	0.43	5440	" " "
Upper East Union Canal	1/12	1054	" " "
Timpanogus Canal	1/50	253	" " "
Lake Bottom Canal	1/15	843	" " "
Little Dry Creek	1/20	632	" " "
		12652	" " "

I could not get no defininte information as to where the portion for what is known as the Faucett Field should come from. One set of parties claimed it should be taken from the 1/12 turned into the Upper East Union Canal, and others interested in the latter denied the statement. I allowed 200 feet extra to go down the Upper East Union Canal on this account, and it left Provo City or some of the River Bottom Parties, or Little Dry Creek short, but which ones I could not ascertain, on account of the water for all these being measured at the xxxxxxxx one weir. We took some from the Provo Bench Canal, some from D.Parks ditch, and some from the West Union Canal, and a second measurement showed.

Provo Bench Canal	2032
West Union Canal	1864

We also turned some from the Timpanogus but the exact amount was not ascertained. The most of the increase obtained was sent down the river bed for the benifit of the Lake Bottom Canal.

During the day I also measured the four canals of the city and found in them

East Union	1388.59 Cu ft min
City Race	733.44 " " "

(Copy of record of A.L.Booth, Continued.)

Factory Race	1624.26	Cu ft. min.
Tanner Race	825.84	" " "
Little Dry Creek (Estimated)	650.00	
	5222113	
Waterworks (Estimated	500	
	5722.13	

Showing an increase of 572 feet from the measurements at the weirs, and leaving the city still short 342 feet of having its 43/100.

July 30,1897. Went and measured the water of the river there being p present W.J.Taylor, Nels Johnson, George Meldrum Jr. W.D.Lewis, I.B.Lott, Samuel Carter, and James Markham and George I Taylor a portion of the time.
Found the following amounts

City Creek	4276.65	cu ft per min
Provo Bench Canal	2188.92	
West Union Canal	1917.12	
D.Parks Ditch	249.50	
River Bed	1260.00	
Upper East Union	1358.00	
S.K.Roberts Ditch	150.00	
Timpanogus	346.40	
Waterworks (Estimated	500.00	
	12286.59	

On account of there being no weir in the Lake Bottom Canal no measurement was taken of the water in it. On the basis heretofore mentioned the canals would be entitled to the following.

Provo City 0.43	5288
Provo Bench Canal 1/8	1535
West Union 2/15	1638
Upper East Union 1/12	1024
Timpanogus 1/50	246
Lake Bottom 1/15	819
Little Dry Creek 1/20	614
Rivver Bottom .0919	1129
	12288

We turned some from the Provo Bench Canal, some from Roberts ditch, and Parks Ditch, some from the Upper East Union and some from the Timpanogus, and took the measurements as follows

Provo Bench Canal	1817.00
West Union	1758.72
City Creek	4848.90
Upper East Union	1223.00
Timpanogus	292.32
Roberts Ditch	109.00
Parks Ditch	115.00
River Bed (Estimated same as in morning	1260.00
Waterworks	500.00
	11923.94

Showing a difference of 362.65 from the measurement in the morning, we left the ditches in that condition, with instructions to the West Union to take some from the river bed to make up the portion belonging to that company, there being also 200 feet of Carters water taken down the West Union Canal. 200 feet of Faucett field water was left in the Upper East Union Canal.

(Copy of Record Of A.L.Booth, continued.)

August 2,1897.

Measured the waters of Provo River and found the following results.

Provo Bench Canal	1817.72
West Union	1864.32
City Creek	4575.15
Upper East Union	1319.04
River Bed	840.00
Timpanogus	248.64
Waterworks (Estimated)	500.00
Parks Ditch	108.04
Roberts Ditch	109.00
	11681.91

There were in the neighborhood J.W.Taylor, Nels Johnson, James Markham, M.C.Newell, Thomas Beesely, Joseph Meldrum, Ray Jones, and one or two others whose names I did not learn, from Provo City: James A. Loveless, T.J.Patten, A.B.Walker, and three others from Provo Bench, I.B.Lott and J.G.Jones from the Faucett Field and Upper East Union. None of these were present when the measurements wer taken except J.W.Taylor, I.B.Lott, and J.G.Jones, the first of whom saw the city, the River Bed, the Upper East Union, and the Timpanogus measured, and the others xxxxxxx two saw City Creek and the Upper East Union. The amount would give the following proportions

City .43	5023	
Provo Bench 1/8	1460.00	
West Union 2/15	1557.00	
Upper East Union 1/12	973.00	
River Bottom .0919	1073.00	
Timpanogus 1/50	233.00	
Lake Bottoms 1/15	778.00	
Little Dry Creek 1/20		
	11681.00	

Informed the parties present of the result but nothing was done as to regulating the quantities by taking from some and giving to others.

August 4,1897.
Went in company with J.W.Taylor and measured the following.

Lake Bottom Canal	720.00	cu ft min.
West Union Canal	1837.44	
Parks Ditch	166.50	
Provo Bench Canal	1970.84	
Roberts Ditch	77.28	
City Weir	5302.50	
Stream running into city creek below weir	399.00	
Waterworks (Estimated)	500.00	
Upper East Union	1287.36	
River Bed	555.00	
Timpanogus empty on account of Break in canal		
	12815.92	

(Copy of Record of A.L.Booth, concluded.)

I also measured the water coming into the city and found the following amounts

Factory Race	2150.00
East Union	1657.57
City Race	602,88
Tanner Race	977.00
Little Dry Creek	528.00
	5915.39
Citys Portion	5387.39
Waterworks	500.00
	5887.39

As there was 5302.50 ft coming through the city weir and in the stream below 399 ft. and the waterworks Estimated 500 ft total 6201.50 and as we found on the lower measurement 5915.39 & 500 for waterworks total 6415.39 It showed a difference of 213.89 ft in favor of the lower measurements, and would make in the river altogether 13029.81 and the various canals would take the following amounts on the basis of the agreement of 1884

City 0.43	5602 plus
Provo Bench 1/8	1626 plus
West Union 2/15	1787 "
Upper East Union 1/12 ~~x~~ & 200	1085 "
Little Dry Creek 1/20	651 "
Lake Bottom Canal 1/15	868 "
Timpanogus 1/50	260 "
River Bottom .0919	1197 "
	~~13202x28~~
	13028

We did not make any changes on account of the parties not being present and also on account of the Timpanogus being empty through breaking.
Provo City had 285 ft too much
Provo Bench " 340 " " "
West Union " 100 feet too little allowing 200 feet for carters in that Ditch.
East Union had 2 feet too much allowing 200 ft for Faucett Field
Little Dry Creek had 123 ft too little.
Lake Bottom Canal Had 148 " " "
Timpanogus had 260 " " "
And River Bottom had 6 " " "

(Note: The foregoing concludes the records of measurements for the season of 1897. On the page following above is expense and salary account, and a copy of minutes of representives of companies held Nov.24,1897, in which the commissioners report was presented and accepted. T.F.W.)

Provo City, Utah,
Dec. 19th, 1898.

To The various representatives of water interests in Provo River:

Gentlemen :-

The undersigned begs leave to make the following report of his labors as water commission for the year 1898, under the appointment that was given him by you in June of the present year:

On June 15th, in company with W.K.Farrer, City Water master of Provo City, Samuel Carter, of the West Union Co. and Wm. S.Roylance I took what was desired to be a "High water measurement" for the purpose of ascertaining the full capacity of the various canals and found as follows:

Factory Race	3226.44 cu. ft.
" " 2nd measurement	3854.88
City Race	1042.56
East Union	1217.61
Tanner's Race	1306.47
Lake Bottom Canal	1092.00
West Union "	2589.12
Provo Bench Canal	4312.80
Upper East Union	1437.84
Park's ditch	528.12
Robert's Ditch	190.00

Timpanogos Canal not measured owing to a break in the ditch. This measurement was not entirely satisfactory for a high water measurement, as the river had fallen so as to make it impossible to get the full amount out into the ditches; It should have been taken a week or ten days earlier. Park's ditch was the only one that had all it could carry.

A measurement of the Provo Bench Canal on June 22 showed 3485.20 cubic feet per minute, over 1100 feet more than a week before, Theodore Farley, James A. Loveless, A. B. Walker, S. Carter and W. K. Farrer were present.

June 30 in company with W. K. Farrer, John N. Strong, E. Martin and A. B. Walker I measured the water and found in

Factory Race	2604.06 cu. ft. min.
East Union	755.30
City Race	566.40
Tanner's Race (Float measurement)	1276.00
Little Dry Creek	700.00
West Union	1917.12
Park's Ditch	558.56
Provo Bench	2988.16
Upper East Union	2030.40
Timpanogos (Float measurement)	889.00
Lake Bottom	367.78

July 7,: Present part or all of the time: W. K. Farrer, S. Carter A. B. Walker, John Strong, W. N. Scott, S. K. Roberts, D. Park and R. Boardman:

Measurements showed in

Provo Bench	2188.92 cu. ft. min.
West Union	1758.72
Park's Ditch	297.00
Roberts' ditch	60.49
City Creek	2935.12

200

Upper East Union	1897.92
Timpanogos	413.00

On this occasion water was turned into City from various flows and a second measurement showed in

Provo Bench	1879.20 cu. ft. min.
West Union	1706.88
Park's ditch	149.76
Upper East Union	1242.72
City Creek	3581.76

July 9th water coming into Provo City was:

Little Dry Creek (estimated)	300.00
Factory Race	1687.74
East Union	901.38
Tanner's Race	654.90
City Race	696.00
Lake Bottom	319.50

July 21: Present A. B. Walker, Roger Farrer, John N. Strong, Geo: Meldrum, Jr., S. D. Roberts, John Stubbs, Fred Ferguson, S. Carter and Robert:Boardman:
The measurements showed in

Provo Bench	1474.36
West Union	1408.32
Park's Ditch	110.52
Roberts' ditch	60.49
City Creek	3581.76
Upper East Union	1242.72
Timpanogos	235.90
Roberts' ditch No. 2	29.92

Changes were made so that a second measurement showed, in

City Creek	3950.24
Upper East Union	1204.56

The water coming into the City was later measured and there was in

Factory Race (Float measurement)	1530.00
Tanner's Race	804.75
City Race	752.64
East Union	826.68
Little Dry Creek, (estimated)	300.00
Lake Bottom	228.62

July 22nd

City Creek	4025.28
Timpanogos	291.20

Streams taken out of City Creek by Stubbs, Ferguson, Boyce, et al.

Island Creek	307.98
Ferguson Ditch	203.00
Will Ferguson's little ditch	36.57

August 8, Present A. B. Walker, S. Carter, R. Board and W.H.Farrer:

Lake Bottom	319.50
West Union	1681.92
Park's ditch	149.64
Provo Bench	~~88.09~~ 1338.64
Roberts' ditch	45.98
" " No. 2	2885.12
City Creek	932.40
Upper East Union	268.10

Timpanogos	268.10
Tanner's Race	425.13
Factory Race	1624.26
East Union	1015.09
City Race	367.68
Little Dry Creek (estimated)	250.00

August 11

Measured Factory Race and found at weir - 1166.10 ft. min.
running in below weir (estimated) 100.00

1266.10

August 20,

Present J. A. Loveless, P. M. Wentz, A. B. Walker, S. Carter and W. K. Farrer.

Factory Race	1195.08 cu. ft. min.
East Union	826.68
City Race	549.12
Tanner's Race	654.90
Little Dry Creek	500.00
Lake Bottom	445.00
West Union	1289.28
" " 2nd measurement	1408.52
Park's ditch	198.32
Roberts' ditch No. 1	88.09
" " " 2	32.34
Provo Bench	1104.32
City Creek	2918.72
Upper East Uniont	915.12
Timpanogos	128.10

At all the times of measurement the city should be credited with the amount in the waterworks, estimated at 50 cu. ft. per minute. It will be seen that the water has not been divided strictly on the basis of the 1884 agreement, but there was less difficulty this year than last year, and generally a feeling was manifest among the parties interested to do the best they could for all the others; especially was this the case during the very scarce period of the season; the water generally was much lower in 1898 than in 1897.

The difficulty to which I referred in my last year's report in relation to the question as to where the water for the Fausett Field should come from has not been settled; neither has that relating to those who comprise the River Bottom parties - some taking the stand that only the parties on the east side of the river are included in this class, and other maintaining that all who do not belong to some canal Company are the ones that should be reckoned among the River Bottom parties.

The weirs are not in such a good condition as they should be; The one placed in the Lake Bottom Canal at the foot of the Provo Dugway has the best situation of any, and if all could be fixed so as to give as much still water as that one does the results would no doubt be more satisfactory to all parties concerned in these measurements: It transpired however with relation to the Lake Bottom Canal weir that in the latter part of the season it did not give a correct measurement on account of the large amount of seepage that comes in below the place of measurement; during the early season this is not so much the case.

I respectfully suggest that before another irrigation season commences an amicable settlement of the questions now pending be brought about, so that the commissioner appointed in future shall know what he is to do and can have the full power to carry out the terms of whatever agreement may be arrived at.

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Respectfully submitted,

Alfred L. Booth Commissioner

Provo City et al

Tabulation of Flow and Distribution of Provo River for 1898.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Est. Tot.	Correction at Station Add.	Correction at Station Ded.	Correction at Station G. H.

Discharge Provo River at the several points of measurement & Canals in the Valley based upon Weekly Gage Heights and discharge as found by A. L. Booth.

Day	April	May	June	July	August	Sept.
1	320	560	620	260	140	140
2	320	560	650	260	140	140
3	320	530	650	200	140	140
4	320	530	650	200	140	140
5	320	500	590	200	140	140
6	320	500	560	200	140	140
7	320	500	560	200	140	140
8	320	530	560	200	140	140
9	320	530	560	200	140	140
10	320	530	500	200	140	140
1	350	530	500	200	140	140
2	350	560	530	200	140	140
3	350	560	560	200	140	140
4	380	560	620	200	140	140
5	380	560	620	200	140	140
6	410	560	620	200	140	140
7	380	560	530	170	140	140
8	410	560	500	170	140	140
9	440	560	410	170	140	140
10	470	560	410	170	140	140
1	380	560	410	170	140	140
2	380	530	470	170	110	140
3	410	500	440	170	110	140
4	440	620	410	140	110	140
5	470	620	410	140	110	140
6	530	590	380	140	110	140
7	530	590	380	140	110	140
8	530	560	320	140	110	140
9	560	590	320	140	140	140
30	560	590	260	140	140	140
1		620		140	140	
Totals	11940	17210	15000	5630	4130	4200
Max	560	620	650	260	140	140
Min	320	500	260	140	110	140
Mean	398	555	500	182	133	140

Total 203

Computations made by ..... **Observations made by** .....

Provo City et al)

Tabulation of Flow and Distribution of Provo River for 1898.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.

Rating Curve.
Natural River Utah Valley.
U.S.G.S. Gage Height.
Based on observation By A.L. Britt Commencing
G.H. discharge.

G.H.	discharge
370	110
380	140
390	170
400	200
410	230
420	260
430	290
440	320
450	350
460	380
470	410
480	440
490	470
500	500
510	530
520	560
530	590
540	620
550	650
560	680
570	710.

Total 204

Computations made by .....

Observations made by .....

Provo City et al

Tabulation of Flow and Distribution of Provo River for 1898.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	G. L. Booth observer.												
	6-30-98.		7-7-98.		7-9-98.		7-21-98	~~7-22-98~~	7-22-98	8-8-98		8-20-98	
Fairview Rose	2604.06				1687.74							1195.05	
Ford Union	755.30				901.38							856.69	
City Rose	566.40				696.							549.12	
Provo Rose	1276.				654.90							654.90	
Little Dry Creek	700.				300.							500.	
West Union	1917.12		1758.72		1758.72 x		1408.32			1671.92		1279.28	
Parks Ditch	358.56		297.		297. x		110.52			149.76		196.32	
Provo Bench	2988.16		2188.92		2188.92 x		1474.36			1338.64		1104.32	
Mc Union	2080.40		1697.92		1697.92 x		1142.72			934.40		915.12	
Springvale	889.		413.		413 x		235.90		291.20	366.10		128.10	
Fort Butler	367.78				319.50					319.50		445.	
Roberts			60.49		60.49 x		60.49			26.9		35.09	
Roberts #2							299			95.98		32.34	
City Creek			2935.12				358.76		402.52	2355.12		2711.72	
	600 x												
River Bottom	Wells et al.				60 x				38.49			60 x	
Jensen									203.				
Wm Jensen									365				
Spring Creek Use	300 x		~~300 x~~		300 x		300 x			300 x		300 x	
Fort Field	180 x		~~180 x~~		180 x		180 x			180 x		180 x	
~~June 15 1898.~~													
x assumed.										8190.32		7004.35	
Minute feet.	15532.78				12558.57		8623.99						
Omissions supplied as shown an assumed. TFW.										T.F.W. T.C.T. 9-18-18			
205	259				204.		144.			137		150.	
Total Used.	287												

Computations made by ..... **Observations made by** .....

COPY OF BOOK OF T.E.THURMAN.

August 3,1900.

Lake Bottoms	476
Little Dry Creek . . .	221.04
Tanner Race	638.40
Factory Race . . .	1753.98
Leakage	50
City Race	152.64
East Union.	84.46
S.S.Cluff Ditch . . .	100
Jacob Baum	100
Wm. Scott	75.00
No.1 Fergson	51.92
No.2 Fergson	105.60
No.3 Fergson	182.12
Upper East Union. . .	811.20
No.4 Fergson	149.76
Timpanogus	285.12
Gordon..	46
Western Union . . .	1197.12
Park Ditch	162.00
Provo Bench	1195.20
	7361.56

(Probably not including Lake Bottoms. Total as Listed 7837.56)

Aug.22,1900.

Provo Bench	1357.20
S.K.Roberts	85
Park Ditch	115.92
Little Dry Creek. . .	309.52
Tanner Race	337.92
Factory Race.	109.64
City Race	399.36
East Union	1002.86
Cluff Ditch.	60
Geo. Baum	100
Jacob Baum.	25
Wm Scott	85
No.1 Fergson	50
No.2 Fergson	62.70
No.3 Fergson	130.50
Upper East Union . .	873.60
Timpanogus	192.72
Faucett Field . . .	35
Ben Richmond . . .	100.
No.4 Fergson	125
Western Union. . . .	956.16
Smith Ditch	200
	6713.10

(Total O.K.)

Copied By T.F.Wentz.
10-4-18.

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COPY OF RECORD OF T.E.THURMAN.

July 16,1900.

Little Dry Creek . . .	348.48	
Tanner Race	696.00	
Factory Race	528.54	
City Race	383.04	
East Union	642.88	
Cluff Ditch	75	
Jacob Baum	125.00	
Wm. Scoot	75	
No.2 Fergson.	76.27	
No.3 Fergson	235.20	
Upper East Union . . .	733.44	
Timpanogus Can	252.78	
Ben Richmond	50.00	
Western Union	1408.32	
Park Ditch	186.48	
Provo Bench	1195.20	
S.T.Roberts	70	
	7022.83	
Waterworks	500	
	7590.83	
Lake Bottoms.	478.	
	8068.83	(Total as listed 7984.63)

July 25,1900.

Little Dry Creek	452.16	
Tanner Race	.752.64	
Factory Race.	714.84	
City Race	480.96	
East Union	780.64	
S.S.Cluff Ditch	100.00	
George Baum	50.00	
Jacob Baum	150.00	
Wm. Scoot	150.00	
No.2 Ferguson	96.00	
No.3 Ferguson	235.20	
Upper East Union . . .	792.00	
Timpanogus	389.40	
Western Union	1107.84	
Park Ditch	137.88	
S.K.Roberts	85.00	
Provo Bench	1092.00	
	7566.56	(Total O.K.)

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COPY OF BOOK OF T.E.THURMAN.

June 28,1900.

	Little Dry creek	346.45
	Tanners Race	566.40
	Factory Race	787.36
	City Race	531.84
	East Union	1161.12
	Cluff on Meadow . . .	225
	J.Baum	100
	No.1 Ferguson . . .	200
	No.2 Ferguson . . .	59
	No.3 Ferguson . . .	204
	Upper East Union . .	998.40
	No. 4 Ferguson . . .	200
	*** Uper E Union .	100
	Timpanogus	274.56
	Park	186.48
5 p.m.	Western Union	1606.08
	S.K.Roberts	75
	Big Bench	1248
		9710.11(Total as shown)

(Actual total as listed above 8869.69, page is dim it may be that one item at top is worn out.)

July 2,1900.

	No. 2 Ferguson Ditch	68.44
	Baum Ditch	100.00
	No.3 Ferguson . . .	204
	No. 4 Ferguson . . .	200
	Little Dry Creek . .	309.60
	Tanners Race	714.04
	Factory Race	667.92
	City Race	566.40
	East Union	1160.32
	Cluff Ditch	150.00
	Upper East Union . .	831.36
	Western Union . . .	1705.08
	Park Ditch	162.00
	Big Bench	1467.60
	Timpanogus .	319.44
	City Waterworks .	500.00
	S.K.Roberts	75.
		9201.20 (Total O.K.)

July 9,1900.

	Little Dry Creek . . .	253.44
	Tanner Race	676.80
	Factory Race.	444.36
	City Race	584.64
	East Union.	1081.58
	Wm. Scoot Ditch . . .	50.00
	No.1 Ferguson	42.09
	No.2 Ferguson	76.27
	No. 3 Fergson	235.20
	Upper East Union. . .	1197.12
	Timpanogus	252.78
	Western Union . . .	1337.28
	Park Ditch	162.00
	S.K. Roberts	75.00
	City Waterworks . .	500.00
	Big Bench.	1248.00
		8216.56
	Lake Bottoms	500.00
		8716,56 (Total O.K.)

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vs.

Provo City et al | **2888 Civil**

Tabulation of Flow and Distribution of Provo River for 1900.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Est. Tot.	Correction at Station		
											Add.	Ded.	G. H.

Summary of Measurements of T. E. Thurman.
With omissions supplied.

	6-26-1900	7-2-1900	7-7-1900	7-16-1900	7-25-1900	8-3-1900	8-22-1900
Total as shown.	147.83 4/10	153.35	145.28	133.08	126.11	130.62	111.88
Lake Bottom	x 8.00	8.00 x	—	—	8.00 x	—	3.00 x
Fort Field	x 3.00	3.00 x	3.00 x	3.00 x	3.00 x	3.00 x	3.00 x
Spring Creek	x 5.00	5.00 x	5.00 x	5.00 x	5.00 x	5.00 x	5.00 x
Total Utah Valley	163.83	169.35	153.28	141.08	142.11	138.62	122.88

x assumed.

Total 209

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow ~~and Distribution of Provo River for~~ 1902.

NAME	~~Time~~	~~G. H.~~	~~Disc.~~	~~Dec'd Net~~	~~Tran. Loss~~	~~Tran. Gain~~	~~Dec'd at St.~~	~~P. Cent Added~~	~~Amt. Added~~	~~Est. Tot.~~	Correction at Station Add.	~~Ded.~~	G. H.
	Jun 23, 1902	7-1-02	9-11-02	7-28-02	8-27-02								
Little Dry Creek	4.56	9.20	10.00	5.22	7.23								
Tanners Race	7.42	9.28	6.87	5.07	4.90								
City Race	12.16	14.71	15.94	12.26	9.84								
Fielding Race	25.60	23.23	26.40	24.27	22.37								
East Union	22.11	20.50	20.50	20.35	19.89								
Waterworks	6.00	6.00x	6.00	6.00	6.00								
Cluff Ditch	1.40	1.50	1.50	1.50	1.00								
Brown Ditch	1.60												
N.E. Union	23.18	16.67	17.00	13.26	11.36								
Fawcett Field		3.00	1.50	3.33	3.33								
River Bottoms	19.00	13.90	18.00	14.61	10.30								
Park & Nuttal	3.00	3.50	4.00	4.79	3.00								
Carlon & Young		1.00	1.00	2.40	.67								
Timpanogos	10.52	7.10	7.45	5.58	6.25								
West Union	26.40	24.10	25.87	29.45	23.46								
Provo Bench	51.44	36.34	34.57	19.95	24.27								
Lake Bottom Canal }	17.00x	12.70	12.50	10.40	11.07								
Ft. Field }		4.00x	2.50	2.50x	2.50x								
Spring Creek Users }		5. x	5. x	5.00x	5. x								
Total 210	231.39	211.93	217.10	185.94	172.44								

Compiled from Book I. pages 1–99.

Observed by A. F. Thomas. Caleb Tanner & H. W. Gillard. Thomas. J. M. Carter. Gillard. Thorne.

T.F.W. 9-15-18

Computations made by ....

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Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Copy of Record.

Tabulation of Flow ~~and Distribution of Provo River for~~ 1903.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Correction at Station Ded.	Correction at Station G. H.
	May 1 1903	6-29-03	7-6-03	7-14-03	7-28-03	8-13-03							
Little Dry Creek.	3.33	3.33	5.05	8.33	10.14	4.93							
Tanners Race	10.00	14.65	8.41	10.95	8.19	9.41							
City Race	15.00	17.60	13.01	12.26	11.88	13.32							
Factory Race	36.54	30.28	26.07	25.00	25.23	21.28							
East Union	11.66	17.60	12.18	20.35	9.83	18.70							
Waterworks	6.00	6.00	6.00	6.00	3.92 ~~6.00~~	6.00							
Upper E. Union	23.18	35.23	17.95	13.85	16.37	14.78 ~~14.93~~							
Lower Bottom & Park & Mott. & B. & Young	10.50	28.33	22.30	20.40	15.27	14.20							
Cliff Ditch			2.50	2.00	2.50	1.33							
Timpanogos	18.72	17.30	9.93	7.38	9.10	4.45							
Fawcett Field			1.33	1.33	2.13	2.90							
West Union	50.58	42.19	35.97	32.85	25.61	22.93							
Provo Bench	98.39	73.10	47.27	39.70	38.01	30.58							
Lake Bottom }		14.40	12.54	10.06	10.11	6.00							
Ft. Field }	17.00x	2.50x	2.50x	3.00x	3.00x	3.00x							
Spring Creek Users }		5.00x	5.00x	5. x	5. x	5. x							
U.S.G.S.	~~[illegible]~~	2.91	2.18	2.18	2.18	1.88							
Loss				00	21	9							
Gain		16	16	00									
Total 211	310.90	307.51	234.01	218.46	196.89	178.73							

Compiled from Book 1 page 100 to 116.

T.F.W. 9-15-18

Computations made by ....

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Provo Reservoir Co.
vs.
Provo City et al
2888 Civil

Tabulation of Flow and Distribution of Provo River for 1904. Copy of Record.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	11-7-04	11-11-04	11-20-04	11-27-04	11-30-04	8-8-04	8-24-04						
Little Dry Creek	13.01	3.93	13.33	9.50	10.92	6.58	8.02						
James Race	10.97	7.43	14.80	14.58	16.73	15.95	11.33						
City Race	20.15	10.85	15.67		16.86	14.92	12.74						
Factory Race	44.74	31.05	41.97		35.98	33.35	37.70						
East Union	41.65	32.27	19.26		20.38	20.19	14.93						
Cluff & Dixon Waterworks	10.00	10.00	1000x		10.00	10.00	10.00						
Upper East Union	32.25	19.08	20.24	not complete	19.49	19.63	18.78						
Fawcett Field	1.87	1.90	5.35		.83	.37							
River Bottom and P & M and Bay.	16.67	24.40 ~~23.51~~	20.60		24.85	27.80	25.16						
Provo Power	15.39	6.76	17.97		10.61	10.84	5.00						
West Union	58.48	46.92	39.08		37.85	40.73							
Provo Bench	66.40	71.26	63.82		67.37	61.28							
Lake Bottom	27.27	16.58	16.57 ~~16.80~~	15.48	17.85	15.37	15.39						
Ft. Field	3.00x	3.00x	8.35		3.00x	3.00x							
Up Creek Users	5.00x	5.00x	5.00x		5.00x	5.00x							
x assumed.													
Plume	no daily discharge												
Mass.	302	199	159		154	139							
Loss													
Gain	~~66~~	~~97~~	~~148~~										
Total	366.65	296.43	307.01		297.72	286.01							

not complete.

T.F.W. 9-15-08

Computations made by .....

Observations made by .....

Provo Reservoir Co.

vs.

Provo City et al

2888 Civil

Copy of Record 1905.

Tabulation of Flow and ~~Distribution of Provo River for~~ .....

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	June 27 1905	6-30-05	7-10-05	7-25=05	8-22-05								
Little Dry Creek.	6.12	6.11	5.26	6.60	5.88								
Lake Bottom Canal	15.00	14.07	13.70	12.70	11.88								
Jamies Race	12.47	5.40	10.11	9.03	7.13								
City Race	19.54	7.69	13.89	12.78	10.54								
Factory Race	22.89	19.91	18.20	23.32	20.86								
East Union	16.26	13.24	18.20	10.39	10.63								
Waterworks int	11.67	8.33	9.20	9.20x	8.33								
Cliff ditch mouth		2.14			.83								
Mc Union	31.13	16.14	20.18	20.21	18.73								
Canal Field	5.67												
River Bottom and P & M and Bby.	43.30	35.60	27.30	27.40	23.20								
Timpanogas	14.41	11.74	8.82	12.94	8.33								
Bluff Ditch.	16.67												
West Union	42.36	41.20	34.85	23.99	25.94								
Provo Bench	95.05	76.78	59.30	39.30	35.03								
Fort Field	300x	300x	300x	300x	300x								
Up Creek Users	500x	500x	500x	500x	500x								
x assumed.													
Assess.	335	301	280	253	165								
Inflow.	+24	-35	-33	-37	+30								
Total 213	358.54	266.30	249.01	215.86	195.31								

T.F.W. 9-15-05

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Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for July 1905.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	USGS Station River			Inflow [illegible]	Loss Curve.	~~Total Heber Valley~~	Total Utah Valley						
1		301			35		266						
2		285			34		251						
3		285			34		251						
4		285			34		251						
5		284			34		250						
6		284			34		250						
7		283			33		250						
8		282			33		249						
9		281			33		248						
10		280			33		247						
1		280			33		247						
2		279			33		246						
3		278			34		244						
4		277			34		243						
5		292			34		258						
6		275			34		241						
7		274			35		239						
8		273			35		238						
9		256			35		221						
20		255			36		219						
1		255			36		219						
2		254			36		218						
3		254			36		218						
4		253			37		216						
5		253			37		216						
6		236			35		201						
7		236			32		204						
8		237			30		207						
9		237			27		210						
30		238			25		213						
1		245			22		223						
Total							7254						
Max							266						
Min							201						
Mean							234						
Total 214													

Computations made by ....

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Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for August 1905.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	Uses station			Provo Reservoir Co.		Provo Canyon		Total U. Vol. Valley					
	River												
1		245				20		225					
2		237				18		219					
3		243				15		228					
4		212				13		199					
5		211				10		201					
6		210				8		202					
7		209				6		203					
8		208				4		204					
9		207				1		206					
10		206		2				208					
1		221		4				225					
2		220		6				226					
3		203		9				212					
4		187		11				198					
5		187		13				200					
6		200		16				216					
7		200		18				218					
8		168		21				189					
9		197		23				220					
10		167		25				192					
1		166		28				194					
2		165		30				195					
3		164		30				194					
4		163		30				193					
5		162		29				191					
6		161		29				190					
7		144		29				173					
8		158		28				186					
9		146		28				174					
10		162		28				190					
1		162		27				189					
Totals								6269					
Max								228					
Min								173					
Mean								202					

Total 215

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for September 1905.

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NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Correction at Station Ded.	Correction at Station G. H.
	USGS Station	River		Inflow Canal		Total Utah Valley							
1		163		27		190							
2		135		27		162							
3		136		26		162							
4		136		26		162							
5		137		26		163							
6		137		25		162							
7		138		25		163							
8		138		25		163							
9		139		24		163							
10		139		24		163							
1		140		24		164							
2		140		23		163							
3		141		23		164							
4		141		22		163							
5		142		22		164							
6		142		22		164							
7		143		21		164							
8		143		21		164							
9		144		20		164							
20		144		20		164							
1		145		19		164							
2		132		19		151							
3		133		19		152							
4		133		18		151							
5		147		18		165							
6		147		17		164							
7		147		17		164							
8		132		16		148							
9		173		16		189							
30		173		15		188							
Total						4927							
Max						190							
Min						~~151~~	148						
Mean						164							
Total 216													

Computations made by ....

Observations made by ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Copy of Record.

Tabulation of Flow and Distribution of Provo River for 1906.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	1-13-06.												
Little Dry Creek.	8.33												
Provo Power	14.80												
City Race	21.90												
Provo Union	25.35												
Factory Race	49.99												
Waterworks	8.33												
Cluff & Dixon	3.23												
River Bottoms &c													
B.P.C.Y. & P. & K.	40.80												
M.C. Union	4.97												
Timpanogos	21.80												
Blue Cliff	8.33												
Provo Bench	103.27												
West Union	5.51												
Lake Bottom	16.67												
Ft. Field.	300x												
Spanish Fork	500x												
Total	217	429.48											

x assumed.

T.F.W. 2-16-06

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for July 1906.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
1		486		58		544							
2		486		59		545							
3		486		60		546							
4		486		61		547							
5		486		62		548							
6		486		63		549							
7		442		64		506							
8		442		65		507							
9		354		66		420							
10		354		68		422							
1		268		70		338							
2		268		71		339							
3		268		72		340							
4		268		74		342							
5		310		75		385							
6		268		76		344							
7		268		77		345							
8		268		78		346							
9		268		79		347							
20		268		80		348							
1		268		81		349							
2		268		81		349							
3		310		82		392							
4		310		82		392							
5		268		83		351							
6		268		83		351							
7		268		83		351							
8		268		83		351							
9		268		84		352							
30		226		84		310							
1		226		84		310							
Total						12466							
Mo. Max						507							
Min						310							
Means						402							

Total 218

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for August 1906.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station: Add.	Ded.	G. H.
7th State Engr Page 109	USGS station River			Bypass Canal		Tot. Utah Valley					Mean Curve Used		
	1	~~226~~	226	84		310							
	2	~~268~~	268	84		352							
	3		268	84		352							
	4		268	84		352							
	5		268	84		352							
	6		226	84		310							
	7		226	84		310							
	8		226	84		310							
	9		226	84		310							
	10		226	84		310							
	1		184	84		268							
	2		184	84		268							
	3		184	84		268							
	4		184	84		268							
	5		184	83		267							
	6		184	83		267							
	7		184	83		267							
	8		184	83		267							
	9		184	83		267							
	20		354	83		437							
	1		268	82		350							
	2		354	82		436							
	3		310	82		392							
	4		268	82		350							
	5		268	81		349							
	6		268	81		349							
	7		268	81		349							
	8		268	81		349							
	9		268	80		348							
	30		268	80		348							
	1		268	80		348							
Total						10080							
Max						437							
Min						267							
Mean						325							
Total 219													

Computations made by .... Observations made by ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for September 1906.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
7th State Engr. page 109	USGS Station	River		Dry Creek Curve		Tot. Valley					Mean Curve used		
1		310		79		389							
2		310		79		389							
3		310		79		389							
4		310		78		388							
5		310		78		388							
6		310		77		387							
7		310		77		387							
8		310		77		387							
9		310		76		386							
10		268		76		344							
1		268		76		344							
2		268		75		343							
3		268		75		343							
4		310		75		385							
5		310		74		384							
6		310		74		384							
7		310		73		383							
8		310		73		383							
9		310		72		382							
20		310		72		382							
1		268		72		340							
2		268		71		339							
3		268		71		339							
4		268		70		338							
5		268		70		338							
6		226		69		295							
7		268		69		337							
8		268		69		337							
9		268		68		338							
30		268		68		338							
Total						10886							
Max						389							
Min						295							
Mean						363							
Total 226													

Computations made by ....

