United States Department of the Interior
Bureau of Land Management

Colorado River Valley Field Office
2300 River Frontage Road
Silt, Colorado 81652
970-876-9000

Environmental Assessment

DOI-BLM-CO-G020-2023-0048-EA

TEP Rocky Mountain LLC and Grand River Gathering, LLC
West Mamm Creek Pipeline Project

BLM Right-of-Way Grant COC 80870 for TEP 6-inch and 8-inch Water Pipelines

BLM Right-of-Way Grant 80933 for TEP Access Road

BLM Short-term Right-of-Way Grant COC 80941 for TEP 6-inch and 8-inch Water Pipelines

Forest Service Special Use Permits

Forest Service Temporary Use Permits

TBD

BLM

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1. INTRODUCTION

NUMBER: **DOI-BLM-CO-G020-2023-0048-EA**

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PROJECT NAME: **West Mamm Creek Pipeline Project**

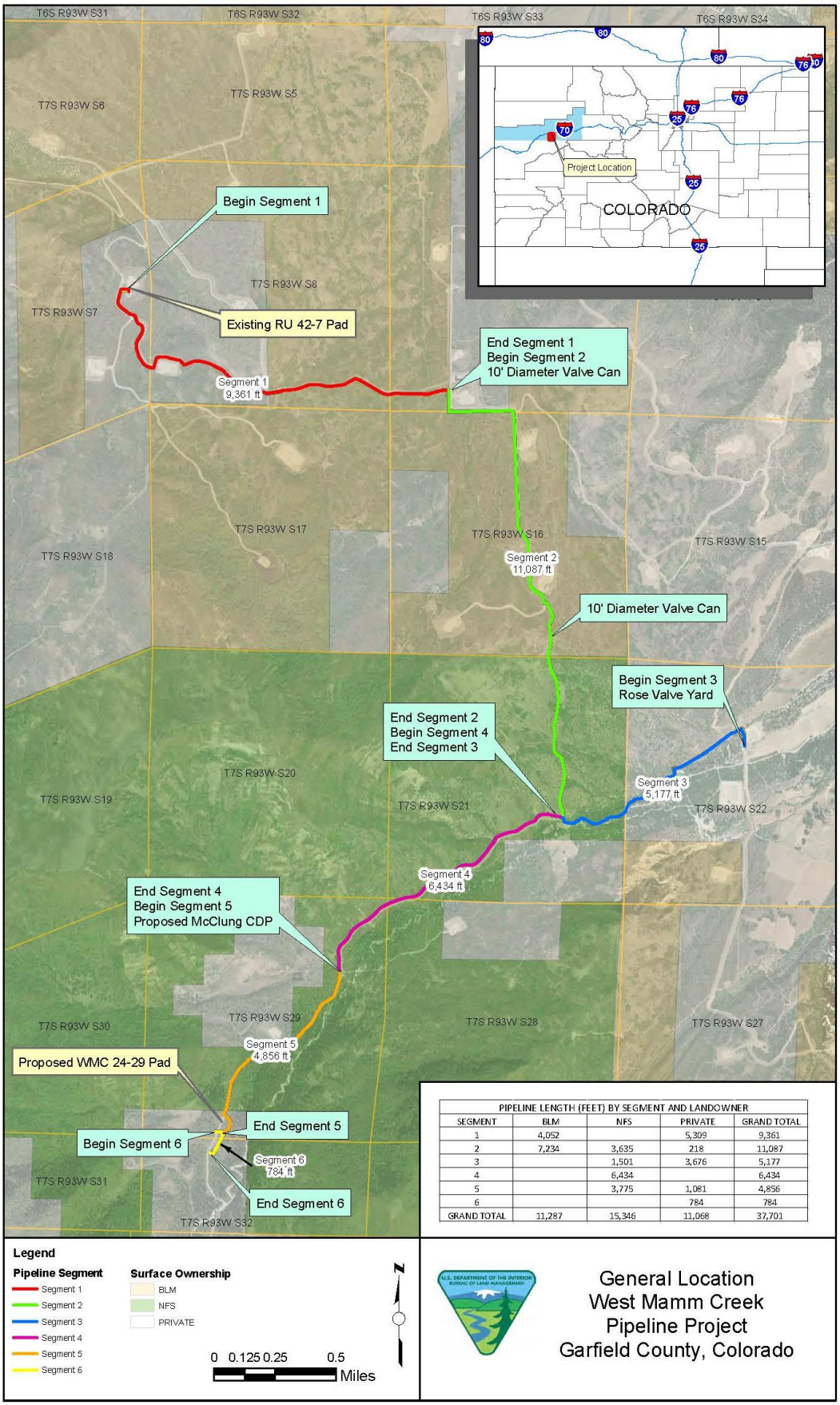
1.1 BACKGROUND

TEP Rocky Mountain LLC (TEP) is requesting new Rights-of-Ways (ROWs) from the Bureau of Land Management (BLM) for the installation and operation of a new buried 8-inch produced water pipeline and a new 6-inch produced water pipeline. Installation of the buried 8-inch produced water pipeline would also require Special and Temporary Use permits from the U.S. Forest Service (Forest Service). The proposed 8-inch produced water pipeline would connect TEP's existing and proposed West Mamm Creek development to their existing water transfer system at the existing RU 42-7 pad. The proposed 6-inch produced water pipeline would be installed from the existing RU 42-7 pad to the proposed 10-foot diameter valve can and would parallel the proposed 8-inch produced water pipeline. Installation of the produced water pipelines would support existing infrastructure in West Mamm Creek as well as any future development. Access to the proposed 8-inch and 6-inch produced water pipelines would be on existing Fee lease roads, county roads, National Forest System Road (NFSR) 818, and existing BLM lease roads and two tracks. TEP is requesting a separate ROW for access on the existing BLM lease roads and two track. The produced water pipelines would cross BLM lands managed by the Colorado River Valley Field Office (CRVFO), National Forest System (NFS) lands managed by the White River National Forest (WRNF), within the Rifle Ranger District, and private lands in Garfield County, Colorado. The 6-inch and 8-inch water pipelines would be installed in the same trench.

