## STATE OF COLORADO IRRIGATION DIVIDION NO. 2

## F. C. BNYDER IRRIGATION DIVISION ENGINEER SON DURANT SLOS.,

Nov. 29, 1961

SUBJECT:

Mr. J. E. Whitten State Engineer Denver; Colo.

Dear Sir:

I herewith submit my report as Division Engineer of Division No. 2 for the year of  $(1960_{\bullet})$  / /

This was a year which started out as if it would be one of short supply since rain and snownfall had been light during the winter and spring. However, frequent rains starting May 3 rd, which were distributed here and there throught the summer kept a fairly constant supply of water for most of the time in the older ditches and some at times for the juniors.

Snow+fall in the mountains was very short and run+off from the spring thaw allowed only three days of storage in June. This coupled with 12 days in December and 15 days in Feburary was the extent of general storage.

Precipitation at Pueblo was 14.18 inches for the year against an average of about 11.5 inches. From May 3rd until Sept. 3rd there were 11.23 inches of precipitation which fell during the growing season. At Ias Animas, the year's total precipitation was 14.68 inches as compared to 12.34 inches as an average. 10.46 inches of precipitation fell during the above-mentioned 4 month period at Ias Animas.

This reduced the amount of storage water needed and we finished the season with more than double the amount we carried over last year. These timely rains were so distributed over the area and timed that no great damage was done nor/big floods to contend with in the river.

Beulah, which is 25 miles west of Pueblo, had 34 inches of

J.F.

precipitation for the 12-month, period against an average of about 14 inches. 20.57 inches of rain fell there between May 3rd and August 13th.

Transymountain diversions totaled 48,847 acre feet which was slightly above the average of 46,700 but below the 54,082 acre feet of last year.

The reservoir carrywover on Nov. 1, 1960, was one of the lowest ever, being only 61,438 acre feet of which 36,705 was irrigation water. This year the carrywover is 113,431 acre feet of which 79,677 acre feet is for irrigation use.

John Martin Reservoir did not close the gates until Dec, 1, 1960. The gates were opened April 3, 1961 when storage amounted to 22,625 acre feet. The reservoir was emptied April 28, 1961, at 7:30 P. M. The gates were again closed for storage at 10:30 A. M. June 3rd due to rains above and heavy hail and damage below reservoir. Gates remained closed until June 19th when they were opened to supply Kansas demand. The reservoir was then emptied at 10 P. M. June 27th. Gates were partially closed from 8 A. M. Aug. 13th to midnight Aug. 17th, when it was again emptied and we reverted to decrees.

Storage season on John Martin reservoir starts Nov. 1, with the Colorado ditches having the right to demand the river flow up to the extent of 100 sec. ft. On Nov. 1, 1960, they did demand 100 second feet claiming an amount must be passed by the ditches above the reservoir to make the river flow available to 100 second feet at the dam. A part of the time during November the river flow was more than 100 second feet, therefore, the excess above 100 second feet should have been stored.

the Cemity Ditch (the beneficiary) Cancelled.
The demand on november 30th and chow the consect of reserving.

I ruled that they were entitled to the <u>river flow</u> but did not have the right to demand any deficiency to be made up from decrees above the reservoir.

The matter was referred to the State Engineer who ruled on Nov.

25th that we were still on decrees and the State Administration should keep 100 second feet at the outlet of the reservoir. This order was passed on to the Water Commissioner of District No. 17.

The demand was cancelled on Nov. 30th by the Amity Ditch, who were the beneficiaries, closing their gates.) Gates of the reservoir were closed Dec. 1, 1960 at 11 A. M. for winter storage.

At the Dec. 16, 1960, meeting of the Arkansas River Compact
Administration, a motion was passed to inquire of the Attorney General
of each state for an interpretation of the above question. Under
date of Jan. 16, 1961 the Attorney General of Kansas issued the
opinion that this 100 second feet of water could be used for irrigation
but did not answer the question of demanding water from above the
reservoir to make up the 100 second feet. It was his opinion "The
term 'River Flow' means the sum of the flows of the Arkansas and
Purgatoire Rivers into John Martin reservoir as determined by gaging
stations appropriately located above the reservoir."

The situation did not recur this year as the gates were closed Nov. 1, 1961, when 300 second feet were available for storage.

The Graneros Pipe-line case was turned over to an attorney last year for civil action which was filed in the court this fall. I understand this will come up for hearing in the spring unless the death of one of the plaintiffs changes matters.

The Beaver Park case is in the process of compromise. One stipulation in compromise I cannot approve, is that it be

\*Stipulated and agreed that the water stored in Brush Hollow Reservoir in 1951 at the time when this controversy arose and this action commenced, including 983.34 acre feet in storage on July 12, 1951, and all other water stored therein on that date or after that date up to and including the date of this Stipulation, has been legally and lawfully stored therein and is the property of the plaintiff Beaver Park Company.

There were no problems unresolved due to good precipitation during the growing season.

The distribution of water in Division No. 2 for the year was 1,850,969 acre feet to a total of 498,041 acres of land, being 3.71 acre feet per acre of ground irrigated.

Tables of trans-mountain diversions, reservoir storage by months, acres of land irrigated and water used are attached hereto.

Thanking the Denver office force, the Water Commissioners and their Deputies as well as the water users for their cooperation this past season, I am,

Respectfully yours,

Division Engineer Div. No. 2.

