DIVISION OF WATER RESOURCES

DIVISION NO. 6

1979 ANNUAL REPORT

Wesley E. Signs
Division Engineer

CONTENTS

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I. INTRODUCTORY STATEMENT

Irrigation Division 6 is basically the northwestern corner of the state of Colorado bordered on the north by the Wyoming boundary, on the west by the Utah boundary, on the south by the White River Drainage, and on the east by the North Platte Drainage. The terrain varies from over 13,000 ft at the Continental Divide to the canyon floors of Western Colorado around 5,000 ft. The precipitation varies from forty inches in the high mountains to less than seven inches in the western desert lands.

Most of the crop bearing areas have around twenty inches of annual precipitation and incompass the ground from 6,000 ft to 8,000 ft in elevation. The high elevation and the western desert areas are primarily used for summer and winter grazing and recreational purposes. The bulk of this ground is government controlled by the US Forest and Bureau of Land Management.

The irrigation is basically all native hay, alfalfa hay, and irrigated pasture which is about 250,000 acres for the entire Division. This acreage is approximately 120,000 acres for the North Platte, 100,000 acres for the Yampa Drainage, and 30,000 acres in the White River Drainage. Dry farming is practiced in the mid areas of the Yampa River and the White River Drainages, with small grains being the basic crops. Dry crop lands amount to around 131,000 acres in the Yampa River Drainage with approximately 17,000 acres in the White River Drainage. This ground is normally summer fallowed which means that only a little over fifty percent of this land is in crop in any given year. The growing season in Division 6 varies from less than thirty days in the North Platte Drainage to around ninety days in the lower reaches of the Yampa and White River Drainages.

The population of Division 6 is sparse with the main population centers being Craig, Steamboat Springs, and Meeker. The development of coal to meet the so-called energy crisis has caused a sharp increase in population and business activity to the point of being almost a boom. An enlargement to the existing steam generating plant at Hayden, Colorado went on line in 1978 with two such plants going on line in the Craig area in 1979. A third such plant is on the drawing boards for the Craig area to be started in 1979 or 1980. Several new coal mines were opened in the area in 1978 and 1979 with more scheduled for opening in the near future. The bulk of the mines are open pit, but several underground coal mines were started during 1979. There are several others submitting plans and studying for more underground mines. Oil Shale Tracts Ca and Cb in the Piceance Basin near Meeker have been the center of much activity in the past year as the respective companies are continuing development of these tracts for the experimental production of oil from oil shale.

Division 6 enjoyed one of its larger snow packs during the winter of 78-79. This resulted in an excellent water year with all deliveries being normal or above for the main part of the irrigation season. The result was average or above hay production on the irrigated ground. Summer moisture was practically non-existent throughout most of the Division. This condition resulted in below average dry land crop production.

The dry summer caused the majority of the stream gages to fall well below normal in the fall months. This is the third fall in a row that this has taken place. This year it was late enough that it didn't have much effect on irrigated production.

II. PERSONNEL

Name	Position	District	FY 78-79 Months Worked	FY 78-79 Months Budgeted	FY 78-79 Mileage
Wesley E. Signs	Division Engineer		Full Time		1,806
Robert McCabe	Asst. Div. Engineer		Full Time		495
W. Kent Holt	Hydrographer		Full Time		1,552
Karen McPherren	Secretary		Full Time		
Roy D. Steffen	1042 Water Commissioner		Full Time		
Joe E. Brown	Water Commissioner B	43	Full Time		
*William Dunham	Water Commissioner A	43	12	2	
Ben E. Cordle	Water Commissioner B	44	Full Time		12,913
Donald C. Gilroy	Water Commissioner B	54	4	6	3,386
Jack Leonard	Water Commissioner B	55-56	3	5	2,887
James E. Sellers	Water Commissioner B	57	Full Time		5,121
Charles Gregory	Water Commissioner B	58	Full Time		7,179
Billy R. Milner	Water Commissioner B	58	6.8	8	3,529
Eric H. Wagner	Water Commissioner A	47	Full Time		3,376

*Additional time above budget allotment was paid for with Piceance Basin Study funds.

III. WATER SUPPLY

A. Forecast

The heavy snowpack made the streamflow well above average at most of the stations. Runoff at key gaging stations was as follows:

Station	Acre Feet	% Average	No. of Years
Yampa River at Steamboat Springs	342,500	101	57
Elk River at Clark	250,000	103	60
Yampa River at Maybell	131,300	117	62
Little Snake near Lilly Park	423,800	103	57
S. Fk. of White River at Buford	206,600	113	28
N. Fk. of White River at Buford	239,500	108	33
White River near Meeker	534,400	119	74
Piceance Creek below Ryan Gulch	20,790	154	14
White River above Rangely	545,700	119	6
White River near Watson, Utah	556,000	111	55
Michigan River near Cameron Pass	2,370	119	5
N. Fk. Michigan River near Gould	12,040	97	23
N. Platte River near Northgate	407,100	131	63

B. Precipitation

Precipitation for selected stations in Division 6:

	Steamboat Springs	Hayden	Walden
November	1.89	1.37	.49
December	3.95	2.07	1.64
January	4.62	1.88	.65
February	2.14	1.64	.28
March	2.68	2.00	1.39
April	1.46	.94	.49
May	2.63	1.07	1.36
June	.75	.27	1.24
July	.51	.80	.37
August	1.64	2.27	1.20
September	.24	.17	.19
October	1.53	1.20	1.08
Totals	24.04	15.68	10.38

C. Flooding

Even though the snowpack was well above average, the flooding from spring runoff was minimal. This was probably due in part to the low soil moisture conditions. The runoff was also orderly due to good weather conditions.

D. Ground Water

Domestic well activity ran at an unprecedented pace in Division 6 during the 1979 Water Year. The energy companies were also very active in attempting to secure additional groundwater appropriations. A total of 470 well permit applications were submitted for approval. Roy Steffen, Division 1042 Commissioner, made on-site inspections of 241 new wells during the year. Most of the wells were found to be in compliance with state regulations, however a few had to be upgraded in order to meet the minimum standards.

Underground waters tributary to the Yampa and Elk Rivers are still not considered to be over-appropriated so that domestic well permits are generally available to applicants. The granting of a well permit does not however guarantee the applicant a sufficient potable water supply. Much of the subdivided land in the Division lies over the Mancos Shale Formation which is classified as a poor aquifer. Dry holes, low yields, and poor water quality are the predominant characteristics of this aquifer. Those subdivisions located over sandstone formations are also beginning to have problems. Some of these subdivisions which at one time yielded sufficient water to meet the needs of residents are now showing signs of overdrafting and well yields are decreasing. Stricter county subdivision regulations requiring developers to provide an adequate water supply are needed to alleviate these problems.

Most of the well activity associated with the energy companies has occured in the lower White River Basin. Occidental Petroleum has been most active and was granted 32 well permits in 1979. Proposed pumping rates ranged from 15 gpm to 10,500 gpm. The wells will be used to dewater the mine area in Tract Cb and other activities associated with oil shale mining.

E. Transmountain Diversions (Transbasin)

Structure	Acre Feet
Stillwater Ditch	1,465
Sarvis Ditch	0
Rich Ditch	1,207
Morgan Creek	684
Dome Creek	258
Michigan Ditch	726
Cameron Pass Ditch	234
	4,574

Total water exported from Yampa R. to Colorado R. Drainage: 1723

Total water exported from N. Platte R. to S. Platte Drainage: 960

III. Water Supply

G. Reservoir Storage

NAME OF RESERVOIR	SOURCE	AMT. IN STORAGE 11/1/78	FILL DURING SEASON	RELEASE + EVAPORATION	AMT. IN STORAGE 10/31/79	TOTAL CHANGE IN STORAGE
DISTRICT NO. 43						
Baxter Reservoir	Evacuation Creek	65	0	0	65	0
Big Beaver Creek Reservoir	Big Beaver Creek	6431	750	750	6431	0
Big Lick Reservoir	Big Beaver Creek	0	503	353	150	150
Black Gulch Reservoir	Black Gulch	41	0	0	41	0
Johnny Johnson Reservoir	White River	1036	186	422	800	-236
Keystone Reservoir No. 3	Price Creek	31	0	0	31	0
Larson Reservoir	Nineteen Mile Creek	62	0	0	62	0
Lunney Reservoir	Nine Mile Craw	16	66	42	40	24
McHatton Reservoir	Coal Creek	32	32	44	20	-12
Procter Reservoir	Curtis Creek	7	0	0	7	0
West Miller Reservoir	West Miller Creek	55	23	48	30	-25
West Stewart Reservoir	West Stewart Creek	0	13	0	13	13
Wilson Reservoir	East Flag Creek	0	20	10	10	10
TOTALS (All figures in Acre Feet)		7776	1593	1669	7700	-76
DISTRICT NO. 44						
Anderson Reservoir	Cottonwood Creek	0	20	18	2	+2
B and B Reservoir	Flume Gulch	22	5	5	22	0
Bennett Reservoir	Spring Creek	7	7	7	7	0
Big Bottom Reservoir	Unnamed Tributary	0	0	0	0	0
Biskup Reservoir	Biskup Gulch	0	0	0	0	0
Bunker Lake Reservoir	Bunker Creek	83	191	191	83	0
Cove Lake Reservoir	Morapos Creek	23	75	75	23	0
Cove Reservoir	Morapos Creek	43	121	120	44	+1
Culverwell Reservoir	Sand Spring Gulch	0	0	0	0	0
D D & E Reservoir	Hullett Draw	588	1408	1220	776	+188
Dresher Reservoir	Long Gulch	20	240	240	20	0
Dunkley Dubeau Reservoir	Willow Creek	28	113	113	28	0
Elgin Reservoir	Bell Rock Gulch	108	35	35	108	0
Elgin Reservoir No. 2	McLernon Draw	0	53	50	3	+3
Elk Head Reservoir	Elk Head Creek	13574	0	0	13574	0
Flat Top (Gill) Reservoir	Unnamed Tributary	25	0	0	25	0

