



— BUREAU OF —  
RECLAMATION

Appendix B

# Tables

Draft Environmental Assessment  
Dry-Redwater Rural Water Project, Montana  
Missouri Basin Region

## **Mission Statements**

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, Native Hawaiians, and affiliated Island Communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

## Appendix B

# Tables

Draft Environmental Assessment  
Dry-Redwater Rural Water Project, Montana  
Missouri Basin Region

*Prepared by*

**Stantec Consulting Services Inc.**  
**Contract 140R8121D0011, Task Order 140R6023F0015**

October 2024

# List of Tables

|   |    |
|---|----|
| Table 1-1. Groundwater Quality Samples Since 2000 in the DRWA Service Area that Exceed U.S. EPA Maximum Contaminant Levels (MCL).....             | 1  |
| Table 1-2. Groundwater Quality Samples since 2000 in the DRWA Service Area that Exceed U.S. EPA Secondary Maximum Contaminant Levels (SMCL) ..... | 3  |
| Table 1-3. Agencies with Federal State or Local Action, Approval, or Consultation Responsibilities .....  | 4  |
| Table 2-1. Power Transmission and Distribution Lines.....   | 5  |
| Table 2-2. Number of Trenchless Crossings .....   | 7  |
| Table 2-3. Typical Construction Equipment .....   | 8  |
| Table 2-4. Phasing Plan.....  | 9  |
| Table 2-5. Alternatives Considered but Eliminated.....  | 10 |
| Table 2-6. Comparison of Alternatives .....   | 12 |
| Table 3.1-1. Resources Considered for Inclusion in Environmental Assessment .....   | 13 |
| Table 3.2-1. Vegetation Communities Within the Project Study Area.....  | 16 |
| Table 3.2-2. Wetlands and Water Bodies Within the Project Study Area .....  | 18 |
| Table 3.2-3 Effects to Vegetation Communities .....   | 19 |
| Table 3.2-4 Preliminary Effects to Waters of the U.S. ....  | 21 |
| Table 3.3-1 Threatened and Endangered Species List in DRWA Service Area .....   | 22 |
| Table 3.3-2 Special-Status Species Occurring Within the DRWA Service Area.....  | 23 |
| Table 3.4-1. Fort Peck Power Plant (Dam) Temperature Records 1991–2020 .....  | 29 |
| Table 3.4-2. Fort Peck Power Plant (Dam) Precipitation and Snow Records 1991–2020.....  | 30 |
| Table 3.4-3. Fort Peck Power Plant (Dam) Monthly Precipitation Records 1991–2020.....   | 32 |
| Table 3.4-4. Sidney, Montana Temperature Records 1991–2020 .....  | 33 |
| Table 3.4-5. Sidney, Montana Precipitation and Snow Records 1991–2020.....  | 34 |
| Table 3.4-6. Sidney, Montana Precipitation Records 1991–2020 .....  | 36 |
| Table 3.4-7 Montana’s Greenhouse Gas Emissions Compared to the U.S., Broken Down by Sector or Type of Greenhouse Gas.....                         | 37 |
| Table 3.4-8. Actively Producing Oil and Gas Wells by County .....   | 38 |
| Table 3.4-9. Average Montana Temperature Change by Decade-1950–2015 .....   | 39 |
| Table 3.4-10. Change in Climate Extremes in the State of Montana from 1950-2015 .....   | 40 |
| Table 3.4-11. Future Projections for Climate Change in Northeast Montana.....   | 41 |
| Table 3.5-1. USGS Gages in the DRWA Service Area .....  | 42 |
| Table 3.5-2. Annual Statistics for the Fort Peck Reservoir, 1937-2006 .....   | 43 |
| Table 3.5-3. Fort Peck Reservoir Surface Area, Volume, Mean Depth, and Retention Time at Different Pool Elevations.....                           | 46 |
| Table 3.5-4. FEMA Floodplain Mapping and Designations within the DRWA Service Area .....  | 47 |
| Table 3.5-5. Designated Flood Zones in Project Study Area .....   | 48 |
| Table 3.5-6. Well Data Throughout the DRWA Service Area.....  | 49 |
| Table 3.5-7. 303D List of Impaired Waters and Category Definitions.....   | 50 |

Table 3.5-8. 303D List of Impaired Waters .....51

Table 3.5-9. Summary of 2021 and 2022 Water Sample Analysis at Proposed Fort Peck Reservoir Intake .....55

Table 3.5-10. USGS Gage Water Quality Monitoring Parameters.....56

Table 3.5-11. Comparison of Physically- and Legally Available Volumes [acre-feet] on the Missouri River at Fort Peck Reservoir.....60

Table 3.6-1. Stratigraphic Column for Northeastern Montana Portraying Geologic Units Including Fossiliferous Materials (i.e., Dinosaurs, Mammals, Plants, and Invertebrates).....61

Table 3.6-2 Major Sensitive Soils Located Within the Project Study Area.....63

Table 3.6-3 Summary Table of BLM Potential Fossil Yield Classifications for the Project Study Area.....66

Table 3.8-1. Population and Population Density by County .....67

Table 3.8-2. Average Median Income by Census Tract.....68

Table 3.8-3. Employment Rate and Unemployment Rate by Census Tract.....69

Table 3.8-4. Median Value of Owner-Occupied Housing by Census Tract .....70

Table 3.8-5. Municipal Water Systems in the DRWA Service Area.....71

Table 3.9-1. Population and Poverty Statistics by Census Tract .....72

Table 3.9-2 American Indian and Alaskan Native Percent of Population by Census Tract .....73

Table 3.9-3 Population Under 18 Years of Age by Census Tract .....74

Table 3.10-1. Land Type by County Within the Project Study Area.....75

Table 3.10-2. BLM RMP Applicable Land Use Objectives and Management Decisions.....76

Table 3.10-3. BLM RMP Environmental Commitments and Mitigation .....82

Table 3.11-1 BLM Visual Resource Management Class Objectives .....84

Table 3.11-2. Project Study Area on BLM-Managed Land, Total Acres by Class .....85

Table 3.11-3. Permanent Project Effects on BLM-Managed Land, Total Acres by Class .....86

Table 3.12-1. BLM’s Recreation Goals and Objectives .....87

Table 3.12-2. List of Recreation Facilities and Opportunities Available in the DRWA Service Area.....88

Table 3.12-3. Recreation Sites Directly Affected by the Proposed Action.....93

Table 3.12-4. Recreation Sites Within Two Miles of the Proposed Action.....94

Table 3.13-1. Miles of Highways and Local Roads in DRWA Service Area.....95

Table 3.13-2. Annual Daily Traffic Counts in DRWA Service Area.....96

# Chapter 1. Introduction

**Table 1-1. Groundwater Quality Samples Since 2000 in the DRWA Service Area that Exceed U.S. EPA Maximum Contaminant Levels (MCL)**

| Contaminant  | MCL (mg/l) | Potential Health Effects  | Avg. Sample Value | Min. Sample Value | Max. Sample Value | Number of Samples | Number of Samples Exceeding MCL | Percentage of Samples Exceeding MCL |
|--------------|------------|---|-------------------|-------------------|-------------------|-------------------|---------------------------------|-------------------------------------|
| Arsenic      | 0.01       | Skin damage or problems with circulatory systems, and may have increased risk of getting cancer.  | 0.005             | 0.000385          | 0.0496            | 84                | 7                               | 8%                                  |
| Fluoride     | 4          | Bone disease (pain and tenderness of the bones); Children may get mottled teeth.  | 1.2               | 0.1               | 6.9               | 217               | 20                              | 9%                                  |
| Nitrate as N | 10         | Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome. | 2.8               | 0                 | 22                | 51                | 5                               | 10%                                 |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| <b>Contaminant</b> | <b>MCL (mg/l)</b> | <b>Potential Health Effects</b>   | <b>Avg. Sample Value</b> | <b>Min. Sample Value</b> | <b>Max. Sample Value</b> | <b>Number of Samples</b> | <b>Number of Samples Exceeding MCL</b> | <b>Percentage of Samples Exceeding MCL</b> |
|--------------------|-------------------|---|--------------------------|--------------------------|--------------------------|--------------------------|--|--|
| Selenium           | 0.05              | Hair or fingernail loss; numbness in fingers or toes; circulatory problems. | 0.013                    | 0.0000022                | 0.13135                  | 55                       | 3                                      | 5%   |
| Uranium            | 0.03              | Increased risk of cancer, kidney toxicity.                                  | 0.0087                   | 0.000409                 | 0.08437                  | 90                       | 4                                      | 4%   |

Source: GWIC 2024

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 1-2. Groundwater Quality Samples since 2000 in the DRWA Service Area that Exceed U.S. EPA Secondary Maximum Contaminant Levels (SMCL)**

| Contaminant            | SMCL (mg/l) | Noticeable Effects   | Avg. Sample Value | Min. Sample Value | Max. Sample Value | Number of Samples | Number of Samples Exceeding SMCL | Percentage of Samples Exceeding SMCL |
|------------------------|-------------|--|-------------------|-------------------|-------------------|-------------------|----------------------------------|--------------------------------------|
| Aluminum               | 0.05        | Colored water  | 0.07              | 0.01876           | 0.25763           | 19                | 5                                | 26%                                  |
| Chloride               | 250         | Salty taste  | 30.2              | 1.4               | 815.1             | 247               | 2                                | 1%                                   |
| Fluoride               | 2           | Tooth discoloration  | 1.2               | 0.1               | 6.9               | 217               | 43                               | 20%                                  |
| Iron                   | 0.3         | Rusty color; sediment; metallic taste; reddish or orange staining                        | 0.00194           | 0                 | 0.053636          | 155               | 99                               | 64%                                  |
| Lab pH                 | 6.5-8.5     | Low pH: bitter metallic taste; corrosion<br>high pH: slippery feel; soda taste; deposits | 7.8               | 6.6               | 10.1              | 214               | 20                               | 9%                                   |
| Manganese              | 0.05        | Black to brown color; black staining; bitter metallic taste                              | 0.0016            | 0                 | 0.22              | 158               | 114                              | 72%                                  |
| Sulfate                | 250         | Salty taste  | 542.2             | 0                 | 3245              | 233               | 138                              | 59%                                  |
| Total Dissolved Solids | 500         | Hardness; deposits; colored water; staining; salty taste                                 | 1275.6            | 0.0               | 5100.7            | 251               | 232                              | 92%                                  |

Source: GWIC 2024



**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 1-3. Agencies with Federal State or Local Action, Approval, or Consultation Responsibilities**

| Federal, State, or Local | Agency  | Action/Approval/Consultation   |
|--------------------------|---|--|
| Federal                  | U.S. Army Corps of Engineers, Omaha District            | Clean Water Act, Section 404 Permit  |
| Federal                  | U.S. Army Corps of Engineers, Omaha District            | Rivers and Harbors Act, Section 408 Permission   |
| Federal                  | U.S. Army Corps of Engineers, Omaha District            | Rivers and Harbors Act, Section 10 Permit  |
| Federal                  | U.S. Army Corps of Engineers, Omaha District            | Real Estate Outgrant <sup>1</sup>  |
| Federal                  | U.S. Bureau of Land Management, Miles City District     | Federal Land Management Policy Act, Permit to Construct  |
| Federal                  | U.S. Bureau of Land Management, Miles City District     | Federal Land Management Policy Act, Special Use Permit to Occupy Federal Lands                             |
| Federal                  | Natural Resource Conservation Service, West Region      | Watershed Program funding  |
| Federal                  | U.S. Fish and Wildlife Service                          | Endangered Species Act, Section 7 Consultation   |
| Federal                  | Western Area Power Administration                       | Environmental review per Section 39.3 of the SPP Tariff. Participate in NEPA process as cooperating agency |
| Montana                  | Montana Department Natural Resources & Conservation     | Montana Environmental Policy Act   |
| Montana                  | Montana Department Natural Resources & Conservation     | Authorization to occupy state lands  |
| Montana                  | Montana Department of Environmental Quality             | General Permit for Storm Water Discharge Associated with Construction Activities                           |
| Montana                  | Montana Department of Environmental Quality             | 318 Temporary Turbidity Authorization  |
| Montana                  | Montana Department of Environmental Quality             | Clean Water Act, Section 401 Water Quality Certificate   |
| Montana                  | Montana Department of Transportation                    | Occupancy/Encroachment Permit  |
| Montana                  | Montana Fish, Wildlife, and Parks                       | Fish and Wildlife Coordination Act   |
| Montana                  | Montana State Historic Preservation Office              | National Historic Preservation Act, Section 106 Consultation   |
| Local                    | County Conservation Districts/Floodplain Administrators | Floodplain Permit,   |
| Local                    | County Conservation Districts                           | Permit for excavation in perennial rivers and streams  |
| Local                    | County Road & Public Works Department                   | Right-of-Way/Utility Permit  |

Note:

<sup>1</sup> A real estate outgrant is an instrument that authorizes a private or public entity, which is not USACE, to access federally controlled property for non-mission-related purposes pursuant to Army Regulation 405-80 Management of Title and Granting Use of Real Property.

## Chapter 2. Alternatives

**Table 2-1. Power Transmission and Distribution Lines**

| Type                      | Size    | Length         | Construction Segment  |
|---------------------------|---------|----------------|---|
| Transmission              | 69 kV   | 35 miles       | Circle Substation to Flowing Wells (upgrade with underbuild of existing line)   |
| Transmission              | 69 kV   | 34 miles       | Flowing Wells to transition with underground construction (new construction with 25 kV underbuild) using conventional above ground construction |
| <b>Total Transmission</b> | —       | <b>69miles</b> | —   |
| Distribution              | 25kV    | 1.15 miles     | New WTP sub to proposed Fort Peck Reservoir Intake site (underground)   |
| Distribution              | 14.4 kV | 0.7 miles      | Jordan Tap to Loomis & Clark  |
| Distribution              | 25 kV   | 0.6 miles      | Mosby Tap to N. Lodge Pole  |
| Distribution              | 25 kV   | 0.06 miles     | Jordan Tap to Brusett Road  |
| Distribution              | 25 kV   | 0.5 miles      | Jordan Tap to Hell Creek Road Pump  |
| Distribution              | 14.4 kV | 0.7 miles      | Jordan Tap to Highway 59N Pump  |
| Distribution              | 25 kV   | 0.05 miles     | Brockway Tap to Brockway Pump   |
| Distribution              | 25 kV   | 9.2 miles      | WTP Sub to S. Highway 24  |
| Distribution              | 14.4 kV | 0.03 miles     | New Circle Tap to Union Road Pump   |
| Distribution              | 12.5 kV | 7.94 miles     | Duck Creek Tap to Existing Retah Feeder   |
| Distribution              | 12.5 kV | 8.0 miles      | Multiphase Existing Retah Feeder  |
| Distribution              | 12.5 kV | 0.2 miles      | Retah Tap to Highway 254 Pump   |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Type                      | Size     | Length             | Construction Segment                   |
|---------------------------|----------|--------------------|--|
| Distribution              | 25 kV    | 4.1 miles          | WTP Sub to Proposed Intake Site        |
| Distribution              | 12.5 kV  | 6.9 miles          | Lindsay Feeder to Highway 200 S        |
| Distribution              | 12.5kV   | 4.3 miles          | Lindsay Feeder to Highway 200 S        |
| Distribution              | 12.5kV   | 2.5 miles          | Lindsay Feeder to Highway 200 S        |
| Distribution              | 7.7 kV   | 0.02 miles         | M1 & M4 Booster Pump CR 128 Booster-   |
| Distribution              | 14.4 kV  | 0.08 miles         | M4 System Booster Pump Station CR 338  |
| Distribution              | 14.4 kV- | 0.03 miles         | M4 Pressure Zone 3 Pump Station Hwy 16 |
| Distribution              | 7.7 kV   | 0.02 miles         | M1 & M4 Booster Pump CR 132 Booster    |
| Distribution              | 14.4 kV- | 0.06 miles         | M1 Intake Pump Station                 |
| Distribution              | 14.4 kV- | 0.02 miles         | M1 Pressure Zone 2 Pump Station        |
| Distribution              | 7.7 kV-  | 0.02 miles         | M1 & M4 Booster Pump Fox Creek Booster |
| Distribution              | 14.4 kV- | 0.03 miles         | M1 & M4 Booster Pump Station CR 340    |
| Distribution              | 12.4kV   | 0.3 miles          | M8 Booster Pump Station                |
| <b>Total Distribution</b> | —        | <b>47.51 miles</b> | —                                      |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 2-2. Number of Trenchless Crossings**

| Description             | Totals |
|-------------------------|--------|
| Known Utility Crossings | 670    |
| Stream/Canal Crossings  | 1,953  |
| Highway Crossings       | 62     |
| Railroad Crossings      | 3      |
| County Road Crossings   | 445    |
| Total Crossings         | 3,133  |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 2-3. Typical Construction Equipment**

| Type                                      | Details   |
|---|---|
| Earthmoving & Plowing Equipment           | Dozer<br>Dozer with Disc<br>Loader<br>Tractor with Blade<br>Excavator<br>Compactor<br>Water Truck<br>Dump Truck |
| Concrete Equipment                        | Concrete Mixer<br>Trailer Mounted Concrete Pump<br>Concrete Vibrator-Normal<br>Concrete Truck                   |
| Utility Equipment                         | Diesel Compressor<br>Diesel Welder  |
| Hoisting Equipment                        | Truck Crane<br>Crawler Crane<br>Motorized Manlift   |
| Horizontal Directional Drilling Equipment | Air Track Drill<br>Vacuum Truck<br>Horizontal Auger<br>Backhoe  |
| Paving Equipment                          | Asphalt Paver<br>Double Steel Drum Roller<br>Skip Loader<br>Asphalt Grinder                                     |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 2-4. Phasing Plan**

