Steamboat Springs, Colorado
November 24, 1961

Mr. J. E. Whitten
State Engineer
Denver, Colorado

Dear Mr. Whitten:

I herewith present my Annual Report for Irrigation Division No. 6 for 1961.

Attached are the tabulations of the Water Commissioners' Ditch and Reservoir Reports from Water Districts 43,44,54,57, and 58, along with a copy of a report on the delivery of Pot Creek water to the Colorado users. The Report on the Pot Creek delivery was make by Robert Guy, Area Engineer, State of Utah, and Dave Rasmussen, Water Commissioner for Pot Creek, to Mr. Wayne D. Criddle, State Engineer for Utah.

The first water recorded for direct irrigation in Division No. 6 was Feburary 25th, on Piceance Creek, in Water District No. 43 and the last day was November 11th out of Snake River in Water District No. 54. Lower Piceance Creek is in a low rainfall belt, and they start irrigating early in the season, there is very little late water and this early irrigation serves as ground storage.

The irrigation season extended over a period of 260 days in Division No. 6. The length of irrigation season varied from 126 days in Water District No. 44 to 218 days in Water District No. 43. The streams in Division No. 6 were lower than average, as the runoff forecasts predicted; however, this

shortage wasn't severe enough to appreciably change crop production.

Water Commissioners' Reports show a total of 19,885 acre feet of reservoir storage capacity in Division No. 6 with a storage of 15,352 acre feet as of May 1st. Two of the larger reservoirs in Water District No. 58 did not have runoff enough to fill. The November 1st storage is 4,978 acre feet, which is more than the 1960 season, this was due to the heavy precipitation in September.

The precipitation during the peak growing months of June and July was generally below normal throughout the Division.

The temperatures were above normal throughout the Division for most of the irrigation season. The increase in temperature favored crop production, making most crops above average in spite of the shortage of rainfall and irrigation water.

The increase in crop production was generally lost, however, because of one of the worst harvest seasons in years.

~~There was a two to twenty four inche~~ snow in most of the Division on the 2nd of September. This storm did considerable damage to most crops and livestock. Almost all spring grain crops, along with a lot of hay, was snowed down making harvesting practically impossible. Many bands of sheep on the high ranges had to be rescued with bulldozers,

making a large shrinkage on the lambs due to lack of feed.

The Division had began to recover from the first snow when a second snow on September 22nd covered the Division with six to forty eight inches of snow. This second storm did much damage to the remaining crops and was hard on all of the livestock.

The fall flow of streams and the soil moisture is above average with the rainfall varying from four to eight inches over the Division for the month of September.

On May 4th the Routt County Annex, (location of the Division Office) caught on fire. The fire alarm was sounded at 3:35 A.M. I was notified and arrived at the scene at 4:10 A.M. The office was smoke-filled and it was impossible to enter. We fought the fire until 11:30 A.M. at which time the building had burned to the ground. All records and equipment of the Division No. 6 Office were completely destroyed. The fire apparently started in the heating plant or a candle factory both of which were located in the basement. The local fire department did everything in its power to extinguish the fire, but ~~had~~ a terrific disadvantage due to the construction of the old building.

A Trip was made to Pot Creek on the 21st of June to follow up on a complaint arising from a dispute between the two Colorado users. I made a complete inspection of Pot Creek from its headwaters to its confluence with Green

River. I met with the Colorado users, and they agreed on a method to measure and divide their water. ~~The~~ Parshall Flume of ~~the Massey's~~ was moved and reset and a ~~two~~ 2- foot rectangular weir was installed by Bill Karren until he could get a Parshall Flume. They agreed to build and install a 5-foot rectangular weir below the Crouse Reservoir to insure accurate measurement of their alloted Pot Creek water. I agreed to be present when their water was delivered. I returned to Pot Creek on July 5th when the Colorado water delivery was started. A complete report of this delivery is included in the report from Mr. Guy.

I have the feeling that the system on Pot Creek could stand much improvement. There are no accurate measurements made in Utah except at the United States Geological Survey's gaging stations. Also, the division of water is made at the headwaters instead of at the point of diversions, which is a definite disadvantage to the Colorado Users. The State of Colorado was not notified of the Pot Creek water meeting last March, but Utah Water Officials promised that the State Engineer and the Division Engineer would be notified of the 1962 meeting. Utah Water Officials were very cooperative in carrying out the delivery of Colorado users water.

