JOHN A. LOVE Governor



DIVISION OF WATER RESOURCES

232 STATE SERVICES BUILDING 1525 SHERMAN STREET DENVER, COLORADO 80203

DIVISION OF WATER RESOURCES

IRRIGATION DIVISION NUMBER 4

ANNUAL REPORT

1967 Water Year



DIVISION OF WATER RESOURCES

232 STATE SERVICES BUILDING 1525 SHERMAN STREET DENVER, COLORADO 80203

> Montrose Office P. O. Box 456 Montrose, Colorado 81401

November 25, 1967

Mr. A. Ralph Owens, State Engineer 1845 Sherman Street Denver, Colorado

Dear Mr. Owens:

Attached hereto is the Annual Report of Irrigation Division No. 4, as required under the provisions of Colorado law C. R. S. 148-12-7, 1963.

Respectfully submitted,

Ralph V. Kelling, Ur V Irrigation Division Engineer



DIVISION OF WATER RESOURCES

232 STATE SERVICES BUILDING 1525 SHERMAN STREET DENVER, COLORADO 80203

ANNUAL REPORT

IRRIGATION DIVISION NUMBER 4

At the present time it appears that this water year could almost be called the Kannah Creek story, as considerable time and effort have been expended in an attempt to resolve some of the issues in this problem area. Hopefully parts of the conflict may be resolved by the Court in the not too distant future. Water Commissioners W. W. Saunders and G. Pickens are to be commended for their honest and conscientious efforts, cooperation, and restraint in administering this most difficult area without due cooperation from many of the parties involved.

Generally the 1967 water year was very good in Division No. 4, with many timely saving rains occurring when severe irrigation water shortages appeared to be imminent. Although this region did not receive the massive and continuous rains of many eastern slope areas, rainfall here was received at timely intervals to interrupt otherwise long dry periods, and these rains were of great value in relieving near-drought conditions.

The Gunnison Valley area possibly had the mildest winter in about forty years, and spring soil moisture conditions were therefore extremely dry with prospects for a summer hay crop discouraging. However a good winter snow-pack in the high country and subsequent spring run-off combined with very good summer and fall rains to make

1967 a good water year in this area.

Flow records of the Uncompangre River at the Colona gaging station have indicated a 53 % of normal flow for the year, but apparently this condition did not seriously injure crop production or summer range for stock.

Maximum storage in the Elue Mesa, the largest reservoir in the U.S. Bureau of Reclamations' Curecanti Project, was reached on July 20, 1967, when a total of 574,900 A.F. was impounded. The last pour of concrete at the Morrow Point reservoir dam was completed this fall. Bostwick Park Project construction was initiated this spring at the Silver Jack reservoir damsite on the Cimarron River and has continued steadily throughout the year.

The Gunnison Tunnel, operated by the Uncompangre Valley Water Users Association, was shut down early last fall for repairs and said work was completed in the spring prior to irrigation demands on the tunnel. The City of Montrose removed in excess of 50,000 cu. yds. of silt from the City reservoir on Cerro Summit and has commenced construction of the Fairview reservoir, which will become a part of the city water supply system.

The Town of Cedaredge was granted alternate points of diversion by the Court for their pipeline system under a new law recently passed by the legislature.

Various highway construction projects in Division No. 4 have been completed this year, and their water requirements have either been cleared through this office or contracted for with individual or group water users.

The Colorado Game, Fish, and Parks Department completed construction of the Highline reservoir in Mesa County and the Miramonte reservoir

IN San Miguel County.

In general, fruit ranches suffered severely again this year due to late killing freezes. Peach production in the Grand Junction-Palisade area was probably cut to less than a 10 % crop, and the apple harvest in the Cedaredge-Paonia area was averaged about a 35 % crop. By contrast, sugar beet production was better than average with both tonnage and sugar content up above average yields. One small tract near Delta was reported anticipating a yield in beets of 32 tons per acre prior to harvest time.

The Association of Water Commissioners and Deputies of Irrigation Division Number 4 held their annual meeting in Montrose on August 3, 1967 with 22 members attending.

The State Engineer held a hearing on June 12, 1967 in Grand Junction concerning exchanges under the Crawford Project, and defined the duties of the water commissioner as they relate to the regulation of various ditches enjoying said exchanges.

