

Extra copy 1952  
ANNUAL REPORT  
DIVISION ENGINEER  
DIVISION NO 5 - 1952

Glenwood Springs, Colorado  
November 30, 1952

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, 1952.

This season with more than a normal flow of water in the streams, the administration in this Division has been simplified. It was not necessary to close any of the Trans-Mountain Diversions or to use any replacement water.

The City of Colorado Springs diverted water through their Hoosier Pass Diversion Tunnel for the first time, a total of 2380 Acre Feet.

Granby Reservoir was filled to elevation 8276.76 just 4.24 feet short of the Capacity at elevation 8280.00. Amount at elevation 8276.76 was 516,480 Acre feet. The Capacity is 539,758 Acre feet with inactive capacity of 74,190 Acre feet below elevation 8186.00.

The Bureau of Reclamation is making good progress on the Willow Creek Dam and Pumping Plant. It may be ready for use by the 1954 season.

The Grimes-Brooks Reservoir Dam on Rock Creek in Water District No. 53 burst at about 9 a.m. June 3, releasing a wall of water down Rock Creek. The flood caused considerable damage

to farm buildings along the Creek, destroying two bridges on State Highway No. 131 and several small houses in the town of McCoy. Total damage to property including crops and livestock, was estimated at \$25,000. Part of the damages have been paid by the Reservoir owners but several damage suits are pending in the Routt County District Court at Steamboat Springs.

Upon investigation it was found that the reservoir had never been adjudicated. The low point in the spillway was approximately 8 inches higher than the top of the Dam which caused overtopping and failure. The Dam has since been rebuilt and raised about 8 feet under the supervision of the Soil Conservation Service.

The Colorado River at Glenwood Springs reached a peak of 21,000 Second Feet, on June 8th which was the highest it had been since May 31, 1918. On June 8, when it was running 21,000 Second Feet, there was 5,384 Second Feet being withheld at Granby and Green Mountain Reservoirs.

The Roaring Fork River at Glenwood Springs reached a peak of 13,100 Second Feet on June 11th which was the highest it had been since June 14, 1921 when it reached 17,600 Second Feet.

About 1950 carloads of peaches were shipped from Palisade this season. Prices ranged from \$2.10 to \$2.20 per bushel. This year's crop was much larger and very much better quality than last year's. About an 80 percent crop.

The Apple crop was about 90 per cent of normal and 40 percent greater than last year, and prices are much higher than a year ago.

The Potato crop was good with yield about 80 percent of normal. Prices are near bottom at \$3.00 per c.w.t. at Glenwood Springs.

There was a small increase in cereal acreage this year especially on Dry Farms with very good yields being reported.

Alfalfa and natural grasses were about normal as to acreage with a much better yield than in several years.

Prices received by farmers for most field crops are at a higher level than a year ago. Baled alfalfa at \$35. per ton is about the same as last year price with much more on hand. Prices will probably go much higher.

Meat animals are bringing lower prices than a year ago. Hogs are bringing \$17.75 per c.w.t. compared with \$20.00 per c.w.t. a year ago. Beef cattle are bringing \$31.85 per c.w.t. and a year ago \$35.75 per c.w.t. Lams are bringing \$23.00 per c.w.t. and a year ago \$31.25 per c.w.t.

Wool a year ago was 82 cents per pound and this year it is 65 cents per pound.

#### Weather

This year, Irrigation Division No. 5 experienced a very early and warm spring a big contrast with the past few years. Above normal temperatures, precipitation and sunshine during the months of April and May gave all field crops, pastures, and ranges an early start. During the months June, July and August, 1952 there were 10 days of .01 inches or more of precipitation this season as against 20 days for the 1951 season.

Drouth conditions during the later part of August all of September, and the most of October left ranges and pastures in very poor condition. Many Forest fires were reported this fall due to the dry conditions and careless big game hunters.

	TEMPERATURE						PRECIPITATION				
	ELEVATION	DEPARTURE FROM NORMAL	HIGHEST	LOWEST	No. of Days		TOTAL	DEPARTURE FROM NORMAL	No. of Days		
					90° or above	32° or below			.01 OR MORE	.23 OR MORE	1.00 OR MORE
<u>MAY</u>											
<u>Green Mountain Dam</u>	7760	0.4	75	23	0	16	1.54	.22	13	0	0
Eagle	6497	2.2	81	24	0	17	.70	-.36	8	0	0
Rifle	5500	0.0	83	32	0	1	.78	-.16	5	0	0
<u>JUNE</u>											
<u>Green Mountain Dam</u>		3.5	86	30	0	3	.26	-.98	2	0	0
Eagle		3.8	89	29	0	5	.95	.08	4	1	0
Rifle		0.7	93	38	5	0	.64	.08	3	0	0
<u>JULY</u>											
<u>Green Mountain Dam</u>		-1.2	96	34	1	0	2.07	.91	10	1	1
Eagle		0.5	93	33	7	0	1.33	.33	10	1	0
Rifle		-1.7	97	43	16	0	.56	-.55	8	0	0
<u>August</u>											
<u>Green Mountain Dam</u>		-0.5	90	35	1	0	2.79	1.62	19	0	0
Eagle		0.0	89	34	0	0	2.64	1.47	17	2	0

## SNOW REPORT

On May 1 the snow cover on the Colorado and Roaring Fork Rivers above Glenwood Springs was 145 percent of normal which assured us a good water supply for the season.