Most of the reservoirs in the Division were inspected during the summer. The Stillwater Reservoir needs a new

depth gage and measuring device in the main inlet. A Parshall Flume for the inlet and the material to build the depth gage were obtained by the Reservoir Company, but the early snow prohibited installation until next year.

The cooperative operation carried on by the Wyoming Water Commissioner and the Water Commissioner of Water District No. 54 in Colorado along the Little Snake River Compact Area, as per agreement adopted by the State Engineers of both states and put into operation in the 1957 season; is still operating successfully. It appeared that some adjustment would have to be made, as the Town of Baggs, Wyoming almost ran out of water but the early fall snows raised the water in time to prevent trouble.

Mr. Watkins, Water Commissioner in Water District 43, make some special readings on some of the main ditches out of the White River in cooperation with the United States Bureau of Reclamation. This work is being done for reconnaissance work on the Yellow Jacket Project.

Lists of current water users had to be furnished District Courts for opening Adjudication Proceedings in Water Districts No. 43, 56, and 58 during the past year. All Districts are now or will soon be open in the Division with the exception of Districts 44 and 55.

It is going to be a tremendous job to get the records and maps of Division No. 6 ~~into~~ order after the fire. Everyone has been most helpful in supplying what information they have. The Federal Land Bank supplied me with some maps and reproduced the Water Commissioner Tabulations for me.

The office is presently situated on the second floor of the Squire Building. The County plans to build a new Annex in the coming year and office for the Division Office has been promised.

Respectfully submitted

Wesley E. Dizmang

Irrigation Division Engineer
Division No. 6

COPY

OUT

June 7, 1961

Mr. J. E. Whitten, State Engineer
State of Colorado
232 State Services Building
Denver 3, Colorado

Dear Mr. Whitten:

During a fire which started at 3:35 a.m. on May 4, 1961, our entire office was destroyed, in Steamboat Springs.

It has not yet been determined just what the cause was, but it thought that the fire originated in a candle factory or in the heating plant, both of which are located in the basement of the building.

All office furniture, equipment, and records were completely destroyed in this fire.

Very truly yours,

Wesley E. Signs
Division Engineer
Irrigation Division No. 6

WES:L
cc: State Archivist

OUT

COPY

July 3, 1961

Mr. R. Wayne Light
Water Commissioner
Water Dist. 58
Steamboat Springs,
Colorado

Dear Mr. Light,

Enclosed is the storage and prorated amounts for Allen Basin Reservoir for the purpose of administering the water for the 1961 irrigation season.

The Allen Basin Reservoir Company voted to leave 5 % or 34.14 Acre Feet in the reservoir for seepage & evaporation loss, if at anytime during the later part of the season it appears that the 34 acre feet is present it may be prorated by any member of the company calling a special meeting.

The company agreed to let 0.5 cfs be released from the reservoir over and above the amount running into the reservoir. This is a temporary arrangement for the 1961 irrigation season. This is being done to compensate for and arrive at a permenant figure for creek water formed in the reservoir basin.

Very truly yours

Wesley E. Signs

cc. Mr. Charles Gregory, Deputy Comm.
Mr. George Possi,Pres.
Mr Jack Redmond,Sec.
Mr. E.M. Hinman,Treas.

WES:wes
Encl.

COPY

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July 10, 1961

Mr. Dale Webb
Department of Interior
Geological Survey
Vernal, Utah

Dear Mr. Webb:

I received the stream flow records for Pot Creek this morning and wish to thank you for getting them for me.

I am very interested in how the flow that we released from the Crouse Reservoir on July 5, 1961 passed the lower gaging station. I would really appreciate this information if it won't cause to much inconvinience.

Thanks Again

Very truly yours

Wesley E. Signs
Irrigation Division Engineer
Division No. 6
Steamboat Springs, Colorado

OUT

COPY

Oct. 13, 1961

Mr. Roy P. Hofstetter
Clerk of theDistrict Court
Steamboat Springs, Colorado

Dear Mr. Hofstetter:

Enclosed, as per ordered of the District Court relative to Civil Action No. 3538, is a list of all water users during the past calendar year, so far as known by me.