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DISTRICT NO. 44 CONT.						
Fredrickson No. 1 Reservoir	Tributary to Elk Head	5	0	0	5	0
Fredrickson No. 2 Reservoir	Tributary to Elk Head	2	0	0	2	0
Fredrickson No. 3 Reservoir	Tributary to Elk Head	9	0	0	9	0
Fredrickson No. 4 Reservoir	Tributary to Elk Head	3	0	0	3	0
Freeman Reservoir	Little Cottonwood Creek	137	0	0	137	0
Gerber Reservoir	Sand Spring Gulch	5	0	0	5	0
Konopik Reservoir	Clear Creek	13	0	0	13	0
Leftwich Reservoir	Boone Gulch	36	0	0	36	0
Malburg Pond	Brown's Gulch	2	0	0	2	0
Morin Reservoir	Dayton Creek	7	0	0	7	0
Morton Reservoir	Deacon Gulch	9	0	0	9	0
Pitney Reservoir	Corral Gulch	11	0	0	11	0
Poose Creek Reservoir	Poose Creek	277	125	125	277	0
Ralph White Reservoir	Fortification Creek	925	300	300	925	0
Roby Reservoir	Morapos Creek	0	26	26	0	0
Sagebrush Reservoir No. 1	Butler Creek	4	0	1	3	-1
Sagebrush Reservoir No. 2	Butler Creek	2	2	0	4	2
Sellers Crowell Reservoir	Willow Creek	40	60	92	8	-32
Shafer Reservoir	Willow Creek	42	39	68	13	-29
Velanzas Reservoir No. 1	Jeffway Gulch	8	0	0	8	0
Velanzas Reservoir No. 2	Jeffway Gulch	4	0	0	4	0
Waddle Creek Reservoir	Waddle Creek	19	20	34	5	-14
Wilson Reservoir	Good Springs Creek	68	0	0	68	0
Wyman Reservoir	Beaver Creek	78	0	0	78	0
TOTALS (All figures in Acre Feet)		16,227	2,840	2,720	16,347	120

III. Water Supply

G. Reservoir Storage

NAME OF RESERVOIR	SOURCE	AMT. IN STORAGE 11/1/78	FILL DURING SEASON	RELEASE + EVAPORATION	AMT. IN STORAGE 10/31/79	TOTAL CHANGE IN STORAGE
DISTRICT NO. 47						
Addison Reservoir	Buffalo Creek	0	42	42	0	0
Aqua Fria Reservoir	Beaver Creek	731	0	0	731	0
Bennett Reservoir	T. Beaver Creek	0	0	0	0	0
Big Creek Lake	Big Creek	1434	0	0	1434	0
Boettcher Lake	Lake Creek	0	0	0	0	0
Brands Reservoir	T. No. Fk. North Platte	0	0	0	0	0
Buffalo Reservoir	Buffalo Creek	486	0	0	486	0
Burns Reservoir	Burns Draw	39	0	0	39	0
Butte (South and East) Res.	Roaring Fork	202	407	198	411	209
Carlstrom (Upper Cowdrey) Res.	Michigan River	0	640	192	448	448
Case No. 1 Reservoir	Illinois River	0	117	117	0	0
Case No. 2 Reservoir	Illinois River	0	98	98	0	0
Case No. 3 Reservoir	Illinois River	0	60	60	0	0
Clayton Reservoir	Buffalo Creek	130	83	0	213	83
Cowdrey (Lower) Reservoir	Michigan River	0	0	0	0	0
Coyte Reservoir	Arapahoe Creek	38	0	0	38	0
Fisher Lake and Pump	Seepage T Michigan R.	58	0	0	58	0
Fuller Reservoir	Cow Creek	5	3	2	6	1
Gamber Reservoir	Little Grizzly River	0	0	0	0	0
Ginger Quill Reservoir	Three Mile Creek	38	0	0	38	0
Hap Reservoir	Buffalo Creek	0	14	14	0	0
Hecla Reservoir	Arapaho Creek	255	0	0	255	0
House (Upper) Reservoir	Spring Creek	44	0	0	44	0
Hunter Reservoir	Three Mile Creek	0	63	63	0	0
Jackson Reservoir	Dry Creek	119	0	0	119	0
Kettle Reservoir	Newcomb Creek	0	0	0	0	0
Lake John	Lake Creek	5970	230	785	5415	-555
Lake Roslyn	Willow Creek	200	0	0	200	0
Laune Reservoir	Roaring Fork	2118	407	675	1850	-268
MacFarlane Reservoir	Illinois River	2400	2489	889	4000	1600
McGowan Reservoir	Middle Fk Mexican Cr.	29	3	0	32	3
Mexican Reservoir	Mexican Creek	13	67	80	0	-13
Muddy Pass Reservoir	T Grizzly Creek	58	0	0	58	0
Ninegar Reservoir	Ninegar Creek	24	0	0	24	0
North Michigan Reservoir	No. Fk. Michigan Cr.	1250	0	0	1250	0
Petry Lake	T. Grizzly Creek	72	0	0	72	0
Pole Mountain Reservoir	Mexican Creek	954	851	454	1351	397

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DISTRICT NO. 47 CONT.						
Ridings Reservoir	Buffalo Creek	0	0	0	0	0
Rock Reservoir	Newcomb Creek	0	0	0	0	0
Seymour Reservoir	Ninegar Creek	525	0	0	525	0
Shawver Reservoir	Sutton Creek	0	9	5	4	4
Slack and Weiss Reservoir	Ninegar Creek	82	110	55	137	55
Stambaugh Reservoir	Little Grizzly	60	79	139	0	-60
South Arapahoe Reservoir	Arapaho Creek	0	16	16	0	0
Three Mile Reservoir	Three Mile Creek	0	49	49	0	0
Two Ledge Reservoir	T. Coyote Creek	50	0	0	50	0
Van Valkenburg Reservoir	Van Valkenburg Draw	27	27	27	27	0
Walden Reservoir	Illinois River	4506	0	106	4400	-106
West Arapaho Reservoir	T. Big Grizzly	0	125	125	0	0
TOTALS (All figures in Acre Feet)		21,917	5,989	4,191	23,715	1,798
DISTRICT NO. 54						
Elk Lake Reservoir	Willow Creek	0	398	398	0	0
Gold Blossom Reservoir	Gold Blossom Creek	0	0	0	0	0
Lake Fork Reservoir	Lake Fork Creek	44	0	0	44	0
Lower Cogdill Reservoir	Government Corral Creek	173	0	0	173	0
Martin Cull Reservoir	T. Four Mile Creek	95	25	30	90	-5
McCargar Dam and Reservoir	Independence Creek	64	0	0	64	0
Skunk Creek Reservoir	Skunk Creek	16	0	0	16	0
Slater Creek Lake	T. Slater Creek	44	0	0	44	0
Upper Cogdill Reservoir	Government Corral Creek	45	0	0	45	0
TOTALS (All figures in Acre Feet)		481	423	428	476	-5
DISTRICT NO. 56						
Ainge Reservoir	Flynn Spring	0	5	1	4	4
Bassett No. 1 Reservoir	Bull Canyon Gulch	28	4	0	32	4
Bassett No. 2 Reservoir	Bull Canyon Gulch	50	10	16	54	4
Blevins Reservoir	Spring T. Vermillion Cr	5	0	3	2	-3
Cove Reservoir	Cottonwood Creek	0	1.0	0	1.0	1

