

DIVISION OF WATER RESOURCES

DIVISION NO. 6

1980 ANNUAL REPORT

Wesley E. Signs
Division Engineer

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I. INTRODUCTION

Division 6 is located in the northwestern corner of the state and includes the Yampa, White, and North Platte River Drainages. Elevations range from 5000 feet within the canyons along the western boundary of the state to more than 12,000 feet along the Continental Divide. Precipitation ranges from less than nine inches in the desert areas to more than fifty inches along the Continental Divide.

The most productive crop bearing areas lie between the 6000 feet and 8000 feet range in elevation. The higher elevations and the western desert areas are primarily used for summer and winter grazing and for recreational purposes. The bulk of these lands are owned by the US Government and are managed by the Bureau of Land Management and the Forest Service.

The growing season in Division 6 varies from less than 30 days in the North Platte Drainage to around 90 days in the lower White and Yampa Drainage. This short growing season is most suitable for the production of irrigated native hay, alfalfa hay, and irrigated pasture which total about 250,000 acres within the Division. Irrigated acreage broken down by drainage basin is as follows: Yampa River - 100,000 acres, North Platte River - 120,000 acres, and the White River - 30,000 acres. Dry land 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 is in crop in any given year.

Although the population density of Division 6 remains relatively light, the booming energy, construction, and recreational industries have contributed to substantial population gains during the past decade with the population of Routt County nearly doubling from 1970 to 1980. The population boom has moderated somewhat during the past several months with the completion of the Craig Power Plants and a slackening of demand for coal. The power plant has reduced its work force from a peak of 1850 workers down to about 400, and many of the local mines have been forced to either close or cut back production. The energy focus has shifted recently from coal production to oil shale. Oil shale Tracts Ca and Cb in the Piceance Basin near Meeker have been the center of much activity in the past year as Occidental Petroleum and Rio Blanco continue the development of these tracts for the experimental production of oil from oil shale. Several coal slurry pipelines have been proposed for the Division, the most recent of which is designed to carry crude oil shale from the Colony Oil Shale Tract near Parachute to Casper, Wyoming, transportation facilities. The project is proposed by Exxon and would include a spur to transport the slurry to transportation facilities near Rangely. The project has been opposed by ranchers in Moffat County.

Division 6 enjoyed an above average snow pack during the 1979-80 water year. Reservoir storage was also above average going into the irrigation season which resulted in above normal water deliveries to irrigators. A lack of precipitation during the summer and fall accompanied by hot dry winds reduced yields on second and third hay cuttings in the lower Yampa and White Basins. The dry summer also caused the majority of stream gages to fall well below normal in the fall months for the fourth year in a row.

II. PERSONNEL

Name	Position	District	FY 79-80		FY 79-80 Mileage
			Months Worked	Budgeted	
Wesley E. Signs	Division Engineer		Full Time		1,240
Robert McCabe	Asst. Div. Engineer		Full Time		1,377
W. Kent Holt	Hydrographer		Full Time		1,230
Roy D. Steffen	1042 Water Commissioner		Full Time		
Karen McPherrren	Secretary		Full Time		
Joe E. Brown	Water Commissioner C	43	Full Time		
*William Dunham	Water Commissioner A	43	7	2	5,108
Ben E. Cordle	Water Commissioner B	44	Full Time		7,526
Donald C. Gilroy	Water Commissioner B	54	5	6	3,784
Jack Leonard	Water Commissioner B	55-56	5	5	3,531
James E. Sellers	Water Commissioner B	57	Full Time		5,770
Charles Gregory	Water Commissioner B	58	Full Time		6,477
Billy R. Milner	Water Commissioner B	58	7	8	3,818
Eric H. Wagner	Water Commissioner C	47	Full Time		3,822

*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	332,100	98	58
Yampa River at Maybell	1,298,200	116	63
Little Snake near Lily Park	559,000	135	58
S. Fk. of White River at Buford	187,600	102	29
N. Fk. of White River at Buford	224,600	101	34
White River near Meeker	457,600	102	75
White River above Rangely	498,400	106	7
White River near Colo State Line	526,500	105	56
N. Platte River near Northgate	373,600	120	64

B. Precipitation

Precipitation for selected stations in Division 6:

	Steamboat Springs	Hayden	Walden
November	1.90	1.57	.37
December	.63	.48	.33
January	5.80	3.40	2.26
February	2.73	1.63	.78
March	2.92	1.83	.74
April	1.14	.73	.58
May	2.76	2.34	2.43
June	.10	.02	.04
July	.75	.79	.32
August	1.29	1.92	.98
September	1.04	.90	1.08
October	1.72	1.30	.75
Totals	21.97	16.91	10.66

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

1980 saw a slight decline from the previous year in the number of new well permits issued in Division 6. A total of 310 well permits were issued during 1980 compared with 470 permits granted last year. The slow down can probably be attributed to the negative impact of record high interest rates. Increased competition has kept the well drilling costs relatively stable over the past year, but fewer and fewer people are able to afford the exorbitant costs of building a new house.

Proliferation of wells in some subdivisions and small municipalities has resulted in conflicts among well owners due to over-drafting of aquifers and contamination from septic tanks. Aquifer pollution forced the city of Phippsburg to develop a central well and distribution system instead of individual wells. Milner has also had problems with polluted wells and is moving toward a similar solution.

E. Transmountain Diversions (Transbasin)

Structure	Acre Feet
Stillwater Ditch	1,888
Sarvis Ditch	0
Rich Ditch	1,311
Morgan Creek	592
Dome Creek	190
Michigan Ditch	1,110
Cameron Pass Ditch	<u>154</u>
	5,245
Total water exported from Yampa R. to Colorado R. Drainage:	2078
Total water exported from N. Platte R. to S. Platte Drainage:	1264

III. Water Supply
F. Reservoir Storage

NAME OF RESERVOIR	SOURCE	AMT. IN STORAGE 11/1/79	FILL DURING SEASON	RELEASE + EVAPORATION	AMT. IN STORAGE 10/31/80	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	150	353	203	300	150
Black Gulch Reservoir	Black Gulch	41	0	0	41	0
Johnny Johnson Reservoir	White River	800	200	200	800	0
Keystone Reservoir No. 3	Price Creek	31	0	10	21	-10
Larson Reservoir	Nineteen Mile Creek	62	0	0	62	0
Lunney Reservoir	Nine Mile Draw	40	42	62	20	-20
McHatten Reservoir	Coal Creek	20	44	24	40	20
Procter Reservoir	Curtis Creek	7	0	0	7	0
West Miller Reservoir	West Miller Creek	30	23	30	23	-7
West Stewart Reservoir	West Stewart Creek	13	0	0	13	0
Wilson Reservoir	East Flag Creek	10	0	10	0	-10
TOTALS (All figures in Acre Feet)		7700	1412	1535	7823	123

DISTRICT NO. 44

Anderson Reservoir	Cottonwood Creek	2	20	20	2	0
B and B Reservoir	Flume Gulch	22	5	21	6	-14
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	44	120	120	44	0
Culverwell Reservoir	Sand Spring Gulch	0	0	0	0	0
D.D.&E Reservoir	Hullett Draw	776	1214	1690	300	-476
Dresher Reservoir	Long Gulch	20	240	260	0	-20
Dunkley Dubeau Reservoir	Willow Creek	28	113	141	0	-28
Elgin Reservoir	Bell Rock Gulch	108	35	143	0	-108
Elgin Reservoir No. 2	McLernon Draw	0	53	53	0	-3
Elk Head Reservoir	Elk Head Creek	13574	0	0	13574	0
Flat Top (Gill) Reservoir	Unnamed Tributary	25	0	0	25	0

