STATE OF COLORADO IRRIGATION DIVISION NO. 4

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

SUBJECT:

Annual Report, 1964 November 27, 1964

J. E. Whitten
State Engineer
Denver, Colorado

Dear Mr. Whitten:

The 1964 irrigation season started with a rather meager appearing supply of water which ran a supply through the so-called flood season without floods and high water then ran out for a two-week period past the usual time when regulation starts. We actually finished out the season with above-average flows.

Checking with the County Extension Agent, we find that with the exception of sugar beets, crops were better than normal. There was a rather heavy loss of hay due to untimely but welcome rainfall in July and August. Average production of sugar beet yields this year appears at this time to be fifteen tons per acre for the Grand and Uncompangre Valleys.

We might add we had an unusually heavy field work load this year although there were no serious problems in any one district.

Water District 28

Our new water commissioner had a pretty tough time on Razor Creek this year. This creek has been an administrative headache for a good many years. I went over the creek with him and we ordered in headgates on all of the ditches and a larger Parshall Flume above the Vouga Reservoir. Some repairs and releveling of structures is also needed. We further ordered a new gage rod and capacity table for the Vouga Reservoir.

Mr. Davison had to regulate a dozen ditches by moving rocks in the streambed of Razor Creek. This, when equipped with new headgates will be an easy
creek to handle. He will be able, with headgates and measuring flumes, to
deliver measured amounts of water to where those amounts should go.

Due to the rain fall, upper Cochetopa Creek gave us no special problems this season. We are working with the users for adequate headgates and flumes in the near future on all of the ditches instead of part of them.

We now have four streams in this district with reservoirs in the upper reaches. It is amazing how much difference some storage water makes to all concerned in July and August; less trouble for the administrative officials and more feed for the stockmen.

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Water District 40

With some arm twisting on our part, the books and sheets for the annual report are in from this district at the required time for the first time since I have been Division Engineer.

I have had very little trouble in this district this season. The only reason I can figure out for this district is that it was a year of high rainfall.

We had one reservoir failure in which severe leakage developed and stopped # by our Deputy Water Commissioner, Frank Brezonick. Mr. Brezonick gotone helper to wade out into waist deep water with him and apply blankets and a mattress from a bedroll, to seal off the leak. He handled an extremely dangerous situation with excellent judgement, skill, and with what most of us would consider plain, rawcourage. The Reservoir Dam on Minnesota Creek. It has since been repaired and this leak will probably be of no further problem to us. The owner also laid blank seals on other spots appearing to seep and/or percolate away the storage.

Three other dams were rebuilt. Grandbys #6 and #7 and Sackett Reservoir Dam. Each dam being rebuilt and brought up to safe standards, certainly aids the scenic picture as well as making for easier, better, and more economical administration. Another help is the new road the U.S. Forest Service built into Sackett and Weir & Johnson.

The new Deputy Water Commissioner, Charley Wooley has straightened out several problems on Dry Creek.

Water District 41

In this district we had an unusual situation. We had calls for water under conditions which caused us to make several inquiries. We found the ditches of the organization full for all practical purposes, but there still calling for more water. Since there are four districts involved we watch this pretty closely. We refused the call, as had we turned the water down, it would have for all practical purposes been run to waste.

For three-weeks period we teetered back and forth between close administration and very little administration. Rainfall occurred every fewdays. We are happy to say the rainfall won out and we hadonly a minimum of regulation to perform.

Quite a bit of hay <u>waslost</u> here this summer but other crops were excellent. For some reason fruit ripened slowly this last season and come off from three to five weeks later than usual.

Water District 42

Kannah Creek this year gave us more problems than the rest of the district put together. First we had a hassle over interpretation of decrees. Then later whether the water officials had authority to turn flowthrough the reservoir, or not. As this last involved the City of Grand Junction and their Water Superintendant, the argument got pretty strong before we entered into a talk in the City Hall, with all parties present at one time to reach a proper settlement of the issues. We have been promised a letter from the city attorney, which we have not yet received.

Things went more smoothly under the Collbran Project this year. We

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refused to enforce the contracts between the Conservancy District and the users on Big and Cottonwood Creeks. When the district men found that they had torum their own water it seemed to make things go smoother.

The Palmer Ditch #1 on Big Creek installed new headgate, releveled their Parshall Flume, and installed an automatic recorder. For the past three months the Palmer Ditch users have bragged about how good their water supply was this year. The commissioner and his deputy are happy.

We had some minor problems with the reservoir storage and <u>flowon</u> Bull Creek. Some storage was accumulated by accident, so far as I can determine, but we were able to settle this amiably.

