

DIVISION OF WATER RESOURCES

DIVISION NO. 6

1978 ANNUAL REPORT

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I. INTRODUCTORY STATEMENT

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

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

The irrigation is basically all native hay, alfalfa hay, and irrigated pasture which is about 250,000 acres for the entire Division. This acreage is approximately 120,000 acres for the North Platte, 100,000 acres for the Yampa drainage, and 30,000 acres in the White River drainage. Dry farming is practiced in the mid areas of the Yampa River and the White River drainages, with small grains being the basic crops. Dry crop lands amount to around 131,000 acres in the Yampa River drainage with approximately 17,000 acres in the White River drainage. This ground is normally summer fallowed which means that

only a little over fifty percent of this land is in crop in any given year. The growing season in Division 6 varies from less than thirty days in the North Platte drainage to around ninety days in the lower reaches of the Yampa and White River drainages.

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

Division 6 enjoyed one of its larger snow packs during the winter of 77-78. This resulted in an excellent water year with all deliveries being normal or above for the main part of the irrigation season. The result was average or above hay production on the irrigated ground. Summer moisture was practically non-existent throughout most of the Division. This condition resulted in below average dry land crop production.

The late season river flows fell well below average with many even being below the 1977 late fall flows. The reason for this, of course, was the lack of any summer moisture. Even in the drought of 1977, fall moisture brought up the fall flows.

The total water year flows, however, were very good with preliminary figures indicating 100 percent of average for the White River, 120 percent of average for the North Platte River, and 130 percent of average for the Yampa River.

## II. PERSONNEL

| Name             | Position                | District | FY 77-78<br>Months |          | FY 77-78<br>Mileage |
|------------------|-------------------------|----------|--------------------|----------|---------------------|
|                  |                         |          | Worked             | Budgeted |                     |
| Wesley E. Signs  | Division Engineer       |          | Full Time          |          | 1,600               |
| Daries C. Lile   | Asst. Division Engineer |          | Full Time          |          | 915                 |
| W. Kent Holt     | Hydrograpner            |          | Full Time          |          | 2,756               |
| Karen McPherrren | Secretary               |          | Full Time          |          |                     |
| Roy D. Steffen   | 1042 Water Commissioner |          | Full Time          |          |                     |
| Joe E. Brown     | Water Commissioner B    | 43       | Full Time          |          |                     |
| *William Dunham  | Water Commissioner A    | 43       | 12                 | 2        | 14,611              |
| Ben E. Cordle    | Water Commissioner B    | 44       | Full Time          |          | 16,528              |
| Donald C. Gilroy | Water Commissioner B    | 54       | 4                  | 6        | 3,184               |
| Jack Leonard     | Water Commissioner B    | 55-56    | 3                  | 5        | 4,719               |
| James E. Sellers | Water Commissioner B    | 57       | Full Time          |          | 12,045              |
| Charles Gregory  | Water Commissioner B    | 58       | Full Time          |          | 5,776               |
| Billy R. Milner  | Water Commissioner B    | 58       | 6.8                | 8        | 3,196               |
| Eric H. Wagner   | Water Commissioner A    | 47       | Full Time          |          | 4,797               |
| *Kenneth Johnson | Water Commissioner A    | 43       | 4                  | 0        |                     |

\*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:

| <u>Station</u>                   | <u>Acre Feet</u> | <u>% Average</u> | <u>No. of Years</u> |
|----------------------------------|------------------|------------------|---------------------|
| Yampa River at Steamboat Springs | 428,000          | 126              | 69                  |
| Elk River at Clark               | 321,000          | 132              | 57                  |
| Yampa River at Maybell           | 1,480,000        | 132              | 60                  |
| Little Snake near Lilly Park     | 507,000          | 122              | 55                  |
| S. Fk. of White River at Buford  | 237,000          | 128              | 27                  |
| N. Fk. of White River at Buford  | 250,000          | 111              | 30                  |
| White River near Meeker          | 485,000          | 107              | 71                  |
| Piceance Creek below Ryan Gulch  | 11,200           | 83               | 11                  |
| White River above Rangely        | 520,000          | ---              | --                  |
| White River near Watson, Utah    | 529,000          | 100              | 53                  |
| Michigan River near Cameron Pass | 2,380            | ---              | --                  |
| N. Fk. Michigan River near Gould | 13,770           | 111              | 27                  |
| N. Platte River near Northgate   | 362,900          | 117              | 62                  |

#### B. Precipitation

Precipitation for selected stations in Division 6:

|           | <u>Steamboat Springs</u> | <u>Hayden</u> | <u>Walden</u> |
|-----------|--------------------------|---------------|---------------|
| November  | 2.71                     | 1.05          | .77           |
| December  | 4.97                     | 1.76          | .65           |
| January   | 3.59                     | 2.49          | .24           |
| February  | 2.72                     | 1.30          | .42           |
| March     | 3.13                     | 2.15          | .79           |
| April     | 2.38                     | 1.76          | .85           |
| May       | 1.96                     | 1.84          | 3.16          |
| June      | .36                      | .41           | .62           |
| July      | 1.71                     | .77           | .38           |
| August    | 1.32                     | .69           | .92           |
| September | 1.62                     | .73           | .87           |
| October   | .72                      | .39           | .45           |
| Totals    | 27.19                    | 15.34         | 10.12         |

113% of normal      96% of normal      101% of normal

#### 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.

### E. Ground Water

A move to the country by everyone able to afford it still is producing more than average domestic well activity.

Along with the activity has been the accompanying problems of late permits, dry holes, and all of the other problems that arise with a basically shale formation.

There are a few areas that have some good sandstone aquifers, but basically it is shallow alluvium over a shale base. In some areas east of Steamboat Springs there is water in decomposed granite which also causes some problems.

Coal and uranium exploration is still continuing on even a larger scale than in the past. The age old problem still exists as to whether these are properly plugged to prevent aquifer mixing. It seems almost impossible to keep this problem checked, and it would probably be impractical to have enough personnel to solve this problem. There are still no irrigation wells in the Division of any consequence.

### F. Transmountain Diversions (Transbasin)

| <u>Structure</u>   | <u>Acre Feet</u> |
|--------------------|------------------|
| Stillwater Ditch   | 3680             |
| Sarvis Ditch       | 0                |
| Rich Ditch         | 1211             |
| Morgan Creek       | 375              |
| Dome Creek         | 431              |
| Michigan Ditch     | 261              |
| Cameron Pass Ditch | 201              |

Total water exported from Yampa R. to Colorado R. Drainage: 4111

Total water exported from N. Platte R. to S. Platte Drainage: 462



III. Water Supply  
G. Reservoir Storage

| NAME OF RESERVOIR                        | SOURCE              | AMT. IN STORAGE 11/1/77 | FILL DURING SEASON | RELEASE + EVAPORATION | AMT. IN STORAGE 10/31/78 | TOTAL CHANGE IN STORAGE |
|--|---------------------|-------------------------|--------------------|-----------------------|--------------------------|-------------------------|
| <u>DISTRICT NO. 43</u>                   |                     |                         |                    |                       |                          |                         |
| Baxter Reservoir                         | Evacuation Creek    | 65                      | 0                  | 0                     | 65                       | 0                       |
| Big Beaver Creek Reservoir               | Big Beaver Creek    | 6,431                   | 0                  | 0                     | 6,431                    | 0                       |
| Big Lick Reservoir                       | Big Beaver Creek    | 200                     | 0                  | 200                   | 0                        | -200                    |
| Black Gulch Reservoir                    | Black Gulch         | 41                      | 0                  | 0                     | 41                       | 0                       |
| Johnny Johnson Reservoir                 | White River         | 1,036                   | 0                  | 0                     | 1,036                    | 0                       |
| Keystone Reservoir No. 3                 | Price Creek         | 10                      | 21                 | 0                     | 31                       | 21                      |
| Larson Reservoir                         | Nineteen Mile Creek | 62                      | 0                  | 0                     | 62                       | 0                       |
| Lunney Reservoir                         | Nine Mile Draw      | 15                      | 67                 | 66                    | 16                       | 1                       |
| McHattton Reservoir                      | Coal Creek          | 15                      | 49                 | 32                    | 32                       | 17                      |
| Procter Reservoir                        | Curtis Creek        | 6                       | 1                  | 0                     | 7                        | 1                       |
| West Miller Reservoir                    | West Miller Creek   | 30                      | 48                 | 23                    | 55                       | 25                      |
| West Stewart Reservoir                   | West Stewart Creek  | 13                      | 2                  | 15                    | 0                        | -13                     |
| Wilson Reservoir                         | East Flag Creek     | 0                       | 15                 | 15                    | 0                        | 0                       |
| <b>TOTALS (All figures in Acre Feet)</b> |                     | <b>7,924</b>            | <b>203</b>         | <b>351</b>            | <b>7,776</b>             | <b>-148</b>             |

DISTRICT NO. 44

|                           |                   |        |      |     |        |     |
|---------------------------|-------------------|--------|------|-----|--------|-----|
| Anderson Reservoir        | Cottonwood Creek  | 0      | 0    | 0   | 0      | 0   |
| B and B Reservoir         | Flume Gulch       | 10     | 12   | 0   | 22     | 12  |
| Bennett Reservoir         | Spring Creek      | 7      | 0    | 0   | 7      | 0   |
| Big Bottom Reservoir      | Unnamed Tributary | 0      | 20   | 20  | 0      | 0   |
| Biskup Reservoir          | Biskup Gulch      | 0      | 12   | 12  | 0      | 0   |
| Bunker Lake Reservoir     | Bunker Creek      | 90     | 101  | 108 | 83     | -7  |
| Cove Lake Reservoir       | Morapos Creek     | 9      | 66   | 52  | 23     | 14  |
| Cove Reservoir            | Morapos Creek     | 0      | 121  | 78  | 43     | 43  |
| Culverwell Reservoir      | Sand Spring Gulch | 0      | 0    | 0   | 0      | 0   |
| D.D.&E Reservoir          | Hullett Draw      | 200    | 1208 | 820 | 588    | 388 |
| Dresher Reservoir         | Long Gulch        | 0      | 200  | 180 | 20     | 20  |
| Dunkley Dubeau Reservoir  | Willow Creek      | 33     | 79   | 84  | 28     | -5  |
| Elgin Reservoir           | Bell Rock Gulch   | 64     | 64   | 20  | 108    | 44  |
| Elgin Reservoir No. 2     | McLernon Draw     | 0      | 45   | 45  | 0      | 0   |
| Elk Head Reservoir        | Elk Head Creek    | 13,574 | 0    | 0   | 13,574 | 0   |
| Flat Top (Gill) Reservoir | Unnamed Tributary | 25     | 0    | 0   | 25     | 0   |

