# FINDING OF NO SIGNIFICANT IMPACT FOR

# **CENTRAL MONTANA REGIONAL WATER AUTHORITY** MUSSELSHELL-JUDITH RURAL WATER SYSTEM PHASE 3 PROJECT

#### TO: ALL INTERESTED PERSONS

Date:

August 11, 2025

Action:

**Drinking Water System Installation Project** 

Location of Project:

Musselshell County, Montana

DEQ/DWSRF Funding: \$1,985,000

**Total Project Cost:** 

Approximately \$13,400,000 (in 2025 dollars)

An environmental assessment (EA) has been prepared by the Montana Department of Environmental Quality (DEQ) regarding construction of Phase 3 of the Musselshell-Judith Rural Water System (MJRWS) in Musselshell County by the Central Montana Regional Water Authority (CMRWA).

The proposed action consists of the installation of approximately 45 miles of buried HDPE pipeline that is 6 and 8 inches in diameter as well as the installation of a buried fiberglass storage tank, a pressure reducing valve vault, two altitude valve vaults, and a booster pump station. The project will also include all associated valves, fittings, meters, controls. appurtenances and surface repair. The pipeline will extend from the Phase 2 pipeline halfway between the Rothiemay Tank and the Town of Roundup, Montana at the intersection of Middle Road and Emory Road to Lavina, Montana and then south to Broadview, Montana. This project is Phase 3 of the MJRWS and is intended to bring high quality drinking water to serve the Town of Broadview, residence in the Town of Lavina, and rural residents along the pipeline route.

Based on the EA, the project is not expected to have any significant adverse impacts upon terrestrial and aquatic life or habitat, including endangered species, water quality or quantity, air quality, geological features, cultural or historical features, or social quality. The project construction specifications note the potential to encounter petroleum contaminated soil or water within the project site and include language on the procedures to follow if this were to occur.

The DEQ utilized the following references in completing its EA for this project: (1) Uniform Environmental Checklist for Montana Public Facility Projects dated April 2025 and prepared by Great West Engineering; (2) Musselshell-Judith Rural Water System -Central Montana Regional Water System Environmental Assessment dated July 2014 and prepared by Tetra Tech; (3) a Design Report for Phases 1, 2A, 2B, 2C, 3, and 4 of the Musselshell-Judith Rural Water System Project dated July 2025 and prepared by Great West Engineering; (4) a consultation letter from the Montana Sage Grouse Conservation Program dated December 2024; (5) a Cultural Resource Report dated January 2025 and prepared by Rabbitbrush Archaeological Services, LLC; (6) a review of potential contaminant sources for Phase 3 of the project completed by the source water protection section of DEQ; and (7) a Finding of No Significant Impact for CMRWA Phases 2 through 5 prepared by the United States Bureau of Reclamation. In addition to these references. twenty-five entities that included state and federal agencies were contacted regarding the proposed construction of Phase 3 of the MJRWS. Response letters were received from DNRC, MDT, FAA, Golden Valley County, and Yellowstone County. The documentation for the FONSI is available for public review at https://deq.mt.gov/public/publiccomment and at the following locations:

Sandie Koenig
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
Phone (406) 444-6770
Email: sandie.koenig@mt.gov

Or:

Monty Sealey Central Montana Regional Water Authority 34 3<sup>rd</sup> Ave. West Roundup, MT 59072 (406) 323-6060

Email: cmrcd@midrivers.com

Comments on this finding or on the EA may be submitted to DEQ at the above address. Comments must be postmarked no later than 30 days after the date of publication of this FONSI in the newspaper. After evaluating substantive comments received, DEQ will revise the EA or determine if an Environmental Impact Statement is necessary. Otherwise, this finding of no significant impact will stand if no substantive comments are received during the comment period or if substantive comments are received and evaluated and the environmental impacts are still determined to be non-significant.

Signed.