| Location                      | Installation Year | Phase |
|-------------------------------|-------------------|-------|
| Ft. Peck→Circle               | 1                 | A–B   |
| Circle→Richey                 | 2                 | B–C   |
| Richey→HWY 200/RD 317         | 2                 | C–D   |
| HWY 200/RD 317→Lambert        | 3                 | D–K   |
| HWY 200/RD 317→HWY 201/RD 328 | 4                 | D–P   |
| HWY 201/RD 328→HWY 16         | 5                 | P–E   |
| HWY 16→Fairview               | 5                 | E–J   |
| Circle→Jordan                 | 6                 | B–G   |
| Circle→Glendive               | 7                 | B–G   |
| Circle→Missouri River         | 7                 | B–F   |
| Richey→S. Richey              | 8                 | C–I   |
| Hwy 16→Culbertson             | 8                 | E–L   |
| Jordan→Lodge Pole Rd          | 9                 | H–N   |
| Jordan→Cohgen                 | 9                 | H–O   |
| Richey→HWY 201/RD 328         | 10                | C–P   |
| Ft. Peck→HWY 528              | 10                | A–M   |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 2-5. Alternatives Considered but Eliminated**

| <b>Alternatives</b>   | <b>Agency Concerns</b> | <b>Water Quality Concerns</b> | <b>Inadequate Water Supply</b> | <b>Cost Concerns</b> |
|---|------------------------|-------------------------------|--------------------------------|----------------------|
| Groundwater: Town of Circle                                       | No                     | Yes                           | Yes                            | Yes                  |
| Groundwater: Purchase from City of Wolf Point                     | Yes                    | No                            | No                             | Yes                  |
| Groundwater: Purchase from City of Sidney                         | Yes                    | No                            | No                             | No                   |
| Missouri River: Town of Circle                                    | No                     | No                            | No                             | Yes                  |
| Missouri River: South of Wolf Point                               | Yes                    | No                            | No                             | Yes                  |
| Missouri River: Purchase from Fort Peck Tribal Rural Water System | Yes                    | No                            | No                             | Yes                  |
| Missouri River: South of Culbertson                               | Yes                    | No                            | No                             | No                   |
| Missouri River & Fort Peck Reservoir: Towns of Circle and Jordan  | Yes                    | No                            | No                             | Yes                  |
| Fort Peck Reservoir: Town of Jordan                               | Yes                    | No                            | No                             | Yes                  |
| Fort Peck Reservoir: Hell Creek                                   | Yes                    | No                            | No                             | Yes                  |
| Fort Peck Reservoir: Devils Creek                                 | Yes                    | No                            | No                             | Yes                  |
| Fort Peck Reservoir: Dry Arm-Bear Creek                           | Yes                    | No                            | No                             | No                   |
| Fort Peck Reservoir: Dry Arm-Nelson Creek                         | Yes                    | No                            | No                             | No                   |
| Fort Peck Reservoir: Dry Arm-Sand Arroyo                          | Yes                    | No                            | No                             | No                   |
| Fort Peck Reservoir: Dry Arm-Rock Creek (A)                       | Yes                    | No                            | No                             | No                   |
| Fort Peck Reservoir: Dry Arm-Rock Creek (B)                       | Yes                    | No                            | No                             | No                   |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| <b>Alternatives</b>                         | <b>Agency Concerns</b> | <b>Water Quality Concerns</b> | <b>Inadequate Water Supply</b> | <b>Cost Concerns</b> |
|---|------------------------|-------------------------------|--------------------------------|----------------------|
| Fort Peck Reservoir: Dry Arm-Rock Creek (C) | Yes                    | No                            | No                             | No                   |
| Yellowstone River: North of Glendive        | Yes                    | No                            | Yes                            | No                   |



**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 2-6. Comparison of Alternatives**

| <b>Resource</b>                | <b>No Action</b>      | <b>Proposed Action</b>  |
|--------------------------------|-----------------------|---|
| Vegetation and riparian areas  | No adverse effects    | Minor adverse effects with mitigation   |
| Fish and wildlife              | No adverse effects    | Minor adverse effects with mitigation   |
| Climate change                 | No adverse effects    | No adverse effects on greenhouse gas emissions; no adverse effects of climate change on Proposed Action   |
| Hydrology & water quality      | No adverse effects    | Minor adverse effects   |
| Geology, soils, & paleontology | No adverse effects    | Minor adverse effects with mitigation   |
| Cultural resources             | No adverse effects    | Minor adverse effects with mitigation   |
| Socioeconomics                 | Minor adverse effects | Beneficial effects  |
| Environmental justice          | Minor adverse effects | Beneficial Effects  |
| Land use                       | No adverse effects    | Minor temporary adverse effects of underground waterline on BLM and state lands with mitigation; minor permanent adverse effects of powerlines on BLM and state lands |
| Visual resources               | No adverse effects    | Minor adverse effects with mitigation   |
| Recreation                     | No adverse effects    | Minor adverse effects with mitigation   |
| Traffic                        | No adverse effects    | Minor adverse effects with mitigation   |

## Chapter 3 Affected Environment and Environmental Consequences

**Table 3.1-1. Resources Considered for Inclusion in Environmental Assessment**

| Resource                                | Not Present | Present/ Not Affected | Present/ Potentially Affected | Assessed in this EA? | Rationale/ Analysis Section                          |
|---|-------------|-----------------------|-------------------------------|----------------------|--|
| Air Quality                             |             |                       | X                             | No                   | Resource not affected or effects would be negligible |
| Areas of Critical Environmental Concern | X           |                       |                               | No                   | Not present in or near the Project study area        |
| Bald and Golden Eagles                  |             |                       | X                             | Yes                  | Refer to Section 3.3                                 |
| Climate Change                          |             |                       | X                             | Yes                  | Refer to Section 3.4                                 |
| Cultural Resources                      |             |                       | X                             | Yes                  | Refer to Section 3.7                                 |
| Environmental Justice                   |             |                       | X                             | Yes                  | Refer to Section 3.9                                 |
| Floodplains                             |             |                       | X                             | Yes                  | Refer to Section 3.5                                 |
| General Fish and Wildlife               |             |                       | X                             | Yes                  | Refer to Section 3.3                                 |
| Geology                                 |             |                       | X                             | Yes                  | Refer to Section 3.6                                 |
| Grazing                                 |             | X                     |                               | No                   | Resource not affected or effects would be negligible |
| Hazardous Materials                     | X           |                       |                               |                      | Not present in or near the Project study area        |
| Historic Trails                         |             |                       | X                             | Yes                  | Refer to Section 3.7, 3.12                           |
| Indian Trust Assets                     |             | X                     |                               | No                   | Resource not affected or effects would be negligible |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Resource   | Not Present | Present/<br>Not Affected | Present/<br>Potentially Affected | Assessed in this EA? | Rationale/ Analysis Section                          |
|--|-------------|--------------------------|----------------------------------|----------------------|--|
| Land Use   |             |                          | X                                | Yes                  | Refer to Section 3.10                                |
| Migratory Birds  |             |                          | X                                | Yes                  | Refer to Section 3.3                                 |
| Minerals   |             | X                        |                                  | No                   | Resource not affected or effects would be negligible |
| Noise  |             |                          | X                                | No                   | Resource not affected or effects would be negligible |
| Noxious Weeds/Invasive, Non-native Species                     |             |                          | X                                | Yes                  | Refer to Section 3.2                                 |
| Paleontological Resources                                      |             |                          | X                                | Yes                  | Refer to Section 3.6                                 |
| Prime or Unique Farmlands and Farmland of Statewide Importance |             |                          | X                                | Yes                  | Refer to Section 3.6                                 |
| Public Services and Utilities                                  |             |                          | X                                | No                   | Resource not affected or effects would be negligible |
| Recreation   |             |                          | X                                | Yes                  | Refer to Section 3.12                                |
| Riparian/Wetlands  |             |                          | X                                | Yes                  | Refer to Section 3.2                                 |
| Socioeconomics   |             |                          | X                                | Yes                  | Refer to Section 3.8                                 |
| Soils  |             |                          | X                                | Yes                  | Refer to Section 3.6                                 |
| Special-Status Species   |             |                          | X                                | Yes                  | Refer to Section 3.2, 3.3                            |
| Traffic  |             |                          | X                                | Yes                  | Refer to Section 3.13                                |
| Vegetation   |             |                          | X                                | Yes                  | Refer to Section 3.2                                 |
| Visual Resources   |             |                          | X                                | Yes                  | Refer to Section 3.11                                |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Resource                   | Not Present | Present/<br>Not Affected | Present/<br>Potentially Affected | Assessed in this EA? | Rationale/ Analysis Section                   |
|----------------------------|-------------|--------------------------|----------------------------------|----------------------|---|
| Water Quality and Quantity |             |                          | X                                | Yes                  | Refer to Section 3.5                          |
| Wild and Scenic Rivers     | X           |                          |                                  | No                   | Not present in or near the Project study area |
| Wilderness                 | X           |                          |                                  | No                   | Not present in or near the Project study area |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.2-1. Vegetation Communities Within the Project Study Area**

| <b>Vegetation Communities</b>        | <b>Area (acres)</b> |
|--------------------------------------|---------------------|
| Agricultural Lands - Dry             | 6,247               |
| Agricultural Lands - Irrigated       | 987                 |
| Altered Herbaceous                   | 926                 |
| Badlands                             | 102                 |
| Broadleaf Riparian                   | 149                 |
| Conifer Riparian                     | 14                  |
| Graminoid and Forb Riparian          | 486                 |
| Limber Pine                          | 60                  |
| Low Density Xeric Forest             | 14                  |
| Low/Moderate Cover Grasslands        | 5,822               |
| Mesic Shrub-Grassland Associations   | 260                 |
| Mixed Barren Sites                   | 9                   |
| Mixed Broadleaf and Conifer Forest   | 2                   |
| Mixed Broadleaf and Conifer Riparian | 16                  |
| Mixed Broadleaf Forest               | 176                 |
| Mixed Mesic Shrubs                   | 318                 |
| Mixed Riparian                       | 41                  |
| Mixed Xeric Shrubs                   | 112                 |
| Moderate/High Cover Grasslands       | 915                 |
| Ponderosa Pine                       | 26                  |
| Rock                                 | 12                  |
| Rocky Mountain Juniper               | 133                 |
| Sagebrush                            | 620                 |
| Salt-Desert Shrub/Dry Salt Flats     | 27                  |
| Shrub Riparian                       | 162                 |
| Silver Sage                          | 152                 |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| <b>Vegetation Communities</b>      | <b>Area (acres)</b> |
|------------------------------------|---------------------|
| Urban or Developed Lands           | 84                  |
| Very Low Cover Grasslands          | 192                 |
| Water                              | 69                  |
| Xeric Shrub-Grassland Associations | 57                  |
| <b>Total Acres</b>                 | <b>18,189</b>       |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.2-2. Wetlands and Water Bodies Within the Project Study Area**

| <b>Category of Waters of the U.S.</b> | <b>Total Area or Distance</b> |
|---------------------------------------|-------------------------------|
| Fresh Emergent Wetland                | 100 acres                     |
| Freshwater Forested Wetland           | <1 acre                       |
| Freshwater Ponds                      | 19 acres                      |
| Lakes                                 | 25 acres                      |
| Riverine Environment                  | 246 acres                     |
| Intermittent Creeks                   | 24 miles                      |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.2-3 Effects to Vegetation Communities**

| <b>Vegetation Communities</b>      | <b>Temporary Effects<br/>(acres)</b> | <b>Permanent Effects<br/>(acres)</b> |
|------------------------------------|--------------------------------------|--------------------------------------|
| Agricultural Lands - Dry           | 6,171.25                             | 73.30                                |
| Agricultural Lands - Irrigated     | 948.50                               | 38.56                                |
| Altered Herbaceous                 | 908.04                               | 17.73                                |
| Badlands                           | 90.83                                | 10.82                                |
| Broadleaf Riparian                 | 117.60                               | 31.15                                |
| Conifer Riparian                   | 14.00                                | 0.00                                 |
| Graminoid and Forb Riparian        | 474.62                               | 11.11                                |
| Limber Pine                        | 59.99                                | 0.00                                 |
| Low Density Xeric Forest           | 13.90                                | 0.00                                 |
| Low/Moderate Cover Grasslands      | 5,594.96                             | 199.71                               |
| Mesic Shrub-Grassland Associations | 228.16                               | 31.69                                |
| Mixed Barren Sites                 | 8.68                                 | 0.00                                 |
| Mixed Broadleaf and Conifer Forest | 2.21                                 | 15.93                                |
| Mixed Broadleaf Forest             | 145.67                               | 30.51                                |
| Mixed Mesic Shrubs                 | 288.23                               | 29.36                                |
| Mixed Riparian                     | 31.06                                | 10.03                                |
| Mixed Xeric Shrubs                 | 111.96                               | 0.00                                 |
| Moderate/High Cover Grasslands     | 870.71                               | 38.26                                |
| Ponderosa Pine                     | 26.49                                | 0.00                                 |
| Rock                               | 11.79                                | 0.00                                 |
| Rocky Mountain Juniper             | 97.74                                | 35.62                                |
| Sagebrush                          | 557.16                               | 55.77                                |
| Salt-Desert Shrub/Dry Salt Flats   | 21.86                                | 5.50                                 |
| Shrub Riparian                     | 132.03                               | 29.65                                |
| Silver Sage                        | 152.01                               | 0.00                                 |



**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| <b>Vegetation Communities</b>      | <b>Temporary Effects<br/>(acres)</b> | <b>Permanent Effects<br/>(acres)</b> |
|------------------------------------|--------------------------------------|--------------------------------------|
| Urban or Developed Lands           | 84.06                                | 0.00                                 |
| Very Low Cover Grasslands          | 141.81                               | 49.61                                |
| Water                              | 11.49                                | 57.51                                |
| Xeric Shrub-Grassland Associations | 46.67                                | 10.01                                |
| <b>Total</b>                       | <b>17,363.48</b>                     | <b>781.82</b>                        |

Dry-Redwater Rural Water Project  
Draft Environmental Assessment

Appendix B – Tables

**Table 3.2-4 Preliminary Effects to Waters of the U.S.**

| Category of Waters of the U.S. | Temporary Effects (Acres) | Permanent Effects (Acres) |
|--------------------------------|---------------------------|---------------------------|
| Fresh Emergent Wetland         | 87.92                     | 12.05                     |
| Freshwater Forested Wetland    | 0.34                      | 0.00                      |
| Freshwater Ponds               | 19.16                     | 0.00                      |
| Lakes                          | 0.45                      | 25.04                     |
| Riverine Environment           | 138.94                    | 107.27                    |
| Intermittent Creeks            | 27.77                     | 0.77                      |
| <b>Totals</b>                  | <b>274.58</b>             | <b>145.14</b>             |

Dry-Redwater Rural Water Project  
Draft Environmental Assessment

Appendix B – Tables

**Table 3.3-1 Threatened and Endangered Species List in DRWA Service Area**

| Species Name   | Endangered Species Act Status | Potential Occurrence in DRWA Service Area |
|--|-------------------------------|---|
| northern long-eared bat<br><i>Myotis septentrionalis</i> | endangered                    | Missouri River corridor                   |
| whooping crane<br><i>Grus americana</i>                  | endangered                    | western areas                             |
| pallid sturgeon<br><i>Scaphirhynchus albus</i>           | endangered                    | Missouri and Yellowstone rivers           |
| rufa red knot<br><i>Calidris canutus rufa</i>            | threatened                    | exceedingly rare throughout               |
| piping plover<br><i>Charadrius melodus</i>               | threatened                    | northern areas (breeding)                 |
| paddlefish<br><i>Polyodon spathula</i>                   | candidate                     | Missouri and Yellowstone rivers           |
| monarch butterfly<br><i>Danaus plexippus</i>             | candidate                     | Missouri and Yellowstone river corridors  |

