Steamboat Springs, Colorado November 27, 1967

Mr. A. Ralph Owens Colorado State Engineer 101 Columbine Building 1845 Sherman Street Denver, Colorado 80203

Dear Mr. Owens:

I herewith present my Annual Report for Irrigation Division Number Six for the year 1967.

Attached to this report are the tabulations of the Water Commissioner's Ditch and Reservoir Reports for 1967 for Water Districts Number 43, 44, 57 and 58. Also attached is a copy of the Water Commissioners report for the administration of Pot Creek for 1966. This report is always one year late due to the fact that it is submitted in March by the Utah Commissioner administering this area.

A total of 851 ditches were reported in the Division with a total of 639,759 acre feet being diverted for the irrigation of 141,888 acres, making an average diversion of 4.5 acre feet per acre. The irrigation season extended from March 15th to November 3rd, with District 43 having the longest season which extended over 102 days.

Water Commissioner reports show a May 1st reservoir storage of 16,926 acre feet with a 20,304 acre feet capacity. There were a total of 62 reservoirs reported by Commissioners in all Districts. The November 1st storage is reported as 8,607 acre feet, this figure actually misleading due to the fact that there are more recreational reservoirs every yea and these remain full or nearly so the year around.

The May 1st snow pack was below normal with the soil moisture below normal. The runoff for the Yampa-White River drainages was predicted at 70% of normal.

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With storage at an all-time low it appeared that we were in for a dry year. The first two weeks of May were unusually dry and allowed everyone to get their spring work completed and from all appearances confirmed the prospects of a dry year.

Rains started in approximately mid-May and above normal precipitation continued through August with the rain coming at the proper intervals for proper irrigation. This made what originally appeared to be a dry year into one of the best production years that we have had in many years.

The temperatures were also above normal which also aided in making an outstanding crop.

Small grains and dry-land hay produced a bumper crop in the Division almost without exception. Irrigated crops were also above average in production.

Some of the crops were hard to harvest due to rain in late July and August. However, the above-average production made up for any waste caused by excess precipitation.

The range land in the Division had one of the highest productions in many years with an excess of grass left after the grazing season.

Water District 43 had a good water supply. What started out to be a hard year on Piceance Creek with most of the ditches closed earlier than usual turned out to be an outstanding year due to the May and June rains.

The interest in oil shale is still high with oil companies studying the water supply for White River. An atomic blast under ground is planned for this area in the coming year. It is hoped that this will release the oil in the oil shale.

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The Rangely area was denied the right to form a water conservancy district due to a discrepancy in the law which made it illegal for a district of their evaluation to form. An attempt to change this law by the 1967 Legislature failed. At the present time the area is considering forming a sub-district under the Colorado River Water Conservation District so they might work on building the Rangely Project under the Small Projects Act.

The Feasibility Investigations by the Bureau of Reclamation on the Yellow Jacket Project are to be completed by this fall with a draft of the report completed shortly thereafter. The project, if completed, will furnish around 55,000 acre feet of water for the irrigation of about 23,600 acres around the Meeker area.

The adjudication proceedings are still underway in Water District 44 with several claims being presented at each court hearing.

The Juniper Water Conservancy District and the Colorado River Conservation District have put up \$20,000 for the Bureau of Reclamation to start Feasibility Studies on the Juniper Project located in Moffat County.

Water District No. 54 enjoyed above average precipitation as did
the rest of the Division. The Cheyenne Wyoming Transcontinental Diversion
out of the North Fork of the Little Snake was visited this fall and all
of the facilities are completed and working including a large storage
reservoir in Hog Park on the headwaters of the Encampment River.

The Bureau of Reclamation is in the advanced planning stages on the Savory-Pot Hook Project in District 54. The final plan is expected in 1969. A slight set back was experienced this summer when a sizeable block of land was determined unsuitable for irrigation as a result of

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soil surveys. Other lands were available so it is doubtful if this factor will hold up the project.

The Division Engineer was called on to furnish testimony to the Court concerning ditches in Water District No. 55 that had been previously adjudicated in Water Districts 44 and 54. The first General Adjudication of Water District No. 55 is presently underway in the District Court in Moffat County.

There are very few ditches in Water District 55 and it is doubtful if this will cause any change in the administration of the District.