Rachel Clark, Bureau Chief Engineering Bureau

c: file

# CENTRAL MONTANA REGIONAL WATER AUTHORITY MUSSELSHELL-JUDITH RURAL WATER SYSTEM PHASE 3 PROJECT

## ENVIRONMENTAL ASSESSMENT

# I. <u>COVER SHEET</u>

## A. PROJECT IDENTIFICATION

Applicant: Central Montana Regional Water Authority

Address: 34 3<sup>rd</sup> Ave. West

Roundup, MT 59072

## B. CONTACT PERSON

Name: Monty Sealey, Project Administrator

Central Montana Regional Water Authority

Address: 34 3<sup>rd</sup> Ave. West

Roundup, MT 59072

Telephone: (406) 323-6060

# C. ABSTRACT

The Central Montana Regional Water Authority (CMRWA) is a public, non-profit organization consisting of a coalition of cities and towns in central Montana who have a long legacy of inadequate drinking water supplies. The CMRWA was legally created in 2005 as a public water authority in the state of Montana. The CMRWA is governed by a board of directors with members from the various communities to be served by the water system. The goal of the Musselshell-Judith Rural Water System (MJRWS) is to provide a reliable and adequate quantity of high-quality drinking water for the member communities. The project consists of developing groundwater wells within the Madison Aquifer to supply water to member communities including Hobson, Harlowton, Ryegate, Broadview, Roundup, and Melstone as well as smaller communities and local users along the pipeline route.

An Environmental Assessment (EA) was published in July 2014 for all phases of this project as part of an effort to obtain approval from the United States Bureau of Reclamation (USBR) to pursue federal authorization of the project. Since the project will receive financing through the Department of Environmental Quality (DEQ) Drinking Water State Revolving Loan Fund (DWSRF), the DWSRF must also prepare an EA to satisfy the requirements of the National Environmental Policy Act (NEPA) and the Montana Environmental Policy Act (MEPA). This EA focuses on Phase 3 of the project which includes installing approximately 45 miles of pipeline from the Phase 2 pipeline (the connection point is approximately halfway between the Rothiemay Tank and the Town of Roundup, Montana) to the

Town of Broadview, Montana. The pipeline will pass through the Town of Lavina, Montana. Communities in central Montana face challenges obtaining reliable, quality drinking water. Phase 3 of the project will specifically address water quality and quantity issues faced by residents in the Town of Broadview and poor water quality in private wells in Lavina that contain high concentrations of total dissolved solids, sulfates, and nitrates. In addition, approximately 50 rural customers along the route that have water quality and/or quantity issues can also benefit from the proposed project.

Funding for design and construction of the MJRWS is expected to come from the USBR, the Department of Natural Resources and Conservation (DNRC), the Department of Environmental Quality (DEQ) Drinking Water State Revolving Loan Fund (DWSRF), Musselshell County, and CMRWA. Environmentally sensitive characteristics such as wetlands, floodplains, and threatened or endangered species are not expected to be adversely impacted as a consequence of the proposed project. No significant long-term environmental impacts were identified during the preparation of this document.

#### D. COMMENT PERIOD

Thirty calendar days.

# II. PURPOSE AND NEED FOR ACTION

As described in the July 2014 EA (Tetra Tech, 2014), the purpose of this project is to provide a consistent and reliable source of high-quality water to the communities in central Montana. Phase 3 will serve the Town of Broadview and some residents in the Town of Lavina as well as rural residents along the pipeline route between the Phase 2 connection and Broadview. The Town of Broadview's water supply consists of four deep, low-production and poor-quality groundwater wells. The wells contain high total dissolved solids, sulfate, and sodium, well above the Environmental Protection Agency Secondary Maximum Contaminant Levels. Many residents buy bottled water and Community members have indicated that household appliances have shorter lives than expected due to the poor quality of the water. According to the 2014 Feasibility Study (Author, 2014), the Town of Broadview has historically operated two deep, low production wells. They added two additional wells in 2014 but the new wells are also low production so the additional capacity is not sufficient to ensure the community can keep up with average day demand especially if one of the wells goes out of service. The noncommunity public and private wells in Lavina contain high levels of nitrate. The proposed Phase 3 project will provide the Town of Broadview, residents in Lavina that connect to the system, and the rural residents along the pipeline route with a reliable, high-quality source of drinking water over the 50-year planning period.

