BLM

United States Department of the Interior
Bureau of Land Management

Environmental Assessment
for the Baxter Pass Road Overhead Power Line

Grand Junction Field Office
2815 H Road
Grand Junction, Colorado 81506

DOI-BLM-CO-130-2013-0016-EA
COC 76033
COC 76033-01

May 2016

The Bureau of Land Management is responsible for the stewardship of our public lands. It is committed to manage, protect, and improve these lands in a manner to serve the needs of the American people for all times. Management is based on the principles of multiple-use and sustained yield of our nation's resources within a framework of environmental responsibility and scientific technology. These resources include recreation; rangelands; timber; minerals; watershed; fish and wildlife; wilderness; air; and scenic, scientific and cultural values.

TABLE OF CONTENTS

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CHAPTER 1 – INTRODUCTION

1.1 IDENTIFYING INFORMATION

This Environmental Assessment (EA) has been prepared by the Bureau of Land Management (BLM) in response to Grand Valley Power's (GVP's) application for Rights-of-Ways (ROWs) for transportation and utility systems on federal lands (Standard Form 299) to the BLM Grand Junction Field Office (GJFO). The ROWs are requested for power to the Enterprise Gas Processing, LLC (Enterprise) valve site. GVP has requested a right-of-way (ROW) for a single phase overhead distribution power line under 25 kV as well as temporary work areas during the construction of this power line. GVP requests the following:

- A grant for 62,603 feet in length (50 feet wide) of ROW (71.859 acres). The proposed route generally follows the Baxter Pass Road located NW of Mack, Colorado in Mesa and Garfield counties.

- Four Temporary Work Areas consisting of a total of 8,750 feet or 0.201 acres, more or less.

GVP submitted a Plan of Development (POD) for the power line project to the BLM GJFO, which describes construction, reclamation, operation, maintenance, and abandonment of the Proposed Action.

The facility, owned by Enterprise, is a valve site which provides Pressure Control Valves, Motor Operated Block Valves (6), Flow Transmitters (3), and Pressure Transmitters (6). These devices monitor and relay pressure and flow information and provide emergency shut-off functions to and from a centralized dispatch center. Three pipelines deliver natural gas liquids (NGL) from Wyoming to New Mexico, allowing the pipelines to operate safely and efficiently. The current on-site power is a combination of solar with batteries, wind, and propane powered generators. A loss of power at the facility disables the dispatch center from monitoring and controlling the pressures and volumes in the pipelines in the event of built up, or pipeline breaks. These events create the need for a field inspection to check equipment and re-establish power. Enterprise is requesting commercial electric service to their valve site, which would provide increased reliability over their current electric source. This change would help to ensure safety for the day to day pipeline operations.

This EA was prepared in conformance with the policy guidance provided in the BLM's National Environmental Policy Act (NEPA) Handbook H-1790-1 (BLM, 2008a). The BLM Handbook provides instruction for compliance with the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations (CFR) §1500-1508) and U.S. Department of the Interior (DOI) Manual 516 DM 1-7 on NEPA compliance (DOI, 2005).

CASEFILE/PROJECT NUMBER: COC76033 and COC76033-01 / DOI-BLM-CO-130-2013-0016-EA

PROJECT NAME: Baxter Pass Overhead Power Line

PLANNING UNIT: Grand Junction Field Office

1.2 PROJECT LOCATION AND LEGAL DESCRIPTION

The power line is proposed in Garfield and Mesa County, approximately 5 miles northwest of Mack, Colorado in the Grand Junction Colorado U.S. Geologic Survey (USGS) Quadrangle. The line runs south (private) to north along Mesa County Road 4, also known as Baxter Pass Road and Garfield County Road 201. The line concludes at the Enterprise valve site located in the Sixth Principal Meridian, T. 7 S. R. 104 W., Section 26, NWNW.

Sixth Principal Meridian, Garfield and Mesa County, Colorado
T. 7 S. R. 104 W.
Section 26, NW¼NW¼;
Section 27, E½NE¼, N½SE¼, SE¼SW¼, SW¼SE¼;
Section 34, E½NW¼, N½SW¼, SW¼SW¼;
T. 8 S. R. 104 W.
Section 3, Lot 4, SW¼NW¼, W½SW¼;
Section 10, W½NW¼, W½SW¼;
Section 15, W½NW¼, W½SW¼;
Section 22, N½NW¼, SE¼NW¼, NE¼SW¼, S½SW¼;
Section 27, W½NW¼, SE¼NW¼, E½SW¼, W½SE¼;
Section 34, E½NW¼, N½SW¼, SW¼SW¼;
T. 9 S. R. 104 W.
Section 2, SW¼SW¼;
Section 3, Lots 6, 11, 14, 19, 20, E½SE¼;
Section 11, N½NW¼, SE¼NW¼, SW¼NE¼, NWSE¼, S½SE¼;
Section 14, NE¼NE¼.

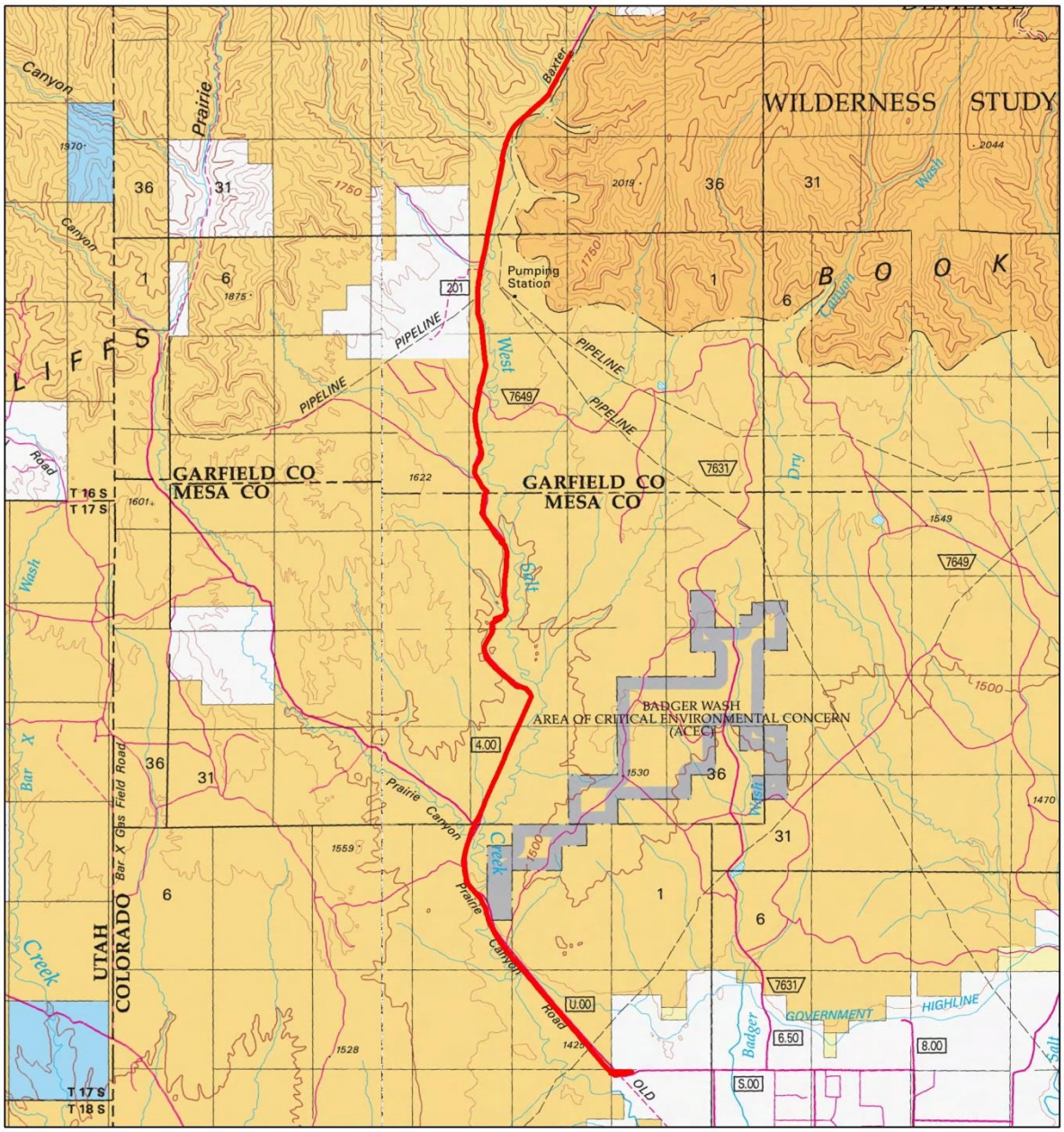
1.3 PURPOSE AND NEED

The purpose for the Proposed Action is to provide reliable power to the Enterprise Baxter Pass valve site that is almost entirely located on public land, except for 750 feet that is placed on private land (T. 9 S. R. 104 W., Sec. 13, NWNW). The need for the action is established by the BLM's responsibilities under the Federal Land Policy and Management Act (FLPMA) to respond to GVP's request for a ROW Grant for utilities.

In order to issue ROW Grants, the actions would need to be consistent with other existing authorized activities in the Project Area. If granted, the actions would include development of appropriate project design and mitigation that would be consistent with the goals, objectives, and decisions of the Grand Junction Field Office Resource Management Plan (RMP-BLM, August 2015), as well as with other applicable federal, state, and county policies, regulations, and laws. The Proposed Action is consistent with FLPMA, which reiterates that the 1970 Mining and Minerals Policy Act shall be implemented and directs that public lands be managed in a manner which recognizes the need for domestic sources of mineral and other resources.

Exhibit A

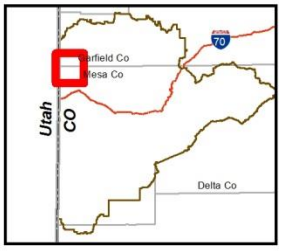
Grand Valley Power Proposed Overhead line - COC76033



0 1 2 3 Miles

- Bureau of Land Management
- Bureau of Reclamation
- Private
- State

N



This map was produced by the BLM Grand Junction Field Office August, 2015

Location of the Project in the Grand Junction Field Office

1.4 PLAN CONFORMANCE REVIEW

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

Name of Plan: Grand Junction Field Office Approved Resource Management Plan (RMP)

Date Approved: AUGUST 2015

Decision Number/Page: Page 169

Decision Language: The objective (L&R-OBJ-01) of the GJFO RMP under Public Utilities Management is "Provide for the development and operation of transportation systems, pipelines, transmission lines, communication sites, renewable energy resources, and other land use authorizations in an environmentally responsible and timely manner".

Policies for development and land use decisions are currently contained in the GJFO RMP and Record of Decision (ROD) dated August 2015. Management activities and development projects selected and approved must be in conformance with the RMP. According to the details summarized below, the BLM has determined that the Proposed Action would comply with management objectives in the BLM GJFO RMP.

1.5 PUBLIC STANDARDS FOR LAND HEALTH

In January 1997, the Colorado State Office of the BLM approved the Standards for Public Land Health and amended all RMPs in the State. Standards describe the conditions needed to sustain public land health and apply to all uses of public lands.

Standard 1: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes.
Standard 2: Riparian systems associated with both running and standing water function properly and have the ability to recover from major disturbance such as fire, severe grazing, or 100-year floods.
Standard 3: Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential.
Standard 4: Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.
Standard 5: The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado.

Because standards exist for each of these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in Chapter 3 of this document.

1.6 PUBLIC PARTICIPATION

Scoping is the process by which the BLM solicits internal and external input on the issues, impacts, and potential alternatives that will be addressed, along with the extent to which those issues and impacts will be analyzed in a NEPA document. Internal scoping is the use of BLM staff and cooperating agency partners to help determine what needs to be analyzed in a NEPA document. External scoping involves notification and opportunities for feedback from other agencies, organizations, tribes, local governments, and the public. NEPA regulations (40 CFR 1500-1508) do not require external scoping for an EA. The BLM decided to internally scope the Proposed Action and to notify the public about the project via the GJFO website.

1.5.1 Internal Scoping: Internal Scoping included presentation and discussion of the project at a BLM interdisciplinary meeting (IDT) and a field visit to the proposed alignment on April 2, 2013. The Project was posted on the GJFO website on November 8, 2013 and is still posted; the BLM received no public comments on this project.

1.5.2 Issues Identified: The following issues were identified during Internal Scoping:

1. How would the Proposed Action affect Threatened, Endangered, or BLM Sensitive plant species?
2. How would the Proposed Action affect raptors and other wildlife species?
3. Would significant historic and prehistoric cultural resources or visual setting be affected by the Proposed Action?
4. How would the Proposed Action affect the visual and scenic values of the area, from the Baxter Pass Road?
5. Can the impacts of the Proposed Action be avoided by generating more electricity at the valve site?
6. Can the impacts of the Proposed Action be avoided by burying the electric distribution line to the Enterprise valve site?

1.7 DECISION TO BE MADE

BLM decision-makers will decide whether or not to grant the requested ROW based on the analysis contained in this EA. The BLM may choose to: a) authorize the Project as proposed, b) authorize the Project with modifications/mitigation, c) modify the Proposed Action, or d) deny the application. The Decision Record (DR) associated with this EA may not constitute the final approval for the Proposed Action. It provides the BLM Authorized Officer (AO) with an analysis from which to base the final approval for the proposed ROW.

CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

The purpose of this chapter is to describe the Proposed Action and Alternatives. Alternatives considered but not analyzed in detail as well as the No Action Alternative are discussed in this chapter.

2.2 ALTERNATIVES ANALYZED IN DETAIL

2.2.1 Proposed Action

GVP has requested a right-of-way on BLM administered land for a new single phase power line less than 25 kV to provide electricity to an existing valve site operated by Enterprise Products. The proposed line would begin in Mesa County, Colorado at the address of 506 S Road located in the Sixth Principal Meridian, T. 9 S., R. 104 W., Section 13 and continue along the Baxter Pass Road (Mesa County Road 4) concluding in the NW corner of Section 26, T. 7 S., R. 104 W., Garfield County, Colorado (See Exhibit A). The design, construction, operation, and maintenance of the project would be expected to meet or exceed the requirements of the National Electrical Safety Code and U.S. Department of Labor Occupational Safety and Health Standards, as well as GVP's requirements for the safety and protection of landowners and their property.