Very truly yours

Wesley E. Signs
Irrigation Division Engineer
Division No. 6
Steamboat Springs, Colorado

COPY OF POT CREEK REPORT

REPORT

TO: Wayne D. Criddle, State Engineer of Utah.

FROM: Robert F. Guy, Area Engineer, in cooperation with Dave Rasmussen, Pot Creek Water Commissioner.

SUBJECT: Release of water from the Crouse(Bill Allen) Reservoir on Pot Creek to the Colorado Rights.

Date: July 13, 1961.

(5) WRA

Wednesday, July 13, 1961

Bill Karren and Julian Massey came in the Vernal office and requested that the water stored in the Crouse (Bill Allen) Reservoir and belonging to the Colorado rights be released immediately. Dave Rasmussen, the Pot Creek Water Commissioner, was unavailable at the time so I consented to start the release.

Mr. Dayle Webb (of the U.S.G.S.) and myself arrived at the reservoir at 2:00 P.M. There we met Mr. Wesley Signs, Irrigation Division Engineer for the State of Colorado. Julian Massey and Bill Karren were completing the installation of a 5 foot rectangular weir at the base of the Crouse(Bill Allen) Reservoir. With the aid of an Engineers level furnished by Mr. Signs the weir was leveled and the staff gage positioned and set. At 5:30 PM the reservoir gate was opened and the flow set for 9.68 cfs. The Staff gage read 0.71.

The consensus of opinion between myself, Dayle Webb, Wesley Signs, Bill Karren and Julian Massey was that it would be wiser to release 9.68 cfs for now, observe how the water reacts in the channel, and then release more water if conditions permit.

The channel below the reservoir was w et to Bill Allen's diversion, which is approximatly 2 miles below the reservoir. Below this diversion the channel appears to be very dry.

On this date there is 42 acre feet of water belonging to the Colorado rights yet to be released from the Matt Warner Reservoir. This figure was obtained from the records of Dave Rasmussen.

Thursday, July 6, 1961--Crouse (Bill Allen) Reservoir.

Time of visit--12 Noon.

Staff gage on weir below reservoir--0.71

Flow--9.68 cfs

Comment--At 12:30 PM the water had reached approximatly 4 miles downstream from the reservoir. The channel was wet previously from the reservoir to Bill Allen's diversion which undoubtedly contributed to the long distance covered by the water. Below the head of the stream the channel is very dry with numerous "Pot Holes". A few of the deeper holes showed a slight dampness. The water appeared to be maintaining a good head considering the channel conditions. At a point approximatly 5 miles below the reservoir in the area known as "Clarks Pasture" a bulldozer, hired by the Colorado users, was operating in the stream channel removing beaver dams and other obstructions.

Friday, July 7, 1961--Crouse(Bill Allen) Reservoir.

Time of visit--2:30 PM.

Staff gage on weir below reservoir--0.71

Flow--9.68 cfs

Comment--The water has progressed approximatly 6 miles from the reservoir. In this section of the channel the stream was moving quite slow as the channel is flat and meandering. A fair stream of water was flowing

approximately ½ mile upstream (est. 5 cfs).

A visitation was made to the weir at the Matt Warner reservoir for the purpose of checking the measurement on the water being released to the Colorado rights. At this time the dam around the weir was leaking so much that it was impossible to get an accurate reading. Dayle Webb, who was along on this trip, consented to take a current meter measurement in the channel below the weir. He measured 7.3 cfs.

Saturday, July 8, 1961.

Matt Warner Reservoir

Time of visit--6:00 PM

Lower Reservoir gage--6.0

Comment--All the water belonging to the Colorado rights has been released. The reservoir gate was closed and locked and the key given to Zelph Calder.

Area below the Crouse (Bill Allen) Reservoir.

Time of visit--6:30 PM

Comment--At this the water has reached approximately 8 miles below the reservoir. The channel is still flat and meandering and the progress of the water is slow.

On the way back to Vernal Dave and myself were intercepted by Bill Allen who informed us that the Shiner Brothers ~~and~~ damed Pot Creek and were taking water through two ditches. Dave and I returned to Pot Creek and broke the dams. We estimated that each of the two ditches held one cfs and that a minimum of 20 acre feet had been diverted. Under the circumstances we deemed it necessary to charge the Colorado users with the loss as it was their water in the channel at the time.

Monday, July 10, 1961--Crouse (Bill Allen) Reservoir.

Time of visit--5:30 PM.

