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DIVISION OF WATER RESOURCES

DIVISION NO. 6

1975 ANNUAL REPORT

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DIVISION OF WATER RESOURCES
DIVISION NO. 6

1975 ANNUAL REPORT

I. Introductory Statement

The Yampa, North Platte, Green, Little Snake and White River drainage basins comprise Division No. 6 which includes the major portion of the Northwestern corner of Colorado. Elevations range from 14,000 feet in the Eastern portion to around 5,000 feet in the West including rugged mountains, irrigated valleys, farmed mesas, desert ranges and the beautiful canyon country of the Yampa and Green River. The annual precipitation varies from seven inches annually in the western winter ranges to over 40 inches in the high mountains with about 20 inches in the crop producing portions of the Division. The bulk of precipitation is in the form of snow during the winter months with some areas having summer precipitation enough to support small grains and some dry land hay.

Primarily the irrigation is on mountain meadows producing hay and irrigated pasture. This acreage is approximately as follows for various drainages: Yampa River - 100,000 acres, White River - 37,000 acres and 120,000 acres for the North Platte drainage. Dry farming in the North Platte drainage is practically nonexistent due to the short growing season and a minimum elevation of 8,000 feet. The dry crop acreage in the Yampa basin is approximately 131,000 acres and the White River

drainage has approximately 17,000 acres. Dry land crops consist of wheat, oats and barley. The land is generally summer fallowed which for the most part means only 50 per cent of the land is in production annually.

The population in Division No. 6 is sparse with most of the population being in Craig, Steamboat Springs and Meeker. As a result of the national energy crisis, the cities of Craig and Meeker are presently showing the most rapid growth. Several coal mines are being opened in the Craig area and construction has started on a new fossil fuel power plant. Meeker is located near the two tracts of land that were recently leased from the Federal Government for oil shale development which is resulting in population growth in that area. Steamboat Springs has stabilized to some degree and is not at present experiencing the phenomenal growth that it has had in the past.

Agriculture is the primary industry in the entire Division. Industry, though, particularly coal mining, is rapidly becoming a key source of revenue to Routt and Moffat Counties. Recreational development has stabilized with only one additional project planned. The oil shale industry, as of yet, has not caught fire, although there are several people being employed in making studies and formulating development plans.

The only area to receive substantial increases in population has been Craig. With the planned opening of two additional strip mines and work being in full swing on the power plant, many people have been attracted to the region. Several new trailer parks along with subdivisions have been started.

II. Personnel**A.**

NAME	POSITION	DISTRICT	FY 74-75 MONTHS WORKED	BUDGETED	FY 74-75 MILEAGE
Wesley E. Signs	Division Engineer		Full Time	\$ 43.20	
Daries C. Lile	Asst. Division Engineer		Full Time	162.96	
W. Kent Holt	Hydrographer		Full Time Sabbatical leave 1-75	28.56	
Linda L. Fox	Secretary		Full Time	NONE	
Roy D. Steffen	1042 Water Commissioner		Full Time	301.68	
Joe E. Brown	Water Commissioner 1	43	Full Time	1048.44	
William Dunham	Deputy Water Commissioner	43	3 3	795.60	
Clarence Johnson	Water Commissioner 1	43	Full Time	NONE	
Ben E. Cordle	Water Commissioner 1	44	Full Time	2060.88	
Neil Black	Water Commissioner 1	47	Full Time	774.12	
Donald C. Gilroy	Water Commissioner 1	54	5 6	592.80	
Jack Leonard	Water Commissioner 1	55-56	3.7 6	810.72	
James E. Sellers	Water Commissioner 1	57	8 6	911.64	
Charles Gregory	Water Commissioner 1	58	9 7	912.60	
Billy R. Milner	Water Commissioner 1	58	7 8	399.84	
Eric H. Wagner	Deputy Water Commissioner	58	7.5 5	571.44	

III. Water Supply

A. Forecast

The winter snow pack in the Division 6 drainage areas resulted in a good water year. The peak flows were not as high as those experienced in the spring of 1974 as a result of the snow melting much slower and at a more uniform rate this spring. The U.S. Department of Agriculture Soil Conservation Service May 1, 1975 stream flow forecast were all above 115 percent and soil moisture in the mountain areas were near normal.

