

1945

C. W. BEACH
DIVISION ENGINEER OF IRRIGATION DIVISION
NUMBER TWO
504 CENTRAL BLOCK
PUEBLO, COLORADO

Report of Irrigation Engineer Division No. 2 for 1945

Mr. M. C. Hinderlider
State Engineer
Denver
Colorado

Dear Sir:

The season of 1945 started off cool and the temperatures were below normal until July 1st. In this respect the season was unusual and the growth of some crops was retarded materially. About July 1st temperatures rose and crops made a good growth. The yield on the whole was above the average and prices were good also, so that it was a favorable season for the farmers.

The river flow was below normal but the reservoir water was plentiful so nothing suffered from lack of moisture.

Water district 67 was supplied almost entirely from the storage in Caddoa Reservoir. This left the river flow to supply districts 11, 12, 14 and 17.

There were no disastrous floods and but little hail. Insect pests were few and did but little damage.

The snowfall in the mountains was below the average but coupled with the reservoir water it furnished ample water for crops.

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M. C. Hinderlider No. 2

The following table gives the rainfall record for the Pueblo station and the average for this station for the past 53 years:

Nov 1944	Dec 1944	Jan 1945	Feb 1945	Mar 1945	Apr 1945	May 1945	Jun 1945	Jul 1945	Aug 1945	Sep 1945	Oct 1945	Total
0.19	0.03	0.88	0.53	0.57	1.53	0.91	1.54	3.57	3.93	0.36	1.30	15.34
Average:												
0.36	0.50	0.31	0.47	0.59	1.31	1.60	1.36	1.94	1.82	0.75	0.66	11.67

The precipitation was 3.67 inches above the average and most of this fell during July and August which was a great help to crops, and also permitted the storage of water in the reservoirs. There were 23 days during August that storage was permitted.

The total rainfall for 1945 at Las Animas was 12.54 inches and at Lamar it was 16.68 inches. A little above the average in each case.

The flow of the Arkansas River at Pueblo amounted to approximately 410,000 Ac. Ft. The average flow for the past 50 years is 520,000 Ac. Ft.

The Caddoa Reservoir captured 49,000 Ac. Ft. by March 1st and by April 1st the storage amounted to 53,000 Ac. Ft. This water was run out to supply District 67 and the needs of Kansas irrigators so that by June 1st the reservoir

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M. C. Hinderlider No. 3

was empty. The rains in July and August furnished enough water to refill the Caddoa Reservoir to 63,000 Ac. Ft. by September 1st and to also supply the irrigation needs of water district No. 67 and Kansas water users during July and August.

Five of the trans-mountain reservoirs operated in 1945. They brought ^{into the Basin} ~~over~~ a total of 54,845 acre feet.

A total of 45,258 Ac. Ft. of reservoir and trans-mountain water was run to the canals near Pueblo and below. On this water a charge of 5,068 Ac. Ft. was made.

On May 1st there was in storage a total of 335,890 Ac. Ft. The average on May 1st for the past 25 years is 194,651 Ac. Ft., distributed as follows: 18,175 Ac. Ft. for manufacturing purposes, 5791 Ac. Ft. for domestic purposes, and the remainder of 170,685 Ac. Ft. for irrigation.

The amount in storage on November 1st was 309,361 Ac. Ft. divided as follows: manufacturing 13,768 Ac. Ft., domestic use 8,277 Ac. Ft., irrigation 287,316 Ac. Ft.

The average in storage on November 1st for the past 25 years is 140,771 Ac. Ft. The extra water in storage bids fair for spring irrigation water ^{in 1946.}

Yours truly,

C. W. Beach

Division Engineer of Irr. Div. No. 2.

**Capacity
in acre feet**
1945

Major Reservoirs Irrigation Division No. 2.

