

STATE OF COLORADO

IRRIGATION DIVISION NO. 4

MONTROSE

FREDERICK W. PADDOCK  
IRRIGATION DIVISION ENGINEER  
P. O. BOX 15

SUBJECT:

Annual Report, 1962

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

Dear Mr. Whitten:

We had a rather unique year for Irrigation Division #4 during the current season for 1962.

All of the Water districts had one thing in common, a late peak for the snow runoff, being, relatively speaking, low in volume and an extremely long runoff period in time. Because of this, very little regulation was needed in most of the districts, in some cases for only a short period of three weeks.

Because of the plentiful supply of water, there were few valid complaints made, which took a great deal of pressure off our department.

In two or three instances we had protests against reservoirs running some storage and refilling; however since those making the complaint had all of their priorities filled, the matter complained of was dropped.

Charges were filed by three towns and a Ditch Company and a Cattle Company asking for my removal from office. The Civil Service Commission's findings indicate that I am a most undiplomatic and untactful person. I am afraid that at times I will have to agree. Their ruling, however, was in my favor, I am happy to say. I believe the other Division Engineers should be informed in detail of this happening, and such other administrative personnel of our department of somewhat similar duties, so that if possible a similar happening does not occur in other parts of the state. It would further appear from the testimony in my hearing that our Division is behind most of the rest of the state, and is having to catch up at an accelerated rate, in regard to headgates, spillgates and measuring devices.

One of the chief reasons I won was the unqualified backing I received from our department and your office. *Doing your job and duties correctly is not enough.*

Water District #28 for the first time in many years, received a complete report on ditches. Mr. Hicks and myself discussed the situation and both felt that with a dam the size of the Blue Mesa Reservoir Dam under construction, the best protection we could give all concerned was to start keeping more records. Commissioner Hicks reported over 192 ditches, and by the end of next year we hope to have them all. We will also start keeping close tab on the new storage reservoirs.

Mr. Hicks reports show that it is the opinion of some ranchers that there has been a tendency among users to apply too much water. The results noted by those

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interested, are that "flat" or swamp grasses are replacing the timothy, orchard, and other valuable grasses. It also has killed out the red clover and other legumes mixed with the better grasses.

Several drains built in this district are enabling several ranches to harvest lands that had become too wet to farm.

Mr. Hicks further notes and reports that return flows from the extra waters applied in later summer from the reservoirs on Razor and Hotsprings Creeks are aiding many more ditches than they were originally built for, and he predicts further benefits from Needle Creek Reservoir.

There were no calls from Cochetopa Creek this year, for the second time in about the last 14 years.

Work on ~~Highway~~ <sup>in two ditches</sup> 50 prevented some use of water for six weeks. All in all he says it was a very good year.

In Water District <sup>40</sup>, our office and the Water Commissioner had no administrative problems. We understand a hearing was held in regard to the Orchard City pipeline exchange, but to date have heard of no results. We have been going along as usual as a result.

We did have a major failure of a dam this year, although no damage was done. Simply stated, the foundation appeared to slide under the downstream section of the Knox Reservoir Dam, causing the downstream face immediately below the crown to crack and separate, for about 200 feet of the dam. This dam has been used for holdover storage at a level near the highwater line and, as a result, it appears the foundation has filled up to a supersaturated point, allowing the slide to occur. *We believe it to be a typical case from lack of proper drainage.*

We inspected the Cole #5, and the Hotel Twin Lake Reservoir Dams on completion. Both structures appear to meet the minimum requirements of your office. Changes in plans on the Hotel Twin Lake Reservoir Dam appeared to agree with what was discussed by Mr. L. D. Morrill, engineer for the owner, with Mr. L. Rees Brooks of our department.

It appears to us that more detailed engineering must be done on future structures in this area. Some of my reports 12 years ago went into the subject of the soils in this district, it being my position that we did not in all cases have the world's best material for dams. Dams made of silts and rock flour surprise one at times with how well they stand up, even though in many cases insufficient engineering and sound construction took place or were not followed.

In Water District #41 we had our usual problem when it became necessary for

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I make mention that a hydrographic investigation is being made in Water District No. 42 on Kannah Creek to make certain determinations of conditions which may be imposed by the Court in connection with certain changes in points of diversion of several water rights which have been granted by the Court.