Grand River Gathering, LLC (GRG), a wholly owned subsidiary of Summit Midstream Partners, LP (Summit) is requesting Special and Temporary Use permits from the Forest Service to construct and operate two co-located, up to 8-inch diameter low pressure natural gas pipelines. The 8-inch natural gas pipelines would begin at the proposed WMC 24-29 pad. One of the pipelines would terminate at the existing McClung Central Delivery Point (CDP). The other would terminate at Summit's Rose Valve Yard. The natural gas pipelines would cross NFS lands, managed by the WRNF, within the Rifle Ranger District and private lands. In locations where the proposed 8-inch natural gas pipelines parallel the proposed produced water pipelines, they would be installed in the same trench at the same time by the same contractor.

1.2 LOCATION AND LEGAL DESCRIPTION

For purposes of analysis, the produced water and natural gas pipelines have been divided into six segments (see Map 1). Table 1 lists the proposed length and disturbance for each pipeline by landowner for each segment.



PIPELINE LENGTH (FEET) BY SEGMENT AND LANDOWNER

SEGMENT	BLM	NFS	PRIVATE	GRAND TOTAL
1	4,052		5,309	9,361
2	7,234	3,635	218	11,087
3		1,501	3,676	5,177
4		6,434		6,434
5		3,775	1,081	4,856
6			784	784
GRAND TOTAL	11,287	15,346	11,068	37,701

Map 1. West Mamm Creek Pipeline Project Location

Table 1. Begin and End Points for Pipeline Segments				
Segment	**Begin**	**End**	**Pipeline Type**	**Landowner**
Segment 1	RU 42-7 Pad	10-Foot Diameter Valve Can	TEP 8-inch produced water TEP 6-inch produced water	Private BLM
Segment 2	10-Foot Diameter Valve Can	NFSR 818	TEP 8-inch produced water	BLM
Segment 3	NFSR 818 Junction	Rose Valve Yard	One GRG natural gas	NFS Private
Segment 4	NFSR 818 Junction	McClung CDP	TEP 8-inch produced water One GRG natural gas	NFS
Segment 5	McClung CDP	WMC 24-29 Pad	TEP 8-inch produced water Two GRG natural gas	NFS Private
Segment 6	WMC 24-29 Pad	WMC 24-29 Frac Pad	TEP 8-inch produced water	Private

Segment 1 includes the proposed TEP 6-inch and 8-inch produced water pipelines. The segment begins at the tank farm on the existing RU 42-7 pad on private surface. The proposed pipelines in Segment 1 parallel an existing Summit natural gas pipeline ROW and existing access road between the existing RU 42-7 pad and the Beaver Creek Ranch 08-13 pad and parallel an existing Summit natural gas pipeline to the BLM boundary. The proposed pipelines travel east on BLM surface to the terminus of the 6-inch produced water pipeline at the proposed 10-foot diameter valve can on BLM surface (see Map 1).

Segment 2 includes continuation of the proposed TEP 8-inch produced water pipeline. The segment begins at the proposed 10-foot diameter valve can and travels south crossing into NFS lands and continuing south to NFSR 818 (see Map 1).

Segment 3 includes one GRG 8-inch natural gas pipeline. The segment begins where Segments 2, 3, and 4 meet at NFSR 818. The proposed 8-inch natural gas pipeline in Segment 3 is a continuation of the pipeline in Segment 4 and continues across NFS lands crossing into private lands and terminating at the Rose Valve Yard (see Map 1).

Segment 4 includes the continuation of TEP's 8-inch produced water pipeline from Segment 2 and the continuation of one of GRG's 8-inch natural gas pipelines between Segments 3 and 5 on NFS lands (see Map 1). Segment 4 begins where Segments 2, 3, and 4 meet at NFSR 818 and ends at the existing McClung CDP paralleling NFSR 818 (see Map 1).

Segment 5 includes the continuation of TEP's 8-inch produced water pipeline between segments 4 and 6 and two GRG 8-inch natural gas pipelines. The segment begins at the existing McClung CDP on NFS lands, crosses through private lands, back into NFS lands, and ends near the proposed WMC 24-29 pad on private lands (see Map 1).

Segment 6 includes TEP's 8-inch produced water pipeline and begins at the proposed WMC 24-29 pad and ends approximately 784 feet to the southwest on the WMC 24-29 Frac Pad, all on private lands (see Map 1).

1.3 PURPOSE AND NEED FOR ACTION

The purpose of the Proposed Action is to authorize TEP to use public land in the BLM CRVFO and the Forest Service Rifle Ranger District to install, operate, and maintain an 8-inch produced water pipeline between the existing RU 42-7 pad and the proposed WMC 24-29 pad and a 6-inch produced water pipeline between the existing RU 42-7 pad and a proposed 10-foot diameter valve can (see Map 1). The produced water pipelines would expand TEP's water transfer system to allow transfer of produced water for use in

well completions and to deliver produced water to the water management system. The Proposed Action would also authorize construction of two 10-foot diameter valve cans. The purpose of the Proposed Action is also to authorize GRG to use public land in the Forest Service Rifle Ranger District to install, operate, and maintain two 8-inch natural gas pipelines between the proposed WMC 24-29 pad and the existing McClung CDP and Rose Valve Yard. The 8-inch natural gas pipelines would collect low pressure natural gas from TEP's proposed WMC 24-29 pad to the existing Rose Valve Yard continuing through the existing pipeline system and to national markets.