May 1, 1975 stream flow forecasts were:

Stream	Percent of Average
Elk River at Clark	126%
Little Snake at Lilly Park	117%
Yampa River at Maybell	133%
Yampa River at Steamboat	133%
White River near Meeker	136%
North Platte at Northgate	140%

B. Precipitation

The summer and fall precipitation has been below normal for most of the area. Soil moisture consequently is lower which may reduce next springs runoff. The August and September precipitation for various

Division 6 locations are:

	August Departure Precipitation From Normal	September Departure Precipitation From Normal		
			Location	Location
Steamboat Springs	.52	-1.09	.23	-1.36
Hayden	.60	-.80	.21	-.98
Meeker No. 2	.44		.48	
Walden	1.46	+.17	.38	-.63

III. Water Supply

C. Flooding

There were no major flood problems in the Division. The Yampa River at Steamboat Springs peaked at approximately 4,260 c.f.s. on June 8, 1975. This was considerably less than the 1974 peak which was 5,790 c.f.s. on April 26, 1974. The trend on the Yampa River was reflected throughout the Division.

III. Water Supply

D. Water Budget - Water Year 1974

DRAINAGE BASINS

	<u>Yampa Riv. at Maybell</u>	<u>Little Snake Riv. at Lily Park</u>	<u>White Riv. near Watson, Utah</u>	<u>North Platte Riv. at Northgate</u>
Drainage Area				
Sq. Mile	3,400	3,700	4,000	1,400
Estimated Irrigated Acres	98,800	11,300	36,500	121,800
Irrigation Diversions A.F.	356,120	35,708	322,150	846,247
Municipal Diversions A.F.	7,430	0	946	394
Industrial Diversions A.F.	4,920	0	7,590	0
Transmountain Diversions A.F.	750	0	0	2,090
Estimated Irrig. (1) Depletion A.F.	89,030	0	80,540	169,250
Estimated Munc. Depletion A.F.	1,500	0	190	80
Estimated Ind. Depletion A.F.	2,470	0	7,590	0
Change in Res. Storage A.F.	- 970	+ 649	+1,580	-2,300
Surface Outflow A.F.	1,418,000	523,200	566,000	417,000
Basin Yield A.F.	1,510,780	523,849 (2)	655,900	586,120
Basin Yield AF/SQ. Mile	444	142	164	419

Notes: 1. Estimated depletion figures on 25% consumptive use for all drainages except North Platte which is figured on 20%.

2. Basin yield does not reflect water consumed by Wyoming.

E. Ground Water

The use of ground water continues to increase in the division.

There has been 75 new domestic wells, three municipal, five industrial and 18 observation wells drilled. The drilling of observation wells has provided new data on deep aquifers. The most promising is the Twenty Mile sandstone, a member of the Williams Fork Formation, which is cretaceous in age. Artesian flow of approximately 450 gpm at depths of 800 feet is being encountered in the Moffat County area.

F. Transmountain Diversions (Transbasin)

	Acre Feet
Stillwater Ditch	878
Sarvis Ditch	0
Rich Ditch (Transbasin)	1510
Morgan Creek Feeder (Transbasin)	246
Dome Creek Ditch	335
Four Counties Ditch	0
Michigan Ditch	1710
Cameron Pass Ditch	276

**III. Water Supply
G. Reservoir Storage**

NAME OF RESERVOIR	SOURCE	ACRE FEET		
		1974 NOV. 1	1975 MAY 1	1975 OCT. 31
District No. 43				
Baxter Reservoir	Evacuation Creek	65.0	65.0	65.0
Beaver Lake Reservoir	Vaughan Creek	7.45	7.45	7.45
Big Beaver Creek Reservoir	Big Beaver Creek	7,657.86	7,657.86	7,657.86
Big Lick Reservoir	Big Beaver Creek	291.33	503.0	503.0
Black Gulch Reservoir	Black Gulch	0	45.0	41.0
Cabin Lake Reservoir	Vaughan Creek	16.06	16.06	16.06
Gregor Reservoir	Vaughan Creek	47.0	47.0	47.0
Johnny Johnson Reservoir	White River	1,036.0	1,036.0	1,036.0
Keystone Reservoir No. 3	Price Creek	11.0	31.18	20.0
Lady Lake Reservoir	Vaughan Creek	4.41	4.41	4.41
Larson Reservoir	Nineteen Mile Creek	61.90	61.90	62.0
Lunney Reservoir	Nine Mile Draw	41.12	82.12	0
McHatton Reservoir	Coal Creek	0	32.1	44.0
Procter Reservoir	Curtis Creek	6.66	6.6	0
Seventh Lake Reservoir	Vaughan Creek	2.12	2.12	2.12
Shadow Lake Reservoir	Vaughan Creek	2.60	2.60	2.60
Stump Lake Reservoir	Vaughan Creek	10.23	10.23	10.23
West Miller Reservoir	West Miller Creek	48.0	77.8	38.4
West Stewart Reservoir	West Stewart Creek	13.3	6.5	4.0
Wilson Reservoir	East Flag Creek	0	0	0