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Some trouble developed at the Bull Basin Reservoir Dam when a crack appeared below the high-water line and it appeared necessary that restrictions in stage of storage be imposed. The crack is irregular, parallels the crest, and goes from near the high-water line at the outlet valve control southerly to a point about four feet below the high-water line.

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the Uncompahgre Valley Water Users to pro~~vide~~ water. However, as this took place for only 2-1/2 weeks instead of about 60 or 70 days, as usual, we all concluded it was a wonderful water year.

There is great interest in Districts 41 and 68 in the proposed Ridgway Project. Stated simply, the U. S. Bureau of Reclamation proposes to build a reservoir below Ridgway to store about 125,000 to 150,000 acre feet of water. There are proposals for primary and supplemental uses of irrigation water, and water for domestic and industrial uses. Flood control is an important feature. All in all, we feel that the project has much to recommend it. The Uncompahgre Valley Water Users have been replacing about ~~3,000 of a 7,000 foot siphon~~, and we understand will have a new headgate and diversion works for the M & D Canal next season. It is a much needed improvement.

In Water District #42, we will mention that a hydrographic survey has been made on Kannah Creek. We hope when the results are announced that all of our local problems will be solved. It appears that new owners may take over, and we entertain optimistic thoughts that new faces and attitudes will help greatly.

Bull Basin Reservoir Dam cracked below the high water line, we applied a restriction and made the owners responsible ~~to~~ looking after the situation in ~~maintaining~~. A Soil Conservation employee made some level measurements, and stated that we were in error in regard to the elevation of the crack. We made a return trip, took pictures and more levels. The crack is irregular, parallels the crest and goes from near the highwater line at the outlet valve control southerly to a point about four feet below the highwater line. ~~The owner has made threats about court orders and so on, but we have not received one yet.~~

A slide took place on Cottonwood Reservoir while the Bureau of Reclamation was rebuilding it. The reservoir was drained for the rebuilding when it occurred. The dam was rehabilitated and a new outlet built. We mention this simply because it is our experience that when water saturates the earthen materials on Grand Mesa, sudden or complete withdrawal of storage on 3:1 or steeper slopes quite often causes sliding of embankments.

Commissioner Saunders and myself feel that ~~as of~~ the 1963 irrigation season, we will begin to have administrative problems under the Collbran Project of a different nature and scope than we have previously encountered. For instance, we will have a domestic water problem approaching on Cottonwood Creek. Only a pipeline will adequately solve this. Already Plateau Creek is flowing heavier in July and August than it has in the last 20 years. ~~of my own knowledge~~. The Vega storage is doing this. The Ute appropriation for a domestic pipeline will cut this some, but not all. We understand another reservoir and ditch on the North side of the Plateau are proposed.

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On July 20, 1960, we received written notice that the Redlands Water and Power Company wanted more flow turned down to them on the Gunnison River in the District. Due to a severe water shortage and their date of appropriation of 1912 we could not help them. We hope when the Blue Mesa Dam operates, as the Crawford and Paonia Dams now do, that the additional flows may make a sufficient difference of no shortage for them, even though they have a junior decree.

As we view it, changes now are so fast they far overshadow current problems and quite often we cannot predict the end result.

Water Districts # 59 and 62 are now administered by Mr. Edwin Hofmann, who was appointed Acting Water Commissioner after the death of Mr. Henry Koch. He is assisted by a Deputy in District #59, Mr. William Rhodes.

Due to the favorable water year, both men had a nice time getting into the swing of things. There were no particular problems in either District in 1962.

Work is progressing on both the Blue Mesa and Morrow Point Dams. The bridges and road changes necessary because of the construction at the Blue Mesa Dam site are almost ready for use. Here, too, are major changes. We cannot tell yet what all of our benefits in the water picture will be, but we have reason to believe we will benefit.

*Quint*  
In Water District #60, we were asked to step in and write a letter which would deprive a water company of their subsidy payments from the U. S. Department of Agriculture. We took the position that this was not our problem and bowed out.

Surveys are in progress in this district by the Bureau of Reclamation, along the San Miguel River. Plans are too indefinite to mention at this point.

We assisted the Town of Nucla last spring, when the Town Storage dam through heavy leakage, and heavy use of water, ran short of water for a three or four week period. The suggestion made by you and Mr. Owens was followed, and a drain was constructed into the sump and a new pump installed to pump the leakage back into the reservoir. This we think is the most practical solution to their problem, although if a means can be devised to stop the leakage to a great extent, that would possibly be even better, in conjunction with the drain and pump.