The need for the Proposed Action is to allow the transfer of produced water between well pads and the water management system and to allow the transfer of natural gas to national markets. The BLM has responsibility, under the 1976 Federal Land Policy and Management Act (FLPMA), to respond to TEP's request for the ROW grants authorizing use of public land to install, operate, and maintain the produced water pipelines. The Forest Service manages lands pursuant to the Land and Resource Management Plan (LRMP) prepared according to the National Forest Management Act; any special use and temporary use permits issued by the Forest Service would be in compliance with the White River National Forest LRMP. The Proposed Action is reviewed and processed under the National Environmental Policy Act of 1969 (NEPA) to analyze and disclose to decision makers and the public the potential impacts to public lands that may be associated with installation of the pipelines if it goes forward.

1.4 SCOPING

NEPA regulations (40 CFR §§ 1500-1508) require that the BLM and Forest Service use a scoping process to identify potentially significant issues in preparation for an impact analysis. Each agency has separate regulations for conducting the scoping process. The principal goals of scoping are to allow public participation to identify issues, concerns, and potential impacts that require detailed analysis. As scoping for this EA, the BLM placed information regarding the project on its public ePlanning website on insert date 2023. Although no formal comment period was established for project activities on BLM lands, the ePlanning notice provides information on how to submit comments or questions regarding the project.

The Forest Service scoping process for projects on NFS lands is identified in 36 CFR 218.24. The West Mamm Creek Pipeline Project is an activity implementing a land management plan on a portion of NFS lands and therefore is subject to pre-decisional objections under subparts A and B of 36 CFR Part 218. The BLM, as the lead agency has combining scoping with the legal notice and opportunity to comment, as described in 36 CFR 218.24 for the activities that occur on NFS lands. Public scoping began on (insert date) and a Notice of Proposed Action (NOPA) was emailed to various community residents, interested individuals, public agencies, tribal governments, and other organizations. The NOPA package provided a full description of the Proposed Action, the purpose and need for action, issue statements, alternatives considered, preliminary findings, and an illustrative map. A legal notice for a 30-day comment period for the project was published in the Glenwood Springs Post Independent, the newspaper of record for the WRNF on insert date, 2023. The West Mamm Creek pipeline project is also posted at https://www.fs.usda.gov/project/whiteriver/?project=64353. Public comments during the 30-day combined scoping and comment period were directed to be submitted to the BLM ePlanning website.

2. PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

TEP's 6-inch and 8-inch produced water pipelines would be co-located in the same trench and would require a 30-foot ROW (COC 80870) from the BLM. A separate ROW (COC 80933) would be required from the BLM for pipeline access. A short-term ROW (COC 80941) would be required for temporary use areas including 20-feet along the pipeline length and 25 feet for existing road and pipeline crossings.

GRG's 8-inch natural gas pipelines would also be co-located in the same trench as the TEP produced water pipelines and would require a 30-foot permanent ROW from the Forest Service. On NFS lands, special use and temporary use permits would be required from the Forest Service for TEP's 6-inch and 8-inch produced water pipelines and GRG's 8-inch natural gas pipelines.

2.1.1 Disturbances Related to Construction of Water Pipeline

Pipeline lengths and disturbance estimates by segment are shown in **Table 1**. Total construction disturbance on BLM land would be 13.30 acres in Segments 1 and 2 (see Table 1). Total construction disturbance on NFS lands would be 17.72 acres in Segments 2 through 5. No Federal land would be disturbed in Segment 6.

Table 2. Proposed Surface Disturbance by Pipeline Segment

Landowner	*Length (feet)*	*Disturbance (acres)*			
		Existing [1]	*Re-Disturbance*	*New*	*Total* [2]
Segment 1 (TEP 6-inch and 8-inch pipelines)					
BLM	4,052	1.35	3.35	0.11	4.81
Private	5,309	0.56	4.56	1.46	6.58
Subtotal	*9,361*	*1.91*	*7.91*	*1.57*	*11.39*
Segment 2 (TEP 8-inch pipeline)					
BLM	7,234	2.28	0.37	5.84	8.49
NFS	3,635	0.65	--	3.58	4.23
Private	218	0.00	--	0.16	0.16
Subtotal	*11,087*	*2.93*	*0.37*	*9.58*	*12.88*
Segment 3 (GRG 8-inch pipeline)					
NFS	1,501	0.87	--	0.73	1.60
Private	3,676	0.14	3.34	1.16	4.64
Subtotal	*5,177*	*1.01*	*3.34*	*1.89*	*6.24*
Segment 4 (TEP 8-inch and one GRG 8-inch pipelines)					
NFS	*6,434*	*0.06*	--	*7.50*	*7.56*
Segment 5 (TEP 8-inch and two GRG 8-inch pipelines)					
NFS	3,775	1.42	--	2.91	4.33
Private	1,081	0.15	--	1.09	1.24
Subtotal	*4,856*	*1.57*	--	*4.00*	*5.57*
Segment 6 (TEP 8-inch pipeline)					
Private	*784*	*0.06*	--	*0.86*	*0.92*
Total	*37,699*	*7.54*	*11.62*	*25.40*	*44.56*

[1] Existing disturbance refers to various existing road crossings and rights-of-way within the construction corridor.