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DISTRICT 56 CONT.						
Massey Reservoir	Flynn Spring	2	16	15	3	1
Offield Reservoir	Pot Creek	40	60	40	60	20
TOTALS (All figures in Acre Feet)		125	96	65	156	31
DISTRICT NO. 57						
Emrick Reservoir	Dry Creek	0	159	159	0	0
Apple Reservoir	Dry Fk, Trout Creek	0	11	10	1	+1
Basin Reservoir	Basin & Buchanan Gulch	74	289	289	74	0
Brock Reservoir	T. Yampa River	3	7	3	7	+4
Cozzens Walrod Reservoir	Hutchinson Gulch	10	85	47	48	+38
East Signs Reservoir	Hooker Draw	2	2	2	2	0
Eckman Park Reservoir No. 1	Foidel Creek	110	117	117	110	0
Eckman Park Reservoir No. 2	Foidel Creek	12	12	12	12	0
Eckman Park Reservoir No. 3	Foidel Creek	2	24	24	2	0
Elmer Reservoir	Morgan Creek	30	0	0	30	0
F.Schaffermeyer Res. No. 3	Fiske Creek	4	1	1	4	0
F.Schaffermeyer Res. No. 4	Fiske Creek	2	2	2	2	0
Greasewood Flats Reservoir	Dill Gulch	0	80	80	0	0
Hayden Station Ponds	Yampa River	358	0	95	263	-95
James Marion Yoast Reservoir	Yoast Creek	3	147	150	0	-3
John C. Temple Res. No. 1	Temple Gulch	0	553	553	0	0
Kowach Reservoir	Small T Yampa River	28	33	33	28	0
Morgan Creek No. 1 Reservoir	Morgan Creek	52	297	314	35	-17
Nofstger Reservoir	Grassy Creek	350	100	100	350	0
Nofstger-Zeigler Reservoir	Grassy Creek	230	293	293	230	0
Sage Creek Reservoir	Sage Creek	0	609	260	349	349
Scotchmans Gulch Reservoir No. 1	Scotchmans Gulch	0	8	8	0	0
Seaton Reservoir	Middle Fish Creek	0	20	20	0	0
Sheriff Reservoir	Trout Creek	986	140	140	986	0
West Signs Reservoir	Miller.Draw	0	1	1	0	0
Yoast No. 1, No. 2 Reservoir	Yoast Creek	5	7	7	5	0
TOTALS (All figures in Acre Feet)		2,261	2,997	2,720	2,538	277

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DISTRICT NO. 58						
Allen Basin Reservoir	Middle Hunt Creek	471	1356	1138	689	218
Alma Baer Reservoir	Fish Creek	3	0	0	3	0
Bull Park No. 2 Reservoir	West Branch Watson Creek	0	0	0	0	0
Burnt Mesa Reservoir	South Hunt Creek	5	101	96	10	5
Chapman Reservoir	Little Oak Creek	74	172	166	80	6
Crowner Reservoir	Beaver Creek	0	6	6	0	0
Fish Creek Reservoir	Fish Creek	1842	300	300	1842	0
Fish Creek Lake No. 2	Wheeler Creek	35	0	0	35	0
French Reservoir	Jack Creek	2	5	3	4	2
Gardner Park Reservoir	Gardner Creek	999	156	0	1155	156
G.R. Brenneman Reservoir	Cow Creek	2	0	0	2	0
Hahns Peak Reservoir	Willow Creek	600	50	50	600	0
Heart Lake	Watson Creek	0	283	283	0	0
Lake Creek Reservoir	Wheeler Creek	261	0	0	261	0
Lake Windemere	Farnsworth Creek	100	37	127	10	-90
Lee Reservoir	Chimney Creek	21	0	21	0	-21
Lester Creek Reservoir	Lester Creek	5657	803	703	5757	100
Long Lake	Fish Creek	397	100	100	397	0
Martin Reservoir	Yellow Jacket Creek	10	5	5	10	0
May Reservoir	Salt Creek	22	9	21	10	-12
McChivvis Reservoir	Watson Creek	70	124	194	0	-70
Moore Park Reservoir	Elgin Creek	0	20	20	0	0
Oak Creek Reservoir	Oak Creek	1	0	0	1	0
Overman Reservoir	French Creek	100	0	0	100	0
Rams Horn Reservoir	Dome Creek	122	0	0	122	0
Reed Reservoir	Chimney Rock Creek	20	0	0	20	0
Roland Reid Reservoir No. 1	Ft. Willy Gulch	45	0	0	45	0
Sandelin Reservoir No. 1	Big Creek	2	0	0	2	0
Sandelin Reservoir No. 2	Big Creek	7	0	0	7	0
Sandelin Reservoir No. 3	Big Creek	7	0	0	7	0
Simon Reservoir	Middle Hunt Creek	575	437	509	503	-72
Stillwater Reservoir No. 1	Yampa River	2110	3578	3356	2332	222
Storm Mountain Reservoir	Burgess Creek	2	0	0	2	0
Stuckey Distribution Reservoir	Spring Creek	5	0	0	5	0
Bison Park Reservoir	Lawson Creek	0	26	26	0	0

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DISTRICT NO. 58 CONT.						
Lowry Reservoir	Oak Creek	46	0	0	46	0
Lake Catamount	Yampa River	7422	1500	1500	7422	0
Tillquist Reservoir	Morrison Creek	5	0	0	5	0
Trull Creek Reservoir	Trull Creek	0	149	136	13	13
Upper Stillwater Reservoir	Roaring Fork	620	100	100	620	0
Upper Willow Creek Reservoir	Willow Creek	23050	2305	2600	22755	-295
Wheeler Reservoir	Wheeler Creek	37	0	0	37	0
Whitney Nelson Reservoir	Whipple Creek	424	0	160	264	-160
Younger Reservoir	Morrison Creek	15	0	0	15	0
TOTALS (All figures in Acre Feet)		45186	11622	11620	45188	2

IV. AGRICULTURE

The irrigated hay production seemed to be normal or slightly above due to the excellent supply of irrigation water. The quality for the most part was excellent because there was a very low precipitation during the harvest season. Dry land hay crops was below average because of the lack of summer moisture.

Dry crop grain production was much below average because of the moisture shortage. Stands were good and at the beginning of the season it appeared that it would be a bumper crop. However, the lack of moisture caused a poor fill and the yield was well below what was expected. The quality and harvest conditions were excellent and the price somewhat better than last year.

While late summer grazing was not as good as average because of the lack of summer precipitation, the livestock grain was near average because of the good early moisture.

The livestock prices held up being better than last year giving this segment of the industry another fair year. Livestock numbers in the area seem to still be on the decline yielding to industry and subdivisions.

V. COMPACTS

Water supplies were sufficient during the 1979 water year to meet all interstate obligations without serious curtailment of existing Colorado water rights. Interstate compacts, decrees, and agreements governing Division 6 and actual deliveries are discussed in detail below.

A. Upper Colorado River Compact - Article XIII (a) of the Upper Colorado River Compact specifies that the state of Colorado will not cause the flow of the Yampa River at the Maybell gage to be depleted below an aggregate of 5,000,000 acre feet for any period of ten consecutive years beginning with the first day of October succeeding ratification of the Compact. Total flow past the Maybell gage during the 1979 water year was 1,310,300 AF making the aggregate for the last ten consecutive years 11,547,500 AF. The 1979 flow was 17 percent above the normal based on a 62 year period of record.

Article XI of the Upper Colorado River Compact opportions the consumptive use of water of the Little Snake River and its tributaries between the states of Colorado and Wyoming. Water diverted from the main stem of the Little Snake downstream from a point 100 feet below its confluence with Savery Creek is administered according to an interstate priority system. Water supplies were 3 percent above normal during the 1979 water year and no problems were encountered in the administration of Article XI. Total flow past the Little Snake River gage near Lily Park was 423,800 AF.

B. Decree Exerpted from Nebraska VS. Wyoming (325 V.S. 589(1945) - The Nebraska VS. Wyoming Decree enjoins the state of Colorado from:

1. Diverting or permitting the diversion of water from the North Platte River and its tributaries for the irrigation of more than a total of 135,000 acres of land in Jackson County, Colorado during any one irrigation season;

2. Storing or permitting the storage of more than a total amount of 17,000 acre feet of water for irrigation purposes from the North Platte River and its tributaries in Jackson County, Colorado between October 1 of any year and September 30 of the following year;

3. Exporting out of the basin of the North Platte River and its tributaries in Jackson County, Colorado to any other stream basin or basins more than 60,000 acre feet of water in any period of ten consecutive years reckoned in continuing progressive series beginning with October 1, 1945.

All requirements set forth in the Decree were satisfied during the 1979 water year. Total irrigated acreage in Jackson County was 115,156 acres, up 790 acres from the 1978 total of 114,366 acres. Total storage from the North Platte basin in Jackson County was 5996 AF in 1979 and exports from the North Platte Basin totaled 960 AF. Total aggregate exports during the last ten consecutive years total 12,196 AF which is well within the allowable.

C. Pot Creek Agreement - Pot Creek originates in the Uintah Mountains of eastern Daggett and Uintah Counties in Utah. It flows in an easterly direction into Colorado where it empties into the Green River in Colorado. Water from Pot Creek is distributed between Utah and Colorado based on a common agreement establishing an interstate priority system. Based on the terms of the agreement, Colorado was due to receive 421 AF during the 1979 water year. Actual deliveries fell short with only 216 AF being delivered at the state line.

VI. DAMS

1979 has been an active year for those water users attempting to increase storage in Division 6. Field construction was started on two reservoirs in the Division and preliminary planning was being actively pursued on another project.

