THE STATE OF UTAH
OFFICE OF STATE ENGINEER
SALT LAKE CITY

WAYNE D. CRIDDLE
STATE ENGINEER

January 5, 1965

Mr. Neils Anderson, Chairman
Provo River Distribution System
266 North State Street
Orem, Utah

Dear Mr. Anderson:

Re: 1964 Financial Statement
Provo River Water
Distribution System

Submitted herewith is the Financial Statement covering the operation of your Water Distribution System for the period of January 1, 1964 through December 31, 1964 inclusively.

Very truly yours,

Wayne D Criddle

Wayne D. Criddle
State Engineer

FR:dp

Enclosure: One copy of Financial Statement
Additional copies of the Financial Statement were mailed separately to the following:

Mr. H. C. Godbe	Salt Lake City, Utah
Mr. Elmer Seal	Riverton, Utah
Mr. Sherman A. Giles	Heber, Utah
Mr. Ira J Page	Kamas, Utah
Mr. Floyd Bonner	Midway, Utah
Mr. Ernest Knight	Kamas, Utah
Mr. Stanley Roberts	Provo, Utah
Mr. Glenn A. Wright	Provo, Utah
Mr. J. Edwin Ure	Kamas, Utah
Comm. Wallace R. Wayman	Provo, Utah
Dep. Comm. Isaac F. Baum	Heber, Utah

1964

PROVO RIVER WATER DISTRIBUTION SYSTEM

STATEMENT OF FINANCIAL BALANCES, RECEIPTS AND EXPENDITURES

A. Balance of funds on hand:

1. Beginning of year	$ 8,303.23	
2. End of year	8,198.79	
3. Change during year		-$104.44

B. Receipts and expenditures

1. Receipts		
(a) Regular assessments	$ 13,727.60	
(b) Special collections	108.70	
(c) Total	$ 13,836.30	
2. Expenditures (see attached)	$ 13,940.74	

C. Difference between receipts and expenditures -$104.44

Prepared by: Frank Reese
Frank Reese
Controller

Approved by: Wayne D. Criddle
Wayne D. Criddle
State Engineer

STATE OF UTAH

OFFICE OF STATE ENGINEER
PROVO RIVER
WATER DISTRIBUTION SYSTEM

1964 Budget Item No:	Description of Budget Item:	Amount Approved for 1964	Total 1964 Expenditures:
1.	Commissioner's Salary	$ 6,000.00	$ 6,000.00
1-B	River System Matching Soc. Sec.	174.00	174.00
1-F	River System Matching State Retirement	240.00	240.00
2.	Deputy Commissioner's Salary	4,500.00	4,500.00
2-B	River System Matching Soc. Sec.	163.16	163.11
2-F	River System Matching State Retirement	180.00	180.00
3.	Office Rent	180.00	180.00
4.	Travel Expense @ $ .09/mile	1,800.00	1,469.79
5.	Field Equipment & Supplies	50.00	30.07
6.	Office Equipment & Supplies	150.00	64.01
7.	Commissioner's Annual Report (1963)	125.00	123.91
8.	Telephone Expense	225.00	184.05
9.	Committee Expense and Allowances	500.00	314.78
10.	Bonds and Insurance Premiums	100.00	86.37
11.	Miscellaneous Expense	50.00	30.65
12.	Contractual Services (S. Giles)	200.00	200.00
	TOTAL 1964 BUDGET $	14,637.16	$ 13,940.74
	1964 ASSESSMENT $	13,700.00	

STATE OF UTAH

OFFICE OF STATE ENGINEER

PROVO RIVER
WATER DISTRIBUTION SYSTEM

1964 DELINQUENT WATER ASSESSMENTS

NAME AND ADDRESS:	ACCOUNT NO:	TOTAL AMOUNT DUE:
Little Dry Creek Irrigation Co. C/O W. H. F cer 455 No. 1280 West Provo, Utah	5	$ 108.44
Hugh Vern Wentz 75 East Center St. Provo, Utah	35	4.00
Russell A. Dean RFD 2 Box 756 Provo, Utah	42	14.24
O. J. Peay 666 North Main St. Springville, Utah	52	4.00
Clifford Meyers 930 West 9th North Provo, Utah	80	13.20
Thomas A. Clegg 895 North 950 West Provo, Utah	82	4.00
Elmer Lee (Estate) C/O Mrs. Bob Johnson 1250 No. 7th West Provo, Utah	86	12.20
Verl Brown 1301 No. 7th West Provo, Utah	87	12.20
Sunrise Irrigation Co. C/O Lloyd Clawson RFD Woodland, Kamas, Utah	120	174.36
Ellsworth Gines RFD Kamas, Utah	141	24.89
Mrs. Afton Gines C/O Deloy Bisel Star Route Woodland, Utah	146	7.31

PROVO RIVER WATER DISTRIBUTION SYSTEM

1964 DELINQUENT WATER ASSESSMENTS (Cont'd)

NAME AND ADDRESS:	ACCOUNT NO:	TOTAL AMOUNT DUE:
W. H. Lemon RFD Kamas, Utah	153	$ 1.27
Mrs. Appollos Turnbow RFD Kamas, Utah	157	1.00
Mrs. Frank Pace RFD Kamas, Utah	159	4.00
Lucy Peterson, (Estate) C/O Kenneth M. Williams Kamas, RFD Woodland, Utah	170	9.77
Noel W. Peterson C/O Kenneth M. Williams Kamas, RFD Woodland, Utah	171	8.00
David A. Bisel RFD Kamas, Utah	177	5.13
Frank Pace RFD Kamas, Utah	178	4.00
Sperry Rollins Heber RFD, Utah	193	18.75
Burton Van Wagoner Midway, Utah	204	10.18
Rudger Schurtz 903 West 1020 North Provo, Utah	232	1.00 (CC)
Pete M. Christensen 981 West 9th North Provo, Utah	251	4.00
Mrs. Robert Johnson 1250 North 7th West Provo, Utah	261	16.20
Alma V. Nicol C/O Orrin N. Jackson 665 East 700 No. Provo, Utah	267	12.20
Elden C. Sabin 851 West 1340 North Provo, Utah	275	1.00 (CC)

TOTAL AMOUNT DUE: $ 475.34

STATE OF UTAH

OFFICE OF STATE ENGINEER

PROVO

RIVER DISTRIBUTION SYSTEM

1963 Budget Item No.	Description of Item	Amount approved for 1963	Total Expenditures
1	Commissioner's Salary	$5,600.00	$5,600.00
1-B	River System Matching Soc. Sec.	174.00	174.00
1-F	River System Matching State Ret.	224.00	224.00
2	Deputy Commissioner's Salary	4,032.00	4,032.00
2-B	River System Matching Soc. Sec.	146.16	146.15
2-F	River System Matching State Ret.	161.28	161.28
3	Office Rent	180.00	180.00
4	Travel Expense ea. $.09/mile	1,800.00	(1,593.99)
4-A	Commissioner's Travel Expense		812.61
4-B	Deputy Commissioner Trvl Expense		781.38
5	Field Equipment	50.00	8.13
6	Office Equipment & Supplies	150.00	83.40
7	Commissioner's Annual Report (1962)	125.00	105.52

STATE OF UTAH

OFFICE OF STATE ENGINEER

PROVO

RIVER DISTRIBUTION SYSTEM

1963 Budget Item No.	Description of Item	Amount approved for 1963	Total Expenditures
8	Telephone Expense	$ 225.00	$ (191.90)
8-A	Comm. Telephone Exp.		115.28
8-B	Dep. Comm. Telephone Exp.		76.62
9	Committee Exp. & Allowances	500.00	177.48
10	Bonds & Insurance Premiums	100.00	86.74
11	Miscellaneous Expense	32.56	42.41*
12	Contractual Services (S. Giles)	200.00	200.00
	TOTAL 1963 BUDGET	$13,700.00	$13,007.00

*Over-expenditure approved by Neils Anderson
H. C. Godbe for Secretary Expense

SUMMARY
PROVO RIVER NATURAL FLOW
UTAH VALLEY
IRRIGATION SEASONS
1 9 5 0 - 1 9 6 4
Mean_____cfs

Year	April	May	June	July	Aug.	Sept.	Oct.	A.F.
1950	671	1068	1217	415	324	324		214832
1951	576	1063	898	365	331	292		213265
1952	1215	2266	1477	602	532	460		396602
1953	369	391	920	281	253	206	205	153200
1954	419	432	222	193	166	185	192	96952
1955	307	588	410	191	182	180	211	126535
1956	421	895	593	229	195	178	195	165457
1957	313	669	1353	310	263	248	290	298839
1958	480	1106	529	235	220	205	230	183962
1959	271	321	368	197	174	169	272	109379
1960	306	472	354	166	133	136	171	106114
1961	142	168	261	162	107	112	182	69176
1962	831	961	1039	309	207	189	226	229077
1963	395	664	568	213	184	205	208	145693
1964	394	820	770	328	190	180	180	174906

SUMMARY
PROVO RIVER COMPUTED NATURAL FLOW
UTAH VALLEY 1964 SEASON
ACRE FEET

Month	Maximums	Minimum	Average	Ac. Ft.
1963				
Nov.	691	398	541	16220
Dec.	2455	238	580	18027
1964				
Jan.	726	39	467	14505
Feb.	624	146	389	11299
Mar.	665	312	476	14793
Apr.	1212	501	788	23708
May	3281	593	1640	50870
June	2900	395	1540	46376
July	1449	301	655	20168
Aug.	1531	-99	379	11757
Sept.	593	37	361	10825
Oct.	554	149	361	11202
Maximum	3281			
Minimum		-99		
Average			682	
Total				249750

In that D.C.R. water level is a factor in determining daily N.F. some of the daily extreams such as a (-99 A.F.) came about in the bimonthly computation sheet #4 as a result of the D.C.R. mercroid gage being at times, out of order. It is suggested the D.C.R. Assoc. install a second mercroid gage to be used as a check against the first or old one.

TOTAL FLOW HEBER VALEY
Second Feet

NATURAL FLOW HEBER VALLEY
Second Feet

May	June	July	Aug	Sept	Date	May	June	July	Aug	Sept
287.7	1153.5	1643.1	165.9	93.6	1	204.9	600.8	705.6	48.5	45.4
283.4	1271.5	1376.4	159.9	89.5	2	200.0	617.6	534.1	45.5	40.4
329.5	1759.4	1063.8	161.2	82.3	3	242.9	930.0	463.0	49.7	55.1
283.1	2081.4	755.3	151.5	79.1	4	202.0	962.5	427.7	41.0	51.9
260.0	2297.3	480.6	149.3	77.7	5	181.6	1034.1	257.2	57.3	49.7
271.6	2067.6	458.1	168.9	73.5	6	185.6	1399.0	256.3	71.7	45.4
286.9	1861.8	413.6	158.0	71.5	7	169.2	1335.7	235.5	65.3	28.0
279.2	1852.4	381.3	142.6	67.1	8	152.0	1352.6	213.7	49.0	38.6
286.0	1220.3	337.7	145.4	71.0	9	153.8	904.0	152.4	56.1	43.8
267.5	928.6	451.9	140.5	72.1	10	136.2	770.8	248.5	52.9	44.9
289.2	747.9	403.4	132.6	69.9	11	166.5	516.7	173.2	45.1	41.9
327.2	978.6	382.2	132.2	68.2	12	181.6	467.1	146.4	46.0	39.5
369.5	1261.5	361.3	139.4	86.2	13	184.8	520.2	134.3	58.4	57.5
484.6	1318.5	338.2	129.1	78.7	14	239.2	494.8	112.4	46.9	57.9
756.5	1296.7	335.6	124.5	84.1	15	354.8	485.1	138.5	47.8	70.6
1037.8	1503.0	310.4	126.9	88.2	16	498.7	542.5	83.4	44.1	74.4
1396.8	1814.4	280.9	128.4	85.1	17	748.8	694.1	95.0	74.0	70.5
1820.8	1818.0	323.1	102.7	73.4	18	914.2	679.7	140.1	61.0	59.6
1703.6	1513.1	272.8	101.4	73.7	19	1098.6	628.1	76.5	61.7	59.9
2098.9	1333.6	266.7	96.6	72.5	20	1005.2	625.3	93.1	57.6	58.7
2482.5	1188.3	273.3	98.0	69.1	21	1353.0	436.4	98.9	59.2	56.2
2756.9	1344.0	245.4	93.2	68.9	22	1516.1	647.9	76.8	57.2	48.8
2954.0	1418.5	235.8	89.7	70.4	23	1650.3	850.6	74.1	29.7	50.3
2823.0	1168.2	193.8	106.0	71.1	24	1488.6	716.5	45.0	47.7	51.6
2963.0	1126.3	184.5	105.3	70.4	25	1604.8	731.8	63.9	48.8	50.7
2944.0	990.0	179.4	106.5	71.9	26	1809.8	654.7	58.6	50.9	52.4
2325.6	911.4	178.0	108.9	70.4	27	1364.8	451.4	59.3	54.6	50.9
2385.7	991.1	175.7	109.8	71.1	28	1446.6	453.0	55.8	58.8	52.2
2289.3	1287.5	186.8	111.0	70.9	29	1434.6	617.5	6119	62.8	52.0
1786.6	1266.8	173.4	103.5	68.9	30	1071.4	594.6	52.1	48.2	50.0
1365.6		164.2	98.2		31	735.7		47.2	48.5	

NATURAL FLOW PROVO RIVER
UTAH VALLEY 1964 WATER YEAR ACRE FEET

Date	1963 Nov.	Dec.	1964 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	419	403	413	624	502	1212	903	1272	1368	6	333	149
2	610	410	215	427	509	1024	1129	1560	1449	212	37	310
3	422	537	415	360	312	1013	927	1933	947	436	385	426
4	620	520	436	355	511	1005	916	2003	995	381	297	367
5	597	534	632	263	414	916	809	2413	762	337	471	411
6	600	547	421	443	396	766	971	2900	911	608	536	393
7	505	461	413	330	335	779	854	1924	332	215	72	385
8	691	475	614	519	386	676	891	2340	470	633	384	416
9	591	673	414	313	587	925	712	1275	816	168	278	322
10	412	546	605	537	389	898	957	475	729	548	161	398
11	594	557	199	341	398	889	593	395	605	304	321	299
12	398	599	624	419	510	789	863	1041	705	385	456	399
13	585	588	39	233	406	650	831	607	354	458	593	207
14	582	666	629	428	395	681	1217	710	742	235	308	405
15	580	657	423	329	390	833	1734	928	395	224	371	392
16	628	2455	520	612	467	829	1657	1616	767	314	442	289
17	477	238	510	392	575	737	1485	1001	590	646	379	189
18	581	727	610	344	383	845	2583	1275	470	422	170	308
19	404	408	619	146	411	642	1683	1627	454	-99	323	316
20	683	605	419	323	502	744	2520	1796	482	245	424	408
21	474	603	420	317	670	708	2768	1630	527	379	393	437
22	474	412	726	319	665	829	3110	1964	442	498	335	403
23	572	436	524	422	606	817	2469	2605	339	347	482	286
24	467	632	652	327	649	707	3281	2049	301	519	472	310
25	562	420	448	501	422	587	2788	2004	702	472	448	415
26	468	631	426	289	603	688	2458	1766	718	351	283	490
27	487	529	423	490	411	794	1958	767	447	15	203	377
28	578	414	434	492	398	586	2870	1323	313	368	456	376
29	578	508	426	404	400	738	2218	1423	565	200	498	554
30	581	413	428		598	501	1627	1754	532	1531	514	287
31		423	428		593		1088		739	399		378
Total	16220	18027	14505	11299	14793	23708	50870	46376	20168	11757	10825	11202
Max.	691	2455	726	624	665	1212	3281	2900	1449	1531	593	554
Min.	398	238	39	146	312	501	593	395	301	-99	37	149
Mean	541	580	467	389	476	788	1640	1540	655	379	361	361

Such unrealistic daily A.F. amounts as Dec 16th, Aug 1st, 19th, 27th, 30th; all reflects mercroid gage difficulties, all of which automatically compensated themselves after gage repair and adjustment.

ONTARIO TUNNEL 1964 FLOW
SECOND FEET

Date	April	May	June	July	Aug.	Sept.	Oct.
1.		15.0	11.5	10.7	11.5	9.9	14.1
2.		15.0	11.5	10.7	11.5	10.7	14.1
3.		15.0	9.9	10.7	10.7	9.9	14.1
4.		15.3	9.9	9.6	10.7	9.9	14.1
5.		15.5	11.5	8.5	10.7	10.7	14.1
6.		15.5	11.5	9.2	10.7	10.7	14.1
7.		15.7	15.0	8.5	9.9	10.7	14.1
8.		15.9	15.0	13.2	9.9	9.2	15.0
9.		15.7	12.4	8.5	8.9	8.9	15.0
10.		15.5	9.9	8.5	8.1	9.9	15.0
11.		15.3	9.9	7.8	10.7	10.7	15.0
12.		15.0	9.9	7.8	10.7	10.7	15.0
13.		15.0	12.4	8.5	8.5	11.5	15.0
14.		15.0	10.7	9.2	11.9	13.8	15.0
15.		15.0	10.7	13.2	7.8	13.8	15.0
16.		15.0	10.7	9.6	14.1	14.1	15.0
17.		15.0	11.5	8.5	9.9	15.0	15.0
18.		15.0	11.5	9.6	9.9	14.1	15.0
19.		13.2	15.0	9.6	10.7	14.1	15.0
20.		12.4	12.4	9.2	11.5	14.1	15.0
21.	15.0	9.0	12.4	8.9	11.5	13.2	15.0
22.	14.0	9.0	15.0	9.9	10.7	13.2	15.0
23.	13.2	8.5	14.1	9.2	11.5	13.2	15.0
24.	13.0	9.0	13.2	8.9	11.5	13.2	15.0
25.	12.5	9.0	13.2	8.5	10.7	13.2	15.0
26.	12.0	8.0	13.2	8.5	10.7	13.2	15.0
27.	11.5	8.0	11.5	9.6	9.9	13.2	15.0
28.	12.5	8.5	11.5	10.7	9.9	13.2	15.0
29.	13.2	12.4	10.7	11.9	9.9	13.2	15.0
30.	15.0	11.9	10.7	12.4	9.9	13.2	15.0
31.		15.0		10.7	11.5		15.0
Mean for Month	13.2	13.2	11.9	9.7	10.5	12.1	14.8

Mean for usable season (Irrigation) 12.2 12.35
Less 4% Loss - .49 - .49
Diverted by Irr. Users before measurement 1.00 1.00
12.71 12.86 cfs mean Irr. Season

Delivery as follows: cfs

Midway Irrigation Co. Decreed Rights	5.50	5.50
United Parks City Mines Co. Leased to Midway Irrigation Co.	2.60	2.68
United Parks City Mines Co. Leased or furnished to users before measurement	1.00	1.00
Utah Power & Light Co. Decreed rights used through Olmstead Plant for power and leased to Provo Bench Canal Co.	3.61	3.68
Total	12.~~71~~ 86 cfs	

It was not necessary until after July 28th 1965 to take this water into account or the computations as there was sufficent Provo River N.F. water to fill all use~~s~~ requirements. other

9-211c
(Rev. June 61)

UNITED STATES DEPARTMENT OF THE INTERIOR—GEOLOGICAL SURVEY—WATER RESOURCES DIVISION

STA. NO. 10-1595.00

Daily discharge, in second-feet, of Provo River below Deer Creek Dam, Utah, *for the year ending September 30, 19*

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	195	141	147	256	a200	92	60	238	1,320	1,170	534	384
2	193	139	147	256	a166	89	56	240	1,060	1,040	534	394
3	195	142	147	256	*166	89	196	234	1,080	830	534	399
4	195	146	*146	256	163	89	264	234	1,420	753	531	399
5	210	146	158	256	161	*90	264	*236	1,460	640	534	402
6	201	146	166	256	159	87	264	238	1,480	584	528	404
7	197	146	168	256	159	114	266	236	1,560	559	520	404
8	193	146	165	*260	159	141	266	260	1,610	556	522	407
9	*192	*146	168	258	159	139	313	279	*1,570	562	528	412
10	188	147	166	258	161	136	331	281	1,550	550	531	399
11	179	149	166	260	161	136	331	284	1,350	545	534	379
12	183	147	166	258	161	137	331	286	1,110	553	534	376
13	183	146	165	258	159	a137	*331	286	1,040	550	495	379
14	179	146	165	260	159	a137	345	313	1,050	542	484	379
15	177	147	166	260	158	a137	367	357	1,200	531	476	*374
16	177	146	168	258	137	199	367	367	1,400	528	470	374
17	156	146	168	258	125	224	362	372	1,540	534	*345	372
18	137	146	166	260	122	228	362	397	1,410	525	350	369
19	137	147	214	260	120	143	364	436	1,410	522	465	357
20	137	146	260	260	104	51	352	489	1,410	528	465	352
21	139	147	260	260	93	44	340	536	1,390	522	470	334
22	137	144	258	262	93	44	336	*545	1,350	522	465	317
23	137	144	256	262	93	60	336	553	1,340	*528	462	313
24	139	144	256	262	93	64	336	587	1,340	528	443	313
25	137	144	256	262	92	a64	334	652	1,340	531	428	313
26	139	146	256	262	92	a58	336	962	1,330	534	417	313
27	141	146	256		93	a58	338	1,270	1,250	531	415	313
28	139	147	258	a262	93	a54	338	1,320	1,210	539	394	315
29	141	147	258		92	a54	288	1,410	*1,120	539	389	327
30	141	146	258			55	238	1,450	1,180	539	386	272
31	142		256			58		1,420		536	382	
	5,136	*	6,210	*	3,893	*	9,012	*	39,880	*	14,565	*
		4,366	*	8,040	*	3,208	*	16,768	*	18,451	*	10,845

MEAN	166	146	200	259	134	103	300	541	1,329	595	470	362
ACRE-FEET	10,190	8,660	12,320	15,950	7,720	6,360	17,880	33,260	79,100	36,600	28,890	21,510

U. S. GOVERNMENT PRINTING OFFICE 16—60060-2

Max disch 1,620 cfs on June 8, 1964.