III. Water Supply  
G. Reservoir Storage

| NAME OF RESERVOIR<br>DISTRICT 44 CONT. | SOURCE                  | AMT. IN            | FILL             | RELEASE +   | AMT. IN             | TOTAL                |
|--|-------------------------|--------------------|------------------|-------------|---------------------|----------------------|
|  |                         | STORAGE<br>11/1/77 | DURING<br>SEASON | EVAPORATION | STORAGE<br>10/31/78 | CHANGE IN<br>STORAGE |
| 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       | 3                  | 2                | 0           | 5                   | 2                    |
| Konopik Reservoir                      | Clear Creek             | 13                 | 0                | 0           | 13                  | 0                    |
| Leftwich Reservoir                     | Boone Gulch             | 36                 | 0                | 0           | 36                  | 0                    |
| Malburg Pond                           | Brown's Gulch           | 2                  | 0                | 0           | 2                   | 0                    |
| Morin Reservoir                        | Dayton Creek            | 7                  | 0                | 0           | 7                   | 0                    |
| Morton Reservoir                       | Deacon Gulch            | 9                  | 0                | 0           | 9                   | 0                    |
| Pitney Reservoir                       | Corral Gulch            | 11                 | 0                | 0           | 11                  | 0                    |
| Poose Creek Reservoir                  | Poose Creek             | 277                | 0                | 0           | 277                 | 0                    |
| Ralph White Reservoir                  | Fortification Creek     | 925                | 0                | 0           | 925                 | 0                    |
| Roby Reservoir                         | Morapos Creek           | 0                  | 26               | 26          | 0                   | 0                    |
| Sagebrush Reservoir No. 1              | Butler Creek            | 4                  | 1                | 1           | 4                   | 0                    |
| Sagebrush Reservoir No. 2              | Butler Creek            | 3                  | 0                | 1           | 2                   | - 1                  |
| Sellers Crowell Reservoir              | Willow Creek            | 21                 | 79               | 60          | 40                  | 19                   |
| Shafer Reservoir                       | Willow Creek            | 0                  | 81               | 34          | 42                  | 47                   |
| 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            | 13                 | 26               | 20          | 19                  | 6                    |
| Wilson Reservoir                       | Good Springs Creek      | 45                 | 23               | 0           | 68                  | 23                   |
| Wyman Reservoir                        | Beaver Creek            | 50                 | 40               | 12          | 78                  | 28                   |

TOTALS (All figures in Acre Feet)

15,599      2,206      1,573      16,232      633

III. Water Supply  
G. Reservoir Storage

| DISTRICT NO. 47 | NAME OF RESERVOIR              | SOURCE                    | AMT. IN STORAGE 11/1/77 | FILL DURING SEASON | RELEASE + EVAPORATION | AMT. IN STORAGE 10/31/78 | TOTAL CHANGE IN STORAGE |
|-----------------|--------------------------------|---------------------------|-------------------------|--------------------|-----------------------|--------------------------|-------------------------|
|                 | Addison Reservoir              | Buffalo Creek             | 0                       | 42                 | 42                    | 0                        | 0                       |
|                 | Agua Fria Reservoir            | Beaver Creek              | 620                     | 111                | 0                     | 731                      | 111                     |
|                 | Bennett Reservoir              | T. Beaver Creek           | 0                       | 0                  | 0                     | 0                        | 0                       |
|                 | Big Creek Lake                 | Big Creek                 | 331                     | 1103               | 0                     | 1434                     | 1103                    |
|                 | Boettcher Lake                 | Lake Creek                | 0                       | 0                  | 0                     | 0                        | 0                       |
|                 | Brands Reservoir               | T. No. Fk. North Platte   | 0                       | 0                  | 0                     | 0                        | 0                       |
|                 | Buffalo Reservoir              | Buffalo Creek             | 486                     | 150                | 150                   | 486                      | 0                       |
|                 | Burns Reservoir                | Burns Draw                | 0                       | 39                 | 0                     | 39                       | 39                      |
|                 | Butte (South and East) Res.    | Roaring Fork              | 0                       | 202                | 0                     | 202                      | 202                     |
|                 | Carlstrom (Upper Cowdrey) Res. | Michigan River            | 448                     | 0                  | 448                   | 0                        | - 448                   |
|                 | Case No. 1 Reservoir           | Illinois River            | 0                       | 117                | 117                   | 0                        | 0                       |
|                 | Case No. 2 Reservoir           | Illinois River            | 0                       | 98                 | 98                    | 0                        | 0                       |
|                 | Case No. 3 Reservoir           | Illinois River            | 0                       | 66                 | 66                    | 0                        | 0                       |
|                 | Clayton Reservoir              | Buffalo Creek             | 0                       | 213                | 83                    | 130                      | 130                     |
|                 | Cowdrey (Lower) Reservoir      | Michigan River            | 24                      | 0                  | 0                     | 24                       | 0                       |
|                 | Coyte Reservoir                | Arapahoe Creek            | 38                      | 38                 | 38                    | 38                       | 0                       |
|                 | Fisher Lake and Pump           | Seepage T Michigan River  | 58                      | 0                  | 0                     | 58                       | 0                       |
|                 | Fuller Reservoir               | Cow Creek                 | 1                       | 7.3                | 3.3                   | 5                        | 4                       |
|                 | Gamber Reservoir               | Little Grizzly River      | 0                       | 0                  | 0                     | 0                        | 0                       |
|                 | Ginger Quill Reservoir         | Three Mile Creek          | 38.2                    | 0                  | 0                     | 38.2                     | 0                       |
|                 | Hap Reservoir                  | Buffalo Creek             | 0                       | 14                 | 14                    | 0                        | 0                       |
|                 | Hecla Reservoir                | Arapaho Creek             | 255                     | 255                | 255                   | 255                      | 0                       |
|                 | House (Upper) Reservoir        | Spring Creek              | 44                      | 0                  | 0                     | 44                       | 0                       |
|                 | Hunter Reservoir               | Three Mile Creek          | 0                       | 24                 | 24                    | 0                        | 0                       |
|                 | Jackson Reservoir              | Dry Creek                 | 119                     | 0                  | 0                     | 119                      | 0                       |
|                 | Kettle Reservoir               | Newcomb Creek             | 0                       | 0                  | 0                     | 0                        | 0                       |
|                 | Lake John                      | Lake Creek                | 5135                    | 1387               | 552                   | 5970                     | 835                     |
|                 | Lake Roslyn                    | Willow Creek              | 290                     | 0                  | 0                     | 290                      | 0                       |
|                 | Laune Reservoir                | Roaring Fork              | 1065                    | 2059               | 1006                  | 2118                     | 1053                    |
|                 | MacFarlane Reservoir           | Illinois River            | 1950                    | 1200               | 750                   | 2400                     | 450                     |
|                 | McGowan Reservoir              | Middle Fork Mexican Cr.   | 40                      | 0                  | 11                    | 29                       | - 11                    |
|                 | Mexican Reservoir              | Mexican Creek             | 10                      | 70                 | 67                    | 13                       | 3                       |
|                 | Muddy Pass Reservoir           | T. Grizzly Creek          | 58                      | 0                  | 0                     | 58                       | 0                       |
|                 | Ninegar Reservoir              | Ninegar Creek             | 24                      | 24                 | 24                    | 24                       | 0                       |
|                 | North Michigan Reservoir       | No. Fk. Michigan Creek    | 1250                    | 0                  | 0                     | 1250                     | 0                       |
|                 | Petry Lake                     | Unnamed T. Little Grizzly | 72                      | 0                  | 0                     | 72                       | 0                       |
|                 | Pole Mountain Reservoir        | Mexican Creek             | 394                     | 1116               | 556                   | 954                      | 560                     |

III. Water Supply  
G. Reservoir Storage

| NAME OF RESERVOIR                        | SOURCE              | AMT. IN STORAGE 11/1/77 | FILL DURING SEASON | RELEASE + EVAPORATION | AMT. IN STORAGE 10/31/78 | TOTAL CHANGE IN STORAGE |
|--|---------------------|-------------------------|--------------------|-----------------------|--------------------------|-------------------------|
| <u>DISTRICT 47 CONT.</u>                 |                     |                         |                    |                       |                          |                         |
| Ridings Reservoir                        | Buffalo Creek       | 0                       | 41                 | 41                    | 0                        | 0                       |
| Rock Reservoir                           | Newcomb Creek       | 0                       | 0                  | 0                     | 0                        | 0                       |
| Seymour Reservoir                        | Ninegar Creek       | 525                     | 211                | 211                   | 525                      | 211                     |
| Shawver Reservoir                        | Sutton Creek        | 2                       | 115                | 117                   | 0                        | - 2                     |
| Slack and Weiss Reservoir                | Ninegar Creek       | 137                     | 0                  | 55                    | 82                       | -55                     |
| Stambaugh Reservoir                      | Little Grizzly      | 0                       | 139                | 79                    | 60                       | 60                      |
| South Arapahoe Reservoir                 | Arapaho Creek       | 0                       | 16                 | 16                    | 0                        | 0                       |
| Three Mile Reservoir                     | Three Mile Creek    | 0                       | 49                 | 49                    | 0                        | 0                       |
| Two Ledge Reservoir                      | T. Coyote Creek     | 50                      | 0                  | 0                     | 50                       | 0                       |
| Van Valkenburg Reservoir                 | Van Valkenburg Draw | 20                      | 34                 | 27                    | 27                       | 7                       |
| Walden Reservoir                         | Illinois River      | 1478                    | 3028               | 0                     | 4506                     | 3028                    |
| West Arapaho Reservoir                   | T. Big Grizzly      | 92                      | 33                 | 125                   | 0                        | - 92                    |
| State Walden                             |                     | 15                      | 0                  | 0                     | 15                       | 0                       |
| <b>TOTALS (All figures in Acre Feet)</b> |                     | <b>15,069</b>           | <b>12,001</b>      | <b>5024</b>           | <b>22,046</b>            | <b>6977</b>             |