After some twenty years in the planning stages, construction of the Yamcola Reservoir is now underway and is expected to be completed in the Fall of 1980. The reservoir is being sponsored by the Upper Yampa Conservancy District and will be located on the Yampa River about twelve miles above the town of Yampa. Of the total 8,000 AF of useable capacity, 4,000 AF has been committed to Colorado Ute Electric for its power plants in Hayden and Craig; 1,000 AF will be allocated for domestic use; with the remaining 3,000 AF going to irrigators in the Yampa and Toponas area. The water will be sold for $3.50 an acre foot to agricultural users and $26.00 an acre foot to Colorado Ute and municipal users. Although the project was originally conceived for agricultural use only, the $4.5 million cost could not be justified without help from municipal and industrial water users.

Construction also started on the Meadow Creek Reservoir in North Park. This reservoir is located about thirteen miles southeast of Walden on Meadow Creek and will store flood waters from Meadow Creek and the Michigan River for late season irrigation. The reservoir is being built by fifteen water users and will have a capacity of 1,090 AF when completed. The keytrench was completed in October and had to be excavated to a depth of 40 feet in places. The trench was backfilled using a bentonite slurry. Backers of the project hope to have it completed in 1980 and are attempting to line up additional financing.

Progress is also being made toward the eventual construction of the Juniper-Cross Mountain Project. The project will include two reservoirs, both located on the Yampa River in Moffat County below Craig. The Juniper Dam will store 1,080,000 AF with a rated capacity of 45,000 kilowatts. Cross Mountain Dam will store 142,000 AF and have a rated capacity of 33,000 kilowatts. Studies of the project are now taking place under a three year preliminary permit issued by the Federal Energy Regulatory Commission to conduct studies preparatory to license issuance for construction. The project is being sponsored by the Colorado River Water Conservation District and will develop water primarily for hydroelectric power. Colorado Ute has already agreed to purchase all power generated by the project. Total project costs will be paid by water and power sales revenues with no federal or state funds involved.

The Dam Safety Branch was active in Division 6 during the 1979 Water Year collecting field data to update the National Inventory of Dams. The field data is used to establish hazard ratings for the dams and to verify structure dimensions. In addition, some of the dams received Phase 1 inspections by Rocky Mountain Consultants, Inc. in accordance with provisions of the National Dam Safety Act of 1972. These inspections were conducted under the auspices of the Colorado State Engineer and the U.S. Corps of Engineers and the inspection reports are due to be submitted by December 31, 1979 to the State Engineer.

VII. WATER RIGHTS

The Division 6 Water Court has done an impressive job this year in keeping up with the ever-increasing water right applications. The Court was also able to reduce its backlog considerably. A summary of Court actions in Division 6 during the 1979 Water Year is shown below.

A total of 26 Referee Hearings were held in the Division 6 Office during the 1979 Water Year. These hearings were very beneficial with the majority of cases settled by common agreement, thus eliminating the necessity of a court hearing. The effort put forth in resolving the cases was well justified since it takes a great deal of pressure off our overburdened court system.

Judge Hume, Water Judge in Division 6, signed an Order in November, 1979, which stayed the processing of all water cases relating to non-tributary waters pending further orders of the Court. The Order was issued in compliance with a motion from the Colorado River Water Conservation District and is intended to halt further consideration of nontributary water cases pending the settlement of Case No. 79-SA-38 entitled, "Southeastern Colorado Water Conservancy District, et al, VS. John Huston, et al." The Order does not apply to findings of due diligence or for conditional to absolute decrees.

COURT TRANSACTIONS IN DIVISION 6 (EXCEPT DIST. 43*)

	Applications	Rulings	Decrees
Underground Right	35	46	18
Change of Water Right	25	10	3
Plan of Augmentation	2	-	-
Surface Right	194	156	65
Storage Right	46	31	13
In-stream Right	24	-	-

*District 43 water cases are handled in Division 5 Water Court (next page).

COURT TRANSACTIONS IN DIVISION 6 - DIST. 43

	Applications	Rulings	Decrees
Underground Right	10	15	11
Change of Water Right	1	-	1
Plan of Augmentation	-	-	-
Surface Right	42	43	24
Storage Right	4	3	4
In-stream Right	-	-	-

VIII. ORGANIZATIONS

A. Colorado River Water Conservation District, Glenwood Springs, Colorado - Mr. Roland C. Fischer, Secretary-Engineer

Upper Yampa Water Conservancy District, Steamboat Springs, Colorado - John Fetcher, Secretary; Jim Funk, President

Yellow Jacket Water Conservancy District, Meeker, Colorado - Frank Cooley, Attorney

Pot Hook Conservancy District, Baggs, Wyoming - Darwin Dunn, President

Lower Yampa Conservancy District, Craig, Colorado - Tony Angelo, Chairman

Great Northern Conservancy District, Craig, Colorado - Tony Angelo, Chairman

Northwest Colorado Water Council, Craig, Colorado - Tony Angelo, Chairman

Jackson County Water Conservancy District, Walden, Colorado - Lloyd Hampton, Secretary

B. Bear River Reservoir Company, Yampa, Colorado

Stillwater Ditch Company, Yampa, Colorado

Maybell Irrigation District, Maybell, Colorado

Miller Creek Ditch Company, Meeker, Colorado

Woodchuck Ditch Company, Steamboat Springs, Colorado

Mt. Werner Water & Sanitation District, Steamboat Springs, CO

Morrison Creek Water & Sanitation District, Oak Creek, CO

Steamboat Lake Water District, Clark, Colorado

Riverside Water & Sanitation District, Steamboat Springs, CO

Steamboat II Water & Sanitation District, Steamboat Springs, CO

Tree Haus Water & Sanitation District, Steamboat Springs, CO

IX. WATER COMMISSIONER'S SUMMARY

Water District No. 43

Direct Flow Diversions to Irrigation	264,882
Direct Flow Diversions to Transbasin	0
Direct Flow Diversions to Municipal & Domestic	2,500
Direct Flow Diversions to Industrial	3,285
Direct Flow Diversions to Other Uses	17,000
TOTAL DIVERSIONS	287,667
Reservoir Storage (11/1/78)	7,776
Reservoir Storage (10/31/79)	7,700
Net Change in Storage	-76
Fill During Season	1,593
Release + Evaporation During Season	1,669
Direct Diversions to Irrigation	264,882
Diversions from Storage to Irrigation	899
TOTAL DIVERSIONS TO IRRIGATION	265,781
Total Acres Irrigated	30,090
Average Demand for Irrigation	8.9
Number of Active Ditches Observed	466
Number of Active Reservoirs Observed	24
Number of Active Springs Observed	265
Number of Active Wells Observed	21
Number of Inactive Structures Observed	132
TOTAL STRUCTURES OBSERVED	908
Total Number of Structures Regulated	36
Total Number of Field Observations Made	4,572

IX. WATER COMMISSIONER'S SUMMARY

Water District 44

Direct Flow Diversions to Irrigation	181,401
Direct Flow Diversions to Transbasin	684
Direct Flow Diversions to Municipal & Domestic	2,400
Direct Flow Diversions to Industrial	1,922
Direct Flow Diversions to Other Uses	1,000
TOTAL DIVERSIONS	187,407
Reservoir Storage (11/1/78)	16,227
Reservoir Storage (10/31/79)	16,347
Net Change in Storage	120
Fill During Season	2,840
Release + Evaporation During Season	2,720
Direct Diversions to Irrigation	181,401
Diversions from Storage to Irrigation	2,126
TOTAL DIVERSIONS TO IRRIGATION	183,527
Total Acres Irrigated	33,203
Average Demand for Irrigation	5.5
Number of Active Ditches Observed	236
Number of Active Reservoirs Observed	51
Number of Active Springs Observed	66
Number of Active Wells Observed	5
Number of Inactive Structures Observed	92
TOTAL STRUCTURES OBSERVED	450
Total Number of Structures Regulated	41
Total Number of Field Observations Made	1,911

IX. WATER COMMISSIONER'S SUMMARY

Water District 47

Direct Flow Diversions to Irrigation	406,853
Direct Flow Diversions to Transbasin	960
Direct Flow Diversions to Municipal & Domestic	680
Direct Flow Diversions to Industrial	0
Direct Flow Diversions to Other Uses	5,000
TOTAL DIVERSIONS	413,503
Reservoir Storage (11/1/78)	21,917
Reservoir Storage (10/31/79)	23,715
Net Change in Storage	1,798
Fill During Season	5,989
Release + Evaporation During Season	4,191
Direct Diversions to Irrigation	406,853
Diversions from Storage to Irrigation	3,126
TOTAL DIVERSIONS TO IRRIGATION	409,979
Total Acres Irrigated	115,156
Average Demand for Irrigation	3.6
Number of Active Ditches Observed	401
Number of Active Reservoirs Observed	43
Number of Active Springs Observed	15
Number of Active Wells Observed	6
Number of Inactive Structures Observed	37
TOTAL STRUCTURES OBSERVED	502
Total Number of Structures Regulated	4
Total Number of Field Observations Made	1,750

