

INTRODUCTORY STATEMENT

RICHARD D. LAMM
Governor



JERIS A. DANIELSON
State Engineer

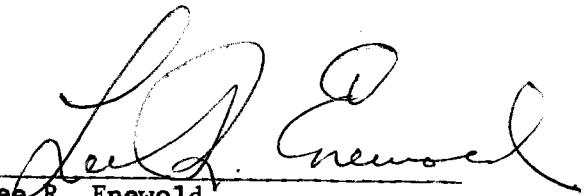
DIVISION OF WATER RESOURCES
WATER DIVISION V

Lee R. Enewold
Division Engineer
P.O. Box 396
Glenwood Springs, Colorado 81601
(303) 945-5665

January 6, 1982

TO: JERIS A. DANIELSON, STATE ENGINEER
FROM: LEE R. ENEWOLD, DIVISION V ENGINEER
SUBJECT: ANNUAL REPORT

Attached herewith is the Division V Annual Report for the period
November 1, 1981 through October 31, 1982.



Lee R. Enewold
Division V Engineer

LRE:mb

Enclosure

cc: File

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January 6, 1982

Dr. Jeris A. Danielson
State Engineer
Division of Water Resources
1313 Sherman Street
Denver, CO 80203

RE: Division Engineers
Annual Report

This annual report for Division No. 5 for the water year ending November 30, 1982 is as follows:

I Introductory Statement.

- A. Division V consists of all the Colorado River Basin, including all of its tributaries from the Continental Divide through its course within the State of Colorado to the Utah State line; excluding only the Gunnison River drainage basin, but including the White River Drainage, which is located in Division VI, only and expressly provided by law as under judiciary, decretal rule by the Water Judge presiding in the Division V Water Court.

The major tributaries of the Colorado River from its headwaters to the State line are the North Fork of the Colorado, Willow Creek, Fraser River, Williams Fork, Troublesome Creek, Blue River, Muddy Creek, Eagle River, Roaring Fork, Divide Creek, Mamm Creek, Rifle Creek, Parachute Creek, Roan Creek, Plateau Creek and the Big Salt Wash.

The major population centers are:

<u>Name</u>	<u>Stream</u>	<u>Approx. Pop.</u>
Carbondale	Roaring Fork	2,084
Glenwood Springs	Roaring Fork	4,637
New Castle	Colorado River	563
Silt	Colorado River	923
Rifle	Colorado River	3,215
Grand Valley	Colorado River	338
DeBeque	Colorado River	279
Collbran	Colorado River	344
Palisade	Colorado River	1,551
Grand Junction	Colorado River	28,144
Fruita	Colorado River	2,810
Grand Lake	Colorado River	382
Granby	Fraser-Colorado River	963
Fraser	Fraser River	470
Hot Sulphur Springs	Colorado River	405
Kremmling	Colo., Muddy, Blue River	1,296
Winter Park	Fraser River	480
Breckenridge	Blue River	818
Frisco	Blue River	1,221
Dillon	Blue River	337
Minturn	Eagle River	1,060
Vail	Eagle River	2,261
Eagle	Eagle River	950
Aspen	Roaring Fork	3,678
Basalt	Roaring Fork	529
Snowmass	Roaring Fork	300

POPULATION PROJECTIONS

<u>COUNTIES</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Eagle	11,903	12,082	12,273	12,500	13,320
Garfield	19,290	20,148	21,127	22,700	22,514
Grand	8,582	9,006	9,461	9,800	7,475
Mesa	65,889	65,256	70,988	75,900	81,530
Pitkin	11,357	11,761	12,193	13,000	10,338
Summit	7,248	7,895	8,403	9,000	8,848

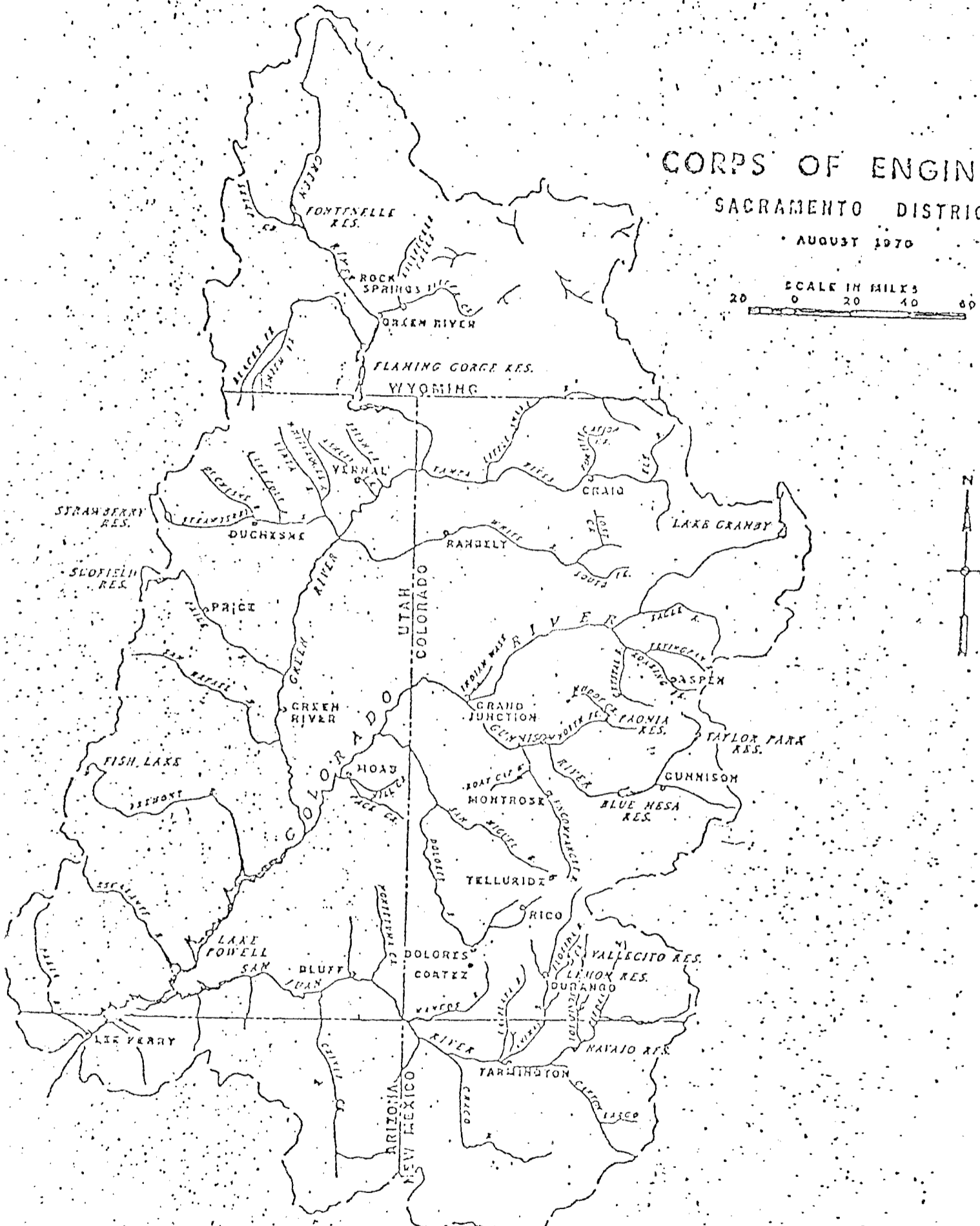
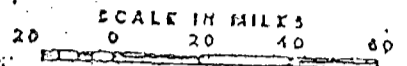
POPULATION PROJECTIONS

