1951

Glenwood Springs, Colorado
November 30, 1951

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

Dear Sir:

In compliance with the provisions of law, I transmit, herewith, my annual report as Division Engineer for Irrigation Division No. 5 for the year ending November 30, 1951.

Administration of the Colorado River has been relatively simple this season, due to the increased run-off. However, replacements were necessary from the Green Mountain Reservoir and Williams Fork Reservoir to compensate for what was being withheld at Granby Dam by the Big Thompson Project and for diversions being made by the City of Denver.

On May 29, 1951, Secretary of the Interior Chapman approved a release of 25,900 Acre feet annualy from Granby Reservoir to maintain what was considered as a satisfactory fishing stream. For the balance of 1951, the releases were to be as follows:

70 second feet, June and July

38 second feet, August

19 second feet, September through December

The Secretary's approval extended through 1952 and 1953 with releases as follows:

75 second ft. during the months of May, June and July

40 second ft. during the month of August

20 second ft. during the other eight months

The above releases are subject to change should the Secretary, within that period, decide to make the final determination of the amount of water needed below Granby Dam to comply with the provisions of Senate Document No.80.

Late this fall, the City of Colorado Springs completed the diversion tunnel under Hoosier Pass and the Western Slope collection ditches. They intend to start diverting water next spring.

The City of Colorado Springs acquired the East and West Hoosier Pass ditches and had applied to the District Court for a change of Point of Diversion to the west portal of the Diversion Tunnel. This action was denied and is being appealed to the Colorado Supreme Court.

The 1951 peach crop was the smallest on record and amounted to about 25 per cent of last years 1,219,000 bushels, and was about 13 per cent of the average crop of the preceding ten years.

The pear crop was slightly larger than the 1950 crop, but was about 15 per cent smaller than the average.

The apple crop was better this year; however,

apple growers had trouble selling their crop, because of an overproduction of apples throughout the nation.

The potato crop was not as good as last year. Prices are much higher than last year. Storage is heavier this year in hope of further price gains.

Some producers have shipped their cattle and sheep out of the state for winter feeding, because of high prices and the shortage of winter feed which is due to poor hay crops.

WEATHER

This Irrigation Division experienced another very late and cold spring. Germination of spring-planted grains, sugar beets and other crops was slow due to subnormal temperatures and inadequate sunshine throughout the month of April and first two weeks of May. During the months of June, July and August, 1951 there were twenty days of .01 inches or more of precipitation than last year. Average precipitation for the Division this season was 4.4 inches as against 1.8 inches for the 1950 season, an increase of 2.6 inches over last year. The total for this year, however, was below normal.

		TEMPERATURE					PRECIPITATION				
					No. of Days				No. of Days		
MAY	ELEVATION	DEPARTURE FROM NORMAL	HIGHEST	LOWEST	90° or above	32° or below	TOTAL	DEPARTURE FROM NORMAL	.01 or more	.23 or more	1.00 or more
Green Mountain Dam	7760	0.2	77	21	0	10					
Eagle	6497	3.3	87	23	0	13	.96	-.23	9	0	0
Rifle	5500	-0.1	90	28	1	4	.69	-.31	10	0	0
JUNE											
Green Mountain Dam		-2.6	87	28	0	10	2.30	1.08	20	0	0
Eagle		-0.3	89	27	0	5	1.19	.42	10	0	0
Rifle		-3.9	90	34	2	0	1.03	.48	8	0	0
JULY											
Green Mountain Dam		1.0	92	34	1	0	1.67	.54	11	1	0
Eagle		3.5	94	35	14	0	.99	.01	7	1	0
Rifle		-0.2	99	41	22	0	.47	-.63	5	0	0
AUGUST											
Green Mountain Dam		-1.1	86	25	0	7	1.82	.56	9	2	0
Eagle		0.9	92	35	2	0	1.92	.64	11	1	0
Rifle		-0.7	97	42	11	0	1.56	.48	10	1	0

SNOW REPORT

On May I

The snow cover on the Colorado and Roaring Fork Rivers above Glenwood Springs was substantially above normal, but at high elevations and on the Grand Mesa down the River from Glenwood Springs, the snow cover was below normal.