District No. 44

Anderson Reservoir	Cottonwood Creek	24.0	0
Biskup Reservoir	Biskup Gulch	45.0	45.0
Bunker Lake Reservoir	Bunker Creek	95.0	191.48
Cove Lake Reservoir	Morapos Creek	74.7	37.0
Cove Reservoir	Morapos Creek	70.0	121.0
D. D. & E. Reservoir	Hullett Draw	500.0	1,408.04
Dresher Reservoir	Long Gulch	160.0	240.0
Dunkley Dubeau Reservoir	Willow Creek	74.0	112.9

NAME OF RESERVOIR	SOURCE	ACRE FEET		1974 NOV. 1	1975 MAY 1	1975 OCT. 31
		1974	1975			
District No. 44						
Elgin Reservoir	Bell Rock Gulch	132.99	0			
Elgin Reservoir No. 2	McLernon Draw	0	52.68			
Freeman Reservoir	Little Cottonwood Creek	137.09	137.09			
Konopik Reservoir	Clear Creek	13.0	13.0			
Pitney Reservoir	Corral Gulch	11.23	11.23			
Poose Creek Reservoir	Poose Creek	277.09	277.09			
Ralph White Reservoir	Fortification Creek	924.61	924.61			
Roby Reservoir	Morapos Creek	0	26.5			
Sellers Crowell Reservoir	Willow Creek	35.0	100.6			
Shafer Reservoir	Willow Creek	81.4	81.4			
Waddle Creek Reservoir	Waddle Creek	39.18	39.18			
Wilson Reservoir	Good Springs Creek	68.4	68.4			
Wyman Reservoir	Beaver Creek	95.0	95.0			
District No. 47						
Addison Reservoir	Buffalo Creek	20.0	41.5			
Aqua Fria Reservoir	Beaver Creek	197.7	550.0			
Bennett Reservoir	T. Beaver Creek	0	139.0			
Big Creek Lake	Big Creek	1,012.0	1,431.0			
Boettcher Reservoir	Lake Creek	757.0	757.0			
Brands Reservoir	T. No. Fk. North Platte	0	48.0			
Buffalo Reservoir	Buffalo Creek	351.0	351.0			
Burns Reservoir	Burns Draw	39.31	39.31			
Butte Reservoir	Off Stream	635.5	846.0			
Case No. 1 Reservoir	Illinois River	51.0	0			
Case No. 2 Reservoir	Illinois River	79.0	97.0			
Case No. 3 Reservoir	Illinois River	8.0	9.1			
Clayton Reservoir	Buffalo Creek	213.0	213.0			
Cowdrey Reservoir - Lower	Off Stream (Michigan River)	10.4	3.0			
Cowdrey Reservoir - Upper	Off Stream (Michigan River)	448.4	448.4			
Coyte Reservoir	Little Willow Creek	38.0	38.0			
Darcy Reservoir	Seepage T. Michigan River	58.4	28.9			
Fisher Lake & Pump	Pinkham Creek	0	0			
Follett Pond No. 1						