III. Water Supply
F. Reservoir Storage

NAME OF RESERVOIR	SOURCE	AMT. IN	FILL	RELEASE +	AMT. IN	TOTAL
		STORAGE 11/1/79	DURING SEASON	EVAPORATION	STORAGE 10/31/80	CHANGE IN STORAGE
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	24	12	-24
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
Falgh White Reservoir	Fortification Creek	925	300	300	925	0
Roby Reservoir	Morapos Creek	0	26	26	0	0
Sagebrush Reservoir No. 1	Butler Creek	3	0	0	3	0
Sagebrush Reservoir No. 2	Butler Creek	4	2	2	4	0
Sellers Crowell Reservoir	Willow Creek	8	60	48	20	12
Shafer Reservoir	Willow Creek	13	67	0	80	67
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	5	20	20	5	0
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)		16344	2673	3267	15750	-594

DISTRICT NO. 47

Addison Reservoir	Buffalo Creek	0	42	42	0	0
Aqua Fria Reservoir	Beaver Creek	731	115	846	0	-731
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. N. Fk. North Platte	0	0	0	0	0

III. Water Supply
F. Reservoir Storage

NAME OF RESERVOIR		SOURCE	AMT. IN STORAGE 11/1/79	FILL DURING SEASON	RELEASE + EVAPORATION	AMT. IN STORAGE 10/31/80	TOTAL CHANGE IN STORAGE
DISTRICT NO. 47 CONT.							
Buffalo Reservoir		Buffalo Creek	486	250	250	486	0
Burns Reservoir		Burns Draw	39	0	0	39	0
Butte (South and East) Res.		Roaring Fork	411	0	209	202	-209
Carlstrom (Upper Cowdrey) Res.		Michigan River	448	200	200	448	0
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	213	0	156	57	-156
Cowdrey (Lower) Reservoir		Michigan River	0	0	0	0	0
Coyte Reservoir		Arapahoe Creek	38	36	36	38	0
Fisher Lake and Pump		Seepage T Michigan R.	58	0	0	58	0
Fuller Reservoir		Cow Creek	6	2	0	8	2
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	160	160	255	0
House (Upper) Reservoir		Spring Creek	44	0	0	44	0
Hunter Reservoir		Three Mile Creek	0	62	62	0	0
Jackson Reservoir		Dry Creek	119	60	60	119	0
Kettle Reservoir		Newcomb Creek	0	0	0	0	0
Lake John		Lake Creek	5415	0	0	5415	0
Lake Roslyn		Willow Creek	200	0	0	200	0
Laune Reservoir		Roaring Fork	1850	2426	1782	2494	644
MacFarlane Reservoir		Illinois River	4000	65	2413	1652	-2348
McGowan Reservoir		Middle Fk Mexican Cr.	32	8	40	0	-32
Mexican Reservoir		Mexican Creek	0	80	80	0	0
Muddy Pass Reservoir		T. Grizzly Creek	58	0	0	58	0
Ninegar Reservoir		Ninegar Creek	24	0	24	0	-24
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	1351	554	1284	621	-730
Ridings Reservoir		Buffalo Creek	0	46	46	0	0
Rock Reservoir		Newcomb Creek	0	0	0	0	0
Seymour Reservoir		Ninegar Creek	525	465	465	525	0
Shawver Reservoir		Sutton Creek	4	0	0	4	0
Slack and Weiss Reservoir		Ninegar Creek	137	30	135	32	-105

III. Water Supply
F. Reservoir Storage

NAME OF RESERVOIR	SOURCE	AMT. IN STORAGE 11/1/79	FILL DURING SEASON	RELEASE + EVAPORATION	AMT. IN STORAGE 10/31/80	TOTAL CHANGE IN STORAGE
DISTRICT NO. 47 CONT.						
Stambaugh Reservoir	Little Grizzly	0	139	139	0	0
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	0	54	27
Walden Reservoir	Illinois River	4400	0	2104	2296	-2104
West Arapaho Reservoir	T. Big Grizzly	0	125	125	0	0
TOTALS (All figures in Acre Feet)		23715	5246	11012	17949	-5766

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	90	25	30	90	0
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)		476	423	428	476	0

DISTRICT NO. 56

Ainge Reservoir	Flynn Spring	4	1	4	1	-3
Bassett No. 1 Reservoir	Bull Canyon Gulch	32	0	12	20	-12
Bassett No. 2 Reservoir	Bull Canyon Gulch	54	0	4	50	-4
Blevins Reservoir	Spring T. Vermillion Cr.	2	1	1	2	0
Cove Reservoir	Cottonwood Creek	1	60	51	10	9
Massey Reservoir	Flynn Spring	3	17	16	4	1
Offield Reservoir	Pot Creek	60	340	310	90	30
TOTALS (All figures in Acre Feet)		156	419	398	177	21

III. Water Supply
F. Reservoir Storage

NAME OF RESERVOIR	SOURCE	AMT. IN STORAGE	FILL DURING SEASON	RELEASE + EVAPORATION	AMT. IN STORAGE	TOTAL CHANGE IN STORAGE
		11/1/79			10/31/80	
DISTRICT NO. 57						
Emrick Reservoir	Dry Creek	0	421	50	371	371
Apple Reservoir	Dry Fk, Trout Creek	1	10	11	0	- 1
Basin Reservoir	Basin & Buchanan Gulch	74	215	145	144	70
Brock Reservoir	T. Yampa River	7	0	5	2	-5
Cozzens Walrod Reservoir	Hutchinson Gulch	48	36	74	10	-38
East Signs Reservoir	Hooker Draw	2	0	0	2	0
Eckman Park Reservoir No. 1	Foidel Creek	110	0	10	100	-10
Eckman Park Reservoir No. 2	Foidel Creek	12	0	2	10	-2
Eckman Park Reservoir No. 3	Foidel Creek	2	19	0	21	19
Elmer Reservoir	Morgan Creek	30	0	19	11	-19
F. Schaffermeyer Res. No. 3	Fiske Creek	4	1	1	4	0
F. Schaffermeyer Res. No. 4	Fiske Creek	2	0	0	2	0
Greasewood Flats Reservoir	Dill Gulch	0	0	0	0	0
Hayden Station Ponds	Yampa River	263	966	200	929	366
James Marion Yoast Reservoir	Yoast Creek	0	147	144	3	3
John C. Temple Res. No. 1	Temple Gulch	0	553	524	29	29
Kowach Reservoir	Small T Yampa River	28	33	33	28	0
Morgan Creek No. 1 Reservoir	Morgan Creek	35	291	298	28	-7
Nofstger Reservoir	Grassy Creek	350	106	0	456	106
Nofstger-Zeigler Reservoir	Grassy Creek	230	114	0	344	114
Sage Creek Reservoir	Sage Creek	349	332	445	236	113
Scotchmans Gulch Reservoir No. 1	Scotchmans Gulch	0	12	0	12	12
Seaton Reservoir	Middle Fish Creek	0	21	21	0	0
Sheriff Reservoir	Trout Creek	986	0	0	986	0
West Signs Reservoir	Miller Draw	0	1	1	0	0
Yoast No. 1, No. 2 Reservoir	Yoast Creek	5	2	6	1	14
TOTALS (All figures in Acre Feet)		2538	3280	1889	3729	1417

