

DIVISION OF WATER RESOURCES

DIVISION NO. 6

1972 ANNUAL REPORT

I. Introductory Statement

Division No. 6 encompasses the northwestern corner of Colorado including the North Platte, Yampa, Green, Little Snake and White River drainage basins. 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 the 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.

Most of the irrigation is on mountain meadows producing hay and irrigated pasture. This acreage is approximately as follows for the various drainages: Yampa River - 100,000 acres, White River - 37,000 acres and 120,000 acres for the North Platte drainage. The dry farming in the North Platte drainage is practically nonexistent due to the short growing season and a minimum elevation of over 8,000 feet.* The dry crop acreage in the Yampa drainage is approximately 131,000 acres with 17,000 acres of dry crop land in the White River drainage.

The bulk of the dry-crop land is planted to wheat, oats, and barley. The dry 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. The most rapid increase in population is in the Steamboat area with the others showing a small but steady increase.

The major industry in the Division is still agriculture, mainly livestock production. Recreation, however, is becoming a more lucrative occupation, with the Steamboat Springs area being the hub of this activity at the present. The ski resort at Steamboat Springs is the main attraction, although summer recreation is becoming increasingly important through out the Division.

A steam generating development utilizing huge coal deposits is in production at the Colorado-Ute Hayden Plant. A 250 mega watt addition to this plant is scheduled for construction in the spring of 1973. Several other plants are being studied for the White and Yampa drainages. Public Service of Colorado at the present time freights coal from three local strip mines to their East Slope plants.

Two large reservoirs are being planned in the Division. Bear Reservoir on the Yampa near Oak Creek is to be a recreational lake for the Stagecoach development. Elkhead dam near Craig will be a recreation lake with emergency storage for proposed power plants near Craig.

II. Personnel

A.

NAME	POSITION	DISTRICT	MONTHS		MILEAGE
			WORKED	BUDGETED	
Wesley E. Signs	Division Engineer				
John M. Dumeyer	Asst. Division Engineer				
W. Kent Holt	Hydrographer				
Linda L. Fox	Secretary				
Clarence Johnson	Water Commissioner 1	43	11	12	9967
William Murray	Deputy Water Commissioner	43	6	2	12111
Roy D. Steffen	Water Commissioner 1	44	10	10	12105
Neil Black	Water Commissioner 1	47	4	5	2152
Samuel Ray	Deputy Water Commissioner	47	1/2	3	278
Donald C. Gilroy	Water Commissioner 1	54	5	6	5759
Jack Leonard	Water Commissioner 1	55-56	3	9	5143
James E. Sellers	Water Commissioner 1	57	7	7	8912
Charles Gregory	Water Commissioner 1	58	7 1/2	8	7066
Billy Milner	Deputy Water Commissioner	58	6	3	2650
R. Wayne Light	Water Commissioner 1	58	8 1/2	8	7107
Roger DeHaan	Engineer Technician	47	3	8	850

III. Water Supply

A. The snow pack was below normal in all of the drainages with the May 1 runoff predications as follows:

<u>Watershed</u>	<u>Per Cent of Average</u>
Elk River	94
North Platte River	93
White River	72
Yampa River	88

The snow melt was early in March on some of the lower drainages. The Yampa at Steamboat Springs peaked at 4,600 c.f.s., with total flow for the water year of 300,000 A.F., 89 per cent of normal.

B. Summer precipitation was below normal through out the Division. Combined with the early runoff the low amount of rainfall caused streams to decline rapidly. As in 1971, above normal fall precipitation occurred.

C. Flooding was very limited due to the low snow pack. The peak flow at Steamboat on June 9 was caused by rain on top of a snow melt peak.

D. Water Budget will be supplied when stream flow records are available.

E. Ground water is becoming a more important, although still minor, source of domestic water. Three water districts are currently using or planning for ground water supplies. Aquifers tapped are Yampa River alluvium and Browns Park formation. Yields range from 60 to 200 gallons per minute. Many individual wells have been drilled in the Mancos Shale with resulting quantity and quality problems. Routt County is presently approving subdivision plats with reported well yields of less than 1/2 gallon per minute. This leads to many well failures and unhappy land-owners.