NAME OF RESERVOIR	SOURCE	1974	1975	1975	ACRE FEET
		NOV. 1	MAY 1	OCT. 31	
District No. 47					
Follett Pond No. 2	Pinkham Creek	0	0	0	0
Follett Pond No. 3	Pinkham Creek	0	0	0	7.3
Fuller Reservoir	Cow Creek	0	8.3	416.5	415.5
Gamber Reservoir	Little Grizzly River	325.0	38.2	38.2	38.2
Ginger Quill Reservoir	Three Mile Creek	38.2	0	0	0
Hap Reservoir	Buffalo Creek	0	0	0	0
Hecla Reservoir	Arapaho Creek	254.74	194.5	194.5	194.5
House Reservoir - Upper	Spring Creek	44.8	44.8	44.8	44.8
Hunter Reservoir	Three Mile Creek	0	0	0	0
Jackson Reservoir	Dry Creek	91.9	118.6	91.9	91.9
Kettle Reservoir	Newcomb Creek	0	24.5	0	0
Lake John	Lake Creek	5,614.6	8,543.0	6,550.0	6,550.0
Laune Reservoir - North Delaney	Roaring Fork	2,275.0	2,275.0	2,056.0	2,056.0
McFarlane Reservoir	Illinois River	674.0	6,951.0	1,155.0	1,155.0
McGowan Reservoir	Middle Fork Mexican Creek	39.8	39.8	25.3	25.3
Mexican Reservoir	Mexican Creek	14.0	57.0	0	0
Muddy Pass Reservoir	T. Grizzly Creek	58.0	56.0	58.0	58.0
Ninegar Reservoir	Ninegar Creek	31.5	37.5	37.5	37.5
North Michigan Reservoir	North Fk. Michigan Creek	1,249.5	1,249.5	1,249.5	1,249.5
Petry Lake	Unnamed Trib. Little Grizzly	71.9	0	71.9	71.9
Pole Mountain Reservoir	Mexican Creek	1,028.9	1,708.3	1,436.6	1,436.6
Ridings Reservoir	Buffalo Creek	0	46.1	0	0
Rock Reservoir	Newcomb Creek	0	54.8	0	0
Roslyn Lake	Hound Creek	141.0	290.0	74.0	74.0
Seymour Reservoir	Ninegar Creek	314.0	525.0	448.0	448.0
Shawver Reservoir	Sutton Creek	0	56.92	0	0
Slack & Weiss Reservoir	Ninegar Creek	144.0	152.0	144.0	144.0
Stambaugh Reservoir	Spring & Flood Water	52.0	139.0	139.0	139.0
South Arapaho Reservoir	Arapaho Creek	0	13.72	0	0
Three Mile Reservoir	Three Mile Creek	35.8	49.1	3.3	3.3
Two Ledge Reservoir	T. Coyote Creek	61.4	61.4	61.4	61.4
Van Valkenburg Reservoir	Van Valkenburg Draw	3.0	53.0	0	0
Walden Reservoir	Illinois River	2,486.2	3,745.6	3,093.7	3,093.7
West Arapaho Reservoir	T. Arapaho Creek	13.3	0	0	0

NAME OF RESERVOIR	SOURCE	ACRE FEET		ACRE FEET	
		1974 NOV. 1	1975 MAY 1	1975 OCT. 31	1974 NOV. 1
District No. 54					
Cull Reservoir	Trib. Four Mile Creek	Dry	250.0	182.0	
Elk Lake Reservoir	Willow Creek	Dry	398.4	215.4	
Gold Blossom Reservoir	Gold Blossom Creek	0	0	0	
Lake Fork Reservoir	Lake Fork Creek				
Lower Cogdill Reservoir	Government Corral Creek	173.44	173.44	173.44	
Perkins Fox Reservoir	Trib. West Willow Creek				
Skunk Creek Reservoir	Skunk Creek	15.32	15.32	15.32	
Upper Cogdill Reservoir	Government Corral Creek	45.4	45.4	45.4	
District No. 56					
Ainge Reservoir	Flynn Spring	.5	4.46	.5	
Bassett Reservoir No. 1	Bull Canyon Gulch	0	0	0	
Bassett Reservoir No. 2	Bull Canyon Gulch	40.0	54.0	30.0	
Dry Lake Reservoir	Pot Creek	0	6.0	15.0	
Haunted Spring Reservoir	Haunted Spring Gulch	0	8.0	0	
Massey Reservoir	Flynn Spring	0	12.0	14.0	
Offield Reservoir	Pot Creek	5.0	64.0	100.0	
T.W. Blevins Reservoir	Spring T. Vermillion Creek	6.0	4.0	1.0	
District No. 57					
Apple Reservoir	Dry Creek	1.0	10.72	0	
Ash Ponds to Hayden Station	Yampa River	1,013.3	70.5	500.0	
Basin Reservoir	Buchanan Gulches	74.5	208.0	74.5	
Greasewood Flats Reservoir	Dill Gulch	0	80.0	0	
Brock Reservoir	Trib. to Yampa River	2.0	6.84	4.0	
J.C. Temple Reservoir No. 1	Temple Gulch	70.0	553.0	363.0	
J.M. Yoast Reservoir	Yoast Creek	0	147.0	0	
Morgan Creek Reservoir No. 1	Morgan Creek	12.3	326.0	179.0	
Sage Creek Reservoir	Sage Creek	141.0	505.0	6.4	
Seaton Reservoir	Middle Fish Creek	0	0	0	
Sheriff Reservoir	Trout Creek	0	986.0	2.08	
Yoast Reservoir No. 1, No. 2	Yoast Creek	0	2.08	824.0	