* Discharge measurement made on this day.

a No gage-height record.

YEAR OR PERIOD — MEAN 384 — ACRE-FEET 278,400

9-211c
(Rev. June 61)

UNITED STATES DEPARTMENT OF THE INTERIOR—GEOLOGICAL SURVEY—WATER RESOURCES DIVISION

STA. No. 10-1630.00

Daily discharge, in second-feet, of Provo River at Provo, Utah *, for the year ending September 30, 19* 64

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	15	133	144		260	113	74		819	656	3.7	
2	17	133	146		167	109	74		645	542	3.9	
3	17	135	149	a260	165	* 96	* 144		608	302	3.9	
4	17	146	153		*a165	92	270	a270	831	188	3.5	
5	28	158	153		a164	94	281		895	109	2.2	
6	37	158	*165	267	163	92	281		937	68	2.0	a2.0
7	45	*165		267	155	102	278		1,030	21	1.9	
8	*50	158		*264	a155	129	278	*313	*1,090	10	1.9	
9	43	155		260	a155	129	309		1,070	10	2.2	
10	48	155		267	155	127	353		1,060	9.4	3.3	
11	37	153		260	155	125	353	a310	964	8.2	5.4	
12	33	144	a168	260	153	125	355		793	8.6	6.5	*3.0
13	42	144		254	a152	129	360		667	10	4.6	a6.0
14	66	144		257	151	127	360	a275	671	14	5.4	a9.0
15	68	149		257	151	129	* 364	a275	728	8.6	4.6	*a12
16	69	155		257	149	155	a364		827	12	4.6	13
17	74	149		257	125	213	a364	a180	979	12	*4.4	5.9
18	59	149		257	123	222	a364		991	11	5.6	7.2
19	50	151	a230	257	121	198	a364		1,020	11	3.3	9.8
20	51	149		257	113	79	a360	a150	1,010	7.5	2.5	11
21	50	153		260	115	66	a350	*a140	1,080	6.2	2.5	15
22	51	151		267	117	64	a340	138	1,100	5.9	1.7	17
23	59	146		260	111	66	a340	127	1,080	5.9	1.0	14
24	98	146		260	107	79	a340	139	1,050	*5.9	1.0	11
25	107	142	a260	264	113	79	a340	222	994	6.8		10
26	111	142		267	116	72	a340	386	903	6.8		7.9
27	115	144		267	117	72	a340	671	819	5.6		5.1
28	117	144		267	117	66	a340	*747	785	4.4	a1.5	5.1
29	117	142		264	115	68	a300	808	*686	3.9		4.9
30	121	142		267		69	a270	884	649	3.5		5.4
31	129			264		69		880		3.3		
	1,941	*	6,276	*	4,125	*	9,250	*	26,781	*	92.1	*
		4,435	*	8,105	*	3,355	*	10,315	*	2,076.5	*	194.3 *

MEAN	62.6	148	202	261	142	108	308	333	893	67.0	2.97	6.48
ACRE-FEET	3,850	8,800	12,450	16,080	8,180	6,650	18,350	20,460	53,120	4,120	183	385

U. S. GOVERNMENT PRINTING OFFICE 16—60000-2

Max disch 1,120 cfs on June 21, 1964.

* Discharge measurement made on this day.

a No gage-height record.

YEAR OR PERIOD — MEAN 210 — ACRE-FEET 152,600

PRECIPITATION

Federal Building - Room 4012
125 South State
Salt Lake City, Utah
January 8, 1965

Wallace R. Wayman
Provo River Water Commissioner
4186 Canyon Road
Provo, Utah

Dear Mr. Wayman:

This letter is in response to your recent request for a forecast of next summer's streamflow for Provo River.

Assuming that average climatic conditions will prevail for the balance of the season, the streamflow during the period of April 1 to September 30 should be about 150,000 acre feet at Hailstone (138% of the 1948-62 average) and about 200,000 acre feet at Vivian Park (139% of average). These values do not include diversions from the Weber and Duchesne rivers.

It may be of interest to you to know that our present forecast for the Weber at Oakley is 170,000 acre feet (138% of average) and for the Duchesne near Tabiona 165,000 acre feet (145% of average). These forecasts are also for the April 1 thru September 30 period.

Ordinarily 35% to 40% of the total snowpack to be expected has accumulated by the first of January. Since this leaves the major portion yet to come, the water supply prospects may change considerably , either up or down, as the rest of the winter's snow accumulates.

Sincerely yours,

Gregory L. Pearson
Snow Survey Supervisor

The January 1, 1965 snow course data given below serves as the basis for a Vivian Park April to September (inclusive) forecast of 139% of the 15 year average (1948-62).

Snow Course	Elev.	Snow Depth Inches	Water Content Inches	Average Water Cont. Inches	% of Average
Timpanogos Divide	8140	58	16.5	10.7	154
Daniels-Strawberry Smt.	8000	42	10.0	5.4	185
Soapstone R. S.	7800	52	12.8	5.2	246
Trial Lake	9800	89	23.4	10.8	217
Smith & Morehouse	7600	43	10.8	4.7	230
Beaver Creek R. S.	7500	35	7.8	3.4	229

PRECIPITATION

Season 1963-1964 Measurement in inches

Normals Based on the 30-Year Period 1931-1960

	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Heber												
Precipitation	1.74	.43	2.07	.25	1.26	1.68	2.02	3.55	.57	.44	.29	.27
Departure from Normal	.35	-1.42	.28	-1.43	-.10	.53	.91	2.66	-.18	-.57	-.46	-.98
Normal	1.39	1.85	1.79	1.68	1.36	1.15	1.11	.89	.75	1.01	.75	1.25
Provo Radio KOVO												
Precipitation	1.62	.59	1.26	.08	1.34	3.02	3.18	3.75	.18	.25	T	.04
Departure from Normal	.51	-.72	-.18	-1.21	.09	1.83	2.05	2.97	-.39	-.59	-.62	-1.30
Normal	1.11	1.31	1.44	1.29	1.25	1.19	1.13	.78	.57	.84	.62	1.34
Salt Lake City AP												
Precipitation	1.56	.79	.94	.35	2.26	2.69	2.77	2.61	.26	.17	.13	.45
Departure from Normal	.26	-.45	-.41	-.83	.70	.93	1.37	1.63	-.32	-.70	-.40	-.70
Normal	1.30	1.24	13.5	1.18	1.56	1.76	1.40	.98	.58	.87	.53	1.15
Snake Creek PH												
Precipitation	2.07	.81	3.05	.20	2.38	3.14	2.17	3.82	.35	.27	.26	.30
Departure from Normal	-.06	-2.22	-.11	-2.65	-.11	1.42	.69	2.76	-.45	-.84	-.65	-1.25
Normal	2.13	3.03	3.16	2.85	2.49	1.72	1.48	1.06	.80	1.11	.91	1.55
Deer Creek Dam												
Precipitation	3.03	.61	2.09	.30	1.27	1.97	2.67	3.07	.03	.58	.58	.76
Departure from Normal	.57	-2.73	-.52	-2.28	-.72	.27	1.57	1.57	-.52	-.42	-.30	-1.58
Normal	2.46	3.34	2.61	2.58	1.99	1.70	1.10	1.50	.55	1.00	.88	2.34

The above precipitation information was secured from U.S. Dept. of Commerce Weather Bureau Water Supply forecast unit, Federal Building S.L.C. Utah. As noted the departure from normal was generally minus Nov. through Feb. and July through Oct., with plus departures March through June which had its advantages for many crops. The record shown is primarly a history record of 1964, with little value as a 1965 forecast. As of Dec. 31, 1964, Utah Lake was 141,500 Ac. Ft. above the previous year. The Jan. 1, 1965 Ac. Ft. forecast indications are: Provo River N.F. forecast at Hailstone for the coming water year is 173,000 and 270,000 at Vivian Park, which is 140% and 141% respectively of a 15 year average. The assumption is that weather conditions will remains normal the rest of the season.

DISTRIBUTION

1964 Irrigation Season.

Showing rights location, by dates, and cfs amounts covering 1233¼ shares of PRWUCo unassigned Class "A" Blue Cliff water right, as reflected by the following:- Class "A" River flow %,- PRWUCo acre duty change provisions,- and added other water (t) in P.B.

Provo Res WUCo duty	Free Water to July 7	60	60	80	80	100	100	100	100
Changing Dates		July 7	July 20	Aug 24	Aug 29	Sept 11	Sept 21	Oct 1	Oct 16
Total unassigned at 100% of Decree		28.92	30.68	30.68					30.68
" " " 90% " "				27.60	27.60	27.60		27.60	
" " " 80% " "							24.50		
Orem City 361 shares in Flume at duty provided	÷60	6.00	6.00						
	÷80			4.52	4.52				
	÷100					3.61	3.61	3.61	3.61
Provo Bench 610 shs at PB duty and River Flow %		9.68	8.72	7.84	7.84	7.84	6.98	7.84	8.72
Matching Water for 610 shares Commingled in Provo Bench		1.48	3.07	3.07	1.47	.74	.74	.55	.55
North Union 263.08 shares at duty provided	÷60 Acre	4.38	4.38						
	÷80 "			3.28	3.28				
	÷100 "					2.63	2.63	2.63	2.63
Balance for Murdock		7.38	8.51	8.89	10.49	12.78	10.54	12.97	15.17

One Share = one acre right.

OUTLINE DISTRIBUTION PROVO BENCH CANAL 1964

One Share of	Is Equal To Provo Bench	Shares of North Union	Murdock PRWU Col	Dixon Irr. Co.
a. Provo Bench C & I Co.	- - -	1.89	2.85	2.85
b. North Union Irr. Co.	0.529	- - -	1.5	1.5
c. Murdock	0.351	0.663	- - -	1.0
d. Dixon Irr. Co.	0.351	0.663	1.0	- - -
(t) includes storage Onterio and Loss Savings.		57 Ac. per cfs May 10 June 20 cfs	63 Ac. per cfs June 20 July 20 cfs	70 Ac. per cfs July 20 May 10 cfs
e. One P.B. Share equals		0.05	0.04525	0.04074
f. One N U Share equals		0.02647	0.02395	0.02156
g. One Murdock Share on duty 57, 63, 70 equals		0.01754	0.01587	0.01429
h. One Dixon share on duty 57, 63, 70 equals		0.01754	0.01587	0.01429
i. PBC & ICO Decree 1420.4 shares	76.	76.01	68.77	61.89
j. Tanner Deed, Par 30, 5 shares		0.25	0.25	0.25
k. Tanner deed 28 shares		1.24	1.24	1.24
l. Provo Res. Co. Deed, 250 shares		12.50	11.31	10.18
m. J. D. Dixon Deed, 31 shares		1.55	1.40	1.26
n. Provo Res. C. Deed 120 shares		6.00	5.43	4.89
o. Total issued stock 1954.4 shares (Less 92.58 shares exchanged to Orem City use in (flume) Bal. 1861.82)		(4.63) 93.2	(4.20) 84.3	(3.78) 76.0
Other Commingled equally participating water.				
p. Provo Res. Co. No. Certificate 610 acre shares. Equal duty.		10.70	9.68	8.72
q. Tanners No. Cert. 108.55 PB shares		5.43	4.92	4.42
r. Tanners Deed 47.00 PB shares		2.35	2.13	1.92
s. Total Class "A" measured by weir 100 % ri.		111.68	101.03	91.06
Quantity with river flow at 100 %		111.68	101.03	91.06
t. / Added storage water in cfs by Provo Bench to increase Acre duty.	96% canal			(28.50)
Onterio Tunnel Loss Savings,	4% Orem			27.36.
For July 22nd	Total			6.00
North Opening				
u. Provo Res. Co. No. Cert. 263.08 Ac. Shares				4.38
60 Ac(Duty as provided)	Dixon Water N.F.			1.50
v. Total Provo Bench & North Opening Water 100 % River. July 22nd				130.30

Other Information

w. Tanner added matching water cfs 6.7% of (t)	(2.23)	Charged to their Provo Canal Storage
x. Provo Res. Co. matching water cfs 9.2% of (t) to bring the 610 shares in parity.	(3.07)	Taken from Blue Cliff
y. Orem City 92.58 PS shares in (flume) 100 % river with 4% of (t) water added	(5.11)	Available for diversion in flume or
z. Orem City 351 P R Co. Ac. shares in (flume) at 60 Acre duty provided, No Cert.	(6.00)	Aqued.

Listed quantities under p and u as reported by official of Provo Res. Co.
" " " q and r " " " " Provo Bench C&I Co.
s, t, u, v, w, & z all are veriables based on River % + PR Co duty + added water (t).

DISTRIBUTION PROVO BENCH CANAL 1965
including North Opening

Name	Provo Bench Shares	North Union Shares	Acres Shares	Equal to PB Shares	Per Cent	
	1954.4			1954.4		
PBC & I Co.	~~1861.82~~		1139 ~~873.08~~	~~1861.82~~	~~72.02~~	72.16
Provo Res WU Co.	117.3			*306.00 399.71	~~12.50~~	14.02
**Tanner No Cert	~~108.55~~			108.55 117.30	~~4.24~~	4.35
**Tanner Deeds	42.25			42.25		
**Tanner Deeds		9.00		4.75		
				47.00	~~1.83~~	1.74
Dixon Irr. Co. App. 2134 a				*** 20.00	~~.78~~	.74
1.5 cfs Oct. 27, 1908 priority	~~39.~~		Total	~~2343.37~~ 2538.49	~~91.47~~	93.71

2695

~~3383~~ A.F. of storage delivered comprised the following: - ~~8.53~~ 6.29
~~100.00~~ 100.00

2000A.F. PB&I Co DCR Storage over PB weir covering 1964 allotment.
368 ~~377~~ A.F. P.R.W.U. Co matching water over PB weir covering past debits.
327 ~~888~~ A.F. (Tanner) Provo City matching water over PB weir covering past debits.
~~-30 A.F. Dixon Irr. Co. DCR storage through N Orific covering 1964 allocation.~~
~~-88 A.F. Pleasant Grove DCR storage through N Orifice covering 1964 allocation.~~

This 3383 A.F. equaled 8.53% of the total ~~39648~~ 42872 A.F. delivered P.B. for 1965.
2695

* Provo Res. W.U. Co. stock held or equaled to 0.351 Provo Bench stock per share for 1965 Irr. Season, hence this figure is reliable.

***This 1.5 cfs of secondary water held for 50% of Irr. season, hence the 20 share estimate inclusion.

**These assumed set-up share rights are based on Tanner 5 cfs. Secondary right Cer. #1310 book 227 page 323 and claim # 9915 for about 3.6 cfs drain water together with sufficent (Tanner) Provo City storage to complete the rights use. Changing irrigation practices relative to source water for Tanner drains indicate, that by 1965 a relatively good over all water year, that after Cert. #1310 is off the yield from claim #9915 is only sufficent to provide water fro 85 PB share sales without drawing extensively on Provo City storage provided as matching water.

OUTLINE DISTRIBUTION CITY CREEK 1964

Alfred Young Ditch Company
73.7 Acres
May 10 - June 20, Duty 57, 1.29 cfs A
June 20 - July 20, Duth 63, 1.17 cfs B
July 20 - May 10 Duty 70, 1.05 cfs C

Totals

	May 10 June 20	June 20 July 20	July 20 Sept 1	Sept 1 May 10
A B & C	1.29	1.17	1.05	1.05
ERBW Co.	7.96	7.35	6.56	6.17
* Rowe A clinger	.327	.298	.262	.243
Birch Boyce	.300	.281	.256	.229
Elmer J. Smith	.110	.100	.087	.079
Total	10.0	9.2	8.2	7.77

A B & C includes the 15 Acre right now in controversy as to present ownership, listed in decree on page 17 paragraph 20 (a) and (b) *This water listed on page 18 #20 (f) has recently been divided three ways.