The estimated length of the route is approximately 11.86 miles (approximately 62,603 feet). The proposed route generally follows the Baxter Pass Road located NW of Mack, CO (maps attached). Except for the first 750 feet, the entire proposed route is on public land managed by the BLM. GVP has applied for a 50 foot ROW, 25 feet either side of centerline of the power line, or 71.86 acres. GVP has applied for (4) temporary work areas for construction space during power line installation.

Single-pole wood structures are proposed for the project. The span length between structures would average approximately 280 feet. Wood pole structures would be 40, 45, 50, and 55 feet in height, depending on the terrain to meet minimum height requirements. Typical design characteristics are listed in Table 1.

TABLE 1 *GVP TYPICAL DESIGN CHARACTERISTICS*	
Line length	Approximately 62,304 feet
Type of structure	Single-pole wood
Structure height	40 to 55 feet
Span length	Ruling span 280 feet
Number of structures per mile	Approximately 19 structures per mile
Right-of-way width	Approximately 50 feet
Land disturbed (approximate): <u>Temporary</u> Structure site Wire pulling, splicing sites Removal of existing line	Temporary workspace for access would include four areas. Where structures are near the County roads and the permanent BLM permit overlaps the County road, ROW equipment can set up and work from the edge of the road ROW. GVP will submit utility permit applications to Mesa County and Garfield County for their approval to work in the road ROW Proper traffic control and signage to be used. An all-terrain vehicle would be used for wire pulling along the permanent right-of-way. Sites for tensioning equipment are located in the proposed permanent right-of-way. None
Access roads	Use County road and the line corridor.
Voltage	Under 25,000 volts phase to phase
Circuit configuration	Single circuit under 25kV, Single phase conductor and a single neutral conductor.
Distribution Conductor size	4 ACSR, 7/1 Swanate, 0.0411 sq. inch diameter(NEUTRAL) 1/0 ACSR 6/1 Raven (phase), 0.0967 sq. inch diameter(PHASE)
Ground clearance of conductor	Follow the National Electrical Safety Code ground clearance safety rules for overhead power lines
Pole depth	Typically between 6 feet and 7.5 feet deep.

<u>Access</u>

Existing roads would provide access for project construction, operation, and maintenance. Construction requires the movement of vehicles along the permanent proposed right-of-way and the temporary construction work space as requested in the application. No new permanent access road construction is anticipated. No vegetation removal or surface disturbance would occur in the temporary work spaces except in the areas where vegetation would prevent vehicle travel. If vegetation removal is necessary, it would occur by crushing, mowing, or cutting of above ground vegetation.

<u>Preconstruction Activities</u>

Structure locations would be flagged and staked, and the proposed centerline would be flagged and staked where necessary.

Construction Activities

Following preconstruction activities, construction activities would include digging holes, assembling and erecting structures, wire stringing, cleanup, and site reclamation. The number of workers and type of equipment expected to be used to construct the proposed distribution line are provided in Table 2.

Construction Yards – One temporary construction yard is anticipated. The location of any temporary yards would be suggested by the contractor and such yard would be located on private property. This yard would be approximately 0.5 acres and would be located near the work site. GVP anticipates the construction yard to be located at either 506 S Road or 540 S Road. Both properties have county road access and are located adjacent to the southern terminus of the project.

TABLE 2
GVP TYPICAL DISTRIBUTION LINE CONSTRUCTION
ESTIMATED PERSONNEL AND EQUIPMENT REQUIRED

Survey	1-2 people	Equipment: 2 pickup trucks
Hole digging	4 people	Equipment: 2 hole digger trucks/back-hoe 2 pickup trucks
Pole haul	2 people	Equipment: 1 pole haul truck
Structure erection	8 people	Equipment: 2 line trucks 2 pickup trucks
Conductor	4 people	Equipment: 1 drum puller 1 double-wheeled tensioner 1 wire reel trailer 1 line truck 1 sagging equipment 2 pickup trucks
Clean-up	4 people	Equipment: 2 pickup trucks
Rehabilitation	2 people	Equipment: 1 pickup truck
Total personnel required	8 people*	
* More personnel may be used in order to meet schedule.		

Structure Sites (Poles and Anchors) - The clearing of some natural vegetation might be required; however, selective clearing would be performed only when necessary to provide for surveying, electrical clearance, line reliability, and construction and maintenance operations. Rights-of-way would not be chemically treated unless necessary to comply with requirements of a permitting agency. Holes would be dug using an auger and backhoe to a depth of 6 to 7.5 feet deep. If needed, down guy (anchor) holes would be dug at this time to a depth of 8 feet. Digging crew

would move to the next location and the structure crew would place and secure the pole structures within the holes.

Structure Assembly and Erection – Poles and associated hardware would be shipped to each structure site by truck. Structure assembly and mounting of associated line hardware would take place at each site, where holes have been dug. The assembled structure would then be raised and placed in the pre-dug holes. The hole would then be backfilled and compacted. Associated anchors would be placed at this time.

For public protection during wire installation, guard structures would be erected over obstacles such as railroads, existing power lines, and structures. Guard structures consist of H-frame poles placed on either side of the obstacle. These structures prevent ground wire, conductors, or other equipment from falling on an obstacle. Equipment for erecting guard structures includes augers, line trucks, pole trailers, and cranes. Guard structures may not be required on small roads; on such occasions, other safety measures such as barriers, flagmen, or other traffic control would be used.

Next, a pilot line is pulled from structure to structure (or strung) by a vehicle and threaded through the stringing sheaves at each tower. Then a larger diameter, stronger line (the pulling line) is attached to the pilot line and strung. At regular intervals sheaves are temporarily placed to guide the wire during the stringing process. This prevents the wire from dragging along the surface. This process is repeated until the ground wire or conductor is pulled through all sheaves.

The ground wire and conductor are strung using power pulling equipment at one end and power braking or tensioning equipment at the other end. Sites for tensioning equipment and pulling equipment are approximately 5,000 feet apart.

The tensioning site would be an area approximately 150 feet in length by 50 feet wide and can utilize the permanent ROW. The tensioner, line truck, and wire trailer that are needed for stringing and anchoring the ground wire or conductors would be located at this site. The tensioner, along with the puller, maintains tension on the ground wire or conductor. Maintaining tension ensures adequate ground clearance and would be necessary to avoid damage to the ground wire, conductor, or any objects below them during the stringing operation.

The pulling site requires two-thirds the area of the tension site. A puller and trucks are needed for the pulling and temporary anchoring of the ground wire and conductor. Once final tension (removal of sagging) is done to all wires, they are then physically tied on to insulators.

Cleanup – Construction sites, material storage yards, and access roads would be kept in an orderly condition throughout the construction period. Refuse and trash, including stakes and flags, would be removed from the sites and disposed of in an approved manner. No construction equipment oil or fuel would be drained on the ground. Oils or chemicals would be hauled to an approved site for disposal. No open burning of construction trash would occur on BLM-administered lands.

Reclamation – Following construction and cleanup, reclamation would be completed. The disturbed surfaces would be restored to the original contour of the land surface to the extent determined by the BLM. Seed would be applied if requested by BLM.

Operation and Maintenance

Ground maintenance patrols would review the line periodically. Routine maintenance would include replacing damaged structures, conductors, or insulators as needed and tightening nuts and bolts.

GVP has included Standard Mitigation Measures in Table 3, Selectively Recommended Mitigation Measures in Table 4, and Standard Operating Procedures in Table 5 all from previous experience with construction on public lands.

All of the above measures and practices would be implemented throughout the construction and operation of the project in order to reduce potential adverse environmental impacts. Most of the impacts would be short term and generally occur during the construction period.

TABLE 3 **GVP STANDARD MITIGATION MEASURES**
1. All construction vehicle movement outside of the right-of-way will be restricted to pre-designated access, contractor acquired access, or public roads.
2. The limits of construction activities will be predetermined, with activity restricted to and confined within those limits. No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate survey or construction activity limits. The right-of-way boundary will be flagged in environmentally sensitive areas described in the plan of development to alert construction personnel that those areas will be avoided.
3. In construction areas where re-contouring is not required, vegetation will be left in place wherever possible to avoid excessive root damage and allow for re-sprouting.
4. In construction areas where ground disturbance is significant or where re-contouring is required, surface restoration will occur as required by the BLM. The method of restoration typically will consist of returning disturbed areas to their natural contour (to the extent practical), reseeding or re-vegetating with native plants (if required), installing cross drains for erosion control, placing water bars in the road, and filling ditches. Seed will be tested and certified to contain no noxious weeds as defined by the State of Colorado Agricultural Department. Seed viability also will be tested at a certified lab approved by the authorized officer. If seed is not from Colorado, then seed tests should include the state of origins' noxious weeds, as well as Colorado's.
5. Watering facilities (e.g., tanks, developed springs, water lines, wells, etc.) will be repaired or replaced to their pre-disturbed conditions as required by the land management agency if they are damaged or destroyed by construction activities.
6. Prior to construction, all construction personnel will be instructed on the protection of cultural, paleontological, and ecological resources. To assist in this effort, the construction contract will address (a) federal and state laws regarding antiquities, fossils, and plants and wildlife, including collection and removal; and (b) the importance of these resources and the purpose and necessity of protecting them.

7. If required, an initial intensive cultural resource inventory survey will be conducted prior to construction. Impact avoidance and mitigation measures developed in consultation with appropriate land management and regulatory agencies and other interested parties will be implemented. In addition, supplemental surveys of appurtenant impact zones beyond the corridor will be undertaken as needed.
8. Any cultural and/or paleontological resource discovered during construction by GVP or any person working on GVP's behalf on public or federal land will be reported immediately to the authorized officer. GVP will suspend operations in the area until an evaluation is completed to prevent the loss of cultural or scientific values.
9. All construction and maintenance activities will be conducted in a manner that would minimize disturbance to vegetation, drainage channels, and intermittent and perennial stream banks. All existing roads will be left in a condition equal to or better than their condition prior to the construction of the transmission line.
10. All requirements of those entities having jurisdiction over air quality matters will be adhered to and any necessary permits for construction activities would be obtained. Open burning of construction trash (cleared trees, etc.) will not be allowed on BLM-administered lands.
11. Fences and gates, if damaged or destroyed by construction activities, will be repaired or replaced to their original pre-disturbed condition as required by the land management agency. Temporary gates will be installed only with the permission of the land management agency.
12. During operation of the distribution line, the right-of-way will be maintained free of construction related non-biodegradable debris.
13. Totally enclosed containment will be provided for all hazardous materials (if needed) and trash. All construction waste including trash, litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials will be removed to a disposal facility authorized to accept such materials.
14. Structures will be constructed to conform to Suggested Practices for Raptor Protection on Power Lines**:** ***State of the Art in 2006*** (Raptor Research Foundation, Inc. 2006).
15. If required, third-party environmental contractors will be used throughout the construction effort, from clearing through rehabilitation.
16. GVP will trim trees in preference to cutting trees, and will cut trees in preference to bulldozing them. No tree clearing is anticipated at the time of application.
17. Construction holes left open overnight will be covered to prevent damage to livestock or wildlife.
18. GVP will respond to complaints of line-generated radio or television interference by investigating the complaints and implementing appropriate mitigation measures. The distribution line will be patrolled on a regular basis so that damaged insulators or other line materials that could cause interference are repaired or replaced.
19. GVP will apply necessary mitigation to minimize problems of induced currents and voltages onto conductive objects sharing a right-of-way, to the mutual satisfaction of the parties involved.
20. The proposed hardware and conductor will limit the audible noise, radio interference (RI), and television interference (TVI), due to corona. Tension will be maintained on all insulator assemblies to assure positive contact between insulators, thereby avoiding sparking. Caution will be exercised during construction to avoid scratching or nicking the conductor surface, which may provide points for corona to occur.

TABLE 4
GVP SELECTIVELY RECOMMENDED MITIGATION MEASURES

Note: These selective mitigation measures apply only to specific locations that are identified or during field investigations and recorded in the plan of development.

1. No widening or upgrading of existing access roads will be undertaken in the area of construction and operation, except for repairs necessary to make roads passable, where soils or vegetation are very sensitive to disturbance.
2. No blading of new access roads in the area of construction and operation is anticipated. Should the need for new access roads be determined, GVP will document these corridors and will comply with all aspects of the BLM right-of-way grant prior to any access road construction. Existing crossings will be utilized at washes. These access routes must be flagged with an easily seen marker and the route must be approved by the authorized officer in advance of use.
3. Modified structure design will be utilized as necessary to minimize ground disturbance, operational conflicts, visual contrast, or avian conflicts.
4. In designated areas, structures will be placed or rerouted so as to avoid sensitive features such as, but not limited to, riparian areas, water courses, and cultural sites, or to allow conductors to clearly span the features, within limits of standard tower design. This will minimize the amount of disturbance to the sensitive features or reduce visual contrast.
5. With the exception of emergency repair situations, right-of-way construction, restoration, maintenance, and termination, activities in designated areas will be modified or discontinued during sensitive periods (e.g., nesting and breeding periods) for candidate, proposed threatened and endangered, or other sensitive animal species. This list will be approved in advance by the authorized officer of the BLM.
6. Existing roads and trails that will be blocked as a result of construction will be rerouted as directed by the authorizing officer.
7. The design of the poles will be determined to achieve the minimum practicable visual impacts.

TABLE 5
GVP STIPULATIONS – STANDARD OPERATING PROCEDURES

1. GVP will construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with the plan of development as it is approved and made part of the right-of-way grant. Any relocation, additional construction, or use that is not in accord with the approved plan(s) of development will not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations and approved plan(s) of development, will be made available on the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above shall be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.

