COPY FOR W. R. SMITH

ANNUAL REPORT

WATER DIVISION VII

REPORT PERIOD NOVEMBER 1, 1975 THRU OCTOBER 31, 1976

Submitted To

Mr. C. J. Kuiper

State Engineer

State of Colorado

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by

Wayne M. Crosby

Division Engineer

Durango, Colorado

December 8, 1976

Richard D. Lamm
Governor

C. J. KUIPER
State Engineer

DIVISION OF WATER RESOURCES

WAYNE M. CROSBY
DIVISION WATER ENGINEER
DIVISION 7
P. O. ~~BOX 551~~ Drawer 1959
DURANGO, COLORADO 81301
Office Phone: 247-1845

December 8, 1976

Mr. C. J. Kuiper
State Engineer
Colorado Division of Water Resources
1313 Sherman Street, Room 804
Denver, Colorado 80203

Dear Mr. Kuiper:

Attached herewith is our Annual Report for the period November 1, 1975 through October 31, 1976.

Very truly yours,

Wayne M. Crosby, P.E.
Division Engineer

WMC:alf
XC: W.R. Smith
M.W. Mattern
O.J. Bell
W.M. Crosby
File

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1976 ANNUAL REPORT
DIVISION 7
Durango, Colorado

Water Division 7, comprised of the San Juan River Basin located in Southwestern Colorado, was a Spanish territory for many years and later a part of Mexico. It was added to the United States after the Mexican War. Although the Basin was part of a large area ceded to the Ute Indians, adjustments of Indian land boundaries during the 1870's opened a large part to future settlers. With the arrival of the narrow gauge railroad in the 1880's, mining and the raising of livestock and farming increased.

Of slightly under 5,000,000 acres in the Basin, approximately half are federally controlled forest or woodlands. Land uses are for timber production, watershed, recreation, wildlife and agriculture. Of the 1.6 million acres of non-federal land, more than half is used for livestock grazing. Livestock grazing is also permitted on a large part of the federally controlled lands. The importance of rangeland and grazeable woodland as watersheds, overshadows all other considerations. Food and cover for wildlife is also of great importance.

Soils in the area are highly variable. They include deep, wind-deposited soils in the valleys, shale-derived clays in many valleys and adjoining slopes, and shallow, stony rocky soils over much of the mountain and foothill areas.

The geologic formations, along with the vegatative cover, make the San Juan Basin one of the most scenic areas in Colorado. Rocks ranging in age from one-to-five hundred million years are exposed here. They are crystalline, volcanic, and sedimentary in nature and of various geological ages.

Climate in the San Juan Basin differs with elevation. Variations are found in the mountainous foothill mesa and desert zones. A climatic feature common to all zones is that winter snow accounts for about half of the annual precipitation, averaging about twenty-one inches.

Most of the Basin has an elevation of over 6,000 feet, therefore, not only is the growing season limited (six months generally), but also the mean daily temperature. One hundred and ninety-five thousand acres of irrigated croplands produce crops of dry beans,[1/] pasture grass, hay, small grain, and corn.

The Basin is one of the most popular recreation areas in the state, with over twenty million dollars per year being spent on hunting and fishing alone. There are several big game animals indigenous to the area such as elk, deer, black bear, and big horn sheep. The western cottontail rabbit is the principal small game animal, while others include the snowshoe hare, squirrels, game birds, and waterfowl. The Basin provides good fishing both in the streams and lakes which provide an excellent habitat for Rainbow, Native Brown, and Brook Trout; Walleye, Northern Pike, and Kokanee Salmon.

Winter sports are an important activity with approximately 100,000 skier visits annually. At the Purgatory Ski Area, the largest of five ski areas, in or adjacent

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1/ The Dove Creek area is the major producer of beans in Colorado. This is dryland farming with very little if any irrigation water used.

to the Basin, development now in progress will make the San Juan Basin a major attraction for skiers. Cross country skiing and snowmobiling are currently among the rapidly growing winter sports.

The Denver and Rio Grande Western Railroad conducts daily passenger tours every summer on its narrow gauge line between Durango and Silverton. Formerly a principal means of transporting heavy freight, the railroad was converted to passenger service mainly due to the curtailment of mining and the topographic nature of the Basin, making the construction costs of expansion too high.[2/] All freight moving into the Basin except from the South, must be transported by truck over the mountain passes. Highway construction and maintenance is costly due to the terrain and unstable shale soils, but cheaper than railroad construction.

The growth of the San Juan Basin is dependent on certain other utilities and their respective services such as the availability of telephone, electric, and natural gas. These are available in most communities, and as of 1976, telephones were modernized by the installation of direct distance dialing.

There is a definite need for rural water and sewage disposal systems. A shortage of underground water and the limitations of certain soils for septic systems create problems. This is particularly important at a time when rapid growth of subdividing of farms and ranches for housing developments is taking place. Home construction and recreational developments have been on the rise in rural areas in recent years, with more rapid increase projected for the future.

Clean air and clear water are among the valuable resources of the area. Pollution of these resources must be eliminated. The most common source of water pollution in the San Juan Basin is sediment resulting from soil erosion. The lack of plant cover accelerates the runoff from snow melt and rain, leading to critically eroded areas. Deep gullies are the most obvious feature of these areas. Wind erosion on dry crop land is less critical generally, but is serious in some localized areas and contributes to air pollution. Air pollution on prevailing westerly winds from the Four-Corners Power Plant near Shiprock, New Mexico, previously of major concern in the area, has been greatly alleviated by the installation of a scrubber. Pollution such as lumber mills, is of a minor extent.

Water is the most important resource in the San Juan Basin. Of the total annual water supply, approximately 270,000 acre feet are used locally. There are slightly over 195,000 acres of irrigated land within the Basin at the present time. Water will be available for an additional 250,000[3/] acres in the western part of La Plata County and dryland areas of Dolores and Montezuma Counties with the proposed Aninas-La Plata and Dolores Projects. There are nine major irrigation systems which distribute water to seventy percent of all irrigated crop lands in the San Juan Basin. They are listed in this report with other pertinent data concerning the administration of water in Division 7 for the year 1976.

2/ The change in mode of transportation also must be considered as a reason for the lack of railroad expansion.

3/ Subject to change depending on cost-benefit.

II. PERSONNEL

The following changes in personnel occurred during the reporting period:

June 1, 1976	Edward W. Blank transferred from Division II to Division VII, filling a position vacated by Kenneth Cooper as of October 1, 1975 as Water Resource Engineer "C".
August 1, 1976	Ann Fauth to Secretary 1-B
October 1, 1976	Glen Humiston to Water Commissioner "C"