OUTLINE DISTRIBUTION PROVO DIVISION
1964
LOSS AND GAIN ALLOWANCES
Second Feet

Name	Loss cfs	Gain cfs
Provo Bench	5	-
Timpanogas Canal	2	-
U. E. Union Canal	2	-
Cith Creek	1	-
Provo City:		
Factory	-	5
Union	2	-
City	1	-
Tanner	1	3 (5th West Drain
Totals	4	8

Gain 4

GENEVA STEEL COMPANY
Nov. 1 1963 to Oct. 31 1964

Date 1963	Report #	Meter 11.59 PM	10M Gal	Appl # 16226 Ac. Ft.	Deer Cr. Storage Ac.Ft.	Total Ac.Ft.
Oct. 31	20	04267				
Dec. 31	24	060405	56138	1721		1721
Apr. 30-64	8	189175	128770	3940		3940
*May 14	9	205348	16173	495		495
**May 23	10	213060	7712		236	236
June 30	12	234162	21102	646		646
*July 6	13	236750	2588	79		79
Aug. 1	15	259591	22841		702	702
" 31	16	280748	21157		648	648
Sept. 15	17	288263	7515		232	232
" 28	18	288263	0		0	0
**Oct. 17	20	308108	19845		605	605
Oct. 30	20	308108	0		0	0
			Total	6881	2423▲△	9304

*Storage water charge started $\frac{43560 \times 7.481}{10,000} = 32.6$ $\frac{\text{Meter Change}}{32.6} =$ A.F.
** " " " ended

▲This varies by ~~44~~ A.F. from that shown on D.C.R. storage summary sheet (only ~~one~~ four days pumping equivelant). Geneva Steel only used 69% of purchased water.

OUTLINE DISTRIBUTION COMPUTED NATURAL RIVER
AT OLMSTED DAM
1964
Second Feet

Time	Flume Utah Power & Light Co.	River Provo Res. W. Users Co.	Utah Lake Distributing Company
First Class A	229 River x Ont. Tunnel	3	-
	223 x		
Second Cert. 1989	-	34 River	-
Second Cert. 2360	-	30 River	-
Second Cert. 2370	-	50 Shingle Crk.	-
		(214)	
		217	
Third Cert. 1125 Nov 28, 1917 Priority	200	-	-
Fourth	-	-	A

Quantity. Right Changes: Based on N.F. from Provo River

0-232x	0-229x	0-3	-
* 232x-446x	229x	3-217	-
446-646x	229x-429x	217	-
** 646x-646xA	429X	217	)-A

* In this quantity range Cert #1207 for 1.5 cfs and Cert #1310 for 5 cfs are filled from tail race water, junior to Cert # 1989 See Exhibit III
** In this quantity range no restriction made on N.F. Irr. Canal Rights.

Legend: x-UP&L Ontario Tunnel Waters:)-Wright Estate right of PRWU Co; A- Utah Lake Distributing Company Waters by change of point of Diversion.

Daily Flow Utah Power and Light Co., 1964

OLMSTEAD PLANT

Flume Flow Quantity in Acre Feet exclusive of Bridal Veil and Lost Creek

Date	1963 Nov.	Dec.	1964 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	376	398	626	622	276	202	590	858	858	478	370	334
2	374	396	628	418	276	204	608	858	858	480	378	332
3	378	398	626	420	274	396	598	858	858	480	388	322
4	386	398	626	418	276	642	590	858	858	480	388	316
5	388	420	626	414	282	650	600	858	846	480	392	314
6	386	432	626	412	280	652	612	692	774	472	392	314
7	392	434	628	416	312	660	614	698	624	466	392	316
8	388	432	628	408	368	662	646	698	596	466	396	312
9	384	434	622	408	372	714	686	694	578	466	396	312
10	390	430	622	416	368	794	700	696	576	472	368	312
11	388	432	624	418	356	786	698	696	572	476	356	312
12	388	430	624	416	362	784	696	696	562	472	358	312
13	388	428	620	416	368	750	696	760	548	470	356	310
14	386	430	620	416	366	794	725	858	530	466	356	306
15	386	434	620	416	360	846	856	858	512	462	361	306
16	362	434	622	376	436	856	858	834	512	464	366	306
17	396	434	622	350	544	856		858	502	470	352	326
18	394	432	624	344	522	856			500	462	356	344
19	398	530	624	340	380	856			492	462	332	352
20	392	626	624	314	362	856			488	462	322	352
21	398	624	630	288	344	836			476	462	310	356
22	398	626	628	286	342	852			468	456	291	340
23	392	626	624	286	374	844			478	446	282	328
24	392	624	626	286	402	844			476	450	282	328
25	390	622	626	284	204	832			476	436	282	332
26	392	624	630	276	190	834			474	422	282	334
27	396	626	628	282	194	846			468	424	282	332
28	396	628	630	282	172	850			468	388	289	332
29	396	628	626	280	176	832		858	458	376	316	314
30	396	630	630		182	602		838	454	376	322	342
31		628	628		182		858		458	364		340
Total A.F.	11664	15668	19388	10704	9932	21988	23643	24462	17798	14006	10313	10088

Grand Total 189,654

CANAL DISCHARGES UTAH VALLEY DIVISION

SUMMARY OF UTAH VALLEY CANALS (Irrigation Period.)
Delivery at Gaging Stations in Acre Feet
1964

Canal	May	June	July	Aug.	Sept	Oct.	Nov.	1964 Total	1963 Total	1962 Total	1961 Total
Murdock	7370	15066	20742	16581	12988	368		73115	77903	78944	23205
Provo Bench Canal	3928	8490	7982	7622	5988	5638		39648	39096	42500	18273
Timpanogas	428	925	797	793	702	524	382	4551	5848	6681	2521
Upper East Union	492	1390	1191	872	760	844	569	6119	5494	6385	3227
City Creek	815	1265	752	629	800	547	541	5049	5126	4942	2747
West Union	855	1702	1826	1563	1396	1096	110	8548	8143	7545	4934
P & N & B & Y	190	366	284	190	146	225	50	1451	1555	1622	650
Provo City Irr.	1440	2178	2538	2385	2062	453		11056	11237	10240	6545
Dry Creek	172	476	498	423	349	82		2000	2084	2199	1083
Lake Bottom	70	567	781	692	506	699	174	3489	3423	4252	2360
Fort Field	210	360	366	332	262	260	144	1934	1460	1647	799
Geneva Pump	1160	218	781	648	232	605		3644	2108	3879	2999
Orem at Alta	29	132	307	321	232	69		1090	1072	972	973
							Total Ac. Ft. --------	161694	164549	171808	70296

All of this water eventually finds itself into Utah Lake or underground storage. The exception being some of Murdock flow, which is syphoned over Jordan River at the point of the mountain. This is compensated by Salt Lake aqueduct water used in the valley.

Daily Acre Feet Discharge into Murdock Canal
measured through fifteen foot wide Parshall Flume, Stevens Recorder
Season to Nov. 1964

Date	May	June	July	Aug.	Sept.	Oct.	Nov.
1		634	585	656	446	0	0
2		634	608	644	456	0	0
3		634	601	630	460	0	0
4		634	644	640	460	0	0
5		634	654	634	456	0	0
6		634	618	632	456	0	0
7		634	670	626	456	0	0
8		566	684	620	472	0	0
9		570	692	620	494	16	0
10		568	692	620	500	16	0
11		570	684	618	470	16	0
12		580	696	624	464	16	0
13	29	590	700	584	456	16	0
14	40	580	702	540	452	16	0
15	52	600	696	524	444	16	0
16	67	566	688	516	424	16	0
17	60	556	688	368	442	16	0
18	100	364	656	284	444	16	0
19	190	308	656	500	432	16	0
20	378	336	662	500	432	16	0
21	500	336	660	516	416	16	0
22	534	210	682	510	392	16	0
23	500	210	688	517	396	16	0
24	560	270	688	486	386	16	0
25	590	380	684	452	388	16	0
26	600	178	676	462	384	16	0
27	634	520	678	462	384	16	0
28	670	520	670	456	380	16	0
29	634	634	682	452	376	16	0
30	616	616	688	448	374	16	0
31	616		670	440		16	0
Mean	388	503	668	535	433	16	
Ac. Ft. Total	7370	15066	20742	16581	12988	368	
Ac. Ft. Grand Total		73115					

PROVO RESERVOIR WATER USERS COMPANY 1964 SEASON
Summary of Natural Flow Water (Acre Feet) Deliveries

		SOURCE				DISTRIBUTION		
Date		Shingle Cr. **	Blue Cliff	Wright Est.	Free 4 Secondary	Murdock	P. Bench Canal ***	Orem in Aqued
1961								
Nov	1-15		0					0
Nov	16-30		15					15
Dec	1-15		45					45
Dec	16-31		64					64
1964								
Jan	1-15		60					60
Jan	16-31		64					64
Feb	1-15		45					45
Feb	16-28		42					42
Mar	1-15		45					45
Mar	16-31		144					144
Apr	1-15		80					80
Apr	16-30		96					96
May	1-15	486	90			121	365	90
May	16-31	1440	142		5809	7249		142
June	1-15	1438	165		7624	9062		165
June	16-30	1351	45		4653	6004		45
July	*1-15	306	70	42	4674	5022		70
July	16-31		788	(292) 96	573	961	436	66
Aug	1-15		915	(270) 90	133	493	645	0
Aug	16-31		880	(289) 89	0	378	591	0
Sept	1-15		825	(293) 75	0	368	532	0
Sept	16-30		780	(327) 66	0	393	453	0
Oct	1-15		825	(84) 28	0	112	741	0
Oct	16-31		960	(256)	0	256	704	0
Total		5021	*7185	486	23466	30419	4467	1278

*Off this amount 1811 Ac. Ft. was distributed to Murdock Canal.

All Shingle Cr. Wright Est. and Secondary waters were distributed to Murdock Canal.

**Shingle Creek water Cert. #2370, is now under litigation and injuction by Provo Reservoir Water Users Co. to show that it is not N.F., but foreign water, under correct distribution it is treated as foreign water and will continue to be so until the courts determine other-wise. To so list it as N.F. as above is for the present technically erroneous.

***Provo Bench Canal delivery is determined by analysing sheets # 11 and 12.

On May 24th D.C.R. declared full, hence no storage charge, and free secondary above rights listed. From May 16 to July 6 no restriction made on UP&L Co. flume diversion, hence no chargable power differential on water listed during that period.

It is evident PRWU Co. does not always fully utelize or take credit for all Blue Cliff water at times, but allows it to be identified as N.F. there-by utilizing it as Secondary Water.

PROVO BENCH CANAL - 1964

Daily Weir gage Height in feet. North opening is a 5 sq. ft. orifice. Head in ft.

Discharge in Second Feet

Date	MAY Weir gage	MAY cfs	MAY Orifice head	MAY cfs	MAY Total cfs	JUNE Weir gage	JUNE cfs	JUNE Orifice head	JUNE cfs	JUNE Total cfs	JULY Weir gage	JULY cfs	JULY Orifice head	JULY cfs	JULY Total cfs
1						1.80	135	.74	21.0	156	1.60	112	.74	21.0	133
2						**	**	**	**	**	**	**	**	**	**
3						**	**	**	**	**	**	**	**	**	**
4						**	**	**	**	**	**	**	**	**	**
5						**	**	**	**	**	**	**	**	**	**
6						**	**	**	**	**	**	**	**	**	**
7						**	**	**	**	**	**	**	**	**	**
8						**	**	**	**	**	1.69	122.1	.47	17.0	139
9						**	**	**	**	**	**	**	.04	4.9	127
10						**	**	**	**	**	**	**	**	**	**
11						**	**	**	**	**	**	**	**	**	**
12						**	**	**	**	**	**	**	**	**	**
13						**	**	**	**	**	**	**	**	**	**
14						**	**	**	**	**	**	**	**	**	**
15						**	**	**	**	**	**	**	**	**	**
16	.79	36.0	.74	21.0	57	1.55	106	**	**	127	**	**	**	**	**
17	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
18	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
19	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
20	1.60	112.	**	**	133.	**	**	**	**	**	**	**	**	**	**
21	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
22	1.72	126	**	**	147	**	**	**	**	**	**	**	**	**	**
23	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
24	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
25	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
26	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
27	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
28	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
29	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
30	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
31	**	**	**	**	**						**	**	**	**	**
Mean cfs					122.8					141.5					128.6
Total A. F.					3928					8490					7982

PROVO BENCH CANAL - 1964

Daily Weir gage Height in feet. North Opening is a 5 sq. ft. orifice. Head in ft.

Discharge in Second Feet

	AUGUST					SEPTEMBER					OCTOBER				
Date	Weir gage	cfs	Orifice head	cfs	Total cfs	Weir gage	cfs	Orifice head	cfs	Total cfs	Weir gage	cfs	Orifice head	cfs	Total cfs
1	1.69	122.1	.04	4.9	127	1.48	98.8	.08	4.2	103	1.4	90.8	.03	4.2	95
2	"	"	"	"	"	"	"	"	"	"					
3	"	"	"	"	"	"	"	"	"	"					
4	"	"	"	"	"	"	"	"	"	"					
5	"	"	"	"	"	"	"	"	"	"					
6	"	"	"	"	"	"	"	"	"	"					
7	"	"	"	"	"	"	"	"	"	"					
8	"	"	"	"	"	"	"	"	"	"					
9	"	"	"	"	"	"	"	"	"	"					
10	"	"	"	"	"	"	"	"	"	"					
11	"	"	"	"	"	"	"	"	"	"					
12	"	"	"	"	"	"	"	"	"	"					
13	"	"	"	"	"	"	"	"	"	"					
14	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
15	"	"	"	"	"	"	"	"	"	"	1.48	98.8	"	"	103
16	"	"	"	"	"	"	"	"	"	"					
17	"	"	"	"	"	"	"	"	"	"					
18	"	"	"	"	"	"	"	"	"	"					
19	"	"	"	"	"	"	"	"	"	"					
20	"	"	"	"	"	"	"	"	"	"					
21	"	"	"	"	"	1.40	90.8	"	"	95	1.69	122.1	.04	4.9	127
22	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
23	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
24	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
25	1.60	112	"	"	117	1.37	87.0	.025	4.0	91	.97	50.1	.04	4.9	55
26	"	"	"	"	"		"	"	"	"	"	"	"	"	"
27	"	"	"	"	"		"	"	"	"	"	"	"	"	"
28	1.48	98.8	.03	4.2	103		"	"	"	"	"	"	"	"	"
29	"	"	"	"	"		"	"	"	"	.50	18.0	.06	6.0	24
30	"	"	"	"	"		"	"	"	"		"	"	"	"
31	"	"	"	"	"										
Mean cfs					123.3					99.8					91.1
Total A.F.					7622					5988					5638

Grand Total A.F. 39648

TIMPANOGAS CANAL, UTAH VALLEY 1963 - 1964
In Acre Feet

Date	1963 Nov.	Dec.	1964 Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept	Oct.
1	21	4	4	3	3	3	0	30	27	26	24	24
2								30	27			
3								30	27			
4								30	24			
5								33	24			
6								33	27			
7								33	27			
8								30	29			
9								27	31			
10	21							27	29			
11	8							24	25			
12								26				
13								26				
14								27				
15	8					3	0	33				24
16	4					0	8	36				12
17							28	36				
18								36				
19								39				
20								39				
21								39			24	
22								27			22	
23												
24										26		12
25										25		8
26										24		
27												
28												
29				3				27				
30	4					0		39			22	
31		4	4		3		28		25	24		8
Total A. F.	295	124	124	87	93	45	428	925	797	793	702	524
Grand Total	4937											

UPPER EAST UNION CANAL

Daily gage height in feet and discharge in second feet.

1' x 7' Suppressed Weir

Date	May Gage	May cfs	June Gage	June cfs	July Gage	July cfs	Aug. Gage	Aug. cfs	Sept. Gage	Sept. cfs	Oct. Gage	Oct. cfs	Nov. Gage	Nov. cfs
1	.33	4.8	.96	24.9	1.05	28.7	.68	14.4	.64	13.1	.63	13.0	.67	14.2
2	"	"	"	"	"	"	"	"	"	"	"	"	"	"
3	"	"	.76	17.2	1.06	29.1	"	"	"	"	"	"	.83	19.7
4	"	"	"	"	"	"	"	"	"	"	"	"	"	"
5	"	"	"	"	"	"	"	"	"	"	"	"	"	"
6	"	"	"	"	"	"	"	"	"	"	"	"	"	"
7	"	"	"	"	"	"	"	"	"	"	"	"	"	"
8	.30	4.1	"	"	1.06	"	"	"	"	"	"	"	"	"
9	"	"	"	"	.80	18.6	"	"	"	"	"	"	"	"
10	"	"	"	"	.80	"	"	"	"	"	"	"	"	"
11	"	"	"	"	.75	16.8	"	"	"	"	"	"	"	"
12	"	"	"	"	"	"	"	"	"	"	"	"	"	"
13	"	"	"	"	"	"	"	"	"	"	"	"	"	"
14	"	"	"	"	"	"	"	"	"	"	"	"	"	"
15	"	"	1.01	27.0	.73	16.1	"	"	"	"	"	"	"	"
16	"	"	"	"	"	"	"	"	"	"	.67	14.2		
17	"	"	"	"	"	"	"	"	"	"	"	"		
18	.68	14.4	"	"	"	"	"	"	"	"	"	"		
19	"	"	"	"	"	"	"	"	"	"	"	"		
20	.73	16.1	"	"	"	"	"	"	"	"	"	"		
21	"	"	"	"	.69	14.8	"	"	.60	11.8	"	"		
22	.78	17.9	"	"	"	"	"	"	"	"	"	"		
23	"	"	"	"	"	"	"	"	"	"	"	"		
24	.83	19.7	"	"	"	"	.64	1321	"	"	"	"		
25	"	"	"	"	"	"	"	"	"	"	"	"		
26	"	"	"	"	"	"	"	"	"	"	"	"		
27	"	"	1.05	28.7	"	"	"	"	"	"	"	"		
28	.88	21.6	"	"	"	"	"	"	"	"	"	"		
29	"	"	"	"	"	"	"	"	"	"	"	"		
30	1.0	26.5	"	"	"	"	"	"	"	"	"	"		
31	"	"			"	"	"	"			"	"		
Mean cfs		8.0		23.2		19.2		14.1		12.7		13.6		19.0
Total Ac.Ft.		493		1390		1191		872		760		844		569

Total Acre Feet for Season - - - 6119

CITY CREEK 1964

Daily Gage Height in feet and Discharge in Second Feet

1' x 7' Suppressed Weir

Date	May Gage	May cfs	June Gage	June cfs	July Gage	July cfs	August Gage	August cfs	September Gage	September cfs	October Gage	October cfs	November Gage	November cfs
1	.40	6.4	.96	24.8	.77	17.5	.55	10.4	.52	9.4	.47	8.1	.55	10.4
2	"	"	"	"	"	"	"	"	"	"	"	"	.80	18.6
3	"	"	"	"	"	"	"	"	"	"	"	"	"	"
4	"	"	"	"	"	"	"	"	"	"	"	"	"	"
5	"	"	"	"	"	"	"	"	"	"	"	"	"	"
6	"	"	"	"	"	"	"	"	"	"	"	"	"	"
7	"	"	"	"	"	"	"	"	"	"	"	"	"	"
8	.41	6.7	"	"	.85	20.5	"	"	"	"	"	"	"	"
9	"	"	"	"	.55	10.4	"	"	"	"	"	"	"	"
10	"	"	"	"	.54	10.1	"	"	.48	8.4	"	"	"	"
11	"	"	"	"	"	"	"	"	"	"	"	"	"	"
12	"	"	"	"	"	"	"	"	"	"	"	"	"	"
13	"	"	"	"	"	"	"	"	"	"	"	"	"	"
14	"	"	"	"	"	"	"	"	"	"	"	"	"	"
15	.47	8.1	.90	22.4	.53	9.8	"	"	"	"	"	"	"	"
16	.46	7.9	"	"	"	"	"	"	"	"	.50	9.0		
17	"	"	"	"	"	"	"	"	"	"	"	"		
18	.75	16.8	.75	16.8	"	"	"	"	"	"	"	"		
19	"	"	"	"	.51	9.2	"	"	"	"	"	"		
20	.67	14.1	"	"	"	"	"	"	"	"	"	"		
21	"	"	"	"	.55	10.4	"	"	.44	7.3	"	"		
22	.90	22.4	"	"	"	"	"	"	"	"	"	"		
23		"	"	"	"	"	"	"	"	"	"	"		
24	.93	23.6	"	"	"	"	.52	9.4	"	"	"	"		
25	"	"	"	"	"	"	"	"	"	"	"	"		
26	.82	19.3	"	"	"	"	"	"	"	"	.55	10.4		
27	"	"	"	"	.56	10.7	"	"	"	"	"	"		
28	.92	23.2	"	"	.55	10.4	"	"	"	"	"	"		
29	"	"	"	"	"	"	"	"	"	"	"	"		
30	1.0	26.5	"	"	"	"	"	"	"	"	"	"		
31	"	"			"	"	"	"			"	"		
Mean cfs		13.2		21.1		12.0		10.2		8.35		8.84		18.1
Total Ac.Ft.		815		1265		752		629		500		547		541

Total Acre Feet for Season - - - 5049

WEST UNION 1964

Daily gage height in feet and discharge in second feet.