The tragic death of Mr. Frank Brezonick occurred on September 12, 1967 when his vehicle went out of control and he was killed at the Paonia reservoir. His passing is a great loss not only to his family and friends, but to the department as well, where he will not be readily replaced. He was an extremely able employee, conscientious and just in all his work with water users, and he earned the respect of many people in the North Fork Valley for his fair manner and impartial judgement in water administration.

WATER DISTRICT NO. 28

As mentioned before, the Gunnison Valley was extremely dry throughout the winter and spring seasons, and of course all of the district is included in this statement. However, summer hay crops were quite good due to rather extensive rains. Much of the cutting had to lay on the ground for some weeks and some may have been lost because of excessive moisture content. As is normal in a dry season, the commissioner was kept very busy distributing available irrigation water. Area ranchers continue to install headgates and flumes, often with the commissioners advice and assistance. The Hot Springs reservoir gage rod was re-marked as the initial marking by other parties was incorrect. Again this year the Vouga reservoir operated under an exchange agreement, apparently to the satisfaction of all parties. Mr. Davison continues to assist U. S. Bureau of Reclamation personnel in their investigation studies of the proposed Upper Gunnison project.

WATER DISTRICT NO. 40

A situation similar to Karnah Creek may be developing on Ward Creek, where senior direct flow decrees call for their rights early in the spring, and before the natural flow has really develpoed. An awkward but practical solution has been to peg all reservoirs involved, and one consequence to this type circumstance has been that seven deputies now own Ski-Doos, as this type of transportation is essential in this area in early spring. The Town of Cedaredge was granted a change of decree under the new law concerning alternate points of diversion, and the meters on the various springs have been removed and measuring devices are expected to be installed below major confluences - i. e., a Venturi tube in the main line on East Beaver Creek. The Overland - Terror conflict was hopefully resolved in

Delta District Court this summer when the Court apparently required the Overland Company to install undershot structures in a number of tributaries which are intercepted by the Overland Canal and which supply the senior priority of the Terror Company. Messrs. Paddock, Kelling, and Brezonick were called as witnesses. A sizeable leak occurred in the dam abutment at the Deep Slough reservoir near the high water line, and said leak was repaired in the fall upon approval of plans submitted to Mr. Paddock. The Paulson reservoir was completed this fall and approved for future storage. Personnel changes within the district are as follows: Mr. Roy Blair has replaced Mr. Clarence Drexel at Crawford. Mr. James Carr has taken the former duties of Mr. Elair in addition to Mr. Carrs' former duties, and Mr. Charles Wooley has replaced Mr. Frank Brezonick in the Paonia area. Many problems were overcome in the district because of slightly over 100 % of normal snow-pack on Grand Mesa, possibly due in part to the cloudseeding operations of the Grand Mesa Water Users Association.

WATER DISTRICT NO. 41

Completion of repairs to weak sections in the Gunnison Tunnel was accomplished prior to project irrigation demands in the spring of the year. The Uncompanier Valley Water Users Association, operating agency for the project, reached a low of 65 % of demand in the spring when an exceptionally low flow run-off existed on the Uncompanier River and prior to this areas receipt of numerous very good rains. Colorado Game, Fish, and Parks Department personnel lowered Sweitzer lake level 2 ft. in mid-October to check control gate safety, operation, and to permit additional construction work. The City of Montrose is currently involved in construction of the Fairview reservoir damsite and replacement of new larger size pipe in their domestic

line from Cerro Summit.

WATER DISTRICT NOS. 42 and 63

Generally a very good water year was enjoyed in this area, marred only by the continuing conflict of Kannah Creek. Basically the problem has been as follows: reservoir owners refused to honor Mr. Saunders direct verbal and written orders to open their control gates in the spring after senior rights had made verbal and written demands upon the commissioner to by-pass all natural flow. Thereupon the water officials impounded storage in two reservoirs, and the injured party has taken his case to Mesa County District Court for damages and judgement of \$ 120,000. In the late fall the City of Grand Junction took the law into their own hands and released said impounded storage, as they feared the dam would not safely contain this water throughout the winter and spring. The water officials treated said released storage as natural flow and administered it accordingly. The water officials have recently been joined as parties in the case by the Court. Some beneficial results hopefully will be attained as automatic recorders and other measuring devices have been requested of the City and the Grand Mesa Reservoir Pool, and in the future both water officials and water users shall have sufficient records to insure that all parties are receiving only that volume of water to which they are legally entitled. Additionally the City has been again advised of the need to clarify through the Court some of their decrees which are incorrect according to present usage. Hopefully the efforts of the water officials this year will have future beneficial results, and possibly some of the administration problems may be resolved. Proper transportation for all seasons of the year and honest cooperation of all parties would assist greatly in solving much of the problem which now exists.