	End of Year									
	1960	1970	1974	Present *	1975	1976	1977	1978	1979	1980
Community	1960	1970	1974	Present *	1975	1976	1977	1978	1979	1980
Carbondale	612	726	1,600	2,400	3,100	3,850	4,300	4,600	4,800	5,000
Collbran	310	225	265	265	275	315	375	450	530	600
Craig	3,984	4,205	5,495	6,000	6,600	8,300	9,900	11,600	13,300	15,000
Cebegue	172	155	300	325	370	490	620	740	870	1,000
Dinosaur	318	247	350	350	370	450	570	710	850	1,000
Fruita	1,830	1,822	2,000	2,000	2,030	2,300	2,800	3,450	4,250	5,000
Glenwood Springs	3,637	4,106	4,646	4,900	5,200	6,200	7,100	8,000	8,900	9,800
Grand Valley	245	270	354	325	340	500	840	1,220	1,600	2,000
Grand Junction	18,694	20,170	26,400	27,000	28,000	29,500	31,000	32,400	34,000	35,700
Hecker	1,655	1,597	2,000	2,150	2,350	2,950	3,750	4,700	5,550	6,200
New Castle	447	499	618	625	650	720	780	860	930	1,000
Palisade	860	874	900	1,000	1,050	1,150	1,270	1,380	1,480	1,600
Rangely	1,464	1,591	1,725	1,785	1,850	2,200	2,850	3,800	5,000	6,100
Rifle	2,135	2,150	2,403	2,750	2,900	3,500	4,200	5,400	6,900	8,600
Silt	384	434	720	750	780	850	920	1,030	1,160	1,300
Totals	36,747	39,071	49,776	52,625	55,865	63,275	71,275	80,340	90,120	99,900

Note: Revision was the results of information McDowell-Smith & Associates obtained during their meetings with the various communities during June and July, 1975, and the current trends of the oil shale industry.
*July 1975

CORPS OF ENGINEER
SACRAMENTO DISTRICT

AUGUST 1970



UPPER COLORADO RIVER BASIN

PERSONNEL

II. PERSONNEL

<u>NAME</u>	<u>POSITION</u>	<u>MONTHS WORKED/ BUDGETED</u>	<u>WATER YEAR MILEAGE</u>
Lee R. Enewold	Division Engineer	Annual	8,039
Orlyn J. Bell	Asst. Division Engineer	Annual	11,370
Alan Martellaro	Hydrographer	Annual	7,896
Mary M. Bacino	Senior Secretary	Annual	

FULL TIME EMPLOYEES IN FIELD

		<u>DISTRICT</u>		
Alvin Cerise	Water Comm. B	45	Annual	12,874
Daniel Hart	Water Comm. C	51	Annual	8,880
Marcus Klocker	Prin. Water Comm	72	Annual	6,205
Jim E. Sheldon	Water Comm. B	52/53	Annual	13,086
Wayne Wells	Sr. Water Comm	36/37	Annual	9,249

PERMANENT PART-TIME EMPLOYEES IN FIELD

George Anderson	Water Comm. B	70	6	5,552
Robert Bieser	Water Comm. B	72	6.4	2,660
Stephen Callicotte	Water Comm. C	38	10.6	4,909
Clifford Hill	Water Comm. B	72	8	3,025
Ray Hittle	Water Comm. A	72	6	5,413
Arlen Jackson	Water Comm. C	45	10*	10,156
James Lemon	Water Comm. B	39	9	5,003
Glen Nelson	Water Comm. A	45	4	863
Miles Reed	Water Comm. A	72	5.5	1,750
William Thompson	Water Comm. B	50	11.7*	9,074
Richard Yoeman	Water Comm. A	45	3	1,976

TEMPORARY EMPLOYEES IN FIELD

Douglas Slogar	Deputy	72	Hourly	2,983
Nels Werner	Deputy	72	Hourly	3,712
Chris Broadhurst**	Deputy		Hourly	702
Julie Ann McLaughlin**	Deputy		Hourly	0

RETIRED

W. W. Gerry	Deputy	72	2	0
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* Authorized Extra budget time for tabulation work

**Terminated this year

SNOW PACK

SNOWPACK FOR 1981 - 1982 WATER YEAR

The past winter's mountain snowpack was well above normal on many of the Division's river watersheds. Cool weather during the late spring and early summer delayed the snowpack melt. As a result, river levels stayed relatively high for as much as 30 days longer than usual. Most irrigation demands were met with river water, and there was less need for water stored in the area's reservoirs.

PRECIPITATION SUMMER

PRECIPITATION FOR 1981 - 1982 WATER YEAR

The Colorado River basin experienced an excellent water year with most streams contributing above normal amounts. Most irrigation demands were met with river water, and there was less need for water stored in reservoirs.

Carryover reservoir storage is excellent throughout the Division. The vast majority of impoundments are at or above their October 1 average levels. Frying Pan - Arkansas is 142 percent of average; Colorado - Big Thompson is 96 percent of normal.

