# Appendix E

# Sample Data and Historic Memos of Crop and Water Allocation Reports

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E-1 Sample Water Utilization Records from Bureau of Reclamation

E-2 Sample Crop and Water Data from Recent Reports by MRGCD and Bureau of Reclamation, by Division and District Totals

E-3 Historic Memos Regarding Preparation of Allocation Reports from Bureau of Reclamation

# Appendix E-1

# Sample Water Utilization Records from Bureau of Reclamation

7-2045 (3-79)
Bureau of Reclamation

# CROP PRODUCTION AND WATER UTILIZATION DATA FOR 19 91



| ADP Code (1-6) | Project & Subdivision | State | Region |
|---|---|---|---|
| 405930 | | | UC |

TYPE OF IRRIGATION SERVICE (7) ☑ Full ☐ Supplemental ☐ Temporary

| LINE CODE | MONTH | NET SUPPLY | OPERATIONAL SPILLS | TRANSPORTATION LOSSES | NONAGRICULTURAL DELIVERIES: MUNICIPAL INDUSTRIAL | NONAGRICULTURAL DELIVERIES: MISCELLANEOUS | DELIVERED TO FARMS | ACRE FEET PER ACRE |
|---|---|---|---|---|---|---|---|---|
| (10-12) | | (13-21) | (22-30) | (31-39) | (40-48) | (49-57) | (58-66) | |
| | PART E | PROJECT WATER (Acre Feet) | | | | | | |
| 201 | January | --- | | | | | | |
| 202 | February | --- | | | | | | |
| 203 | March | 51,750 | 27,980 | 15,530 | | | 8,240 ✓ | |
| 204 | April | 74,750 | 40,430 | 22,450 | | | 11,870 ✓ | |
| 205 | May | 76,570 | 20,560 | 28,040 | | | 27,970 ✓ | |
| 206 | June | 77,380 | 20,790 | 28,320 | | | 28,270 ✓ | |
| 207 | July | 69,270 | 18,600 | 25,340 | | | 25,330 ✓ | |
| 208 | August | 69,680 | 21,210 | 24,900 | | | 23,570 ✓ | |
| 209 | September | 63,440 | 17,090 | 21,330 | | | 25,020 ✓ | |
| 210 | October | 71,610 | 19,240 | 26,210 | | | 26,160 ✓ | |
| 211 | November | --- | | | | | | |
| 212 | December | --- | | | | | | |
| 213 | TOTAL PART I | 554,450 ✓ | 185,900 ✓ | 192,120 ✓ | | | 176,430 ✓ | |
| 214 | M&I POPULATION SERVED | | | | | | | |
| | PART F | NONPROJECT WATER (Acre Feet) | | | | | | |
| 216 | Annual Data | | | | | | | |
| 217 | TOTAL PARTS E & F | | | | | | | |

PART G — ANNUAL OPERATION, MAINTENANCE AND REPLACEMENT COSTS (Whole Dollars)

| | WORKS OPERATED BY | AGRICULTURAL (13-21) | MUNICIPAL & INDUSTRIAL (22-30) | OTHER (31-39) | TOTAL ALL FUNCTIONS |
|---|---|---|---|---|---|
| 221 | Bureau | 116,431 | 0 | (3) 6,565,854 | |
| 222 | Water Users | 6,995,851 | 0 | | |
| 223 | TOTAL COSTS | | | | |

PART H — DRIP AND SPRINKLER IRRIGATION (Whole Numbers)

| | | |
|---|---|---|
| 23 | Total acres sprinkler irrigated (13-21) | |
| 232 | Total acres drip irrigated (13-21) | |
| 233 | Footnotes | Reserved works; (El Vado Dam and San Acacia Diversion Dam) |
| 234 | | (2) Low-flow Conveyance Channel (Operation, Maintenance and Replacement Costs) |
| 235 | | Low-flow Conveyance Channel |
| 236 | | |
| 237 | | |

UNITED STA
DEPARTMENT OF THE ,ERIOR
BUREAU OF RECLAMATION

MONTHLY WATER DISTRIBUTION AND ANNUAL OPERATION AND MAINTENANCE COSTS RUN DATE: 92/04/15

1991

UPPER COLORADO REGION

PROJECT: MIDDLE RIO GRANDE, NM
DIVISION:
UNIT:
ENTITY: ADP CODE - 405930
STATE: NEW MEXICO
TYPE OF IRRIGATION SERVICE: FULL
ACRES IRRIGATED: 57,341

MONTHLY WATER DISTRIBUTION - QUANTITIES IN ACRE-FEET

| ITEM | MONTH | NET SUPPLY | OPERATIONAL SPILLS | TRANSPORT LOSSES | NONAGRICULTURAL DELIVERIES MUNIC.-IND. | NONAGRICULTURAL DELIVERIES MISCELLANEOUS | DELIVERED TO FARMS TOTAL | DELIVERED TO FARMS PER ACRE |
|---|---|---|---|---|---|---|---|---|
| 201 | JANUARY | | | | | | | |
| 202 | FEBRUARY | | | | | | | |
| 203 | MARCH | 51,750 | 27,980 | 15,530 | | | 8,240 | .14 |
| 204 | APRIL | 74,750 | 40,430 | 22,450 | | | 11,870 | .21 |
| 205 | MAY | 76,570 | 20,560 | 28,040 | | | 27,970 | .49 |
| 206 | JUNE | 77,380 | 20,790 | 28,320 | | | 28,270 | .49 |
| 207 | JULY | 69,270 | 18,600 | 25,340 | | | 25,330 | .44 |
| 208 | AUGUST | 69,680 | 21,210 | 24,900 | | | 23,570 | .41 |
| 209 | SEPTEMBER | 63,440 | 17,090 | 21,330 | | | 25,020 | .44 |
| 210 | OCTOBER | 71,610 | 19,240 | 26,210 | | | 26,160 | .46 |
| 211 | NOVEMBER | | | | | | | |
| 212 | DECEMBER | | | | | | | |
| 213 | TOTAL ANNUAL | 554,450 | 185,900 | 192,120 | | | 176,430 | 3.08 |

ANNUAL OPERATION, MAINTENANCE, AND REPLACEMENT COSTS (WHOLE DOLLARS)

| | WORKS OPERATED BY | AGRICULTURAL | MUNIC.-IND. | OTHER | TOTAL | AGRICULTURAL COST PER ACRE |
|---|---|---|---|---|---|---|
| 221 | BUREAU | 116,431 | | 6,565,854 | 6,682,285 | 2.03 |
| 222 | WATER USER | 6,995,851 | | | 6,995,851 | 122.00 |
| 223 | TOTAL | 7,112,282 | | 6,565,854 | 13,678,136 | 124.03 |

FOOTNOTE D/AGRIC OM&R - RESERVED WORKS (EL VADO DAM & SAN ACACIA

FOOTNOTE DIVERSION DAM).

FOOTNOTE E/WATER USERS OM&R - LOW-FLOW CONVEYANCE CHANNEL.

FOOTNOTE F/OTHER OM&R - LOW-FLOW CONVEYANCE CHANNEL.

SERVICE WIDE STANDARD FOOTNOTES
A/ ESTIMATED
B/ INCLUDES TRANSPORTATION LOSSES
C/ INCLUDES OPERATIONAL SPILLS

MIDDLE RIO GRANDE CONSERVANCY DISTRICT
All Divisions.

ACRE, Ft.

# MONTHLY WATER DISTRIBUTION

Project M. R. G. C. D. Area Irrigated _____ Year 1990

## QUANTITIES IN ACRE-FEET

| MONTH | Diverted from Stream 1 | Inflow from Reservoirs and other sources | Delivered to Reservoirs 2 | Net Supply 3 | Main Canal Waste | Main Canal Losses | Delivered to Laterals a | Lateral Waste | Lateral Losses | Non-Irrigation Deliveries 4 | DELIVERED TO FARMS b | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Total | Per Acre |
| January, | ——— | | | | ——— | | | | | | | |
| February, | ——— | | | | ——— | | | | | | | |
| March, | 49,360 | | | | 24,690 | 12,330 | 12,340 | 1880 | 2490 | | 7870 | |
| April, | 61,470 | | | | 30,740 | 15,370 | 15,360 | 2460 | 3090 | | 9810 | |
| May, | 69,140 | | | | 12420 | 17,300 | 39,420 | 6300 | 7880 | | 25210 | |
| June, | 65,240 | | | | 11,760 | 16,300 | 37,180 | 5940 | 7420 | | 23,810 | |
| July, | 71,130 | | | | 12,780 | 12,770 | 40,580 | 6490 | 8120 | | 25,930 | |
| August, | 68,610 | | | | 13,090 | 17,160 | 38,360 | 6270 | 7850 | | 24230 | |
| September, | 61,600 | | | | 11,860 | 15,400 | 34,340 | 5610 | 7010 | | 21,720 | |
| October, | 60,180 | | | | 9130 | 15080 | 35,970 | 5470 | 6740 | | 23,750 | |
| November, | ——— | | | | ——— | | | | | | | |
| December, | ——— | | | | ——— | | | | | | | |
| Total, | 506,730 | | | | 126,570 | 126,710 | 253,450 | 40520 | 50,600 | | 162,330 | |
| Acre ft. per acre, | | | | | | | | | | | | |
| Per cent Net Supply, | | | | | 25% | 25% | 50% | 8% | 10% | | 32% | |

1 Diversion amount exclusive of waste at head gates for sand sluicing, etc.

2 Reservoirs connected with distributing system only.

3 Diversions plus inflow from reservoirs and other sources less delivery to reservoirs.

4 Do not include power.

a Measured at _____

b Measured at _____

MIDDLE RIO GRANDE CONSERVANCY DISTRICT

All Divisions

# MONTHLY WATER DISTRIBUTION

Project M.R.G.C.D. Area Irrigated _____ Year 1989

## QUANTITIES IN ACRE-FEET

| MONTH | Diverted from Stream 1 | Inflow from Reservoirs and other sources | Delivered to Reservoirs 2 | Net Supply 3 | Main Canal Waste | Main Canal Losses | Delivered to Laterals a | Lateral Waste | Lateral Losses | Non-irrigation Deliveries 4 | DELIVERED TO FARMS b | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Total | Per Acre |
| | waste | | waste | losses | | | | | | | | |
| | | | | | | | | | | | | |
| | 58010 | | | | 29010 | 14540 | 14460 | 2300 | 2890 | | 9270 | |
| | 85840 | | | | 42930 | 21480 | 21430 | 3440 | 4290 | | 13700 | |
| | 88640 | | | | 14550 | 22150 | 51940 | 8310 | 10390 | | 33240 | |
| | 73560 | | | | 12180 | 18370 | 43010 | 6880 | 8600 | | 27530 | |
| | 73560 | | | | 12160 | 18400 | 43000 | 6870 | 8590 | | 27540 | |
| | 68560 | | | | 11320 | 17140 | 40100 | 6420 | 8020 | | 25660 | |
| | 65770 | | | | 10880 | 16450 | 38440 | 6140 | 7680 | | 24620 | |
| | 53710 | | | | 8880 | 13390 | 31440 | 5030 | 6290 | | 20120 | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | 567,150 | | | | 141,910 | 141,920 | 283,820 | 45,390 | 56,750 | | 181,680 | |
| | | | | | | | | | | | | |
| | | | | | | | 50 | | | | 32% | |

Diversion amount exclusive of waste at head gates for sand sluicing, etc.

Reservoirs connected with distributing system only.

Diversions plus inflow from reservoirs and other sources less delivery to reservoirs.

Do not include power.

a Measured at _____

b Measured at _____

MIDDLE RIO GRANDE CONSERVANCY DISTRICT

All Divisions

# MONTHLY WATER DISTRIBUTION

Project MRGCD Area Irrigated _____ Year 1988

## QUANTITIES IN ACRE-FEET

| MONTH | Diverted from Stream 1 | Inflow from Reservoirs and other sources | Delivered to Reservoirs 2 | Net Supply 3 | Main Canal Waste | Main Canal Losses | Delivered to Laterals a | Lateral Waste | Lateral Losses | Non-irrigation Deliveries 4 | DELIVERED TO FARMS b | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Total | Per Acre |
| January, | — | | | | | | | | | | | |
| | — | | | | | | | | | | | |
| | 62790 | | | | 31410 | 14150 | 17230 | 2480 | 4360 | | 10390 | |
| | 72830 | | | | 36420 | 16430 | 19980 | 2940 | 5040 | | 12000 | |
| | 95740 | | | | 11570 | 21480 | 62690 | 8950 | 15930 | | 37810 | |
| | 91070 | | | | 11080 | 22800 | 57190 | 8180 | 14500 | | 34510 | |
| | 74600 | | | | 9230 | 17970 | 47400 | 6800 | 11980 | | 28620 | |
| | 75490 | | | | 8870 | 18100 | 48520 | 6960 | 12240 | | 29320 | |
| | 53680 | | | | 6830 | 12130 | 34720 | 4990 | 8740 | | 20990 | |
| | 70450 | | | | 9250 | 15910 | 45290 | 6800 | 11710 | | 26780 | |
| | — | | | | | | | | | | | |
| | — | | | | | | | | | | | |
| | 596650 | | | | 124660 | 138970 | 333020 | 48100 | 84500 | | 200420 | |
| | | | | | | | | | | | | |
| | | | | | 21 % | 23 % | 56 % | 8 % | 14 % | | 34 % | |

1 Diversion amount exclusive of waste at head gates for sand sluicing, etc.

2 Reservoirs connected with distributing system only.

3 Diversions plus inflow from reservoirs and other sources less delivery to reservoirs.

4 Do not include power.

a Measured at _____

b Measured at _____

MIDDLE RIO GRANDE CONSERVANCY DISTRICT

All Divisions

# MONTHLY WATER DISTRIBUTION

Project M.R.G.C.D. Area Irrigated Year 1987

## QUANTITIES IN ACRE-FEET

| MONTH | Diverted from Stream 1 | Inflow from Reservoirs and other sources | Delivered to Reservoirs 2 | Net Supply 3 | Main Canal Waste | Main Canal Losses | Delivered to Laterals a | Lateral Waste | Lateral Losses | Non-Irrigation Deliveries 4 | DELIVERED TO FARMS b Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ——— | | | ——— | | | | | | | | |
| February, | ——— | | | ——— | | | | | | | | |
| March, | 32 910 | | | | 7240 | 6580 | 19090 | 2630 | 4940 | | 11520 | |
| April, | 77010 | | | | 16940 | 15400 | 44670 | 6160 | 11550 | | 26960 | |
| May, | 83740 | | | | 18420 | 16750 | 48570 | 6700 | 12560 | | 29310 | |
| June, | 85010 | | | | 18700 | 17000 | 49310 | 6800 | 12750 | | 29760 | |
| July, | 90350 | | | | 19880 | 18070 | 52400 | 7230 | 13550 | | 31620 | |
| August, | 68360 | | | | 15040 | 13670 | 39650 | 5470 | 10250 | | 23930 | |
| September, | 75580 | | | | 16630 | 15110 | 43840 | 6050 | 11340 | | 26450 | |
| October, | 75710 | | | | 16430 | 14940 | 43340 | 5980 | 11210 | | 26150 | |
| November, | ——— | | | ——— | | | | | | | | |
| December, | ——— | | | ——— | | | | | | | | |
| Total, | 588670 | | | | 129280 | 117520 | 340870 | 47020 | 88150 | | 205700 | |
| Acre ft. per acre, | | | | | | | | | | | 2.86 | |
| | | | | | 22 % | 20% | 58% | 08 % | 15% | | 35 % | |

1 Diversion amount exclusive of waste at head gates for sand sluicing, etc.

2 Reservoirs connected with distributing system only.

3 Diversions plus inflow from reservoirs and other sources less delivery to reservoirs.

4 Do not include power.

a Measured at ———

b Measured at ———

Table 6

Form 7-322 (July 1960)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

# MONTHLY WATER DISTRIBUTION

Project MIDDLE RIO GRANDE Area Irrigated 58,801 Year 1986

| MONTH | Diverted from Stream 1 d/ | Inflow from Reservoirs and other sources | Delivered to Reservoirs 2 | Net Supply 3 d/ | Main Canal Waste c/ | Main Canal Losses c/ | Delivered to Laterals a/ | Lateral Waste c/ | Lateral Losses c/ | Non-Irrigation Deliveries 4 | DELIVERED TO FARM Total b/ | Per Acre |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| January, | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| March, | 61,930 | | | 61,930 | 30,970 | 16,670 | 14,290 | 4,310 | 3,480 | | 6,500 | .11 |
| April, | 77,140 | | | 77,140 | 38,570 | 18,510 | 20,060 | 5,660 | 4,380 | | 10,020 | .17 |
| May, | 80,180 | | | 80,180 | 13,350 | 20,020 | 46,810 | 13,050 | 10,090 | | 23,670 | .40 |
| | 74,630 | | | 74,630 | 12,450 | 18,620 | 43,560 | 12,210 | 9,420 | | 21,930 | .37 |
| | 71,890 | | | 71,890 | 12,090 | 17,400 | 42,400 | 11,900 | 9,230 | | 21,270 | .36 |
| August, | 82,780 | | | 82,780 | 13,850 | 20,690 | 48,240 | 13,620 | 10,300 | | 24,320 | .41 |
| | 68,530 | | | 68,530 | 11,680 | 17,120 | 39,730 | 11,230 | 8,440 | | 20,060 | .34 |
| | 48,870 | | | 48,870 | 8,450 | 12,150 | 28,270 | 7,830 | 6,590 | | 13,850 | .24 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | 565,950 | 141,410 | 141,180 | 283,360 | 79,810 | 61,930 | | 141,620 | 2.41 |
| Acre ft. per acre, | | | | 9.62 | 2.40 | 2.40 | 4.82 | 1.36 | 1.05 | | 2.41 | |
| | | | | 100 | 24.99 | 24.95 | 50.06 | 14.10 | 10.94 | | 25.02 | |

1 Diversion amount exclusive of waste at head gates for sand sluicing, etc.
2 Reservoirs connected with distributing system only.
3 Diversions plus inflow from reservoirs and other sources less delivery to reservoirs.
4 Do not include power.

a Measured at Estimated at head of laterals
b Measured at Estimated at farm headgates
c Estimated
d May include water being routed through system and monor diversions for dredge operation.