IX. WATER COMMISSIONER'S SUMMARY

Water District 54

Direct Flow Diversions to Irrigation	32,041
Direct Flow Diversions to Transbasin	0
Direct Flow Diversions to Municipal & Domestic	150
Direct Flow Diversions to Industrial	0
Direct Flow Diversions to Other Uses	600
TOTAL DIVERSIONS	32,791
Reservoir Storage (11/1/78)	481
Reservoir Storage (10/31/79)	476
Net Change in Storage	-5
Fill During Season	423
Release + Evaporation During Season	428
Direct Diversions to Irrigation	32,041
Diversions from Storage to Irrigation	280
TOTAL DIVERSIONS TO IRRIGATION	32,321
Total Acres Irrigated	10,990
Average Demand for Irrigation	2.9
Number of Active Ditches Observed	81
Number of Active Reservoirs Observed	9
Number of Active Springs Observed	11
Number of Active Wells Observed	0
Number of Inactive Structures Observed	25
TOTAL STRUCTURES OBSERVED	126
Total Number of Structures Regulated	5
Total Number of Field Observations Made	211

IX. WATER COMMISSIONER'S SUMMARY

Water District 55

Direct Flow Diversions to Irrigation	9,553
Direct Flow Diversions to Transbasin	0
Direct Flow Diversions to Municipal & Domestic	10
Direct Flow Diversions to Industrial	0
Direct Flow Diversions to Other Uses	328
TOTAL DIVERSIONS	9,553
Reservoir Storage (11/1/78)	0
Reservoir Storage (10/31/79)	0
Net Change in Storage	0
Fill During Season	0
Release + Evaporation During Season	0
Direct Diversions to Irrigation	9,553
Diversions from Storage to Irrigation	0
TOTAL DIVERSIONS TO IRRIGATION	9,553
Total Acres Irrigated	1,368
Average Demand for Irrigation	7.0
Number of Active Ditches Observed	12
Number of Active Reservoirs Observed	0
Number of Active Springs Observed	20
Number of Active Wells Observed	7
Number of Inactive Structures Observed	7
TOTAL STRUCTURES OBSERVED	46
Total Number of Structures Regulated	0
Total Number of Field Observations Made	140

IX. WATER COMMISSIONER'S SUMMARY

Water District 56

Direct Flow Diversions to Irrigation	13,696
Direct Flow Diversions to Transbasin	0
Direct Flow Diversions to Municipal & Domestic	200
Direct Flow Diversions to Industrial	0
Direct Flow Diversions to Other Uses	2,470
TOTAL DIVERSIONS	16,166
Reservoir Storage (11/1/78)	125
Reservoir Storage (10/31/79)	156
Net Change in Storage	31
Fill During Season	96
Release + Evaporation During Season	65
Direct Diversions to Irrigation	13,696
Diversions from Storage to Irrigation	0
TOTAL DIVERSIONS TO IRRIGATION	13,696
Total Acres Irrigated	2,170
Average Demand for Irrigation	6.3
Number of Active Ditches Observed	34
Number of Active Reservoirs Observed	8
Number of Active Springs Observed	65
Number of Active Wells Observed	10
Number of Inactive Structures Observed	28
TOTAL STRUCTURES OBSERVED	145
Total Number of Structures Regulated	0
Total Number of Field Observations Made	330

IX. WATER COMMISSIONER'S SUMMARY

Water District 57

Direct Flow Diversions to Irrigation	51,655
Direct Flow Diversions to Transbasin	1,207
Direct Flow Diversions to Municipal & Domestic	750
Direct Flow Diversions to Industrial	5,500
Direct Flow Diversions to Other Uses	2,200
TOTAL DIVERSIONS	61,312
Reservoir Storage (11/1/78)	2,261
Reservoir Storage (10/31/79)	2,538
Net Change in Storage	277
Fill During Season	2,997
Release + Evaporation During Season	2,720
Direct Diversions to Irrigation	51,655
Diversions from Storage to Irrigation	1,371
TOTAL DIVERSIONS TO IRRIGATION	53,026
Total Acres Irrigated	10,722
Average Demand for Irrigation	4.9
Number of Active Ditches Observed	93
Number of Active Reservoirs Observed	26
Number of Active Springs Observed	130
Number of Active Wells Observed	14
Number of Inactive Structures Observed	60
TOTAL STRUCTURES OBSERVED	323
Total Number of Structures Regulated	12
Total Number of Field Observations Made	700

IX. WATER COMMISSIONER'S SUMMARY

Water District 58

Direct Flow Diversions to Irrigation	133,236
Direct Flow Diversions to Transbasin	1,465
Direct Flow Diversions to Municipal & Domestic	4,610
Direct Flow Diversions to Industrial	0
Direct Flow Diversions to Other Uses	1,800
TOTAL DIVERSIONS	141,111
Reservoir Storage (11/1/78)	45,186
Reservoir Storage (10/31/79)	45,188
Net Change in Storage	2
Fill During Season	11,622
Release + Evaporation During Season	11,620
Direct Diversions to Irrigation	139,647
Diversions from Storage to Irrigation	6,565
TOTAL DIVERSIONS TO IRRIGATION	146,212
Total Acres Irrigated	41,674
Average Demand for Irrigation	3.5
Number of Active Ditches Observed	355
Number of Active Reservoirs Observed	46
Number of Active Springs Observed	261
Number of Active Wells Observed	43
Number of Inactive Structures Observed	160
TOTAL STRUCTURES OBSERVED	865
Total Number of Structures Regulated	40
Total Number of Field Observations Made	3,500

X. DIVISION ENGINEER'S SUMMARY

Table A

DIVISION SUMMARY - DIVISION NO. 6
1979 -- Direct Flow Diversions

Water District	Total Ditches Reported Active	Inactive	Total Diversions for Irrigation A.F.	No. of Acres Irrigated	A.F. per Acre	Industrial Use A.F.	Municipal & Domestic A.F.	Recreational & Other Uses A.F.	Transbasin/Transmtn. Diversions A.F.	Total Diversions A.F.	No. of Structures Reported on in Dist.	Delivered to Compact Commitment A.F.
43	466	132	266,781	30,090	8.9	3,285	2,500	17,000	0	287,667	908	0
44	236	92	183,527	33,203	5.5	1,922	2,400	1,000	684	187,407	450	0
47	401	31	409,979	115,156	3.6	0	680	5,000	960	413,503	502	0
54	81	25	32,321	10,990	2.9	0	150	600	0	32,791	126	0
55	12	7	9,553	1,368	7.0	0	10	328	0	9,553	46	0
56	34	28	13,696	2,170	6.3	0	200	2,470	0	16,166	145	0
57	93	60	53,026	10,722	4.9	5,500	750	2,200	1,207	61,312	323	0
58	355	160	146,211	41,674	3.5	0	4,610	1,800	1,465	141,111	865	0
TOTALS	1678	535	1115,094	245,373	4.5	10,707	11,300	30,398	4,316	1149,510	3,665	0

X. DIVISION ENGINEER'S SUMMARY

Table B

DIVISION SUMMARY - DIVISION NO. 6

1979 - Storage Report - Acre Feet

Water District	Amount in Storage Acre Feet 11-1-78	Amount in Storage Acre Feet 10-31-79	Actual Amt. Diverted to Storage During Season	Delivered from Storage to Irrigation	Storage for Industrial Use	Storage for Municipal Use	Storage for Recreational Use	Storage for Projects
43	7,766	7,700	1,593	899	0	0	7,467	0
44	16,227	16,347	2,840	2,126	8,310	0	6,775	0
47	21,917	23,715	5,989	3,126	0	0	9,600	0
54	454	476	423	280	0	0	218	0
55	0	0	0	0	0	0	0	0
56	125	156	96	0	0	0	0	0
57	2,261	2,538	2,297	1,371	358	986	0	0
58	45,186	45,188	2	6,565	5,000	2,249	37,400	0

X. DIVISION ENGINEER'S SUMMARY

Table C

STRUCTURES REPORTED AND OBSERVATIONS MADE

Water District	Spgs.&Wells Reported	Reservoirs Reported	Active Ditches	Inactive Ditches	Total Structures Reported	Total Daily Observations	Total Structures Regulated
43	286	24	466	132	908	4,572	36
44	71	51	236	92	450	1,911	41
47	21	43	401	31	502	1,750	4
54	11	9	81	25	126	211	5
55	27	0	12	7	46	140	0
56	75	8	34	28	145	330	0
57	144	26	93	360	323	700	12
58	304	46	355	160	865	3,500	40
TOTALS	939	207	1,678	535	3,665	13,112	138

X. DIVISION ENGINEER'S SUMMARY

Table D

WORKLOAD AND STATISTICAL INDICATORS

Acre Feet Water Used	1,149,510
Acre Feet Diverted for Agricultural Use	1,115,094
Acre Feet Diverted for Storage	25,560
Acre Feet Diverted for Industrial Use	10,707
Acre Feet Diverted for Recreation Use	26,500
Acre Feet Diverted for Domestic and Municipal Use	11,300
Acre Feet Diverted to Compact Commitment	0
Acre Feet Water Stored (10/31/79)	96,120
Acre Feet Water Transbasin Diversion	4,574
Acres Irrigated	245,373
Total Structures Administered	138
Total Daily Observations	13,112
Total Structures Observed or Reported	3,665

