

Mr. Hinderlider:

1951

Thanks for your corrections and instructions
as to requirements of my report.
Hope this will come nearer meeting your
approval.

J.H.S.

1951

F. C. SNYDER

DIVISION ENGINEER OF IRRIGATION DIVISION
NUMBER TWO
32 MASONIC BLDG 504 CENTRAL BLK.
P. O. BOX 1423
PUEBLO, COLORADO

Nov. 29, 1951

Mr. M. C. Hinderlider
State Engineer
Denver, Colo.

Dear Sir;

I herewith submit my report as Division Engineer of Irrigation Division No. Two, for the year of 1951.

Due to illness, Mr. Beach relinquished his duties as Division Engineer on Nov. 30th 1950 when he was completely incapacitated. I assumed the same temporarily with the sanction of the State Engineer and the Civil Service Commission. I was formally appointed by the Governor as Division Engineer, on Feb. 26, 1951, and assumed those duties officially, on March 16th 1951 after the death of Mr. Beach on March 3rd.

The preceding year having been much below normal in precipitation, the moisture content of the soil was deficient, and storage in reservoirs at the end of 1950 amounted to but 220,794 acre feet, or about 17% of capacity, which was very much below normal. There were only 12 days of general storage during the winter period and prospects were very dark for the 1951 season.

Due to the occurrence of timely rains and to late run-off from abnormal deposits of snow in the Leadville area, the three principal reservoirs, Sugar Loaf, Twin Lakes and Clear Creek, were almost filled. Snow deposits in other parts of the Division were much below normal, which resulted in subnormal runoff. Due, however, to timely rains during the summer, the situation was saved to a great extent and a fair crop resulted in most areas.

On the Tributary streams, the drought was very severe and crops were curtailed and in some areas were almost complete failures.

Hails in some districts destroyed crops, which some attributed to the so called "rain makers". The contract they had, ran out about July first and was not immediately renewed.

Precipitation was finally determined to be about normal, and 90% coming during the five growing months from April to September, again tended to save the situation as to crop production. Ordinarily about 70% occurs during this period.

The carry-over of 128,000 acre feet of water in the reservoirs as of Nov. 1st 1951 was much below normal, and only about 10% of their decreed capacities.

The John Martin Reservoir entered the 1951 season with approximately 80,000 acre feet in storage, which was reduced during the later part of May to less than 37,000 acre feet which indicated that some decrees below the reservoir would have to be supplied from the upper river. This situation was changed by the afore mentioned timely rains which increased storage in this reservoir to about 80,000 acre feet. Succeeding rains and diversions fluctuated this amount between 40,000 and 80,000 acre feet until the end of those rains. Storage was finally reduced through Sept. and Oct. to about 23,000 acre feet, when storage was permitted by the Interstate Compact on Nov. 1st. Unless more storage water is available than is anticipated at this time, the upper river will probably have to furnish water for some of the decrees below this reservoir, early next spring.

Approximately 57,475 acre feet of water were delivered into the Arkansas River basin by trans-mountain diversions during the year.

Total diversions by canals and ditches which serve 476,878 acres amounted to 1,517,564 acre feet, or to about 3.2 acre feet per acre irrigated.

District #49 was in need of a Water Commissioner this year for the first time, because of the operation of the new Bonney Reservoir. Accordingly arrangements were made for the Commissioner of District #65 to perform these duties on a part time basis.

It will be necessary to have Parshall flumes and regulatory wastegates installed in several ditches in District #49 prior to the next irrigation season.

In only one instance was cooperation not obtained from the water users. The Beaver Park Company stored under its decrees for direct irrigation, some 428 acre feet of winter flows over a period of $3\frac{1}{2}$ months, in defiance of orders to pass the natural flow of Beaver Creek for the use of earlier priorities. Court action was obtained by the Company, in the form of a restraining order to prevent the release of the stored water. The case is now in process of litigation.

In general the cooperation received by the present Division Engineer from the water users and Water Commissioners, was excellent and very much appreciated. Without this cooperation, satisfactory administration would have been next to impossible.

It is believed that the administration was very successful considering the severe shortage of water.

Tabulations of reservoir contents, trans-mountain diversions and water used by ditches are attached.

I wish to take this opportunity to thank the State Engineer and the Denver office force for their help and cooperation.

Respectfully submitted



Division Engineer, Irrigation Division No.2.

CONTENTS of MAJOR RESERVOIRS in IRRIGATION DIVISION No. 2.

December 1, 1950 to November 1, 1951

Values in Acre Feet.

