

**United States Department of the Interior  
Bureau of Land Management**

---

**Environmental Assessment**  
DOI-BLM-UT-C040-2016-0001 EA

---

**Sink Valley Pipeline Extension**

*Location: Kane County, Utah*

---

U.S. Department of the Interior  
Kanab Field Office  
669 South Hwy 89A  
Kanab UT, 84741  
435-644-1200

**January, 2016**



## Table of Contents

### Table of Contents

<b>Table of Contents .....</b>	<b>i</b>
<b>1.0 Purpose and Need .....</b>	<b>1</b>
1.1. Introduction and Background .....	1
1.2. Background .....	1
1.3. Purpose and Need for the Proposed Action .....	1
1.4. Conformance with BLM Land Use Plan(s) .....	1
1.5. Relationship to Statutes, Regulations, or other Plans .....	2
1.6. Identification of Issues .....	2
1.6.1. Critical Elements of the Human Environment and other Resources/Concerns .....	2
1.7. Summary .....	3
<b>2.0 Description of Alternatives, Including Proposed Action .....</b>	<b>4</b>
2.1. Introduction .....	4
2.2. Alternative A – Proposed Action .....	4
2.3. Alternative B – No Action .....	4
2.4. Additional Components Common to All Action Alternatives .....	4
<b>3.0 Affected Environment .....</b>	<b>5</b>
3.1. General Setting .....	5
3.2. Affected Environment – Resources/Issues Brought Forward for Analysis .....	5
3.2.1. Range .....	5
3.2.2. Wildlife .....	5
3.2.3. Geology and Paleontology .....	5
<b>4.0 Environmental Impacts .....</b>	<b>6</b>
4.1. Introduction .....	6
4.1.1. Range .....	6
4.1.2. Wildlife .....	6
4.1.3. Geology and Paleontology .....	7
4.2. Cumulative Impacts Analysis .....	7
<b>5.0 Consultation and Coordination .....</b>	<b>8</b>
5.1. Introduction .....	8
5.2. Persons, Groups, and Agencies Consulted .....	8

5.3. Summary of Public Participation ..... 8  
5.3.1. List of Preparers.....8

**6.0 References, Glossary and Acronyms .....9**

6.1. References Cited ..... 9

**7.0 APPENDICES.....10**

7.1.1. Map 1.....10

# Sink Valley Pipeline Location

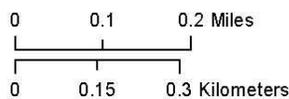
January 2016



- BLM
- BLM Wilderness
- National Forest
- National Park
- State
- Private



- BLM WSA



Projection: Transverse Mercator  
 Coordinate System: UTM  
 Datum: North American Datum of 1983 (NAD 83)

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.



KANAB FIELD OFFICE

BLM

..10

7.1.2. ID Team Checklist ..... 11

## **1.0 PURPOSE AND NEED**

### **1.1. Introduction and Background**

This Environmental Assessment (EA) has been prepared to analyze resource impacts relative to a proposed pipeline extension. The EA is a site-specific analysis of potential impacts that could result with the implementation of a proposed action or alternatives to the proposed action. The EA assists the BLM in project planning and ensuring compliance with the National Environmental Policy Act (NEPA), and in making a determination as to whether any “significant” impacts could result from the analyzed actions. “Significance” is defined by NEPA and is found in regulation 40 CFR 1508.27. An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a statement of “Finding of No Significant Impact” (FONSI). A Decision Record (DR), which includes a FONSI statement, is a document that briefly presents the reasons why implementation of the selected action will not result in “significant” environmental impacts (effects) beyond those already addressed in the EA. If the decision maker determines that this project has “significant” impacts following the analysis in the EA, then an EIS would be prepared for the project. If not, a Decision Record may be signed for the EA approving the alternative selected.

### **1.2. Background**

The Sink Valley Pipeline project is located on three allotments: the Upper Sink Valley allotment, the Lower Sink Valley allotment, and the Cottonwood Springs allotments, all allotments consists of federal land and private land. The project is located south of Alton Utah. Original NEPA to authorize construction of the Sink Valley pipeline occurred in 1985. In 2010 the permittee on the Lower Sink Valley allotment ran a temporary pipeline above ground from the original point of diversion to the spring source approximately .3 a mile to the North East to the spring source in an effort to change the point of diversion. Because the issues in the area have changed and so much time has passed since the original EA was completed it was determined that a new short form EA would need to be completed before additional ground disturbance took place to bury the pipeline and set it on a permanent continuous grade to avoid airlocks.

