

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Musselshell Judith Rural Water System
Proposed Implementation Date:	Fall 2024
Proponent:	Central Montana Regional Water Authority via Great West Engineering
Location:	Section 16, Township 10 North, Range 27 East (Common Schools Trust)
County:	Musselshell County

I. TYPE AND PURPOSE OF ACTION

The proponent, Central Montana Regional Water Authority, is requesting a 30' Right-of-Way across Section 16, Township 10 North, Range 27 East in Musselshell County for the purpose of installing an 8" water pipeline system that is known as the Musselshell Judith Rural Water System (MJRWS). Construction of the MJRWS would provide safe and reliable water for drinking, household uses, livestock, and yard irrigation (not crop irrigation) to member communities and individual rural members of the Central Montana Rural Water Authority (CMRWA). The MJRWS was designed to serve a population of 7,300 people in the CMRWA member communities. The proposed easement will encumber ±3.95-acres.

Central Montana Rural Water Authority (CMRWA) is proposing the construction of Phase 2 through 5 of the Musselshell Judith Rural Water System (MJRWS). Phase 1 was completed in 2022 with the construction of the well field near Ubet and a main branch line to Harlowton with U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) funding. Phase 2 through 5 would be constructed with U.S. Bureau of Reclamation (Reclamation) funding and include the construction of approximately 200 miles of pipeline to individual residents and towns along the Musselshell River in central Montana. Towns that would be serviced include Rygate, Lavina, Broadview, Roundup, Musselshell, and Melstone.

The CMRWA proposed action includes maintaining the newly constructed well field with a maximum daily demand of 1,750 gpm for the current population and 2,720 gpm for an estimated population in 2065. Further, four storage facilities and associated features are part of the distribution network: a 550,000 gallon tank northwest of Judith Gap, a 150,000 gallon tank southeast of Utica, a 550,000 gallon tank just west of Rothiemay, and a 100,000 gallon tank west of Broadview.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project. List number of individuals contacted, number of responses received, and newspapers in which notices were placed and for how long. Briefly summarize issues received from the public.

No formal public scoping was performed by DNRC for this proposed project. The proponent has obtained a Settlement of Damages form from the grazing lessee.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Examples: cost-share agreement with U.S. Forest Service, 124 Permit, 3A Authorization, Air Quality Major Open Burning Permit.

The proponent will secure all necessary permits prior to construction.

3. ALTERNATIVE DEVELOPMENT:

Describe alternatives considered and, if applicable, provide brief description of how the alternatives were developed. List alternatives that were considered but eliminated from further analysis and why.

Proposed Action Alternative: Approve the 30' easement request by Central Montana Regional Water Authority to install a 12" water pipeline across Section 16, Township 10 North, Range 27 East in order to provide water to rural areas along the Musselshell valley.

No Action Alternative: Deny the 30' easement request by Central Montana Regional Water Authority to install a 12" water pipeline across Section 16, Township 10 North, Range 27 East in order to provide water to rural areas along the Musselshell valley. The proponent would need to seek an alternative route.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify direct, indirect, and cumulative effects to soils.

The geologic area is comprised mainly of the Eagle Formations, Niobrara Formations, and Telegraph Creek Formations. The soils of the land area are categorically considered Big Sagebrush Steepe interspersed with small portions of Great Plains Mixedgrass Prairie and according to the NRCS Soil Survey, the area consists of a clay loam soil type across the general easement area.

The proposed action will allow the proponent to install a 8" pipeline within the corridor to supply water to rural areas in the Musselshell Valley. The process will involve trenching in the pipeline and the burying the pipeline with existing soils. The route will generally follow a previously granted right-of-way that disturbed the area.

Minor short-term impacts on geology and soils are anticipated due to the pipeline location and alignment. No long-term impacts are anticipated due to the construction areas being already disturbed areas.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify direct, indirect, and cumulative effects to water resources.

The proponent is proposing to install an 8" pipeline across the northern half of State Section 16, north of North Willow Creek. The proposed action does not cross or impact any surface water. Small ephemeral drainages will be crossed. The proponent is planning to install the pipeline during dry portions of the year. Impacts on surface water quality would be minor and short-term due to requirements for a Stormwater Pollution Prevention Plan (SWPPP), construction timing, pre-construction consultation, and environmental commitments.

A groundwater model developed by Great West Engineering was used to evaluate head change in the aquifer at the existing diversions projected the well interference at the existing Madison Formation wells due to the proposed well field withdrawals would not constitute an adverse effect, as water rights do not protect pressure, but only rate and volume of production. Groundwater impacts would be minimal and would not affect the demands of existing groundwater rights or create adverse effect upon their diversions because:

No significant adverse impacts to water quality, quantity or distribution are anticipated by implementing the proposed action.

6. AIR QUALITY:

What pollutants or particulate would be produced (i.e. particulate matter from road use or harvesting, slash pile burning, prescribed burning, etc)? Identify the Airshed and Impact Zone (if any) according to the Montana/Idaho Airshed Group. Identify direct, indirect, and cumulative effects to air quality.

There may be short-term isolated impacts from the equipment exhaust that is used to install the water pipeline. No significant adverse impacts to air quality are expected by implementing the proposed action.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify direct, indirect, and cumulative effects to vegetation.