III. Water Supply
F. Reservoir Storage

NAME OF RESERVOIR	SOURCE	AMT. IN	FILL	RELEASE +	AMT. IN	TOTAL
		STORAGE 11/1/79	DURING SEASON	EVAPORATION	STORAGE 10/31/80	CHANGE IN STORAGE
Allen Basin Reservoir	Middle Hunt Creek	689	1468	1298	859	170
Alma Baer Reservoir	Fish Creek	3	0	0	3	0
Bull Park No. 2 Reservoir	West Branch Watson Creek	0	32	32	0	0
Burnt Mesa Reservoir	South Hunt Creek	10	96	106	0	-10
Chapman Reservoir	Little Oak Creek	80	166	226	20	-60
Crowner Reservoir	Beaver Creek	0	6	6	0	0
Fish Creek Reservoir	Fish Creek	1842	300	900	1242	-600
Fish Creek Lake No. 2	Wheeler Creek	35	0	0	35	0
French Reservoir	Jack Creek	4	3	5	2	-2
Gardner Park Reservoir	Gardner Creek	1155	0	220	935	-220
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	225	58	58
Lake Creek Reservoir	Wheeler Creek	261	0	0	261	0
Lake Windemere	Farnsworth Creek	10	126	106	30	20
Lee Reservoir	Chimney Creek	0	21	21	0	0
Lester Creek Reservoir	Lester Creek	5757	151	149	5759	2
Long Lake	Fish Creek	397	100	297	200	-197
Martin Reservoir	Yellow Jacket Creek	10	70	70	10	0
May Reservoir	Salt Creek	10	21	21	10	0
McChivvis Reservoir	Watson Creek	0	191	188	3	3
Moore Park Reservoir	Elgin Creek	0	20	20	0	0
Oak Creek Reservoir	Oak Creek	1	1	0	2	1
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	503	525	460	568	65
Stillwater Reservoir No. 1	Yampa River	2332	3096	3805	1623	-709
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	25	25	0	0

DISTRICT NO. 58

III. Water Supply
F. Reservoir Storage

NAME OF RESERVOIR	SOURCE	AMT. IN STORAGE	FILL DURING SEASON	RELEASE + EVAPORATION	AMT. IN STORAGE 10/31/80	TOTAL CHANGE IN STORAGE
		11/1/79				
Lowry Reservoir	Oak Creek	46	0	46	0	-46
Lake Catamount	Yampa River	7422	1500	1500	7422	0
Tillquist Reservoir	Morrison Creek	5	0	0	5	0
Trull Creek Reservoir	Trull Creek	13	136	128	8	-5
Upper Stillwater Reservoir	Roaring Fork	620	100	100	620	0
Upper Willow Creek Reservoir	Willow Creek	22755	630	1349	22036	-719
Wheeler Reservoir	Wheeler Creek	37	0	0	37	0
Whitney Nelson Reservoir	Whipple Creek	264	160	212	212	-52
Younger Reservoir	Morrison Creek	15	0	0	15	0
TOTALS (All figures in Acre Feet)		45188	9277	11565	42900	-2288

DISTRICT NO. 58 CONT.

IV. AGRICULTURE

Summer precipitation was well below average causing a shortage in dry land production of both hay and small grains. Most summer pasture was also short because of the below normal rainfall. It has been several years since we have had sufficient moisture to make a good crop of grain or dry land hay.

The irrigated hay was also short even though we had a good water supply. It seems that the lack of precipitation also effected this crop.

The one bright spot was the so-called desert or low elevation winter range. Early May rains provided excellent growth in these areas giving better than average winter range conditions.

V. COMPACTS

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 1980 water year was 1,298,000 AF making the aggregate for the last ten consecutive years 11,428,900 AF. The 1980 flow was 16 percent above the normal based on a 62 year period of record.

Article XI of the Upper Colorado River Compact apportions the consumptive use of water of the Little Snake River and its tributaries between the states of Colorado and Wyoming. Article XI was not administered during the 1980 water year due to sufficient water supplies. Total flow past the Little Snake River gage near Lily Park was 559,000 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 145,000 acres of land in Jackson County, Colorado during any one irrigation year;
2. Storing or permitting the storage of more than a total amount of 17,000 AF 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 AF 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 1980 water year. Total irrigated acreage in Jackson County was 114,294 acres, down 862 acres from the 1979 total of 115,156 acres. Total storage from the North Platte Basin in Jackson County was 3951 AF in 1980 and exports from the North Platte Basin totaled 1264 AF. Total aggregate exports during the last ten consecutive years total 13,460 AF which is well within the allowable.

VI. DAMS

Two more reservoirs, Yamcola and Meadow Creek, were completed in 1980 adding another 13,400 acre feet of potential storage in Division 6. Two other projects, Juniper-Cross Mountain and Rangely Reservoir, are in the active planning stages.

The 1800 foot long and 110 foot high Yamcola Dam was completed late this fall and has begun to store water for the 1981 season. The reservoir is sponsored by the Upper Yampa Water Conservancy District and is located on the Upper Yampa River about 12 miles above the town of Yampa. Of the total 8000 AF of useable capacity, 4000 AF has been committed to Colorado Ute Electric for its power plants in Hayden and Craig. 1000 AF will be allocated for municipal use with the remaining 3000 AF going to irrigators in the Yampa and Toponas area. The Conservancy District has received authorization from the State Engineer to fill the reservoir to the 9530 foot level under the State Engineer's monitoring program.

Construction was also completed on the Meadow Creek Reservoir in North Park during 1980. The reservoir is located about 13 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 was built by 15 water users and has a capacity of 4400 acre feet.

The Colorado River Water Conservation District and Colorado Ute Electric Association have filed an application with the Federal Energy Regulatory Commission for a license to construct and operate the proposed Juniper-Cross Mountain Hydroelectric Project. The project will be located on the Yampa River in Moffat County between the city of Craig and Dinosaur National Monument. The project will require over 27,000 acres of Federal, State, and private lands and will inundate approximately 75 miles of river and 22,000 acres of land. Two proposed dams and reservoirs are planned with a combined generating capacity of 148 MW at an estimated cost of \$170 million.

Rangely voters have approved the construction of a new municipal reservoir to be located five miles upstream from Rangely on the White River. The \$14 million project is expected to store 569 acre feet and will give the community its first dependable water supply and will provide recreation features. Construction is supposed to commence in the fall of 1981 and be completed about one year later.

VII. WATER RIGHTS

The number of water right cases processed by the water court in Division 6 during 1980 remained about the same as last year with the exception of minimum streamflow applications filed by the Colorado Water Conservation Board. 1980 was the first year these applications were processed through the courts with six minimum flow decrees granted in District 43 and 78 decrees granted for the rest of Division 6. All the applications filed in Division 6 were protested by the Colorado River Water Conservation District and the United States. The CRWCD protested on grounds that the minimum streamflow bill was unconstitutional. When the bill was found constitutional in Division 5 Water Court, the protests were withdrawn. The protests filed by the United States were settled when the CWCB agreed to a stipulation that all applications will be subject to senior US decreed rights and properly decreed senior reserved rights. The stipulation also requires the CWCB to acquire special use permits or right-of-ways if required by law.

During 1980 the Division 6 Water Court moved to abandon many of the old conditional water rights which have not been showing due diligence. In each case where a conditional right was proposed to be abandoned, two notices were sent to the owners to show cause why the decrees should not be abandoned. On Term Day, October 14, 1980, 39 conditional water rights were abandoned when no cause was shown by the owners.