MIDDLE RIO GRANDE CONSERVANCY DISTRICT

1985

# MONTHLY WATER DISTRIBUTION

Project Middle Rio Grande Area Irrigated 58,433 Year 1985

## QUANTITIES IN ACRE-FEET

| MONTH | Diverted from Stream 1 | Inflow from Reservoirs and other sources | Delivered to Reservoirs 2 | Net Supply 3 | Main Canal Waste a | Main Canal Losses | Delivered to Laterals a | Lateral Waste | Lateral Losses | Non-Irrigation Deliveries 4 | DELIVERED TO FARMS b | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Total | Per Acre |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | 32270 | | | | 16140 | 8260 | 7870 | 2360 | 1600 | | 3910 | |
| | 63930 | | | | 32350 | 16290 | 15290 | 4510 | 3090 | | 7680 | |
| | 63130 | | | | 11620 | 15330 | 36180 | 10520 | 7290 | | 18370 | |
| June, | 74100 | | | | 13550 | 17720 | 42830 | 12580 | 8720 | | 21530 | |
| July, | 74630 | | | | 13640 | 17980 | 43010 | 12670 | 8760 | | 21580 | |
| August, | 61370 | | | | 11430 | 14690 | 35250 | 10360 | 7240 | | 17650 | |
| September, | 57090 | | | | 10660 | 13960 | 32470 | 9530 | 6660 | | 16280 | |
| October, | 42410 | | | | 8030 | 10390 | 23990 | 7910 | 5560 | | 10520 | |
| November, | | | | | | | | | | | | |
| December, | | | | | | | | | | | | |
| Total, | 468930 | | | | 117420 | 114620 | 236850 | 70440 | 48920 | | 117530 | |
| Acre ft. per acre, | | | | | | | | | | | | |
| Per cent Net Supply, | --- | | | | | | | | | | | |

1 Diversion amount exclusive of waste at head gates for canal sluicing, etc.

2 Reservoirs connected with distributing system only.

3 Diversions plus inflow from reservoirs and other sources less delivery to reservoirs.

4 Do not include power.

a Measured at _____

b Measured at _____

Form 7-322 (6-, 1960)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

# MONTHLY WATER DISTRIBUTION

Project Middle Rio Grande Area Irrigated 56,244 Year 1983

## QUANTITIES IN ACRE-FEET

| MONTH | Diverted from Stream 1 d/ | Inflow from Reservoirs and other sources | Delivered to Reservoirs 2 | Net Supply 3 d/ | Main Canal Waste c/ | Main Canal Losses c/ | Delivered to Laterals a/ | Lateral Waste c/ | Lateral Losses c/ | Non-Irrigation Deliveries 4 | DELIVERED TO FARMS b Total c/ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| January, | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | 26,800 | | | 26,800 | 13,400 | 4,890 | 8,510 | 910 | 2,320 | | 5,280 | |
| | 50,690 | | | 50,690 | 14,510 | 9,630 | 26,550 | 3,050 | 6,930 | | 16,570 | |
| | 66,010 | | | 66,010 | 13,140 | 12,550 | 40,320 | 4,490 | 10,620 | | 25,210 | |
| | 68,120 | | | 68,120 | 13,610 | 12,970 | 41,540 | 4,830 | 10,770 | | 25,940 | |
| | 73,600 | | | 73,600 | 14,670 | 13,980 | 44,950 | 5,120 | 11,780 | | 28,050 | |
| | 66,100 | | | 66,100 | 13,140 | 12,540 | 40,420 | 4,460 | 10,630 | | 25,330 | |
| | 59,110 | | | 59,110 | 11,710 | 11,250 | 36,150 | 3,910 | 9,490 | | 22,750 | |
| | 48,310 | | | 48,310 | 9,540 | 9,190 | 29,580 | 3,140 | 7,510 | | 18,930 | |
| | 6,590 | | | 6,590 | 1,280 | 1,280 | 4,030 | 380 | 970 | | 2,680 | |
| | | | | | | | | | | | | |
| | 465,330 | | | 465,330 | 105,000 | 88,280 | 272,050 | 30,290 | 71,020 | | 170,740 | |
| | 8.27 | | | 8.27 | 1.86 | 1.57 | 4.84 | 0.54 | 1.26 | | 3.04 | |
| Per cent Net Supply, | 100 | | | 100 | 22.56 | 18.97 | 58.47 | 6.51 | 15.26 | | 36.70 | |

1 Diversion amount exclusive of waste at head gates for sand sluicing, etc.

2 Reservoirs connected with distributing system only.

3 Diversions plus inflow from reservoirs and other sources less delivery to reservoirs.

4 Do not include power.

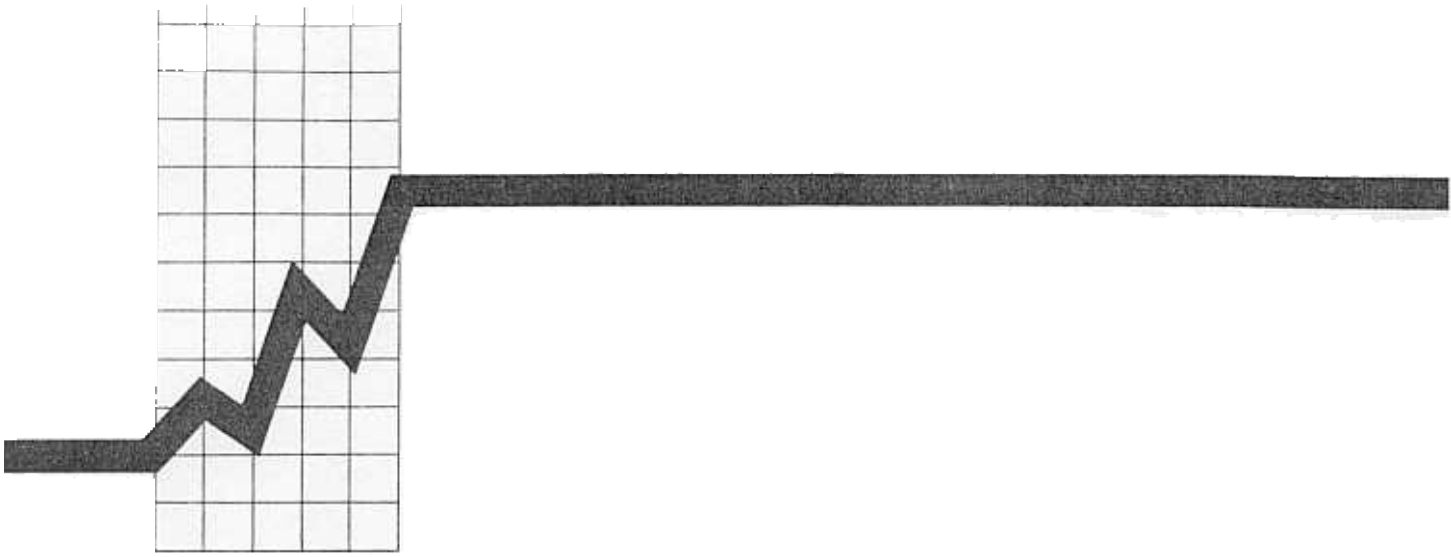
a ~~Measured at~~ Estimated at head of laterals

b ~~Measured at~~ Estimated at farm headgates

c Estimated

GPO 849834

d May include water being routed through system and minor diversions for dredge operation.



# 1985 Summary Statistics

## Vol. I Water, Land, and Related Data

United States Department of the Interior
Donald P. Hodel, Secretary

Bureau of Reclamation
C. Dale Duvall, Commissioner

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## Summary Report


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# WATER DISTRIBUTION - 1984



| STATE AND PROJECT | SUPPLY CODE | IRRIGATED ACRES | ACRE-FEET NET SUPPLY | OPERATIONAL SPILLS | TRANSPORT LOSSES | MUNICIPAL INDUSTRIAL | MISCELLANEOUS | DELIVERED TO FARMS TOTAL | DELIVERED TO FARMS PER ACRE |
|---|---|---|---|---|---|---|---|---|---|
| **NEBRASKA** | | | | | | | | | |
| **LOWER MISSOURI REGION** | | | | | | | | | |
| 1/ CENTRAL NEBRASKA PP&ID | | 37,977 | 78,240 | 526 | 26,033 | - | - | 51,681 | 1.36 |
| MIRAGE FLATS | | 10,736 | 18,369 | - | 9,335 | - | - | 9,034 | .84 |
| NORTH PLATTE, NE-WY | | | | | | | | | |
| NEBRASKA LANDS | | | | | | | | | |
| GERING-FT LARAMIE I D | | 52,614 | 177,240 | 32,060 | 44,690 | - | - | 100,490 | 1.91 |
| NORTHPORT I D | | 14,357 | 81,730 | 8,480 | 36,010 | - | - | 37,240 | 2.59 |
| PATHFINDER I D | | 96,156 | 437,705 | 470 | 215,582 | - | - | 221,653 | 2.31 |
| SP-WARREN ACT CONTR | | | | | | | | | |
| BEERLINE ICC | | 928 | 1,970 | - | 640 | - | - | 1,330 | 1.43 |
| BROWNS CREEK I D | | 4,585 | 13,060 | - | 4,390 | - | - | 8,670 | 1.89 |
| CENTRAL I D | | 1,450 | 6,070 | - | 1,940 | - | - | 4,130 | 2.85 |
| CHIMNEY ROCK I D | | 5,172 | 15,410 | - | 5,040 | - | - | 10,370 | 2.01 |
| FARMERS I D | | 60,179 | 265,510 | 73,160 | 88,770 | - | - | 103,580 | 1.72 |
| GERING I D | | 10,959 | 52,120 | - | 16,670 | - | - | 35,450 | 3.23 |
| TOTAL-SP-WARREN ACT CONTR | | 83,273 | 354,140 | 73,160 | 117,450 | - | - | 163,530 | 1.96 |
| TOTAL-NEBRASKA LANDS | | 246,400 | 1,050,815 | 114,170 | 413,732 | - | - | 522,913 | 2.12 |
| TOTAL-NORTH PLATTE, NE-WY | | 246,400 | 1,050,815 | 114,170 | 413,732 | - | - | 522,913 | 2.12 |
| PICK-SLOAN MBP | | | | | | | | | |
| BOSTWICK DIV | | | | | | | | | |
| NEBRASKA-BOSTWICK I D | | 20,461 | 58,875 | 8,737 | 21,692 | - | - | 28,446 | 1.39 |
| FRENCHMAN-CAMBRIDGE | | | | | | | | | |
| FRENCHMAN-CAMBRIDGE I D | | 43,088 | 81,232 | 5,034 | 20,546 | - | - | 55,652 | 1.29 |
| FRENCHMAN VALLEY I D | | 8,606 | 13,367 | 806 | 5,047 | - | - | 7,514 | .87 |
| M&RW IRRIGATION DIST | | 10,856 | 19,296 | 1,385 | 10,171 | - | - | 7,740 | .71 |
| TOTAL-FRENCHMAN-CAMBRIDGE | | 62,550 | 113,895 | 7,225 | 35,764 | - | - | 70,906 | 1.13 |
| MIDDLE LOUP DIV | | | | | | | | | |
| FARWELL UNIT | | 45,337 | 79,637 | 3,797 | 29,558 | - | - | 46,282 | 1.02 |
| SARGENT UNIT | | 12,550 | 27,915 | 378 | 7,489 | - | - | 20,048 | 1.60 |
| TOTAL-MIDDLE LOUP DIV | | 57,887 | 107,552 | 4,175 | 37,047 | - | - | 66,330 | 1.15 |
| OREGON TRAIL DIV, NE-WY | | | | | | | | | |
| GLENDO UNIT-NE | | | | | | | | | |
| BRIDGEPORT I D | | 8,190 | 34,230 | - | 10,930 | - | - | 23,300 | 2.84 |
| ENTERPRISE I D | | 7,384 | 29,080 | - | 9,380 | - | - | 19,700 | 2.67 |
| 1/ MITCHELL I D | | 11,625 | 35,060 | 4,840 | 2,450 | - | - | 27,770 | 2.39 |
| TOTAL-GLENDO UNIT-NE | | 27,199 | 98,370 | 4,840 | 22,760 | - | - | 70,770 | 2.60 |
| TOTAL-OREGON TRAIL DIV, NE-WY | | 27,199 | 98,370 | 4,840 | 22,760 | - | - | 70,770 | 2.60 |
| SANDHILLS DIV | | | | | | | | | |
| AINSWORTH UNIT | | 31,315 | 63,443 | 6,392 | 14,388 | - | - | 42,663 | 1.36 |
| TOTAL-PICK-SLOAN MBP | | 199,412 | 442,135 | 31,369 | 131,651 | - | - | 279,115 | 1.40 |
| TOTALS - NEBRASKA | | 494,525 | 1,589,559 | 146,065 | 580,751 | - | - | 862,743 | |
| **NEVADA** | | | | | | | | | |
| **MID PACIFIC REGION** | | | | | | | | | |
| HUMBOLDT | | 27,391 | 1,123,030 | 984,905 | 49,723 | - | - | 88,402 | |
| NEWLANDS | | 61,702 | 375,702 | - | 160,764 | - | 1,200 | 213,738 | |
| TRUCKEE STORAGE | | 11,430 | 50,000 | - | 25,000 | - | - | 25,000 | |
| 1/ WALKER RIVER I D | | 60,210 | 381,000 | - | 6,840 | - | - | 374,160 | |
| **LOWER COLORADO REGION** | | | | | | | | | |
| BOULDER CANYON | | | | | | | | | |
| M&I USERS | | | | | | | | | |
| M&I USERS, NV | | | 28,421 | - | - | 28,421 | - | | |
| ROBERT B. GRIFFITH WATER PRJ | | | 139,900 | - | - | 139,900 | - | | |
| TOTALS - NEVADA | | 160,733 | 2,098,053 | 984,905 | 242,327 | 168,321 | 1,200 | | |
| **NEW MEXICO** | | | | | | | | | |
| **UPPER COLORADO REGION** | | | | | | | | | |
| HAMMOND | | | | | | - | - | 16,570 | |
| NAVAJO UNIT, CRSP | | 3,091 | 29,822 | 3,290 | 9,962 | 18,580 | - | - | |
| | | - | 18,580 | - | - | | | | |
| **SOUTHWEST REGION** | | | | | | | | | |
| CARLSBAD | | 24,234 | 75,885 | 2 | 21,585 | - | 2,441 | 51,857 | 2.14 |
| FORT SUMNER | | 6,265 | 41,234 | - | 12,372 | - | - | 28,862 | 4.61 |
| MIDDLE RIO GRANDE | | 57,232 | 525,883 | 171,360 | 192,920 | - | 13,193 | 148,410 | 2.59 |
| RIO GRANDE, NM-TX | | | | | | | | | |
| RIO GRANDE, NM | | | | | | | | | |
| ELEPHANT BUTTE I D | | 79,201 | 413,536 | 24,730 | 166,361 | - | - | 222,445 | 2.81 |
| SAN JUAN-CHAMA | | 2,408 | 98,448 | 728 | 2,696 | 80,137 | 8,001 | 6,886 | 2.86 |
| TUCUMCARI | | 30,871 | 75,043 | - | 35,292 | - | - | 39,751 | 1.29 |
| VERMEJO | | 6,552 | 8,924 | - | 2,060 | - | - | 6,864 | 1.05 |
| TOTALS - NEW MEXICO | | 209,854 | 1,287,355 | 200,110 | 443,248 | 98,717 | 23,635 | | |

# WATER DISTRIBUTION - 1982

TABLE 12
PAGE 6 OF 10

| STATE AND PROJECT | SUPPLY CODE | IRRIGATED ACRES | ACRE-FEET NET SUPPLY | OPERATIONAL SPILLS | TRANSPORT LOSSES | MUNICIPAL INDUSTRIAL | MISCELLANEOUS | DELIVERED TO FARMS TOTAL | DELIVERED TO FARMS PER ACRE |
|---|---|---|---|---|---|---|---|---|---|
| MONTANA (CONT) | | | | | | | | | |
| GREENFIELDS DIVISION | F | 76,227 | 237,670 | 33,469 | 88,370 | 35 | - | 115,796 | 1.52 |
| | T | 2,009 | 6,076 | 856 | 2,260 | - | - | 2,960 | 1.47 |
| TOTAL-SUN RIVER | | 86,797 | 295,806 | 52,585 | 103,164 | 35 | - | 140,022 | 1.61 |
| | | 350,389 | 1,512,639 | 177,306 | 632,217 | 2,975 | 4,480 | 695,661 | 1.99 |
| NEBRASKA | | | | | | | | | |
| LOWER MISSOURI REGION | | | | | | | | | |
| CENTRAL NEBRASKA PP&ID | | 36,468 | 51,970 | | | - | - | 51,970 | |
| MIRAGE FLATS | | 11,111 | 12,930 | | 6,578 | - | - | 6,352 | |
| NORTH PLATTE, NE-WY | | | | | | | | | |
| NEBRASKA LANDS | | | | | | | | | |
| GERING-FT LARAMIE I D | | 52,368 | 148,450 | 17,860 | 42,710 | - | - | 87,880 | |
| NORTHPORT I D | | 15,027 | 72,050 | 10,350 | 32,930 | - | - | 28,770 | |
| PATHFINDER I D | | 96,156 | 334,701 | 630 | 166,556 | 391 | - | 167,224 | |
| SP-WARREN ACT CONTR | | | | | | | | | |
| BEERLINE ICC | | 867 | 1,650 | - | 530 | - | - | 1,120 | 1.29 |
| BROWNS CREEK I D | | 4,058 | 10,270 | - | 3,290 | - | - | 6,980 | 1.72 |
| CENTRAL I D | | 1,450 | 5,570 | - | 1,763 | 379 | - | 3,428 | 2.36 |
| CHIMNEY ROCK I D | | 5,172 | 14,840 | - | 4,660 | 161 | - | 10,019 | 1.94 |
| FARMERS I D | | 61,972 | 179,030 | 17,660 | 78,220 | - | - | 83,150 | 1.34 |
| GERING I D | | 12,046 | 38,970 | - | 16,050 | 1,460 | - | 21,460 | 1.78 |
| TOTAL-SP-WARREN ACT CONTR | | 85,565 | 250,330 | 17,660 | 104,513 | 2,000 | - | 126,157 | 1.47 |
| TOTAL-NEBRASKA LANDS | | 249,116 | 805,531 | 46,400 | 346,709 | 2,391 | - | 410,031 | 1.65 |
| TOTAL-NORTH PLATTE, NE-WY | | 249,116 | 805,531 | 46,400 | 346,709 | 2,391 | - | 410,031 | 1.65 |
| PICK-SLOAN MBP | | | | | | | | | |
| BOSTWICK DIV | | | | | | | | | |
| NEBRASKA-BOSTWICK I D | | 20,492 | 39,778 | 4,530 | 18,232 | | - | 17,914 | 93 |
| FRENCHMAN-CAMBRIDGE | | | | | | | | | |
| FRENCHMAN-CAMBRIDGE I D | | 43,580 | 71,670 | 4,596 | 23,783 | | - | 43,291 | 99 |
| FRENCHMAN VALLEY I D | | 8,720 | 11,298 | 473 | 4,500 | | - | 6,325 | 73 |
| H&RW IRRIGATION DIST | | 10,558 | 21,159 | 1,887 | 12,108 | - | - | 7,164 | 68 |
| TOTAL-FRENCHMAN-CAMBRIDGE | | 62,858 | 104,127 | 6,956 | 40,391 | - | - | 56,780 | 91 |
| MIDDLE LOUP DIV | | | | | | | | | |
| FARWELL UNIT | | 46,794 | 71,126 | 4,536 | 31,204 | - | - | 35,383 | 76 |
| SARGENT UNIT | | 13,079 | 21,456 | 268 | 9,876 | - | - | 11,312 | 87 |
| TOTAL-MIDDLE LOUP DIV | | 59,873 | 92,582 | 4,804 | 41,080 | - | - | 46,695 | |
| OREGON TRAIL DIV, NE-WY | | | | | | | | | |
| GLENDO UNIT-NE | | | | | | | | | |
| BRIDGEPORT I D | | 8,190 | 27,300 | - | 8,590 | 300 | | | |
| ENTERPRISE I D | | 7,337 | 25,370 | - | 8,150 | 70 | | | |
| MITCHELL I D | | 13,218 | 24,370 | 510 | 1,760 | - | | | |
| TOTAL-GLENDO UNIT-NE | | 28,745 | 77,040 | 510 | 18,500 | 370 | | | |
| TOTAL-OREGON TRAIL DIV, NE-WY | | 28,745 | 77,040 | 510 | 18,500 | 370 | - | | 2.01 |
| SANDHILLS DIV | | | | | | | | | |
| AINSWORTH UNIT | | 33,950 | 86,445 | | 12,771 | - | | 46,054 | |
| TOTAL-PICK-SLOAN MBP | | 205,918 | 377,970 | | 130,974 | 370 | - | 224,206 | |
| | | 502,613 | 1,248,401 | 68,820 | 484,261 | 2,761 | - | 692,559 | 1.38 |
| NEVADA | | | | | | | | | |
| MID PACIFIC REGION | | | | | | | | | |
| HUMBOLOT | | 33,835 | 154,688 | 37,015 | 38,791 | - | - | 78,882 | 2.33 |
| NEWLANDS | | 66,487 | 323,939 | - | - | - | - | 323,939 | 4.87 |
| TRUCKEE STORAGE | | 11,430 | 50,000 | - | 25,000 | - | - | 25,000 | 2.19 |
| 1/ WALKER RIVER I D | | 60,210 | 381,000 | - | 6,840 | - | - | 374,160 | 6.21 |
| LOWER COLORADO REGION | | | | | | | | | |
| BOULDER CANYON | | | | | | | | | |
| M&I USERS | | | | | | | | | |
| M&I USERS, NV | | - | 31,152 | - | - | 31,152 | - | - | - |
| ROBERT B. GRIFFITH WATER PRJ | | - | 122,733 | - | - | 122,733 | - | - | - |
| TOTALS - NEVADA | | 171,962 | 1,063,512 | 37,015 | 70,631 | 153,885 | - | 801,981 | 4.66 |
| NEW MEXICO | | | | | | | | | |
| UPPER COLORADO REGION | | | | | | | | | |
| HAMMOND | | 2,986 | 30,785 | 11,300 | 3,187 | - | - | 16,298 | 5.46 |
| NAVAJO UNIT, CRSP | | - | 18,484 | - | - | 18,484 | - | - | - |
| PINE RIVER | | | | | | | | | |
| PINE RIVER, NM | | 395 | 2,300 | - | 233 | - | - | 2,067 | 5.23 |
| SOUTHWEST REGION | | | | | | | | | |
| CARLSBAD | | 22,711 | 73,671 | 241 | 18,832 | - | 1,638 | 52,960 | |
| FORT SUMNER | | 6,061 | 42,124 | - | 12,637 | - | - | 29,487 | |
| MIDDLE RIO GRANDE | | 54,359 | 434,790 | 129,580 | 155,820 | - | - | 149,390 | |
| RIO GRANDE, NM-TX | | | | | | | | | |