NAME OF RESERVOIR	SOURCE	1974	ACRE FEET	1975	1975	OCT. 31
		NOV. 1	1975	MAY 1	OCT. 31	
Allen Basin Reservoir						
Alma Baer Reservoir						
Bar Bee Reservoir						
Bear Lake Reservoir						
Bison Park Reservoir						
Bull Park No. 2 Reservoir						
Burnt Mesa Reservoir						
Chapman Reservoir						
Crowner Reservoir						
Fish Creek Reservoir						
Fish Lake Reservoir No. 2						
French Reservoir						
Gardner Reservoir						
G.R. Brenneman Reservoir						
Hahns Peak Reservoir						
Heart Lake Reservoir						
LaForce Reservoir No. 1						
LaForce Reservoir No. 2						
LaForce Reservoir No. 3						
Lake Creek Reservoir						
Lake Windemere						
Lee Reservoir						
Lester Creek Reservoir						
Long Lake Reservoir						
Lowry Reservoir						
Martin Reservoir						
May Reservoir						
McChivvis Reservoir						
Milk Creek Reservoir						
Moore Park Reservoir						
Oak Creek Reservoir						
Osborn Reservoir						
Overman Reservoir						
Middle Hunt Creek		790.0	1,392.0	1,001.0		
Fish Creek		2.6	2.6	2.6		
Beaver Creek		80.0	80.5	80.0		
Deadmans Creek		.5	.5	.5		
Lawson Creek		0	0	0		
West Branch Watson Creek		0	30.0	0		
South Hunt Creek		40.0	70.0	60.0		
Little Oak Creek		20.0	246.0	80.0		
Beaver Creek		0	0	0		
Fish Creek		1,424.0	1,842.0	1,407.0		
Wheeler Creek		35.0	35.0	35.0		
Jack Creek		4.0	7.0	4.0		
Gardner Creek		1,155.0	1,155.0	1,138.0		
Cow Creek		2.0	2.0	2.0		
Willow Creek		600.0	600.0	600.0		
Watson Creek		0	283.0	0		
Jack Creek		2.0	2.0	2.0		
Jack Creek		6.0	6.0	6.0		
Jack Creek		6.0	6.0	6.0		
Wheeler Creek		261.0	261.0	261.0		
Farnsworth Creek		77.0	137.0	77.0		
Chimney Creek		0	21.0	0		
Lester Creek		5,657.	5,657.	5,657.		
Fish Creek		62.	396.	100.		
Pinnacle Creek		0	0	0		
Yellow Jacket Creek		10.	80.0	10.0		
Salt Creek		20.0	20.0	0		
Watson Creek		50.0	19.0	40.0		
Milk Creek		0	0	0		
Elgin Creek		20.0	20.0	20.0		
Oak Creek		1.0	1.0	1.0		
Raspberry Creek		0	0	0		
French Creek						

District No. 58

NAME OF RESERVOIR	SOURCE	ACRE FEET		
		1974 NOV. 1	1975 MAY 1	1975 OCT. 31
District No. 58				
Rams Horn Reservoir	Dome Creek	112.0	112.0	112.0
Reynolds Reservoir	Bruce Creek	0	0	0
Roland Reid Reservoir No. 1	Ft. Willy Gulch	46.0	46.0	46.0
Sandelin Reservoir No. 1	Big Creek	2.5	2.5	2.5
Sandelin Reservoir No. 2	Big Creek	7.0	7.0	7.0
Sandelin Reservoir No. 3	Big Creek	6.8	6.8	6.8
Simon Reservoir	Middle Hunt Creek	440.0	697.0	578.0
Stillwater Reservoir No. 1	Yampa River	3,070.0	6,392.0	3,711.0
Stillwater Reservoir No. 3	Yampa River	620.0	620.0	620.0
Stukey Distribution Reservoir	Spring Creek	4.6	4.6	4.6
Summer Reservoir	Young Creek	0	12.5	0
Tillquist Lake Reservoir	Morrison Creek	3.0	5.0	5.0
Trull Creek Reservoir	Trull Creek	0	149.0	0
Upper Willow Creek Reservoir	Willow Creek	23,604.0	23,604.0	23,604.0
Wheeler Reservoir	Wheeler Creek	37.0	37.0	37.0
Whitney Nelson Reservoir	Whipple Creek	390.0	424.0	390.0
Willie Reservoir	Cow Creek	0	1.0	0
Younger Reservoir	Morrison Creek			