Appendix B – Tables

**Table 3.3-2 Special-Status Species Occurring Within the DRWA Service Area**

| Species Type | Species Common Name<br><i>Scientific Name</i>              | USFWS Status        | BLM Status | Montana Species of Concern Status | Where Most Likely or Potentially Occurs in DRWA Service Area |
|--------------|--|---------------------|------------|-----------------------------------|--|
| Mammals      | Townsend's big-eared bat<br><i>Corynorhinus townsendii</i> |                     | Sensitive  | S3                                | Throughout   |
| Mammals      | black-tailed prairie dog<br><i>Cynomys ludovicianus</i>    |                     | Sensitive  | S3                                | Throughout   |
| Mammals      | spotted Bat<br><i>Euderma maculatum</i>                    |                     | Sensitive  | S3                                | Southern   |
| Mammals      | eastern red bat<br><i>Lasiurus borealis</i>                |                     | Sensitive  | S3B                               | Eastern  |
| Mammals      | hoary bat<br><i>Lasiurus cinereus</i>                      |                     | Sensitive  | S3B                               | Throughout   |
| Mammals      | little brown bat<br><i>Myotis lucifigus</i>                |                     |            | S3                                | Throughout   |
| Mammals      | northern long-eared bat<br><i>Myotis septentrionalis</i>   | FE                  | Endangered | S2                                | Missouri River corridor                                      |
| Mammals      | long-legged myotis<br><i>Myotis volans</i>                 |                     |            | S3                                | Western  |
| Mammals      | Merriam's shrew<br><i>Sorex mirriam</i>                    |                     |            | S3                                | Southwestern   |
| Mammals      | Preble's shrew<br><i>Sorex preslei</i>                     |                     |            | S3                                | Southern   |
| Mammals      | swift fox<br><i>Vulpes velox</i>                           |                     | Sensitive  | S3                                | Eastern  |
| Birds        | Sprague's Pipit<br><i>Anthus spragueii</i>                 | MBTA BCC11<br>BCC17 | Sensitive  | S3B                               | Throughout   |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Species Type | Species Common Name<br><i>Scientific Name</i>           | USFWS Status              | BLM Status | Montana Species of Concern Status | Where Most Likely or Potentially Occurs in DRWA Service Area |
|--------------|---|---------------------------|------------|-----------------------------------|--|
| Birds        | golden eagle<br><i>Aquila chrysaetos</i>                | BGEPA<br>MBTA             | Sensitive  | S3                                | Throughout   |
| Birds        | great blue heron<br><i>Ardea herodias</i>               | MBTA                      |            | S3                                | Throughout   |
| Birds        | burrowing Owl<br><i>Athene cunicularia</i>              | MBTA BCC17                | Sensitive  | S3B                               | Throughout   |
| Birds        | ferruginous Hawk<br><i>Buteo regalis</i>                | MBTA BCC17                | Sensitive  | S3B                               | Throughout   |
| Birds        | chestnut-collared longspur<br><i>Calcarius ornatus</i>  | MBTA<br>BCC11 BCC17       | Sensitive  | S2B                               | Throughout   |
| Birds        | rufa red knot<br><i>Calidris canutus rufa</i>           | FT MBTA                   | Threatened | SNA                               | Exceedingly rare throughout                                  |
| Birds        | veery<br><i>Catharus fuscescens</i>                     | MBTA                      | Sensitive  | S3B                               | Northern   |
| Birds        | greater sage grouse<br><i>Centrocercus urophasianus</i> |                           | Sensitive  | S2                                | Throughout (esp. western)                                    |
| Birds        | Baird's sparrow<br><i>Centronyx bairdii</i>             | MBTA BCC11<br>BCC17       | Sensitive  | S3B                               | Throughout   |
| Birds        | pipin plover<br><i>Charadrius melodus</i>               | FT<br>CH MBTA             | Threatened | S2B                               | Northern (breeding)  |
| Birds        | mountain plover<br><i>Charadrius montanus</i>           | MBTA BCC10<br>BCC11 BCC17 | Sensitive  | S2B                               | Western  |
| Birds        | black-billed cuckoo<br><i>Coccyzus erythrophthalmus</i> | MBTA BCC11<br>BCC17       | Sensitive  | S3B                               | Throughout   |
| Birds        | bobolink  | MBTA BCC10                |            | S3B                               | Throughout   |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Species Type | Species Common Name<br><i>Scientific Name</i>              | USFWS Status              | BLM Status | Montana Species of Concern Status | Where Most Likely or Potentially Occurs in DRWA Service Area |
|--------------|--|---------------------------|------------|-----------------------------------|--|
|              | <i>Dolichonyx oryzivorus</i>                               | BCC11 BCC17               |            |                                   |  |
| Birds        | whooping crane<br><i>Grus americana</i>                    | FE MBTA                   | Endangered | S1M                               | Western  |
| Birds        | pinyon jay<br><i>Gymnorhinus cyanocephalus</i>             | MBTA BCC10<br>BCC1        |            | S3                                | Southern   |
| Birds        | bald eagle<br><i>Haliaeetus leucocephalus</i>              | DM BGEPA                  | Sensitive  |                                   | Missouri and Yellowstone river corridors                     |
| Birds        | loggerhead shrike<br><i>Lanius ludovicianus</i>            | MBTA                      | Sensitive  | S3B                               | Throughout   |
| Birds        | red-headed woodpecker<br><i>Melanerpes erythrocephalus</i> | MBTA BCC11<br>BCC17       | Sensitive  | S3B                               | Missouri and Yellowstone river corridors                     |
| Birds        | long-billed curlew<br><i>Numenius americanus</i>           | MBTA BCC11                | Sensitive  | S3B                               | Throughout   |
| Birds        | sage thrasher<br><i>Oreoscoptes montanus</i>               | MBTA                      | Sensitive  | S3B                               | Western  |
| Birds        | thick-billed longspur<br><i>Rhynchophanes mccownii</i>     | MBTA BCC10<br>BCC11 BCC17 | Sensitive  | S3B                               | Western  |
| Birds        | Brewer's sparrow<br><i>Spizella breweri</i>                | MBTA                      | Sensitive  | S3B                               | Western  |
| Birds        | least tern<br><i>Sternula antillarum</i>                   | DM MBTA                   | DM         | S1B                               | Missouri and Yellowstone river corridors                     |
| Reptiles     | common snapping turtle<br><i>Chelydra serpentina</i>       |                           | Sensitive  | S3                                | Southern   |
| Reptiles     | western hog-nosed snake<br><i>Heterodon nasicus</i>        |                           | Sensitive  | S2                                | Throughout   |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Species Type | Species Common Name<br><i>Scientific Name</i>               | USFWS Status | BLM Status | Montana Species of Concern Status | Where Most Likely or Potentially Occurs in DRWA Service Area |
|--------------|---|--------------|------------|-----------------------------------|--|
| Reptiles     | central plains milksnake<br><i>Lampropeltis gentilis</i>    |              | Sensitive  | S2                                | Southern   |
| Reptiles     | greater short-horned lizard<br><i>Phrynosoma hernandesi</i> |              | Sensitive  | S3                                | Throughout   |
| Amphibians   | great plains toad<br><i>Anaxyrus cognatus</i>               |              | Sensitive  | S2                                | Throughout   |
| Fish         | northern redbelly dace<br><i>Chrosomus eos</i>              |              |            | S3                                | Throughout   |
| Fish         | blue sucker<br><i>Cycleptus elongatus</i>                   |              |            | S2S3                              | Missouri and Yellowstone rivers                              |
| Fish         | iowa darter<br><i>Etheostoma exile</i>                      |              | Sensitive  | S3                                | Northern   |
| Fish         | shortnose gar<br><i>Lepisosteus platostomus</i>             |              |            | S3                                | Missouri and Yellowstone rivers                              |
| Fish         | sturgeon chub<br><i>Macrhybopsis gelida</i>                 |              | Sensitive  | S2S3                              | Missouri and Yellowstone drainages                           |
| Fish         | sticklefin chub<br><i>Macrhybopsis meeki</i>                |              |            | S1                                | Missouri and Yellowstone rivers                              |
| Fish         | northern pearl dace<br><i>Margariscus nachtriebi</i>        |              | Sensitive  | S2                                | Missouri River drainage                                      |
| Fish         | paddlefish<br><i>Polyodon spathula</i>                      | C            | Sensitive  | S2                                | Missouri and Yellowstone rivers                              |
| Fish         | sauger<br><i>Sander canadensis</i>                          |              | Sensitive  | S2                                | Missouri and Yellowstone drainages                           |
| Fish         | pallid sturgeon   | FE           | Endangered | S1                                | Missouri and Yellowstone rivers                              |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Species Type  | Species Common Name<br><i>Scientific Name</i>                    | USFWS Status | BLM Status | Montana Species of Concern Status | Where Most Likely or Potentially Occurs in DRWA Service Area |
|---------------|--|--------------|------------|-----------------------------------|--|
|               | <i>Scaphirhynchus albus</i>                                      |              |            |                                   |  |
| Invertebrates | monarch butterfly<br><i>Danaus plexippus</i>                     | C            |            | S2S3                              | Missouri and Yellowstone river corridors                     |
| Invertebrates | mayfly<br><i>Leucrocota petersi</i>                              |              |            | SNR                               | Missouri and Yellowstone river corridors                     |
| Invertebrates | gray comma (butterfly)<br><i>Polygonia progne</i>                |              |            | S2                                | Eastern  |
| Plants        | painted milkvetch<br><i>Astragalus ceramicus var. filifolius</i> |              |            | S3                                | Southern   |
| Plants        | American bittersweet<br><i>Celastrus scandens</i>                |              |            | S1                                | Eastern  |
| Plants        | silky prairie clover<br><i>Dalea villosa</i>                     |              |            | S2                                | Eastern  |
| Plants        | pale-spiked lobelia<br><i>Lobelia spicata</i>                    |              |            | S2                                | Yes  |
| Plants        | bractless blazingstar<br><i>Mentzelia nuda</i>                   |              |            | S1S2                              | Eastern  |
| Plants        | prairie goldenrod<br><i>Solidago ptarmicoides</i>                |              |            | S2S3                              | Eastern  |

**Status Key**

**USFWS Status**

**FE** Federally listed as endangered: Any species in danger of extinction throughout all or a significant portion of its range (16 U.S.C. 1532(6)).



**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

- FT** Federally listed as threatened: Any species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range (16 U.S.C. 1532(20)).
- C** Candidate: Those taxa for which sufficient information on biological status and threats exists to propose to list them as threatened or endangered. We encourage their consideration in environmental planning and partnerships; however, none of the substantive or procedural provisions of the Act apply to candidate species.
- DM** Recovered, delisted, and being monitored - Any previously listed species that is now recovered, has been delisted, and is being monitored.
- BGEPA** Protected under the Bald and Golden Eagle Protection Act of 1940 (BGEPA) - (16 U.S.C. 668-668c)
- MBTA** Protected under the Migratory Bird Treaty Act (MBTA) - (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989)
- BCC** The 1988 amendment to the Fish and Wildlife Conservation Act mandates the U.S. Fish and Wildlife Service to identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act. BCC10, BCC11, and BCC17 designations represent inclusion on the Birds of Conservation Concern list for Bird Conservation Region 10, 11, and 17 in Montana, respectively.

**BLM Status**

- Endangered** Species listed as Endangered under the Endangered Species Act
- Threatened** Species listed as Threatened under the Endangered Species Act
- Sensitive** Species listed by BLM as Sensitive on BLM lands

**State of Montana Species of Concern Rank Definitions**

- S1** At high risk because of extremely limited and/or rapidly declining population numbers, range and/or habitat, making it highly vulnerable to global extinction or extirpation in the state.
- S2** At risk because of very limited and/or potentially declining population numbers, range and/or habitat, making it vulnerable to global extinction or extirpation in the state.
- S3** Potentially at risk because of limited and/or declining numbers, range and/or habitat, even though it may be abundant in some areas.
- SNA** A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities because of being: 1) not confidently present in the state; 2) non-native or introduced; 3) a long-distance migrant with accidental or irregular stopovers; or 4) a hybrid without conservation value.
- SNR** Not yet ranked.

**State of Montana Qualifiers**

- B** Breeding - Rank refers to the breeding population of the species in Montana. Appended to the state rank, e.g., S2B, S5N = At risk during breeding season, but common in the winter
- M** Migratory - Species occurs in Montana only during migration.

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.4-1. Fort Peck Power Plant (Dam) Temperature Records 1991–2020**

| Month     | Daily Max (°F) | Daily Min (°F) | Daily Mean (°F) |
|-----------|----------------|----------------|-----------------|
| January   | 28.3           | 7.5            | 17.9            |
| February  | 33.2           | 11.6           | 22.4            |
| March     | 46.2           | 22.4           | 34.3            |
| April     | 60.0           | 33.7           | 46.9            |
| May       | 70.7           | 43.8           | 57.2            |
| June      | 79.6           | 53.0           | 66.3            |
| July      | 88.6           | 58.5           | 73.5            |
| August    | 88.3           | 56.8           | 72.6            |
| September | 76.6           | 47.6           | 62.1            |
| October   | 60.9           | 36.6           | 48.8            |
| November  | 44.1           | 23.7           | 33.9            |
| December  | 32.3           | 12.5           | 22.4            |

Source: National Oceanic & Atmospheric Administration 2024 (FT PECK PWR PLT, MT US USC00243176)

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.4-2. Fort Peck Power Plant (Dam) Precipitation and Snow Records 1991–2020**

| Year | Precipitation (inches) | Snow (inches) |
|------|------------------------|---------------|
| 1991 | 14.08                  | —             |
| 1992 | 10.83                  | —             |
| 1993 | 19.41                  | —             |
| 1994 | 9.48                   | —             |
| 1995 | 10.86                  | —             |
| 1996 | —                      | —             |
| 1997 | 13.79                  | 0             |
| 1998 | 13.48                  | —             |
| 1999 | 15.11                  | —             |
| 2000 | 13.3                   | —             |
| 2001 | —                      | —             |
| 2001 | —                      | —             |
| 2003 | 10.81                  | —             |
| 2004 | —                      | —             |
| 2005 | —                      | —             |
| 2006 | —                      | 0.1           |
| 2007 | 15.1                   | —             |
| 2008 | 11.77                  | 0             |
| 2009 | 9.69                   | —             |
| 2010 | 16.27                  | —             |
| 2011 | —                      | —             |
| 2012 | 11.09                  | —             |
| 2013 | 13.31                  | —             |
| 2014 | 14.26                  | —             |
| 2015 | 10.23                  | —             |
| 2016 | —                      | —             |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| <b>Year</b> | <b>Precipitation (inches)</b> | <b>Snow (inches)</b> |
|-------------|-------------------------------|----------------------|
| 2017        | 5.56                          | 5.4                  |
| 2018        | 13.63                         | 33                   |
| 2019        | 19.3                          | 34.6                 |
| 2020        | 11.09                         | 23.5                 |

Source: National Oceanic & Atmospheric Administration 2024 (FT PECK PWR PLT, MT US USC00243176)

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.4-3. Fort Peck Power Plant (Dam) Monthly Precipitation Records 1991–2020**

| Month     | Mean Monthly Precipitation (inches) |
|-----------|-------------------------------------|
| January   | 0.3                                 |
| February  | 0.3                                 |
| March     | 0.38                                |
| April     | 0.92                                |
| May       | 2.52                                |
| June      | 2.67                                |
| July      | 2.39                                |
| August    | 1.40                                |
| September | 1.05                                |
| October   | 0.94                                |
| November  | 0.36                                |
| December  | 0.35                                |

Source: National Oceanic & Atmospheric Administration 2024 (FT PECK PWR PLT, MT US USC00243176)

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.4-4. Sidney, Montana Temperature Records 1991–2020**

| Month     | Daily Max (°F) | Daily Min (°F) | Mean (°F) |
|-----------|----------------|----------------|-----------|
| January   | 27.2           | 6.5            | 16.9      |
| February  | 32.0           | 10.6           | 21.3      |
| March     | 45.8           | 21.0           | 33.4      |
| April     | 60.5           | 31.8           | 46.1      |
| May       | 71.3           | 42.7           | 57.0      |
| June      | 79.1           | 52.3           | 65.7      |
| July      | 86.6           | 57.3           | 72.0      |
| August    | 86.4           | 55.1           | 70.8      |
| September | 75.8           | 45.5           | 60.6      |
| October   | 59.4           | 33.6           | 46.5      |
| November  | 41.9           | 21.2           | 31.6      |
| December  | 30.6           | 10.7           | 20.6      |

Source: National Oceanic & Atmospheric Administration 2024 (SIDNEY, MT US USC00247560)

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.4-5. Sidney, Montana Precipitation and Snow Records 1991–2020**

| Year | Precipitation (inches) | Snow (inches) |
|------|------------------------|---------------|
| 1991 | 21.02                  | 25.9          |
| 1992 | —                      | —             |
| 1993 | 20.46                  | 28.5          |
| 1994 | 13.46                  | 28.7          |
| 1995 | 15.61                  | 28.9          |
| 1996 | 15.23                  | 55.5          |
| 1997 | 14.34                  | 18.4          |
| 1998 | 17.5                   | 41.6          |
| 1999 | 14.51                  | 28.2          |
| 2000 | 14.41                  | 37.6          |
| 2001 | 15.35                  | 17.1          |
| 2002 | 12.11                  | 35.6          |
| 2003 | 14.07                  | 40.4          |
| 2022 | 11.27                  | 31.1          |
| 2005 | 15.06                  | 30.9          |
| 2006 | —                      | —             |
| 2007 | 14.29                  | 22            |
| 2008 | 10.37                  | 35.3          |
| 2009 | 14.63                  | 24.4          |
| 2010 | 21.62                  | 41.8          |
| 2011 | 19                     |               |
| 2012 | —                      | —             |
| 2013 | 21.7                   |               |
| 2014 | —                      | —             |
| 2015 | —                      | —             |
| 2016 | 17.15                  | —             |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| <b>Year</b> | <b>Precipitation (inches)</b> | <b>Snow (inches)</b> |
|-------------|-------------------------------|----------------------|
| 2017        | 11.54                         | 35.7                 |
| 2018        | 16.45                         | —                    |
| 2019        | 24.13                         | —                    |
| 2020        | 8.43                          | 34.4                 |

Source: National Oceanic & Atmospheric Administration 2024 (SIDNEY, MT US USC00247560)



**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.4-6. Sidney, Montana Precipitation Records 1991–2020**

| Month     | Mean Monthly Precipitation (in) |
|-----------|---------------------------------|
| January   | 0.45                            |
| February  | 0.37                            |
| March     | 0.58                            |
| April     | 1.17                            |
| May       | 2.40                            |
| June      | 2.78                            |
| July      | 2.65                            |
| August    | 1.30                            |
| September | 1.62                            |
| October   | 1.08                            |
| November  | 0.59                            |
| December  | 0.51                            |

Source: National Oceanic & Atmospheric Administration 2024 (SIDNEY, MT US USC00247560)

Appendix B – Tables

**Table 3.4-7 Montana’s Greenhouse Gas Emissions Compared to the U.S., Broken Down by Sector or Type of Greenhouse Gas**

| Economic Sector         | Montana’s 2021 Values (Million Metric Tons CO <sub>2</sub> Equivalent) | United States 2021 Values (Million Metric Tons CO <sub>2</sub> Equivalent) | United States Emissions |
|-------------------------|--|--|-------------------------|
| Agriculture             | 19.5   | 634.0  | 3.1%                    |
| Electric power industry | 12.8   | 1577.5   | 0.8%                    |
| Transportation          | 8.1  | 1801.5   | 0.4%                    |
| Industry                | 7.5  | 1452.5   | 0.5%                    |
| Commercial              | 2.3  | 463.7  | 0.5%                    |
| Residential             | 1.9  | 391.3  | 0.5%                    |
| Carbon dioxide          | 29.5   | 5017.2   | 0.6%                    |
| Nitrous oxide           | 13.8   | 408.9  | 3.4%                    |
| Methane                 | 10.8   | 782.6  | 1.4%                    |
| Fluorinated gases       | 0.5  | 193.0  | 0.3%                    |
| Gross total             | 52.3   | 6343.2   | 0.8%                    |

Source: U.S. EPA 2024

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.4-8. Actively Producing Oil and Gas Wells by County**

| <b>County Name</b> | <b>Actively Producing Oil and Gas Wells</b> |
|--------------------|---|
| Dawson             | 53  |
| Garfield           | 1   |
| McCone             | 4   |
| Richland           | 1,144                                       |

Source: Montana Board of Oil and Gas Conservation 2024; ShaleXP 2024a, 2024b, 2024c, 2024d

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.4-9. Average Montana Temperature Change by Decade-1950–2015**

| <b>Annual</b> | <b>Winter</b> | <b>Spring</b> | <b>Summer</b> | <b>Fall</b> |
|---------------|---------------|---------------|---------------|-------------|
| + 0.48        | + 0.78        | + 0.65        | + 0.26        | *           |

\*Statistically insignificant

Source: Whitlock et al. 2017

Appendix B – Tables

**Table 3.4-10. Change in Climate Extremes in the State of Montana from 1950-2015**

| Climate Metric              | Value       |
|-----------------------------|-------------|
| Warm Days <sup>1</sup>      | + 11 Days   |
| Cool Days <sup>2</sup>      | - 13 Days   |
| Frost Days <sup>3</sup>     | - 12 Days   |
| Growing Season              | + 12 Days   |
| Warm Nights <sup>4</sup>    | + 14 Nights |
| Cool Nights <sup>4</sup>    | - 12 Nights |
| Monthly Minimum Temperature | + 5 °F      |
| Monthly Maximum Temperature | + 1.1 °F    |

Source: Whitlock et al. 2017

Note:

<sup>1</sup> Warm days: maximum temperature exceeds 90°F.