# WATER DISTRIBUTION - 1981

| STATE AND PROJECT | SUPPLY CODE | IRRIGATED ACRES | ACRE-FEET NET SUPPLY | OPERATIONAL SPILLS | TRANSPORT LOSSES | MUNICIPAL INDUSTRIAL | MISCELLANEOUS | DELIVERED TO FARMS TOTAL | DELIVERED TO FARMS PER ACRE |
|---|---|---|---|---|---|---|---|---|---|
| NEW MEXICO (CONT) | | | | | | | | | |
| CARLSBAD | | 20,545 | 45,454 | - | 12,848 | - | - | 32,606 | 1.59 |
| FORT SUMNER | | 5,998 | 37,427 | - | 11,229 | - | - | 26,198 | 4.37 |
| MIDDLE RIO GRANDE | | 53,906 | 476,590 | 154,160 | 189,740 | - | - | 131,690 | 2.44 |
| RIO GRANDE, NM-TX | | | | | | | | | |
| RIO GRANDE, NM | | | | | | | | | |
| ELEPHANT BUTTE I D | | 83,655 | 387,478 | 23,645 | 154,971 | - | - | 208,862 | 2.50 |
| SAN JUAN-CHAMA | | 2,422 | 42,490 | - | A/ 550 | 25,920 | 14,590 | 1,430 | .59 |
| TUCUMCARI | | 32,994 | 47,915 | - | 22,993 | - | - | 24,922 | .76 |
| VERMEJO | | 5,019 | 3,178 | - | 596 | - | - | 2,582 | .51 |
| TOTALS - NEW MEXICO | | 207,674 | 1,090,548 | 189,801 | 398,219 | 42,932 | 14,590 | | |
| NORTH DAKOTA | | | | | | | | | |
| UPPER MISSOURI REGION | | | | | | | | | |
| BUFORD-TRENTON | | 7,188 | 30,951 | 8,152 | 10,831 | - | - | 11,968 | 1.66 |
| | | 2,346 | 8,915 | - | 5,468 | - | - | 3,447 | 1.47 |
| LOWER YELLOWSTONE, ND-MT | | | | | | | | | |
| DISTRICT NO 2, ND | | 16,504 | 74,978 | 28,845 | 17,086 | - | - | 29,047 | 1.76 |
| PICK-SLOAN MBP | | | | | | | | | |
| HEART DIVISION | | | | | | | | | |
| DICKINSON UNIT | | 345 | 1,848 | - | - | 1,848 | - | | |
| HEART BUTTE | | | | | | | | | |
| LOWER HEART I C | | 3,669 | 4,146 | - | - | - | - | 4,146 | 1.13 |
| W HEART RIVER I D | | 2,115 | 3,580 | - | 358 | - | - | 3,222 | 1.52 |
| WATER RENTAL LANDS | | 80 | 50 | - | - | - | - | 50 | .63 |
| TOTAL-HEART BUTTE | | 5,864 | 7,776 | - | 358 | - | - | 7,418 | 1.27 |
| TOTAL-HEART DIVISION | | 6,209 | 9,624 | - | 358 | 1,848 | - | 7,418 | 1.19 |
| NO DAKOTA PUMPING DIV | | | | | | | | | |
| FORT CLARK UNIT | | 833 | 1,295 | - | 129 | - | - | 1,166 | 1.40 |
| TOTAL-PICK-SLOAN MBP | | 7,042 | 10,919 | - | 487 | 1,848 | - | 8,584 | 1.22 |
| TOTALS - NORTH DAKOTA | | 33,080 | 125,763 | 36,997 | 33,872 | 1,848 | - | | 1.60 |
| OKLAHOMA | | | | | | | | | |
| SOUTHWEST REGION | | | | | | | | | |
| ARBUCKLE | | - | 10,218 | - | - | 10,218 | - | - | |
| MOUNTAIN PARK | | - | 3,884 | - | - | 3,884 | - | - | |
| NORMAN | | - | 12,370 | - | - | 12,370 | - | - | |
| W C AUSTIN | | 45,057 | 20,668 | - | 8,251 | 729 | - | 11,688 | |
| WASHITA BASIN | | | | | | | | | |
| FORT COBB DIVISION | | - | 11,621 | - | C/ 433 | 11,188 | - | - | |
| FOSS DIVISION | | - | 6,111 | 4,328 | 363 | 1,420 | - | - | |
| TOTAL-WASHITA BASIN | | - | 17,732 | 4,328 | 796 | 12,608 | - | - | |
| | | 45,057 | 64,872 | 4,328 | 9,047 | 39,809 | - | 11,688 | |
| OREGON | | | | | | | | | |
| ARNOLD | | | A/ 16,300 | - | | - | A/ 3,800 | A/ 5,900 | 5.48 |
| BAKER | | | | | | | | | |
| LOWER POWDER RIVER I D | | | A/ 48,400 | - | | - | - | A/ 32,000 | 4.45 |
| BAKER VALLEY I D | | | 67,070 | - | | - | - | 66,370 | 3.82 |
| TOTAL-BAKER | | | 115,470 | | | - | - | 98,370 | 4.01 |
| BOISE, OR-ID | | | | | | | | | |
| ARROWROCK DIVISION | | | | | | | | | |
| BIG BEND I D | | 1,469 | 9,694 | - | C/ 4,084 | - | - | 5,610 | 3.82 |
| BURNT RIVER | | 15,061 | A/ 80,000 | 5,000 | A/ 21,000 | A/ 1,000 | - | A/ 53,000 | 3.52 |
| CRESCENT LAKE DAM | | 7,600 | A/ 55,000 | - | C/ 28,000 | A/ 2,500 | - | A/ 24,500 | 3.22 |
| CROOKED RIVER | | 17,969 | 55,132 | - | C/ 6,516 | - | - | 48,616 | 2.71 |
| DESCHUTES | | | | | | | | | |
| 1/ CENTRAL OREGON I D | | 43,917 | 292,268 | 257 | 85,868 | 1,142 | - | 205,001 | 4.67 |
| CROOK COUNTY IMP D NO 1 | | 2,300 | A/ 16,500 | - | C/ 6,500 | - | - | A/ 10,000 | 4.35 |
| NORTH UNIT I D | | 47,148 | 191,391 | 9,945 | 67,408 | 91 | - | 113,947 | 2.42 |
| TOTAL-DESCHUTES | | 93,365 | 500,159 | 10,202 | 159,776 | 1,233 | - | 328,948 | 3.52 |
| GRANTS PASS | | 3,340 | A/ 51,000 | - | C/ 13,000 | - | A/ 18,000 | A/ 20,000 | 5.99 |
| OWYHEE, OR-ID | | | | | | | | | |
| NORTH DIVISION | | | | | | | | | |
| ADVANCEMENT I D | | 199 | 4,633 | - | C/ 2,365 | - | A/ 200 | 2,068 | 10.39 |
| BENCH I D | | 2,227 | 12,278 | 2,288 | 1,778 | - | - | 8,212 | 3.69 |
| CRYSTAL I D | | 1,241 | 6,221 | 1,241 | 980 | - | - | 4,000 | 3.22 |
| ONTARIO-NYSSA I D | | 5,568 | 28,996 | - | C/ 6,053 | - | - | 20,943 | 3.76 |
| OWYHEE IRRIGATION DIST | | 46,750 | 286,773 | 22,839 | 72,506 | - | - | 191,428 | 4.09 |
| PAYETTE-OREGON SLOPE I D | | 4,323 | 23,704 | 4,304 | 3,280 | - | - | 16,120 | 3.73 |
| TOTAL-NORTH DIVISION | | 60,308 | 360,605 | 30,672 | 86,962 | - | 200 | 242,771 | 4.03 |
| OWYHEE DITCH COMPANY | | 12,450 | A/ 65,000 | - | C/ 20,000 | - | - | A/ 45,000 | 3.61 |
| TOTAL-OWYHEE, OR-ID | | 72,758 | 425,605 | 30,672 | 106,962 | | 200 | 287,771 | 3.96 |

## WATER DISTRIBUTION - 1980



| STATE AND PROJECT | SUPPLY CODE | IRRIGATED ACRES | ACRE-FEET | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | NET SUPPLY | OPERATIONAL SPILLS | TRANSPORT LOSSES | MUNICIPAL INDUSTRIAL | MISCELLANEOUS | DELIVERED TO FARMS TOTAL | DELIVERED TO FARMS PER ACRE |
| **NEBRASKA** | | | | | | | | | |
| **LOWER MISSOURI REGION** | | | | | | | | | |
| MIRAGE FLATS | | 11,093 | 17,023 | - | 8,668 | - | - | 8,355 | .75 |
| NORTH PLATTE, NE-WY | | | | | | | | | |
| NEBRASKA LANDS | | | | | | | | | |
| GERING-FT LARAMIE I D | | 50,818 | 183,460 | 21,490 | 47,910 | - | - | 114,060 | 2.24 |
| NORTHPORT I D | | 15,156 | 79,170 | 5,730 | 36,540 | - | - | 36,900 | 2.43 |
| PATHFINDER I D | | 96,156 | 413,259 | 450 | 187,702 | - | - | 225,107 | 2.34 |
| SP-WARREN ACT CONTR | | | | | | | | | |
| BEERLINE ICC | | 928 | 2,290 | - | 750 | - | - | 1,540 | 1.66 |
| BROWNS CREEK I D | | 4,110 | 12,550 | - | 4,060 | - | - | 8,490 | 2.07 |
| CENTRAL I D | | 1,450 | 6,690 | - | 2,100 | - | - | 4,590 | 3.17 |
| CHIMNEY ROCK I D | | 5,172 | 15,710 | - | 5,060 | - | - | 10,650 | 2.06 |
| FARMERS I D | | 61,974 | 210,580 | 30,210 | 73,850 | - | - | 106,520 | 1.72 |
| GERING I D | | 12,506 | 49,550 | 1,430 | 16,760 | - | - | 31,360 | 2.51 |
| TOTAL-SP-WARREN ACT CONTR | | 86,140 | 297,370 | 31,640 | 102,580 | - | - | 163,150 | 1.89 |
| TOTAL-NEBRASKA LANDS | | 248,270 | 973,259 | 59,310 | 374,732 | - | - | 539,217 | 2.17 |
| TOTAL-NORTH PLATTE, NE-WY | | 248,270 | 973,259 | 59,310 | 374,732 | - | - | 539,217 | 2.17 |
| PICK-SLOAN MBP | | | | | | | | | |
| BOSTWICK DIV | | | | | | | | | |
| NEBRASKA-BOSTWICK I D | | 20,492 | 55,360 | 4,140 | 20,087 | - | - | 31,133 | 1.52 |
| FRENCHMAN-CAMBRIDGE | | | | | | | | | |
| FRENCHMAN-CAMBRIDGE I D | | 44,060 | 80,744 | 4,992 | 22,796 | - | - | 52,956 | 1.20 |
| FRENCHMAN VALLEY I D | | 8,953 | 12,885 | 470 | 5,208 | - | - | 7,207 | .80 |
| H&W IRRIGATION DIST. | | 10,978 | 18,574 | 759 | 11,295 | - | - | 6,520 | .59 |
| TOTAL-FRENCHMAN-CAMBRIDGE | | 63,991 | 112,203 | 6,221 | 39,299 | - | - | 66,683 | 1.04 |
| MIDDLE LOUP DIV | | | | | | | | | |
| FARWELL UNIT | | 47,523 | 82,681 | 2,815 | 31,923 | - | - | 47,943 | 1.01 |
| SARGENT UNIT | | 13,048 | 32,076 | 1,252 | 11,675 | - | - | 19,149 | 1.47 |
| TOTAL-MIDDLE LOUP DIV | | 60,571 | 114,757 | 4,067 | 43,598 | - | - | 67,092 | 1.11 |
| OREGON TRAIL DIV, NE-WY | | | | | | | | | |
| GLENDO UNIT-NE | | | | | | | | | |
| BRIDGEPORT I D | S | 8,103 | 29,240 | - | 9,280 | - | - | 19,960 | 2.46 |
| ENTERPRISE I D | S | 7,333 | 26,680 | - | 8,620 | - | - | 18,060 | 2.46 |
| MITCHELL I D | S | 12,763 | 40,320 | 3,040 | 2,680 | - | - | 34,600 | 2.71 |
| TOTAL-GLENDO UNIT-NE | | 28,199 | 96,240 | 3,040 | 20,580 | - | - | 72,620 | 2.58 |
| TOTAL-OREGON TRAIL DIV, NE-WY | | 28,199 | 96,240 | 3,040 | 20,580 | - | - | 72,620 | 2.58 |
| SANDHILLS DIV | | | | | | | | | |
| AINSWORTH UNIT | | 33,412 | 75,948 | 4,966 | 17,451 | - | - | 53,531 | 1.60 |
| TOTAL-PICK-SLOAN MBP | | 206,665 | 454,508 | 22,434 | 141,015 | - | - | 291,059 | 1.41 |
| | | 466,028 | 1,444,790 | 81,744 | 524,415 | - | - | | 1.80 |
| **NEVADA** | | | | | | | | | |
| **MID PACIFIC REGION** | | | | | | | | | |
| HUMBOLDT | S | 33,440 | 209,600 | 98,916 | 37,218 | - | - | 73,466 | 2.20 |
| NEWLANDS | F | 67,034 | 341,544 | - | 84,596 | - | - | 256,948 | 3.83 |
| TRUCKEE STORAGE | S | 12,325 | 50,000 | - | 25,000 | - | - | 25,000 | 2.03 |
| 1/ WALKER RIVER I D | S | 60,210 | 379,179 | - | 6,841 | - | - | 372,338 | 6.18 |
| **LOWER COLORADO REGION** | | | | | | | | | |
| BOULDER CANYON | | | | | | | | | |
| M&I USERS | | | | | | | | | |
| M&I USERS, NV | | - | 27,588 | - | - | 27,588 | - | | |
| SOUTHERN NEVADA WATER | | - | 106,026 | - | - | 106,026 | - | | |
| TOTALS - NEVADA | | 173,009 | 1,113,937 | 98,916 | 153,655 | 133,614 | - | 727,752 | 4.21 |
| **NEW MEXICO** | | | | | | | | | |
| **UPPER COLORADO REGION** | | | | | | | | | |
| HAMMOND | | 3,123 | 28,139 | 10,514 | 3,349 | - | - | 14,276 | 4.57 |
| NAVAJO UNIT, CRSP | | - | 7,100 | - | - | 7,100 | - | - | - |
| PINE RIVER | | | | | | | | | |
| PINE RIVER, NM | | 65 | 760 | - | 188 | - | - | 572 | 8.80 |
| **SOUTHWEST REGION** | | | | | | | | | |
| CARLSBAD | | 21,354 | 78,348 | 43 | 22,235 | - | - | 56,070 | 2.63 |
| FORT SUMNER | | 6,056 | 41,991 | - | 12,597 | - | - | 29,394 | 4.85 |
| MIDDLE RIO GRANDE | | 53,655 | 513,465 | 169,363 | 205,306 | - | - | 138,796 | 2.59 |
| RIO GRANDE, NM-TX | | | | | | | | | |
| RIO GRANDE, NM | | | | | | | | | |
| ELEPHANT BUTTE | | 83,096 | 422,536 | 24,117 | 174,710 | - | - | 223,709 | 2.69 |
| SAN JUAN-CHAMA | | 2,422 | 32,570 | - | 510 | 25,920 | 4,840 | 1,300 | .54 |
| TUCUMCARI | | 32,874 | 72,748 | - | 31,621 | - | - | 41,127 | 1.25 |
| VERMEJO | | 4,069 | 8,488 | - | 1,900 | - | - | 6,588 | 1.62 |
| TOTALS - NEW MEXICO | | 206,714 | 1,206,145 | 204,037 | 452,416 | 33,020 | 4,840 | | |