The following table shows the snow depth and water content of 24 snow courses for the year 1951 in the Colorado River Drainage Basin within Irrigation Division No. 5; also, the water content for the first of February, March, April and May for the years 1948, 1949, 1950, 1951 and the average for the past fifteen years.

	Snow Depth Inches 1951	Snow Depth 15 Yr. Avg.	WATER CONTENT 1951	1950	1949	1948	Fifteen Year Avg.
Feb.-/.	42.2	33.5	10.8	7.1	11.2	9.3	7.7
March-/.	50.3	41.5	14.5	9.8	13.5	11.8	10.8
April-/.	47.6	45.0	15.9	13.5	16.8	16.1	13.6
May -/.	45.4	32.2	15.5	13.3	12.1	14.8	11.8

STREAM FLOW FORECASTS

May 1,1951

	Acre Feet Forecast	April-Sept. Incl. Streamflow Measured Runoff	Forecast ~~Under~~ High by Acre Feet	10 year Avg. 1940-1950
Colorado River at Glenwood	1,900,000	1,515,000	384,940	1,438,000
Roaring Fork at Glenwood	900,000	719,210	180,790	759,000
Totals	2,800,000	2,234,270	565,730	2,197,000

The above table shows that the forecast runoff for the Colorado River at Glenwood Springs for 1951 was 384,940 acre feet more than the measured runoff. It also shows the forecast runoff for the Roaring Fork at Glenwood Springs for 1951 was 180,000 acre feet more than the measured runoff. The overall forecast was that the runoff would be about 127 % of the 10 year average. Actually,however, the measured runoff was 101 % of the 10 year average.

Total stream runoff in acre feet for each of the following months at Glenwood Springs.

	ROARING FORK RIVER	COLORADO RIVER
April	37,920	104,300
May	142,900	381,300
June	274,800	535,600
July	171,000	284,700
Aug.	63,490	132,300
Sept.	29,100	76,860
TOTAL	719,210	1,515,060

TRANS-MOUNTAIN DIVERSIONS

Following is a reportof the Trans-Mountain Diversions from Division No.5 to Division No.1 and Division No.2 for the irrigation season:

TO DIVISION NO. 1

Adams Tunnel	56,310	Acre	Feet
Grand River	24,970	"	"
Berthoud	716	"	"
Eureka	124	"	"
Williams Fork Tunnel	11,140	"	"
Moffat Tunnel	33,800	"	"
East Hoosier	0	"	"
West Hoosier	0	"	"
Boreas Pass	176	"	"
TOTAL	127,236	"	"

TO DIVISION NO.2

Twin Lakes Tunnel		44,920	Acre Feet
Busk Ivanhoe Tunnel		5,130	" "
Ewing Ditch		1,420	" "
Wurtz Ditch		2,940	" "
Columbine Ditch		1,740	" "
Fremount Pass Ditch		0	" "
	TOTAL	56,150	" "
	GRAND TOTAL	183,386	" "

Very truly yours,

L. C. Finley

Irrigation Division Engineer
Division No. 5

District No.	No.of Ditches Reported	First Day Water Was Used	Last Day Water Was Used	Average Daily Amt. Diverted in Sec. Ft.	Number of Acre Feet Used from Stream
36	....	.....	.....	.....	.....
37	171	4-20-51	10-25-51	579.0	170,087
38	124	5- 1-51	10- 1-51	902.4	184,963
39	131	3- 1-51	10-31-51	351.9	145,351
45	101	4- 4-51	11-10-51	206.1	39,407
50	8	5- 1-51	8- 1-51	146.1	15,254
51	72	5- 1-51	11- 2-51	681.6	108,681
52	21	4-20-51	10-20-51	36.7	10,867
53	31	4-20-51	10-20-51	156.0	53,536
70	61	4- 1-51	10-30-51	80.4	20,753
Total	720	3- 1-51	11-10-51	3140.2	757,899

	No.of Acres That Can Be Irrigated	No.of Acres That Are Irrigated
36	11,500	8,400
37	22,088	18,487
38	33,754	35,280
39	26,277	20,733
46	30,953	24,693
50	3,845	3,745
51	35,016	21,016
52	1,895	1,895
53	8,330	8,330
70	10,217	8,734
Total	183,875	151,313