<sup>2</sup> Cool days: maximum temperature is lower than 10% of the historical observations.

<sup>3</sup> Frost days: days in which the minimum temperatures are below 32°F.

<sup>4</sup> Warm nights (cool nights): the number of days when minimum temperature is higher (lower) than a specified maximum (minimum) threshold defined by historical conditions.

Appendix B – Tables

**Table 3.4-11. Future Projections for Climate Change in Northeast Montana**

| Scenario  | Mid-Century (2040-2069) | End-of-Century (2070-2099) |
|---|-------------------------|----------------------------|
| <b>Change in Annual Temperature (°F)</b>                                    | —                       | —                          |
| Stabilization Scenario  | 1 – 3                   | 3 – 7.5                    |
| Business as Usual   | 2.5 – 4.5               | 6 – 13.5                   |
| <b>Change in Annual Average Daily Maximum Temperature (°F)</b>              | —                       | —                          |
| Stabilization Scenario  | 4.4 – 4.6               | 5 – 5.8                    |
| Business as Usual   | 5.7 – 5.9               | > 10                       |
| <b>Change in the Number of Days Above 90 °F</b>                             | —                       | —                          |
| Stabilization Scenario  | 8 – 37                  | 12 – 44                    |
| Business as Usual   | 11– 44                  | 30 – 70                    |
| <b>Change in the Number of Freeze Days (Minimum Temperature &gt; 32 °F)</b> | —                       | —                          |
| Stabilization Scenario  | 10 – 44                 | 14 – 62                    |
| Business as Usual   | 15 – 60                 | 29 – 104                   |
| <b>Change in Annual Precipitation (Inches)</b>                              | —                       | —                          |
| Stabilization Scenario  | - 1.25 – 2.6            | - 0.2 – 2.5                |
| Business as Usual   | - 0.2 – 2.7             | - 0.2 – 4.75               |

Source: Whitlock et al. 2017

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.5-1. USGS Gages in the DRWA Service Area**

| County   | USGS Site Number | USGS Site Name                                     | Average Annual Discharge (cfs) |
|----------|------------------|--|--------------------------------|
| Garfield | 06130000         | Flatwillow Creek near Mosby MT                     | 83.0                           |
| Garfield | 06130500         | Musselshell River at Mosby MT                      | 120.4                          |
| Garfield | 06130610         | Bair Coulee near Mosby MT                          | nd                             |
| Garfield | 06130915         | Russian Coulee near Jordan MT                      | nd                             |
| McCone   | 06131200         | Nelson Creek near Van Norman MT                    | 1.9                            |
| McCone   | 06131300         | Mcguire Creek trib near Van Norman MT              | nd                             |
| McCone   | 06175100         | Missouri R at W Frazer Pump Plant nr Frazer MT     | nd                             |
| McCone   | 06175510         | Missouri R at E Frazer Pump Plant nr Frazer MT     | nd                             |
| McCone   | 06177000         | Missouri River near Wolf Point MT                  | 9801.7                         |
| McCone   | 06177700         | Cow Creek Tributary near Vida MT                   | 0.3                            |
| McCone   | 06177500         | Redwater River at Circle MT                        | 10.8                           |
| McCone   | 06177100         | Duck Creek near Brockway, MT                       | nd                             |
| Dawson   | 06326950         | Yellowstone River Tributary no. 5 nr Marsh MT      | nd                             |
| Dawson   | 06327500         | Yellowstone River at Glendive, MT                  | 12925.5                        |
| Dawson   | 06328100         | Yellowstone River trib no 6 nr Glendive MT         | nd                             |
| Dawson   | 06328495         | Yellowstone River Fish Bypass Channel nr Intake MT | 2550.7                         |
| Dawson   | 06327450         | Cains Coulee at Glendive MT                        | 16.0                           |
| Dawson   | 06327720         | Griffith Creek trib near Glendive MT               | nd                             |
| Richland | 06329500         | Yellowstone River near Sidney MT                   | 12452.7                        |
| Richland | 06329590         | YELLOWSTONE R NO. 1 NR FAIRVIEW, MT                | nd                             |
| Richland | 06185500         | Missouri River near Culbertson MT                  | 10069.6                        |
| Richland | 06185600         | MISSOURI R NO. 4 NR NOHLY, MT                      | nd                             |
| Richland | 06185650         | MISSOURI R NO. 5 AT NOHLY, MT                      | nd                             |

Source: USGS 2024a, 2024b, 2024c, 2024d, 2024e, 2024f, 2024g, 2024h, 2024i, 2024j

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.5-2. Annual Statistics for the Fort Peck Reservoir, 1937-2006**

| Year | Maximum Elevation<br>(feet msl) | Mean<br>Discharge (cfs) | Minimum<br>Discharge (cfs) | Maximum<br>Discharge (cfs) |
|------|---------------------------------|-------------------------|----------------------------|----------------------------|
| 1937 | 2065.80                         | 2,663                   | 301                        | 8,780                      |
| 1938 | 2136.50                         | 8,508                   | 710                        | 25,400                     |
| 1939 | 2100.00                         | 7,582                   | 590                        | 22,600                     |
| 1940 | 2128.40                         | 4,017                   | 0                          | 16,840                     |
| 1941 | 2131.20                         | 3,858                   | 820                        | 15,100                     |
| 1942 | 2183.80                         | 4,909                   | 410                        | 15,300                     |
| 1943 | 2222.70                         | 7,196                   | 0                          | 22,910                     |
| 1944 | 2225.80                         | 7,205                   | 0                          | 19,510                     |
| 1945 | 2226.40                         | 5,310                   | 500                        | 20,770                     |
| 1946 | 2232.30                         | 5,170                   | 1,000                      | 20,580                     |
| 1947 | 2242.60                         | 11,783                  | 690                        | 27,000                     |
| 1948 | 2244.80                         | 13,948                  | 1,000                      | 28,610                     |
| 1949 | 2231.80                         | 9,984                   | 2,910                      | 23,590                     |
| 1950 | 2234.20                         | 8,471                   | 900                        | 23,990                     |
| 1951 | 2237.50                         | 12,196                  | 1,400                      | 27,390                     |
| 1952 | 2237.80                         | 9,637                   | 2,310                      | 22,220                     |
| 1953 | 2240.00                         | 10,859                  | 2,880                      | 28,000                     |
| 1954 | 2226.80                         | 10,730                  | 2,980                      | 28,050                     |
| 1955 | 2206.00                         | 13,347                  | 4,260                      | 28,060                     |
| 1956 | 2180.90                         | 6,401                   | 3,010                      | 10,400                     |
| 1957 | 2186.60                         | 6,211                   | 3,100                      | 7,500                      |
| 1958 | 2198.50                         | 6,130                   | 3,900                      | 7,500                      |
| 1959 | 2210.00                         | 7,438                   | 5,200                      | 7,900                      |
| 1960 | 2217.70                         | 7,217                   | 3,200                      | 9,100                      |
| 1961 | 2212.20                         | 8,925                   | 4,600                      | 15,500                     |
| 1962 | 2205.10                         | 6,800                   | 1,900                      | 12,400                     |
| 1963 | 2216.10                         | 4,975                   | 1,000                      | 12,500                     |
| 1964 | 2235.90                         | 6,183                   | 1,000                      | 12,700                     |



**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| <b>Year</b> | <b>Maximum Elevation<br/>(feet msl)</b> | <b>Mean<br/>Discharge (cfs)</b> | <b>Minimum<br/>Discharge (cfs)</b> | <b>Maximum<br/>Discharge (cfs)</b> |
|-------------|---|---------------------------------|------------------------------------|------------------------------------|
| 1965        | 2245.90                                 | 5,100                           | 5,100                              | 15,700                             |
| 1966        | 2242.10                                 | 9,900                           | 5,000                              | 15,800                             |
| 1967        | 2245.70                                 | 11,400                          | 900                                | 14,800                             |
| 1968        | 2244.70                                 | 10,700                          | 3,000                              | 14,200                             |
| 1969        | 2246.80                                 | 11,500                          | 4,800                              | 14,700                             |
| 1970        | 2247.30                                 | 12,600                          | 2,800                              | 15,300                             |
| 1971        | 2244.20                                 | 11,600                          | 7,400                              | 15,300                             |
| 1972        | 2244.00                                 | 10,900                          | 7,400                              | 14,900                             |
| 1973        | 2241.70                                 | 8,000                           | 3,000                              | 15,000                             |
| 1974        | 2245.50                                 | 9,500                           | 3,100                              | 13,300                             |
| 1975        | 2251.60                                 | 15,700                          | 4,300                              | 35,400                             |
| 1976        | 2249.00                                 | 14,500                          | 9,000                              | 25,500                             |
| 1977        | 2240.50                                 | 8,600                           | 4,600                              | 15,400                             |
| 1978        | 2249.60                                 | 11,700                          | 0                                  | 15,300                             |
| 1979        | 2247.30                                 | 12,600                          | 1,000                              | 28,900                             |
| 1980        | 2242.10                                 | 10,500                          | 5,800                              | 14,600                             |
| 1981        | 2242.20                                 | 12,107                          | 7,300                              | 15,000                             |
| 1982        | 2239.70                                 | 10,900                          | 5,200                              | 15,600                             |
| 1983        | 2241.70                                 | 8,991                           | 4,400                              | 14,400                             |
| 1984        | 2217.63                                 | 6,466                           | 2,800                              | 8,800                              |
| 1985        | 2243.20                                 | 10,384                          | 4,800                              | 13,800                             |
| 1986        | 2238.50                                 | 10,193                          | 5,600                              | 14,600                             |
| 1987        | 2238.30                                 | 8,025                           | 1,100                              | 14,500                             |
| 1988        | 2238.50                                 | 7,108                           | 3,100                              | 11,400                             |
| 1989        | 2234.20                                 | 7,858                           | 4,300                              | 12,200                             |
| 1990        | 2223.60                                 | 9,708                           | 5,000                              | 13,400                             |
| 1991        | 2216.20                                 | 8,118                           | 3,300                              | 13,100                             |
| 1992        | 2220.12                                 | 7,208                           | 3,000                              | 8,200                              |
| 1993        | 2232.22                                 | 5,650                           | 2,700                              | 8,700                              |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| <b>Year</b> | <b>Maximum Elevation<br/>(feet msl)</b> | <b>Mean<br/>Discharge (cfs)</b> | <b>Minimum<br/>Discharge (cfs)</b> | <b>Maximum<br/>Discharge (cfs)</b> |
|-------------|---|---------------------------------|------------------------------------|------------------------------------|
| 1994        | 2238.94                                 | 7,291                           | 3,300                              | 12,200                             |
| 1995        | 2244.21                                 | 9,308                           | 3,600                              | 14,900                             |
| 1996        | 2247.30                                 | 12,025                          | 3,000                              | 15,200                             |
| 1997        | 2250.31                                 | 13,275                          | 2,500                              | 22,400                             |
| 1998        | 2240.46                                 | 8,900                           | 4,600                              | 12,700                             |
| 1999        | 2238.32                                 | 8,267                           | 4,300                              | 12,300                             |
| 2000        | 2235.37                                 | 7,883                           | 4,400                              | 10,400                             |
| 2001        | 2226.00                                 | 5,967                           | 3,600                              | 11,800                             |
| 2002        | 2220.44                                 | 6,592                           | 3,900                              | 10,400                             |
| 2003        | 2214.53                                 | 7,542                           | 3,700                              | 10,800                             |
| 2004        | 2206.80                                 | 6,758                           | 3,600                              | 11,200                             |
| 2005        | 2203.70                                 | 5,645                           | 3,000                              | 8,500                              |
| 2006        | 2206.34                                 | 7,274                           | 4,500                              | 10,400                             |

Source: USACE 2008

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.5-3. Fort Peck Reservoir Surface Area, Volume, Mean Depth, and Retention Time at Different Pool Elevations**

| Pool Elevation (feet-msl) | Surface Area (acres) | Volume (acre-feet) | Mean Depth (feet) | Retention Time (years) |
|---------------------------|----------------------|--------------------|-------------------|------------------------|
| 2250                      | 245,405              | 18,462,840         | 75.2              | 2.78                   |
| 2245                      | 237,605              | 17,253,500         | 72.6              | 2.60                   |
| 2240                      | 225,065              | 16,094,980         | 71.5              | 2.43                   |
| 2235                      | 213,025              | 15,000,180         | 70.4              | 2.26                   |
| 2230                      | 201,130              | 13,964,500         | 69.4              | 2.10                   |
| 2225                      | 188,765              | 12,991,390         | 68.8              | 1.96                   |
| 2220                      | 180,590              | 12,069,610         | 66.8              | 1.82                   |
| 2215                      | 171,930              | 11,188,080         | 65.1              | 1.69                   |
| 2210                      | 163,400              | 10,349,820         | 63.3              | 1.56                   |
| 2205                      | 154,773              | 9,554,578          | 61.7              | 1.44                   |
| 2200                      | 146,595              | 8,801,156          | 60.0              | 1.33                   |
| 2195                      | 138,081              | 8,090,417          | 58.6              | 1.22                   |
| 2190                      | 132,175              | 7,415,889          | 56.1              | 1.12                   |
| 2185                      | 126,146              | 6,769,319          | 53.7              | 1.02                   |
| 2180                      | 118,608              | 6,156,918          | 51.9              | 0.93                   |
| 2175                      | 111,285              | 5,582,093          | 50.2              | 0.84                   |
| 2170                      | 103,394              | 5,045,002          | 48.8              | 0.76                   |
| 2165                      | 95,316               | 4,549,151          | 47.7              | 0.69                   |
| 2160                      | 89,461               | 4,087,903          | 45.7              | 0.62                   |