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      | 75         | 20         | 0          | 95         | 20        |
| McCargar Dam and Reservoir               | Independence Creek      | 64         | 0          | 0          | 64         | 0         |
| Skunk Creek Reservoir                    | Skunk Creek             | 8          | 8          | 0          | 16         | 8         |
| Slater Creek Lake                        | T. Slater Creek         | 44         | 0          | 0          | 44         | 0         |
| Upper Cogdill Reservoir                  | Government Corral Creek | 45         | 0          | 0          | 45         | 0         |
| <b>TOTALS (All figures in Acre Feet)</b> |                         | <b>454</b> | <b>426</b> | <b>390</b> | <b>482</b> | <b>28</b> |

DISTRICT NO. 56

|                         |                         |    |    |    |    |     |
|-------------------------|-------------------------|----|----|----|----|-----|
| Ainge Reservoir         | Flynn Spring            | 0  | 1  | 1  | 0  | 0   |
| Bassett No. 1 Reservoir | Bull Canyon Gulch       | 5  | 32 | 9  | 28 | 23  |
| Bassett No. 2 Reservoir | Bull Canyon Gulch       | 25 | 29 | 4  | 50 | 25  |
| Blevins Reservoir       | Spring T. Vermillion Cr | 2  | 3  | 0  | 5  | 3   |
| Cove Reservoir          | *Cottonwood Creek       | 10 | 0  | 10 | 0  | -10 |

III. Water Supply  
G. Reservoir Storage

| NAME OF RESERVOIR                 | SOURCE                 | AMT. IN STORAGE 11/1/77 | FILL DURING SEASON | RELEASE + EVAPORATION | AMT. IN STORAGE 10/31/78 | TOTAL CHANGE IN STORAGE |
|-----------------------------------|------------------------|-------------------------|--------------------|-----------------------|--------------------------|-------------------------|
| DISTRICT 56 CONT.                 |                        |                         |                    |                       |                          |                         |
| Massey Reservoir                  | Flynn Spring           | 0                       | 2                  | 0                     | 2                        | 2                       |
| Offield Reservoir                 | Pot Creek              | 25                      | 50                 | 35                    | 40                       | 15                      |
| TOTALS (All figures in Acre Feet) |                        | 67                      | 117                | 59                    | 125                      | 58                      |
| DISTRICT NO. 57                   |                        |                         |                    |                       |                          |                         |
| Apple Reservoir                   | Dry Fk, Trout Creek    | 2                       | 9                  | 11                    | 0                        | - 2                     |
| Basin Reservoir                   | Basin & Buchanan Gulch | 13                      | 195                | 134                   | 74                       | 61                      |
| Brock Reservoir                   | T. Yampa River         | 1                       | 6                  | 4                     | 3                        | 2                       |
| Cozzens Walrod Reservoir          | Hutchinson Gulch       | 0                       | 84                 | 74                    | 10                       | 10                      |
| East Signs Reservoir              | Hooker Draw            | 2                       | 0                  | 0                     | 2                        | 0                       |
| Eckman Park Reservoir No. 1       | Foidel Creek           | 80                      | 30                 | 0                     | 110                      | 30                      |
| Eckman Park Reservoir No. 2       | Foidel Creek           | 12                      | 0                  | 0                     | 12                       | 0                       |
| Eckman Park Reservoir No. 3       | Foidel Creek           | 0                       | 2                  | 0                     | 2                        | 2                       |
| Elmer Reservoir                   | Morgan Creek           | 30                      | 0                  | 0                     | 30                       | 30                      |
| F. Schaffermeyer Res. No. 3       | Fiske Creek            | 3                       | 4                  | 3                     | 4                        | 1                       |
| F. Schaffermeyer Res. No. 4       | Fiske Creek            | 2                       | 1                  | 1                     | 2                        | 0                       |
| Greasewood Flats Reservoir        | Dill Gulch             | 0                       | 80                 | 80                    | 0                        | 0                       |
| Hayden Station Ponds              | Yampa River            | 1060                    | 0                  | 702                   | 358                      | -702                    |
| James Marion Yoast Reservoir      | Yoast Creek            | 0                       | 147                | 144                   | 3                        | 3                       |
| John C. Temple Res. No. 1         | Temple Gulch           | 0                       | 553                | 553                   | 0                        | 0                       |
| Kowach Reservoir                  | Small T. Yampa River   | 28                      | 0                  | 0                     | 28                       | 0                       |
| Morgan Creek No. 1 Reservoir      | Morgan Creek           | 0                       | 326                | 274                   | 52                       | 52                      |
| Nofstger Reservoir                | Grassy Creek           | 40                      | 416                | 106                   | 350                      | 310                     |
| Nofstger-Zeigler Reservoir        | Grassy Creek           | 110                     | 234                | 114                   | 230                      | 120                     |
| Sage Creek Reservoir              | Sage Creek             | 0                       | 473                | 473                   | 0                        | 0                       |
| Scotchmans Gulch Reservoir No. 1  | Scotchmans Gulch       | 0                       | 8                  | 8                     | 0                        | 0                       |
| Seaton Reservoir                  | Middle Fish Creek      | 0                       | 21                 | 21                    | 0                        | 0                       |
| Sheriff Reservoir                 | Trout Creek            | 824                     | 162                | 0                     | 986                      | 162                     |
| West Signs Reservoir              | Miller Draw            | 1                       | 0                  | 1                     | 0                        | - 1                     |
| Yoast No. 1, No. 2 Reservoir      | Yoast Creek            | 0                       | 7                  | 2                     | 5                        | 5                       |
| TOTALS (All figures in Acre Feet) |                        | 2208                    | 2758               | 2705                  | 2261                     | 53                      |

III. Water Supply  
G. Reservoir Storage

| NAME OF RESERVOIR             | SOURCE                   | AMT. IN STORAGE 11/1/77 | FILL DURING SEASON | RELEASE + EVAPORATION | AMT. IN STORAGE 10/31/78 | TOTAL CHANGE IN STORAGE |
|-------------------------------|--------------------------|-------------------------|--------------------|-----------------------|--------------------------|-------------------------|
| DISTRICT NO. 58               |                          |                         |                    |                       |                          |                         |
| Allen Basin Reservoir         | Middle Hunt Creek        | 44                      | 1634               | 1207                  | 471                      | 427                     |
| Alma Baer Reservoir           | Fish Creek               | 3                       | 0                  | 0                     | 3                        | 0                       |
| Bull Park No. 2 Reservoir     | West Branch Watson Creek | 0                       | 30                 | 30                    | 0                        | 0                       |
| Burnt Mesa Reservoir          | South Hunt Creek         | 0                       | 55                 | 50                    | 5                        | 5                       |
| Chapman Reservoir             | Little Oak Creek         | 10                      | 246                | 182                   | 74                       | 64                      |
| Crowner Reservoir             | Beaver Creek             | 0                       | 6                  | 6                     | 0                        | 0                       |
| Fish Creek Reservoir          | Fish Creek               | 1530                    | 312                | 0                     | 1842                     | 312                     |
| Fish Creek Lake No. 2         | Wheeler Creek            | 35                      | 0                  | 0                     | 35                       | 0                       |
| French Reservoir              | Jack Creek               | 4                       | 0                  | 2                     | 2                        | - 2                     |
| Gardner Park Reservoir        | Gardner Creek            | 2                       | 1153               | 156                   | 999                      | 997                     |
| G.R. Brennehan Reservoir      | Cow Creek                | 2                       | 0                  | 0                     | 2                        | 0                       |
| Hahns Peak Reservoir          | Willow Creek             | 600                     | 0                  | 0                     | 600                      | 0                       |
| Heart Lake                    | Watson Creek             | 0                       | 283                | 283                   | 0                        | 0                       |
| Lake Creek Reservoir          | Wheeler Creek            | 261                     | 61                 | 61                    | 261                      | 0                       |
| Lake Windemere                | Farnsworth Creek         | 0                       | 137                | 37                    | 100                      | 100                     |
| Lee Reservoir                 | Chimney Creek            | 0                       | 21                 | 0                     | 21                       | 21                      |
| Lester Creek Reservoir        | Lester Creek             | 4400                    | 1257               | 0                     | 5657                     | 1257                    |
| Long Lake                     | Fish Creek               | 397                     | 0                  | 0                     | 397                      | 0                       |
| Martin Reservoir              | Yellow Jacket Creek      | 5                       | 80                 | 75                    | 10                       | 5                       |
| May Reservoir                 | Salt Creek               | 6                       | 31                 | 15                    | 22                       | 16                      |
| McChivvis Reservoir           | Watson Creek             | 0                       | 191                | 121                   | 70                       | 70                      |
| Moore Park Reservoir          | Elgin Creek              | 0                       | 21                 | 21                    | 0                        | 0                       |
| Oak Creek Reservoir           | Oak Creek                | 1                       | 0                  | 0                     | 1                        | 0                       |
| Overman Reservoir             | French Creek             | 100                     | 0                  | 0                     | 100                      | 0                       |
| Rams Horn Reservoir           | Dome Creek               | 122                     | 0                  | 0                     | 122                      | + 122                   |
| Reed Reservoir                | Chimney Rock Creek       | 0                       | 20                 | 0                     | 20                       | 20                      |
| 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        | 120                     | 875                | 420                   | 575                      | 455                     |
| Stillwater Reservoir No. 1    | Yampa River              | 21                      | 6371               | 2110                  | 2110                     | 4285                    |
| Storm Mountain Reservoir      | Burgess Creek            | 2                       | 0                  | 0                     | 2                        | 0                       |
| Stukey Distribution Reservoir | Spring Creek             | 5                       | 0                  | 0                     | 5                        | 0                       |
| Bison Park Reservoir          | Lawson Creek             | 0                       | 26                 | 26                    | 0                        | 0                       |

III. Water Supply  
 G. Reservoir Storage

| NAME OF RESERVOIR            | SOURCE         | AMT. IN STORAGE 11/1/77 | FILL DURING SEASON | RELEASE + EVAPORATION | AMT. IN STORAGE 10/31/78 | TOTAL CHANGE IN STORAGE |
|------------------------------|----------------|-------------------------|--------------------|-----------------------|--------------------------|-------------------------|
| Lowry Reservoir              | Oak Creek      | 0                       | 46                 | 0                     | 46                       | 46                      |
| Lake Catamount               | Yampa River    | 30                      | 7770               | 378                   | 7422                     | 7392                    |
| Tillquist Reservoir          | Morrison Creek | 5                       | 0                  | 0                     | 5                        | 0                       |
| Trull Creek Reservoir        | Trull Creek    | 0                       | 149                | 149                   | 0                        | 0                       |
| Upper Stillwater Reservoir   | Roaring Fork   | 328                     | 292                | 0                     | 620                      | 292                     |
| Upper Willow Creek Reservoir | Willow Creek   | 23,604                  | 496                | 1050                  | 23,050                   | - 554                   |
| Wheeler Reservoir            | Wheeler Creek  | 37                      | 0                  | 0                     | 37                       | 0                       |
| Whitney Nelson Reservoir     | Whipple Creek  | 74                      | 350                | 0                     | 424                      | 350                     |
| Younger Reservoir            | Morrison Creek | 15                      | 0                  | 0                     | 15                       | 0                       |
| TOTALS                       |                | 31,824                  | 21,913             | 6379                  | 47,358                   | 15,534                  |

(All figures in Acre Feet)

#### IV. AGRICULTURE

Irrigated crop production, or basically hay production, was average or slightly above average. Dry crop production, basically small grains, were well below average due to no rainfall and some hail damage just before harvest. This coupled with depressed prices has made this segment of the areas agriculture very depressed.