## III. CONSIDERED ALTERNATIVES

The alternatives for addressing Phase 3 of the Musselshell-Judith Rural Water System (MJRWS) needs included:

## A. NO ACTION

Under the no action alternative, the federal government would not provide funding for the MJRWS and it is likely that the water pipeline would not be constructed because the cost would render the project infeasible. The residents served by Phase 3 would continue to receive water of poor quality and quantity.

## B. ACTIONS CONSIDERED BUT NOT PURSUED

A detailed feasibility study examined multiple alternatives to determine the most economically viable alternative for pipelines, storage, pumping and controls in order to establish a single preferred alternative for the regional system. The feasibility study examined alternatives for pipeline routing for the Utica, Judith Gap, and Melstone subregions of the project area, as well as multiple alternatives for pipeline materials, water storage infrastructure, pump stations, and controls. The preferred alternative was selected over these other alternatives because it was determined to provide the most economically feasible solution to meet the project objectives.

## C. PROPOSED ACTION

The proposed water system for Phase 3 would provide water service for drinking, household use, livestock, and yard irrigation (not crop irrigation) to the residents of Broadview, some residents in Lavina, and individual rural users who are located along the pipeline route that elect to receive the service. The proposed infrastructure for Phase 3 includes:

- Approximately 45 miles of 6- and 8-inch water mains;
- A buried storage tank;
- A pressure reducing valve vault;
- Two altitude valve vaults; and
- A booster pump station.

#### D. TOTAL ESTIMATED COSTS

The total estimated cost of the proposed Phase 3 project is approximately \$13.4M (in 2025 dollars). Funding for Phase 3 is comprised of grants and loans and is as follows:

\$2,600,000 House Bill 11 2025 Biennium administered by DNRC \$8,800,000 USBR

\$1,985,000 DWSRF \$15,000 Local Funds (CMRWA) \$13,400,000 Total Estimated Project Cost

# IV. AFFECTED ENVIRONMENT

## A. PLANNING AREA

The planning area for Phase 3 of the MJRWS is in two counties: Golden Valley and Yellowstone. The Phase 3 pipeline route connects to the Phase 2 pipeline at a location halfway between the Rothiemay Tank and the Town of Roundup, Montana at the intersection of Middle Road and Emory Road 16 miles north of Lavina. From here, it will extend south along Middle Road for 14.5 miles before Middle Road turns into East Red Hill Road, and the pipeline continues south 5.5 miles into Lavina. From Lavina, the Phase 3 pipeline will continue south along Montana Highway-3 for 30 miles to Broadview, and 1 mile west to the Broadview Tank. State, county, and private easements were obtained for the transmission main. Figure 1 shows the general location for pipeline route proposed in Phase 3 of the MJRWS project (represented by the pink line).

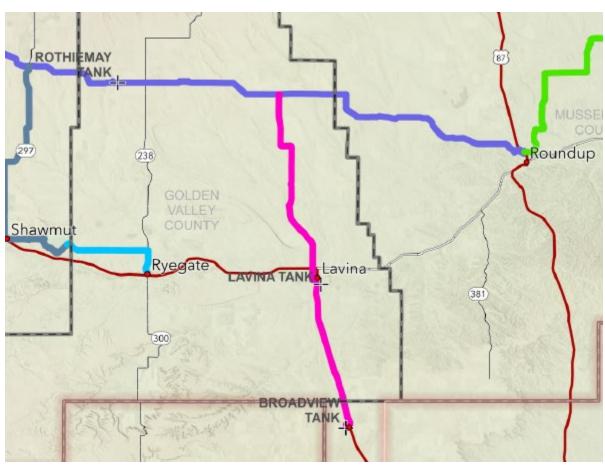


Figure 1. Location of Pipeline Route Proposed for Phase 3 of the MJRWS (Pink Line)

#### B. POPULATION AND FLOW PROJECTIONS

The existing population estimated during planning for customers that will be served by Phase 3 (the Town of Broadview, customers in the Town of Lavina, and rural areas along the pipeline route) is approximately 350 persons. The annual growth rate over the life of the project (estimated at 50 years) for the area covered in Phase 3 varies by area but is expected to be approximately 1 percent in Broadview based on past growth trends including previous census data. As such, the projected population for Phase 3 customers at buildout was expected to be approximately 800 persons.