Source: USACE 2019

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.5-4. FEMA Floodplain Mapping and Designations within the DRWA Service Area**

| <b>Flood Zone</b> | <b>Description</b>                          | <b>Area (acres)</b> |
|-------------------|---|---------------------|
| A                 | 1% Annual Chance Flood Hazard               | 22,783.28           |
| AE                | 1% Annual Chance Flood Hazard               | 50,441.31           |
| AREA NOT INCLUDED | Area Not Included                           | 1,537,769.71        |
| D                 | Undetermined Flood Hazard or Unstudied Area | 807,479.26          |
| X                 | 0.2% annual Chance Flood Hazard             | 1,555.36            |
| X                 | Area of Minimal Flood Hazard                | 459,142.10          |
| Total Acreage     |   | 2,879,171.02        |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.5-5. Designated Flood Zones in Project Study Area**

| <b>Flood Zone</b> | <b>Description</b>                          | <b>Area (acres)</b> |
|-------------------|---|---------------------|
| A                 | 1% Annual Chance Flood Hazard               | 116.72              |
| AE                | 1% Annual Chance Flood Hazard               | 119.92              |
| AREA NOT INCLUDED | Area Not Included                           | 5,834.41            |
| D                 | Undetermined Flood Hazard or Unstudied Area | 4,105.57            |
| X                 | Area of Minimal Flood Hazard                | 2,065.43            |
| Total Acreage     |   | 12,242.04           |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.5-6. Well Data Throughout the DRWA Service Area**

| Groundwater Information Center # | County   | Total Depth | Static Water Level | Production Rate (gallons per minute) | Location            |
|----------------------------------|----------|-------------|--------------------|--------------------------------------|---------------------|
| 296024                           | Garfield | 120 ft      | 74 ft              | 10                                   | South of Jordan     |
| 172433                           | Garfield | 520 ft      | 420 ft             | 10                                   | West of Jordan      |
| 2477                             | Garfield | 197 ft      | 70 ft              | 10                                   | North of Jordan     |
| 37777                            | McCone   | 210 ft      | 185 ft             | 4                                    | North of HWY 24     |
| 294181                           | McCone   | 135 ft      | 61 ft              | 14                                   | East of HWY 24      |
| 31261                            | Garfield | 150 ft      | 130 ft             | 11                                   | South of HWY 24     |
| 33879                            | McCone   | 282 ft      | 210 ft             | 12                                   | West of HWY 24      |
| 32504                            | McCone   | 181 ft      | 130 ft             | 7                                    | South of Circle     |
| 30246                            | Dawson   | 138 ft      | 110 ft             | 10                                   | Southeast of Circle |
| 211518                           | McCone   | 112 ft      | 56 ft              | 6                                    | Southwest of Circle |
| 36252                            | Richland | 148 ft      | 130 ft             | 3                                    | Northwest of Richey |
| 288391                           | Dawson   | 183 ft      | 70 ft              | 12                                   | South of Richey     |
| 219178                           | Richland | 170 ft      | 100 ft             | 7                                    | East of Richey      |
| 32571                            | Dawson   | 126 ft      | 60 ft              | 2                                    | East of Circle      |
| 36276                            | Richland | 105 ft      | 47 ft              | 5                                    | Northeast of Richey |

Source: Dry-Redwater 2023

Appendix B – Tables

**Table 3.5-7. 303D List of Impaired Waters and Category Definitions**

|             |  |
|-------------|--|
| Category 1  | Waters for which all applicable beneficial uses have been assessed and all uses are determined to be fully supported.  |
| Category 3  | Waters for which there is insufficient data to assess the use-support of any applicable beneficial use; no use-support determinations have been made.                    |
| Category 4A | All TMDLs needed to rectify all identified threats or impairments have been completed and approved.  |
| Category 4c | Identified threats or impairments result from pollution categories such as dewatering or habitat modification and thus a TMDL is not required.                           |
| Category 5  | Waters where one or more applicable beneficial uses are impaired or threatened, and a TMDL is required to address the factors causing the impairment or threat           |
| Category 5N | Available data and/or information indicate that a water quality standard is exceeded due to an apparent natural source in the absence of any identified manmade sources. |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.5-8. 303D List of Impaired Waters**

| HUC-08 Watershed     | Name of Waterway  | Category | Reason   |
|----------------------|---|----------|--|
| Big Dry              | BIG DRY CREEK, Steves Fork to mouth (Fort Peck Reservoir)                                 | 5        | Not fully supporting contact recreation, not fully supporting aquatic life |
| Big Muddy            | BIG MUDDY CREEK, north corner of Fort Peck Reservation boundary to mouth (Missouri River) | 5        | Not fully supporting aquatic life  |
| Big Porcupine        | BIG PORCUPINE CREEK, headwaters to mouth (Yellowstone River)                              | 3        |  |
| Charlie-Little Muddy | CHARLIE CREEK, East and Middle Charlie Creek to mouth (Missouri River)                    | 5        | Not fully supporting aquatic life  |
| Charlie-Little Muddy | HARDSCRABBLE CREEK, headwaters to mouth (Missouri River)                                  | 5        | Not fully supporting aquatic life  |
| Charlie-Little Muddy | MISSOURI RIVER, Poplar River to North Dakota border                                       | 5        | Not fully supporting aquatic life  |
| Flatwillow           | FLATWILLOW CREEK, Highway 87 bridge to mouth (Musselshell River)                          | 5        | Not fully supporting aquatic life  |
| Fort Peck Reservoir  | NELSON CREEK, headwaters to mouth (Big Dry Creek arm of Fort Peck Res)                    | 5        | Not fully supporting aquatic life  |
| Fort Peck Reservoir  | TIMBER CREEK, headwaters to mouth (Big Dry Creek arm of Fort Peck Res)                    | 4A       | Not fully supporting aquatic life  |
| Little Dry           | LITTLE DRY CREEK, headwaters to mouth (Big Dry Creek)                                     | 1        |  |
| Lower Musselshell    | BLOOD CREEK, Dovetail County Road to mouth (Musselshell River)                            | 4C       | Not fully supporting aquatic life  |
| Lower Musselshell    | CALF CREEK, headwaters to mouth (Musselshell River)                                       | 3        |  |
| Lower Musselshell    | LOGGPOLE CREEK, North and Middle Fork Lodgepole Creeks to mouth (Musselshell River)       | 1        |  |
| Lower Musselshell    | MUSSELSHELL RIVER, Flatwillow Creek to Fort Peck Reservoir                                | 5        | Not fully supporting contact recreation, not fully supporting aquatic life |



**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| HUC-08 Watershed  | Name of Waterway  | Category | Reason  |
|-------------------|---|----------|---|
| Lower Yellowstone | BRACKETT CREEK, headwaters to mouth (Cherry Creek)  | 3        |   |
| Lower Yellowstone | BURNS CREEK, headwaters to mouth (Yellowstone River)  | 5        | Not fully supporting contact recreation, not fully supporting aquatic life  |
| Lower Yellowstone | CEDAR CREEK, 26 miles upstream to mouth (Yellowstone River)   | 5        | Not fully supporting aquatic life   |
| Lower Yellowstone | CHERRY CREEK, 20 miles upstream to mouth (Yellowstone River)  | 3        |   |
| Lower Yellowstone | CHERRY CREEK, headwaters to 20 miles upstream of mouth  | 3        |   |
| Lower Yellowstone | CRANE CREEK, headwaters to mouth (Yellowstone River, T21N R58E S23)                                     | 5        | Not fully supporting aquatic life   |
| Lower Yellowstone | DEER CREEK, Confluence of Middle Fork Deer Creek and South Fork Deer Creek to mouth (Yellowstone River) | 3        |   |
| Lower Yellowstone | EAST FORK FOX CREEK, headwaters to mouth (Fox Creek)  | 3        |   |
| Lower Yellowstone | FIRST HAY CREEK, headwaters to mouth (Yellowstone River)  | 5        | Not fully supporting aquatic life   |
| Lower Yellowstone | FOURMILE CREEK, headwaters to North Dakota border   | 5        | Not fully supporting contact recreation, not fully supporting aquatic life  |
| Lower Yellowstone | FOX CREEK, headwaters to mouth (Yellowstone River), T22N R59E S19                                       | 5        | Not fully supporting drinking water, not fully supporting contact recreation, not fully supporting agriculture, not fully supporting aquatic life |
| Lower Yellowstone | LONE TREE CREEK, confluence of North Fork to mouth (Yellowstone River)                                  | 5        | Not fully supporting contact recreation, not fully supporting aquatic life  |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| <b>HUC-08 Watershed</b>  | <b>Name of Waterway</b>   | <b>Category</b> | <b>Reason</b>   |
|--------------------------|---|-----------------|---|
| Lower Yellowstone        | MIDDLE FORK DEER CREEK, headwaters to mouth (South Fork Deer Creek)       | 3               |   |
| Lower Yellowstone        | MORGAN CREEK, headwaters to mouth (Yellowstone River)                     | 4C              | Not fully supporting aquatic life   |
| Lower Yellowstone        | NORTH FORK FOX CREEK, headwaters to mouth (Fox Creek), T22N R58E S21      | 5               | Not fully supporting drinking water, not fully supporting contact recreation, not fully supporting agriculture, not fully supporting aquatic life |
| Lower Yellowstone        | SEARS CREEK, headwaters to mouth (Yellowstone River)                      | 5               | Not fully supporting contact recreation, not fully supporting aquatic life  |
| Lower Yellowstone        | SOUTH FORK DEER CREEK, headwaters to mouth                                | 3               |   |
| Lower Yellowstone        | YELLOWSTONE RIVER, Lower Yellowstone Diversion Dam to North Dakota border | 5               | Not fully supporting aquatic life   |
| Lower Yellowstone        | YELLOWSTONE RIVER, Powder River to Lower Yellowstone Diversion Dam        | 4C              | Not fully supporting aquatic life   |
| Lower Yellowstone-Sunday | CUSTER CREEK, headwaters to mouth (Yellowstone River)                     | 1               |   |
| Lower Yellowstone-Sunday | LITTLE PORCUPINE CREEK, headwaters to mouth (Yellowstone River)           | 5               | Not fully supporting contact recreation, not fully supporting aquatic life  |
| Middle Musselshell       | MUSSELSHELL RIVER, HUC boundary near Roundup to Flatwillow Creek          | 5               | Not fully supporting aquatic life   |
| Prairie Elk-Wolf         | MISSOURI RIVER, Milk River to Poplar River                                | 5               | Not fully supporting aquatic life   |
| Prairie Elk-Wolf         | PRAIRIE ELK CREEK, East and Middle Forks to mouth (Missouri River)        | 4A              | Not fully supporting aquatic life   |
| Prairie Elk-Wolf         | SAND CREEK, confluence of East and West Forks to mouth (Missouri River)   | 5               | Not fully supporting aquatic life   |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| <b>HUC-08 Watershed</b> | <b>Name of Waterway</b>  | <b>Category</b> | <b>Reason</b>  |
|-------------------------|--|-----------------|--|
| Redwater                | EAST REDWATER CREEK, headwaters to mouth (Redwater River)              | 5               | Not fully supporting contact recreation, not fully supporting aquatic life |
| Redwater                | HORSE CREEK, headwaters to mouth at Redwater River near town of Circle | 4A              | Not fully supporting aquatic life  |
| Redwater                | PASTURE CREEK, headwaters to mouth at Redwater River                   | 4A              | Not fully supporting aquatic life  |
| Redwater                | REDWATER RIVER, Buffalo Springs Creek to Pasture Creek                 | 1               |  |
| Redwater                | REDWATER RIVER, headwaters to Hell Creek                               | 1               |  |
| Redwater                | REDWATER RIVER, Hell Creek to Buffalo Springs Creek                    | 4A              | Not fully supporting aquatic life  |
| Redwater                | REDWATER RIVER, Pasture Creek to mouth (Missouri River)                | 4C              | Not fully supporting aquatic life  |

Source: NRCS 2019a, 2019b, 2019c, 2020; MDEQ 2020

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.5-9. Summary of 2021 and 2022 Water Sample Analysis at Proposed Fort Peck Reservoir Intake**

| Parameter                             | Average      | Minimum      | Maximum      |
|---------------------------------------|--------------|--------------|--------------|
| pH                                    | 8.5          | 8.4          | 8.7          |
| Total dissolved solids, mg/L          | 437          | 431          | 443          |
| Specific conductance, µS/cm           | 690          | 679          | 709          |
| Turbidity, NTU                        | 1.5          | 0.5          | 2.6          |
| Alkalinity, mg/L                      | 168          | 168          | 169          |
| Hardness, mg/L                        | 247          | 229          | 276          |
| Calcium, mg/L                         | 56           | 52           | 62           |
| Iron, mg/L                            | 0.04         | ND           | 0.09         |
| Magnesium, mg/L                       | 26           | 24           | 29           |
| Copper, µg/L                          | Not Detected | Not Detected | Not Detected |
| Zinc, µg/L                            | Not Detected | Not Detected | Not Detected |
| Mercury, mg/L                         | Not Detected | Not Detected | 0.0001       |
| Lead, mg/L                            | Not Detected | Not Detected | Not Detected |
| Total organic carbon, mg/L            | 2.9          | 2.4          | 4.0          |
| Dissolved organic carbon, mg/L        | 3.0          | 2.8          | 3.3          |
| Total coliform, MPN/100mL             | 326          | 1            | 649          |
| Fecal coliform, MPN/100mL             | <1           | <1           | <1           |
| Giardia cysts/mL <sup>1</sup>         | 0            | 0            | 0            |
| Cryptosporidium, oocysts/L            | 0            | 0            | 0            |
| Volatile Organic Compounds, µg/L      | Not Detected | Not Detected | Not Detected |
| Semi-Volatile Organic Compounds, µg/L | Not Detected | Not Detected | Not Detected |
| Polyfluoroalkyl substances, µg/L      | Not Detected | Not Detected | Not Detected |

Source: Dry-Redwater 2023

Note:

<sup>1</sup> Microorganisms (Cryptosporidium and Giardia) were not detected in samples taken however hold time and temperatures of samples were outside of specifications prior to analysis.

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.5-10. USGS Gage Water Quality Monitoring Parameters**

| Gage   | Data Time Period        | Parameter   | Average Over Time Period |
|--|-------------------------|---|--------------------------|
| USGS 06175510 Missouri River at E Frazer Pump Plant near Frazer, Montana | 04/24/2024 – 06/04/2024 | Turbidity, water, unfiltered, monochrome near infra-red LED light, 780-900 nm, detection angle 90 +-2.5 degrees, formazin nephelometric units (FNU) (Maximum) | 148.1                    |
| USGS 06175510 Missouri River at E Frazer Pump Plant near Frazer, Montana | 04/24/2024 – 06/04/2024 | Turbidity, water, unfiltered, monochrome near infra-red LED light, 780-900 nm, detection angle 90 +-2.5 degrees, formazin nephelometric units (FNU) (Mean)    | 89.6                     |
| USGS 06175510 Missouri River at E Frazer Pump Plant near Frazer, Montana | 04/24/2024 – 06/04/2024 | Turbidity, water, unfiltered, monochrome near infra-red LED light, 780-900 nm, detection angle 90 +-2.5 degrees, formazin nephelometric units (FNU) (Minimum) | 57.1                     |
| USGS 06177000 Missouri River near Wolf Point, Montana                    | 04/24/2024 – 06/04/2024 | Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius (Maximum)  | 648.5                    |
| USGS 06177000 Missouri River near Wolf Point, Montana                    | 04/24/2024 – 06/04/2024 | Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius (Mean)   | 640.8                    |
| USGS 06177000 Missouri River near Wolf Point, Montana                    | 04/24/2024 – 06/04/2024 | Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius (Minimum)  | 634.0                    |
| USGS 06177000 Missouri River near Wolf Point, Montana                    | 04/24/2024 – 06/04/2024 | pH, water, unfiltered, field, standard units (Median)   | 8.3                      |
| USGS 06177000 Missouri River near Wolf Point, Montana                    | 04/24/2024 – 06/04/2024 | Dissolved oxygen, water, unfiltered, milligrams per liter (Maximum)   | 10.6                     |
| USGS 06177000 Missouri River near Wolf Point, Montana                    | 04/24/2024 – 06/04/2024 | Dissolved oxygen, water, unfiltered, milligrams per liter (Mean)  | 10.5                     |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Gage  | Data Time Period        | Parameter   | Average Over Time Period |
|---|-------------------------|---|--------------------------|
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Dissolved oxygen, water, unfiltered, milligrams per liter (Minimum)   | 10.4                     |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Oxidation reduction potential, reference electrode not specified, millivolts (Maximum)  | 294.0                    |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Oxidation reduction potential, reference electrode not specified, millivolts (Mean)   | 289.1                    |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Oxidation reduction potential, reference electrode not specified, millivolts (Minimum)  | 276.1                    |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | pH, water, unfiltered, field, standard units (Maximum)  | 8.4                      |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | pH, water, unfiltered, field, standard units (Minimum)  | 8.3                      |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Turbidity, water, unfiltered, monochrome near infra-red LED light, 780-900 nm, detection angle 90 +-2.5 degrees, formazin nephelometric units (FNU) (Maximum) | 197.5                    |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Turbidity, water, unfiltered, monochrome near infra-red LED light, 780-900 nm, detection angle 90 +-2.5 degrees, formazin nephelometric units (FNU) (Mean)    | 108.3                    |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Turbidity, water, unfiltered, monochrome near infra-red LED light, 780-900 nm, detection angle 90 +-2.5 degrees, formazin nephelometric units (FNU) (Minimum) | 64.5                     |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Dissolved organic matter fluorescence (fDOM), water, in situ, concentration estimated from reference material,  | 36.3                     |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Gage  | Data Time Period        | Parameter  | Average Over Time Period |
|---|-------------------------|--|--------------------------|
|   |                         | micrograms per liter as quinine sulfate equivalents (QSE) (Maximum)  |                          |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Dissolved organic matter fluorescence (fDOM), water, in situ, concentration estimated from reference material, micrograms per liter as quinine sulfate equivalents (QSE) (Mean)    | 22.1                     |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Dissolved organic matter fluorescence (fDOM), water, in situ, concentration estimated from reference material, micrograms per liter as quinine sulfate equivalents (QSE) (Minimum) | 15.5                     |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Chlorophyll relative fluorescence (fChl), water, in situ, relative fluorescence units (RFU) (Maximum)  | 46.5                     |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Chlorophyll relative fluorescence (fChl), water, in situ, relative fluorescence units (RFU) (Mean)   | 20.8                     |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Chlorophyll relative fluorescence (fChl), water, in situ, relative fluorescence units (RFU) (Minimum)  | 5.2                      |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Phycocyanin relative fluorescence (fPC), water, in situ, relative fluorescence units (RFU) (Maximum)   | 15.7                     |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Phycocyanin relative fluorescence (fPC), water, in situ, relative fluorescence units (RFU) (Mean)  | 2.1                      |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/24/2024 – 06/04/2024 | Phycocyanin relative fluorescence (fPC), water, in situ, relative fluorescence units (RFU) (Minimum)   | 0.6                      |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| <b>Gage</b>   | <b>Data Time Period</b> | <b>Parameter</b>  | <b>Average Over Time Period</b> |
|---|-------------------------|---|---------------------------------|
| USGS 06177000 Missouri River near Wolf Point, Montana | 07/31/1979 – 06/04/2024 | Temperature, water, degrees Celsius (Maximum)           | 9.9                             |
| USGS 06177000 Missouri River near Wolf Point, Montana | 07/31/1979 – 06/04/2024 | Temperature, water, degrees Celsius (Median)            | 8.3                             |
| USGS 06177000 Missouri River near Wolf Point, Montana | 07/31/1979 – 06/04/2024 | Temperature, water, degrees Celsius (Minimum)           | 8.9                             |
| USGS 06177000 Missouri River near Wolf Point, Montana | 04/28/1948 - 06/29/1969 | Suspended sediment discharge, short tons per day (Mean) | 11,535                          |