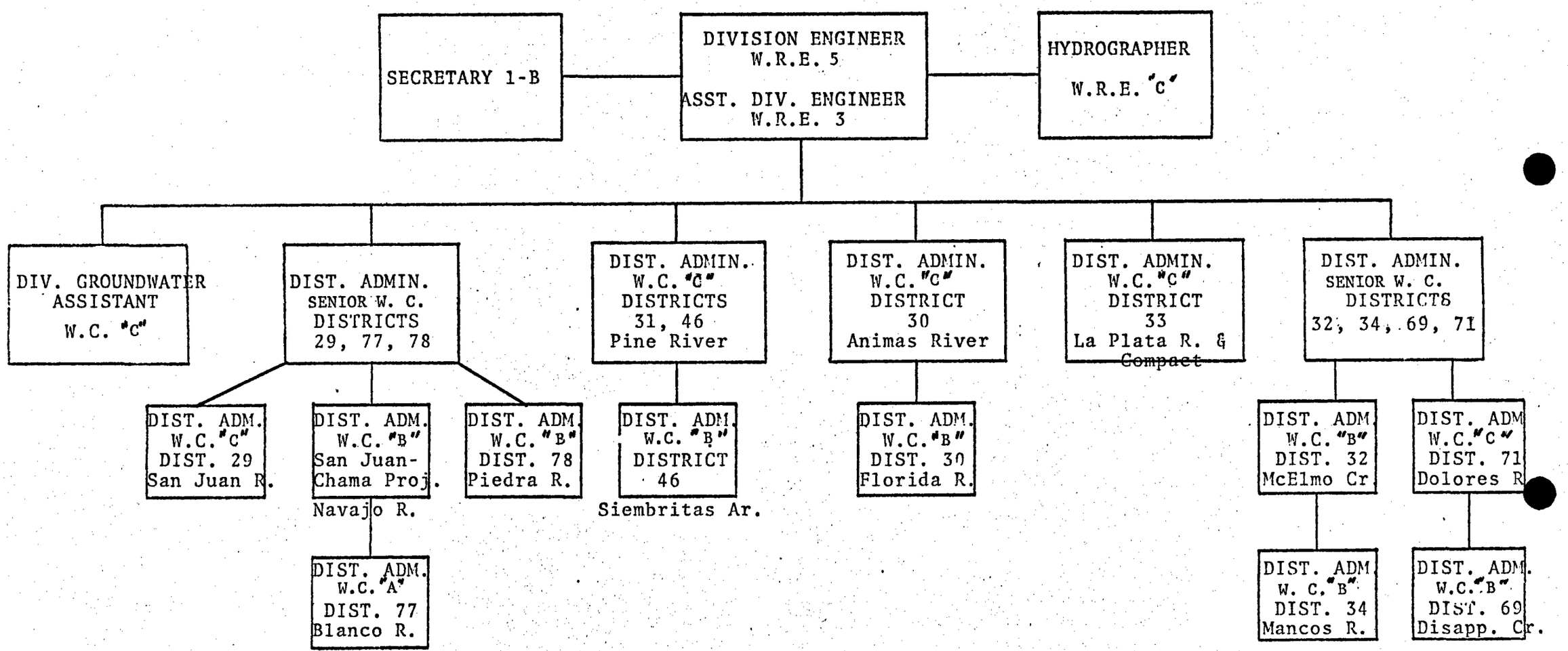
A realignment of the Division Staffing Pattern was made and submitted to Denver with corresponding forms P.C.-8.

July 1, 1976 salary increases based on salary surveys conducted in the area of the "front range" were funded. This differs from the previous year where only the Denver Area was considered. The result was a lower percentage of increase. Seventy percent of the people employed by the state of Colorado live and work in the immediate Denver area. An additional ten to fifteen percent were added up by enlarging the area.

The twelve-cent-per-mile reimbursement continues to be an unaffordable subsidy by those who drive their own vehicles in the course of their duties. Governor Lamm reneged on the last day of the time period for putting items on his call. With the exception of two or three water commissioners, all of Water Division VII is four-wheel drive territory. Operating costs continue to increase causing the break-even point to become further out of reach.

The Division staff and staffing pattern is shown on the following two pages.

PROPOSED ORGANIZATIONAL CHART
FOR
DIVISION OF WATER RESOURCES
DIVISION 7
DURANGO, COLORADO



Revised 10/1974
Wayne M. Crosby, Division Engineer

II. PERSONNEL (Continued)

NOVEMBER 1, 1975 TO OCTOBER 31, 1976

NAME	POSITION	GRADE	MONTHS BUDGETED/ WORKED		MILEAGE
Wayne M. Crosby	Division Engineer	P.E. V	12	12	1,308 P 11,245 S*
Orlyn J. Bell	Asst. Div. Engineer	P.E. III	12	12	1,873 P
Edward W. Blank[1/]	Hydrographer	P.E. II	5	5	8,447 S
Ann-L. Fauth	Secretary	Sec. 1-B[2/]	12	12	330 p**

FULL TIME EMPLOYEES - FIELD

NAME	POSITION	RIVER BASIN	MONTHS BUDGETED/ WORKED		MILEAGE
E. Ivan Danielson	Water Comm. B	Animas River	12	12	8,860 P
George E. Davis	Water Comm. B	Florida River	12	12	8,405 P 6,757 S
George Edmonson	Water Comm. A	McElmo Creek	12	12	7,821 P 5,106 S
Glen E. Humiston	Water Comm. C[3/]	Mancos R., McElmo Cr., Dolores R., Disappointment Cr.	12	12	15,043 S
J. Russell Kennedy	Water Comm. B	La Plata River	12	12	13,659 P
William P. Lynn	Water Comm. B	Blanco, Navajo, Piedra, San Juan Rivers	12	12	8,930 P
Larry Nielsen	Water Comm. B	Navajo/Blanco R.	12	12	6,715 P 4,296 S
Avrit G. Sparks	Water Comm. B.	Pine R./Siembritas	12	12	12,837 P
Wilford E. Speer	Water Comm. B	Dolores R., Disappointment Cr.	12	12	16,070 P

PERMANENT PART-TIME EMPLOYEES - FIELD

Roy M. Brown, Jr.	Water Comm. A	San Juan R., Lower Blanco R.	7	8	4,371 P 7,525 S
Ronald R. Robinson	Water Comm. A	Piedra River	5	6	6,161 P
Bob R. Shahan	Water Comm. A	Blanco/Navajo R.	4	4	2,392 P
Lawrence J. Shock	Water Comm. A	Siembritas Cr., Lower Pine River	8	8	8,519 P
		TOTAL	173	175	107,921 P 50,894 S
		GRAND TOTAL MILES DRIVEN IN DIVISION			158,815***

* Vehicle #5313 used by Division Engineer, Assistant, Hydrographer and Dam Section personnel
** Secretary's personal mileage used for keypunching, not reimbursed by the State
1/ Transferred to Division VII June 1, 1976
2/ To Secretary "B" August 1, 1976
3/ To Water Commissioner "C" October 1, 1976
*** This is 11,242 less miles than driven in the 1974-1975 period
P Private Vehicle
S State Vehicle

III. WATER SUPPLY

A. SNOW PACK (Winter 1975-1976)

The San Juan Basin received a normal snow pack this year with the weather cooperating to bring the runoff along on schedule. All streams were average to slightly above. April first forecasts proved to be accurate and are listed below. This was the second year for our participation in snow courses on the Mancos and La Plata Rivers, with good correlation between water content and actual runoff.

SNOW PACK	NO. OF COURSES AVERAGED	THIS YEAR'S WATER CONTENT AS A PERCENTAGE OF LAST YEAR	AVERAGE
Animas River	6	75	117
Dolores River	4	61	104
San Juan River	4	73	118
La Plata River	1	60	103 (10 yrs.)
Mancos River	1	61	75 (2 yrs.)