SUMMARY OF 1980 COURT TRANSACTIONS IN DIVISION 6 (EXCEPT DISTRICT 43*)

Type of Filing	Applications	Rulings	Decrees
Underground	43	15	19
Change of right	9	3	4
Augmentation plan	2	2	
Surface	140	98	96
Reservoir	58	29	32
Minimum streamflow		90	78

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

SUMMARY OF 1980 COURT TRANSACTIONS WITHIN DISTRICT 43

Type of Filing	Applications	Rulings	Decrees
Underground	7	9	13
Change of right			1
Augmentation plan	1		
Surface	49	32	39
Reservoir	8	14	8
Minimum streamflow	10	9	6

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.....	284,229
Direct Flow Diversions to Transbasin.....	0
Direct Flow Diversions to Municipal & Domestic.....	2,000
Direct Flow Diversions to Industrial.....	3,658
Direct Flow Diversions to Other Uses.....	13,765
TOTAL DIVERSIONS.....	303,652
Reservoir Storage (11/1/79).....	7,700
Reservoir Storage (10/31/80).....	7,823
Net Change in Storage.....	123
Fill During Season.....	1,412
Release + Evaporation During Season.....	1,535
Direct Diversions to Irrigation.....	284,229
Diversions from Storage to Irrigation.....	310
TOTAL DIVERSIONS TO IRRIGATION.....	284,539
Total Acres Irrigated.....	30,904
Average Demand for Irrigation.....	9.2
Number of Active Ditches Observed.....	400
Number of Active Reservoirs Observed.....	22
Number of Active Springs Observed.....	329
Number of Active Wells Observed.....	30
Number of Inactive Structures Observed.....	127
TOTAL STRUCTURES OBSERVED.....	908
Total Number of Structures Regulated.....	36
Total Number of Field Observations Made.....	4,372

IX. WATER COMMISSIONER'S SUMMARY

Water District No. 44

Direct Flow Diversions to Irrigation.....	160,210
Direct Flow Diversions to Transbasin.....(Net Export)...	592
Direct Flow Diversions to Municipal & Domestic.....	2,500
Direct Flow Diversions to Industrial.....	4,298
Direct Flow Diversions to Other Uses.....	800
TOTAL DIVERSIONS.....	168,400
Reservoir Storage (11/1/79).....	16,344
Reservoir Storage (10/31/80).....	15,750
Net Change in Storage.....	- 594
Fill During Season.....	2,673
Release + Evaporation During Season.....	3,267
Direct Diversions to Irrigation.....	160,210
Diversions from Storage to Irrigation.....	2,122
TOTAL DIVERSIONS TO IRRIGATION.....	162,332
Total Acres Irrigated.....	30,723
Average Demand for Irrigation.....	5.3
Number of Active Ditches Observed.....	226
Number of Active Reservoirs Observed.....	48
Number of Active Springs Observed.....	60
Number of Active Wells Observed.....	10
Number of Inactive Structures Observed.....	50
TOTAL STRUCTURES OBSERVED.....	394
Total Number of Structures Regulated.....	41
Total Number of Field Observations Made.....	1,583

IX. WATER COMMISSIONER'S SUMMARY

Water District No. 47

Direct Flow Diversions to Irrigation.....	362,591
Direct Flow Diversions to Transbasin.....	1,264
Direct Flow Diversions to Municipal & Domestic.....	700
Direct Flow Diversions to Industrial.....	0
Direct Flow Diversions to Other Uses.....	1,000
TOTAL DIVERSIONS.....	365,555
Reservoir Storage (11/1/79).....	23,715
Reservoir Storage (10/31/80).....	17,949
Net Change in Storage.....	-5,766
Fill During Season.....	5,246
Release + Evaporation During Season.....	11,012
Direct Diversions to Irrigation.....	362,591
Diversions from Storage to Irrigation.....	8,581
TOTAL DIVERSIONS TO IRRIGATION.....	371,172
Total Acres Irrigated.....	114,294
Average Demand for Irrigation.....	3.2
Number of Active Ditches Observed.....	399
Number of Active Reservoirs Observed.....	34
Number of Active Springs Observed.....	17
Number of Active Wells Observed.....	8
Number of Inactive Structures Observed.....	39
TOTAL STRUCTURES OBSERVED.....	497
Total Number of Structures Regulated.....	50
Total Number of Field Observations Made.....	2,020

IX. WATER COMMISSIONER'S SUMMARY

Water District No. 54

Direct Flow Diversions to Irrigation.....	34,458
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.....	35,208
Reservoir Storage (11/1/79).....	476
Reservoir Storage (10/31/80).....	476
Net Change in Storage.....	0
Fill During Season.....	423
Release + Evaporation During Season.....	423
Direct Diversions to Irrigation.....	34,458
Diversions from Storage to Irrigation.....	398
TOTAL DIVERSIONS TO IRRIGATION.....	34,856
Total Acres Irrigated.....	5,398
Average Demand for Irrigation.....	6.5
Number of Active Ditches Observed.....	78
Number of Active Reservoirs Observed.....	5
Number of Active Springs Observed.....	0
Number of Active Wells Observed.....	0
Number of Inactive Structures Observed.....	14
TOTAL STRUCTURES OBSERVED.....	97
Total Number of Structures Regulated.....	0
Total Number of Field Observations Made.....	194

IX. WATER COMMISSIONER'S SUMMARY

Water District No. 55

Direct Flow Diversions to Irrigation.....	10,205
Direct Flow Diversions to Transbasin.....	0
Direct Flow Diversions to Municipal & Domestic.....	7
Direct Flow Diversions to Industrial.....	0
Direct Flow Diversions to Other Uses.....	124
TOTAL DIVERSIONS.....	10,336
Reservoir Storage (11/1/79).....	0
Reservoir Storage (10/31/80).....	0
Net Change in Storage.....	0
Fill During Season.....	0
Release + Evaporation During Season.....	0
Direct Diversions to Irrigation.....	10,205
Diversions from Storage to Irrigation.....	0
TOTAL DIVERSIONS TO IRRIGATION.....	10,205
Total Acres Irrigated.....	1,388
Average Demand for Irrigation.....	7.4
Number of Active Ditches Observed.....	13
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.....	47
Total Number of Structures Regulated.....	0
Total Number of Field Observations Made.....	147

IX. WATER COMMISSIONER'S SUMMARY

Water District No. 56

Direct Flow Diversions to Irrigation.....	12,371
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.....	2,942
TOTAL DIVERSIONS.....	15,312
Reservoir Storage (11/1/79).....	156
Reservoir Storage (10/31/80).....	177
Net Change in Storage.....	21
Fill During Season.....	419
Release + Evaporation During Season.....	398
Direct Diversions to Irrigation.....	12,371
Diversions from Storage to Irrigation.....	16
TOTAL DIVERSIONS TO IRRIGATION.....	12,387
Total Acres Irrigated.....	2,147
Average Demand for Irrigation.....	5.8
Number of Active Ditches Observed.....	40
Number of Active Reservoirs Observed.....	9
Number of Active Springs Observed.....	55
Number of Active Wells Observed.....	8
Number of Inactive Structures Observed.....	20
TOTAL STRUCTURES OBSERVED.....	132
Total Number of Structures Regulated.....	4
Total Number of Field Observations Made.....	512

IX. WATER COMMISSIONER'S SUMMARY

Water District No. 57

Direct Flow Diversions to Irrigation.....	52,744
Direct Flow Diversions to Transbasin...(Net Export).....	1,121
Direct Flow Diversions to Municipal & Domestic.....	800
Direct Flow Diversions to Industrial.....	5,330
Direct Flow Diversions to Other Uses.....	1,400
TOTAL DIVERSIONS.....	61,395
Reservoir Storage (11/1/79).....	2,538
Reservoir Storage (10/31/80).....	3,729
Net Change in Storage.....	1,417
Fill During Season.....	3,280
Release + Evaporation During Season.....	1,889
Direct Diversions to Irrigation.....	52,744
Diversions from Storage to Irrigation.....	1,340
TOTAL DIVERSIONS TO IRRIGATION.....	54,084
Total Acres Irrigated.....	10,761
Average Demand for Irrigation.....	5.0
Number of Active Ditches Observed.....	81
Number of Active Reservoirs Observed.....	42
Number of Active Springs Observed.....	130
Number of Active Wells Observed.....	15
Number of Inactive Structures Observed.....	60
TOTAL STRUCTURES OBSERVED.....	328
Total Number of Structures Regulated.....	2
Total Number of Field Observations Made.....	735