IV. Agriculture

The past season has again provided an average hay crop, but late frost conditions did serious damage to the dry land grain crops. The yield per acre for dry land grain was below normal. Beef prices are somewhat higher than last years, but hay and grain are still very high which makes it very difficult to make a profit in the beef industry. Fat lamb prices are extremely good and the sheep industry is stable financially. However, predator control still continues to be a problem.

The White River drainage has almost twice as much irrigated land as dry crop land. Most of the irrigated land is in hay production for livestock feed. This land is probably about equally divided between wild meadow hay and alfalfa. The average production on wild hay is around two to three tons per acre with alfalfa being slightly higher. Alfalfa usually produces two cuttings of hay per season. The dry crop land is almost exclusively planted in grains, wheat, oats and barley. The crop yields vary greatly in proportion to the climatic conditions. The average for wheat is around 26 bushels per acre with oats and barley slightly higher. The bulk of the dry crop land is fallowed in alternating years, which cuts production to something over 50 per cent of the total acreage annually.

The Yampa drainage has about 40 per cent more dry crop land than irrigated. The dry land crops in the Yampa drainage are almost identical to the White River drainage, with the exception that a small portion of it is in the production of hay. This dry land is mostly alfalfa and generally produces only one cutting. The wheat yield for the Yampa drainage is around 30 bushels per acre. The hay in the Yampa

drainage is predominately wild hay with a yield of two to three tons per acre.

The North Platte drainage produces only wild hay with an average yield of around one ton per acre. The elevation of North Park is high and the growing season is short.

V. Compacts

The Upper Colorado River Compact was complied with the delivery of more than 500,000 acre feet of water past the Maybell Yampa River gaging station.

The Supreme Court stipulations on the North Platte were met with the total water stored over last year being 13,550 acre feet, 120,074 acres of land were irrigated, and 2,018 acre feet of water was diverted out of the basin.

Pot Creek was operated with little difficulty with Utah delivering an excess amount of water to the Colorado diversions. However, there has been no further progress on updating the 1958 agreement.

The Little Snake River was administered in accordance with Article XI of the Upper Colorado River Compact with no problems occurring.

VI. Dams

A. Elkhead Reservoir was completed this spring but during its filling two serious leaks which are located in the abutments developed. Grouting was attempted to decrease the amount of flow from the leakage. It was not successful in the case of the right abutment, but the flow on the left abutment has diminished.

Lester Creek Reservoir has had several problems which began with the slippage of the right abutment which has been leaking for several years. Also, difficulties occurred with the headgate which required divers to remove the hydraulic cylinder and rebuild it. Temporary trenches have been dug to leach away the seep area in an effort to dry up and stabilize the slope. The reservoir is presently being drawn down to decrease the head on the structure.

Sage Creek Reservoir which was the victim of a land slide in the spring of 1974 which plugged the outlet pipe with debris has been breached and a new outlet pipe along with a new headgate are being installed. The work has stopped this fall due to weather and consequently the reservoir may not be able to store water next season.

The dams and reservoir section engineers have made several field inspections of all the structures that require maintenance. They have also made routine inspection of the major reservoirs in the division and issued orders for all necessary repair work.

B. Several stock dams have been constructed during the past year. A total of 24 were approved for construction.

VII. Water Rights

A. At present, all new water court decrees are coded and punched as they are received by the Division. This procedure enables us to keep up-to-date information on all new water rights and insures that they will be included on the computer tabulations. Corrections are continuously being made to the existing tabulation even though it will not be published until 1978.

B. Referee's Findings and Decrees

Consultations with the water referees are made upon their request and are up-to-date. All of the water cases are field checked by a member of the division staff with the water referee unless both parties have previous knowledge of the case.