1979
ANNUAL SUMMARY - DISTRICTS
ACRE FEET (11-1-78 thru 10-31-79)

			IRRIGATION			CURRENT YEAR	TRANS-MOUNTAIN	
Districts	Non-Exempt Wells	Ditch Structures Reported	Direct Diversions To Irrigation	Diversions To Storage	Storage to Irrigation	Acres Irrigated	Div. to Div. Export	Import
43	8	575	264,882	1,593	899	30,090	0	0
44	13	310	181,401	2,840	2,126	33,203	0	0
47	7	438	406,853	5,989	3,126	115,156	960	0
54	0	101	32,041	423	280	10,990	0	0
55	0	19	9,553	0	0	1,368	0	0
56	0	62	13,696	96	0	2,170	0	0
57	9	153	51,655	2,997	1,371	10,722	0	0
58	15	525	139,647	11,622	6,565	41,674	2,149	0
TOTALS	52	2,183	1,099,728	25,560	14,367	245,373	3,109	0

	MUNICIPAL			INDUSTRIAL			RECREATION	ACTUAL STORAGE		
Districts	Direct Diversions	Diversions To Storage	Storage Releases	Direct Diversions	Diversions To Storage	Hydro-Power	Storage Wildlife Parks	For Year All Reservoirs	# Decree Applications	# Water Court Applications
43	2500	0	0	3,285	0	0	7,467	7,700	37	57
44	2400	0	0	1,922	0	0	6,775	16,347	43	43
47	680	0	0	0	0	0	9,600	23,715	13	49
54	150	0	0	0	0	0	218	476	17	8
55	10	0	0	0	0	0	0	0	2	5
56	200	0	0	0	0	0	0	156	0	1
57	750	0	0	5,500	0	0	986	2,538	30	30
58	4610	300	300	0	0	0	37,400	45,188	49	87
TOTALS	11,300	300	300	10,707	0	0	62,446	96,120	191	280

XII. RECOMMENDATIONS

The age-old problem of proper scale wages for water commissioners is still with us. We are still fortunate to have good commissioners, but with several of them getting closer to retirement age, it would appear to be impossible to replace them with young qualified people.

The Division 6 Water Budget has worked successfully for several years, and it computes the consumptive use giving us the virgin flow of the entire Division. With this type of information, it will be relatively easy to answer to Compact calls if and when they come on the Colorado River. The Division feels that if the entire Colorado Drainage had this type of program, the state of Colorado would be in a better position down the line when a call eventually comes on the river.

With the gasoline prices what they are, the Division feels that a mileage figure tied to the price of fuel would be desirable. With water commissioners being already under-paid, it seems ridiculous that they subsidize the State with mileage rates.

NOTE-O-GRAM®

DIVISION OF WATER RESOURCES

1313 SHERMAN STREET, ROOM 818 • DENVER, COLORADO 80203 • PHONE 892-3581

MESSAGE

TO Mary Ann

DATE February 6, 1980

Mary Ann, would you be kind enough to add this Water Budget Section to the Annual Report for Division 6.

BY Thanks, Karen

REPLY

DATE

SIGNED

INSTRUCTIONS TO SENDER:

1. KEEP YELLOW COPY. 2. SEND WHITE AND PINK COPIES WITH CARBON INTACT.

INSTRUCTIONS TO RECEIVER:

1. WRITE REPLY. 2. DETACH STUB, KEEP PINK COPY, RETURN WHITE COPY TO SENDER.

1979 IRRIGATION YEAR

****
COLORADO DIVISION OF WATER RESOURCES
DIVISION 6 WATER BUDGET PROGRAM
****

WATER DISTRICT . . 43

RESERVOIR EVAPORATION AT 6450. FT.

MONTH	EVAPORATION(INCHES)		NET DEPLETION(AF.)
11	1.59		53.
12	0.52		17.
1	0.52		17.
2	0.52		17.
3	0.70		23.
4	2.17		78.
5	3.38		127.
6	4.50		169.
7	5.39		193.
8	5.18		181.
9	4.63		154.
10	3.47		110.
	32.55	TOTALS	1140.

IRRIGATION CONSUMPTIVE USE

ELEV. 7700. FT. 3000. IRR. ACRES IRR. SEASON 6/25/1979 - 8/20/1979
AB BUFORD

MONTH	DEPLETION (INCHES)
6	0.75
7	5.04
8	2.40
	8.19 YEARLY TOTAL

NET DEPLETION = 2048.ACRE FT. 0.683 ACRE FT. PER ACRE

ELEV. 6347. FT. 14090. IRR. ACRES IRR. SEASON 5/25/1979 - 10/15/1979
WR TO PICEANCE

MONTH	DEPLETION (INCHES)
5	0.47
6	5.27
7	5.88
8	4.72
9	3.48
10	0.62
	20.44 YEARLY TOTAL

NET DEPLETION = 24006.ACRE FT. 1.704 ACRE FT. PER ACRE

ELEV. 6500. FT. 6500. IRR. ACRES IRR. SEASON 5/ 1/1979 - 7/10/1979
TRIBS TO MEEKER

MONTH	DEPLETION (INCHES)
5	2.03
6	5.22
7	1.88
	9.13 YEARLY TOTAL

NET DEPLETION = 4944.ACRE FT. 0.761 ACRE FT. PER ACRE

****

ELEV. 6300. FT. 4300. IRR. ACRES IRR. SEASON 5/15/1979 - 7/31/1979
PICEANCE YELLOW

MONTH	DEPLETION (INCHES)
5	1.08
6	5.05
7	6.00
	12.13 YEARLY TOTAL

NET DEPLETION = 4347.ACRE FT. 1.011 ACRE FT. PER ACRE

****

ELEV. 5300. FT. 2200. IRR. ACRES IRR. SEASON 5/25/1979 - 8/31/1979
WR BEL PICEANCE

MONTH	DEPLETION (INCHES)
5	0.78
6	5.80
7	6.43
8	5.74
	18.75 YEARLY TOTAL

NET DEPLETION = 3437.ACRE FT. 1.562 ACRE FT. PER ACRE

****

IRRIGATION TOTALS FOR WATER DISTRICT 43

38782. A.F. NET IRRIGATION DEPLETION 1.289 A.F./ACRE 30090.IRR. ACRES

WATER DISTRICT 44

RESERVOIR EVAPORATION AT 6390. FT.

MONTH	EVAPORATION(INCHES)	NET DEPLETION(AF.)
11	0.70	46.
12	0.52	34.
1	0.52	34.
2	0.52	34.
3	0.70	46.
4	2.81	186.
5	3.78	278.
6	5.03	358.
7	6.08	407.
8	5.65	372.
9	5.19	342.
10	3.24	214.
	34.76 TOTALS	2352.

IRRIGATION CONSUMPTIVE USE

ELEV. 6390. FT. 6244. IRR. ACRES IRR. SEASON 5/ 5/1979 - 9/30/1979
YAMPA TO JUN SP

MONTH	DEPLETION (INCHES)
5	1.37
6	5.04
7	5.92
8	4.41
9	3.87
	20.60 YEARLY TOTAL

NET DEPLETION = 10719.ACRE FT. 1.717 ACRE FT. PER ACRE

ELEV. 5920. FT. 5706. IRR. ACRES IRR. SEASON 5/15/1979 - 10/15/1979
YAMPA BELJUN SP

MONTH	DEPLETION (INCHES)
5	0.90
6	5.00
7	5.45
8	4.40
9	3.65
10	0.62
	20.01 YEARLY TOTAL

NET DEPLETION = 9513.ACRE FT. 1.667 ACRE FT. PER ACRE

ELEV. 6400. FT. 14268. IRR. ACRES IRR. SEASON 5/20/1979 - 7/25/1979
TRIBS 1

MONTH	DEPLETION (INCHES)
5	0.58
6	4.91
7	4.65
	10.14 YEARLY TOTAL

NET DEPLETION = 12053.ACRE FT. 0.845 ACRE FT. PER ACRE

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ELEV. 6700. FT. 6985. IRR. ACRES IRR. SEASON 6/ 5/1979 - 8/20/197

TRIBS 2

MONTH	DEPLETION (INCHES)
6	3.97
7	4.99
8	2.58
	11.54 YEARLY TOTAL

NET DEPLETION = 6716.ACRE FT. 0.961 ACRE FT. PER ACRE

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IRRIGATION TOTALS FOR WATER DISTRICT 44

39000. A.F. NET IRRIGATION DEPLETION 1.175 A.F./ACRE 33203.IRR. ACRES

WATER DISTRICT 47

RESERVOIR EVAPORATION AT 8100. FT.