# WATER DISTRIBUTION - 1979



| STATE AND PROJECT | SUPPLY CODE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **NEBRASKA** | | | | | | | | | |
| **LOWER MISSOURI REGION** | | | | | | | | | |
| MIRAGE FLATS | | 11,139 | 13,329 | - | 6,823 | - | - | 6,506 | .58 |
| NORTH PLATTE, NE-WY | | | | | | | | | |
| NEBRASKA LANDS | | | | | | | | | |
| GERING-FT LARAMIE I D | | 52,346 | 183,310 | 25,460 | 55,100 | - | - | 102,750 | 1.96 |
| NORTHPORT I D | | 14,841 | 76,610 | 2,610 | 42,280 | - | - | 31,720 | 2.14 |
| PATHFINDER I D | | 96,156 | 390,290 | 650 | 193,260 | - | - | 196,380 | 2.04 |
| SP-WARREN ACT CONTR | | | | | | | | | |
| BEERLINE ICC | | 885 | 2,220 | - | 720 | - | - | 1,500 | 1.69 |
| BROWNS CREEK I D | | 4,110 | 11,640 | - | 3,810 | - | - | 7,830 | 1.91 |
| CENTRAL I D | | 1,450 | 5,690 | - | 1,820 | - | - | 3,870 | 2.67 |
| CHIMNEY ROCK I D | | 5,172 | 14,460 | - | 4,820 | - | - | 9,640 | 1.86 |
| FARMERS I D | | 62,312 | 217,900 | 47,530 | 77,420 | - | - | 92,950 | 1.49 |
| GERING I D | | 12,543 | 51,180 | - | 16,410 | - | - | 34,770 | 2.77 |
| TOTAL-SP-WARREN ACT CONTR | | 86,472 | 303,090 | 47,530 | 105,000 | - | - | 150,560 | 1.74 |
| TOTAL-NEBRASKA LANDS | | 249,815 | 953,300 | 76,250 | 395,640 | - | - | 481,410 | 1.93 |
| TOTAL-NORTH PLATTE, NE-WY | | 249,815 | 953,300 | 76,250 | 395,640 | - | - | 481,410 | 1.93 |
| PICK-SLOAN MISSOURI B PROG | | | | | | | | | |
| AINSWORTH UNIT, NE | | 30,475 | 60,881 | 5,947 | 15,180 | - | - | 39,754 | 1.30 |
| BOSTWICK DIV | | | | | | | | | |
| NEBRASKA-BOSTWICK I D | | 20,492 | 33,418 | 5,381 | 13,075 | - | - | 14,962 | .73 |
| FRENCHMAN-CAMBRIDGE DIV | | | | | | | | | |
| FRENCHMAN-CAMBRIDGE I D | | 43,960 | 59,433 | 4,964 | 22,472 | - | - | 31,997 | .73 |
| FRENCHMAN VALLEY I D | | 8,511 | 12,887 | 600 | 5,408 | - | - | 6,879 | .81 |
| H&RW IRRIGATION DIST | | 10,467 | 17,229 | 907 | 10,338 | - | - | 5,984 | .57 |
| TOTAL-FRENCHMAN-CAMBRIDGE DIV | | 62,938 | 89,549 | 6,471 | 38,218 | - | - | 44,860 | .71 |
| GLENDO UNIT, NE-WY | | | | | | | | | |
| NEBRASKA LANDS | | | | | | | | | |
| BRIDGEPORT I D | | 8,550 | 29,760 | - | 9,420 | - | - | 20,340 | 2.38 |
| ENTERPRISE I D | | 7,333 | 23,660 | - | 7,590 | - | - | 16,070 | 2.19 |
| MITCHELL I D | | 13,058 | 28,440 | 400 | 2,000 | - | - | 26,040 | 1.99 |
| TOTAL-NEBRASKA LANDS | | 28,941 | 81,860 | 400 | 19,010 | - | - | 62,450 | 2.16 |
| TOTAL-GLENDO UNIT, NE-WY | | 28,941 | 81,860 | 400 | 19,010 | - | - | 62,450 | 2.16 |
| MIDDLE LOUP DIV | | | | | | | | | |
| FARWELL UNIT | | 48,231 | 96,386 | 4,725 | 39,089 | - | - | 52,572 | 1.09 |
| SARGENT UNIT | | 11,597 | 29,854 | 1,016 | 12,218 | - | - | 16,620 | 1.43 |
| TOTAL-MIDDLE LOUP DIV | | 59,828 | 126,240 | 5,741 | 51,307 | - | - | 69,192 | 1.16 |
| TOTAL-PICK-SLOAN MISSOURI B PROG | | 202,674 | 391,948 | 23,940 | 136,790 | - | - | 231,218 | 1.14 |
| | | 463,628 | 1,358,577 | 100,190 | 539,253 | - | - | 719,134 | 1.55 |
| **NEVADA** | | | | | | | | | |
| **MID PACIFIC REGION** | | | | | | | | | |
| HUMBOLDT | | 32,903 | 128,502 | 41,585 | - | - | - | 86,917 | 2.64 |
| NEWLANDS | | 67,294 | 382,310 | - | C/ 167,688 | - | - | 214,622 | 3.19 |
| TRUCKEE STORAGE | | 13,225 | 50,000 | - | A/ 25,000 | - | - | 25,000 | 1.89 |
| 1/ WALKER RIVER I D | | 57,760 | 156,686 | - | 15,524 | - | - | 141,162 | 2.44 |
| **LOWER COLORADO REGION** | | | | | | | | | |
| BOULDER CANYON, AZ-CA-NV | | | | | | | | | |
| M&I USERS, NV | | - | 28,956 | - | - | 28,950 | 6 | | |
| SOUTHERN NEVADA WATER | | - | 97,237 | - | - | 97,237 | - | | |
| TOTALS - NEVADA | | 171,182 | 843,691 | 41,585 | 208,212 | 126,187 | 6 | 467,701 | 2.73 |
| **NEW MEXICO** | | | | | | | | | |
| **UPPER COLORADO REGION** | | | | | | | | | |
| HAMMOND | | 3,699 | 32,089 | 13,117 | 4,026 | - | - | 14,946 | 4.04 |
| NAVAJO UNIT, CRSP | | - | 7,100 | - | - | 7,100 | - | - | |
| PINE RIVER | | | | | | | | | |
| PINE RIVER, NM | | 416 | 738 | - | 185 | - | - | 553 | |
| **SOUTHWEST REGION** | | | | | | | | | |
| CARLSBAD | | 21,854 | 77,381 | 44 | 21,397 | - | 3,476 | 52,464 | 2.40 |
| FORT SUMNER | | 5,875 | 36,731 | - | 11,019 | - | - | A/ 25,712 | 4.38 |
| MIDDLE RIO GRANDE | | 52,779 | 547,726 | 178,586 | 209,878 | - | - | 159,262 | 3.02 |
| RIO GRANDE, NM-TX | | | | | | | | | |
| RIO GRANDE, NM | | | | | | | | | |
| ELEPHANT BUTTE I D | | 81,803 | 345,795 | 19,204 | 157,213 | - | - | 169,378 | 2.07 |
| SAN JUAN-CHAMA | | 2,422 | 65,309 | 240 | 2,250 | 25,920 | 31,359 | 5,540 | 2.29 |
| TUCUMCARI | | 31,497 | 65,547 | - | 31,072 | - | - | 34,475 | 1.09 |
| VERMEJO | | 3,398 | 5,553 | - | 2,221 | - | - | 3,332 | .98 |
| TOTALS - NEW MEXICO | | 203,743 | 1,183,969 | 211,191 | 439,261 | 33,020 | 34,835 | 465,662 | |
| **NORTH DAKOTA** | | | | | | | | | |
| **UPPER MISSOURI REGION** | | | | | | | | | |
| | | 7,200 | | 6,728 | 10,285 | | | 11,861 | |
| | | 1,989 | | 1,859 | 2,791 | | | A 3,326 | |

# WATER DISTRIBUTION - 1976



| STATE AND PROJECT | SUPPLY CODE | IRRIGATED ACRES | ACRE-FEET | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | NET SUPPLY | OPERATIONAL SPILLS | TRANSPORTATION LOSSES | MUNICIPAL-INDUSTRIAL | MISCELLANEOUS | DELIVERED TO FARMS TOTAL | DELIVERED TO FARMS PER ACRE |
| **KANSAS** | | | | | | | | | |
| PICK-SLOAN MISSOURI BASIN PROGRAM: | | | | | | | | | |
| BOSTWICK DIVISION: | | | | | | | | | |
| KANSAS BOSTWICK I. D. | F | 30,648 | 110,406 | 10,021 | 31,749 | - | - | 68,636 | 2.24 |
| KANASKA DIVISION: | | | | | | | | | |
| ALMENA UNIT | F | 5,274 | 6,270 | 50 | 1,960 | 832 | - | 3,428 | .65 |
| SMOKY HILL DIVISION: | | | | | | | | | |
| CEDAR BLUFF UNIT | F | 6,763 | 20,916 | 584 | 4,532 | 785 | 2,388 | 12,627 | 1.87 |
| SOLOMON DIVISION: | | | | | | | | | |
| GLEN ELDER UNIT | S | - | 452 | - | - | 452 | - | - | - |
| KIRWIN UNIT | F | 9,266 | 27,679 | 1,063 | 8,426 | - | - | 18,190 | 1.96 |
| WEBSTER UNIT | F | 7,099 | 19,690 | 959 | 7,027 | - | - | 11,704 | 1.65 |
| TOTALS - SOLOMON DIVISION | | 16,365 | 47,821 | 2,022 | 15,453 | 452 | - | 29,894 | 1.83 |
| TOTALS - PICK-SLOAN M. B. P. | | 59,050 | 185,413 | 12,677 | 53,694 | 2,069 | 2,388 | 114,585 | 1.94 |
| WICHITA | S | - | 15,880 | - | - | 15,880 | - | - | - |
| **MONTANA** | | | | | | | | | |
| BITTER ROOT | F | 14,933 | 102,158 | - | 31,792 | - | - | 70,366 | 4.71 |
| BUFFALO RAPIDS: | | | | | | | | | |
| IRRIGATION DISTRICT NO. 1 | F | 11,659 | 52,939 | - | 27,115 | - | - | 25,824 | 2.21 |
| IRRIGATION DISTRICT NO. 2 | F | 8,685 | 42,009 | - | 23,073 | - | - | 18,936 | 2.18 |
| TOTALS - BUFFALO RAPIDS PROJECT | | 20,344 | 94,948 | - | 50,188 | - | - | 44,760 | 2.20 |
| FRENCHTOWN | F | 3,574 | ‡ 25,940 | ‡ 2,080 | ‡ 7,520 | - | 300 | ‡ 16,040 | 4.49 |
| HUNTLEY | F | 25,015 | 141,237 | 37,317 | 45,967 | 510 | 200 | 57,243 | 2.29 |
| INTAKE | F | 756 | 2,374 | 380 | 210 | - | - | 1,784 | 2.36 |
| MILK RIVER: | | | | | | | | | |
| CHINOOK DIVISION | F | 34,491 | 132,760 | - | 90,337 | - | - | 42,423 | 1.23 |
| DODSON PUMPING UNIT | F | 795 | 3,870 | - | 2,579 | - | - | 1,291 | 1.62 |
| FORT BELKNAP INDIAN RESERVATION | F | 10,425 | 32,064 | - | 2,020 | - | - | 30,044 | 2.88 |
| GLASGOW DIVISION | F | 12,431 | 59,450 | - | 43,966 | - | - | 15,484 | 1.25 |
| MALTA DIVISION | F | 34,965 | 152,834 | - | 108,536 | - | 5,181 | 39,117 | 1.12 |
| MUNICIPAL & INDUSTRIAL USERS | S | - | 1,436 | - | - | 1,436 | - | - | - |
| TOTALS - MILK RIVER PROJECT | | 93,107 | 382,414 | - | 247,438 | 1,436 | 5,181 | 128,359 | 1.38 |
| MISSOULA VALLEY | | 230 | ‡ 2,170 | ‡ 170 | ‡ 540 | - | 330 | ‡ 1,130 | 4.91 |
| PICK-SLOAN MISSOURI BASIN PROGRAM: | | | | | | | | | |
| HELENA-GREAT FALLS DIVISION: | | | | | | | | | |
| HELENA VALLEY UNIT | B | | 67,789 | 5,444 | | 497 | - | 40,833 | |
| MARIAS DIVISION: | | | | | | | | | |
| LOWER MARIAS UNIT | S | | 429 | - | | 429 | - | - | |
| TOTALS - MARIAS DIVISION | | | 429 | | | 429 | - | | |
| THREE FORKS DIVISION: | | | | | | | | | |
| CROW CREEK PUMP UNIT | F | 4,841 | | - | 8,466 | | - | 8,933 | |
| EAST BENCH UNIT: | | | | | | | | | |
| CLARK CANYON W. S. C. | S | 27,790 | | - | - | 103 | - | - | |
| EAST BENCH I. D. | F | 20,664 | | 7,658 | 32,358 | - | - | 52,467 | |
| TOTALS - THREE FORKS DIVISION | | 53,295 | | 7,658 | 40,824 | 103 | - | 61,400 | |
| YELLOWSTONE DIVISION: | | | | | | | | | |
| SAVAGE UNIT | F | | | | | - | - | 4,152 | |
| TOTALS - PICK-SLOAN M. B. P. | | | | | | 1,029 | - | 106,385 | |
| SUN RIVER: | | | | | | | | | |
| FORT SHAW DIVISION | F | 9,296 | 49,922 | 20,467 | 9,486 | - | - | 19,969 | |
| GREENFIELDS DIVISION | F | 73,125 | 268,166 | 67,926 | 77,462 | - | - | 122,778 | |
| POWER-TETON CO. WATER & SEWER D. | S | - | 15 | - | - | 15 | - | - | |
| TOTALS - SUN RIVER PROJECT | | 82,421 | 318,103 | 88,393 | 86,948 | 15 | - | 142,747 | |
| **MONTANA-NORTH DAKOTA** | | | | | | | | | |
| LOWER YELLOWSTONE | | 45,483 | 366,278 | 163,379 | 81,648 | 53 | - | 121,198 | |
| **NEBRASKA** | | | | | | | | | |
| MIRAGE FLATS | | 11,072 | 15,214 | - | 8,542 | | - | 6,672 | .60 |
| PICK-SLOAN MISSOURI BASIN PROGRAM: | | | | | | | | | |
| BOSTWICK DIVISION: | | | | | | | | | |
| NEBRASKA BOSTWICK I. D. | F | 20,889 | 66,885 | 7,252 | 20,532 | - | - | 39,101 | 1.87 |
| FRENCHMAN-CAMBRIDGE DIVISION: | | | | | | | | | |
| FRENCHMAN-CAMBRIDGE I. D. | F | 43,862 | 115,049 | 6,320 | 26,376 | - | - | 82,353 | 1.88 |
| FRENCHMAN VALLEY I. D. | S | 9,022 | 17,435 | 646 | 5,765 | - | - | ‡ 11,024 | 1.22 |
| H. & R. W. IRRIGATION DISTRICT | F | 11,364 | 23,677 | 1,108 | 11,175 | - | - | 11,394 | 1.00 |
| TOTALS - FRENCHMAN-CAMBRIDGE DIV | | 64,248 | 156,161 | 8,074 | 43,316 | - | | 104,771 | 1.63 |
| MIDDLE LOUP DIVISION: | | | | | | | | | |
| FARWELL UNIT | | 45,365 | 104,508 | 6,534 | | | | 58,843 | 1.30 |
| SARGENT UNIT | | 12,668 | 28,778 | 1,225 | | | | 16,072 | 1.27 |
| TOTALS - MIDDLE LOUP DIVISION | | 58,033 | 133,286 | 7,759 | | | | 74,915 | 1.29 |
| SANDHILLS DIVISION: | | | | | | | | | |
| AINSWORTH UNIT | | 33,934 | 91,601 | 7,443 | 17,736 | | | 66,422 | 1.96 |
| TOTALS - PICK-SLOAN M. B. P. | | 77,104 | 447,933 | 30,528 | 132,196 | - | | 285,209 | 1.61 |
| **NEVADA** | | | | | | | | | |
| HUMBOLDT | S | 32,887 | 133,078 | - * | 44,607 | - | | 88,471 | 2.69 |
| SOUTHERN NEVADA WATER | S | - | 72,602 | - | - | 72,602 | | - | - |
| WALKER RIVER * | S | 57,000 | 138,952 | - | 13,895 | - | | 125,057 | 2.19 |
| **NEVADA-CALIFORNIA** | | | | | | | | | |
| NEWLANDS | F | 64,043 | 287,576 | - | 123,369 | | | 164,207 | 2.56 |
| TRUCKEE STORAGE | S | 18,865 | ‡ 30,000 | - | ‡ 10,000 | | | ‡ 20,000 | 1.06 |
| **NEW MEXICO** | | | | | | | | | |
| CARLSBAD | F | 21,490 | 38,800 | 5 | 12,795 | | 329 | 25,671 | 1.19 |
| FORT SUMNER | F | 5,886 | 40,817 | - | ‡ 12,245 | | | ‡ 28,572 | 4.85 |
| HAMMOND | F | 3,416 | 35,027 | 12,167 | 6,504 | | | 16,356 | 4.79 |
| MIDDLE RIO GRANDE | F | 59,180 | 550,110 | ‡ 179,190 | ‡ 195,310 | | | ‡ 175,610 | 2.97 |
| TUCUMCARI | F | 35,086 | 20,780 | 920 | 10,795 | | | 9,065 | .26 |
| VERMEJO | F | 2,748 | 3,075 | - | ‡ 1,230 | | | ‡ 1,845 | .67 |
| **NEW MEXICO-COLORADO** | | | | | | | | | |
| COLORADO RIVER STORAGE: | | | | | | | | | |
| NAVAJO RESERVOIR | S | | 5,215 | - | | 5,215 | - | | |
| SAN JUAN CHAMA | S | | 72,986 | - | | 17,808 | 55,178 | | |
| TOTALS - COLORADO RIVER STORAGE P | | | 78,201 | - | | 23,023 | 55,178 | | |

# Appendix E-2

# Sample Crop and Water Data from Recent Reports by MRGCD and Bureau of Reclamation, by Division and District Totals

## Cochiti Division

## Sample Crop and Water Data from MRGCD and Bureau of Reclamation

**1999** all numbers in acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 1156 | 1.20 | 289 | 289 | 578 | 116 | 93 | 369 |
| **March** | 10682 | 11.06 | 5341 | 2671 | 2671 | 537 | 430 | 1703 |
| **April** | 11000 | 11.39 | 2750 | 2750 | 5500 | 1107 | 885 | 3508 |
| **May** | 12289 | 12.72 | 2675 | 3072 | 6541 | 1316 | 1053 | 4172 |
| **June** | 12620 | 13.07 | 2747 | 3155 | 6718 | 1352 | 1081 | 4285 |
| **July** | 12925 | 13.38 | 2814 | 3231 | 6880 | 1384 | 1107 | 4388 |
| **August** | 10926 | 11.31 | 2379 | 2732 | 5816 | 1170 | 936 | 3710 |
| **September** | 12120 | 12.55 | 2639 | 3030 | 6451 | 1298 | 1038 | 4115 |
| **October** | 12862 | 13.32 | 2800 | 3216 | 6846 | 1378 | 1102 | 4367 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **96580** | **100.00** | **24145** | **24145** | **48001** | **9658** | **7726** | **30617** |