	Applications	Rulings	Decrees
Underground	37	28	37
Change of Water Right	42	17	18
Plan of Augmentation	0	0	0
Water Right	116	105	129
Diligence	0	2	3
Water Storage	23	9	9
Applications received in Water Court	218		
Number of Referee Consultations	161		

VIII. Organizations

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

Upper Yampa Water Conservancy District - Steamboat Springs, CO
John Fetscher, Secretary

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

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

Lower Yampa Conservancy District - Craig, CO
Tony Angelo

Great Northern Conservancy District - Craig, CO
Tony Angelo

Northwest Colorado Water Council, Craig, CO
Sam Haslem, Chairman

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

B. Bear River Reservoir Company - Yampa, CO

Stillwater Ditch Company - Yampa, CO

Maybell Irrigation District - Maybell, CO

Miller Creek Ditch Company - Meeker, CO

Woodchuck Ditch Company - Steamboat Springs, CO

Mt. Werner Water and Sanitation District - Steamboat Springs, CO

Morrison Creek Water and Sanitation District - Oak Creek, CO

Steamboat Lake Water District - Clark, CO

Riverside Water and Sanitation District - Steamboat Springs, CO

Steamboat II Water and Sanitation District - Steamboat Springs, CO

Tree Haus Water and Sanitation District - Steamboat Springs, CO

IX. Water Commissioner's Summary**District No. 43**

Direct Flow Diversions (ac.ft.) -----	308,319.46
Reservoir Storage (ac.ft.) -----	9,543.13
Amount Delivered from Storage -----	250.70
Acres Irrigated -----	38,987.00
Number of Ditches -----	458
Number of Daily Ditch Reports -----	6,500
Number of Reservoirs Served -----	19
Average Demand (ac.ft./ac.) -----	7.4

District No. 44

Direct Flow Diversions (ac.ft.) -----	152,447.7
Reservoir Storage (ac.ft.) -----	3,009.9
Amount Delivered from Storage -----	1,565.8
Acres Irrigated -----	30,574.0
Number of Ditches -----	284
Number of Daily Ditch Reports -----	1,800
Number of Reservoirs Served -----	47
Average Demand (ac.ft./ac.) -----	4.93
Transbasin -----	246.0
Municipalities -----	1,296.5

District No. 47

Direct Flow Diversions (ac.ft.) -----	736,213.53
Reservoir Storage (ac.ft.) -----	13,545.3
Amount Delivered from Storage -----	8,928.53
Acres Irrigated -----	120,074.24
Number of Ditches -----	484
Number of Daily Ditch Reports -----	811
Number of Reservoirs Served -----	50
Average Demand -----	6.11
Transmountain -----	2,018.0
Municipalities -----	431.0

District No. 54

Direct Flow Diversions (ac.ft.) -----	33,218.26
Reservoir Storage (ac.ft.) -----	631.56
Amount Delivered from Storage -----	313.0
Acres Irrigated -----	9,920.0
Number of Ditches -----	93
Number of Daily Ditch Reports -----	240
Number of Reservoirs Served -----	3
Average Demand (ac.ft./ac.) -----	3.34

District No. 55

Direct Flow Diversions (ac.ft.) -----	7,888.1
Reservoir Storage (ac.ft.) -----	0
Amount Delivered from Storage -----	0
Acres Irrigated -----	1,142.0
Number of Ditches -----	6
Number of Daily Ditch Reports -----	92
Number of Reservoirs Served -----	0
Average Demand (ac.ft./ac.) -----	6.90

District No. 56

Direct Flow Diversions (ac.ft.) -----	19,238.16
Reservoir Storage (ac.ft.) -----	0
Amount Delivered from Storage -----	0
Acres Irrigated -----	2,650.0
Number of Ditches -----	72
Number of Daily Ditch Reports -----	545
Number of Reservoirs Served -----	0
Average Demand (ac.ft./ac.) -----	7.27

District No. 57

Direct Flow Diversions (ac.ft.) -----	68,288.40
Reservoir Storage (ac.ft.) -----	1,952.90
Amount Delivered from Storage -----	1,624.0
Acres Irrigated -----	14,696
Number of Ditches -----	124
Number of Daily Ditch Reports -----	815
Number of Reservoirs Served -----	42
Average Demand (ac.ft./ac.) -----	4.12
Transbasin -----	1,510.0

District No. 58

Direct Flow Diversions (ac.ft.) -----	152,523.46
Reservoir Storage (ac.ft.) -----	39,792.5
Amount Delivered from Storage -----	4,244.5
Acres Irrigated -----	48,824.0
Number of Ditches -----	464
Number of Daily Ditch Reports -----	3,451
Number of Reservoirs Served -----	51
Average Demand (ac.ft./ac.) -----	2.92
Transmountain -----	1,212.94
Municipalities -----	1,693.0