1' x 12' Suppressed Weir

Date	May Gage	May cfs	June Gage	June cfs	July Gage	July cfs	August Gage	August cfs	September Gage	September cfs	October Gage	October cfs	November Gage	November cfs
1	.31	7.5	.59	20.0	.80	31.9	.72	27.0	.67	24.0	.64	23.0	.40	11
2	"	"	"	"	"	"	"	"	"	"	"	"	"	"
3	"	"	.74	28.2	"	"	"	"	"	"	"	"	"	"
4	"	"	"	"	"	"	"	"	"	"	"	"	"	"
5	"	"	"	"	"	"	"	"	"	"	"	"	"	"
6	"	"	"	"	"	"	"	"	"	"	"	"		
7	"	"	"	"	"	"	"	"	"	"	.60	20.3		
8	.26	5.8	.74	28.2	.85	35.0	"	"	"	"	"	"		
9	"	"	"	"	.78	31.6	.70	25.8	"	"	"	"		
10	"	"	"	"	"	"	"	"	"	"	"	"		
11	"	"	"	"	"	"	"	"	"	"	"	"		
12	"	"	"	"	"	"	"	"	.64	23.0	"	"		
13	"	"	"	"	"	"	"	"	"	"	.58	19.3		
14	"	"	"	"	"	"	"	"	.67	24.0	"	"		
15	.28	6.4	.75	28.8	"	"	"	"	"	"	"	"		
16	"	"	"	"	"	"	.68	24.7	"	"	"	"		
17	"	"	"	"	"	"	"	"	"	"	"	"		
18	"	"	"	"	"	"	"	"	"	"	"	"		
19	"	"	"	"	.70	25.8	"	"	"	"	"	"		
20	.42	11.8	"	"	.72	27.0	"	"	"	"	.52	16.3		
21	"	"	.77	30.0	"	"	"	"	.62	22.0	"	"		
22	.68	24.7	"	"	"	"	"	"	"	"	"	"		
23	"	"	"	"	"	"	"	"	"	"	"	"		
24	.77	30.0	"	"	"	"	.67	24.0	"	"	.40	11		
25	"	"	"	"	.68	24.7	"	"	"	"	"	"		
26	.82	33.2	"	"	"	"	"	"	"	"	"	"		
27	"	"	.77	30.0	"	"	.65	23.1	"	"	"	"		
28	.79	31.2	"	"	"	"	"	"	"	"	"	"		
29	"	"	"	"	"	"	"	"	"	"	"	"		
30	.60	20.3	"	"	"	"	"	"	"	"	"	"		
31	"	"			"	"	"	"			"	"		
Mean cfs		13.8		28.4		29.5		25.2		23.3		17.1		11
Total Ac. Ft.		855		1702		1826		1563		1396		1096		110

Total Acre Feet for Season - - - 8548

FORT FIELD

Daily gage height in feet and discharge in second feet

2' Parshall Flume

Date	May Gage	May cfs	June Gage	June cfs	July Gage	July cfs	August Gage	August cfs	September Gage	September cfs	October Gage	October cfs	November Gage	November cfs
1			.83	6.0	.80	5.7	.88	6.6	.71	4.7	.62	3.8	.80	5.7
2			"	"	"	"	"	"	"	"	"	"	"	"
3			"	"	"	"	.75	5.1	.76	5.2	"	"	"	"
4			"	"	"	"	"	"	"	"	"	"	"	"
5			"	"	"	"	"	"	"	"	"	"	"	"
6			"	"	"	"	"	"	"	"	"	"	"	"
7			"	"	"	"	"	"	.71	4.7	.71	4.7	"	"
8			"	"	.90	6.8	"	"	"	"	"	"	"	"
9			"	"	"	"	"	"	"	"	"	"	"	"
10			"	"	"	"	"	"	"	"	"	"	"	"
11			"	"	.80	5.7	.83	6.0	"	"	.58	3.5	.53	3.0
12			"	"	"	"	"	"	"	"	"	"	"	"
13			"	"	"	"	"	"	"	"	"	"	"	"
14			"	"	"	"	"	"	.76	5.2	"	"	"	"
15	.71	4.7	"	"	"	"	.75	5.1	"	"	"	"	"	"
16	"	"	"	"	"	"	"	"	"	"	.66	4.2		
17	"	"	"	"	"	"	"	"	.58	3.5	"	"		
18	.81	5.8	"	"	"	"	"	"	"	"	"	"		
19	"	"	"	"	.88	6.6	"	"	"	"	.76	5.2		
20	"	"	"	"	"	"	"	"	"	"	"	"		
21	"	"	"	"	"	"	"	"	"	"	"	"		
22	.90	6.8	"	"	"	"	"	"	"	"	"	"		
23	"	"	"	"	"	"	.83	6.0	"	"	.66	4.2		
24	"	"	"	"	.76	5.2	"	"	"	"	"	"		
25	"	"	"	"	"	"	"	"	"	"	"	"		
26	"	"	"	"	"	"	"	"	.70	4.6	"	"		
27	"	"	"	"	"	"	.71	4.7	"	"	"	"		
28	"	"	"	"	"	"	"	"	"	"	"	"		
29	"	"	"	"	"	"	"	"	.58	3.5	"	"		
30	"	"	"	"	.88	6.6	"	"	"	"	"	"		
31	"	"			"	"	"	"			"	"		
Mean cfs		6.18	6.0	6.0		5.9		5.36		4.35		4.2		4.8
Total Ac. Ft.		210		360		366		332		262		260		144

Total Acre Feet for Season --- 1934

During May and June 1964 there was no restriction of Fort Field diversion only periodic gage reading were taken

LAKE BOTTOMS

Daily gage height in feet and discharge in second feet

Measured through a 4' wide Parshall Flume at end of concrete lining by old gravel pit.

Date	May Gage	May cfs	June Gage	June cfs	July Gage	July cfs	August Gage	August cfs	September Gage	September cfs	October Gage	October cfs	November Gage	November cfs
1	.		.50	5.4	.70	9.1	.82	11.7	.68	8.7	.69	8.9	.62	7.5
2			.65	8.1	.60	7.2	.86	12.6	"	"	"	"	"	"
3			.70	9.1	.90	13.6	"	"	.67	8.5	"	"	"	"
4			"	"	"	"	.90	13.6	.74	10.0	"	"	"	"
5			"	"	.75	10.2	.80	11.3	.62	7.5	"	"	"	"
6			"	"	.95	14.8	.85	12.4	.65	8.1	"	"	"	"
7			"	"	.90	13.6	.89	13.3	.20	1.3	.74	10.0	"	"
8			"	"	.92	14.0	.87	12.8	.66	8.3	"	"	"	"
9			.65	8.1	1.00	16.0	"	"	"	"	"	"	"	"
10			"	"	"	"	"	"	.65	8.1	"	"	"	"
11			"	"	.90	13.6	"	"	"	"	"	"	.30	2.4
12			"	"	1.00	16.0	"	"	"	"	"	"	"	"
13			.70	9.1	"	"	"	"	.74	10.0	"	"	"	"
14			"	"	"	"	"	"	"	"	"	"	"	"
15			"	"	.87	12.8	.76	10.4	"	"	"	"	"	"
16			"	"	.82	11.7	"	"	"	"	.90	13.6		
17			"	"	.81	11.5	.87	12.8	"	"	"	"		
18			"	"	.80	11.3	.78	10.8	"	"	"	"		
19			"	"	.82	11.7	"	"	"	"	"	"		
20			"	"	.90	13.6	"	"	"	"	"	"		
21			"	"	.84	12.2	"	"	"	"	"	"		
22			"	"	"	"	.75	10.2	.62	7.5	"	"		
23			.82	11.5	.90	13.6	"	"	"	"	"	"		
24			"	"	"	"	.74	10.0	"	"	"	"		
25	.30	2.4	"	"	.82	11.7	"	"	"	"	"	"		
26	.50	5.4	"	"	.83	11.9	.68	8.7	"	"	.82	11.7		
27	.52	5.4	"	"	.87	12.8	"	"	"	"	"	"		
28	.50	5.7	"	"	.78	10.8	"	"	.64	8.1	"	"		
29	"	"	"	"	.80	11.3	"	"	"	"	"	"		
30	"	"	"	"	.69	8.9	"	"	"	"	"	"		
31	"	"			.70	9.1	.65	8.1			"	"		
Mean cfs		5.0		8.42		12.6		11.2		8.44		11.3		5.8
Total Ac. Ft.		70		567		781		692		506		699		174

Total Acre Feet for Season - - - 3489

Park and Nuttal and B & Y Ditches 1964

Daily gage height in feet and discharge in second feet measured through one 2' wide Parshall Flume and one 58'' wide Rect. suppressed weir 1'' high. Water diverted on turns with River, 46.5% of time. Turns were not full 5 days but 118 hr. Gage height listed is for Rect. Suppressed Weir.

Date	May		June		July		Aug.		Sept.		Oct.		Nov.	
1			.46	5.0	.50	5.9			.45	4.9			.46	5.0
2			.46	5.0	"	"			"	"	.41	4.4	"	"
3			.46	5.0	"	"					"	"	"	"
4			.46	5.0	"	"	.48	5.4			"	"	"	"
5			.52	6.5	"	"	"	"			"	"	"	"
6			"	"	"	"	"	"			"	"	"	"
7			"	"	"	"	"	"	.41	4.4			"	"
8			"	"	"	"			"	"			"	"
9			"	"	"	"			"	"			"	"
10		5.5	"	"	"	"			"	"	.41	4.4	"	"
11		"	"	"	"	"			"	"	"	"		
12		"	"	"	"	"					"	"		
13		"	"	"	"	"	.48	5.4			"	"		
14		"	"	"	"	"	"	"			"	"		
15		"	"	"			"	"	.41	4.4				
16	.41	4.4	"	"			"	"	"	"				
17	"	"	"	"			"	"	"	"				
18	"	"	"	"					"	"	.45	4.9		
19	"	"	"	"	.52	6.5			"	"	"	"		
20	.36	3.5	"	"	"	"					"	"		
21	0	0	.50	5.9	"	"	.48	5.4			"	"		
22	0	"	"	"	"	"	"	"			"	"		
23		"	"	"	"	"	"	"	.38	3.8	"	"		
24	0	"	"	"			.45	4.9	"	"	"	"		
25		"	"	"				"	"	"	"	"		
26	.55	6.80	"	"					"	"	"	"		
27		"	"	"	.48	5.4			"	"	"	"		
28	.55	"	"	"	"	"					"	"		
29		"	"	"	"	"	.45	4.9			"	"		
30	.55	"	"	"	"	"	"	"			"	"		
31	"	"			"	"	"	"			"	"		
Mean cfs		5.6		6.1		5.9		5.3		4.3		4.7		5.0
Total Ac. Ft.		190		366		284		190		146		225		50

Total for Season 1451

The weir was out of order most of the season due to grown up and fill in ditch below weir for about 200 ft. the gage height and discharge are reasonable good estimates.

PROVO CITY IRRIGATION WATER MAY, 1964

East Union, City Race, Factory Race and Tanner Ditch in cfs, East Union Canal-1.5'x8' Suppressed Weir, City Race - 1'x8' Sup. Weir, Factory Race - 1'x12' Sup. Weir, Tanner Ditch - Tanner Race through 6' rectangular Weir less Dry Creek diversion measured through a 3' wide Parshall flume.

May	East Union		Factory Race		City Race		Tanner Ditch		Total Provo		Combin.		Dry Creek	
Day	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs
1														
2														
3														
4														
5														
6														
7														
8														
9														
10			.50	15.4				5.0		20.4	.60	9.1	.50	4.1
11			.50	15.4				5.0		20.4	.60	9.1	.50	4.1
12			.50	15.4				5.0		20.4	.60	9.1	.50	4.1
13			.50	15.4				5.0		20.4	.60	9.1	.50	4.1
14			.50	15.4				5.0		20.4	.60	9.1	.50	4.1
15	.40	7.1	.50	15.4				5.0		27.5	.60	9.1	.50	4.1
16	.40	7.1	.50	15.4				5.0		27.5	.60	9.1	.50	4.1
17	.40	7.1	.50	15.4				5.0		27.5	.60	9.1	.50	4.1
18	.40	7.1	.50	15.4	.30	4.7		7.2		34.4	.70	11.3	.50	4.1
19	.46	8.8	.50	15.4	.30	4.7		7.2		36.1	.70	11.3	.50	4.1
20	.46	8.8	.50	15.4	.30	4.7		7.2		36.1	.70	11.3	.50	4.1
21	.46	8.8	.50	15.4	.30	4.7		8.7		37.6	.76	12.8	.50	4.1
22	.46	8.8	.50	15.4	.30	4.7		7.2		36.1	.70	11.3	.50	4.1
23	.46	8.8	.50	15.4	.30	4.7		9.2		38.1	.78	13.3	.50	4.1
24	.46	8.8	.50	15.4	.30	4.7		9.2		38.1	.78	13.3	.50	4.1
25	.46	8.8	.50	15.4	.30	4.7		9.7		38.6	.80	13.8	.50	4.1
26	.46	8.8	.48	14.4	.30	4.7		9.7		37.6	.80	13.8	.50	4.1
27	.56	11.8	.48	14.4	.30	4.7		9.7		40.6	.80	13.8	.50	4.1
28	.56	11.8	.48	14.4	.30	4.7		9.7		40.6	.80	13.8	.50	4.1
29	.56	11.8	.48	14.4	.30	4.7		9.7		40.6	.80	13.8	.50	4.1
30	.56	11.8	.48	14.4	.30	4.7		9.7		40.6	.80	13.8	.50	4.1
31	.56	11.8	.48	14.4	.30	4.7		9.7		40.6	.80	13.8	.50	4.1
Mean cfs										32.7				4.1
Total Ac.Ft.										1440				172

PROVO CITY IRRIGATION WATER JUNE, 1964

East Union, City Race, Factory Race and Tanner Ditch in cfs, East Union Canal- 1.5'x8' Suppressed Weir, City Race - 1'x8' Sup. Weir, Factory Race - 1'x12' Sup. Weir, Tanner Ditch - Tanner Race through 6' rectangular Weir less Dry Creek diversion measured through a 3' wide Parshall flume.

June	East Union		Factory Race		City Race		Tanner Ditch		Total Provo		Combin.		Dry Creek	
Day	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs
1	.56	11.8	.46	13.6	.26	3.8		7.4		36.6	.88	15.9	.80	8.5
2	.56	11.8	.46	13.6	.30	4.7		5.3		35.4	.80	13.8	.80	8.5
3	.56	11.8	.46	13.6	.30	4.7		7.9		37.0	.90	16.4	.80	8.5
4	.56	11.8	.46	13.6	.30	4.7		7.9		37.0	.90	16.4	.80	8.5
5	.58	12.5	.46	13.6	.30	4.7		7.9		37.8	.90	16.4	.80	8.5
6	.60	13.1	.46	13.6	.30	4.7		7.4		38.8	.88	15.9	.80	8.5
7	.60	13.1	.46	13.6	.30	4.7		7.9		39.3	.90	16.4	.80	8.5
8	.60	13.1	.46	13.6	.10	2.0		7.9		36.6	.90	16.4	.80	8.5
9	.60	13.1	.48	14.4	.10	2.0		9.0		38.5	.94	17.5	.80	8.5
10	.60	13.1	.48	14.4	.10	2.0		9.0		38.5	.94	17.5	.80	8.5
11	.60	13.1	.48	14.4	.26	3.8		9.0		40.3	.94	17.5	.80	8.5
12	.58	12.5	.46	13.6	.26	3.8		9.0		38.9	.94	17.5	.80	8.5
13	.56	11.8	.44	12.6	.30	4.7		9.0		38.1	.94	17.5	.80	8.5
14	.56	11.8	.44	12.6	.30	4.7		9.0		38.1	.94	17.5	.80	8.5
15	.60	13.1	.48	14.4	.26	3.8		9.0		40.3	.94	17.5	.80	8.5
16	.60	13.1	.46	13.6	.24	3.4		9.8		39.9	.98	18.6	.82	8.8
17	.54	11.2	.46	13.6	.24	3.4		9.8		38.0	.98	18.6	.82	8.8
18	.46	8.8	.46	13.6	.24	3.4		8.6		34.4	.90	16.4	.76	7.8
19	.46	8.8	.46	13.6	.24	3.4		6.9		32.7	.80	13.8	.70	6.9
20	.40	7.2	.40	10.9	.24	3.4		8.4		29.9	.80	13.8	.60	5.4
21	.46	8.8	.46	13.6	.26	3.8		4.4		30.6	.70	11.3	.70	6.9
22	.40	7.2	.46	13.6	.26	3.8		5.9		30.5	.70	11.3	.60	5.4
23	.54	11.2	.46	13.6	.26	3.8		5.9		34.5	.70	11.3	.60	5.4
24	.54	11.2	.46	13.6	.26	3.8		4.4		33.0	.78	13.3	.70	6.9
25	.60	13.1	.46	13.6	.22	3.0		7.3		37.0	.86	15.4	.78	8.1
26	.60	13.1	.40	10.9	.30	4.7		6.6		35.3	.80	13.8	.72	7.2
27	.54	11.2	.40	10.9	.30	4.7		5.7		32.5	.80	13.8	.78	8.1
28	.54	11.2	.40	10.9	.30	4.7		5.7		32.5	.80	13.8	.78	8.1
29	.58	12.5	.40	10.9	.30	4.7		9.4		37.5	.94	17.5	.78	8.1
30	.58	12.5	.46	13.6	.30	4.7		9.0		39.8	.94	17.5	.80	8.5
Mean cfs										36.3				7.94
Total Ac.Ft.										2178				476

8.5
30
255.0
510.
7.94
30
23.820
1764

PROVO CITY IRRIGATION WATER JULY, 1964

East Union, City Race, Factory Race and Tanner Ditch in cfs, East Union Canal- 1.5'x8' Suppressed Weir, City Race - 1'x8' Sup. Weir, Factory Race - 1'x12' Sup. Weir, Tanner Ditch - Tanner Race through 6' rectangular Weir less Dry Creek diversion measured through a 3' wide Parshall flume.

