

1946

C. W. BEACH
DIVISION ENGINEER OF IRRIGATION DIVISION
NUMBER TWO
PUEBLO, COLORADO
31 MASONIC BLDG.
P. O. BOX 1423



1946 Annual Report

December 1, 1946

M. C. Hinderlider
State Engineer
Denver, Colo

Dear Sir:

Herewith is my annual report for 1946. The irrigation season started off much as usual. The Spring months were dry with the exception of April which had a rainfall of one and one half inches above the normal of 1.31 inches. The Summer months were below the average in rainfall. During the past twelve days in August there was 5.37 inches. The average for the entire month of August is 1.82 inches. The total rainfall for the entire year was 12.87 inches. The average is 11.67 inches.

Most of the ditches did not suffer from lack of irrigation water owing to a supply of reservoir water.

The heavy rainfall in late August did some damage to melons and onions. On the whole crops were good and prices fair with the exception of onions. There was a large crop of onions in the United States.

Below is a tabulation of the rainfall at the Pueblo station, and the average.

Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Total
1945	1945	1946	1946	1946	1946	1946	1946	1946	1946	1946	1946	Inches
0.09	0.36	0.32	0.42	0.45	2.82	1.34	0.23	0.95	5.37	0.13	0.69	12.87
Average												
0.36	0.50	0.32	0.47	0.59	1.31	1.60	1.36	1.94	1.82	0.75	0.66	11.67

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The rainfall at Las Animas was 11.46 inches, and the average is 12.26 inches. The rainfall at Lamar was 19.31 inches, and the average is 15.24 inches.

The evaporation loss at the Caddoa Reservoir for the year 1946 was 6 feet, and 0.98 inches.

The runoff of the Arkansas River at Pueblo was below the average. The average is 520,000 acre feet.

There was seven and one Half days of general storage during the heavy rainfall in the latter part of August. This water was all run out immediately after.

An unusual snow occurred on November 1st, and 2nd. From 24 to 36 inches fell over the irrigation division east of the mountains, and in the foot hills. This snow made it difficult to get feed to stock. By the use of tractors, catapillars, trucks, and bull dozers practically all the stock was saved. The snow also covered the 45 per cent of the Sugar Beet crop that was in the ground on November 1st. The beets were eventually saved after the snow had disappeared, and the weather moderated.

Storage was allowed in all reservoirs on November 4th. Some of the intake canals had much difficulty in getting water to the reservoirs on account of the ditches being full of snow.

There were no disastrous floods in 1946, and but few hail storms

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and but little insect pests. A few localities suffered from grass hoppers.

There were six trans-mountain diversions operated in 1946. They brought over a total of 48,156 acre feet for storage in reservoirs, and direct irrigation to canals.

On May 1st there was 293,365 acre feet in storage reservoirs. The average for the past 26 years was 198,448 acre feet. Of the stored water 269,678 acre feet was for irrigation. 15,388 acre feet for manufacturing purposes, and 8,299 acre feet for domestic purposes.

On November 1st there was 92,450 acre feet in storage. The average for the past 26 years is 138,909 acre feet. Of the stored water 67,044 acre feet is for irrigation, 17,660 acre feet for manufacturing purposes, and 7,446 acre feet for domestic use.

A total of 87,779 acre feet of reservoir, and trans-mountain water was run to canals near Pueblo, and east of there. A charge of 11,445 acre feet was made on the carrying of this water in the river channel.

A dispute arose between the irrigation interests in western Kansas, and the ditches in Colorado over the division of the water captured in the John Martin reservoir in the winter 1945, and 1946.

At the request of Governor Vivian of Colorado, the U. S. Army Engineers discharged the 49,800 acre feet in the John Martin reservoir starting at 12:01 A. M. May 10th, and completing the run at

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2 A. M. May 25th. The water was used by the irrigators in Colorado and Kansas in about equal proportion. The reservoir remained empty thru the season and until 1 A. M. November 7th, 1946 when storage was again allowed, and will continue until April 1st, 1947.