2. GVP will submit a plan or plans of development that describe in detail the construction, operation, maintenance, and termination of the right-of-way and its associated improvements and/or facilities. The degree and scope of these plans will vary depending on (1) the complexity of the right-of-way or its associated improvements and/or facilities, (2) the anticipated conflicts that require mitigation, and (3) additional technical information required by the authorizing officer. An approved plan of development will be made a part of the right-of-way grant.
3. GVP will contact the authorized officer at least 10 days prior to the anticipated start of construction and/or any surface-disturbing activities. The authorized officer may require and schedule a preconstruction conference with GVP prior to commencement of construction and/or surface-disturbing activities on the right-of-way. GVP, GVP's contractor(s), or agents involved with the construction and/or surface-disturbing activities on the right-of-way should attend this conference to review the stipulations of the grant including the plan(s) of development.
4. GVP will designate a representative(s) who will have the authority to act upon and implement instructions from the authorized officer within a reasonable time when construction or other surface-disturbing activities are underway.
5. The authorized officer may suspend or terminate in whole or in part, any notice to proceed which has been issued when, in his/her judgment, unforeseen conditions arise which result in the approved terms and conditions being inadequate to protect the public health and safety or to protect the environment.
6. The design and location of all facilities shall be approved by the authorized officer prior to construction.
7. The holder will protect all survey monuments found within the right-of-way. Survey monuments include but are not limited to General Land Office and BLM Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. In the event of obliteration or disturbance of any of the above, GVP will immediately report the incident, in writing, to the authorized officer and the respective installing authority, if known. Where General Land Office or BLM right-of-way monuments or references are obliterated during operations, GVP shall secure the services of a registered land surveyor or a BLM cadastral surveyor to restore the disturbed monuments and references using surveying procedures found in the *Manual of Surveying Instructions for the Survey of the Public Lands of the United States*, latest edition. GVP shall record such survey in the appropriate county and send a copy to the authorized officer. If the BLM cadastral surveyors or other federal surveyors are used to restore the disturbed survey monument, GVP will be responsible for the survey cost.
8. The holder of this right-of-way grant or the holder's successor in interest shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et. seq.) and the regulations of the Secretary of Interior issued pursuant hereto.
9. GVP will conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.
10. GVP will survey and clearly mark the centerline and/or exterior limits of the right-of-way, as determined by the authorized officer.
11. All design; material; and construction, operation, maintenance, and termination practices will be in accordance with safe and proven engineering practices.

12. GVP will inform the authorized officer within 48 hours of any accidents on federal lands that require reporting to the Department of Transportation as required by 49 CFR Part 195.
13. During conditions of extreme fire danger, operations may be suspended or limited in certain areas.
14. The holder will be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2803.1-4. The holder will be held to a standard of strict liability for damage or injury to the United States resulting from fire or soil movement (including landslides and slumps as well as wind and water-caused movement of particles) caused or substantially aggravated by any of the following within the right-of-way or permit area: Activities of the holder including but not limited to construction, operation, maintenance, and termination of the facility. Activities of other parties including but not limited to: - land clearing - earth-disturbing and earth-moving work - blasting - vandalism and sabotage
15. If required within 60 days of completion at the request of BLM, GVP will submit to the authorized BLM officer, as-built drawings and a certification of construction verifying that the facility has been constructed (and tested) in accordance with the design, plans, specifications, and applicable laws and regulations.
16. Construction sites will be maintained in a sanitary condition at all times; waste materials at those sites will be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including but not limited to human waste, debris, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

Potential future upgrades:
This proposed power line is a single phase line which would meet the power requirements of the Enterprise site. The line would have the capacity to provide electric power to many other electric loads at similar sites such as sites for cathodic protection, communication sites, valve stations, house power for compression sites, etc. The line would not have capacity to provide electric power for electric motor driven compressors, such as the nearby Public Service Company Compressor Station

The proposed single phase line could be easily upgraded to three phase. Upgrading the line to three phase would increase capacity and allow additional single phase and/or three phase electric loads to be served by the power line; however, this upgrade would not likely have the capacity to provide power for larger electric motor driven compressors like what is typical for natural gas compressor stations. Three phase upgrade would involve installing cross arms to the existing poles, adding two more conductors and additional guys and anchors as required. GVP would utilize most of the existing poles but some additional poles and some pole replacements would be required.

Future expansions of this line would likely be expected to occur after a five year period. A cost sharing fee would apply to new extensions in the 5 year period after initial construction. After 5 years the cost of new extensions would go down significantly. After planning for this proposal, GVP has received 2 requests for electrical service other than the request from Enterprise in this area. Those requests were not moved forward for cost prohibitive reasons but will likely be reactivated after the 5 year cost sharing period is over. Anticipated future lateral expansion of this local distribution would be to small industry facilities along Baxter Pass Road and adjacent private land.

2.2.2 No Action Alternative

Under the No Action Alternative, the power line would not be authorized. GVP customer Enterprise would continue using their valve site with the electric service consisting of solar, wind, and propane generators. The facility has operated under these conditions since approximately 1980 with a second pipeline added in 1998 and a third pipeline added in 2013.

2.2.3 Buried Power Line Alternative

This alternative would follow roughly the same route as the overhead power line, however would be buried at industry standard depths. Where the route intersects large drainage cut banks, the buried line would come to the surface and span aerially over these deep drainage cuts before continuing underground. GVP estimates fifteen (15) locations would meet this criterion.

Construction of a buried line would cost approximately $2.41 million. This is 321% higher than the overhead construction costs. This option adds complexity due to several buried gas and natural gas liquid pipelines near and crossing the route. This complexity and difficulty increases as the route goes further north where the canyon narrows.

2.3 ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

Under the Enterprise Facility Expansion Alternative, the power line ROW would not be authorized and instead a BLM authorization to Enterprise for expansion of the valve site would be analyzed. This expansion would allow for additional and or larger propane tanks and the addition of a building to protect a propane generator and solar/wind battery storage.

Under this alternative, the BLM could process a separate application for valve site expansion from Enterprise. Expanding the Enterprise valve site would allow for additional propane generators. The site expansion would consist of increasing the current footprint from 0.3 acres to 0.6 acres if needed. This expansion would allow for additional propane tanks to occupy the site and the construction of a building to store and protect an industrial generator and battery bank. This would improve the reliability of electric power by increasing life of both batteries and generator and reducing maintenance costs. The site expansion is within previously disturbed ground from three pipeline construction periods which occurred in 1983, 1996, and 2013.
Under this alternative, Enterprise would continue to use solar, wind, and propane.

This alternative was considered but not analyzed in detail because this form of electric power can be ineffective and unreliable, which doesn't address existing safety concerns. Generators

powered by propane as well as solar/wind are not a reliable source of constant power in this remote location, and thus safety to personnel, the public, and environment are at risk.

CHAPTER 3 – *AFFECTED ENVIRONMENT AND EFFECTS*

3.1 INTRODUCTION

This section provides a description of the human and natural environmental resources that could be affected by the Proposed Action and presents comparative analyses of the direct, indirect, and cumulative effects on the affected environment stemming from the implementation of the actions under the Proposed Action and other analyzed alternatives. This EA draws upon information compiled in the Grand Junction Field Office Approved Resource RMP (BLM 2015).

Within each resource type potentially impacted, when applicable, definitions of the kinds of effects are included in the evaluation of potential environmental effects. Comparison of effects is intended to provide an impartial assessment to help inform the decision-maker and the public. The impact analysis does not imply or assign a value or numerical ranking to effects. Actions resulting in adverse impacts to one resource might impart a beneficial impact to other resources. In general, adverse effects described in this chapter are considered important if they result from, or relate to, the implementation of any of the alternatives. These effects are defined as follows:

- **Direct effects:** effects that are caused by the action, and that occur at the same time and in the same general location as the action.
- **Indirect effects:** effects that occur at a different time or in a different location than the action to which the effects are related. These are usually long term impacts that would continue after the project is implemented.
- **Cumulative effects:** Cumulative effects are defined in the CEQ regulations (40 CFR 1508.7) as "*the impact on the environment that results from the incremental impact of the action when added to other past, present and reasonably foreseeable actions regardless of what agency* (Federal or non-Federal) *or person undertakes such other actions."*

3.1.1 Resources—Not Present on Location or No Impact

The following resources identified as not present or not affected will not be brought forward for additional analysis as described below:

- *Geology/Mineral Resources* – No known unique geological resources occur in the Project Area. Based on the limited depth of disturbance associated with the Project, mineral resources would not be affected.
- *Paleontological* – The Project would not have any impacts to vertebrate paleontological resources.
- *Wastes, Hazardous or Solid* – Standard stipulations would apply and would provide adequate protection.
- *Special Designations (ACEC, SMAs, WSR)* – There would be no direct impacts to special designations. The proposal is adjacent to, but outside Badger Wash ACEC.

- *Wilderness* – There would be no direct impacts to wilderness. The proposal is adjacent to, but outside Demaree WSA.
- *Range* – The project and alternatives would not affect livestock management. Livestock would be in the project area from March 1 to May 31 and October 15 to November 30. Livestock would not be in the area from June 1 to October 1 making this a better time period for project construction to avoid livestock conflicts.
- *Wild Horse and Burros* – The project is not within the Little Book Cliffs Wild Horse Range thus wild horses are not present.
- *Fire and Fuels* – There are no current or proposed fuels projects in this area that would be impacted.
- *Recreation* - Recreation use in the project area is low. The primary activities in the area are associated with dispersed OHV riding and accessing the Book Cliffs area during the fall big game hunting seasons along the Baxter Pass Road. Constructing the power line would not restrict opportunities to participate in these activities. The project is not within a recreation management area. Recreation management is focused on visitor safety and reducing use and user conflicts. Currently, BLM is unaware of any visitor safety issues or conflicts within the project area, and the BLM does not anticipate construction of the power line will result in new safety issues or conflicts.
- *Transportation and Access* – Construction of the power line would not result in any long-term restriction for access to and across public lands. Any restriction associated with construction would likely include traffic being stopped for a short time (less than an hour).

3.1.2 Past, Present, Reasonably Foreseeable Actions

NEPA requires federal agencies to consider the cumulative effects of proposals under their review. Cumulative effects are defined in the Council on Environmental Quality (CEQ) regulations 40 CFR §1508.7 as "…the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions regardless of what agency…or person undertakes such other actions." The CEQ states that the "cumulative effects analyses should be conducted on the scale of human communities, landscapes, watersheds, or air sheds" using the concept of "project impact zone" or more simply put, the area that might be affected by the proposed action. The area that may be affected by this project includes the 5th code watershed that contains the project area. To assess past, present, and reasonably foreseeable actions that may occur within the affected area a review of GJFO NEPA log and our field office GIS data was completed. The following list includes all past, present, and reasonably foreseeable actions known to the BLM that may occur within the affected area:

Past Actions:

- Livestock Grazing
- Rights-of-Way: Numerous pipeline ROWs
- Oil & Gas Development
- Recreation
- Construction of the WEP II Pipeline

Present Actions:

- Livestock Grazing
- Rights-of-Way: Numerous pipeline ROWs
- Oil & Gas Development

Reasonably Foreseeable Actions

- Possibility of additional overhead distribution lines
- Possible extension of the line into West Salt Creek Canyon
- Oil & Gas Development

Resources	Not Present On Location	No Impact	Potentially Impacted	Mitigation Necessary	BLM Evaluator Initial & Date
Air and Climate	☐	☐	☒	Y☐ N☒	KEH 10/22/15
Water (surface & subsurface, floodplains)	☐	☐	☒	Y☐ N☐	KEH 10/26/15
Soils	☐	☐	☒	Y☐ N☐	KEH 10/26/15
Geological/Mineral Resources	☐	☒	☐	Y☐ N☐	DSG 1/29/13
Special Status Plants	☐	☐	☒	Y☒ N☐	ARL 11/25/15
Special Status Wildlife	☐	☐	☒	Y☒ N☐	HLP 11/24/15
Migratory Birds	☐	☐	☒	Y☒ N☐	HLP 11/24/15
Other Important Wildlife Habitat	☐	☐	☒	Y☐ N☒	HLP 11/24/15
Vegetation, Forestry	☐	☐	☒	Y☐ N☐	SC 2/26/13
Invasive, Non-native Species	☐	☐	☒	Y☐ N☐	MT 2/6/13
Wetlands/Riparian Zones	☐	☐	☒	Y☐ N☒	ARL 11/25/15
Cultural or Historical	☐	☐	☒	Y☐ N☐	NFC 1/2/14
Paleontological	☐	☒	☐	Y☐ N☐	DSG 1/29/13
Tribal& American Indian Religious Concerns	☐	☐	☒	Y☐ N☐	NFC 3/10/14
Visual Resources	☐	☐	☒	Y☐ N☐	AW 10/20/15
Social/Economic	☐	☐	☒	Y☒ N☐	CS 11/17/15
Transportation and Access	☐	☒	☐	Y☐ N☐	AW 10/20/15
Wastes, Hazardous or Solid	☒	☒	☐	Y☐ N☒	AEK 12/23/14

Resources	Not Present On Location	No Impact	Potentially Impacted	Mitigation Necessary	BLM Evaluator Initial & Date
Recreation	☐	☒	☐	Y☐ N☐	AW 10/16/15
Special Designations (ACEC, SMAs, WSR)	☒	☐	☐	Y☐ N☐	CPP 2/20/13
Wilderness & Wilderness Characteristics	☒	☐	☐	Y☐ N☐	CPP 2/20/13
Range Management	☐	☒	☐	Y☐ N☐	SC 2/26/13
Wild Horse and Burros	☒	☐	☐	Y☐ N☐	
Land Tenure, ROW, Other Uses	☐	☒	☐	Y☐ N☐	JD10/1/15
Fire/Fuels	☐	☒	☐	Y☐ N☐	

3.2 PHYSICAL RESOURCES

3.2.1 Air Quality and Climate Change

Current Conditions:

Air Quality in a geographic area is defined by its visual appearance and measured concentrations of air pollutants. Due to the nature of the air resource, the affected area considered in this analysis is the greater GJFO area. Air pollutants that may impact that area include criteria pollutants, hazardous air pollutants, greenhouse gases, and compounds that could impair visibility or contribute to atmospheric deposition.