WATER SUPPLY	APRIL THRU SEPT. (1000 A.F.) FORECAST	% OF AVERAGE	15 YEAR AVERAGE	THIS YEAR	% OF LAST YEAR
Animas River at Durango	450	111	423	364	53
Dolores River at Dolores	255	116	232	212	56
La Plata River at Hesperus	24	121	24	21	50
Piedra River at Arboles	215	119	185	192	89

STREAM SUPPLY OUTLOOK	FLOW PERIOD SPRING	SUMMER	FALL
Florida River	Excellent	Good to fair	Fair to poor
San Juan River	Excellent	Good	Fair
Piedra River	Excellent	Good	Fair
Animas River	Excellent	Good	Fair
Dolores River	Excellent	Good to fair	Fair to poor

Through spring and early summer water supplies were above average. However, no rain was received until mid-July, and none after that, resulting in below-average stream flows.

SOIL MOISTURE

Soil moisture in most of the watersheds in the San Juan Basin is determined from a relatively thin top soil. In addition, water bearing strata is exposed in the watersheds being recharged at this point. These are two of the variables that make

soil moisture correlation poor at best.

I believe that a more accurate determination of ground water recharge could be made by deducting a percentage of potential runoff by drainage basin. This percentage could be determined from computed past records of snow course water content in acre foot runoff, compared with actual runoff.

III. WATER SUPPLY

B. PRECIPITATION (Summer 1976)

Below-normal precipitation produced a dry summer season, broken only by some rain in mid-July. An equally dry fall and winter followed with warm clear weather continuing until Thanksgiving. A light snow of two to four inches fell the Friday after Thanksgiving, bringing no appreciable moisture.

III. WATER SUPPLY

C. FLOODS

A slightly above-average snow pack and normal warming trend combined to prevent flooding this year. A dry fall was in contrast to a wet one considered by some as normal for this area.

III. WATER SUPPLY

D. WATER BUDGET FOR 1975

WATER DISTRICT	SUPPLY - A.F.	DAMAND - A.F.	OUT OF DISTRICT - A.F.
29	268,045	132,401	334,190
30	472,811	220,972	511,385
31	250,382	329.479	130,968 (10,388 A.F. to District 46)
32	192,452	176,293	31,430
33	32,282	38,897	12,016
34	49,448	47,862	15,270
46	10,388	7,747	10,601
69	12,723	5,343	7,808
71	145,144	70,196	249,200 (119,908 A.F. to District 32)
77	72,197	61,023	74,148
78	204,571	49,789	226,940
	1,710,443	1,140,002	1,603,956

III. WATER SUPPLY

E. UNDER GROUND WATER

The well printouts formerly used to make up this part of the report gave a breakdown as to uses. However, the newer printout does not show the number of permits applied for, only those wells where the applicant has returned the beneficial use form. A comparison between the new printout with the old one shows deletion of some registered wells without any apparant reason, and does not have a breakdown on the different useages.

III. WATER SUPPLY

F. TRANSMOUNTAIN DIVERSIONS

NAME OF DITCH	WATER DISTRICT	SOURCE OF SUPPLY	RECIPIENT	AMOUNT A.F.
Pine R. Weminuche Pass (Fuchs Ditch)	31	Pine River	Leland & Harley Fuchs Del Norte, CO	227
Weminuche Pass Ditch (Raber-Lohr Ditch)	31	Pine River	Hilde Lohr & Leon Raber Del Norte, CO	2,210
Treasure Pass Diversion	29	San Juan River	Fred Falk, Del Norte, CO	278
Williams Creek Squaw Pass Diversion Ditch	78	Piedra River	Seaborn Collins, Navajo Development Co., Creede, CO	86
Don LaFont Ditch #1 E., South River Peak Ditch	78	Piedra River	Colo. Div. of Wildlife	174
Don LaFont Ditch #2 W., (Piedra Pass Ditch)	78	Piedra River	Colo. Div. of Wildlife	66
Carbon Lake Ditch	30	Animas River	Ouray Ditch Co., Montrose, CO	355*
Red Mountain Ditch	30	Animas River	Ouray Ditch Co., Montrose, CO	220*
Mineral Point itch	30	Animas River	Warren Gibbs, Ouray, CO	No structure
St. John Ditch	30	Animas River	Charles Gunn & W. Worley, Olathe, Colorado	No structure

* Records are poor on Carbon Lake and Red Mountain Ditches due to charts not being changed on time. Carbon Lake Ditch flume also is bent, submerged, and full of stream bed material.

III. WATER SUPPLY

G. RESERVOIR STORAGE

Division VII had good carryover storage going into 1976, however, a dry summer and fall depleted this.

Average supplies were stored this year but without a good or better snow pack, storage will be below-normal for 1977.

Reservoirs in this Division, noting their change in storage, are listed on the following pages.

IRRIGATION SEASON 11-1-75 THRU 10-31-76

IST.	NAME OF RESERVOIR	DECREED A.F. CAPACITY	SOURCE OF SUPPLY	LAST READING PREVIOUS YEAR	MAXIMUM STORAGE	LAST READING
32	A.M. Puett Reservoir	2,320	Summit Res. System	419	2,320	165
30	Animas Mountain Res.	17,640	Animas-LaPlata Project		Not Built	
29	Barrow Reservoir	12.97	San Juan River	13	13	13
34	Bauer Reservoir #1	229.5	Crystal Creek	24	230	75
34	Bauer Reservoir #2	1,393	Crystal Creek	966	1,393	898
71	Bear Creek Reservoir	7,261.49	Dolores River		Not Built	
77	Beaver Creek Reservoir	1.42	Navajo River	2	2	2
34	Beaver Lake No. 1	(?)			Not Built	
71	Beaver Reservoir	16,210	Dolores River		Not Built	
31	Bellflower Retention Res.	59.8	Pine River	30	30	30
69	Belmear Lake Reservoir	445.0	Rincone Creek	0	353	326
78	Bennett Reservoir	1.512	Stollsteimer Creek	2	2	2
77	Bigbee Coyote Dam & Res.	1,371.3	Coyote Creek		Not Built	
77	Bigbee-Archuleta Res.	2,470	Blanco R. (Transbasin)		Abandoned	
71	Big Pine Reservoir	459.19	Turkey Creek	357	459	209
29	Blanco Retaining Pond	68.0	Blanco River	68	68	68
30	Bondad Reservoir	478,000	Animas-LaPlata Project		Not Built	
29	Born's Lake Reservoir	67.879	W. Fork San Juan River	68	68	68
29	Bramwell Reservoir	1.749	Little Blanco River	2	2	2
29	Bramwell Reservoir #2	0.424	Little Blanco River	1	1	1
29	Bramwell Reservoir #3	1.555	Little Blanco River	2	2	2
29	Brown Reservoir	5.44	Little Blanco River	5	5	5
71	Buck Pasture Reservoir	53.94	Trib. to Beaver Creek	0	54	0
32	Cahone Reservoir	13,800	Dolores River		Not Built	
30	Cascade Reservoir	23,352	Cascade Creek	10,038	2,791	13,665
30	Cascade Reservoir #3	97.8	Cascade Creek	Power	Stabilization	
30	Cinder Butte Reservoir	24,800	Animas River	Trans. to Ridges Basin-Not Built		
30	Clifty Lodge Reservoir	1.43	Elbert Creek	1	1	1
30	Columbine Reservoir Enlge.	383	Little Cascade Creek		Not Built	
77	Columbine Reservoir	5.10	Little Navajo River	5	5	5
77	Confar Hill Reservoir	0.50	Coyote Creek	1	1	1
34	Coppinger Reservoir #1	35.46	Summit Res. System	15	18	15
34	Coppinger Reservoir #2	13.84	Summit Res. System	1	14	1
77	Coyote Park Reservoir	1.21	Coyote Creek	1	1	1
29	Crescent Lake	26.24	White Creek	26	26	26
29	Daily Hott Reservoir	409.6	McCabe Creek		Not Built	
71	Dawson Reservoir	37,380.51	Dolores River		Not Built	
29	Dry Gulch Reservoir	0.123	San Juan River	1	1	1
32	Ducks Nest Reservoir	625.6	Monument Creek	71	71	71
30	Duck Slough-Andrews Lake	131.38	Animas River	125	131	131
69	Dunham Reservoir	78.75	Disappointment Creek	79	79	79
78	Dunnagan Reservoir	93.48	Devil Creek	93	93	51
30	Durango Regulatory Res.	227	Animas-Florida River		Stabilization	
30	Durango Reservoir	140,000	Animas River		Not Built	

