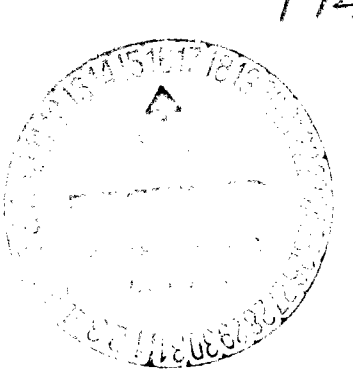
1947

C. W. BEACH
DIVISION ENGINEER OF IRRIGATION DIVISION
NUMBER TWO
[redacted]BLOCK
PUEBLO, COLORADO
31 MASONIC BL. S.
P. O. BOX 1423



1947 Annual Report

December 1, 1947

M. C. Hinderlider
State Engineer
Denver, Colorado

Dear Sir:

The heavy snow of November 2nd, 1946 left the ground well saturated with moisture in the Spring of 1947. This was a good start for seeding, and crops. Other wise the Spring months were normal. There was an excess of 3.46 inches of moisture during the months of May, and June. This also added much to the ground moisture, and enabled crops to withstand the dry weather of July, and August.

The excess rainfall in May, and June coupled with the snow runoff enabled us to fill the reservoirs. This water was called upon during July, and August. There was plenty of water for all. No ditch suffered. We went into the winter months with a good supply of water in the reservoirswith prospect good for a large winter run of reservoir water.

Below is a tabulation of the rainfall record at Pueblo, Colo as compared with the average annual.

Nov 1946	Dec 1946	Jan 1947	Feb 1947	Mar 1947	Apr 1947	May 1947	June 1947	July 1947	Aug 1947	Sept 1947	Oct 1947	Total Inches
2.04	0.09	0.26	0.79	0.62	1.25	2.99	3.43	1.24	1.04	0.45	2.10	1630
						Average						
0.36	0.50	0.31	0.49	0.59	1.31	1.60	1.36	1.92	1.82	0.75	0.66	11.67

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The rainfall at Las Animas was 13.66 inches. The average is 12.33 inches. The rainfall at Lamar was 17.17 inches. The average is 15.39 inches.

The evaporation loss at the Caddoa reservoir amounted to 6 feet, and 1 inch. This is almost identical with that of 1946, which was 6 feet, and 0.98 inch.

The annual runoff of the Arkansas River at Pueblo was above the average. The runoff from melting snow was good.

Storage was allowed in all reservoirs on May 4th, and continued thru the season until July 30th, which was a period of 86 days.

On April 1st, the Caddoa reservoir contained 6~~8~~4,000 ac. ft.

The canals in Water District #67, and Kansas irrigators were supplied from the Caddoa reservoir, and river flow from April 1st, until October 23rd. This allowed canals above District #67 to draw water from the River that was formerly allowed to pass for lower canals. This was a great benefit.

At this writing the Caddoa reservoir has been completed, and a greater benefit from the reservoir will accrue to the farmer in both Colorado, and Kansas.

The Caddoa reservoir was operated during the past season under a temporary agreement with Kansas irrigation interests. The principles of this agreement will be incorporated into a permanent agreement to be later ratified by the legislatures of both states.

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On May 1st there was a total of 271,950 ac. ft. in storage in in this Division.
reservoirs, The average for May 1st is 200,037 ac. ft.

On November 1st there was a total of 266,425 ac. ft. in storage. The average for November 1st is 137,203 ac. ft.

There was a total of 45,541 ac. ft of trans-mountain water brought over during the 1947 season. This was for direct irrigation and storage.

There was a total of 46,257 ac. ft. of Trans-mountain, and storage water run to ditches near Pueblo, and east of here. A charge of 5,234 ac. ft. was made upon this water for carriage. Owing to the large supply of river water a lesser amount of trans-mountain water than usual was brought over.

~~There were~~ No disastrous floods occurred. There were but few insect pests to feed on crops. Hail storms were few, and far between.