The Pot Creek Water Users meeting in Vernal Utah was attended on March 15, 1967. The meeting was, for the most part, routine. Mr. Dave Rasmussen was appointed as Water Commissioner for 1967. Mr. Rasmussen was contacted this fall and apparently Pot Creek had an average run of water and it was delivered to the Colorado users with a minimum of trouble. Apparently the Utah Game and Fish Department buying the Crouse Right has releived the situation on Pot Creek considerably.

Everyone was saddened by the sudden death of Mr. A. R. Goree, Water Commissioner in Water District No. 57 for over 35 years. Mr. Goree worked friday, June 23rd, in apparently good health and passed away on sunday, June 25th, with a heart attack.

Mr. Steffen, Water Commissioner in Water District 44, who had previously served as a Deputy in District 57 was able to fill out the remainder of the year without any difficulty. It was fortunate that it was an easy year.

A test was given in October for a replacement in District 57 with four applicants being tested. It is fortunate to have this many applications

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for the position.

The Sheriff Reservoir enlargement for the town of Oak Creek was completed with the exception of a little work on the riprap.

A new Deputy Water Commissioner was hired for the Upper Yampa River in Water District 58. This has helped considerably in a troublesome area and it should also aid in a change over when Mr. Light reaches retirement age.

The Bear River Reservoir Company hired a Grand Junction engineering firm to make a Feasibility Study on the Yamcola Reservoir site on the headwaters of the Yampa River. They plan to try to construct this under the Bureau of Reclamations Small Projects Act. The report is almost complete at this time. It would certainly help to utilize the flow of the Upper Yampa if this project could be constructed.

The Game, Fish and Parks Department has completed the Willow Creek Reservoir at Hahns Peak. The final inspection was made November 22nd, at which time the gates were closed and storage was started. This reservoir is a joint project with Colorado-Ute Electric Association, with the Game and Fish Department using 18,000 acre feet for strictly recreation purposes and Colorado-Ute using 5,000 acre feet for standby storage for their power plant at Hayden. It is not contemplated that Colorado-Ute will need this water in the near future. This lake, which will cover some 1,100 acres, should make an outstanding recreational area.

The Game and Fish Department also completed and filled the Upper Stillwater Reservoir above Yampa. This is nice recreation area and to date has caused no administration problem, even though it is in a water short area.

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There was an adjudication proceedings opened in Water District No. 58 November 13th by the Town of Steamboat Springs to adjudicate winter flow for the Town.

An artesian water well was brought in by an oil well driller west of Yampa on Watson Creek. This well is producing around 6 c.f.s. of warm water from an 8 inch well. The temperature is around 110° F. and the water is fresh with possibly a little hardness. The ranche involved is having the well cased and capped. This could well start an increase in well drilling activity in this area.

The Bureau of Reclamations Weather Modification Project is still under way with more snow measurements, stream measurements and cloud seeding. Many valuable records and information are being collected, if nothing else.

The Water Pollution Hearings were attended in Grand Junction. Some suggestions were made as to the classification of the different reaches of the Little Snake River. The rest of the streams in the Division seemed to be properly classified as to amount, use, etc.

A Water Commissioners meeting with all of the Commissioners of the Division in attendance was held the 3rd of April. The years work was covered with problems discussed and questions answered. This is the second such meeting and they seem to be very helpful for everyone involved.

The fall has been rather dry but snows the last week have started a good snow pack in the higher mountains which is encouraging for the 1968 water year.

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I would like to thank the Water Commissioners of my Division for their cooperation and for doing an excellent job during the past year.

Also, I wish to thank the State Engineer's Office for their cooperation in fulfilling all requests made by the Division.

Respectfully Submitted,

Wesley E. Signs

Irrigation Division Engineer

Division No. 6

TABULATION OF WATER COMMISSIONER'S ANNUAL DITCH REPORTS FOR IRRIGATION SEASON OF 1967

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	220	1,562.41	2,251.34	3 - 15	11-1
44	190	813.80	1,113.58	4-4	10-16
54	71	261.82	600.91	4-15	11-3
55 & 56		No Water Comm	issioner Repo	rt	
57	70	457.54	450.00	4-5	11-1
58	300	1,691.10	1,711.00	4-1	11-1
TOTALS	851	4,786.67	6,126.83	3-15	11-3

District No.	Average No. Days Water Carried	Average Daily Amount Carried Cubic Feet Per Second	No. of Acre Feet Used	Total No. Of Acres Irrigated	Water Use Acre Feet Per Acre
43	102	1,084.8	278,442	34,439	8.6
44	47	698.9	108,657	28,889	3.8
54	98	238.1	57,421	10,340	5.6
55 & 56		No Water Comm	issioner Repo	rt	
57	63	246.3	56,417	15,140	3.7
58	62	1,083.6	138,822	53,080	2.6
TOTALS	372	3,351.7	639•759	141,888	4.5