	Dec. 1, 1950	Jan. 1, 1951	Feb. 1, 1951	Mar. 1, 1951	Apr. 1, 1951	May 1, 1951	June 1, 1951	July 1, 1951	Aug. 1, 1951	Sept 1, 1951	Oct. 1, 1951	Nov. 1, 1951
Fountain Valley #2	769	932	1116	1420	1470	1382	1256	1282	496	265	0	203
Fountain Valley #3	15	11	31	36	32	36	38	36	31	31	27	27
Spring Run #2	44	21	95	123	81	21	59	95	63	121	151	105
Callahan	38	47	47	85	85	71	74	56	40	56	40	40
Monument Reservoir	237	266	289	347	324	399	202	208	144	169	169	169
Sugar Loaf	4523	4637	4911	5120	5160	5238	4714	15794	15794	10906	9068	8994
Twin lakes	9692	10742	10767	11048	11232	11362	15179	48957	36240	26684	20343	20104
Clear Creek	298	304	419	547	502	545	1198	9867	6580	4290	4202	4107
Skaquay	* 1045	1072	1050	1021	1075	1075	1075	975	892	602	623	573
Mount Pisgah	536	536	539	493	537	539	539	539	482	482	482	482
Brush Hollow	423	423	440	536	584	584	916	897	966	683	579	584
City of Colo Springs*1883	2423	2423	2701	2530	2423	2462	2372	2737	2040	2126	2000	1822
DeWeese-Dye	1722	1722	1722	2217	1754	1568	1738	1538	1019	978	684	1024
Teller	628	E 600	E 600	571	540	510	540	473	517	1148	1023	923
Lake Henry	E 2000	E 2000	4850	E 6355	0	0	2472	396	81	0	0	0
Lake Meredith	0	0	0	0	0	0	0	0	0	0	0	0
Beckwith	328	319	319	319	312	322	390	405	349	334	296	274
Lake Minnequa	* 807	973	1264	1320	1316	1293	1270	1222	1256	1209	1140	1116
C. F. & I. No. 2	*2641	2689	2753	2587	2638	2723	2639	2723	2743	2670	2670	2704
C. F. & I. No. 3	*8671	8516	8020	8609	8448	7557	7218	7575	7761	7389	6446	7705
Cucharas	2462	2428	2320	2212	1924	772	84	84	1560	1480	95	26
Huerfano Lake8	0	0	0	0	369	376	214	452	452	163	410	225
Dotson	0	0	0	0	0	0	0	0	0	565	0	0
Dye	962	947	970	961	864	800	661	2981	2944	2230	2076	1771
Holbrook	337	324	1056	2433	2295	2618	2033	4621	2433	1676	1456	522
Horse Creek	0	0	0	0	0	0	0	3355	5688	2018	0	0
Adobe	None available	None available	None available	None available	None available	None available	None available	11106	11626	16767	14064	9584
Madel	0	0	336	500	216	0	0	0	500	0	0	0
North Lake	* 632	582	513	443	378	378	682	788	837	853	848	788
Monument Lake	* 955	1006	1028	991	921	1028	1036	1043	1059	1105	1121	1105
Great Plains Reser.	45323 ^m	45842	46256	46359	40807	25574	28777	30965	33096	26142	24263	23631
Two Buttes	34570	34207	33482	32757	31473	28822	39470	40558	38745	36387	32390	30924
Thurston	1586	1690	1522	1690	1599	1509	1431	1651	1509	1383	1264	1216
Caddoa, John Martin	63257	68048	74339	79504	80765	60184	40530	73827	77667	62530	49294	22826
Totals	182662	193307	202033	213134	200124	159748	158807	267206	265610	213442	177224	143574
Non Irrigation	16634	17261	17329	17501	17199	16516	16292	17063	16588	15954	14848	15813
For Irrigation	166028	176046	184704	195633	182925	143232	142515	250143	239022	197488	162376	127761

TRANS-MOUNTAIN DIVERSIONS
Irrigation Division No. 2.
1951.

MONTH	COLUMBINE Acre-Feet	EWING Acre-Feet	TENN. PASS Acre-Feet	BUSK-IVANHOE Acre-Feet	TWIN LAKES Acre-Feet	LARKSPUR Acre-Feet	TOTALS Acre-Feet
Nov.					100		100
Dec.					159		159
Jan.					124		124
Feb.					129		129
Mar.					114		114
Apr.				66	156		222
May		326	811	872	5796	24	7829
June	1036	865	1548	2305	22197	98	28049
July	778	305	480	1690	12794		16047
Aug.	73	119	133	451	2954		3730
Sept.		17		1	478		496
Oct.					476		476
Totals	1887	1632	2972	5385	45477	122	57475

TABULATION of WATER COMMISSIONER'S ANNUAL REPORTS
For the Irrigation Season 1951

IRRIGATION DIVISION No. 2.

Dist. No.	First Day Water was used from Natural Stream.	Last Day Water was used from Natural Stream	No. Acre-Feet Used by Canals for Season	Total Acres that can be Irrigated	Total Acres that was Irrigated.	
10	Jan. 2	Nov. 15	26208	27822	20772	
11	Mar. 10	Oct. 31	161720	37519	26694	
12	Nov. 1	Oct. 31	340319		19186	
13	Apr. 27	Nov. 1	19843	17508	13645	
14	Nov. 1	Oct. 31	269937	116876	107078	
15	Mar. 1	Oct. 30	15638	12547	3367	
16	Nov. 1	Oct. 31	26884	71773	39910	
17	Nov. 1	Oct. 31	461769	251552	159103	
18	May	Aug. 9		9325	2570	
19	Nov. 1	Oct. 31	18292	71242	10336	
66	No report					
67	Nov. 1	Oct. 31	213739		72612	
49	Mar. 24	Oct. 31	6805	4780	1605	
Totals - -				1,561,154	620,944	476,878