### **1.3. Purpose and Need for the Proposed Action**

The purpose of this project is to provide clean, silt free water to the Sink Valley Pipeline by diverting water from the spring source and eliminating the old point of diversion. The need for this project was identified by the permittees as they have struggled to keep the pipeline clear of silt and operating efficiently over the last 20 years. The proposed project would allow only clean water to enter the pipeline providing for a better operating system requiring less maintenance.

### **1.4. Conformance with BLM Land Use Plan(s)**

The Kanab Resource Management plan provides for the Sink Valley Pipeline extension project through the following decisions.

#### **GRA-9**

Design grazing systems and range improvements to achieve and maintain healthy rangelands.

**WL-22**

Develop present use area water needs for wildlife as capabilities exist; maintain water throughout the spring and fall in existing and new livestock range improvements (e.g., tanks and pipelines).

**WL-20**

Authorize construction of wildlife habitat improvement projects (including water developments and vegetation treatments) to meet wildlife goals and objectives, provided that the project complies with NEPA, ESA, and other applicable laws and policies.

**WL-19**

Continue to work with UDWR and conservation organizations to establish additional water developments, subject to NEPA consideration, and maintain existing water developments to improve wildlife distribution and encourage habitat use by native wildlife species and introduced non-native species.

**1.5. Relationship to Statutes, Regulations, or other Plans**

Taylor Grazing Act of (TGA) of 1934

Federal Land Policy and Management Act (FLPMA) of 1976 (43 U.S.C. 1701 et seq.)

Public Rangelands Improvement Act (PRIA) of 1978

43 CFR 4100 Grazing Administration-Exclusive of Alaska

Standards of Quality for Waters of the State, R317-2-6, Utah Administrative Code, December 1997

National Environmental Policy Act of 1969 (as amended)

Executive Order 11988 (floodplains)

Executive Order 11990 (wetlands)

Executive Order 12898 (environmental justice)

Executive Order 13186 (Migratory Bird Treaty Act)

Clean Air Act of 1970 (As Amended)

**1.6. Identification of Issues**

Identification of issues for this assessment was accomplished by considering the resources that could be affected by implementation of the alternatives, as well as through involvement with the public and input from the interdisciplinary team. Public involvement consisted of posting the proposal on the Utah BLM Environmental Notification Bulletin Board on 10/26/2015, on the BLM e-planning website on 1/14/16, and through continued contact with permittees that could be affected by the actions proposed.

**1.6.1. Critical Elements of the Human Environment and other Resources/Concerns**

Critical elements of the human environment as identified in BLM Handbook 1790-1 must be considered. Those critical elements of the human environment and resource which are not present, or are not affected by the Proposed Action or alternatives, are included as part of the Interdisciplinary team checklist. These issues will not be discussed further.

Those critical elements of the human environment and resources which may be affected by the Proposed Action and/or alternatives are carried forward throughout this analysis, and are discussed briefly as follows:

#### 1.6.1.1. Range

This project would have a positive impact on Range by providing reliable water to the Sink Valley Pipeline.

#### 1.6.1.2. Wildlife

This project would have a positive impact on mule deer by providing a reliable water source in the Lower Sink Valley Area. Also a short term negative impact could be expected because wildlife would temporarily be displaced during construction. Also a small acreage of disturbance is expected to install the pipeline.

### **1.7. Summary**

This chapter has presented the Purpose and Need of the Proposed Action, as well as the relevant issues (i.e., those elements that could be affected by implementation of the Proposed Action). In order to meet the purpose and need of the Proposed Action in a way that resolves the issues, the BLM has developed a range of alternatives. These alternatives, including the No Action Alternative, are presented in Chapter 2. The potential environmental impacts or consequences resulting from the implementation of each alternative are then analyzed in Chapter 4 for each of the identified issues.

## **2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION**

### **2.1. Introduction**

The alternatives found in this chapter have been developed by an interdisciplinary team to provide reliable water on the Upper Sink Valley, Lower Sink Valley and Cottonwood Springs allotments for cattle and wildlife.

### **2.2. Alternative A – Proposed Action**

Alternative A would be to install approximately .3 of a mile of 2 inch pipe approximately 24” deep in the ground from the existing diversion to the spring source. Pipeline would be installed using a dozer with a ripper and a backhoe where needed. Care would be taken to route the pipeline on the side hill and away from the existing stream channel to avoid impacts to the current water delivery system used by the private landowner adjacent to the proposed project.

### **2.3. Alternative B – No Action**

Under this alternative the proposed pipeline would not be installed. Pipeline maintenance would continue to be a struggle and water would remain unreliable throughout the system.

### **2.4. Additional Components Common to All Action Alternatives**

All clearances would be completed prior to ground disturbing activities or as required (wildlife, archaeology, cadastral, paleontology).