The proposed action would disturb vegetation within the 30' right-of-way area while the pipeline is installed. The proponent is required to re-seed the disturbed area with a native grass mix and monitor for weeds after the pipeline is installed. Impacts on vegetation would be minor and short-term because disturbance would be kept to a minimum and disturbed areas would be reclaimed and vegetation would be reseeded and restored.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify direct, indirect, and cumulative effects to fish and wildlife.

A variety of big game, small mammals, raptors, songbirds and turkeys may traverse the subject sections. The proposed alternative will allow the proponent to install an 8" pipeline using trenching equipment.

There will be short-term impacts during the installation of said pipeline. After the pipeline is installed and re-seeded, there will only be above ground markers showing the disturbed area. No significant adverse impacts to terrestrial, avian and aquatic life and habitats are expected to occur as a result of implementing the proposed alternative.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify direct, indirect, and cumulative effects to these species and their habitat.

A search of the Montana Natural Heritage Program database indicated the following species of concern in the proposed section:

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- **Black-tailed Prairie Dog** (*Cynomys ludovicianus*)
- **Greater Sage-Grouse** (*Centrocercus urophasianus*); **Golden Eagle** (*Aquila chrysaetos*) **SOC**
- **Great Plains Toad** (*Anaxyrus cognatus*)
- **Greater Short-horned Lizard** (*Phrynosoma hernandesi*)

The area falls within the General Sage Grouse General Habitat. The proponent has completed and submitted a consultation through the Sage Grouse Program.

While these species may be present in the general project area, no direct or lasting impacts are expected to occur to sensitive species. Due to the short duration and minimal disturbance, the project will have minimal impact to the environment and habitat on State Land.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine direct, indirect, and cumulative effects to historical, archaeological or paleontological resources.

A Class III cultural and paleontological resources inventory was conducted of the area of potential effect on state land. Despite a detailed examination, no cultural or fossil resources were identified in the easement corridor. No additional archaeological or paleontological investigative work is recommended.

The proposed project will have *No Effect* to *Antiquities* as defined under the Montana State Antiquities Act. A formal report of findings is on file with the DNRC and the Montana State Historic Preservation Officer.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify direct, indirect, and cumulative effects to aesthetics.

Once the easement areas are rehabbed from the installation disturbance, there will be no significant adverse impact to aesthetics is expected as a result of implementing the proposed alternative.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify direct, indirect, and cumulative effects to environmental resources.

Impacts on social and economic conditions would be minor with small increases to the labor force. Residents and local business may see a minor effect because appliances and equipment would need to be replaced less often, reduced need for water treatment systems and supplies, bottled drinking water, and services if the demand is decreased by the improved water quality.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

There are no other known studies or future actions planned for this Trust land parcel. If a future timber harvest was proposed, it would be analyzed under its own environmental review.

<p style="text-align: center;">IV. IMPACTS ON THE HUMAN POPULATION</p>

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| <ul style="list-style-type: none">• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i>• <i>Enter "NONE" if no impacts are identified or the resource is not present.</i> |
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14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

No significant adverse impacts to human health and safety would occur as a result of implementing the proposed alternative.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

The location of the easement does not traverse any crop lands. No significant adverse impacts to industrial, commercial and agricultural activities and production would occur as a result of implementing the proposed alternative.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify direct, indirect, and cumulative effects to the employment market.

The proposed action will have no significant adverse impact on the quantity and distribution of employment.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify direct, indirect, and cumulative effects to taxes and revenue.

The proposed action will have no adverse impact on tax revenue.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify direct, indirect, and cumulative effects of this and other projects on government services

The implementation of the proposed alternative will not generate any additional demands on governmental services.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

Implementation of the proposed alternative will not conflict with any locally adopted plans.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify direct, indirect, and cumulative effects to recreational and wilderness activities.

The implementation of the proposed alternative is not expected to have a long-term adverse impact on recreational use of this Trust Land parcels.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify direct, indirect, and cumulative effects to population and housing.

No significant adverse impacts to density and distribution of population and housing would occur as a result of implementing the proposed alternative.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

There are no native, unique or traditional lifestyles or communities in the vicinity that would be impacted by the proposed alternative.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

The proposed alternative will not have a significant adverse impact on cultural uniqueness or diversity.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify direct, indirect, and cumulative economic and social effects likely to occur as a result of the proposed action.

The Common Schools Trust would benefit by received a one-time payment of \$2,570.00 for granting the right-of-way.

EA Checklist Prepared By:	Name: Michelle Yeager	Date:
	Title: Acting Area Planner	

V. FINDING

25. ALTERNATIVE SELECTED:


After review, the proposed action has been selected and it recommended that Central Montana Regional Water Authority be granted the ±3.95-acre easement across State Section 16, Township 10 North, Range 27 East in Musselshell County. The proposed 8" water pipeline will be installed within a corridor that generally follows a previously granted right-of-way. The water pipeline will allow potable water to rural areas within the Musselshell valley.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

The potential for significant adverse impacts to the Trust lands listed above are minimal due to the nature of the proposed action which would entail the issuing of an easement and installation of an 8" water pipeline to provide water to rural areas in Montana. The installation and disturbance are expected to be completed in a short timeframe. There are no natural features that could produce adverse impacts or species of concern occupying the parcel that is expected to be impacted by implementing the proposed action.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS More Detailed EA No Further Analysis

EA Checklist Approved By:	Name: Joe Holzwarth	
	Title: Area Manager	
Signature:		Date: 4/11/24