Source: USGS 2024k, 2024l, 2024m, 2024n



**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.5-11. Comparison of Physically- and Legally Available Volumes [acre-feet] on the Missouri River at Fort Peck Reservoir**

| Month     | Physical Availability <sup>1</sup><br>(acre-feet) | Existing Legal Demands (acre-feet) | Amount Available<br>(Physical – Existing Legal Demands) (acre-feet) | Amount Requested <sup>2</sup><br>(acre-feet) | Amount Remaining<br>(acre-feet) | Percent Change in Amount Available |
|-----------|---|------------------------------------|---|--|---------------------------------|------------------------------------|
| January   | 388,694   | 284,912                            | 103,782   | 332.5  | 103,450                         | -0.32%                             |
| February  | 375,120   | 284,912                            | 90,208  | 332.5  | 89,876                          | -0.37%                             |
| March     | 463,998   | 284,912                            | 179,086   | 332.5  | 178,754                         | -0.19%                             |
| April     | 531,960   | 285,296                            | 246,664   | 332.5  | 246,332                         | -0.13%                             |
| May       | 795,461   | 303,696                            | 491,765   | 332.5  | 491,433                         | -0.07%                             |
| June      | 1,001,812   | 303,696                            | 698,116   | 332.5  | 697,784                         | -0.05%                             |
| July      | 584,362   | 303,696                            | 280,666   | 332.5  | 280,334                         | -0.12%                             |
| August    | 374,063   | 303,696                            | 70,367  | 332.5  | 70,035                          | -0.47%                             |
| September | 341,651   | 303,696                            | 37,955  | 332.5  | 37,623                          | -0.88%                             |
| October   | 380,979   | 285,296                            | 95,683  | 332.5  | 95,351                          | -0.35%                             |
| November  | 397,041   | 284,912                            | 94,129  | 332.5  | 93,797                          | -0.35%                             |
| December  | 390,321   | 284,912                            | 105,319   | 332.5  | 104,987                         | -0.32%                             |

Source: DNRC 2014

Note:

<sup>1</sup> Reproduced from the DRNC 2014 permit. Physical availability data is from the 1934 – 2012 time period.

<sup>2</sup> Monthly withdrawal volume is calculated based on an even distribution of the requested 3,990 acre-feet (3,990 / 12 = 332.5 acre-feet per month).

Appendix B – Tables

**Table 3.6-1. Stratigraphic Column for Northeastern Montana Portraying Geologic Units Including Fossiliferous Materials (i.e., Dinosaurs, Mammals, Plants, and Invertebrates)**

| Era      | Period     | Epoch   | Formation | Member              | Definition of Major Units  |
|----------|------------|---|-----------|---------------------|--|
| Cenozoic | Quaternary | Anthropocene<br>Holocene  | n/a       | n/a                 | Colluvium, alluvium, and landslides<br>Map symbol Qs, Qal, Qls   |
| Cenozoic | Quaternary | Pleistocene<br>(2.58 million to<br>11,700 years ago)                                    | n/a       | n/a                 | Gravel deposits<br>Map symbol Qgr  |
| Cenozoic | Quaternary | Pleistocene<br>(2.58 million to<br>11,700 years ago)                                    | n/a       | n/a                 | Clinker from baked and melted rock from burned-out<br>coal seams on or in the Fort Union Formation<br>Map Symbol QTcl                              |
| Cenozoic | Tertiary   | Pliocene<br>Miocene<br>Oligocene<br>Eocene<br>(56 million to 2.58<br>million years ago) | n/a       | Flaxville<br>Gravel | Terrance gravels left behind as streams carved valleys<br>with sandstone (strath terraces) and gravel<br>(depositional terraces)<br>Map Symbol Tgr |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

|          |            |   |  |  |  |
|----------|------------|---|--|--|--|
| Cenozoic | Tertiary   | Paleocene<br>(66 million to 56 million years ago) | Fort Union Formation   | Tongue River Member<br>Lebo Member<br>Tulloch Member | <p>Thick sandstone beds with some shale and extensive coal beds in the Tongue River member deposited in a marine coastal shore and wetland.<br/>Map Symbol Tftr</p> <p>Shale in the Lebo member, deposited in a large regional lake.<br/>Map Symbol Tfle</p> <p>Tulloch member sandstone and thin coal beds with disarticulated Cretaceous age fossils deposited in streams, marine shoreline sands and gravels and estuaries.<br/>Map Symbol Tft</p>  |
| Mesozoic | Cretaceous | (100.5 million to 66 million years ago)           | Hell Creek Formation<br>Fox Hills Formation<br>Bearpaw Shale | n/a  | <p>At the top of the Hell Creek Formation is the iridium-rich layer deposited after by bolide caused extinction.<br/>Hell Creek Formation has interbedded sandstone, shale and coal beds deposited in a marine shoreline with estuaries and streams. Extensive articulated and disarticulated dinosaur fossils.<br/>Map Symbol Khf</p> <p>Sandstone and shale deposited in near shore and estuary environments in the Fox Hills Formation.<br/>Map Symbol Khf (Fox Hills and Hell Creek Formations)</p> <p>Marine and estuarine shale interbedded with bentonite clay seams and some sand and many iron-rich concretions<br/>Map Symbol Kb</p> |

Source: Modified after Hyndman and Thomas 2020

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.6-2 Major Sensitive Soils Located Within the Project Study Area**

| <b>Soil Types, Series, or Families</b>                  | <b>Texture</b>                                    | <b>Origin</b>  | <b>Conductivity<br/>Permeability<br/>Porosity</b> | <b>Acres in<br/>Project<br/>Study Area</b> | <b>Erosion</b>   |
|---|---|--|---|--|--|
| Lambert-Dimyaw complex, 15 to 65 percent slopes         | Clay, silt, sand and gravel, cobbles and boulders | Formed recent alluvium on uplands, fans and terraces.  | Moderately slowly permeable                       | 266.0                                      | Low shear strength<br>Slope gradients $\geq$ 60% may be unstable |
| Zahill loam, 15 to 60 percent slopes                    | Clay and silt, mostly sand with cobbles           | Till plains, hills, moraines, and escarpments.   | Well drained                                      | 217.3                                      | Low shear strength<br>Slope gradients $\geq$ 60% may be unstable |
| Zahill-Lambert complex, 15 to 65 percent slopes         | Clay, silt, sand and gravel, cobbles and boulders | Formed recent alluvium on uplands, fans and terraces.<br>Till plains, hills, moraines, and escarpments                               | Moderate to high permeability                     | 210.5                                      | Low shear strength<br>Slope gradients $\geq$ 60% may be unstable |
| Cambeth-Cabbart-Yawdim complex, 15 to 25 percent slopes | Clay and silt, mostly sand with cobbles           | Sedimentary plains, hills, and alluvial fans.<br>Alluvium or colluvium over residuum or weathered from calcareous siltstone or shale | Poorly to well drained                            | 102.2                                      | Low shear strength   |
| Hillon-Kevin clay loams, 8 to 25 percent slopes         | Clay and silt, mostly sand with cobbles           | Till plains, hills, and escarpments  | Poorly to well drained                            | 104.9                                      | Low shear strength   |
| Tinsley soils, 15 to 65 percent slopes                  | Gravelly loam                                     | Outwash plains, escarpments, stream terraces, eskers, and kames  | Poorly to well drained                            | 87.6                                       | Low shear strength<br>Slope gradients $\geq$ 60% may be unstable |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| <b>Soil Types, Series, or Families</b>              | <b>Texture</b>                        | <b>Origin</b>  | <b>Conductivity Permeability Porosity</b> | <b>Acres in Project Study Area</b> | <b>Erosion</b>   |
|---|---------------------------------------|--|---|------------------------------------|--|
| Work clay loam, 4 to 8 percent slopes               | Clayey loam                           | Alluvial fans, stream terraces, relict stream terraces, plains, and hills.                                 | Very deep, well drained                   | 80.7                               | Low shear strength   |
| Leavitt cobbly loam, 8 to 15 percent slopes         | Cobbly loam                           | Alluvial fans, stream terraces, relict stream terraces, plains, and hills.                                 | Well drained                              | 36.6                               | Low shear strength   |
| Windham cobbly loam, 15 to 45 percent slopes        | Cobbly loam                           | Alluvial fans, fan remnants, stream terraces, structural benches, escarpments, ridges, divides, and hills. | Very deep, well drained                   | 76.8                               | Low shear strength   |
| Linnet clay, 2 to 4 percent slopes                  | Silty, clay loam                      | Clayey alluvium and glaciolacustrine   | Very deep, well drained                   | 65.0                               | Low shear strength   |
| Judith-Windham complex, 8 to 15 percent slopes      | Cobbly loam                           | Alluvial fans, fan remnants, stream terraces, structural benches, escarpments, ridges, divides, and hills. | Very deep, well drained                   | 20.5                               | Low shear strength   |
| Boralfs-Ochrepts complex, landslide deposits, steep | Clay, silt, sand, gravel and boulders | Landslide deposits   | Well drained                              | 59.4                               | Forested landslide deposits indicating unstable slopes upslope above the deposits. |
| Dufort ashy silt loam, 5 to 15 percent slopes       | Silty loam                            | Glacial till   | Well drained                              | 62.3                               | Low shear strength   |
| Truscreek silt loam, 0 to 2 percent slopes          | Silty loam                            | Glaciofluvial and glaciolacustrine   | Well drained                              | 55.6                               | Low shear strength   |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Soil Types, Series, or Families   | Texture | Origin   | Conductivity<br>Permeability<br>Porosity | Acres in<br>Project<br>Study Area | Erosion            |
|-----------------------------------|---------|--|--|-----------------------------------|--------------------|
| Yamac loam, 2 to 4 percent slopes | Loam    | Alluvial fans, fan remnants, stream terraces, structural benches, escarpments, ridges, divides, and hills. | Well drained                             | 50.2                              | Low shear strength |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.6-3 Summary Table of BLM Potential Fossil Yield Classifications for the Project Study Area**

| Formation  | Formation          | BLM Federal Lands (acres) | Private Lands (acres) |
|--|--------------------|---------------------------|-----------------------|
| Potential Fossil Yield Classification 4 High Potential | Fort Union Tullock | 0.1                       | 110.0                 |
| Class 5<br>Very High Potential                         | Hell Creek         | 65.8                      | 781.8                 |
| Class 4<br>High Potential                              | Fox Hills          | -                         | 16.8                  |
| Class 3<br>Moderate Potential                          | Bearpaw            | 18.6                      | 63.4                  |
| <b>Acres of Class 4 and 5</b>                          | <b>—</b>           | <b>65.9</b>               | <b>908.6</b>          |

Source: USBLM 2007, 2008

Dry-Redwater Rural Water Project  
Draft Environmental Assessment

Appendix B – Tables

**Table 3.8-1. Population and Population Density by County**

| County               | Population         | Population Density<br>(people/square mile) |
|----------------------|--------------------|--|
| Dawson               | 8,915              | 3.8  |
| Garfield             | 976                | 0.2  |
| McCone               | 1,746              | 0.7  |
| Richland             | 11,366             | 5.5  |
| <b>Montana</b>       | <b>1,091,840</b>   | <b>7.5</b>                                 |
| <b>United States</b> | <b>331,449,281</b> | <b>93.8</b>                                |

Source: U.S. Census Bureau 2022d, 2022f



**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.8-2. Average Median Income by Census Tract**

| Location                             | Average Median Income |
|--------------------------------------|-----------------------|
| Census Tract 1, Dawson County        | \$78,125              |
| Census Tract 2, Dawson County        | \$70,109              |
| Census Tract 3, Dawson County        | \$67,601              |
| Census Tract 1, Garfield County      | \$61,786              |
| Census Tract 9540, McCone County     | \$79,022              |
| Census Tract 701, Richland County    | \$79,000              |
| Census Tract 702, Richland County    | \$73,841              |
| Census Tract 703.01, Richland County | \$47,418              |
| Census Tract 703.02, Richland County | \$46,753              |
| Census Tract 704, Richland County    | \$74,375              |
| <b>State of Montana</b>              | <b>\$66,341</b>       |
| <b>United States</b>                 | <b>\$75,149</b>       |

Source: U.S. Census Bureau 2022a

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.8-3. Employment Rate and Unemployment Rate by Census Tract**

| Location                             | Unemployment Rate (%) |
|--------------------------------------|-----------------------|
| Census Tract 1, Dawson County        | 1.4                   |
| Census Tract 2, Dawson County        | 1.7                   |
| Census Tract 3, Dawson County        | 2.2                   |
| Census Tract 1, Garfield County      | 0.0                   |
| Census Tract 9540, McCone County     | 1.6                   |
| Census Tract 701, Richland County    | 7.8                   |
| Census Tract 702, Richland County    | 0.7                   |
| Census Tract 703.01, Richland County | 5.2                   |
| Census Tract 703.02, Richland County | 0.0                   |
| Census Tract 704, Richland County    | 2.2                   |
| <b>State of Montana</b>              | <b>2.4</b>            |
| <b>United States</b>                 | <b>3.4</b>            |

Source: U.S. Census Bureau 2022b

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.8-4. Median Value of Owner-Occupied Housing by Census Tract**

| Location                             | Median Value of Owner-Occupied Housing |
|--------------------------------------|--|
| Census Tract 1, Dawson County        | \$171,800                              |
| Census Tract 2, Dawson County        | \$195,100                              |
| Census Tract 3, Dawson County        | \$204,400                              |
| Census Tract 1, Garfield County      | \$164,900                              |
| Census Tract 9540, McCone County     | \$186,700                              |
| Census Tract 701, Richland County    | \$237,500                              |
| Census Tract 702, Richland County    | \$225,800                              |
| Census Tract 703.01, Richland County | \$270,500                              |
| Census Tract 703.02, Richland County | \$344,200                              |
| Census Tract 704, Richland County    | \$221,100                              |
| <b>State of Montana</b>              | <b>\$305,700</b>                       |
| <b>United States</b>                 | <b>\$281,900</b>                       |

Source: U.S. Census Bureau 2022c

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.8-5. Municipal Water Systems in the DRWA Service Area**

| County          | Municipal Water System     | Primary Water Source |
|-----------------|----------------------------|----------------------|
| Dawson County   | West Glendive <sup>1</sup> | Groundwater          |
|                 | Town of Richey             | Groundwater          |
| Garfield County | Town of Jordan             | Groundwater          |
| McCone County   | Town of Circle             | Groundwater          |
| Richland County | Town of Fairview           | Groundwater          |
|                 | City of Sidney             | Groundwater          |

Source: Safe Drinking Water Information System 2024

Notes:

<sup>1</sup> West Glendive is an unincorporated area with several local community water systems.