IX. WATER COMMISSIONER'S SUMMARY

Water District No. 58

Direct Flow Diversions to Irrigation.....	141,042
Direct Flow Diversions to Transbasin.....	768
Direct Flow Diversions to Municipal & Domestic.....	5,200
Direct Flow Diversions to Industrial.....	0
Direct Flow Diversions to Other Uses.....	1,800
TOTAL DIVERSIONS.....	148,917
Reservoir Storage (11/1/79).....	45,188
Reservoir Storage (10/31/80).....	42,900
Net Change in Storage.....	-2,288
Fill During Season.....	9,277
Release + Evaporation During Season.....	11,565
Direct Diversions to Irrigation.....	141,042
Diversions from Storage to Irrigation.....	5,767
TOTAL DIVERSIONS TO IRRIGATION.....	146,809
Total Acres Irrigated.....	41,331
Average Demand for Irrigation.....	3.6
Number of Active Ditches Observed.....	370
Number of Active Reservoirs Observed.....	61
Number of Active Springs Observed.....	416
Number of Active Wells Observed.....	70
Number of Inactive Structures Observed.....	160
TOTAL STRUCTURES OBSERVED.....	1,022
Total Number of Structures Regulated.....	50
Total Number of Field Observations Made.....	4,332

X. DIVISION ENGINEER'S SUMMARY

Table A

DIVISION SUMMARY - DIVISION NO. 6
1980 -- Direct Flow Diversions

Water District	Total Ditches Reported		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.
	Active	Inactive									
43	400	127	30,904	9.2	3,658	2,000	13,765	0	303,652	908	0
44	226	50	30,723	5.3	4,298	2,500	800	592	168,400	394	0
47	399	39	114,294	3.2	0	700	1,000	1,264	365,555	497	0
54	78	14	5,398	6.5	0	150	600	0	35,208	97	0
55	13	7	1,388	7.4	0	7	124	0	10,336	47	0
56	40	20	2,147	5.8	0	200	2,942	0	15,312	132	0
57	81	60	10,761	5.0	5,330	800	1,400	1,121	61,395	328	0
58	370	160	41,331	3.6	0	5,200	1,800	768	148,917	1,022	0
TOTALS	1,607	477	236,946	4.5	13,286	11,557	22,431	3,745	1,108,775	3,425	0

X. DIVISION ENGINEER'S SUMMARY

Table B

DIVISION SUMMARY - DIVISION NO. 6

1980 - Storage Report - Acre Feet

Water District	Amount in Storage Acre Feet 11-1-79	Amount in Storage Acre Feet 10-31-80	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	7,700	3,823	1,412	310	0	0	7,467	0
44	16,344	15,750	2,673	2,122	9,000	0	6,775	0
47	23,715	17,949	5,246	8,581	0	0	9,600	0
54	476	476	398	398	0	0	218	0
55	0	0	0	0	0	0	0	0
56	156	177	419	16	0	0	0	0
57	2,538	3,729	3,280	1,340	1,500	986	0	0
58	45,188	42,900	9,277	5,767	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	359	22	400	127	908	4,372	36
44	70	48	226	50	394	1,583	41
47	25	34	399	39	497	2,020	50
54	0	5	78	14	97	194	0
55	27	0	13	7	47	147	0
56	63	9	40	20	132	512	0
57	145	42	81	60	328	735	2
58	486	61	370	160	1,022	4,332	50
TOTALS	1,175	221	1,607	477	3,425	13,895	179

X. DIVISION ENGINEER'S SUMMARY

Table D

WORKLOAD AND STATISTICAL INDICATORS

Acre Feet Water Used	1,108,775
Acre Feet Diverted for Agricultural Use	1,076,117
Acre Feet Diverted for Stoarge	22,730
Acre Feet Diverted for Industrial Use	13,286
Acre Feet Diverted for Recreation Use	22,431
Acre Feet Diverted for Domestic and Municipal Use	11,557
Acre Feet Diverted to Compact Commitment	0
Acre Feet Water Stored (10/31/80)	88,804
Acre Feet Water Transbasin Diversion	3,745
Acres Irrigated	236,946
Total Structures Administered	183
Total Daily Observations	13,895
Total Structures Observed or Reported	3,832

XI. ANNUAL SUMMARY - DISTRICTS
ACRE FEET (11-1-73 thru 10-31-80)

Districts	IRRIGATION			CURRENT YEAR		TRANS-MOUNTAIN		
	Non-Exempt Wells	Ditch Structures Reported	Direct Diversions To Irrigation	Diversions To Storage	Storage to Irrigation	Acres Irrigated	Div. to Div. Export	Import
43	11	400	284,229	1,412	310	30,904	0	0
44	15	226	160,210	2,673	2,122	30,723	0	0
47	9	399	362,591	5,246	8,581	114,294	1,264	0
54	1	78	34,458	423	398	5,398	0	0
55	1	13	10,205	0	0	1,388	0	0
56	0	40	12,371	419	16	2,147	0	0
57	9	81	52,744	3,280	1,340	10,761	0	0
58	18	370	146,809	9,277	5,767	41,331	2,078	0
TOTALS	64	1607	1,076,117	22,730	18,534	236,946	3,342	0

Districts	MUNICIPAL			INDUSTRIAL			RECREATION		ACTUAL STORAGE		# Decree Applications	# Water Court Applications
	Direct Diversions	Diversions To Storage	Storage Releases	Direct Diversions	Diversions To Storage	Hydro-Power	Storage Wildlife Parks	For Year All Reservoirs				
43	2,000	0	0	3,658	0	0	7,467	7,823	67	75		
44	2,500	0	0	4,298	0	0	6,775	15,750	37	46		
47	700	0	0	0	0	0	9,600	17,949	30	38		
54	150	0	0	0	0	0	218	423	21	13		
55	7	0	0	0	0	0	0	0	12	3		
56	200	0	0	0	0	0	0	156	0	6		
57	800	0	0	5,330	0	0	986	3,729	25	18		
58	5,200	300	600	0	0	0	37,400	42,900	104	130		
TOTALS	11,557	300	600	13,286	0	0	62,446	88,574	296	327		

XII. RECOMMENDATIONS

Ownership of water rights is still an issue which everyone seems to avoid. One of our most precious assets is in the dilemma of being unable to have title insurance issued in its behalf. It would seem that legislation could be passed so title of water rights could be straightened out and ownership could be verified without huge expense. The present adjudication system is not overly expensive. It would seem that if this system is adequate to originate water rights, it would be sufficient to verify ownership. Persons who are using water in the decreed locations on the originally designated land could file a \$26 case showing that they are owners. If after advertising no one comes forth showing anything different, the court could verify title.

Consumptive use is more important than ever and we need to know what our use is so that we can discuss energy needs, compact negotiations, and many other issues in an intelligent manner.

In face of what could be a record short year, the importance of storage is again facing us. It would seem that all federal and many state regulations are geared to stop or hinder most storage projects. We would like to have studies made that would relate the peak runoff to snow melt on the western slope as it truly happens, rather than relating to fictitious rainfall data which is designed for entirely different areas. To our knowledge, this has only been slightly covered and this is the true source of peak runoff rather than intense rainfall.