[2] Surface disturbance is entirely "short-term" because reclamation of the pipeline corridor, except at existing road crossings, would occur within 30 days after pipeline construction is completed.

2.1.2 Legal Descriptions of BLM and NFS Pipeline Segments

BLM Surface (TEP proposed 8-inch and 6-inch produced water pipelines)

Township 7 South, Range 93 West, Sixth Principal Meridian
Section 8: S½SE¼
Section 9: SW¼SW¼
Section 16: N½NW¼, W½E½

NFS Surface (TEP proposed 8-inch produced water pipeline and GRG's two natural gas pipelines)

Township 7 South, Range 93 West, Sixth Principal Meridian
Section 21: W½NE¼, N½SE¼, NE¼ SW¼, SE¼SW¼, SW¼SW¼
Section 28 NW¼NW¼
Section 29: Lot 1 (NE¼NE¼), Lot 5 (SE¼NE¼ & SW¼NE¼), Lot 7 (NW¼SE¼), Lot 8 (NE¼SW¼), Lot 11 (SE¼SW¼)

2.1.3 Construction Schedule

Construction of the pipelines would begin when all permits and approvals are obtained and would be dependent on weather conditions, applicable ROW stipulations, and timing limitations. It is estimated that construction would last for 4 months and would be conducted with one crew. The pipeline corridor would be seeded after construction is finished and during suitable weather and soil conditions.

2.1.4 Components of Pipeline Construction

Pipeline Specifications

The buried 8-inch produced water pipeline specifications are as follows:

- 8-inch Nominal Pipe Size (NPS): Outside Diameter (O.D.) 8.625 inches, Steel Wall Thickness 0.219 inch
- Internal Liner: O.D. 7.52 inches and Liner Wall Thickness 0.33 inch
- External Coating: Three-Layer Fusion Bond Epoxy (FBE) with Polyethylene
- Pressure Rating: 600# rating, American National Standards Institute (ANSI), 1,480# rating @ <100°F

The buried 6-inch produced water pipeline specifications are as follows:

- 6-inch Nominal Pipe Size (NPS): Outside Diameter (O.D.) 6.625 inches, Steel Wall Thickness 0.188 inch
- Internal Liner: O.D. 5.74 inches and Liner Wall Thickness 0.25 inch
- External Coating: Three-Layer FBE with Polyethylene
- Pressure Rating: 600# rating ANSI, 1,480# rating @ <100°F

The buried 8-inch natural gas pipeline specifications are as follows:

- 8-inch Nominal Pipe Size (NPS): Outside Diameter (O.D.) 8.625 inches, Steel Wall Thickness 0.250 inch, X52
- External Coating: Three-Layer Fusion Bond Epoxy (FBE) with Polyethylene
- Pressure Rating: 600# rating, American National Standards Institute (ANSI), 1,480# rating @ <100°F

Aboveground appurtenances required for the pipeline ROW would be the placement of Carsonite signs marking the approximate pipeline centerline as required by Federal, State, and/or local requirements. TEP would also install two above ground pipeline valve cans located inside the permanent ROW. Each valve can would be 10 feet in diameter and would be required for the installation and operation of the required block valves for pipeline maintenance. Both valve cans would be located on BLM surface.

Temporary Construction Workspace

TEP is requesting a 20-foot temporary workspace adjacent to the permanent ROW. TEP is also requesting an additional 25-feet of temporary workspace for a total width of 45 feet at road and existing pipeline crossings. GRG is also requesting a 20-foot temporary workspace adjacent to the permanent ROW and additional 25-feet of temporary workspace at road and existing pipeline crossings.

Construction Access

Access to the pipeline ROW would be on existing Fee lease roads, county roads, existing NFSR 818, and existing BLM lease roads and two tracks. TEP is requesting a separate ROW for access on the existing BLM lease roads and two track. The existing BLM lease roads are located in SW¼SE¼ of Section 9 and in the W½E½ of Section 16. The existing BLM two track is located in the SW¼SE¼ of Section 16 and would also be used to access the proposed valve can in the same location. All the above-mentioned Sections are in Township 7 South, Range 93 West, 6th P.M.

Construction activities associated with pipeline installation typically follow this general order of operation:

1) Installation of perimeter sediment control measures;
2) Clearing and grubbing of site vegetation;
3) Preservation of topsoil by stripping and windrowing topsoil;
4) Excavation and grading of ROW;
5) Trench and blasting (if needed);
6) Installation of pipeline (welding, placement, padding);
7) Backfilling trench excavation;
8) Pressure testing; and
9) Reclamation of ROW (contouring, ripping, seeding, etc.).

Clearing, Grading, and Topsoiling for the Pipeline Installation

Vegetation would be cleared, and the construction workspace graded to provide for a safe and efficient operation of construction equipment and vehicles, and to provide space for storage of subsoil and topsoil. Construction activity and ground disturbance would be limited to approved, staked areas.

Trees, if any, would be cut with a chain saw and/or mechanical shears and brush would be generally cut with a hydro-axe or similar equipment. Trees and brush would be cut as close to the ground as possible. Vegetative material would typically be chipped or shredded and incorporated into the topsoil. Stumps that are not shredded or chipped and incorporated into the topsoil would be removed and disposed of at an approved disposal facility.