The Gurley Reservoir Dam stored water at the 60.5 level this year and it makes the lake appear much greater. Holdover storage for domestic use will probably average 2,000 acre feet from now on.

In Water District #61 we have no new projects to report, but we note that storage and flow use of water were most unusually high. I assisted the Water Commissioner

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on two occasions by driving over to his district and attending meetings with water users at his and their request. This district receives its supply of water from the eastern slopes of the La Sal Mountains in Utah, and there is small chance of increasing their supply. If it snows they get it, if it does not snow they do with less or without.

In Water District #63 Commissioner Saunders finds that the newly completed reservoirs are not only serving the owners, but are adding to the flow of the West Creek by waste, seepage, and making springs flow greater, which accrues to the benefit of the Creek. Being used to getting by on small amounts of water, the users in this district do not fuss as much as they do in districts having greater supplies.

District #68, like District #41, did well this year. Outside of Horsefly Creek all users were well satisfied. There was one lawsuit below the headgate not involving the water officials. A great deal of what was said in our report of District #41 also applies to this District.

By way of conclusion, I have more office callers now than ever before. Most of their questions are of the nature of what is going to happen in the near future with the dams being built. At this point I cannot say, other than <sup>that</sup> good to accurate measuring devices and possibly the increasing use of automatic registers will solve, partially, at least, some of our problems and questions.

We will shortly need a hydrographer, and I recommend that all commissioners be paid on an annual basis. It is possible when this occurs we can cut down on the number of deputies. I am not sure but have started a personal study of this point.

I am making a personal study of a problem area in Water District #40, which toward the end of next season, I hope to have some answers.

I wish that I could express in words my appreciation for the confidence and assistance rendered to me by you and the members of your staff, during those moments when the chips were down and I was under attack for the performance of my duty. Looking back, I will say I would handle some situations in a different manner, but I would still have to make the same rulings, as there was no other way to go.

The Statistical report is attached.

Very truly yours,

*Frederick W. Paddock*  
Frederick W. Paddock

1962

Annual Report  
 Division of  
 Water Commission of  
 Irrigation Division  
 State of Colorado

Ditch Report

Ditch No.	No. of Districts in the Water District	No. of Ditches Administered	Irrigation Water Delivered in Acre Feet	Daily Amount of Water run in Second Feet	No. Days Water was Run	Domestic and Municipal Water Run Acre Feet	Public Works Water Run Acre Feet	Total Acre Feet in the District
28	439	240	82,801	518	80	—	—	24,336
40	1,520	482	398,748	923	216	28,500	—	152,890
41	222	89	662,096	1,505	220	23,434	—	97,594
42	1,434	206	908,583	1,907	212	36,180	802,014	131,539
59	489	70	195,744	576	170	9,320	800	35,596
60	464	24	64,955	176	185	2,580	12,880	13,360
61	59	14	10,070	25.6	196	648*	—	1,500
62	439	20	65,795	263	125	1,344	—	23,000
63	114	21	8,204	22.9	179	2,832	—	1,200
68	422	138	106,516	246	214	15,075	—	25,943
Total for Division 4	5,546	1,304	2,503,506	6,144	365	119,533	814,812	581,206

\* Domestic water run during the non-irrigating season.



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Annual Tabulation of  
Water Commissioner Reports for  
Irrigation Division No. 4

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Reservoir Report

Water District Number	No. of Reservoir Districts	No. of Reservoirs Administered	Amount of Storage on June 15, in Acre Feet	Irrigation Storage delivered during the season in Acre Feet	Domestic and Municipal Storage in Acre Feet, delivered	Manufacturing and Power Storage Acre Feet, Deliv-	Amount of Storage on November 1, in Acre Feet
28	5	4	2,775	2,497	--	--	none
40	439	154	69,876	61,491	none	none	8,385
41	6	4	695	515	180	none	147
42	470	60	18,208	16,203	339	--	6,976
59	35	5	106,000	51,590	--	803	63,240
60	73	2	10,421	10,421	1,400	none	2,000
61	none	1	5,360	2,698	--	--	1,300
62	22	6	4,113	3,618	495	--	675
63	4	5	1,155	1,155	--	--	none
68	27	12	842	422	--	--	420
Total for Division 4	1,076	252	219,445	150,609	2,414	803	81,166