The Environmental Protection Agency (EPA) has set time-averaged standards known as national ambient air quality standards (NAAQS) for six air pollutants considered to be key indicators of air quality: carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), two categories of particulate matter (particulate matter with an aerodynamic diameter of 10 microns or less [PM_{10}] and particulate matter with an aerodynamic diameter of 2.5 microns or less [$PM_{2.5}$], ozone, and lead.

Air quality in the project area is typical of undeveloped regions in the western United States. The GJFO is not within a non-attainment or a maintenance area, thus, Clean Air Act conformity regulations do not apply.

The primary sources of air pollutants in the region are fugitive dust from the desert to the west of the planning area, unpaved roads and streets, seasonal sanding for winter travel, motor vehicles, and wood-burning stove emissions. Seasonal wildfires throughout the western U. S. may also contribute to air pollutants and regional haze. The ambient pollutant levels are usually near or below measurable limits, except for high short-term increases in PM_{10} levels (primarily wind-blown dust), ozone, and carbon monoxide. Occasional peak concentrations of CO_2 and SO_2 may be found in the immediate vicinity of combustion equipment. Locations vulnerable to decreasing air quality include the

immediate areas around mining and farm tilling, local population centers, and distant areas affected by long-range transportation of pollutants.

Two fully-automated air quality monitoring stations (AQMS) are operated near the intersection of 7th Street and Pitkin Avenue at the Mesa County Powell Building in Grand Junction, CO. These sites are considered the main anchor for air monitoring in the Grand Valley (Mesa County Health Department, 2012). Representative monitoring of air quality from these sites indicate existing air quality is well within acceptable standards (CDPHE-AQCD 2015). Although air quality is well within the standards, the overall trend in concentration of pollutants is upward. This trend is not well understood and it is unknown if the pollutants are locally derived or if they are transported from distant locations.

No Action:
Direct and Indirect Effects: Visual appearance and concentration of air pollutants can be affected by naturally occurring phenomena such as wind, temperature, humidity, geographic features, vegetation, and wildfire. Air quality characteristics can also be affected by anthropogenic phenomena such as industrial and agricultural activities, fossil fuel combustion, and prescribed fire.

Under the no action alternative there would be no new direct effects. The indirect effects would be the continued discharge of combustion engine pollutants from the use of the propane generator. The emission discharge is minor compared to things such as automobiles and other more permanent type of combustion engines due to the occasional use and cooperative use of solar energy to manage electrical needs.

Cumulative Effects:
If this alternative is selected the cumulative impacts would increase due to the emissions from the propane generator and other pollutants from fugitive dust from the desert to the west of the planning area, unpaved roads and streets, seasonal sanding for winter travel, motor vehicles, other combustion engines, and wood-burning stove emissions. Seasonal wildfires throughout the western U. S. may also contribute to air pollutants and regional haze.

Proposed Action:
Direct and Indirect Effects: Under the proposed action direct effects would include fugitive dust production and combustion engine emissions during construction. These impacts would be short term and only last the duration of the project.

Indirect effects would be the decreased use of the propane generator as a primary source of power. The decrease in emissions would be small.

Cumulative Effects:
If this alternative is selected the cumulative impacts would be the reduced effect of the combustion engine to other sources of air pollution in the valley.

Buried Power Line Alternative

Direct and Indirect Effects: Under the buried power line alternative direct effects would include fugitive dust production and combustion engine emissions during construction. The rate and amount of dust and emissions would be greater than the proposed action due to the increase in disturbed area and amount of time that it would take to complete the work. These impacts would be short term and only last the duration of the project.

Indirect effects include the decreased use of the propane generator as a primary source of power. The decrease in emissions would be small.

Cumulative Effects:

If this alternative is selected the cumulative impacts would be the reduced effect of the combustion engine to other sources of air pollution in the valley.

3.2.2 Soils (includes a finding on Standard 1)

Current Conditions:

Soils within the project area have been mapped by the Natural Resources Conservation Service (NRCS) and the Web Soil Survey was accessed to obtain the soils data (NRCS. 2015). Soils within this allotment have been described in two soil surveys. The Douglas-Plateau Area, Colorado, Parts of Garfield and Mesa Counties (CO682) and Mesa County Area, Colorado (CO680) surveys. These two soil surveys are used to describe the 72 acres of right of way (ROW) and the additional 6 acres of temporary work spaces.

There are 19 soil map units ranging from 0.6% to 50% of the area. Slopes range from 0% up to 45%. Approximately 92% of the area has slopes less than 25% and 35% is less than 6% slope. There are stream banks within the permanent ROW that are unstable and susceptible to erosion due to recent incision from heavy rain.

Soil textures are highly variable and include sandy soils and clayey soils. This variation is due to the linear nature of this project which crosses a variety of land formations. Soil textures help determine the stability or susceptibility of the soils to erosion, but in this project area, due to the level nature of the ground, moisture is the primary factor in soil erodibility.

Soils horizons include E, A, B, and C horizons. E, A, and B can be a deep as 60 inches before reaching the C horizons. C horizons are comprised of alluvial material and in some instances near mesa end points weathered bedrock is the parent material. The depth to restrictions can reach more than 80 inches.

Soils in this area have been mapped as saline for the majority of the project area (BLM. 2015). Soils are very well drained and the water is more than 80 inches below the surface. Soil K factor ranges from 0.1 to 0.49 which indicate that these soils are highly susceptible to rill and gully erosion. There are several areas within the project area that currently display rill and gully erosion.

Finding on Public Land Health Standard 1 for upland soils:
The project area occurs primarily in areas that are not meeting Land Health Standard (LHS) 1 due to erosion (BLM. 2010). The area as a whole exhibits fair to good soil health. Soils in the assessed landscape tend be highly erosive, making it difficult to determine the degree of departure from natural conditions. Excessive erosion was determined by extreme pedestalling, and loss of the A Horizon. While there are multiple contributors (loss of vegetation, drought, past and present grazing), future projects and management must take into account erosion risk. Loss of vegetation cover can result in reductions in soil health and substantial increases in soil erosion.

No Action:
Direct and Indirect Effects: Under the No Action Alternative there would be no new direct or indirect effects to soils as there would be no construction activities.

Finding on Public Land Health Standard 1 for Upland Soils:
There would be no change to Land Heath Standard 1 with the No Action Alternative.

Cumulative Effects:
There would be no cumulative impacts to soils if the No Action alternative is selected.

Proposed Action:
Direct and Indirect Effects: Under the Proposed Action effects to soils include compactions and soil disturbance that could lead to erosion and stream bank destabilization. Compaction can occur when equipment, vehicles, and ATVs move over the soil surface. All of the planned activities can lead to soil disturbance which can increase erosion. All of these effects would be temporary and minimal due to selective vegetation removal, heavy equipment use only at pole locations, and ATV use to pull wires. Constructing the poles and pulling the wires may lead to indirect effects which are stream bank destabilization. This destabilization may not be evident at the time of construction.

Direct and indirect effects of permitting the ROW would only occur when maintenance activities occurred and would be similar to the effects during the construction activities.

Finding on Public Land Health Standard 1 for Upland Soils:
The Proposed Action would have the potential to increase the areas that are not meeting Land Heath Standard 1. The project is mainly in area currently not meeting Standard 1, but there are several places that the project crosses that are meeting Standard 1. The proposed activities have a good potential to increase erosion in the meeting areas. This is due to the proximity to area currently not meeting Standard 1, and other soil properties. Although this action has the potential to impact land health, mitigation measures and project design are such that the risk is small.

Cumulative Effects:
The Proposed Action effects are expected to be short term and should not increase the overall soil impacts in the watershed.

Protective/Mitigation Measures:

1) Use BMPs to limit surface water runoff at temporary work areas and if near West Salt Creek place erosion control devices on the creek side of area.

Buried Power Line Alternative

Direct and Indirect Effects: The direct and indirect effects for this alternative are the same as the Proposed Action except, this action will increase the area and magnitude of the soil disturbance. Additionally, this action would cross several tributaries and intersect many locations where the stream banks are highly unstable. During construction the potential for soil erosion and soil production disruption increase. These effects would be expected to last longer than the duration of the project. This is due to the environment and lack of annual precipitation. Soil recovery from this ground disturbance may last decades, especially, in lower and drier areas.

Finding on Public Land Health Standard 1 for Upland Soils:

The Buried Power Line Alternative would have the potential to increase the areas that are not meeting Land Health Standard 1. The project is mainly in area currently not meeting Standard 1, but there are several places that the project crosses that are meeting Standard 1. The proposed activities have a high potential of increasing erosion in the meeting areas. This is due to the proximity to area currently not meeting Standard 1 and soil properties. The mitigation measures can reduce these concerns, but it is still highly probable that areas not meeting Standard 1 would increase.

Cumulative Effects:

Due to the anticipated lasting effects of soil instability and stream bank destabilization, this alternative will contribute to long-term watershed wide effects. Current grazing and recreation impacts increase soil erosion potential and this project would increase those effects.

3.2.3 Water (surface and groundwater, floodplains) (includes a finding on Standard 5)

Current conditions:

The proposed project area occurs in the West Salt Creek drainage. The 50 foot ROW and temporary work spaces is within one-quarter mile of the mainstem West Salt Creek. The ROW crosses West Salt Creek and crosses nine other tributaries. All waters are tributary to the Colorado River and have an identification number of COLCLC13b (CDPHE-WQCD, 2015).

Segment COLCLC13a includes all tributaries to the Colorado River, including wetlands, from the Government Highline Canal Diversion to a point immediately below Salt Creek, and down gradient from the Government Highline Canal, the Orchard Mesa Canal No. 2, Orchard Mesa Drain, Stub Ditch, and the northeast Colorado National Monument boundary (CDPHE-WQCC, 2015).

The state of Colorado has established water quality standards for streams in the state, based on existing or potential water uses. The use classifications for the tributaries to the

Colorado River within the allotments are Aquatic Life Warm Water 2, Recreation E, and Agriculture. This segment is use protected; therefore the anti-degradation rule does not apply. A comprehensive list of standards for physical, biological, inorganic, and metals parameters have been established to protect these uses (CDPHE-WQCC. 2015). The 303(d) list which is updated every two years list impaired waters within the state. The tributaries and mainstem of the Colorado River are included on that list because of selenium. Salt Creek was sampled 37 times with an ambient level of 56 micrograms per liter. The existing chronic aquatic life standard for selenium is 4.6 micrograms per liter. The source of elevated selenium is primarily deep percolation of irrigated soils developed from Mancos shale. Flow and water quality data exist from United States Geological Survey (USGS) gaging stations that were located on West Salt and Salt Creeks and from the active station on the Colorado River near the Utah and Colorado Stateline. Data collected on West Salt Creek at stations #09153330 which was located near Carbonera and #09153400 which was located near Mack show relatively poor water quality with high salinity concentrations. Data collected upstream (Carbonera) indicate better quality water with slightly lower dissolved solids concentrations then that at the Mack station. The increase in concentration is a result of flow over the Mancos shale geologic formation common in the Grand Valley, and historic land use. The Mancos is a saline formation with high erosion potential. Specific conductance readings occasionally exceeded 10,000 microsiemens per centimeter (µSuS/cm) and suspended sediment concentrations of over 300,000 micrograms per liter (mg/l) were measured. The primary ions were sodium, magnesium, and sulfates. Flow in West Salt Creek is perennial in the upper reaches and intermittent downstream. Highest flows generally result from summer convective storms while base flow and no flow conditions generally occur in fall and winter.

Salt in the Upper Colorado River is of concern for a number of political and socioeconomic reasons. Salinity limits in the 1974 U.S. agreement with Mexico require the United States to deliver Colorado River water of a particular quality to the border. Irrigation of crops, protection of wildlife habitat, and treatment for municipal water along the course of the river also place restrictions on the river's salt content (Tuttle & Grauch. 2009). The Colorado River Basin Salinity Control Act (Public Law 93-320) was enacted in June 1974. The Act was amended in 1984 by Public Law 98-569. Public Law 98-569 includes directing the BLM to develop a comprehensive program for minimizing salt contributions from lands under its management. Studies conducted by the Bureau of Reclamation estimate that 580,000 tons of salt are added to the Colorado River annually from the Grand Valley alone (BOR. 2011). It is also estimated that up to 15% of salt loading from the Grand Valley comes from diffuse sources on public lands (BLM 1985b).

Finding on Public Land Health Standard 5 for Water Quality:
Public Land Health Standard 5 states that the water quality of all water bodies located on or influenced by BLM lands will meet or exceed State Water Quality Standards. This can be difficult to achieve because stream segments can include large areas with mixed private and public land ownership, making cohesive management challenging. Currently Segment COLCLC13b is not meeting water quality standards. This segment is not

meeting the selenium standard. BLM management would not have the ability to affect the primary cause of selenium pollution in West Salt Creek.

No Action:
Direct and Indirect Effects: There would be no new impacts to water quality if No Action were taken.

Finding on Public Land Health Standard 5 for Water Quality:
Land Health Standard 5 would be the same as the current conditions.

Cumulative Effects:
There would be no additional cumulative effects if this project did not occur.

Proposed Action:
Direct and Indirect Effects: If the Proposed Action was selected, water quality would be impacted due to the increase in sediment delivered to the stream and waterways and stream function may be altered if stream banks are compromised. If the design features and mitigation measures are implemented correctly, impacts would only be of concern during construction and when maintenance occurs.

Finding on Public Land Health Standard 5 for Water Quality:
This would not likely change Land Health Standard 5. If there were problems or excessive erosion, water quality could be reduced, but only during construction.

Cumulative Effects:
Effects are expected to be minimal and short duration. This will eliminate the potential for this project to cumulatively add to impacts to water quality.