In areas with heavy concentrations of trees, slash, or aspen downfall and/or designated hazard trees, chainsaws and/or trackhoe would be used to clear the ROW corridor footprint of trees. Prior to construction, to create a safe working area for pipeline construction crews, experienced chainsaw operators may be employed to fall and buck standing trees along the pipeline corridor. Where necessary, given the large number of trees, trees would be decked alongside the ROW in locations approved by the BLM representative and later removed from public lands.

All topsoil would be stripped following removal of vegetation from the trench line and working side of the workspace and salvaged for replacement during reclamation following completion of pipeline construction. Topsoil would be windrowed along the outer edge of the pipeline corridor and segregated from subsurface materials. The BLM best management practice (BMP) for the Windrowing of Topsoil would be implemented for well pad construction whenever topography allows.

Topsoil would be stockpiled separate from subsoil and would not be used to pad the trench or construct trench breakers. Dry drainages or washes that cross the construction workspace would not be blocked with topsoil or subsoil piles. Topsoil and subsoil would be placed on the banks of the drainage. Gaps would be left periodically in the topsoil and subsoil windrows to avoid ponding and excess diversion of natural runoff during storm events.

Excavating and Trenching the Alignment

Existing roads and the existing pipeline corridor would provide for landowners and grazing permittees to move vehicles, equipment, and livestock across the trench where necessary.

Excavated subsoil would be stored separately from windrowed topsoil piles. Subsoil would not be stored in flowing water bodies and dry drainages or washes that cross the construction workspace would not be blocked with subsoil. Subsoil would be placed on the banks of the drainage, outside of the ordinary high water mark.

Blasting is not expected on BLM lands with this project. Where rock formations are encountered and blasting is necessary on BLM, NFS, and/or private lands, all necessary authorizations would be obtained, and all safety precautions would be observed. All blasting work would be conducted in compliance with Federal, State, or local laws, regulations, or ordinances.

Connecting the Pipeline Joints

For TEP's water pipelines, the joints of pipe would be strung along the trench and mechanically joined utilizing a proprietary ClickWeld process. When necessary, pipe would be bent to accommodate horizontal and vertical changes in direction. Pipe joints would be aligned end-to-end, clamped into position, and mechanically joined in accordance with manufacturer recommendations and applicable regulations. All joints would be visually inspected by a qualified inspector. Non-destructive radiographic inspection would be conducted on fabricated components such as valve sets and risers. A specialized contractor would be employed to perform this work. Any defects would be repaired or cut out as required under the specified regulations and standards.

For GRG's gas pipelines, the joints of pipe would be strung along the trench line and welded together. When necessary, pipe would be bent to accommodate horizontal and vertical changes in direction. Pipe joints would be lined up end-to-end and clamped into position and welded in accordance with regulations and standards currently required for natural gas pipelines, as applicable. All welds would be visually inspected by a qualified inspector. Non-destructive radiographic inspection methods would be conducted in accordance with current requirements. A specialized contractor would be employed to perform this work. Any defects would be repaired or cut out as required under the specified regulations and standards. To prevent corrosion, the pipe would be externally coated with fusion bonded epoxy coating prior to delivery. After welding, field joints would be coated with a tape wrap, shrinkable sleeve wrap, or field applied fusion bond epoxy. Before the pipe is lowered into the ditch, the pipeline coating would be visually inspected and tested with an electronic detector, and any faults or scratches would be repaired.

Lowering in and Padding the Pipeline

Before the pipe section is lowered into the trench, an inspection would be conducted to verify that the pipe is properly fitted and installed in the trench, minimum cover is provided, and the trench bottom is free of rocks and other debris that could damage the external pipe coating. The pipe sections would be simultaneously lifted into position over the trench and lowered into place. Sifted soil fines from the excavated subsoils would provide rock-free pipeline padding and bedding. Sandbags may be used to pad the bottom of the trench instead of, or in combination with, padding with soil fines. In rocky areas, padding material or a rock shield would be used to protect the pipe. No topsoil would be used as padding.

Dewatering may be necessary where water has accumulated in the trench; TEP and GRG would acquire a Colorado Department of Health and Environment (CDPHE) construction dewatering permit prior to construction. Pipe sections would be simultaneously lifted in position over the trench and lowered in place. Sifted soilfines from the excavated subsoils would provide rock-free pipeline padding and bedding. Sandbags may be used to pad the bottom of the trench instead of, or in combination with, padding with soil fines. In rocky areas, padding material or a rock shield would be used to protect the pipe.

Backfilling the Pipeline Trench

Backfilling would begin after a section of pipe has been successfully placed in the trench. Backfilling would be conducted using an excavator, bulldozer or other suitable equipment. Backfilling the trench would generally use the subsoil previously excavated from the trench, except in rocky areas where imported, appropriate fill material may be needed. Backfill would be graded and compacted (where necessary for ground stability) by tampering or walking with a wheeled or tracked vehicle. Compaction would be performed to the extent that there are no voids in the trench. Any excavated material or materials unfit for backfill would either be utilized elsewhere, shallowly mounded on the trench (to help avoid trenchline settling issues), or properly disposed of in conformance with applicable laws or regulations.

Pressure Testing the Pipeline

The pipeline would be tested in compliance with regulations. Prior to filling the pipeline for a hydrostatic or pneumatic test, each section of the pipeline would be cleaned by passing reinforced poly pigs through the interior of the line. Incremental segments of the pipeline would then be filled with water, compressed air, or nitrogen, pressurized, and held for the duration of the test. The length of each segment tested would depend on topography. Water used for hydrostatic testing would not be discharged into a drainage.