July	East Union		Factory Race		City Race		Tanner Ditch		Total Provo		Combin.		Dry Creek	
Day	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs
1	.58	12.5	.46	13.6	.30	4.7		9.3		40.1	.96	18.1	.82	8.8
2	.60	13.1	.44	12.6	.30	4.7		9.4		39.8	.94	17.5	.78	8.1
3	.60	13.1	.46	13.6	.30	4.7		4.4		35.8	.70	11.3	.70	6.9
4	.54	11.2	.44	12.6	.30	4.7		4.4		32.9	.70	11.3	.70	6.9
5	.68	15.9	.44	12.6	.30	4.7		8.9		42.1	.92	17.0	.78	8.1
6	.70	16.6	.44	12.6	.30	4.7		9.0		42.9	.94	17.5	.80	8.5
7	.58	12.5	.44	12.6	.30	4.7		9.0		38.8	.94	17.5	.80	8.5
8	.58	12.5	.44	12.6	.30	4.7		9.6		39.4	.96	18.1	.80	8.5
9	.68	15.9	.44	12.6	.30	4.7		10.1		43.3	.98	18.6	.80	8.5
10	.68	15.9	.46	13.6	.30	4.7		10.1		44.3	.98	18.6	.80	8.5
11	.66	15.2	.44	12.6	.30	4.7		9.0		41.5	.94	17.5	.80	8.5
12	.66	15.2	.44	12.6	.30	4.7		9.0		41.5	.94	17.5	.80	8.5
13	.68	15.9	.46	13.6	.30	4.7		9.6		43.8	.96	18.1	.80	8.5
14	.66	15.2	.46	13.6	.30	4.7		9.0		42.5	.94	17.5	.80	8.5
15	.66	15.2	.44	12.6	.30	4.7		9.0		41.5	.94	17.5	.80	8.5
16	.66	15.2	.44	12.6	.30	4.7		9.0		41.5	.94	17.5	.80	8.5
17	.66	15.2	.44	12.6	.30	4.7		9.0		41.5	.94	17.5	.80	8.5
18	.68	15.9	.44	12.6	.30	4.7		9.0		42.2	.94	17.5	.80	8.5
19	.68	15.9	.44	12.6	.30	4.7		8.5		41.7	.92	17.0	.80	8.5
20	.68	15.9	.44	12.6	.30	4.7		9.0		42.2	.94	17.5	.80	8.5
21	.70	16.6	.44	12.6	.30	4.7		9.4		43.3	.94	17.5	.78	8.1
22	.70	16.6	.44	12.6	.30	4.7		9.5		43.4	.90	16.4	.70	6.9
23	.72	17.4	.40	10.9	.30	4.7		9.7		42.7	.94	17.5	.76	7.8
24	.72	17.4	.40	10.9	.30	4.7		9.7		42.7	.94	17.5	.76	7.8
25	.72	17.4	.40	10.9	.30	4.7		9.7		42.7	.94	17.5	.76	7.8
26	.72	17.4	.40	10.9	.30	4.7		10.3		43.3	.96	18.1	.76	7.8
27	.68	15.9	.40	10.9	.30	4.7		10.3		41.8	.96	18.1	.76	7.8
28	.68	15.9	.40	10.9	.30	4.7		10.3		41.8	.96	18.1	.76	7.8
29	.66	15.2	.38	10.1	.30	4.7		7.7		37.7	.84	14.9	.72	7.2
30	.66	15.2	.32	7.8	.30	4.7		8.0		35.7	.84	14.9	.70	6.9
31	.66	15.2	.32	7.8	.30	4.7		6.9		34.6	.80	13.8	.70	6.9
Mean cfs										40.8				8.02
Total Ac.Ft										2538				498

PROVO CITY IRRIGATION WATER AUGUST, 1964

East Union, City Race, Factory Race and Tanner Ditch in cfs, East Union Canal- 1.5'x8' Suppressed Weir, City Race - 1'x8' Sup. Weir, Factory Race - 1'x12' Sup. Weir, Tanner Ditch - Tanner Race through 6' rectangular Weir less Dry Creek diversion measured through a 3' wide Parshall flume.

Aug.	East Union		Factory Race		City Race		Tanner Ditch		Total Provo		Combin.		Dry Creek	
Day	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs
1	.70	16.6	.34	8.6	.20	2.6		9.5		37.3	.90	16.4	.70	6.9
2	.70	16.6	.40	10.9	.22	3.0		10.1		40.6	.98	18.6	.80	8.5
3	.70	16.6	.40	10.9	.22	3.0		10.1		40.6	.98	18.6	.80	8.5
4	.70	16.6	.40	10.9	.22	3.0		10.9		41.4	.96	18.1	.72	7.2
5	.70	16.6	.40	10.9	.22	3.0		11.1		41.6	.98	18.6	.74	7.5
6	.70	16.6	.40	10.9	.22	3.0		11.1		41.6	.96	18.6	.74	7.5
7	.70	16.6	.40	10.9	.22	3.0		9.2		39.7	.90	16.4	.72	7.2
8	.72	17.4	.40	10.9	.22	3.0		10.9		42.2	.96	18.1	.72	7.2
9	.72	17.4	.40	10.9	.22	3.0		10.9		42.2	.96	18.1	.72	7.2
10	.70	16.6	.40	10.9	.22	3.0		10.3		40.8	.94	17.5	.72	7.2
11	.70	16.6	.40	10.9	.22	3.0		10.9		41.4	.96	18.1	.72	7.2
12	.70	16.6	.40	10.9	.22	3.0		10.9		41.4	.96	18.1	.72	7.2
13	.68	15.9	.38	10.1	.22	3.0		9.2		38.2	.90	16.4	.72	7.2
14	.70	16.6	.38	10.1	.22	3.0		10.3		40.0	.94	17.5	.72	7.2
15	.72	17.4	.38	10.1	.22	3.0		10.3		40.8	.94	17.5	.72	7.2
16	.72	17.4	.40	10.9	.22	3.0		10.9		42.2	.96	18.1	.72	7.2
17	.70	16.6	.38	10.8	.20	2.6		9.6		38.9	.88	15.9	.68	6.6
18	.72	17.4	.40	10.9	.22	3.0		10.3		41.6	.94	17.5	.72	7.2
19	.70	16.6	.38	10.1	.22	3.0		10.3		40.0	.94	17.5	.72	7.2
20	.72	17.4	.40	10.9	.22	3.0		10.9		42.2	.96	18.1	.72	7.2
21	.72	17.4	.40	10.9	.22	3.0		10.9		42.2	.96	18.1	.72	7.2
22	.68	15.9	.38	10.1	.20	2.6		9.3		37.9	.88	15.9	.68	6.6
23	.62	15.9	.36	9.4	.20	2.6		8.1		36.0	.80	13.8	.62	5.7
24	.60	13.1	.34	8.6	.20	2.6		7.6		31.9	.78	13.3	.62	5.7
25	.70	16.6	.40	10.9	.22	3.0		8.1		38.6	.80	13.8	.62	5.7
26	.67	15.6	.34	8.6	.22	3.0		8.1		35.3	.80	13.8	.62	5.7
27	.66	15.2	.36	9.4	.22	3.0		8.1		35.7	.80	13.8	.62	5.7
28	.50	10.0	.34	8.6	.20	2.6		7.6		28.8	.78	13.3	.62	5.7
29	.60	13.1	.34	8.6	.22	3.0		8.1		32.8	.80	13.8	.62	5.7
30	.60	13.1	.34	8.6	.18	2.4		8.1		32.2	.80	13.8	.62	5.7
31	.54	11.2	.30	7.1	.18	2.4		5.6		26.3	.70	11.3	.62	5.7
Mean cfs										38.5				6.82
Total Ac.Ft										2385				423

PROVO CITY IRRIGATION WATER SEPTEMBER, 1964

East Union, City Race, Factory Race and Tanner Ditch in cfs, East Union Canal-1.5'x8' Suppressed Weir, City Race - 1'x8' Sup. Weir, Factory Race - 1'x12' Sup. Weir, Tanner Ditch - Tanner Race through 6' rectangular Weir less Dry Creek diversion measured through a 3' wide Parshall flume.

Sept.	East Union		Factory Race		City Race		Tanner Ditch		Total Provo		Combin.		Dry Creek	
Day	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs
1	.54	11.2	.30	7.1	.18	2.4		5.6		26.3	.70	11.3	.62	5.7
2	.66	15.2	.36	9.4	.20	2.6		7.8		35.0	.80	13.8	.64	6.0
3	.68	15.9	.38	10.1	.20	2.6		9.3		37.9	.88	15.9	.68	6.6
4	.68	15.9	.38	10.1	.20	2.6		9.3		37.9	.88	15.9	.68	6.6
5	.70	16.6	.40	10.9	.20	2.6		9.3		39.4	.88	15.9	.68	6.6
6	.70	16.6	.38	10.1	.20	2.6		9.2		38.5	.84	14.9	.62	5.7
7	.68	15.9	.38	10.1	.20	2.6		8.1		36.7	.80	13.8	.62	5.7
8	.62	13.8	.36	9.4	.20	2.6		7.6		33.4	.78	13.3	.62	5.7
9	.66	15.2	.36	9.4	.22	3.0		7.6		34.8	.78	13.3	.62	5.7
10	.66	15.2	.36	9.4	.22	3.0		8.1		35.3	.80	13.8	.62	5.7
11	.62	13.8	.38	10.1	.22	3.0		11.3		36.2	.92	17.0	.62	5.7
12	.64	14.6	.36	9.4	.22	3.0		11.3		38.3	.92	17.0	.62	5.7
13	.64	14.6	.36	9.4	.22	3.0		11.2		38.2	.94	17.5	.66	6.3
14	.64	14.6	.36	9.4	.22	3.0		10.9		37.9	.94	17.5	.68	6.6
15	.60	13.1	.36	9.4	.22	3.0		9.6		35.1	.88	15.9	.66	6.3
16	.62	13.8	.36	9.4	.22	3.0		11.2		37.4	.94	17.5	.66	6.3
17	.60	13.1	.36	9.4	.22	3.0		8.1		33.6	.80	13.8	.62	5.7
18	.60	13.0	.36	9.4	.22	3.0		10.0		35.5	.86	15.4	.60	5.4
19	.62	13.8	.36	9.4	.22	3.0		11.3		37.5	.92	17.0	.62	5.7
20	.62	13.8	.36	9.4	.22	3.0		11.3		37.5	.92	17.0	.62	5.7
21	.62	13.8	.36	9.4	.22	3.0		9.3		35.5	.88	15.9	.68	6.6
22	.60	13.1	.36	9.4	.22	3.0		8.3		33.8	.84	14.9	.68	6.6
23	.54	11.2	.30	7.1	.18	2.4		8.4		29.1	.80	13.8	.60	5.4
24	.54	11.2	.30	7.1	.18	2.4		7.7		28.4	.76	12.8	.58	5.1
25	.56	11.8	.30	7.1	.18	2.4		7.7		29.0	.76	12.8	.58	5.1
26	.58	12.5	.32	7.8	.18	2.4		7.9		30.6	.78	13.3	.60	5.4
27	.58	12.5	.32	7.8	.20	2.6		7.9		30.8	.78	13.3	.60	5.4
28	.58	12.5	.32	7.8	.20	2.6		8.4		31.3	.80	13.8	.60	5.4
29	.52	10.6	.34	8.6	.20	2.6		8.2		30.0	.78	13.3	.58	5.1
30	.52	10.6	.34	8.6	.20	2.6		8.2		30.0	.78	13.3	.58	5.1
Mean cfs										34.5				5.82
Total Ac.Ft.										2062				349

PROVO CITY IRRIGATION WATER OCTOBER, 1964

East Union, City Race, Factory Race and Tanner Ditch in cfs, East Union Canal- 1.5'x8' Suppressed Weir, City Race - 1'x8' Sup. Weir, Factory Race - 1'x12' Sup. Weir, Tanner Ditch - Tanner Race through 6' rectangular Weir less Dry Creek diversion measured through a 3' wide Parshall flume.

Oct.	East Union		Factory Race		City Race		Tanner Ditch		Total Provo		Combin.		Dry Creek	
Day	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs	Gage	cfs
1	.58	12.5	.32	7.8	.20	2.6		8.4		31.3	.80	13.8	.60	5.4
2	.56	11.8	.32	7.8	.20	2.6		8.2		30.4	.78	13.3	.58	5.1
3	.56	11.8	.32	7.8	.20	2.6		8.2		30.4	.78	13.3	.58	5.1
4	.40	7.1	.26	5.8	.16	2.0		5.0		19.9	.60	9.1	.50	4.1
5	.40	7.1	.28	6.4				5.0		18.5	.60	9.1	.50	4.1
6	.40	7.1	.30	7.1				3.3		17.5	.50	6.9	.46	3.6
7	.46	8.8	.30	7.1				3.6		19.5	.50	6.9	.44	3.3
8	.44	8.2	.30	7.1				3.6		18.9	.50	6.9	.44	3.3
9	.44	8.2	.30	7.1				3.6		18.9	.50	6.9	.44	3.3
10	.44	8.2	.32	7.8				5.0		21.0	.58	8.6	.46	3.6
Mean cfs										22.6				4.9
Total Ac.Ft.										453				82

Little Dry Creek Ditch Company under an agreement with Fort Field Ditch Company returned their stream to Provo River at 860 North in Provo for addition and diversion by Fort Field Ditch Company below for a 78 hour 45 min. turn on dates and time listed:

April 18	11:38 A.M.	April 29	11:38 P.M.		
May 11	11:38 A.M.	May 22	11:38 P.M.		
June 3	11:38 A.M.	June 14	11:38 P.M.	June 26	11:38 A.M.
July 7	11:38 P.M.	July 19	11:38 A.M.	July 30	11:38 P.M.
Aug. 11	11:38 A.M.	Aug. 22	11:38 P.M.		
Sept. 3	11:38 A.M.	Sept.14	11:38 A.M.	Sept. 26	11:38 A.M.
Oct. 7	11:38 P.M.	Oct. 19	11:38 A.M.		

CANAL DISCHARGES WASATCH DIVISION

WASTCH DIVISION SUMMARY
Acre Feet Deliverys, 1964 Irrigation Season

Name	May	June	July	Aug.	Sept.	Total
Midway Irrigation Co.	205.8	3185.6	1380.4	656.8	708.4	7984
Wasatch Irr. Co.	3050.4	5543.2	5198.0	2430.4	1583.0	17805
North Field Irr. Co.	3212.6	5193.2	2133.6	1224.4	1129.4	12893
Timpanogas Irr. Co.	1993.2	3834.2	3290.0	296.2	184.0	9598
Spring Creek & Sage B.	920.0	2994.0	1798.0	1221.4	918.0	7851
Upper Charleston	640.0	1872.0	1488.0	793.6	804.0	5598
Lower Charleston	220.4	588.0	533.2	446.4	582.0	2370
Island Ditch	345.6	516.0	372.0	359.6	41.0	1634
S. Kamas & Washington	1287.6	4050.0	3472.0	3684.6	1230.0	12724
Sunrise		188.1	310.0	210.8	52.8	764
Jordan to Baum Ditches	354.8	462.0	272.8	235.6	168.0	1493
Snyder to Morris	354.8	488.0	279.0	192.2	174.0	1588
Clyde & Moon	168.0	522.0	223.2	341.0	228.00	1482
Larson & Cutler	192.0	630.0	310.0	151.2	102.0	1395
Phillips	52.8	144.0	148.8	130.4	96.0	572
McNeil & Fitzgerald	184.8	612.0	440.2	334.8	300.0	1872
Turnbow & Baird	184.8	546.0	440.2	395.6	234.0	1765
Wilson & Rowand	204.0	45.0	328.6	291.4	150.0	1424

Midway Irr. Co. Snake Creek Diversions Mean Flow 21.8 cfs for 150 days= 6540 A F determined as follows:

Ditch								
Warm Spring	2.37	2.24	2.50	2.50	2.50	2.24	2.24	2.2
West Bench	2.00	8.82	7.93	5.00	5.43	4.14	5.60	5.7
Mahogney Sp (1)	2.87	1.85	5.40	3.50	4.80	4.48	5.25	5.7
Mahogney Sp (2)	3.10	4.06	2.16	3.84	1.74	2.37	1.74	2.1
Snake C, PP	14.20	7.22	6.00	5.71	5.71	3.30	3.93	3.5
Probst	2.87	4.82	3.87	4.10	2.20	3.20	2.92	2.6
Total	27.41	29.01	27.86	24.65	22.38	19.73	21.68	20.2

The following is an inventory of Gates and Weirs that either have not been installed, or not installed properly, or need repair as of November 1, 1964.

WmGines, No Gate, No Weir
Fitzgerald, Bros No Gate, No Weir
Moon Ditch, Not Installed Properly
Wm & Clift Jordan, Non Installed Properly
Douglas Edwards, Weir Not Installed Properly
Aurbach Ranch, High Water covered Weir with sand & gravel.
Midway Upper Dam Measureing Station * by pass for Lower users needs repair.

Daily Discharge in Second Feet of Wasatch and Extension Irrigation Canal. May-September 1964. 18" x 1" Rectangular Suppressed Weir. From a recorder mean cfs is determined.

May	June	July	Aug	Sept
	86.4	88.9	73.8	30.4
	93.8	106.4	72.5	27.5
	78.3	88.9	71.5	52.9
	84.1	74.9	62.8	23.0
	87.7	86.4	57.6	32.9
	96.3	81.7	58.7	32.0
	95.0	98.8	63.9	24.5
	88.9	88.9	39.6	23.4
	81.7	76.0	29.0	23.0
	92.5	101.3	27.5	23.4
14.0	96.3	86.4	39.7	24.5
14.0	103.7	86.4	29.0	24.5
16.4	101.3	85.3	28.7	25.9
35.5	98.8	85.3	27.5	32.0
53.6	103.7	86.4	26.6	36.2
55.6	105.1	77.0	27.5	34.7
84.1	106.4	83.0	27.5	37.1
88.9	106.4	91.3	25.2	32.0
88.9	100.1	86.4	39.6	27.5
93.8	95.0	85.3	37.1	27.5
98.8	98.8	86.4	37.1	25.9
91.3	66.1	80.5	36.2	24.5
88.9	69.3	79.4	34.7	25.9
87.7	84.1	71.5	36.2	23.0
91.3	71.5	76.0	25.9	18.9
91.3	84.1	77.0	25.9	20.3
88.9	92.5	78.3	25.9	20.9
88.9	103.7	73.0	27.5	21.6
86.5	96.3	79.4	33.8	22.3
80.5	103.7	76.0	32.9	20.3
86.4		72.5	33.8	
75.0	92.4	83.8	39.2	26.4
3050.4	5543.2	5198.0	2430.4	1583.0

Mean cfs

Aft

Grand Total May-September 17805 Acre Feet.

Daily Discharge in Second Feet of Midway Irrigation Canal, River Ditch. May-September 1964. 8" Rectangular Suppressed Weir.