### **3.0 AFFECTED ENVIRONMENT**

This chapter presents the potentially affected existing environment (i.e., the physical, biological, social, and economic values and resources) of the impact area as identified in the Interdisciplinary Team Analysis Record Checklist and presented in Chapter 1 of this assessment. This chapter provides the baseline for comparison of impacts/consequences described in Chapter 4.

#### **3.1.General Setting**

The site for the proposed project is located within the Upper Sink Valley allotment South of Alton Utah (T40S R5W SEC 5). It is located in Kane County.

#### **3.2.Affected Environment – Resources/Issues Brought Forward for Analysis**

##### **3.2.1. Range**

Currently livestock use the Upper Sink Valley, Lower Sink Valley and Cottonwood Springs allotments in conjunction with private lands June 1 through October 31 each year. Livestock on the three allotments combined are permitted a total of 1,114 AUM's annually.

##### **3.2.2. Wildlife**

Wildlife currently use the area analyzed in this EA year round but more concentration takes place in the Spring, Summer, and Fall months because deer and elk typically winter further to the south.

##### **3.2.3. Geology and Paleontology**

The bedrock geology in the project area consists of the Tropic Shale Formation overlying the Dakota Formation. Both of these units are Cretaceous in age and are known to contain numerous marine fossils. The bedrock ridges are usually capped with Quaternary alluvial gravels and the valley bottoms are made up of Quaternary alluvial valley fill.

## 4.0 ENVIRONMENTAL IMPACTS

### 4.1. Introduction

This chapter summarizes the physical and biological aspects of the project area and the effects of implementing each alternative on the environment. It also presents as appropriate the scientific and analytical basis for the comparison of each alternative. Affected environments, in which issues have been identified include: 1) range and 2) wildlife. This chapter also contains the cumulative impacts for the above resources with the implementation of the alternatives.

#### 4.1.1. Range

##### *Alternative A – Proposed Action*

The proposed action would have a beneficial impact on livestock grazing and Range in all of the allotments by providing a reliable water source for each allotment. The current pipeline and system has required a large amount of maintenance the last ten years. With implementation of the preferred alternative it is anticipated that the system would not require as much maintenance and would operate more efficiently providing reliable water for livestock and allowing for an even distribution of livestock across the allotments.

##### *Alternative B – No Action*

Under this alternative the pipeline would not be extended. The problem of silt in the line would remain and the cost of maintenance on the line would remain high preventing the system from operating efficiently.

##### *Mitigation Measures*

No mitigation measures have been identified other than those incorporated as part of the Proposed Action.

#### 4.1.2. Wildlife

##### *Alternative A – Proposed Action*

The proposed action would have a long term positive impact to wildlife in the area and a short term negative impact. The Short term negative impact would consist of temporary animal (mule deer) displacement during construction and installation of the pipeline. This displacement would be minor in nature and limited to construction and installation of the pipeline, approximately 2 weeks. In addition to a short displacement, there would be a minor loss of cover where vegetation would be cleared to facilitate the installation of the pipeline by a dozer and backhoe.

The long term positive impact to wildlife would be the reliable water source the project would provide especially during the fall migration when the area is generally dry.

##### *Alternative B – No Action*

Under the no action alternative impacts would remain the same as current conditions.

##### *Mitigation Measures*

1. Limit excessive soil/vegetation disturbance to that necessary for pipeline installation.

2. Follow existing roads and trails where possible. Vehicle travel off existing roads will be limited to that necessary to construct and install the pipeline.
3. No trash or waste material resulting from construction operations shall be left on site.
4. Escape ladders or ramps will be installed in all troughs and tanks to provide escape access for small mammals, birds and/or bats.

#### **4.1.3. Geology and Paleontology**

##### ***Alternative A – Proposed Action***

The proposed action could have a negative impact on paleontological resources where the water line will be buried from the water diversion site to the valley floor. This section of the pipeline will need to be entrenched into bedrock, namely the Tropic Shale and the Dakota Formations. These formations are known to contain numerous fossils. It is possible that fossils could be impacted and destroyed by the heavy equipment required to bury the pipeline.

In the Quaternary-age deposits located on the ridge tops and in the valley bottoms, the likelihood of encountering in situ fossils is remote and not an issue.

##### ***Alternative B – No Action***

Under the no action alternative impacts would remain the same as current conditions.

##### ***Mitigation Measures***

1. Conduct a foot survey as the pipeline route is being created, before any excavation takes place, paying special attention for any in-place paleontological resources.
2. During heavy equipment use in the Tropic Shale and Dakota Formations, have a specialist on site that can monitor for any paleontological material and stop or reroute the pipeline to avoid damage to any resource.