Observations made by ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for Provo River August 1907

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
State Engr. page 111	U.S.G.S. Station River			[illegible] Canal		Total Mid Valley					Mean Cumulative		
1	458			84		542							
2	458			84		542							
3	418			84		502							
4	458			84		542							
5	418			84		502							
6	418			84		502							
7	378			84		462							
8	378			84		462							
9	378			84		462							
10	378			84		462							
1	378			84		462							
2	378			84		462							
3	340			84		424							
4	340			84		424							
5	340			83		423							
6	340			83		423							
7	340			83		423							
8	340			83		423							
9	340			83		423							
20	340			83		423							
1	340			82		422							
2	340			82		422							
3	340			82		422							
4	340			82		422							
5	387			81		468							
6	387			81		468							
7	387			81		468							
8	387			81		468							
9	387			80		467							
30	418			80		498							
1	387			80		467							
Total						14282							
Max						542							
Min						422							
Mean						461							
Total 221													

Computations made by ....

Observations made by ....

Provo Reservoir Co.

vs.

Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for July, 1902.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
1	1680			58		1738							
2	1860			59		1919							
3	1920			60		1980							
4	1920			61		1981							
5	2100			62		2162							
6	2040			63		2103							
7	1920			64		1984							
8	1680			65		1745							
9	1505			66		1571							
10	1395			68		1463							
1	1340			70		1410							
2	1175			71		1246							
3	1120			72		1192							
4	1175			74		1249							
5	1070			75		1145							
6	970			76		1046							
7	870			77		947							
8	744			78		822							
9	774			79		853							
10	726			80		806							
1	680			81		761							
2	634			81		715							
3	634			82		716							
4	588			82		670							
5	588			83		671							
6	588			83		671							
7	544			83		627							
8	544			83		627							
9	500			84		584							
10	458			84		542							
1	458			84		542							
Total						36488							
Max						2162							
Min						542							
Means						1177							

Total 2222

Computations made by .....

Observations made by .....

vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for *Provo River September 1907*

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
2d Stillings Page 11.	*U.S.G.S. Station River*			*Inflow Bunree*		*Total Utah Valley*				*Mean ... ...*			
1		387		79		466							
2		387		79		466							
3		387		79		466							
4		387		78		465							
5		500		78		578							
6		500		77		577							
7		418		77		495							
8		418		77		495							
9		418		76		494							
10		418		76		494							
1		418		76		494							
2		418		75		493							
3		418		75		493							
4		387		75		462							
5		387		74		461							
6		387		74		461							
7		387		73		460							
8		387		73		460							
9		340		72		412							
20		340		72		412							
1		387		72		459							
2		387		71		458							
3		387		71		458							
4		387		70		457							
5		387		70		457							
6		387		69		456							
7		387		69		456							
8		387		69		456							
9		387		68		455							
30		387		68		455							
Total						14171							
Max						578							
Min						412							
Mean						457							
Total 223													

Computations made by ....

Observations made by ....

Provo Reservoir Co.

vs.

Provo City et al

2888 Civil

Copy of Record. Tab of Flow.

Tabulation of Flow and Distribution of Provo River for .....

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
1907. No Record. (Complete)													
1909 No Record (Complete)													
	7-9-08.												
Lyle Bottoms.	18.74												
Little Dry Creek	9.13												
Dannels Ranch	12.85												
Daly Ranch	14.26												
Gadsby Ranch	31.39												
Fort Union	18.95												
Cluff & Dixon	1.21												
Washburn's	5.00												
River Bottoms and P & M. and B & Y.	50.25												
U & D J Fd.	41.35												
Timpanogos	27.68												
West Union	61.58												
Provo Bench	125.00												
J. J. Field	300 x												
Dry Creek Users	500 x												
x assumed.													
Total	424.39												

1. F.W. 1-15-18.

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for July, 1908.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
1	10 70			58		1128							
2	10 20			59		1079							
3	10 20			60		1080							
4	970			61		1031							
5	970			62		1032							
6	970			63		1033							
7	970			64		1034							
8	870			65		935							
9	822			66		888							
10	822			68		890							
1	726			70		796							
2	694			71		765							
3	662			72		734							
4	630			74		704							
5	598			25		673							
6	566			76		642							
7	534			77		611							
8	502			78		580							
9	470			79		549							
20	438			80		518							
1	403			81		484							
2	371			81		452							
3	339			82		421							
4	307			82		389							
5	275			83		358							
6	275			83		358							
7	241			83		324							
8	258			83		341							
9	258			84		342							
30	292			84		376							
1	310			84		394							
Total						20941							
Max						1128							
Min						324							
Mean						676							

Total 725

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al } **2888 Civil**

Provo River

Tabulation of Flow and Distribution of Provo River for August. 1908.

Utah State Engr. page 112.

Mean Curve used.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	U.S.G.S. Station River			Inflow Canals		Total Utah Valley							
1		310		84		394							
2		275		84		359							
3		258		84		332							
4		258		84		332							
5		225		84		309							
6		292		84		376							
7		346		84		430							
8		310		84		394							
9		258		84		332							
10		258		84		332							
1		292		84		376							
2		346		84		430							
3		328		84		412							
4		292		84		376							
5		275		83		358							
6		241		83		324							
7		241		83		324							
8		225		83		308							
9		225		83		308							
20		241		83		324							
1		241		82		323							
2		241		82		323							
3		225		82		307							
4		225		82		307							
5		225		81		306							
6		225		81		306							
7		225		81		306							
8		225		81		306							
9		225		80		305							
30		225		80		305							
1		225		80		305							
Total						10529							
Max						430							
Min						305							
Mean						340.							
Total 226													

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for September 1908.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Correction at Station Ded.	Correction at Station G. H.
Midstate Gage page 118	U.S.G.S. Station	River		Inflow Reservoir		Total Mid Valley					Mean Inflow Curve Used		
1		225		79		304							
2		225		79		304							
3		225		79		304							
4		225		78		303							
5		225		78		303							
6		225		77		302							
7		225		77		302							
8		225		77		302							
9		241		76		317							
10		225		76		301							
1		241		76		317							
2		241		75		316							
3		241		75		316							
4		241		75		316							
5		241		74		315							
6		241		74		315							
7		241		73		314							
8		241		73		314							
9		225		72		297							
20		225		72		297							
1		225		72		297							
2		225		71		296							
3		225		71		296							
4		225		70		295							
5		258		70		328							
6		364		69		433							
7		310		69		379							
8		328		69		397							
9		328		68		396							
30		328		68		396							
Total						9672							
Max						433							
Min						295							
Mean						322							

Total 227

Computations made by .... Observations made by ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for July. 1909.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	U.S.G.S. Dat. Record. River			Provo Canal Bench		Total River [illegible]							
1	1570			102		1672							
2	1460			103		1563							
3	1460			104		1564							
4	1510			105		1615							
5	1410			106		1516							
6	1360			107		1467							
7	1210			108		1318							
8	1010			109		1119							
9	910			110		1020							
10	860			112		972							
1	810			114		924							
2	715			115		830							
3	535			116		651							
4	375			118		493							
5	340			119		459							
6	358			120		478							
7	322			121		443							
8	322			122		444							
9	305			123		428							
20	322			124		446							
1	322			125		447							
2	305			125		430							
3	290			126		416							
4	305			126		431							
5	290			127		417							
6	305			127		432							
7	275			127		402							
8	275			127		402							
9	275			128		403							
30	260			128		388							
1	275			128		403							
Total						24043							
Max						1672							
Min						388							
Mean						776							

Note: [illegible] measurements 1910 [illegible]

Total 228

Computations made by

Observations made by

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for August 1909.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Correction at Station Ded.	Correction at Station G. H.
	USGS Station (River)			(Inflow Reservoir)		(Total Utah Valley)							
1	250			128		378							
2	290			128		418							
3	275			128		403							
4	275			128		403							
5	250			128		378							
6	305			128		433							
7	322			128		450							
8	290			128		418							
9	275			128		403							
10	275			128		403							
1	290			128		418							
2	305			128		433							
3	275			128		403							
4	275			128		403							
5	250			127		377							
6	340			127		467							
7	275			127		402							
8	290			127		417							
9	305			127		432							
20	290			127		417							
1	290			126		416							
2	410			126		536							
3	340			126		466							
4	322			126		448							
5	340			125		465							
6	340			125		465							
7	358			125		483							
8	340			125		465							
9	322			124		446							
30	392			124		516							
1	375			124		499							
Totals.						13461							
Max						536							
Min						378							
Mean						434							
Total 229													

(Comp Curves of 1910 Rev W.S.)

Computations made by

Observations made by

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for September 1909.

W.S. 790

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	U.S.G.S. station River			Inflow Curve.		Total Utah Valley							
1	640			123		763							
2	515			123		638							
3	490			123		613							
4	450			122		572							
5	515			122		637							
6	490			121		611							
7	490			121		611							
8	490			121		611							
9	515			120		635							
10	450			120		570							
1	450			120		570							
2	450			119		569							
3	450			119		569							
4	450			119		569							
5	450			118		568							
6	450			118		568							
7	450			117		567							
8	450			117		567							
9	340			116		456							
20	322			116		438							
1	305			116		421							
2	305			115		420							
3	392			115		507							
4	340			114		454							
5	375			114		489							
6	490			113		603							
7	470			113		583							
8	390			113		503							
9	450			112		562							
30	490			112		602							
Total						16866							
Max.						763							
Min						420							
Mean.						562							

Provo Curve as 1910 rec'd W.S.

Total 230

Daily gage height, in feet, and discharge, in second-feet, of Provo River at or near Provo, Utah for 1909

Drainage area 640 square miles. (Measurer.)

Day.	JANUARY.		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
1	2.6	240	2.35	285	2.35	285	2.85	470	4.0	1000	5.3	1650
2	2.6	240	2.4	300	2.35	285	3.0	530	3.7	850	5.6	1830
3	2.6	240	2.4	300	2.4	300	3.2	620	3.8	900	6.4	2310
4	2.6	240	2.45	318	2.4	300	3.3	670	4.2	1100	7.3	2850
5	2.7	270	2.45	318	2.5	335	3.05	550	4.65	1325	8.2	3410
6	3.9	760	2.2	240	2.5	335	2.95	510	4.65	1325	8.4	3550
7	3.7	670	2.2	240	2.55	352	2.8	450	4.8	1400	8.9	3620
8	3.0	375	2.55	352	2.55	352	2.8	450	5.0	1500	8.3	3280
9	3.0	375	2.3	270	2.4	300	2.85	470	5.0	1500	7.2	2590
10	3.0	375	2.3	270	2.25	255	2.9	490	5.5	1770	7.1	2530
11	4.2	910	2.35	285	2.2	240	2.9	490	5.7	1890	7.0	2470
12	3.3	495	2.6	370	2.2	240	2.9	490	5.2	1600	6.8	2350
13	3.2	455	2.6	370	2.2	240	2.95	510	4.9	1450	6.7	2290
14	5.0	1310	2.5	335	2.2	240	3.0	530	4.8	1400	6.7	2290
15	5.0	1500	2.45	318	2.6	370	3.3	670	4.85	1425	6.4	2110
16	3.5	760	2.5	335	2.55	352	3.55	785	4.9	1450	6.4	2110
17	3.2	620	2.5	335	2.6	370	3.8	900	4.7	1350	6.5	2170
18	3.1	570	2.45	318	2.75	430	4.35	1175	4.6	1300	6.4	2110
19	3.0	530	2.6	335	2.75	430	4.7	1350	4.7	1350	6.8	2350
20	3.3	670	2.5	335	2.75	430	4.55	1275	4.82	1475	6.4	2110
21	3.4	710	2.5	335	2.65	390	3.95	975	5.1	1550	6.1	1930
22	3.4	710	2.4	300	2.6	370	3.65	830	5.3	1650	5.8	1750
23	3.3	670	2.4	300	2.6	370	3.6	810	5.3	1650	5.8	1750
24	3.0	530	2.5	335	2.7	410	3.8	900	5.2	1600	5.7	1810
25	2.7	410	2.45	318	2.7	410	3.7	850	4.9	1450	5.8	1750
26	2.7	410	2.4	300	2.75	430	3.8	900	4.8	1400	6.0	1870
27	2.6	370	2.3	270	2.7	410	4.3	1150	5.1	1550	5.8	1720
28	2.4	300	2.35	285	2.8	450	4.25	1225	5.55	1800	5.8	1750
29	2.4	300			2.8	450	4.4	1200	5.4	1710	5.7	1690
30	2.4	300			2.85	470	4.0	1000	5.36	1680	5.6	1630
31	2.5	335			2.6	450			5.4	1710		
Total		16650		8672		11051		23225		45110		67630
Mean		537		310		356		774		1,460		2,250
Sec.-ft. per square mile		.839		.484		.556		1.21		2.28		3.52
Run-off, depth in inches		.97		.50		.64		1.35		2.63		3.93
Run-off in acre-feet		33,000		17,200		21,900		46,100		89,800		134,000
Maximum		1,500		370		470		1,350		1,890		3,620
Minimum		240		240		240		450		850		1,630
Accuracy		D		D		D		D		D		D

UNITED STATES GEOLOGICAL SURVEY. WATER RESOURCES BRANCH

Daily gage height, in feet, and discharge, in second-feet, of Provo **River at or near** Pro

Drainage area ....640.... square miles.

Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DEC
	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.
1	5.5	1570	2.4	250	3.4	640	2.8	450	2.7	410	2.75
2	5.3	1460	2.55	290	3.15	515	2.75	430	2.6	370	3.1
3	5.3	1460	2.5	275	3.1	490	2.8	450	2.5	335	2.7
4	5.4	1510	2.5	275	3.0	450	2.8	450	2.5	335	2.6
5	5.2	1410	2.4	250	3.15	515	2.85	470	2.7	410	2.55
6	5.1	1360	2.6	305	3.1	490	2.75	430	2.7	410	2.4
7	4.8	1210	2.65	322	3.1	490	2.8	450	2.65	390	2.5
8	4.4	1010	2.55	290	3.1	490	2.7	410	2.65	390	2.7
9	4.2	910	2.5	275	3.15	515	2.75	430	2.6	370	2.65
10	4.1	860	2.5	275	3.0	450	2.7	410	3.0	530	2.6
11	4.0	810	2.55	290	3.0	450	2.7	410	2.7	410	2.5
12	3.8	715	2.6	305	3.0	450	2.75	430	2.6	370	2.55
13	3.4	535	2.5	275	3.0	450	2.6	370	2.55	352	2.7
14	2.8	375	2.5	275	3.0	450	2.65	390	2.7	410	2.6
15	2.7	340	2.4	250	3.0	450	2.7	410	2.6	370	2.4
16	2.75	358	2.7	340	3.0	450	2.6	370	2.65	390	2.3
17	2.65	322	2.5	275	3.0	450	2.65	390	2.65	390	2.0
18	2.65	322	2.55	290	3.0	450	2.6	370	2.6	370	2.2
19	2.6	305	2.6	305	2.7	340	2.6	370	2.7	410	2.4
20	2.65	322	2.55	290	2.65	322	2.6	370	2.85	470	2.4
21	2.65	322	2.55	290	2.6	305	2.6	370	2.45	318	2.35
22	2.6	305	2.9	410	2.6	305	2.6	370	3.00	530	2.5
23	2.55	290	2.7	340	2.85	392	2.6	370	2.85	470	2.6
24	2.6	305	2.65	322	2.7	340	2.6	370	2.85	470	2.55
25	2.55	290	2.7	340	2.8	375	2.50	352	2.85	470	2.6
26	2.6	305	2.7	340	2.9	490	2.50	352	2.85	470	2.5
27	2.5	275	2.75	358	2.85	470	2.6	370	2.85	470	2.5
28	2.5	275	2.7	340	2.65	390	2.50	352	2.6	370	2.5
29	2.5	275	2.65	322	2.8	450	2.5	335	2.55	352	2.4
30	2.45	260	2.85	392	2.9	490	2.5	335	2.7	410	2.5
31	2.5	275	2.8	375			2.7	410			2.4
	20,341		9,531		13,314		12,246		12,222		106
	656		307		444		395		407		3
	1.02		.480		.694		.617		.636		
	1.18		.55		.77		.71		.71		
	40,300		18,900		26,400		24,300		24,200		21,2
	1,570		410		640		470		530		5
	260		250		305		335		318		1
	D		D		D		D		D		D

UNITED STATES GEOLOGICAL SURVEY. (WATER RESOURCES BRANCH.)

Daily gage height, in feet, and discharge, in second-feet, of Provo **River** ~~at~~ **near** Provo, Utah **for** 1909

Drainage area 640 square miles.

Day	July Gage height.	July Discharge.	August Gage height.	August Discharge.	September Gage height.	September Discharge.	October Gage height.	October Discharge.	November Gage height.	November Discharge.	December Gage height.	December Discharge.	Day.
1	5.5	1570	2.4	250	3.4	640	2.8	450	2.7	410	2.75	430	1
2	5.3	1460	2.55	290	3.15	515	2.75	430	2.6	370	3.1	570	2
3	5.3	1460	2.5	275	3.1	490	2.8	450	2.5	335	2.7	410	3
4	5.4	1510	2.5	275	3.0	450	2.8	450	2.5	335	2.6	370	4
5	5.2	1410	2.4	250	3.15	515	2.85	470	2.7	410	2.55	352	5
6	5.1	1360	2.6	305	3.1	490	2.75	430	2.7	410	2.4	300	6
7	4.8	1210	2.65	322	3.1	490	2.8	450	2.65	390	2.5	335	7
8	4.4	1010	2.55	290	3.1	490	2.7	410	2.65	390	2.7	410	8
9	4.2	910	2.5	275	3.15	515	2.75	430	2.6	370	2.85	470	9
10	4.1	860	2.5	275	3.0	450	2.7	410	3.0	530	2.6	370	10
11	4.0	810	2.55	290	3.0	450	2.7	410	2.7	410	2.5	335	11
12	3.8	715	2.6	305	3.0	450	2.75	430	2.6	370	2.55	352	12
13	3.4	535	2.5	275	3.0	450	2.6	370	2.55	352	2.7	410	13
14	2.8	375	2.5	275	3.0	450	2.65	390	2.7	410	2.6	370	14
15	2.7	340	2.4	250	3.0	450	2.7	410	2.6	370	2.4	300	15
16	2.75	358	2.7	340	3.0	450	2.6	370	2.65	390	2.3	270	16
17	2.65	322	2.5	275	3.0	450	2.65	390	2.65	390	2.0	185	17
18	2.65	322	2.55	290	3.0	450	2.6	370	2.6	370	2.2	240	18
19	2.6	305	2.6	305	2.7	340	2.6	370	2.7	410	2.4	300	19
20	2.65	322	2.55	290	2.65	322	2.6	370	2.85	470	2.4	300	20
21	2.65	322	2.55	290	2.6	305	2.6	370	2.45	318	2.35	285	21
22	2.6	305	2.9	410	2.6	305	2.6	370	3.00	530	2.5	335	22
23	2.55	290	2.7	340	2.85	392	2.6	370	2.85	470	2.5	335	23
24	2.6	305	2.65	322	2.7	340	2.6	370	2.85	470	2.55	352	24
25	2.55	290	2.7	340	2.8	375	2.55	352	2.85	470	2.6	370	25
26	2.6	305	2.7	340	2.9	490	2.55	352	2.85	470	2.5	335	26
27	2.5	275	2.75	358	2.85	470	2.6	370	2.85	470	2.5	335	27
28	2.5	275	2.7	340	2.65	390	2.55	352	2.6	370	2.5	335	28
29	2.5	275	2.65	322	2.8	450	2.5	335	2.55	352	2.4	300	29
30	2.45	260	2.85	392	2.9	490	2.5	335	2.7	410	2.5	335	30
31	2.5	275	2.8	375			2.7	410			2.4	300	31
		20,341		9,531		13,314		12,246		12,222		10696	Year ~~period~~ 250,688
		656		307		444		395		407		345	687
		1.02		.480		.694		.617		.686		.539	1.07
		1.18		.55		.77		.71		.71		.62	14.56
		40,300		18,900		26,400		24,300		24,200		21,200	497,000
		1,570		410		640		470		530		570	3,620
		260		250		305		335		318		185	185
		D		D		D		D		D		D	

Gage hts. checked from obs. book
Computed by
Checked by
Dist. Eng.
Discharge applied by
Discharge checked by
Gage hts. copied by
Gage hts. checked by

Provo Reservoir Co.
vs.
Provo City et al } **2888 Civil**

Tabulation of Flow ~~and Distribution of Provo River for~~ 1910.

NAME	Time	G. H.	Dise.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	6-22-10	7-6-10											
	6-23-10												
~~Upper & Union~~	~~28.88~~												
Provo Res Co.	8.94	33.98											
Lake Bottom Canal	12.01	12.00											
Little Dry Creek	9.77	9.70											
James Race	13.27	10.58											
City Race	19.00	16.68											
Factory Race	33.86	27.54											
East Union	30.29	16.13											
Waldrons	8.33	8.33											
Cliff Diversion	2.00												
River Bottoms.	29.80	39.70											
Mc Mc Fld.	24.31	24.44											
Pumpings	23.56	8.19											
West Union	32.91	44.73											
Provo Reservoir	78.05	89.16											
Fort Field	3.00x	3.00x											
Spring Creek Mines	5.00x	5.00x											

x assumed.

Meas. St. 270 240

Inflow 84 107

July 6. Mean Curve 63. June 107 = 44
Run parallel to Mean Curve 44 above.

T. F. W.
7-18-16.

Total 232 ~~347.54~~ 347.16.

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for July 1910.

Ut. 270

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G.
	U.S.G.S. station	River		Inflow Channel		Total Utah Valley		Storage & Duncan		Net River Utah Valley			
1		225		102		327		20		307			
2		240		103		343		20		323			
3		240		104		344		20		324			
4		225		105		330		20		310			
5		240		106		346		20		326			
6		240		107		347		20		327			
7		240		108		348		20		328			
8		210		109		319		20		299			
9		210		110		320		20		300			
10		210		112		322		20		302			
1		240		114		354		20		334			
2		210		115		325		20		305			
3		255		116		371		20		351			
4		240		118		358		20		338			
5		240		119		359		20		339			
6		240		120		360		20		340			
7		255		121		376		20		356			
8		240		122		362		20		342			
9		240		123		363		20		343			
20		240		124		364		20		344			
1		240		125		365		20		345			
2		225		125		350		20		330			
3		225		126		351		20		331			
4		240		126		366		20		346			
5		225		127		352		20		332			
6		195		127		322		20		302			
7		180		127		307		20		287			
8		210		127		337		20		317			
9		240		128		368		20		348			
30		240		128		368		20		348			
1		240		128		368		20		348			
Total										10172			
Max										356			
Min										287			
Mean										328			

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for August 1910.

Ad. 290

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	U.S.G.S. Station River			Jordan Canal		Total Utah Valley		Storage & Tunnel		Net River Utah Valley			
1		270		128		398		20		378			
2		240		128		368		20		348			
3		240		128		368		20		348			
4		240		128		368		20		348			
5		255		128		383		20		363			
6		255		128		383		20		363			
7		225		128		353		20		333			
8		225		128		353		20		333			
9		210		128		338		20		318			
10		225		128		353		20		333			
1		210		128		338		20		318			
2		225		128		353		20		333			
3		210		128		338		20		318			
4		210		128		338		20		318			
5		210		127		337		20		317			
6		210		127		337		20		317			
7		210		127		337		20		317			
8		210		127		337		20		317			
9		195		127		322		20		302			
20		195		127		322		20		302			
1		195		126		321		20		301			
2		210		126		336		20		316			
3		195		126		321		20		301			
4		180		126		306		20		286			
5		210		125		335		20		315			
6		210		125		335		20		315			
7		210		125		335		20		315			
8		210		125		335		20		315			
9		210		124		334		20		314			
30		210		124		334		20		314			
1		210		124		334		20		314			
Total										10030			
Max										378			
Min										286			
Mean										323			

Total 234

Computations made by ....

Observations made by ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for September 1910.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
USGS 90.	USGS Station			Deduced Discharge		Total Tribut. Valley		Storage & Seepage		Mouth Provo River Tribut. Valley			
	River												
1		210		123		333		20		313			
2		210		123		333		20		313			
3		210		123		333		20		313			
4		210		122		332		20		312			
5		210		122		332		20		312			
6		210		121		331		20		311			
7		210		121		331		20		311			
8		210		121		331		20		311			
9		210		120		330		20		310			
10		210		120		330		20		310			
1		210		120		330		20		310			
2		210		119		329		20		309			
3		210		119		329		20		309			
4		240		119		359		20		339			
5		240		118		358		20		338			
6		255		118		373		20		353			
7		270		117		387		20		367			
8		270		117		387		20		367			
9		270		116		386		20		366			
20		270		116		386		20		366			
1		255		116		371		20		351			
2		255		115		370		20		350			
3		255		115		370		20		350			
4		255		114		369		20		349			
5		255		114		369		20		349			
6		255		113		368		20		348			
7		270		113		383		20		363			
8		270		113		383		20		363			
9		255		112		367		20		347			
30		255		112		367		20		347			
Totals										10057			
max										367			
min										309			
Mean										335			

Total 235

Computations made by ..... **Observations made by** .....

UNITED STATES GEOLOGICAL SURVEY. WATER RESOURCES BRANCH

Daily gage height, in feet, and discharge, in second-feet, of Provo River near Provo, Utah for 1910

Drainage area 640 square miles. (Observer)

Day	JANUARY.		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
1	4.2	1200	2.3	335	2.3	335	3.0	615	4.25	1225	3.8	995
2	3.7	950	2.35	352	2.8	530	3.0	615	4.0	1100	3.7	950
3	2.85	550	1.8	180	3.1	665	3.1	665	3.65	922	3.6	895
4	2.65	470	1.9	220	3.3	755	3.0	615	3.75	972	3.45	828
5	2.4	370	2.0	240	3.3	755	3.5	850	3.6	895	3.3	755
6	2.3	335	2.15	285	3.3	755	3.1	665	3.5	850	3.5	850
7	2.5	410	2.0	240	3.0	615	2.9	570	3.25	732	3.95	1025
8	2.55	430	2.25	318	2.9	570	3.0	615	3.55	872	2.7	490
9	2.6	450	2.25	318	3.0	615	3.15	688	3.65	922	2.55	430
10	2.5	410	2.35	352	2.8	530	3.2	710	3.95	1080	2.35	352
11	2.55	430	2.35	352	2.7	490	3.45	828	4.65	1425	2.35	352
12	2.5	410	2.25	318	2.65	470	3.55	872	4.6	1400	2.3	335
13	2.4	370	2.4	370	2.7	490	3.5	850	4.5	1350	2.35	352
14	2.7	490	2.4	370	3.0	615	3.5	850	4.6	1400	2.4	370
15	2.6	450	2.7	570	3.15	688	3.45	828	4.5	1350	2.35	352
16	2.45	390	2.4	370	3.25	732	3.3	755	4.0	1100	2.3	335
17	2.3	335	2.2	300	3.3	755	3.2	710	3.95	1080	2.2	300
18	2.2	300	2.4	370	3.2	710	3.3	755	3.6	895	2.15	285
19	2.15	285	2.3	335	3.4	805	3.5	850	3.5	850	2.2	300
20	2.4	370	2.3	335	3.3	755	3.65	922	3.25	732	2.1	270
21	2.45	390	2.4	370	3.5	850	3.95	1080	3.25	780	2.0	240
22	2.45	390	2.45	390	3.65	922	3.95	1080	3.35	780	2.1	270
23	2.55	430	2.4	370	4.0	1100	3.8	995	3.3	755	2.1	270
24	2.55	430	2.5	410	3.6	895	3.9	1050	3.35	780	1.85	225
25	2.65	470	2.5	410	3.5	850	4.15	1175	3.35	780	2.0	240
26	2.35	352	2.3	335	3.4	805	4.45	1325	3.7	950	1.95	225
27	2.3	335	2.4	370	3.35	780	4.65	1425	3.5	895	2.0	240
28	2.35	352	2.4	370	3.4	805	4.7	1450	3.5	850	1.95	225
29	2.3	335			3.45	828	4.6	1400	3.65	922	2.0	240
30	2.1	270			3.2	710	4.4	1300	4.0	1100	1.95	225
31	2.25	318			3.0	615			3.9	925		
Total.		13477		9545		21795		27108		30739		13221
Mean		435		341		703		904		992		441
Sec.-ft. per square mile		.680		.533		1.10		1.41		1.55		.690
Run-off, depth in inches		.78		.56		1.27		1.57		1.79		.77
Run-off in acre-feet		26,700		18,900		43,200		53,800		61,000		26,200
Maximum		1,200		570		1,100		1,450		1,420		1,020
Minimum		270		180		335		570		732		225
Accuracy		D		D		D		D		D		D

UNITED STATES GEOLOGICAL SURVEY. WATER RESOURCES BRANCH

Daily gage height, in feet, and discharge, in second-feet, of Provo River at or near Provo, Utah for 1910

Drainage area 240 square miles.

Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	
1	1.95	225	2.1	270	1.9	210	2.1	270	2.1	270	2.25	318	1
2	2.00	240	2.0	240	1.9	210	2.1	270	2.1	270	2.2	300	2
3	2.00	240	2.0	240	1.9	210	2.05	255	2.15	285	2.2	300	3
4	1.95	225	2.0	240	1.9	210	2.05	255	2.15	285	2.25	318	4
5	2.00	240	2.05	255	1.9	210	2.05	255	2.15	285	2.25	318	5
6	2.00	240	2.05	255	1.9	210	2.05	255	2.15	285	2.25	318	6
7	2.00	240	1.95	225	1.9	210	2.1	270	2.1	270	2.2	300	7
8	1.9	210	1.95	225	1.9	210	2.05	255	2.15	285	2.2	300	8
9	1.9	210	1.9	210	1.9	210	2.05	255	2.2	300	2.2	300	9
10	1.9	210	1.95	225	1.9	210	2.05	255	2.15	285	2.25	318	10
11	2.0	240	1.9	210	1.9	210	2.1	270	2.15	285	2.4	370	11
12	1.9	210	1.95	225	1.9	210	2.1	270	2.15	285	2.4	370	12
13	2.05	255	1.9	210	1.9	210	2.1	270	2.15	285	2.3	335	13
14	2.0	240	1.9	210	2.0	240	2.1	270	2.15	285	2.2	300	14
15	2.0	240	1.9	210	2.0	240	2.1	270	2.2	300	2.15	285	15
16	2.0	240	1.9	210	2.05	255	2.1	270	2.2	300	2.2	300	16
17	2.05	255	1.9	210	2.1	270	2.1	270	2.15	285	2.3	335	17
18	2.0	240	1.9	210	2.1	270	2.15	285	2.2	300	2.25	318	18
19	2.0	240	1.85	195	2.1	270	2.2	300	2.25	318	2.25	318	19
20	2.0	240	1.85	195	2.1	270	2.2	300	2.2	300	2.3	335	20
21	2.0	240	1.85	195	2.05	255	2.2	300	2.2	300	2.25	318	21
22	1.95	225	1.9	210	2.05	255	2.15	285	2.25	318	2.2	300	22
23	1.95	225	1.85	195	2.05	255	2.15	285	2.3	335	2.15	285	23
24	2.00	240	1.8	180	2.05	255	2.1	270	2.3	335	2.15	285	24
25	1.95	225	1.9	210	2.05	255	2.1	270	2.25	318	2.3	335	25
26	1.85	195	1.9	210	2.05	255	2.15	285	2.25	318	2.2	300	26
27	1.8	180	1.9	210	2.1	270	2.1	270	2.25	318	2.2	300	27
28	1.9	210	1.9	210	2.1	270	2.1	270	2.25	318	2.2	300	28
29	2.0	240	1.9	210	2.05	255	2.1	270	2.25	318	2.15	285	29
30	2.0	240	1.9	210	2.05	255	2.1	270	2.25	318	2.15	285	30
31	2.0	240	1.9	210			2.1	270			2.2	300	31
	7140		6720		7125		8415		8959		9649		163,893
	230		217		238		271		299		311		449
	.359		.339		.372		.423		.467		.486		7.02
	.41		.39		.42		.49		.52		.56		9.53
	14,100		13,300		14,200		16,700		17,800		19,100		325,000
	255		270		270		300		335		370		1,450
	180		180		210		255		270		285		180
	D		D		D		D		D		D		

Gage hts. checked from obs. book.

Discharge applied by

Discharge checked by

Year period

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow ~~and Distribution of Provo River~~ for 1911.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	7-10-11												
Little Dry Creek	7.68												
Fort Field	11.53												
James Ranch	11.65												
City Ranch	12.22												
Bailey Ranch	37.10												
East Union	16.50												
Watsons	8.33												
Cliff Gibson	.83												
River Bottoms	25.50												
U.S. U.S.F.R.	29.10												
Campings	29.65												
West Union	37.57												
Provo Bench	77.76												
Provo Res Co.	36.64												
Lake Bottom	12.00												
Dry Creek Users	5.00x												
x assumed.													
Total U.S.S.	210												
Inflow.	124												
	344.06												

Mean Inflow Curve = 68. a difference of 56.
Curve is run parallel of 56 above Mean.