MONTH	EVAPORATION(INCHES)	NET DEPLETION(AF.)
11	0.60	144.
12	0.60	144.
1	0.60	144.
2	0.60	144.
3	0.60	144.
4	2.07	514.
5	3.31	867.
6	4.60	1226.
7	5.56	1432.
8	5.24	1343.
9	4.47	1153.
10	2.87	743.
	31.13 TOTALS	7998.

IRRIGATION CONSUMPTIVE USE

ELEV. 8700. FT. 9582. IRR. ACRES IRR. SEASON 5/25/1979 - 7/20/1979
MR TO 3R BRIDGE

MONTH	DEPLETION (INCHES)
5	0.55
6	3.99
7	3.69
	8.23 YEARLY TOTAL

NET DEPLETION = 6572.ACRE FT. 0.686 ACRE FT. PER ACRE

ELEV. 8300. FT. 10047. IRR. ACRES IRR. SEASON 5/20/1979 - 7/20/1979
MR TO WALDEN

MONTH	DEPLETION (INCHES)
5	0.99
6	4.17
7	3.83
	9.00 YEARLY TOTAL

NET DEPLETION = 7533.ACRE FT. 0.750 ACRE FT. PER ACRE

ELEV. 8000. FT. 4944. IRR. ACRES IRR. SEASON 5/15/1979 - 7/15/1979
MR BEL WALDEN

MONTH	DEPLETION (INCHES)
5	1.49
6	4.38
7	2.99
	8.86 YEARLY TOTAL

NET DEPLETION = 3651.ACRE FT. 0.739 ACRE FT. PER ACRE

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ELEV. 8700. FT. 12593. IRR. ACRES IRR. SEASON 5/10/1979 - 7/15/1979
ILL. R. MIDLAND

MONTH	DEPLETION (INCHES)
5	1.69
6	3.94
7	2.74
	8.37 YEARLY TOTAL

NET DEPLETION = 8783.ACRE FT. 0.697 ACRE FT. PER ACRE

****

ELEV. 8000. FT. 9324. IRR. ACRES IRR. SEASON 5/25/1979 - 7/15/1979
LOWER ILLINOIS

MONTH	DEPLETION (INCHES)
5	0.59
6	4.22
7	2.90
	7.70 YEARLY TOTAL

NET DEPLETION = 5985.ACRE FT. 0.642 ACRE FT. PER ACRE

****

ELEV. 8200. FT. 15501. IRR. ACRES IRR. SEASON 5/10/1979 - 7/15/1979
BIG GRIZZLY

MONTH	DEPLETION (INCHES)
5	1.33
6	3.86
7	2.57
	7.76 YEARLY TOTAL

NET DEPLETION = 10028.ACRE FT. 0.647 ACRE FT. PER ACRE

****

ELEV. 8000. FT. 11471. IRR. ACRES IRR. SEASON 5/15/1979 - 7/15/1979
CANADIAN

MONTH	DEPLETION (INCHES)
5	1.45
6	4.27
7	2.93
	8.65 YEARLY TOTAL

NET DEPLETION = 8269.ACRE FT. 0.721 ACRE FT. PER ACRE

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ELEV. 8100. FT. 10807. IRR. ACRES IRR. SEASON 5/15/1979 - 7/20/1979
ROARING FORK

MONTH	DEPLETION (INCHES)
5	1.00
6	3.79
7	3.37
	8.17 YEARLY TOTAL

NET DEPLETION = 7357.ACRE FT. 0.681 ACRE FT. PER ACRE

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ELEV. 8100. FT. 13338. IRR. ACRES IRR. SEASON 5/20/1979 - 7/31/1979
NORTH FORK

MONTH	DEPLETION (INCHES)
5	0.71
6	3.79
7	5.23
	9.73 YEARLY TOTAL

NET DEPLETION = 10814.ACRE FT. 0.811 ACRE FT. PER ACRE

****

ELEV. 8100. FT. 1108. IRR. ACRES IRR. SEASON 5/15/1979 - 7/15/1979
NON TRIB

MONTH	DEPLETION (INCHES)
5	1.02
6	3.85
7	2.56
	7.43 YEARLY TOTAL

NET DEPLETION = 686.ACRE FT. 0.619 ACRE FT. PER ACRE

****

ELEV. 8000. FT. 4746. IRR. ACRES IRR. SEASON 5/20/1979 - 7/20/1979
N PLATTE

MONTH	DEPLETION (INCHES)
5	1.04
6	4.33
7	3.95
	9.31 YEARLY TOTAL

NET DEPLETION = 3682.ACRE FT. 0.776 ACRE FT. PER ACRE

****

ELEV. 8100. FT. 11695. IRR. ACRES IRR. SEASON 5/ 5/1979 - 7/20/1979
LITTLE GRIZZLY

MONTH	DEPLETION (INCHES)
5	1.62
6	3.85
7	3.41
	8.88 YEARLY TOTAL

NET DEPLETION = 8655.ACRE FT. 0.740 ACRE FT. PER ACRE

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IRRIGATION TOTALS FOR WATER DISTRICT 47

82016. A.F. NET IRRIGATION DEPLETION 0.712 A.F./ACRE 115156.IRR. ACRES

WATER DISTRICT 54

RESERVOIR EVAPORATION AT 7500. FT.

MONTH	EVAPORATION(INCHES)		NET DEPLETION(AF.)
11	0.52		2.
12	0.52		2.
1	0.52		2.
2	0.52		2.
3	0.52		2.
4	2.26		12.
5	3.24		35.
6	4.49		49.
7	5.53		46.
8	5.10		26.
9	4.64		21.
10	2.70		11.
	30.58	TOTALS	212.

IRRIGATION CONSUMPTIVE USE

ELEV. 6300. FT. 6363. IRR. ACRES IRR. SEASON 5/25/1979 - 8/25/1979
SNAKE-WILLOW

MONTH	DEPLETION (INCHES)
5	0.35
6	5.04
7	5.91
8	3.55
	14.86 YEARLY TOTAL

NET DEPLETION = 7877.ACRE FT. 1.238 ACRE FT. PER ACRE

ELEV. 6500. FT. 4627. IRR. ACRES IRR. SEASON 6/ 1/1979 - 7/31/1979
TRIBS

MONTH	DEPLETION (INCHES)
6	4.79
7	5.62
	10.41 YEARLY TOTAL

NET DEPLETION = 4015.ACRE FT. 0.868 ACRE FT. PER ACRE

IRRIGATION TOTALS FOR WATER DISTRICT 54

11892. A.F. NET IRRIGATION DEPLETION 1.082 A.F./ACRE 10990.IRR. ACRES

WATER DISTRICT 55

RESERVOIR EVAPORATION AT 5354. FT.

MONTH	EVAPORATION(INCHES)		NET DEPLETION(AF.)
11	0.70		0.
12	0.52		0.
1	0.52		0.
2	0.52		0.
3	1.84		0.
4	3.02		0.
5	4.07		0.
6	5.30		0.
7	5.91		0.
8	5.75		0.
9	4.98		0.
10	3.50		0.
	36.62	TOTALS	0.

IRRIGATION CONSUMPTIVE USE

ELEV. 5400. FT. 1368. IRR. ACRES IRR. SEASON 5/15/1979 - 9/ 1/1979
LOWER SNAKE

MONTH	DEPLETION (INCHES)
5	1.01
6	5.29
7	5.76
8	4.67
9	0.13
	16.86 YEARLY TOTAL

NET DEPLETION = 1922.ACRE FT. 1.405 ACRE FT. PER ACRE

IRRIGATION TOTALS FOR WATER DISTRICT 55

1922. A.F. NET IRRIGATION DEPLETION 1.405 A.F./ACRE 1368.IRR. ACRES

WATER DISTRICT 56

RESERVOIR EVAPORATION AT 5500. FT.

MONTH	EVAPORATION(INCHES)		NET DEPLETION(AF.)
11	1.53		4.
12	0.52		1.
1	0.52		1.
2	0.52		1.
3	2.08		8.
4	3.06		17.
5	4.08		27.
6	5.26		35.
7	6.15		36.
8	5.82		29.
9	4.99		21.
10	3.56		12.
	38.12	TOTALS	192.

IRRIGATION CONSUMPTIVE USE

ELEV. 5354. FT. 2170. IRR. ACRES IRR. SEASON 4/15/1979 - 8/20/1979
GREEN R

MONTH	DEPLETION (INCHES)
4	1.07
5	3.33
6	5.83
7	6.57
8	2.96
	19.76 YEARLY TOTAL

NET DEPLETION = 3572.ACRE FT. 1.646 ACRE FT. PER ACRE

IRRIGATION TOTALS FOR WATER DISTRICT 56

3572. A.F. NET IRRIGATION DEPLETION 1.646 A.F./ACRE 2170.IRR. ACRES

WATER DISTRICT 57

RESERVOIR EVAPORATION AT 6700. FT.

MONTH	EVAPORATION(INCHES)	NET DEPLETION(AF.)
11	1.45	12.
12	0.52	4.
1	0.52	4.
2	0.52	4.
3	0.70	6.
4	2.65	32.
5	3.28	56.
6	5.04	90.
7	5.91	76.
8	5.56	63.
9	4.98	48.
10	3.23	31.
	34.36 TOTALS	427.

