Mr. M. C. Hinderlider State Engineer Denver, Colorado

Dear Sir:

I herewith present my annual report for Irrigation Division No. 6 for 1950. Attached hereto are the tabulations of Water Commissioners ditch and reservoir reports.

While the supply of irrigation water from direct stream flow were short in some instances near the later part of the irrigation season, the overall shortages were only slightly under the average.

Snow accumulations recorded and forecasts as of May 1, were 115 percent to 120 percent of normal on Yampa and White river water sheds. Early runoff occurred followed by cool and dry weather through month of June. This dry condition continued through balance of the growing season with only slight temperature moderations. This condition created a much heavier than the normal demand upon irrigation water.

All storage reservoirs used for irrigation were filled by July 1, and first use of stored water for irrigation started on June 25 and continued, in some instances, through to October 9. First demand for direct irrigation was started on an extensive scale by April 15.

Deficiencies in temperatures and precipitation accompanied by above normal winds, made a combination detrimental to good crop production regardless of water supply. Subnormal temperatures were prevalent starting early in May and continued through June, July and August with

precipitation deficiencies for each of the said months. The average minimum temperatures and precipitation by months as follows:

Month	Average minimum temperature	Precipitation in inches		
May	28 ⁰	1.90		
June	30.8°	.22		
July	38 ⁰	1.27		
August	34.4° Average 32.8°	.96		

September, both temperature and precipitation returned to about normal.

Most dry land crops, particularly as to grains, the yields were reported as low as 50 percent of normal. The irrigated crops averaged about 75 percent of normal.

Pasture and ranges suffered considerably due to the dry and cold period. The range conditions, however, were materially improved following temperature moderations and the return to normal precipitation starting early in September.

Harvesting conditions were favorable for all crops. Growers of the lettuce producing sections are reported to have taken a heavy loss this season, both in production and unfavorable prices. Operators in the Toponas area reported the crop is down 70 percent below normal this year due to unfavorable weather conditions. This crop has been selling for \$1.75 to \$2.00 per crate packed, as compared to \$3.50 and up to \$6.00 per crate previous prices. The shipping and packing operations were virtually on a non profit basis, the growers receiving just enough to compensate for cutting the crop.

Administration problems were numerous during the irrigation season but none serious. Good progress was made on new installations of Parshall flumes and new headgate construction and repairs to present gates. Also under the supervision of the soil conservation service a large amount of ditch cleaning and repairs were made.

Respectfully submitted

Irrigation Division Engineer
Division No. 6

TABULATED STATEMENT OF WATER COMMISSIONER'S ANNUAL DITCH REPORT FOR IRRIGATION SEASON OF 1950

District No.	Number of ditches reported	Amount of appropriat cu. ft. pessecond	ion	Capacity of ditches second feet	First day water used from natural stream
43	78	820.63		1045.00	4-15
44	97	471.73		548.00	5-4
54	50	109.28		275.00	5-15
55 & 56	No reports			. 	
57	57	307.18		253.00	4-19
58	276	1408.81		1669.28	5-1
Total	558	3117.63		3700.28	4-15
	Last day	Average		Average	Number of
	water used	number of		daily amount	acre feet
	from natural				used
	stream	carried	second feet		u pou
43	10-30	76		463.10	139,725
44	10-9	70		346.86	50,232
54	10-1	50		148.00	16,240
57	10-26	75		180.60	41,068
58	11-1	72		1027.55	175,924
Total	11-1	69		2166.11	423,189
		· · · · · · · · · · · · · · · · · · ·			
	Number of				
5	acres that				
	can be		Natural		Market
	irrigated	Alfalfa	grasses		gardens
43	21,398	6398	10,748	3772	
44	30,427	5815	10,363	2505	12
54	10,450	750	5,785	450	
57	16,681	930	9,439	1845	
58	69,098	971	41,408	<u>3565</u>	8
Total	148,054	14,864	77,743	12,137	20
	,				Total
	Potatoes	Pasture	Spinach	Lettuce	irrigated
43					20,918
44				-	18,695
54	27				7,010
	27				7,010 12.214
54	27 88	10,466	955	660	7,010 12,214 58,121

TABULATED STATEMENT OF WATER COMMISSIONER'S ANNUAL RESERVOIR REPORT FOR IRRIGATION SEASON OF 1950

District	Number of	Area of high	Total	Quar	tity of		
No.	reservoirs	water line	capacity	y wate	r in reservoir		
	reported	acres	cubic f	eet May	1, cu. ft.		
43	No reservoirs	reported					
44	11	174	63,176	,128 44,	724,928		
54	2	. 32	18,791		15,859,416		
55 & 56	No reports		•	<i></i>	,		
57	14	363	149,226	,694 65,	65,048,741		
58	12	366	401,671		397,625,477		
Total	39	935	632,865		258,562		
	Quantity of	First day	Last da	y Aver	age		
	water in	water was	water w		number of		
	reservoir	used	used	days	water		
	Nov.1, cu.ft.	•		carı	ied		
44	000	5-8	9-8	94			
54	3,703,066	7-20	8-15	25			
57	000	6-22	9-3	59			
58	133,795,887	6-25	11-1	45			
Total	137,498,953	5-8	11-1	54			
	Average	Number of					
	daily amount	acre feet					
	carried	reservoir					
	cubic feet	water		Natural			
	per sec.	carried	Alfalfa	grasses	Cereals		
44	12.50	2,614		1,160			
54	6.00	300					
57	7.50	1,383	40	260	160		
58	73.85	6,478					
Total	99.85	10,775	40	1,420	160		
	Total						
	irrigated		Remai				
44	1,160i	n addition to	that repor	ted on dita	h report.		
54	S	upplemental su	apply to Ril	Ley Live St	ock ditch.		
57		hree reservoir					
58	All acreage reported under the several ditches in						
					d as supplemen		
		upply to appro					
Total	1,620		-				