While grazing was not as good as average because of the short rainfall, it was considerably better than last year due to the good winter moisture. Even though the young livestock was possibly a little lighter than average, the more mature livestock was average or better. The overall price of livestock was excellent making the first advancement in this segment of agriculture in a number of years.

#### V. COMPACTS

Preliminary gaging station records show 1,480,000 AF at the Maybell Gage on the Yampa River for the past water year. This is well above average and certainly compensates for the deficient supply of the 1977 season.

The Nebraska VS Wyoming Supreme Court stipulations were met with 114,366 irrigated acres allowed. The storage was 13,022 AF which is well under the 17,000 AF allowed; however, this is the largest amount stored since the North Platte was transferred to Division 6 in 1969. The transbasin diversion was 462 AF which is well under the 6,000 AF allowed annually.

The Pot Creek Agreement with Utah is still out of date but is apparently operating successfully under the old outdated 1958 Agreement. There was very little water in the basin to divide and it was taken care of with no apparent controversy.

#### VI. DAMS

Catamount Reservoir was completed and filled with no problem during



the spring runoff. The lake filled automatically with the outlet tube open to its capacity and caused no problem. Most of the dams in the Division were inspected at least once by staff members or the State dam inspection team.

Some problems arose on Pearl Lake again. While they are not serious now, if an access road is not allowed to the dam, it could well develop into a real problem.

Yamcola Reservoir Dam is progressing at a good rate and it would appear that construction would start in 1979. The taxpayers in the Upper Yampa Conservancy District approved a tax levy to support this project in a 1978 election.

#### VII. WATER RIGHTS

Water Judge Don Lorenz retired early in 1978 and was replaced by Judge Claus Hume. Judge Hume is doing an excellent job including holding quarterly meetings with the Water Referee and the Division Engineer. The Division 6 Water Referee and Division staff have inspected many of the applications submitted; and while not completely up-to-date, the backlog is not serious.

The Division 5 Referee and Division staff have inspected all of the current water cases on the White River drainage and are current with the water cases.

|                                       | <u>Applications</u> | <u>Rulings</u> | <u>Decrees</u> |
|---------------------------------------|---------------------|----------------|----------------|
| Underground                           | 31                  | 35             | 34             |
| Change of Water Right                 | 35                  | 14             | 22             |
| Plan of Augmentation                  | 0                   | 0              | 0              |
| Water Right                           | 208                 | 100            | 96             |
| Diligence                             | 24                  | 32             | 21             |
| Water Storage                         | 22                  | 10             | 16             |
| Applications received in Water Court: | 320                 |                |                |
| Number of Referee Consultations:      | 191                 |                |                |

## 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, Colorado

Morrison Creek Water & Sanitation District, Oak Creek, Colorado

Steamboat Lake Water District, Clark, Colorado

Riverside Water & Sanitation District, Steamboat Springs, Colorado

Steamboat II Water & Sanitation District, Steamboat Springs, CO

Tree Haus Water & Sanitation District, Steamboat Springs, Colorado

## IX. WATER COMMISSIONER'S SUMMARY

Water District No. 43

|  |                  |
|--|------------------|
| Direct Flow Diversions to Irrigation .....           | 280,000 AF       |
| Direct Flow Diversions to Transbasin .....           | 0                |
| Direct Flow Diversions to Municipal & Domestic ..... | 2,000 AF         |
| Direct Flow Diversions to Industrial .....           | 6,000 AF         |
| Direct Flow Diversions to Other Uses .....           | <u>15,000 AF</u> |
| TOTAL DIVERSIONS .....                               | 303,000 AF       |
| Reservoir Storage (11/1/77) .....                    | 7,924 AF         |
| Reservoir Storage (10/31/78) .....                   | <u>7,776 AF</u>  |
| Net Change in Storage .....                          | - 148 AF         |
| Fill During Season .....                             | 203 AF           |
| Release + Evaporation During Season .....            | 351 AF           |
| Direct Diversions to Irrigation .....                | 280,000 AF       |
| Diversions from Storage to Irrigation .....          | <u>148 AF</u>    |
| TOTAL DIVERSIONS TO IRRIGATION .....                 | 280,148 AF       |
| Total Acres Irrigated .....                          | 29,438 Acres     |
| Average Demand for Irrigation .....                  | 10.3 AF/Acre     |
| Number of Active Ditches Observed .....              | 435              |
| Number of Active Reservoirs Observed .....           | 23               |
| Number of Active Springs Observed .....              | 240              |
| Number of Active Wells Observed .....                | 10               |
| Number of Inactive Structures Observed .....         | <u>130</u>       |
| TOTAL STRUCTURES OBSERVED .....                      | 850              |
| Total Number of Structures Regulated .....           | 50               |
| Total Number of Field Observations Made .....        | 4,500            |

Water District 44

|  |                  |
|--|------------------|
| Direct Flow Diversions to Irrigation .....           | 172,000 AF       |
| Direct Flow Diversions to Transbasin .....           | 375 AF           |
| Direct Flow Diversions to Municipal & Domestic ..... | 2,000 AF         |
| Direct Flow Diversions to Industrial .....           | 500 AF           |
| Direct Flow Diversions to Other Uses .....           | <u>1,000 AF</u>  |
| TOTAL DIVERSIONS .....                               | 175,875 AF       |
| Reservoir Storage (11/1/77) .....                    | 15,599 AF        |
| Reservoir Storage (10/31/78) .....                   | <u>16,232 AF</u> |
| Net Change in Storage .....                          | 633 AF           |
| Fill During Season .....                             | 2,206 AF         |
| Release + Evaporation During Season .....            | 1,573 AF         |
| Direct Diversions to Irrigation .....                | 172,000 AF       |
| Diversions from Storage to Irrigation .....          | <u>900 AF</u>    |
| TOTAL DIVERSIONS TO IRRIGATION .....                 | 172,900 AF       |
| Total Acres Irrigated .....                          | 30,880 Acres     |
| Average Demand for Irrigation .....                  | 5.6 AF/Acre      |
| Number of Active Ditches Observed .....              | 219              |
| Number of Active Reservoirs Observed .....           | 49               |
| Number of Active Springs Observed .....              | 29               |
| Number of Active Wells Observed .....                | 3                |
| Number of Inactive Structures Observed .....         | <u>90</u>        |
| TOTAL STRUCTURES OBSERVED .....                      | 390              |
| Total Number of Structures Regulated .....           | 45               |
| Total Number of Field Observations Made .....        | 1,880            |

Water District 47

|  |                  |
|--|------------------|
| Direct Flow Diversions to Irrigation .....           | 430,000 AF       |
| Direct Flow Diversions to Transbasin .....           | 460 AF           |
| Direct Flow Diversions to Municipal & Domestic ..... | 400 AF           |
| Direct Flow Diversions to Industrial .....           | 0                |
| Direct Flow Diversions to Other Uses .....           | <u>5,500 AF</u>  |
| TOTAL DIVERSIONS .....                               | 436,360 AF       |
| Reservoir Storage (11/1/77) .....                    | 15,069 AF        |
| Reservoir Storage (10/31/78) .....                   | <u>22,046 AF</u> |
| Net Change in Storage .....                          | 6,977 AF         |
| Fill During Season .....                             | 12,001 AF        |
| Release + Evaporation During Season .....            | 5,024 AF         |
| Direct Diversions to Irrigation .....                | 430,000 AF       |
| Diversions from Storage to Irrigation .....          | <u>5,024 AF</u>  |
| TOTAL DIVERSIONS TO IRRIGATION .....                 | 435,024 AF       |
| Total Acres Irrigated .....                          | 114,366 Acres    |
| Average Demand for Irrigation .....                  | 3.8 AF/Acre      |
| Number of Active Ditches Observed .....              | 390              |
| Number of Active Reservoirs Observed .....           | 42               |
| Number of Active Springs Observed .....              | 10               |
| Number of Active Wells Observed .....                | 6                |
| Number of Inactive Structures Observed .....         | <u>40</u>        |
| TOTAL STRUCTURES OBSERVED .....                      | 488              |
| Total Number of Structures Regulated .....           | 4                |
| Total Number of Field Observations Made .....        | 1,700            |

Water District No. 54

|  |                  |
|--|------------------|
| Direct Flow Diversions to Irrigation .....           | 47,000 AF        |
| Direct Flow Diversions to Transbasin .....           | 0                |
| Direct Flow Diversions to Municipal & Domestic ..... | 150 AF           |
| Direct Flow Diversions to Industrial .....           | 0                |
| Direct Flow Diversions to Other Uses .....           | 600 AF           |
| TOTAL DIVERSIONS .....                               | <u>47,750 AF</u> |
| Reservoir Storage (11/1/77) .....                    | 454 AF           |
| Reservoir Storage (10/31/78) .....                   | 482 AF           |
| Net Change in Storage .....                          | <u>28 AF</u>     |
| Fill During Season .....                             | 426 AF           |
| Release + Evaporation During Season .....            | 398 AF           |
| Direct Diversions to Irrigation .....                | 47,000 AF        |
| Diversions from Storage to Irrigation .....          | 398 AF           |
| TOTAL DIVERSIONS TO IRRIGATION .....                 | <u>47,398 AF</u> |
| Total Acres Irrigated .....                          | 12,000 Acres     |
| Average Demand for Irrigation .....                  | 4.0 AF/Acre      |
| Number of Active Ditches Observed .....              | 65               |
| Number of Active Reservoirs Observed .....           | 7                |
| Number of Active Springs Observed .....              | 3                |
| Number of Active Wells Observed .....                | 0                |
| Number of Inactive Structures Observed .....         | 24               |
| TOTAL STRUCTURES OBSERVED .....                      | <u>99</u>        |
| Total Number of Structures Regulated .....           | 5                |
| Total Number of Field Observations Made .....        | 196              |