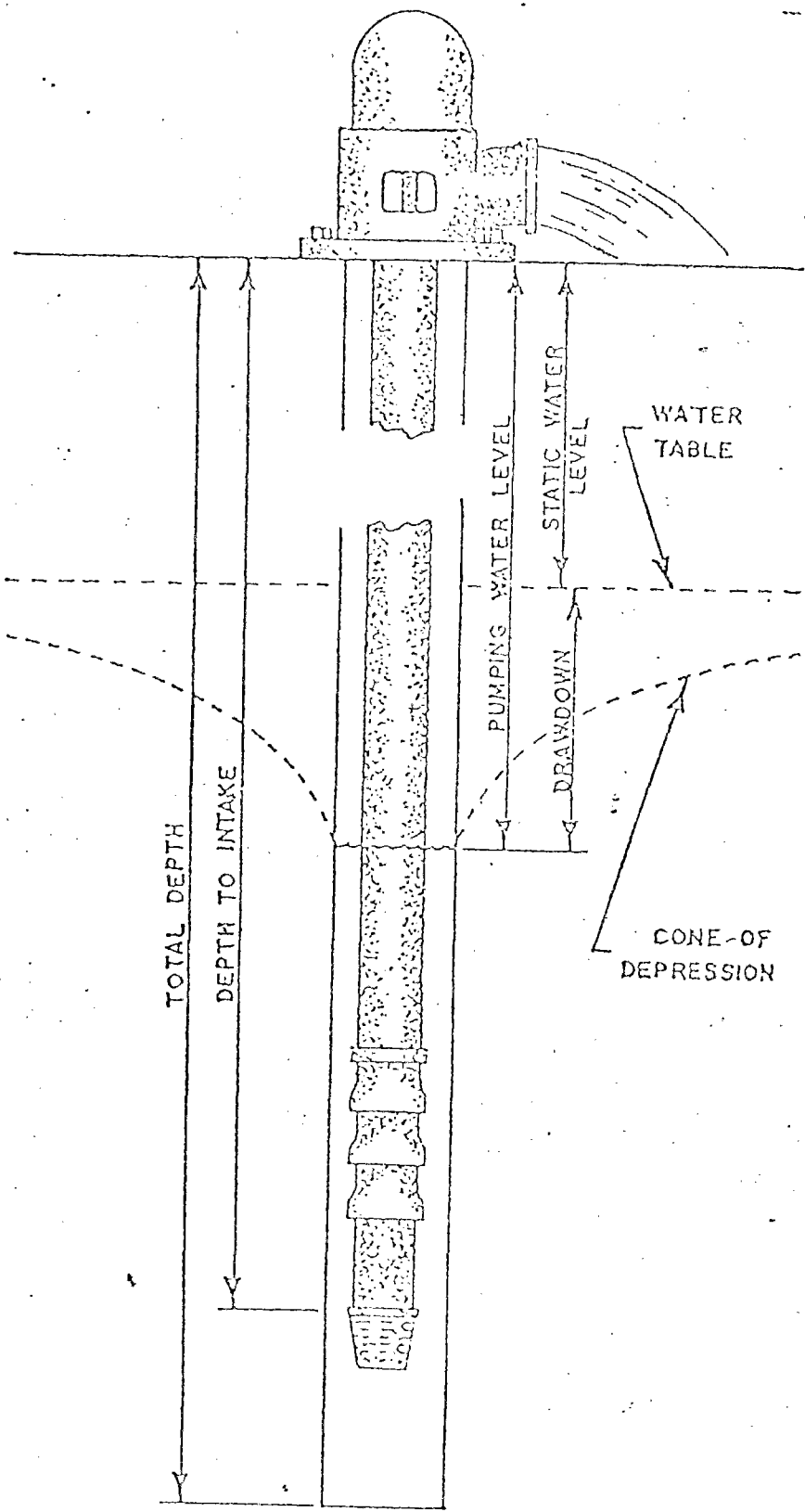
Above normal streamflow was the rule throughout most of the Colorado Basin. Last winter's snowpack provided melt water to keep the rivers high most of the summer. Runoff was delayed by cool late spring weather. Then the river levels were kept up by heavy late summer rains. No shortage occurred with water supplies remaining adequate throughout the season.

The prospects for the 1983 irrigation are quite favorable. Late summer weather was wet and soils were saturated. Reservoirs contain more water than normal. The winter snowpack appears to be accumulating early with significant snowfall over a wide area of the Division in late September. A near normal snowpack this coming winter should assure adequate water for 1983.

UNDERGROUND WATER

Division 5
Well Permits Issued

District	No. of Permits	Domestic (1)	Commercial (4)	Irrigation (6)	Municipal (8)	Other Use (0) Incl.-Household
36.	26	2	0	0	0	24
37	4	0	1	0	0	3
38	36	12	0	0	0	24
39	18	10	0	0	0	8
45	18	9	0	0	0	9
50	12	0	0	0	0	12
51	69	7	2	0	0	60
52	3	1	0	0	0	2
53	4	3	0	0	0	1
70	0	0	0	0	0	0
72	10	6	0	0	0	4
TOTAL	200	50	3	0	0	147



In the Colorado River valley, ground water is quite limited as to irrigation use. Most wells in this area are used for domestic purposes. They vary from relatively soft water wells and springs in the mountain areas to water which is quite high in soluble salts along the lower river valleys.

A study of the ground water resources of the Middle Park areas was made by the USGS and the State Water Conservation Board. According to this study in Middle Park, the best source of ground water is the alluvium including the terrace deposits of streams. The alluvium consists mainly of sand and gravel in a matrix of silt and other fine grained material. Their thickness ranges up to 100 feet. Ground water in Middle Park is used mostly for domestic and livestock purposes. The natural conditions for developing large capacity wells do not seem to exist in most of the park.

Further studies of ground water are currently being made, and further information will be available from time to time.

Non-exempt small capacity wells have been issued only with a plan for augmentation. This took effect June 12, 1981.