IRRIGATION SEASON 11-1-75 THRU 10-31-76

IST.	NAME OF RESERVOIR	DECREED A.F. CAPACITY	SOURCE OF SUPPLY	LAST READING PREVIOUS YEAR	MAXIMUM STORAGE	LAST READING
30	Durango Reservoir #1	2,220	Florida River	400	400	400
30	Durango Reservoir #2	570.0	Florida River	570	570	570
30	Durango Reservoir #3	42.5	Florida River	42	42	42
30	Durango Reservoir #4	440.0	Florida River	440	440	440
29	East Fork San Juan Res.	35,200	E. Fork San Juan River		Not Built	
29	Echo Canyon Reservoir	2,148.79	Echo Creek	2,149	2,149	2,149
29	Echo Dam & Reservoir	1,798.41	Echo Creek		Not Built	
29	Echo Reservoir	2.2	Echo Creek	2	2	2
29	Echo Reservoir #2	6.78	Echo Creek	7	7	7
31	Emerald Lake Reservoir	7,077.7	Lake Fork/Pine River	No Storage	Dam Breached	
29	Eight Mile Reservoir	1.17	San Juan River	1	1	1
71	Ethel Belmear Reservoir	87.30	Unnamed Draw	87	87	87
77	Fall Creek Reservoir	4.67	Fall Creek	5	5	5
77	Fall View Reservoir	7.78	Aspen Cr./ Navajo River	8	8	8
29	Fawn Gulch Reservoir	0.63	San Juan River	1	1	1
31	Fitzgerald Irr. Sys. Res.	2.5	Crowbar Creek	2.5	2.5	2.5
33	Fellers Reservoir	1.6	Big Stick Ditch	0	1.6	0
30	Florida Res. & Canal (Pastorius Reservoir)	970.0	Florida River		Stabilization	
31	Fredrick Reservoir No. 2	3.0	Pine River	0	3	0
29	Freemans Lake & Spring	4.0	Square Top Creek	4	4	4
78	Friend Reservoir No. 1	286.26	Yellowjacket Creek		Not Built	
29	Gale Reservoir #1	10.292	Blanco River	10	10	10
29	Gale Reservoir #2	6.89	Blanco River	7	7	7
29	Gale Reservoir #3	11.060	Blanco River	11	11	11
77	Gardner Lake Reservoir	23.16	Gardner Lake Cr./ Little Navajo River	15	23	15
69	Garner Reservoir	36.97	Bear Creek	10	37	37
71	Glade Reservoir #2	500	Glade Draw/Dolores R.		Not Built	
71	Glade Reservoir	(?)			Not Built	
30	Gregg Reservoir	1.802	Florida River	2	2	2
71	Groundhog Reservoir	21,710	Fish Creek	9,236	20,389	7,480
78	G. S. Hatcher Reservoir	1,730	Martinez Creek	1,735	1,735	1,386
29	Harris Bros. & Boone #1	33.24	Branch Creek	0	60	56
29	Harris Bros. & Boone #2	205.3	Branch Creek	206	206	160
29	Harvey Lake	4.0	Square Top Creek	4	4	4
29	Hatcher Retaining Pond	6.87	West Fork San Juan R.	7	7	7
30	Haviland Lake Reservoir	303.86	Elbert Creek	170	170	0
33	Hay Gulch Reservoir	56,330	Hay Gulch		Not Built	
30	Henderson Lake	57.8	Trib. Animas River	58	58	58
78	Hersch Reservoir	32.04	Stollsteimer Creek		Rebuilding	
30	Hermosa Park Reservoir	.300	Hermosa Creek		Not Built	
77	Hidden Lake Reservoir	14.92	Indian Creek	5	5	5
29	Hidden Valley Reservoir	191.637			Not Built	
30	Highland Mary Reservoir	650.0	Animas River	400	400	400

IRRIGATION SEASON 11-1-75 THRU 10-31-76

IST.	NAME OF RESERVOIR	DECREED A.F. CAPACITY	SOURCE OF SUPPLY	LAST READING PREVIOUS YEAR	MAXIMUM STORAGE	LAST READING
30	Hotter Brothers Lake	39.36	Little Cascade Cr.	39	39	39
30	Howardsville Reservoir	90,700	Animas-La Plata Project		Not Built	
30	Hutchinson Reservoir	10.9596	Bear Creek		Not Usable	
78	Hutchinson Reservoir	3.0	Stollsteimer Creek		Not Built	
29	Hydeaway Ranch Reservoir	2.29	San Juan River	0	4	2
30	Ice Lake Reservoir	416.20	Elbert Creek	403	416	400
34	Jackson Gulch Reservoir	9,980	West Mancos River	5,760	9,980	5,436
31	Jeffries Pond No. 1	1.0	Pine River	1	1	1
31	Jeffries Pond No. 2	3.0	Pine River	3	3	3
29	Joe Hersch Reservoir #1	1.74	San Juan River	2	2	2
30	Johansing-Vinnel Fish Res.	4.0	Florida River	4	4	4
30	Keeler Reservoir	487.5	Elbert Creek	488	488	488
77	King Dam No. 1	4.0	Navajo River	1	4	1
77	Kruger Reservoir #2	9.0	Oil Well Creek	9	9	9
34	L A Bar Reservoir	73.33	Bauer Reservoir System	5	70	0
30	L-U Lakes	3.25	Florida River	3	3	3
30	Lake Carol Reservoir	8.109	Florida River	8	8	8
78	Lake Forest Dam	500				
30	Lake of the Pines	114.4	Little Cascade Creek	114	100	100
30	Lake Susan Reservoir	17.459	Florida River	18	18	18
33	Lapp Davis Res. System	1.70	Cherry Creek	0	2	0
33	Lapp Home Res. System	0.40	Cherry Creek	0	1	0
33	Lapp North Res. System	2.25	Cherry Creek	0	2	0
33	Lapp Ranch S. Stock Res.	0.80	Cherry Creek	0	1	0
30	Lemon Reservoir	40,240	Florida River	20,414	35,893	18,527
32	Lively Reservoir	15	McElmo Creek		Not Built	
78	Linn & Clark Reservoir	997.26	Martin Creek	997	997	997
33	Lobato Reservoir (Peck)					
71	Lost Canyon Reservoir	106.0	Dolores River	106	106	106
29	Lost Creek Irr. Res.	2.89	Lost Creek		Not Built	
30	Macy Reservoir	11.2	Animas River	0	0	0
32	Margwain Storage Reservoir	1.5	Alkali Canyon	0	0	0
78	Martinez Dam	2,900	Four Mile Creek		Not Built	
33	Meadows Reservoir	17,450			Not Built	
29	McGirr-Gomez Reservoir		San Juan River			
78	McInnes Reservoir No. 1	286.76	Yellowjacket Creek		Not Built	
71	McPhee Reservoir	400,000	Dolores River		Not Built	
71	Mod Dairy Res. Dam No. 1	98.004	Dolores River		Not Built	
71	Monument Creek Reservoir	5,100	Dolores River		Not Built	
69	Morrison Reservoir	116.33	Morrison Creek	116	116	80
77	Muddy Creek Reservoir	8.16	Big Middy Creek	8	8	8
32	Narraguinnep Reservoir	20,710	Dolores River	7,000	20,710	9,538
69	North Draw Reservoir	13.64	North Draw	30	20	0
78	O'Neal Park Reservoir	40,700	E. Fork Piedra River		Not Built	