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MAR 12 1981

WATER RESOURCES
STATE ENGINEER
C.D. 10

COLORADO DIVISION OF WATER RESOURCES
DIVISION 6 WATER BUDGET PROGRAM

RESERVOIR EVAPORATION AT 6450. FT.

MONTH	EVAPORATION(INCHES)	NET DEPLETION(AF.)
11	0.53	18.
12	0.53	18.
1	0.53	16.
2	0.70	23.
3	0.53	18.
4	1.91	70.
5	3.30	127.
6	4.78	179.
7	5.73	210.
8	5.23	187.
9	4.43	155.
10	2.77	97.
TOTALS		1120.

IRRIGATION CONSUMPTIVE USE

 ELEV. 7700. FT. 3081. IRR. ACRES IRR. SEASON 6/15/1980 - 8/20/1980
 ABOVE BUFORD *****

MONTH	DEPLETION (INCHES)
6	2.61
7	4.93
8	2.16
9.70 YEARLY TOTAL	

NET DEPLETION = 2491. ACRE FT. 0.809 ACRE FT. PER ACRE

 ELEV. 6347. FT. 14071. IRR. ACRES IRR. SEASON 6/ 1/1980 - 10/15/1980
 WR TO PICEANCE *****

MONTH	DEPLETION (INCHES)
6	5.87
7	5.53
8	4.19
9	2.88
10	0.35
16.81 YEARLY TOTAL	

NET DEPLETION = 22687. ACRE FT. 1.568 ACRE FT. PER ACRE

 ELEV. 6500. FT. 6676. IRR. ACRES IRR. SEASON 5/25/1980 - 7/10/1980
 TRIBS AB WEEKER *****

MONTH	DEPLETION (INCHES)
5	0.60
6	5.82
7	1.77
8.18 YEARLY TOTAL	

NET DEPLETION = 4552. ACRE FT. 0.682 ACRE FT. PER ACRE

RECEIVED
 MAR 12 1981
 WATER RESOURCES
 STATE ENGINEER
 CORD

ELEV. 6300. FT. 4416. IRR. ACRES IRR. SEASON 5/ 5/1980 - 7/15/1980
LOWER TRIBS

MONTH	DEPLETION (INCHES)
5	1.63
6	5.82
7	2.68

10.14 YEARLY TOTAL

NET DEPLETION = 3730. ACRE FT. 0.845 ACRE FT. PER ACRE

ELEV. 5300. FT. 2260. IRR. ACRES IRR. SEASON 5/25/1980 - 8/31/1980
WR BEL PICEANCE

MONTH	DEPLETION (INCHES)
5	0.64
6	6.47
7	6.64
8	4.95

18.70 YEARLY TOTAL

NET DEPLETION = 3522. ACRE FT. 1.558 ACRE FT. PER ACRE

IRRIGATION TOTALS FOR WATER DISTRICT 43

36983. A.F. NET IRRIGATION DEPLETION 1.197 A.F./ACRE . 30904. IRR. ACRES

RESERVOIR EVAPORATION AT 6390. FT.

MONTH	EVAPORATION(INCHES)	NET DEPLETION(AF.)
11	0.53	34.
12	0.53	34.
1	0.53	34.
2	0.53	34.
3	0.70	46.
4	2.52	176.
5	3.81	284.
6	5.28	385.
7	6.17	419.
8	5.67	372.
9	4.69	302.
10	3.02	192.
TOTALS		2313.

IRRIGATION CONSUMPTIVE USE

 ELEV. 6390. FT. 5778. IRR. ACRES IRR. SEASON 5/10/1980 - 10/ 5/1980
 YR AB JUNIP SPG

MONTH	DEPLETION (INCHES)
5	1.56
6	5.53
7	6.44
8	4.36
9	3.21
10	0.14
21.23 YEARLY TOTAL	

NET DEPLETION = 10225.ACRE FT. 1.770 ACRE FT. PER ACRE

 ELEV. 5920. FT. 5278. IRR. ACRES IRR. SEASON 5/10/1980 - 10/15/1980
 YR BL JUNIP SPG

MONTH	DEPLETION (INCHES)
5	1.56
6	5.88
7	5.61
8	4.66
9	3.42
10	0.44
21.57 YEARLY TOTAL	

NET DEPLETION = 9489.ACRE FT. 1.798 ACRE FT. PER ACRE

 ELEV. 6400. FT. 13204. IRR. ACRES IRR. SEASON 5/20/1980 - 7/15/1980
 LOWER TRIBS

MONTH	DEPLETION (INCHES)
5	0.92
6	5.39
7	3.04
9.25 YEARLY TOTAL	

NET DEPLETION = 10179.ACRE FT. 0.771 ACRE FT. PER ACRE

ELEV. 6700. FT. 6463. IRR. ACRES IRR. SEASON 6/ 5/1980 - 8/20/1980
UPPER TRIBS

MONTH DEPLETION (INCHES)

6	4.70
7	5.15
8	2.75

12.59 YEARLY TOTAL

NET DEPLETION = 6783.49 ACRE FT. 1.049 ACRE FT. PER ACRE

IRRIGATION TOTALS FOR WATER DISTRICT 44 30723. IRR. ACRES
36675. A.F. NET IRRIGATION DEPLETION 1.194 A.F./ACRE

RESERVOIR EVAPORATION AT 8100. FT.

MONTH	EVAPORATION(INCHES)	NET DEPLETION(AF.)
11	0.60	149.
12	0.60	149.
1	0.60	149.
2	0.60	149.
3	0.60	149.
4	2.05	509.
5	3.80	950.
6	5.33	1320.
7	6.23	1212.
8	5.54	1039.
9	4.74	911.
10	2.89	563.
TOTALS	33.58	7248.

***** IRRIGATION CONSUMPTIVE USE *****
 ***** ELEV. 8700. FT. *****
 ***** 9510. IRR. ACRES *****
 ***** IRR. SEASON 5/25/1980 - 7/20/1980 *****
 MR TO 3R BRIDGE

MONTH	DEPLETION (INCHES)
5	0.47
6	5.62
7	4.17
TOTAL	10.26

***** NET DEPLETION = 8133. ACRE FT. *****
 ***** 0.655 ACRE FT. PER ACRE *****
 ***** ELEV. 8300. FT. *****
 ***** 9972. IRR. ACRES *****
 ***** IRR. SEASON 5/20/1980 - 7/15/1980 *****
 MR TO WALDEN

MONTH	DEPLETION (INCHES)
5	0.78
6	5.53
7	3.08
TOTAL	9.40

***** NET DEPLETION = 7809. ACRE FT. *****
 ***** 0.783 ACRE FT. PER ACRE *****
 ***** ELEV. 8000. FT. *****
 ***** 4907. IRR. ACRES *****
 ***** IRR. SEASON 5/20/1980 - 7/15/1980 *****
 MR BEL WALDEN

