Annual Report, Burnt Fork- Birch Creek Area

From,W. Moile Triplett, Water Commissioner

To, Mr. Donald Norseth, Distribution Engineer

Flow and Distribution of Burnt Fork waters.
Natural stream flow and waters from Beaver Meadows and Island Lake.
Period of May 23-,Aug.3 incl.

Total Flow for period		11,158.61 acre ft.
Interstate Canal		3,364.15 " "
Overflow from Beaver Meadows May 23 through June 15	894.60 ac.ft.	
From Island Lake June 16 through June 28	659.80 ac.ft.	
From Beaver Meadows storage June 29 through Aug.1	1,199.75ac.ft.	
From Burnt Fork Stream June 3 through June 15	610.00 ac.ft.	
Total for upper diversions exclusive of Interstat canal		2,464.97 acre ft.
Ike Edwards canal	780.21 ac.ft.	
Gamble Ditch	1,168.52 ac.ft.	
Wyman Ditch	516.24 ac.ft.	
Total flow to lower diversions		5,329.49 acre ft.
Flow delivered to lower diversions	3,491.92 ac.ft.	
Creek loss to lower diversions	1,837.57 ac.ft.	

Island Lake;

Headgate opened June 15
Lake level same as 1959,
5.5' above center lineof gate.
Gate opened same as 1959, 23".
Discharge flow 43.00 cfs.

Flow increase at U.S.G.S. gage, due to input from Island Lake 29.00 cfs., this increased flow was .675 of flow at Island Lake.

As per instructions from Mr.Norseth, the transportation loss for the Island Lake flow was .10.

The initial flow into the Interstate Canal,from Island Lake was 38.00 cfs.

Island Lake storage was depleted June 28, the total delivery from Island Lake to the Interstate canal was 659.80 ac.ft.

The Island Lake headgate was closed October 6.

A more complete study is indicated, as to the discharge from this storage and the input flow into the lake during the discharge period.

Thompson Creek and Hoop Lake;

Thompson Creek diverted into Burnt Fork, May 29.

One half the flow of Thompson Creek diverted into hoop lake June 4, this was necessary in order to utalize the peak flow of burnt fork.

Entire flow of thompson creek diverted into burnt fork,June 14.

Thompson creek diverted into hoop lake, October 6.

The hoop lake headgate was opened July 6, the initial discharge was 35.00 cfs.

A Parshall measuring flume was installed for the measurement of the hoop lake discharge, the later part of Sept..

Beaver Meadows;

Spring run-off in excess of reirvoir capacity,delivered to Interstate Canal, May 23 through June 15 894.6 acre ft. A .10 transportation loss was deducted from the Beaver Meadows flow measurements.

Headgate opened for storage draw-off, June 29
Storage depleted Aug. 1

The Interstate Canal Co. contended that the .10 transportation loss taken on the Beaver Meadows water in 1959 was excessive.

On June 2, the Interstate Canal Co. called a meeting with Mr. Dave Miller, on the matter of transportation losses and I was instructed by Mr.Miller to attend the meeting. It was decided at the suggestion of Mr. Miller, that the Beaver Meadows water would be measured at the confluence with Burnt Fork and the Burnt Fork water would be measured above the confluence with Beaver Meadows,from the total of these two measurements the reading at the U.S.G.S. gage would be subtracted to arrive at the loss figure.

On June 26 I was informed by the Interstate Canal Co. that thay the Interstate Canal Co. was going tomplace a marker in the stream bellow the Interstate headgate and turn the stream increase from Beaver Meadows into the canal. I was also informed that no-matter how I intended handeling the measurement,that theres the Interstates way,was the way the matter would be handled.

On June the 27 I contacted the State Engineers Office by phone, and talked with Mr.Norseth, he instructed me to be at the U.S.G.S. GAGE the morning of June 29,when the Beaver Meadows headgate would be opened,and record consecutive gage readings and that he or some of the State Engineers Staff would be there.

I arrived at theU.S.G.S. gage at 9.00 A.M. on the morning of June 29, and recorded readings at half hour intervals, these readings are tabulated on page 4 of this report. Mr.Norseth arrived at the gage station about 12.30.

Burnt Fork stream flow, at U.S.G.S.gage station, June 29

Gage highth ft.	Stream Flow cfs.	time of reading
6.01	45.2	9.05 A.M.
6.015	45.8	9.35
6.015	45.8	10.00
6.01	45.2	10.30
6.01	45.2	11.00
6.01	45.2	11.30
6.01	45.2	12.00 Noon
6.005	44.6	12.30
6.11	57.3	12.43
6.16	63.8	12.46
6.17	65.1	12.50
6.18	66.4	1.00
6.18	66.4	1.15
6.20	69.0	1.50
6.19	67.7	3.30

Mr. Norseth suggested that I obtain the stabalized flow from gage chart, the next day June 30.

The stream flow stabalized at 65.1 cfs. at 6.30P.M June 29.

The flow at the Beaver Meadows Flume was 27.60 cfs.
The increased creek flow due to the Beaver Meadows water was 20.50 cfs., a loss of 7.10 cfs. or .26.

Mr. Norseth instructed me to maintain the loss figure of .10 for the 1960 season.