The following table shows the snow depth and water content of 28 snow courses for the year 1952 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 1949, 1950, 1951 and 1952 and the average for the past sixteen years.

### WATER CONTENT

	Snow Depth Inches 1952					Sixteen Year Avg.
		1952	1951	1950	1949	
Feb.	47.8	14.1	10.1	6.4	11.2	7.6
March	53.7	16.7	13.7	8.9	13.5	10.4
April	66.4	21.4	17.9	13.1	16.8	13.9
May	40.0	16.0	15.3	10.9	12.1	10.7

### STREAM FLOW FORECASTS

	Acre Feet Forecast	May 1, 1952 April-Sept. Incl. Streamflow Measured Runoff	Forecast over by Acre Feet	10 year Avg. 1941 - 1951
Colorado River at Glenwood	2,100,000	2,077,450	22,550	1,443,000
Roaring Fork at Glenwood	<u>1,200,000</u>	<u>1,084,340</u>	<u>115,660</u>	<u>777,000</u>
Totals	<u>3,300,000</u>	<u>3,161,790</u>	<u>138,210</u>	<u>2,220,000</u>

The above table shows that the forecast runoff for the Colorado River at Glenwood Springs for 1952 was 22,550 Acre Feet more than the measured runoff. It also shows the forecast runoff for the Roaring Fork at Glenwood Springs for 1952 was 115,660 Acre Feet more than the measured runoff.

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

	ROARING FORK RIVER	COLORADO RIVER
April	73,910	194,100
May	225,600	597,400
June	469,900	785,100
July	176,000	244,800
August	91,000	156,700
September	<u>47,930</u>	<u>99,350</u>
TOTAL	<u>1,084,340</u>	<u>2,077,450</u>

TRANS MOUNTAIN DIVERSIONS

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

TO DIVISION NO. 1

Adams Tunnel	<u>56,020</u>	Acre Feet
Grand River	<u>21,380</u>	" "
Berthoud	<u>730</u>	" "
Eureka	<u>103</u>	" "
Williams Fork Tunnel	<u>6,810</u>	" "
Moffat Tunnel	<u>31,230</u>	" "
East Hoosier	<u>0</u>	" "
West Hoosier	<u>0</u>	" "
Colorado Springs Tunnel	<u>2,380</u>	" "
Boreas Pass	<u>13</u>	" "
TOTAL	118,666	Acre Feet

TO DIVISION NO. 2

Twin Lakes Tunnel	<u>51,360</u>	Acre Feet
Busk Ivanhoe Tunnel	<u>6,340</u>	" "
Ewing Ditch	<u>1,820</u>	" "
Wurtz Ditch	<u>2,950</u>	" "
Columbine Ditch	<u>1,020</u>	" "
Fremount Pass Ditch	<u>0</u>	" "
TOTAL	<u>63,490</u>	Acre Feet
GRAND TOTAL	182,156	Acre Feet

Very truly yours,

/S/ 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.	No. of Acre Feet Used from Stream
36	215	4-2-52	10-30-52	645.8	187,518
37	107	4-11-52	10-15-52	832.7	208,415
38	131	4-1-52	10-31-52	408.6	179,470
39	112	4-14-52	11-15-52	289.1	59,818
45	10	5-1-52	8-3-52	191.1	22,247
50	21	5-11-52	11-10-52	459.3	66,922
51	10	5-1-52	11-1-52	16.3	3,053
52	37	5-1-52	11-1-52	206.3	71,881
53	60	4-1-52	11-30-52	223.4	69,431
70					
Total	<u>703</u>	<u>4-1-52</u>	<u>11-30-52</u>	<u>3,272.6</u>	<u>868,755</u>

District No.	No. of Acres That Can be Irrigated	No. of Acres That Are Irrigated
36	11,500	8,400
37	19,913	19,913
38	39,950	39,950
39	25,899	20,395
45	30,953	24,693
50	6,095	4,535
51	23,892	14,334
52	1,300	1,300
53	11,140	11,140
70	9,825	9,201
Total	<u>180,467</u>	<u>153,861</u>