**1998** all numbers in acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 9251 | 9.35 | 4626 | 2313 | 2313 | 463 | 370 | 1480 |
| **April** | 12130 | 12.26 | 3033 | 3033 | 6065 | 1213 | 970 | 3882 |
| **May** | 13827 | 13.97 | 3045 | 3457 | 7326 | 1465 | 1172 | 4688 |
| **June** | 13066 | 13.20 | 2877 | 3267 | 6923 | 1385 | 1108 | 4430 |
| **July** | 12808 | 12.94 | 2820 | 3202 | 6786 | 1357 | 1086 | 4343 |
| **August** | 13139 | 13.28 | 2893 | 3285 | 6961 | 1392 | 1114 | 4455 |
| **September** | 13084 | 13.22 | 2881 | 3271 | 6932 | 1386 | 1109 | 4437 |
| **October** | 11648 | 11.77 | 2565 | 2912 | 6171 | 1234 | 987 | 3950 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **98953** | **100.00** | **24738** | **24738** | **49477** | **9895** | **7916** | **31665** |

Notes: The totals listed are the totals listed in the 1996 Crop Utilization publication

*Includes both new diversions from river and return flow from upstream divisions

**Returned to River through wasteways and drains

***Evaporation, Phreatophyte Consumption, and Seepage to groundwater

## Cochiti Division

## Sample Crop and Water Data from MRGCD and Bureau of Reclamation

**1997** all numbers in acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 10018 | 10.26 | 5009 | 2505 | 2505 | 501 | 401 | 1603 |
| **April** | 11898 | 12.18 | 2975 | 2975 | 5949 | 1190 | 952 | 3807 |
| **May** | 13270 | 13.58 | 2879 | 3318 | 7074 | 1415 | 1132 | 4527 |
| **June** | 12719 | 13.02 | 2759 | 3180 | 6780 | 1356 | 1085 | 4339 |
| **July** | 12211 | 12.50 | 2649 | 3053 | 6509 | 1302 | 1041 | 4166 |
| **August** | 11965 | 12.25 | 2596 | 2991 | 6378 | 1276 | 1020 | 4082 |
| **September** | 12086 | 12.37 | 2622 | 3022 | 6442 | 1288 | 1031 | 4123 |
| **October** | 13074 | 13.38 | 2836 | 3269 | 6969 | 1394 | 1115 | 4460 |
| **November** | 444 | 0.45 | 96 | 111 | 237 | 47 | 38 | 151 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **97685** | **99.99** | **24421** | **24421** | **48843** | **9769** | **7815** | **31259** |

**1996** all numbers in acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 9814 | 10.91 | 4907 | 2454 | 2454 | 491 | 393 | 1570 |
| **April** | 12275 | 13.64 | 3069 | 3069 | 6138 | 1228 | 982 | 3928 |
| **May** | 13720 | 15.25 | 2934 | 3430 | 7356 | 1471 | 1177 | 4708 |
| **June** | 11408 | 12.68 | 2440 | 2852 | 6116 | 1223 | 979 | 3914 |
| **July** | 10367 | 11.52 | 2217 | 2592 | 5558 | 1112 | 889 | 3557 |
| **August** | 11710 | 13.01 | 2504 | 2928 | 6278 | 1256 | 1005 | 4018 |
| **September** | 10625 | 11.81 | 2272 | 2656 | 5696 | 1139 | 911 | 3646 |
| **October** | 10064 | 11.18 | 2152 | 2516 | 5396 | 1079 | 863 | 3453 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **89983** | **100.00** | **22496** | **22496** | **44992** | **8998** | **7199** | **28795** |

Notes: The totals listed are the totals listed in the 1996 Crop Utilization publication

*Includes both new diversions from river and return flow from upstream divisions

**Returned to River through wasteways and drains

***Evaporation, Phreatophyte Consumption, and Seepage to groundwater

## Albuquerque Division

## Sample Crop and Water Data from MRGCD and Bureau of Reclamation

**1999** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 21606 | 12.92 | 10803 | 5401 | 5401 | 1080 | 864 | 3457 |
| **April** | 20125 | 12.04 | 5031 | 5031 | 10062 | 2012 | 1610 | 6440 |
| **May** | 20308 | 12.15 | 4203 | 5077 | 11029 | 2206 | 1765 | 7058 |
| **June** | 20938 | 12.53 | 4333 | 5235 | 11371 | 2274 | 1819 | 7277 |
| **July** | 21246 | 12.71 | 4397 | 5312 | 11538 | 2308 | 1846 | 7384 |
| **August** | 18555 | 11.10 | 3840 | 4639 | 10076 | 2015 | 1612 | 6449 |
| **September** | 21305 | 12.74 | 4409 | 5326 | 11570 | 2314 | 1851 | 7405 |
| **October** | 23087 | 13.81 | 4778 | 5772 | 12538 | 2508 | 2006 | 8024 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **167170** | **100.00** | **41792** | **41792** | **83585** | **16717** | **13374** | **53494** |

**1998** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 20403 | 10.62 | 10201 | 5101 | 5101 | 1020 | 816 | 3264 |
| **April** | 23040 | 11.99 | 5760 | 5760 | 11520 | 2304 | 1843 | 7373 |
| **May** | 25118 | 13.07 | 5418 | 6280 | 13420 | 2684 | 2147 | 8589 |
| **June** | 24526 | 12.76 | 5291 | 6132 | 13104 | 2621 | 2097 | 8387 |
| **July** | 25375 | 13.20 | 5474 | 6344 | 13558 | 2712 | 2169 | 8677 |
| **August** | 23571 | 12.26 | 5085 | 5893 | 12594 | 2519 | 2015 | 8060 |
| **September** | 25877 | 13.46 | 5582 | 6469 | 13826 | 2765 | 2212 | 8848 |
| **October** | 24286 | 12.64 | 5239 | 6072 | 12976 | 2595 | 2076 | 8305 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **192197** | **100.00** | **48049** | **48049** | **96099** | **19220** | **15376** | **61503** |

Notes: The totals listed are the totals listed in the 1996 Crop Utilization publication

*Includes both new diversions from river and return flow from upstream divisions

**Returned to River through wasteways and drains

***Evaporation, Phreatophyte Consumption, and Seepage to groundwater

## Albuquerque Division

## Sample Crop and Water Data from MRGCD and Bureau of Reclamation

**1997** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 20009 | 11.06 | 10004 | 5002 | 5002 | 1000 | 800 | 3201 |
| **April** | 21443 | 11.86 | 5361 | 5361 | 10722 | 2144 | 1715 | 6862 |
| **May** | 24988 | 13.82 | 5350 | 6247 | 13391 | 2678 | 2143 | 8570 |
| **June** | 24338 | 13.46 | 5211 | 6085 | 13043 | 2609 | 2087 | 8347 |
| **July** | 25030 | 13.84 | 5359 | 6257 | 13413 | 2683 | 2146 | 8584 |
| **August** | 21200 | 11.72 | 4539 | 5300 | 11361 | 2272 | 1818 | 7271 |
| **September** | 22274 | 12.32 | 4769 | 5568 | 11936 | 2387 | 1910 | 7639 |
| **October** | 21576 | 11.93 | 4620 | 5394 | 11562 | 2312 | 1850 | 7400 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **180858** | **100.01** | **45215** | **45215** | **91429** | **18086** | **14469** | **57875** |

**1996** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 20833 | 11.36 | 10416 | 5208 | 5208 | 1042 | 833 | 3333 |
| **April** | 24194 | 13.19 | 6049 | 6049 | 12097 | 2419 | 1936 | 7742 |
| **May** | 26077 | 14.22 | 5538 | 6519 | 14020 | 2804 | 2243 | 8973 |
| **June** | 23048 | 12.57 | 4894 | 5762 | 12391 | 2478 | 1983 | 7930 |
| **July** | 21739 | 11.85 | 4616 | 5435 | 11688 | 2338 | 1870 | 7480 |
| **August** | 24161 | 13.17 | 5131 | 6040 | 12990 | 2598 | 2078 | 8314 |
| **September** | 22847 | 12.46 | 4852 | 5712 | 12283 | 2457 | 1965 | 7861 |
| **October** | 20491 | 11.17 | 4352 | 5123 | 11017 | 2203 | 1763 | 7051 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **183390** | **100.00** | **45848** | **45848** | **91695** | **18339** | **14671** | **58685** |

Notes: The totals listed are the totals listed in the 1996 Crop Utilization publication

*Includes both new diversions from river and return flow from upstream divisions

**Returned to River through wasteways and drains

***Evaporation, Phreatophyte Consumption, and Seepage to groundwater

## Belen Division

## Sample Crop and Water Data from MRGCD and Bureau of Reclamation

**1999** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 27918 | 12.11 | 13959 | 6980 | 6980 | 1396 | 1117 | 4467 |
| **April** | 30053 | 13.03 | 7513 | 7513 | 15027 | 3005 | 2404 | 9617 |
| **May** | 29140 | 12.64 | 6107 | 7285 | 15748 | 3150 | 2520 | 10079 |
| **June** | 37486 | 16.26 | 7856 | 9372 | 20259 | 4052 | 3241 | 12966 |
| **July** | 34267 | 14.86 | 7181 | 8567 | 18519 | 3704 | 2963 | 11852 |
| **August** | 18512 | 8.03 | 3879 | 4628 | 10005 | 2001 | 1601 | 6403 |
| **September** | 28524 | 12.37 | 5977 | 7131 | 15416 | 3083 | 2466 | 9866 |
| **October** | 24658 | 10.69 | 5167 | 6165 | 13326 | 2665 | 2132 | 8529 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **230558** | **99.99** | **57640** | **57640** | **115279** | **23056** | **18445** | **73779** |

**1998** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 15605 | 5.88 | 7803 | 3901 | 3901 | 780 | 624 | 2497 |
| **April** | 32500 | 12.24 | 8125 | 8125 | 16250 | 3250 | 2600 | 10400 |
| **May** | 39241 | 14.78 | 9106 | 9810 | 20325 | 4065 | 3252 | 13008 |
| **June** | 42673 | 16.08 | 9902 | 10668 | 22102 | 4420 | 3536 | 14146 |
| **July** | 32829 | 12.37 | 7618 | 8207 | 17004 | 3401 | 2721 | 10882 |
| **August** | 33750 | 12.71 | 7832 | 8438 | 17481 | 3496 | 2797 | 11188 |
| **September** | 40366 | 15.21 | 9367 | 10092 | 20908 | 4182 | 3345 | 13381 |
| **October** | 28478 | 10.73 | 6608 | 7120 | 14750 | 2950 | 2360 | 9440 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **265442** | **100.00** | **66361** | **66361** | **132721** | **26544** | **21235** | 84941 |

Notes: The totals listed are the totals listed in the 1996 Crop Utilization publication

*Includes both new diversions from river and return flow from upstream divisions

**Returned to River through wasteways and drains

***Evaporation, Phreatophyte Consumption, and Seepage to groundwater

## Belen Division

## Sample Crop and Water Data from MRGCD and Bureau of Reclamation

**1997** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 24981 | 10.11 | 12491 | 6245 | 6245 | 1249 | 999 | 3997 |
| **April** | 28307 | 11.46 | 7077 | 7077 | 14154 | 2831 | 2265 | 9058 |
| **May** | 33920 | 13.73 | 7386 | 8480 | 18054 | 3611 | 2889 | 11554 |
| **June** | 34465 | 13.95 | 7505 | 8616 | 18344 | 3669 | 2935 | 11740 |
| **July** | 37297 | 15.10 | 8122 | 9324 | 19851 | 3970 | 3176 | 12705 |
| **August** | 30551 | 12.37 | 6653 | 7638 | 16260 | 3252 | 2602 | 10407 |
| **September** | 29965 | 12.13 | 6525 | 7491 | 15949 | 3190 | 2552 | 10207 |
| **October** | 27514 | 11.14 | 5991 | 6879 | 14644 | 2929 | 2343 | 9372 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **247000** | **99.99** | **59798** | **61750** | **123500** | **24700** | **19760** | **79040** |

**1996** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 26291 | 10.99 | 13146 | 6573 | 6573 | 1315 | 1052 | 4207 |
| **April** | 32390 | 13.54 | 8098 | 8098 | 16195 | 3239 | 2591 | 10365 |
| **May** | 34397 | 14.38 | 7347 | 8599 | 18451 | 3690 | 2952 | 11809 |
| **June** | 34877 | 14.58 | 7449 | 8719 | 18708 | 3742 | 2993 | 11973 |
| **July** | 27375 | 11.44 | 5847 | 6844 | 14684 | 2937 | 2349 | 9398 |
| **August** | 32835 | 13.73 | 7013 | 8209 | 17613 | 3523 | 2818 | 11272 |
| **September** | 27978 | 11.70 | 5976 | 6995 | 15008 | 3002 | 2401 | 9605 |
| **October** | 23050 | 9.64 | 4923 | 5763 | 12364 | 2473 | 1978 | 7913 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **239193** | **100.00** | **59798** | **59798** | **119597** | **23919** | **19135** | **76542** |

Notes: The totals listed are the totals listed in the 1996 Crop Utilization publication

*Includes both new diversions from river and return flow from upstream divisions

**Returned to River through wasteways and drains

***Evaporation, Phreatophyte Consumption, and Seepage to groundwater

## Socorro Division

## Sample Crop and Water Data from MRGCD and Bureau of Reclamation

**1999** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 14246 | 10.47 | 6167 | 3084 | 3084 | 655 | 524 | 1905 |
| **April** | 13506 | 12.80 | 3770 | 3770 | 7541 | 1601 | 1281 | 4658 |
| **May** | 15783 | 14.12 | 3605 | 4159 | 8871 | 1884 | 1507 | 5480 |
| **June** | 16128 | 13.65 | 3486 | 4022 | 8579 | 1822 | 1457 | 5300 |
| **July** | 13933 | 11.04 | 2818 | 3252 | 6936 | 1473 | 1178 | 4285 |
| **August** | 13237 | 11.02 | 2813 | 3246 | 6924 | 1470 | 1176 | 4277 |
| **September** | 15077 | 10.52 | 2685 | 3098 | 6609 | 1403 | 1123 | 4083 |
| **October** | 15902 | 11.04 | 2818 | 3251 | 6936 | 1473 | 1178 | 4285 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **117812** | **94.66** | **29453** | **29453** | **55478** | **11781** | **9425** | **34272** |

**1998** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 13567 | 10.05 | 6167 | 3084 | 3084 | 690 | 552 | 1842 |
| **April** | 16589 | 12.29 | 3770 | 3770 | 7541 | 1686 | 1349 | 4505 |
| **May** | 18299 | 13.56 | 3728 | 4159 | 8749 | 1956 | 1565 | 5227 |
| **June** | 17695 | 13.11 | 3605 | 4022 | 8460 | 1892 | 1513 | 5055 |
| **July** | 14307 | 10.60 | 2914 | 3252 | 6840 | 1530 | 1224 | 4087 |
| **August** | 14281 | 10.58 | 2909 | 3246 | 6828 | 1527 | 1222 | 4080 |
| **September** | 13631 | 10.10 | 2777 | 3098 | 6517 | 1457 | 1166 | 3894 |
| **October** | 14306 | 10.60 | 2914 | 3251 | 6840 | 1529 | 1224 | 4087 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **122674** | **90.91** | **30669** | **30669** | **54858** | **12267** | **9814** | **32776** |

Notes: The totals listed are the totals listed in the 1996 Crop Utilization publication

*Includes both new diversions from river and return flow from upstream divisions

**Returned to River through wasteways and drains

***Evaporation, Phreatophyte Consumption, and Seepage to groundwater

## Socorro Division

## Sample Crop and Water Data from MRGCD and Bureau of Reclamation

**1997** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 14295 | 11.13 | 7147 | 3574 | 3574 | 715 | 572 | 2287 |
| **April** | 16399 | 12.77 | 4100 | 4100 | 8199 | 1640 | 1312 | 5248 |
| **May** | 18873 | 14.70 | 4028 | 4718 | 10127 | 2025 | 1620 | 6481 |
| **June** | 18511 | 14.41 | 3951 | 4628 | 9932 | 1986 | 1589 | 6357 |
| **July** | 19388 | 15.10 | 4138 | 4847 | 10403 | 2081 | 1664 | 6658 |
| **August** | 14065 | 10.95 | 3002 | 3516 | 7547 | 1509 | 1207 | 4830 |
| **September** | 11845 | 9.22 | 2528 | 2961 | 6356 | 1271 | 1017 | 4068 |
| **October** | 15043 | 11.71 | 3211 | 3761 | 8071 | 1614 | 1291 | 5166 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **128416** | **99.99** | **32104** | **32104** | **64208** | **12842** | **10273** | **41093** |

**1996** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 15834 | 14.96 | 7917 | 3959 | 3959 | 792 | 633 | 2533 |
| **April** | 16305 | 15.40 | 4076 | 4076 | 8153 | 1631 | 1304 | 5218 |
| **May** | 13913 | 13.14 | 2731 | 3478 | 7704 | 1541 | 1233 | 4930 |
| **June** | 13509 | 12.76 | 2652 | 3377 | 7480 | 1496 | 1197 | 4787 |
| **July** | 10738 | 10.14 | 2108 | 2685 | 5946 | 1189 | 951 | 3805 |
| **August** | 12174 | 11.50 | 2390 | 3044 | 6741 | 1348 | 1079 | 4314 |
| **September** | 12462 | 11.77 | 2446 | 3116 | 6900 | 1380 | 1104 | 4416 |
| **October** | 10918 | 10.31 | 2143 | 2730 | 6045 | 1209 | 967 | 3869 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **105853** | **100.00** | **26463** | **26463** | **52927** | **10585** | **8468** | **33873** |

Notes: The totals listed are the totals listed in the 1996 Crop Utilization publication

*Includes both new diversions from river and return flow from upstream divisions

**Returned to River through wasteways and drains

***Evaporation, Phreatophyte Consumption, and Seepage to groundwater

## District Total

## Sample Crop and Water Data from MRGCD and Bureau of Reclamation

**1999** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 1156 | 0.19 | 289 | 289 | 578 | 116 | 93 | 370 |
| **March** | 74452 | 12.16 | 37226 | 18613 | 18613 | 3726 | 2981 | 11906 |
| **April** | 74684 | 12.20 | 18671 | 18671 | 37342 | 7475 | 5980 | 23886 |
| **May** | 77520 | 12.66 | 16304 | 19380 | 41836 | 8375 | 6700 | 26761 |
| **June** | 87172 | 14.24 | 18334 | 21793 | 47045 | 9418 | 7534 | 30093 |
| **July** | 82371 | 13.46 | 17325 | 20593 | 44454 | 8899 | 7119 | 28435 |
| **August** | 61230 | 10.00 | 12878 | 15307 | 33044 | 6615 | 5292 | 21137 |
| **September** | 77026 | 12.58 | 16200 | 19257 | 41569 | 8322 | 6657 | 26590 |
| **October** | 76509 | 12.50 | 16092 | 19127 | 41290 | 9266 | 6613 | 26412 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **612119.6** | **100.00** | **153030** | **153030** | **305771** | **62212** | **48970** | **195589** |