TABULATION OF WATER COMMISSIONER'S ANNUAL RESERVOIR REPORTS FOR IRRIGATION SEASON OF 1967

District No.	Use of Water	No. of Reservoirs Reported	Area of H.W.L. Acres	Capacity in Cubic Feet	Capacity in Acre Feet
प्रेप	Irrigation	20	336	99,118,551	2,275.4
	Stock Water	3	5	6,415,920	147.3
	Fish & Recreation	3	142	38,436,941	882.4
	Not Used	3	4	1,332,000	30.6
	TOTAL	29	487	145,303,412	3,335.7
54	Irrigation	1	30	17,345,000	398•2
	Stock Water	3	10	2,103,739	48.3
	Not Used	3	4	1,700,000	39.0
	TOTAL	7	ht	21,148,739	485•5
57	Irrigation	7	185	86,301,226	1,981.2
	Domestic	1	33	30,975,295	711.1
	Not Used	4	38	30,935,951	710.2
	TOTAL	12	256	148,212,472	3,402.5
<i>5</i> 8	Irrigation	12	480	501,369,405	11,509.9
	Domestic	2	120	68,436,160	1,571.0
	TOTAL	14	600	569,805,565	13,080.9
TOTAL ALL DISTRICTS REPORTED		62	1,387	884,470,188	20,304.6

RESERVOIR TABULATION (CONTINUED)

1	District Quantity of Water Quantity of Water No. In Reservoir In Reservoir May 1, 1967 November 1, 1967		r	In Reservoi November 1,	r 1967	First Day Water Used From	Last Day Water Used From
		Cubic Ft.	Acre Ft.	Cubic Ft.	Acre Ft.	Reservoir	Reservoir
44	Irrig.	69,111,876	1,586.6	6,096,384	140.0	6-1	8-18
	Stock	5,749,920	132.0	5,749,920	132.0		
	Fish	38,436,941	882.4	38,436,941	882.4		
	TOTAL	113,298,737	2,601.0	50,283,245	1,154.4	6-1	8-18
54	Irrig.	17,345,000	398.2	0.0		7-25	9-7
	Stock	2,103,739	48.2	600,000	13.8		
	Not Used	1,700,000	39.1	1,700,000	39.0		
	TOTAL	21,148,739	485•5	2,300,000	52.8	7-25	9-7
57	Irrig.	85,220,998	1,956.4	2,734,700	62.8	6-10	7-25
	Domestic	30,975,295	711.1	15,453,000	354.7	8-18	9 - 25
	Not Used	31,265,951	717.7	30,072,100	690.4	·	
	TOTALS	147,462,244	3,385.2	48,259,800	1,107.9	6-10	9 - 25
58	Irrig.	386,978,312	8,883.8	222,863,059	5,116.2	5-15	10-10
	Domestic		1,571.1	51,201,295	1,175.4	8-28	12-30
	TOTAL	455,414,472	10,454.9	274,064,354	6,291.6	5-15	12-30
	TAL ALL STRICTS	737,324,192	16,926.6	374,907,399	8,606.7	5-15	12-30

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
†††	32	33•70	1,781	990	Portion of acreage reported under ditches
54	45	2.50	225	800	Supplemental water to this acreage
57	40	9•7	777	1,050	Some of this acreage reported under ditches
58 Irrig.	29	42.55	3,602		Water supplemental to ditches reported
Domestic	100	2.20	395		
TOTALS	41	90.65	6,780	2,840	

SUMMARY OF 1966 POT CREEK DISTRIBUTION

The yield of water from drainage above the Matt Warner was significantly less during 1966 as compared with 1965. Total from 1966 was 2,122 Ac. Ft. as compared with 3,857 in 1965.

Due to the fact that Zelph Calder held over approximately 2,400 Ac. Ft. from 1965, his Matt Warner Reservoir was full and spilling 5.7 cfs on my first visit, April 12, 1966. On this date, I released approximately 8.0 cfs. as per Zelph Calder's request. He was concerned over the poxxibility of his fish going over the apillway and down Pot Creek.