For Phase 3, average day demand (ADD) at buildout is projected to be 80 gpm. ADD is based on the expected population at buildout and the expected water usage of 153 gallons per capita per day (gpcd). This value differs from water usage data collected in 2013 which showed the average gallons per capita per day for member communities was 167 gpcd. When calculating ADD, the Feasibility Report (Great West Engineering, 2014) justified the use of the lower water usage number based on factors that occurred after 2013 data were collected such as: the town of Harlowton installing customer meters and implementing a tiered rate structure to encourage water conservation; the exit of one community from the project that reported the highest annual water usage affecting the average usage rate for all member communities; and the assumption that implementing a metered rate for all customers in the system will encourage water conservation. As such, the Feasibility Report (Great West Engineering, 2014) determined that using 153 gpcd to estimate ADD at buildout (and subsequent design of the system) was reasonable and conservative.

For Phase 3, the maximum day demand (MDD) of 280 gpm was calculated using a peaking factor of 3.5.

#### C. NATURAL FEATURES

Phase 3 of the MJRWS includes the area from the connection to the Phase 2 pipeline directly south passing through Lavina, Montana and extending to Broadview, Montana. The project area is largely comprised of grasslands across a semi-arid largely treeless terrain.

The project area is located within the Great Plains Ecoregion, which is largely an unglaciated, semiarid and rolling plain that is underlain by shale, siltstone and sandstone. Predominant soil types are classified as silty clays, clay loams, and various soil complexes. The geotechnical investigation for the area showed that soils from north to south are comprised of sandy lean clay, lean clay, shale, and lean clay with sand.

The project area includes intermittent small wetlands, seasonal drainages, the Musselshell River and small creeks including Currant Creek, Cottonwood Creek and Sand Creek.

# V. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

## A. DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS

1. <u>Land Use</u> – Land use within the Phase 3 project area has relatively little diversity, as it is predominately agriculture. Dryland and irrigated farming and livestock grazing are the most common land uses within the project area (USBR, 2014). None of the project area is classified as prime farmland. Approximately 170 acres of prime farmland, if irrigated, and 480 acres of farmland of statewide importance fall within the project area (USBR, 2014).

Pipeline construction would temporarily disturb the land surface within the project area. Surface disturbance activities would be minimal and short-term and would have minimal impacts. The majority of the pipeline route will be within the state and county right-of-ways (ROWs) and private landowner easements in which land use opportunities to residents within the project area are limited. Ground disturbance for pipeline construction would be temporary and all disturbed surfaces would be graded and reseeded. Therefore, pipeline construction would have very minor and negligible effects on land use within the project area.

2. Floodplains and Wetlands – The project area includes intermittent small wetlands, seasonal drainages, the Musselshell River and small creeks including Currant Creek, Cottonwood Creek and Sand Creek. The majority of the project resides in zone D which is considered an area of undetermined flood hazard. The Musselshell River crossing south of Lavina is a zone AE regulatory floodway, which will be crossed with the use of boring. As this phase primarily consists of distribution pipe installation, the limited floodplain area to be crossed is not anticipated to be of concern, nor anticipated to experience adverse long-term effects. The Department of Natural Resources (DNRC) commented that 'A floodplain permit will be needed in any place that work will be conducted in the special flood hazard area (SFHA). Please contact the local floodplain administrator for each area if work is to be conducted in the SFHA." Required permits will be obtained prior to construction (See Section VI).

The project design has taken into account wetland crossings and monitoring that may need to be completed. Wetland crossings will be directionally bored or drilled to mitigate/limit impact. Where boring is not feasible, necessary measures will be taken to protect the wetland during

construction and rehabilitate the wetland upon completion, including monitoring for three years post-construction. The Army Corps of Engineers (USACE) has been notified of the project and the intent to bore under all delineated wetlands to avoid any disturbance.

