Alamosa, Colorado,
November 27th., 1956

Mr. J. E. Whitten,
State Engineer,
State Capitol Building,
Denver, Colorado

Dear Sir:

Herewith is submitted my annual report as Irrigation Division Engineer of Division No. 3 for the year 1956. This report includes the tabulated and summarized reports of the water commissioners in this division of the amounts of water diverted from the various streams; of reservoir storage and of acres irrigated.

This year of 1956 was the fourth consecutive very dry year, the driest of the four, and the driest for many years. While the amount of diversions was more than some of the previous dry years, the effects of the continued drought were worse than the previous years because it was the fourth one in succession. Late in August the daily stream flow in most of the streams was less than any time since 1902. On May 1, the snow pack on the west range was only 60% of normal and the forecasts of run-off for the various streams for 50% to 60% of normal. These forecasts of reduced stream flow were reflected in the acreage planted. The regular run off period was short. the only stream in the division which was able to supply the demand for irriation water was the Conejos River in District No. 22 and for some 20 days there was water run into the Rio Grande River.

There was no reservoir storage during the irrigating season. On May 1 there were in storage in the entire division 49483 acre feet out of a total capacity of 370000 acre feet. On November 1,

1955 there were in storage 25990 acre feet which shows a gain of 23493 acre feet to May 1, 1956. On November 1, 1956 there were 12283 acre feet in storage in the entire division, 3500 acre feet of which are represented by storage in Platora Reservoir, none of which, in all probability, will ever be available for use in Colorado. The Platora Reservoir again this year, in my opinion, stored water illegally, accumulating the 3500 acre feet, because the gates in the dam are not large enough to permit the natural flow of the stream to go through up to flood stage. This water was held in storage arbitrarily by the Reclamation Bureau in spite of repeated requests that it be released during the period that the Conejos River was discharging water into the Rio Grande River. Believe the records will show that if the gates had remained open this water would have run out and been discharged into the Rio Grande River during the period that water was being run into the Rio Grande River from the Conejos River. This is a serious situation and should receive serious consideration from the water users on the Conejos River and the Commissioners of the Rio Grande Tri State Compact.

During the 1956 season there was diverted to ditches in this division 92% as much water as in the 1955 season and this amount was only 64% of the previous ten year average. The precipitation was considerably under normal for the season and the few rains that did develope were local. There was no single rain that extended over the entire Valley. The use of pump and artesian wells was required to mature the crops. More wells, both pump and artesian, are being put down in all parts of the Valley to provide supplemental water. The continued use of these wells continues to lower the water table which causes many of the more shallow wells to stop flowing and requires that many of the pumps be lowered. The pressure of the deeper

artesian wells is being reduced every year of the continued excessive pumping. The last damaging frost in the spring was on May 17th. and the first one in the fall was on August 31st. Records of temperature and precipitation are available from other sources and accordingly, are not included in this report. The report of vegetable shipments by railroad is not included are such a large percentage of the Valley's produce is shipped by truck that the report of rail shipments is no longer comparative of the products produced. The mountain ranges were not good and the number of livestock permitted on the ranges was materially reduced.

D. H. Mathias, Special Deputy State Engineer, has supervision of diversions in District No. 20 and will make the detailed report for that District.

In District No. 21 the season began early, the first diversions report being on Jan. 31. There was no reservoir storage. The diversions in this District were 87% of the previous 10 year average, compared to 62% in 1955. The early run off on the Alamosa River was good, supplying most of the ditches with some water but during the latter part of the season, in August and September, the stream flow became so low that the No. 1 priority for 14.40 cfs. was being supplied less than 3 cfs.

In District No. 22 the season was similar to that in District No 21. The early run off was good supplying the demands for irrigating water and also discharging some water in the Rio Grande River. However in late September the flow in the Conejos River became so low that only 3 cfs. were being diverted to the # 1 priority. The diversions for 1956 were 111% of the Diversions in 1955, and this was 89% of the previous ten year average compared to 69% in 1955.