Total 237

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for July, 1911.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	Usual Station. River			Provo Reservoir Canal		Total Provo River & Utah Valley		Average Summer		Provo River & Utah Valley			
1	300			114		414		25		389			
2	285			115		400		25		375			
3	270			116		386		25		361			
4	270			117		387		25		362			
5	300			118		418		25		393			
6	300			119		419		25		394			
7	285			120		405		25		380			
8	285			121		406		25		381			
9	285			122		407		25		382			
10	210			(124)		334		25		309			
1	225			126		351		25		326			
2	240			127		367		25		342			
3	270			128		398		25		373			
4	270			130		400		25		375			
5	255			131		386		25		361			
6	270			132		402		25		377			
7	300			133		433		25		408			
8	300			134		434		25		409			
9	270			135		405		25		380			
10	270			136		406		25		381			
1	318			137		455		25		430			
2	318			137		455		25		430			
3	285			138		423		25		398			
4	270			138		408		25		383			
5	285			139		424		25		399			
26	270			139		409		25		384			
27	270			139		409		25		384			
28	240			139		379		25		354			
29	270			140		410		25		385			
30	285			140		425		25		400			
1	240			140		380		25		355			
~~Totals~~ Totals										11760			
Max										430			
Min										309			
Mean										379			

Total 2 38

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for August 1911.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	Used. Station.				Provo River Channel		To Provo Valley Canal		Provo River Channel				
1		240			140		380	25		355			
2		172			140		312	25		287			
3		172			140		312	25		287			
4		172			140		312	25		287			
5		160			140		300	25		275			
6		172			140		312	25		287			
7		172			140		312	25		287			
8		172			140		312	25		287			
9		160			140		300	25		275			
10		160			140		300	25		275			
1		160			140		300	25		275			
2		160			140		300	25		275			
3		160			140		300	25		275			
4		160			140		300	25		275			
5		160			139		299	25		274			
6		160			139		299	25		274			
7		160			139		299	25		274			
8		160			139		299	25		274			
9		148			139		287	25		262			
10		148			139		287	25		262			
1		160			138		298	25		273			
2		160			138		298	25		273			
3		160			138		298	25		273			
4		172			138		310	25		285			
5		172			137		309	25		284			
6		172			137		309	25		284			
7		172			137		309	25		284			
8		172			137		309	25		284			
9		172			136		308	25		283			
10		172			136		308	25		283			
1		172			136		308	25		283			
Max.										8711			
Min										355			
Mean										262			
										281			

Total 239

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al } **2888 Civil**

Tabulation of Flow and Distribution of Provo River for Provo River September 1911.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
1		172		135		307		25		282			
2		172		135		307		25		282			
3		185		135		320		25		305			
4		185		134		319		25		294			
5		185		134		319		25		294			
6		172		133		305		25		280			
7		172		133		305		25		280			
8		172		133		305		25		280			
9		185		132		317		25		292			
10		185		132		317		25		292			
1		172		132		304		25		279			
2		172		131		303		25		278			
3		185		131		316		25		291			
4		185		131		316		25		291			
5		185		130		315		25		290			
6		185		130		315		25		290			
7		185		129		314		25		289			
8		185		129		314		25		289			
9		185		128		313		25		288			
30		185		128		313		25		288			
1		172		128		300		25		275			
2		172		127		299		25		274			
3		185		127		312		25		287			
4		225		126		351		25		326			
5		198		126		324		25		299			
6		185		125		310		25		285			
7		210		125		335		25		310			
8		210		125		335		25		310			
9		210		124		334		25		309			
30		285		124		309		25		284			
Gatol,										8713			
Max										326			
Min										274			
Mean										290			

Total 240

Computations made by ..... Observations made by .....

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Monthly discharge of Provo River at or near Provo, Utah.
for 191/

(Drainage area, 640 square miles)

MONTH	DISCHARGE IN SECOND-FEET				RUN-OFF		Accuracy
	Maximum	Minimum	Mean	Per square mile	Depth in inches on drainage area	Total in acre-feet	
January	1,920	270	458	.716	.83	28,200	D
February	1,000	198	~~353~~ 353	~~.545~~ .552	~~.61~~ .62	~~21,400~~ 21,100	D
March	975	270	438	.684	.79	26,900	D
April	620	285	441	.689	.77	26,200	D
May	810	410	686	1.07	1.23	42,200	D
June	1320 ~~1335~~	~~470~~ 435	899	1.40	1.56	53,500	D
July	318	210	275	.430	.50	16,900	D
August	240	148	167	.261	.30	10,300	D
September	285	172	189	.295	.33	11,200	D
October	335	240	283	.442	.51	17,400	D
November	410	255	336	.523	.58	~~19,900~~ 20,000	D
December	352	270	299	.461	.54	18,400	D
The { year / period }	1720	148	402	.628	8.51	~~240,000~~ 291,000	

NOTE.—

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UNITED STATES GEOLOGICAL SURVEY. WATER RESOURCES BRANCH

Daily gage height, in feet, and discharge, in second-feet, of PROVO River at Provo, Utah for 1911

Drainage area 640 square miles

	JANUARY.		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
1	2.2	300	4.0	1000	2.3	270	2.95	510	3.05	550	3.8	900
2	2.15	285	3.1	570	2.35	285	3.05	550	2.7	490	3.9	950
3	2.5	410	2.9	490	2.3	270	3.15	595	3.0	530	3.7	850
4	2.25	318	2.75	430	2.3	270	2.95	510	2.7	410	3.85	925
5	2.4	370	2.9	490	2.4	300	2.9	490	2.9	490	4.15	1075
6	2.3	335	3.0	530	2.45	318	3.2	620	3.05	550	4.35	1175
7	2.25	318	2.7	410	2.5	335	2.85	470	3.35	690	4.5	1250
8	2.25	318	2.5	335	2.75	430	2.9	490	3.[illegible]	670	4.35	1175
9	2.3	[illegible]	2.6	370	3.4	710	2.9	490	3.4	710	4.3	1150
10	2.5	410	2.55	352	3.65	830	3.0	530	3.5	760	4.3	1150
11	2.2	300	2.7	410	3.95	975	2.95	510	3.3	670	4.15	1075
12	2.2	300	2.6	370	2.9	490	2.9	450	3.4	710	4.0	1000
13	2.25	318	2.4	300	2.75	430	2.75	430	3.3	670	4.2	1100
14	2.25	318	2.4	300	2.65	390	2.7	410	3.45	735	4.2	1100
15	2.3	335	2.3	270	2.7	410	2.65	390	3.6	810	4.6	1325
16	2.35	352	2.25	255	2.75	430	2.75	430	3.45	735	4.25	1125
17	2.25	318	2.25	255	2.7	410	2.65	390	3.50	760	4.2	1100
18	2.2	300	2.1	210	2.75	430	2.5	335	3.5	760	4.0	1000
19	2.1	270	2.05	198	2.4	300	2.45	318	3.45	735	3.8	900
20	2.2	300	2.15	225	2.6	370	2.45	318	3.5	760	3.7	850
21	2.3	335	2.3	270	2.75	430	2.35	285	3.4	710	3.7	850
22	2.1	270	2.3	270	2.7	410	2.4	300	3.35	690	3.6	810
23	2.35	352	2.15	225	2.8	450	2.45	318	3.5	760	3.3	670
24	2.3	335	2.3	270	3.15	595	2.5	335	3.5	760	3.3	670
25	4.75	1975	2.4	300	2.95	510	2.6	370	3.6	810	3.15	595
26	3.0	615	2.4	300	2.6	370	2.75	430	3.6	810	3.0	530
27	2.7	490	2.2	240	2.7	410	2.8	450	3.6	810	2.9	510
28	2.55	430	2.2	240	2.65	390	2.85	470	3.4	710	2.7	410
29	2.8	530			2.75	430	2.95	510	3.25	675	2.7	410
30	3.7	950			2.8	450	3.0	530	3.3	670	2.9	435
31	5.75	1920			2.85	470			3.4	710		
Total		14212		9885		13,568		13234		21280		26965
Mean		458		353		438		441		686		899
Run-off, second-feet per square mile		.716		.552		.684		.689		1.07		1.40
Run-off, depth in inches		.83		.57		.79		.77		1.23		1.56
Run-off, total in acre-feet		28,200		19,600		26,900		26,200		42,200		53,600
Maximum		1,920		1,000		975		620		810		1,320
Minimum		270		198		270		285		410		336
Accuracy		D		D		D		D		D		D

UNITED STATES GEOLOGICAL SURVEY . WATER RESOURCES BRANCH

Daily gage height, in feet, and discharge, in second-feet, of Provo River at Provo, Utah for 1911

Drainage area 640 sq. mi. Frank Dusenberry observer

JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		
Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	
2.4	300	2.2	240	1.85	172	2.1	240	2.15	285	2.1	270	
2.35	285	1.95	172	1.85	172	2.4	335	2.15	285	2.1	270	
2.3	270	1.95	172	1.90	185	2.25	318	2.2	300	2.1	270	
2.3	270	1.95	172	1.90	185	2.1	270	2.2	300	2.1	270	
2.4	300	1.90	160	1.90	185	2.1	270	2.2	300	2.15	285	
2.4	300	1.95	172	1.85	172	2.05	255	2.2	300	2.15	285	
2.35	285	1.95	172	1.85	172	2.05	255	2.2	300	2.2	300	
2.35	285	1.95	172	1.85	172	2.15	285	2.25	318	2.25	318	
2.35	285	1.90	160	1.9	185	2.1	270	2.25	318	2.2	300	
2.10	210	1.90	160	1.9	185	2.25	318	2.4	370	2.25	318	
2.15	225	1.90	160	1.85	172	2.2	300	2.5	410	2.3	335	
2.2	240	1.90	160	1.85	172	2.2	300	2.35	352	2.35	352	
2.3	270	1.90	160	1.9	185	2.2	300	2.25	318	2.25	318	
2.3	270	1.90	160	1.9	185	2.2	300	2.3	335	2.25	318	
2.25	255	1.90	160	1.9	185	2.2	300	2.4	370	2.25	318	
2.3	270	1.9	160	1.9	185	2.2	300	2.45	390	2.3	335	
2.4	300	1.9	160	1.9	185	2.15	285	2.4	370	2.35	352	
2.4	300	1.9	160	1.9	185	2.15	285	2.4	370	2.35	352	
2.3	270	1.85	148	1.9	185	2.15	285	2.4	370	2.3	335	
2.3	270	1.85	148	1.9	185	2.15	285	2.4	370	2.15	285	
2.45	318	1.8	160	1.85	172	2.1	270	2.4	370	2.1	270	
2.45	318	1.8	160	1.85	172	2.1	270	2.4	370	2.1	270	
2.35	285	1.8	160	1.9	185	2.1	270	2.4	370	2.1	270	
2.3	270	1.85	172	2.05	225	2.1	270	2.35	352	2.1	270	
2.35	285	1.85	172	1.85	198	2.1	270	2.3	335	2.1	270	
2.3	270	1.85	172	1.9	185	2.1	270	2.35	352	2.1	270	
2.3	270	1.85	172	2.0	210	2.1	270	2.35	352	2.1	270	
2.2	240	1.85	172	2.0	210	2.1	270	2.25	318	2.2	300	
2.3	270	1.85	172	2.0	210	2.15	285	2.05	255	2.2	300	
2.35	285	1.85	172	2.25	285	2.15	285	2.05	255	2.2	300	
2.2	240	1.85	172			2.15	285			2.2	300	
8,511		5,184		5,661		8,771		10,060		9,276		146607
275		167		189		283		335		299		402
.430		.261		.295		.442		.523		.467		.628
.50		.30		.33		.51		.58		.54		8.51
16,900		10,300		11,200		17,400		19,900		18,400		291,000
318		240		285		335		410		352		1,920
210		148		172		240		255		270		148
D		D		D		D		D		D		

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for 1912.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
(Copy of Record by J. J. Farnes)													
			7-8-12	7-25-12									
			7-9-12	7-26-12									
Lilly Day Creek			6.35	10.07									
Farnes Rose			8.75	11.77									
City Rose			14.42	20.77									
Factory Rose			28.30	31.41									
Fork Union			2.12	19.60									
Clyde Dyer			2.30										
Waterworks			8.00 XX	12.00									
~~Wm Hunter~~			~~18.99~~	~~15.44~~									
River Bottoms			10.59	~~4.5~~									
U Rail & T Co.			23.95	23.07									
Impromptu			24.63	20.71									
Water Users			28.71	30.65									
Park & Nuttall			3.37	4.69									
River Bank			69.01	77.00									
Baker Dyeing			3.43	3.43									
River Bed Canal			66.37	44.98									
			~~305.04~~										
			310.04										
T. Irrig			2.15	2.15 X									
Lit. Bottoms			10.12	19.22 XX									
S.P. Creek			5.00 XX	500 XX									
X assumed by other Measurements													
XX assumed													
			~~327.47~~										
			330.04										
Users.													
River			259	245									
Fork			30	30									
			289	275									
Dry Farm			41	68									
			330.04	343.68									
Total			243										

T.F.W. 9-18-18.

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River
July 1912

Tabulation of Flow and Distribution of Provo River for July 1912

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	U.S.G.S. station River	Fork		Inflow Curve		Total Utah Valley		Storage & Pumping		Net River Utah Valley			
1	396	32		28		456				456			
2	355	32		30		417				417			
3	338	30		32		400				400			
4	328	30		34		392				392			
5	312	30		36		378				378			
6	296	30		38		364				364			
7	266	30		40		336		20		316			
8	266	30		42		338		20		318			
9	252	30		44		326		20		306			
10	252	30		46		328		20		308			
1	246	30		48		324		20		304			
2	255	30		49		334		20		314			
3	278	30		51		359		40		319			
4	284	30		53		367		40		327			
5	281	30		54		365		40		325			
6	281	30		56		367		40		327			
7	266	30		57		353		40		313			
8	260	30		59		349		40		309			
9	263	30		60		353		40		313			
20	284	30		62		376		40		336			
1	275	31		63		369		40		329			
2	266	30		64		360		40		320			
3	258	30		65		353		40		313			
4	249	30		67		346		40		306			
5	252	30		68		350		40		310			
6	238	30		68		336		40		296			
7	244	31		69		344		40		304			
8	244	32		69		345		40		305			
9	246	32		69		347		40		307			
30	246	32		69		347		40		307			
1	258	33		69		360		40		320			
Total										10259			
Max										456			
Min										296			
Mean										331			

Total 244

Computations made by ....

Observations made by

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for August 1912.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
Vol. 330	U.S.G.S. Station River	Fork		Inflow Canals		Total Utah Valley		Storage Dummy		Net Supply Utah Valley			
1	266	33		69		368		40		328			
2	266	33		70		369		40		329			
3	309	33		70		412		40		372			
4	290	33		70		393		40		353			
5	272	33		70		375		40		335			
6	260	33		70		363		40		323			
7	260	33		70		363		40		323			
8	255	34		70		359		40		319			
9	244	33		70		347		40		307			
10	238	33		70		341		40		301			
1	235	33		70		338		35		303			
2	232	34		70		336		35		301			
3	232	33		69		334		35		299			
4	232	33		69		334		40		294			
5	246	36		69		351		40		311			
6	241	34		69		344		40		304			
7	238	34		69		341		40		301			
8	252	35		69		356		40		316			
9	249	34		69		352		40		312			
20	244	34		68		346		40		306			
1	246	35		68		349		40		309			
2	238	34		68		340		40		300			
3	238	34		68		340		40		300			
4	238	34		67		339		40		299			
5	238	34		67		339		40		299			
6	238	34		67		339		40		299			
7	272	34		67		373		40		333			
8	281	42		66		389		40		349			
9	266	35		66		367		40		327			
30	266	35		66		367		40		327			
1	266	35		65		366		40		326			
Total										9305			
Max										372			
Min										294			
Mean										316			

Total 245

Computations made by ....

Observations made by ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for September 1912

WS 330

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	U.S.G.S. Station River	Fork		Inflow Curve		Total Utah Valley		Storage & Timp		Net Provo Utah Valley			
1	255	35		65		355		40		315			
2	255	35		65		355		40		315			
3	252	36		64		352		40		312			
4	252	36		64		352		40		312			
5	260	36		63		359		40		319			
6	266	37		63		366		40		326			
7	260	37		63		360		40		320			
8	260	37		63		360		40		320			
9	328	37		62		427		40		387			
10	328	42		62		432		40		392			
1	328	38		62		438		40		398			
2	312	38		61		411		40		371			
3	312	42		61		415		40		375			
4	318	39		60		417		40		377			
5	328	38		60		426		40		386			
6	328	37		60		425		40		385			
7	335	38		59		432		40		392			
8	328	38		59		425		40		385			
9	322	37		58		417		40		377			
20	302	37		58		397		40		357			
1	312	37		58		407		40		367			
2	309	38		57		404		40		364			
3	302	37		57		396		40		356			
4	299	38		56		393		40		353			
5	296	38		56		390		40		350			
6	296	38		55		389		40		349			
7	296	38		55		389		40		349			
8	293	38		54		385		40		345			
9	293	38		54		385		40		345			
30	290	38		54		382		40		342			
Totals										10641			
Max										398			
Min										312			
Mean										355			

Total 246

Computations made by ....

Observations made by ....

UNITED STATES GEOLOGICAL SURVEY. (WATER RESOURCES BRANCH.)

Daily gage height, in feet, and discharge, in second-feet, of Provo **River at** Forks, Utah **for 191**2

Drainage area .... square miles. (Frank Dusenberry, observer.)

Day.	January Gage height	January Discharge	February Gage height	February Discharge	March Gage height	March Discharge	April Gage height	April Discharge	May Gage height	May Discharge	June Gage height	June Discharge	Day.
1	0.8	236	.8	251	.85	287	1.30	424	1.28	417	2.86	1130	1
2	0.8	236	.75	241	.80	274	1.20	390	1.25	407	3.01	1230	2
3	.75	226	.7	229	.75	261	1.30	424	1.20	390	3.25	1410	3
4	.75	226	.8	253	.75	261	1.34	438	1.20	390	3.60	1710	4
5	.9	264	.8	256	.75	261	1.47	487	1.17	380	3.72	1820	5
6	.9	264	.8	256	.95	314	1.37	449	1.14	371	3.70	1800	6
7	1.0	290	.75	243	1.15	374	1.33	435	1.16	377	3.82	1910	7
8	.9	264	.7	231	1.15	374	1.40	460	1.33	435	4.03	2110	8
9	1.0	290	.8	258	1.15	374	1.40	460	1.40	460	4.00	2070	9
10	1.05	306	.8	258	1.15	374	1.55	518	1.52	506	3.95	2010	10
11	1.1	320	.8	258	1.1	358	1.38	453	1.71	582	3.50	1660	11
12	1.1	320	.8	261	1.1	358	1.30	424	1.78	610	3.15	1310	12
13	1.1	320	.8	261	1.1	358	1.23	400	1.75	598	3.01	1200	13
14	1.15	334	.8	261	1.1	358	1.15	374	1.52	506	3.15	1300	14
15	1.1	320	.8	261	.95	314	1.12	364	1.58	530	2.50	1050	15
16	1.1	322	.85	277	3.6	321	1.11	361	1.82	626	2.45	867	16
17	1.1	322	.85	277	1.0	328	1.08	352	1.95	679	2.25	776	17
18	1.1	322	.85	277	1.1	358	1.15	374	2.10	742	1.53	598	18
19	1.15	337	.85	279	1.2	390	1.10	358	2.33	840	1.70	542	19
20	.85	256	.85	279	1.35	442	1.10	358	2.50	922	1.80	580	20
21	.85	256	.85	279	1.1	358	1.08	352	2.62	985	1.82	588	21
22	.8	246	.85	279	1.1	358	1.05	343	2.55	948	2.05	680	22
23	.8	246	.85	282	1.13	368	1.03	337	2.18	776	2.10	700	23
24	.8	246	.85	282	1.0	328	1.05	343	2.05	721	2.10	700	24
25	.85	258	.8	269	1.1	358	1.12	364	2.15	763	2.15	720	25
26	.85	261	.8	271	1.1	358	1.12	364	2.33	840	1.90	620	26
27	.85	261	.85	284	1.1	358	1.10	358	2.39	867	1.80	580	27
28	.85	261	.85	284	1.2	390	1.15	374	2.38	863	1.72	548	28
29	.85	264	.85	284	1.3	424	1.20	390	2.30	826	1.55	482	29
30	.85	264			1.3	424	1.22	397	2.72	1040	1.43	440	30
31	.8	251			1.3	424			3.81	1900			31
Total		8589		7681		10887		11925		21247		33081	
Mean		277		265		351		398		687		1100	
Sec.-ft. per square mile													
Run-off, depth in inches													
Run-off in acre-feet		17,000		15,200		21,600		23,700		42,200		65,400	
Maximum		337		284		442		518		1900		2110	
Minimum		226		229		261		337		371		440	
Accuracy		C		B		A		A		A		B	

Used tables dated 12/3/13
Est Mar. 16 and 3ms slide

UNITED STATES GEOLOGICAL SURVEY. WATER RESOURCES BRANCH

Daily gage height, in feet, and discharge, in second-feet, of Provo River at Provo Forks, Utah for 1916

Drainage area ..... square miles.

L. Frank Disenberry observer

Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	
1	1.30	396	.9	266	.86	255	.94	278	1.38	423	1.14	342	1
2	1.18	355	.9	266	.86	255	.94	278	1.30	396	1.11	331	2
3	1.13	338	1.04	309	.85	252	.94	278	1.35	413	1.05	312	3
4	1.10	328	.98	290	.85	252	.98	290	1.34	410	1.15	345	4
5	1.05	312	.92	272	.88	260	1.08	322	1.34	410	1.07	318	5
6	1.00	296	.88	260	.90	266	1.08	322	1.35	413	.98	290	6
7	.90	266	.88	260	.88	260	1.04	309	1.32	403	.93	275	7
8	.90	266	.86	255	.88	260	1.01	302	1.3	396	.97	287	8
9	.85	252	.82	244	1.10	328	1.06	315	1.28	389	.95	281	9
10	.85	252	.80	238	1.10	328	1.08	322	1.26	382	1.05	312	10
11	.83	246	.79	235	1.10	328	1.06	315	1.40	430	1.02	302	11
12	.80	255	.78	232	1.05	312		315	1.30	396	1.02	302	12
13	.94	278	.75	232	1.05	312	1.06	315	1.24	376	1.06	315	13
14	.96	284	.78	232	1.07	318	1.05	312	1.23	372	1.07	318	14
15	.95	281	.83	246	1.10	328	1.06	312	1.21	365	1.09	325	15
16	.95	281	.81	241	1.10	328	1.04	309	1.22	369	1.13	338	16
17	.90	266	.80	238	1.12	335	1.04	309	1.18	355	1.11	331	17
18	.88	260	.85	252	1.10	328	1.04	309	1.18	355	1.03	306	18
19	.89	263	.84	249	1.08	322	1.03	306	1.18	355	1.13	338	19
20	.96	284	.82	244	1.02	302	1.04	309	1.18	355	1.06	315	20
21	.93	275	.83	246	1.05	312	1.18	355	1.18	355	.97	287	21
22	.90	266	.80	238	1.04	309	1.10	328	1.18	355	.86	255	22
23	.87	258	.80	238	1.02	302	1.08	322	1.15	345	.84	249	23
24	.84	249	.80	238	1.01	299	1.08	322	1.15	345	.84	249	24
25	.83	252	.86	238	1.01	296	1.08	322	1.15	345	.94	278	25
26	.80	238	.80	238	1.00	296	1.10	328	1.10	328	.84	249	26
27	.82	244	.92	272	1.00	296	1.50	464	1.12	335	1.04	309	27
28	.82	244	.95	281	.99	293	1.70	540	1.12	335	.96	284	28
29	.83	246	.9	266	.99	293	1.45	447	1.11	331	.94	278	29
30	.83	246	.9	266	.98	290	1.43	440	1.14	342	1.00	296	30
31	.81	258	.9	266			1.45	457			.97	287	31
	8535		1848		8915		10452		11119		9304		149,643
	275		255		297		337		373		300		409
	16,900		15,600		17,700		20,700		22,200		18,400		291,000
	396		309		335		540		430		345		2,110
	238		252		252		278		328		249		226
	A		A		A		A		A		B		

Year period

UNITED STATES GEOLOGICAL SURVEY WATER RESOURCES BRANCH.

Daily gage height, in feet, and discharge, in second-feet, of Provo (So. Fk.) River at Forks, Utah for 1912.

Drainage area ..... square miles. (Frank Lusenberg, observer.)

Day	JANUARY.		FEBRUARY		MARCH		APRIL.		MAY		JUNE	
	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
1	2.3	34	2.2	30	2.2	28	2.2	30	2.18	31	2.6	40
2	2.3	34	2.2	30	2.2	28	2.2	30	2.18	31	2.6	42
3	2.3	34	2.2	30	2.1	26	2.2	30	2.18	31	2.87	47
4	2.3	34	2.2	30	2.1	26	2.19	30	2.18	31	3.35	56
5	2.25	32	2.2	30	2.1	26	2.2	30	2.17	31	3.6	62
6	2.25	32	2.2	30	2.2	29	2.2	30	2.17	31	3.5	60
7	2.3	34	2.2	30	2.2	29	2.2	30	2.15	30	3.6	62
8	2.3	34	2.2	30	2.2	29	2.2	30	2.15	30	3.75	66
9	2.3	34	2.2	29	2.2	29	2.2	30	2.2	32	4.0	72
10	2.3	34	2.2	29	2.2	29	2.22	31	2.21	32	4.25	74
11	2.3	34	2.2	29	2.2	29	2.19	30	2.2	32	3.60	61
12	2.3	34	2.2	29	2.2	29	2.18	30	2.25	33	3.15	52
13	2.3	34	2.2	29	2.2	29	2.18	30	2.23	33	2.90	48
14	2.3	34	2.2	29	2.2	29	2.18	30	2.2	32	3.0	50
15	2.3	34	2.2	29	2.2	29	2.15	29	2.2	32	2.72	44
16	2.3	34	2.2	29	2.2	29	2.15	29	2.2	32	2.5	40
17	2.3	34	2.2	29	2.2	29	2.15	29	2.22	32	2.4	38
18	2.3	34	2.2	29	2.2	29	2.18	30	2.24	33	2.3	35
19	2.3	34	2.2	29	2.2	29	2.18	30	2.21	32	2.3	35
20	2.2	30	2.2	29	2.2	29	2.18	30	2.25	33	2.3	35
21	2.2	30	2.2	29	2.2	29	2.15	29	2.3	35	2.3	35
22	2.2	30	2.2	29	2.2	29	2.18	30	2.25	33	2.3	35
23	2.25	32	2.2	29	2.2	30	2.18	30	2.23	33	2.4	38
24	2.2	30	2.2	29	2.2	30	2.18	31	2.21	32	2.3	35
25	2.25	32	2.2	29	2.2	30	2.15	30	2.22	32	2.25	33
26	2.25	32	2.2	29	2.2	30	2.15	30	2.22	32	2.2	32
27	2.25	32	2.2	29	2.2	30	2.15	30	2.22	32	2.2	32
28	2.2	30	2.2	29	2.2	30	2.15	30	2.28	34	2.2	32
29	2.2	30	2.2	28	2.2	30	2.15	30	2.29	35	2.2	32
30	2.2	30			2.2	30	2.18	31	2.35	37	2.2	32
31	2.2	30			2.2	30			2.81	46		
Total		1010		845		897		899		1015		1355
Mean		32.6		29.2		28.9		30.0		32.7		45.2
Sec.-ft. per square mile												
Run-off, depth in inches												
Run-off in acre-feet		2000		1680		1780		1790		2010		2690
Maximum		34		30		30		31		46		74
Minimum		30		28		26		29		30		32
Accuracy		B		B		B		B		A		B

Used table dated Dec 8, 1913

UNITED STATES GEOLOGICAL SURVEY WATER RESOURCES BRANCH

Daily gage height, in feet, and discharge, in second-feet, of Provo (So. Fk) **River at** Forks, Utah **for 1912**

Drainage area .... square miles.

Frank Dusenbery observer

Day	July Gage height	July Discharge	August Gage height	August Discharge	September Gage height	September Discharge	October Gage height	October Discharge	November Gage height	November Discharge	December Gage height	December Discharge	Day
1	2.2	32	2.2	33	2.24	35	2.29	38	2.28	37	2.2	34	1
2	2.2	32	2.2	33	2.24	35	2.3	38	2.25	36	2.2	34	2
3	2.15	30	2.2	33	2.28	36	2.3	38	2.3	38	2.2	34	3
4	2.15	30	2.2	33	2.26	36	2.3	38	2.28	37	2.2	34	4
5	2.15	30	2.2	33	2.26	36	2.35	40	2.27	37	2.2	34	5
6	2.15	30	2.2	33	2.28	37	2.3	38	2.27	37	2.2	34	6
7	2.15	30	2.22	33	2.28	37	2.4	42	2.27	37	2.2	34	7
8	2.15	30	2.24	34	2.28	37	2.3	38	2.27	37	2.2	34	8
9	2.15	30	2.2	33	2.3	37	2.32	39	2.27	37	2.2	34	9
10	2.15	30	2.2	33	2.4	42	2.3	38	2.25	36	2.2	34	10
11	2.15	30	2.2	33	2.3	38	2.3	38	2.3	38	2.2	34	11
12	2.15	30	2.22	34	2.3	38	2.3	38	2.28	37	2.2	34	12
13	2.15	30	2.2	33	2.4	42	2.3	38	2.25	36	2.18	33	13
14	2.15	30	2.2	33	2.32	39	2.3	38	2.25	36	2.2	34	14
15	2.15	30	2.3	36	2.3	38	2.3	38	2.24	36	2.2	34	15
16	2.15	30	2.22	34	2.28	37	2.3	38	2.23	35	2.2	34	16
17	2.15	30	2.22	34	2.29	38	2.3	38	2.2	34	2.2	34	17
18	2.15	30	2.24	35	2.3	38	2.3	38	2.22	35	2.18	33	18
19	2.15	30	2.22	34	2.28	37	2.29	38	2.22	35	2.2	34	19
20	2.15	30	2.22	34	2.28	37	2.36	40	2.22	35	2.18	33	20
21	2.15	31	2.25	35	2.28	37	2.35	40	2.22	35	2.17	33	21
22	2.12	30	2.23	34	2.29	38	2.3	38	2.22	35	2.18	33	22
23	2.12	30	2.23	34	2.28	37	2.3	38	2.21	34	2.17	33	23
24	2.12	30	2.22	34	2.29	38	2.3	38	2.2	34	2.17	33	24
25	2.13	30	2.22	34	2.29	38	2.29	38	2.2	34	2.17	33	25
26	2.13	30	2.22	34	2.3	38	2.3	38	2.2	34	2.17	33	26
27	2.15	31	2.28	34	2.3	38	2.35	40	2.21	34	2.17	33	27
28	2.18	32	2.42	42	2.3	38	2.35	40	2.2	34	2.17	33	28
29	2.18	32	2.24	35	2.29	38	2.3	38	2.2	34	2.17	33	29
30	2.18	32	2.25	35	2.3	38	2.3	38	2.22	35	2.17	33	30
31	2.2	33	2.23	35			2.3	38			2.17	33	31
		945		1057		1128		1193		1069		1040	Year period 12456
		30.5		34.1		37.6		38.5		35.6		33.5	34.0
		1880		2100		2240		2370		2120		2060	24700
		33		42		42		42		38		34	74
		30		33		35		38		34		33	26
		B		B		A		A		A		B	

Gage hts. checked from orig. book .... Computed by L.d. .... Checked B.E.J. .... Dist. Eng.

Gage ht. copied by [illegible] Discharge applied by L.d. Discharge checked by B.E.J. Gage ht. checked by [illegible]

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for July 12, 1913.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
River Bottoms			23,66										
Provo City			110.43										
Provo Res Canal			44.51										
Provo Bench			60,66										
U&LR J&.			21,47										
Timpanogos			13,60										
Dry Creek			8,53										
West Union			35,96										
Fort Field			3,82										
Lake Bottoms			14,42										
Sp. Creek assumed.			5,00										
			342,06										

USGS.													
River										232			
Fork										28			
										260			
										342			
Inflow.										82			

August 8, 1913.

River Bottoms			41,70										
Provo City			97,97										
Provo Bench			51,83										
West Union			24,67										
Timpanogos			8,92										
U&L. & J.			16,02										
Dry Creek			10,12										
Fort Field			3,02										
Lake Bottoms			10,80										
Provo Res Canal			49,50										
Depot			3,10										
Sp Creek assmd.			5,00										
			322,65										
USGS.													
River.			215,										
Fork.			28										
			243										
			323										
Inflow.			80										

August 28. 1913.

			33,11										
			82,21										
			56,23										
			31,00										
			9,08										
			20,50										
			6,86										
			3,50										
			10,80										
			56,23										
			3,10 x										
			5,00										
			317,62										
USGS.													
			217										
			28										
			245										
			318										
Inflow.			73										

Total 249

Computations made by .....

Observations made by H. F. Wentz

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for July 1913.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	U.S.G.S. Station. River	Foot.		[illegible] Canal		Total [illegible] Valley		Storage Tunnel		[illegible] Mid Valley			
1	394	29		71		494				494			
2	324	28		72		424				424			
3	307	28		73		408				408			
4	290	28		74		392				392			
5	290	28		75		393				393			
6	260	28		76		364				364			
7	255	28		77		360				360			
8	247	28		78		353		20		333			
9	234	28		79		341		20		321			
10	234	28		80		342		20		322			
1	232	28		81		341		30		311			
2	232	29		82		343		30		313			
3	234	29		82		345		45		300			
4	232	28		82		342		45		297			
5	232	28		83		343		40		303			
6	222	28		83		333		40		293			
7	217	29		83		329		40		289			
8	232	28		83		343		40		303			
9	242	28		83		353		40		313			
20	237	28		83		348		45		303			
1	234	28		83		345		45		300			
2	247	28		83		358		45		313			
3	250	28		83		361		45		316			
4	247	28		83		358		45		313			
5	244	28		82		354		45		309			
6	222	28		82		332		45		287			
7	234	28		82		344		45		299			
8	224	28		82		334		45		289			
9	220	28		82		330		45		285			
30	217	28		82		327		45		282			
1	205	28		82		315		45		270			
Totals										10099			
Max										494			
Min										270			
Mean										326			

Total 250

Computations made by ....

Observations made by ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River Mid Valley.

Tabulation of Flow and Distribution of Provo River for August 1913.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	U.S.G.S. Station River	Fork		Inflow Duchesne		Total Mid Valley		Storage & Tunnel		Net Right Mid Valley			
1	203	30		82		315		45		270			
2	205	30		81		316		45		271			
3	200	30		81		311		45		266			
4	215	28		81		324		45		279			
5	217	28		81		326		45		281			
6	215	28		80		323		50		273			
7	215	28		80		323		50		273			
8	215	28		80		323		50		273			
9	215	28		80		323		50		273			
10	217	28		80		325		50		275			
1	215	28		79		322		50		272			
2	222	29		79		330		50		280			
3	217	29		78		324		50		274			
4	208	28		78		314		50		264			
5	208	28		78		314		50		264			
6	205	28		77		310		50		260			
7	205	29		77		311		50		261			
8	205	28		77		310		50		260			
9	208	28		77		313		50		263			
20	210	28		76		314		50		264			
1	210	28		76		314		50		264			
2	210	28		75		313		50		263			
3	212	28		75		315		50		265			
4	229	28		75		332		50		282			
5	220	28		74		322		50		272			
6	217	28		74		319		50		269			
7	217	28		73		318		50		268			
8	217	28		73		318		50		268			
9	217	28		73		318		50		268			
30	217	28		72		317		50		267			
1	224	28		72		324		50		274			
Totals										8356			
Max										282			
Min										260			
Mean										270			
Total 251													

Computations made by ....