TRANSMOUNTAIN DIVERSIONS

TRANSMOUNTAIN DIVISIONS

TO DIVISION NO. 1

1981-1982

<u>NAME</u>	<u>SOURCE</u>	<u>RECIPIENT</u>	<u>AMOUNT A.F.</u>	<u>IDENT NO.</u>
Grand River Ditch	North Fork Colo. River		21130	5104601
Eureka Ditch	North Fork Colo. River		-0-	51
Alva B Adams Tunnel	North Fork Colo. River	Colo.-Big Thompson Prj.	239572	5104634
Moffat Tunnel	Frazier River	Denver Water Board	89856	5104655
Berthard Canal Tunnel	Frazier River		No. Info	5104625
August P Gumlick Tunnel (AKA Jones Pass) Vasquez Pipeline	Williams Fork Williams Fork	Denver Water Board Denver Water Board	Included in Moffat " "	51 7
Vidler Tunnel	Snake River		No Info.	3604626
Roberts Tunnel	Blue River	Denver Water Board	53538	3604512
Boreas Pass Ditch	Blue River	Coors of Golden	No Info.	36
Hoosier Tunnel	Blue River		2140	3604683

325336

TRANSMOUNTAIN DIVISIONS

TO DIVISION NO. 2

1981-1982

<u>NAME</u>	<u>SOURCE</u>	<u>RECIPIENT</u>	<u>AMOUNT A.F.</u>	<u>IDENT NO.</u>
Homestake Tunnel	Middle Fork Homestake Creek Division #5	Cities of Colorado Springs and Aurora	20356	3704614
Wurtz Ditch	Eagle River, Division #5	City of Pueblo	3673	3704648
Ewing Ditch	Piney Creek, Division #5	City of Pueblo	1241	3704642
Columbine Ditch	Eagle River, Division #5	City of Pueblo	2107	3704641
Twin Lakes Tunnel	Roaring Fork River Division #5	Twin Lakes Reservoir and Canal Company	54287	3804617
Busk Ivanhoe Tunnel	Ivanhoe Creek, Division #5	Highline Canal Co.	6936	3804613
Boustead	Frying Pan River Division #5	City of Pueblo	75520	3800699

164120

TRANSMOUNTAIN DIVISIONS

TO DIVISION NO. 4

1981-1982

<u>NAME</u>	<u>SOURCE</u>	<u>RECIPIENT</u>	<u>AMOUNT A.F.</u>	<u>IDENT NO.</u>
Leon Tunnel Canal	Leon Creek		1604	7200758
<u>FROM DIVISION 4</u>				
Clear Fork Ditch AKA Divide Creek Highline Feeder	Clear Fork		2538	4500577
Grand Junction Municipal			11673	42
Redlands Power Canal	Gunnison River		496066	None
<u>FROM DIVISION 6</u>				
Dome Creek Ditch	Bear River		668	58004630
Stillwater Ditch	Bear River		2179	58004685
Sarvis Ditch				58004684

ALL DIVISIONS

TOTAL EXPORTED

491060

TOTAL IMPORTED

513124

AGRICULTURE

AGRICULTURE

Agriculture is one of the largest industries in Division 5. The number of farms showed a decrease from 1970 to 1980, while at the same time farm income also decreased. The approximate acres of farm land total 1,593,893, which is divided into three main areas of agriculture. The high mountain area is classed as livestock and grazing. The major crop is hay, with 3/4 to 1 ton per acre. The grazing land in the area ranges in elevation from 4,500 to 12,000 feet. With this difference in elevation, there is a great difference in ability to produce forage for cattle and browse for wild game and sheep. Some sites can produce no more than 100 pounds of plant material per acre. Other sites in favorable years produce 4000 pounds per acre.

The Middle Park area crops are mostly barley, potatoes, corn and hay. Over the last twenty years the cropping patterns have changed in this area. Carbondale and Aspen used to be known for potatoes, and crops like strawberries were common around Glenwood Springs. Today this area is devoted to pasture and hayland, with minor acreages of cash crops.

The Lower Grand Valley area produces fruits and row crops. About 8,141 acres of fruit orchards - peaches, pears and apples.

In all three areas combined, the approximate yield of wheat and hay is 105,700 bushels and 310,276 tons. There are approximately 152,548 sheep and lambs, and 143,276 cattle and calves. Livestock is an important part of the agriculture industry. However, the total number has decreased. Cattle and sheep are often summered on land administered by the U. S. Forest Service and Bureau of Land Management.

In the past few years we have seen much farm land become residential areas. Due to the uncertainty of making a living on a farm or ranch and due to high taxes on farm land, many ranches and farms have fallen into the hands of subdividers.

The uncertainty of the weather on fruit orchards causes hardships on everyone.

If the fruit growers have a short crop due to late frosts in the spring, the consumer has to pay more for the product.

Irrigation water is available for many farms in the three areas and new planned developments are underway to promote more irrigation water.

DAMS

1/10/83

FROM: J. SCHURER

TO: DIVISION 5

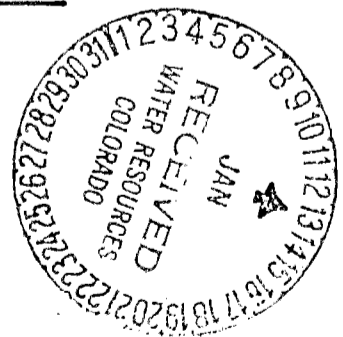
SUMMARY OF INSPECTIONS BY THE FIELD ENGINEERING UNIT
IN FY 81 - 82 IN YOUR DIVISION.

ANNUAL SAFETY INSPECTIONS BY HAZARD RATING

HIGH	MODERATE	LOW
<u>24</u>	<u>13</u>	<u>8</u>

CONSTRUCTION INSPECTIONS BY HAZARD RATING

HIGH	MODERATE	LOW
<u>6</u>	<u>13</u>	<u>1</u>



REFEREE'S FINDINGS AND DECREES

WATER RIGHTS TABULATION

1. Underground water rights	147
2. Changes in water rights	53
3. Water rights (absolute)	125
4. Diligence (conditional)	190
5. Water storage rights	45
6. Applications received in Water Court	453
7. Referee consultations	453

HYDROGRAPHER'S REPORT

HYDROGRAPHERS REPORT

During the 1981 - 1982 water year 106 stream discharge measurements were made along with 12 administrative measurements on canals and ditches. Records were completed for 8 gaging stations. Of these 8 stations, 7 were submitted for publication by the USGS.

Some progress was made this year towards verification of the measuring devices for the diversions and bypasses on the Frying Pan - Arkansas Project. Flows were checked with current meter measurements for the South Fork, Morman Creek, and Frying Pan - Martin Creek diversions and for the Morman Creek bypass flow. The measurements for the Morman Creek diversion and bypass did not check to within 5% (they were 14% - 9% in error).