Water District 59

No serious problems arose here, although this is one of the districts tied in with the District # 41 calls for water we mentioned earlier. There were a number of change of point of diversion actions in this district. Some moving water from 50 or 60 miles or more from the original point of diversion. Curiously there were no objections raised by water users of any sort. The Court therefore allowed the changes, but wrote the decrees so that all decrees made prior to this action had priority over these decrees. This will be one of the places we can use a Hydrographer when we can get one.

On a change of point of diversion on Ohio creek which would only move water about one mile or so there was a big objection. This case has a rather farreaching effect, as a number of years ago at a public meeting, to which the
commissioner was invited and did attend, the users of this Ohio Creek voted
that noone would call in the water commissioner. They lived up to this
agreement, until this case hit court. We are therefore, in the process of
issuing orders for headgates and Parshall flumes to all who do not have them.
This is almost everyone. The completion of the Blue Mesa Unit of the
Curicanti Project is also another factor entering the picture.

We cannot predict just how many changes will occur with the Hydro#Electric plants in operation, but we can see changes are already taking place. We hope we have a hydrographer prior to this, to set up our measuring points prior to the Curecanti-Blue Mesa Operation.

Water District # 60

In this district we are losing our commissioners due to advancing age. He is seventy this year. While we hate to see him retire, since it the rule or law we now operate under, we are thankful we could keep him this long. He was able to see that most of his problem users put in measuring devices and headgates where we had administrative problems, some of them as late os October.

The Farmers Water Development Company through a reorganization has at this time become owner of all of the water rights that are run in their Gurley Canal. This should eliminate problems for both the water officials and the Company. Every stockholders share of stock is now equal. Probably the Company Supt. will have more problems from now on than he foremerly had, as people are never satisfied with water division.

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Hatings Mesa is no longer a bad problem but the new commissioner will have some problems around the Lone Cone Mountain area, and inthe area east of Nucla and Naturita. Another area of problems he may encounter is the conflicting use of reservoir for power water versus direct flow use by rival power corporations.

Water District 61

In this district the commissioner and myself refused to administer wells, which are alleged to be taking water from Paradox Creek. Since the well water or ground water is not covered by statutes directing the water officials how to proceed, we further refused to write a ruling, giving it orally.

We did however go over the Paradox Valley in detail, to all decreed ditches and the wellsin question. The Paradox Valley is principally composed of salt beds of the Hermosa formation lying in a southeasterly by northwesterly bearing. Faults running at approximate right angles have silver and copper deposits. All water entering the valley has to lie on an alluvial till. Wells going through the overburden into the salt formations simply allow the waters therein to literally fall into great depths, beyond the point of reclamation and use. Such wells should, of course, be sealed. It would appear to usthattwo wells may very well be depleting the stream of probably .25 cubic feet per second.

What I am getting at isthat Commissioner Garber and myself were namedinal a law suit; in which the plaintiffs have asked the court to direct us to shut down the wells and to place the well owners under injunction not to use the wells. It is quite possible this may never go to trial. It is however, one more argument, we fell for agood ground water code.

Water District 62

Some of the decreed waters of this district were transferred upstream as a result of the Blue Mesa Unit of the Curecanti Project. The comment made in our report for District 59 covers the situation in this district, as the waters so moved in this district were moved into District 59.

Mr. Hofmannhad some troubld on the Little Cimmarron Creek. Most of these were settled by reading from the statute, the owner or users' duties and the water officials duties.

As we understand it the Blue Mesa Dam is about 60% complete. Mr. Hofmannand myself are preparing or planning as best we can for storage operation anddelivery. We hope we will have a hydrographer prior to operation of Blue Mesa Reservoir. However we will in any event have a usable plan and made of operation worked out by next April, hydrographer or not. Probably we will need an alternative plan, what we do with a hydrographer and what we do without one.

District 63

Due to the combining of small ranches into larger units, West Creek is the only stream the commissioner has to look after. For the most part water users are very cooperative. By and large they have a better than average attitude toward our department. We feel this is due to the excellent work

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of Commissioner W. W. Saunders, who is their first and to date only water commissioner.

He has insisted from the start of his administration on Parshall Flumes and headgates with spillways. Once the creek was stabilized by good structures the problems were over.

Water District 68

In this district we note in many cases an extremely heavy use of water for the current year. Not only in this district but over the Division as a whole, many of our people try to solve all of their agricultural problems with more water. This year being one in which there was little regulation, even ditches with marginal water rights for the most part ran more than the necessary 3 acre feet per acre needed for maximum production. Due to change of ownership many of our former problems no longer exist in this district. There is a greater tendency to view the future with optimism as this district is one with definite recreational possibilities.

The water commissioner of this district has more than average ability to get along with people. As nearly as I can tell, probably 75 or 50% of his water users feel he is doing a good job. The users in the downstream district, humber 41 likewise feel he is treating them fairly. In view of this we feel he is doing an excellent job.