Water District No. 55

|  |               |
|--|---------------|
| Direct Flow Diversions to Irrigation .....           | 8,300 AF      |
| Direct Flow Diversions to Transbasin .....           | 0             |
| Direct Flow Diversions to Municipal & Domestic ..... | 1 AF          |
| Direct Flow Diversions to Industrial .....           | 0             |
| Direct Flow Diversions to Other Uses .....           | <u>130 AF</u> |
| TOTAL DIVERSIONS .....                               | 8,301 AF      |
| Reservoir Storage (11/1/77) .....                    | 0             |
| Reservoir Storage (10/31/78) .....                   | 0             |
| Net Change in Storage .....                          | 0             |
| Fill During Season .....                             | 0             |
| Release + Evaporation During Season .....            | 0             |
| Direct Diversions to Irrigation .....                | 8,300 AF      |
| Diversions from Storage to Irrigation .....          | <u>0</u>      |
| TOTAL DIVERSIONS TO IRRIGATION .....                 | 8,300 AF      |
| Total Acres Irrigated .....                          | 1,368 Acres   |
| Average Demand for Irrigation .....                  | 6.1 AF/Acre   |
| Number of Active Ditches Observed .....              | 11            |
| Number of Active Reservoirs Observed .....           | 0             |
| Number of Active Springs Observed .....              | 20            |
| Number of Active Wells Observed .....                | 5             |
| Number of Inactive Structures Observed .....         | <u>8</u>      |
| TOTAL STRUCTURES OBSERVED .....                      | 44            |
| Total Number of Structures Regulated .....           | 0             |
| Total Number of Field Observations Made .....        | 150           |

Water District No. 56

|  |                 |
|--|-----------------|
| Direct Flow Diversions to Irrigation .....           | 8,700 AF        |
| Direct Flow Diversions to Transbasin .....           | 0               |
| Direct Flow Diversions to Municipal & Domestic ..... | 200 AF          |
| Direct Flow Diversions to Industrial .....           | 0               |
| Direct Flow Diversions to Other Uses .....           | <u>1,900 AF</u> |
| TOTAL DIVERSIONS .....                               | 10,800 AF       |
| <br>   |                 |
| Reservoir Storage (11/1/77) .....                    | 67 AF           |
| Reservoir Storage (10/31/78) .....                   | <u>125 AF</u>   |
| Net Change in Storage .....                          | 58 AF           |
| <br>   |                 |
| Fill During Season .....                             | 117 AF          |
| Release + Evaporation During Season .....            | 59 AF           |
| <br>   |                 |
| Direct Diversions to Irrigation .....                | 8,700 AF        |
| Diversions from Storage to Irrigation .....          | <u>59 AF</u>    |
| TOTAL DIVERSIONS TO IRRIGATION .....                 | 8,759 AF        |
| <br>   |                 |
| Total Acres Irrigated .....                          | 2,335 Acres     |
| Average Demand for Irrigation .....                  | 3.8 AF/Acre     |
| <br>   |                 |
| Number of Active Ditches Observed .....              | 33              |
| Number of Active Reservoirs Observed .....           | 8               |
| Number of Active Springs Observed .....              | 65              |
| Number of Active Wells Observed .....                | 4               |
| Number of Inactive Structures Observed .....         | <u>25</u>       |
| TOTAL STRUCTURES OBSERVED .....                      | 135             |
| <br>   |                 |
| Total Number of Structures Regulated .....           | 0               |
| Total Number of Field Observations Made .....        | 330             |



Water District No. 57

|  |                 |
|--|-----------------|
| Direct Flow Diversions to Irrigation .....           | 59,603 AF       |
| Direct Flow Diversions to Transbasin .....           | 836 AF          |
| Direct Flow Diversions to Municipal & Domestic ..... | 500 AF          |
| Direct Flow Diversions to Industrial .....           | 5,018 AF        |
| Direct Flow Diversions to Other Uses .....           | <u>2,178 AF</u> |
| TOTAL DIVERSIONS .....                               | 68,135 AF       |
| Reservoir Storage (11/1/77) .....                    | 2,208 AF        |
| Reservoir Storage (10/31/78) .....                   | <u>2,261 AF</u> |
| Net Change in Storage .....                          | 53 AF           |
| Fill During Season .....                             | 2,758 AF        |
| Release + Evaporation During Season .....            | 2,705 AF        |
| Direct Diversions to Irrigation .....                | 59,603 AF       |
| Diversions from Storage to Irrigation .....          | <u>1,596 AF</u> |
| TOTAL DIVERSIONS TO IRRIGATION .....                 | 61,199 AF       |
| Total Acres Irrigated .....                          | 10,780 Acres    |
| Average Demand for Irrigation .....                  | 5.7 AF/Acre     |
| Number of Active Ditches Observed .....              | 80              |
| Number of Active Reservoirs Observed .....           | 30              |
| Number of Active Springs Observed .....              | 113             |
| Number of Active Wells Observed .....                | 12              |
| Number of Inactive Structures Observed .....         | <u>75</u>       |
| TOTAL STRUCTURES OBSERVED .....                      | 310             |
| Total Number of Structures Regulated .....           | 12              |
| Total Number of Field Observations Made .....        | 750             |

Water District No. 58

|  |                  |
|--|------------------|
| Direct Flow Diversions to Irrigation .....           | 168,000 AF       |
| Direct Flow Diversions to Transbasin .....           | 2,900 AF         |
| Direct Flow Diversions to Municipal & Domestic ..... | 3,100 AF         |
| Direct Flow Diversions to Industrial .....           | 0                |
| Direct Flow Diversions to Other Uses .....           | <u>1,500 AF</u>  |
| TOTAL DIVERSIONS .....                               | 172,400 AF       |
| Reservoir Storage (11/1/77) .....                    | 31,824 AF        |
| Reservoir Storage (10/31/78) .....                   | <u>47,358 AF</u> |
| Net Change in Storage .....                          | 15,534 AF        |
| Fill During Season .....                             | 21,913 AF        |
| Release + Evaporation During Season .....            | 6,379 AF         |
| Direct Diversions to Irrigation .....                | 168,000 AF       |
| Diversions from Storage to Irrigation .....          | <u>4,600 AF</u>  |
| TOTAL DIVERSIONS TO IRRIGATION .....                 | 172,600 AF       |
| Total Acres Irrigated .....                          | 38,952 Acres     |
| Average Demand for Irrigation .....                  | 4.4 AF/Acre      |
| Number of Active Ditches Observed .....              | 351              |
| Number of Active Reservoirs Observed .....           | 45               |
| Number of Active Springs Observed .....              | 244              |
| Number of Active Wells Observed .....                | 40               |
| Number of Inactive Structures Observed .....         | <u>160</u>       |
| TOTAL STRUCTURES OBSERVED .....                      | 840              |
| Total Number of Structures Regulated .....           | 40               |
| Total Number of Field Observations Made .....        | 3,700            |



X. DIVISION ENGINEER'S SUMMARY

Table B

DIVISION SUMMARY - DIVISION NO. 6

1978 - Storage Report - Acre Feet

| Water District | Amount in Storage Acre Feet 11-1-77 | Amount in Storage Acre Feet 10-31-78 | 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 |
|----------------|-------------------------------------|--------------------------------------|---|--------------------------------------|----------------------------|---------------|---------------------------|----------|------------------------------|---|----------------------|
|                |                                     |                                      |   |                                      | Industrial Use             | Municipal Use | Recreational Use          | Projects |                              |   |                      |
| 43             | 7,924                               | 7,776                                | 203   | 351                                  | 0                          | 0             | 0                         | 0        | 7,467                        | 0 | 0                    |
| 44             | 15,599                              | 16,232                               | 2,206   | 1,500                                | 8,310                      | 0             | 0                         | 0        | 6,775                        | 0 | 0                    |
| 47             | 15,069                              | 22,046                               | 12,001  | 5,024                                | 0                          | 0             | 0                         | 0        | 9,600                        | 0 | 0                    |
| 54             | 454                                 | 482                                  | 426   | 390                                  | 0                          | 0             | 0                         | 0        | 218                          | 0 | 0                    |
| 55             |                                     |                                      |   |                                      |                            |               |                           |          |                              |   |                      |
| 56             | 67                                  | 125                                  | 117   | 58                                   | 0                          | 0             | 0                         | 0        | 0                            | 0 | 0                    |
| 57             | 2,208                               | 2,261                                | 2,758   | 1,900                                | 358                        | 986           | 0                         | 0        | 0                            | 0 | 0                    |
| 58             | 31,824                              | 47,358                               | 21,913  | 6,379                                | 5,000                      | 2,249         | 37,400                    | 3235     | 61460                        | 0 | 0                    |
|                |                                     |                                      | 15602   |                                      | 13668                      |               |                           |          |                              |   |                      |

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             | 250                    | 23                  | 435            | 130              | 850                       | 4,500                    | 50                         |
| 44             | 32                     | 49                  | 219            | 90               | 390                       | 1,700                    | 45                         |
| 47             | 16                     | 42                  | 390            | 40               | 488                       | 1,700                    | 4                          |
| 54             | 3                      | 7                   | 65             | 24               | 99                        | 196                      | 5                          |
| 55             | 25                     | 0                   | 11             | 8                | 44                        | 150                      | 0                          |
| 56             | 69                     | 8                   | 33             | 25               | 135                       | 330                      | 0                          |
| 57             | 125                    | 30                  | 80             | 75               | 310                       | 750                      | 12                         |
| 58             | 284                    | 45                  | 351            | 160              | 840                       | 3,700                    | 40                         |
| <b>TOTALS</b>  | <b>804</b>             | <b>204</b>          | <b>1,584</b>   | <b>552</b>       | <b>3,156</b>              | <b>13,026</b>            | <b>156</b>                 |