In all the other water districts in this diversion the diversions

were considerably less than the previous 10 year average; in District #24, being 71%, in District # 25, being 41%; in District # 26, being 39%, in District # 27, being 26%, and in District # 35, being 59%. These percentage figures depict the very dry season when it is remembered that in this division the 10 year average is still a short water supply. These reduced diversions are reflected in the acres irrigated, which have been greatly reduced in the past few years. Some examples of this reduced acreage are in District No. 27 where there were only 830 acres irrigated compared to 11540 in 1949, and in District # 26, there were irrigated in 1956 only 6379 acres compared to 48483 in 1949. The north end of the Valley has been very hard hit by the continued drought.

As a further indication of the effects of the drought in the north end of the Valley in District # 25 out of a total of 65 ditches reporting 50 ditches received no water; in District # 27 out of a total of 37 ditches reporting 27 received no water.

The crops throughout the Valley were good where ever there was supplemental water to mature the crops. The early frost on August 31, did some damage to the potato crop and did reduce the yield. the lettuce crop has become an important factor in the economics of the Valley. The acreage was increased very materially this year and there were three more dehydrating tubes installed to process the crop.

In this division water was administered 285 days. The water commissioners and their deputies and Special Deputy State Engineer D. H. Mathias are to be commended for the very fine job of administering the water in this fourth very dry year. It is well known that the shorter the water supply the more difficult is the job of the water officials.

Respectfully submitted.

Roy B. Heilman

Roy B. Heilman,

Irrigation Division Engineer, Div.#3.

SUMMARY

WATER COMMISSIONERS' DITCH REPORTS

1956

IRRIGATION DIVISION NO. 3

No. of Water District	Number of Ditches Reporting	First day Water was Carried	Last Day Water was Carried	No Days carried.	No. of Acre feet carried by all.	Total Acres Irrigated.
20	188	3-5	11-10	251	261716	256483
21	74	1-31	10-31	274	67781	40464
22	96	3-10	10-31	236	223468	95498
24	53	3-20	10-31	226	36616	14664
25	65	4-1	10-31	214	17232	5571
26	73	4-1	10-31	214	15247	6370
27	37	3-25	10-31	220	2780	830
35	71	4-1	10-31	214	27698	14565
Total	657				752538	434445

1956 SUMMARY

TRANS-MOUNTAIN DIVERSIONS

INTO DIVISION # 3

Name	Acre Feet Diverted	Acre Feet Delivered to Ditches-
Weminuche - Raber Lohr -	2355.6	1518
Weminuche - Fuchs	903.6	688
Tabor	223.	161
Squaw	174.5	149
Treasure Pass	128.9	80
Piedra	82	77
Weminuche - Raber-Lohr	- Stored in Alberta Reservoir	147
Weminuche - Fuchs -	Stored in Wee Ruby Reservoir	96
Cochetopa-Saguache	21	12.25
Totals - - - - - - - - - - - -	3888.6	2928.25

1956 RESERVOIR STORAGE REPORT - DIVISION NO. 3

AMOUNTS IN STORAGE IN ACRE FEET.

	Rio Grande	Santa Maria		Continental	Sanchez	Terrace
12-1-55	1428	1653	Est.	320	13100	482
1-1-56	2708	1983	Est.	785	13433	757
2-1-56	4044	2449	"	1250	13517	1036
3-1-56	5223	3089	"	1830	13517	1382
4-1-56	6509	3080	Actual	3733	13500	2174
5-1-56	6509	3089		3733	13020	2937
6-1-56	6509	3089		3732	10900	3196
7-1-56	0	1864		1322	7350	2017
8-1-56	0	1387		982	4831	1020
9-1-56	0	1367		982	2959	873
10-1-56	0	1367		982	2189	530
11-1-56	0	1367		982	2384	412

	Mt. Home	Smith	Cove Lake	La Jara	San Luis or Beaver Park	Platore
12-1-55	5769	2148	0			0
1-1-56	6192	2157	0			0
2-1-56	6510	2805	0		0	0
3-1-56	6852	3140	0		0	0
4-1-56	7325	3438	---		1806	-
5-1-56	7490	3210	2340		1806	0
6-1-56	7005	1531	5365		1806	1800
7-1-56	4569	1050	3395		1466	3400
8-1-56	1335	647	1720		0	3500
9-1-56	300	200	808		0	3500
10-1-56	300	0	409		0	3500
11-1-56	600	500	161		0	3500