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.9-1. Population and Poverty Statistics by Census Tract**

| Location                             | Total Population   | Percent Minority | Percent White Only | Percent Below Poverty |
|--------------------------------------|--------------------|------------------|--------------------|-----------------------|
| Census Tract 1, Dawson County        | 1,485              | 3.0              | 97.0               | 6.5                   |
| Census Tract 2, Dawson County        | 2,818              | 8.9              | 91.1               | 8.8                   |
| Census Tract 3, Dawson County        | 4,612              | 4.8              | 95.2               | 7.0                   |
| Census Tract 1, Garfield County      | 976                | 2.4              | 97.5               | 9.4                   |
| Census Tract 9540, McCone County     | 1,746              | 9.6              | 90.4               | 2.4                   |
| Census Tract 701, Richland County    | 1,637              | 6.1              | 93.8               | 7.3                   |
| Census Tract 702, Richland County    | 1,893              | 5.1              | 94.9               | 11.0                  |
| Census Tract 703.01, Richland County | 2,819              | 17.8             | 82.2               | 11.9                  |
| Census Tract 703.02, Richland County | 1,989              | 8.3              | 91.7               | 7.0                   |
| Census Tract 704, Richland County    | 3,028              | 7.4              | 92.6               | 4.7                   |
| <b>Montana</b>                       | <b>1,091,840</b>   | <b>13.6</b>      | <b>86.4</b>        | <b>12.4</b>           |
| <b>United States</b>                 | <b>331,449,281</b> | <b>34.1</b>      | <b>65.9</b>        | <b>12.8</b>           |

Source: U.S. Census Bureau 2022d, 2022e

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.9-2 American Indian and Alaskan Native Percent of Population by Census Tract**

| Location                             | Percent of American Indian and Alaskan Native |
|--------------------------------------|---|
| Census Tract 1, Dawson County        | 0.7   |
| Census Tract 2, Dawson County        | 2.7   |
| Census Tract 3, Dawson County        | 1.2   |
| Census Tract 1, Garfield County      | 0.3   |
| Census Trac 9540, McCone County      | 4.5   |
| Census Tract 701, Richland County    | 0.0   |
| Census Tract 702, Richland County    | 0.0   |
| Census Tract 703.01, Richland County | 0.0   |
| Census Tract 703.02, Richland County | 0.0   |
| Census Tract 704, Richland County    | 0.6   |
| <b>State of Montana</b>              | <b>5.8</b>                                    |
| <b>United States</b>                 | <b>0.8</b>                                    |

Source: U.S. Census Bureau 2022d

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.9-3 Population Under 18 Years of Age by Census Tract**

| Location                             | Population Under 18 Years of Age | Percent of Population Under 18 Years of Age |
|--------------------------------------|----------------------------------|---|
| Census Tract 1, Dawson County        | 360                              | 24.2  |
| Census Tract 2, Dawson County        | 682                              | 24.2  |
| Census Tract 3, Dawson County        | 878                              | 19.0  |
| Census Tract 1, Garfield County      | 219                              | 22.4  |
| Census Trac 9540, McCone County      | 295                              | 16.9  |
| Census Tract 701, Richland County    | 365                              | 22.3  |
| Census Tract 702, Richland County    | 616                              | 32.5  |
| Census Tract 703.01, Richland County | 400                              | 14.2  |
| Census Tract 703.02, Richland County | 650                              | 32.7  |
| Census Tract 704, Richland County    | 860                              | 28.4  |
| <b>State of Montana</b>              | <b>231,347</b>                   | <b>21.2</b>                                 |
| <b>United States</b>                 | <b>73,213,705</b>                | <b>22.1</b>                                 |

Source: U.S. Census Bureau 2022d

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.10-1. Land Type by County Within the Project Study Area**

| <b>Land Type/County</b> | <b>BLM (acres)</b> | <b>USACE (acres)</b> | <b>State (acres)</b> | <b>Private (acres)</b> |
|-------------------------|--------------------|----------------------|----------------------|------------------------|
| Dawson                  | 2.1                | 0.0                  | 152.3                | 2,559.0                |
| Garfield                | 193.1              | 227.7                | 91.7                 | 2,438.3                |
| McCone                  | 385.5              | 20.0                 | 348.0                | 5,717.8                |
| Richland                | 60.4               | 0.0                  | 371.7                | 5,269.2                |
| TOTAL                   | 641.1              | 247.7                | 963.7                | 15,984.3               |



Appendix B – Tables

**Table 3.10-2. BLM RMP Applicable Land Use Objectives and Management Decisions<sup>1</sup>**

| Resource   | RMP Objectives and Management Decisions <sup>1</sup>  |
|--|---|
| Riparian and Wetlands Areas  | Goal RIP 1: Manage riparian and wetland systems to be healthy, diverse and functional.<br>Objective RIP 1: Improve riparian and wetlands areas toward PFC or higher ecological status.<br>MD RIP 1: Surface-disturbing activities are allowed in and within 300 feet of the boundary of the riparian and wetlands areas with approved design features to maintain or improve functionality and resiliency.<br>MD RIP 5: New livestock development (e.g., troughs, tanks, etc.) will be located and designed to maintain or improve the integrity, functionality, and resiliency of the associated wetland or riparian area.   |
| Air Quality  | Goal AQ 1: Maintain or enhance air quality and air quality related values in the planning area and at sensitive areas in and near the planning area.<br>MD AQ-2: Emission reduction measures and conservation actions will be considered during project-level planning  |
| Cultural Resources   | Goal CR-1: Identify, preserve and protect significant cultural resources on BLM-administered land.<br>MD CR-1: Surface-disturbing activities are allowed in significant cultural sites as long as activities will not have an adverse effect.   |
| Fish, Aquatic and Wildlife Habitat, Including Special Status Species | Goal WF 1: Provide habitats for well-distributed and diverse fish and wildlife.<br>Goal WF-2: Maintain, enhance or restore habitats for special status fish and wildlife species to ensure BLM actions do not contribute to list these species.<br>Objective WF-1: Maintain or enhance plant communities and habitat needed to maintain, or restore fish, aquatic or wildlife populations.<br>Objective WF-2: Provide sufficient habitat for native wildlife species in order to support viable native wildlife populations.<br>Objective WF-3: Implement habitat improvements to restore and/or improve unsatisfactory or declining fish, wildlife and wildlife habitat.<br>Objective WF-5: Minimize fragmentation of large intact blocks of important wildlife habitat, particularly habitat areas for GRSG and grassland birds.<br>Objective WF-6: Maintain, improve and increase sagebrush habitats to sustain sagebrush obligate and other sagebrush dependent species.<br>Objective WF-7: Maintain or reestablish connectivity between and within sagebrush habitats with emphasis on communities occupied by BLM priority species for management.<br>MD FD 1: BLM authorized activities associated with all resources and resource use programs are subject to mitigation or minimization guidelines as defined in Appendix L, Mitigation Measures and Conservation Actions. |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Resource  | RMP Objectives and Management Decisions <sup>1</sup>  |
|---|---|
|   | <p>MD WF 3: For migratory bird conservation and restore, enhance, and maintain habitats for all birds, the BLM will follow Appendix J, Fish, Aquatic and Wildlife Habitat, including Special Status Species which outlines the recommended strategies for migratory birds.</p> <p>MD WF 5: Low voltage above ground power lines (Less than 69 kV are allowed with specialized design features).</p>   |
| Greater Sage-Grouse Habitat                                     | Goal 1: Maintain or increase habitat needed for DRSG through the management of surface disturbing and disruptive activities, including the loss and distribution of sagebrush habitat.  |
| Greater Sage-Grouse Habitat – General Habitat Management Areas  | MD 1: Major ROWs (100kV and over high voltage transmission lines and 24 inch in width and over for large pipelines) and renewable energy ROWs will avoid GRSG GHMA.   |
| Greater Sage-Grouse Habitat – Priority Habitat Management Areas | <p>Objective 1: Maintain or increase GRSG habitat over the long-term, recognizing valid existing rights.</p> <p>Objective 1: Maintain or increase GRSG habitat over the long-term, recognizing valid existing rights.</p> <p>Objective 2: Restore degraded GRSG habitat.</p> <p>Objective 3: Manage permitted uses while providing GSRG habitat for the long-term.</p> <p>MD 1: Where deemed effective, water developments will be managed to reduce the spread of West Nile virus (See Appendix C, GRSG Required Design Features).</p> <p>MD 3: Major high voltage transmission lines and large pipelines) and minor ROWs will avoid GRSG priority areas. In undertaking BLM management actions, and consistent with valid and existing rights and law in authorizing third-party actions, the BLM will apply the lek buffer-distances identified in the USGS Report Conservation Buffer Distance Estimates for Greater Sage-grouse – A Review (open file Report 2014-1239), in accordance with Appendix B, GSRG Conservation Buffer.</p> <p>If the 3% anthropogenic disturbance cap is exceeded on lands (regardless of ownership) within GRSG PHMA in any given BSU, then no further discrete anthropogenic disturbances will be permitted by BLM within GRSG PHMA in any given BSA until the disturbance has been reduced to less than the cap.</p> <p>If the 3% anthropogenic disturbance cap is exceeded on lands (regardless of ownership) or if anthropogenic disturbance and habitat loss associated with conversion to agriculture tillage or fire exceed 5% within a analysis area in PHMA, then no further discrete anthropogenic disturbance will be permitted by BLM within PHMA in a analysis area until the disturbance has been reduced to less than the cap.</p> <p>If the BLM determines that the State of Montana has adopted a GRSG Habitat Conservation Program that contains comparable components to those found in the State of Wyoming Core Area Strategy including an all lands approach for calculating anthropogenic disturbances, a clear methodology for measuring the density of operations , and a fully</p> |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Resource  | RMP Objectives and Management Decisions <sup>1</sup>   |
|---|--|
|   | operational Density Disturbance Calculation Tool, the 3% disturbance cap will be converted to a 5% cap for all sources of habitat alteration within an analysis area.  |
| Big Game Crucial Winter Range   | MD WF-7: Surface-disturbing and disruptive activities are allowed in Big Game Crucial Winter Range areas with design features which maintain the functionality of the crucial winter range habitat.  |
| Sharp-tailed Grouse (lek sites and nesting habitat)   | MF WF 8: Surface disturbing and disruptive activities are allowed on and within 2 miles of sharp-tailed grouse lek sites with design features to protect breeding, nesting and brood-rearing habitats at a level capable of supporting the long-term populations associated with the lek.                                    |
| Colonial Nesting Water Birds  | MD WF 10: Surface-disturbing and disruptive activities are allowed within 0.5 miles of water bird colonies, with design features to maintain functionality of the water bird nesting colonies habitat.   |
| Bald Eagles   | MD WF 16: Surface-disturbing and disruptive activities are allowed within 0.5 miles of bald eagle nest sites active within the preceding 5 years, with design features which will minimize disturbance to the nest site and maintain functionality of the bald eagle habitat.  |
| Raptor Nest Sites: Burrowing Owl, Golden Eagle, Ferruginous Hawk, Swainson’s Hawk, Prairie Falcon, Northern Goshawk | MD WF 18: Surface-disturbing and disruptive activities are allowed within 0.5 miles of raptor nest sites within the past 7 years with design features which maintain the functionality for the raptor nest and nesting habitat.  |
| Piping Plover Habitat   | MD WF 21: Surface-disturbing and disruptive activities are allowed within 0.25 miles of piping plover habitat with design features which maintain the functionality of the piping plover habitat   |
| Interior Least Tern Habitat   | MD WF 23: Surface-disturbing and disruptive activities are allowed within 0.25 miles of interior least tern habitat with design features which maintain the functionality of the least tern habitat.   |
| Black-footed Ferret Habitat   | MD WF 26: Surface occupancy and use is prohibited within 0.25 miles of black-footed ferret (Complex of prairie dog towns within 1.5 km of each other comprising a total of at least 1,500 acres).  |
| Pallid Sturgeon Habitat   | MD WF 29: Surface-disturbing and disruptive activities are allowed within 0.25 miles of the water’s edge of the Yellowstone and Missouri rivers with design features which maintain the functionality of the pallid sturgeon habitat.  |
| Invasive Species  | Goal INV 1: Manage for healthy native plant communities and aquatic systems by reducing, preventing expansion of, or eliminating the occurrences of invasive species.<br>Objective INV 1: Plant communities that reflect the potential natural community of the desired plant community appropriate for the ecological site. |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Resource                                    | RMP Objectives and Management Decisions <sup>1</sup>  |
|---|---|
|   | <p>MD INV 1: Surface-disturbing activities are allowed on BLM-administered lands in areas of invasive species infestation only with approved mitigation measures in place.</p> <p>MD INV 4 Treat areas that contain cheatgrass and other invasive or noxious species to minimize competition and favor establishment of desired species.</p>  |
| Lands and Realty                            | <p>Goal LR 1: Provide public lands, interest in land, and authorizations for public and private uses while maintaining and improving resource values.</p> <p>Goal LR 5: Effects of infrastructure projects, including siting, will be minimized using the best available science, updated as monitoring information on current infrastructure projects becomes available.</p> <p>MD LR 2: Major and Minor ROWS and other realty-related land use authorizations are excluded in 3% of the planning area.</p>  |
| National Trails                             | <p>Goal NT 1: Conserve, protect, and restore National Trail resources, qualities, values, associated settings and primary use or uses of national trails.</p> <p>Objective NT 1: Sustain and enhance Lewis and Clark Trail to complement its status as a national historic trail emphasizing natural and historical interpretation as part of the National Trail Management Corridor. Effective inventory, planning, management and monitoring of the trail corridor will occur through management as the Lewis and Clark SRMA.</p> <p>Objective NT 2: Safeguard the Nature and Purposes; and conserve, protect, and restore the National Trail resources, qualities and values, and associated settings and the primary use or uses of the Lewis and Clark Trail.</p> <p>MD NT 1: See the Lewis and Clark SRMA section for additional management actions and delineation of the Lewis and Clark National Trail Management Corridor (Map 7)</p> |
| Special Recreation Management Areas (SRMAs) | <p>Objective SRMA 1: Manage SRMAs to enhance a targeted and/or specific set of activities, experiences, benefits and desired recreation setting characteristics in response to visitor demand to sustain recreation settings characteristics.</p>   |
| Lewis and Clark Trail SRMA                  | <p>Objective LEWIS 1: Manage for public use and enjoyment, while preserving the historic and cultural resources related to the events that occurred during the Lewis and Clark Expedition.</p> <p>Objective LEWIS 2: Maintain and enhance recreation opportunities for residents and visitors along the trail to accommodate camping, scenery and wildlife viewing, hunting, picnicking, boating, fishing, hiking and other compatible and dispersed recreational uses in prescribed setting so visors are able to realize experiences and benefits.</p> <p>MD LEWIS 4: ROWS and other land use authorizations are avoided.</p> <p>MD LEWIS 7: The area is managed according to VRM Class II objectives.</p>  |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Resource                  | RMP Objectives and Management Decisions <sup>1</sup>  |
|---------------------------|---|
| Jordan Bison Kill ACEC    | Goal ACE 1: Identify and manage ACECs to protect life and safety from natural hazards or to protect and prevent irreparable damage to important historic, cultural, paleontological, or scenic values, fish and wildlife resources and other natural systems and processes.   |
| Paleontological Resources | Goal PALEO 1: Identify, preserve, and protect significant paleontological resources on BLM-administered lands.<br>Goal PALEO 2: Ensure that paleontological resources are available to present and future generations for appropriate uses such as scientific studies and public education.<br>Objective PALEO 1: Ensure that proposed land uses initiated or authorized by the BLM avoid inadvertent damage to significant paleontological resources.<br>MD PALEO 1: Surface-disturbing activities are allowed as long as activities will not affect the quality of significant paleontological resources.   |
| Recreation                | Goal REC 1: Provide a diverse array of quality resource-based recreation opportunities while protecting and interpreting the resource values, providing educational opportunities, minimizing recreational use conflicts, and promoting public safety.  |
| Soils                     | Goal SL 1: Maintain or improve the chemical, physical and biotic properties of soil.<br>Objective SL 1: Prevent or limit accelerated soil loss, minimize degradation of soils, and control sedimentation.<br>Objective SL 2: Maintain or improve adequate vegetation and ground cover (including biological soil crust and litter) to promote soil health, productivity and stability.<br>MD SL 1: Reclamation measures for surface-disturbing activities will be implemented as described in Appendix N, Reclamation.<br>MD SL 2: Surface-disturbing activities on sensitive soils are allowed with specialized design features to maintain or improve the stability of the site.<br>MD SL 4: Surface-disturbing activities on badlands and rock outcrop is allowed with specialized design features to maintain or improve the stability of the site. |
| Socioeconomics            | Goal SE 1: Provide for a diverse array of stable economic opportunities in an environmentally sound manner.<br>Goal SE 2: Identify and correct or revise, to the extent possible, disproportionate negative effects on minority or low-income populations in accordance with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994).<br>Goal SE 3: Protect humans and the environment from exposure to hazardous materials.<br>MD SE 1: Analyze effects on socioeconomic, environmental justice and hazardous material resources from the implementation of projects through design, planning and NEPA processes.   |
| Visual Resources          | Goal VR 1: Maintain scenic qualities consistent with the management of resources and uses.  |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Resource                 | RMP Objectives and Management Decisions <sup>1</sup>   |
|--------------------------|--|
|                          | <p>Objective VR 1: Manage visual resources according to established guidelines for VRM class objectives.<br/>                     MD VR 1: The visual contrast rating system will be used during project-level planning to determine mitigation measures and conservation actions.<br/>                     MD VR 4: VRM will be managed according to VRM class.</p>   |
| Water Resources          | <p>Goal WR 1: Maintain or enhance the beneficial uses of surface water and groundwater.<br/>                     Objective WR 1: Support natural surface water flow regimes.<br/>                     Objective WR 2: Protect water resources from point source and nonpoint source pollution.<br/>                     MD WR 1: The BLM activities conducted will meet or exceed Montana water quality standards.<br/>                     MD WR 2: Surface-disturbing activities are allowed in 100-year floodplains with specialized design features to minimize effects on the functionality and resiliency of the floodplain in compliance with Executive Order 11988.<br/>                     MD WR 4: Surface-disturbing activities that do not benefit the functionality of the perennial or intermittent stream, lake, pond or reservoir are allowed with specialized design features to ensure that all state water quality standards are met and that all beneficial uses remain fully supported.<br/>                     MD WR6: Surface water impoundments are allowed with measures designed to maintain water quality, and riparian and watershed functionality and resiliency.<br/>                     MD WR 7: Surface-disturbing activities are allowed in State-designated Source Water Protection Areas with specialized design features to minimize effects on surface or groundwater quality.</p> |
| Wildland Fire Management | <p>Goal WILDLAND: Create and maintain landscape-level fuel breaks using fire management, grazing, range improvements, transportation corridors, terrain features and vegetation communities to provide suppression opportunities.</p>  |

Notes:

<sup>1</sup> Greater sage-grouse (GRSG), Management Decision (MD), General Habitat Management Area (GHMA), Priority Habitat Management Area (PHMA), Right-of-Way (ROW), Biologically Significant Unit (BSU), Special Recreation Management Areas (SRMA), Area of Critical Environmental Concern (ACEC).