## X. DIVISION ENGINEER'S SUMMARY

Table D

## WORKLOAD AND STATISTICAL INDICATORS

|   |           |
|---|-----------|
| Acre Feet Water Used                            | 1,222,621 |
| Acre Feet Diverted for Agricultural Use         | 1,185,930 |
| Acre Feet Diverted for Storage                  | 39,624    |
| Acre Feet Diverted for Industrial Use           | 11,518    |
| Acre Feet Diverted for Recreation Use           | 27,808    |
| Acre Feet Diverted for Domestic & Municipal Use | 8,351     |
| Acre Feet Diverted to Compact Commitment        | 0         |
| Acre Feet Water Stored (10/31/78)               | 96,280    |
| Acre Feet Water Transbasin Diversion            | 4,573     |
| Acres Irrigated                                 | 240,119   |
| Total Structures Administered                   | 156       |
| Total Daily Observations                        | 13,026    |
| Total Structures Observed or Reported           | 3,156     |

1978

XI. ANNUAL SUMMARY - DISTRICTS  
ACRE FEET (11-1-77 thru 10-31-78)

| Districts     | Non-Exempt Wells # | Ditch Structures Reported # | IRRIGATION                      |                       |                       | CURRENT YEAR    |              | TRANS-MOUNTAIN      |  |
|---------------|--------------------|-----------------------------|---------------------------------|-----------------------|-----------------------|-----------------|--------------|---------------------|--|
|               |                    |                             | Direct Diversions To Irrigation | Diversions To Storage | Storage To Irrigation | Acres Irrigated | Export       | Div. to Div. Import |  |
| 43            | 4                  | 565                         | 280,148                         | 148                   | 148                   | 29,438          | 0            | 0                   |  |
| 44            | 11                 | 309                         | 172,900                         | 1,100                 | 900                   | 30,880          | 0            | 0                   |  |
| 47            | 5                  | 430                         | 435,024                         | 10,000                | 5,024                 | 114,366         | 462          | 0                   |  |
| 54            | 0                  | 89                          | 47,000                          | 426                   | 398                   | 12,000          | 0            | 0                   |  |
| 55            | 0                  | 19                          | 8,300                           | 0                     | 0                     | 1,368           | 0            | 0                   |  |
| 56            | 0                  | 58                          | 8,759                           | 117                   | 59                    | 2,335           | 0            | 0                   |  |
| 57            | 7                  | 155                         | 61,199                          | 1,800                 | 1,596                 | 10,780          | 0            | 0                   |  |
| 58            | 11                 | 511                         | 172,600                         | 11,000                | 4,600                 | 38,952          | 4,111        | 0                   |  |
| <b>TOTALS</b> | <b>38</b>          | <b>2,136</b>                | <b>1,185,930</b>                | <b>24,591</b>         | <b>12,725</b>         | <b>240,119</b>  | <b>4,573</b> | <b>0</b>            |  |

| Districts     | MUNICIPAL         |                       |                  | INDUSTRIAL        |                       |             | RECREATION             |                         | ACTUAL STORAGE |            | # Decree Applications | # WaterC 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                | 6,000             | 0                     | 0           | 7,467                  | 7,776                   | 54             | 32         |                       |                       |
| 44            | 2,000             | 0                     | 0                | 500               | 0                     | 0           | 6,775                  | 16,232                  | 11             | 26         |                       |                       |
| 47            | 400               | 0                     | 0                | 0                 | 0                     | 0           | 9,600                  | 22,046                  | 36             | 27         |                       |                       |
| 54            | 150               | 0                     | 0                | 0                 | 0                     | 0           | 218                    | 482                     | 14             | 22         |                       |                       |
| 55            | 1                 | 0                     | 0                | 0                 | 0                     | 0           | 0                      | 0                       | 0              | 0          |                       |                       |
| 56            | 200               | 0                     | 0                | 0                 | 0                     | 0           | 0                      | 125                     | 1              | 0          |                       |                       |
| 57            | 500               | 0                     | 0                | 5,018             | 0                     | 0           | 986                    | 2,261                   | 11             | 32         |                       |                       |
| 58            | 3,100             | 162                   | 0                | 0                 | 0                     | 0           | 37,400                 | 47,358                  | 37             | 140        |                       |                       |
| <b>TOTALS</b> | <b>8,351</b>      | <b>312</b>            | <b>0</b>         | <b>11,518</b>     | <b>0</b>              | <b>0</b>    | <b>62,446</b>          | <b>96,280</b>           | <b>164</b>     | <b>279</b> |                       |                       |

### XIII. RECOMMENDATIONS AND SUGGESTIONS

One of the biggest problems facing Water Division 6 is the low scale pay of the water commissioners compared to non-skilled or semi-skilled people in the area that form competition for housing and living expenses. According to a survey conducted in the spring of 1978, living expenses in this mountain area can run as high as 52 percent above the cost of living in the Denver area. As an example, housing in the Steamboat-Craig area is 72 percent higher than in the Denver area.

As a comparison in salaries, a truck driver hauling coal from the mine to the power plant starts at between \$20,000 and \$25,000 depending on overtime in a year as compared to a water commissioner at a little less than \$11,000 per year; plus such fringe benefit differences as full medical and year-end bonuses to name only two. This comparison alone shows the competition that plagues our commissioners. We have one commissioner who has quit to work as a laborer on the county road crew which pays considerably better than the state scale for water commissioners.

The result is that our younger commissioners have the choice of moonlighting or quitting for higher paying jobs. Eventually, the result will be personnel to allot the States most precious resource coming from the ranks of people that are not even qualified to work as common laborers.

It is recommended that commissioner salaries be raised to change this problem before more personnel leave these positions.

Ownership of water still remains one of the big problems. At the present time, title insurance companies will not insure title to any water within the State. When one of our most important resources and property rights gets to the point that titles cannot be insured, something should be done.



It is recommended that ownership be established through a water case application giving ownership which would be advertised in the usual manner. This would take some time, but would be better and cheaper than anything that has been proposed to date.

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WATER RESOURCES  
STATE ENGINEER  
D.D.B.

1978 IRRIGATION YEAR

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

WATER DISTRICT 43

RESERVOIR EVAPORATION AT 6450. FT.

\*\*\*\*\*

| MONTH | EVAPORATION(INCHES) | NET DEPLETION(AF.) |
|-------|---------------------|--------------------|
| 11    | 1.86                | 62.                |
| 12    | 0.70                | 23.                |
| 1     | 0.52                | 17.                |
| 2     | 0.52                | 17.                |
| 3     | 1.66                | 55.                |
| 4     | 2.71                | 95.                |
| 5     | 3.47                | 121.               |
| 6     | 4.83                | 165.               |
| 7     | 5.66                | 193.               |
| 8     | 5.19                | 173.               |
| 9     | 4.48                | 146.               |
| 10    | 3.45                | 109.               |
|       | 35.06               | TOTALS 1178.       |

\*\*\*\*\*

IRRIGATION CONSUMPTIVE USE

\*\*\*\*\*

ELEV. 7700. FT. 3000. IRR. ACRES IRR. SEASON 6/15/1978 - 8/15/1978  
AB. BUFORD

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 6     | 2.43               |
| 7     | 5.10               |
| 8     | 1.80               |
|       | 9.33 YEARLY TOTAL  |

NET DEPLETION = 2334. ACRE FT. 0.778 ACRE FT. PER ACRE

\*\*\*\*\*

ELEV. 6347. FT. 15500. IRR. ACRES IRR. SEASON 5/10/1978 - 9/30/1978  
WR. STO PICEANCE

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 5     | 2.14               |
| 6     | 4.79               |
| 7     | 6.30               |
| 8     | 5.12               |
| 9     | 2.21               |
|       | 20.55 YEARLY TOTAL |

NET DEPLETION = 26541. ACRE FT. 1.712 ACRE FT. PER ACRE

\*\*\*\*\*

ELEV. 6500. FT. 6738. IRR. ACRES IRR. SEASON 4/15/1978 - 6/30/1978  
TRIBS TO MEEKER

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 4     | 0.63               |
| 5     | 2.97               |
| 6     | 4.74               |
|       | 8.34 YEARLY TOTAL  |

NET DEPLETION = 4681. ACRE FT. 0.695 ACRE FT. PER ACRE

\*\*\*\*\*



WATER DISTRICT 44

RESERVOIR EVAPORATION AT 6390. FT.

\*\*\*\*\*

| MONTH | EVAPORATION(INCHES) | NET DEPLETION(AF.) |
|-------|---------------------|--------------------|
| 11    | 1.72                | 109.               |
| 12    | 0.52                | 33.                |
| 1     | 0.52                | 33.                |
| 2     | 0.52                | 33.                |
| 3     | 1.70                | 108.               |
| 4     | 2.95                | 199.               |
| 5     | 3.50                | 251.               |
| 6     | 5.06                | 360.               |
| 7     | 5.92                | 406.               |
| 8     | 5.47                | 368.               |
| 9     | 4.52                | 300.               |
| 10    | 3.09                | 204.               |
|       | 35.51               | TOTALS 2404.       |

\*\*\*\*\*

IRRIGATION CONSUMPTIVE USE

\*\*\*\*\*

ELEV. 6390. FT. 5800. IRR. ACRES IRR. SEASON 5/ 1/1978 - 9/15/1978  
YAMPA TO JUN SP

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 5     | 2.73               |
| 6     | 5.30               |
| 7     | 5.80               |
| 8     | 4.68               |
| 9     | 1.37               |

19.89 YEARLY TOTAL

NET DEPLETION = 9611. ACRE FT. 1.657 ACRE FT. PER ACRE

\*\*\*\*\*

ELEV. 5920. FT. 5300. IRR. ACRES IRR. SEASON 4/25/1978 - 9/15/1978  
YAMPA BELJUN SP

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 4     | 0.10               |
| 5     | 2.89               |
| 6     | 5.14               |
| 7     | 6.35               |
| 8     | 4.53               |
| 9     | 1.19               |

20.21 YEARLY TOTAL

NET DEPLETION = 8926. ACRE FT. 1.684 ACRE FT. PER ACRE

\*\*\*\*\*

ELEV. 6400. FT. 13253. IRR. ACRES IRR. SEASON 5/10/1978 - 7/20/1978  
TRIBS 1

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 5     | 1.88               |
| 6     | 5.17               |
| 7     | 3.65               |

10.70 YEARLY TOTAL

NET DEPLETION = 11812. ACRE FT. 0.891 ACRE FT. PER ACRE

\*\*\*\*\*

\*\*\*\*\*  
ELEV. 6700. FT.      6527. IRR. ACRES      IRR. SEASON 6/ 1/1978 - 8/15/1978  
TRIBS 2

MONTH      DEPLETION (INCHES)

6            4.71  
7            5.86  
8            2.00

12.58 YEARLY TOTAL

NET DEPLETION =      6842. ACRE FT.      1.048 ACRE FT. PER ACRE

\*\*\*\*\*

IRRIGATION TOTALS FOR WATER DISTRICT      44

37191. A.F. NET IRRIGATION DEPLETION      1.204 A.F./ACRE      30880. IRR. ACRES

WATER DISTRICT 47

RESERVOIR EVAPORATION AT 8100. FT.