On the whole the season was far above the average. Crops ~~were~~ good, and also prices were good.

We have inspected a number of reservoir dams during the past season. We found two that were in need of repairs, and so reported to your office. In one case prompt action undoubtedly prevented serious trouble.

Yours Truly,

C. W. Beach

Division Engineer of Irrigation Division #2.

Amount of Storage in Major Reservoirs in Irrigation Division No 2
on First of each Month. November 1 - 1946 to October 1 - 1947
In Acre Feet.

Location District	Name Reservoir	November 1946	December 1946.	January 1947	February 1947	March 1947	April 1947	May 1947	June 1947	July 1947	August 1947	September 1947	October 1947
10	Fountain Valley No 2	1521	1994	3794	4921	5076	4929	5076	5076	4987	5106	4019	3149
10	Fountain Valley No 3	60	145	88	135	405	450	450	450	405	344	198	157
10	Spring Run No 2	0	0	0	31	363	151	59	189	223	311	151	145
10	Calahan	323	323	449	449	449	383	449	449	449	449	449	449
10	Cheyenne Mountain	155	189	197	179	179	155	189	189	189	189	189	189
10	Monument	343	442	395	403	363	403	403	434	461	307	307	363
11	Sugar Loaf	6754	6939	7218	7535	7676	8068	8082	15287	16780	16943	10544	9149
11	Twin Lakes	18235	18649	19532	20585	21150	21902	15733	32089	50558	53056	42607	33425
11	Clear Creek	1786	2574	3232	3685	4036	4460	4408	9121	9735	9387	7696	7691
12	Skaguay	1918	1696	1270	809	344	333	1008	2831	2856	2887	2681	2870
12	Mount Pisgah	1585	1976	2305	2452		2964	2964	2964	2964	2608	1308	180
12	Brush Hollow	855	1556	2445	2791	3346	3694	4127	3788	5909	3686	2740	2409
12	City Colorado Springs	4317	4317	3903	3903	3703	3417	3123	2891	4411	5915	6100	5408
13	Dye-Derreese	1142	2091	3442	3712	4322	4322	4322	4322	4322	4322	4170	3962
14	Teller	360	334	315	815	321	270	245	1192	1660	1989	1834	1557
14	Lake Henry	2709		4291	6355	6355	6355	6727	7419	7450	5913	4135	2630
14	Lake Meredith	8051	11655	22989	26518	26955	27611	26791	34791	32999	32037	21497	14235
15	Hayden (Beckwith	162		394	437	437	583	563	925	837	878	777	678
15	Lake Isabel	1038	1038	1038	1030	1030	1030	1030	1030	1030	1030	1035	1038
15	Minnequa	1312	1370	1347	1347	1399	1293	841	900	1221	1145	1073	1003
15	C.F. + I No 2	2586	2674	2699	2624	2612	2625	2586	2560	2677	2536	2638	2651
15	C.F. + I No 3	8274	8392	7360	5395	6768	7479	8330	6441	8001	8001	7449	6845
16	Colar	0	0	0	0	0	948	948	2597	2786	2786	2121	1754
16	Cucharas	1920	1996	2212	2212	2320	2356	2212	12842	20988	20988	20435	18664
16	Bradford	0	0	0	0	0	0	0	0	0	0	0	0
16	Huerfano Valley	0	0	0	0	700	1257	1154	1420	1671	1529	899	668
16	Crane Holmes	Dam out											
16	Lindsley Lake	0	0	0	0	0	0	0	0	0	0	0	0
16	Holita	19	19	19	19	111	111	111	432	432	433	379	67
16	Valdez	0	0	0	0	0	0	200	200	200	300	300	400
16	Dotson	180	180	180	180	200	200	200	400	800	800	700	700
17	Dye	1550	3094	3038	3019	2962	3169	3038	3112	2908	2974	2335	699
17	Holbrook	942	4531	4372	4299	4205	4319	4083	5472	5268	5153	3407	2116
17	Horse Creek	8009		17147	17405	17190	17082	15854	21118	21807	21807	19919	13789
17	Adobe	14435	19326		28387	31630	39163	38000	58503	61188	62488	55441	50946
18	Seven Lakes	0	0	0	0	0	0	0	306	800	800	700	700
19	Model	0	1300	1828	2242	2630	3358	3134	3920	1208	860	533	95
19	Hermosa	308	308	308	308	308	245	245	245	620	620	620	620
18	North Lake	870	853	788	724	657	626	804	870	870	870	870	870
19	Monument Lake	1348	1429	1429	1389	1348	1429	1429	1429	1429	1429	1429	1307
67	Nee No Shee												
67	Nee Gronda	10774	10367	28284	46194	61046	66475	85493	97794	113278	162173	91373	87087
67	Nee Sopah												
67	Nee Skah (Queen)	5677	5568	9801	9801	10713	11108	10779	12748	15979	13893	10713	9802
67	Two Buttes	8004	8004	8004	8004	7945	7945	7945	8848				
67	Thurston	0	0	0	0	0	0	0	0		1612		0
67	Caddoa	0	29994	37818	46631	53719	63715	66277	105424	137736	100972	45559	10061
Kansas	Lake Ms Minnie	13673									18798	15645	