No new equipment was installed in any gaging stations, or was bought for the hydro truck.

ORGANIZATIONS

WATER USERS ORGANIZATION ROSTER

BASALT WATER CONSERVANCY DISTRICT

817 Colorado Avenue, #201, Glenwood Springs, CO 81601
Phone: (303) 945-2447
Dan Kerst, Secretary-Attorney
Floyd Crawford, Chairman

BATTLEMENT MESA WATER CONSERVANCY DISTRICT

P. O. Box 238, Collbran, CO 81624
Phone: (303) 487-3425
Edward Currier, President
Arthur E. Linn, Secretary

BLUESTONE WATER CONSERVANCY DISTRICT

P. O. Box 37, DeBeque, CO 81630
Phone: (303) 283-5424
Carlos Carpenter, President
George M. Anderson, Secretary

COLLBRAN WATER CONSERVANCY DISTRICT

P. O. Box 163, Collbran, CO 81624
Phone: (303) 487-3306
Henry J. Tupper, President
Robert Byers, Secretary-Treasurer

COLORADO RIVER WATER CONSERVATION DISTRICT

201 Centennial Building, Suite 204, P. O. Box 1120
Glenwood Springs, CO 81602
Phone: (303) 945-8522
A. Allen Brown, President
Roland C. Fisher, Secretary-Engineer

Colorado River Water Conservation District, Quasi-Municipal 15-County political subdivision covers N.W. & W. Central Colorado; created in 1937 to safeguard, conserve, apply to beneficial use waters of the Colorado River and principal tributaries. Sub-district is building Rangely Reservoir.

MIDDLE PARK WATER CONSERVANCY DISTRICT

% Stanley W. Cazier, P. O. Box 588, Granby, CO 80446
Phone: (303) 723-4587
Redwood Fisher, President
Carl Breeze, Treasurer

SILT WATER CONSERVANCY DISTRICT

P. O. Box 216, Silt, CO 81652
Phone: (303) 876-2375
Jack Haas, President
Elsa Pyles, Secretary-Treasurer

UTE WATER CONSERVANCY DISTRICT

560 25 Road, P. O. Box 460, Grand Junction, CO 81502

Phone: (303) 242-7491

Fred Simpson, President

Dick I. Fletcher, Secretary

WEST DIVIDE WATER CONSERVANCY DISTRICT

P. O. Box 1478, Rifle, CO 81650

Phone: (303) 623-1235

Carl H. Bernklau, President

Nora Ruth Bernklau, Secretary-Treasurer

COLORADO DEPARTMENT OF NATURAL RESOURCES

Division of Game & Fish & Parks
Division of Mines
Division of Water Resources
Geological Survey
Board of Land Commissioners
Oil and Gas Conservation Commission
Soil Conservation Board
Water Conservation Board

WATER COMISSIONER'S SUMMARY

WATER COMMISSIONER'S SUMMARY

WATER DISTRICT 36

DIRECT DIVERSIONS:

ACRE FEET

STORAGE	202,124
IRRIGATION	111,061
MUNICIPAL	-0-
COMMERCIAL	-0-
INDUSTRIAL	123,204
RECREATION	-0-
FISH	-0-
FIRE	-0-
DOMESTIC	1,994
STOCK	-0-
OTHER:	
TRANSBASIN	-0-
TRANSMOUNTAIN	24,180
	<hr/>
TOTAL DIVERSIONS	462,563

DELIVERIES FROM STORAGE:

IRRIGATION	533
MUNICIPAL	-0-
COMMERCIAL INDUSTRIAL	17,965
RECREATION	-0-
FISH	-0-
OTHER:	(Includes 15454 exchange)
TRANSBASIN	15,906
TRANSMOUNTAIN	-0-
	33,377
	<hr/>
TOTAL FROM STORAGE	67,781

DELIVERIES FROM TRANSBASIN:

IRRIGATION	-0-
STORAGE	-0-
MUNICIPAL	-0-
INDUSTRIAL	-0-
	<hr/>
TOTAL FROM TRANSBASIN	-0-

DUTY OF WATER:

TOTAL TO IRRIGATION	111,594
ACRES IRRIGATED	16,518
ACRE FEET DIVERTED PER ACRE	6.76

NUMBER OF STRUCTURES OBSERVED:

WATER RUN - NO INFORMATION AVAILABLE	200
ACTIVE DIVERSIONS - DAILY	50
INFREQUENT	100
INACTIVE DIVERSIONS - NO WATER AVAILABLE	1
NO WATER WANTED OR STRUCT. NOT USUABLE	214
NO INFORMATION AVAILABLE	105

NUMBER OF DITCHES	456
NUMBER OF RESERVOIRS	66
NUMBER OF WELLS	165
NUMBER OF OBSERVATIONS	576

WATER COMMISSIONER'S SUMMARY

WATER DISTRICT 37

DIRECT DIVERSIONS:

ACRE FEET

STORAGE	33,146
IRRIGATION	129,630
MUNICIPAL	4,161
COMMERCIAL	-0-
INDUSTRIAL	-0-
RECREATION	-0-
FISH	-0-
FIRE	-0-
DOMESTIC	145
STOCK	-0-
OTHER:	
TRANSBASIN	-0-
TRANSMOUNTAIN	7,021
TOTAL DIVERSIONS	174,103

DELIVERIES FROM STORAGE:

IRRIGATION	582
MUNICIPAL	-0-
COMMERCIAL	-0-
RECREATION	-0-
FISH	-0-
OTHER:	568
TRANSBASIN	-0-
TRANSMOUNTAIN	20,355
TOTAL FROM STORAGE	21,505

DELIVERIES FROM TRANSBASIN:

IRRIGATION	-0-
STORAGE	376
MUNICIPAL	-0-
INDUSTRIAL	-0-
TOTAL FROM TRANSBASIN	376

DUTY OF WATER:

TOTAL TO IRRIGATION	130,212
ACRES IRRIGATED	19,269
ACRE FEET DIVERTED PER ACRE	6.76

NUMBER OF STRUCTURES OBSERVED:

WATER RUN - NO INFORMATION AVAILABLE	205
ACTIVE DIVERSIONS - DAILY	129
INFREQUENT	21
INACTIVE DIVERSIONS - NO WATER AVAILABLE	-0-
NO WATER WANTED OR STRUCT. NOT USUABLE	203
NO INFORMATION AVAILABLE	155

NUMBER OF DITCHES	652
NUMBER OF RESERVOIRS	100
NUMBER OF WELLS	105
NUMBER OF OBSERVATIONS	742

WATER COMMISSIONER'S SUMMARY

WATER DISTRICT 38

DIRECT DIVERSIONS:

ACRE FEET

STORAGE	56,642
IRRIGATION	362,111
MUNICIPAL	21,463
COMMERCIAL	-0-
INDUSTRIAL	-0-
RECREATION	-0-
FISH	53,302
FIRE	-0-
DOMESTIC	1,636
STOCK	-0-
OTHER:	
TRANSBASIN	1,781
TRANSMOUNTAIN	136,520
TOTAL DIVERSIONS	633,455

DELIVERIES FROM STORAGE:

IRRIGATION	11,248
MUNICIPAL	-0-
COMMERCIAL	-0-
RECREATION	37,648
FISH	-0-
OTHER:	1,695
TRANSBASIN	-0-
TRANSMOUNTAIN	-0-
TOTAL FROM STORAGE	50,591

DELIVERIES FROM TRANSBASIN:

IRRIGATION	652
STORAGE	360
MUNICIPAL	-0-
INDUSTRIAL	-0-
TOTAL FROM TRANSBASIN	1,012

DUTY OF WATER:

TOTAL TO IRRIGATION	374,011
ACRES IRRIGATED	55,634
ACRE FEET DIVERTED PER ACRE	6.72

NUMBER OF STRUCTURES OBSERVED:

WATER RUN - NO INFORMATION AVAILABLE	92
ACTIVE DIVERSIONS - DAILY	311
INFREQUENT	118
INACTIVE DIVERSIONS - NO WATER AVAILABLE	7
NO WATER WANTED OR STRUCT. NOT USUABLE	212
NO INFORMATION AVAILABLE	43
NUMBER OF DITCHES	699
NUMBER OF RESERVOIRS	77
NUMBER OF WELLS	68
NUMBER OF OBSERVATIONS	848

WATER COMMISSIONER'S SUMMARY

WATER DISTRICT 39

DIRECT DIVERSIONS:

ACRE FEET

STORAGE	10,445
IRRIGATION	131,641
MUNICIPAL	54
COMMERCIAL	7
INDUSTRIAL	-0-
RECREATION	-0-
FISH	2,058
FIRE	-0-
DOMESTIC	262
STOCK	4,598
OTHER:	
TRANSBASIN	1,178
TRANSMOUNTAIN	-0-
TOTAL DIVERSIONS	150,243

DELIVERIES FROM STORAGE:

IRRIGATION	7,995
MUNICIPAL	-0-
COMMERCIAL	-0-
RECREATION	-0-
FISH	-0-
OTHER:	
TRANSBASIN	-0-
TRANSMOUNTAIN	-0-
TOTAL FROM STORAGE	7,995

DELIVERIES FROM TRANSBASIN:

IRRIGATION	-0-
STORAGE	-0-
MUNICIPAL	-0-
INDUSTRIAL	-0-
TOTAL FROM TRANSBASIN	-0-

DUTY OF WATER:

TOTAL TO IRRIGATION	139,636
ACRES IRRIGATED	17,503
ACRE FEET DIVERTED PER ACRE	7.98

NUMBER OF STRUCTURES OBSERVED:

WATER RUN - NO INFORMATION AVAILABLE	82
ACTIVE DIVERSIONS - DAILY	0
INFREQUENT	85
INACTIVE DIVERSIONS - NO WATER AVAILABLE	3
NO WATER WANTED OR STRUCT. NOT USUABLE	130
NO INFORMATION AVAILABLE	47

NUMBER OF DITCHES	339
NUMBER OF RESERVOIRS	15
NUMBER OF WELLS	11
NUMBER OF OBSERVATIONS	411

WATER COMMISSIONER'S SUMMARY

WATER DISTRICT 45

DIRECT DIVERSIONS:

ACRE FEET

STORAGE	-0-
IRRIGATION	79,535
MUNICIPAL	290
COMMERCIAL	-0-
INDUSTRIAL	-0-
RECREATION	-0-
FISH	-0-
FIRE	-0-
DOMESTIC	785
STOCK	1,011
OTHER:	
TRANSBASIN	-0-
TRANSMOUNTAIN	-0-
TOTAL DIVERSIONS	81,621

DELIVERIES FROM STORAGE:

IRRIGATION	-0-
MUNICIPAL	-0-
COMMERCIAL	-0-
RECREATION	-0-
FISH	-0-
OTHER:	
TRANSBASIN	-0-
TRANSMOUNTAIN	-0-
TOTAL FROM STORAGE	-0-

DELIVERIES FROM TRANSBASIN:

IRRIGATION	4,565
STORAGE	552
MUNICIPAL	1,178
INDUSTRIAL	-0-
TOTAL FROM TRANSBASIN	6,295

DUTY OF WATER:

TOTAL TO IRRIGATION	84,100
ACRES IRRIGATED	31,514
ACRE FEET DIVERTED PER ACRE	2.67

NUMBER OF STRUCTURES OBSERVED:

WATER RUN - NO INFORMATION AVAILABLE	88
ACTIVE DIVERSIONS - DAILY	109
INFREQUENT	10
INACTIVE DIVERSIONS - NO WATER AVAILABLE	0
NO WATER WANTED OR STRUCT. NOT USUABLE	114
NO INFORMATION AVAILABLE	254

NUMBER OF DITCHES	499
NUMBER OF RESERVOIRS	57
NUMBER OF WELLS	105
NUMBER OF OBSERVATIONS	2,064

WATER COMMISSIONER'S SUMMARY

WATER DISTRICT 50

DIRECT DIVERSIONS:

ACRE FEET

STORAGE	6,590
IRRIGATION	81,957
MUNICIPAL	-0-
COMMERCIAL	-0-
INDUSTRIAL	-0-
RECREATION	-0-
FISH	365
FIRE	-0-
DOMESTIC	11
STOCK	29
OTHER:	
TRANSBASIN	-0-
TRANSMOUNTAIN	-0-