An agreement has been reached over the division of the winter stored water. The John Martin Reservoir has been of material benefit to the irrigation interests of western Kansas, and it is hoped that a permanent agreement can be reached.

Yours Truly,



Division Engineer of Irrigation Division No.2

Tabulation showing Amount of stored water in acre feet
on the first of each month of major reservoirs in Irrigation Division No. 2.

	January 1 st 1946	February 1 st 1946	March 1 st 1946	April 1 st 1946	May 1 st 1946	June 1 st 1946	July 1 st 1946	August 1 st 1946	September 1 st 1946	October 1 st 1946	November 1 st 1946	December 1 st 1946
10 Fountain Valley No 2	3994	4771	5076	4872	4545	3894	2592	1912	1659	1482	1521	1994
10 Fountain Valley No 3	51	36	405	254	171	104	46	27	36	46	60	145
10 Spring Run No 2	200	207	207	95	31	93	95	40	21	95	0	0
10 Calahan	47	47	47	449	323	141	85	64	141	85	323	323
10 Cheyenne Mountain	189	189	189	155	155	124	124	124	189	155	155	189
10 Monument	403	403	403	438	438	412	351	300	412	363	393	442
11 Sugar Loaf.	12628	12667	12846	12574	10055	9596	13803	10755	5839	5890	6454	6939
11 Twin Lakes	39357	39771	40081	40227	29469	29019	42393	30490	16018	17072	18235	18647
11 Clear Creek.	8486	8633	8820	8783	8559	6061	6406	2841	1820	1814	1786	2574
12 Skaguay	1390	1244	963	594	631	685	623	1057	1826	2119	1918	1696
12 Mount Pisgah	3043	3043	3043	3043	1652	1669	1423	1368	1627	1669	1585	1976
12 Brush Hollow	1604	1582	1482	2022	2232	1560	1003	494	565	712	855	1556
12 City Colorado Springs	5218	5218	4218	4828	3385	4399	4399	4528	4327	4045	4490	4317
13 Deneese-Dye	3712	4322	4322	4322	4322	4040	2961	1818	1583	1179	1142	2091
14 Teller	812	812	774	736	686	295	55	790	612	401	360	334
14 Lake Henry	5223	5223	6445	6623	3424	3424		1912	5223	4031	2709	
14 Lake Meredith	23983	26273	26140	25574	23237	16040	7724	4561	8377	8051	8051	11655
15 Hayden (Beckwith)	237	237	409	502	433	371	315	258	188	174	162	
15 Lake Isabel	1038	1038	1038	1038	1038	1038	1027	1030	1030	1030	1038	1030
15 Minnegua-	1316	1313	1287	1255	1232	1215	1118	1042	1104	1062	1312	1378
15 C.F. + I No 2	2573	2644	2612	2628	2633	2625	2586	2625	2664	2586	2586	2674
15 C.F. + I No 3	4919	4843	6823	7247	7104	7999	6576	6360	7512	7976	8274	8392
16 Coler	481	481	526	526	526	526	436	196	196	160	0	0
16 Cucharas	4942	5140	5470	5305	3358	1600	388	520	2698	1420	1420	1996
16 Bradford	0	0	0	0	0	0	0	0	0	0	0	0
16 Huerfano Valley	1366	1366	1366	1366	1257	1154	950	668	0	0	0	0
16 Crane Holmes	Dam out											
16 Lindsley	0	0	0	0	0	0	0	0	0	0	0	0
16 Holita	37	37	158	158	158	50	67	50	19	19	19	19
16 Valdez	0	0	0	0	0	0	0	0	0	0	0	0
16 Dotson	200	200	1003	784	784	565	200	100	200	100	180	180
17 Dye	2128	3038	2955	2915	2770	1727	196	174	1740	1623	1550	
17 Holbrook No 1	4193	4431	4312	4332	4034	1592	982	582	2242	1619	942	
17 Horse Creek		15653	18195	17768	13972	11386	10286	8863	9852	10633	8009	
17 Adobe		47119		48104		32861	31132	17524	14823	15502	14435	19326
18 Seven Lakes	200	200	200	200	150	150	100	0	0	0	0	0
19 Model	2435	2435	3649	3649	3575	0	0	0	210	0	0	392
19 Hermosa	934	934	620	620	533	533	533	533	308	308	308	308
19 North Lake	632	582	482	426	526	578	592	642	804	870	870	853
19 Monument	1384	1389	1389	1348	1429	1389	1348	1184	1105	1266	1348	1429
67 Nee No She												
67 Nee Gronda	93068	97794	107675	106299	90276	71342	68198	40503	21386	10774		9960
67 Nee Sopah												
67 Nee Skah	15074	15074	15000	14851	14404	12335	9675	8793	8672	7950		5459
67 Two Buttes			354				11774	4088	7423			
67 Thurston	144	0	0	0	0	0	0	0	0	0	0	0
67 Caddog	34520	40571	50441	57022	49858	0	0	0	0	0	0	0
Lake McKinnie Kans.		11094		12257	14987	10600	15207	10091	5871		13675	27005