MONTH	DEPLETION (INCHES)
5	0.84
6	5.76
7	3.21
TOTAL	9.81

***** NET DEPLETION = 4010. ACRE FT. *****
 ***** 0.617 ACRE FT. PER ACRE *****

ELEV. 8700. FT. IRR. SEASON 5/15/1980 - 7/15/1980
ILL TO MIDLAND

MONTH DEPLETION (INCHES)
5 1.13
6 5.56
7 3.09
9.78 YEARLY TOTAL

NET DEPLETION = 10191. ACRE FT. 0.815 ACRE FT. PER ACRE

ELEV. 8000. FT. IRR. SEASON 6/1/1980 - 7/15/1980
LOWER ILLINOIS

MONTH DEPLETION (INCHES)
6 5.58
7 3.11
8.69 YEARLY TOTAL

NET DEPLETION = 6699. ACRE FT. 0.724 ACRE FT. PER ACRE

ELEV. 8200. FT. IRR. SEASON 5/15/1980 - 7/15/1980
BIG GRIZZLY

MONTH DEPLETION (INCHES)
5 1.36
6 5.53
7 2.38
9.28 YEARLY TOTAL

NET DEPLETION = 11895. ACRE FT. 0.773 ACRE FT. PER ACRE

ELEV. 8000. FT. IRR. SEASON 5/15/1980 - 7/15/1980
CANADIAN R

MONTH DEPLETION (INCHES)
5 1.15
6 5.64
7 3.14
9.93 YEARLY TOTAL

NET DEPLETION = 9423. ACRE FT. 0.828 ACRE FT. PER ACRE

ELEV. 8000. FT. IRR. SEASON 5/15/1980 - 7/20/1980
ROARING FORK

MONTH DEPLETION (INCHES)
5 1.35
6 5.51
7 3.16
10.01 YEARLY TOTAL

NET DEPLETION = 9499. ACRE FT. 0.834 ACRE FT. PER ACRE

ELEV. 8100. FT. 13230. IRR. ACRES IRR. SEASON 5/25/1980 - 7/25/1980
NORTH FORK

MONTH DEPLETION (INCHES)

5 0.55
6 5.45
7 3.90

9.90 YEARLY TOTAL

NET DEPLETION = 10927. ACRE FT. 0.825 ACRE FT. PER ACRE

ELEV. 8100. FT. 1100. IRR. ACRES IRR. SEASON 5/15/1980 - 7/15/1980
NON TRIB IN CO

MONTH DEPLETION (INCHES)

5 1.35
6 5.51
7 2.37

9.24 YEARLY TOTAL

NET DEPLETION = 847. ACRE FT. 0.770 ACRE FT. PER ACRE

ELEV. 8000. FT. 4710. IRR. ACRES IRR. SEASON 5/25/1980 - 7/20/1980
N PLATTE R

MONTH DEPLETION (INCHES)

5 0.48
6 5.70
7 4.23

10.41 YEARLY TOTAL

NET DEPLETION = 4087. ACRE FT. 0.868 ACRE FT. PER ACRE

ELEV. 8100. FT. 11607. IRR. ACRES IRR. SEASON 5/15/1980 - 7/20/1980
LIL GRIZZLY

MONTH DEPLETION (INCHES)

5 1.35
6 5.51
7 3.16

10.03 YEARLY TOTAL

NET DEPLETION = 9700. ACRE FT. 0.836 ACRE FT. PER ACRE

IRRIGATION TOTALS FOR WATER DISTRICT 47
93219. A.F. NET IRRIGATION DEPLETION 0.611 A.F./ACRE 114952. IRR. ACRES

RESERVOIR EVAPORATION AT 7500. FT.

MONTH	EVAPORATION (INCHES)	NET DEPLETION (AF.)
11	0.53	2.
12	0.53	2.
1	0.53	2.
2	0.53	2.
3	0.53	2.
4	1.97	11.
5	3.26	35.
6	4.73	51.
7	5.62	47.
8	5.12	26.
9	4.14	19.
10	2.48	10.
TOTALS	29.95	211.

IRRIGATION CONSUMPTIVE USE

 ELEV. 6300. FT. 3125. IRR. ACRES IRR. SEASON 6/1/1980 - 8/5/1980
 SNAKE WILLOW CK *****

MONTH	DEPLETION (INCHES)
6	5.52
7	6.43
8	0.70
TOTALS	12.66 YEARLY TOTAL

NET DEPLETION = 3296. ACRE FT. 1.055 ACRE FT. PER ACRE

 ELEV. 6500. FT. 2273. IRR. ACRES IRR. SEASON 6/1/1980 - 7/25/1980
 TRIBUTARIES *****

MONTH	DEPLETION (INCHES)
6	5.26
7	4.95
TOTALS	10.21 YEARLY TOTAL

NET DEPLETION = 1934. ACRE FT. 0.851 ACRE FT. PER ACRE

5230. A.F. NET IRRIGATION DEPLETION 0.969 A.F./ACRE 5398. IRR. ACRES

RESERVOIR EVAPORATION AT 5354. FT.

MONTH	EVAPORATION(INCHES)	NET DEPLETION(AF.)
11	0.53	0.
12	0.53	0.
1	0.53	0.
2	0.53	0.
3	1.80	0.
4	3.05	0.
5	4.27	0.
6	5.56	0.
7	6.46	0.
8	5.93	0.
9	5.02	0.
10	3.37	0.
	37.56	0.

TOTALS

IRRIGATION CONSUMPTIVE USE

 ELEV. 5400. FT. 1388. IRR. ACRES IRR. SEASON 5/ 5/1980 - 8/20/1980
 LOWER SNAKE R *****

MONTH	DEPLETION (INCHES)
5	2.10
6	6.19
7	5.93
8	3.19

17.41 YEARLY TOTAL

NET DEPLETION = 2014.ACRE FT. 1.451 ACRE FT. PER ACRE *****

 IRRIGATION TOTALS FOR WATER DISTRICT 55
 2014. A.F. NET IRRIGATION DEPLETION 1.451 A.F./ACRE 1388.IRR. ACRES *****

RESERVOIR EVAPORATION AT 5500. FT.

MONTH	EVAPORATION(INCHES)	NET DEPLETION(AF.)
11	0.53	1.
12	0.53	1.
1	0.53	1.
2	0.53	1.
3	1.76	7.
4	2.88	17.
5	4.00	28.
6	5.20	37.
7	5.95	40.
8	5.63	30.
9	4.70	22.
10	3.19	12.
TOTALS	35.41	197.

IRRIGATION CONSUMPTIVE USE

ELEV. 5354. FT. 2147. IRR. ACRES IRR. SEASON 4/25/1980 - 8/25/1980 GREEN R

MONTH	DEPLETION (INCHES)
4	0.39
5	2.75
6	5.98
7	6.69
8	4.52
YEARLY TOTAL	20.31

NET DEPLETION = 3635. ACRE FT. 1.693 ACRE FT. PER ACRE

3635. A.F. NET IRRIGATION DEPLETION 1.693 A.F./ACRE 2147. IRR. ACRES

RESERVOIR EVAPORATION AT 6700. FT.

MONTH	EVAPORATION(INCHES)	NET DEPLETION(AF.)
11	0.53	6.
12	0.53	6.
1	0.53	6.
2	0.53	6.
3	0.53	6.
4	2.45	54.
5	3.82	86.
6	5.26	104.
7	6.06	103.
8	5.44	76.
9	4.63	62.
10	2.99	39.
33.28		TOTALS 554.