Date	May	June	July	Aug	Sept
1	16.9	31.8	55.2	10.6	9.9
2	4.7	80.9	55.2	9.0	9.9
3	4.4	61.2	39.7	10.3	9.9
4	4.4	55.2	28.1	10.6	9.9
5	4.4	51.7	22.9	12.5	9.9
6	4.4	54.0	18.2	9.7	9.1
7	15.9	52.8	16.6	10.0	9.4
8	4.4	48.3	34.6	10.0	9.4
9	15.9	35.7	33.7	12.9	10.0
10	15.9	40.7	37.6	11.3	10.0
11	15.9	51.7	36.6	11.3	10.0
12	35.7	67.5	36.6	11.3	10.0
13	42.8	60.0	38.2	10.1	13.1
14	58.8	51.7	22.1	10.7	13.8
15	45.0	35.2	22.9	10.6	13.8
16	48.3	55.2	23.5	10.3	13.8
17	49.4	57.6	11.5	10.0	14.6
18	50.6	54.0	12.7	10.0	13.1
19	52.8	49.4	12.4	9.4	13.8
20	54.0	43.9	12.1	10.0	13.1
21	54.0	61.2	12.1	10.6	11.8
22	50.6	61.2	10.6	11.6	12.5
23	41.8	42.8	13.0	11.6	11.8
24	40.2	54.0	10.6	12.2	12.5
25	50.6	42.8	11.2	9.4	12.5
26	43.9	47.2	10.0	10.6	13.2
27	43.9	51.1	10.0	10.6	13.1
28	40.7	58.8	9.7	10.6	13.1
29	42.8	57.6	11.2	9.6	13.1
30	37.6	57.6	11.2	10.6	13.1
31	35.7		10.2	11.0	
Mean cfs	33.1	53.1	22.3	10.6	11.4
Aft	2052.8	3185.6	1380.4	656.8	708.4

Grand Total May- September 7984 Acre Feet.

Daily Mean Flow in Second Feet of Provo River
Midway Upper Dam.
1964

Date	May	June	July	Aug	Sept	Oct
1	264.7	887.6	1381.0	16.4	33.9	10.3
2	272.4	945.7	1123.0	13.3	32.7	9.4
3	318.8	1481.0	793.0	14.2	27.8	9.4
4	272.4	1790.0	521.5	61.4	29.6	9.8
5	249.3	1996.0	284.0	63.1	13.8	11.1
6	260.9	1749.0	253.0	84.8	11.6	11.1
7	264.7	1549.0	201.4	66.8	20.3	12.0
8	268.6	1560.0	163.0	70.4	17.4	12.0
9	253.2	967.4	132.5	84.8	20.3	11.1
10	233.9	642.5	221.6	83.0	19.4	11.1
11	241.6	438.0	196.4	72.2	17.4	11.1
12	660.9	637.0	181.0	72.2	16.4	12.0
13	280.1	931.1	151.7	81.2	8.5	13.8
14	353.3	1011.0	143.5	72.2	10.7	13.8
15	609.5	967.4	157.0	68.6	10.3	12.9
16	858.5	1157.0	120.1	70.4	16.0	12.9
17	1134.0	1487.0	104.0	72.2	8.9	12.9
18	1526.0	1493.0	138.0	50.2	7.5	12.9
19	1425.0	1202.0	92.4	26.1	5.6	12.9
20	1790.0	1045.0	87.0	25.6	5.4	13.8
21	2160.0	865.8	90.6	25.1	5.3	13.8
22	2462.0	1101.0	74.4	19.8	5.8	13.3
23	2668.0	1190.0	65.4	19.8	6.2	13.8
24	2545.0	902.0	35.8	33.9	12.8	13.3
25	2654.0	887.0	28.4	53.0	15.2	12.9
26	2634.0	727.9	25.6	57.0	13.8	13.8
27	2038.0	637.0	22.8	54.4	12.0	13.3
28	2105.0	800.5	23.9	53.0	12.0	12.4
29	2009.0	1000.4	25.0	44.6	11.1	11.1
30	1526.0	967.4	21.8	37.8	11.1	15.5
31	1101.0		16.4	30.8		20.3

Daily Discharge in Second Feet of North Field Irrigation Canal May-September 1964. 15° x 1.5° Rectangular Suppressed Weir to July 7, 8° Rectangular Suppressed balance of season. Early part of season includes Sage Brush and Upper Charleston Canals.

Date	May	June	July	Aug	Sept
1	6.3	84.3	63.1	16.0	19.4
2	6.3	88.5	25.9	16.0	19.4
3	6.3	80.2	76.3	15.3	18.7
4	6.3	89.5	65.8	16.7	16.6
5	6.3	92.7	49.3	16.0	21.1
6	6.3	99.1	50.1	15.9	20.8
7	6.3	95.8	41.9	17.3	17.3
8	6.2	84.3	42.1	22.6	17.3
9	6.2	69.6	39.1	18.7	17.7
10	7.0	83.2	39.4	18.7	18.7
11	7.0	92.7	35.6	19.4	18.0
12	7.0	101.2	34.8	19.7	17.3
13	21.0	99.1	35.6	19.4	18.7
14	28.5	96.9	36.1	18.7	22.2
15	42.9	101.2	37.3	18.7	24.1
16	61.3	105.7	39.0	18.7	23.7
17	88.5	96.9	31.9	18.7	24.5
18	92.7	96.9	29.2	17.3	20.8
19	92.7	91.6	31.1	26.3	19.7
20	96.9	82.3	31.1	34.0	19.4
21	110.2	94.8	30.7	24.7	18.3
22	94.8	62.2	30.0	65.6	18.3
23	92.7	64.9	28.1	23.6	18.7
24	90.6	72.4	19.0	23.7	15.0
25	101.2	72.4	19.0	18.0	16.0
26	90.6	74.4	16.3	18.0	16.6
27	90.6	72.4	17.0	18.0	16.6
28	88.5	72.4	16.0	18.7	16.6
29	88.5	78.3	16.3	23.0	16.6
30	78.3	80.2	16.0	22.2	16.6
31	78.3		16.0	22.6	
Mean cfs	51.8	86.5	34.4	19.7	18.8
Aft	3212.6	5993.2	2133.2	1224.4	1129.4

Grand Total May-September 12893 Acre Feet.

Daily Discharge in Second Feet of South Kamas & Washington Canal 1964. 14" x 1.25" Rectangular Suppressed Weir.

May	June	July	Aug	Sept
	80.9			24.5
		71.2		
			46.7	
				25.2
	87.9			
			46.3	
		77.3		
				22.5
		54.4		
	64.9		46.3	
				11.6
	79.8	55.2	46.3	
		50.2		
42.1	39.6	47.1	46.4	
				8.7
		46.3	46.3	
65.2				
	31.8			
			24.5	9.9
		46.3		
53.6	67.5	56.0	43.3	20.5
1287.6	4050.0	3472.0	2684.6	1230.0

Grand Total May-September 12724 Acre Feet.

Daily Discharge in Second Feet of Timpanogas Irrigation Canal May-September 1964. Rectangular Suppressed Weir 12" x 1.5".

Date	May	June	July	Aug	Sept
1		63.4	54.9	49.1	
2		62.6	65.9	49.1	
3		58.7	65.9	49.9	
4		62.6	65.0		
5		69.2	65.0		
6		69.2	54.9		
7		69.2	54.9		
8		70.9	55.7		
9	10.7	65.9	56.4		
10	10.7	69.2	52.0		
11	10.7	69.2	48.4		
12	9.6	69.2	43.4		
13	9.2	70.0	50.5		
14	8.5	70.0	51.2		
15	5.5	69.2	52.0		
16	14.1	70.0	50.5		
17	40.8	72.5	50.5		
18	62.6	67.7	51.2		
19	64.2	70.0	50.5		7.1
20	64.2	67.7	51.2		7.1
21	59.5	67.7	53.5		7.8
22	57.9	53.5	49.9		7.8
23	62.6	50.5	49.9		7.8
24	59.5	55.7	49.9		7.8
25	65.9	52.0	49.9		7.8
26	62.6	56.4	50.5		7.8
27	64.2	56.4	49.9		7.8
28	62.6	55.7	49.1		7.8
29	62.6	54.9	54.9		7.8
30	64.2	57.9	48.4		7.8
31	64.2		49.1		
Mean cfs	43.3	63.9	53.7	49.4	7.7
Aft.	1993.2	3834.2	3290.0	296.2	184.0

Grand Total May-September 9598 Acre Feet.

DAILY DISCHARGE IN SECOND FEET OF INDIVIDUAL DITCHES
1964

Lower Charleston Canal. 3' Parshall.						Island Ditch. 6' Rectangular Weir.				
May	June	July	Aug	Sept	Date	May	June	July	Aug	Sept
		10.2			1			9.5		
	10.3				2		10.5			
					3					
					4					
		8.5	7.8	10.5	5			1.3	8.2	.6
	7.8				6		16.5			
					7					
		12.4			8			12.4		
	10.5		6.9		9		6.5		6.5	
				10.1	10					.9
					11					
	10.5	6.1			12		8.6	6.1		
1.4					13					
			5.1		14				6.7	
					15					
1.4					16	5.7		2.9		.7
		7.5		9.1	17					
					18					
5.4	10.5		9.1		19		4.8		2.9	
					20	6.1				
					21					
					22					
		8.1			23	18.2		7.3	6.1	
10.5			9.1		24					
					25		4.6			
	9.1	8.1			26					
				9.1	27					
					28					1.2
10.2					29	13.1				
					30					
					31			2.6	4.1	
5.8	9.8	8.6	7.2	9.7	Mean Cfs	10.8	8.6	8.0	5.8	.85
220.4	588.0	533.2	446.4	582.0	Aft	345.6	516.0	372.0	359.6	41.0

Grand Total May-September 2370 Acre Feet.

Grand Total May-September 1634 Acre Feet.

DAILY DISCHARGE IN SECOND FEET OF INDIVIDUAL DITCHES
1964

Spring Creek Sage Brush Canal, May-September 1964, Orfice.

May	June	July	Aug	Sept	Date
		51.5			1
	40.1				2
					3
					4
		33.7	23.4	17.3	5
	48.5				6
					7
					8
	47.8		21.1		9
* *				17.3	10
					11
2.3	54.5	25.9			12
					13
			18.4		14
					15
17.3					16
		21.8		21.1	17
					18
24.3	56.6		18.8		19
					20
					21
					22
		22.6			23
34.4			17.3		24
	52.1				25
		23.4			26
				5.9	27
					28
36.9					29
					30
		21.1	19.5		31
23.0	49.9	29.0	19.7	15.3	Mean Cfs
920.0	2994.0	1798.0	1221.4	918.0	Aft

Grand Total May-September 7851 Acre Feet.

Upper Charleston Canal. May-September 1964, 10' Weir

May	June	July	Aug	Sept
		26.1		13.1
	29.9			
		28.8	12.7	12.0
	29.9			
	32.6		16.0	
				14.9
	33.6	23.0		
			11.3	
11.7				
		22.6		13.8
17.2	32.6		11.0	
		19.2		
30.7	28.8		13.1	
		12.0		
				13.1
40.6				
		12.4		
20.0	31.2	24.0	12.8	13.4
640.0	1872.0	1488.0	793.6	804.0

Grand Total May-September 5598 Acre Feet.

DAILY DISCHARGE IN SECOND FEET OF INDIVIDUAL DITCHES

1964

Diamond Bar X & Moon Ditches.						Phillips Ditch				
May	June	July	Aug	Sept	Date	May	June	July	Aug	Sept
	10.5				1					
					2					
		6.0			3		2.0			
				2.1	4					2.1
					5					
			6.2		6				2.2	
					7					
					8					
	6.5	2.2			9			3.2		
					10		2.5		2.1	
				4.0	11					
					12					2.1
			6.5		13					
					14					
			3.5		15					
					16					
	4.0				17		2.6			
					18					
					19					
8.5		3.8	3.5		20	2.2		2.0	2.1	
				2.6	21					
					22					
	13.8				23		2.6			
					24					
		2.5			25	2.2		1.9		
					26		2.2			
5.5			6.3	2.5	27					
					28				2.1	1.1
					29					
					30					
					31					
7.0	8.7	3.6	5.5	3.8	Mean cfs	2.2	2.4	2.4	2.1	1.6
168.0	522.0	223.2	341.0	228.0	Aft	52.8	144.0	148.8	130.4	96.0

Grand Total May-September 1482 Acre Feet.

Grand Total May-September 572 Acre Feet.

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DAILY DISCHARGE IN SECOND FEET OF INDIVIDUAL DITCHES
1964

Turnbow to Baird Ditches						Sunrise Canal River Ditch.			
May	June	July	Aug	Sept	Date	May	June	July	Aug	Sept
	7.5				1					3.8
					2			7.7		
					3				3.6	
				7.4	4					3.0
					5					
			7.2		6				3.2	
					7			6.2		
					8					3.0
					9			5.4		
	6.8				10				2.2	
		9.1			11					
				4.3	12					0.0
					13				2.2	
			9.6		14					
					15			5.4		
					16					
					17			4.2		
					18					
	8.4				19					
7.0		10.7	1.9		20		9.4	3.4	3.2	
				1.9	21					
					22					
		4.4			23			3.2	4.0	
					24					
					25					
		4.4			26		7.7			
8.5	13.9				27					
			4.3	1.9	28				4.0	
					29			5.0		
					30					
					31					
7.7	9.1	7.1	5.8	3.9	Mean Cfs	8.5		5.0	3.4	3.3
184.8	546.0	440.2	359.6	234.0	Aft	188.1		310.0	210.8	52.8

Grand Total May-September 1765 Acre Feet.

Grand Total June-September 762 Acre Feet.

DAILY DISCHARGE IN SECOND FEET OF INDIVIDUAL DITCHES

1964

Larson & Cutler Ditches.						McNeil to FitzGerald Ditches.				
May	June	July	Aug	Sept	Date	May	June	July	Aug	Sept
	9.0				1		7.5			
					2					
					3					
				1.5	4					4.3
					5					
			4.1		6				7.9	
					7					
					8					
		6.3			9		6.0	10.9		
	8.0				10					
					11					
				1.6	12					8.1
					13					
					14					
	6.7		2.6		15		5.4		5.1	
					16					
					17					
					18					
					19					
8.5		3.8	1.8		20	9.0		6.1	4.3	
				1.8	21					4.8
					22					
	12.4	4.8			23		9.3	5.8		
					24					
		4.8			25			5.7		
	6.0				26		12.8			
7.5					27	7.5				
			1.8	1.8	28				4.3	2.9
					29					
					30					
					31					
8.0	10.5	5.0	2.6	1.7	Mean Cfs	7.7	10.2	7.1	5.4	5.0
192.0	630.0	310.0	161.2	102.0	Aft	184.8	612.0	440.2	334.8	300.0

Grand Total May-September 1395 Acre Feet

Grand Total May-September 1879 Acre Feet.

DAILY DISCHARGE IN SECOND FEET OF INDIVIDUAL DITCHES
1964

Snyder to Morris Ditches.						Jordan to Baum Ditches				
May	June	July	Aug	Sept	Date	May	June	July	Aug	Sept
	10.5				1		10.5			
					2					
				3.2	3				3.2	
			1.3		4					
					5		1.8			
		5.6			6			4.7		2.8
					7					
					8				3.4	
					9					
	7.0				10		7.0			
					11					
			3.3	3.4	12					3.2
7.6					13	8.0			4.3	
					14					
		6.6			15					
					16			4.7		
					17					
					18					
					19	7.6			4.3	
7.8			4.3		20					
		2.0		3.2	21					
					22					3.4
	12.0				23					
					24		11.5			
					25			3.9		
					26					
12.0					27	12.0				
		4.5	3.4	1.9	28				3.4	1.9
					29					
					30					
					31					
9.1	9.8	4.5	3.1	2.9	Mean Cfs	9.1	7.7	4.4	3.8	2.8
354.8	588.0	279.0	192.2	174.0	Aft	354.8	462.0	272.8	235.6	168.0

Grand Total May-September 1588 Acre Feet.

Grand Total May-September 1493 Acre Feet.

DAILY DISCHARGE IN SECOND FEET OF INDIVIDUAL DITCHES
1964

Wilson and Remund

Date	May	June	July	Aug	Sept
1		6.0	8.5		
2		6.0			
3					
4					2.6
5					
6					
7				2.2	
8					
9		6.6	3.8		
10					
11					
12					
13					2.3
14					
15					
16		8.8			
17			6.3		
18					
19					
20	8.5			6.1	
21					
22					
23					
24					2.6
25	8.5	8.5			
26					
27					
28			2.6		
20					
30					
31					
Mean Cfs	8.5	7.5	5.3	4.7	2.5
Aft	204.0	450.0	328.6	291.4	150.0

Grand Total May-September 1424 Acre Feet.

HEAD OF PROVO RIVER STORAGE

HEAD OF RIVER STORAGE
JULY 13 1964

Appl. Nos.		Reservoir Name	Total Gage	Storage Acre Feet	Provo Res. Co	Exten-sion	Was-atch Irr. Co	Timp-anogas Irr. Co	Provo City	Wash-ington Irr. Co
A	442	Trial	36.6	1362	707	74	390.5	390.5		
B	442	Washington	37.4	2520	1144	121	632	632		
C	442	Wall	31.5	2000	904	96	500	500		
D	2077h	Weir & Pet. NF 1 & 2		162	148	14				
E	2077a	Long NF # 3	22	824	746	78				
F	2077b	Island NF # 4	Full	98	98					
G	2077c	NF # 5	Full	75	75					
H	2077e	Lost	20.8	1065	298	43			724	
I	2077g	Lost Tea Pot	Full	70	68	2				
J	2077h	Ster	Full	314	142	16	78	78		
K	2077j	Crystol	Full	38	38					
L		NF # 6	Full	438				438		
M		Marjorie	Full	285				285		
2812 & 2813		Big Elk	22	871						871
		Total		10331	4368	444	1600.5	2323.5	724	871

1964 SUMMARY OF STORAGE AT HEAD OF PROVO RIVER

Company Name	Impounded	Bought	Sold	Loss	Draft	Balance	Extra Deliver
Provo Res. Water Users Co.	4368	81	2125	90	2234	0	
Extension Irr. Co	444		81	14	349	0	
Wasatch Irr. Co.	1600.5			64	1536.5	0	
Timpanogos Irr. Co.	2323.5			93	2230.5	0	
Provo City	724		250	19	455.	0	
Washington Irr. Co.	871	950	128	73	1620	0	
South Kamas		1328		53	1275	0	
—X Ranch		225		9	216	0	

HEAD OF RIVER STORAGE RIGHTS

App. No.	Cer. No.	Name	Gage	Aft.	P.Res.Co.	Ext.	Wash.	Timp.	P.City	Wash.
422	1945	Washington	38.7	2720	1230	130	680	680		
442	1945	Wall	31.9	2030	918	97	507.5	507.5		
442	1945	Trial	38.0	1660	751.2	78.8	415.0	415		
2077	2366	N.Fork 1 & 2	Full	162	162					
2077a	1956	N.Fork #3 Long	22.0	827.1	745.6	78.5				
2077b	2400	N.Fork #4 Island	Full	97.7	97.7					
2077c	2367	N.Fork #5	Full	108	108					
2077e	2368	Lost Lake	22.0	1153	321.76	47			784.24	
2077g	2369	Lost Lake #2	Full	140	135.7	4.3				
2077h	1944	Star Lake	Full	314	141.5	15.5	78.5	78.5		
2077j	2403	) Wash #3 Crystol	Full	38	38					
		Sub. Total		9246.8	4649.46	451.1	1681	1681	784.24	
		N.Fork #6	16.8	438				438		
		Mojorie	21.0	285				285		
2812 & 2813		Big Eld	22.0	871						871
		Grand Total		10840.8	4649.46	451.1	1681	2404	784.24	871

PER CENT DISTRIBUTION

Washington	2720	Aft	Wasatch Irr Co	1/4	Timpanogas	1/4	Provo Res Co	1/2	Less	.096%	to Extension	130	Aft
Wall	2030	"	"	1/4	"	1/4	"	1/2	"	.096%	"	97	
Trial	1660	"	"	1/4	"	1/4	"	1/2	"	.095%	"	78.8	
Star	314	"	"	1/4	"	1/4	"	1/2	"	.10 %	"	15.5	
Long	824.1	"					824.1		Less	.095%	"	78.5	
Lost	1153	"	Provo City	784.24			368.76		Less	.127%	"	47	
Lost #2	140						140		Less	.031%	"	4.3	
Balance of Lakes as Shown above.												451.1	Total

Taken from an old abstract by Frank Wentz. To be examined by those concerned and to be verified or rejected as a basis for distribution.