Observations made by ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for September 1913.

WS360

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	USGS. Station River	Fork.		Bypass Curve		Total Mid Valley		Storage & Tenmile		Net River Mid Valley			
1	222	31		71		324		40		284			
2	242	31		71		344		40		304			
3	232	30		70		332		40		292			
4	232	30		70		332		40		292			
5	237	31		70		338		40		298			
6	227	30		69		326		40		286			
7	229	28		69		326		40		286			
8	242	28		68		338		40		298			
9	239	29		68		336		40		296			
10	232	29		67		328		40		288			
1	237	29		67		333		40		293			
2	234	29		66		329		40		289			
3	239	29		66		334		40		294			
4	255	30		65		350		40		310			
5	242	29		65		336		40		296			
6	242	29		64		335		40		295			
7	242	28		64		334		40		294			
8	239	28		64		331		40		291			
9	232	28		63		323		40		283			
20	229	28		63		320		40		280			
1	227	28		62		317		40		277			
2	237	29		61		327		40		287			
3	242	28		61		331		40		291			
4	237	28		60		325		40		285			
5	234	28		60		322		40		282			
6	234	28		59		321		40		281			
7	237	28		59		324		40		284			
8	229	28		58		315		40		275			
9	227	28		58		313		40		273			
30	220	28		57		305		40		265			
Totals										8649			
max										310			
min										265			
Mean										288			
Total 252													

Computations made by ....

Observations made by ....

UNITED STATES GEOLOGICAL SURVEY. (WATER RESOURCES BRANCH)

Daily gage height, in feet, and discharge, in second-feet, of Provo River near Provo, Ut. for 1913.

Drainage area ____ square miles. (Frank Dunnbery, observer.)

Day	JANUARY. Gage height.	JANUARY. Discharge.	FEBRUARY. Gage height.	FEBRUARY. Discharge.	MARCH. Gage height.	MARCH. Discharge.	APRIL. Gage height.	APRIL. Discharge.	MAY. Gage height.	MAY. Discharge.	JUNE. Gage height.	JUNE. Discharge.	Day
1	1.00	296	1.89	263	0.89	263	2.50	874	2.5	874	2.0	660	1
2	0.97	287	0.91	269	1.87	258	2.90	1090	2.4	828	1.95	640	2
3	0.89	263	0.89	263	0.86	252	2.10	700	2.2	740	1.9	620	3
4	1.01	299	0.89	263	1.00	296	1.75	560	2.0	660	1.8	580	4
5	0.8	238	0.93	275	0.89	263	1.85	600	2.0	660	1.6	500	5
6	0.81	241	0.89	263	0.94	278	1.80	580	1.96	640	1.445	447	6
7	1.45	268	0.89	263	0.96	284	1.55	482	2.1	700	1.4	430	7
8	1.0	296	0.94	278	0.98	290	1.50	464	2.3	784	1.3	396	8
9	1.1	328	0.89	263	1.00	296	1.50	464	2.5	874	1.26	379	9
10	1.0	296	0.89	263	1.00	296	1.50	464	2.4	828	1.16	345	10
11	1.0	296	0.90	266	1.00	296	1.55	482	2.5	874	1.1	328	11
12	0.96	284	0.85	252	1.16	345	1.90	540	2.6	922	1.1	328	12
13	0.96	284	0.83	246	1.25	379	1.80	580	2.5	874	1.15	345	13
14	1.0	296	0.85	252	1.10	328	2.00	660	2.4	828	1.05	312	14
15	1.0	296	0.85	252	0.99	293	2.10	700	2.1	700	0.99	293	15
16	1.0	296	0.87	258	0.98	290	1.95	640	1.9	620	1.0	296	16
17	0.97	287	0.87	258	1.10	328	2.00	660	1.8	580	0.97	287	17
18	0.97	287	0.84	249	1.10	328	2.30	784	1.75	560	1.05	312	18
19	0.97	287	0.8	238	1.15	345	2.40	828	2.0	660	1.0	296	19
20	1.0	296	0.85	252	1.10	328	2.10	700	2.0	660	0.99	284	20
21	0.98	290	0.85	252	1.10	328	2.00	660	1.8	580	0.96	266	21
22	1.0	296	0.86	255	1.05	312	2.10	700	1.65	520	0.95	255	22
23	1.0	296	0.81	241	1.15	345	2.10	700	1.75	560	0.93	247	23
24	1.0	296	0.84	249	1.05	312	2.00	660	2.1	700	0.98	255	24
25	0.88	260	1.86	255	1.00	296	1.90	620	2.4	828	0.98	255	25
26	0.93	275	1.96	284	1.05	312	1.90	620	2.7	974	1.10	290	26
27	0.91	269	0.95	281	1.00	296	2.00	660	2.7	974	1.4	394	27
28	0.93	275	0.92	272	1.05	312	2.80	784	2.6	922	2.0	624	28
29	0.95	281			1.15	345	2.90	924	2.6	922	2.1	666	29
30	0.92	272			1.60	500	3.00	1160	2.4	828	1.6	466	30
31	0.88	260			2.20	740			2.3	784			31
Total		8791		7275		10134		20390		23458		11796	
Mean		284		260		327		680		757		393	
Sec.-ft. per square mile													
Run-off, depth in inches													
Run-off in acre-feet		17,500		14,400		20,100		40,500		46,500		23,400	
Maximum		328		284		740		1160		974		666	
Minimum		238		238		252		464		520		241	
Accuracy		B		B		A		A		A		A	

Used Table dated 12/15/13

UNITED STATES GEOLOGICAL SURVEY. (WATER RESOURCES BRANCH.)

Daily gage height, in feet, and discharge, in second-feet, of Provo River near Provo, Ut. for 1913.

Drainage area ..... square miles.

(Frank Duesenberg, observer.)

Day	JANUARY.		FEBRUARY		MARCH		APRIL		MAY		JUNE	
	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
1	1.00	296	1.89	263	0.89	263	2.50 (2)	874	2.5	874	2.0	660
2	0.97	287	0.91	269	1.87	258	2.90	1090	2.4	828	1.95	640
3	0.89	263	0.89	263	0.86	252	2.10	700	2.2	740	1.9	620
4	1.01	299	0.89	263	1.00	296	1.75	560	2.0	660	1.8	580
5	0.8	238	0.93	275	0.89	263	1.85	600	2.0	660	1.6	500
6	0.81	241	0.89	263	0.94	278	1.80	580	1.95	640	1.475	447
7	1.45	268	0.89	263	0.96	284	1.65	482	2.1	700	1.4	430
8	1.0	296	0.94	278	0.98	290	1.50	464	2.3	784	1.3	396
9	1.1	328	0.89	263	1.00	296	1.50	464	2.5	874	1.26	379
10	1.0	296	0.89	263	1.00	296	1.50	464	2.4	828	1.16	345
11	1.0	296	0.90	266	1.00	296	1.55	482	2.5	874	1.1	328
12	0.96	284	0.85	252	1.16	345	1.90	540	2.6	922	1.1	328
13	0.96	284	0.83	246	1.25	379	1.80	580	2.5	874	1.15	345
14	1.0	296	0.85	252	1.10	328	2.00	660	2.4	828	1.05	312
15	1.0	296	0.85	252	0.99	293	2.10	700	2.1	700	0.99	293
16	1.0	296	0.87	258	0.98	290	1.95	640	1.9	620	1.0	296
17	0.97	287	0.87	258	1.10	328	2.00	660	1.8	580	0.97	287
18	0.97	287	0.84	249	1.10	328	2.30	784	1.75	560	1.05	312
19	0.97	287	0.8	238	1.15	345	2.40	828	2.0	660	1.0	296
20	1.0	296	0.85	252	1.10	328	2.10	700	2.0	660	0.99	284
21	0.98	290	0.85	252	1.10	328	2.00 (3)	660	1.8	580	0.96	266
22	1.0	296	0.86	255	1.05	312	2.10	700	1.65	520	0.95	255
23	1.0	296	0.81	241	1.15	345	2.10	700	1.75	560	0.95	247
24	1.0	296	0.84	249	1.05	312	2.00	660	2.1	700	0.98	255
25	0.88	260	0.86	255	1.00	296	1.90	620	2.4	828	0.98	255
26	0.93	275	1.96	284	1.05	312	1.90	620	2.7	974	1.10	290
27	0.91	269	0.95	281	1.00	296	2.00	660	2.7	974	1.4	394
28	0.93	275	0.92	272	1.05	312	2.80	784	2.6	922	2.0	624
29	0.95	281			1.15	345	2.70	974	2.6 (4)	922	2.1	666
30	0.92	272			1.60	500	3.00	1160	2.4	828	1.6	466
31	0.88	260			2.20	740			2.3	784		
Total		8791		7275		10134		20390		23458		11796
Mean		284		260		327		680		757		393
Sec.-ft. per square mile												
Run-off, depth in inches												
Run-off in acre-feet		17,500		14,400		20,100		40,500		46,500		23,400
Maximum		328		284		740		1160		974		666
Minimum		238		238		252		464		520		241
Accuracy		B		B		A		A		A		A

Used table dated 12/15/13

UNITED STATES GEOLOGICAL SURVEY. WATER RESOURCES BRANCH

Daily gage height, in feet, and discharge, in second-feet, of Provo River at/near Forks 'U' for 1913

Drainage area ..... square miles.

Frank Dusenbery

Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	
1	1.4	394	0.84	203	0.92	222	0.93	227	1.05	275	1.15	307	1
2	1.2	324	0.85	205	1.0	242	.95	234	1.1	290	1.1	290	2
3	1.15	307	0.83	200	0.96	232	.94	237	1.25	341	1.1	290	3
4	1.1	290	0.89	215	0.96	232	.96	242	1.15	307	.99	257	4
5	1.1	290	0.9	217	0.98	237	1.35	376	1.15	307	1.05	275	5
6	1.0	260	0.89	215	0.94	227	1.15	307	1.1	290	1.1	290	6
7	0.98	255	0.89	215	0.95	229	1.1	290	1.1	290	1.05	275	7
8	0.95	247	0.89	215	1.0	242	1.1	290	1.1	290	1.15	307	8
9	0.9	234	0.89	215	0.99	239	1.15	307	1.1	290	1.1	290	9
10	0.9	234	0.9	217	0.96	232	1.15	307	1.1	290	1.05	275	10
11	0.89	232	0.89	215	0.98	237	1.15	307	1.1	290	1.05	275	11
12	0.89	232	0.92	222	0.97	234	1.2	324	1.2	324	1.05	275	12
13	0.9	234	0.9	217	0.99	239	1.2	324	1.3	358	.99	257	13
14	0.89	232	0.86	208	1.05	255	1.25	341	1.25	341	1.05	275	14
15	0.89	232	0.86	208	1.00	242	1.25	341	1.15	307	1.05	275	15
16	0.85	222	0.85	205	1.0	242	1.2	324	1.15	307	1.1	290	16
17	1.84	217	0.85	205	1.0	242	1.2	324	1.1	290	1.1	290	17
18	0.9	232	0.85	205	0.99	239	1.15	307	1.1	290	1.1	290	18
19	0.95	242	0.86	208	0.96	232	1.15	307	1.15	307	1.05	275	19
20	0.93	237	0.87	210	0.95	229	1.15	307	1.2	324	.90	234	20
21	0.93	234	0.87	210	0.94	227	1.1	290	1.15	307	.86	224	21
22	0.98	247	0.87	210	0.98	237	1.15	307	1.1	290	1.1	290	22
23	1.0	250	0.88	212	1.0	242	1.15	307	.98	255	.95	247	23
24	0.99	247	0.95	229	0.98	237	1.1	290	1.05	275	.88	229	24
25	0.99	244	0.91	220	0.97	234	1.1	290	1.2	324	1.0	260	25
26	0.9	222	0.9	217	0.97	234	1.1	290	1.25	341	1.05	275	26
27	0.95	234	0.9	217	0.98	237	1.1	290	1.35	376	1.1	290	27
28	0.92	224	0.9	217	0.95	229	1.1	290	1.2	324	.93	241	28
29	0.9	220	0.9	217	0.94	227	1.1	290	1.15	307	1.0	260	29
30	0.89	217	0.9	217	0.91	220	1.1	290	1.1	290	1.2	324	30
31	0.85	205	0.93	224			1.05	275			1.05	275	31
		7691		6610		7049		9232		9197		8507	130,130
		248		213		235		298		307		275	357
		15,200		13,100		14,000		18,300		18,300		16,900	258,000
		394		224		242		341		358		324	1160
		205		200		220		227		255		224	200
		B		A		B		B		A		A	

Daily gage height, in feet, and discharge, in second-feet, of Provo (So. Fork) **River near** Forks, Utah **for 1913**

Drainage area .... square miles. (Frank Dusenberry, observer.)

Day	January Gage height	January Discharge	February Gage height	February Discharge	March Gage height	March Discharge	April Gage height	April Discharge	May Gage height	May Discharge	June Gage height	June Discharge
1	2.17	33	2.15	32	2.12	31	2.14	32	2.35	39	2.30	40
2	2.17	33	2.15	32	2.10	30	2.35	40	2.32	37	2.30	42
3	2.17	33	2.15	32	2.10	30	2.20	34	2.30	36	2.25	43
4	2.17	33	2.15	32	2.10	30	2.15	32	2.24	34	2.23	43
5	2.17	33	2.15	32	2.10	30	2.15	32	2.20	32	2.22	47
6	2.22	35	2.15	32	2.10	30	2.16	33	2.21	33	2.20	41
7	2.75	34	2.15	32	2.10	30	2.15	32	2.22	33	2.20	40
8	2.17	33	2.15	32	2.10	30	2.15	32	2.23	33	2.20	40
9	2.17	33	2.14	32	2.10	30	2.15	32	2.20	32	2.20	40
10	2.17	33	2.13	32	2.10	30	2.15	32	2.20	32	2.20	39
11	2.17	33	2.13	32	2.10	30	2.15	32	2.27	34	2.20	39
12	2.17	33	2.13	32	2.10	30	2.18	33	2.30	35	2.20	38
13	2.17	33	2.14	32	2.12	31	2.20	34	2.32	36	2.20	38
14	2.17	33	2.15	32	2.10	30	2.22	35	2.30	35	2.15	36
15	2.17	33	2.15	32	2.10	30	2.24	36	2.32	36	2.50	32
16	2.17	33	2.14	32	2.10	30	2.25	36	2.25	33	2.48	31
17	2.17	33	2.14	32	2.10	30	2.28	37	2.22	32	2.50	32
18	2.17	33	2.14	32	2.10	30	2.35	40	2.22	32	2.50	31
19	2.15	32	2.14	32	2.10	30	2.38	41	2.30	34	2.50	31
20	2.15	32	2.14	32	2.10	30	2.32	39	2.25	32	2.50	31
21	2.15	32	2.14	32	2.10	30	2.30	38	2.22	31	2.50	31
22	2.17	33	2.14	32	2.10	30	2.32	39	2.20	30	2.50	31
23	2.15	32	2.14	32	2.10	30	2.35	40	2.21	30	2.50	31
24	2.15	32	2.14	32	2.10	30	2.34	39	2.23	31	2.50	30
25	2.15	32	2.14	32	2.10	30	2.30	38	2.27	33	2.50	30
26	2.15	32	2.14	32	2.10	30	2.30	37	2.35	35	2.50	30
27	2.15	32	2.14	32	2.10	30	2.30	37	2.39	37	2.51	30
28	2.15	32	2.10	30	2.10	30	2.32	38	2.40	37	2.51	30
29	2.15	32			2.10	30	2.35	39	2.32	34	2.51	30
30	2.15	32			2.10	30	2.37	40	2.32	36	2.50	29
31	2.15	32			2.12	31			2.31	38		
Total		1014		894		933		1079		1052		1056
Mean		32.7		31.9		30.1		36.0		33.9		35.2
Sec.-ft. per square mile												
Run-off, depth in inches												
Run-off in acre-feet		2010		1770		1850		2140		2080		2090
Maximum		35		32		31		41		39		47
Minimum		32		30		30		32		30		29
Accuracy		B		B		B		B		B		C

New gage beginning June 15
Rat. table dated Dec. 8, 1913

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for *Provo River July, 1914*

W.S. 390

USGS Station

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	River	*Fork*		*Inflow Tunnel*		*Total Heber Valley*		*Storage & Tunnel*		*Natural River Heber Valley*			
1	306	41		84		431				431			
2	322	41		85		448				448			
3	306	41		86		433				433			
4	306	41		87		434				434			
5	338	41		88		467				467			
6	322	41		89		452				452			
7	306	40		90		436				436			
8	306	41		91		438				438			
9	291	41		92		424				424			
10	291	41		93		425				425			
1	306	41		94		441				441			
2	291	41		95		427				427			
3	291	41		96		428				428			
4	306	41		97		444				444			
5	291	41		98		430				430			
6	291	40		99		430				430			
7	273	40		100		413				413			
8	262	41		101		404				404			
9	259	40		102		401				401			
20	259	40		103		402				402			
1	306	40		104		450		15		435	435		
2	291	41		105		437		15		422			
3	276	41		106		423		15		408			
4	276	41		107		424		15		409			
5	276	41		108		425		15		410			
6	273	40		107		420		15		405			
7	276	40		106		422		15		407			
8	276	40		105		421		15		406			
9	276	40		103		419		15		404			
30	291	40		102		433		15		418			
1	306	40		101		447		15		432			
Totals						~~13329~~				13173			
Max						~~452~~				452			
Min						~~401~~				401			
Mean						~~429~~				425			

Total 255

Computations made by ____________ Observations made by ____________

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for *August 1914.*

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Correction at Station Ded.	Correction at Station G. H.
	Users Stat. River	Fork		Foothill Canal		Total at Valley		Storage & Tunnel		[illegible]			
1	291	40		100		431		15		416			
2	306	41		99		446		15		431			
3	291	41		98		430		15		415			
4	291	41		97		429		15		414			
5	276	41		96		413		15		398			
6	276	41		95		412		15		397			
7	276	40		94		410		15		395			
8	276	41		94		411		15		396			
9	276	41		93		410		15		395			
10	276	41		93		410		15		395			
1	276	41		92		409		40		369			
2	273	41		92		406		40		366			
3	268	41		92		401		40		361			
4	265	41		91		397		40		357			
5	262	41		91		394		40		354			
6	262	40		91		393		40		353	353		
7	262	40		91		393		40		353	353		
8	256	41		91		388		40		348			
9	256	40		92		388		40		348			
20	262	40		92		394		50		344			
1	262	40		93		395		50		345			
2	262	41		94		397		45		352			
3	270	41		95		406		45		361			
4	270	41		96		407		45		362			
5	259	41		97		397		45		352			
6	273	40		98		411		45		366			
7	273	40		99		412		48		364			
8	276	40		99		415		48		367			
9	276	40		99		415		40		375			
30	273	40		100		413		40		373			
1	273	40		100		413		40		373			
Totals										11595			
Max										431			
Min										344			
Mean										374			

Total **256**

Computations made by .... Observations made by ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for Provo River September 1914.

W.S. 390

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	USGS: Station River	Fork		[illegible]		[illegible]		[illegible]		[illegible]			
1	273	41		101		415		37		378			
2	265	41		101		407		37		370			
3	259	41		101		401		37		364			
4	262	41		101		404		30		374			
5	251	41		101		393		30		363			
6	251	42		101		394		30		364			
7	251	43		101		395		27		368			
8	248	41		101		390		27		363			
9	240	43		101		384		23		361			
10	226	44		100		370		23		347			
1	223	42		100		362		25		337			
2	220	41		100		361		25		336			
3	217	41		100		358		25		333			
4	220	41		99		360		25		335			
5	248	41		99		388				388			
6	248	41		98		387				387			
7	248	41		98		387				387			
8	248	41		97		386				386			
9	226	42		97		365				365			
20	248	41		96		385				385			
1	240	42		96		378				378			
2	248	42		95		385				385			
3	234	43		94		371				371			
4	240	43		93		377				377			
5	234	43		93		370				370			
6	240	43		92		375				375			
7	248	42		91		381				381			
8	240	42		90		372				372			
9	234	43		89		366				366			
30	248	43		88		379				379			
Totals										11045			
Max										387			
Min										333			
Mean										368			

Total 257

Computations made by ....

Observations made by ....

D 194-a UNITED STATES GEOLOGICAL SURVEY. (WATER RESOURCES BRANCH)

Year ending September 30, 19[illegible]

Daily gage height, in feet, and discharge, in second-feet, of Provo River at Forest, Utah

Drainage area ..... square miles. Frank Duemberry

Day	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
1	0.93	227	1.05	275	1.15	307	1.2	324	1.10	290	1.15	307
2	.95	234	1.1	290	1.1	290	1.1	290	1.05	275	1.5	430
3	.94	237	1.25	341	1.1	290	1.2	324	.93	242	1.1	290
4	.96	242	1.15	307	.99	257	1.1	290	.90	234	1.1	290
5	1.35	376	1.15	307	1.05	275	1.05	275	1.05	275	1.15	307
6	1.15	307	1.1	290	1.1	290	1.05	275	.88	229	1.2	324
7	1.1	290	1.1	290	1.05	275	.96	250	.99	257	1.35	376
8	1.1	290	1.1	290	1.15	307	1.0	260	1.00	260	1.3	358
9	1.15	307	1.1	290	1.1	290	.99	257	.92	239	1.4	394
10	1.15	307	1.1	290	1.05	275	.92	239	.90	234	1.45	412
11	1.15	307	1.1	290	1.05	275	.76	200	.98	255	1.45	412
12	1.2	324	1.2	324	1.05	275	.98	255	1.00	260	1.4	394
13	1.2	324	1.3	358	.99	257	.91	237	1.00	260	1.4	394
14	1.25	341	1.25	341	1.05	275	1.0	260	1.00	260	1.45	412
15	1.25	341	1.15	307	1.05	275	1.65	485	.99	257	1.45	412
16	1.2	324	1.15	307	1.1	290	1.35	376	.88	229	1.55	448
17	1.2	324	1.1	290	1.1	290	1.35	376	.99	257	1.75	524
18	1.15	307	1.1	290	1.1	290	1.4	394	1.00	260	1.6	466
19	1.15	307	1.15	307	1.05	275	1.55	448	1.1	290	1.6	466
20	1.15	307	1.2	324	.90	234	1.2	324	1.15	307	1.5	430
21	1.1	290	1.15	307	.86	224	1.15	307	1.3	358	1.45	412
22	1.15	307	1.1	290	1.1	290	1.2	324	1.6	466	1.4	394
23	1.15	307	.98	255	.95	247	1.15	307	1.3	358	1.4	394
24	1.1	290	1.05	275	.88	229	1.1	290	1.2	324	1.4	394
25	1.1	290	1.2	324	1.0	260	1.15	307	1.2	324	1.35	376
26	1.1	290	1.25	341	1.05	275	2.3	760	1.2	324	1.45	412
27	1.1	290	1.35	376	1.1	290	1.6	466	1.0	260	1.5	430
28	1.1	290	1.2	324	.93	241	1.2	324	1.1	290	1.4	394
29	1.1	290	1.15	307	1.0	260	.95	247			1.45	412
30	1.1	290	1.1	290	1.2	324	.93	242			1.4	394
31	1.05	275			1.05	275	1.05	275			1.45	412
Total		9233		9177		8507		9988		7874		12270
Mean		298		307		275		322		281		396
Sec.-ft. per square mile												
Run-off, depth in inches												
Run-off in acre-feet		18,300		18,300		16,900		19,800		15,600		24300
Maximum		341		358		324		760		466		524
Minimum		227		255		224		200		229		290
		B		A		A		A		A		

UNITED STATES GEOLOGICAL SURVEY

Daily gage height, in feet, and discharge, in second-feet, at Provo

Drainage area ..... square miles.

Forks, Utah

Frank Lucenberry

Day	APRIL Gage height	APRIL Discharge	MAY Gage height	MAY Discharge	JUNE Gage height	JUNE Discharge	JULY Gage height	JULY Disch	AUGUST		SEPTEMBER	
1	1.4	394	2.0	722	3.4	1400	1.1	306	1.05	291	0.99	273
2	1.45	412	2.0	722	3.4	1400	1.15	322	1.1	306	.96	265
3	1.45	412	1.85	659	3.5	1470	1.1	306	1.05	291	.94	259
4	1.6	500	2.2	808	3.7	1610	1.1	306	1.05	291	.95	262
5	1.7	540	2.4	900	3.5	1470	1.2	338	1.0	276	.91	251
6	1.85	600	2.5	950	3.2	1260	1.15	322	1.0	276	.91	251
7	1.8	580	2.6	922	3.1	1200	1.1	306	1.0	276	.91	251
8	1.75	560	2.7	974	2.7	974	1.1	306	1.0	276	.90	248
9	1.65	520	3.0	1140	2.5	874	1.05	291	1.0	276	.87	240
10	1.75	560	3.1	1200	2.2	740	1.05	291	1.0	276	.82	226
11	1.9	620	3.2	1260	2.2	740	1.1	306	1.0	276	.81	223
12	1.8	580	2.8	1030	2.2	740	1.05	291	.99	273	.80	220
13	1.8	580	2.6	922	2.3	784	1.05	291	.99	268	.79	217
14	1.95	640	2.7	974	2.4	828	1.1	306	.96	265	.80	220
15	2	808	2.9	1090	2.4	828	1.05	291	.95	262	.90	248
16	2.6	1000	3.0	1140	2.4	828	1.05	291	.95	262	.90	248
17	2.5	950	3.1	1200	2.6	922	.99	273	.95	262	.90	248
18	2.3	854	3.2	1260	2.2	740	.95	262	.93	256	.90	248
19	2.3	854	3.2	1260	2.2	740	.94	259	.93	256	.82	226
20	2.4	900	3.2	1260	2.3	784	.94	259	.95	262	.90	248
21	2.7	1060	3.4	1400	2.1	700	1.1	306	.95	262	.87	240
22	2.7	1060	3.6	1540	2.0	660	1.05	291	.95	262	.90	248
23	2.7	1060	3.6	1540	1.85	600	1.0	276	.98	270	.85	234
24	2.5	950	3.9	1760	1.7	540	1.0	276	.98	270	.87	240
25	2.6	1000	3.7	1610	1.65	520	1.0	276	.94	259	.85	234
26	2.5	950	3.4	1400	1.45	447	.99	273	.99	273	.87	240
27	2.5	950	3.1	1200	1.5	464	1.0	276	.99	273	.90	248
28	2.2	808	3.3	1330	1.3	370	1.0	276	1.0	276	.87	240
29	2.2	808	3.4	1400	1.2	338	1.0	276	1.0	276	.85	234
30	2.2	808	3.2	1260	1.15	322	1.05	291	.99	273	.90	248
31			3.4	1400			1.1	306	.99	273		
		22318		36233		25,293		9046		8444	7278	165680
		744		1170		843		292		272	243	454
		44,300		71,900		50,200		18,000		16,700	14,500	329,000
		1060		1760		1610		338		306	273	1760
		344		659		322		259		256	212	200

1912-13 UNITED STATES GEOLOGICAL SURVEY. WATER RESOURCES BRANCH. Year ending September 30, 19

Daily gage height, in feet, and discharge, in second-feet, of ~~Provo (Lake)~~ River at Forks, Utah for 1913

Drainage area ..... square miles. South Fork Provo (Frank Dusenberry, observer)

Day.	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
	Gage height	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	
1	2.50	28	2.50	28	2.52	29	2.50	28	2.50	28	2.50	28	
2	2.50	28	2.50	28	2.51	28	2.50	28	2.50	28	2.50	28	
3	2.50	28	2.52	29	2.51	28	2.50	28	2.50	28	2.50	28	
4	2.52	29	2.50	28	2.50	28	2.50	28	2.50	28	2.50	28	
5	2.51	28	2.50	28	2.55	30	2.50	28	2.50	28	2.50	28	
6	2.50	28	2.50	28	2.50	28	2.50	28	2.50	28	2.50	28	
7	2.50	28	2.50	28	2.50	28	2.50	28	2.50	28	2.50	28	
8	2.50	28	2.50	28	2.50	28	2.50	28	2.50	28	2.50	28	
9	2.52	29	2.50	28	2.50	28	2.50	28	2.50	28	2.50	28	
10	2.50	28	2.50	28	2.50	28	2.50	28	2.50	28	2.50	28	
11	2.51	28	2.50	28	2.50	28	2.50	28	2.50	28	2.50	28	
12	2.51	28	2.51	28	2.50	28	2.50	28	2.50	28	2.50	28	
13	2.51	28	2.52	29	2.49	28	2.50	28	2.50	28	2.50	28	
14	2.50	28	2.51	28	2.50	28	2.50	28	2.50	28	2.50	28	
15	2.50	28	2.50	28	2.50	28	2.56	30	2.51	28	2.50	28	
16	2.50	28	2.50	28	2.50	28	2.58	31	2.50	28	2.50	28	
17	2.50	28	2.50	28	2.50	28	2.56	30	2.50	28	2.52	29	
18	2.50	28	2.50	28	2.50	28	2.53	29	2.50	28	2.51	28	
19	2.50	28	2.50	28	2.50	28	2.54	30	2.51	28	2.50	28	
20	2.50	28	2.50	28	2.50	28	2.52	29	2.50	28	2.50	28	
21	2.50	28	2.56	30	2.50	28	2.52	29	2.51	28	2.50	28	
22	2.50	28	2.50	28	2.50	28	2.52	29	2.51	28	2.50	28	
23	2.50	28	2.50	28	2.50	28	2.52	29	2.50	28	2.50	28	
24	2.50	28	2.50	28	2.50	28	2.51	28	2.50	28	2.50	28	
25	2.50	28	2.51	28	2.50	28	2.51	28	2.50	28	2.50	28	
26	2.50	28	2.51	28	2.50	28	2.59	32	2.51	28	2.51	29	
27	2.50	28	2.51	28	2.50	28	2.55	30	2.40	24	2.50	30	
28	2.50	28	2.51	28	2.50	28	2.52	29	2.50	28	2.50	31	
29	2.50	28	2.51	28	2.50	28	2.50	28			2.51	32	
30	2.50	28	2.52	29	2.50	28	2.50	28			2.50	33	
31	2.50	28			2.50	28	2.50	28			2.50	34	
TOTAL		870		845		871		889		780		890	
Mean		28.1		28.2		28.1		28.7		27.9		28.7	
Sec.-ft. per square mile													
Run-off, depth in inches													
Run-off in acre-feet		1730		1680		1730		1760		1550		1760	
Maximum		29		30		30		32		28		34	
Minimum		28		28		28		28		24		28	
Accuracy		B		B		B		B		B		C	

...mb... 30, 1914

UNITED STATES GEOLOGICAL SURVEY. [WATER RESOURCES BRANCH.]

Daily gage height, in feet, and discharge, in second-feet, of ~~Provo (to Utah)~~ South Fork Provo River at Forks, Utah for 1914.

Drainage area.....square miles.

Frank Rosenberg

Day	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	
1	2.50	35	2.60	46	2.65	52	2.56	41	2.54	40	2.56	41	1
2	2.50	36	2.60	46	2.65	52	2.56	41	2.56	41	2.56	41	2
3	2.50	37	2.62	47	2.64	52	2.56	41	2.56	41	2.56	41	3
4	2.51	37	2.65	48	2.66	52	2.56	41	2.56	41	2.56	41	4
5	2.51	38	2.65	48	2.65	52	2.56	41	2.56	41	2.56	41	5
6	2.51	39	2.65	48	2.62	51	2.56	41	2.56	41	2.58	41	6
7	2.52	41	2.68	49	2.60	50	2.54	40	2.55	40	2.60	42	7
8	2.51	41	2.71	50	2.60	50	2.55	40	2.56	41	2.62	43	8
9	2.51	42	2.73	51	2.60	50	2.55	40	2.56	41	2.56	41	9
10	2.59	46	2.71	50	2.60	50	2.55	40	2.56	41	2.63	43	10
11	2.57	45	2.75	52	2.60	50	2.58	41	2.56	41	2.64	44	11
12	2.58	45	2.73	51	2.56	48	2.54	40	2.56	41	2.57	42	12
13	2.58	45	2.70	50	2.56	48	2.55	40	2.57	41	2.58	41	13
14	2.58	45	2.69	50	2.53	47	2.55	40	2.57	41	2.57	41	14
15	2.61	46	2.67	49	2.54	48	2.54	40	2.57	41	2.56	41	15
16	2.63	47	2.71	50	2.55	48	2.54	40	2.56	41	2.56	41	16
17	2.60	46	2.87	57	2.55	48	2.54	40	2.55	40	2.56	41	17
18	2.56	45	2.89	58	2.46	45	2.54	40	2.55	40	2.56	41	18
19	2.58	45	2.84	56	2.46	45	2.54	40	2.56	41	2.58	41	19
20	2.60	46	2.81	54	2.48	45	2.54	40	2.55	40	2.60	42	20
21	2.64	48	2.79	54	2.50	46	2.54	40	2.55	40	2.58	41	21
22	2.60	46	2.80	54	2.50	46	2.54	40	2.55	40	2.60	42	22
23	2.62	47	2.80	54	2.47	45	2.54	40	2.56	41	2.60	42	23
24	2.60	46	2.80	54	2.51	39	2.54	40	2.56	41	2.62	43	24
25	2.57	45	2.75	54	2.51	39	2.54	40	2.56	41	2.63	43	25
26	2.58	45	2.68	52	2.52	40	2.54	40	2.55	40	2.63	43	26
27	2.58	45	2.67	53	2.52	40	2.54	40	2.55	40	2.60	42	27
28	2.60	46	2.66	52	2.54	40	2.55	40	2.55	40	2.60	42	28
29	2.60	46	2.66	52	2.55	40	2.55	40	2.55	40	2.63	43	29
30	2.60	46	2.63	51	2.56	41	2.55	40	2.55	40	2.63	43	30
31			2.68	53			2.55	40	2.55	40			31
		1307		1593		1399		1247		1258		1256	13,205
		43.6		51.4		46.6		40.2		40.6		41.9	36.2
		2590		3160		2770		2470		2500		2490	26,200
		48		58		52		41		41		43	58
		35		46		39		40		40		41	24
		C		B		B		B		B		B	

Provo River 1915.

Copy of Page 37,Part 7,1915 report, with correction.

Table showing Discharge at U.S.G. Station, Discharge in Utah Valley and the Inflow.

	Obsr at River	Stat. Fork.	Total	Disch In Utah Valley	Inflow.
May 12.	175	29	204	212.66	8.66
May 24.	239	29	268	318.95	64.28
June 8-9	508	32	540	560.01	20.01
June 21	430	30	460	497	37.
June 25	301	24	325	400	75.
June 29	260	30	290	329.36	39.36
July 2,	255	28	283	312.22	29.22
July 8,	252	28	280	317.35	37.35
July 15,	242	28	270	315.23	45.23
July 29	185	36	221	277.52	56.52
Aug. 11,	173	30	203	277.02	74.02
Sept. 7,	168	34	202	265.98	63.98

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for Provo River July 1915.