In contrast the yield measured below the Matt Warner and Crouse Reservoirs, near the Colorado line, was 400% of the 1965 yield, when 2,140 Ac. Ft. was measured in 1966 as compared to 535. Ac. Ft. in 1965.

The Crouse Reservoir headgate was damaged by ice and storage in this facility was limited until the Fish and Game Department was able to repair the damage and begin storage. The Fish and Game Department released a portion of their storage for use in construction of the Jones Hole Fish Hatchery road and the balance for wildlife use down stream from the Crouse Reservoir. As a result some of this water went into Colorado and added to the total received by these users. Records show measurable amounts as late as August 26, 1966 as compared to July 11, in 1965.

Repair on the Crouse Reservoir was completed by September 30, 1966 and storage of the released water from Matt Warner began. For details on the release of Calder water to the Fish and Game, see the agreement which is enclosed in this report.

Since all storage facilities filled to capacity and all rights were satisfied, use of the storage water was left to the discretion of Users owning the right to use this water.

On July 11, 1966, Max Rasmussen and Karl Searle were delivered 60.0 Ac. Ft. out of their total of 138.0 c. ft. included as part of the Calder Right, and stored in the Matt Warner Reservoir. In addition to this Zelph Calder may have turned them other water later in the season when the Matt Warner was drained for fish harvest.

Water used by A. Allen Bennion was released by Zelph Calder as was water used by H. Ralph Siddoway down stream.

My last visit was on October 14, 1966, the Matt Warner had a g. h. of 935. Approximately 8.0 cfs. was being released down stream for use by Calder and in an effort to lower the water for fish harvest.

In summary, it would be fair to say that all rights were satisfied up to and above the limits of their fillings due to the fact that the Matt Warner hold over caused extra water to go down stream to the Fish and Game as well as Colorado users. Also, the necessity of draining Crouse Reservoir for headgate repair increased the water available for use by Colorado users downstream.

Page 2 Summary of 1966 Pot Creek Distribution

The only known violation of water use occured October 6, 1966, when the Fish and Game Department personel reported that Mayne Bros. were diverting water from Pot Creek in the old Shiner Ditch, North and East from Allen Bennion's property. The diversion was dammed off and photos taken before and after for record. It is recommended that this diversion be destroyed, since it has been ruled as being illegal, in several instances before, by the State Engineer's Office.

For assessment purposes, it is recommended that all users be assessed on the basis of using a full right, or as follows:

Zelph Calder	Total available for	use 2,443.2	ac.	ft.
Joseph O. Calder		262.0	ac.	ft.
Allen A. Bennion		101.8	ac.	ft.
Carl E. Searle		69.0	ac.	ft.
Max B. Rasmussen		69.0	ac.	ft.
Utah State Fish &	Game Dept.	1,144.0	ac.	ft.
Colorado Users (1	49.8 through Matt War	mer + (Limited to	the	eir
е	xtra water released f	from filings 100%)	
C	rouse - Total availab	le for use 2,140	ac.	ft.

Trips to the Pot Creek area were made on the following dates per the request of individual Users or in the necessary operation of the system to obtain information or make necessary adjustments:

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April 12, 1966
April 24, 1966
May 14, 1966
May 27, 1966
June 4, 1966
June 12, 1966
July 11, 1966
July 16, 1966
September 26, 1966
October 14, 1966
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These trips were as per agreement, at the rate of \$25 each, \$10 mileage and \$15 time compensation.

After considering the experience gained over a period of years as the Pot Creek Commissioner, the following recommendations are made in an effort to more efficiently distribute the waters of this system:

1. A need still exists for the State Engineer's Office to compile a comprehensive priority schedule, including all rights out of Pot Creek. Re-distribution of property ownerships has caused considerable confusion of water rights held in the original Calder Storage in Matt Warner Reservoir. Some question also exists on the diversion and total amount of water allocated to the Colorado Users.

Page 3 Summary of 1966 Pot Creek Distribution

- 2. While some advance was seen during 1966 in the area of water measuring and control structures, a need still remains for the installation of proper measuring devices below the Matt Warner Reservoir and the Crouse Reservoir. The Fish and Game Department along with the Colorado Users should be complimented for the work done at their diversion point above Crouse Canyon.
- 3. The budget should remain at least twelve trips and \$50 for the Commissioner's Report.