IRRIGATION CONSUMPTIVE USE

ELEV. 6375. FT. 6742. IRR. ACRES IRR. SEASON 5/25/1979 - 10/20/1979
YAMPA R

MONTH	DEPLETION (INCHES)
5	0.64
6	5.42
7	5.97
8	3.89
9	3.78
10	0.80
	20.50 YEARLY TOTAL

NET DEPLETION = 11518.ACRE FT. 1.708 ACRE FT. PER ACRE

ELEV. 6600. FT. 3980. IRR. ACRES IRR. SEASON 6/ 5/1979 - 8/20/1979
TRIBUTARIES

MONTH	DEPLETION (INCHES)
6	4.47
7	5.67
8	2.35
	12.49 YEARLY TOTAL

NET DEPLETION = 4144.ACRE FT. 1.041 ACRE FT. PER ACRE

IRRIGATION TOTALS FOR WATER DISTRICT 57

15662. A.F. NET IRRIGATION DEPLETION 1.461 A.F./ACRE 10722.IRR. ACRES

WATER DISTRICT 58

RESERVOIR EVAPORATION AT 7500. FT.

MONTH	EVAPORATION(INCHES)		NET DEPLETION(AF.)
11	1.55		311.
12	0.52		105.
1	0.52		105.
2	0.52		105.
3	0.70		140.
4	2.33		472.
5	3.48		706.
6	4.58		945.
7	5.48		1133.
8	5.22		1049.
9	4.71		943.
10	3.16		630.
	32.79	TOTALS	6643.

IRRIGATION CONSUMPTIVE USE

ELEV. 8000. FT. 11234. IRR. ACRES IRR. SEASON 5/25/1979 - 9/15/1979
ABOVE YAMPA

MONTH	DEPLETION (INCHES)
5	0.40
6	4.48
7	4.29
8	3.67
9	1.63
	14.47 YEARLY TOTAL

NET DEPLETION = 13544.ACRE FT. 1.206 ACRE FT. PER ACRE

ELEV. 6770. FT. 6941. IRR. ACRES IRR. SEASON 6/10/1979 - 9/15/1979
YAMPA TO ELK

MONTH	DEPLETION (INCHES)
6	3.04
7	5.55
8	3.84
9	1.66
	14.09 YEARLY TOTAL

NET DEPLETION = 8153.ACRE FT. 1.175 ACRE FT. PER ACRE

ELEV. 6900. FT. 7061. IRR. ACRES IRR. SEASON 6/10/1979 - 9/10/1979
ELK

MONTH	DEPLETION (INCHES)
6	2.90
7	5.30
8	3.64
9	1.06
	12.90 YEARLY TOTAL

NET DEPLETION = 7589.ACRE FT. 1.075 ACRE FT. PER ACRE

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ELEV. 7800. FT. 6098. IRR. ACRES IRR. SEASON 6/ 1/1979 - 8/31/1979
TRIBS AB SARVIS

MONTH	DEPLETION (INCHES)
6	4.54
7	4.35
8	3.73
	12.62 YEARLY TOTAL

NET DEPLETION = 6411.ACRE FT. 1.051 ACRE FT. PER ACRE

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ELEV. 6800. FT. 5884. IRR. ACRES IRR. SEASON 6/ 5/1979 - 8/31/1979
TRIBS BL SARVIS

MONTH	DEPLETION (INCHES)
6	3.76
7	5.54
8	3.83
	13.13 YEARLY TOTAL

NET DEPLETION = 6440.ACRE FT. 1.094 ACRE FT. PER ACRE

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ELEV. 7000. FT. 4814. IRR. ACRES IRR. SEASON 6/ 1/1979 - 8/15/1979
TRIBS ELK

MONTH	DEPLETION (INCHES)
6	4.11
7	5.27
8	1.75
	11.13 YEARLY TOTAL

NET DEPLETION = 4465.ACRE FT. 0.928 ACRE FT. PER ACRE

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IRRIGATION TOTALS FOR WATER DISTRICT 58

46601. A.F. NET IRRIGATION DEPLETION 1.109 A.F./ACRE 42032.IRR. ACRES

SUMMARY FOR WATER DISTRICT 43 IN ACRE-FT

IRRIGATION DEPLETION	38782.
RESERVOIR EVAPORATION	1140.
CHANGE IN RESERVOIR STORAGE	-76.
OUT OF BASIN DIVERSIONS	0.
MUNICIPAL+INDUSTRIAL CONSUMPTION	3500.
MISC. USE OR CORRECTIONS	500.
TOTAL DEPLETION	43846.

SUMMARY FOR WATER DISTRICT 44 IN ACRE-FT

IRRIGATION DEPLETION	39000.
RESERVOIR EVAPORATION	2352.
CHANGE IN RESERVOIR STORAGE	120.
OUT OF BASIN DIVERSIONS	684.
MUNICIPAL+INDUSTRIAL CONSUMPTION	3000.
MISC. USE OR CORRECTIONS	400.
TOTAL DEPLETION	45556.

SUMMARY FOR WATER DISTRICT 47 IN ACRE-FT

IRRIGATION DEPLETION	82016.
RESERVOIR EVAPORATION	7998.
CHANGE IN RESERVOIR STORAGE	1798.
OUT OF BASIN DIVERSIONS	960.
MUNICIPAL+INDUSTRIAL CONSUMPTION	100.
MISC. USE OR CORRECTIONS	500.
TOTAL DEPLETION	93371.

SUMMARY FOR WATER DISTRICT 54 IN ACRE-FT

IRRIGATION DEPLETION	11892.
RESERVOIR EVAPORATION	212.
CHANGE IN RESERVOIR STORAGE	-5.
OUT OF BASIN DIVERSIONS	0.
MUNICIPAL+INDUSTRIAL CONSUMPTION	0.
MISC. USE OR CORRECTIONS	100.
TOTAL DEPLETION	12198.

SUMMARY FOR WATER DISTRICT 55 IN ACRE-FT

IRRIGATION DEPLETION	1922.
RESERVOIR EVAPORATION	0.
CHANGE IN RESERVOIR STORAGE	0.
OUT OF BASIN DIVERSIONS	0.
MUNICIPAL+INDUSTRIAL CONSUMPTION	0.
MISC. USE OR CORRECTIONS	50.
TOTAL DEPLETION	1972.

SUMMARY FOR WATER DISTRICT 56 IN ACRE-FT

IRRIGATION DEPLETION	3572.
RESERVOIR EVAPORATION	192.
CHANGE IN RESERVOIR STORAGE	31.
OUT OF BASIN DIVERSIONS	0.
MUNICIPAL+INDUSTRIAL CONSUMPTION	0.
MISC. USE OR CORRECTIONS	100.
TOTAL DEPLETION	3896.

SUMMARY FOR WATER DISTRICT 57 IN ACRE-FT

IRRIGATION DEPLETION	15662.
RESERVOIR EVAPORATION	427.
CHANGE IN RESERVOIR STORAGE	277.
OUT OF BASIN DIVERSIONS	523.
MUNICIPAL+INDUSTRIAL CONSUMPTION	6000.
MISC. USE OR CORRECTIONS	100.
TOTAL DEPLETION	22989.

SUMMARY FOR WATER DISTRICT 58 IN ACRE-FT

IRRIGATION DEPLETION	46601.
RESERVOIR EVAPORATION	6643.
CHANGE IN RESERVOIR STORAGE	2.
OUT OF BASIN DIVERSIONS	1723.
MUNICIPAL+INDUSTRIAL CONSUMPTION	900.
MISC. USE OR CORRECTIONS	300.
TOTAL DEPLETION	56169.

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DIVISION 6 BREAKDOWN BY RIVER BASIN

	YAMPA	LITTLE SNAKE	GREEN	WHITE	N PLATTE	COLORADO
IRRIG DPLTN	101263.	13814.	3572.	38782.	82016.	157431.
RES EVAP	9422.	212.	192.	1140.	7998.	10965.
CHG STORAGE	399.	-5.	31.	-76.	1798.	349.
MUN-IND	9900.	0.	0.	3500.	100.	13400.
TRANS-MTN	2930.	0.	0.	0.	960.	2930.
MISC	800.	150.	100.	500.	500.	1550.
OUTFLOW	1321788.	423800.	11000.	556000.	407100.	2312588.
BASIN YIELD	1446502.	437970.	14896.	599846.	500471.	2499214.
CONS USE	124714.	14170.	3896.	43846.	93371.	186626.
PCT CONS	0.0862	0.0324	0.2615	0.0731	0.1866	0.0747

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DIVISION 6 TOTAL IRRIGATION DEPLETION IN ACRE FT. 239447.

IRRIGATED ACRES 245731.

ACRE FT. PER ACRE 0.974

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NOTES: Yampa River outflow is estimated flow above confluence of Little Snake River

North Platte outflow does not include Big Creek or Encampment River

Little Snake River does not include any uses in Wyoming

Green River does not include mainstem