PROVO RESERVOIR WATER USERS COMPANY

Storage Rights

App.No.	Cert.No.	Name	Ac.Ft.	Ext.Irr.	Co.Ac.Ft	Priority
442	1995	Washington	1360	130	1230	8-22-05
442	1945	Wall	1015	97	918	8-22-05
442	1945	Trial	830	78.8	751.2	8-22-05
2077	2366	N.Fork Lake # 1-2	162		162	9-15-08
2077a	1956	N.Fork Lake #3 Long	824.1	78.5	745.6	9-15-08
2077b	2400	N.Fork Lake #4 Island	97.7		97.7	9-15-08
2077c	2367	N.Fork Lake #5	108		108	9-15-08
2077e	2368	Lost Lake	368.76	47	321.76	9-15-08
2077g	2369	Lost Lake #2	140	4.3	135.7	9-15-08
2077h	1944	Star Lake (1/2 Int.)	157	15.5	141.5	9-15-08
2077j	2401	Washington #3	38		38	9-15-08
			5100.56	451.1	4649.46	

River Rights-Heiselt

1828	1989	Provo River	134.16 Sec.Ft.	4-16-08
4221-b	2360	Provo River	30 Sec.Ft.	9-5-11
3387	2370	Shingle Creek	50 Sec.Ft.	7-11-10
			214.16	

River Rights-Provo Bench

2134	1917	Provo River	8.50 Sec.Ft.	10-27-08
1828	1989	Provo River	15.84 Sec.Ft. (Cer. of change #33)	4-26-08
			24.34 Sec.Ft.	

Lake Rights

944b	2396	Shingle Creek	4326 Acre Feet (Voided 11-28-58)	6-14-06
8456	2371	Utah Lake	31.02 Sec.Ft.	6-7-28
10616	2231	American Fork River	10.97 Sec.Ft.	2-27-29

(COPY FROM FRANK WENTZ FILES) I.F. Baum Deputy Comm.

DEER CREEK PROJECT

Acre Feet Storage Summary with Deer Creek Project Use
Year Ending Oct 31, 1964

		Additions				Uses								
Date 1963	R No	NF App # 12144	Duch Tunnel	App #803	Weber Provo	Evap Loss	S.L. Aqued	Provo City	Oren City	Geneva Steel	City Creek	Murd Canal	Provo Bench	Balan
Nov 15	21		367		295	75	189	265	0					Res Oct 3
" 30	22		324		612	86	208	50	↑					97274
Dec 15	23		246		497	30	754	0						Class A
" 31	24		261		622	48	441	↑						+80
1964														Power W
Jan 15	1		245		584	30	404							Bal - 2
" 31	2		229		542	32	344							Assec B
Feb 15	3		230		563	45	726							97,21
" 29	4		140		472	42	597							
Mar 15	5		202		552	146	731							
" 31	6		216		580	166	624							
Apr 15	7	831	206		896	311	547							
" 30	8	0	349	280	977	310	386							
May 15	9	1596	698	280	3419	461	207							
" 31	10	9068	11351	298	17410	580	254			172		215		
June 15	11	11495	6842	280	10981	0	0			0		0		
" 30	12	Shingle Cr	6568	280	11633	0	0		↓ 0	0		0		
July 15	13	Additions for Reports	4207	280	1946	458	412	0	95	341		4904	180	
" 31	14	8,9,10,11+12 shows a	1239	299	0	790	1449	234	0	350	22	9329	764	
Aug 15	15	total of	591	280	0	630	1562	521	↑	331	30	7481	855	Res Oct 3
" 31	16	5867 AF	352	298	0	608	1505	569		342	32	6094	708	10019
Sept 15	17	Project Additions	0	280	0	443	1404	310		216	16	6475	60	Class A
" 30	18	which is	122	280	0	381	975	697		99		5653	121	+106
Oct 15	19	determined erroneous	177	280	0	210	989	250		514		0	0	Power
" 31	20	as App # 944-b was voided 11-28-58	157	299	0	224	505	255	↓ 0	14		0	0	Bal+37
														Assoc
														98,150
App # 12144		= 11495	35319	3714	52581	6106	15213	3151	95	2379	100	40151	2688	Totals

Shingle Creek was in-total credited erroneously to DCR storage on days there was river N.F. Water flowing direct to Utah Lake.
No Project use storage charge listed when Res was spilling May 24th to July 6th.

← Water year additions 103109 →

← Water year delivery to users 63777 → A.F. on a recorded daily basis.

No PRWUCo Shingle Creek or Echo Storage waters are included in above use amount. Lump sum A.F. transfers during the season accounts for differences in use totals shown and that shown on Oct 31-64 Sht #3 No 20 report. Use transfers are listed on Sheet #3 of Reports 22, 8, 10, 11, 13, 15, 16, 17 + 18. Other than inter-storage use transfers there was 377 A.F. from N.F. matching water included in the 2688 AF Provo Bench use coming from NF Class "A" making only 63,400 A.F. Storage use on which the 1963-1964 A.F. distribution assessment is due as per the formula.

From May 24th to July 6th when DCR was full and spilling considerable Assoc DCR Project Water Additions shown, spilled into Utah Lake as Utah Valley Water

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DEER CREEK RESERVOIR
DAILY END OF DAY GAGE READING
AND ACRE FEET AMOUNTS IRRIGATION SEASON 1963 - 1964

	1963				1964							
	November		December		January		February		March		April	
Day	Gage	a.f.	Gage	a.f.	Gage	a.f.	Gage	a.f.	Gage	a.f.	Gage	a.f.
1	5392.70	97274	5395.00	101770	95.90	103564	93.60	99021	93.70	99216	96.10	103965
2	92.80	97467	95.00	101770	95.70	103165	93.60	99021	93.80	99410	96.50	104772
3	92.80	97467	95.05	101870	95.60	102996	93.55	98924	93.80	99410	96.80	105377
4	92.80	97659	95.10	101969	95.50	102767	93.50	98826	93.90	99605	96.95	105730
5	93.00	97852	95.15	102069	95.50	102767	93.40	98631	93.95	99703	97.10	105986
6	93.10	98047	95.20	102169	95.40	102567	93.40	98631	94.00	99800	97.15	106088
7	93.15	98145	95.20	102169	95.30	102368	93.35	98533	94.00	99800	97.20	106191
8	93.30	98436	95.20	102169	95.30	102368	93.40	98631	94.00	99800	97.20	106191
9	93.40	98631	95.30	102368	95.20	102169	93.35	98533	94.10	99997	97.30	106395
10	93.40	98631	9535	102468	95.20	102169	93.40	98631	94.10	99997	97.35	106498
11	93.50	98826	95.40	102567	95.00	101770	93.35	98533	94.10	99997	97.40	106600
12	93.50	98826	95.45	102667	95.00	101770	93.35	98533	94.15	100096	97.40	106600
13	93.60	99021	95.50	102767	94.70	101179	93.25	98339	94.15	100096	97.35	106498
14	93.70	99216	95.60	102966	94.70	101179	93.25	98339	94.15	100096	97.30	106395
15	93.80	99410	95.70	103165	94.60	100982	93.20	98242	94.15	100096	97.30	106395
16	93.95	99702	96.70	105176	94.55	100884	93.30	98436	94.15	100096	97.30	106395
17	94.00	99800	96.60	104974	94.50	100785	93.30	98436	94.15	100096	97.25	106293
18	94.10	99997	96.75	105277	94.50	100785	93.30	98436	94.05	99898	97.20	106191
19	94.10	99997	96.70	105176	94.50	100785	93.20	98242	94.05	99898	97.10	105986
20	94.25	100292	96.70	105176	94.40	100588	93.20	98242	94.10	99997	97.05	105884
21	94.30	100391	96.70	105176	94.30	100391	93.20	98242	94.25	100292	97.00	105781
22	94.35	100489	96.60	104974	94.35	100490	93.20	98242	94.40	100588	97.00	105781
23	94.45	100687	96.50	104772	94.30	100391	93.25	98339	94.50	100588	97.00	105781
24	94.50	100785	96.50	104772	94.30	100391	93.25	98339	94.60	100982	96.95	105680
25	94.60	100982	96.40	104570	94.20	100194	93.35	98533	94.70	101179	96.85	105478
26	94.65	101080	96.40	104570	94.10	99997	93.35	98533	94.90	101573	96.80	105377
27	94.70	101179	96.35	104469	94.00	99800	93.45	98728	95.00	101770	96.80	105377
28	94.80	101376	96.25	104268	93.90	99605	93.55	98924	95.10	101969	96.70	105176
29	94.90	101573	96.20	104167	93.80	99910	93.60	99021	92.20	102169	96.70	105176
30	95.00	101770	96.10	103965	93.70	99216			95.40	102567	96.70	105176
31			96.00	103763	93.60	99021			95.60	102966		

DEER CREEK RESERVOIR
DAILY END OF DAY GAGE READING
AND ACRE FEET AMOUNTS IRRIGATION SEASON 1963 - 1964

	1964 May		June		July		Aug.		Sept.		Oct.	
Day	Gage	a.f.	Gage	a.f.	Gage	a.f.	Gage	a.f.	Gage	a.f.	Gage	a.f.
1	5396.90	105579	5416.35	150831	5417.70	154455	5410.70	136343	02.05	116424	5394.70	101179
2	97.20	106191	16.65	151631	17.80	154725	10.30	135364	01.65	115557	94.65	101080
3	97.40	106600	17.20	153104	17.65	154320	09.95	134509	01.40	115017	94.65	101080
4	97.60	107010	17.80	154725	17.50	153915	09.60	133666	01.10	115017	94.60	100982
5	97.75	107317	18.10	155539	17.30	153374	09.25	132823	00.85	113832	94.60	100982
6	98.00	107829	18.45	156497	17.20	153104	09.05	132342	00.65	113405	94.60	100982
7	98.20	108245	18.40	156360	16.90	152297	08.70	131511	00.25	112550	94.60	100982
8	98.40	108661	18.35	156223	16.60	151498	08.50	131037	99.95	111910	94.60	100982
9	98.50	108869	17.90	154995	16.50	151231	08.10	130090	99.60	111173	94.55	100884
10	98.70	109284	17.25	153239	16.40	150964	07.85	129504	99.20	110330	94.55	100884
11	98.75	109388	16.90	152297	16.30	150698	07.50	128687	98.90	109700	94.50	100785
12	98.95	109804	17.10	152834	16.15	150298	07.20	127987	98.70	109284	94.50	100785
13	99.20	110330	17.10	152834	15.85	149503	06.95	127406	98.55	108973	94.40	100058
14	99.75	111489	17.20	153104	15.70	149108	06.60	126602	98.25	108349	94.40	100588
15	5400.60	113298	17.30	153374	15.45	148450	06.25	125798	98.00	107829	94.40	100588
16	01.50	115233	17.60	154185	15.30	148054	06.00	125223	97.75	107317	94.35	100490
17	02.50	117408	17.60	154185	15.10	147527	05.90	124996	97.50	106805	94.30	100391
18	03.90	120272	17.60	154185	14.85	146874	05.70	124543	97.15	106089	94.25	100292
19	05.00	122955	17.60	154185	14.60	146224	05.20	123409	96.90	105579	94.20	100194
20	06.50	126372	17.60	154185	14.35	145578	04.85	122619	96.70	105176	94.20	100194
21	08.10	130090	17.55	154050	14.10	144924	04.55	121947	96.50	104772	94.20	100194
22	09.85	134268	17.60	154185	13.80	144151	04.30	121387	96.30	104368	94.20	100194
23	11.30	137825	17.80	154725	13.45	143252	04.00	120715	96.15	104066	94.15	100096
24	13.00	142098	17.75	154590	13.10	142355	03.75	120162	96.00	103763	94.10	99997
25	14.40	145704	17.60	154185	12.90	141845	03.50	119609	95.85	103464	94.10	99997
26	15.20	147791	17.45	153780	12.70	141339	03.20	118945	95.60	102966	94.15	100096
27	15.70	149108	17.20	153104	12.40	140580	02.75	117955	95.30	102368	94.15	100096
28	16.40	150974	17.20	153104	12.00	139568	02.50	117408	95.15	102069	94.15	100096
29	16.70	151764	17.35	153509	11.70	138821	02.20	116752	95.00	101770	94.25	100292
30	16.70	151764	17.55	154050	11.40	138074	02.50	117408	94.85	101475	94.20	100194
31	16.45	151098			11.20	137576	02.30	116970			94.20	100194

WEBER - PROVO CANAL

DAILY DISCHARGE IN ACRE FEET AT WOODLAND

As computed and recorded by Deputy Commissioner from Automatic recorder record

Date	1963 Nov.	Dec.	1964 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	0	39	50	41	41	57	95	778	1080	0	0	0
2	0	41	50	44	43	56	99	1194	690			
3	0	45	47	37	45	56	89	1464	173			
4	4	38	32	34	42	59	95	1550	27			
5	30	41	33	37	44	59	101	594	39			
6	22	44	41	41	44	61	168	386	36			
7	23	43	44	42	37	63	186	320	0			
8	26	31	40	46	42	67	188	250	0			
9	24	34	33	56	43	67	188	143	81			
10	25	48	44	52	41	69	165	123	178			
11	32	38	65	46	41	69	202	496	143			
12	39	22	48	45	41	65	240	1050	139			
13	38	25	40	38	41	68	362	966	146			
14	40	36	39	36	39	80	506	1112	132			
15	41	38	49	37	39	80	824	1060	139			
16	55	48	48	21	40	77	990	1436	107			
17	52	48	49	36	39	72	1436	1498	96			
18	44	48	45	44	42	63	922	1184	105			
19	44	48	36	44	43	65	1592	904	70			
20	45	48	40	41	37	65	1528	824	75			
21	47	48	44	41	39	62	1470	730	75			
22	44	47	32	44	43	61	1510	598	60			
23	41	36	32	39	43	66	1544	330	36			
24	49	30	17	36	39	73	1586	304	0			
25	50	48	19	38	39	70	1492	308				
26	48	42	35	34	42	70	744	366				
27	45	41	43	34	42	70	726	744				
28	41	46	41	41	33	70	708	976				
29	39	45	44	41	37	89	682	970				
30	37	39	46		44	91	644	984			0	
31		28	45		51		602		0	0		0
Total	1025	1262	1271	1166	1276	2040	21784	23642	3627			
Grand Total		57093										

Echo Storage 1582

← This amount is with-in 99% of the intergrated 57,820 A.F. amount determined by USGS for the same period.

DUCHESNE TUNNEL
DAILY DISCHARGE IN ACRE FEET

as computed and recorded by
Deputy Commissioner from Automatic Gage Recorder and Sparling Meter

Date	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.
1	21	17	17	16	14	14	28	448	594	48	0	12
2	21	17						580	511	46		
3	21	17						714	447	46		
4	21	17						898	391	51		
5	22	18						592	342	47		
6	28	17						495	299	50		
7	30	17						498	275	43		
8	30	17					28	205	249	42		
9	31	17				14	30	27	226	41		
10	30	18				15	32	200	214	50		
11	21	17				14	37	445	186	35		12
12	24	17				15	46	460	172	32		13
13	24	17				14	72	485	163	33		13
14	24	17				15	116	530	151	31		13
15	24	18	17	16		14	168	550	172	31		13
16	23	17	15	11	14	24	230	785	139	64		10
17	23			11			296	743	123	43		
18	23			11			368	553	112	36		
19	23			11			476	491	99	35		
20	24			10			607	411	96	32		
21	23						862	469	93	30	0	
22	23						1016	438	84	26	15	
23	23						1066	472	78	24	15	
24	22						1062	388	72	22	14	
25							1101	270	65	21	14	
26							1088	273	61	21	14	10
27						24	1071	273	57	12	13	11
28						25	918	275	57	0	14	10
29				10		25	699	498	52	0	14	10
30	22					25	527	504	51	0	14	11
31		17	15		14		438		49	0		10
Total	711	530	495	384	434	576	12578	13970	5671	982	127	346

Total for Irr. Year 36,804 Ac. Ft. as compared to 36,657 Ac.Ft. for 1963 Irr. Year

SALT LAKE AQUEDUCT DIVERSION

Daily Discharge in Acre Feet at D.C.R. Dam as reported by Dam attendant from Sparling Meter

Date	1963 Nov.	Dec.	1964 Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.
1	12	30	30	35	50	40	17	20	20	91	89	85
2		40	30	45	60	40	20		20	52	97	50
3		68	30	68	60	40			20	166	61	80
4		48	36	60	60	40			20	178	82	125
5		41	34	72	54	40			20	95	148	74
6		43	30	63	40	43			27	31	103	55
7		45	24	44	40	50			50	56	68	46
8		60	20	50	40	50			44	121	146	80
9		60	20	51	40	44			30	130	110	72
10		50	20	65	42	40			30	140	123	50
11	12	50	30	58	62				30	118	114	50
12	21	76	40	40	70				44	79	40	50
13	12	70	40	40	58				98	70	82	59
14	12	60	40	40	50				76	115	97	63
15	12	48	40	40	50		20		44	120	44	50
16	14	51	33	50	50		50		98	21	121	50
17	20	47	25	66	50		50		65	46	54	31
18	20	33	20	30	50		50		106	131	41	30
19	36	20	20	30	53		53		50	72	30	30
20	26	20	20	37	58		58		74	70	30	25
21	8	20	20	56	50		50		134	82	30	48
22	9	27	20	60	50		50		134	82	30	32
23	9	40	20	60	57	40	57		110	93	81	24
24	10	40	33	60	70	38	70		35	172	77	51
25	10	40	30	43	40	30	40		49	170	49	59
26	10	40	20	30		30			68	164	90	33
27	21	40	27	30		23			49	144	109	20
28	10	27	30	37		17			178	83	61	20
29	10	20	30	50		12			157	53	80	20
30	10	20	30			12		20	120	76	92	18
31		20	30		40		40		90	58		14
Total	412	1304	872	1410	1544	1109	1065	600	2088	3067	2379	1494

Grand Total 17344 A.F.

Water Year Ending Oct 31st 1964 showing
Acre Ft. Distribution of Weber-Provo Canal Water. Between July 9th & 24th inclusive the Canal was used only to convey & distribute Echo Storage to Provo River Users direct.