F. Transmountain Diversions		A.F.
Stillwater Ditch	Yampa River c/o Stillwater Ditch Co.	2320
Sarvis Ditch	Service Creek	0
Four Counties Ditch	Fish Creek	0
Michigan Ditch	Michigan River Fort Collins	1770
Cameron Pass Ditch	Michigan River Mountain Supply Co.	111

III. Water Supply
G.

DIST.	NAME OF RESERVOIR	SOURCE	NOV. 1	MAY 1 Acre Feet	OCT. 31
54	Elk Lake Reservoir	Willow Creek	Dry	298.4	Dry
56	Offield Reservoir	Pot Creek	64.0	60.0	15.0
56	Ainge Reservoir	Flynn Spring	.05	4.0	1.0
56	T.W. Blevins Reservoir	Spring trib. Vermillion Cr.	3.0	5.0	3.0
56	Dry Lake Reservoir	Pot Creek	18.4	18.4	2.0
56	Massey Reservoir	Flynn Spring	6.0	10.0	4.0
56	Haunted Spring Reservoir	Haunted Spring Gulch	Dry	Dry	Dry
57	Basin Reservoir	Buchanan Gulches	Dry	203.0	116.0
57	J.C. Temple Reservoir No. 1	Temple Gulch	221.	553.0	33.0
57	Greasewood Flats Reservoir	Dill Gulch	Dry	24.8	Dry
57	Morgan Creek Reservoir No. 1	Morgan Creek	131.64	250.0	54.0
57	Sage Creek Reservoir	Sage Creek	263.50	406.5	Dry
57	Sheriff Reservoir	Trout Creek	271.1	986.5	343.1
57	Seaton Reservoir	Middle Fish Creek	10.4	20.8	Dry
57	Yoast Reservoir No. 1, 2	Yoast Creek	Dry	6.85	Dry
57	J.M. Yoast Reservoir	Yoast Creek	30.1	301.3	Dry
57	Apple Reservoir	Dry Creek	Dry	10.7	Dry
43	Big Lick Reservoir	Big Beaver Creek	10.0	11.8	7.8
43	Big Beaver Creek Reservoir	Big Beaver Creek	6000.0	7657.9	6000.0
43	Proctor Reservoir	Curtis Creek	--	290.0	Dry
43	West Miller Reservoir	West Miller Creek	77.8	77.8	13.2
43	Lunney Reservoir	Nine Mile Draw	65.7	82.1	51.7
43	McHatton Reservoir	Coal Creek	64.2	64.2	--
43	Gregor Reservoir	Vaughan Creek	47.0	47.0	47.0
43	Stump Lake Reservoir	Vaughan Creek	10.2	10.2	10.2
43	Cabin Lake Reservoir	Vaughan Creek	16.1	16.1	16.1
43	Lady Lake Reservoir	Vaughan Creek	4.4	4.4	4.4
43	Beaver Lake Reservoir	Vaughan Creek	4.4	4.4	4.4
43	Seventh Lake Reservoir	Vaughan Creek	7.5	7.5	7.5
43	West Stewart Reservoir	West Stewart Creek	8.0	13.3	1.3
43	Larson Reservoir	Nineteen Mile Creek	61.9	61.9	61.9

DIST.	NAME OF RESERVOIR	SOURCE	NOV. 1	MAY 1	OCT. 31
				Acre Feet	
44	Cove Lake Reservoir	Morapos Creek		Empty on Order	
44	Cove Reservoir	Morapos Creek		Empty	Dry
44	Roby Reservoir	Morapos Creek	Dry	20.0	Dry
44	Konopik Reservoir	Clear Creek	Dry	13.3	Dry
44	D.D. & E. Reservoir	Hullett Draw	Dry	1408.0	Dry
44	Wilson Reservoir	Good Springs	Dry	68.4	Dry
44	Dresher Reservoir	Long Gulch	Dry	240.0	Dry
44	Biskup Reservoir	Biskup Gulch	Dry	68.0	Dry
44	Bunker Lake Reservoir	Bunker Creek	191.5	100.0	20.0
44	Ralph White Reservoir	Fortification Creek	605.0	605.0	605.0
44	Elgin Reservoir	Unnamed trib. Yampa River	Dry	Dry	Dry
44	Elgin Reservoir No. 2	Unnamed trib. Yampa River	Dry	Dry	Dry
44	Anderson Reservoir	Cottonwood Creek	Dry	20.1	Dry
44	Freeman Reservoir	Little Cottonwood Creek	137.09	137.09	137.09
44	Poose Creek Reservoir	Poose Creek	277.6	277.6	277.6
44	Seller's Crowell Reservoir	Willow Creek	Dry	106.0	22.0
44	Dunckley DeBeau Reservoir	Willow Creek	112.90	112.9	112.9
44	Wyman Reservoir	Second Creek	95.7	--	80.0
44	Shafer Reservoir	Willow Creek	Full	Full	--
44	Waddle Creek Reservoir	Waddle Creek	10.0	39.2	10.0
47	Seymore Reservoir	Ninegar Creek	236.0	525.0	183.0
47	Hecla Reservoir	Arapaho Creek	74.0	389.0	254.0
47	Addison Reservoir	Buffalo Creek	23.0	41.5	41.5
47	Lake Roslyn	Willow Creek	290.0	290.0	290.0
47	Clayton Reservoir	Buffalo Creek	180.0	213.0	213.0
47	Ridings Reservoir	Buffalo Creek	0	0	0
47	Pole Mountain Reservoir	Mexican Creek	1800.0	1905.0	1897.0
47	House Reservoir	Spring Creek	0	27.0	13.0
47	Slack & Weiss Reservoir	Ninegar Creek	130.0	152.0	137.0
47	Stambaugh Reservoir	Spring & Flood	7.0	7.0	7.0
47	Big Creek Lake	Big Creek	500.0	1434.0	1363.0
47	McFarlane Reservoir	Illinois River	4200.0	6509.0	3053.0
47	North Michigan Reservoir	North Fork Michigan River	1250.0	1250.0	1250.0
47	Aqua Fria Reservoir	Beaver Creek	75.0	550.0	75.0
47	West Arapaho Reservoir	Trib. Arapaho Creek	0	99.0	0