Total days worked	54
Utah	30
Wyoming	24

Total pay for season	$ 834.00
Total for milage	99.52
Total wages	734.48

Wage per day 13.60
This wage per day would have been less, if the creek flow had been sufficient in August so that the Interstate could have had a stream.

On July 1, the Utah trapper and Lawrence Beck, removed the beaver dam at the mouth of Burnt Fork canyon. From calculations made from gage chart readings, on July 2 the removal of this dam improved the stream flow by .099 , the main loss caused by this dam, was the diversion of part of the stream out of the main channel.

There has been more than normal contention as to the division of the Ike Edwards Canal waters, the only solution is proper measuring devises and headgates at each diversion, this could be brought about by some action from the State Engineers Office.

I could not afford the time to spend on Birch Creek, but there should be some action taken as to the installation of headgates and measuring flumes.

The combined job of Utah and Wyoming water commissioner can not be handled properly on a part time bases, as can be seen from the figures at the top of this page, sixty percent of the pay period was active duty and considering that very little time was spent in August, this made June and July practicly full time.

Untill there is a Utah Commissioner on Beaver Creek, the wyoming Commissioner can not be fully effective.

STATE OF UTAH
OFFICE OF STATE ENGINEER

Daily Gage Height in Feet and Discharge in Second Feet of Interstate Canal

at ..... for ..... 19 .....

Month	May		June		July		Aug.							
Day	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge
1			1.48	37.24			0.45	10.10						
2					1.00	20.00	0.41	9.36						
3			1.28	29.57	1.19	24.30								
4			1.35	33.09										
5					1.13	24.30								
6														
7														
8			1.75	48.41										
9			1.45	34.04	1.09	22.93								
10														
11					0.99	19.68								
12				30.33	~~1.00~~	~~20.00~~								
13			1.30	~~28.44~~	1.07	22.82								
			1.19	23.36										
14														
15														
16			1.42	34.76	1.00	20.00								
			1.52	38.87										
17														
18														
19														
20			1.30	30.93	0.93	18.49								
			1.37	32.85	0.97	19.06								
21														
22														
23			1.25	28.5										
			1.20	27.0										
24														
25	0.82	14.40	1.15	29.96	0.90	17.92								
	0.93	17.84	1.00	20.00	0.79	16.20								
26														
27			1.00	20.00										
			0.79	16.45										
28	Started take out		0.83	16.45										
			0.71	11.70										
29	Rain in		0.74	13.74	0.83	15.76								
			1.19	25.94	0.76	16.90								
30	0.66	15.75	1.14	24.62										
	1.09	20.81												
31														
Total														
Total Ac. Ft.														

TOTAL FOR 3,344.15 ACRE FEET

STATE OF UTAH
OFFICE OF STATE ENGINEER

Daily Gage Height in Feet and Discharge in Second Feet of Mc Edwards Canal

at ..... for ..... 19 .....

Month	May		June		July		Aug.							
Day	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge
1			0.99	11.44			0.40	2.86						
2					0.41	2.99								
3			0.88	10.63										
4														
5					0.41 0.71	2.99 7.00								
6														
7														
8			0.76 0.85	8.13 9.30										
9					0.80 0.34	4.84 2.25								
10					0.34	2.25								
11					0.34	2.25								
12														
13			1.01 0.99	12.19 11.44										
14														
15														
16			1.12 0.93	12.28 10.27	0.32	2.03								
17														
18														
19														
20			1.00 0.91	12.00 9.20			0.40	2.86						
21														
22														
23			0.29	1.55										
24														
25	0.9	2.35	0.27	1.55										
26														
27														
28			0.27	1.55										
29														
30	0.9 0.93	10.17 10.77	0.42	3.15										
31														
Total														
Total Ac. Ft.														

TOTAL FOR 780.21 ACRE FEET

STATE OF UTAH
OFFICE OF STATE ENGINEER

Daily Gage Height in Feet and Discharge in Second Feet of Gunnison River

at ..... for ..... 19 .....

Month	May		June		July									
Day	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge
1														
2														
3														
4														
5														
6														
7														
8			0.98	11.63										
9					0.79	7.33								
10														
11														
12														
13			0.90 0.82	10.17 8.54										
14														
15														
16			0.82	8.84										
17														
18														
19														
20														
21														
22														
23			0.80	8.42										
24														
25	0.83	8.96												
26														
27														
28														
29					0.48	5.39								
30	0.95	11.07												
31														
Total														
Total Ac. Ft.														

TOTAL FOR 1,168.52 ACRE FEET

STATE OF UTAH
OFFICE OF STATE ENGINEER

Daily Gage Height in Feet and Discharge in Second Feet of Wyman Ditch

at ..... for ..... 19 .....

Month	May		June		July									
Day	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge	Gage Ht.	Discharge
1														
2														
3														
4														
5														
6														
7														
8			0.50	4.05										
9			~~0.75~~	~~5.12~~	0.49	4.50								
10														
11														
12														
13			0.75	5.12										
14														
15														
16			0.80	5.46										
17														
18														
19														
20														
21														
22														
23			0.70	4.60										
24														
25	0.45	2.32												
26														
27														
28														
29					0.40	1.93								
30	0.55	3.17												
31														
Total														
Total Ac. Ft.														

TOTAL FOR 516.24 ACRE FEET