Reclaiming the Pipeline

For BLM land, reclamation, including seeding, of temporarily disturbed areas along roads and pipelines, and of topsoil piles and berms, would be completed within 30 days following completion of construction. Any such area on which construction is completed prior to December 1 would be seeded during the remainder of the early winter season instead of during the following spring, unless BLM approves otherwise based on weather. If road or pipeline construction occurs discontinuously (e.g., new segments installed as new pads are built) or continuously but with a total duration greater than 30 days, reclamation, including seeding, would be phased such that no portion of the temporarily disturbed area remains in an unreclaimed condition for longer than 30 days. BLM may authorize deviation from this requirement based on the season and the amount of work remaining on the entirety of the road or pipeline when the 30-day period has expired.

Cleanup and reclamation would occur after the pipeline is installed and would begin after backfilling is complete. Cleanup of the surface along the construction workspace and any temporary use areas would be performed by removing any construction debris and by performing final grading to the original contour. For compacted areas, initial seedbed preparation would include ripping to a minimum depth of 18 inches,

with a maximum furrow spacing of 2 feet. Where practicable, ripping would be conducted in two passes at perpendicular directions. Following final contouring, the backfilled or ripped surfaces would be covered evenly with topsoil. If directed by the BLM, the operator would implement measures following seedbed preparation (when broadcast-seeding or hydroseeding is to be used) to create small depressions to enhance capture of moisture and establishment of seeded species. Depressions (pocking) would be no deeper than 1 to 2 inches and would not result in piles or mounds of displaced soil. Excavated depressions would not be used unless approved by the BLM for the purpose of erosion control on slopes. Where excavated depressions are approved by the BLM, the excavated soil shall be placed only on the downslope side of the depression. Erosion control measures would be installed, and seeding would be performed in accordance with BLM, Forest Service and private landowner requirements.

Drill, broadcast, or hydroseed methods would be employed as appropriate to ensure proper seed placement. Drill seeding is the preferred seeding method and would be used wherever soil characteristics and slope allow for effective operation of a rangeland seed drill. Drill seeding would be performed perpendicular to the slope. Seed would be placed in direct contact with the soil at a depth of 0.25 to 0.5 inches, covered with soil, and firmed to eliminate air pockets around the seeds.

Broadcast seeding would be employed only in areas where drill seeding is unsafe or physically impossible. Seed would be applied uniformly over disturbed areas with manually operated cyclone-bucket spreaders, mechanical spreaders, or blowers. Broadcast application rates would be twice that of drill rates. The seed would be uniformly raked or dragged to incorporate seed to a sufficient seeding depth to provide 0.25 to 0.5 inch of soil cover or by hydroseeding and hydromulching. Hydroseeding and hydromulching would be conducted in two separate applications to ensure adequate contact of seeds with the soil.

The seed mix used would be a BLM, Forest Service, and private landowner approved mix (see GJFO and CVFRO Combined Seed Mixes dated October 26, 2022). TEP and GRG would incorporate these ROWs into their existing weed management plan to ensure monitoring and control of noxious weeds.

All irrigation ditches, cattle guards, fences, and artificial and natural livestock and wildlife water sources would be repaired to at least pre-construction conditions.

2.1.5 Other Considerations

Air Quality. Air pollutant emissions would be permitted as applicable by the CDPHE Air Pollution Control Division. The anticipated emissions include exhaust from vehicles and construction equipment, fugitive dust from vehicles and equipment on unpaved surfaces, and other surface disturbance activities. Water trucks would apply fresh or potable water to construction access roads, the construction zone within the ROW, staging areas, or any activity producing fugitive dust. Water would be acquired from an approved source and applied as necessary based on visible dust plume levels and soil moisture conditions. In addition to routine water application to control dust when necessary, common (feasible) best management practices to reduce unnecessary air pollutant emissions including dust would be prescribed for implementing the proposed action.

Greenhouse Gas (GHG) Emissions. GHG emissions would originate from pipelines' construction phase heavy equipment and related vehicle traffic. The GHG analysis for estimating potential climate change impacts associated with the proposed action would consider direct and indirect GHG emissions and be conducted following latest relevant Council on Environmental Quality (CEQ) Guidance. The cumulative GHG and climate change analysis would be completed using BLM's online 2022 GHG Report.

Environmental Justice. The Project is located in a rural, sparsely populated area of Garfield County adjacent to existing pipeline rights-of-way and near existing oil and gas development infrastructure. As such, as well as based on review of the project area in relation to the data available on the EPA's EJScreen

website (https://ejscreen.epa.gov/mapper/), the Proposed Action is not anticipated to have a disproportionally high or adverse effect on low income or minority populations.

Noise. Heavy equipment and internal combustion engines would be the primary sources of noise. Noise would be temporary and limited to daylight hours.

Noxious Weeds. Infestations of State-listed noxious weeds and other invasive non-native plants would be monitored and controlled during each growing season until final reclamation status is achieved.

Safety. The construction contractor would have a trained professional with a safety manual on-site that illustrates how to respond to human health or environmental hazards.

Transportation. Traffic volumes would temporarily increase during the pipeline construction period including daily crew visits, truck deliveries of materials, and operation of equipment. During construction, existing roads would temporarily be open to one-way traffic for a period of up to 5 weeks in various sections. Traffic control or traffic lights would be used in areas with one-way traffic. After completion of the pipeline construction work, traffic would revert to existing traffic levels, focusing on periodic inspections and maintenance activities of the pipeline.

Vegetation. Vegetation along the ROW consists of sagebrush shrublands, oakbrush shrublands, mixed mountain shrublands, mixed spruce-fir woodlands, and riparian woodlands along West Mamm Creek. Gambel oak stands and mountain shrub communities dominate the lower elevation areas, which give way to aspen and spruce stands at the higher elevations. No Federally listed, proposed, or candidate threatened or endangered plant species are known or expected to occur within or near the pipeline alignments.