Observed at USGS Stat.

NAME	Time (River)	G. H. (Fork)	Disc.	Dec'd Net (Inflow Curve)	Tran. Loss (Total River Utah Valley)	Tran. Gain (Storage & Tunnel Water)	Dec'd at St.	P. Cent Added (Natural River Utah Valley)	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
1	255	28		35	318			318					
2	255	28		35	318			318					
3	252	28		36	316			316					
4	255	28		36	319			319					
5	255	27		37	319			319					
6	255	28		38	321	33		288					
7	252	24		38	314	33		281					
8	252	28		39	319	33		286					
9	250	27		40	317	33		284					
10	250	27		40	317	33		284					
1	248	27		41	316	33		283					
2	245	24		42	311	33		278					
3	245	28		43	316	33		283					
4	245	28		43	316	33		283					
5	242	28		44	314	33		281					
6	242	27		45	314	33		281					
7	240	27		45	312	33		279					
8	235	28		46	309	33		276					
9	240	28		47	315	33		282					
20	235	28		48	311	33		278					
1	232	27		49	308	33		275					
2	235	26		49	310	33		277					
3	230	27		50	307	33		274					
4	220	28		51	299	33		266					
5	220	27		52	299	33		266					
6	215	27		53	295	33		262					
7	210	30		54	294	33		261					
8	195	27		55	277	33		244					
9	185	36		56	277	33		244					
30	180	28		58	266	33		233					
1	178	28		61	265	33		232					
Total								8651					
Max								319					
Min								232					
Mean								279					

/

Total 261

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for August 1915

NAME	Time	G. H.	Dise.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	* G. H.
	Observer's Less. Stat.			Deer Creek	Total River Utah Valley	Storage & Surface Water		Natural River Utah Valley					
	River	Fork											
1	175	29		63	267	33		234					
2	175	28		65	268	33		235					
3	180	28		68	276	33		243					
4	178	31		69	278	33		245					
5	178	30		70	278	33		245					
6	175	30		72	277	33		244					
7	178	28		73	279	33		246					
8	173	30		73	276	33		243					
9	170	28		74	272	33		239					
10	168	30		75	273	33		240					
11	173	30		75	278	33		245					
12	170	30		75	275	33		242					
13	168	31		75	274	33		241					
14	168	34		74	276	33		243					
15	168	34		74	276	28		243					
16	168	33		74	275	28		247					
17	168	28		74	270	28		242					
18	173	34		73	280	28		252					
19	168	31		73	272	28		244					
20	166	31		72	269	28		241					
21	164	24		72	260	28		232					
22	164	24		72	260	28		232					
23	166	27		71	264	28		236					
24	168	27		71	266	28		238					
25	168	27		71	266	28		238					
26	168	33		70	271	28		243					
27	168	33		70	271	28		243					
28	166	33		69	268	28		240					
29	168	31		69	268	28		240					
30	168	33		68	269	28		241					
31	168	36		68	272	28		244					
Total	5276	936				910		7481					
Max	180	36						252					
Min	164	24						232					
Mean	170	34.4						241					

Total 467

Computations made by ..... **Observations made by** .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for *Provo River September 1915.*

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	Obsr at USGS station												
	River	*Fork*		*Inflow Current*	*Total River Utah Valley*	*Storage & Tunnel Water*		*Natural River Utah Valley*					
1	155	33		67	255	28		227					
2	164	34		67	265	28		237					
3	175	39		67	281	28		254					
4	187	36		66	289	28		261					
5	185	34		66	285	28		257					
6	178	34		65	277	10		267					
7	168	34		65	267	10		257					
8	164	34		64	262	10		252					
9	164	34		64	262	10		252					
10	192	36		63	291	10		281					
1	205	36		63	304	10		294					
2	210	36		62	308	10		298					
3	196	34		62	292	10		282					
4	194	34		61	289	10		279					
5	192	34		61	287	10		277					
6	187	36		60	283	10		273					
7	187	36		60	283	10		273					
8	187	36		59	282	10		272					
9	187	36		59	282	10		272					
20	189	34		58	281	10		271					
1	187	34		58	279	10		269					
2	192	36		57	285	10		275					
3	187	31		57	275	10		265					
4	187	33		56	276	10		266					
5	201	33		56	290	10		280					
6	228	35		55	318	10		308					
7	225	31		55	311	10		301					
8	212	31		54	297	10		287					
9	210	34		54	298	10		288					
30	210	34		53	297	10		287					
	~~5705~~	~~103~~											
Total	5705	1032						8162					
Max	228	39						308					
Min	155	31						227					
Mean	190	34.4						272					
Total 263													

Computations made by ....

Observations made by ....

9- 192-a UNITED STATES GEOLOGICAL SURVEY. [WATER RESOURCES BRANCH]

The Year ended Sept 30 1915

Daily gage height, in feet, and discharge, in second-feet, at Provo River at Forlee, Utah for 1915

Drainage area ____ square miles. [illegible]

Day.	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
1	0.87	236	1.1	298	0.97	262	0.90	244	0.95	257	0.99	267
2	.87	236	1.1	298	.99	267	.93	252	.95	257	.99	267
3	1.05	284	1.1	298	1.05	284	.98	265	.97	262	.99	267
4	1.1	298	1.1	298	1.1	298	.98	265	.92	249	.99	267
5	1.1	298	1.05	284	1.1	298	.98	265	.85	232	1.01	273
6	1.1	298	1.05	284	1.1	298	.99	267	.82	224	.99	267
7	1.05	284	1.05	284	1.1	298	.97	262	.95	257	.99	267
8	1.05	284	1.05	284	1.1	298	.99	267	.95	257	.96	260
9	1.4	394	1.05	284	1.0	270	.99	267	.95	257	.97	262
10	1.2	328	1.05	284	.9	244	.97	262	.97	262	.96	260
11	1.45	412	1.1	298	1.0	270	.99	267	.97	262	.98	265
12	1.4	394	1.05	284	1.0	270	.99	267	1.05	284	.98	265
13	1.4	394	1.05	284	.85	232	.98	265	1.00	270	1.00	270
14	1.35	377	1.05	284	.85	232	.99	267	.90	244	1.00	270
15	1.15	313	1.05	284	.84	229	.99	267	.89	242	1.10	298
16	1.17	319	1.05	284	.82	224	.93	252	.92	249	1.15	313
17	1.19	325	1.05	284	.79	216	.80	219	.95	257	1.15	313
18	1.2	328	1.05	284	.90	244	.80	219	1.05	284	1.2	328
19	1.2	328	1.0	270	.90	244	.76	209	.97	262	1.2	328
20	1.2	328	1.0	270	.81	222	.76	209	.97	262	1.2	328
21	1.2	328	1.0	270	.83	226	.81	222	.99	267	1.25	344
22	1.2	328	1.0	270	.82	224	.72	199	.99	267	1.3	360
23	1.2	328	1.0	270	.81	222	.72	199	.99	267	1.4	394
24	1.2	328	1.0	270	.79	216	.77	212	.99	267	1.5	430
25	1.1	298	.98	265	.75	206	.85	232	.98	265	1.55	449
26	1.1	298	.97	262	.77	212	.87	236	.98	265	1.7	508
27	1.1	298	.95	257	.87	236	.92	249	.99	267	1.7	508
28	1.1	298	.94	254	.89	242	.92	249	.98	265	1.7	508
29	1.1	298	.97	262	.94	254	.95	257			1.7	508
30	1.1	298	.98	265	.95	257	.95	257			1.65	488
31	1.1	298			.95	257	.97	262			1.55	449
Total		9856		8367		7752		7631		7265		10581
Mean		318		279		250		246		259		341
Sec.-ft. per square mile												
Run-off, depth in inches												
Run-off in acre-feet		19,600		16,600		15,400		15,100		14400		21,000
Maximum		412		298		298		267		284		508
Minimum		236		254		206		199		224		260
Accuracy		B		B		B		B		B		B

September 30

UNITED STATES GEOLOGICAL SURVEY. WATER RESOURCES BRANCH

Daily gage height, in feet, and discharge, in second-feet, of PROVO [illegible] FORKS, UTAH 1915

Drainage area 600 square miles.

PUBLISHED RECORDS

SUBJECT TO REVISION

J. C. Carter

Day	MAY Gage height	MAY Discharge	JUNE Gage height	JUNE Discharge	JULY Gage height	JULY Discharge	AUGUST Gage height	AUGUST Discharge	SEPTEMBER Gage height	SEPTEMBER Discharge
1	1.37	384	1.75	528	1.52	438	0.86	255	.70	168	0.64	155
2	1.24	341	1.64	484	2.20	714	.86	255	.71	175	.66	164
3	1.30	360	1.47	419	2.13	685	.85	252	.75	180	.73	1[illegible]
4	1.36	380	1.30	360	1.72	516	.86	255	.74	178	.78	187
5	1.39	391	1.10	298	1.9	588	.86	255	.74	178	.77	185
6	1.32	367	.89	242	1.75	528	.86	255	.73	175	.74	178
7	1.34	374	.83	226	1.8	548	.85	252	.74	178	.70	168
8	1.38	387	.80	219	1.7	508	.85	252	.72	173	.68	164
9	1.37	384	.70	194	1.7	508	.84	250	.71	170	.68	164
10	1.26	347	.67	187	1.75	528	.84	250	.70	168	.77	192
11	1.28	354	.64	180	2.15	693	.83	248	.72	173	.80	205
12	1.28	354	.62	175	2.2	714	.82	245	.71	170	.80	210
13	1.30	360	.60	170	1.8	548	.82	245	.70	168	.74	196
14	1.37	384	.60	170	1.75	528	.82	245	.70	168	.73	194
15	1.44	408	.80	219	1.5	430	.81	242	.70	168	.72	192
16	1.53	441	.81	222	1.5	430	.81	242	.70	168	.70	187
17	1.55	449	.98	265	1.49	419	.80	240	.70	168	.70	187
18	1.55	449	1.45	412	1.58	460	.78	235	.72	173	.70	187
19	1.66	492	1.31	363	1.52	438	.80	240	.70	168	.70	187
20	1.68	500	1.18	322	1.52	438	.78	235	.69	166	.71	189
21	1.75	528	1.20	328	1.50	430	.77	232	.68	164	.70	187
22	1.80	548	1.07	290	1.30	362	.78	235	.68	164	.72	192
23	1.72	516	1.00	270	1.18	330	.78	230	.69	166	.70	187
24	1.65	488	.88	239	1.12	308	.77	220	.70	168	.70	187
25	1.68	500	.94	254	1.10	301	.79	220	.70	168	.76	201
26	1.57	457	1.11	301	.90	250	.79	215	.70	168	.87	228
27	1.60	468	1.03	278	1.01	280	.79	210	.70	168	.86	225
28	1.65	488	.95	257	.93	270	.75	195	.69	166	.81	212
29	1.73	520	.95	257	.90	260	.72	185	.70	168	.80	210
30	2.00	630	1.22	334	.90	262	.71	180	.70	168	.80	210
31			1.34	374			.70	178	.70	168		
	13049		8837		13712		7248		5,276		5,705	105,279
	435		285		457		234		170		190	288
	25,900		17,500		27,200		14,400		10,500		11,300	209,000
	630		528		714		255		180		228	714
	341		170		250		178		164		155	155
	A		A		B		B		B		B	

ABP

ABP

9-192-a UNITED STATES GEOLOGICAL SURVEY. WATER RESOURCES BRANCH.

Daily gage height, in feet, and discharge, in second-feet, of Provo (So. Fk.) River near Forks, Utah for 1915

Drainage area 90 square miles. J. F. Carter, ~~[illegible]~~

Datum of Gage raised 2.0 on June 12, [illegible]

Day	October Gage height	October Discharge	November Gage height	November Discharge	December Gage height	December Discharge	January Gage height	January Discharge	February Gage height	February Discharge	March Gage height	March Discharge
1	2.63	38	2.65	40	2.65	40	2.57	34	2.59	35	2.56	33
2	2.63	38	2.65	40	2.69	43	2.58	34	2.59	35	2.56	33
3	2.68	42	2.65	40	2.66	41	2.62	38	2.59	35	2.56	33
4	2.70	44	2.65	40	2.70	44	2.60	36	2.59	35	2.56	33
5	2.64	39	2.65	40	2.69	43	2.59	35	2.58	34	2.56	33
6	2.64	39	2.65	40	2.70	44	2.59	35	2.58	34	2.56	33
7	2.62	38	2.65	40	2.69	43	2.60	36	2.58	34	2.56	33
8	2.62	38	2.65	40	2.68	42	2.60	36	2.59	35	2.56	33
9	2.67	42	2.65	40	2.65	40	2.60	36	2.57	34	2.56	33
10	2.65	40	2.65	40	2.65	40	2.59	35	2.55	32	2.56	33
11	2.67	42	2.65	40	2.65	40	2.60	36	2.55	32	2.57	34
12	2.67	42	2.65	40	2.65	40	2.60	36	2.52	30	2.57	34
13	2.67	42	2.65	40	2.65	40	2.60	36	2.52	30	2.57	34
14	2.65	40	2.65	40	2.63	38	2.61	37	2.56	33	2.58	34
15	2.63	38	2.65	40	2.62	38	2.60	36	2.56	33	2.57	34
16	2.64	39	2.65	40	2.63	38	2.60	36	2.56	33	2.57	34
17	2.66	41	2.65	40	2.61	37	2.60	36	2.56	33	2.57	34
18	2.65	40	2.65	40	2.62	38	2.60	36	2.56	33	2.58	34
19	2.65	40	2.65	40	2.62	[illegible]8	2.60	36	2.56	33	2.58	34
20	2.65	40	2.65	40	2.59	[illegible]5	2.60	36	2.56	33	2.58	34
21	2.65	40	2.65	40	2.60	[illegible]6	2.59	35	2.56	33	2.57	34
22	2.65	40	2.65	40	2.60	[illegible]6	2.58	34	2.56	33	2.57	34
23	2.65	40	2.65	40	2.63	[illegible]8	2.58	34	2.56	33	2.58	34
24	2.65	40	2.65	40	2.60	[illegible]6	2.60	36	2.56	33	2.58	34
25	2.65	40	2.65	40	2.60	[illegible]6	2.60	36	2.56	33	2.58	34
26	2.65	40	2.65	40	2.60	3[illegible]	2.60	36	2.56	33	2.58	34
27	2.65	40	2.65	40	2.58	34	2.58	34	2.56	33	2.58	34
28	2.65	40	2.65	40	2.57	34	2.58	34	2.56	33	2.58	34
29	2.65	40	2.65	40	2.57	34	2.59	35			2.60	36
30	2.65	40	2.65	40	2.58	34	2.59	35			2.60	36
31	2.69	43			2.59	35	2.59	35			2.60	36
Total		1245		1200		119[illegible]		1100		930		1050
Mean		40.2		40.0		38.[illegible]		35.5		33.2		33.9
Sec.-ft. per square mile												
Run-off, depth in inches												
Run-off in acre-feet		2,470		2,380		2,36[illegible]		2,180		1,840		2,080
Maximum		44		40		4[illegible]		38		35		36
Minimum		38		40		34		34		30		33
Accuracy		B		B		B		B		B		B

[illegible] 9/-/15

UNITED STATES GEOLOGICAL SURVEY. WATER RESOURCES BRANCH

PUBLISHED RECORDS SUBJECT TO REVISION

Daily gage height, in feet, and discharge, in second-feet, of SOUTH FORK PROVO [illegible] PROVO, UTAH for 1915

Drainage area 39 square miles. J.F. CARTER ~~FRANK DUSENBERRY~~

Day	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.
1	2.58	34	2.60	36	2.10	28	0.50	28	0.51	29	0.56	33
2	2.58	34	2.60	36	2.13	30	.50	28	.50	28	.58	34
3	2.58	34	2.60	36	2.13	30	.50	28	.50	28	.64	39
4	2.57	34	2.58	34	2.16	25	.50	28	.54	31	.60	36
5	2.60	36	2.58	34	2.10	28	.48	27	.52	30	.58	34
6	2.64	39	2.56	33	2.50	28	.50	28	.52	30	.58	34
7	2.68	42	2.56	33	2.50	28	.44	24	.50	28	.56	34
8	2.68	42	2.56	33	2.55	30	.50	28	.52	30	.58	34
9	2.63	38	2.56	33	2.57	34	.48	27	.50	28	.58	34
10	2.68	42	2.56	33	2.57	34	.48	27	.52	30	.60	36
11	2.68	42	2.51	29	2.52	30	.48	27	.52	30	.60	36
12	2.68	42	2.51	29	.52	[illegible]	.45	24	.52	30	.60	36
13	2.57	34	2.50	28	.52	[illegible]	.50	28	.54	31	.58	34
14	2.56	33	2.50	28	.50	[illegible]	.50	28	.58	34	.58	34
15	2.58	34	2.48	27	.50	[illegible]	.50	28	.58	34	.58	34
16	2.59	35	2.42	22	.48	[illegible]	.48	27	.56	33	.60	36
17	2.57	34	2.48	27	.50	[illegible]	.48	27	.50	28	.60	36
18	2.58	34	2.50	28	.50	[illegible]	.50	28	.58	34	.60	36
19	2.58	34	2.52	30	.48	27	.50	28	.54	31	.60	36
20	2.60	36	2.55	32	.48	27	.50	28	.54	31	.58	34
21	2.61	37	2.50	28	.52	30	.48	27	.44	24	.58	34
22	2.60	36	2.50	28	.54	31	.47	26	.44	24	.60	36
23	2.59	35	2.50	28	.54	31	.48	27	.48	27	.54	31
24	2.58	34	2.51	29	.48	27	.50	28	.48	27	.56	33
25	2.58	34	2.52	30	.44	24	.48	27	.48	27	.56	33
26	2.58	34	2.55	32	.43	23	.48	27	.56	33	.59	35
27	2.58	34	2.55	32	.53	30	.52	28	.56	33	.54	31
28	2.59	35	2.55	32	.53	30	.48	27	.56	33	.54	31
29	2.60	36	2.55	32	.52	30	.60	36	.54	31	.58	34
30	2.60	36	2.55	32	.50	28	.50	28	.56	33	.58	34
31			2.55	32			.50	28	.60	36		
	1084		956		864		878		936		1,032	12,445
	36.1		30.8		28.8		28.2		30.2		34.4	34.1
	2,150		1,890		1,710		1,740		1,860		2,050	24,700
	42		36		34		36		36		39	44
	33		22		23		24		24		31	22
	B		B		B		B		B		B	

Provo River

Summary 1916.

Date	Total Diverted	To Lake	Total in Utah Valley	Discharge U.S.G. St.	Inflow Below Station.
4-21	249.35	**			
4-27	335.76	**			
5-3	503.97	**			
5-10	473.06	**			
5-18	473.22	162.85	636.07	595	41
5-26	527.42	114.22	641.64	607	35
6-24	565.34	165.50	730.84	630	101
7-3	457.85	00	457.85	377	81
7-5	442.80	00	442.80	353	90
7-10	423.69	0.50	424.19	336	88
7-25	390.41	0.50	390.91	294	97
8-2	362.93	2.50	365.43	276	89
8-14	358.54	00	358.54	272	87
8-26	372.91	2.25	375.16	282	93
9-8	364.09	0.50	364.59	269	96
9-22	386.91	5.00	391.91	309	83

Note:- Measurements below all diversions on river were made by wading, amounts marked thus ** are not known, discharge too great to measure by wading.

(Copy of Page 4 part 2 1916 report.)

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vs. — 2888 Civil

Provo City et al

Provo River

Tabulation of Flow and Distribution of Provo River for July 1916.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	Obsv. at USGS St.												
	River	Fork		[illegible]	Total [illegible] Valley		Storage & [illegible] Water		[illegible] Valley				
1	363	35		82	480				480				
2	346	35		83	464				464				
3	343	34		84	461				461				
4	312	34		85	431				431				
5	318	35		86	439				439				
6	315	35		86	436				436				
7	306	35		87	428				428				
8	309	35		88	432				432				
9	306	35		89	430				430				
10	306	30		90	426				426				
1	291	32		91	414				414				
2	285	32		92	409				409				
3	282	32		92	406		10		396				
4	285	32		93	410		10		400				
5	282	35		94	411		10		401				
6	282	35		95	412		10		402				
7	291	35		95	421		10		411				
8	282	35		96	413		10		403				
9	270	35		97	402		10		392				
20	256	35		97	388		10		378				
1	259	34		98	391		10		381				
2	262	32		98	392		10		382				
3	262	30		98	390		10		380				
4	259	32		98	389		10		379				
5	262	32		97	391		10		381				
6	262	32		96	390		10		380				
7	262	29		94	385		10		375				
8	309	29		93	431		10		421				
9	288	34		92	414				414				
30	268	30		91	389				389				
1	259	30		91	380				370				
Totals									12685				
max									480				
min									370				
Mean									409				
Total 267													

Computations made by .... Observations made by ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for August 1916.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	~~USRS~~ Stat.			Asylum Camp.	Salt Lake Valley.		Utah & Salt Lake		Provo River Utah Valley				
	River	Fork.											
1	259	28		90	377				377				
2	247	29		89	365				365				
3	250	29		89	368				368				
4	247	29		88	364				364				
5	282	30		88	400				400				
6	297	34		88	419				419				
7	270	32		87	389				389				
8	270	32		87	389				389				
9	253	32		87	372				372				
10	247	32		87	366				366				
11	245	32		87	364				364				
12	245	32		86	363				363				
13	253	35		87	375				375				
14	237	35		87	359				359				
15	234	35		87	356				356				
16	242	37		87	366				366				
17	237	35		87	359				359				
18	226	35		88	349				349				
19	221	35		88	343				343				
20	213	35		89	337				337				
21	210	37		89	336				336				
22	208	35		90	333				333				
23	221	36		91	348		10		338				
24	226	36		92	354		20		334				
25	247	37		93	377		30		347				
26	245	37		93	375		30		345				
27	229	37		94	360		30		330				
28	237	35		95	367		30		337				
29	240	35		95	370		40		330				
30	245	35		96	376		50		326				
31	270	35		96	401		50		351				
Total									11084				
Max.									419				
Min									326				
Mean									358				

Total 26

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and Distribution of Provo River for Provo River September 1916.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	USGS Stat.			Orpheum Circuit			&						
	River	Frk.			Utah Valley		Strawberry Aqueduct		Provo River Utah Valley				
1	272	35		96	403		45		358				
2	253	35		96	384		45		339				
3	253	35		96	384		45		339				
4	245	35		96	376		45		331				
5	247	35		96	378		45		333				
6	247	35		96	378		45		333				
7	250	35		96	381		40		341				
8	242	37		96	375		40		335				
9	265	37		95	397		40		357				
10	333	38		95	466		40		426				
1	306	37		94	437		40		397				
2	297	38		94	429		40		389				
3	279	38		93	410		40		370				
4	282	37		92	411		40		371				
5	285	39		91	415		40		375				
6	285	39		90	414		30		384				
7	285	38		89	417		30		387				
8	282	38		88	408		30		378				
9	294	38		87	419		30		389				
20	288	39		86	413		30		383				
1	276	38		84	398		30		365				
2	270	39		83	392		30		362				
3	291	39		82	412		20		392				
4	265	39		80	384		10		374				
5	270	39		78	387				387				
6	262	39		76	377				377				
7	253	38		74	365				365				
8	256	42		72	370				370				
9	245	37		70	352				352				
30	245	37		68	350				350				
total									11007				
max									426				
min									331				
mean									367				

Total 269

Computations made by .....

Observations made by .....

DEPARTMENT OF THE INTERIOR — UNITED STATES GEOLOGICAL SURVEY

Daily gage heights, in feet, and discharge in second-feet, of Provo River at Provo
J.F. Carter

OCT.		NOV.		DEC.		JAN.		FEB.		MAR.		APR.	
Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
*.52	232	*.48	219	.75	297	*.64	226	*.64	226	.81	315		
*.50	226	.44	211	*.78	306	.70	242	.77	262	*.83	321		
*.50	226	*.51	229	.80	312	*.69	239	*.82	276	.69	279		
*.50	226	.44	211	*.81	315	.79	268	.86	288	*.83	321		
.52	232	*.48	219	.86	331	*.77	262	*.84	282	1.59	589		
*.52	232	.45	213	*.82	318	.74	253	.86	288	*1.56	578		
.57	245	.61	256	.79	309	*.74	253	*.87	291	1.27	471		
*.57	245	*.57	245	*.76	300	.69 (288)	240	.87	291	*1.00	377		
.55	240	.51	229	.76	300	*.90	300	*.83	279	1.16	432		
*.54	237	*.59	250	*.76	300	.90	300	.84	282	*1.36	504		
.54	237	.56	242	.78	306	*.74	253	*.83	279	1.48	548		
*.57	245	*.57	245	*.74	294	.60	216	.83	278	*1.49	552		
.57	245	.54	237	.73	291	*.84	282	*.74	253	1.55	574		
*.58	248	*.57	245	*.76	300	.80	270	.78	264	*1.51	559		
.58	248	.68	276	.82	318	*.77	262	*.75	256	1.42	525		
*.57	245	*.70	282	*.74	294	.81	273	.75	256	*1.29	478		
.62	259	.70	282	.68	276	*.71	245	*.74	253	1.68	624		
*.58	248	*.76	300	*.62	259	*.64	226	.69	240	*1.86	697		
.59	250	.78	306	.50	226	.74	253	*.75	256	1.94	730		
*.57	245	*.82	318	*.62	259	*.76	253	.75	256	*2.42	931		
.56	242	.85	328	.78	306	.78	264	*.75	256	4.40	1820		
*.54	237	*.83	321	*.76	300	*.93	309	.78	264	*2.90	1140		
.55	240	.80	312	.86	331	.78	264	*.78	264	2.66	1034		
*.52	232	*.78	306	*.86	331	*.85	285	.78	264	*2.40	923		
.56	242	.76	300	.68	276	.83	279	*.79	267	1.88	705		
*.56	242	*.81	315	*.69	279	*.81	273	.81	273	*1.79	668		
.54	237	.81	315	.60	253	.67	234	*.89	297	1.72	640		
*.56	242	*.64	265	*.63	262	*.59	213	.91	303	*1.91	717		
.48	221	.69	279	.70	282	.78	264	*.89	297	1.72	640		
*.46	215	*.81	315	*.63	262	*.68	237			*1.63	605		
.44	211			.60	253	.72	248			1.44	533		
	7,372		8,071		9,046		7,992		7,842		19,830		
	238		269		292		258		270		640		
	14,600		16,000		18,000		15,900		15,500		39,400		
	259		328		331		309		303		1820		
	211		211		226		213		226		279		

River stage slightly affected by ice during January and February. Use correction of -.14 to Std. Curve. CCJ 8/18/36

* These gage heights were computed from lower gage record.

…EOLOGICAL SURVEY — WATER RESOURCES BRANCH

…Forks, Utah for the year ending Sept. 30, 1916

…below No. Fk.

…SHED RECORDS … TO REVISION

Day	Apr. Gage height	Apr. Discharge	May Gage height	May Discharge	June Gage height	June Discharge	July Gage height	July Discharge	Aug. Gage height	Aug. Discharge	Sept. Gage height	Sept. Discharge	
1	*1.46	540	2.38	915	2.48	957	.96	363	.62	259	.67	272	
2	1.62	601	2.14	814	2.62	1017	.91	346	.58	247	.60	253	
3	*1.83	684	2.08	789	2.26	864	.90	343	.59	250	.60	253	
4	1.71	636	2.08	789	2.26	864	.80	312	.58	247	.57	245	
5	*1.63	605	2.34	898	2.60	1008	.82	318	.70	282	.58	247	
6	1.50	555	2.62	1017	2.94	1158	.81	315	.75	297	.58	247	
7	*1.39	514	2.76	1078	2.92	1149	.78	306	.66	270	.59	250	
8	1.42	525	3.08	1221	2.76	1078	.79	309	.66	270	.56	242	
9	*1.48	547	3.14	1248	2.82	1105	.78	306	.60	253	.64	265	
10	1.66	616	3.22	1284	2.98	1176	.78	306	.58	247	.78	337	
11	*1.91	717	2.98	1176	2.93	1154	.73	291	.57	245	.73	306	
12	2.24	856	2.78	1087	2.82	1105	.71	285	.57	245	.75	297	
13	*1.89	709	2.58	999	2.64	1026	.70	282	.60	253	.69	279	
14	1.86	697	2.30	881	2.68	1043	.71	285	.54	237	.70	282	
15	*1.89	709	2.14	814	2.66	1035	.70	282	.53	234	.71	285	
16	2.07	784	1.84	688	2.48	956	.70	282	.56	242	.71	285	
17	*2.22	847	1.64	609	2.52	974	.73	291	.54	237	.71	285	
18	2.28	873	1.50	555	2.34	898	.70	282	.50	226	.70	282	
19	*2.24	856	1.47	544	2.28	873	.66	270	.48	221	.74	294	
20	1.98	747	1.62	601	2.26	864	.61	256	.45	213	.72	288	
21	*1.89	709	1.56	578	2.16	822	.62	259	.44	210	.68	276	
22	1.74	648	1.56	578	2.08	789	.63	262	.43	208	.66	270	
23	*1.75	652	1.68	624	1.80	672	.63	262	.48	221	.73	291	
24	1.92	721	1.70	632	1.60	593	.62	259	.50	226	.64	265	
25	*2.10	797	1.62	601	1.52	563	.63	262	.58	247	.66	270	
26	2.42	931	1.54	570	1.42	525	.63	262	.57	245	.63	262	
27	*2.48	956	1.42	525	1.17	436	.63	262	.51	229	.60	253	
28	2.74	1070	1.37	507	1.07	401	.79	309	.54	237	.61	256	
29	*2.91	1144	1.59	589	1.14	425	.72	288	.55	240	.57	245	
30	2.68	1043	1.81	676	.96	363	.65	268	.57	245	.57	245	
31			2.26	839			.62	259	.66	270			
Total		22,289		24726		25,893		8982		7552		8127	157,723
Mean		743		798		863		290		244		271	431
Acre-feet		44,200		49,100		51,400		17,800		15,000		16,100	313,000
Maximum		1144		1284		1176		363		297		337	1820
Minimum		514		507		363		256		208		242	208

WED WED WED
JJS JJS JJS
8/18/16 8/18/16 8/18/16

CCJ CCJ CCJ CCJ
WED WED JJS
8/18/16 8/18/16 8/18/16

RC RC RC CCJ
CCJ CCJ CCJ CCJ
8/18/16 8/18/16 8/18/16 8/18/16

DEPARTMENT OF THE INTERIOR — UNITED STATES GEOLOGICAL SURVEY

Daily gage height, in feet, and discharge, in second-feet, of SO. FK. PROVO

Drainage area — Gage no. — FRANK DUSENBERRY

UNPUBLISHED PRELIMINARY DATA SUBJECT TO REVISION

Day	Oct. Gage height	Oct. Discharge	Nov. Gage height	Nov. Discharge	Dec. Gage height	Dec. Discharge	Jan. Gage height	Jan. Discharge	Feb. Gage height	Feb. Discharge	Mar. Gage height	Mar. Discharge
1	.58	34	.56	33	.60	36	.58	34	.54	30	.50	28
2	.58	34	.56	33	.60	36	.58	34	.54	30	.50	28
3	.60	36	.56	33	.60	36	.58	34	.54	30	.50	28
4	.60	36	.56	33	.58	34	.58	34	.54	30	.55	31
5	.60	36	.56	33	.60	36	.58	34	.53	30	.56	32
6	.60	36	.56	33	.59	35	.57	33	.53	30	.54	30
7	.60	36	.60	36	.60	36	.57	33	.52	29	.54	30
8	.60	36	.60	36	.59	35	.57	33	.51	28	.52	29
9	.60	36	.60	36	.59	35	.58	34	.50	28	.52	29
10	.60	36	.60	36	.58	34	.58	34	.50	28	.52	29
11	.54	31	.58	34	.58	34	.58	34	.51	28	.53	30
12	.55	32	.58	34	.68	34	.58	34	.51	28	.53	30
13	.54	31	.58	34	.58	34	.58	34	.50	28	.54	30
14	.54	31	.56	33	.58	34	.58	34	.50	28	.52	29
15	.54	31	.60	36	.60	36	.58	34	.50	28	.52	29
16	.54	31	.60	36	.58	34	.58	34	.50	28	.52	29
17	.57	34	.60	36	.58	34	.58	34	.50	28	.52	29
18	.58	34	.60	36	.57	34	.58	34	.50	28	.52	29
19	.58	34	.60	36	.57	34	.58	34	.50	28	.53	30
20	.58	34	.60	36	.58	34	.58	34	.50	28	.54	30
21	.56	34	.60	36	.58	34	.58	34	.50	28	.14	46
22	.57	34	.60	36	.58	34	.58	34	.50	28	.68	42
23	.58	34	.60	36	.58	34	.58	34	.50	28	.68	42
24	.56	33	.60	36	.58	34	.56	32	.50	28	.66	40
25	.55	32	.60	36	.58	34	.56	32	.50	28	.66	40
26	.55	32	.60	36	.58	34	.56	32	.50	28	.66	40
27	.56	33	.60	36	.57	34	.56	32	.52	29	.66	40
28	.56	33	.60	36	.57	34	.55	31	.50	28	.62	37
29	.54	31	.60	36	.57	34	.56	32	.50	28	.60	35
30	.55	32	.60	36	.56	33	.56	32			.60	35
31	.55	32			.57	34	.55	31			.58	34
Total	1039		1053		1068		1035		826		1020	
Mean	33.5		35.1		34.5		33.3		28.5		32.9	
Acre-feet	2,060		2,090		2,120		2,050		1,640		2,020	
Max.	36		36		36		34		30		46	
Min.	31		33		33		31		28		28	

...GEOLOGICAL SURVEY — WATER RESOURCES BRANCH

...FORKS, UT. ...for the year ending Sept. 30, 1916

...ISHED RECORDS
...TO REVISION, APR.