3. <u>Cultural Resources</u> – A cultural resource report summarizing an inventory of the pipeline corridor was conducted by Rabbitbrush Archaeological Services, LLC and completed in January of 2025. The results of the report indicate 20 cultural resource sites present within the project area but only 8 of those sites were recommended for inclusion in the National Register of Historic Places. Eight of those sites will be avoided which, in some cases, includes rerouting the pipeline. Two of the sites are listed on the National Register. No cultural resource monitoring is recommended for the project.

There is a possibility that cultural resources could be discovered during construction. In the event of an unanticipated discovery, construction would cease immediately, and the appropriate authorities, including the SHPO and/or Tribal Historic Preservation Officer, would be notified. Construction would not continue until authorization is issued from the appropriate authorities.

4. <u>Fish and Wildlife</u> – Fish-bearing streams within the project area include Musselshell River and small creeks including Currant Creek, Cottonwood Creek and Sand Creek. However, Phase 3 construction would not negatively impact water availability or water quality in any fish-bearing streams.

This project is in an area in central Montana which includes an abundance of diverse wildlife species that are both game and nongame species. However, land disturbance activities associated with the transmission main installation would typically occur within a small area along the route where the majority of construction and installation activities are within or immediately adjacent to state and county ROWs and where the distribution of wildlife is low relative to the region. These areas receive regular disturbance due to traffic and road maintenance activities.

There are portions of the pipeline that would cross over private and State land away from road ROWs and in open rangeland, occasionally crossing wooded riparian areas. Construction activities would temporarily displace any present wildlife in the area of the activities. Disturbance and associated displacement would be brief and disturbed areas would be reclaimed and reseeded upon completion of construction and installation. Any wildlife displaced within a specific area during the pipeline installation phase would return to normal activities upon completion of the activities. For bald eagles and golden eagles, construction timelines and

mitigation guidelines have already been established to minimize any impacts.

The pipeline route also intersects the Greater Sage Grouse (GSG) General and Core Habitat (MSGCPa, 2024). To address project impacts, Great West Engineering provided a Mitigation Plan to the Montana Sage Grouse Habitat Conservation Program outlining project specific avoidance, minimization, reclamation, and compensatory mitigation. The Montana Sage Grouse Habitat Conservation Program acknowledged that the Plan is consistent with the Montana Sage Grouse Conservation Strategy (MSGCPb, 2024).

- 5. <u>Water Resources and Water Quality</u> Impacts on water quality for wetlands and intermittent streams are expected to be minor and short-term during construction and can be controlled through proper construction practices.
- 6. <u>Social and Economic Resources</u> This project is not expected to negatively impact social or economic resources in the project area. With the improved water source, this project will be an economic improvement for those currently purchasing bottled drinking water or who pay for household water treatment systems that can be expensive to purchase and maintain.
- 7. Soils and Vegetation The proposed project is primarily located in the Great Plains with slopes typically ranging from 0-8%. There are intermittent areas of slopes up to 45%. The geotechnical investigation for the area showed that soils from north to south are comprised of sandy lean clay, lean clay, shale, and lean clay with sand. Native soils removed for pipe installation will be reused in the trench, with necessary reseeding and restoration efforts to minimize environmental and visual impacts.

The majority of disturbed areas associated with pipeline installation would occur within or immediately adjacent to state and county ROWs. Areas within or adjacent to ROW were previously disturbed and likely do not represent rare or sensitive vegetation communities. CMRWA will acquire landowner permission for all disturbance areas and disturbances would be minor and short-term. Areas of native grassland disturbed by construction activities would be reseeded with an approved native seed mix. Sensitive plants such as sagebrush would be avoided whenever possible. There would be no impact on noxious weeds, due to weed mitigation measures.