IRRIGATION SEASON 11-1-75 THRU 10-31-76

IST.	NAME OF RESERVOIR	DECREED A.F. CAPACITY	SOURCE OF SUPPLY	LAST READING PREVIOUS YEAR	MAXIMUM STORAGE	LAST READING
78	Pargin Reservoir	530.6	Stollsteimer Creek	531	531	531
78	Park Reservoir	0.52	Stollsteimer Creek	1	1	1
30	Patricia A. Sherwood Res.	3.7	Animas River	4	4	4
78	Piedra Retaining Pond	5.24	Piedra River	5	5	5
31	Pine R. Ret. Res. No. 1	98.32	Pine River		Flood Control	
31	Pine R. Ret. Res. No. 2	192.0	Pine River		Flood Control	
31	Pine Spring Ranch Res. #1	2.9	Beaver Cr./Pine River	1	1	1
78	Pinon Lake	161.85	Stollsteimer Creek	162	162	162
78	Poma Reservoir	26.53	Piedra River	27	27	27
77	Price-Kinny Reservoir	1.31	Coyote Creek	1	1	1
29	Proctor Reservoir	959.45	McCabe Creek		Not Built	
71	R.B. Coppinger Res. #1	16.16	Dolores River	0	16.16	0
34	Red Arrow Reservoir	6.04	Mid. Fork Mancos R.	Abandoned	Not Built	
33	Red Mesa-Ward Reservoir	1,176	Hay Gulch	354	1,210	321
30	Relay Retaining Pond Res.	19.54	Hermosa Creek		Not Built	
32	Robert Leighton Reservoir	36.65	McElmo Creek	36	37	36
71	Ruin Canyon Reservoir	250	Dolores River		Not Built	
29	San Juan Raw Storage Res.	250	San Juan River		Not Built	
29	San Juan River Rec. Res.	300	San Juan River		Not Built	
34	Sellers & McClane Res.	52.09	Summit Res. System	31	52	6
30	Shaull Reservoir	1.0 cfs	Trumble Draw/Florida R.		Stabilization	
29	Shoestring Reservoir	1.16	Mill Creek	1	1	1
30	Short Reservoir	40.0	Trumble Draw/Florida R.		Stabilization	
29	Spiler Canyon Reservoir	2.31	Blanco River	2	2	2
29	Spring Buck Reservoir	431.793	McCabe Creek		Not Built	
78	Spring Creek Reservoir	46.201	Spring Creek	2	46	16
77	Spence Reservoir	441.007	Coyote Creek	272	272	16
29	Squaw Gap Reservoir	0.87	Little Blanco River	1	1	1
78	Stevens Reservoir	634.84	FourMile Cr./Transbasin	635	635	635
78	Stovall Dam & Reservoir	117.16	Yellowjacket Creek		Abandoned	
71	Summit Reservoir	4,287	Lost Canyon	2,794	4,287	937
29	Sunset Cottages Res. #1	18.03	San Juan River	18	18	18
29	Sunset Cottages Res. #2	22.95	San Juan River	23	23	23
29	Talon Reservoir	200.860	McCabe Creek		Not Built	
30	Tamarron Lakes #1 - #8	140.5	Elbert Creek	Plan of	Augmentation	
33	Taylor Reservoir	85.58	La Plata River	86	86	86
29	Thomas Reservoir	55.66	San Juan River	56	56	56
33	Three Buttes Reservoir	38,400	Animas-La Plata Project		Not Built	
77	Three Lakes Res. #1	3.40	Navajo River		Not Usable	
77	Three Lakes Res. #2	8.39	Navajo River	8	8	8
77	Three Lakes Res. #3	10.47	Navajo River	5	10	5
32	Totten Reservoir	3,400	Dolores River	1,755	3,302	1,857
78	Town Center Dam	600	Fourmile/Dutton, Martinez Cr.(Transbasin)	600	600	600
29	Town of Pagosa Springs Res.	0.80	W. Fork San Juan River	1	1	1
29	Trilsch Reservoir	2.76	Blanco River		Not Built	

IRRIGATION SEASON 11-1-75 THRU 10-31-76

IST.	NAME OF RESERVOIR	DECREED A.F. CAPACITY	SOURCE OF SUPPLY	LAST READING PREVIOUS YEAR	MAXIMUM STORAGE	LAST READING
29	Trujillo Reservoir	18,300	San Juan River		Not Built	
78	Turkey Springs Reservoir	2.0	Stollsteimer Creek	2	2	2
30	Turner Pmp. Sta. & Ponds	84.0	Animas River	20	0	84
30	Turner Reservoir	472.37	Waterfall Creek	450	473	460
31	Vallecito Reservoir	129,675	Pine River	48,854	109,351	52,163
29	Valle Seco Reservoir	0.496	San Juan River	1	1	1
29	Wapiti Reservoir	257.157	Fourmile Creek		Not Built	
30	Warner Reservoir #1	13.0	Elbert Creek	13	13	13
30	Warner Reservoir #2	6.0	Elbert Creek	6	6	6
30	Warner Reservoir #3	0.8	Elbert Creek	1	1	1
30	Warner Reservoir #4	0.5	Elbert Creek	1	1	1
30	Warner Reservoir #5	23.0	Elbert Creek	23	23	23
30	Warner Reservoir #6	0.4	Elbert Creek	1	1	1
30	Warner Reservoir #7	0.3	Elbert Creek	1	1	1
30	Warner Reservoir #8	2.0	Elbert Creek	2	2	2
34	Weber Reservoir	441.8	Middle Mancos River	196	442	116
78	Weminuche Reservoir	5,700	Weminuche Creek		Not Built	
29	West Fork Reservoir	39,356	W. Fork San Juan River		Not Built	
32	West Reservoir	6.0	McElmo Creek		Stabilization	
34	Wetherill Reservoir	(Unlimited)	Mancos River		Not Usable	
78	Williams Creek Reservoir	10,084	Williams Creek	10,084	10,084	10,084
29	Willow Draw Reservoir	1.06	Mill Creek	1	1	1
29	Wilson's Lake	7.025	Blanco River	7	7	7
71	Wiman Reservoir #3	2.0	Dolores River		Not Usable	
31	Wommer Reservoir #1	185.69	Little Bear Creek	133	186	41

IV. AGRICULTURE

Montezuma and Dolores Counties lead the state in acres planted in dry beans. Although Montezuma County's production is non-irrigated, it rates third in Colorado; 94,000 acres were planted in 1974 compared to 107,000 in 1975. Production was up 26% over 1974 with the yield per acre increasing 21%. Quality is good. Price per hundred weight (cwt) in 1975 was down $9.40 compared to 1974.