DIST.	NAME OF RESERVOIR	SOURCE	NOV. 1	MAY 1 Acre Feet	OCT. 31
47	South Arapaho Reservoir	Arapaho Creek	0	16.0	0
47	Boettcher Reservoir	Lake Creek	265.0	265.0	265.0
47	Buffalo Reservoir	Buffalo Creek	351.0	351.0	351.0
47	Burns Reservoir	Burns Draw	0	0	19.7
47	Walden Reservoir	Illinois River	3094.0	4506.0	2486.0
47	South Butte - East Delaney Lake	Off Stream	518.0	935.0	179.0
47	North Butte - East Delaney Lake	Off Stream	0	0	275.0
47	Case No. 1 Reservoir	Illinois River	4.0	--	--
47	Case No. 2 Reservoir	Illinois River	30.0	60.0	60.0
47	Coyte Reservoir	Off Stream	0	0	38.5
47	Fischer Lake & Pumping System	Seepage	0	0	0
47	Hap Reservoir	Buffalo Creek	0	0	0
47	Lake John	Lake Creek	5800.0	6522.0	6522.0
47	Mexican Reservoir	Mexican Creek	6.0	80.0	0
47	McGowan Reservoir	Middle Fork Mexican Creek	0	0	26.4
47	Muddy Pass Reservoir	Trib. Grizzly Creek	58.0	58.0	56.0
47	Ninegar Reservoir	Ninegar Creek	0	37.5	37.5
47	Petry Lake Reservoir	Unnamed Trib. Little Grizzly	82.0	81.5	40.7
47	Gamber Reservoir	Little Grizzly	0	0	208.2
47	Laune Reservoir	Roaring Fork	1700.0	2056.0	2056.0
47	Three-Mile Reservoir	Three Mile Creek	0	--	--
47	Van Valkenburg Reservoir	Van Valkenburg Draw	260.0	Washed Out	0
47	Carlstrom Reservoir	Michigan River	214.0	614.0	344.0
58	Fish Lake Reservoir No. 2	Wheeler Creek	35.0	35.0	35.0
58	Alma Baer Reservoir	Fish Creek	0	2.5	0
58	Fish Creek Reservoir	Fish Creek	1175.4	1175.4	1175.4
58	Long Lake Reservoir	Fish Creek	100.0	395.0	100.0
58	Reynolds Reservoir	Bruce Creek	0	0	0
58	Bison Park Reservoir	Lawson Creek	0	0	0
58	Milk Creek Reservoir	Milk Creek	0	0	0
58	Osborn Reservoir	Raspberry Creek	0	0	0
58	Stukey Distribution Reservoir	Spring Creek	5.0	5.0	5.0
58	Wheeler Reservoir	Wheeler Creek	37.0	37.0	37.0
58	Whitney Nelson Reservoir	Whipple Creek	428.0	428.0	378.0
58	Martin Reservoir	Yellow Jacket Creek	0	80.0	20.0