Buried Power Line Alternative
The largest impact to water quality with this alternative is increased sedimentation and stream bank erosion. Erosion and sedimentation issue increase with this alternative due to the increase in surface disturbance and are magnified due to the proximity to the waterways. The planned location for the buried power line would cross waterways 10 times and have a suspended line running across several drainages. The potential for stream bank erosion and channel instability is greatly increased when ground disturbing activities occur. The potential for impacts increases, especially with 10 stream crossings and the characteristics of the soils.

Finding on Public Land Health Standard 5 for Water Quality:
The Buried Power Line Alternative would have the potential to degrade water quality and increase the potential for impairment beyond selenium. The proposed activities have a good potential to increase erosion and destabilize stream banks. The mitigation measures can reduce these concerns, but it is still highly probable. The current nature of the selenium impairment is not within the BLM's ability to change, but if this alternative is selected sediment impairments may become an issue.

Cumulative Effects:
If the construction of the buried power line occurs, increased erosion potential would exist until site conditions rehabilitate. Due to the limited annual precipitation, recovery could take 3 to 10 years. With the ROW in the drainage bottom, it may have an even greater compounding effect on cumulative impacts to water quality. Other activities such as grazing and recreation cause similar impacts on the outlying project boundaries. Combined, increased sediment and stream channel instability would likely increase.

3.3 BIOLOGICAL RESOURCES

3.3.1 Invasive, Non-native Species

Current Conditions:
The general area of the west desert is characterized by very few perennial noxious weeds, but abundant annual weeds. These species include cheatgrass, Russian thistle, annual wheatgrass, and annual mustards. The relative abundance of these weeds depends on the amount of early season precipitation. The ROW is similar, with locally abundant annual weeds.

No Action:
Direct and Indirect Effects: This alternative would result in no new disturbance, and therefore a reduced chance of weed problems.

Cumulative Effects:
There would be no cumulative impacts to weeds if the No Action Alternative is selected.

Proposed Action:
Direct and Indirect Effects: The short and long term effects are an increased potential for weed invasion due to the initial disturbance caused by construction. The standards stipulations for ROWs (9 and 10) would mitigate the chance of new weeds invading sites, and would provide for the long term maintenance of the ROW. Reclamation plans would also help prevent the spread of weeds.

Cumulative Effects:
The proposed action represents additional disturbance in the general area when added to some larger recent projects (WEP II pipeline), however this project has a much smaller disturbance area. The cumulative effects of the power line are expected to be negligible in the long term from a weed perspective.

3.3.2 Threatened, Endangered and Sensitive Species (includes a finding on Standard 4)

Current conditions:
The project area is suitable habitat for several BLM Sensitive Plant Species. Plants with potential to occur include but are not limited to: Dolores River skeletonplant, Ferron's milkvetch, Grand buckwheat, Grand Junction suncup, and Jones' bluestar. The project area is not within designated critical habitat, or considered habitat for any federally listed

plant species. Biological surveys of the project area were completed in 2011 and May 2013.

The project area contains suitable habitat for several BLM sensitive wildlife species including the white tailed prairie dog, big-free tailed bat, townsend's big-eared bat, fringed myotis, spotted bat, kit fox, burrowing owl, golden eagle, brewers sparrow, long-nosed leopard lizard, and midget faded rattlesnake. The project area is not within designated or proposed critical habitat for any federally listed fish or wildlife species nor does the project area contain any potential habitat for federally listed fish or wildlife species. The project is within the Colorado River basin and therefore any water depletions or runoff would have the potential to impact the federally listed Colorado River fish (Humback chub, Razorback sucker, Colorado Pikeminnow, and Bonnytail). White tailed prairie dog, long-nosed leopard lizard, and burrowing owl were observed during surveys conducted in 2011 and 2013. No active white tailed prairie dog towns were observed within the proposed right of way during 2013 surveys.

Migratory birds of conservation concern and raptors likely to occur in the action area include the burrowing owl, golden eagle, brewer's sparrow, gray vireo, juniper titmouse, pinion jay, Long billed curlew, prairie falcon, great horned owl, American kestrel, red-tailed hawk, long-eared owl, coopers hawk, and sharp-shinned hawk. Raptor surveys were conducted in this area in 2011 and 2013. One unoccupied burrowing owl nest was observed during the 2011 nesting season, this nest was not occupied during the 2013 survey. Four long-eared owl nests found in the dense tamarisk stands along West Salt Creek, originally documented during the 2011 nesting season, were not occupied during the 2013 survey. One occupied golden eagle nest was observed within 0.5 miles of the proposed power line.

Finding on Public Land Health Standard 4 for Special Status Species:
The majority of the proposed project area is in an area not meeting Land Health Standard 4 due to poor habitat conditions (lack of perennial vegetation and dominance of weedy species).

No Action:
Direct and Indirect Effects: The No Action Alternative would have no new impacts on any threatened, endangered, or sensitive plants fish or wildlife species. Impacts would continue from livestock grazing, recreational use, existing ROWs, and oil and gas development.

Finding on Public Land Health Standard 4 for Special Status Species:
No changes to the Land Health status would be anticipated from this alternative.

Cumulative Effects:
No changes to Cumulative Effects are anticipated from the No Action Alternative.

Proposed Action:

Direct and Indirect Effects: The proposed project has potential to directly and indirectly impact Ferron's milkvetch. Three small occurrences of milkvetch (totaling 0.323 acres) were documented within 30 meters of the proposed power line. Approximately 18 square feet of the 0.32 acres lie within the project ROW. No other rare plants were documented in the proposed project action area. Potential direct impacts include trampling from construction activities and unauthorized use of construction access routes. Potential indirect effects include reduced photosynthesis and reduced reproduction due to pollinator disruption from dust associated with soil disturbance.

While approximately 18 square feet of Ferron's milkvetch occurs within the proposed power line ROW, the majority of the plants are outside of the proposed pole locations, where construction activities can be avoided. Direct and indirect impacts can be greatly reduced if construction is avoided in the milkvetch sites.

The proposed action has the potential to directly impact individual white tailed prairie dog, big-free tailed bat, townsend's big-eared bat, fringed myotis, spotted bat, kit fox, burrowing owl, golden eagle, brewers sparrow, long-nosed leopard lizard, and midget faded rattlesnake through displacement of individuals during the construction phase. Displacement of individuals during construction is not expected to adversely impact the species as a whole. Mortality of some individual white tailed prairie dog, long-nosed leopard lizard, and midget faded rattlesnake may occur during construction; however the nature of these impacts is not expected to be substantially higher than background levels of mortality due to human activity in the area.

Construction during migratory bird and or raptor nesting season has the potential to cause nest failure or abandonment. Adhering to the protective/mitigation measures listed below is expected to reduce the impacts resulting from this project to a negligible level for migratory birds and raptors.

The overhead power line would result in the creation of artificial perches for species that may prey on burrowing owls, brewer's sparrow, and long-nosed leopard lizard. In addition the overhead power line introduces the potential for electrocution of species that utilize the power line. Construction of the power line utilizing the mitigation suggested below is expected to minimize these impacts.

Finding on Public Land Health Standard 4 for Special Status Species:
The proposed action is unlikely to affect Land Health Standard 4, as a majority of the project is not meeting this standard. Construction activities could contribute to weed spread, however with proper weed management weed spread will be minimized.

Cumulative Effects:
The proposed project represents a small immediate increase of disturbance along 4 Road. During the past several years, 4 Road has been realigned and the WEP II pipe line was constructed adjacent to 4 Road. Cumulative Effects from the proposed project would be minor in the first 5 years following installation, and then may increase as additional lines

are constructed. While the project employs the co-location of ROWs, which is considered a Best Management Practice to decrease habitat fragmentation, the project is expected to result in an increase in development of the 4 Road area, as more properties have access to electricity. This is expected to adversely impact special status wildlife that currently utilize the area by increasing anthropogenic disturbance. Increased development would also contribute to habitat fragmentation, and would be expected to increase weed spread, and negatively affect the ability of the area to meet Land Health Standard 4 in the future.

Protective/Mitigation Measures:

To avoid impacts to the Ferron's milkvetch construction and surface disturbance should be avoided within the occupied habitat, and a BLM approved biological monitor should be on-scene during surface disturbing activities in the two sensitive areas (T8S, R104W, sections 22 & 27). If determined necessary by the biological monitor, temporary fencing or similar material should be installed prior to construction activities commencing in the sensitive areas to ensure avoidance of the occupied sites.

To avoid impacts to migratory birds during peak breeding season vegetation removal would not occur between May 15 and July 15 annually.

To avoid impacts to nesting raptors additional raptor surveys would be required for any construction occurring between February 1 and August 15 (Where cliffs are within 0.5 miles of the action area surveys for nesting golden eagles would be required for construction occurring between December 15 and July 15). Surveys would need to be conducted in the year of construction and should any active nests be discovered the following timing limitations will apply:

SSS-RPT-AU-01:
STIPULATION *WILDLIFE RAPTOR NESTS TL CO:* No surface use is allowed within a 402 meter (0.25 mile) radius of active raptor nests, as mapped in the Resource Management Plan, BLM's GIS database or other maps provided by local, state, federal or tribal agencies that are analyzed and accepted by the BLM, during the following time period(s), or until fledging and dispersal of young:

- Osprey nests: April 1 to August 31.
- Red-tailed hawk nests, including any alternate nests: February 15 to July 15.
- Swainson's hawk nests and associated alternate nests: April 1 to July 15.
- Burrows or burrowing owl nest sites: March 1 to August 15.
- Great horned owl nests: February 1 to August 15.
- Other owls and raptors: March 1 to August 15.
- Cooper's hawk, sharp shinned hawk, and northern harrier nests: April 1 to August 15.

SSS-RPT-AU-02:
STIPULATION *WILDLIFE SENSITIVE RAPTOR NESTS TL CO:* No surface use

is allowed within an 805 meter (0.5 mile) radius of active or inactive raptor nests, as mapped in the Resource Management Plan, BLM's GIS database or other maps provided by local, state, federal or tribal agencies that are analyzed and accepted by the BLM, during the following time period(s), or until fledging and dispersal of young: · Ferruginous hawk nests, including any alternate nests: February 1 to July 15. · Goshawk nest sites: March 1 to September 30. · Peregrine and prairie falcon nest cliff(s): March 15 to July 31.
SSS-EGL-AU-02: **STIPULATION** TL-13: *Golden Eagle Nest Sites.* Prohibit human encroachment (beyond that which historically has occurred in the area) within 0.5-mile of active golden eagle nests and associated alternate nests from December 15 to July 15.

Buried Line Alternative:
Direct and Indirect Effects: The Buried Line Alternative construction impacts would be similar to those of the Proposed Action for special status plants, fish and wildlife. However, this alternative would represent the greatest level of initial disturbance as the entire line would be trenched and disturbance would not be limited to the power line pole locations. Potential direct impacts include removal and destruction of the Ferrons milkvetch in the ROW alignment. Potential indirect effects to the adjacent milkvetch include reduced photosynthesis, and reduced reproduction due to pollinator disruption from dust associated with soil disturbance. Boring may be employed to avoid impacts to the milkvetch, however if boring were not feasible the entire 18 square feet of Ferrons milkvetch that lie within the project ROW would be directly impacted. Rerouting may be necessary to minimize impacts to the milkvetch. Threats of weed spread would be greatest under this alternative.

The buried power line alternative is expected to have fewer long term impacts on wildlife because artificial perches for species that may prey on burrowing owls, brewer's sparrow and long-nosed leopard lizard would not be provided. While the buried line would still require some above ground facilities the habitat between these structures would be expected to return to pre-disturbance levels over time. In addition, the potential for electrocution of species that utilize the power line would not exist.

Finding on Public Land Health Standard 4 for Special Status Species:
While the project area is currently not meeting Land Health Standards, this alternative may further impair the ability of the area to meet Standard 4 if soil disturbance results in further vegetation degradation.

Cumulative Effects:
This alternative represents an immediate increase of disturbance along 4 Road. Recent disturbance in project area includes the 4 Road realignment and the WEP II pipe line. The buried power line is not expected to encourage future development in this area to the same extent as the overhead line because expanding the buried line would represent a much larger cost and effort than expanding the overhead line. Therefore, the buried

power line is expected to have fewer cumulative impacts from anthroprogenic disturbance and habitat fragmentation. The buried line alternative would not be expected to affect the ability of the area to meet Land Health Standards.

Protective/Mitigation Measures:
To avoid impacts to the Ferron's milkvetch construction activities should be avoided within the occupied habitat, and a BLM approved biological monitor should be on-scene during construction in the two sensitive areas (T8S, R104W, secs. 22 and 27). Rerouting or boring may be necessary, and temporary fencing or similar material may need to be installed prior to construction activities commencing in the sensitive areas to ensure avoidance of the occupied sites.

To protect migratory birds, including raptors, the same protective/mitigation measures as those listed under the proposed action would be required for the buried pipeline, with the exception of the practices for avian protection on power lines, because these practices are for overhead lines.

3.3.3 Vegetation (includes a finding on Standard 3)

Current conditions:
The main ecological sites the ROW would cross through include foothill swale, silty salt desert, salt flats, and salt desert overflow. Potential native vegetation typically found in these ecological sites includes:

Foothill Swale: Basin big sagebrush, basin wildrye, 4-wing saltbush, western wheat, and basin wildrye.

Silty Salt Desert: Indian ricegrass, sand dropseed, galleta, bottlebrush squirrel tail, rabbit brush, and shadscale.

Salt Flats: greasewood, salt grass, 4-wing saltbush, western wheat, basin wildrye, and alkali sacaton.

Salt Desert Overflow: Gardners's saltbush, matt saltbush, shadscale, and galleta.