## TABULATION of WATER COMMISSIONER'S ANNUAL REPORTS. for IRRIGATION SEASON of 1961.

## IRRIGATION DIVISION No. 2.

Dist. No.	First day water was used from natural stream	Last day water was used from natural stream	Number of acre feet water used by canals for season	Total number acres irrigated 1961
10	Nov. 1, 1960	Oct. 31, 1961	63,432	12,412
11	Nov. 1, 1960	Oct. 31, 1961	159,341	26,042
12	Nov. 1, 1960	Oct. 31, 1961	358 <b>,</b> 322	22,071
13	Apr. 23, 1961	Oct. 31, 1961	46,938	19,870
14	Nov. 1, 1960	Oct. 31, 1961	211,905	108,585
15	Nov. 1, 1960	Oct. 31, 1961	40 <b>,</b> 768	5,039
16	Nov. 1, 1960	Oct. 31, 1961	99,718	44,467
17	Nov. 1, 1960	Oct.31, 1961	525 <b>,</b> 918	155,700
18	Mar. 11, 1961	Oct. 31, 1961	15,784	4,980
19	Nov. 1, 1960	Oct. 31, 1961	150,874	29,960
66	Jan. 1, 1961	Oct. 31, 1961	1,153	433
67	Nov. 1, 1960	Oct. 31, 1961	176,816	68,482
49				

Totals 1,850,969 498,041

TRANS-MOUNTAIN DIVERSIONS Irrigation Division No. 2.

1961

Month Columbine	lumbine	Bwing	Wurtz	Ewing Wurtz Busk-Ivanhoe Tunnel	Twin Lakes Tunnel Larkspur	Larkspur	Totals.
}				in acre feet.			
Nov. 1960		:			178		178
Dec.					102		102
Jan. 1961					<del>1</del> 78		78
Feb•					9/		92
March					85		85
April					82		82
May	254	205	658	692	9058	9	10873
June	732	321	919	2542	18222	32	22525
July	103	112	78 <sup>m</sup>	655	3116	0	0207
August	20	28	17	200	1780		5072
Sept.				7175	782		5224
October				235	3268		3503
Totals	1109	999	1435	9927	40833	38	7,488,4

CONTENTS of MAJOR RESERVOIRS in IRRIGATION DIVISION No. 2.
Dec. 1, 1960 to Nov. 1, 1961 - Values in Acre Feet.

Mow. 1	1	34.92	077	9566	22411	8573	1231	2798	3412	6051	2300	1463	0	939	12488	1754	3905	995	432	838	0	508	3982	0	2760	152	1948		1101	6842	11322	2030	0	113431	33764	19961
0ct. 1 -		3128	0	9376	17986	8372	1158	- 5 <del>86</del> 4	3252	0219	2291	2339	0	939	12471	1754	2938	1089	432	921	0	0	4571	0	3507	152	1948		1832	7888	7887	1942	0	107654	33731	73923
Sent 1	7 272	3128	0 777	8972	18389	8448	1158	- 5864	3398	2994	2395	4170	327	939	12548	1754	2515	1260	432	696	0	994	0	0	3920	152	1948		2530	81.90	11170	<b>₽</b> 970	0	110447	27414	82733
Anos		3149	777	8899	35433	8529	11.58	2765	2421	5397	2600	4635	4316	891	<b>E</b> 2489	1754	2515	927	435	627	0	1328	0	0	3920	152	1948		250	10054	6010	1970	0	125016	33034	91982
ժողտ 1 <sub>2</sub>	-	3171	2777	8247	39005	8721	1158	2743	2552	7805	2661	7650	5016	925	12655	1754	2794	654	432	1%	1859	3570	1950	550	3920	152	1948		88	10515	4742	2030	0	135079	32775	102304
June 1.		2828	777	2456	17168	6398	1158	1809	2248	3864	2127	3720	3940	925	12587	1476	1430	325	432	1%	740	37.92	0	0	3134	152	1948		1657	10186		2075	0	92218	28234	78669
May 1.		2892	744	9299	9574	5507	1150	1893	2516	9979	2162	6207	5016	918	12090	1325	20 <b>8</b> 0	418	432	0	1035	4021	0	0	7817	143	1764		7271	11647	7603	2211	0	105233	29188	76045
Apre 15		2871	577 147	0999	9377	5530	1037	1167	2095	3841	2744	6366	5821	865	12608	84%	2080	257	<b>433</b>	0	1138	4192	0	0	5232	116	1187		10671	12129	5023	2241	22260	128800	25394	103406
Mark 1.		2849	7.44 7.47	6502	9339	5539	897	1167	1899	3900	2217		5890	805	12265	621	1920	127	276	0	1182	4375	0	0	4784	116	1184		10976	12610		2166	16853	110935	592475	88170
Feb. 1.		2289	447	8879	8922	5249	786	1167	1790	3990	2109	6715	163	729	11722	<b>6</b> 21	1467	124	187	0	0	4435	0	0	4250	116	1184	-	0	9423	5214	5166	9925	91713	25049	79999
Dec. l Jang l. Feb. 1		2289m 3.5	147	89779	8331	5238	750	1809	7406	0007	2136	6773	0	672	12266	1448	1430	124	187	0	0	806	0	0		152	1105		227	3152	5261	1746	6153	74513	26018	48495
Dec. 1	, t.	1470	) [2] -	6419	744	± 204	750	1809	1026		1754	1317		.) 613	12351	1448	_		158	0	0	0	0	0	3358	152	1105	Gronda	227	Queen)3152	5023	1347	799	62836	r25966	36870
		Fountain Val.#2		Sugar Loaf	Twin Lakes	Clear Creek	Mt. Pisgah	Skaguay	Brush Hollow	City of ColoSpgs	DeWeese⊷Dye	Lake Henry	Lake Weredith	Beckwith(Hayden)	CF & 1 Hes	Color	Cucharas	Huerfano Valley	Holita	Dotson	Dye	Holbrook	Horse Creek	Adobe	Model	North Lake		0	e Sopha	ţ,	Two Buttes	Thurston	John Martin	Totals	Mun.Mnfg. & Power25966	Irrigation