**1998** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 58826 | 8.66 | 29413 | 14707 | 14707 | 2941 | 2353 | 9412 |
| **April** | 84260 | 12.40 | 21065 | 21065 | 42130 | 8426 | 6741 | 26963 |
| **May** | 96485 | 14.20 | 21475 | 24121 | 50889 | 10178 | 8142 | 32569 |
| **June** | 97960 | 14.42 | 21803 | 24490 | 51667 | 10333 | 8267 | 33067 |
| **July** | 85319 | 12.56 | 18990 | 21330 | 45000 | 9000 | 7200 | 28800 |
| **August** | 84742 | 12.48 | 18861 | 21185 | 44695 | 8939 | 7151 | 28605 |
| **September** | 92958 | 13.69 | 20690 | 23239 | 49029 | 9806 | 7845 | 31378 |
| **October** | 78718 | 11.59 | 17520 | 19679 | 41518 | 8304 | 6643 | 26572 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **679266.2** | **100.00** | **169817** | **169817** | **339633** | **67927** | **54341** | **217365** |

Notes: The totals listed are the totals listed in the 1996 Crop Utilization publication

*Includes both new diversions from river and return flow from upstream divisions

**Returned to River through wasteways and drains

***Evaporation, Phreatophyte Consumption, and Seepage to groundwater

## District Total

## Sample Crop and Water Data from MRGCD and Bureau of Reclamation

**1997** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 69213 | 10.59 | 34607 | 17303 | 17303 | 3461 | 2769 | 11074 |
| **April** | 78047 | 11.94 | 19512 | 19512 | 39024 | 7805 | 6244 | 24975 |
| **May** | 91051 | 13.92 | 19653 | 22763 | 48635 | 9727 | 7782 | 31127 |
| **June** | 90033 | 13.77 | 19433 | 22508 | 48092 | 9618 | 7695 | 30779 |
| **July** | 93926 | 14.36 | 20273 | 23482 | 50171 | 10034 | 8027 | 32109 |
| **August** | 77781 | 11.90 | 16789 | 19445 | 41547 | 8309 | 6648 | 26590 |
| **September** | 76170 | 11.65 | 16441 | 19043 | 40687 | 8137 | 6510 | 26039 |
| **October** | 77207 | 11.81 | 16665 | 19302 | 41240 | 8248 | 6598 | 26394 |
| **November** | 444 | 0.07 | 96 | 111 | 237 | 47 | 38 | 152 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **653872** | **100.00** | **163468** | **163468** | **326936** | **65387** | **53310** | **209239** |

**1996** All numbers in Acre-feet

| Month | Water entering Division | % of Annual | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Irrigators |
|---|---|---|---|---|---|---|---|---|
| | | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 72772 | 11.77 | 36386 | 18193 | 18193 | 3639 | 2911 | 11644 |
| **April** | 85164 | 13.77 | 21291 | 21291 | 42582 | 8516 | 6813 | 27252 |
| **May** | 88107 | 14.25 | 18546 | 22027 | 47534 | 9507 | 7606 | 30422 |
| **June** | 82842 | 13.40 | 17438 | 20711 | 44694 | 8939 | 7151 | 28604 |
| **July** | 70219 | 11.35 | 14781 | 17555 | 37884 | 7577 | 6061 | 24246 |
| **August** | 80880 | 13.08 | 17025 | 20220 | 43635 | 8727 | 6982 | 27927 |
| **September** | 73912 | 11.95 | 15558 | 18478 | 39876 | 7975 | 6380 | 25521 |
| **October** | 64523 | 10.43 | 13582 | 16131 | 34811 | 6962 | 5570 | 22279 |
| **November** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Annual** | **618419** | **100.00** | **154605** | **154605** | **309210** | **61842** | **49474** | **197894** |

Notes: The totals listed are the totals listed in the 1996 Crop Utilization publication

*Includes both new diversions from river and return flow from upstream divisions

**Returned to River through wasteways and drains

***Evaporation, Phreatophyte Consumption, and Seepage to groundwater

## District Total

## Sample Crop and Water Data from MRGCD and Bureau of Reclamation

**1995** All numbers in Acre-feet

| Month | Diverted (A.F.) | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Farms |
|---|---|---|---|---|---|---|---|
| | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 54.12 | 27.06 | 13.57 | 13.49 | 2.54 | 2.17 | 8.78 |
| **April** | 72.17 | 36.09 | 18.04 | 18.04 | 3.33 | 2.89 | 11.82 |
| **May** | 82.54 | 15.32 | 20.63 | 46.59 | 9.31 | 7.45 | 29.83 |
| **June** | 86.1 | 15.99 | 21.52 | 48.59 | 9.75 | 7.77 | 31.07 |
| **July** | 87.09 | 16.15 | 21.77 | 49.17 | 9.06 | 7.87 | 32.24 |
| **August** | 86.88 | 16.14 | 21.73 | 49.01 | 9.8 | 8.01 | 31.2 |
| **September** | 71.95 | 13.39 | 17.99 | 40.57 | 8.11 | 6.47 | 25.99 |
| **October** | 76.68 | 14.23 | 19.17 | 43.28 | 8.65 | 6.92 | 27.71 |
| **November** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **617.53** | **154.37** | **154.42** | **308.74** | **60.55** | **49.55** | **198.64** |

**1994** All numbers in Acre-feet

| Month | Diverted (A.F.) | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Farms |
|---|---|---|---|---|---|---|---|
| | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 60.61 | 30.31 | 15.15 | 15.16 | 3.03 | 2.43 | 9.69 |
| **April** | 77.1 | 38.56 | 19.28 | 19.26 | 3.85 | 3.38 | 12.03 |
| **May** | 76.29 | 13.46 | 19.07 | 43.76 | 9.51 | 13.82 | 20.43 |
| **June** | 85.34 | 15.05 | 21.33 | 48.96 | 16.05 | 7.82 | 25.09 |
| **July** | 91.04 | 16.05 | 22.77 | 52.22 | 10.44 | 9.16 | 32.62 |
| **August** | 77.75 | 13.73 | 19.45 | 44.57 | 8.93 | 7.74 | 27.9 |
| **September** | 70.4 | 12.43 | 17.59 | 40.38 | 8.07 | 7.02 | 25.29 |
| **October** | 67.5 | 11.91 | 16.89 | 38.7 | 7.74 | 6.67 | 24.29 |
| **November** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **606.03** | **151.50** | **151.53** | **303** | **67.62** | **58.04** | **177.34** |

Notes: The totals listed are the totals listed in the 1996 Crop Utilization publication

*Includes both new diversions from river and return flow from upstream divisions

**Returned to River through wasteways and drains

***Evaporation, Phreatophyte Consumption, and Seepage to groundwater

## District Total

## Sample Crop and Water Data from MRGCD and Bureau of Reclamation

**1993** All numbers in Acre-feet

| Month | Diverted (A.F.) | Main Canals | | Delivered to Laterals | Laterals | | Delivered to Farms |
|---|---|---|---|---|---|---|---|
| | | Waste | Loss | | Waste | Loss | |
| **January** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **February** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **March** | 43.36 | 21.67 | 10.86 | 10.83 | 2.17 | 1.73 | 6.93 |
| **April** | 73.87 | 36.95 | 18.46 | 18.46 | 3.69 | 2.96 | 11.81 |
| **May** | 85.59 | 16.28 | 21.39 | 47.92 | 9.59 | 7.66 | 30.67 |
| **June** | 84.35 | 16.05 | 21.09 | 47.21 | 9.42 | 7.54 | 30.25 |
| **July** | 89.43 | 17.04 | 22.35 | 50.04 | 10.01 | 8.02 | 32.01 |
| **August** | 78.65 | 14.98 | 19.65 | 44.02 | 8.81 | 7.04 | 28.17 |
| **September** | 75.64 | 14.4 | 18.91 | 42.33 | 8.47 | 6.78 | 27.08 |
| **October** | 78.16 | 14.87 | 19.53 | 43.76 | 8.76 | 7 | 28 |
| **November** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **December** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **609.05** | **152.24** | **152.24** | **304.57** | **60.92** | **48.73** | **194.92** |

Notes: The totals listed are the totals listed in the 1996 Crop Utilization publication

*Includes both new diversions from river and return flow from upstream divisions

**Returned to River through wasteways and drains

***Evaporation, Phreatophyte Consumption, and Seepage to groundwater

# Appendix E-3

# Historic Memos Regarding Preparation Of Allocation Reports from Bureau of Reclamation

BR

- BUREAU OF RECLAMATION

Acting Project Superintendent February 12,

Robert Grano, Supervisory Hydrologic Technician

Preparation of Monthly Water Distribution Report

The amount diverted from the Rio Grande and net supply is the sum of provisional records at the following gaging stations:

Cochiti Main Canal at head near Cochiti,

Sili Main Canal near Cochiti,

Lower Santo Domingo Eastside Acequia near Santo Domingo,

Algodones Riverside Drain near Algodones,

Albuquerque Main Canal below Santa Ana Wasteway,

Atrisco Feeder Canal at head near Angostura,

Chical Lateral at Isleta,

Chical Acequia at Isleta,

Casique Acequia at Isleta,

Peralta Main Canal near Isleta,

Belen Highline Canal at Isleta,

Socorro Main Canal north at heading, and

Computed portion of the Alamillo Acequia at San Acacia.

The computed portion of the Atrisco Feeder Canal and Algodones Riverside Drain, which are assumed to have resulted from drain pickup, were subtracted because it would result in a duplication of records. Stream gage records are available for most diversions from the river and a small amount of the drain return flow. In addition, many of these drains serve the dual purpose of a drain and canal. As the flows in these combination ditches contain drain water pickup, unmeasured diverted flow from the river, and new water which has been diverted and measured further upstream, it is impossible to differentiate between the three types of water.

In the Cochiti Division, information provided by the Irrigation Division, the main canal waste was distributed by assuming that there was a 50 percent waste in March and April, and the remainder would be distributed in equal percentages during the rest of the months.

Main canal and lateral losses were broken down approximately equal between the main canals and laterals on the assumption that the seepage losses would be greater per mile in the main canals, but the greater mileage of the laterals would result in the lateral losses being approximately equal to the main canal losses on an acre-feet basis.

The Irrigation Division estimates that of the total recorded flow at the Cochiti Eastside Main Canal at San Felipe, 60 percent is diverted to supply the Albuquerque Division and the remainder is for continued eastside irrigation. Therefore, the total diverted in the Cochiti Division was adjusted by subtracting the amount that was diverted from the Cochiti Eastside Main Canal to the Albuquerque Division, thus avoiding a double accounting of water.

In the Albuquerque Division, the computed portion of the Atrisco Feeder Canal and the Algodones Riverside Drain flows which are assumed to have resulted from drain pickup above the gages were subtracted because it would result in a duplication of records.

In the Belen Division, the computed portion of the Barr Riverside Drain Extension was subtracted since it is included in the discharge measurements of the diversions to the east side at Isleta Diversion Dam.

Percentages of main canal and lateral waste and loss in the Albuquerque and Belen Divisions were based on previous years having comparable amounts of water diverted.

In the Socorro Division, there was no diversion demand on the conveyance channel to supplement irrigation demand within the division. Percentages of main canal and lateral waste and losses were based on previous years having comparable amounts of water diverted.

In previous years, the Irrigation Division has estimated that 50 percent of the diversions is wasted in March and 25 percent in April, the remaining months being an equal percentage of the supply. In the Cochiti Division, main canal waste was 50 percent for April, the same as in 1973.

The main canal losses were assumed to be an equal percentage of the water diverted each month. The amount of water diverted to the lateral was computed by subtracting the monthly main canal waste and losses from the quantity diverted. The lateral waste and losses were distributed monthly by the percentages delivered to the laterals.

Drainage wells in the Los Padillas area were not used to supplement the diverted supply.

Two water distribution reports, Form 7-322 and revised Form 7-33A, for summarizing Form 7-322 data for automatic data processing, were prepared for 1974.

The farm delivery by division as described above is as follows:

Cochiti Division..... 8,150 Acre-feet

Albuquerque & Belen Divisions.....121,520 Acre-feet

Socorro Division..... 24,790 Acre-feet

On the basis of total water-right lands (121,680 acres) in the Project, there were 1.27 acre-feet per farm delivery.

Robert Crane

Encls. (Form 7-322 & 7-33A)

cc: Robert Crane (w/encls.)
Robert Hanninga, MRGCD (w/encls.)

March 14, 1967

Memorandum

To: Chief, Hydrology Division

From: John T. Kristl, Hydraulic Engineer

Subject: Preparation of Monthly Water Distribution Report 7-322 (revised) for 1966.

The amount of water diverted from the Rio Grande and net supply is the sum of the provisional records at the following gaging stations: Cochiti main canal at head near Cochiti; Sili main canal near Cochiti; Lower Santo Domingo cantaida acequia near Santo Domingo; Albuquerque main canal below Santa Ana wasteway; Atrisco feeder canal at head, near Angostura; Chical lateral at Isleta; Chical acequia at Isleta; Cacique acequia near Isleta; Peralta main canal near Isleta; Belen highline canal at Isleta; Socorro main canal north below heading; and the three diversions from the conveyance channel within the Socorro Division. The average of the previous years records on the discharge of the Algodones wasteway, the flow at Bare riverside drain extension near Isleta, and the computed portion of the Atrisco canal flows, which are assumed to have resulted from drain pickup in Angostura riverside drain and Atrisco feeder above gage, was subtracted because it would result in a duplication of records. Some of the drains serve the dual purpose of a drain and canal; as the flow in these combination ditches contain drain water pickup and new water which has been diverted and measured farther upstream, it is impossible to differentiate between the two types of water.

Percentages of main canal and lateral waste and loss are the same as used in previous years for the Cochiti Division. The canals in this division were run full to reduce the loss in the river.

Percentages of main canal and lateral waste and loss in the Albuquerque and Belen Divisions are the same as used in 1964. These percentages were used because the total amount diverted from the stream was comparable to 1964.

In the Socorro Division, the recorded flow in the Socorro main canal south near San Antonio was assumed to be the main canal waste and 30 percent of the sum of the recorded flow of San Antonio riverside drain and Blumendorf interior drain was assumed to be the lateral waste. Percentages of main canal and lateral losses used are the same as previous years.

In previous years, the Irrigation District has estimated that 30 percent of the diversion is wasted in March and 25 percent in April and the waste in the remaining months being an equal percentage of the supply. In the Cochiti Division, main canal waste was increased to 30 percent for April.

The main canal losses were assumed to be an equal percentage of the water diverted each month. The amount of water delivered to the laterals was computed by subtracting the monthly main canal waste and losses from the quantity diverted. The lateral waste and losses were distributed monthly by the monthly percentages delivered to the laterals.

An undetermined quantity of water may have been pumped from drainage wells in the Los Padillas area to supplement the diverted supply.

Three water distribution reports, form 7-332 (July 1960) were prepared for 1966. One for the total area, 59,777 acres; one for the net irrigated area, 51,677 acres, and one for the class 6W lands, 8,100 acres. The various quantities were computed for the total area and distributed percentage-wise for the other two reports.

The farm delivery, by divisions as described above, is as follows in acre-feet:

| | |
|---|---|
| Cochiti Division | 6,340 |
| Albuquerque and Belen Divisions | 82,490 |
| Socorro Divisions | 34,300 |

On the basis of total water-right lands (121,680 acres) in the project there were 1.01 acre-feet per acre farm delivery.

Enclosure
Form 7-332 (revised)

cc: R. W. Elliott (w/encl.)

Copy of enclosure only to: Ed Lewis
John Kristl

J. T. Kristl:bms 3-16-67

Kristel

March 11, 1965

Memorandum

To: Chief, Hydrology Division

From: John T. Kristel, Hydraulic Engineer

Subject: Preparation of Monthly Water Distribution Report 7-322 (revised) for 1965

The amount diverted from stream and net supply is the sum of the provisional records at the following gaging stations: Cochiti main canal at head near Cochiti; Sili main canal near Cochiti; Lower Santo Domingo cuatrido acequia near Santo Domingo; Albuquerque main canal below Santa Ana wasteway; Atrisco feeder canal at head, near Angostura; Chical lateral at Isleta; Chical acequia at Isleta; Carrique acequia near Isleta; Peralta main canal near Isleta; Belen highline canal at Isleta; Socorro main canal north at heading; and the three diversions from the conveyance channel within the Socorro Division. The average of the previous years records on the discharge of the Algodones wasteway, the flow at Barr riverside drain extension near Isleta, and the computed portion of the Atrisco feeder canal flows, which are assumed to have resulted from drain pickup in Angostura riverside drain and Atrisco feeder above gage, was subtracted because it would result in a duplication of records. Some of the drains serve the dual purposes of a drain and canal; as the flow in these combination ditches contain drain water pickup and new water which has been diverted and measured farther upstream, it is impossible to differentiate between the two types of water.

Percentages of main canal and lateral waste and loss are the same as used in 1963 and 1964 for the Cochiti Division. The canals in this division were run full to reduce the loss in the river.

Percentages of main canal and lateral waste and loss in the Albuquerque, Belen, and Socorro Divisions are the same as used in 1957 with the exception of the lateral waste in the Socorro Division. These percentages were used because the supply in 1965

was comparable to 1957. The lateral waste in the Socorro Division was increased from 6.[illegible] percent to 13.[illegible] percent due to the greater amount of water diverted in 1963 than in 1957 and was computed from the [illegible] of outflow from the division.

In previous years, the Irrigation District has estimated that [illegible] percent of the diversion is wasted in March and 25 percent in April and the waste in the remaining months being an equal percentage of the supply. In the Cochiti Division, main canal waste was increased to [illegible] percent for April. In the remaining divisions, the Irrigation District percentages were used.

The main canal losses were assumed to be an equal percentage of the water diverted each month. The amount of water delivered to the laterals was computed by subtracting the monthly main canal waste and losses from the quantity diverted. The lateral waste and losses were distributed monthly, with the exception of the lateral waste in the Socorro Division as explained previously, by the monthly percentages delivered to the laterals.

An undetermined quantity of water may have been pumped in the Socorro Division to supplement the diverted supply.

The farm delivery, by divisions as described above, is as follows in acre-feet:

| | |
|---|---|
| Cochiti Division---------- | 6,[illegible] |
| Albuquerque Belen Divisions---------- | 141,[illegible] |
| Socorro Division---------- | 41,470 |

On the basis of total water-right lands ([illegible]) acres in the project, there were [illegible] acre-feet per acre farm delivery.

Enclosure:
(Form 7-[illegible] [revised])

cc:
H.W. Elliott (w/encl.)

Copy of enclosure only to:
Ed Lewis
John Kristl

JKristl:rc 3-[illegible]-66

OPTIONAL FORM NO. 10
5010-104
UNITED STATES GOVERNMENT

# *Memorandum*

TO : Files

DATE: February 23, 1965

FROM : Chief, Water Resources and Stream Gaging Branch

SUBJECT: Preparation of Monthly Water Distribution Report 7-322 (Revised) for 1964

The amount diverted from stream and net supply is the sum of the provisional records at the following gaging stations: Cochiti main canal at head near Cochiti; Sili main canal near Cochiti; average of recorded flows from past years records of the Lower Santo Domingo eastside acequia near Santo Domingo; Albuquerque main canal below Santa Ana wasteway; Atrisco feeder canal at head, near Angostura; Chical lateral at Isleta; Chical acequia at Isleta; Cacique acequia near Isleta; Peralta main canal near Isleta; Belen highline canal at Isleta; Socorro main canal north at San Acacia; and the three diversions from the conveyance channel within the Socorro Division. The average of the previous years records on the discharge of the Algodones wasteway, the flow at the Barr riverside drain extension near Isleta, and the computed portion of the Atrisco feeder canal flows, which are assumed to have resulted from drain pickup in Angostura riverside drain and Atrisco feeder above gage, was subtracted because it would result in a duplication of records. Stream gage records are available only for diversions from the river and a small portion of the drain return flow. In addition, some of the drains serve the dual purpose of a drain and canal; as the flow in these combination ditches contain drain water pickup and new water which has been diverted and measured farther upstream, it is impossible to differentiate between the two types of water.