POT CREEK DISTRIBUTION 1966

	ALI	LOCATION OF POT	CREEK FLOW		Matt
Month March	Pot C. Flow U.S.G.S. A.F.	Fish & Game A.F.	Colo. Rts. A.F.	Calder Rt. A.F.	Warner Gage Ht.
1					
2 3 4 5 6 7 8 9					
4 5					
6					
8					
10					
11 12					
13 14					
15 16					
17					
18 19					
20 21					
22 23					
23 24 25 26					
26	2.0	2.0			
27 28	6.0 10.0	6.0 10.0		•	
29 30	16.0 26.0	10.0 10.0		6.0 16.0	
31 OTAL	36.0 96.0	10.0 48.0		26.0 48.0	

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POT CREEK DISTRIBUTION 1966

Month April	Pot C. Flow U.S.G.S. A.F.	Fish & Game A.F.	Colo. Rts. A.F.	Calder Rt. A.F.	Matt Warner Gage Ht.
4	40.0	10.0	30	30.0	
123456789	46.0	10.0) 0	36 . 0	
2	44.0	10.0		34.0	
ر ار	40.0	10.0		30.0	
- - -	38.0	10.0		28.0	
5	40 . 0	10.0		30.0	
7	48.0	10.0		38.0	
é	52.0	10.0		42.0	
a	42.0	10.0		32.0	
10	36.0	10.0		26.0	
11	26.0	10.0		16.0	
12	17.0	10.0		7.8	2" above
13	15.8	10.0		5.8	spillway
14	16.6	10.0		6.6	•
15	19.8	10.0		9.8	
16	22.0	10.0		12.0	
17	22.0	10.0		12.0	
18	40.0	10.0		30 .0	
19	48.0	10.0		38.0	
20	34.0	10.0		24.0	
21	24.0	10.0		14.0	
22	24.0	10.0		14.0	
23	24.0	10.0		14.0	
24	26.0	10.0		16.0	Spillway le
25	22.0	10.0		12.0	
26	22.0	10.0		12.0	
27	17.8	10.0		7.8	
28	16.2	10.0		6.2	
29	16.2	10.0		6.2	
30	16.2	10.0		5.2	
COTAL	895•4	300.0		595•4	

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POT CREEK DISTRIBUTION 1966

	A.	LLOCATION OF PO	ot creek flow		Matt
Month May	Pot C. Flow U.S.G.S. A.F.	Fish & Game A.F.	Colo. Rts. A.F.	Calder Rt. A.F.	Warner Gage Ht.
1	14.8	10.0	4.8		
2	15.2	10.0	5.2		
	15.8	10.0	5 . 8		
4	17.0	10.0	7.0		
3 4 5 6	17.8	10.0	7.8		
6	19.0	10.0	9.0		
7	22.0	10.0	12.0		
7 8	22.0	10.0	12.0		
9	24.0	10.0	12.0	2.0	
10	28.0	10.0	12.0	6.0	
11	32.0	10.0	12.0	10.0	
12	30.0	10.0	12.0	8.0	
13	28.0	10.0	12.0	6.0	
14	22.0	10.0	12.0		Spillway
15	18.2	10.0	8.2		
16	14.8	10.0	4.8		
17	11.2	10.0	1.2		
18	7.8	7.8			
19	7.0	7.0			
20	6.4	6.4			
21	5 . 6	5.6			
22	5.2	5.2			
23	4.6	4.6			
24	4.6	4.6			
25	4.6	4.6			
26	5.2	5 .2			
27	5.2	5.2			Spillway
28	4.4	4.4			
29	4.0	4.0			
30	3.2	3.2			
31	5.2	5.2			
LATO	424.3	424.8	149.8	30.0	

POT CREEK DISTRIBUTION 1966

	W. 4.1				
Month June	Pot C. Flow U.S.G.S. A.F.	Fish & Game A.F.	Colo. Rts. A.F.	Calder Rt. A.F.	Matt Warner Gage Ht.
1	3.4	3.4			
2	2.8	2.8			
3	2.4	2.4			
1 2 3 4 5 6 7 8 9	2.2	2.2			
5	2.2	2.2			
6	2.0	2.0			
7	2.0	2.0			
8	5.2	5.2			
.9	4.0	4.0			
	2.6	2.6			
11	2.2	2.2			107.5
12 No	significant f	low after this	date affecti	ng rights	
13					
14					
15					
16					
17					
18					
19					
20					
21 22					
23 24					
2 4 25					
26					
27					
28					
29					
30					
TOTAL	31.0	31.0			
FOR SEASON		803.8	149.8	673.4	107.5
1 -11 -11-1901			1.740		1010 J