Harrington's beardtongue which is a BLM sensitive and Forest Service-sensitive plant species is known to occur within and adjacent to the proposed pipeline alignment. Impacts to this species would occur and therefore, mitigation would be required in order minimize these impacts. Additional special status plant surveys in the survey area between the 2021 survey buffer and the now-required 100-meter survey buffer (in accordance with the CRVFO RMP 2016) were conducted during the flowering season of 2023.

Visual Resources. The project area is within BLM Visual Resource Management Class III and Class IV areas and a Forest Service Scenic Objective area designated as Low. The project is adjacent to existing rights-of-way and will minimally widen the already disturbed area. Following restoration, observers would be unlikely to discern the difference between pre- and post-construction visual conditions.

Waste. Solid waste would be kept in vehicles and removed from the project area each day. Prior to reclamation, the permanent and short-term ROW areas would be cleared of all remaining debris, which would then be hauled to an approved disposal facility. At staging areas and/or along the working spread of the pipeline, portable sanitary facilities would be appropriately located and serviced to minimize the potential for discharge to stormwater conveyances and would be staked or otherwise secured to prevent blow-over, tipping by vandals, and leakage.

Water Resources. In accordance with CDPHE general stormwater permit and Stormwater Management Plan (SWMP), stormwater best management features would be installed prior to construction and then maintained. The SWMP addresses potential stormwater discharge sources of pollution that could affect surface-water quality if not managed properly and identifies BMPs that would be used to maintain surface-water-quality standards. Eleven potentially jurisdictional Waters of the U.S. (WOTUS) were observed during surveys along project features (WestWater 2023). The proposed project features would cross several unnamed intermitted drainages in addition to Dry Creek. The National Wetlands Inventory (NWI) database was reviewed and no wetlands were observed where any of the proposed project features cross the NWI-mapped drainages.

Wildlife It is unlikely that project development would impact populations of sensitive species of bats due to the absence of known or suitable breeding habitat and the availability of foraging and roosting habitat in

the surrounding area. The project area does not contain a sufficient amount of suitable American marten habitat to be anything other than marginal habitat. The project area is on the periphery of Canada lynx range and does not contain necessary characteristics of viable Canada lynx habitat.

Construction of the project is expected to occur as soon as permits and approvals are obtained. Surveys for nesting raptors, Birds of Conservation Concern, and migratory birds protected by the Migratory Bird Treaty Act (MBTA) would need to be completed prior to any construction work or vegetation removal initiated during raptor nesting season (February 15 to August 15) or migratory bird nesting season (May 15 to July 15). There is potential for the federally-listed distinct western population segment of yellow-billed cuckoo to occur in the project area.

Stormwater runoff and any water depletions required to complete this project may affect special status species of fish and amphibians. Tracking and mitigation of depletions would be required according to the 2017 Programmatic Biological Opinion issued by the USFWS for minor water depletions. Stormwater management plans, spill prevention, and streambank erosion mitigations would be required for construction activities in riparian areas to protect fish and amphibian breeding and foraging habitat. Due to the high availability of suitable habitat for the midget faded rattlesnake in the region surrounding the project area, this project is unlikely to impact the local population.

The project area is within elk and mule deer winter range and winter concentration areas. To protect sensitive big game winter range, the operator would be required to eliminate traffic on the BLM ROW from January 1 to March 1 annually, to the extent practicable.

2.2 NO ACTION ALTERNATIVE

The No Action Alternative would not authorize construction or other ground-disturbing activities on BLM-managed lands or on NFS lands. TEP would not construct the 6-inch and 8-inch produced water pipelines which would expand their water management system to support existing infrastructure and any future development. GRG would not construct the two 8-inch natural gas pipelines which would expand their ability to transport natural gas to national markets.

2.3 LAND USE PLAN SPECIAL STIPULATIONS

Stipulations identified in the BLM 2015 CRVO ROD/ARMP (described in **Section 2.4**) and applicable to the West Mamm Creek Pipeline Project are listed in **Table 3**. Further descriptions of exception criteria and standards are found in the referenced land use plan.

Table 3. Protective Stipulations Applicable to the West Mamm Creek Project	
Authority	***Stipulations***
2015 ROD/ARMP	CRV-No Surface Occupancy (NSO)-5. Perennial Streams, Waterbodies, Riparian Areas, and Aquatic Dependent Species. Prohibit surface occupancy and surface-disturbing activities within a buffer distance of 328 horizontal feet from the outer edge of riparian/wetland zones.
	CRV-Timing Limitation (TL)-2. Big Game Winter Habitat. Prohibit surface occupancy and surface-disturbing activities from December 1 to April 15 to protect mule deer, Rocky Mountain elk, and Rocky Mountain bighorn sheep winter range, severe winter range, and winter concentration areas; moose winter range; and pronghorn winter concentration areas.
	CRV-TL-4: Nesting Season for Migratory Birds. Prohibit initiation of surface occupancy and surface-disturbing activities between May 15 and July 15 to minimize the destruction of active nests. Application of the TL would consider the type of equipment to be used (e.g., hand-operated power tools verses mechanized/motorized equipment), the scale and duration of the project, habitat types present, breeding phenology, weather conditions, elevation, and terrain.
	CRV-TL-5: Nesting Raptors. Prohibit surface occupancy and surface-disturbing activities within species-specific buffer distances from active nests of non-special status birds of prey and during species-specific nesting periods. The general nesting period in the project area for non-special status raptor species expected to occur is February 15 to July 15.
	CRV-Controlled Surface Use (CSU)-1. Slopes Greater than 30% or Fragile/Saline Soils: As appropriate, apply CSU constraints on areas: 1) with slopes steeper than 30% or 2) areas with fragile and saline soils regardless of slope based on the NRCS soil description and surveys.
	CRV-CSU-3: Intermittent and Ephemeral Streams. Apply CSU constraints within 100 feet from the edge of intermittent or ephemeral stream drainages as defined by the USGS National Hydrography Dataset or field evaluation.
	CRV-CSU-4: Riparian and Wetland Vegetation Zones. Apply CSU constraints from 328 to 500 horizontal feet from the outer edge of the riparian/wetland zones.
	CRV-CSU-6: BLM Sensitive Plants outside of ACEC. Apply CSU constraints to surface-disturbing activities within a 100-meter (328-foot) buffer around occupied habitat for sensitive plants outside of ACECs.