Total production value was $8,444,000 in 1975, while in 1974 it was $9,436,000. The main cause for the difference in income can be attributed to the drop in price per cwt. The current year (1976) forecast is 8% below 1975, but 9% more than 1974.

Hay production was up 6% over 1975. With a $2.00 per ton increase in price received, production income was $24,700,000 in 1976 as against $22,438,000 in 1975.

The Livestock Index at 155 (1966-68 average) was still $3.40 below a year ago. Steers and heifers at $37.50 per cwt were $4.50 below September 1975. The index prices received by southwest Colorado farmers at mid-September for crops and livestock increased one point from mid-August. The index at 165 percent (1966-68 average) was 12% lower than one year ago.

V. COMPACTS AND AGREEMENTS

I. THE SAN JUAN-CHAMA DIVERSION PROJECT

A trial date of December 27, 1976 has been set for the Shutz vs Stamm Case to be tried in Federal Court with Judge Matsch presiding. Exhibits have been prepared and will be viewed prior to the trial (December 4, 1976). Also, a pre-trial conference will be held although a date has not been set.

The main complaint by the plaintiffs is the damage caused by sluicing to headgates, ditches, meadows and fishlife; secondly the extinction of the fishery due to insufficient bypass flows in the Navajo and Blanco Rivers.

A trip was taken to Albuquerque to gather data for the court exhibits. The Bureau of Reclamation figures were used to draft the exhibits. Another trip was taken to Denver to view what the Bureau of Reclamation modeled as a solution to the sluicing problem. The decision to be made was whether or not this would be entered as evidence.

Although demonstrated as a solution to the sluicing problem, in reality the river material was moved from behind the diversion dam to just below where it is still injurious to Colorado water users. The only benefit derived would be to prevent stream bed material from entering the diversion tunnel.

The Jicarilla-Apaches, represented by attorney Bob Nordhaus, may withdraw as a party to the Shutz vs Stamm suit, after some concessions were made by the BuRec to them (rumored to be 26,000 A.F. of Colorado Project Water) and promises to build some dams on the reservation. The Apaches entered the litigation on the side of the plaintiffs.

Several calls were made by this office to maintain minimum flows as directed in the Decrees by the Colorado Water Conservation Board. The Bureau of Reclamation no longer officially refuses the calls, but now just ignores any request by Colorado without benefit of an answer.

Some notification of sluicing was received without a definite date being named. The "either Monday or Tuesday" type of notification, in my opinion, is intentional harrassment.

Calls for small amounts of increased bypass to Colorado users (under 10 c.f.s.) were all refused, although there were large amounts being diverted to New Mexico.

II. THE LA PLATA RIVER COMPACT

Irrigation out of the interstate ditches began March 26, 1976 with the request by the New Mexico Compact Commissioner for a split on available water quickly following. The division of water continued through the spring and early summer.

From July 1 through July 3, the river flow at Hesperus fell below the point where it was reasonable to pass water through to satisfy Compact committments. Colorado placed the river under a futile call and began diverting that water. This is in some contrast to last year when it wasn't necessary to split or curtail diversion until July 14.

There was no abnormally high water this year and diversion structure damage varied from very little to none.

Precipitation was good in June, July and September, with August, October, and November having no more than traces of moisture. Soil conditions now are extremely dry and there still is no snow even high on the La Plata Mountains.

VI. DAMS

With a normal runoff, most reservoirs filled as expected with no reported damage due to snow melt.

There were two emergencies this year; Electra Lake dam (again) and Haviland Lake dam. The problem at Electra Dam was the same as last year, with the fines washing out from between the large rocks. The damage last year was successfully repaired. This year's leak occurred further west near the lake level recorder. Emergency repairs were made (sandbags) and permanent repairs made similar to last year.

The valve at Haviland Lake outlet was found to be stuck when checked. Divers were brought in from Farmington, New Mexico. After the inspection by divers, the lake was drained to repair the outlet gate. An exchange of water was arranged with Electra Lake by the Water Commissioner, so that Haviland Lake could be refilled. Problems were encountered here when the Division of Wildlife personnel ignored a beaver dam in the inlet to the lake after they had been told about it. Approximately nineteen acre feet of water were lost downstream.

Several inspectors from the Dams Section visited the area this year. From these inspections, letters were written to reservoir owners outlining maintenance programs, etc. Compliance with orders was generally good throughout the Division, although follow-up letters were necessary to receive communication from owners for work completed.

VI. DAMS

B. LIVESTOCK WATER TANKS

Stocktank and/or erosion control dam permits were issued in individual districts as follows:

DISTRICT	NUMBER OF PERMITS ISSUED
29	16
30	1
31	14
32	1
33	2
34	3
46	0
69	4
71	2
77	0
78	2
TOTAL ISSUED	45

VII. WATER RIGHTS

A. TABULATION

Division VII personnel processed the 1975 W-case numbered Decrees and converted them to 1,914 keypunched cards for addition to the Water Rights Tabulation. In addition to the new entries, six hundred and eleven (611) line corrections to the October 10, 1974 Tabulation have been keypunched and sent in. These corrections are very judiciously reviewed and take considerable time to spot and process.

In many cases, personnel contact the water right owner(s) involved, when there are discrepencies between existing conditions and the Decree, and can get them to make application to the court for the proper revision.

The exactness required of the Tabulation is always demanding and at times, quite exasperating.

VII. WATER RIGHTS

B. REFEREE'S FINDINGS AND DECREES

	NO. FILED	INVESTIGATED BY DIVISION VII	REFEREE RULINGS	COURT DECREES
1. Underground Water Rights	17	17	12	16
2. Change of Water Rights	26	31	29	46
3. Plans of Augmentation	8	7	4	4
4. Surface Water Rights	48	43	36	44
5. Due Diligence:				
Quadriennial Findings	110	109	102	104
Conditional Made Absolute	43	39	34	36
6. Water Storage Rights	3	3	3	3
TOTALS	255	249	220	253

Quite a number of applications were received during the latter part of the last reporting year and were subsequently investigated and a ruling made by the referee after the new calendar year began.

After the U.S. vs Akin decision in Federal Supreme Court, Judge Eakes, Division VII, Sixth Judicial District Judge, wrote a "FINDINGS OF LAW OF CASE AND ORDER" dated October 6, 1976, and setting a trial date of December 6, 1976 for Federal Water Cases W-1120-73 through W-1139-73 and W-1143-73 through W-1148-73. Federal trial attorney for the Department of Justice, Hank Meshorer, immediately filed a "MOTION TO VACATE FINDINGS OF LAW OF CASE AND ORDER AND, IN THE ALTERNATIVE, MOTION TO POSTPONE TRIAL DATE INDEFINITELY". This was mailed October 22, 1976. Mailed on November 2, 1976 and filed in the Supreme Court, was a Motion for "ENLARGEMENT OF TIME FOR A PERIOD OF 30 DAYS FROM THE DATE OF THE RULING BY THE WATER COURT FOR WATER DIVISION NO. 7 UPON THE UNITED STATES OF AMERICA'S MOTION TO VACATE FINDINGS OF LAW OF CASE AND ORDER AND, IN THE ALTERNATIVE, MOTION TO POSTPONE TRIAL DATE INDEFINITELY WITHIN WHICH TO FILE A PETITION FOR CERTIORARI TO THE COLORADO SUPREME COURT". As of this date nothing has been received granting either Federal Motion.