Vegetation and soils throughout the majority of the proposed ROW have been disturbed from previous construction and maintenance of numerous buried pipelines, resulting in high influxes of weedy species that include: cheatgrass, annual wheatgrass, tumbleweeds, and halogeton. Currently, vegetation in the middle and northern sections of the proposed ROW are mainly greasewood and 4-wing saltbush mixed with occasional basin big sagebrush and shadscale, with understories of tumbleweeds, halogeton, sand dropseed, annual wheatgrass, and cheatgrass. Sand dropseed is a perennial grass with good production and is present through the middle and northern sections of the proposed ROW, and appears to be increasing over the last three years. The southern section of the ROW is mainly greasewood mixed with matt saltbush and Gardner's saltbush; seep weed is common and patches of cheatgrass, tumbleweeds, halogeton, and widely scattered sand dropseed also occur.

Finding on Public Land Health Standard 3 for plant communities:

The majority of the proposed project area is not meeting land health due to high production of annual weedy plants (cheatgrass, annual wheatgrass, halogeton, and tumble weeds) and lack of perennial native grasses.

No Action
Direct and Indirect Effects:
Under the No Action Alternative, vegetation would remain as described above.

Finding on Public Land Health Standard 3 for Plant and Animal Communities:
The area would continue to not meet Land Health Standard 3 for vegetation due to the high production of weedy invasive annual species mentioned above, even though sand dropseed appears to be increasing, which is a positive indication that land health conditions may be starting to improve.

Cumulative Effects:
Cumulative effects on vegetation from livestock grazing, numerous buried pipelines, ROWs, and oil and gas development would remain the same as the current condition.

Proposed Action
Direct and Indirect Effects:
Only minimal damage to vegetation would occur during construction of the project, and vegetation would quickly recover after completion of the project. Current vegetation health would likely remain the same as existing conditions.

Finding on Public Land Health Standard 3 for Plant and Animal Communities:
Land Health Standard 3 for plant communities would remain the same and possibly improve over time depending on timing and the amount annual of precipitation.

Cumulative Effects:
Cumulative effects would remain low or similar to existing conditions.

Buried Power line Alternative:

Direct and Indirect Effects:
A substantial increase in disturbance to plants and soils would occur under this alternative as a result of a 12.5 mile trench that would be dug to bury the pipeline. Burying the pipeline would also potentially increase invasion of weedy plants (cheatgrass, annual wheatgrass, halogeton, and tumble weeds) in the project area. Crossing 15 ravines with the pipeline would create high potential for soil erosion problems which would both directly and indirectly affect vegetation.

Finding on Public Land Health Standard 3 for Plant and Animal Communities:
Improvement for Land Health Standard 3 for plant communities would be prolonged due to the amount of surface disturbance required to bury the pipeline. Additional surface disturbance would allow for an increase in weedy plant invasions, and crossing 15 ravines could affect soil and plant health.

Cumulative Effects:
Even though this alternative would have a substantially larger impact to vegetation over the Proposed Action area the cumulative effects are still anticipated to be minimal.

3.3.4 Wetlands & Riparian Zones (includes a finding on Standard 2)

Current conditions:
Twenty three potential jurisdictional Waters of the U.S. (WoUS) were identified during the 2013 biologic surveys, all of which were drainage crossings. None of the identified crossings exhibited characteristics of having an associated fringe wetland. The proposed power line parallels West Salt Creek for nearly the entire alignment. Although the proposed power line would cross numerous small drainages and washes in Mesa County, no wetland vegetation was observed (WestWater Engineering, 2012). While wetlands are present within Garfield County; wetland vegetation is not present until just north of the confluence of West Salt Creek and South Canyon near mile post (MP) 700.4. The confluence of the West Salt Creek and South Canyon is approximately 1 mile north of the northern terminus of the proposed power line.

Finding on Public Land Health Standard 2 for Riparian:
BLM records show that West Salt Creek is Functioning at Risk (FAR), with geologic limitations and saline soils listed as factors.

No Action:
Direct and Indirect Effects: The No Action Alternative would have no impacts on wetlands and riparian zones, as the power line would not be built. However, impacts would continue from livestock grazing, recreational use, existing ROWs, and oil and gas development.

Finding on Public Land Health Standard 2 for Riparian:
No changes to the Functioning at Risk status are anticipated from this alternative.

Cumulative Effects:
No changes to cumulative effects are anticipated from the No Action Alternative.

Proposed Action:
Direct and Indirect Effects: While the proposed action could directly affect West Salt Creek and its tributaries since the power line parallels the creek, and crosses the tributaries numerous times, impacts are anticipated to be minimal. GVP is committed to avoiding impacts to riparian zones and wetlands by placing structures or reroutes to avoid riparian areas and water courses (Table 4, GVP Selectively Recommended Mitigation Measures). All power line poles have been placed outside of the drainages, with only the aerial power line crossing the drainages. Increased sediment loads could result if excess soil from the pole and anchor holes were pushed into the drainages.

Finding on Public Land Health Standard 2 for Riparian:
No changes to the Functioning at Risk status are anticipated from this alternative.

Cumulative Effects:
The proposed project represents a small increase of disturbance along 4 Road, with very little additional disturbance to West Salt Creek and its tributaries. In the recent past 4 Road was realigned, and the WEP II Pipeline was constructed adjacent to 4 Road. Cumulative effects from the proposed project would be minor in the first 5 years following installation, and then potentially increase if additional lines are constructed. While the project employs the co-location of ROWs, which is considered a Best Management Practice to decrease habitat fragmentation, the project is expected to result in an increase in development of the area, as more properties have access to electricity. Additional power lines would result in more power line anchors, more soil disturbance, and increased activity in the power line ROW, which could further degrade the creek and tributaries.

Buried Power line Alternative:
Direct and Indirect Effects: This alternative would have the greatest impact on riparian zones and wetlands. West Salt Creek and its tributaries would be directly disturbed, as the entire alignment would be trenched and disturbance would not be limited to the power line pole locations. Boring may be employed to avoid impacts to the creek and tributaries. Increases in sediment load would be anticipated under this alternative if boring is not used.

Finding on Public Land Health Standard 2 for Riparian:
While West Salt Creek is Functioning at Risk, this alternative may further impair the creek.

Cumulative Effects:
This alternative represents an immediate increase in disturbance to West Salt Creek and its tributaries. Disturbance in the project area in 2013 and before includes the 4 Road. realignment, and the WEP II Pipeline. While the project proposes the co-location of ROWs, which is considered a Best Management Practice to decrease habitat fragmentation, the project would result in continued trenching in the drainages. Increased activity would be expected to increase sediment loads in the drainages, as the repeated disturbance would result in unconsolidated soils, and negatively affect the ability of the system to reach proper functioning condition.

Protective/Mitigation Measures:
If this alternative were selected, rerouting or boring may be necessary to reduce impacts to the drainages.

3.3.5 Wildlife (includes fish, aquatic and terrestrial) (includes a finding on Standard 3)

Current conditions:
The project area contains habitat for multiple terrestrial wildlife species. No aquatic systems occur within the project area; impacts to adjacent aquatic systems are not expected (beyond the potential impacts through water depletions discussed under special

status species above). Terrestrial wildlife likely to occur in the area include mule deer, elk, pronghorn antelope, bull snake, desert cottontail, mountain lion, coyote, gray fox and a number of other small rodents, reptiles, and resident birds. Biological surveys of the project area were completed in 2011 and May 2013, at that time incidental observations of coyote, pronghorn, desert cottontail, rock squirrel, white-tailed antelope, and ground squirrel were noted.

The proposed power line is on the eastern edge, outside of, the Prairie Canyon Wildlife Emphasis Area. The upper end of the project, near the pumping station, is within severe winter range for both deer and elk. The project area lies between two pronghorn winter concentration areas and severe winter range for the species.

Finding on Public Land Health Standard 3 for Plant and Animal Communities:
The majority of the proposed project area is in an area not meeting Land Health Standard 3 due to poor habitat conditions (lack of perennial vegetation and dominance of weedy species).

No Action:
Direct and Indirect Effects: The No Action Alternative would have no impacts on any fish or wildlife species. Impacts would continue from livestock grazing, recreational use, existing ROWs, and oil and gas development.

Finding on Public Land Health Standard 3 for Plant and Animal Communities:
No changes to the Land Health status would be anticipated from this alternative.

Cumulative Effects:
No changes to cumulative effects are anticipated from the No Action Alternative.

Proposed Action:
Direct and Indirect Effects: The Proposed Action has the potential to directly impact individual animals during the construction phase through disturbance and displacement. Displacement of individual animals during construction is not expected to adversely impact the species as a whole. Mortality of some individual small mammals and reptiles may occur during construction; however the nature of these impacts is not expected to be substantially higher than background levels of mortality due to human activity in the area.

Addition of the overhead power line may cause avoidance of the ROW area by some wildlife species; however the single phase power line adjacent to the existing road is not expected to substantially impact habitat or habitat use in the area. The overhead power line would result in the creation of artificial perches for species that prey on small mammals.

Finding on Public Land Health Standard 3 for Plant and Animal Communities:
The Proposed Action is unlikely to affect Land Health Standard 3, as a majority of the project is Not Meeting this standard. Construction activities could contribute to weed spread, however with proper weed management weed spread would be minimized.

Cumulative Effects:
The proposed project represents a small immediate increase of disturbance along 4 Road. During the past several years, 4 Road has been realigned and the WEP II Pipeline was constructed adjacent to 4 Road. Cumulative effects from the proposed project would be minor in the first 5 years following installation, and then may increase as additional lines are constructed. While the project proposes the co-location of ROWs, which is considered a Best Management Practice to decrease habitat fragmentation, the project is expected to result in an increase in development of the 4 Road area, as more properties have access to electricity. This is expected to adversely impact terrestrial wildlife that currently utilize the area by increasing anthropogenic disturbance. Increased development would also contribute to habitat fragmentation, and would be expected to increase weed spread, and negatively affect the ability of the area to meet Land Health Standard 3 in the future.

Buried Line Alternative
Direct and Indirect Effects: The Buried Line Alternative construction impacts would be similar to those of the Proposed Action for terrestrial wildlife. However, this alternative would represent the greatest level of initial disturbance as the entire line would be trenched and disturbance would not be limited to the power line pole locations.

The buried power line alternative is expected to have fewer long term impacts on wildlife because artificial perches for predatory species would not be provided.

Finding on Public Land Health Standard 3 for Plant and Animal Communities:
The Proposed Action is unlikely to affect Land Health Standard 3, as a majority of the project is Not Meeting this standard. Construction activities could contribute to weed spread, however with proper weed management weed spread will be minimized.

Cumulative Effects:
This alternative represents an immediate increase of disturbance along 4 Road. Recent disturbance in project area includes the 4 Road realignment and the WEP II Pipeline. The buried power line is not expected to encourage future development in this area to the same extent as the overhead line because expanding the buried line would represent a much larger cost and effort than expanding the overhead line. Therefore, the buried power line is expected to have fewer cumulative impacts from anthropogenic disturbance and habitat fragmentation. The buried line alternative would not be expected to affect the areas ability to meet Land Health Standards over the long term.

3.4 HERITAGE RESOURCES AND HUMAN ENVIRONMENT

3.4.1 Cultural Resources

Current Conditions:
The BLM manages cultural resources on public lands in accordance with the Antiquities Act of 1906, National Historic Preservation Act (NHPA) of 1966, Native American Graves Protection and Repatriation Act of 1990, the Archaeological Resources Protection

Act of 1979, and various other laws and Executive Orders. The management process is also governed by the BLM's Colorado Protocol with the State Historic Preservation Officer (SHPO), implementing the BLM's National Programmatic Agreement with the Advisory Council on Historic Preservation. Section 106 of NHPA applies to consideration of the presence of and effect to cultural resources on both public and private lands in the area of potential effect (APE).

In the greater region encompassing the project area, cultural resources span approximately 12,000 years and represent use of Paleoindian, Archaic, Formative, Protohistoric, and historic populations. The region contains prehistoric and historic sites and traditional cultural places. Examples of known cultural resources in the project area include but are not limited to lithic scatters, rock art, open camps, rock shelters, hunting sites, trails, homesteads/ranches, wagon roads, railways, telephone/telegraph lines, and ditches.

Grand River Institute (GRI) conducted an intensive Class III cultural resource inventory in the APE of the Proposed Action, as defined in the NHPA in the spring of 2013 (Conner et al., 2013/ BLM GJFO CRIR 1113-03). GRI surveyed a 200-foot-wide corridor along the approximately 12-mile proposed power line, with wider areas at proposed temporary use locations, for a total of 292 acres surveyed (286.4 BLM and 5.6 private). During the inventory, previously recorded sites were revisited to either confirm the original recordings and their evaluations, or to reevaluate them. Newly located sites were also mapped, photographed, and recorded on site forms. Table 3.4-1 summarizes the revisited and newly recorded sites in the APE and provides field-evaluated recommendation for National Register of Historic Places (NRHP) eligibility and landowner status. Recommendations for eligibility are pertinent in guiding the final determination of site significance and are currently in consultation with SHPO and the BLM.

Table 3.4-1
Revisited and Newly Recorded Sites in the Proposed Action APE

Site number	Site type	Eligibility	Landowner
5GF621.8	Baxter Pass Road/ Garfield County Road 201	Eligible; non-supporting	BLM
5GF642.4	Uintah Railway	Eligible; supporting	BLM
5GF642.36	Uintah Railway	Eligible; non-supporting	BLM
5GF642.37	Uintah Railway	Eligible; non-supporting	BLM
5GF1436	Rock art	Eligible	BLM
5GF1460	Open architectural	Need data	BLM
5GF2585.4	Uintah Railway Co. Telephone and Telegraph Line	Not eligible	BLM
5GF4919	Historic, animal control	Not eligible	BLM
5ME767.1	Uintah Railway	Eligible; non-supporting	BLM

Site number	Site type	Eligibility	Landowner
5ME767.3	Uintah Railway	Eligible; supporting	BLM
5ME767.4	Uintah Railway	Eligible; supporting	BLM
5ME767.5	Uintah Railway	Eligible; non-supporting	BLM/ Private
5ME767.6	Uintah Railway	Eligible; non-supporting	BLM
5ME767.8	Uintah Railway	Eligible; supporting	BLM
5ME767.9	Uintah Railway	Eligible; supporting	BLM
5ME767.10	Uintah Railway	Eligible; supporting	BLM
5ME1215	Historic trash dump/camp	Not eligible	BLM
5ME4116.1	Historic road	Need data; non-supporting	BLM
5ME4676.25	Government Highline Canal	Eligible; supporting	BLM
5ME4676.26	Government Highline Canal/ 58A and 58AA lateral ditch	Eligible; supporting	BLM
5ME4676.27	Government Highline Canal/ 58C and 58D lateral ditch	Eligible; supporting	BLM
5ME18404.2	Uintah Railway Co. Telephone and Telegraph Line	Not eligible	BLM
5ME18404.3	Uintah Railway Co. Telephone and Telegraph Line	Not eligible	BLM
5ME18404.4	Uintah Railway Co. Telephone and Telegraph Line	Not eligible	BLM
5ME19664.1	Baxter Pass Road/ Mesa County 4 Road	Eligible; supporting	BLM/ Private
5ME19665	Isolated find	Not eligible	BLM

No Action:
Direct and Indirect Effects: The power line would not be authorized, so there would be no additional impacts to cultural resources.