(1) Diverted from Weber River 1964 Water Year * 55028	(2) Water arriving at Woodland ** 57093	(3) Less Allowance for N.F. 783	(4) Weber Water at Woodland 56310	(5) Weber-Provo Canal Conv. loss = None but gain of 2.3%	(6) 4% Conv. River Loss Allowed to Res 2254	(7) Net to Ext. Irr.Co. PRWU Co. + UCR A.F. 54056
Ext. Irr Co 400 × 29% = 116	1562 A.F. 195	7	*** 188	No loss determined from formulas provided, but a gain of 2.3% Beaver Cr. diversion to W-P Canal at Kamas may account for the gain instead of a conveyance loss expected.	8	1475 180
Provo Res WUCo 5000 × 29% = 1446	1387	38	1349		54	1295 See sht #5 Reports #13 & 14
Bal is Power or Assoc Water 53462 Ac Ft.	55511	738	54773		2192	52581 See sht #3 Report #14
Total 55028	57093	783	56310	+ 1282 gain.	2254	54056

* As per E Blaine Johnson & USGS reports.
** As per Ike Baum records furnished. see page # 51 this report.
*** These quantities represent the computed amounts of Echo Storage arriving after July 8th when UCR had ceased to spill and no power or Assoc Water was arriving.

$\frac{400}{5400} = 7.4\%$

July	11	12	13	14	15	16
	30	30	30	30	30	30

7.4% × 1475 = 109 A.F. which is Ext Irr.Co share
Total = 180 − 109 = 71 debit to PRWUCo.

Ext. Irr Co used the 180 A.F. shown above which was delivered direct and Not stored.
" " " transfered 81 AF of their "Head of River Storage", July 31-64 Report # 14 to cover or compensate for debit shown to PRWUCo this year and 1963.

$\frac{\text{1562 A.F. through Oakley diversion July 9 to 24}}{\text{5400 AF Total right for Echo Storage}} = 29\%$ Delivery.

An analysis of columns #s (1) and (4) above will indicate that 3 A.F. per day N.F. allowance into Weber-Provo Canal is not sufficent to effect proper balances.

(EXHIBIT I) STATE ENGINEER'S OFFICE April 8, 1964

TO WATER USERS OF SOUTH FORK PROVO RIVER:

The distribution of waters of the South Fork of Provo River during the past three years has shown the necessity for improved measuring devices and control structures in order to assure adequate distribution. Also there seems to be some lack of understanding of policies on the part of the water users, as to distribution practices followed on this source. Therefore, the following practices will be adopted.

1. South Fork Water Users are to be allocated water on a turn system based on a duty of 40 acres per second foot. (See attached water schedule.)
2. Stock and domestic uses will be deducted from the irrigation water of the water users involved.
3. Water use from Birch Creek will be diverted as per Application No. a-3809 and the stipulation of 1961. The waters of Birch Creek must pass through the properties of Long and Giles with only proper diversions being made. These rights are: Dipping rights by Giles for domestic use and diversions by Long for irrigation purposes through headgates that can be controlled and locked. Also, proper measuring devices must beinstalled.
4. It has been brought to our attention that there are diversions being made in the South Fork Area for which this office has no record of a water right, the water users making these uses will be required to supply information setting forth the basis for their water rights. They must furnish said information or cease water use.

An inventory of ditches show that diversion works are lacking on many ditches. You are hereby ordered to make the installations recommended herein or no water will be turned to you during the 1964 distribution period. The following diversion controls and measuring devices must be installed or completed.

a. The Sterling M. Ercanbrack rights shall have properly installed a metal or concret parshall flume, either in their west side diversion from Middle Fork or in Middle Fork itself, at or near the west side diversion. The flume need not have a measuring capacity in excess of 3 cfs.
b. The Sterling M. Ercanbrack right shall have properly installed a metal or concrete parshall flume in the Left-hand Fork back of the Summer House at a point above the pipe line diversion, where all the will be measured. This flume need not have a measuring capacity to exceed 1½ cfs.
c. The Albert and Elwood Conrad right successors-in-interest to the Nettie Conrad Right, Paragraph #73 shall provide and install a steel weir plate in existing concrete weir box to adequately measure all the water diverted at the upper Big Springs ditch diversion.
d. The Albert and Elwood Conrad right shall install a concrete or steel measuring device in their main South Fork diversion near the road with sufficient capacity to measure 4 cfs. It is optional if a parshall flume or a suppressed weir is installed as there is sufficient grade for either.
e. The Albert or Elwood Conrad right shall install operative control gates at any diversions used along the Big Spring channel below the main diversion, this also applies to the diversion on South Fork west of the A.M. Conrad barn.
f. The David Long right shall complete its upper diversion control gate on the South Fork satisfactory to the commissioner. This includes stopping all leaks around the concrete gate abutments. Installing a steel or metal covered wood gate in existing concrete box which can be closed tight and opened to various heights and set, with a steel stem and wheel lift.

g. The David Long right shall reset the steel gate on its Bunnell Fork diversion in a concrete box or in such a manner that all leaks will be stopped from around the gate.

h. The David Long right shall install a tight steel headgate at its lower diversion on South Fork, before it will be authorized to divert water at that location during a regulatory period.

i. The David Long right shall make the presently constructed suppressed weir at Bunnel Fork operative to the point that it will measure all the water diverted.

These installations to be completed 50 days from receipt of this notice.

If there are questions concerning this matter we suggest that you contact Mr. Wallace Wayman, Provo River Water Commissioner, or this office.

Yours very truly,

Hubert C. Lambert
DEPUTY STATE ENGINEER

Copies to:-

Mr. David Long
457 South State St.
Provo, Utah

Mr. Albert Conrad
R.F.D. #2 Vivian Park
Provo, Utah

Mr. Elwood Conrad
R.F.D. #2
Box 587
Vivian Park,
Provo, Utah

Mr. Sterling M. Ercanbrack
390 E. 1771 North
Provo, Utah

Mr. Lawrence Johnson
R.F.D. #2
Box 1614 Vivian Park
Provo, Utah

Darel G. and Vard L. Moulton
60 North 8 West
Provo, Utah

Frank Hancock
R.F.D. #2
Vivian, Park
Provo, Utah

Mr. Vern J. Shoel
Route #2
Box 583 B
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Mr. Ray E. Christensen
247 North 600 East
Provo, Utah

Mr. Marion W. Holliday
247 N. 6th East
Provo, Utah

Mr. Alton Tom Giles
1043 E. Briar Avenue
Provo, Utah

Utah Girl Scout Council
c/o Mrs. Roy N. Deering, President
781 East 50 South
Provo, Utah

Jack D. Thomas
837 E. 50 S.
Provo, Utah

SOUTH FORK IRRIGATION WATER SCHEDULES

Based on an assumed duty of 40 Acres per c.f.s. Irrigation Right to equal continuous flow diversion right less Cullinary Stream use.

$$\frac{\text{Irrigation right cfs}}{\text{Water Diverted For Irr.}} = \text{\% of Time} \times 168 = \text{hours turn per week.}$$

Sterling M. Ercanbrack 22 Acre Right. Turn begins Tuesday 8: A.M.

River Flow %	Continuous Flow Diversion Right	Less Cullinary Stream Use	Irrigation Right	Stream Diverted	% of One Week	Turn Time	Turn Ends
100	.55 cfs						
80	.44 "						
60	.30 "						
50	.275 "						

Elwood Conrad 52 Acre Right. Turn begins Saturday 9: A.M.

100	1.3						
80	1.04						
60	.78						
50	.65						

Albert Conrad 52 Acre Right. Turn begins immediatly after Elwoods.

100	1.3						
80	1.04						
60	.78						
50	.65						

David Long 20 Acre Right. Turn begins Wednesday 8: A.M.

100	.50						
80	.40						
60	.30						
50	.25						

River Flow % changed to % You may divert for Irrigation

Your turn ends

Exhibit II
Points of Diversion relative to
Provo River Water

N 1382° and E 2849° from the SW Cor. Sec 27, T3N, R9W, USB & M	Duchesne Tunnel Diversion
S 1157° and E 2007° from NE Cor Sec 2 T3N, R8E, SLM	Outlet from Duchesne Tunnel or Point of comingling with Provo River Water.
N 1110° and E 765° from SW¼ Sec 21 T1S, R6E, SLM	Weber River diversion to Weber-Provo Canal near Oakley
S 300° and West 1650° from NE COR Sec 31, T2S, R6E, SLM	Point of comingling of Weber River Water with Provo River
N 700° and E 100° from SW Cor Sec 5, T5S, R4E, SLM	Center of Deer Creek Dam Point of rediversion of Storage Rights
S 147° and W 189° from NE Cor Sec 7, T5S, R4E, SLM	Point of release from DCR to Provo River and S.L. Aqueduct

* The following 16 points of diversion are Exchange Points of Diversion above DCR as listed in App. #12230

South Fork of the Provo River

S 1680° and W 2500 from E¼ Cor Sec 24	Ed Clyde Ditches
N 410° and W 240° " SE Cor " 14	"
N 1800° and E 80° " S¼ Cor " 14	"
N 2250° and W 610° " S¼ Cor " 14	"
S 120° and E 400° " W½ Cor " 14	"
S 180° and W 350° " W½ Cor " 14	"
N 2010° and E 400° " S¼ Cor " 15	"

Nobletts Gulch Creek

N 600° and W 1200° from E¼ Cor Sec 24	Ed Clyde Ditches
N 500° and W 1800° " E¼ " " 24	"

North Fork of Provo River

N 920° and E 140° from SW Cor Sec 2	Ed Clyde Ditches
N 220° and E 480° " S¼ " " 10	"
All in T3S, R7E SLB&M	

** N 1800° and W 80° from SE Cor Sec 12	South Kamas from Swift Cr. Chann
N 70° and E 2500° from SW Cor Sec 3	Fitzgerold Est Div
All in T3S, R6E, SLB&M	

S 750° and E 860° from NW Cor Sec 32	Aurbachs
S 760° and E 660° " NW " " 32	"
S 1620° and W 1200° " NW " " 32	"
All in T2S, R6E, SLB&M	

** Part of this exchange water at this point is further exchanged by delivery to lands presently irr. from Beaver Creek and in lieu thereof additional water is diverted to other lands here under covered by point of Div. of Weber River Decre of Beaver and Shingle Creek Irr. Co.

N 410° and E 2415°	McNeil-Turnbow Diversion
N 430° and E 2340°	Wm Gines Div.
N 1610° and E 20°	Aurbach & Hillside Stake Div.
N 1640° and E 930° All from SW Cor Sec3, T3S, R6E, SLM	Wm Gines & Hilside Stake Div.
S 760° and W 675° from NE Cor Sec 10, T3S, R6E, SLM	Stewart-Winterton Div.
N 1150° and W 460° from SE Cor Sec 12, T3S, R7E, SLM	Alma Carlile Div.
S 400° E 1600° from NW Cor Sec 21, T3S, R7E, SLM	Sunrise Canal Div.
S 110 and W 1275°	Philips Ditch Swift Creek Div.
N 320° and W 2890 both from E¼ Cor Sec 12, T3S, R7E, SLM	Moon Ditch Div.
S 1960° and W 610°	LDS South Summit Div.
S 730° and W 1770°	Larson & Cutler Div.
S 1220° and W 2990° All from NE Cor Sec 11, T3S, R7E, SLM	Knight & Gines Div.
N 75° and E 760 from SW Cor Sec 16, T3S, R7E, SLM	Mallery Ditch Div.
N 448° and E 2330° from SW Cor Sec 3, T3S, R6E, SLM	Wm Gines
S 910° and E 2150°	Aurbachs & Howard
S 675° E 2405° both from NW Cor Sec 32, T2S, R6E, SLM	Lemon Div.
No data as to exact point but with relation to other diversions it should fall in Sec 1, T3S, R7E, SLM	Margret Hewlett Pine Valley
S 720° and E 660 from NW Cor Sec 32, T2S, R6E, SLM	Aurbachs
S 825° and E 510° from NW Cor Sec 32, T2S, R6E, SLM	Aurbachs
N 2100° and E 95° from SW Cor Sec 35, T2S, R5E, SLM	Utah Power & Light Berg
N 2400° and E 185° from SW Cor Sec 36, T2S, R5E, SLM	Baird Ditch
S 2300° and E 4300° from NW Cor Sec 33, T2S, R5E, SLM	Snyder & Berg
S 2165° and W 220° from NE Cor Sec 32, T2S, R5E, SLM	Wasatch Stake LDS Joe & Hale Morris

	Joe & Hale Morris From Ross Creek
	Joe & Hale Morris from Ross Creek
	Sam Lawrey Bennys Spring & Springs in Morris Field.
E 2010° from SW Cor Sec 31, T2S, R5E, SLM	Opel Jordan
W 252° and N 12°56° E 155° from S½ Cor Sec 31, T2S, R5E, SLM	Timpanogas Irr. Co.
S 1125° and E 830° from NW Cor Sec 6, T3S, R5E, SLM	Wm & Clift Jordan
N 2330° and 1225° E from SW Cor Sec 7, T3S, R5E, SLM	Wasatch Irr. Co North Field I also Spring Creek, Sage Brush, Upper Charleston in High Flow, Low Flow Springs Seepage and Percolating Waters.
S 1550° and E 1280° from NW Cor Sec 7, T3S, R5E, SLM	Parley Probst Edwards & Baum
S 300° and E 710° from NW COr Sec 18, T3S, R5E, SLM	Ike & Tom Baum
N 1135° E 190° from SW Cor Sec 18, T3S, R5E, SLM	Midway Irr. Co.
N 1135° and E 190° from SW Cor Sec 18, T3S, R5E, SLM	David Young
N 2740° and W 1860° from SE Cor Sec 24, T3S, R4E, SLM	Wilson & Remund
S 140° and E 1410° from NW Cor Sec 25, T3S, R4E, SLM	Birkumshaw Slough
N 820° E 500° from SW Cor Sec 36, T3S, R4E, SLM	Island Ditch
N 1120 E735 from SW Cor Sec 36, T3S, R4E, SLM	Nelson Ditch
S 1850° E 1260 from NE Cor Sec 1, T4S, R4E, SLM	Averrett Slough
S 1030 and 660 W from NE Cor Sec 11, T4S, R4E, SLM	Lower Charleston Irr. Canal

S 9° 40° E 1012 ft. from W¼ Cor Sec 7 T6S, R3E, SLB&M	Upper East Union
" "	City Creek or East River Bottoms Canal
" "	West Union Canal
" "	Park & Nuttal, B&Y Ditch
N 67°07° E 1486.7' from the S¼ Cor Sec 27, T5S, R3E, SLM	UP&L Co Olsted Flowline intake
" "	Provo Bench Canal
" "	Geneva Steel Co.
2 " "	Orem City for Alta exchange
Point of rediversion E 641.3° and N 1069.5° from W¼ Cor Sec 7, T6S, R3E, SLM	UP&L Co Steam Plant Provo Bench Canal Geneva Steel Co
S 55°45° W 1104° from W¼ Cor Sec 5, T6S, R3E, SLM	Center of Murdock Dam (Provo Res WU Co Canal)
N 35°04° E 1537° from W¼ Cor Sec 8, T6S, R3E, SLM	Timpanogas Canal Co. Utah Valley
S 1944' and E 511' from N¼ Cor Sec 25, T6S, R2E SLM.	Lake Bottom Canal
N 1171° and E 720° from S¼ Cor Sec 25, T6S, R2E, SLM	Provo East Union
N 1820° and E 1645° from SW Cor Sec. 36, T6S, R2E, SLM	Provo Tanner Race
" "	Little Dry Creek
N 75° and 1030° E from W¼ Cor Sec 2, T7S, R2E, SLM	Fort Field Upper Canal

New Point of Diversion	By Whom Made and Amount
For Exchange application # 65 from Lost Lake, High Uintas to Lost Cr. Provo Canyon is N 4°02' W 2530.5' from E¼ Cor. Sec. 33, T 5 S, R 3 E, SLM	Made by Provo City Corp. for 6/7 of 2 cfs.
For exchange app. #66 from Lost Lake, High Uintas to Bridal Veil Falls Provo Canyon is S 6°46' W 676.4' from E¼ Cor. Sec 33, T 5 S, R 3 E SLM	Made by Provo City Corp. for 6/7 of 3 cfs.
For exchange app # 67 from DCR storage or Orem City water Canal stock to Alta Ditch is N 1200' and E 800' from SW Cor Sec 6, T 6 S, R 3 E, SLM.	Made by Orem City Corp. for 6 cfs.
For exchange app #69 from DCR Storage to Spring which is N 77°36' E 19,700' from NW Cor Sec 32, T 4 S, R 2 E SLM.	Made by American Fork City Corp. for 7500 A.F.
For exchange app # 85 from DCR storage, through Culinary diversion Provo City located is South Fork Provo River, Utah County	Made by Provo City Corp. for 8000 A.F. limit
△ For exchange app #100 from Murdock Dam diversion to Bricker Spring Which is S 53°01' W 4993' from NE Cor Sec 15, T 5 S, R 3 E, SLM.	Made by Brickerhaven Corp for .033 cfs using Provo River Water Users Co Water.
For exchange app # 110 from Spring Creek west of Ironton Plant to Utah Lake at a pt. Which is N 22°06' W 2484' from S¼ Cor Sec 8, T 6 S, R 2 E, SLM.	Made by United States Corp. for 20 cfs.
△ For exchange app #114 from Provo Res WU CO. Canal stock to unnamed springs located S 800" and E 400" from NW Cor Sec 16 T5S, R3E, SLM S 1550" " E 1420" " " " " " " "	Made by Provo Canyon Develop. Co. for .002 cfs
For eschange app#126 from DCR Storage to 8" well at Street Boat & Fishing Camp located at a point N 720" and W 2250" from E½ Cor Sec 27, T4S, R4E, SLM	Made by DCR Assoc. for .10 cfs limit 2 A.F.
For exchange app #148 from DCR storage to 6" well near DCR dam in Sec 7, T5W, R4E, SLM	Made by DCR Assoc. fro .05 cfs limit 1.5 A.F.
△ For exchange app #157 from Timponagas Canal Co. stock 4 shares to 6" well 200" to 400" deep located N 1400" and E 1315" from S½ Cor Sec 26, T5S, R3E, SLM	Made by Vivian park Home owners for .5 cfs
For exchange app # from to two well pumps one ft. deep the other ft. deep both located S 1792' and E 1432' from N¼ Cor. Sec. 25, T 6 S, R 2 E SLM	Made by Riverside Country Club for

EXHIBIT III

Tabulation of Secondary direct flow water rights below D.C.R. giving priority dates.

Amount in cfs	Application	No.		
134 cfs			Cert 1989	Provo Res. Co. in Murdock April 16, 1908 priority.
1.5 cfs		2134-a	Cert 1207	Dixon Irr. Co. in Provo Bench Oct. 27, 1908 priority.
1.93		2623 2624	Cert 376	Hoovers, Deer Creek Stream. Aug. 5, 1909 priority
50 cfs		3387	Cert 2370	Provo Res. Co. in Murdock July 11, 1910 priority Shingle Creek
30 cfs		4221-b	Cert 2360	Provo Res. Co in Murdock Sept. 5, 1911 priority
5 cfs		4306-a	Cert 1310	Tanner in Provo Bench Oct. 11, 1911 priority
200 cfs		7550	Cert 1125	UP&L Co. In Flume Nov. 28, 1917 priority
19.62		16226	Cert 4069	Geneve Steel Co. in UP&L Flume Dec. 12, 1944 priority
1.00		34744		Lee Rock Products Co. diverting at Murdock Dam
.10		34579		Rue L. Clegg from Spring located S 2097' E 240' from W ¼ Cor Sec 34 T5S, R3E SLM