Number of District	Amount Appropriated in Sec. Feet	Capacity of Ditches Second Feet	Length 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 Diverted from Reservoir in Acre Feet	Average Daily Amount Diverted from Natural Stream in Sec. Feet	Number of Acre Feet Diverted From Natural Stream	Number of Acres that can be Irrigated	Alfalfa	Irrigated Pasture
10	755.14			Mar 15	Oct 31	192			203.5	49588.7	27469	3483	1428
11	1075.55	908.9		April 23rd	Oct 31	214			573.3	163505.	45642.	5448	832
12	636.28	590.3		Nov 1-'46	Oct 31	331			373.87	128385.		6167	
13	584.40			May 1	Sept 30	143			276.32	31666.	18620	1397	
14	1960.85	2191.67		Nov 1-'46	Oct 31	358			683.5	301871	116874.	26476	
15	199.33	215.4		Mar. 7	Oct 31	365			114.8	39873	11610	3034.5	
16	1525.42			April 1	Oct 31.	214			464.7	92056.8	105539.	15303.	
17	21538.87	15914.		Nov 1-'46	Oct 31	356			1321	635908.	255305.	63114	
18	389.04			Mar. 1	Sept 30						9325	2280	
19	1841.31			Mar. 19	Oct 31	264				67021	50577	9244.	
67	2252.57	1880		Nov. 1	Oct 31.	316	101	9968					
							171	43876	545.30	210564		14605	
66				May 1	July 15	60			7.0	386.		300.	
Totals	32756.76	21680.				358.	171	44184.	4583.29	1722824.51	71796.	150848.	2960.

Number 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	3822.5	1502.4	93	298					331	10555	40	80	289	13832.4
11	13882	5645.	103	165		40								17931.
12	2252	6801	3243	1330					173		266	572	715	21520
13	15413	1699	1											18620
14	7454	36059	221	2120	66	1262	4929	5304	15354.		5675		2174	105712
15	2570	1994.5	20	2.4				10	5.		0.3		16	7598.7
16	19835.	8986	96	25.	19			402	1084	1009.	1395.	106	573	48882.
17	2685	33297.	59	377		1149	3124	2208	11774	28280	1878	8061.	1022	157214.
18	2230.	1170								172	120			6170
19	8751	8166		48.					1289.	2716	668			30883.
67	5456	19730	537	350				228	4169	9948	89	9992.	532	66072
66	19	8								39				366
	84468.5	125058.	4373.	4715.4	85	2451.	8053.	8152.	34175	42219.5	9532.	18811.	5321.	494731.