SUMMARY- 1956

WATER COMMISSIONERS' RESERVOIR REPORTS

IRRIGATION DIVISION NO. 3

Name of Reservoir	Water District No.	Capacity in Acre Feet	Acre Ft. in Storage May 1, or amount available	Acre Feet in Storage	Total Acre Feet Delivered.
Rio Grande	20	51113	6509	0	4928
Santa Maria	20	43565	3089	1367	1544
Continental	20	26716	3732	982	2475
San Luis (Beaver Cr)	20	4758	1806	0	1776
Metroz	20	395	283	210	64
Regan	20	667	120	84	32
Big Ruby	20	77	30	0	28
Wee Ruby	20	186	96	0	84
Sowards 1-2-3	20	162	162	162	not used
Meadow Lake (Sowards)	20	199	122	0	114
Lock Laven (Sowards)	20	24	24	24	not used
Streams (Sowards)	20	40	40	40	" "
Downing (Sowards)	20	41	41	41	" "
Goose Lake	20	232	92	0	86
Alberta Park	20	599	490	0	420
Jumper	20	38	38	0	
Mill Creek	20	43	43	13	not used
Hunters Lake	20	48	48	48	" "
Humphreys	20	842	842	842	" "
Lake Cliff	20	No Record			
Bristol Head #1	20	151	0	0	
Bristol Head #2	20	804	0	0	
Spruce Lake #1	20	111	52	0	48
Spruce Lake #2	20	105	50	0	48
Shaw Lake	20	680.6	560	28	474
Hermit Lakes #1-2-3	20	200	200	200	not used
Fuchs	20	237	128	0	88
Troutvale#1	20	299	299	49	226
Troutvale#2	20	257	257	257	Fish culture
Road Canon	20	1183	100 + or -	100	" "

SUMMARY - Continued -

WATER COMMISSIONERS' RESERVOIR REPORTS

1956

Name of Reservoir	Water District No.	Capacity in Acre Ft.	Acre Feet in storage or available May 1,	Acre Feet in storage or available Nov. 1,	Total Acre feet delivered
Lost Lakes	20	966	371	0	361
Spring Creek (Wrights)	20	145	145	145	not used
Meadow Lake	20	114	114	114	" "
Trout Lake	20	320	160	0	144
S U Dude	20	120	100	0	96
Poage	20	261	191	20	156
Squaw	20	162	162	0	148
Terrace	21	17700	2937	412	2026
La Jara	21	14502	No water stored.		
Cove Lake	22	6480	2340	161	6826
Platora	22	60000	0	#3500	0
Sanchez	24	103135	13020	2384	12274
Eastdale #1	24	3468	No water stored.		
Eastdale # 2,	24	3047	" " "		
Salazar #1,	24	234	No Report		
Salazar #2,	24	35	" "		
Mountain Home	35	20147	7490	600	7314
Smith	35	5336	3210	500	1600
Totals - - -		369494	49493	12283	43380

This 3500 acre feet is subject to the Rio Grande Tri-State Compacy and it is presumed that this water will not be available for delivery for use in Colorado.

DIVISION NO. 3,

COMPARISON FOR PAST 10 YEAR PERIOD

	No. of Acres Irrigated	Acre Feet of Water Delivered to Ditches
1947	742289	1351229
1948	757041	1320484
1949	789722	1444440
1950	570392	964516
1951	359228	631136
1952	615338	1626360
1953	581441	880377
1954	421406	772333
1955	446690	818004
1956	434445	752538

ROY B. HEILMAN
Division Engineer

GLEN E. BREES
Hydrographer

STATE OF COLORADO

DIVISION OF WATER RESOURCES
Irrigation Division No. 3
Alamosa, Colorado

December 11, 1956

Mr. J.E.Whitten, State Engineer,
Office of State Engineer,
State Capitol Bldg.,
Denver, Colo.

Dear Mr. Whitten;

Enclosed is the corrected copy of my annual report and the four sheets of the Water Commissioners Ditch report sheets for District No. 22 on which the corrections have been made. Please have Mr. Sittser file them again.

Thanks for sending down the report and the sheets for me correct.

I am planning on having a meeting of the Valley water officials some time in January. We would like very much to have you be present. Is there any particular date that would suit you better than some other, if it is possible for you to attend at all.

Yours very truly,

Roy B. Heilman