The main canal and lateral losses were assumed to be as follows: Cochiti Division 50 percent; Albuquerque-Belen Divisions, 40 percent, due to intermittent flow causing additional losses; and Socorro Division 45 percent, due also to intermittent flow. These losses were broken down approximately equal between the main canals and laterals on the assumption that the seepage losses would be greater per mile in the main canals, but the greater mileage of the laterals would result in the lateral losses being approximately equal to the main canal losses on an acre-foot basis.

The lateral waste has normally been assumed to be 10 percent of the water delivered to the laterals; however, in the Cochiti Division all ditches are maintained in a full condition which resulted in an increase in this loss. In the Albuquerque-Belen Division 10 percent was used. In the Socorro Division the lateral waste was higher in early spring and during periods of flows from the Rio Salado and Rio Puerco. It will be noted that the waste was at a minimum during the period of shortage.

ROUGH DRAFT LShaffer:rc 2-17-64

February 17, 1964

MEMORANDUM

To: Files

From: L. E. Shaffer

Subject: Preparation of Monthly Water Distribution Report 7-322 (Revised)

The amount diverted from stream and net supply is the sum of the provisional records at the following stations: Cochiti main canal at head near Cochiti; Sili main canal near Cochiti. Average of recorded flows from past years records of the Lower Santo Domingo eastside acequia near Santo Domingo; Albuquerque main canal below Santa Ana wasteway; Atrisco feeder canal at head, near Angostura; Chical lateral at Isleta; Chical acequia at Isleta; Cacique acequia near Isleta; Peralta main canal near Isleta; Belen highline canal at Isleta; Socorro main canal north at San Acacia; and the three diversions from the conveyance channel within the Socorro Division.

The average of the previous years records on the discharge of the Algodones wasteway, the flow at the Barr riverside drain extension near Isleta, and the computed portion of the Atrisco feeder canal flows, which are assumed to have resulted from drain pickup in Angostura riverside drain and Atrisco feeder above gage, was subtracted, as otherwise it would result in a duplication of recording. Stream gage records are available only for diversions from the river and a small

portion of the drain return flow. In addition, many of the drains serve the dual purpose of a drain and a canal; as the flows in these combination ditches contain drain water pickup and new water which has been diverted and measured farther upstream, it is impossible to differentiate between the two types of water.

Because of the following reasons, a slightly different method was used in making the computations this year:

a. An unusually cold spring delayed most crops with the result that more water was wasted early in the season.

b. Probably the most acute water shortage in history limited the amount of water available for irrigation, so very little water was wasted in the main canals during months of shortage.

c. The Cochiti Division was an exception to the above statement, as it was believed that by running all ditches full, that there would be less waste then if the water was allowed to remain in the river. This practice is similar to that carried on in previous years. Operating personnel were contacted to get estimates of the actual water applied to the farms.

The main canal and lateral losses were assumed to be as follows: Cochiti Division, 50 percent; Albuquerque-Belen Divisions, 40 percent, due to intermittent flow causing additional losses; and Socorro Division, 45 percent, due also to the same reason. These losses were broken down approximately equal between the main canals and the laterals on the assumption that the seepage losses would be greater per mile in the main canals, but the greater mileage of the laterals would result in the lateral losses being approximately equal to the main canal losses on an acre-foot basis.

The lateral waste and carriage water has normally been assumed to be 10 percent of the water delivered to the laterals; however, in the Cochiti Division the maintaining of all ditches in a full condition resulted in an increase in this loss. In the Albuquerque-Belen Division this percentage was correct. In the Socorro-Division the lateral waste was higher in early spring and during periods of flows from the Rio Salado and Rio Puerco. It will be noted that the waste was at a minimum during the period of extreme shortage, although the overall waste is fairly high because of the aforementioned reasons. The main canal waste is usually assumed to be the difference required to make all columns balance. In the past, the Irrigation District has assumed that 50 percent of the delivery is wasted in March and 25 percent in April, with the balance being an equal percentage of the supply. These figures were increased in the Cochiti, Albuquerque, and Belen Divisions; however, in the Socorro Division the records of the outflow from the district were used as a basis for these computations.

An undetermined quantity of water was pumped in the Socorro Division to supplement the diverted supply. The main canal losses were assumed to be an equal percentage of the water diverted each month. Subtracting the monthly main canal waste and canal losses from the water diverted resulted in the amount of water delivered to the laterals. The total farm deliveries were then distributed in accordance with the monthly percentage delivered to the laterals. The lateral wastes and lateral losses were distributed monthly according to this same distribution.

The lateral waste and carriage water has normally been assumed to be 10 percent of the water delivered to the laterals; however, in the Cochiti Division the maintaining of all ditches in a full condition resulted in an increase in this loss. In the Albuquerque-Belen Division this percentage was correct. In the Socorro-Division the lateral waste was higher in early spring and during periods of flows from the Rio Salado and Rio Puerco. It will be noted that the waste was at a minimum during the period of extreme shortage, although the overall waste is fairly high because of the aforementioned reasons. The main canal waste is usually assumed to be the difference required to make all columns balance. In the past, the Irrigation District has assumed that 50 percent of the delivery is wasted in March and 25 percent in April, with the balance being an equal percentage of the supply. These figures were increased in the Cochiti, Albuquerque, and Belen Divisions; however, in the Socorro Division the records of the outflow from the district were used as a basis for these computations.

An undetermined quantity of water was pumped in the Socorro Division to supplement the diverted supply. The main canal losses were assumed to be an equal percentage of the water diverted each month. Subtracting the monthly main canal waste and canal losses from the water diverted resulted in the amount of water delivered to the laterals. The total farm deliveries were then distributed in accordance with the monthly percentage delivered to the laterals. The lateral wastes and lateral losses were distributed monthly according to this same distribution.

The farm delivery, by divisions, as described above, is as follows:

| | Acre-feet |
|---|---|
| Cochiti Division---------- | 6,040 |
| Albuquerque & Belen Divisions-------- | 63,460 |
| Socorro Division---------- | 18,590 |

On the basis of total water-right lands (121,680 acres) in the project, there were 0.72 acre-feet per acre farm delivery.

L. E. Shaffer

cc:
Elliott

Form 7-322 (Revised)
Lewis
Nasci
Elliott
Shaffer

For 1962 Irrig. Year

January 30, 1963

MEMORANDUM

To: Files

From: L. E. Shaffer

Subject: Preparation of Monthly Water Distribution Report Form 7-322 (Revised)

The amount diverted from stream and net supply is the sum of the provisional discharge records at the following stations: Cochiti Main Canal at head near Cochiti; Sili Main Canal near Cochiti; Lower Santo Domingo Eastside Acequia near Santo Domingo; San Felipe Acequia below San Felipe Pueblo; Albuquerque Main Canal below Santa Ana Wasteway; Atrisco Feeder Canal at Head, near Angostura, estimated diversion from Atrisco Headworks; Chical Lateral at Isleta; Chical Acequia at Isleta; Cacique Acequia near Isleta; Peralta Main Canal near Isleta; Belen High Line Canal at Isleta; Socorro Main Canal North at San Acacia, the three diversions from the conveyance channel within the Socorro Division and the Alamillo Acequia at San Acacia.

The discharge of the Algodones Wasteway, Barr Riverside Drain Extension near Isleta and the computed portion of the Atrisco Feeder Canal, which is assumed to have resulted from drain pickup in Angostura Riverside Drain and Atrisco Feeder above gage, was subtracted, as otherwise it would result in a duplication of recording. Stream gage records are available only for diversions from the river and a small portion of the drain return flow. In addition, many of the drains serve the dual purpose of a drain and a canal; so the flows in these combination ditches contain drain water pick up and new water which has been diverted and measured further upstream, it is impossible to differentiate between the two types of water. A fixed percentage of Main Canal and lateral losses has been used previously due to lack of data and has been continued in this report for the Albuquerque-Belen Divisions.

Considerably more water was diverted within the Cochiti Division to be used for flushing out the canals during 1962 so the Main Canal losses and waste were increased over that used in previous years.

In the Socorro Division, the rehabilitation of the Socorro Main Canal Reading resulted in the ability to divert a much larger supply. About 21% more water was actually diverted in 1961 than in 1960. Examination of the Socorro Main Canal South, records for 1961, disclosed that 19.5% more water was passed on thru the district in 1961. It is logical to assume that more water was also allowed to return to the river thru the wasteways. With the increased amount of water being carried by all canals and laterals it could also be assumed that an increased loss would result. On this basis all losses and waste computations for both the canals and laterals were increased by 19.5% over the computed totals arrived at by the previously used method. These same percentages have been used in computing the 1962 records.

Average percentages of waste-loss, lateral and farm deliveries were computed for 1959, based on the years 1956, 1957 and 1958 and these percentages were used in 1959 and 1960. The same percentages were used for the Albuquerque-Belen Division again this year. The revised percentages for the Cochiti and Socorro Divisions are reflected in the following table which also changes the average computed for the divisions as a whole.

| | Net Supply | Main Canal Waste | Main Canal Losses | Delivery To Laterals | Lateral Waste | Lateral Losses | Total Farm Delivery |
|---|---|---|---|---|---|---|---|
| Cochiti Division | 100 | 27.21 | 25.42 | 46.37 | 4.64 | 24.60 | 17.12 |
| Albuq.-Belen Division | 100 | 21.93 | 15.18 | 62.89 | 6.28 | 14.82 | 41.79 |
| Socorro Division | 100 | 32.62 | 12.20 | 55.18 | 7.70 | 11.70 | 35.78 |
| Average of Divisions | 100 | 26.65 | 15.78 | 59.57 | 6.39 | 13.23 | 37.95 |

The net supply was broken down on a yearly basis thru each stage of delivery to the farm but on a division basis. It was assumed that 30 percent of the net supply was wasted in March, 25 to 30 percent in April and that the remainder of the canal waste was proportionate to the supply. The main canal losses were all considered proportionate to the supply. Subtraction of the main canal loss and waste resulted in the amount delivered to the laterals. In the past 10 percent of this water was considered to have been wasted thru the laterals. The same percentage was used this year for the upper divisions, however, the increased diversions in the Socorro Division resulted in a 14.0 percent waste at this point. The lateral loss was broken down as a percentage of the delivery.

The farm delivery, by divisions, as described above is as follows:

| | |
|---|---|
| Cochiti Division | 7,520 Acre-feet |
| Albuquerque & Belen Division | 119,160 Acre-feet |
| Socorro Division | 29,800 Acre-feet |

On the basis of total water-right lands (121,680 acres) in the project, there were 1.28 acre-feet per acre farm delivery.

## MIDDLE RIO GRANDE PROJECT

### Irrigated Lands - 1962

| Division: | | Acres Irrigated |
|---|---|---|
| **Cochiti:** | | |
| Non-Indian | 602 | |
| Indian | 1,980 | |
| Subtotal | | 2,582 |
| **Albuquerque:** | | |
| Non-Indian | 10,898 | |
| Indian | 2,029 | |
| Subtotal | | 12,927 |
| **Belen:** | | |
| Non-Indian | 24,282 | |
| Indian | 1,915 | |
| Subtotal | | 26,197 |
| **Socorro:** corrected 2/15/63 (Ed Lewis) | | |
| Non-Indian | | ~~[illegible]~~ 9268 + 193 |
| TOTAL | | ~~50,781~~ 50,974 |

39,124

For Eng. Yr. 1961

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ALBUQUERQUE PROJECT OFFICE
P. O. BOX 252
ALBUQUERQUE, NEW MEXICO

IN REPLY
REFER TO:

January 30, 1962

MEMORANDUM

To: Files

From: L. E. Shaffer

Subject: Preparation of Monthly Water Distribution Report Form 7-322 (Revised)

The amount diverted from stream and net supply is the sum of the provisional discharge records at the following stations: Cochiti Main Canal at head near Cochiti; Sili Main Canal near Cochiti; Lower Santo Domingo Eastside Acequia near Santo Domingo; San Felipe Acequia below San Felipe Pueblo; Albuquerque Main Canal below Santa Anna Wasteway; Atrisco Feeder Canal at Head, near Angostura; Chical Lateral at Isleta; Chical Acequia at Isleta; Cacique Acequia near Isleta; Peralta Main Canal near Isleta; Belen High Line Canal at Isleta; Socorro Main Canal North at San Acacia and the three diversions from the conveyance channel within the Socorro Division.

The discharge of the Algodones Wasteway, Barr Riverside Drain Extension near Isleta and the computed portion of the Atrisco Feeder Canal, which is assumed to have resulted from drain pickup in Angostura Riverside Drain and Atrisco Feeder above gage, was subtracted, as otherwise it would result in a duplication of recording. Stream gage records are available only for diversions from the river and a small portion of the drain return flow. In addition, many of the drains serve the dual purpose of a drain and a canal; as the flows in these combination ditches contain drain water pick up and new water which has been diverted and measured farther upstream, it is impossible to differentiate between the two types of water. A fixed percentage of Main Canal and lateral losses has been used previously due to lack of data and has been continued in this report for the Cochiti and Albuquerque-Belen Divisions.

In the Socorro Division, the rehabilitation of the Socorro Main Canal Heading resulted in the ability to divert a much larger supply. About 23% more water was actually diverted this year than in 1960. Examination of the Socorro Main Canal South, records for 1961, disclosed that 19.5% more water was passed on thru the district this year than in 1960. It is logical to assume that more water was also allowed to return to the river thru the wasteways. With the increased

amount of water being carried by all canals and laterals it could also be assumed that an increased loss would result. On this basis all losses and waste computations for both the canals and laterals were increased by 19.5% over the computed totals arrived at by the previously used method.

Average percentages of waste-loss, lateral and farm deliveries were computed for 1959, based on the years 1956, 1957 and 1958 and these percentages were used in 1959 and 1960. The same percentages were used for the Cochiti and Albuquerque-Belen Divisions again this year. The revised percentages for the Socorro Division are reflected in the following table which also changes the average computed for the divisions as a whole.

| | Net Supply | Main Canal Waste | Main Canal Losses | Delivery To Laterals | Lateral Waste | Lateral Losses | Total Farm Delive |
|---|---|---|---|---|---|---|---|
| Cochiti Division | 100 | 22.02 | 25.20 | 52.78 | 5.26 | 24.81 | 22.71 |
| Albuq.-Belen Division | 100 | 21.93 | 15.18 | 62.89 | 6.28 | 14.82 | 41.79 |
| Socorro Division | 100 | 30.34 | 12.16 | 56.90 | 7.66 | 11.71 | 37.53 |
| Average of Divisions | 100 | 24.96 | 17.51 | 57.53 | 6.40 | 17.11 | 34.02 |

The net supply was broken down on a yearly basis thru each stage of delivery to the farm but on a division basis. It was assumed that 50 percent of the net supply was wasted in March, 25 percent in April and that the remainder of the canal waste was proportionate to the supply. The main canal losses were all considered proportionate to the supply. Subtraction of the main canal loss and waste resulted in the amount delivere to the laterals. In the past 10 percent of this water was considered to have been wasted thru the laterals. The same percentage was used this year for the upper divisions, however, the increased diversions in the Socorro Division resulted in a 13.5 percent waste at this point. The lateral loss was broken down as a percentage of the delivery.

The farm delivery, by divisions, as described above is as follows:

| | |
|---|---|
| Cochiti Division | 8,790 Acre-feet |
| Albuquerque-& Belen Division | 125,410 Acre-feet |
| Socorro Division | 31,590 Acre-feet |

On the basis of total water-right lands (121,680 acres) in the project, there were 1.36 acre-feet per acre farm delivery.

Louis E. Shaffer

amount of water being carried by all canals and laterals it could also be assumed that an increased loss would result. On this basis all losses and waste computations for both the canals and laterals were increased by 19.5% over the computed totals arrived at by the previously used method.

Average percentages of waste-loss, lateral and farm deliveries were computed for 1959, based on the years 1956, 1957 and 1958 and these percentages were used in 1959 and 1960. The same percentages were used for the Cochiti and Albuquerque-Belen Divisions again this year. The revised percentages for the Socorro Division are reflected in the following table which also changes the average computed for the divisions as a whole.

| | Net Supply | Main Canal Waste | Main Canal Losses | Delivery To Laterals | Lateral Waste | Lateral Losses | Total Farm Delive |
|---|---|---|---|---|---|---|---|
| Cochiti Division | 100 | 22.02 | 25.20 | 52.78 | 5.26 | 24.81 | 22.71 |
| Albuq.-Belen Division | 100 | 21.93 | 15.18 | 62.89 | 6.28 | 14.82 | 41.79 |
| Socorro Division | 100 | 30.34 | 12.16 | 56.90 | 7.66 | 11.71 | 37.53 |
| Average of Divisions | 100 | 24.96 | 17.51 | 57.53 | 6.40 | 17.11 | 34.02 |

The net supply was broken down on a yearly basis thru each stage of delivery to the farm but on a division basis. It was assumed that 50 percent of the net supply was wasted in March, 25 percent in April and that the remainder of the canal waste was proportionate to the supply. The main canal losses were all considered proportionate to the supply. Subtraction of the main canal loss and waste resulted in the amount delivere to the laterals. In the past 10 percent of this water was considered to have been wasted thru the laterals. The same percentage was used this year for the upper divisions, however, the increased diversions in the Socorro Division resulted in a 13.5 percent waste at this point. The lateral loss was broken down as a percentage of the delivery.

The farm delivery, by divisions, as described above is as follows:

| | |
|---|---|
| Cochiti Division | 8,790 Acre-feet |
| Albuquerque-& Belen Division | 125,410 Acre-feet |
| Socorro Division | 31,590 Acre-feet |

On the basis of total water-right lands (121,680 acres) in the project, there were 1.36 acre-feet per acre farm delivery.

Louis E. Shaffer

IN REPLY
REFER TO:

# UNITED STATES
# DEPARTMENT OF THE INTERIOR
## BUREAU OF RECLAMATION
### ALBUQUERQUE PROJECT OFFICE
### P. O. BOX 252
### ALBUQUERQUE, NEW MEXICO

January 20, 1961

For Irrig. y ea. 1960

Memorandum

To: Files

From: L. E. Shaffer

Subject: Preparation of Monthly Water Distribution Report
Form 7-322

The amount diverted from stream and net supply is the sum of the provisional discharge records at the following stations: Cochiti Main Canal at head near Cochiti; Sili Main Canal near Cochiti; Lower Santo Domingo Eastside Acequia near Santo Domingo; San Felipe Acequia below San Felipe Pueblo; Albuquerque Main Canal below Santa Anna Wasteway; Atrisco Feeder at Head, near Angostura; Los Padillas Acequia at head near Pajarito; Isleta Indian Acequia at head near Isleta; Chical Lateral at Isleta; Chical Acequia at Isleta; Cacique Acequia near Isleta; Peralta Main Canal near Isleta; Belen High Line Canal at Isleta; Socorro Main Canal North at San Acacia and the three diversions from the conveyence channel within the Socorro Division.