\*\*\*\*\*

| MONTH | EVAPORATION (INCHES) | NET DEPLETION (AF.) |
|-------|----------------------|---------------------|
| 11    | 0.80                 | 143.                |
| 12    | 0.60                 | 108.                |
| 1     | 0.60                 | 107.                |
| 2     | 0.50                 | 107.                |
| 3     | 0.80                 | 143.                |
| 4     | 2.36                 | 514.                |
| 5     | 3.09                 | 731.                |
| 6     | 4.57                 | 1073.               |
| 7     | 5.30                 | 1211.               |
| 8     | 4.86                 | 1126.               |
| 9     | 4.04                 | 961.                |
| 10    | 2.80                 | 671.                |
|       | 30.42                | TOTALS 6896.        |

\*\*\*\*\*

IRRIGATION CONSUMPTIVE USE

\*\*\*\*\*

ELEV. 8700. FT. 9516. IRR. ACRES IRR. SEASON 5/ 1/1978 - 7/10/1978  
MR TO 3R BRIDGE

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 5     | 1.30               |
| 6     | 4.30               |
| 7     | 1.51               |
|       | 7.11 YEARLY TOTAL  |

NET DEPLETION = 5637. ACRE FT. 0.592 ACRE FT. PER ACRE

\*\*\*\*\*

ELEV. 8300. FT. 9981. IRR. ACRES IRR. SEASON 5/ 1/1978 - 7/15/1978  
MR TO WALDEN

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 5     | 1.52               |
| 6     | 4.74               |
| 7     | 2.84               |
|       | 8.89 YEARLY TOTAL  |

NET DEPLETION = 7395. ACRE FT. 0.741 ACRE FT. PER ACRE

\*\*\*\*\*

ELEV. 8000. FT. 4878. IRR. ACRES IRR. SEASON 5/15/1978 - 7/10/1978  
MR BEL WALDEN

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 5     | 0.76               |
| 6     | 4.84               |
| 7     | 1.93               |
|       | 7.53 YEARLY TOTAL  |

NET DEPLETION = 3060. ACRE FT. 0.627 ACRE FT. PER ACRE

\*\*\*\*\*

\*\*\*\*\*  
 ELEV. 8700. FT. 12527. IRR. ACRES IRR. SEASON 4/20/1978 - 7/ 5/1978  
 ILL. AB MIDLAND

MONTH DEPLETION (INCHES)

4 0.23  
 5 1.30  
 6 4.30  
 7 0.75

6.58 YEARLY TOTAL

NET DEPLETION = 6870.ACRE FT. 0.548 ACRE FT. PER ACRE

\*\*\*\*\*  
 ELEV. 8200. FT. 15435. IRR. ACRES IRR. SEASON 4/20/1978 - 7/ 5/1978

BIG GRIZZLY

MONTH DEPLETION (INCHES)

4 0.67  
 5 2.19  
 6 4.46  
 7 0.77

8.09 YEARLY TOTAL

NET DEPLETION = 10406.ACRE FT. 0.674 ACRE FT. PER ACRE

\*\*\*\*\*  
 ELEV. 8000. FT. 11405. IRR. ACRES IRR. SEASON 5/ 1/1978 - 7/10/1978

CANADIAN

MONTH DEPLETION (INCHES)

5 1.39  
 6 4.84  
 7 1.93

8.16 YEARLY TOTAL

NET DEPLETION = 7753.ACRE FT. 0.680 ACRE FT. PER ACRE

\*\*\*\*\*  
 ELEV. 8100. FT. 10741. IRR. ACRES IRR. SEASON 5/ 5/1978 - 7/15/1978

ROARING FORK

MONTH DEPLETION (INCHES)

5 1.93  
 6 4.49  
 7 2.33

8.75 YEARLY TOTAL

NET DEPLETION = 7835.ACRE FT. 0.729 ACRE FT. PER ACRE

\*\*\*\*\*  
 ELEV. 8100. FT. 13272. IRR. ACRES IRR. SEASON 5/15/1978 - 7/25/1978

NORTH FORK

MONTH DEPLETION (INCHES)

5 1.21  
 6 4.49  
 7 3.89

9.60 YEARLY TOTAL

NET DEPLETION = 10613.ACRE FT. 0.800 ACRE FT. PER ACRE

\*\*\*\*\*





WATER DISTRICT 54

RESERVOIR EVAPORATION AT 7500. FT.

\*\*\*\*\*

| MONTH | EVAPORATION(INCHES) | NET DEPLETION(AF.) |
|-------|---------------------|--------------------|
| 11    | 0.70                | 3.                 |
| 12    | 0.52                | 2.                 |
| 1     | 0.52                | 2.                 |
| 2     | 0.52                | 2.                 |
| 3     | 0.70                | 3.                 |
| 4     | 2.40                | 12.                |
| 5     | 2.95                | 31.                |
| 6     | 4.51                | 49.                |
| 7     | 5.38                | 40.                |
| 8     | 4.92                | 21.                |
| 9     | 3.97                | 15.                |
| 10    | 2.54                | 10.                |
|       | 29.65               | TOTALS 189.        |

\*\*\*\*\*

IRRIGATION CONSUMPTIVE USE

\*\*\*\*\*  
 ELEV. 6300. FT.      5500. IRR. ACRES      IRR. SEASON 5/ 1/1978 - 8/10/1978  
 SNAKE WILLOW

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 5     | 2.73               |
| 6     | 5.30               |
| 7     | 5.80               |
| 8     | 1.51               |
|       | 15.33 YEARLY TOTAL |

NET DEPLETION = 7026. ACRE FT.      1.277 ACRE FT. PER ACRE

\*\*\*\*\*  
 ELEV. 6500. FT.      4000. IRR. ACRES      IRR. SEASON 5/20/1978 - 7/15/1978  
 TRIBS

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 5     | 0.99               |
| 6     | 5.04               |
| 7     | 2.67               |
|       | 8.70 YEARLY TOTAL  |

NET DEPLETION = 2900. ACRE FT.      0.725 ACRE FT. PER ACRE

\*\*\*\*\*  
 IRRIGATION TOTALS FOR WATER DISTRICT 54  
 9926. A.F. NET IRRIGATION DEPLETION      1.045 A.F./ACRE      9500. IRR. ACRES

WATER DISTRICT 55

RESERVOIR EVAPORATION AT 5354. FT.

\*\*\*\*\*

| MONTH | EVAPORATION(INCHES) | NET DEPLETION(AF.) |
|-------|---------------------|--------------------|
| 11    | 1.86                | 0.                 |
| 12    | 0.70                | 0.                 |
| 1     | 0.52                | 0.                 |
| 2     | 0.70                | 0.                 |
| 3     | 2.64                | 0.                 |
| 4     | 3.55                | 0.                 |
| 5     | 4.25                | 0.                 |
| 6     | 5.53                | 0.                 |
| 7     | 6.32                | 0.                 |
| 8     | 5.83                | 0.                 |
| 9     | 4.85                | 0.                 |
| 10    | 3.47                | 0.                 |
|       | 40.23               | TOTALS 0.          |

\*\*\*\*\*

IRRIGATION CONSUMPTIVE USE

\*\*\*\*\*  
 ELEV. 5400. FT. 1537. IRR. ACRES IRR. SEASON 5/15/1978 - 9/ 1/1978  
 LOWER SNAKE

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 5     | 1.71               |
| 6     | 5.44               |
| 7     | 6.68               |
| 8     | 4.81               |
| 9     | 0.09               |
|       | 18.72 YEARLY TOTAL |

NET DEPLETION = 2398.ACRE FT. 1.560 ACRE FT. PER ACRE  
 \*\*\*\*\*

IRRIGATION TOTALS FOR WATER DISTRICT 55  
 2398. A.F. NET IRRIGATION DEPLETION 1.560 A.F./ACRE 1537.IRR. ACRES

WATER DISTRICT 56

RESERVOIR EVAPORATION AT 5500. FT.

\*\*\*\*\*

| MONTH | EVAPORATION(INCHES) | NET DEPLETION(AF.) |
|-------|---------------------|--------------------|
| 11    | 1.83                | 3.                 |
| 12    | 0.70                | 1.                 |
| 1     | 0.70                | 1.                 |
| 2     | 0.70                | 1.                 |
| 3     | 2.41                | 8.                 |
| 4     | 3.38                | 17.                |
| 5     | 3.99                | 25.                |
| 6     | 5.26                | 33.                |
| 7     | 6.11                | 31.                |
| 8     | 5.65                | 24.                |
| 9     | 4.67                | 16.                |
| 10    | 3.49                | 9.                 |
|       | 38.89               | TOTALS 168.        |

\*\*\*\*\*

IRRIGATION CONSUMPTIVE USE

\*\*\*\*\*

ELEV. 5354. FT.      2230. IRR. ACRES      IRR. SEASON 4/ 1/1978 - 8/15/1978  
GREEN R

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 4     | 1.24               |
| 5     | 3.34               |
| 6     | 5.78               |
| 7     | 6.91               |
| 8     | 2.26               |
|       | 19.53 YEARLY TOTAL |

NET DEPLETION =      3629. ACRE FT.      1.628 ACRE FT. PER ACRE

\*\*\*\*\*

IRRIGATION TOTALS FOR WATER DISTRICT 56  
3629. A.F. NET IRRIGATION DEPLETION      1.628 A.F./ACRE      2230. IRR. ACRES

WATER DISTRICT 57

RESERVOIR EVAPORATION AT 6700. FT.