DIST.	NAME OF RESERVOIR	SOURCE	NOV. 1	MAY 1 Acre Feet	OCT. 31
58	Lee Reservoir	Chimney Creek	0	20.0	0
58	Sandelin Reservoir No. 1	Big Creek	2.5	2.5	2.5
58	Sandelin Reservoir No. 2	Big Creek	7.0	7.0	7.0
58	Sandelin Reservoir No. 3	Big Creek	7.0	7.0	7.0
58	May Reservoir	Salt Creek	30.0	30.0	30.0
58	Trull Creek Reservoir	Trull Creek	0	150.0	0
58	French Reservoir	Jack Creek	0	0	0
58	LaForce Reservoir No. 1	Jack Creek	2.0	2.0	2.0
58	LaForce Reservoir No. 2	Jack Creek	6.0	6.0	6.0
58	LaForce Reservoir No. 3	Jack Creek	6.0	6.0	6.0
58	Chapman Reservoir	Little Oak Creek	75.0	246.0	60.0
58	Stillwater Reservoir No. 3	Yampa River	1947.0	1947.0	1947.0
58	Wiley Reservoir	Cow Creek	0	0	0
58	Hahns Peak Reservoir	Willow Creek	600.0	600.0	600.0
58	Lester Creek Reservoir	Lester Creek	5657.0	5657.0	5657.0
58	Heart Lake Reservoir	Watson Creek	0	283.0	0
58	Bull Park No. 2 Reservoir	West Branch Watson Creek	0	30.0	0
58	McChivvis Reservoir	Watson Creek	0	191.2	0
58	Burnt Mesa Reservoir	South Hunt Creek	--	30.0	0
58	Simon Reservoir	Middle Hunt Creek	455.0	503.6	209.3
58	Allen Basin Reservoir	Middle Hunt Creek	1001.97	2249.9	1304.8
58	Younger Reservoir	Morrison Creek	--	--	--
58	Oak Creek Reservoir	Oak Creek	28.5	28.5	28.5
58	Tillquist Lake Reservoir	Morrison Creek	5.6	2.8	2.8
58	Roland Reid Reservoir No. 1	Ft. Willy Gulch	45.5	45.5	45.5
58	Summer Reservoir	Young Creek	--	--	--
58	Lowry Reservoir	Pinnacle Creek	--	--	--
58	Moore Park Reservoir	Elgin Creek	10.0	20.85	0
58	Ramshorn Reservoir	Dome Creek	122.4	122.4	122.4
58	Stillwater Reservoir No. 1	Yampa River	4274.0	5804.8	2510.0
58	Gardner Reservoir	Gardner Creek	0	576.0	576.0
58	Crowner Reservoir	Beaver Creek	0	60.0	0
58	Lake Creek Reservoir	Wheeler Creek	292.0	292.0	292.0

IV. Agriculture

The value of crops produces in the Division for 1971 was estimated at 8 million dollars. Hay production accounted for 5.6 million of this total.

In the White River drainage, the major crop is irrigated hay with very limited dry land grain production. In the Yampa drainage, hay production constitutes about 2/3 of the total crops. In the North Platte drainage, hay is the only crop.

V. Compacts

The Upper Colorado River Compact was complied with by delivery of more than 500,000 A.F. in the Yampa River at Maybell.

The Supreme Court stipulations on the North Platte were met in 1972: total storage was 7300 A.F., irrigated acreage was 115,000 acres, and trans basin diversions were 1880 A.F.

VI. Dams

A. Dam inspection activity was limited this year. One failure occurred on an illegally built fish dam south of Steamboat Springs. Plans were prepared and approved for rebuilding. Filling orders were removed on the Cove Reservoirs in District 44 after repairs were made to the dams. As built plans were requested for two dams near Craig.

B. Permits were issued for 51 stock dams.

VII. Water Rights

A. Considerable effort is being made to recorrect last years corrections. It is planned to process the new cards in Steamboat to eliminate time and punching errors.

B. Referee's Rulings - Division 6	200
Ground Water Right	72
Change of Water Right	17
Plan of Augmentation	0
Water Right	92
Diligence	10
Storage Right	14
Number of Referee Consultations	200

Two decrees were for a well as an alternate point of diversion.

VIII. Organizations

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

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

Yellow Jacket Water Conservancy District - Meeker, CO -
Robert Raley, President

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

Lower Yampa Conservancy District - Craig, CO -
Jack Davis, Attorney

Great Northern Conservancy District - Craig, CO -
John Sherman, President

Northwest Colorado Water Council - Craig, CO -
Bill Jordan, 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
- Morrisson 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. 55

Direct Flow Diversions (ac. ft.)	6,179
Reservoir Storage (ac. ft.)	0
Amount Delivered from Storage	0
Acres Irrigated	1,047
Number of Ditches	14
Number of Daily Ditch Reports	12
Number of Reservoirs Served	0
Average Demand (ac. ft./ac.)	5.9

