

enc 3

Alamosa, Colorado
November 20, 1963

Mr. J. E. Whitten, State Engineer
Room 232 State Services Building
Denver, Colorado

Dear Mr. Whitten:

Herewith is my annual report for 1963, being my last and final report as Irrigation Division Engineer for Division No. 3. This report includes the summarized and tabulated reports of the water commissioners' reports of water diverted to ditches, of reservoir storage, of acres irrigated, and of trans-mountain diversions.

This report for 1963 might be given in a very few words, that 1963 has been a year of very, very short water supply, and a short run off period. This is true of every district in the Division with the percentage of this years diversions varying from 67% of the past ten year average, which is never enuf, in District 20, to 30% in District 25. There was no high water in any of the streams during the run off period and hence very little water was stored in Reservoirs during this period. None of the reservoirs filled to capacity.

The total acre feet diverted to ditches, which includes reservoir water, was 619856 compared to 1352711 in 1962 and was 69% of the previous ten-year average. The total acres irrigated was 419863 compared to 553111 in 1962. Water was diverted for 365 days. The figure given above, 619856, as the number of acre feet diverted does not bear a true comparison of the previous 10 year average, as this year there has been included the water diverted to ditches after November 1, 1962. This has not been true

L

in past years. With this in mind, 1963 will prove to be one of driest years of record. The following table shows the amounts of water diverted to ditches in each of the various Water Districts and the percentage each bears to the amount diverted in 1962 and to the previous 10 year average.

District	Acre feet diverted in 1963	Percentage of 1962 diversions	Percentage of previous 10-year average
20	364817	46%	67%
21	39486	62%	50%
22	135835	50%	67%
24	31426	57%	62%
25	11795	30%	31%
26	12718	27%	33%
27	2710	40%	35%
35	21069	37%	41%

It will be noted that the Districts in the North end of the Valley, being Numbers 25, 26, and 27, suffered the most severely from the drought, and this has been true for the past several years.

Out of a total reservoir capacity of approximately 311000 acre feet, exclusive of the Platora Reservoir and other reservoirs subject to the Tri-State Compact, there were in storage on May 1 and available from later storage, 63026 acre feet. Of this amount, there was delivered to ditches 44707 acre feet. The carry-over on November 1, 1963, was 17054 acre feet, again exclusive of compact reservoirs, which have been excluded because water stored in them is not available for use in Colorado because of the present debit status of Colorado.

On November 1, 1962, the Platora Reservoir held in storage 16700 acre feet. By releases to the lower states during the first 10 days of November, 1962, this amount was reduced to 4000 acre feet. The winter storage and the pickup during 1963 increased this amount

to 6,000 acres. Since November 1, 1963, some 3,000 acre feet have been released to the lower states as per the terms of the compact.

The amounts of water in storage and delivered by the various reservoirs are shown on the summary of the Water Commissioners' Reservoir Report Sheets attached to this report.

As stated at the beginning of this report, the year 1963 has been exceptionally dry, the dry season being generally referred to as the drought. The rainy season was short and late. There was practically no precipitation from May to August 1st. The rains came in early August just at the time for the harvest of Monravian or Beer Barley, of which there was an extensive acreage in the Valley. The rains caused considerable rust and discolorization to develop in the barley and, as a result, a very large amount was not acceptable to the Coors Company. Of 703 ditches reporting, 245 received no water, and I expect half that many more received water for a very few days and in such small amounts that the water did very little good.

Pumping wells for supplemental water was carried on extensively, which developed into a peculiar situation, or a sort of merry-go-round. As the amount of water decreased in the pump because of the continued pumping, the owner found it necessary to lower his pump. Then his neighbor had to lower his pump, even lower than his neighbor's had been lowered. This caused the first pump to again be lowered and this went on and on, adding to the cost of producing the crop.

The hay crop in the north part of the Valley was very short and this is the principal crop in that area. In areas where pumping was carried on, the crops were good, however, in the marginal

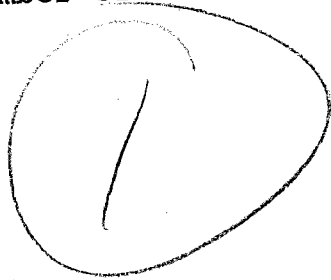
area the crops were poor, some of them not being worth the cost of the harvest. The lettuce acreage was again increased and additional vacuum tubes were installed to take care of the increased production. Potatoes are still the major row crop in the Valley. The production of other vegetables is increasing. Vegetable shipments, exclusive of potatoes, to November 11th were reported as 1975 car lots, being 1471 of lettuce, 47 of mixed vegetables, 254 of spinach, 49 of carrots, 2 of peas, and 85 of cauliflower.

In this, my last report as division engineer, I again want to call to your attention the situation at Garcia, and in particular the delivery of water to Colorado thru the Acecia Madre ditch. I will not take the time or the space to go into details of the situation, but it seems most inequitable to me as it is being handled.