Day	Apr. Gage height	Apr. Discharge	May Gage height	May Discharge	June Gage height	June Discharge	July Gage height	July Discharge	Aug. Gage height	Aug. Discharge	Sept. Gage height	Sept. Discharge
1		34	.70	44	.50	28	.60	35	.50	28	.60	35
2	.58	34	.70	44	.50	28	.60	35	.52	29	.60	35
3	.58	34	.70	44	.56	33	.58	34	.52	29	.60	35
4	.58	34	.68	42	.50	28	.58	34	.52	29	.60	35
5	.60	35	.68	42	.68	42	.60	35	.54	30	.60	35
6	.58	34	.70	44	.72	46	.60	35	.58	34	.60	35
7	.58	34	.70	44	.70	44	.60	35	.56	32	.60	35
8	.58	34	.70	44	.70	44	.60	35	.56	32	.62	37
9	.60	35	.72	46	.70	44	.60	35	.56	32	.62	37
10	.60	35	.74	48	.70	44	.54	30	.56	32	.63	38
11	.64	39	.74	48	.70	44	.56	32	.56	32	.62	37
12	.64	39	.76	50	.66	40	.56	32	.56	32	.63	38
13	.65	40	.76	50	.66	40	.56	32	.60	35	.63	38
14	.64	39	.74	48	.66	40	.56	32	.60	35	.62	37
15	.63	38	.74	48	.66	40	.60	35	.60	35	.64	39
16	.70	44	.68	42	.66	40	.60	35	.62	37	.64	39
17	.69	43	.68	42	.66	40	.60	35	.60	35	.63	38
18	.69	43	.66	40	.64	39	.60	35	.60	35	.63	38
19	.68	42	.66	40	.64	39	.60	35	.60	35	.63	38
20	.68	42	.64	39	.64	39	.60	35	.60	35	.64	39
21	.68	42	.63	38	.64	39	.58	34	.62	37	.63	38
22	.68	42	.62	37	.64	39	.56	32	.60	35	.64	39
23	.64	39	.62	37	.62	37	.54	30	.61	36	.64	39
24	.64	39	.62	37	.62	37	.56	32	.61	36	.64	39
25	.66	40	.62	37	.62	37	.56	32	.62	37	.64	39
26	.70	44	.62	37	.62	37	.56	32	.62	37	.64	39
27	.70	44	.62	37	.60	35	.52	29	.62	37	.63	38
28	.74	48	.58	34	.60	35	.52	29	.60	35	.68	42
29	.74	48	.46	24	.60	35	.58	34	.60	35	.62	37
30	.72	46	.50	28	.60	35	.54	30	.60	35	.62	37
31			.50	28			.54	30	.60	35		

	Apr.	May	June	July	Aug.	Sept.	Year
Total	1184	1263	1148	1025	1048	1125	12830
Mean	39.5	40.7	38.3	33.1	33.8	37.5	35.1
Run-off	2,350	2,500	2,280	2,040	2080	2230	25,500
Maximum	48	50	46	35	37	42	50
Minimum	34	24	28	29	28	35	24

Remarks: Bud ... J.J.S. J.J.S. — 8/18/16 — ; Bud ccd ccd ccd ccd ccd — 8/18/16 ; RC RC RC ccd RC ccd ccd — 8/18/16 —

Summary Utah Valley

1917.

Date.	Total Diverted.	To Lake	Total in Utah Valley	Total at U.S.G.S.St.	Inflow.
7-16	515.26	4.00	519.26	416	103
7-19	468.71	4.00	472.71	364	109
7-23	418.62	00	418.62	306	113
7-26	417.82	00	417.82	320	98
8-6	404.67	7.00	411.67	322	90
8-9			394.32	320	74
8-15			400.29	320	80
8-22	404.28	5.50	409.78	305	105
8-29			419.87	320	100
9-15	423.64	28.80	452.44	367	85.

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Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Discharge at U.S.G.S. Station.

Tabulation of Flow and Distribution of Provo River for April, May, June 1917

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
		April.				May.				June			
		River	Fork	Total		River	Fork	Total		River	Fork	Total	
1		487	29	516		720	36	756		1020	44	1064	
2		487	29	516		934	40	974		979	44	1023	
3		399	29	428		762	38	800		979	44	1023	
4		333	29	362		762	38	800		1070	46	1116	
5		382	29	411		720	38	758		1180	44	1224	
6		434	29	463		679	38	717		1120	44	1164	
7		524	29	553		720	38	758		1120	44	1164	
8		600	29	629		762	38	800		1240	44	1284	
9		804	31	835		762	38	800		1360	44	1404	
10		762	31	793		804	38	842		1670	64	1734	
1		762	31	793		890	40	930		2090	64	2154	
2		847	31	878		934	40	974		1670	52	1722	
3		847	31	878		1020	44	1064		1480	51	1531	
4		890	31	921		1240	44	1284		1360	46	1406	
5		804	31	835		1540	66	1606		1600	44	1644	
6		639	31	670		1810	72	1882		1950	46	1996	
7		600	31	631		1810	72	1882		2090	46	2136	
8		562	31	593		1740	72	1812		2300	59	2359	
9		562	31	593		1740	72	1812		2450	59	2509	
20		543	31	574		1740	72	1812		2300	56	2356	
1		679	31	710		1670	69	1739		2230	54	2284	
2		890	31	921		1240	59	1299		2230	49	2279	
3		1020	31	1051		1240	56	1296		2160	44	2204	
4		1120	32	1152		1240	56	1296		2160	34	2194	
5		1300	34	1334		1180	42	1222		2020	28	2048	
6		1420	40	1460		1070	42	1112		1880	28	1908	
7		1240	44	1284		1120	51	1171		1740	28	1768	
8		979	40	1019		1020	51	1071		1540	36	1576	
9		804	38	842		1020	46	1066		1480	34	1514	
30		720	36	756		1120	44	1164		1420	42	1462	
1						1070	44	1114					

Total 273

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for July 1917.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	U.S.G.S. Station												
	River	Fork		Inflow Chrwe		Total Provo Mid Valley		18 Springs & Tunnel, etc		Natural River Mid Valley			
1	1360	42		90		1492							
2	1240	42		91		1373							
3	1120	44		92		1256							
4	1070	40		93		1203							
5	934	34		94		1062							
6	934	26		95		1055							
7	890	26		96		1012							
8	1020	26		97		1143							
9	890	36		98		1024							
10	762	36		99		897							
1	679	36		100		809							
2	600	36		101		737							
3	506	36		102		644							
4	451	36		103		590							
5	399	34		104		537							
6	382	34		105		521							
7	366	34		106		506							
8	349	32		107		488							
9	333	31		108		472							
20	317	31		109		457							
1	286	32		110		428							
2	286	32		111		429							
3	286	20		112		418							
4	286	23		107		416							
5	286	28		102		416							
6	286	34		98		418							
7	302	34		96		432							
8	286	38		94		418							
9	333	38		93		464							
30	434	49		91		574							
1	469	36		91		596							
Total						22287							
Max						1492							
Min						416							
Mean						719							
Total 274													

Computations made by ....

Observations made by ....

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Provo River

Tabulation of Flow and Distribution of Provo River for August 1917.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	USGS Station			Deer Creek		Provo Valley		Provo River Drainage		Provo River			
	River	Fork											
1	399	36		90		525				525			
2	366	36		90		492				492			
3	317	36		90		443				443			
4	286	36		90		412				412			
5	286	34		90		410				410			
6	286	36		90		412				412			
7	286	36		90		412				412			
8	256	34		91		381				381			
9	286	34		92		412				412			
10	286	34		92		412				412			
1	286	34		93		413				413			
2	286	34		94		414		10		404			
3	286	36		95		417		10		407			
4	286	34		96		416		10		406			
5	286	34		97		417		10		407			
6	286	36		98		420		10		410			
7	286	36		99		421		10		411			
8	286	36		100		422		10		412			
9	286	38		101		425		10		415			
10	286	36		103		425		10		415			
1	286	34		104		424		10		414			
2	271	34		105		410		10		400			
3	271	34		104		409		10		399			
4	271	32		104		407		10		397			
5	271	32		103		406	~~12~~	10		396			
6	256	34		102		392	~~00~~	00		392			
7	256	34		101		391	~~00~~	00		391			
8	286	34		100		420	~~30~~	30		390			
9	286	34		100		420	~~30~~	30		390			
30	286	34		99		419	~~30~~	30		389			
1	286	34		98		418	~~30~~	30		388			
Total										12757			
Max										525			
Min										388			
Mean										412			

Total 275

Computations made by .....

Observations made by .....

Provo Reservoir Co.
vs.
Provo City et al } **2888 Civil**

Tabulation of Flow and Distribution of Provo River for Provo River September 1917.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	U.S.G.S. Station River	Enk.		Inflow Reservoir		Total use Valley		Storage & Diversions		Natural River [illegible]			
1	286	34		97		417		40		377			
2	256	34		96		386		40		346			
3	271	34		95		400		40		360			
4	271	34		94		399		40		359			
5	271	34		94		399		45		354			
6	302	38		93		433		50		383			
7	366	38		92		496		50		446			
8	333	34		91		458		50		408			
9	317	34		90		441		50		391			
10	317	34		89		440		50		390			
1	366	36		88		490		50		440			
2	382	34		87		503		50		453			
3	333	34		86		453		50		403			
4	333	34		86		453		50		403			
5	333	34		85		452		50		402			
6	333	34		84		451		40		411			
7	333	34		83		450		40		410			
8	333	36		82		451		40		411			
9	333	34		81		448		40		408			
20	333	34		80		447		40		407			
1	317	34		79		430		40		390			
2	317	34		78		429		40		389			
3	349	36		77		462		30		432			
4	382	36		76		494		30		464			
5	382	34		75		491		30		461			
6	382	34		74		490		25		465			
7	366	34		73		473		20		453			
8	366	34		72		472		15		457			
9	349	34		71		454		15		439			
30	349	34		70		453		10		443			
Total										12355			
Max										465			
Min										346			
Mean										412			

Total 276

Computations made by .... Observations made by ....

9-192-a

DEPARTMENT OF THE INTERIOR — UNITED STATES GEOLOGICAL SURVEY

Daily gage height, in feet, and discharge, in second-feet, of PROVO River at Provo, Utah

Drainage area — square miles.

J. F. CARTER

Day	OCT. Gage height	OCT. Discharge	NOV. Gage height	NOV. Discharge	DEC. Gage height	DEC. Discharge	JAN. Gage height	JAN. Discharge	FEB. Gage height	FEB. Discharge	MAR. Gage height	MAR. Discharge
1	1.2	451	.9	349	0.85	333	0.85	271	.75	271	.7	286
2	1.1	416	.85	333	.85	333	.7	271	.8	271	.6	256
3	1.4	524	.85	333	.8	317	.7	286	1.05	286	.6	256
4	1.2	451	.85	333	.9	349	.75	302	.7	286	.65	271
5	1.1	416	.85	333	.9	349	.75	302	.7	286	.7	286
6	1.0	382	.85	333	.95	366	.75	302	.7	286	.7	286
7	1.2	451	.85	333	.75	302	.7	286	.6	256	.55	242
8	1.1	416	.8	317	.65	271	.9	286	.7	256	.7	286
9	1.0	382	.85	333	.65	271	1.3	286	.8	256	.7	286
10	1.0	382	.85	333	.75	302	1.35	302	.6	256	.7	286
11	1.25	469	.85	333	.7	286	1.15	302	.75	256	.6	256
12	1.1	416	.75	302	.8	317	.75	302	.6	256	.5	227
13	1.05	399	.65	271	.85	333	.8	317	.65	271	.6	256
14	1.05	399	.6	256	.8	317	.85	333	.6	256	.7	286
15	1.1	416	.7	286	.7	286	.65	271	.55	242	.7	286
16	1.05	399	.8	317	.7	286	.8	271	.65	[illegible]	.6	256
17	1.05	399	.85	333	.7	286	.9	256	.7	[illegible]	.6	256
18	1.0	382	.85	333	.85	333	.85	256	[illegible]	[illegible]	.5	227
19	1.05	399	.85	333	.8	317	.8	271	[illegible]	[illegible]	.7	286
20	1.0	382	.85	333	.85	333	1.45	286	.6	[illegible]	.65	271
21	1.0	382	.8	317	.8	317	1.7	286	.65	[illegible]	.65	271
22	1.0	382	.8	317	.75	302	1.05	286	.7	[illegible]	.6	256
23	.95	366	.85	333	.8	317	1.0	271	.7	[illegible]	.65	271
24	.95	366	.8	317	.85	333	.65	271	.8	[illegible]	.65	271
25	.9	349	.75	302	.85	333	.65	271	.8	[illegible]	.75	302
26	.95	366	.85	333	.75	302	.65	271	1.2	451	.8	317
27	.95	366	.75	302	.65	271	.6	256	1.0	382	.8	317
28	.95	366	.8	317	.6	256	.65	271	.7	286	.9	349
29	1.0	382	.7	286	1.1	286	.75	302			1.2	451
30	1.0	382	.7	286	1.15	256	.75	302			2.2	847
31	1.0	382			[illegible]	256	.75	286			1.6	600
Total		12,420		9537		9486		8,831		6811		9,600
Mean		401		318		306		285		281		310
Sec. ft. per square mile												
Run-off, depth in inches												
Run-off in acre feet		24,700		18,900		18,800		17,500		13,500		19,100
Maximum		524		349		366		333		451		847
Minimum		349		256		256		256		242		227
Accuracy												

NOTE. — MAX. STAGE 4.8 AT 7AM JUNE 19 (DISCHARGE 2,450 SECOND-FEET)

S GEOLOGICAL SURVEY — WATER RESOURCES BRANCH

FORKS, UTAH for the year ending Sept. 30, 1917

Table of daily discharge 0.5 to 1.5

Feet to HUNDREDTHS

4/28/17

	APR.		MAY		JUNE		JULY		AUG.		SEPT		
	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge	Gage Height	Discharge	
1	1.3	487	1.9	720	2.6	1,020	3.2	1,360	1.05	399	0.7	286	
2	1.3	487	2.4	934	2.5	979	3.0	1,240	.95	366	.6	256	
3	1.05	399	2.0	762	2.5	979	2.8	1,120	.8	317	.65	271	
4	.85	333	2.0	762	2.7	1,070	2.7	1070	.7	286	.65	271	
5	1.0	382	1.9	720	2.9	1,180	2.4	934	.7	286	.65	271	
6	1.15	434	1.8	679	2.8	1,120	2.4	934	.7	286	.75	302	
7	1.4	524	1.9	720	2.8	1,120	2.3	890	.7	286	.95	366	
8	1.6	600	2.0	762	3.0	1,240	2.6	1,020	.6	256	.85	333	
9	2.1	804	2.0	762	3.2	1,360	2.3	890	.7	286	.8	317	
10	2.0	762	2.1	804	3.7	1,670	2.0	762	.7	286	.8	317	
11	2.0	762	2.3	890	4.3	2,090	1.8	679	.7	286	.95	366	
12	2.2	847	2.4	934	3.7	1,670	1.6	600	.7	286	1.0	382	
13	2.2	847	2.6	1,020	3.4	1,480	1.35	506	.7	286	.85	333	
14	2.3	890	3.0	1240	3.2	1,360	1.2	451	.7	286	.85	333	
15	2.1	804	3.5	1,540	3.6	1,600	1.05	399	.7	286	.85	333	
16	1.7	639	3.9	1,810	4.1	1,430	1.0	382	.7	286	.85	333	
17	1.6	600	3.9	1870	4.3	2,090	.95	366	.7	286	.85	333	
18	1.5	562	3.8	1740	4.6	2,300	.9	349	.7	286	.85	333	
19	1.5	562	3.8	1740	4.8	2,450	.85	333	.7	286	.85	333	
20	1.45	543	3.8	1,740	4.4	2,300	.8	317	.7	286	.85	333	
21	1.8	679	3.7	1,670	4.5	2,230	.7	286	.7	286	.8	317	
22	2.3	890	3.0	1,240	4.5	2,230	.7	286	.65	271	.8	317	
23	2.6	1,020	3.0	1,240	4.4	2,160	.7	286	.65	271	.9	349	
24	2.8	1,120	3.0	1,240	4.4	2,160	.7	286	.65	271	1.0	382	
25	3.1	1,300	2.9	1,180	4.2	2,020	.7	286	.65	271	1.0	382	
26	3.3	1,420	2.7	1,070	4.0	1,880	.7	286	.6	256	1.0	382	
27	3.0	1,240	2.8	1,120	3.8	1,740	.75	302	.6	256	.95	366	
28	2.5	979	2.6	1,020	3.5	1,540	.7	286	.7	286	.95	366	
29	2.1	804	2.6	1,020	3.4	1,480	.85	333	.7	286	.9	349	
30	1.9	720	2.8	1,120	3.3	1,420	1.15	434	.7	286	.9	349	
31			2.7	1,070			1.25	469	.7	286			
		22,440		35,079		49,888		18,142		8940		9961	202,206
		748		1,130		1,660		585		288		332	554
		44,500		69,500		98,800		36,000		17700		19800	401,000
		420		1,810		2,450		1,360		399		382	2,450
		333		679		979		286		256		256	227

9 192-a

Daily gage height, in feet, and discharge, in second-feet, of So. Fork Provo

Frank Dusenberry

Day	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge
1	0.62	57	0.68	71	0.60	54	0.60					
	.59	43	68	71	.62	56						
	.60	47	68	71	.60	54						
	.63	53	68	71	.60	54						
	.62	52	66	70	.62	56						
	.61	52	66	70	.61	54						
	.60	49	67	71	.60	54						
	.61	50	66	70	.60	54						
	.59	43	65	69	.60	54						
	.61	49	65	69	.60	54						
11	.60	47	64	68	.60	54						
	.61	49	64	68	.60	54						
	.62	51	62	66	.58	52						
	.63	53	62	66	.60	54						
	.63	53	62	66	.60	54						
	.62	51	63	67	.60	54						
	.62	51	63	67	.60	54						
	.61	49	63	67	.60	54						
	.60	47	62	66	.60	54						
	.60	47	61	65	.60	54						
	.60	47	61	65	.60	54						
	.60	47	60	64	.60	54						
	.60	47	60	64								
27	.60	47	60	64								
28	.60	47	60	64								
29	.60	47										
30	.60	47										
31	.60	47										
TOTAL		1323		1771		1620						
Mean		42.7		57.1		54.0						
Sec.-ft. per square mile												
Run-off, depth in inches												
Run-off in acre-feet												
Maximum												
Minimum												
Accuracy												

GEOLOGICAL SURVEY — WATER RESOURCES BRANCH

UNITED STATES GEOLOGICAL SURVEY

River FCR

Creek near

FCRKS

for the year ending Sept. 30, 19 57

HUNDREDTHS

	MAR	APR	MAY	JUNE	JULY	AUG	SEPT
1						36	60
2						36	60
3						36	60
4						34	60
5						36	64
6						36	64
7						34	60
8						34	60
9						34	60
10						34	60
11						34	60
12						36	62
13						36	60
14						34	60
15						34	60
16						36	60
17						36	60
18						36	62
19						38	60
20						36	60
21						34	60
22						34	60
23						34	60
24						34	60
25						36	62
26						32	62
27						32	60
28						34	60
29						34	60
30						34	60
31						34	60
					1076	1036	
					34.7	34.5	
				710			
				64	2130	2050	
				28	33	33	
						34	

LOGICAL SURVEY — WATER RESOURCES BRANCH

RKS — for the year ending Sept. 30, 1917

HUNDREDTHS

11/13/17

APR.		MAY		JUNE		JULY		AUG.		SEPT.		
	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	Gage height	Discharge	
1						2.68			.36	0.60	.34	
2						.68			.36	.60	.34	
3						.70		.62	.36	.60	.34	
4						.66		.62	.36	.60	.34	
5						.60		.60	.34	.60	.34	
6						.50		.62	.36	.64	.38	
7						.50		.62	.36	.64	.38	
8						.50		.60	.34	.60	.34	
9						.62		.60	.34	.60	.34	
10					.61	.62		.60	.34	.60	.34	
11					.64	.62		.60	.34	.62	.36	
12					.56	.62		.60	.34	.60	.34	
13						.62		.62	.36	.60	.34	
14						.62		.60	.34	.60	.34	
15						.60		.60	.34	.60	.34	
16						.60		.62	.36	.60	.34	
17						.60		.62	.36	.60	.34	
18						.60		.62	.36	.62	.36	
19						.60		.64	.38	.60	.34	
20						.60		.62	.36	.60	.34	
21						.58		.60	.34	.60	.34	
22						.58		.60	.34	.60	.34	
23						.58		.58	.32	.62	.36	
24						.58		.58	.32	.60	.34	
25						.60		.60	.34	.60	.34	
26						.60		.60	.34	.60	.34	
27						.60		.60	.34	.60	.34	
28						.60		.60	.34	.60	.34	
29						.60		.60	.34	.60	.34	
30						.60		.60	.34			
31												
				1.66		1076		1,076		1,036		13,287
				55		241		347		345		364
				710		2,130		2,130		2,050		26,400
				64		39		33		33		72
				28		20		34		34		20

Provo,Utah,Nov.9,1918.

Provo Reservoir Company.

Provo,Utah.

Gentlemen:

In reply to your verbal request for the amounts of water diverted from the Olmstead flume to supply your canal during the past season,I submit the following ;

August 4, 12. c.f.s reduced to 2. c.f.s.
August 7, 2. c.f.s.
August 16, raised to 7. c.fs. on account increased storage.
August 24, reduced to 4. c.f.s.

Provo Reservoir Company Storage and Tunnel Water on above Dates;

Aug. 4, 33.00 c.f.s.
Aug. 7, 33.00 c.f.s.
Aug. 16, 20.00 c.f.s
Aug. 18, 23.00 c.f.s
Aug. 24, 23.00 c.f.s.
Provo Reservoir Co. Blue Cliff Water; and
Provo Reservoir Co. Wright Estate Water, and John D.Dixon Wright of 2.50 c.f.s. an award of 7.50 c.fs. the following is proportion of canyon flow they recieved;

	Total	Blue Cliff.	Wright & Dixon.
Aug. 4,	40.3 c.f.s.	35.00	5.3
Aug. 7,	41.67 c.f.s.	36.24	5.43
Aug. 16,	40.3 c.f.s.	35.00	5.30
Aug. 24,	36.8 c.f.s.	32.00	4.80

(Dates not on observations are calculated from discharge at Gageing Station.)

Resp. Submitted,

T. F. Wentz

Commissioner.

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SUMMARY OF TOTAL MEASUREMENTS

UTAH VALLEY AND PROVO CANYON

SHOWING INFLOW IN CANYON AND VALLEY.

xxxxxxxxxx
1918
xxxxxxxxxx

	U.S.G.S. Station. River	Fork	Total	Storage & Tunnel	Natural River U.S.G.S.	Total Utah Valley	Total Inflow	Disch. Mouth Canyon	Inflow in Canyon	Inflow in Valley.
July 15,	300	40	340	44	296	388.46	48.46	347.71	7.71	40.75
Juky 23,	253	34	287	39	248	336.49	49.49	308.98	21.98	27.51
July 31	186	28	214	39	175	291.63	77.63	257.57	43.57	34.06
Aug. 7,	192	31	223	39	184	297.64	74.64	263.60	40.60	34.04
Aug. 15,	180	28	208	26	182	298.00	90.00	249.14	41.14	48.86
Aug. 23,	163.~~22~~	23	186	29	157	267.21	81.21	231.06	45.06	36.15
Sept. 6,	169	29	198	29	169	278.04	80.04	234.30	36.30	43.74

Discharge Mouth of Canyon.

Date.	Olmstead Flume	Provo Reservoir Canal	Timpanogus Canal.	By Timpanogus Dam.	Total
July 15,	203.52	130.44	10.75	3.00	347.71
July 23	193.84	95.18	13.10	6.86	308.98
July 31,	180.00	60.02	15.80	1.75	257.57
Aug. 7,	187.64	65.16	10.50	0.30	263.60
Aug. 15,	180.29	56.10	12.00	0.75	249.14
Aug. 23,	162.79	54.38	12.64	1.25	231.06
Sept. 6,	165.26	55.77	12.27	1.00	234.30

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Measured inflows to Olmstead flume.

	July 17.	Aug. 2.
Lost Creek . . .	1.41	2.87
Bridal Veil Falls	3.61	3.59
U. Guard Quarters.	0.60	0.60
Totals.	5.62	7.06.

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Provo, Utah, Oct. 11, 1918.

Provo Reservoir Co.

Provo, Utah.

Gentlemen;

The foregoing is submitted in compliance with your application of the 4th. inst.

Resp.

T. F. Wentz

Commissioner.

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UTAH POWER & LIGHT COMPANY

KEARNS BUILDING

SALT LAKE CITY, UTAH

November 1, 1918.

Mr. T. F. Wentz, Water Commissioner,
Provo, Utah.

Dear Sir:

I have instructed Mr. Ripka to make a negative for you from our map UD-8757. This negative will replace the one damaged in an express shipment recently sent you. You are at liberty to use this negative to prepare prints for inclusion in your reports, as you recently requested.

Yours very truly,

MARKHAM CHEEVER, GEN'L SUPT. & CHIEF ENGINEER

HLS-H

BY - H. L. Stoner

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Provo,Utah, Nov.5,1918.

Utah Power & Light Co.

Salt Lake City, Utah.

Gentlemen;

I have your favor of the 1st. inst., and I am very grateful for your courtesy. I am making all haste possible to have report ready for next session of Court.

On account of limited time the Unit map of the Provo System has been a great help. I am sure the Court as well as myself will appreciate your attitude in this matter.

Yours Very Truly,

T. Howard

Commissioner.

28/a

RESPONSE FOR REQUEST FOR DATA.

Provo,Utah, Nov.18,1918.

Provo Reservoir Company.

Provo,Utah.

Gentlemen:

Complying with your request over telephone,of this date, for the quantities of water available in Provo Canyon for use of Provo Reservoir Company and Timpanogus Canal Company of waters arising in the Canyon Below the diversion dam of the Utah Power & Light Co. and waters that pass through and beneath the said dam,and also the quantity of water that has been diverted over the U.P.&.L.CO. dam and from flume to supplement the quantities to Provo Reservoir Canal and Timpanogus Canal. I submit an abstract of records.

Following this letter is copy of notes relative to information desired:

Resp.

D. F. Watt

Commissioner.

July 7,1913: Provo Reservoir Canal 75.cfs.
July 8,1913: Provo Reservoir Canal cut from 65.cfs. to 45.cfs.
July 11,1913 Provo Reservoir Canal 46 cfs.
Timpanogus Canal 13.60.
July 12,1913 Provo Reservoir Canal 44.51 cfs.
July 13,1913 " " " 49.02 cfs.
July 17,1913 " " " 44.66 cfs.
July 23,1913 " " " 54.84 cfs.
July 30,1913 " " " 55.43 cfs.

Aug.1,1913 Provo Reservoir Canal 47.00 cfs.,
Timpanogus Normal.
I arrange with Utah Power & L.Co. to turn 5 cfs. over dam.

Aug. 7,1913: Timpanogus Canal 6.43 cfs. gate has been dislodged.
~~Aug xx 5, 1913~~ Provo Reservoir Canal 49.50 cfs.
Aug. 8,1913. Timpanogus canal 8.92 cfs.
Aug. 20,1913. Provo Reservoir Canal 47.cfs. Plus.
Aug. 27,1913. Timpanogus Canal 7.99 cfs.,drift in gates removed.
Aug. 25,1913 Provo Reservoir Canal 47 cfs. Plus.

December 4,1913. Provo River at Donnon's Resort, about one-half mile below U.P.&.L.Co. Dam 74.36 c.f.s.
Provo River at Heiselt Bridge 78.29 c.f.s.
Provo River at U.S.G.S. Station ~~222~~ 285 c.f.s.

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July 8,1914: Provo Reservoir Canal 74. cfs.
Timpanogus Canal 29.00 c.fs.
July 18,1914: Provo Reservoir Canal 78.00 cfs.
Timpanogus Canal 20.76 cfs.
July 19,1914: Provo Reservoir Canal 69.30 cfs.
Timpanogys Canal 18.40 cfs.
July 22,1914: Provo Reservoir Canal 69.00 cfs.
Timpanogus Canal 17.80 cfs.
On July 20,1914,I turned down the river,past the Wasatch and Midway Dams 15 cfs. of tunnel and reservoir water for the Provo Reservoir Comapny,Since the highwater and until this date the Upper Midway Dam has been tight.

2810

July 10,1915: Provo Reservoir Canal 33.00 cfs.
Timpanogus Canal 10.80 cfs.
I raise gates of Timpanogus and ask Mr. Condor of U.P.&L.Co. to have turned over dam 4 cfs. to bring up Timpanogus.

July 12,1915: Provo Reservoir Canal 29.78 cfs.
Timpanogus Canal 11.60 cfs.
4:20 p.m. Condor reports 6 inches over weir at gate house = 6.95 cfs.

July 15,1915: Provo Reservoir Canal 34.92 cfs.
Timpanogus Canal 12.70 cfs.

July 20,1915: U.P.&.L Flume at Donnons Stat. 9:10 a.m. 4.82 gage H. 5.85 cfs. over U.P.&.LCo. Dam,at 9:25 a.m. turned this amount into flume,at 9:40 a.am. gage at Donnons stat. reads 4.85.

July 21,1915: At 6;45 am. ask U.P.&.L. to take 4 cfs more through flume.

July 22,1915: Provo Reservoir Canal 32.32 cfs.
Timpanogus Canal 12.70 cfs.

July 25,1915: Provo Reservoir Canal 31.50 cfs.
Timpanogus Canal 12.70 cfs.

July 26,1915: Provo Reservoir Canal 32.32 cfs.
Timpanogus Canal 12.70 cfs.

July 29,1915: Provo Reservoir Canal 24.74 cfs.
Timpanogus Canal 11.37 cfs.
At 6:30 p.m. called Mr. Fowler of U.P.& L. to turn 5 cfs. more over dam for Provo Reservoir Co. "We will turn it now."

July 31,1915: Provo Reservoir Canal 27. cfs. I phone Heiselt to turn in 2 cfs. more. I also phone U.P.&.L. to turn more water from flume to river.

Aug. 3,1915: Provo Reservoir Canal 35.02 cfs. About 6.cfs going over Timpanogus Dam. Go to U.P.&.L. Dam with Fowler, raise flume to G.H. at Donnons to 4.97 at 11:40 a.m.

Aug. 9,1915: Provo Reservoir Canal 31.20 cfs.
Timpanogus 11.60 cfs.

Aug. 11,1915: Provo Reservoir Canal 31.10 cfs.
Timpanogus Canal 12.04 cfs.

Aug.12,1915: Provo Reservoir Canal 30.10 cfs.
Advise Mr. Fowler ,Provo Reservoir Canal is 1.20 high.

Aug.15,1915: I phone Fowler of U.P.&.L. Co. to turn 5.cfs. more through flume in morning. Pratt phoned "Turned 5 cfs less from Reservoirs for Provo Reservoir Co."

Sept. 7,1915: Provo Reservoir Canal 16.87 cfs.
Timpanogus Canal 9.85 cfs.

Sept. 4,1915: I clear the Provo Reservoir Dam of top structure getting spill entire length of dam and lowering canal.

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July 3,1916: Provo Reservoir Canal 102.69 cfs.
Timpanogus Canal 19.50 cfs.

July 5,1916 Provo Reservoir Canal 99.60 cfs.
Timpanogus Canal 18.79 cfs.

July 10,1916: Provo Reservoir Canal 89.75 cfs.
Timpanogus Canal 17.36 cfs.

July 25,1916 Provo Reservoir Canal 67.83 cfs.
Timpanogus Canal 15.53 cfs.

Aug.2,1916: Provo Reservoir Canal 69.17 cfs.
Timpanogus Canal 16.27 cfs.

Aug. 14,1916: Provo Reservoir Canal 70.49 cfs.
Timpanogus Canal 15.89 cfs.

Aug. 23,1916 Turned from Wasatch County to Utah County 37.cfs. Midway Dam has been tight to this date, since highwater.

Aug. 26,1916: Provo Reservoir Canal 74.80 cfs.
Timpanogus Canal 12.13 cfs.

Sept.8,1916: Provo Reservoir Canal 83.27 cfs.
Timpanogus Canal 14.00 cfs.

2810 Sept.9,1916: Olmstead Flume Donnons 198.93 cfs.
U.S.G.S.Station 302 cfs.

July 25,1914: Provo Reservoir Canal 64.13 cfs.
Timpanogus Canal 20.00 cfs.
July 27,1914: Olmstead Flume at Donnons Station 227.83 cfs.
Olmstead Flume at Nunns Station 236.74 cfs.
River at U.S.G.S.Station 316 cfs.
July 28,1914: Provo Reservoir Canal 61 cfs.
Timpanogus Canal 21.80 cfs.
River at U.S.G.S Station 316 cfs.

Aug. 1,1914: Provo Reservoir Canal 76.50 cfs.
Timpanogus Canal 21.20 cfs.
Aug.3,1914: Provo Reservoir Canal 77.00 cfs.
Timpanogus Canal 20.40 cfs.
Aug. 6,1914: Provo Reservoir Canal 66.50 cfs.
Timpanogus Canal 18.00 cfs.
Aug.11,1914: Provo Reservoir Canal 66.50 cfs.
Timpanogus Canal 16.20 cfs.
Aug.12,1914; Provo Reservoir Canal 60.00 cfs.
Timpanogus Canal 18.00 cfs.
Aug.15,1914: Provo Reservoir Canal 54.50 cfs.
Timpanogus Canal 18.00 cfs.
Aug.19,1914: Provo Reservoir Canal 60.20 cfs.
Timpanogus Canal 16.40 cfs.
Aug.25,1914: Provo Reservoir Canal 64.75 cfs.
Timpanogus Canal 15.96 cfs.
Sept.1,1914: Provo Reservoir Canal 63.00 cfs.
Timpanogus Canal 17.40 cfs.
Sept.7,1914: Provo Reservoir Canal 41.17 cfs.
Timpanogus Canal 17.40 cfs.
Sept.10,1914: Provo Reservoir Canal 42.22 cfs.
Timpanogus 16. cfs.
Sept.12,1914: Provo Reservoir Canal 41.54 cfs.
Timpanogus Canal 15.39 cfs.

1914: No record of quantity of water passing Timpanogus Dam,and no record of any water being diverted over U.P.&.L.Co. dam or from Olmstead Flume.

Oct.19,1914: Olmstead Flume at Donnons 207.92 cfs.
U.S.G.S.Station 368 cfs.
Nov. 6,1914: Olmstead Flume at Donnons 212.06 cfs.
U.S.G.S.Station 324 cfs.
Nov. 9,1914: Olmstead Flume 220.33 cfs. (Donnons Station)
U.S.G.S.Station 324 cfs.

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July 2,1915: Provo Reservoir Canal 30.78 cfs.
Timpanogus Canal 11.87 cfs.
July 7,1915: Provo Reservoir Canal 29.78.
At 10 a.m. ask U.P.& L.Co. to turn 5 cfs. additional by dam.In going to head of Provo Reservoir canal I notice small flow over U.P.&.L spillway-- the Timpanogus with no spill over dam,if this amount of water is taken over dam Timpanogus will be short I therefore call U.P.&.L from heislets and ask for 8-10 cfs. over dam. Go to dam about 12-14 cfs by dam. Return to Olmstead,talk over phone with Brundige and explain situation. expect answer in 15-20 minutes. Answer " Will turn the amount"
P.M. Go to dam,with Mr. Lusenberry turn over U.P.&.L 6 ft. waste gate 7 inches of water,approx 9 cfs.
July 8,1915: Provo Reservoir Canal 36.99 cfs.
Timpanogus Canal 11.80 cfs.
July 9,1915: Provo Reservoir Canal 37.95 cfs.
Timpanogus Canal 12.00 cfs.
Through Timpanogus Dam 0.25 cfs.
Leakage at Nunns from Olmstead flume 0.50 cfs.
Olmstead flume Donnons 224.64 cfs.