District No. 44

Direct Flow Diversions (ac. ft.)	106,802
Reservoir Storage (ac. ft.)	1,019
Amount Delivered from Storage	2,308
Acres Irrigated	28,161
Number of Ditches	258
Number of Daily Ditch Reports	165
Number of Reservoirs Served	40
Average Demand (ac.ft./ac.)	3.8

District No. 57

Direct Flow Diversions (ac. ft.)	71,875
Reservoir Storage (ac. ft.)	611
Amount Delivered from Storage	2,274
Acres Irrigated	14,906
Number of Ditches	117
Number of Daily Ditch Reports	70
Number of Reservoirs Served	35
Average Demand (ac. ft./ac.)	4.9
Transmountain	1,039

District No. 43

Direct Flow Diversions (ac. ft.)	267,990
Reservoir Storage (ac. ft.)	3,185
Amount Delivered from Storage	1,870
Acres Irrigated	36,524
Number of Ditches	505
Number of Daily Ditch Reports	473
Number of Reservoirs Served	20
Average Demand (ac. ft./ac.)	7.3

District No. 58

Direct Flow Diversions (ac. ft.)	144,837
Reservoir Storage (ac. ft.)	14,710
Amount Delivered from Storage	2,926
Acres Irrigated	50,968
Number of Ditches	522
Number of Daily Ditch Reports	418
Number of Reservoirs Served	51
Average Demand (ac. ft./ac.)	2.9
Transmountain	2,320

District No. 56

Direct Flow Diversions (ac. ft.)	15,301
Reservoir Storage (ac. ft.)	117
Amount Delivered from Storage	0
Acres Irrigated	2,390
Number of Ditches	62
Number of Daily Ditch Reports	38
Number of Reservoirs Served	7
Average Demand (ac. ft./ac.)	6.4

District No. 54

Direct Flow Diversions (ac. ft.)	30,108
Reservoir Storage (ac. ft.)	0
Amount Delivered from Storage	398
Acres Irrigated	11,230
Number of Ditches	89
Number of Daily Ditch Reports	53
Number of Reservoirs Served	5
Average Demand (ac. ft./ac.)	3.7

District No. 47

Direct Flow Diversions (ac. ft.)	479,426
Reservoir Storage (ac. ft.)	21,469
Amount Delivered from Storage	7,660
Acres Irrigated	115,590
Number of Ditches	501
Number of Daily Ditch Reports	434
Number of Reservoirs Served	55
Average Demand	4.1
Transmountain	1,880

XI. Recommendations and Suggestions

The per diem situation has not improved from last year. As a matter of fact, it has worsened due to increased costs. Again it is realized that this is not a Division decision but we would suggest all should be done to make it possible for personnel to stay in quarters befitting their positions without using their own funds. The Federal system of room plus a fixed amount for food seems like an acceptable policy.

The situation concerning full-time commissioners has been relieved somewhat, however, the problem will be harder to live with as our older commissioners are required to retire because of age. It is hard to find young competent personnel on a part-time basis especially in an area such as Division 6 where everything is done on a seasonal basis due to the harsh winters. There are many jobs during the short summer season to compete with water commissioner jobs.

One big problem is the location and identification of diversions. The ties to section corners are in many cases erroneous and in cases where there is no error it is almost impossible to find the corners. The diversion itself is generally evident on the ground but identification is many times the problem.

It would seem that a permanent monument set in a prescribed position at each diversion describing the name and other pertinent data concerning the diversion would be an answer.

These should be prescribed by Statute and the cost borne by the diversion owner in the same manner that the headgate and measuring flume are handled. In any case, this should not be too costly.

Many diversions such as domestic wells, springs and small ditches are being adjudicated at the present time and a great many of them are presently insignificant. However, in a period of a few years as this type of water becomes shorter identification could become a terrific problem.

DIVISION SUMMARY - DIVISION NO. 6
 1972 - Storage Report - Acre Feet

Table B

Water Dist.	Amount in Storage Acre Feet			Actual Am't Diverted to Storage During Season	Delivered from Storage to Irrigation	Storage to Industrial Use	Storage to Municipal Use	Storage to Recreation Use	Storage to Projects
	11-1-71	5-1-72	10-31-72						
43	6070	9255	7385	3185	1870	---	---	1658	---
44	1019	2332	1019	1323	2308	---	---	---	---
47	21140	29128	21468	7988	7660	---	---	722	---
54	0	398	0	398	398	---	---	---	---
55	---	---	---	---	---	---	---	---	---
56	92	97	25	5	---	---	---	---	---
57	896	2885	611	1989	2274	---	---	---	---
58	16269	17636	14710	1367	2926	---	327	---	---
TOTALS	45486	61736	45218	16255	17436	---	327	2380	---