The discharge of the Algodones Wasteway, Barr Riverside Drain Extension near Isleta and the computed portion of the Atrisco Feeder Canal, which resulted from drain pickup in Angostura Riverside Drain and Atrisco Feeder above gage, was subtracted, as otherwise it would result in a duplication of recording. Stream gage records are available only for diversions from the river and a small portion of the drain return flow. In addition many of the drains serve the dual purpose of a drain and a canal making them impractical to measure. A fixed percentage of main canal and lateral losses has been used previously due to lack of data and is continued in this report.

Average percentages of waste-loss, lateral and farm deliveries were computed for 1959, based on the years 1956, 1957 and 1958, and have been used again for 1960.

These percentages are as follows:

| | Net Supply | Main Canal Waste | Main Canal Losses | Delivery to Laterals | Lateral Waste | Lateral Losses | Total Farm Deliver |
|---|---|---|---|---|---|---|---|
| Cochiti Division | 100 | 22.02 | 25.20 | 52.78 | 5.26 | 24.81 | 22.71 |
| Albuq.-Belen Div. | 100 | 21.93 | 15.18 | 62.89 | 6.28 | 14.82 | 41.79 |
| Socorro Division | 100 | 25.89 | 10.18 | 63.93 | 6.41 | 9.80 | 47.72 |
| Average of Divisions | 100 | 23.28 | 16.85 | 59.87 | 5.98 | 16.48 | 37.41 |

The net supply was broken down on a yearly basis thru each stage of delivery to the farm but on a division basis. It was assumed that 50 percent of the net supply was wasted in March, 25 percent in April and that the remainder of the canal waste was proportionate to the supply. The main canal losses were all considered proportionate to the supply. Subtraction of the Main Canal loss and waste from the net supply resulted in the amount delivered to the laterals. Ten percent of this water was considered to have been wasted. The lateral loss was broken down as a percentage of the delivery.

The farm delivery, by divisions, as described above is as follows:

| | | |
|---|---|---|
| Cochiti Division | 9,610 | Acre-Feet |
| Albuquerque & Belen Div. | 112,670 | " " |
| Socorro Division | 30,980 | " " |

On the basis of total water-right lands (121,680 acres) in the project, there were 1.26 acre-feet per acre farm delivery.

Louis E. Shaffer

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ALBUQUERQUE PROJECT OFFICE
P. O. BOX 252
ALBUQUERQUE, NEW MEXICO

IN REPLY
REFER TO:

February 4, 1960

Memorandum

To: Files

From: L. E. Shaffer

Subject: Preparation of Monthly Water Distribuation Report, Form 7-322

The amount diverted from stream and net supply is the sum of the provisional discharge records at the following stations: Cochiti Main Canal at head near Cochiti; Sili Main Canal near Cochiti; Lower Santo Domingo Eastside Acequia near Santo Domingo; San Felipe Acequia below San Felipe Pueblo; Albuquerque Main Canal below Santa Anna Wasteway; Atrisco Feeder at Head near Angostura; Los Padillas Acequia at head near Pajarita; Isleta Indian Acequia at head near Isleta; Chical Lateral at Isleta; Chical Acequia at Isleta; Cacique Acequia near Isleta; Peralta Main Canal near Isleta; Belen High Line Canal at Isleta; San Juan Main Canal below first check; Sais Lateral at head; Socorro Main Canal, North at San Acacia and the three Diversions from the conveyence within the Socorro Division this past season.

The discharge of the Algodones Wasteway, Barr Riverside Drain Extension near Isleta and the computed portion of the Atrisco Feeder Canal which resulted from drain pick up in Angostora Riverside Drain and Atrisco Feeder above gage, was subtracted, as otherwise it would result in a duplication of recording. A fixed percentage of main canal and lateral losses has been used previously due to lack of data and is continued in this report.

The 1956, 1957 and 1958 reports were examined by divisions and the average percentages of waste, loss, lateral and farm deliveries computed for each division. Table No. I lists these percentages.

Table No. I

| | Net Supply | Main Canal Waste | Main Canal Losses | Delivered to Laterals | Lateral Waste | Lateral Losses | Total | Per Acr |
|---|---|---|---|---|---|---|---|---|
| Cochiti Division | 100 | 22.02 | 25.20 | 52.78 | 5.26 | 24.81 | 22.71 | 100 |
| Albuquerque-Belen D. | 100 | 21.93 | 15.18 | 62.89 | 6.28 | 14.82 | 41.79 | 100 |
| Socorro Division | 100 | 25.89 | 10.18 | 63.93 | 6.41 | 9.80 | 47.72 | 100 |
| Average of Div. | 100 | 23.28 | 16.85 | 59.87 | 5.98 | 16.48 | 37.41 | 100 |

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ALBUQUERQUE PROJECT OFFICE
P. O. BOX 252
ALBUQUERQUE, NEW MEXICO

IN REPLY
REFER TO:

February 4, 1960

Memorandum

To: Files

From: L. E. Shaffer

Subject: Preparation of Monthly Water Distribuation Report, Form 7-322

The amount diverted from stream and net supply is the sum of the provisional discharge records at the following stations: Cochiti Main Canal at head near Cochiti; Sili Main Canal near Cochiti; Lower Santo Domingo Eastside Acequia near Santo Domingo; San Felipe Acequia below San Felipe Pueblo; Albuquerque Main Canal below Santa Anna Wasteway; Atrisco Feeder at Head near Angostura; Los Padillas Acequia at head near Pajarita; Isleta Indian Acequia at head near Isleta; Chical Lateral at Isleta; Chical Acequia at Isleta; Cacique Acequia near Isleta; Peralta Main Canal near Isleta; Belen High Line Canal at Isleta; San Juan Main Canal below first check; Sais Lateral at head; Socorro Main Canal, North at San Acacia and the three Diversions from the conveyence Extension within the Socorro Division this past season.

The discharge of the Algodones Wasteway, Barr Riverside Drain Extension near Isleta and the computed portion of the Atrisco Feeder Canal which resulted from drain pick up in Angostora Riverside Drain and Atrisco Feeder above gage, was subtracted, as otherwise it would result in a duplication of recording. A fixed percentage of main canal and lateral losses has been used previously due to lack of data and is continued in this report.

The 1956, 1957 and 1958 reports were examined by divisions and the average percentages of waste, loss, lateral and farm deliveries computed for each division. Table No. I lists these percentages.

Table No. I

| | Net Supply | Main Canal Waste | Main Canal Losses | Delivered to Laterals | Lateral Waste | Lateral Losses | Total Revised | Per Acr |
|---|---|---|---|---|---|---|---|---|
| Cochiti Division | 100 | 22.02 | 25.20 | 52.78 | 5.26 | 24.81 | 22.71 | 100 |
| Albuquerque-Belen D. | 100 | 21.93 | 15.18 | 62.89 | 6.28 | 14.82 | 41.79 | 100 |
| Socorro Division | 100 | 25.89 | 10.18 | 63.93 | 6.41 | 9.80 | 47.72 | 100 |
| Average of Div. | 100 | 23.28 | 16.85 | 59.87 | 5.98 | 16.48 | 37.41 | 100 |

As the results appeared consistent the net supply was broken down on a yearly basis thru each stage of delivery to the farm but still on a division basis. It was assumed that 50 percent of the net supply was wasted in March, 25 percent in April and that the remainder of the main canal waste was proportionate to the supply. The main canal losses were all considered proportionate to the supply. Subtraction of the main canal loss and waste from the net supply resulted in the amount delivered to the laterals. Ten percent of this water was considered to be wasted while the total lateral loss for the season was broken down as a percentage of delivery to the laterals.

In previous years the irrigation division furnished estimates of farm delivery by divisions but as these usually had to be re-examined and adjusted, this practice was omitted this year. The average percentage of the farm delivery for the past three years was used instead. This resulted in the following deliveries by divisions.

| | |
|---|---|
| Cochiti | 9,640 Acre Feet |
| Albuquerque & Belen | 113,020 Acre Feet |
| Socorro Division | 27,690 Acre Feet |

L. E. Shaffer

CC: Fife
Shaffer

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ALBUQUERQUE PROJECT OFFICE
P. O. BOX 252
ALBUQUERQUE, NEW MEXICO

IN REPLY
REFER TO:

1958 For Irrig

Note: Corrected copy by District due as acreage furnished did not agree with Census

February 17, 1959

MEMORANDUM

To: Files

From: L. E. Shaffer

Subject: Preparation of Monthly Water Distribution Report, Form 7-322

The amount diverted from stream and net supply is the sum of the provisional discharge records at the following stations: Cochiti Main Canal at head near Cochiti; Sili Main Canal near Cochiti; Albuquerque Main Canal at head near Algodones; Arenal Main Canal at Albuquerque; Armijo Canal at Albuquerque; Atrisco Ditch at Albuquerque; Isleta Indian Lateral at head; Chical Lateral at Isleta; Chical Acequia at Isleta; Cacique Acequia near Isleta; Peralta Main Canal near Isleta; Belen High Line Canal at Isleta; San Juan Main Canal below first check; Sais Lateral at head; and Socorro Main Canal, North, at San Acacia.

The discharge of the Barr Riverside Drain extension near Isleta was subtracted since it is included in the discharge measurements of the diversions to the east side at Isleta Diversion Dam.

No diversions for January and February were included since all water diverted during those two months was used for sluicing purposes.

Irrigation, in most cases, was shut down on about November 1; however, considerable water was diverted for flushing purposes after this date. No delivery for irrigation use was considered for November or December.

The total quantity of water delivered to the farms was furnished by the Irrigation Division and was broken down by Divisions as follows:

| | |
|---|---|
| Cochiti Division | 6,700 Acre-feet |
| Albuquerque Division | 42,080 Acre-feet |
| Belen Division | 101,900 Acre-feet |
| Socorro Division | 25,800 Acre-feet |
| TOTAL | 176,480 Acre-feet |

The main canal and lateral losses were assumed to be as follows: Cochiti Division, 50 percent of diversions; Albuquerque and Belen Divisions, 30 percent; Socorro Division, 20 percent. These losses were broken down approximately equal between the main canals and the laterals on the assumption that the seepage losses would be greater per mile in the main canals, but the greater mileage of laterals would result in the lateral losses being approximately equal to the main canal losses on an acre-foot basis.

The lateral waste and carriage water was assumed to be 10 percent of the deliveries to the laterals. The main canal waste was assumed to be the difference required to make all columns balance. After the annual values for each column were determined for each division by the above method, the main canal waste was distributed by assuming, from the information provided by the Irrigation Division, that there was a 50 percent waste in March, a 25 percent waste in April, and the remainder would be distributed in equal percentages during the rest of the months. The main canal losses were assumed to be an equal percentage of the water diverted each month. Subtracting the monthly main canal waste and canal losses from the water diverted resulted in the amount of water delivered to the laterals. The total farm deliveries were then distributed in accordance with the monthly percentage delivered to the laterals. The lateral wastes and lateral losses were distributed monthly according to this same distribution.

L. E. Shaffer

L. E. Shaffer

Copy to: R. W. Fife

Form 7-322
Justice - Original and 2 (To go with Crop census)
Nasci - 1 copy
Fife - 1 copy
Elliott - 1 copy

1957 For Irrig. Year

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ALBUQUERQUE PROJECT OFFICE
P. O. BOX 252
ALBUQUERQUE, NEW MEXICO

IN REPLY
REFER TO:

March 5, 1958

Memorandum

To: Files

From: L. E. Shaffer

Subject: Preparation of monthly water distribution report, Form 7-322

The amount diverted from stream and net supply is the sum of the provisional discharge records at the following stations: Cochiti Main Canal at head near Cochiti; Sili Main Canal near Cochiti; Albuquerque Main Canal at head near Algodones; Arenal Canal at Atrisco heading; Indian lateral at head; Chical lateral at Isleta; Chical acequia at Isleta; Cacique acequia at Isleta; Peralta Main Canal near Isleta; Belen Highline Canal at Isleta; San Juan Main Canal at head; and Socorro Main Canal, North, at San Acacia.

The discharge of the Barr riverside drain extension near Isleta was subtracted since it is included in the discharge measurements of the diversions to the east side at Isleta Diversion Dam.

The discharge of the Albuquerque Main Canal was corrected for sand sluicing by subtracting a proportionate part of the discharge for the periods this operation was in progress (sluicing schedule was 7:00 to 8:00 p.m. on week days and from 8:00 p.m. Saturday to 8:00 p.m. on Sunday. Twelve hours only of this latter period sluicing was thru the Santa Ana sluiceway.) Actually, much of the water used for sluicing after July 1, when the Bureau assumed operation of this station, was deducted during the process of working up the flows. This was accomplished from observations made while sluicing was in progress and was related to the recorder records.

No diversions for January and February were included since all water diverted during those two months was used for sluicing purposes.

Irrigation was actually shut down in most canals on November 2, however, much of the water at this time was being bypassed back to the river, so no delivery was considered for November and December.

The total quantity of water delivered to the farms was furnished by the O & M Division and was broken down by divisions as follows:

| | |
|---|---|
| Cochiti Division | 6,600 acre-feet |
| Albuquerque Division | 34,300 acre-feet |
| Belen Division | 106,900 acre-feet |
| Socorro Division | 31,200 acre-feet |
| Total | 179,000 acre-feet |

The main canal and lateral losses were assumed to be as follows: Cochiti division, 50 percent of diversions; Albuquerque and Belen divisions, 30 percent; Socorro division, 20 percent. These losses were broken down approximately equal between the main canals and the laterals on the assumption that the seepage losses would be greater per mile in the main canals, but the greater mileage of laterals would result in the lateral losses being approximately equal to the main canal losses on an acre-foot basis.

The lateral waste and carriage water was assumed to be 10 percent of the deliveries to the laterals. The main canal waste was assumed to be the difference required to make all columns balance. After the annual values for each column were determined for each division by the above method, the main canal waste was distributed by assuming, from the information provided by the O & M Division, that there was a 50 percent waste in March, a 25 percent waste in April, and the remainder would be distributed in equal percentages during the rest of the months. The main canal losses were assumed to be an equal percentage of the water diverted each month. Subtracting the monthly main canal waste and canal losses from the water diverted resulted in the amount of water delivered to the laterals. The total farm deliveries were then distributed in accordance with the monthly percentage delivered to the laterals. The lateral wastes and lateral losses were distributed monthly according to this same distribution.

L. E. Shaffer

Copy to: RWFife

March 8, 1957

To: Regional Director, Amarillo, Texas
Attention: 5-430

From: Acting Project Manager

Subject: Water Use--Middle Rio Grande Project, New Mexico

In compliance with the request in your letter of January 9, 1957, to Mr. Louis A. Scott, a copy of which was furnished this office, there follows water data covering the 1956 irrigation season:

According to our studies based on the ditch riders field records and the total water right lands (121,000 ac.) in the Middle Rio Grande Conservancy District, approximately 0.9 acre feet of water per acre was available for irrigation during the year. On this same basis, 1.10 acre feet per acre was available to the Indian water right lands. However, during the 1956 season we estimate that 1.65 acre feet of water per acre were delivered to non-Indian lands in the District that were actually under irrigation. Indian lands that were irrigated received approximately 2.5 acre feet per acre. A weighted average of about 1.8 acre feet per acre of water was delivered to the total non-Indian and Indian lands subject to irrigation during 1956 season.

These values were arrived at through weighted average calculations beginning with the number and estimated depth of water per irrigation application for the representative crops grown within each irrigation branch, and brought forward in arriving at a weighted average figure.

As a matter of further information, on the basis of non-Indian water right acreage alone (100,000 ac), 0.86 acre feet per acre was available for use.

The above values should be increased by 22% for arriving at 1955 figures.

Acreage figures used in the computations for estimating the

weighted average per acre applications in 1956 for the lands to which water was delivered were taken from the 1955 crop census and adjusted for vega and other similar type lands that did receive some water, but were not included in our crop census. At the time these estimates were prepared, the 1956 crop census was not complete; however, we do not expect much difference in figures between 1955 and 1956.

Charles H. Clark

Blind to: E. W. Elliott
G.R. Stephens
R. Fife ✓

For 1957 Irrig Year.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ALBUQUERQUE PROJECT OFFICE
P. O. BOX 252
ALBUQUERQUE, NEW MEXICO

IN REPLY
REFER TO:

March 25, 1957

Memorandum

From: R. W. Fife

Subject: Preparation of monthly water distribution report, Form 7233

The amount diverted from stream and net supply is the sum of the provisional discharge records at the following stations: Cochiti Main Canal at head near Cochiti; Sili Main Canal near Cochiti; Albuquerque Main Canal at head near Algodones ; Arenal Canal at Atrisco heading; Indian lateral at head; Chical lateral at Isleta; Chical acequia at Isleta; Cacique acequia at Isleta; Peralta Main Canal near Isleta; Belen highline canal at Isleta; San Juan Main Canal at head; and Socorro Main Canal, North, at San Acacia.

The discharge of the Barr riverside drain extension near Isleta was subtracted since it is included in the discharge measurements of the diversions to the east side at Isleta Diversion Dam.

The discharge of the Albuquerque Main Canal was corrected for sand sluicing by subtracting the discharge of each Sunday, Monday, and Tuesday, (sluicing schedule is from 8:00 p.m. Saturday to 8:00 p.m. Tuesday each week).

No diversions for January and February were included since all water diverted during those two months was for sluicing purposes.

The total quantity of water delivered to the farms was furnished by the O & M Division and was broken down by divisions as follows:

| | |
|---|---|
| Cochiti Division..... | 13,700 acre-feet |
| Albuquerque Division..... | 26,850 acre-feet |
| Belen Division..... | 55,700 acre-feet |
| Socorro Division..... | 14,295 acre-feet |
| Total..... | 110,545 acre-feet |

The main canal and lateral losses were assumed to be as follows: Cochiti division, 50 percent of the diversions; Albuquerque and Belen divisions, 30 percent; Socorro division, 20 percent. These losses were broken down approximately equal between the main canals and the laterals on the assumption that the seepage losses would

be greater per mile in the main canals, but the greater mileage of laterals would result in the lateral losses being approximately equal to the main canal losses on an acre-foot basis.

The lateral waste and carriage water was assumed to be 10 percent of the deliveries to the laterals. The main canal waste was assumed to be the difference required to make all of the columns balance. After the annual values for each column were determined for each division by the above method, the main canal waste was distributed by assuming, from information provided by O & M Division, that there was a 50 percent waste in March, a 25 percent waste in April, and the remainder would be distributed in equal percentages during the rest of the months. The main canal losses were assumed to be an equal percentage of the water diverted each month. Subtracting the monthly main canal waste and canal losses from the water diverted resulted in the amount of water delivered to the laterals. The total farm deliveries were then distributed in accordance with the monthly percentage delivered to the laterals. The lateral wastes and lateral losses were distributed monthly according to this same distribution.

R. W. Fife