Cumulative Effects:
The power line would not be authorized, so there would be no new impacts to cultural resources.

Proposed Action:
Direct and Indirect Effects: If the Proposed Action is selected, six linear segments considered supporting of the overall NRHP eligible or potentially eligible resource could be impacted by power line construction (5GF642.4, 5ME767.3, 5ME767.4, 5ME767.9, 5ME4676.25, and 5ME19664.1). Additionally, one site (5GF1436) considered eligible to the NRHP could be impacted by power line construction and maintenance. Impacts occur

when 1) there are known features in the power line corridor where poles are to be constructed and 2) the power line introduces a visual aspect that affects the integrity of the site.

To protect cultural resources considered eligible for listing on the NRHP, GVP has agreed to add the following design features to the Proposed Action:

5GF642.4
The current project has the potential to adversely affect the site; however, because of the narrow corridor for placement of the line between the road, the existing pipeline, and the washes to the east, realignment is not feasible. To minimize potential impacts to features pole 177 has been moved 35 feet to the north and that pole 180 has been moved 35 feet to the south. To minimize impacts to the site overall, an archaeological monitor will be present during installation of the poles.

5ME767.3
In order to avoid direct effects to the site, the power line has been moved to the west to follow the county road. This realignment also eliminates the necessity of temporary use areas that could impact the site. It is also recommended that monitoring occur during construction. With this redesign, the proposed project would have no effect on the integrity of the segment or the overall eligibility of 5ME.767.

5ME767.4
Under the initial proposal, a pole and two anchors and the temporary use area would have affected the grade. Through project redesign by moving the pole and anchors to the west, between the railroad grade and the road, the segment would be avoided. This realignment would also eliminate the need for a temporary use area. Construction should be monitored. With this redesign, the proposed project would have no effect on the integrity of the segment or the overall eligibility of 5ME767.

5ME767.9
For the initial alignment proposed by GVP, the construction and maintenance of a wooden pole power line along County 4 Road east of the segment would have visually reintroduce an element that was present during the period of significance. In order to ensure that the two poles at the south end of the segment are not placed in the railroad grade, the proposed location of pole 11-1046-35 has been moved 40 feet to the southeast, and pole 11-1046-36 has been moved 50 feet to the northwest. Monitoring is recommended to ensure that poles avoid the grade and that construction equipment does not create impacts that alter the character of the grade.

5GF1436

GVP has agreed to mitigate visual impacts to the site by using lighter color wood and minimal reflective hardware, as well as no transformers on poles within the view shed of the site.

5ME4676.25
The proposed wooden pole power line in this area is similar to one that was present in the view shed of the segment when it was first constructed, and in the years between 1917 and 1940. Feature 10 is located between Pole 11-1046-30 and 31, GVP has agreed to flag this feature prior to construction. This feature, and component area of the site, should be monitored during construction to ensure that Feature 10 is avoided and construction vehicles do not alter any features in this component area.

5ME19664.1
The proposed project would introduce a wooden pole power line similar to one that was present in the viewshed of the site between 1904 and 1940. Power poles installed in abandoned sections of road will affect the integrity of those sections. GVP has redesigned the alignment to avoid this impact where topography or design is not a constraint. Avoidance has been recommended; a temporary use area and pole 12-1000-110 and associated anchor proposed locations have been relocated 65 to 78 feet the northeast to avoid the north end of Feature 2. Pole 12-1000-97 and associated anchor proposed location have been moved 80 feet northwest to avoid Feature 4.

Cumulative Effects:
In addition to the impacts mentioned under direct and indirect effects, the continued maintenance of this power line would incrementally increase damage to the sites through vehicular access and surface disturbance. This could create accelerated rates of erosion and crushing and movement of artifacts, causing further damage even after the power line is constructed.

Protective/Mitigation Measures:
To protect cultural resources considered eligible for listing on the NRHP, the following protective/mitigation measures will be implemented:

An archaeological monitor will be present during installation of the poles and associated infrastructure for sites 5GF642.4, 5ME767.3, 5ME767.4, 5ME767.9, and 5ME4676.25.

Buried Line Alternative
If the buried power line alternative is selected, nine cultural resource sites and linear segments considered eligible or potentially eligible to the NRHP would be potentially impacted (5GF642.4, 5ME767.3, 5ME767.4, 5ME767.9, 5ME767.10, 5ME4676.25, 5ME4676.26, 5ME4676.27, and 5ME19664.1). Under this alternative, direct and indirect impacts would occur through surface and subsurface disturbance to features within the power line corridor.

Cumulative Effects:
In addition to the impacts mentioned under direct and indirect effects of the buried power line alternative, the continued maintenance of this power line would incrementally increase damage to the sites through vehicular access and surface disturbance. This could create accelerated rates of erosion and crushing and movement of artifacts, causing further damage even after the power line is constructed and buried.

Protective/Mitigation Measures:
If the buried power line alternative is selected, the following protective/mitigation measures are suggested:

5GF642.4
If the power line is constructed within existing disturbance, there will be no impacts to the site. If project redesign is not feasible, Level II documentation of this segment of the Unitah Railway would need to be completed to mitigate effects.

5ME767.3
If the power line is constructed within existing disturbance, there will be no impacts to the site. If project redesign is not feasible, Level II documentation of this segment of the Unitah Railway would need to be completed to mitigate effects.

5ME767.4
If the power line is constructed within existing disturbance, there will be no impacts to the site. If project redesign is not feasible, Level II documentation of this segment of the Unitah Railway would need to be completed to mitigate effects.

5ME767.9
If the power line is constructed within existing disturbance, there will be no impacts to the site. If project redesign is not feasible, Level II documentation of this segment of the Unitah Railway would need to be completed to mitigate effects.

5ME767.10
If the power line is constructed within existing disturbance, there will be no impacts to the site. If project redesign is not feasible, Level II documentation of this segment of the Unitah Railway would need to be completed to mitigate effects.

5ME4676.25
In order to avoid direct effects to the site, the power line would have to be rerouted around the site to the west. The power line could also be rerouted to the east around features; however, mitigation would be needed where the power line

crosses the Government Highline Canal. A cultural resources monitor would be required during construction.

5ME4676.26
In order to avoid direct effects to the site, it is recommended that the power line be rerouted around the site to the west. If a reroute is not feasible, data recovery would be needed where the power line crosses the site. A cultural resources monitor would be required during construction.

5ME4676.27
In order to avoid direct effects to the site, it is recommended that the power line be rerouted around the site to the west. If a reroute is not feasible, data recovery would be needed where the power line crosses the site. A cultural resources monitor would be required during construction.

5ME19664.1
If the power line is constructed within existing disturbance, there will be no impacts to the site. If a reroute is not feasible, data recovery is suggested, and a cultural resources monitor would be required during construction.

Even if cultural resources are mitigated through project redesign and monitoring, the following stipulations would help protect cultural resources, known and unknown to the agency, during the implementation of the power line construction and maintenance under all alternatives:

All persons in the area who are associated with this project shall be informed that any person who, without a permit, injures, destroys, excavates, appropriates or removes any historic or prehistoric ruin, artifact, object of antiquity, Native American remains, Native American cultural item, or archaeological resources on public lands is subject to arrest and penalty of law (16 USC 433, 16 USC 470, 18 USC 641, 18 USC 1170, and 18 USC 1361). Strict adherence to the confidentiality of information concerning the nature and location of archeological resources would be required of the proponent and all of their subcontractors (Archaeological Resource Protection Act, 16 U.S.C. 470hh)

Inadvertent Discovery: The National Historic Preservation Act (NHPA) [16 USC 470s., 36 CFR 800.13], as amended, requires that if newly discovered historic or archaeological materials or other cultural resources are identified during the Proposed Action implementation, work in that area must stop and the BLM Authorized Officer (AO) must be notified immediately. Within five working days the AO will determine the actions that will likely have to be completed before the site can be used (assuming in place preservation is not necessary).

The Native American Graves Protection and Repatriation Act (NAGPRA) [25 USC 3001 et seq., 43 CFR 10.4] requires that if inadvertent discovery of Native American Human Remains or Objects of Cultural Patrimony occurs, any activity

must cease in the area of discovery, a reasonable effort made to protect the item(s) discovered, and immediate notice be made to the BLM Authorized Officer, as well as the appropriate Native American group(s) (IV.C.2). Notice may be followed by a 30-day delay (NAGPRA Section 3(d)).

The holder may relocate activities to avoid the expense of mitigation and delays associated with this process, as long as the new area has been appropriately inventoried and has no resource concerns, and the exposed materials are recorded and stabilized. Otherwise, the holder shall be responsible for mitigation costs. The BLM authorized officer will provide technical and procedural guidelines for relocation and/or to conduct mitigation. Upon verification from the BLM authorized officer that the required mitigation has been completed, the holder will be allowed to resume construction. Antiquities, historic ruins, prehistoric ruins, and other cultural or paleontological objects of scientific interest that are outside the authorization boundaries but potentially affected, either directly or indirectly, by the proposed action shall also be included in this evaluation or mitigation. Impacts that occur to such resources as a result of the authorized activities shall be mitigated at the holder's cost, including the cost of consultation with Native American groups.

3.4.2 Tribal and Native American Religious Concerns

Current Conditions:

American Indian religious concerns are legislatively considered under several acts and Executive Orders, namely the American Indian Religious Freedom Act of 1978 (PL 95-341), the Native American Graves Environmental Assessment Protection and Repatriation Act of 1990 (PL 101-601), and Executive Order 13007 (1996; Indian Sacred Sites). In summary, these require, in concert with other provisions such as those found in the NHPA and ARPA, that the federal government carefully and proactively take into consideration traditional and religious Native American culture and life and ensure, to the degree possible, that access to sacred sites, the treatment of human remains, the possession of sacred items, the conduct of traditional religious practices, and the preservation of important cultural properties are considered and not unduly infringed upon. In some cases, these concerns are directly related to "historic properties" and "archaeological resources". In some cases elements of the landscape without archaeological or other human material remains may be involved. Identification of these concerns is normally completed during the land use planning efforts, reference to existing studies, or via direct consultation.

No Action:

Direct and Indirect Effects: There are no effects known to the agency.

Cumulative Effects:

There are no cumulative effects known to the agency.

Proposed Action:

Tribal consultation was conducted via correspondence in January of 2014. The Ute Mountain Ute, Northern Ute, and Southern Ute tribes had no concerns about the project.

The Ute have a generalized concept of spiritual significance that is not easily transferred to Western models or definitions. As such the BLM recognizes that they have identified sites that are of concern because of their association with Ute occupation of the area as part of their traditional lands. Due to project design, locations would not be placed on cultural resources sites and no tribal access to the area would be impacted. There would be no impacts to cultural resources due to Proposed Action design.

Cumulative Effects:
Cumulative effects would be the same as direct and indirect effects.

Buried Line Alternative
Direct and Indirect Effects: Impacts would be the same as Proposed Action.

Cumulative Effects:
Impacts would be the same as Proposed Action.

3.4.3 Visual Resources

Current Conditions:
The project area was inventoried as Visual Resource Inventory (VRI) Class II and IV. VRI Class I is the highest valued landscapes and VRI Class IV is the lowest valued landscapes. The low desert below the Book Cliffs was inventoried as VRI Class IV and the Book Cliffs and adjacent drainages were inventoried as VRI Class II. The VRI Class II area was rated as high sensitivity, meaning the public would be sensitive to visible changes in the landscape. The inventory noted the Book Cliffs as an important visual landscape for the communities in the Grand Valley.

The 2015 RMP designated the project area as Visual Resource Management (VRM) Class III and IV. VRM Classes relate to the level of change that can occur on the landscape. VRM Class Objectives include:

Class I Objective: To preserve the existing character of the landscape. The level of change to the characteristic landscape should be very low and must not attract attention

Class II Objective: 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 attention.

Class III Objective: 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 landscape.

Class IV Objective: 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. Management activities may dominate the view of the landscape.

Approximately 10 miles of the power line is proposed within VRM Class IV. The remaining miles are within VRM Class III.

The project area includes two distinct landscapes. One is the low Mancos shale desert that extends from the developed farmland along the Highline Canal north to the base of the Book Cliffs. This landscape has little topographic relief with minimal vegetation.

The other landscape in the project area is a broad canyon setting along West Salt Creek where the creek exits the Book Cliffs. This landscape also has minimal vegetation, but it has substantial topographic relief. The slopes rising out of West Salt Creek to the top of the adjacent ridges are steep and gain over 1,000 feet in elevation.

No Action

Direct and Indirect Effects: Under the No Action Alternative, the power line would not be constructed. As such there would be no changes to the landscape and no new impacts to visual resources.

Cumulative Effects:

The cumulative effects of the No Action Alternative would be the same as the direct and indirect effects.