\*\*\*\*\*

| MONTH | EVAPORATION(INCHES) | NET DEPLETION(AF.) |
|-------|---------------------|--------------------|
| 11    | 1.64                | 16.                |
| 12    | 0.52                | 5.                 |
| 1     | 0.52                | 5.                 |
| 2     | 0.52                | 5.                 |
| 3     | 0.70                | 8.                 |
| 4     | 2.89                | 59.                |
| 5     | 3.65                | 76.                |
| 6     | 5.11                | 83.                |
| 7     | 5.89                | 77.                |
| 8     | 5.44                | 65.                |
| 9     | 4.59                | 47.                |
| 10    | 3.24                | 33.                |
|       | 34.73               | TOTALS 480.        |

\*\*\*\*\*

IRRIGATION CONSUMPTIVE USE

\*\*\*\*\*

ELEV. 6375. FT.      6800. IRR. ACRES      IRR. SEASON 5/25/1978 - 10/15/1978  
YAMPA R

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 5     | 0.57               |
| 6     | 5.33               |
| 7     | 5.98               |
| 8     | 5.01               |
| 9     | 3.12               |
| 10    | 0.81               |

20.82 YEARLY TOTAL

NET DEPLETION = 11800.ACRE FT.      1.735 ACRE FT. PER ACRE

\*\*\*\*\*

ELEV. 6600. FT.      3980. IRR. ACRES      IRR. SEASON 6/ 1/1978 - 8/15/1978  
TRIBS

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 6     | 5.07               |
| 7     | 5.69               |
| 8     | 2.30               |

13.05 YEARLY TOTAL

NET DEPLETION = 4330.ACRE FT.      1.088 ACRE FT. PER ACRE

\*\*\*\*\*

IRRIGATION TOTALS FOR WATER DISTRICT 57

16130. A.F. NET IRRIGATION DEPLETION      1.496 A.F./ACRE      10780. IRR. ACRES

WATER DISTRICT 58

RESERVOIR EVAPORATION AT 8000. FT.

\*\*\*\*\*

| MONTH | EVAPORATION(INCHES) | NET DEPLETION(AF.) |
|-------|---------------------|--------------------|
| 11    | 1.82                | 218.               |
| 12    | 0.70                | 84.                |
| 1     | 0.52                | 63.                |
| 2     | 0.52                | 64.                |
| 3     | 1.52                | 190.               |
| 4     | 2.53                | 360.               |
| 5     | 3.31                | 618.               |
| 6     | 4.61                | 968.               |
| 7     | 5.17                | 1074.              |
| 8     | 4.90                | 1001.              |
| 9     | 4.17                | 849.               |
| 10    | 2.92                | 585.               |
|       | 32.70               | TOTALS 6074.       |

\*\*\*\*\*

IRRIGATION CONSUMPTIVE USE

\*\*\*\*\*

ELEV. 8000. FT. 10500. IRR. ACRES IRR. SEASON 5/15/1978 - 8/31/1978  
 ABOVE YAMPA

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 5     | 1.32               |
| 6     | 4.28               |
| 7     | 4.17               |
| 8     | 4.24               |
|       | 14.00 YEARLY TOTAL |

NET DEPLETION = 12247. ACRE FT. 1.166 ACRE FT. PER ACRE

\*\*\*\*\*

ELEV. 6770. FT. 6320. IRR. ACRES IRR. SEASON 6/10/1978 - 9/15/1978  
 YAMPA TO ELK

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 6     | 3.35               |
| 7     | 4.59               |
| 8     | 4.01               |
| 9     | 1.10               |
|       | 13.05 YEARLY TOTAL |

NET DEPLETION = 6871. ACRE FT. 1.087 ACRE FT. PER ACRE

\*\*\*\*\*

ELEV. 6900. FT. 6600. IRR. ACRES IRR. SEASON 6/ 5/1978 - 9/ 5/1978  
 ELK

| MONTH | DEPLETION (INCHES) |
|-------|--------------------|
| 6     | 3.97               |
| 7     | 4.36               |
| 8     | 3.80               |
| 9     | 0.34               |
|       | 12.47 YEARLY TOTAL |

NET DEPLETION = 6857. ACRE FT. 1.039 ACRE FT. PER ACRE

\*\*\*\*\*



SUMMARY FOR WATER DISTRICT 43 IN ACRE-FT

|                                  |        |
|----------------------------------|--------|
| IRRIGATION DEPLETION             | 39214. |
| RESERVOIR EVAPORATION            | 1178.  |
| CHANGE IN RESERVOIR STORAGE      | -148.  |
| OUT OF BASIN DIVERSIONS          | 0.     |
| MUNICIPAL+INDUSTRIAL CONSUMPTION | 6300.  |
| MISC. USE OR CORRECTIONS         | 500.   |
| TOTAL DEPLETION                  | 47044. |

SUMMARY FOR WATER DISTRICT 44 IN ACRE-FT

|                                  |        |
|----------------------------------|--------|
| IRRIGATION DEPLETION             | 37191. |
| RESERVOIR EVAPORATION            | 2404.  |
| CHANGE IN RESERVOIR STORAGE      | 633.   |
| OUT OF BASIN DIVERSIONS          | 375.   |
| MUNICIPAL+INDUSTRIAL CONSUMPTION | 1000.  |
| MISC. USE OR CORRECTIONS         | 400.   |
| TOTAL DEPLETION                  | 42003. |

SUMMARY FOR WATER DISTRICT 47 IN ACRE-FT

|                                  |        |
|----------------------------------|--------|
| IRRIGATION DEPLETION             | 79087. |
| RESERVOIR EVAPORATION            | 6896.  |
| CHANGE IN RESERVOIR STORAGE      | 6977.  |
| OUT OF BASIN DIVERSIONS          | 462.   |
| MUNICIPAL+INDUSTRIAL CONSUMPTION | 100.   |
| MISC. USE OR CORRECTIONS         | 600.   |
| TOTAL DEPLETION                  | 94122. |



SUMMARY FOR WATER DISTRICT 54 IN ACRE-FT

|                                  |        |
|----------------------------------|--------|
| IRRIGATION DEPLETION             | 9926.  |
| RESERVOIR EVAPORATION            | 189.   |
| CHANGE IN RESERVOIR STORAGE      | 28.    |
| OUT OF BASIN DIVERSIONS          | 0.     |
| MUNICIPAL+INDUSTRIAL CONSUMPTION | 0.     |
| MISC. USE OR CORRECTIONS         | 100.   |
| TOTAL DEPLETION                  | 10244. |

SUMMARY FOR WATER DISTRICT 55 IN ACRE-FT

|                                  |       |
|----------------------------------|-------|
| IRRIGATION DEPLETION             | 2398. |
| RESERVOIR EVAPORATION            | 0.    |
| CHANGE IN RESERVOIR STORAGE      | 0.    |
| OUT OF BASIN DIVERSIONS          | 0.    |
| MUNICIPAL+INDUSTRIAL CONSUMPTION | 0.    |
| MISC. USE OR CORRECTIONS         | 100.  |
| TOTAL DEPLETION                  | 2498. |

SUMMARY FOR WATER DISTRICT 56 IN ACRE-FT

|                                  |       |
|----------------------------------|-------|
| IRRIGATION DEPLETION             | 3629. |
| RESERVOIR EVAPORATION            | 168.  |
| CHANGE IN RESERVOIR STORAGE      | 45.   |
| OUT OF BASIN DIVERSIONS          | 0.    |
| MUNICIPAL+INDUSTRIAL CONSUMPTION | 0.    |
| MISC. USE OR CORRECTIONS         | 100.  |
| TOTAL DEPLETION                  | 3942. |

SUMMARY FOR WATER DISTRICT 57 IN ACRE-FT

|                                  |        |
|----------------------------------|--------|
| IRRIGATION DEPLETION             | 16130. |
| RESERVOIR EVAPORATION            | 480.   |
| CHANGE IN RESERVOIR STORAGE      | 53.    |
| OUT OF BASIN DIVERSIONS          | 836.   |
| MUNICIPAL+INDUSTRIAL CONSUMPTION | 5200.  |
| MISC. USE OR CORRECTIONS         | 100.   |
| TOTAL DEPLETION                  | 22799. |

SUMMARY FOR WATER DISTRICT 58 IN ACRE-FT

|                                  |        |
|----------------------------------|--------|
| IRRIGATION DEPLETION             | 41839. |
| RESERVOIR EVAPORATION            | 6074.  |
| CHANGE IN RESERVOIR STORAGE      | 15534. |
| OUT OF BASIN DIVERSIONS          | 2900.  |
| MUNICIPAL+INDUSTRIAL CONSUMPTION | 700.   |
| MISC. USE OR CORRECTIONS         | 300.   |
| TOTAL DEPLETION                  | 67347. |

\*\*\*\*\*  
 DIVISION 6 BREAKDOWN BY RIVER BASIN  
 \*\*\*\*\*

|             | YAMPA    | LITTLE SNAKE | GREEN  | WHITE   | N PLATTE | COLORADO |
|-------------|----------|--------------|--------|---------|----------|----------|
| IRRIG DPLTN | 95160.   | 12324.       | 3629.  | 39214.  | 79087.   | 150328.  |
| RES EVAP    | 8958.    | 189.         | 168.   | 1178.   | 6896.    | 10493.   |
| CHG STORAGE | 16220.   | 28.          | 45.    | -148.   | 6977.    | 16145.   |
| MUN-IND     | 6900.    | 0.           | 0.     | 6300.   | 100.     | 13200.   |
| TRANS-MTN   | 4111.    | 0.           | 0.     | 0.      | 462.     | 4111.    |
| MISC        | 800.     | 200.         | 100.   | 500.    | 600.     | 1600.    |
| OUTFLOW     | 1464900. | 507100.      | 5000.  | 529000. | 362900.  | 2506000. |
| BASIN YIELD | 1597048. | 519842.      | 6942.  | 576044. | 457022.  | 2701877. |
| CONS USE    | 132148.  | 12742.       | 3942.  | 47044.  | 94122.   | 195877.  |
| PCT CONS    | 0.0827   | 0.0245       | 0.4409 | 0.0817  | 0.2059   | 0.0725   |

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DIVISION 6 TOTAL IRRIGATION DEPLETION IN ACRE FT. 229415.

IRRIGATED ACRES 237851.

ACRE FT. PER ACRE 0.965

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

North Platte outflow does not include Big Creek or Encampment River

Little Snake River does not include any uses in Wyoming