28/C

1916: No record of water from Olmstead flume or over Timpogus Dam.

Sept.22,1916: Provo Reservoir Canal 81.47 cfs.
Timpanogus Canal 14.32 cfs.
Oct. 9,1916: Olmstead flume at Donnons 218.76 cfs.
U.S.G.S.Station 425 cfs.

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July 16,1917: Provo Reservoir Canal 118 cfs.
Timpanogus Canal 22.57 cfs.
July 19,1917: Provo Reservoir Canal 116.50 cfs.
Timpanogus Canal 21.50 cfs.
July 23,1917: Provo Reservoir Canal 88.16 cfs.
Timpanogus Canal 16.87 cfs.
July 26,1917: Provo Reservoir Canal 90.00 cfs.
Timpanogus Canal 17.10 cfs.
July 30:1917: At 12 p.m. Midnight Utahp Power & Light turned out of flume for instalation of new structure. No water in balance of season.

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June 28,1918: Provo Reservoir Canal 51.84 cfs.
Timpanogus Canal Co. 13.20 cfs.
Olmstead Flume at Donnons 228.96 cfs.
June 29,1918: Provo Reservoir Canal 33. cfs.
Timpanogus Canal 13.20 cfs.
I request U.P.&.L. to turn 20cfs by dam. I raise gate at sandbox 8½ inches,this is agreeable to U.P.&.L. for temporary arrangement.
Provo Reservoir canal,7:12pm. 57. cfs. I meet Oliver (of U.P.&.L.CO.) at Olmstead and authorize hime to close sand gate 2 inches.
June 30,1918: Provo Reservoir Canal 54.10 cfs.
July 3, 1918: Provo Reservoir Canal 62.50 cfs.
I call Oliver and tell him to raise sandgate 4 inches.
July 4,1918. Provo Reservoir Canal 83.81 cfs.
July 6,1918: U.P.&.L.Co. turn out of flume approx. 14 cfs. of water.This is Factory Race Water to go through Provo Reservoir Canal for irrigation of grain as arranged by U.S. Food Administrator.
July 7,1918: "Mr Jones" is now in charge of Olmstead Plant,I request Jones to turn more water down to Provo Res. Canal.
At 1 p.m. Provo Reservoir Canal 88 cfs.
I call Jones he states"We did not turn water until 12M."
I advise him to get Provo Reservoir Canal up to 102.50 cfs. this p.m. if he can conveniently.
July 8,1918: Provo Reservoir Canal 94.95 cfs.
Timpanogus Canal 16.94 cfs.
Provo Reservoir canal at 10 p.m. 113. cfs.
I call Jones and tell him to take more water thru flume.
July 9,1918: Timpanogus Canal 16 cfs.
I talk to Jones he reports same load as yesterday morning. In our conversation we conclude that the bulk heading of flume caused the extra amount of water to flow out and to the Provo Reservoir Canal.
Provo Reservoir Canal 100.25 cfs. I request U.P.&.L.Co. to take more water thru flume and reduce Provo Reservoir Canal to stage of yesterday morning.
In company with Mr. Stoner go over part of system.
Provo Reservoir Canal, 12;05pm. 106.60 cfs.
At 12;20 pm. I tell Jones to take 15 cfs. more thru flume.
We stop at Nunns and request Mr. Carter (Employee of U.P.&.L.Co.) to take enough water into flume so that gage in river is the same as yesterday morning.

281 E,

July 9,1918: J.Edward Taylor of U.S Food Administration,phones "We have arranged to have use of the U.P.& L.Co. Ontario Tunnel Water through Provo Reservoir Canal, for grain irrigation." I reply I will get this in Canal tomorrow.

July 10,1918: I call Jones and tell him we will run Provo Reservoir Canal at G.H. 2.10. (104 cfs.)
Olmstead Flume at Nunns 171.64 cfs. Go to plant,on account of flume being bulkheaded it is impossible to make adjustment to-night by taking more water t rough U.P.&.L.Co.
Cut Provo Reservoir Canal by taking out plank in spillway. Raining.
Timpanogus Canal 13. cfs. at 6;20 a.m.

July 11,1918. Provo Reservoir Canal 10;22 a.m. 145.cfs.
Provo Reservoir Canal Entitled to 104.63*cfs. a g.h. of 2.13. River ~~z~~ is raising and muddy. I notify Jones to take more water through flume.Observe that at this stage Provo Reservoir Company are entitled to some class "d" water
* Class "A" right.
I call on Jones,he states we will have bulkheads out this afternoon and can then take more water.
7:40p.m. I call Jones he states: we put 20-30 cfs. more water in flume,expect to get more in when bulkheads are removed. At 8:10 p.m. Jones Calls"we:have taken all the water that has been going over spill at Nunns".

July 12,1918: Provo Reservoir Canal ~~xixx&&xxfxx~~ 113. cfs.
Timpanogus Canal 10.75 cfs.
By Timpanogus Dam 5. cfs.
Installed "Nunns River Gage". reads 68.

July 14,1918: Provo Reservoir Canal 136.50 cfs.
About 2.5 cfs. through Timpanogus Dam.
Timpanogus Canal 10.75 cfs. River is muddy and carrying large quantities of drift,U.P.&.L.Co. tailrace clear--probably Smith Ditch Broken or cloudburst in Pole Canyon.
Jones states " We are on usual load."

July 15,1918; Provo Reservoir Canal 130.44 cfs.
By Timpanogus Dam 3.00 cfs.
Timpanogus Canal 10.75 cfs.
U.P.&.L. Co. Olmstead Flume at Nunns 203.52 cfs.

July 18,1918: Provo Reservoir Canal 95.50 cfs.
Timpanogus Canal 13.10 cfs.
Talker with Oliver of U.P.&.L.Co. and instructed him to turn about 10 cfs. down to Provo Reservoir Canal.
Nunns River gage 2;46p 55. I call Oliver and again ask him to turn 10. cfs. to river. No water has been turned as requested this a.m.
In evening I phone McEwan of P.R.CO. he reports Provo Reservoir gage 224 (111.50) I request him to phone Oliver and have it cut to 2.13 g.h.

July 19,1918: Provo Reservoir Canal 4:41 p.m. 2.07 (102. cfs.)

July 20,1918: McEwan Reports G.H.Provo Reservoir Canal at 2.38
I call Oliver and tell him to close gate at Nunns, and take spill through flume,and until Monday run Nunns River gage at 64.

July 23,1918: Provo Reservoir Canal 95.18. cfs.
By Timpanogus Dam 6.86 cfs.
Olmstead Flume at Nunns 193.84 cfs.
Timpanogus Canal ~~xx~~ 13.10 cfs.
H.L.Stoner in company.

July 24,1918: 8:30 a.m. I call Chipman of Timpanogus Canal and order that Timpanogus Dam be made tight.
I call Oliver of U.P.&.L. and request him to raise water in flume to G.H. 5.90 at Nunns Station,I suggest it would be well to make this raise in two steps,one this morning and one this afternoon.
Under conditions it seems best to change Factory Race ~~xxxx~~ water from Provo Reservoir Canal to Provo City tonight. (nothing definite could be obtained on proposed change to other canals.)

281 F.

July 24,1918: Continued:
I call at Olmstead Plant, Oliver states " we have raised from 58 inches to 60 inches at gage below gatehouse.
I call at Dam,Richens (Gate Tender) states," we are full in this old flume."
At 8:20 p.m. Mr. Peay phones(Provo City Watermaster) phones "We cannot be ready for Factory Race water this week."
Factory Race Water returned July 24,1918, 10:00 a.m.

July 25,1918: Provo Reservoir Canal 5;36 a.m. 68.cfs.
At 8:10 a.m. I call Oliver of U.P.&.L. and request him to turn 5 cfs. over spillway for Provo Reservoir Co.
Provo Reservoir Canal 6;06p.m. 80.62 cfs.

July 26,1918: Provo Reservoir Canal 77.50 cfs.
Timpanogus Canal 13.10 cfs.
I call Oliver and tell him of 2.12 cfs. excess to Provo Reservoir Co. We think it best not to try to make this change as falling river will hit Provo Reservoir Canal.
Oliver states "We will keep flume at same point. I go to breakfast at 10.am.

July 27,1918: Olmstead flume at Nunns 11;31 a G.H.510.
Nunns River Gage 47.
Provo Reservoir Canal 73.50 cfs.
Timpanogus Canal 13.10 cfs.

July 28,1918: Observe that "concession" of U.P.&.L.Co. Ontario Tunnel water to U.S.Food Administrator through Provo Reservoir Canal expired last night.

July 29,1918: I have notified Timpanogus Canal Co. that all leakage through dam will be charged against them begining to-morrow.

July 30,1918: I have instructed McEwan to tighten dam,and to observe Timpanogus in the work on their dam so as not to cut Timpanogus out,but I desire to not have leakage passing Timpanogus dam.

July 31,1918: Provo Reservoir Canal 60.02 cfs.
Nunns River gage 40.
Olmstead Flume Nunns 180. cfs.
By Timpanogus Dam 1.75 cfs.
Timpanogus Canal 15.80 cfs.
At 7 p.m. I authorize Jacobs of Provo Reservoir Co. to increase flow in Provo Reservoir Canal to 63.83 cfs.

Aug.1,1918: Jacobs calls my attention to modification of decision and assignment of J.D.Dixon.

Aug.2,1918: By Timpanogus Dam 0.30 cfs.
Provo Reservoir Canal 64. cfs.
Timpanogus Canal 15.80 (No change and reads same before and after)

Aug. 4,1918: Provo Reservoir Canal 64.00 cfs.
About 2 cfs. spilling over Timpanogus Dam.
Timpanogus Canal 15. cfs.*
I have requested Oliver to take a little more water through flume by closing gate two notches.
Provo Reservoir Canal 7:10p.m. 57.60 cfs.
I request Oliver to raise gate one notch,and have requested McEwan to tighten dam to cut out spill over Timpanogus Dam.

Aug.6,1918: Provo Reservoir Canal 8:45pm. 77.50 cfs.
U.P.&.L.Co. load same.
Additional water to Provo Reservoir Canal caused by storms,Oliver reports no change of amount in flume,at present I am unable to account for extra water coming down river instead of flume unless control to flume is regulated by radial gate.

Aug.7,1918: Provo Reservoir Canal 65.16 cfs.
By Timpanogus Dam 0.30 cfs.
Olmstead flume Nunns 187.64 cfs.
Nunns River Gage 38.
Nunns Spill to river 2.cfs.
Timpanogus Canal 10.50 cfs.
Note: No.1 Bulkhead reduced to one plank July 15, 2:20 p.m. "Dusenberry".

281 G

Aug.15,1918: Provo Reservoir Canal 56.10 cfs.
By Timpanogus Dam 0.75 cfs.
Nunns River gage 34.
Olmstead flume at Nunns 180.29 cfs.
Timpanogus Canal 12.00 cfs.

Aug.16,1918: Provo Reservoir Canal 51.80 cfs.
I request Oliver to raise gate at Nunns spill "one notch" approx. 5 cfs. to river for Provo Res. Co.
Bridal Veil Falls to flume tomorrow.

Aug. 19,1918: Provo Reservoir Canal 56.50 cfs.

Aug.23,1918: Provo Reservoir Canal 54.38 cfs.
By Timpanogus Dam 1.25 cfs.
Nunns River Gage 33.
Olmstead Flume at Nunns 162.79 cfs.
Timpanogus Canal 12.64 cfs.

Aug.24,1918: I call at Olmstead and authorize Olive to take 3 cfs. more thru flume.

Aug. 27,1918: Provo Reservoir Canal 55.cfs.
By Timpanogus Dam 0.30 cfs.
Timpanogus Canal 10.70 cfs.

Sept.6,1918: Provo Reservoir Canal 55.77 cfs.
By Timpanogus Dam 1.00 cfs.
Nunns River Gage 37.
Olmstead flume at Nunns 165.26 cfs.
Timpanogus Canal 12.27 cfs.

Sept. 7,1918; Observe that storage is exhausted.
I call at Olmstead and request Oliver to cut off two-thirds of amount over Nunns Spillway, that is I expect to increase U.P.&.L. and decrease Provo Reservoir Co. by storage supply exhausted to-day.

Sept.9,1918: Provo Reservoir Canal 54.40 cfs. I adjust at mouth of cnayon to divide extra water through U.P.&.L.Co. tail-race.
I call on Oliver at Olmstead he states that change at Nunns Spillway was made this morning at 7 am. This is noticable on register record of Provo Bench Canal. You will observe drop has not reached Provo Reservoir Canal. I defer further adjustment until conditions are settled.
Provo Reservoir Canal at 6:52 pm. 50 cfs.

****

Abstract of record prior to 1913 not submitted on account ot time.

281 H

Provo,Utah, Dec. 20,1918.

O.J.Poulsen,
Secretary Provo Bench Canal And Irrigation Co.
Provo, Utah.

Dear Sir:

In compliance with your request over telephone this a.m., I hand you herewith "Discharge in second feet Provo Bench Canal and Irrigation Company Canal 1886 to 1913 inclusive." as appears of record in this office. I am also forwarding to Joseph Frampton two copies of the same.

Resp.

T. F. Wentz

Commissioner.

Provo,Utah, Dec.20,1918.

Joseph Frampton,
Director Provo Bench Canal And Irrigation Co.
Pleasant Grove, Utah.

Dear Sir:

In compliance with request I hand you two copies of "Discharge in second feet Provo Bench Canal & Irrigation Company Canal 1886 to 1913 inclusive," as appears of record in this office.

Resp.

T. F. Wentz

Commissioner.

281 I

T A B U L A T I O N .

DISCHARGE IN SECOND FEET PROVO BENCH CANAL AND IRRIGATION COMPANY CANAL THE YEARS 1886 TO 1913 INCLUSIVE.

Date:	Second Feet.	Reference.
July 21,1886	33.05	A-171,172.
July 7, 1887	29.84	A-178
July 14,1887	28.42	A-179
July 29,1887	30.31	A-181
Aug. 1,1887	31.29	A-181
Aug. 10,1887	24.85	A-182
July 19,1893	53.67	B-106
July 2, 1895	51.89	A-188
July 8, 1895	41.08	A-190
July 28,1895	39.85	A-190
July 2,1897	53.32	A-199
July 9,1897	42.58	A-199
July 20,1897	36.48	A-199
July 30,1897	36.48	A-199
July 30,1897	30.28 Ad.	A-199
Aug. 4,1897	32.85	A-199
June 15,1898	71.86	A-200
June 22,1898	58.09	A-200
June 30,1898	49.80	A-200
July 7,1898	36.48	A-200
July 7,1898	31.32	A-201
July 21,1898	24.57	A-201
Aug. 8,1898	22.31	A-205
Aug.20, 1898	18.41	A-202
June 28,1900	20.80	A-208
July 2,1900	24.46	A-208
July 9,1900	20.80	A-208
July 16,1900	19.92	A-207
July 25,1900	18.20	A-207
Aug. 3,1900	19.92	A-206
Aug. 22,1900	22.62	A-206
June 23,1902	51.44	1-7
July 1,1902	36.34	1-17
July 12,1902	34.57	1-29
July 29,1902	19.95	1-51
Aug. 6,1902	20.00	1-69
Aug. 22,1902	28.33	1-83
Aug. 28,1902	24.27	1-93

Date	Second Feet	Reference. Book:Page.
May 6,1903	98.39	1-107
June 17,1903	115.05	1-117
June 29,1903	73.10	1-123
July 6, 1903	47.27	1-131
July 7,1903	36.98	1-135
July 14,1903	39.70	1-138
July 28,1903	38.01	1-130
July 28,1903	26.26	1-128
Aug. 13,1903	30.58	1-122
June 20,1904	111.72	1-104
July 2,1904	66.40	1-96
July 7,1904	86.43	1-94
July 11,1904	71.26	1-82
July 20,1904	63.82	1-76
July 30,1904	62.37	1-66
Aug. 8,1904	61.28	1-56
June 6,1905	123.62	2-7
June 27,1905	95.05	2-17
June 28,1905	76.78	2-21
July 1,1905	66.91	2-31
July 10,1905	59.30	2-41
July 14,1905	39.16	2-45
July 25,1905	39.30	2-51
Aug. 22,1905	35.03	2-61
July 13,1906	103.27	2-77
Sept. 9,1907	103.39	2-85
July 22,1908	69.45	2-99
Aug. 25,1908	84.75	2-99
June 5,1909	117.78	2-103
June 24,1909	139.88	2-107
June 23,1910	98.05	2-121
July 6,1910	89.16	2-129
July 7,1910	84.87	2-133
July 11,1911	77.76	2-154
July 12,1911	86.31	2-152
July 12,1911	70.42	2-150.
July 9,1912	69.01	3-3
July 26,1912	77.00	3-6
June 3,1913	122.80	3-23
June 18,1913	84.76	3-31
July 11,1913	60.66	3-37
Aug. 8,1913	51.83	
Aug.10, 1913	60.32	
Aug. 28,1913	56.23.	

281 Ex

Provo,Utah, Dec. 27,1918.

Provo Reservoir Company,

Provo,Utah.

Gentlemen:

Complying with your verbal request of the 24th inst., I hand you herewith " Tabulation Discharge Timpanogus Canal Company Canal Of Record In The Office Of The Commissioner. 1886-1918 Inc." And which appears as page 281 N of Commissioners Special Report 1918. And this Letter appears in the same volumn as page 281m.

Very Resp.

D. F. Wentz

Commissioner.

Provo,Utah, Dec.27,1918.

Timpanogus Canal Company.

Provo, Utah.

Gentlemen:

I hand you herewith"Tabulation Discharge Timpanogus Canal Company Canal Of Record In The Office Of The Commissioner. 1886-1913 Inc."
I also enclose copy of letter to Provo Reservoir Company of this date.

Very Truly,

D. F. Wentz

Commissioner.

281 M.

T A B U L A T I O N .

DISCHARGE IN SECOND FEET TIMPANOGUS CANAL COMPANY CANAL? OF RECORD IN THE OFFICE OF THE COMMISSIONER. 1886-1913.Inc.

Date.	Second Feet.	Reference.
July 16,1886.	2.58	A-170,173
July 21,1886	5.00	A-171,172,174.
July 7,1887	5.00	A-178
July 11,1887	6.20	A-179
July 14,1887	4.97	A-179
Juky 26,1887	3.42	A-180
Aug. 1,1887	5.11	A-181
July 19,1893	8.33	B-106
July 8 1895	10.00	A-190
July 28,1895	10.00	A-190
July 2,1897	14.43	A-199
July 9, 1897	7.26	A-199
July 20,1897	5.95	A-199
July 30,1897	6.44	A-199
July 30,1897	4.87	A-199
Aug. 4,1897	0.00	A-199
June 30,1898	14.82	A-200
July 7.1898	6.86	A-201
July 21,1898	3.93	A-201
July 22,1898	4.85	A-201
Aug. 8,1898	4.46	A-202
Aug. 20,1898	2.14	A-202
June 28,1900	4.57	A-208
July 2, 1900	5.32	A-208
July 9,1900	4.21	A-208
July 16,1900	4.21	A-207
July 25,1900	6.49	A-207
Aug. 3,1900	4.75	A-206
Aug. 22,1900	3.21	A-206
June 23,1902	10.52	1-5
July 1,1902	7.10	1-17
July 28,1902	5.58	1-51
Aug. 6,1902	5.17	1-69
Aug. 22,1902	9.17	1-83
Aug. 28,1902	6.25	1-91
May 6,1903	18.72	1-105
June 17,1903	22.54	1-115
June 29,1903	17.30	1-123
July 6, 1903	9.93	1-131
July 7,1903	7.61	1-135
July 14,1903	7.38	1-140
July 28,1903	9.10	1-130
July 29,1903	6.87	1-128
Aug. 13,1903	4.45	1-122

Date	Second Feet.	Reference. Book: Page:
June 20,1904	24.44	1-106.
July 2,1904	15.39	1-98
July 11,1904	6.76	1-84
July 20,1904	12.97	1-76
July 30,1904	10.61	1-66
Aug. 8,1904	10.84	1-58
Aug. 24,1904	5.00	1-42
June 6,1905	26.44	2-7
June 27,1905	14.41	2-17
June 30,1905	11.74	2-27
July 10,1905	8.82	2-39
July 14,1905	15.27	2-45
Aug. 22,1905	8.33	2-61
July 13,1906	21.80	2-75
July 9,1908	27.68	2-93
June 5,1909	12.90	2-105
June 23,1910	23.56	2-121
July 6, 1910	8.19	2-129
July 11,1911	24.65	2-154
Aug. 13,1911	10.34	2-138
July 9,1912	24.63	3-3
July 26,1912	20.71	3-5
Aug. 27,1912	15.29	3-19
June 2,1913	39.65	3-24
June 11,1913	30,39	3-26
June 17,1913	24.27	3-29
July 11,1913	13.60	4-15
Aug. 8,1913	8.92	2-113
Aug. 27,1913	7.99	5-16
Aug. 28,1913	9.08	5-28

A: Commissioners Special Report 1918.
B: Transcript.

281 N

Carbon Copy

Provo, Utah, Nov. 26, 1918.

Hon. C.W. Morse,

Special Judge Fourth District Court.

Salt Lake City, Utah.

Dear Sir:

I am sending you by American Express:
Volume, and Roll of Maps, Special report on Provo River.

You will observe report is not yet complete, the two additional plates will be forwarded as soon as completed, and the written material can be inserted at any time.

I think it would be advisable to return the report to reach me about Dec. 7, so I may finish indexing and compiling.

Resp.

T. F. Wentz

Commissioner.

281 "O"

Carbon Copy

Provo, Utah, Nov. 29, 1918.

Provo Reservoir Company.

Provo, Utah.

Gentlemen:

I am forwarding to you to-day one copy of "Commissioners Special Report 1918", you will observe report is not complete, the additions will be furnished as they are compiled. I would advise that you return report a few days before session of Court that I may page and sign.

Resp.

T. Fillentz

Commissioner.

281 P"

Carbon Copy.

Subject:
Provo Reservoir Co.
Vs
Provo City et al
No.2888.

Provo City, Utah, Jan.24,1919.

Rawlins Ray & Rawlins.

Counsel Provo Bench Canal & Irrigation Co.

Salt Lake City, Utah.

Gentlemen:

In the case Provo Reservoir Company vs. Provo City et al. the Commissioner was ordered to submit a special report on the discharge of Provo River. This work as I understood the order was completed and a copy furnished you.

Yesterday I had occasion to examine the transcript,and I find in Mr. Ray's motion the application for average Provo River 1889-1918,-- a composite of 1889-1905 and 1905-1918. This composite has not been made,and I desire to know, now that you have examined the report, if you wish the average river for the period 1889-1918.

Kindly advise me in this matter,and I will be pleased to include in the report all matters you may designate.

Very Truly,

T. F. Wentz.

Commissioner.

Note: March 1,1919. To this date I have recieved no reply to above.

T. F. Wentz.

Commissioner.

2818

Carbon Copy.

Provo,Utah, Nov.27,1918.

W.W. Ray,
Attorney Provo Bench Canala & Irrigation Co.

Richards & Richards,
Attorneys Provo City.

Story & Steigmeyer
Attorneys Utah Power & Light Co.

H.L.Stoner,
Engineer Utah Power & Light Co.

Salt Lake City,Utah.

Gentlemen:

I am delivering by Mr. Thomptson to Richards & Richards one copy of "Commissioners Special Report 1918".

I suggest that Richards & Richards may retain copy until Dec. 2, and then deliver the same to Utah Power & Light Co.,and they may forward same to Mr. Ray about Dec. 5., however, you may arrange the time to suit your convenience. I do desire that Mr. Ray shall have ample time to go over the matter,as I expect he will present this to the Court. In case either of you are crowded for time,I will try and arrange to let you have my copy for a couple of days.

The two plates on precipitation will be furnished as soon as completed.

It is also advisable that you return copy to me before session of court that the additional data may be inserted,or I will forward the same and you may bind in proper place.

Very Resp.

T.F.Wentz.

Commissioner.

Note. March 1,1919. All of the information completed since Nov. 27,1918., has been forwarded to H.L.Stoner.

T. F. Wentz

281 R

Provo City et al

2888 Civil

Tabulation of Flow and ~~Distribution~~ of Provo River for 1918.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Est. Tot.	Correction at Station Add.	Ded.	G. H.

Summary of Total Measurements and Inflow.

	Total Diverted	To Lake	Total Mill Valley	Total Wells Water	Inflow Between Stations
May 3.	364.34	1.50	366.84	322	45
May 13.	397.43	2.50	399.93	378	22
July 8.	315.07	—	315.07	253	62
July 15	385.96	2.50	388.46	340	48
July 23.	336.29	.20	336.49	287	49
July 31.	291.53	.10	291.63	214	78
~~Aug~~ 7.	295.39	1.25	297.64	223	73
Aug 15.	~~299.0~~	~~—~~	298.00	208	90
Aug 23.	266.46	.75	267.21	186	81
Sept. 6	~~278.04~~		278.04	198	80
Sept 27	198.39	91.22	297.11	250	47

Total 282

Computations made by H. A. Hunter

Observations made by J. B. Black

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

1918.

~~Tabulation of Flow and Distribution of Provo River for~~ Storage + Turned Water To Provo Division.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Est. Tot.	Correction at Station Add.	Ded.	G. H.
	July				August.				September.				
	Storage	Turned	Tot.		Stor.	Turn.	Tot.		Stor.	Turn.	Tot.		
1	—				27	12	39		17	12	29		
2	10	13	23		27	12	39		17	12	29		
3	26	13	39		27	12	39		17	12	29		
4	31	13	44		27	12	39		17	12	29		
5	31	13	44		27	12	39		17	12	29		
6	31	13	44		27	12	39		17	12	29		
7	31	13	44		27	12	39		17	12	29		
8	31	13	44		27	12	39		17	12	29		
9	31	13	44		22	12	34		~	12	~~22~~		
10	31	13	44		22	12	34			12	12		
1	31	13	44		22	12	34			12	12		
2	31	13	44		22	12	34			12	12		
3	31	13	44		22	12	34			12	12		
4	31	13	44		22	12	34			12	12		
5	31	13	44		14	12	26			12	12		
6	31	13	44		14	12	26			12	12		
7	31	13	44		14	12	26			12	12		
8	31	13	44		17	12	29			12	12		
9	31	12	43		17	12	29			12	12		
20	27	12	39		17	12	29			12	12		
1	27	12	39		17	12	29			12	12		
2	27	12	39		17	12	29			12	12		
3	27	12	39		17	12	29			12	12		
4	27	12	39		17	12	29			12	12		
5	27	12	39		17	12	29			12	12		
6	23	12	35		17	12	29			12	12		
7	27	12	39		17	12	29			12	12		
8	27	12	39		17	12	29			12	12		
9	27	12	39		17	12	29			12	12		
30	27	12	39		17	12	29			12	12		
1.	27	12	39		17	12	29						
Total	783												

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow ~~and Distribution~~ of Provo River for april 1918.

NAME	Time	G. H.	Disc.	Dec'd Ne	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	USGS Station												
	River		Fork		Total		Inflow Canal		Nat Provo River Mid Valley		Mean Curve used		
1	416		31		447		20		467				
2	416		32		448		20		468				
3	416		32		448		20		468				
4	382		32		414		20		434				
5	382		32		414		20		434				
6	382		31		413		21		434				
7	382		31		413		21		434				
8	366		31		397		21		418				
9	366		31		397		21		418				
10	382		32		414		21		435				
1	451		32		483		21		504				
2	451		32		483		21		504				
3	469		32		501		21		522				
4	524		32		556		21		577				
5	487		32		519		22		541				
6	434		32		466		22		488				
7	416		31		447		22		469				
8	382		31		413		22		435				
9	382		31		413		22		435				
20	366		31		397		22		419				
1	349		31		380		22		402				
2	349		31		380		22		402				
3	349		31		380		22		402				
4	382		31		413		23		436				
5	382		31		413		23		436				
6	416		31		447		23		470				
7	366		31		397		23		420				
8	300		29		329		23		452				
9	284		29		313		23		336				
30	284		29		313		24		337				
Total									13397				
Max									577				
Min									336				
Mean									447				

Total 284

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow ~~and Distribution~~ of Provo River for May 1918.

U.S.G.S. Station

Mean [illegible] U.S.G.S.

NAME	Time	G. H.	Disc.	Dec'd No	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	River		Ft		Total		Inflow Curve		Total Provo Utah Valley				
1	284		29		314		24		338				
2	300		30		330		24		354				
3	300		22		322		24		346	(36684)			
4	284		23		307		24		331				
5	349		23		372		25		397				
6	416		23		439		25		464				
7	434		28		462		25		487				
8	416		29		445		25		470				
9	487		31		518		25		543				
10	487		31		518		25		543				
1	434		29		463		26		489				
2	434		29		463		26		489				
3	349		29		378		26		404	(400)			
4	316		29		345		26		371				
5	300		29		329		27		356				
6	316		29		345		27		372				
7	416		29		345		27		372				
8	562		29		591		27		618				
9	487		29		516		28		544				
20	434		29		463		28		491				
1	434		29		463		28		491				
2	506		29		535		29		564				
3	434		32		466		29		495				
4	562		32		594		29		623				
5	679		32		711		30		741				
6	720		32		752		30		782				
7	679		31		710		30		740				
8	600		31		631		31		662				
9	543		28		571		31		602				
30	600		28		628		32		660				
1	600		28		628		32		660				
Total									15799				
Max									782				
Min									331				
Mean									510				

Total 285

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow and ~~Distribution~~ of Provo River for June 1918.

NAME	Time	G. H.	Disc.	Dec'd Ne	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	U.S.G.S. Station										Mean curve used		
	River		[illegible]		Total		[illegible] Canal		Nat. Power Mid. Valley				
1	639		29		668		33		701				
2	600		22		622		33		655				
3	639		22		661		34		695				
4	847		23		870		34		904				
5	890		26		916		35		951				
6	1020		29		1049		35		1084				
7	1020		28		1048		36		1084				
8	1020		28		1048		36		1084				
9	1180		26		1206		37		1243				
10	1120		26		1146		38		1184				
1	1120		26		1146		39		1185				
2	1180		29		1209		40		1249				
3	1020		29		1049		40		1089				
4	1020		29		1049		41		1090				
5	1020		29		1049		42		1091				
6	1020		34		1054		43		1097				
7	934		32		966		44		1010				
8	804		32		836		45		881				
9	762		34		796		46		842				
20	679		32		711		47		758				
1	639		32		671		48		719				
2	600		32		632		49		681				
3	524		31		555		50		605				
4	487		31		518		51		569				
5	416		31		447		52		499				
6	316		32		348		53		401				
7	253		32		285		54		339				
8	253		32		285		55		340				
9	216		28		244		56		300				
30	210		26		236		57		293				
Total									24623				
Max									1249				
Min									293				
Mean									821				
Total 286													

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow ~~and Distribution~~ of Provo River for July 1918

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
Mean Curve & July 7 Chan 1918 Curve	USGS Station River		Fork		Total		Dyson Canal	Total Utah Valley	Strong Tunnel		Weber River Utah Valley		
1	210		28		238		58	296	—		296		
2	216		23		239		59	298	~~28~~		275		
3	222		28		250		60	310	39		271		
4	222		32		254		61	315	44		271		
5	238		38		276		62	338	44		294		
6	238		38		276		63	339	44		295		
7	222		32		254		64	318	44		274		
8	222		31		253		62	315	44		271		
9	222		31		253		59	312	44		268		
10	253		31		284		57	341	44		297		
1	332		38		370		55	425	44		381		
2	284		38		322		53	375	44		331		
3	284		36		320		51	371	44		327		
4	300		40		340		49	389	44		345		
5	300		40		340		48	388	44		344		
6	268		31		299		47	346	44		302		
7	268		31		299		46	345	44		301		
8	253		31		284		46	330	44		286		
9	253		32		285		46	331	43		288		
20	268		36		304		46	350	39		311		
1	284		36		320		46	366	39		327		
2	253		34		287		47	334	39		295		
3	253		34		287		49	336	39		297		
4	238		34		272		52	324	39		285		
5	222		32		254		54	308	39		269		
6	210		32		242		58	300	35		265		
7	210		32		242		63	305	39		266		
8	192		28		220		68	288	39		249		
9	198		25		223		70	293	39		254		
30	198		28		226		72	298	39		259		
1	186		28		214		74	(?) 288	39		249		
Total											9043		
Max											381		
Min											249		
Mean											292		
Total 287													

Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow ~~and Distribution~~ of Provo River for August 1918.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	USGS Station River		Fork	Total		Inflow Curve		Total Utah Valley		Storage [illegible]		Needs of Utah Valley [illegible]	
1	186		28	214		75		289		39		250	
2	186		28	214		76		290		39		251	
3	192		31	223		77		300		39		261	
4	186		31	217		78		295		39		256	
5	183		31	214		79		293		39		254	
6	213		38	251		79		330		39		291	
7	192		31	223		80		303		39		264	
8	192		29	221		80		301		39		262	
9	189		31	220		81		301		34		267	
10	189		29	218		82		300		34		266	
1	192		28	220		82		302		34		268	
2	192		29	221		82		303		34		269	
3	183		26	209		83		292		34		258	
4	178		26	204		83		287		34		253	
5	180		28	208		83		291		26		265	
6	175		26	201		83		284		26		258	
7	169		31	200		84		284		26		258	
8	163		29	192		84		276		29		247	
9	163		22	185		84		269		29		240	
20	166		22	188		84		272		29		243	
1	166		23	189		84		273		29		244	
2	163		23	186		83		269		29		240	
3	163		23	186		83		269		29		240	
4	163		23	186		83		269		29		240	
5	157		23	180		83		263		29		234	
6	149		22	171		83		254		29		225	
7	157		22	179		82		261		29		232	
8	157		26	183		82		265		29		236	
9	155		23	178		82		260		29		231	
30	155		23	178		81		259		29		230	
1	155		23	178		81		259		29		230	
Total												7763	
Max												291	
Min												225	
Mean												250	
Total 288													

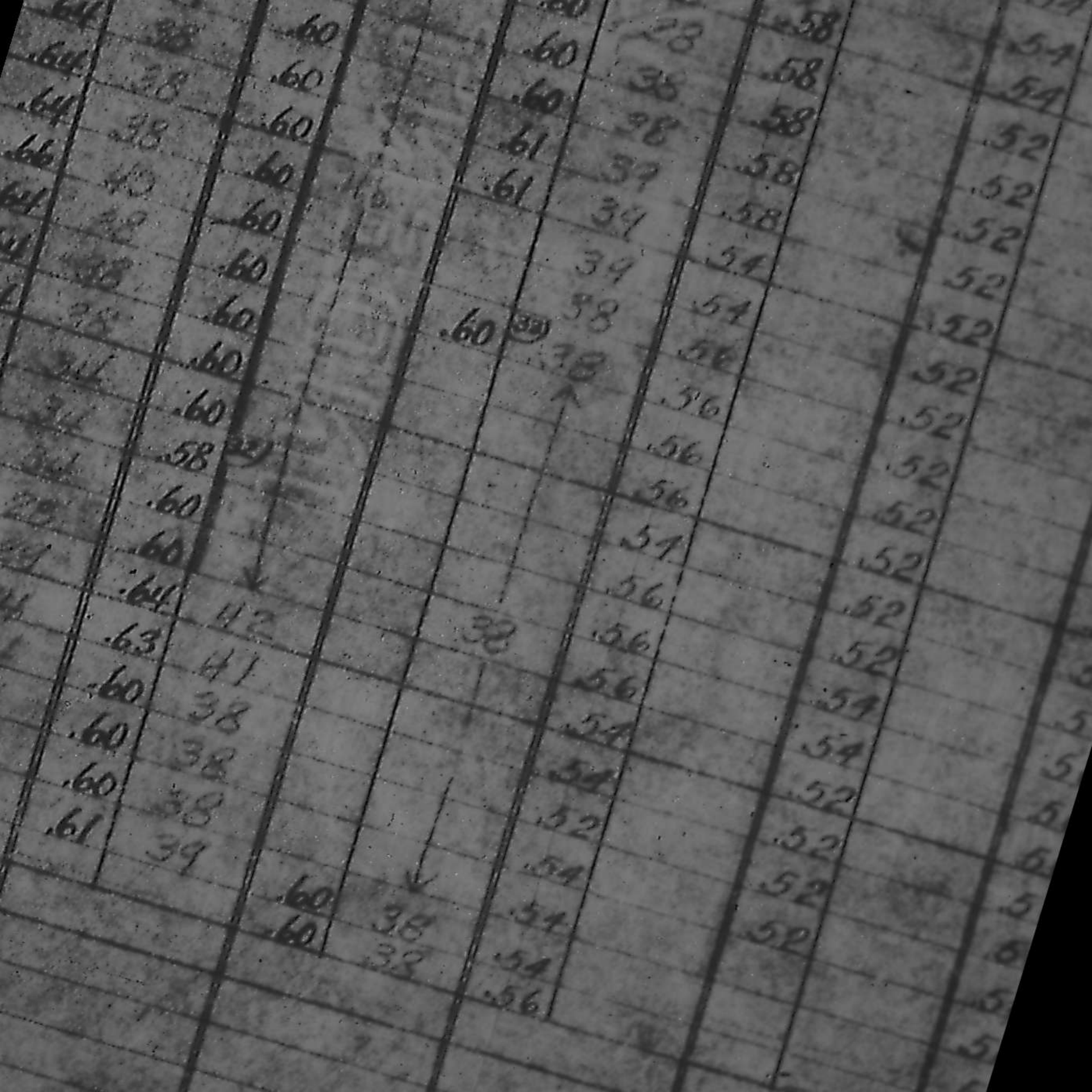
Provo Reservoir Co.
vs.
Provo City et al

2888 Civil

Tabulation of Flow ~~and Distribution~~ of Provo River for September 1918.