This year he has given us a new total for overall acreage in his district, which revised figure we believe to be reasonably accurate than any heretoforgiven us. Duty of water this year in this district figures but to be approximately 3-1/2 to 4 acre feet per acre for the whole district. This seems to give a bumper crop of hay which is their principle crop. Some silage corn is raised and 3 or 4 fields of sugar beets. Altitude is the limiting factor for farmers of this district.

In conclusion we would like to make the following recommendations:

- 1. We need an hydrographer in Division 24, and we recommend that funds be requested for one. We understand some water users organizations are also requesting the services of an hydrographer.
- 2. We recommend the rule on requiring all written orders for headgates and measuring to be signed by the Division Engineers be modified to permit water commissioners III to issue their own orders.
- 3. We farther recommend that a small amount of additional hydrographic equipment be issued our division. We particularly need a 50-pound Columbus weight and a cable car winch frame and winch be issued us for cable car measurements. The reason we recommend this is that until such time as we have an hydrographer it will be necessary tomake our own hydrographic for delivery of water. In event we get a hydrographer he would still need the equipment.

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We believe a study of conflicting areas in administration of water between Colorado, and the U.S. Governmental agencies should be made. Our congressmen and senators probably should be asked to support and push for passage of the measure to define state and federal authority over water. Usurpation of our department's duties in regard to water rights could cause a severe impact on the entire states economy. One could write a book on this subject.

Slowly, year by year, we notice a shift from irrigation water to power, municipal, and manufacturing purposes. There is the usual emotional outcry that the other fellow wastes the water. Our observation over a period of twenty years is that our present practice of irrigation from open ditches is probably about as wasteful of water as one may run it. Changing the use of our waters to purposes other than irrigation, will result in the installation of pipelines for carriage and it is not unlikely that our ditches for irrigation will be lined with concrete and other imperations materials in the not distant future. In some cases the water will be put in pipes. Duty of water should and will be studied and defined. One has the feeling at times of standing on the threshold of a complete new era of use of water and of water history.

Lastly, all field books for Divison No. 4, are in on time for the first time that in the last 15 years. One man who never got them in Before was first, and the one who was first for 14 years turned in the his book last.

Very truly yours,

Frederick W. Paddock

Frederick W. Paddock,

Irrigation Division Engineer.

Annual Tabulation of Annual Tabulation of Water Commissioner Reports Irrigation Division No. 4
State of Colorado
Ditch Report

կ76,564	907,658	32,392	162	7,236	2,495,056	1,187	5,612	Total for Division 4
25,931		1	86	416	105,531	140	132	68
1,187		1,294	153	18	5,410	22	114	63
23,015	\$5 THE RES	500	196	890	348,930 *	1,2	կ39	62
3,347	8 8	190	163	16	5,184	12	59	61
10,190	8	117	160	208	66,605	25	կ6կ	60
35,596	803	7	165	651	214,962	66	489	59
130,290	906,855	29,991	180	1,620	583,259	249	1,434	42
77,609	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		237	1,554	775,163 *	89	222	41
150,169	1 1 1		112	1,464	322,705	կ82	1,520	40
19330	\$ 50 PM	1	168	200	67,306	60	439	2 8
No of Acres Irrigated in the Water District	Power & Manufacturing Water Run in A cre Feet	Domestic and Municipal Water Run Acre Feet	No. Days Water was Run	Daily Amount of Water run in Second	Irrigation Water Delivered in Acre Feet	No. of Ditches Administered	No. of Ditch Decrees In the Water District	Waţer District Number

Includes Gunnison Tunnel Intra-district diversion Districts 59 and 62 to District μ .

1964

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

Reservoir Report

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Water District Number	No. of Reservoir Decrees in District	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	Domestic and Manufacturing Municipal Storage in Acre Power Storage Feet, delivered Acre Feet, Deliv-	Amount of Holdover storage November I, in Acre Feet
2 8	ح	3	1,860	1,660	the making the		200
4	439	241	73,880	64,588		to the feet of	19,538
4	9	m	273	126	14.7	# T T T T T T T T T T T T T T T T T T T	147
42	η 170	69	52,670	19,270	1,200	6,848 **	No Report **
3.9	35	У	106,000	42,710	t t t	803	63,870
္	73	2	11,630	9,130	1,500	3,186	1,540
19	None		1,384	1,384	der lief van dek		None
62	22	9	4,113	12,710	1,80	igen führ man den der	675
6.2	1	77	750	750	that was day law	der gen bei del bei	
6.3	27	12	81,2	1,22	9- We die 9- 92		420
Total for Division 4	1,081	248	253,402	182,750	3,327	10,837	96,390

** These two items should be identical. The last report received indicates all water used and no holdover storage left for winter use.