The Water Pollution Control Commission of the State of Colorado held a hearing in Grand Junction in mid-May, at which time the public was given an opportunity to present testimony concerning the relative classifications of streams in this area. The Colorado Game, Fish, and Parks Department completed construction of the Highline reservoir near Mack, however serious leaks developed on filling. The east abutment is apparently in a porous shale interval, and even after extensive grouting the total leak amounted to 8-10 cfs when the reservoir was filled to an elevation of 62' on the gage rod. It appears that the future highwater line will be about 40-45' on the gage rod, as at this level the leak is reduced to about 2-3 cfs. The Redlands Power Canal on the Gunnison River upstream from Grand Junction was short 150 cfs of their senior decree in the fall, and as we could not shut off enough junior decreed rights to fulfill their requirement the Bureau of Reclamation increased their releases from Blue Mesa reservoir to meet their demand. A number of water user meetings in the district were attended by Messrs. Saunders and Kelling, as well as numerous visits with attorneys.

WATER DISTRICT NOS. 59 and 62

The Taylor Park reservoir spilled during the period of July 12 to July 28, 1967. Controlled releases during the year were requested by numerous individuals and groups in the Gunnison area to obtain better non-fluctuating flows for the benefit of resort owners and sportsmen and said flow was regulated as follows: 50 cfs from December 16, 1966 to April 30, 1967; 100 cfs during May; 150 cfs from June 1 to July 4; 250 cfs from July 5 through October; and 450 cfs from November 1 through the end of the year. All parties, including water users, apparently were well pleased with this arrangement and similar releases will be obtained in 1968. The U. S. Bureau of Reclamation offered rental

water on an exchange basis in the upper Gunnison area but apparently sufficient water was available and no users participated in this initial program. Our office took over operation of the gaging station on Soap Creek above Sapinero and a State owned automatic recorder has been installed at the station. A number of water meetings in Gunnison have been attended by personnel from this office. Said meetings have been conducted by the Upper Gunnison Water Conservancy District, with Eureau of Reclamation personnel attending, and project status and study reveiws of the Upper Gunnison Project have been the primary agenda.

WATER DISTRICT NOS. 60 and 68

Since the retirement of Mr. J. A. Sullivan, Mr. Howard Noble and I have imposed upon Alvies' time and knowledge of the area many times in an effort to familiarize ourselves in this area. Due partly to the Kannah Creek conflict this year, I have not had the time to spend with Mr. Noble in Water District # 60, and consequently records for the year are rather scanty. Hopefully in the near future we will spend considerable time in the district familiarizing ourselves with those structures which have been administered in the past.

The Colorado Game, Fish, and Parks Department started construction at the Miramonte reservoir site south of Norwood.

In Water District # 68 the water year was very good, with very few problems. A number of headgates were rebuilt, flumes re-set, and an automatic recorder was installed at the Garnet trans-mountain diversion on Owl Greek Pass.

Water Commissioner Report Irrigation Division No. 4 State of Colorad

Ditch Report

Water District Number	No. of Ditch Decrees 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	Power & Manufacturing Water Run in Acre Feet	No. of Acres Irrigated In the Water District
			009 701			•		29,062
20 00	569	822	104,050 7EC 0E0			11, 414	5475	153,540
04	2095	484	000,000			2.516		77,550
4	222	70	000,600			25.166	878,838	123,804
42	1014	259	107,225					35,596
59	661	57	T00 ° 9 8T				20.000	10.240
09	529	21	000,09					
19	62	12	869*9					5,547
0	460	20	408,209					23,015
ט ע	114	9	11,375					1161
	027	140	75.000					25,647
00	6175	1317	3,021,226					482,992

Note: Howard Noble appointed Water Commissioner in W. D. 60 on January 4, 1968, therefore prior records are incomplete.

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

Reservoir Report

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 I 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	. 23	2	2310	2,000			
0 4	603	139	62,651	45,975			19,486
4	9	0					
42	467	91	7	19,894	-		
6 6	19	0	507,100				592,900
09 &	102	-		5,320		20,516	6,250
19	0	. 1		026			
62	88	0					
ю 9	4	0					
89	24	H					
Total for Division 4	1276	238	572,061	74,119			618,636