Eaton International's Plan of Augmentation is progressing according to the runoff and return flow formula developed by their engineers. They will probably petition the Water Court for an Absolute Decree early next year. A meeting was held in November with Golf Host International (Tamarron) discussing progress made by them toward

finalizing their operation and progress toward an Absolute Decree. They have signed a ten-year contract with Colorado Ute Electric for backup water from Electra Lake.

Several minimum flow Decrees have recently been received from the Colorado Water Conservation Board under Statutes C.R.S. 1973 37-92-102(3) and 37-92-103(4), enabling that agency to file.

While previous filings by the Colorado Water Conservation Board were on streams where there was either surplus water or storage set aside to maintain minimum flows, these recent filings are on streams that do not, nor is there any statement of how the Board is to acquire water to maintain these flows. Also, several minimum lake level filings have been received on U.S. Forest Service land where C.R.S. 37-92-103(4) is being complied with under Federal Acts. Filings on over-appropriated streams where supplies are not sufficient to maintain minimum flows is an exercise in futility. A minimum flow Decree where water is not available also precludes the development of ground water in that drainage basin.

No attempt has been made by the Colorado Water Conservation Board to enforce their minimum flow decrees on the Navajo and Blanco Rivers where there is water available to maintain them but is being diverted by the Bureau of Reclamation to New Mexico.

VIII. ORGANIZATIONS

A. WATER CONSERVATION AND CONSERVANCY DISTRICTS

NAME	ADDRESS	ATTORNEY	PRESIDENT
La Plata Water Conservation	Box 497 Durango	F.S. Maynes	V. A. Paulek
Dolores Water Conservancy	16 E. Main Cortez	George Armstrong	Bruce McAfee
Florida Water Conservancy	Box 1157 Durango	L.W. McDaniel	Loyd Hess
Mancos Water Conservancy	Cortez	Guy Dyer	Noland Alexander
Pine River Irrigation Dist.	843 Main Durango	Robert Duthie	Frank Wommer, Jr.
San Miguel Water Conservancy	Box 497 Durango	F.S. Maynes	George M. Young
Southwest Water Conservation	Box 497 Durango	F.S. Maynes	Fred Kroeger

VIII. ORGANIZATIONS

B. INCORPORATED DITCH COMPANIES

NAME	OFFICER	ADDRESS
DISTRICT 29		
Echo Ditch Company	William Jackson	Pagosa Springs, Colorado
Park Ditch Company	Hood Formwalt	Pagosa Springs, Colorado
DISTRICT 30		
Animas Ditch Company	R. V. Bonds	Rt. 2, Box B61, Durango, CO
Animas Consolidated Ditch Co.	Bernard Colby	Rt. 1, Durango, Colorado

Incorporated Ditch Companies continued

	OFFICER	ADDRESS
DISTRICT 30 (continued)		
Florida Canal Company	T. G. Eggleston	135 Riverview Dr., Durango, CO
Florida Farmers Ditch Co.	Hazel Brown	505 CR 234, Durango, Colorado
Hermosa Ditch Company	Ted Harer	Rt. 1, Box 397C, Durango, CO
Pioneer Ditch Company	Roy Annala	122 CR 510, Durango, Colorado
Reid Ditch Company	Animas Valley Ditch Co., % Larry Simmons	2815 Main Ave., United Realty, Durango, Colorado
DISTRICT 31		
King Ditch Company	James F. Mayfield	Rt. 1, Ignacio, Colorado
Los Pinos Ditch Company	Frank Ludwig, Jr.	Box 245, Bayfield, Colorado
Robert Morrison Ditch Company	Delwin Fassett	Rt. 2, Durango, Colorado
Schroder Irrigation Ditch Company	Lucian Squires	Bayfield, Colorado
Spring Creek Ditch Company	Glen Faverino	Rt. 2, Ignacio, Colorado
Sullivan Ditch Company	Raymond VanCamp	Rt. 1, Bayfield, Colorado
Thompson-Epperson Ditch Company	E. G. Loring	Rt. 1, Bayfield, Colorado
Vallecito Reservoir	Pine River Irr. Dist., Frank Wommer	Rt. 1, Bayfield, Colorado
DISTRICT 32		
Montezuma Valley Irrigation Company	Victor Bryan	Cortez, Colorado
DISTRICT 33		
Big Stick Ditch Company	Grant Paulek	Hesperus, Colorado
Hay Gulch Ditch Company	Lawrence Huntington	Hesperus, Colorado
H. H. Ditch Company	Orlo Schmitt	Hesperus, Colorado
Joseph Freed Ditch Company	Nancy Price	Hesperus, Colorado
La Plata River & Cherry Creek Ditch Company	Roland Bartel	Mancos, Colorado
Lightner Canal Company	V. A. Paulek	Hesperus, Colorado
Pine Ridge Ditch Company	Colo. Div. Wildlife	Durango, Colorado
Red Mesa-Ward Reservoir & Ditch Supply Company	Nancy Price	Hesperus, Colorado
Reorganized Revival Ditch Company	Lila Greer	Hesperus, Colorado
Slade Ditch Company	Judy Albrecht	Hesperus, Colorado
Townsite Ditch Company	Judy Albrecht	Hesperus, Colorado
Treanor Enterprise Ditch Company	Ruth Candelaria	Marvel, Colorado
DISTRICT 34		
Bauer Lakes Water Company	Leroy Everett	Mancos, Colorado
Ratliff & Root Ditch Company	Lloyd Doerfer	Mancos, Colorado
Town of Mancos Ditch Company	Geraldine Wallace	Mancos, Colorado
Webber Ditch Company	Vernon Ellis	Mancos, Colorado
Webber Reservoir & Ditch Company	Foster Hall	Mancos, Colorado
DISTRICT 71		
Summit Irrigation System	Eddie McRea	Dolores, Colorado
Groundhog Reservoir & Beaver Ditch System	Victor Bryan	Cortez, Colorado
Montezuma Valley Irrigation System	Victor Bryan	Cortez, Colorado
DISTRICT 78		
Piedra Falls Ditch Company	Raymond McWhiter	Pagosa Springs, Colorado

IX. WATER COMMISSIONERS' SUMMARIES

Summaries for the 1975 Annual Report were received recently and should be available in Denver for inclusion with last year's report. This year key-punching and computer printing was done at the local level and summaries are included with this report.

X. DIVISION ENGINEER'S SUMMARIES

The Division Engineer's Summary for 1975 is now available in the Denver Office

for inclusion in last year's report. This year's summary is included with this report.

XI. RECOMMENDATIONS AND SUGGESTIONS

A. DIVERSION RECORDS AND DATA BANK

Indoctrination into the Data Bank process was completed with a minimum of problems due to capable and dedicated personnel, resulting in less end-of-the-year work, with a much higher degree of accuracy in data recording and reporting.