NAME	Time	G. H.	Disc.	Dec'd Net	Tran. Loss	Tran. Gain	Dec'd at St.	P. Cent Added	Amt. Added	Ent. Tot.	Correction at Station Add.	Ded.	G. H.
	U.S.G.S. Station												
	River	Fork		Total		Deer Creek		Total Utah Valley		Storage & Deer Creek		Wk. River Utah Valley	
1	169	23		192		80		272		29		243	
2	163	23		186		80		266		29		237	
3	155	28		183		79		262		29		233	
4	183	28		211		79		290		29		261	
5	178	28		206		78		284		29		255	
6	169	29		198		77		275		29		246	
7	172	31		203		76		279		29		250	
8	172	28		200		76		276		29		247	
9	172	29		201		75		276		12		264	
10	172	29		201		74		275		12		263	
1	163	28		191		73		264		12		252	
2	166	28		194		72		266		12		254	
3	169	29		198		71		269		12		257	
4	169	29		198		69		267		12		255	
5	192	29		221		68		289		12		277	
6	198	29		227		67		294		12		282	
7	180	29		209		66		275		12		263	
8	180	29		209		65		274		12		262	
9	180	29		209		63		272		12		260	
20	175	29		205		62		267		12		255	
1	175	29		205		60		265		12		253	
2	180	28		208		59		267		12		255	
3	284	44		328		57		385		12		373	
4	253	38		291		55		346		12		334	
5	253	36		289		53		342		12		330	
6	216	34		250		52		302		12		290	
7	216	34		250		50		300		12		288	
8	216	34		250		48		298		12		286	
9	210	34		244		46		290		12		278	
30	210	34		244		44		288		12		276	
Total												8079	
Max												373	
Min												233	
Mean												269	

Total 269



Day													Day
1	0.60	34	0.70	46	0.60	38	0.60	38	.54		.52		1
2	.60	34	.72	46	.60	38	.60		.54		.52		2
3	.60	34	.74	47	.61	39	.60		.54		.52		3
4	.60	34	.74	47	.60	38	.60		.54		.52		4
5	.62	36	.78	54	.60	38	.60		.56		.54		5
6	.62	36	.78	54	.60	38	.60		.56		.54		6
7	.64	38	.78	54	.60	38	.60		.54		.54		7
8	.62	36	.78	54	.60	38	.60		.54		.56		8
9	.68	42	.62		.60	38	.60		.54		.54		9
10	.66	40	.62		.60	38	.58		.54		.58		10
11	.66	40	.62		.60	38	.58		.52		.58		11
12	.67	41	.60		.60	38	.58		.52		.60		12
13	.67	41	.60		.60	38	.58		.52		.60		13
14	.64	38	.60		.61	39	.58		.52		.60		14
15	.64	38	.60		.61	39	.54		.52		.56		15
16	.64	38	.60	46		39	.54		.52		.56		16
17	.66	40	.60			38	.56		.52		.54		17
18	.64	38	.60		.60	(38) 38	.56		.52		.54		18
19	.64	38	.60			↑	.56		.52		.54		19
20	.64	38	.60				.56		.52		.54		20
21	.60	34	.60				.54		.52		.54		21
22	.66	34	.58	(32)			.56		.52		.56		22
23	.60	34	.60				.56		.54		.56		23
24	.52	28	.60	↓		38	.56		.54		.56		24
25	.54	29	.64	42			.54		.52		.56		25
26	.60	34	.63	41			.54		.52		.56		26
27	.60	34	.60	38			.52		.52		.56		27
28	.70	44	.60	38			.54		.52		.56		28
29	.70	44	.60	38		↓	.54				.56		29
30	.70	44	.61	39	.60	38	.54				.56		30
31	.70	44			.60	38	.56				.56		31
Total		1157											
Mean		37.3											
Sec.-ft. per square mile													
Run-off, depth in inches													
Run-off in acre-feet		2,230											
Maximum		44											

Note.—

DEPARTMENT OF THE INTERIOR — UNITED STAT[ES]

Daily gage height, in feet, and discharge, in second-feet, of *South* [illegible]

Drainage area .... square miles. *J. F. Carter* .... observer.

Day	Oct. Gage height	Oct. Discharge	Nov. Gage height	Nov. Discharge	Dec. Gage height	Dec. Discharge	Jan. Gage height	Jan. Discharge	Feb. Gage height	Feb. Discharge	Mar. Gage height	Mar. Discharge
1	0.60	34	0.70	46	0.60	38	0.60	38	.54		.52	
2	.60	34	.72	46	.60	38	.60		.54		.52	
3	.60	34	.74	49	.61	39	.60		.54		.52	
4	.60	34	.74	49	.60	38	.60		.54		.52	
5	.62	36	.78	54	.60	38	.60		.56		.54	
6	.62	36	.78	54	.60	38	.60		.56		.54	
7	.64	38	.78	54	.60	38	.60		.54		.54	
8	.62	36	.78	54	.60	38	.60		.54		.56	
9	.68	42	.62		.60	38	.60		.54		.54	
10	.66	40	.62		.60	38	.58		.54		.54	
11	.66	40	.62		.60	38	.58		.52		.56	
12	.67	41	.60		.60	38	.58		.52		.60	
13	.67	41	.60		.60	38	.58		.52		.60	
14	.64	38	.60		.61	39	.58		.52		.60	
15	.64	38	.60		.61	39	.54		.52		.56	
16	.64	38	.60	46		39	.54		.52		.56	
17	.66	40	.60			38	.56		.52		.54	
18	.64	38	.60		.60	(39) 38	.56		.52		.54	
19	.64	38	.60				.56		.52		.54	
20	.64	38	.60				.56		.52		.54	
21	.60	34	.60				.54		.52		.54	
22	.60	34	.58	(37)			.56		.52		.56	
23	.60	34	.60				.56		.54		.56	
24	.52	28	.60			38	.56		.54		.56	
25	.54	29	.64	42			.54		.52		.56	
26	.60	34	.63	41			.54		.52		.56	
27	.60	34	.60	38			.52		.52		.56	
28	.70	44	.60	38			.54		.52		.56	
29	.70	44	.60	38			.54				.56	
30	.70	44	.61	39	.60	38	.54				.56	
31	.70	44			.60	38	.56				.56	
Total		1157										
Mean		37.3										
Sec.-ft. per square mile												
Run-off, depth in inches												
Run-off in acre-feet		2240										
Maximum		44										
Minimum		28										
Accuracy												

NOTE.—

LOGICAL SURVEY — WATER RESOURCES BRANCH

FORKS, UTAH — for the year ending Sept. 30, 1918

Gage read to Hundredths a day

File Number | Washington | Drainage

Table of use: Half tenths — Ft. to

Used rating table dated 11/23/17

Day	APR. Gage height.	APR. Discharge.	MAY Gage height.	MAY Discharge.	JUNE Gage height.	JUNE Discharge.	JULY Gage height.	JULY Discharge.	AUG. Gage height.	AUG. Discharge.	SEPT. Gage height.	SEPT. Discharge.	Day
1	0.52	31	0.50	29	0.50	29	0.43	28	0.48	28	0.42	23	1
2	.54	32	.51	30	.40	22	.4[illegible]	23	.48	28	.42	23	2
3	.54	32	.40	22	.40	22	.45	28	.52	31	.48	28	3
4	.54	32	.42	23	.42	28	.[illegible]	32	.52	31	.48	28	4
5	.54	32	.42	23	.46 (34)	26	.60	38	.52	31	.48	28	5
6	.52	31	.42	23	.50	29	.60	38	.52	31	.48	28	6
7	.52	31	.48	28	.48	28	.[illegible]	32	.60	38	.50	29	7
8	.52	31	.50	29	.48	28	.52	31	.52	31	.52	31	8
9	.52	31	.52	31	.46	26	.52	31	.50	29	.48	28	9
10	.54	32	.52	31	.46	26	.52	31	.52	31	.50	29	10
11	.54	32	.50	29	.46 (37)	26	.52	31	.50	29	.50	29	11
12	.54	32	.50	29	.50	29	.60	38	.48 (38)	28	.48	28	12
13	.54	32	.50	29	.50	29	.60	38	.50	29	.48	28	13
14	.54	32	.50	29	.50	29	.58	36	.46	26	.50	29	14
15	.54	32	.50	29	.50	29	.62	40	.46	26	.50	29	15
16	.54	32	.50	29	.50	29	.62	40	.48	28	.50	29	16
17	.54	32	.50	29	.56	34	.52	31	.46	26	.50	29	17
18	.52	31	.50	29	.54	32	.52	31	.52	31	.50	29	18
19	.52	31	.50	29	.54	32	.52	31	.50	29	.50	29	19
20	.52	31	.50	29	.56	34	.54	32	.40	22	.50	29	20
21		31	.50	29	.54	32	.58	36	.40	22	.50	29	21
22	.52	31	.50	29	.54	32	.58	36	.42	23	.50	29	22
23	.52	31	.54 (36)	32	.54	32	.56	34	.42	23	.48	28	23
24	.52	31	.54	32	.52	31	.56	34	.42	23	.66	44	24
25	.52	31	.54	32	.52	31	.56	34	.42	23	.60	38	25
26	.52	31	.54	32	.52	31	.54	32	.42	23	.58	36	26
27	.52	31	.52	31	.54	32	.54	32	.40	22	.56	34	27
28	.50	29	.52	31	.54	32	.48	28	.46	26	.56	34	28
29	.50	29	.48 (35)	28	.48	28	.44	25	.42	23	.56	34	29
30	.50	29	.48	28	.46	26	.48	28	.42	23	.56	34	30
31			.48	28			.48	28	.42	23			31
	935		891		872		1,008		828		909		Year period
	31.2		28.7		29.1		32.5		26.7		30.3		
	1,860		1,760		1,730		2,000		1,640		1,800		
	32		32		34		40		38		44		
	29		22		22		23		22		23		

y gage height, in feet, and discharge, in second-feet, of

PROVO River

Drainage area ____ square miles. | J. F. Carter, observer

Day	OCT. Gage height	OCT. Discharge	NOV. Gage height	NOV. Discharge	DEC. Gage height	DEC. Discharge	JAN. Gage height	JAN. Discharge	FEB Gage height	FEB Discharge	MAR. Gage height	MAR. Discharge
1	0.90		0.6		0.8		8		6		8	
2	.85		.6		.8		8		.65		9	
3	.85		.6		.85		8		7		1.95	
4	.85		.6		.8		8		7		1.0	
5	.82		.6		.8		.85		8		1.1	
6	.8		.6		.75		8		8		1.0	
7	.8		.6		.75		8		8		1.0	
8	.8		.6		.75		.75		8		1.0	
9	.75		.6		.8		8		.65		1.0	
10	.75		.6		.85		6		6		1.1	
11	.75		.6		.8		6		8		1.1	
12	.75		.6		.85		6		8		1.1	
13	.75		.65		.85		7		8		1.0	
14	.7		.65		.85		6		7.5		1.25	
15	.7		.65		.85				8		1.1	
16	.7		.65		.85				6		1.05	
17	.7		.65		.85	(40)			8.5		1.0	
18	.7		.65		.85				7		1.1	
19	.7		.7		.85				7		1.05	
20	.65		.7		.85		.75		7		1.0	
21	.65		.75	(39)	.85		.6		7		1.1	
22	.65		.75		.85		.6		7		1.05	
23	.6		.8		.85		.8		10		1.0	
24	.6		.8		.85		.85		10		1.0	
25	.6		.85		.85		.7		1.35		1.05	
26	.6		.85		.85		.85		11		1.05	
27	.6		.8		.85		.7		11		1.1	
28	.6		.75		.85		.75		8		1.15	
29	.55		.75		.85		.8				1.0	
30	.55		.8		.8		.7				1.0	
31	.6				.8		.75				1.0	
TOTAL												
Mean												
Sec.-ft. per square mile												
Run-off, depth in inches												
Run-off in acre-feet												
Maximum												
Minimum												
Accuracy												

Hundredths ance a day

Rate of use: Half tenths 0.5 ft to 1.5

Used rating table dat 1. 9/28/17

Day	APR. Gage height.	APR. Discharge.	MAY Gage height.	MAY Discharge.	JUNE Gage height.	JUNE Discharge.	JULY Gage height.	JULY Discharge.	AUG. Gage height.	AUG. Discharge.	SEPT. Gage height.	SEPT. Discharge.
1	1.1	416	0.1	23[illegible]	1.7	63[illegible]	0.1[illegible]	210	0.[illegible]8	186	0.[illegible]2	169
2	[illegible].1	416	.75	300	1.[illegible]	[illegible]02	.18	216	.38	186	.30	163
3	[illegible]1	416	.15	300	1.1	629	.5	222	.40	192	.27	155
4	[illegible].0	382	.1	26[illegible]	1.2	8[illegible]2	.5	222	.35	186	.37	183
5	[illegible].0	382	.2	3[illegible]	2.3	3[illegible]0	.55	238	.31	183	.33	178
6	[illegible].0	382	1.1	4[illegible]	2.6	1020	.55	238	.[illegible]	21[illegible]	.32	169
7	[illegible].0	382	1.15	434	2.[illegible]	1[illegible].0	.[illegible]	222	.40	192	.33	172
8	[illegible].15	366	1.1	416	2.[illegible]	1022	.3	222	.40	192	.33	172
9	[illegible].3	366	1.3	437	2.9	1[illegible]30	.3	222	.39	189	.33	172
10	[illegible].0	352	1.3	427	2.8	1[illegible]20	.[illegible]	2[illegible]3	.32	152	.33	172
11	[illegible]2	431	1.15	401	2.8	1[illegible]20	.85	332	.40	192	.30	163
12	[illegible]2	451	1.[illegible]	4[illegible]4	2.9	1[illegible]2[illegible]	.1	284	.40	192	.31	166
13	[illegible].3	469	.9	3[illegible]0	2.6	1[illegible].0	.1	284	.[illegible]	[illegible]	.32	169
14	[illegible]	124	.[illegible]	31[illegible]	2.[illegible]	1[illegible].0	.[illegible]	300	.[illegible]	1[illegible]8	.32	169
15	[illegible].3	481	.[illegible]	300	2.[illegible]	1[illegible]22	.[illegible]	300	.36	180	.40	1[illegible]
16	[illegible].15	434	.[illegible]	316	2.[illegible]	1020	.[illegible]	268	.34	175	.32	193
17	[illegible].1	416	1.10	416	2.1	934	.[illegible]	268	.32	169	.36	180
18	[illegible].0	382	1.[illegible]	3[illegible]2	2.1	80[illegible]	.[illegible]	253	.30	163	.36	180
19	[illegible].0	382	1.3	437	2.0	762	.[illegible]	253	.30	163	.36	180
20	[illegible].05	366	1.[illegible]	3[illegible]4	[illegible]	679	.[illegible]	268	.31	1[illegible]6	.34	1[illegible]5
21	[illegible]	349	1.1[illegible]	3[illegible]	1.7	639	.1	284	.[illegible]	1[illegible]6	.34	1[illegible]5
22	[illegible]	349	1.3[illegible]	3[illegible]6	1.6	600	.[illegible]	2[illegible]3	.30	163	.[illegible]	180
23	[illegible]	349	1.[illegible]	3[illegible]4	1.[illegible]	5[illegible]2	.[illegible]	2[illegible]3	.30	163	.[illegible]	284
24	[illegible].0	382	1.[illegible]	362	1.3	487	.3[illegible]	238	.30	163	.[illegible]	253
25	[illegible].0	382	1.[illegible]	379	1.1	476	.5	222	.[illegible]	152	.[illegible]	253
26	[illegible].1	416	1.[illegible]	420	.8	316	.[illegible]6	210	.[illegible]	149	.[illegible]8	216
27	[illegible].05	366	1.[illegible]8	679	.6	253	.[illegible]6	210	.[illegible]8	157	.[illegible]8	216
28	[illegible].[illegible]	300	1.[illegible]6	600	.6	253	.[illegible]0	192	.[illegible]8	157	.[illegible]5	216
29	[illegible]	284	1.[illegible]3	543	.[illegible]8	216	.[illegible]2	198	.[illegible]7	155	.[illegible]6	210
30		284	1.[illegible]	600	.[illegible]6	210	.[illegible]2	198	.[illegible]7	155	.[illegible]6	210
31			1.[illegible]	600			.[illegible]6	186	.[illegible]7	155		
	11,713		14,162		22,448		7,519		5,409		5,690	
	340		457		748		243		174		190	
	23,200		28,100		44,500		14,900		10,700		11,300	
	524		720		1,180		332		213		284	
	284		284		210		186		155		155	

West gage

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Monthly discharge of South Fork Provo River at near Forks, Utah
for the years 1911-1914 Station established Nov. 17, 1911
[Drainage area, 30 square miles.]

YEAR 1911	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean.	
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November 17-30	35	32	34.6	961
December	35	32	33.5	2000
The period				
Note				

YEAR 1912	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean.	
January	34	30	32.6	2000
February	30	28	29.2	1680
March	30	26	28.9	1780
April	31	29	30.0	1790
May	46	30	32.7	2010
June	74	32	45.2	2690
July	33	30	30.5	1880
August	42	33	34.1	2100
September	42	35	37.6	2240
October	42	38	38.5	3370
November	38	34	35.6	2120
December	34	33	33.5	2060
The period	74	26	34.0	24,700
Note				

YEAR 1913	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean	
January	35	32	32.7	2010
February	32	30	31.9	1770
March	31	30	30.1	1850
April	41	32	36.0	2140
May	39	30	33.9	2080
June	49	29	35.2	2090
July	32	28	29.1	1790
August	30	28	28.3	1740
September	31	28	28.8	1710
October	29	28	28.1	1730
November	30	28	28.2	1680
December	30	28	28.1	1730
The period	49	28	30.9	22,300
Note				

YEAR 1914	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean.	
January	32	28	28.7	1760
February	28	24	27.9	1550
March	34	28	28.7	1760
April	48	35	43.6	2590
May	58	46	51.4	3160
June	52	39	46.6	2770
July	41	40	40.2	2470
August	41	40	40.6	2500
September	43	41	41.9	2490
October				
November				
December				
The period				
Note				

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Monthly discharge of Provo River at near Forks, Utah. Station established November 16, 1911.
for the years 1911-1914. [Drainage area, 600 square miles.]

YEAR 1911	DISCHARGE IN SECOND-FEET Maximum	Minimum	Mean.	Total in acre-feet
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November 16-30	284	204	257	7600
December	269	211	232	14300
The period				21900
Note				

YEAR 1912	DISCHARGE IN SECOND-FEET Maximum	Minimum	Mean.	Total in acre-feet
January	337	226	277	17,000
February	284	229	265	15200
March	442	261	351	21,600
April	518	337	398	23700
May	1900	371	687	42200
June	2110	440	1100	65400
July	396	238	275	16900
August	309	232	253	15600
September	335	252	297	17700
October	540	278	337	20700
November	430	328	373	22200
December	345	249	300	18400
The period	2110	226	409	297,000
Note				

YEAR 1913	DISCHARGE IN SECOND-FEET Maximum	Minimum	Mean	Total in acre-feet
January	328	238	284	17,500
February	284	238	260	14400
March	740	252	327	20100
April	1160	464	680	40500
May	974	520	757	46500
June	666	247	393	23400
July	394	205	248	15200
August	224	200	213	13100
September	242	220	235	14000
October	341	227	298	18300
November	358	255	307	18300
December	324	224	275	16900
The period	1160	200	357	258,000
Note				

YEAR 1914	DISCHARGE IN SECOND-FEET Maximum	Minimum	Mean.	Total in acre-feet
January	760	200	322	19800
February	466	229	281	15600
March	524	290	396	24300
April	1060	394	744	44300
May	1760	659	1170	71900
June	1610	322	843	50200
July	338	259	292	18000
August	306	256	272	16700
September	273	217	243	14500
October				
November				
December				
The period				
Note				

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Monthly discharge of Provo River at or near Provo, Utah.
for the years 1909-1911. [Drainage area, 640 square miles.] Station established

YEAR 1909	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean	
January	1500	240	537	33,000
February	370	240	310	17,200
March	470	240	356	21,900
April	1350	450	774	46,100
May	1890	850	1460	89,800
June	3620	1630	2250	134,000
July	1570	260	656	40,300
August	410	250	307	18900
September	640	305	444	26400
October	470	335	395	24300
November	530	318	407	24200
December	570	185	345	21200
The period	3620	185	687	497,000
Note				

YEAR 1910	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean	
January	1800	270	435	
February	570	180	341	
March	1100	335	703	
April	1450	570	904	
May	1425	732	992	
June	1025	225	441	
July	255	180	230	
August	270	180	217	
September	270	210	238	
October	300	255	271	
November	335	270	299	
December	370	285	311	
The period	1450	180	449	325,000
Note				

YEAR 1911	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean	
January	1920	270	458	28200
February	1000	198	353	19600
March	975	270	438	26900
April	620	285	441	26200
May	810	410	686	42200
June	1320	335	892	53500
July	318	210	275	16900
August	240	148	167	10300
September	285	172	189	11200
October	335	240	283	17400
November	410	255	336	19900
December	352	270	299	18400
The period	1920	148	402	291,000
Note				

YEAR	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean	
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
The period				
Note				

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
WATER-RESOURCES BRANCH

Monthly discharge of Provo River at or near Provo, Utah.
for the years 1909-1911. Station established
[Drainage area, 640 square miles.]

YEAR 1909	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean	
January	1500	240	537	33,000
February	370	240	310	17,200
March	470	240	356	21,900
April	1350	450	774	46,100
May	1890	850	1460	89,800
June	3620	1630	2250	134,000
July	1570	260	656	40,300
August	410	250	307	18900
September	640	305	444	26400
October	470	335	395	24300
November	530	318	407	24200
December	570	185	345	21200
The period	3620	185	687	497,000
Note				

YEAR 1910	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean	
January	1200	270	435	26700
February	570	180	341	18900
March	1100	335	703	43200
April	1450	570	904	53,800
May	1425	732	992	61,000
June	1025	225	441	26200
July	255	180	230	14100
August	270	180	217	13300
September	270	210	238	14200
October	300	255	271	16700
November	335	270	299	17800
December	370	285	311	19100
The period	1450	180	449	325,000
Note				

YEAR 1911	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean	
January	1920	270	458	28200
February	1000	198	353	19600
March	975	270	438	26900
April	620	285	441	26200
May	810	410	686	42200
June	1320	335	899	53500
July	318	210	275	16900
August	240	148	167	10300
September	285	172	189	11200
October	335	240	283	17400
November	410	255	336	19900
December	352	270	299	18400
The period	1920	148	402	291,000
Note				

YEAR	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean	
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
The period				
Note				

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Monthly discharge of Provo River at near Hailstone Dam, Utah
for the years 1905-1908 Station established February 1, 1905
[Drainage area, 600 square miles.]

YEAR 1905	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean.	
January				
February	336	238	249	13,830
March	335	254	279	17,160
April	485	238	319	18,980
May	740	301	468	28,780
June	1215	301	687	40,880
July	301	236	267	16,420
August	245	144	190	11,680
September	173	132	143	8,509
October	193	132	157	9,654
November	273	193	226	13,450
December	246	143	200	12,300
The period	1,215	132	290	191,600
Note				

YEAR 1906	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean.	
January			274	16800
February	340	153	250	13900
March	657	240	360	22100
April	774	340	527	31400
May	1680	340	973	59800
June	1860	500	1090	64900
July	479	240	331	20400
August	359	210	260	16000
September	322	256	295	17600
October	272	240	258	15900
November	340	210	289	17200
December	479	240	320	19700
The period	1860	153	436	316,000
Note				

YEAR 1907	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean	
January	340	196	280	17200
February	774	272	450	25000
March	750	322	460	28300
April	1560	418	897	53400
May	2340	634	1170	71900
June	2340	1120	1650	98200
July	2100	479	1120	68900
August	458	359	387	23800
September	500	359	400	23800
October	398	378	381	23400
November	378	378	378	22500
December	458	305	378	23200
The period	2340	196	663	480,000
Note				

YEAR 1908	DISCHARGE IN SECOND-FEET			Total in acre-...
	Maximum	Minimum	Mean.	
January	378	240	329	20200
February	458	225	330	19000
March	458	322	372	22900
April	870	322	515	30600
May	1070	500	886	54500
June [a]	1800	970	1230	73200
July	1070		579	35600
August	346	225	260	16000
September	364	225	253	15100
October	504	328	386	23700
November	382	258	364	21700
December	495	310	365	22400
The period	1800	225	489	355,000
Note [a] Discharges interpolated July 12-24				

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Provo, Utah.

River at near Provo Station established July 27, 1889

[drainage area, 640 square miles.]

Monthly discharge of Provo 1901–1904 for the years

YEAR 1901	DISCHARGE IN SECOND-FEET Maximum	Minimum	Mean.	Total in acre-feet
January	353	279	314	19,307
February	1658	258	471	26,158
March	411	302	333	20,475
April	788	302	392	23,326
May	2093	587	1,181	72,617
June	875	224	399	23,742
July	240	224	239	14,696
August	240	224	238	14,634
September	240	240	240	14,281
October	302	240	257	15,802
November	279	279	279	16,602
December				17,155
The period	2093	224	385	278,795
Note				

YEAR 1902	DISCHARGE IN SECOND-FEET Maximum	Minimum	Mean.	Total in acre-feet
January				
February				
March				
April				
May				
June 7-30				
July				
August				
September				
October				
November				
December				
The period				
Note	No Record			

YEAR 1903	DISCHARGE IN SECOND-FEET Maximum	Minimum	Mean	Total in acre-feet
January				
February				
March				
April				
May				
June 7-30	1195	245	685	32608
July	235	203	218	13,404
August	203	168	187	11,498
September	218	168	195	11,603
October	253	235	245	15064
November	420	253	306	18208
December	311	253	292	17,954
The period	1195	168	323	120,339
Note	No Record			

YEAR 1904	DISCHARGE IN SECOND-FEET Maximum	Minimum	Mean.	Total in acre-feet
January	290	196	244	15,000
February	861	253	373	21,460
March	667	331	388	23,860
April	680	353	486	28,920
May	2153	461	1,145	70,410
June	1625	371	1131	67,300
July	326	136	202	12,420
August	182	134	149	9,162
September	184	80	117	6,962
October	146	79	113	6,948
November	190	113	139	8,271
December	205	113	149	9,16
The period	2153	79	386	279,90
Note				

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Monthly discharge of Provo River at near Provo, Utah
for the years 1901–1904 Station established July 27, 1889
[Drainage area, 640 square miles.]

YEAR 1901	DISCHARGE IN SECOND-FEET Maximum	Minimum	Mean.	Total in acre-feet
January	353	279	314	19,307
February	1658	258	471	26,158
March	411	302	333	20,475
April	788	302	392	23,326
May	2093	587	1,181	72,617
June	875	224	399	23,742
July	240	224	239	14,696
August	240	224	238	14,634
September	240	240	240	14,281
October	302	240	257	15,802
November	279	279	279	16,602
December			279	17,155
The period	2093	224	385	278,795
Note				

YEAR 1902	DISCHARGE IN SECOND-FEET Maximum	Minimum	Mean.	Total in acre-feet
January				
February				
March				
April				
May				
June 1-30				
July				
August				
September				
October				
November				
December				
The period				
Note	No Record			

YEAR 1903	DISCHARGE IN SECOND-FEET Maximum	Minimum	Mean	Total in acre-feet
January	a			
February	a			
March	a			
April	a			
May	a			
June 1-30	1195	245	685	32,608
July	235	203	218	13,404
August	203	168	187	11,498
September	216	168	195	11,603
October	253	235	245	15,064
November	420	253	306	18,208
December	311	253	292	17,954
The period	1195	168	323	120,339
Note	a No Record			

YEAR 1904	DISCHARGE IN SECOND-FEET Maximum	Minimum	Mean.	Total in acre-feet
January	290	196	244	15,000
February	861	253	373	21,460
March	667	331	388	23,860
April	680	353	486	28,920
May	2153	461	1,145	70,410
June	1625	371	1,131	67,300
July	326	136	202	12,420
August	182	134	149	9,162
September	184	80	117	6,962
October	146	79	113	6,948
November	190	113	139	8,271
December	205	113	149	9,162
The period	2153	79	386	279,900
Note				

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Monthly discharge of Provo River at near Provo, Utah.
for the years 1897–1900 Station established July 27, 1889.
[Drainage area 640 square miles.]

YEAR 1897	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean.	
January [a]			400	24,595
February [a]			500	27,769
March [a]			415	25,518
April	1320	712	856	50,935
May	2600	1920	1856	114,122
June	1472	360	796	47,365
July	360	265	295	18,139
August	225	225	225	13,835
September	415	225	260	15,471
October	485	415	449	27,608
November	485	360	433	25,765
December	415	360	371	22,874
The period	2600	225	571	413,996
Note	[a] Estimated			

YEAR 1898	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean.	
January	336	250	283	17,401
February	390	287	307	17,050
March	390	390	390	23,980
April	972	612	566	33,679
May	1132	390	957	58,844
June	1212	287	823	48,972
July	387	167	202	12,421
August	167	146	162	9961
September	167	107	167	9937
October	250	167	210	12,912
November	287	250	281	16,721
December	287	250	279	17,155
The period	1212	146	386	279,033
Note				

YEAR 1899	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean	
January	287	287	287	17,647
February	287	190	267	14828
March	1052	336	564	34,679
April	1052	582	855	50,876
May	1454	652	1169	71,879
June	3310	1454	2345	139,537
July	1890	330	679	41,750
August	350	330	337	20,721
September 1-23	330	330	330	19,636
October 1-21	370	370	370	22,750
November				
December				
The period	3310	190	720	434,303
Note				

YEAR 1900	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean.	
January				
February				
March				
April				
May 21-31			1249	27,055
June	1310	155	404	24,040
July	200	175	181	11,129
August	175	155	170	10,453
September	200	155	176	10,473
October	255	200	218	13,404
November	788	255	359	21,362
December 1-8			316	5,014
The period	1310	155	466	122,930
Note				

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Monthly discharge of Provo River at near Provo, Utah
for the years 1893-1896 Station established July 27, 1889
[Drainage area, 640 square miles.]

YEAR 1893	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean.	
January	280	240	251	15,433
February	280	240	275	15,273
March	775	280	351	21,582
April	928	380	638	39,238
May	2340	564	1237	76,060
June	2260	774	1580	94,016
July	1006	280	431	26,501
August	280	240	249	15,310
September	280	240	258	15,352
October	380	280	348	21,390
November	440	380	388	23,088
December	440	380	413	25,395
The period	2340	240	535	388,638
Note				

YEAR 1894	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean.	
January	380	380	380	23365
February	440	380	391	21,715
March	630	440	485	29,575
April	1084	564	687	40,880
May	1860	851	1449	89095
June	1940	380	1110	66050
July	440	240	312	19184
August	330	240	247	15187
September	500	240	430	25587
October	440	380	380	23365
November	440	330	375	22315
December	440	240	341	20,967
The period	1,940	240	549	397,285
Note				

YEAR 1895	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean	
January	508	292	341	20,967
February	389	292	326	18,105
March	968	292	421	25,886
April	1050	444	683	40,641
May	1760	968	1216	74,769
June	968	292	542	33,251
July	292	220	261	16,048
August	220	192	215	13,220
September	254	192	209	12436
October	254	254	254	15,618
November	338	292	300	17851
December	338	292	303	18,631
The period	1,760	192	423	306,423
Note				

YEAR 1896	DISCHARGE IN SECOND-FEET			Total in acre-feet
	Maximum	Minimum	Mean.	
January	444	256	322	19798
February	339	292	298	17141
March	728	292	398	24471
April	1518	390	629	37428
May	4150	581	1166	71,694
June	3345	444	1558	92,707
July	728	292	384	23611
August	444	292	311	19122
September	339	292	309	18,387
October	339	339	339	20,844
November	511	339	421	25041
December	390	390	390	23980
The period	4,150	292	544	394,224
Note				