8. <u>Environmental Justice</u> – Environmental Justice Executive Order 12898: The proposed project will not result in disproportionately high or adverse human health or environmental effects on minority or low-income populations. The economic impact will ultimately affect all users of the

- system proportionately. No disproportionate effects among any portion of the community are expected.
- 9. <u>Air Quality</u> Short-term negative impacts on air quality may occur from heavy equipment and exhaust fumes during project construction. Emissions would occur over a single construction season and all equipment used and transport vehicles would meet emission control requirements. Emissions from this low level, short-term activity would be minimal and would not create a noticeable or measurable increase in pollutants. Construction activities may cause an increase in dust. The contractor will be required to mitigate dust through the use of watering. Air quality impacts would be short-term.
- 10. Noise Short-term impacts from increased noise levels may occur during construction activities particularly during installation of pipe in the vicinity of residential homes near Lavina, MT and Broadview, MT. However, construction in the area near residential homes will be short-term. The construction period will be limited to normal daylight hours to avoid early morning or late evening construction related disturbances. In the long-term, no increase in noise levels associated with this project will occur.

#### B. UNAVOIDABLE ADVERSE IMPACTS

Short-term construction-related impacts such as traffic disruption will occur but can be minimized through proper construction management. No permanent direct, indirect, or cumulative adverse impacts are anticipated as a result of the proposed MJRWS Phase 3 project.

# VI. <u>AGENCY ACTION, APPLICABLE REGULATIONS, AND PERMITTING AUTHORITIES</u>

All conveyance infrastructure will be designed to meet DEQ requirements. Proper state regulatory review and approval of the project plans and specifications will be provided. All applicable local, federal, and state permits will be obtained.

Required Montana Department of Transportation, Bureau of Land Management, and County ROW Encroachment Permits, State Lands, and private landowner easements have or will be obtained for Phase 3 of the project. In addition, permits for floodplains, storm water, construction dewatering, the Clean Water Act (404 Permit), the Montana Natural Streambed and Land Preservation Act (310 Permit), the County Weed Board Submission of a weed management plan, and any permits/requirements from the Montana Department of Natural Resources and Conservation and the Farm Protection Policy Act have or will be submitted for Phase 3 of the project.

# VII. PUBLIC PARTICIPATION

CMRWA holds board meetings every month for which the public is welcome to attend. The location of the meetings typically occurs in Harlowton, Montana and maintains a consistent stream of communication to keep up with the current state of affairs.

# VIII. REFERENCE DOCUMENTS

The following documents were used in the environmental review of this project and are considered part of the project file:

- A. <u>Great West Engineering.</u> (2025). Uniform Environmental Checklist for Montana Public Facility Projects.
- B. <u>Tetra Tech.</u> (2014). Musselshell-Judith Rural Water System Central Montana Regional Water System Environmental Assessment.
- C. <u>United States Bureau of Reclamation.</u> (2023). Finding of No Significant Impact. Musselshell Judith Rural Water System. MT-2023-02F.
- D. <u>Great West Engineering.</u> (2025). Central Montana Regional Water Authority Musselshell Judith Rural Water System Phases 1, 2A, 2B, 2C, 3, and 4 Design Report.
- E. <u>Great West Engineering</u>. (2014). Musselshell-Judith Rural Water System Feasibility Report.
- F. Montana Sage Grouse Conservation Program (MSGCPa). (2024). Montana Sage Grouse Habitat Conservation Map. [Online] Available at: https://sagegrouse.mt.gov/ProgramMap.
- G. <u>Montana Sage Grouse Conservation Program (MSGCPb).</u> (2024). Consultation letter provided to Great West Engineering regarding the Musselshell-Judith Rural Water System Phase 3 Construction Project (Project No. 6693).
- H. <u>Rabbitbrush Archaeological Services, LLC.</u> (2025). Class III Cultural Resource Report Musselshell Judith Rural Water System Phase III Golden Valley and Yellowstone Counties, Montana.

# IX. AGENCIES CONSULTED

Twenty-five entities were contacted regarding the CMRWA Musselshell-Judith Rural Water System Phase 3 Project. The following entities provided written correspondence regarding this project:

- The Department of Natural Resources and Conservation (DNRC); correspondence A. dated April 4, 2025.
- The Montana Department of Transportation (MDT); correspondence dated April В. 11, 2025.
- C. The Federal Aviation Administration (FAA); correspondence dated March 26,

Χ.	RECOMMENDATION	N FOR FURTHER EN	VIRONMENTAL ANALYSIS

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