



STATE OF COLORADO

DIVISION OF WATER RESOURCES  
Irrigation Division No. 5  
Glenwood Springs, Colorado  
November 30, 1955

L. L. FINLEY  
Division Engineer



SUBJECT:

J. E. Whitten  
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, 1955.

Another season of drought continued throughout the division again this year. Because of heavier snowfall last winter, stream flow during April, May, and June was somewhat better than last season.

Precipitation records for April showed it to be the driest April of record with frequent high winds and severe dust storms. Several intense dust storms, originating in Nevada and Utah, moved into Colorado leaving snow-covered mountains red, instead of white.

Temperatures and precipitation were about normal during May and June and crop prospects had improved considerably by the beneficial late May and June rainfall.

Streamflow fell off rapidly during July while temperatures averaged above normal with below normal precipitation.

Precipitation during August was above normal and temperatures averaged above normal also.

September and October were the driest of record and temperatures were above the normal.

#### SNOW REPORT

Rainfall during the fall months was near normal in the division, but as the season advanced, warm temperatures prevented snow accumulation even at high altitudes, until December. By February 1 snow cover was about 70 percent of normal. During February and March snow accumulated at a near-average rate, but was not enough to make up the earlier deficiencies. Snow cover as of April 1 ranged near 75 percent of normal but declined sharply during April because of lack of precipitation, above normal temperatures, and high winds. On May 1 it looked as though streamflow would be better than in 1954, but about 30 percent less than normal.

2 - J. E. Whitten - November 30, 1955.

Several meetings were held again this year between Bureau of Reclamation personnel and myself, in order to discuss the manner of operation of Green Mountain Reservoir and Power Plant.

Water accounting for Western Slope replacement from Green Mountain Reservoir is a somewhat complicated procedure and takes close cooperation between Bureau of Reclamation personnel and this office in order to come up with the same result.

The Granby Reservoir had 367,435 acre-feet in storage on September 30, 1954, had dropped to 148,214 acre-feet on April 21, 1955 and went back up to 248,214 acre-feet on July 15, 1955; it had 216,689 acre-feet in storage on September 30, 1955, 150,746 acre-feet less than on the same date in 1954.

The Granby Pumping Plant pumped a total of 218,436 acre-feet from Granby Reservoir to Shadow Mountain Reservoir between September 30, 1954 and September 30, 1955, and the Willow Creek Reservoir Pumping Plant pumped 22,762 acre-feet from Willow Creek Reservoir to Granby Reservoir. 256,600 acre-feet were taken through the Adams Tunnel during the same period of time.

Because of low stream flow in the Williams Fork River, it was necessary to close the City of Denver's Jones Pass Diversion on July 14 in order to supply senior irrigation rights above the Williams Fork Reservoir. The diversion was turned back on July 25th and was turned off for the rest of the season on October 29, 1955.

Stream flow at Shoshone dropped to 1250 second feet on August 11, 1955. However, good rains brought the river up again and we actually stored water in Green Mountain Reservoir reaching a peak of 149,771 acre-feet on August 21. On August 23 stream flow at Shoshone again had dropped to 1250 second feet. On August 24 all trans-mountain diversions junior to the Public Service Company's 1250 second foot right were closed down except the City of Denver's Moffat Tunnel and Jones Pass Tunnel diversions; however, daily charges against the City's Williams Fork Reservoir were begun. We did not make actual releases from Williams Fork Reservoir until September 10 and continued until October 21, during which time a total of 5,833 acre-feet were released to the River.

On August 31 an irrigation shortage occurred on the Colorado River at Palisade and releases from the Power Pool at Green Mountain Reservoir were started. The Twin Lakes Diversion tunnel was closed on September 1, 1955 and was again opened on October 25, 1955.

Maximum storage was reached in Green Mountain Reservoir on August 21 with 149,771 acre-feet. Storage allocations for 1955 were as follows:

Storage - acre-feet	Remarks
7,757	Dead Storage
52,000	Replacement Storage
<u>90,014</u>	Power Pool Storage
149,771	Total Storage August 21, 1955.

A total of 30,910 acre-feet were used from the Power Pool for irrigation in Western Colorado between August 31 and October 25, 1955.

1955

TRANS-MOUNTAIN DIVERSIONS

Following is a report of 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	256,600	Acre-Feet
Grand River	16,150	" "
Berthoud Pass	458	" "
Eureka	125	" "
Williams Fork Tunnel	10,300	" "
Moffat Tunnel	37,020	" "
Colorado Springs Tunnel	6,060	" "
Boreas Pass	<u>268</u>	" "
TOTAL	326,981	" "

1955

To Division No. 2

Twin Lakes Tunnel	35,060	Acre	Feet
Busk Ivanhoe Tunnel	5,270	"	"
Ewing Ditch	415	"	"
Wurtz Ditch	1,350	"	"
Columbine Ditch	1,160	"	"
Fremount Pass Ditch	<u>0</u>	"	"
TOTAL	43,255	"	"
GRAND TOTAL	370,236	"	"

Yours very truly,

*L. L. Finley*  
L. L. FINLEY  
Division Engineer

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	No. of Acres that Are Irrigated
36	.....	.....	.....	.....	.....	.....
37	210	4-20-55	11- 1-55	573.0	173,111	21,480
38	71	4-15-55	11- 1-55	346.0	70,261	15,165
39	132	3- 1-55	11- 1-55	327.0	115,378	25,784
45	112	4-10-55	11- 1-55	273.0	36,910	25,082
50	21	4-16-55	8- 1-55	153.0	22,110	6,614
51	45	4-24-55	10-20-55	528.0	99,582	19,565
52	14	5- 1-55	10-31-55	18.0	5,129	1,230
53	69	4-10-55	10-31-55	212.0	50,937	11,040
70	62	4- 2-55	11-20-55	156.0	45,270	9,575
Total	<u>736</u>			<u>2,586.0</u>	<u>618,688</u>	<u>135,535</u>