X. Division Engineer's Summary
Table A

DIVISION SUMMARY - DIVISION NO. 6
1975 -- Direct Flow Diversions

Water District	Delivered to Compact Cmtmt Ac. Ft.		No. of Structures Reported on in Dist.		Total Diversions Ac. Ft.		Transbasin/Transmtn. Diversions Ac. Ft.		Recreational Use Ac. Ft.		Municipal & Domestic Ac. Ft.		Industrial Use Ac. Ft.		Ac. Ft. Per Acre		No. of Acres Irrigated		Direct Diversions Ac. Ft. (Irrig.)		Inactive		Total Ditches Reported		Active	
43	362	96	297,284	38,987	7.40	7,553	1,180	2,052	-	-	308,319	485	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	213	71	149,339	30,574	4.93	-	1,296	-	-	246	152,448	342	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	479	5	724,836	120,074	6.11	-	-	431	-	-	2,018	736,214	536	-	-	-	-	-	-	-	-	-	-	-	-	-
54	56	37	32,905	9,920	3.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55	11	5	7,888	1,142	6.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
56	40	32	19,238	2,650	7.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
57	70	54	58,964	14,696	4.12	4,867	1,306	-	-	-	1,510	68,288	221	-	-	-	-	-	-	-	-	-	-	-	-	-
58	332	132	138,672	48,824	2.92	-	-	1,693	-	-	953	1,421	152,523	690	-	-	-	-	-	-	-	-	-	-	-	3005
			1429126	12470	6906																					

X. Division Engineer's Summary

Table B

DIVISION SUMMARY - DIVISION NO. 6

Water Dist.	Amount in Storage Acre Feet	Actual Amt. Diverted to Storage 11-1-74 5-1-75 10-31-75			Delivered from Storage to Irrigation During Season	Storage for Industrial Use	Storage for Municipal Use	Storage for Recreation Use	Storage for Projects
		10-31-75	10-31-75	During Season					
43	9,322	9,695	9,543	373	251	-	-	-	-
44	2,700	4,230	3,010	1,530	1,565	-	-	-	-
47	18,999	32,007	19,323	13,545	8,929	-	-	-	-
54	234	883	632	648	313	-	-	-	-
55	-	-	-	-	-	-	-	-	-
56	52	151	161	100	-	-	-	-	-
57	2,318	2,895	1,953	631	1,642	-	-	-	-
58	35,598	41,793	39,714	6,195	4,245	-	-	-	953
					1,6945				

X. Division Engineer's Summary

Table C

STRUCTURES REPORTED AND OBSERVATIONS MADE

Water Dist.	Spgs. & Wells Reported	Reservoirs Reported	Active Ditches	Inactive Ditches	Total Structures Reported	Total Daily Observations
43	8	19	362	96	485	6,500
44	11	47	213	71	342	1,800
47	2	50	479	5	536	810
54	2	3	56	37	98	240
55	22	0	11	5	38	90
56	26	8	40	32	106	540
57	55	42	70	54	221	810
58	175	51	332	132	690	3,450

X. Recommendations

The ownership of older water rights continues to be difficult to establish. Perhaps a method of recording and maintaining ownership does exist through the present water court structures. Water rights which are being subjected to court proceedings such as changes of points of diversion or uses can set out the apparent ownership in the application. When the court acts on these cases, then the ownership becomes a matter of court records. This system could be used to establish ownership. The question would remain if this approach actually constitutes legal proof of ownership. It appears that it would be strong evidence.

The points of diversion of many rights are difficult to located. Consequently, a program of monumentation could be started in conjunction with ownership establishment. Many of the points of diversion of water rights have changed from their original location over the years and when the present point is located an application could be entered into the water court spelling out the ownership and the present location. Monuments could be then installed as previously outlined in past annual reports.

Progress is being made in the use of the computer for record keeping purposes. Key punching data has proven to be considerably better than the opscan approach. Utilizing key punch services available locally the lag time between what has been reported and reviewed has been reduced. Through a very simple listing program, we are able to generate a complete record of data for a water year, except for the calculations of the totals, without the added cost of computer time. Corrections are made simply by removing the cards which have errors from the deck and replacing them

with corrected ones. No computer time is then required and the problem of removing incorrect data from the computer is minimized.