Local keypunching with summary printouts are of great value in completing the Water Commissioners' and Division Engineer's Annual summaries. This takes a burden off of the Denver Office where computer time is short. Even with local work in data bank computations, more time is needed between October 31 when the irrigation season ends, and the middle of December when the Division Engineer's Annual Report is scheduled. Banks, colleges, etc., in the local areas have other customers who compete for priority computer time. Therefore, it is suggested that the Division Engineer's meeting be held in February to allow more versatility in obtaining computer time for annual computations.

The field investigation of the water right applications along with court hearing participation by Division VII personnel has shown good preparation and attention to details, resulting in "zero deficits" with the Water Court.

Changes in the Law increased the number of requests for old and new data. This, coupled with an ever widening field of envolvement with a growing array of new agencies, has greatly increased the work load of everyone.

Without a team effort both in the Division and in Denver, the job would be insurmountable. I would like to take this opportunity to thank each and every one in Water Division VII for their cooperation and effort in completing a year well done. Also, thanks to those in Denver whose extra effort made our jobs easier.

Sincerely,

Wayne M. Crosby, P.E.
Division Engineer

WMC:alf

TABLE A

WATER COMMISSIONERS' SUMMARY

1975-1976

WATER DIST.	DIRECT ACRE FEET: NUMBER OF DITCHES: ACTIVE	NO WATER AVAIL.	NOT USED	INFREQ.	NUMBER DAILY REPORTS	DIRECT TO IRRIG.	TOTAL DIRECT FLOW	STORAGE ACRE FEET: NO. OF RES.	TOTAL TO STORAGE (A.F.)	TOTAL FROM STORAGE (A.F.)	COMBINED: DIRECT TO IRRIGATION STORAGE TO IRRIGATION: STORAGE TO IRRIGATION	ACRES IRRIGATED	A.F./ACRE
29	160	3	143	54	3,983	78,633	129,393	52	2,795	2,795	213	21,272	3.71
30	202	17	233	300	18,387	79,640	116,254	46	56,416	48,302	21,949	40,887	2.48
31	145	0	61	147	11,656	163,377	175,131	10	72,310	82,038	81,185	55,518	4.41
32	163	5	67	29	4,704	142,566	144,303	8	16,058	15,932	13,372	49,373	3.21
33	100	7	58	40	6,230	20,122	36,970	10	985	942	942	11,963	1.76
34	131	2	33	10	1,988	28,596	33,819	12	6,480	7,563	7,563	16,310	2.22
46	30	0	3	1	1,622	4,881	7,747	0	0	0	0	2,073	2.35
69	26	1	16	1	211	4,718	4,719	5	427	197	197	1,529	3.21
71	68	5	56	79	1,118	9,571	21,868	16	27,457	20,871	7,094	3,217	5.18
77	82	4	44	22	1,492	18,506	60,618	18	0	405	405	3,716	5.09
78	121	3	86	26	3,130	47,222	48,518	23	447	824	122	9,230	5.13
TOTAL	1,228	47	800	709	54,521	597,832	779,340	200	183,375	179,869	133,042	215,088	2.78

TABLE B

DIVISION SUMMARY - DIVISION VII
DIRECT FLOW DIVERSIONS
1976 - 1976

WATER DIST.	TOTAL DITCHES REPORTED ACTIVE	INACTIVE* NA	INACTIVE* NU	DIRECT DIVERSIONS A.F. IRRIGATION	NO. OF ACRES IRRIGATED	A.F./AC.	INDUSTRIAL USE DIVER. A.F.	MUNICIPAL USE DIVER. A.F.	RECREATION USE DIVER. A.F.	DOMES.	STOCK	TRANSMOUNTAIN DIVERSIONS	COMPACT	TOTAL DIVER.	DAILY DITCH RPTS.
29	214	3	143	78,633	21,272	3.71	854	3,903	---	782	4,393	278 From	40,550 3/	129,393	3,983
30	502	17	233	79,640	40,887	2.48	16,554	5,902	56	525	967	575 From	12,035 2/	116,254	18,387
31	292	0	61	163,377	55,518	4.41	3,569	557	73	68	5,050	2437 From	0	175,131	11,656
32	192	5	67	142,566	49,373	3.21	12	---	---	13	1,712	0	0	144,303 1/	4,704
33	140	7	58	20,122	11,963	1.76	5	---	---	1,442	3,385	0	12,016 4/	36,970	6,230
34	141	2	33	28,596	16,310	2.22	---	1,069	---	80	4,074	0	0	33,819	1,988
46	31	0	3	4,881	2,073	2.35	---	---	468	---	---	0	2,397 2/	7,747	1,622
69	27	1	16	4,718	1,529	3.21	---	---	---	---	---	0	0	4,719	211
71	147	5	56	21,868	3,217	5.18	6,254	5,144	---	70	191	0	0	21,868 1/	1,118
77	104	4	44	18,506	3,716	5.09	2,444	---	---	19	281	0	39,368 5/	60,618	1,492
78	147	3	86	47,222	9,230	5.13	804	---	---	492	---	0	0	48,518	3,130
TOT.	1,937	47	800	597,832	215,088	2.78	30,496	16,575	597	4,129	20,055	3,290	106,366	779,340	54,521

NA = NO WATER AVAILABLE NU = NON USE

TRANSMOUNTAIN DIVERSIONS: DESIGNATE EITHER TO OR FROM DIVISION

1/ 110,676 A.F. M.V.I. Canals 1 & 2 diverted out of W.D. #71 for use in W.D. #32, 35,000 acres
9,232 A.F. Summit System " " " 5,000 acres

2/ Water diverted in Colorado for use in New Mexico
W.D. #30 Ralston Ditch 100% (7,830 A.F.), 350 acres N.M.
" Twin Rock Ditch (73%, 4,205 A.F., 200 acres N.M.) (27%, 1,555 A.F., 70 acres Colo.)
W.D. #46 Horner-Heath Ditch (65%-278 A.F., 325 acres N.M.) (35%-149 A.F., 175 acres Colo.)
" Briggs Ditch (100%-3,033 A.F., 270 acres N.M.)

3/ Delivered to New Mexico thru Blanco Tunnel Diversion, San Juan-Chama Project

4/ Delivered to New Mexico under LaPlata River Compact (irrigation season)

5/ Delivered to New Mexico thru Navajo and Little Navajo (Oso & Little Oso Tunnel diversions) San Juan-Chama Project

TABLE C

Storage Report - Acre Feet
1975-1976

WATER DISTRICT	Amount in Storage Acre Feet 11-1-75	5-1-76	10-31-76	Actual Am't Diverted to Storage During Season	Delivered from Storage to Irrigation	Storage to Industrial Use	Storage to Municipal Use	Storage to Recreation Use	Storage to Projects
29	2,755	2,751	2,669	2,795	213	---	1,241	1,341	---
30	33,266	31,471	39,585	56,416	21,949	26,253	100	---	---
31	50,516	120,158	52,331	72,310	81,185	22	101	730	---
32	8,874	24,932	11,560	16,058	13,372	---	2,560	---	---
33	389	1,303	414	985	942	---	---	---	---
34	6,999	13,542	7,231	480	7,563	---	---	---	---
46	NO	STORAGE		---	---	---	---	---	---
69	235	605	522	427	197	---	---	---	---
71	12,223	28,904	8,504	27,457	7,094	---	---	---	13,777
77	346	350	90	---	405	---	---	---	---
78	14,276	14,320	13,899	447	122	---	702	---	---
TOTALS	129,879	238,336	136,805	183,375	133,042	26,275	4,704	2,071	13,777