No	District Name Reservoir	Jan 1st	Feb 1st	March 1st	April 1st	May 1st	June 1st	July 1st	Aug 1st	Sept 1st	Oct 1st	Nov 1st	Dec 1st
10	Fountain Valley No 2	2487	4319	5076	4957	5046	4898	3694	3042	2957	2322	2487	
10	Fountain Valley No 3	27	46	306	254	254	235	157	104	96	71	104	
10	Spring Run	207	207	207	192	223	192	75	207	207	181	192	
10	Callahan	64	64	64	64	64	64	47	64	447	447	449	
10	Cheyenne Mountain	124	124	172	189	189	189	155	189	226	155	124	
10	Mountaint	447	447	169	363	283	399	408	429	447	416	363	
11	Sugar loaf	6447	6447	6448	6502	6137	6309	9787	12088	14638	12020	12273	
11	Twinn Lakes	15128	15894	16481	16964	13968	15632	34014	50225	52583	37876	38425	
11	Clear Creek	7638	7762	7868	8049	7691	4150	3081	4513	8156	8193	8210	
12	Skaguay	1396	1035	789	646	676	986	922	1609	2809	2606	1982	
12	Mount Pisgah	1064	1136	1232	1364	1022	1167	788	1217	3043	3043	3043	
12	Brush Hollow	876	1195	1534	1801	2344	2962	1705	645	840	576	1176	
12	City Colorado Springs	3778	3624	3412	3177	3177	3177	3737	4264	4806	5272	5019	
13	Deweese Dye	3297	4118	4322	4322	4322	154	3587	3762	4322	3737	3472	
14	Teller	486	486	519	572	572	154	0	1236	2004	926	926	
14	Lake Herry		5913	5913	5567	5568	4031	4205	6312	6726	3858	2948	
14	Lake Meredith	38109	38102	37447	35644	33840	22296	14923	7724	14923	14045	14923	
15	Hayden (Beckwith)	218	346	462	502	558	558	475	409	262	223	177	
15	Lake Isabel	1042	1042	1042	1042	1042	1042	1077	1042	1039	1038	1038	
15	Minnequa	1302	1334	1333	1303	1306	1237	1208	1214	1264	1211	1275	
15	C.F. & I No 2	2687	2677	2664	2651	2612	2711	2625	2573	2633	2589	2609	
15	C.F. & I No 3	5546	4906	6020	5814	7161	7735	6340	6441	8423	7431	7539	
16	Coler	662	779	984	1194	1194	1194	1008	833	621	419	394	
16	Cachanas	8824	11470	11764	10000	10000	7984	6556	5272	7564	5272	5074	
16	Bradford	0	0	0	0	0	0	0	0	0	0	0	
16	Huerfano Valley	878	1338	1872	1872	1756	1257	1050	1338	1671	1128	1205	
16	Crane Holmes No 1												
16	Lindsayley	0	0	0	0	0	0	0	0	0	0	0	
16	Hollia	37	37	37	158	158	158	134	134	68	50	37	
16	Valdez	0	0	0	0	0	0	0	0	0	0	0	
16	Datson	0	0	200	200	200	100	100	100	200	200	200	
17	Dye	3112	3037	3019	2871	2799	1123	1417	2511	2636	2300	1594	
17	Holbrook No 1	4464	4498	4730	4491	4266	1734	1687	2745	5201	4144	1848	
17	Horse Creek	2862	11258	16055	15452	11897	10459	9158	11532	19017	10338	8304	
17	Adobe	32721	32896	300	35033	34296	28094	32196	47333	45051	44519	44519	
18	Seven Lakes	300	300	300	300	300	300	100	60	500	230	250	
19	Model	2326	3369	3960	3708	5018	1681	971	50	2119	332	2119	
19	Hermosa	308	308	3960	308	308	934	934	879	879	879	934	
19	North Lake	563	490	435	395	388	667	886	870	875	853	831	
19	Monument	1266	1184	1484	1184	1184	1519	1511	1511	1571	1511	1389	
67	Nee No. 1												
67	Nee No. 2												
67	Nee Gronda	73169	91871	96948	100826	48254	88682	83600	80192	88682	94771	90276	
67	Nee Sopah												
67	Nee Skat (Queen)	14776	14627	16597	20192	19937	19342	18509	16443	19007	16597	15747	
67	Two Buttes												
67	Thurston	0	0	1002	0	0	6	0	0	1600	1398	339	
67	Caddoa	22907	36884	49019	53319	45940	1284	0	7066	63348	22603	24204	
67	Lake McKinnie			9302	8468			10365	15436		7219		

Number of District	Amount Appropriated in Second Feet	Capacity of 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 Run From Reservoirs	Amount of Water From Reservoirs in Acre Feet	Average Daily Amount Diverted From Natural Stream	Number of Acre Feet From Natural Stream	Number of Acres Can be Irrigated	Alfalfa	Irrigated Pasture
10	637.97			March 2	Nov 30	227			164.71	37255.70	26125	4708	1086
11	621.27			May 1	Nov 30	214			756.	28651.4	41180	6762	
12	717.12			Nov. 1-1944	Oct 31-1945	360		4538		111420		5974.	
13	541.33			April 20	Sept 11-1945	129			254.95	20536	18106	2550.	
14	1941.65	2404		Nov. 1-1944	Oct 31-1945	348			637	301547	117051	29539.	
15	212.80	25515							87.25	27652.	12172	3064	
16	151366	4453.		April 1-	Oct 31	214			72.72	99081	104550	17246	
17	21538.87	15809		Nov 1-1944	Oct 31-1945	339			2631	557352	252539	63305	
18	447.76			May 1	Sept 1						8690	1774	
19	1840.75			Feb 4-1944	Nov 4	274					70621	7984	
67	2243.95			Nov 1-1944	Oct 31-1945	313	163	175815.	784	161226		13343.	
Total	32257.13	22921.50				2418	163	180353.	5387.13	1602586.7	651034.	156149.	1086

No. District	Natural Grasses	Cereals	Orchards	Market Gardens	Head Lettuce Cauliflower Cabbage	Potatoes Tomatoes	Onions Celery	Melons Cucumbers	Sugar Beets	Corn	Peanut Beans	Cane Sorghum Maize	Other Crops	Total Irrigated
10	3813	2318	105	384					1553	422	204	229	200	19418
11	12145	7305	138	124	34	302							7619	35777
12	3665	8072	3096	1238	69		2	138			107		728	23141
13	14382	2095		20	183	22					10			18147
14	4735	34374	174	2368	143	2525	4700	4631	15069		3074		1599	104105
15	3312	1820	15	5							23	17		7246
16	16836	11835	105	16	40				496	596	2292		1278	46108
17	3367	29768	143	534		2177	3689	2222	12676	26264	2984	10947	1114	159190
18		650	8	3						131	460			4048
19	6983	6050	5	156					1749	1354	1016			26734
67	3952	17738	537	223		9	203	489	3274	9038	16	12272	1976	63070
Total	73256	122025	4326	5071	469	5035	8592	7344	34955	37805	10186	23465	14514	505981