Number of District	Amount Appropriated in Sec. Feet	Capacity Ditches in Second Feet	Length of Main Ditches in Miles	First Day Water Used From Natural Stream	Last Day Water Used From Natural Stream	Maximum Number of Days Water Diverted From Natural Stream	Maximum Number of Days Water Diverted From Reservoir	Amount of Water From Reservoir in Acre Feet	Average Daily Amount Diverted From Natural Stream in Second Feet	Number of Acre Feet Diverted From Natural Stream	Number of Acres that can be Irrigated	Alalfa	Irrigated Pasture
10	66089			Mar 2	Nov 5	244		7304	156.32	22977.7	26096	5512	1823
11	105507	1180		May 15	Oct 1	306	81	84072	769.74	172005	31029	5678	
12	65084	74730		Nov 1-1945	Oct 31	354				108913		4644	
13	597.04			May 2nd	Oct 1	172	117	3548	102.19	7901	10610	899	
14	1966.45	2174		Nov 1-1945	Oct 31	359	131	94771	579.50	252474	117626	28180	
15	200.88	215.4		Mar 15	Oct 31	240		328	72.5	18647	12353	2821	
16	1513.66	445296		April 1	Oct 31	214	75		232.48	34930	77308	12446	
17	21539	15809		Nov 1-1945	Oct 31	365	85	54783	1124.	413804	242539	64350	
18	4736									7235		720	
19	1881.8			Nov 1-1945	Oct 31	275	45	3990	12.	29387	50958	5118	
67	2239.53			Nov 3-1945	Oct 31	305	80	103772	412.75	142198		13317	
Totals.	13387.15								3461.48	1203236.7	675754.	143685.	

No. District	Natural Grasses	Cereals	Orchards	Market Gardens	Head Lettuce Cabbage Cauliflower	Potatoes Tomatoes	Onions Celery	Melons Cucumbers	Sugar Beets	Corn	Peas Beans	Cane Sorghum Maize	Other Crops	Total Irrigated
10	3906	2186	132	339		88			1059	2453	138	78	539	19765.
11	13357	5360	110	117		74							2797	29354.
12	1254	6095	2372	1181					155		11	1201	822	15814
13	7830	255	3	2									98	9839.
14	3614	34445	198	2650	33	3792	6951	4149	16181				1900	106779.
15	1896	2006	20	10					88				57	6958.
16	16638	11308	183	23	15				1488		2138	277	1968	51537
17	2555	29234	84	525		2394	4340	2219	11967	25856	3205	9868	539	157136
18	104	85											45	2074
19	4391	3711		111					1219				973	15523
67	5250	19014	598	432			60	110	4461	9462	18	10909	1623	65254.
Totals	60795.	113699	3700	5390	48	6340	11351	6528	36618	37771	5570	22333	11361	480033