Staff gage on weir below reservoir--0.71

Flow--9.68 cfs

Gate reset to read:

Staff gage on weir below reservoir--0.95

Flow--14.8 cfs

Comments-- At 7:00 PM the water had reached Bill Karren's diversion in Colorado. This diversion is approximatly one mile from the Utah-Colorado line a nd approximately 12 miles from the reservoir.

Upon observing the channel it was noted that the bank was wet 6 to 8 inches above the water level. With these conditions in mind Dave and I decided to release another 5 cfs from the reservoir.

The U.S.G.S. gage on the Utah-Colorado line was visited at this time.

Outside staff gage--1.04

Flow-- 5.50 cfs

Wednesday, July 12, 1961--Crouse(Bill Allen) Reservoir.

Time of visit--6:30 PM

Staff gage on weir below reservoir--0.90

Flow--13.7 cfs

Calculated flow for this day--28.52 acre feet.

Comment--The release of the water to the Colorado users having been completed the gate to the Crouse (Bill Allen) Reservoir was closed at 6:30 PM.

The U.S.G.S. gage was visited.

Outside staff gage--1.20

Flow--10.9 cfs.

(continued)

At 4:00 PM water was being stored in the Offield and Karren reservoirs. Bill Karren's was filled to capacity and the excess was flowing downstream into the Offield Reservoir. There was 4.54 cfs in the Karren ditch (measured at a 2 foot rectangular weir at the head of the ditch).

Downstream from the U.S.G.S. gage the stream channel has a steeper gradient and in places flows over bedrock. These channel conditions prevail down to the Offield reservoir. Consequently, channel losses in this section of the channel should be negligable. negligible

Conclusion--Preliminary information from the U.S.G.S. indicates that 76 acre feet of water flowed past their station of the Utah-Colorado line. This figure will probably be adjusted pending analysis of the flow chart by the U.S.G.S. staff.

Comparing the release figure (154.92) ac ft) with the amount of water that flowed past the U.S.G.S. gage (76 ac ft) approximately 50% of the water released reached its destination in Colorado.

A number of photographs were taken by Dave Rasmussen. These pictures have not been developed and therefore will be submitted at a later date. The final data from the U.S.G.S. will be submitted at a later date also.

Respectfully submitted

(Signed) Robert G. Guy

Area Engineer

(Signed) Dave Rasmussen

Pot Creek Water Commissioner

cc: Mr. Wesley Signs
Irrigation Division Engineer
P.O. Box 95
Steamboat Springs, Colorado

DATA SHEET

183.00 ac ft This figure represents the water allocated to the Colorado rights as computed from the U.S.G.S. flow records on Pot Creek above the Matt Warner Reservoir. The computations were based on the priority schedule which gives the first 5 cfs to Bill Allen, The next 6 cfs to the Colorado rights and the remainder to Zelph Calder.

-18.30 ac ft 10% storage loss in Matt Warner Reservoir.

164.70 ac ft Water stored in the Matt Warner Reservoir and belonging to the Colorado rights.

-9.78 ac ft Conveyance loss between Matt Warner and Crouse Reservoir.

154.92

-20.00 ac ft Estimated amount of water diverted by Shiner Brothers.

134.92

+20.00 ac ft Holdover storage in Crouse (Bill Allen) Reservoir.

154.92 ac ft Total amount of water to be released from the Crouse (Bill Allen) Reservoir to the Colorado rights.

96.80 ac ft Amount of water released from the Crouse (Bill Allen) Reservoir from 5:30 PM July 5 to 5:30 PM July 10, 1961.

29.60 ac ft Amount of water released from the Crouse (Bill Allen) Reservoir between 5:30 PM July 10 and 5:30 PM July 11,1961.

28.52 ac ft Amount of water released from the Crouse (Bill Allen) Reservoir from 5:30 PM July 11 and 6:30 PM July 12, 1961.

154.92 ac ft Total amount of water released from the Crouse(Bill Allen) Reservoir to the Colorado rights.