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.10-3. BLM RMP Environmental Commitments and Mitigation**

| RMP Resource  | Environmental Commitments and Mitigation Measures <sup>1</sup>  |
|---|---|
| Riparian and Wetlands Areas   | Environmental Commitments, Appendix G<br>Mitigation Measure BIO-1 – Wetland and Riparian Effects  |
| Air Quality   | Environmental Commitments, Appendix G   |
| Cultural Resources  | Environmental Commitments, Appendix G<br>Mitigation Measure Cul 1– Avoid Historical Resources or Prepare and Implement a Historic Properties Treatment Plan<br>Mitigation Measure TCP-1: Avoid Tribal Cultural Properties or Develop Treatment for Tribal Cultural Properties in Consultation with Tribes |
| Fish, Aquatic and Wildlife Habitat, Including Special Status Species  | Environmental Commitments, Appendix G<br>Mitigation Measure SSS-2 Avoid and Minimize Effects on Greater Sage Grouse   |
| Greater Sage-Grouse Habitat   | Environmental Commitments, Appendix G<br>Mitigation Measure SSS-2 Avoid and Minimize Effects on Greater Sage Grouse   |
| Greater Sage-Grouse Habitat – General Habitat Management Areas  | Environmental Commitments, Appendix G<br>Mitigation Measure SSS-2 Avoid and Minimize Effects on Greater Sage Grouse   |
| Greater Sage-Grouse Habitat – Priority Habitat Management Areas   | Environmental Commitments, Appendix G<br>Mitigation Measure SSS-2 Avoid and Minimize Effects on Greater Sage Grouse   |
| Colonial Nesting Water Birds  | Environmental Commitments, Appendix G   |
| Bald Eagles   | Environmental Commitments, Appendix G   |
| Raptor Nest Sites: Burrowing Owl, Golden Eagle, Ferruginous Hawk, Swainson’s Hawk, Prairie Falcon, Northern Goshawk | Environmental Commitments, Appendix G   |
| Piping Plover Habitat   | Environmental Commitments, Appendix G   |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| RMP Resource                | Environmental Commitments and Mitigation Measures <sup>1</sup> |
|-----------------------------|--|
| Interior Least Tern Habitat | Environmental Commitments, Appendix G                          |
| Pallid Sturgeon Habitat     | Environmental Commitments, Appendix G                          |
| Invasive Species            | Environmental Commitments, Appendix G                          |
| Lands and Realty            | Environmental Commitments, Appendix G                          |
| National Trails             | Environmental Commitments, Appendix G                          |
| Lewis and Clark Trail SRMA  | Environmental Commitments, Appendix G                          |
| Paleontological Resources   | Environmental Commitments, Appendix G                          |
| Recreation                  | Environmental Commitments, Appendix G                          |
| Soils                       | Environmental Commitments, Appendix G                          |
| Visual Resources            | Environmental Commitments, Appendix G                          |
| Water Resources             | Environmental Commitments, Appendix G                          |



Appendix B – Tables

**Table 3.11-1 BLM Visual Resource Management Class Objectives**

| Visual Resource Management (VRM) Class | Objective   |
|--|---|
| Class I                                | The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.  |
| Class II                               | The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen but should not attract the attention of the casual observer.   |
| Class III                              | The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.  |
| Class IV                               | The objective of this class is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of the viewer attention. However, every attempt should be made to minimize the effect of these activities through careful location, minimal disturbance, and repeating the basic elements. |

Source: BLM 1986

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.11-2. Project Study Area on BLM-Managed Land, Total Acres by Class**

| <b>Visual Resource Management<br/>Sensitivity Level Rating</b> | <b>Acres</b> |
|--|--------------|
| Class I  | 0.00         |
| Class II   | 67.59        |
| Class III  | 411.45       |
| Class IV   | 166.94       |
| Total  | 645.99       |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.11-3. Permanent Project Effects on BLM-Managed Land, Total Acres by Class**

| Visual Resource Management<br>Sensitivity Level Rating by Project                    | Acres  |
|--|--------|
| <b>69 kV Transmission Line</b>   | —      |
| Class III  | 72.87  |
| Class IV   | 24.01  |
| <b>69 kV Transmission Line &amp; Distribution Line</b>                               | —      |
| Class III  | 47.90  |
| Distribution Line  |        |
| Class IV   | 1.97   |
| <b>Missouri 1 WTP &amp; Intake Facility, Raw Water<br/>Intake, Distribution Line</b> | —      |
| Class II   | 22.61  |
| <b>Missouri 8 Intake WTP</b>   | —      |
| Class II   | 11.66  |
| Class III  | 32.59  |
| Total  | 213.61 |

Appendix B – Tables

**Table 3.12-1. BLM’s Recreation Goals and Objectives**

|                                   |   |
|-----------------------------------|---|
| <b>Recreation</b>                 | Goal REC 1: Provide a diverse array of quality resource-based recreation opportunities while protecting and interpreting the resource values, providing educational opportunities, minimizing recreational use conflicts, and promoting public safety.  |
| <b>National Trails</b>            | <p>Goal NT 1: Conserve, protect, and restore National Trail resources, qualities, values, associated settings and primary use or uses of national trails.</p> <p>Objective NT 1: Sustain and enhance Lewis and Clark Trail to complement its status as a national historic trail emphasizing natural and historical interpretation as part of the National Trail Management Corridor. Effective inventory, planning, management, and monitoring of the trail corridor will occur through management as the Lewis and Clark SRMA.</p> <p>Objective NT 2: Safeguard the Nature and Purposes; and conserve, protect, and restore the National Trail resources, qualities and values, and associated settings and the primary use or uses of the Lewis and Clark Trail.</p> <p>MD NT 1: See the Lewis and Clark SRMA section for additional management actions and delineation of the Lewis and Clark National Trail Management Corridor (Map 7).</p> |
| <b>Lewis and Clark Trail SRMA</b> | <p>Objective LEWIS 1: Manage for public use and enjoyment, while preserving the historic and cultural resources related to the events that occurred during the Lewis and Clark Expedition.</p> <p>Objective LEWIS 2: Maintain and enhance recreation opportunities for residents and visitors along the trail to accommodate camping, scenery and wildlife viewing, hunting, picnicking, boating, fishing, hiking and other compatible and dispersed recreational uses in prescribed setting so visors are able to realize experiences and benefits.</p> <p>Management Directive (MD) LEWIS 4: ROWS and other land use authorizations are avoided.</p> <p>MD LEWIS 7: The area is managed according to VRM Class II objectives.</p>   |

Dry-Redwater Rural Water Project  
Draft Environmental Assessment

Appendix B – Tables

**Table 3.12-2. List of Recreation Facilities and Opportunities Available in the DRWA Service Area**

| Name   | Managing Entity            | Fishing | Hunting <sup>1</sup> | Trapping | Camping | Boat Access | Water Sports | Swimming | Wildlife Viewing | Bird Watching | Photography | Motorized Vehicles | Horseback Riding | Hiking | Recreational Shooting |
|--|----------------------------|---------|----------------------|----------|---------|-------------|--------------|----------|------------------|---------------|-------------|--------------------|------------------|--------|-----------------------|
| Fort Peck Lake Reservoir and Recreation Area | USACE                      | x       | x                    |          | x       | x           |              |          |                  | x             |             |                    |                  | x      |                       |
| BLM Land                                     | BLM                        | x       | x                    | x        | x       | x           | x            | x        | x                | x             | x           | x                  | x                | x      | x                     |
| Homestead Reservoir                          | BLM                        |         |                      |          | x       |             |              |          |                  |               |             |                    |                  |        |                       |
| Lewis and Clark Bridge Historic Site         | BLM                        |         |                      |          |         |             |              |          |                  |               |             |                    |                  | x      |                       |
| Lewis and Clark National Historic Trail      | BLM SMRA / NPS             |         |                      |          |         |             |              |          |                  |               |             |                    |                  | x      |                       |
| Silvertip Reservoir                          | BLM                        |         |                      |          | x       |             |              |          |                  |               |             |                    |                  |        |                       |
| South Fork Reservoir                         | BLM                        |         |                      |          | x       |             |              |          |                  |               |             |                    |                  |        |                       |
| Hollecker Lake                               | Dawson County Public Works | x       |                      |          |         |             |              | x        |                  |               |             |                    |                  |        |                       |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Name                                   | Managing Entity | Fishing | Hunting <sup>1</sup> | Trapping | Camping | Boat Access | Water Sports | Swimming | Wildlife Viewing | Bird Watching | Photography | Motorized Vehicles | Horseback Riding | Hiking | Recreational Shooting |
|--|-----------------|---------|----------------------|----------|---------|-------------|--------------|----------|------------------|---------------|-------------|--------------------|------------------|--------|-----------------------|
| Black Bridge Fishing Access Site       | FWP FAS         | x       |                      |          |         | x           |              |          |                  |               |             |                    |                  |        |                       |
| Culbertson Bridge Fishing Access Site  | FWP FAS         | x       | x                    |          |         | x           |              |          |                  |               |             |                    |                  |        |                       |
| Diamond Willow Fishing Access Site     | FWP FAS         | x       | x                    |          |         |             |              |          |                  |               |             |                    |                  |        |                       |
| Elk Island Fishing Access Site         | FWP FAS         | x       | x                    |          |         | x           |              |          |                  |               |             |                    |                  |        |                       |
| Gartside Reservoir Fishing Access Site | FWP FAS         | x       | x                    |          |         | x           |              |          |                  |               |             |                    |                  |        |                       |
| Intake Dam Fishing Access Site         | FWP FAS         | x       |                      |          | x       | x           |              |          |                  |               |             |                    |                  |        |                       |
| Johnson Reservoir Fishing Access Site  | FWP FAS         | x       | x                    |          |         |             |              |          |                  |               |             |                    |                  |        |                       |
| Lewis and Clark Fishing Access Site    | FWP FAS         | x       |                      |          |         | x           |              |          |                  |               |             |                    |                  |        |                       |
| Rock Creek Fishing Access Site         | FWP FAS         | x       |                      |          | x       | x           |              |          |                  |               |             |                    |                  |        |                       |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Name                               | Managing Entity | Fishing | Hunting <sup>1</sup> | Trapping | Camping | Boat Access | Water Sports | Swimming | Wildlife Viewing | Bird Watching | Photography | Motorized Vehicles | Horseback Riding | Hiking | Recreational Shooting |
|------------------------------------|-----------------|---------|----------------------|----------|---------|-------------|--------------|----------|------------------|---------------|-------------|--------------------|------------------|--------|-----------------------|
| Seven Sisters Fishing Access Site  | FWP FAS         | x       | x                    |          |         | x           |              |          |                  |               |             |                    |                  |        |                       |
| Sidney Bridge Fishing Access Site  | FWP FAS         | x       |                      |          |         | x           |              |          |                  |               |             |                    |                  |        |                       |
| Snowden Bridge Fishing Access Site | FWP FAS         | x       |                      |          | x       | x           |              |          |                  |               |             |                    |                  |        |                       |
| Stipek Fishing Access Site         | FWP FAS         | x       |                      |          |         | x           |              |          |                  |               |             |                    |                  |        |                       |
| Country Cross Ranch                | FWP PALA        |         | x                    |          |         |             |              |          |                  |               |             |                    |                  |        |                       |
| Fortyfour Coulee                   | FWP PALA        |         | x                    |          |         |             |              |          | x                |               |             |                    |                  | x      |                       |
| Kenny Mckerlick Ranch              | FWP PALA        | x       | x                    |          |         |             |              |          |                  |               |             |                    |                  |        |                       |
| Kirkland Dry Arm                   | FWP PALA        |         | x                    |          |         |             |              |          | x                |               |             |                    |                  | x      |                       |
| Kirkland Stole Creek               | FWP PALA        |         | x                    |          |         |             |              |          | x                |               |             |                    |                  | x      |                       |
| Morris Coulee                      | FWP PALA        |         | x                    |          |         |             |              |          | x                |               |             |                    |                  | x      |                       |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Name                     | Managing Entity   | Fishing | Hunting <sup>1</sup> | Trapping | Camping | Boat Access | Water Sports | Swimming | Wildlife Viewing | Bird Watching | Photography | Motorized Vehicles | Horseback Riding | Hiking | Recreational Shooting |
|--------------------------|-------------------|---------|----------------------|----------|---------|-------------|--------------|----------|------------------|---------------|-------------|--------------------|------------------|--------|-----------------------|
| Robert Reukauf Ranch     | FWP<br>PALA       |         | x                    |          |         |             |              |          |                  |               |             |                    |                  |        |                       |
| Ten Deer Creek           | FWP<br>PALA       |         | x                    |          |         |             |              |          | x                |               |             |                    |                  | x      |                       |
| Three Buttes             | FWP<br>PALA       |         | x                    |          |         |             |              |          | x                | x             |             |                    |                  | x      |                       |
| Twitchell                | FWP<br>PALA       |         | x                    |          |         |             |              |          | x                |               |             |                    |                  | x      |                       |
| Hell Creek               | FWP<br>State Park | x       |                      |          | x       | x           | x            |          |                  |               |             |                    |                  |        |                       |
| Elk Island               | FWP<br>WMA        | x       | x                    |          |         | x           |              |          | x                |               | x           |                    |                  |        |                       |
| Fox Lake                 | FWP<br>WMA        | x       | x                    | x        |         |             |              |          | x                |               |             |                    |                  |        |                       |
| Seven sisters            | FWP<br>WMA        | x       | x                    | x        |         | x           |              |          | x                | x             |             |                    |                  |        |                       |
| State School Trust Lands | MT<br>DNRC        | x       | x                    | x        | x       |             |              |          |                  |               |             | x                  | x                |        | x                     |



**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

| Name  | Managing Entity  | Fishing | Hunting <sup>1</sup> | Trapping | Camping | Boat Access | Water Sports | Swimming | Wildlife Viewing | Bird Watching | Photography | Motorized Vehicles | Horseback Riding | Hiking | Recreational Shooting |
|---|------------------|---------|----------------------|----------|---------|-------------|--------------|----------|------------------|---------------|-------------|--------------------|------------------|--------|-----------------------|
| Devils Creek                                | USACE Campground | x       |                      |          | x       | x           |              |          | x                |               |             |                    |                  |        |                       |
| McGuire Creek                               | USACE Campground | x       |                      |          | x       | x           |              |          | x                |               |             |                    |                  |        |                       |
| Nelson Creek                                | USACE Campground | x       |                      |          | x       | x           |              |          | x                |               |             |                    |                  |        |                       |
| Reclamation Land                            | Reclamation      | x       | x                    |          |         |             |              |          |                  |               |             |                    |                  |        |                       |
| Charles M. Russell National Wildlife Refuge | USFWS            | x       | x                    |          | x       |             |              |          |                  |               |             |                    |                  | x      |                       |

Source: BLM 2022, 2024a, 2024b; FWP 2004, 2017, 2024a, 2024b, 2024c, DNRC 2024; NPS 2024; USFWS 2024; Visit Glendale 2024, Visit Montana 2024a, 2024b, 2024c, 2024d; Wild Montana 2024

Notes:

<sup>1</sup> Hunting includes big game hunting, upland birds, waterfowl and shed antlers.

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.12-3. Recreation Sites Directly Affected by the Proposed Action**

| Name of Recreation Site                       | Type                    |
|---|-------------------------|
| Lewis and Clark Fishing Access Site           | FWP Fishing Access Site |
| Lewis and Clark Bridge Historic Site          | BLM Site                |
| Access road to Rock Creek Fishing Access Site | FWP Fishing Access Site |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.12-4. Recreation Sites Within Two Miles of the Proposed Action**

| Name of Recreation Site                | Type                       |
|--|----------------------------|
| Lewis and Clark Bridge Historic Site   | BLM Site                   |
| Hollecker Lake                         | Dawson County Public Works |
| Black Bridge Fishing Access Site       | FWP FAS                    |
| Culberson Bridge Fishing Access Site   | FWP FAS                    |
| Gartside Reservoir Fishing Access Site | FWP FAS                    |
| Johnson Reservoir Fishing Access Site  | FWP FAS                    |
| Lewis and Clark Fishing Access Site    | FWP FAS                    |
| Rock Creek Fishing Access Site         | FWP FAS                    |
| Sidney Bridge Fishing Access Site      | FWP FAS                    |
| Snowden Bridge Fishing Access Site     | FWP FAS                    |
| Elk Island                             | FWP WMA                    |
| Fox Lake                               | FWP WMA                    |
| Seven Sisters                          | FWP WMA                    |
| Kenny Mckerlick Ranch                  | FWP PALA                   |
| Morris Coulee                          | FWP PALA                   |
| Three Buttes                           | FWP PALA                   |
| Twitchell                              | FWP PALA                   |

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.13-1. Miles of Highways and Local Roads in DRWA Service Area**

| <b>Counties<sup>1</sup></b> | <b>Dawson</b> | <b>Garfield</b> | <b>McCone</b> | <b>Richland</b> | <b>Grand Total</b> |
|-----------------------------|---------------|-----------------|---------------|-----------------|--------------------|
| Highway                     | 108.1         | 103.1           | 225.4         | 126.9           | 563.4              |
| Paved                       | 88.2          | 68.8            | 162.1         | 107.9           | 427.0              |
| Unpaved                     | 19.9          | 34.2            | 63.3          | 19.0            | 136.4              |
| Local Road                  | 108.6         | 123.3           | 243.5         | 323.6           | 799.1              |
| Paved                       | 3.0           | 0.0             | 1.7           | 20.6            | 25.3               |
| Unpaved                     | 105.5         | 123.3           | 241.8         | 303.1           | 773.8              |
| Grand Total                 | 216.7         | 226.4           | 468.9         | 450.5           | 1,362.5            |

Notes:

<sup>1</sup> Prairie County is excluded because it does not contain project components.

**Dry-Redwater Rural Water Project  
Draft Environmental Assessment**

**Appendix B – Tables**

**Table 3.13-2. Annual Daily Traffic Counts in DRWA Service Area**

| Type      | High  | Low   | Mean  |
|-----------|-------|-------|-------|
| Highway   | 3,115 | 1,458 | 1,957 |
| Primary   | 1,520 | 319   | 792   |
| Secondary | 331   | 32    | 125   |
| Urban     | 1,896 | 81    | 1,141 |