2.4 PLAN CONFORMANCE REVIEW

The Proposed Action is subject to, has been reviewed for, and is in conformance with (43 CFR §1610.5, BLM 1617.3) the following plan:

Land Use Plan (LUP) Name: *Colorado River Valley Field Office (CRVFO) Record of Decision and Approved Resource Management Plan (ROD/ARMP), approved June 12, 2015.*

Decision Language: Page 106, LRT-GOAL-01, LRT-OBJ-01: *"Provide for the development of transportation systems, utilities, communication sites, and renewable energy resources when such needs are consistent with other resource values."*

Page 106, Lands and Realty, LRT-GOAL-01 – "*Meet Public needs while for realty authorizations such as ROWs, renewable energy sources, permits, and leases when such needs are consistent with other resource values."*

Page 111, Goal (MIN-GOAL-01): *"Provide opportunities for leasing, exploration, and development of fluid minerals using balanced multiple-use management to meet local and national energy needs."*

Page 111, Oil and Gas, including Coalbed, Natural Gas, and Geothermal (MIN-OBJ-01): *"Facilitate orderly, economic, and environmentally sound exploration and development of oil and gas resources (including coalbed, natural gas and geothermal) using the best available technology."*

Page 111, Management Action (MIN-MA-01): *"Manage approximately 603,100 acres of Federal mineral estate as open to oil and gas leasing and development."*

Determination of Conformance: The Proposed Action is subject to, has been reviewed for, and is in conformance with the LUP.

Land Use Plan (LUP) Name: *U.S. Department of Agriculture, Forest Service, White River National Forest. Final Record of Decision: Oil and Gas Leasing on Lands Administered by The White River National Forest, approved December 3, 2015 and U.S. Department of Agriculture, Forest Service, White River National Forest Land and Resource Management Plan – 2002 Revision.*

Decision Language: LUP Chapter 2, Page 2-4 Geology, Mineral and Energy Resources, Standard 1. Recommend consent to lease on available lands for oil and gas leasing with appropriate lease stipulations as set forth in the December 3, 2015 Record of Decision on the White River National Forest Oil and Gas Leasing Final Environmental Impact Statement.

Page 6 of the ROD: *"Currently, 114,520 acres in the WRNF are leased."* [and later] "*If these leases expire, are relinquished, are terminated, or are completed and rehabilitated, then the parcels become subject to the USFS availability decisions."*

Determination of Conformance: The proposed pipelines would be located in areas administratively available for leasing (see Map 1 to the 2015 WRNF Oil and Gas Leasing ROD), in LUP Management Areas 5.41/Deer and Elk Winter Range and 5.43/Elk Habitat about which the LUP states, "*Oil and gas leasing and locatable mineral exploration is allowed in all prescriptions in Category 5*" (see LUP Table 3-5, footnote 3). The Proposed Action is therefore in conformance with the applicable LUP standards for the WRNF.

2.5 DECISION TO BE MADE

Since the West Mamm Creek Pipeline project proposes activities on both BLM and NFS lands, there will be two separate decisions, one for each agency. The primary decision by the BLM upon completion of this EA is whether to authorize the proposed 8-inch and 6-inch produced water pipelines on BLM-managed lands through the issuance of 30-year ROW (COC 80870), to authorize access (COC 80933), and to authorize a short-term ROW (COC 80941) for temporary use areas during construction. The primary decision by the Forest Service upon completion of this EA is whether to authorize the proposed 8-inch produced water pipelines on NFS lands and whether to authorize the proposed 8-inch natural gas pipelines on NFS lands.

Based on the information presented and analyzed in this EA, the BLM and Forest Service may choose to (a) authorize the Proposed Action; (b) authorize the Proposed Action with modifications; or (c) not authorize the Proposed Action at this time. Options (a) and (b) would include the application of ROW stipulations as mitigation to avoid, minimize, or offset impacts.

If it is determined there are no significant impacts, that finding, along with the EA and a draft decision notice, will be published for a 45-day objection period. If no objection is filed within the 45-day time period, implementation of the decision may begin on, but not before, the 5th business day following the close of the objection filing period (§ 218.12(c)(2)). If an objection is received, implementation may occur immediately following the close of the objection resolution period (§218.12(a)). If the EA concludes there is potential for significant impacts, then an EIS will need to be prepared.

The BLM Decision Record and Forest Service Decision Notice associated with this EA may not constitute the final approval for all actions, such as individual ROW grants associated with the Proposed Action. However, it provides the BLM and the Forest Service with an analysis on which to base the determination for individual components of the Proposed Action.