TABULATION OF WATER COMMISSIONER'S ANNUAL
DITCH REPORTS FOR IRRIGATION SEASON OF 1960 1961

District No.	No. of Ditches Reported	Amount Of Appropriation Cubic Feet Per Second	Capacity Of Ditches Cubic Feet Per Second	First Day Water Was Used	Last Day Water Was Used
43	57	780.42	909.00	2-25	10-1
44	122	531.51	849.00	4-19	8-22
54	73	161.91	327.50	4-8	11-11
55 & 56	No Water Commissioner Report				
57	60	335.78	434.50	4-10	10-1
58	305	1,634.89	1,809.00	4-1	11-1
Total	617	3,444.51	4,329.00	2-25	11-11

District No.	Average No. Days Water Carried	Average Daily Amount Carried Cubic Feet Per Second	No Of Acre Feet Used	Total Number of Acres Irrigated
43	101	283.07	73,899.99	20,240.4
44	40	465.23	37,675.36	22,693.0
54	98	247.25	62,061.09	7,895.0
57	88	162.96	38,426.94	13,985.0
58	61	1,043.13	137,267.80	54,485.0
Total	388	2,201.64	349,331.18	119,298.4

TABULATION OF WATER COMMISSIONER'S ANNUAL RESERVOIR REPORTS FOR IRRIGATION SEASON OF 1961

District No.	Use of Water	No. of Reservoirs Reported	Area of H.W.L. Acres	Capacity in Cubic Feet	Capacity in Acre Feet
44	Irrigation	12	289	69,364,197	1,592.4
	Stock Water	5	100	19,450,613	446.5
	Fish & Recreation	1	35	12,092,256	277.6
	Not Used	4	94	8,964,080	205.8
	Total	22	518	109,871,146	2,522.3
54	Irrigation	1	30	17,345,000	398.2
	Stock Water	1	10	1,436,000	33.0
	Not Used	1		1,700,000	39.0
	Total	3	40	20,481,000	470.2
57	Irrigation	6	150	85,054,658	1,952.6
	Stock Water	5	132	32,302,349	741.6
	Domestic	1	100	30,975,295	711.1
	Not Used	2	10	7,210,447	165.5
	Total	14	392	155,542,749	3,570.8
58	Irrigation	13	483	511,872,796	11,751.0
	Domestic	2	120	68,436,160	1,571.0
	Total	15	603	580,308,956	13,321.0
Total All Districts	Reported	54	1553	866,203,851	19,885.3

RESERVOIR TABULATION (CONTINUED)

District No.	Quantity of Water In Reservoir May 1, 1961		Quantity of Water In Reservoir Nov. 1, 1961		First Day Water Used From Reservoir	Last Day Water Used From Reservoir
	Cubic Ft.	Acre Ft.	Cubic Ft.	Acre Ft.		
44 Irrig.	61,343,597	1,408.2	0.0	0.0	6-16	8-7
Stock	19,450,613	446.5	19,450,613	446.5	- -	- -
Fish	12,092,256	277.6	12,092,256	277.6	- -	- -
Total	92,886,466	2,132.3	31,542,869	724.1		
54 Irrig.	17,345,000	398.2	0.0	0.0	7-8	8-20
Stock	1,436,000	33.0	1,436,000	33.0		
Total	18,781,000	431.2	1,436,00	33.0		
57 Irrig.	81,567,545	1,872.5	0.0	0.0	5-6	9-1
Stock	32,302,349	741.6	32,302,349	741.6		
Dom.	30,975,295	711.1	2,752,992	63.2		
Total	144,845,189	3,325.2	35,055,341	804.8		
58 Irrig.	343,785,669	7,892.2	97,621,380	2,241.1	5-26	9-6
Dom.	68,436,160	1,571.1	51,201,295	1,175.4	7-20	9-16
Total	412,221,829	9,463.3	148,822,675	3,416.5		
Total All Districts	668,734,484	15,352.0	216,856,885	4,978.4	5-6	9-19

RESERVOIR TABULATION (CONTINUED)

District No.	Average No. Days Water Carried	Average Daily Amount Carried Cubic Ft.	No. Of Acre Feet Reservoir Water Carried	Total Acres Irrigated	Remarks
44	35	3.67	1,444.4	1,290	Part of Acreage is Reported Under Ditches
54	42	4.70	398.2	800	Supplemental Water To This Acreage
57	51	2.77	2,143.1	1,543	Supplemental Water to This Acreage
58	22	75.75	4,892.0	100	Water Supplemental to Ditches Reported
	60	3.25	390.0		
Total	82	79.00	5,282.0		
Total all Districts		90.14	9,267.7	3,733	