Proposed Action

Direct and Indirect Effects: Under the Proposed Action, the power line would be constructed using above ground poles to hold the power cable. Both the poles and the power cable would be visible from the Baxter Pass Road along the entire length of the project area. The ground disturbance associated with construction would also be visible over the short-term (3-5 years). Over time the visibility of the ground disturbance would lessen and become less noticeable by the casual observer. The visibility of the poles and the cable would persist over the long-term.

The poles would create the most contrast with the surrounding landscape by adding vertical lines in a landscape that has very few vertical lines. This contrast would be greatest in the flatter terrain in the low Mancos desert. Here the poles would have the sky behind them making them very visible. The poles would be less visible in the West Salt Creek canyon section. Here the canyon walls would provide a background behind the poles. As such, the poles would be less visible than in the flatter terrain to the south.

As noted above, VRM Class III and IV objectives allow for visible changes to the landscape. The contrast created by the poles would be consistent with VRM Class III and IV objectives.

Cumulative Effects:
When combined with other developments in the area, livestock facilities, and oil and gas facilities, the new power line would contribute to an incremental change in the area from a less developed landscape to a more developed landscape.

Buried Power Line Alternative

Under the Buried Power Line Alternative, the changes to the landscape would be similar to the changes describe under the Proposed Action. Where the underground cable would come out of the ground and cross drainages above ground, poles and cable would be visible. Under this alternative the intensity of these impacts would be much less than those under the Proposed Action since there would only be 15 instances where poles would be above ground.

Under this alternative there would be more impacts associated with ground disturbance since most of the power line would be buried. Like the impacts described above in the Proposed Action, these impact would be short-term and the contrast with the surrounding landscape would not persist over the long-term.

Cumulative Effects:
The cumulative impacts of this alternative would be similar to those described in the Proposed Action. Like the direct and indirect impacts of this alternative, the intensity of the impacts would be much less than those in the Proposed Action.

3.4.4 Social, Economic, Environmental Justice

Current Conditions:

The project area is located in both Garfield County and Mesa County. Garfield County has a population of approximately 56,389 and Mesa County has a population of approximately 147,544. Grand Junction, Colorado, with a population of 59,899, is the largest city, and the regional hub of banking, health care, retail trade, and government services in western Colorado and eastern Utah, according to the Census estimates (U.S. Census Bureau 2010). Additional important industries in all of these Western Colorado counties include tourism, energy services, ranching, and fruit and vegetable farming. Tourism in the counties focuses on outdoor recreation activities, including hunting, fishing, rafting, kayaking, bicycling, hiking, and skiing.

Garfield County

Between 2000 and 2010, Garfield County's population increased 29 percent, from 43,791 to 56,389 compared to a statewide growth rate of 17 percent (U.S. Census Bureau, 2000, 2011). The Colorado Department of Local Affairs (CDOLA) projects that population growth rates in Garfield County will continue to exceed the statewide average and that by 2020, Garfield County's population will grow to 88,490 by 2020 (CDOLA, 2011a).

The number of wage and salary employees in Garfield County increased from 19,190 in 2000 to 28,648 in 2008 and decreased to 23,095 in 2010. Most of the job gains and losses were in the Mining and Construction sectors. Service industries are major sources of

employment in Garfield County, accounting for 44 percent of all wage jobs. In 2010, the highest average wages in Garfield County were paid in the Mining ($78,176) and Utilities ($73,682) sectors (Colorado Department of Labor and Employment – CDLE, 2011).

The unemployment rate in Garfield County generally remained below national and statewide unemployment rates between 2000 and 2008. Reflecting the national economic downturn, unemployment rates began to rise in all jurisdictions in 2008. Between 2008 and 2010, unemployment rates increased from 5.8 percent to 9.7 percent in the United States, from 4.9 percent to 8.2 percent in Colorado, and from 3.1 percent to 8.9 percent in Garfield County (Bureau of Labor Statistics - BLS, 2011).

Property taxes and intergovernmental transfers are the largest sources of revenue to Garfield County. Between 2006 and 2010, property taxes comprised between 31 percent and 49 percent of the county's revenues, and intergovernmental transfers contributed between 23 percent and 34 percent (Garfield County, 2011a).

Mesa County

Between 1990 and 2000, the rate of population growth in Mesa County was slightly lower than statewide and regional growth rates. During this time, Colorado's population increased 31 percent, the population of Northwest Colorado increased 29 percent and Mesa County's population increased 25 percent (from 93,145 to 116,255). This trend reversed between 2000 and 2010 and the rate of population growth in Mesa County exceeded statewide and regional averages. Over the decade, Colorado's population increased 17 percent, the population of Northwest Colorado increased 24 percent and Mesa County's population increased 26 percent (to 146,723) (Census Bureau, 1991; 2001 and 2011a).

The Colorado Department of Local Affairs (CDOLA) projects moderate growth in Mesa County in coming years. Between 2010 and 2020, Colorado's population is projected to increase 19 percent, Northwest Colorado's population is projected to increase 22 percent and Mesa County's population is projected to increase 17 percent (to 171,581) (CDOLA, 2012a).

In Mesa County personal income measures the income that individuals receive through earnings, asset ownership and transfer receipts (*i.e.* income received for services not currently rendered). Earnings, which include proprietor, self-employment and wage income, typically comprise a large portion of personal income. In 2010 earnings contributed 69 percent to per-capita personal income in Colorado, 62 percent in Northwest Colorado and 59 percent in Mesa County. Investment income, or dividends and interest and rent, accounted for 18 percent of per-capita personal income in Colorado and 21 percent in Northwest Colorado and Mesa County. Transfer receipts, which include retirement and pension benefits, disability and unemployment insurance benefits, medical payments and veterans' benefits, accounted for 13 percent of per-capita personal income in Colorado, 16 percent in Northwest Colorado and 20 percent in Mesa County (Bureau of Economic Analysis - BEA, 2012).

Between 2000 and 2010, per-capita personal income grew more rapidly in Northwest Colorado and Mesa County than Colorado as a whole. During this time, per-capita personal income increased from $33,977 to $42,451 in Colorado (25 percent increase), from $27,110 to $36,582 in Northwest Colorado and from $25,565 to $34,281 (34 percent increase) in Mesa County (BEA, 2012).

Property tax, sales and use tax and intergovernmental transfers are major sources of revenue to Mesa County government. Between 2006 and 2011 sales and use tax accounted for an average of 20 percent and property taxes accounted for an average of 17 percent of annual county revenues. Total revenues to Mesa County government increased from $141 million in 2006 to $177.3 million in 2010. Due to contracting economic conditions, county revenues fell to $150 million in 2011. In recent years, increases in property tax and intergovernmental revenues have offset losses in sales tax and other revenue sources (Mesa County, 2012).

No Action:

Direct and Indirect Effects: Under the No Action the proposed power line would not be constructed and there would not be a reliable power source to Enterprise's valve site. Failure of the propane, solar, or wind power sources at the valve site could cause economic harm to Enterprise through interruption of transport of their products. Interruption of power to the site could also interfere with response time for controlling the valves. Delays or interruptions of control of the valve site could be problematic during an emergency situation. Delays in controlling the valves could result in loss of product from spills or delay in transport of product during power outages. The extent of impacts related to power outages is dependent on the time-frame of the outage. The site is located in a remote location, which can make access difficult during inclement weather.

Short-term economic benefits resulting from construction of the power line would also not be realized under this alternative.

Cumulative Effects: Cumulative effects are expected to be minimal due to the small scope and extent of this project, as well as the likely short-term nature of potential power outages. However, the cumulative social and economic impacts could increase if there is an outage of the existing power sources on the site during an emergency event on the pipeline (e.g. spill), especially during the winter when access to the site is more difficult.

Proposed Action

All of the socioeconomic impacts associated with the project are expected to occur within Garfield and Mesa counties. Construction of the proposed power line would be completed by GVP employees or contractors. No new long-term jobs beyond the extent of the construction period are expected to be created as a result of this project.

The proposed project may generate some short-term indirect economic benefits to local and regional businesses through the purchase of goods and services, if out of area contractors are used to construct the power line. Directly related regional benefits are expected to be minimal and would be most likely to occur in Grand Junction, where most

crews stay for construction projects within the Grand Valley area. As a result of the limited scope and costs associated with the project, the Proposed Action is not expected to have a large impact on the local economy.

The project would provide a reliable source of power to the Enterprise valve site which would ensure continued transport and control of product through the pipelines that are controlled by the valve site. Providing a more reliable source of power would reduce potential economic and social impacts that could occur if a power outage took place during an emergency event on the pipeline.

Cumulative Effects:
No substantial cumulative effects associated with this project are anticipated. Direct economic benefits from the project are expected to be short-term in nature.

Buried Power Line Alternative:
Direct and Indirect Effects: The communities affected by this alternative would be the same under this alternative because the siting of the power line would be the same as the Proposed Action. This alternative would increase the construction cost of the project and also likely increase the construction time-frame and personnel. The construction cost of this alternative would be approximately $2.41 million or 321% higher than the overhead construction costs, which could impact the constructability of the power line. The extent of the benefits to the local community would be dependent on the increased time-frame for construction or employment of the workers, out of area versus in area hiring, and supplier location for building materials. Overall direct impacts would be short-term in nature due to the limited construction window. Indirect impacts would be similar to those described in the Proposed Action.

Cumulative Effects:
Cumulative impacts would be similar to the Proposed Action, except for the increased short-term expenses related to the increased construction costs.

3.5 LAND RESOURCES

3.5.1 Land Tenure, Rights of Way and other Uses

Current Conditions:
The Project would be located on federal lands administered by the BLM GJFO except for 750 feet on private land located in 6th PM, T. 9 S., R. 104 W. Section 13, NW¼NW¼. The following is a list of the authorized rights-of-way in the Project Area that could be directly or indirectly affected:

COC74989: Enterprise Gas Processing, LLC, 16” WEP II Pipeline
COC69548: Enterprise Gas Processing, LLC, 10” Pipeline
COC62466: Mid-America Pipeline Co., 10” Pipeline
COC29366: MAPL, Enterprise Gas Processing, 10” Pipeline
COC26837: Red Rock Gathering Pipeline
COC61883: Foundation Energy, Access Road

COC50890: Foundation Energy, Access Road
COC66854: National Fuel Corp., Pipeline
COC35139: Garfield County, Baxter Pass Road
COC28020: Red Rock Gathering Pipeline
COC31856: Red Rock Gathering Pipeline
COC21963: Red Rock Gathering Pipeline/Compressor Station
COC012469: Red Rock Gathering Pipeline
COC015888: Red Rock Hydrostatic Relief Reservoir
COC31019: Red Rock Gathering Pipeline
COC31021: Red Rock Gathering Cathodic Protection Site
COC28343: Red Rock Gathering Pipeline
COC28344: Red Rock Gathering Pipeline
COC23632: Red Rock Gathering Pipeline
COC35041: Red Rock Gathering Pipeline
COC68413: Public Service Company of Colorado Pipeline
COC68236: SWEVCO-SABW, LLC Pipeline
COC54893: National Fuel Corp., Pipeline
COC57642: National Fuel Corp., Pipeline
COC26837: Red Rock Gathering Pipeline
COC27063: Red Rock Gathering Pipeline
COC31753: Red Rock Gathering Pipeline
COC0102743: Red Rock Gathering Pipeline
COC73621: Mesa County, Prairie Canyon Bridge alignment
COC35163: Victor Thompson, private access road
COC011369: Northwest Pipeline, Ignacio to Sumas

No Action:
There would be no effects to realty authorizations under this alternative.

Proposed Action:
Direct and Indirect Effects: GVP proposes to construct an overhead power line along Baxter Pass Road to supply electrical power to Enterprise's valve site located in T. 7 S., R. 104 W., Section 26, NW¼NW¼. No construction impacts outside of the extent of the proposed ROW are anticipated.

Cumulative Effects:
Thirty one rights-of-way, including multiple roads and pipelines, have been authorized in the immediate disturbance corridor of the Project Area. Approval of the proposed power line would not be expected to substantially increase cumulative effects. Confining disturbance to corridors could help minimize cumulative impacts across the larger area.

Protective/Mitigation Measures:

- At least 90 days prior to termination of the ROW, GVP should contact the Authorized Officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an accountable termination and rehabilitation plan. This plan should include, but is not limited to, removal of

facilities, removal of surface material; re-contouring, top-soiling, or seeding. The Authorized Officer must approve the plan in writing prior to the holder's commencement of any termination activities.

CHAPTER 4 - CONSULTATION AND COORDINATION

4.1 LIST OF PREPARERS AND PARTICIPANTS

INTERDISCIPLINARY REVIEW

NAME	TITLE	AREA OF RESPONSIBILITY
Janet Doll	Realty Specialist	Project Lead, Lands and Realty
Natalie Clark	Archaeologist	Cultural Resources, Native American Religious Concerns
Andy Windsor	Outdoor Recreation Planner	Access, Transportation, Recreation, VRM, Wilderness, ACECs
Scott Clarke	Range Management Specialist	Vegetation, Range, Forestry
David Scott Gerwe	Geologist	Minerals, Geology, Paleontology
Alan Kraus	Hazardous Materials Specialist	Hazardous Materials
Heidi Plank	Wildlife Biologist	T&E Species, Migratory Bird Treaty Act, Terrestrial & Aquatic Wildlife
Anna Lincoln	Ecologist	Land Health Assessment, Range Ecology, Special Status Plant Species
Christina Stark	Assistant Field Manager (Resource/Planning and Environmental Coordination)	Environmental Justice, Prime & Unique Farmlands, Environmental Coordinator
Kevin Hyatt	Hydrologist	Soils, Air Quality, Water Quality, Hydrology, Water Rights
Mark Taber	Range Management Specialist	Weed Coordinator, Invasive, Non-Native Species
Jeff Phillips	Fire Ecologist Natural Resource Specialist	Fire Ecology, Fuels Management

4.2 TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED

Colorado State Historic Preservation Officer
Ute Indian Tribe of the Uintah and Ouray Reservation
Southern Ute Indian Tribe
Ute Mountain Ute Tribe

CHAPTER 5 - REFERENCES

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