Another thing I want to mention is the beaver situation. It is rapidly getting out of hand. I believe the beaver law should be amended so that the water officials have the authority, and the means, to remove beaver and beaver dams when they are interfering with the delivery of water according to decrees, and this (without the permission of the land owner). Beavers have been an expensive luxury for quite a number of land owners in the Valley this year.

In my opinion the method of operating the Platora Reservoir should be changed so that the Colorado officials may have something to say about the operation of the reservoir. At this time the operation is controlled by long distance telephone from Amarillo, which to me is most unsatisfactory.

Another thing I want to mention is the beaver situation. It is rapidly getting out of hand. I believe the beaver law should be amended so that the water officials (without the permission of the land owner) have the authority and the means to remove beaver and beaver dams when they are interfering with the delivery of water according to decrees. Beavers have been an expensive luxury for quite a number of land owners in the Valley this year.



I want to commend the water commissioners and deputies for the very fine service they have rendered during the past years. They are a group of sincere men, competent and well advised as to their duties. It has been a pleasure to work with them and I believe they will continue to render the same effecient service in the future.

Respectfully submitted

Roy B. Heilman

Roy B. Heilman

Irrigation Division Engineer

Division No. 3

1963 RESERVOIR STORAGE REPORT - DIVISION NO. 3

AMOUNTS IN STORAGE IN ACRE FEET

	Rio Grande	Santa Maria	Continental	Sanchez	Terrace
11-1-62	4665	2818	0	3262	2636
12-1-62	5770	3030	960	4153	2489
1-1-63	7230	3550	2030	4819	2701
2-1-63	8370	3800	2740	5169	2926
3-1-63	9520	4110	3460	5747	3215
4-1-63	12045	4974	4740	7322	4203
5-1-63	12045	4974	4740	7679	4203
6-1-63	1258	4674	2206	5871	4302
7-1-63	0	2348	0	4035	3289
8-1-63	0	2222	0	2508	0
9-1-63	0	2222	0	2483	0
10-1-63	0	2222	0	3226	0
11-1-63	0	2222	0	3579	0

	Mt. Home	Smith	Cove Lake	La Jara	Beaver San Luis	Platora
11-1-62	2367	1441	732	No Report	0	16700
12-1-62	2505	2299	No Report	" "	230	4000
1-1-63	2970	2602	" "	" "	850	4000
2-1-63	3055	2602	" "	" "	1400	4000
3-1-63	3320	2805	" "	" "	1840	4000
4-1-63	3562	4915	734	1906	2500	4000
5-1-63	3806	4634	3712	1906	2500	6000
6-1-63	2729	3412	2326	1860	2500	6000
7-1-63	1747	2602	1326	1800	0	6000
8-1-63	706	1411	538	1550	0	6000
9-1-63	653	1051	0	1550	0	6000
10-1-63	706	1105	0	1550	0	6000
11-1-63	763	1051	0	1550	0	6000

SUMMARY 1963

WATER COMMISSIONERS' DITCH REPORTS

IRRIGATION DIVISION # 3

Water District	Number Ditches Reporting	First day water carried	Last day water carried	Number days	Number acre feet carried by all	Total acres irrigated
20	218	11-1-62	10-31	365	364817	281854
21	80	2-11	10-31	264	39486	24587
22	94	3-21	10-31	240	135835	76228
24	60	4-1	10-31	214	31426	16885
25	69	3-25	10-31	221	11795	2099
26	73	4-1	10-31	214	12718	5513
27	39	4-1	9-30	184	2710	785
35	70	2-1	10-30	263	21069	11912
Totals	703	11-1-62	10-31	365	619856	419863

TRANS-MOUNTAIN DIVERSIONS
1963

Name of Diversion	Acre Feet Imported	Acre Feet Delivered to Ditches	Acre Feet Delivered to Reservoirs
Fuchs Ditch ✓ @ Weminuche Pass ✓	713	631	0
Piedra Pass Ditch (East) ✓ @ Piedra Pass	95	51	34
Piedra Pass Ditch (West) ✓ @ Piedra Pass	42	39	0
Raber-Lohr Ditch ✓ @ Weminuche Pass ✓	1245	1052	49
Squaw Pass Ditch ✓ @ Squaw Pass	362	305	0
Tabor Ditch @ Spring Creek Pass ✓	236	0	210
Treasure Pass Ditch ✓ @ Wolf Creek Pass	145	124	0
	2838	2202	293

DIVISION NO. 3

COMPARISON FOR PAST 10 YEAR PERIOD

	No. of Acres Irrigated	Acre Feet of Water Delivered to Ditches
1953	581441	880377
1954	421406	772333
1955	446690	818004
1956	434445	752738
1957	570796	1655405
1958	572179	1181355
1959	454444	759246
1960	534595	1153248
1961	523553	1063317
1962	553111	1352711
1963	419863	619856