IRRIGATION CONSUMPTIVE USE

ELEV. 6375. FT. 6767. IRR. ACRES IRR. SEASON 5/25/1980 - 10/15/1980
 YAMPA R

MONTH	DEPLETION (INCHES)
5	0.54
6	5.95
7	6.32
8	4.24
9	3.14
10	0.57
20.77 YEARLY TOTAL	

NET DEPLETION = 11712. ACRE FT. 1.731 ACRE FT. PER ACRE
 ELEV. 6600. FT. 3994. IRR. ACRES IRR. SEASON 6/5/1980 - 8/15/1980
 TRIBUTARIES

MONTH	DEPLETION (INCHES)
6	4.92
7	6.02
8	1.94
12.87 YEARLY TOTAL	

NET DEPLETION = 4284. ACRE FT. 1.073 ACRE FT. PER ACRE
 15996. A.F. NET IRRIGATION DEPLETION 1.486 A.F./ACRE 10761. IRR. ACRES

ELEV. 7800. FT. *****
TRIBS AB SARVIS *****

5996. IRR. ACRES ***** IRR. SEASON 6/ 1/1980 - 8/31/1980 *****
MONTH DEPLETION (INCHES)
6 5.23
7 4.27
8 4.08
13.57 YEARLY TOTAL

NET DEPLETION = 6780. ACRE FT. 1.131 ACRE FT. PER ACRE

ELEV. 6800. FT. *****
TRIBS BL SARVIS *****

5786. IRR. ACRES ***** IRR. SEASON 6/ 5/1980 - 8/31/1980 *****
MONTH DEPLETION (INCHES)
6 4.56
7 5.80
8 4.32
14.70 YEARLY TOTAL

NET DEPLETION = 7089. ACRE FT. 1.225 ACRE FT. PER ACRE

ELEV. 7000. FT. *****
ELK R TRIBS *****

4734. IRR. ACRES ***** IRR. SEASON 6/ 1/1980 - 8/ 5/1980 *****
MONTH DEPLETION (INCHES)
6 5.04
7 5.52
8 0.66
11.22 YEARLY TOTAL

NET DEPLETION = 4427. ACRE FT. 0.935 ACRE FT. PER ACRE

48465. A.F. NET IRRIGATION DEPLETION 1.173 A.F./ACRE 41331. IRR. ACRES
58

RESERVOIR EVAPORATION AT 7500. FT.

MONTH	EVAPORATION(INCHES)	NET DEPLETION(AF.)
11	0.53	102.
12	0.53	102.
1	0.53	102.
2	0.53	102.
3	0.53	102.
4	2.04	394.
5	3.36	631.
6	4.81	974.
7	5.56	1121.
8	5.08	981.
9	4.41	832.
10	2.71	502.
TOTALS	30.60	5945.

IRRIGATION CONSUMPTIVE USE

ELEV. 8000. FT. 11047. IRR. ACRES IRR. SEASON 6/1/1980 - 9/15/1980
 BEAR RIVER

MONTH	DEPLETION (INCHES)
6	5.17
7	4.20
8	4.02
9	1.42
14.81	YEARLY TOTAL

NET DEPLETION = 13634. ACRE FT. 1.234 ACRE FT. PER ACRE
 ELEV. 6770. FT. 6825. IRR. ACRES IRR. SEASON 6/10/1980 - 9/10/1980
 YAMPA R TO ELK

MONTH	DEPLETION (INCHES)
6	3.71
7	5.81
8	4.33
9	0.92
14.77	YEARLY TOTAL

NET DEPLETION = 8398. ACRE FT. 1.230 ACRE FT. PER ACRE
 ELEV. 6900. FT. 6943. IRR. ACRES IRR. SEASON 6/10/1980 - 9/10/1980
 ELK R

MONTH	DEPLETION (INCHES)
6	3.55
7	5.55
8	4.12
9	0.87
14.10	YEARLY TOTAL

NET DEPLETION = 8157. ACRE FT. 1.175 ACRE FT. PER ACRE

SUMMARY FOR WATER DISTRICT 43 IN ACRE-FT

IRRIGATION DEPLETION	36983.
RESERVOIR EVAPORATION	1120.
CHANGE IN RESERVOIR STORAGE	123.
OUT OF BASIN DIVERSIONS	0.
MUNICIPAL+INDUSTRIAL CONSUMPTION	4200.
MISC. USE OR CORRECTIONS	500.
TOTAL DEPLETION	42926.

SUMMARY FOR WATER DISTRICT 44 IN ACRE-FT

IRRIGATION DEPLETION	36675.
RESERVOIR EVAPORATION	2313.
CHANGE IN RESERVOIR STORAGE	-594.
OUT OF BASIN DIVERSIONS	592.
MUNICIPAL+INDUSTRIAL CONSUMPTION	5200.
MISC. USE OR CORRECTIONS	400.
TOTAL DEPLETION	44586.

SUMMARY FOR WATER DISTRICT 47 IN ACRE-FT

IRRIGATION DEPLETION	93219.
RESERVOIR EVAPORATION	7248.
CHANGE IN RESERVOIR STORAGE	-5766.
OUT OF BASIN DIVERSIONS	1264.
MUNICIPAL+INDUSTRIAL CONSUMPTION	100.
MISC. USE OR CORRECTIONS	500.
TOTAL DEPLETION	96565.

SUMMARY FOR WATER DISTRICT 54 IN ACRE-FT

IRRIGATION DEPLETION	5230.
RESERVOIR EVAPORATION	211.
CHANGE IN RESERVOIR STORAGE	0.
OUT OF BASIN DIVERSIONS	0.
MUNICIPAL+INDUSTRIAL CONSUMPTION	0.
MISC. USE OR CORRECTIONS	100.
TOTAL DEPLETION	5540.

SUMMARY FOR WATER DISTRICT 55 IN ACRE-FT

IRRIGATION DEPLETION	2014.
RESERVOIR EVAPORATION	0.
CHANGE IN RESERVOIR STORAGE	0.
OUT OF BASIN DIVERSIONS	0.
MUNICIPAL+INDUSTRIAL CONSUMPTION	0.
MISC. USE OR CORRECTIONS	50.
TOTAL DEPLETION	2064.

SUMMARY FOR WATER DISTRICT 56 IN ACRE-FT

IRRIGATION DEPLETION	3635.
RESERVOIR EVAPORATION	197.
CHANGE IN RESERVOIR STORAGE	21.
OUT OF BASIN DIVERSIONS	0.
MUNICIPAL+INDUSTRIAL CONSUMPTION	0.
MISC. USE OR CORRECTIONS	100.
TOTAL DEPLETION	3953.

SUMMARY FOR WATER DISTRICT 57 IN ACRE-FT

IRRIGATION DEPLETION	15996.
RESERVOIR EVAPORATION	554.
CHANGE IN RESERVOIR STORAGE	1417.
OUT OF BASIN DIVERSIONS	719.
MUNICIPAL+INDUSTRIAL CONSUMPTION	5600.
MISC. USE OR CORRECTIONS	100.
TOTAL DEPLETION	24386.

SUMMARY FOR WATER DISTRICT 58 IN ACRE-FT

IRRIGATION DEPLETION	48485.
RESERVOIR EVAPORATION	5945.
CHANGE IN RESERVOIR STORAGE	-2288.
OUT OF BASIN DIVERSIONS	2078.
MUNICIPAL+INDUSTRIAL CONSUMPTION	1000.
MISC. USE OR CORRECTIONS	300.
TOTAL DEPLETION	55519.

DIVISION 6 BREAKDOWN BY RIVER BASIN

IRRI G DPLTN	YAMPA	LITTLE SNAKE	GREEN	WHITE	N PLATTE	COLORADO
	101156.	7243.	3635.	36983.	93219.	149017.
RES EVAP	8811.	211.	197.	1120.	7248.	10339.
CHG STORAGE	-1465.	0.	21.	123.	-5766.	-1321.
MUN-IND	11800.	0.	0.	4200.	100.	16000.
TRANS-MTN	3389.	0.	0.	0.	1264.	3389.
MISC	800.	150.	100.	500.	500.	1550.
OUTFLOW	1307000.	558984.	23000.	526500.	373600.	2415484.
BASIN YIELD	1431491.	566588.	26953.	569426.	470165.	2594458.
CONS USE	124491.	7604.	3953.	42926.	96565.	178974.
PCT CONS	0.0870	0.0134	0.1467	0.0754	0.2054	0.0690

DIVISION 6 TOTAL IRRIGATION DEPLETION IN ACRE FT. 242237.

IRRIGATED ACRES 237604.

ACRE FT. PER ACRE 1.019

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.