TOTAL DIVERSIONS 88,952

DELIVERIES FROM STORAGE:

IRRIGATION	5,169
MUNICIPAL	-0-
COMMERCIAL	-0-
RECREATION	-0-
FISH	-0-
OTHER:	30.4
TRANSBASIN	-0-
TRANSMOUNTAIN	-0-

TOTAL FROM STORAGE 5,199

DELIVERIES FROM TRANSBASIN:

IRRIGATION	-0-
STORAGE	-0-
MUNICIPAL	-0-
INDUSTRIAL	-0-

TOTAL FROM TRANSBASIN -0-

DUTY OF WATER:

TOTAL TO IRRIGATION	87,126
ACRES IRRIGATED	24,697
ACRE FEET DIVERTED PER ACRE	3.53

NUMBER OF STRUCTURES OBSERVED:

WATER RUN - NO INFORMATION AVAILABLE	1
ACTIVE DIVERSIONS - DAILY	78
INFREQUENT	83
INACTIVE DIVERSIONS - NO WATER AVAILABLE	0
NO WATER WANTED OR STRUCT. NOT USUABLE	82
NO INFORMATION AVAILABLE	26

NUMBER OF DITCHES	238
NUMBER OF RESERVOIRS	50
NUMBER OF WELLS	17
NUMBER OF OBSERVATIONS	821

WATER COMMISSIONER'S SUMMARY

WATER DISTRICT 51

DIRECT DIVERSIONS:

ACRE FEET

STORAGE		229,081
IRRIGATION		201,429
MUNICIPAL		1,575
COMMERCIAL		-0-
INDUSTRIAL	Includes 726 Exch.	1,365
RECREATION		-0-
FISH		-0-
FIRE		-0-
DOMESTIC		43
STOCK		-0-
OTHER:		-0-
TRANSBASIN		-0-
TRANSMOUNTAIN	Includes 3235 Exch.	189,151
	TOTAL DIVERSIONS	622,644

DELIVERIES FROM STORAGE:

IRRIGATION		1,376
MUNICIPAL		-0-
COMMERCIAL INDUSTRIAL		3,706
RECREATION		-0-
FISH		-0-
OTHER:	Includes 35323 Exch.	35,326
TRANSBASIN		-0-
TRANSMOUNTAIN		150,278
	TOTAL FROM STORAGE	190,686

DELIVERIES FROM TRANSBASIN:

IRRIGATION		-0-
STORAGE		-0-
MUNICIPAL		-0-
INDUSTRIAL		-0-
	TOTAL FROM TRANSBASIN	-0-

DUTY OF WATER:

TOTAL TO IRRIGATION	202,805
ACRES IRRIGATED	36,813
ACRE FEET DIVERTED PER ACRE	5.51

NUMBER OF STRUCTURES OBSERVED:

WATER RUN - NO INFORMATION AVAILABLE	357
ACTIVE DIVERSIONS - DAILY	238
INFREQUENT	42
INACTIVE DIVERSIONS - NO WATER AVAILABLE	0
NO WATER WANTED OR STRUCT. NOT USABLE	388
NO INFORMATION AVAILABLE	68

NUMBER OF DITCHES	712
NUMBER OF RESERVOIRS	110
NUMBER OF WELLS	260
NUMBER OF OBSERVATIONS	1,185

WATER COMMISSIONER'S SUMMARY

WATER DISTRICT 52

DIRECT DIVERSIONS:

ACRE FEET

STORAGE	-0-
IRRIGATION	47,488
MUNICIPAL	-0-
COMMERCIAL	-0-
INDUSTRIAL	-0-
RECREATION	-0-
FISH	-0-
FIRE	-0-
DOMESTIC	94
STOCK	-0-
OTHER:	
TRANSBASIN	1,012
TRANSMOUNTAIN	-0-
TOTAL DIVERSIONS	48,594

DELIVERIES FROM STORAGE:

IRRIGATION	-0-
MUNICIPAL	-0-
COMMERCIAL	-0-
RECREATION	-0-
FISH	-0-
OTHER:	
TRANSBASIN	-0-
TRANSMOUNTAIN	-0-
TOTAL FROM STORAGE	-0-

DELIVERIES FROM TRANSBASIN:

IRRIGATION	-0-
STORAGE	-0-
MUNICIPAL	-0-
INDUSTRIAL	-0-
TOTAL FROM TRANSBASIN	-0-

DUTY OF WATER:

TOTAL TO IRRIGATION	47,488
ACRES IRRIGATED	8,825
ACRE FEET DIVERTED PER ACRE	5.38

NUMBER OF STRUCTURES OBSERVED:

WATER RUN - NO INFORMATION AVAILABLE	8
ACTIVE DIVERSIONS - DAILY	0
INFREQUENT	119
INACTIVE DIVERSIONS - NO WATER AVAILABLE	1
NO WATER WANTED OR STRUCT. NOT USUABLE	50
NO INFORMATION AVAILABLE	31

NUMBER OF DITCHES	178
NUMBER OF RESERVOIRS	18
NUMBER OF WELLS	1
NUMBER OF OBSERVATIONS	413

WATER COMMISSIONER'S SUMMARY

WATER DISTRICT 53

DIRECT DIVERSIONS:

ACRE FEET

STORAGE	2,419
IRRIGATION	126,039
MUNICIPAL	3,918
COMMERCIAL	-0-
INDUSTRIAL Shoshone	746,825
RECREATION	-0-
FISH	-0-
FIRE	-0-
DOMESTIC	1,564
STOCK	291
OTHER:	
TRANSBASIN	-0-
TRANSMOUNTAIN	-0-
TOTAL DIVERSIONS	881,056

DELIVERIES FROM STORAGE:

IRRIGATION	2,019
MUNICIPAL	-0-
COMMERCIAL	-0-
RECREATION	-0-
FISH	-0-
OTHER:	
TRANSBASIN	-0-
TRANSMOUNTAIN	-0-
TOTAL FROM STORAGE	2,019

DELIVERIES FROM TRANSBASIN:

IRRIGATION	2,847
STORAGE	-0-
MUNICIPAL	-0-
INDUSTRIAL	-0-
TOTAL FROM TRANSBASIN	2,847

DUTY OF WATER:

TOTAL TO IRRIGATION	130,905
ACRES IRRIGATED	34,835
ACRE FEET DIVERTED PER ACRE	3.76

NUMBER OF STRUCTURES OBSERVED:

WATER RUN - NO INFORMATION AVAILABLE	59
ACTIVE DIVERSIONS - DAILY	0
INFREQUENT	219
INACTIVE DIVERSIONS - NO WATER AVAILABLE	0
NO WATER WANTED OR STRUCT. NOT USUABLE	145
NO INFORMATION AVAILABLE	56

NUMBER OF DITCHES	411
NUMBER OF RESERVOIRS	55
NUMBER OF WELLS	16
NUMBER OF OBSERVATIONS	874

WATER COMMISSIONER'S SUMMARY

WATER DISTRICT 70

DIRECT DIVERSIONS:

ACRE FEET

STORAGE	-0-
IRRIGATION	46,235
MUNICIPAL	61
COMMERCIAL	-0-
INDUSTRIAL	-0-
RECREATION	-0-
FISH	-0-
FIRE	-0-
DOMESTIC	-0-
STOCK	1,237
OTHER:	
TRANSBASIN	-0-
TRANSMOUNTAIN	-0-
TOTAL DIVERSIONS	47,533

DELIVERIES FROM STORAGE:

IRRIGATION	-0-
MUNICIPAL	-0-
COMMERCIAL	-0-
RECREATION	-0-
FISH	-0-
OTHER:	
TRANSBASIN	-0-
TRANSMOUNTAIN	-0-
TOTAL FROM STORAGE	-0-

DELIVERIES FROM TRANSBASIN:

IRRIGATION	-0-
STORAGE	-0-
MUNICIPAL	-0-
INDUSTRIAL	-0-
TOTAL FROM TRANSBASIN	-0-

DUTY OF WATER:

TOTAL TO IRRIGATION	46,235
ACRES IRRIGATED	6,547
ACRE FEET DIVERTED PER ACRE	7.06

NUMBER OF STRUCTURES OBSERVED:

WATER RUN - NO INFORMATION AVAILABLE	2
ACTIVE DIVERSIONS - DAILY	55
INFREQUENT	1
INACTIVE DIVERSIONS - NO WATER AVAILABLE	9
NO WATER WANTED OR STRUCT. NOT USUABLE	71
NO INFORMATION AVAILABLE	108

NUMBER OF DITCHES	128
NUMBER OF RESERVOIRS	19
NUMBER OF WELLS	98
NUMBER OF OBSERVATIONS	589

WATER COMMISSIONER'S SUMMARY

WATER DISTRICT 72

DIRECT DIVERSIONS:

ACRE FEET

STORAGE	44,397
IRRIGATION	1,100,642
MUNICIPAL	-0-
COMMERCIAL	-0-
INDUSTRIAL	75,908
RECREATION	-0-
FISH	-0-
FIRE	-0-
DOMESTIC	11,593
STOCK	-0-
OTHER:	
TRANSBASIN	2,191
TRANSMOUNTAIN	-0-
TOTAL DIVERSIONS	1,234,731

DELIVERIES FROM STORAGE:

IRRIGATION	14,618
MUNICIPAL	-0-
COMMERCIAL	20,567
RECREATION	-0-
FISH	-0-
OTHER:	
TRANSBASIN	-0-
TRANSMOUNTAIN	-0-
TOTAL FROM STORAGE	35,185

DELIVERIES FROM TRANSBASIN:

IRRIGATION	200,000
STORAGE	-0-
MUNICIPAL	11,673
INDUSTRIAL	284,393
TOTAL FROM TRANSBASIN	496,066

DUTY OF WATER:

TOTAL TO IRRIGATION	1,315,260
ACRES IRRIGATED	115,506
ACRE FEET DIVERTED PER ACRE	11,39

NUMBER OF STRUCTURES OBSERVED:

WATER RUN - NO INFORMATION AVAILABLE	265
ACTIVE DIVERSIONS - DAILY	100
INFREQUENT	50
INACTIVE DIVERSIONS - NO WATER AVAILABLE	0
NO WATER WANTED OR STRUCT. NOT USUABLE	207
NO INFORMATION AVAILABLE	451

NUMBER OF DITCHES	769
NUMBER OF RESERVOIRS	231
NUMBER OF WELLS	89
NUMBER OF OBSERVATIONS	5,160

DIVISION ENGINEER'S SUMMARY

WATER COMMISSIONER'S SUMMARY

DIVISION
 WATER ~~XXXXXXXX~~ V

DIRECT DIVERSIONS:

ACRE FEET

STORAGE	584,844
IRRIGATION	2,417,768
MUNICIPAL	31,522
COMMERCIAL	7
INDUSTRIAL	947,302
RECREATION	-0-
FISH	55,725
FIRE	-0-
DOMESTIC	8,725
STOCK	7,166
OTHER:	
TRANSBASIN	6,162
TRANSMOUNTAIN	356,872

TOTAL DIVERSIONS 4,416,093

DELIVERIES FROM STORAGE:

IRRIGATION	43,540
MUNICIPAL	-0-
COMMERCIAL Industrial (Power)	42,238
RECREATION	37,648
FISH	-0-
OTHER:	53,525
TRANSBASIN	
TRANSMOUNTAIN	204,010

TOTAL FROM STORAGE 380,961

DELIVERIES FROM TRANSBASIN:

IRRIGATION	208,064
STORAGE	1,288
MUNICIPAL	16,851
INDUSTRIAL	284,393

TOTAL FROM TRANSBASIN 506,596

DUTY OF WATER:

TOTAL TO IRRIGATION	2,669,372
ACRES IRRIGATED	367,661
ACRE FEET DIVERTED PER ACRE	7.26

NUMBER OF STRUCTURES OBSERVED:

WATER RUN - NO INFORMATION AVAILABLE	1,359
ACTIVE DIVERSIONS - DAILY	970
INFREQUENT	798
INACTIVE DIVERSIONS - NO WATER AVAILABLE	21
NO WATER WANTED OR STRUCT. NOT USUABLE	1,816
NO INFORMATION AVAILABLE	1,344

NUMBER OF DITCHES	5,081
NUMBER OF RESERVOIRS	798
NUMBER OF WELLS	935
NUMBER OF OBSERVATIONS	13,683

RECOMMENDATIONS AND SUGGESTIONS