#### **4.2. Cumulative Impacts Analysis**

“Cumulative impacts” are those impacts resulting from the incremental impact of an action when added to other past, present, or reasonably foreseeable actions regardless of what agency or person undertakes such other actions.

All resource values have been evaluated for cumulative impacts. It has been determined that cumulative impacts from any other foreseeable connected actions would be negligible as a result of these alternatives. All impacts associated with these alternatives have been identified above in “Direct and Indirect Impacts”.

## 5.0 CONSULTATION AND COORDINATION

### 5.1. Introduction

The issue identification section of Chapter 1 identifies those issues analyzed in detail in Chapter 4. The issues were identified through the public and agency involvement process described in sections 5.2 and 5.3 below.

### 5.2. Persons, Groups, and Agencies Consulted

UDWR- Utah Division of Wildlife Resources

UPCD- Utah Partners for Conservation Development

Linda Kollander- Adjacent private landowner

### 5.3. Summary of Public Participation

Notice of the preparation of this EA consisted of posting the proposal on the Utah BLM Kanab Field Office Environmental Notification Bulletin Board (ENBB) on 10/26/2015, on the BLM e-planning website on 1/14/16, and through continued contact with permittees that could be affected by the actions proposed. No comments were received.

#### 5.3.1. List of Preparers

**Carson Gubler** (Range, Invasive, Non-native Species, Threatened, Endangered or Candidate Plant Species) – Rangeland Management Specialist, Kanab Field Office

**John Reese** (Range, Vegetation) – Rangeland Management Specialist, Kanab Field Office

**Lisa Church** (Wildlife, Riparian) – Wildlife Biologist, Kanab Field Office

**Laurel Glidden** (Cultural Resources) – Archeologist, Cedar City District Office

**James Holland** (Geology/Hydrology) – Geologist, Kanab Field Office

**Clay Stewart** (Recreation Planner)- Kanab Field Office

## 6.0 REFERENCES, GLOSSARY AND ACRONYMS

### 6.1. References Cited

**BLM Documents** - Available for review at the Kanab Field Office  
Kanab Field Office RMP & ROD October 31, 2008

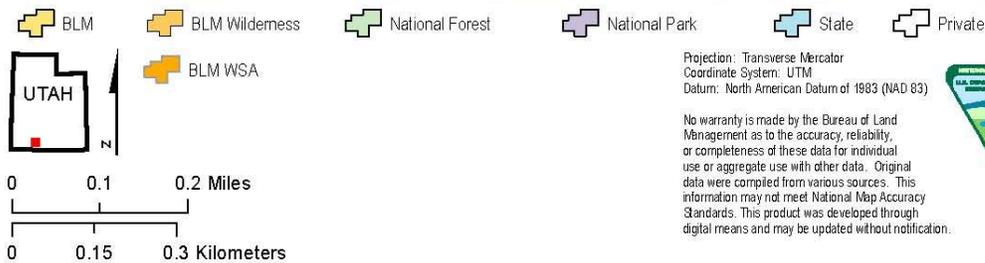
ID Team Checklist- Found in Appendices 7.1.3

# 7.0 APPENDICES

## 7.1.1. Map 1.

### Sink Valley Pipeline Location

January 2016



**BLM**

**KANAB FIELD OFFICE**



## 7.1.2. ID Team Checklist

### INTERDISCIPLINARY TEAM ANALYSIS RECORD CHECKLIST

**Project Title:** Sink Valley Pipeline Extension EA

**NEPA Log Number:** DOI-BLM-UT-C040-2016-0001-EA

**File/Serial Number:**

**Project Leader:** Carson Gubler

**Project Proposal:** In response to ongoing water right litigation the BLM Kanab Field office entered into and agreement with Linda Kollander to take a number of steps in the Sink Valley area to better the water system for all parties. This project proposal is a part of that settlement agreement. The Proposed action of this EA is to install approximately .3 of a mile of 2 inch pipe approximately 24" deep in the ground from the existing diversion to the spring source. Pipeline would be installed using a dozer with a ripper and a backhoe where needed. Care would be taken to route the pipeline on the side hill and away from the existing stream channel to avoid impacts to the current water delivery system used by the private landowner adjacent to the proposed project.

**FOR EAs/CXs:** NP: not present; NI: resource/use present but not impacted; PI: potentially impacted  
**FOR DNAs only:** NC: no change (anticipated resource impacts not changed from those analyzed in the NEPA document on which the DNA is based)

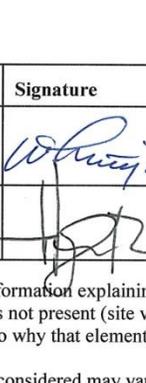
#### STAFF REVIEW OF PROPOSAL:

NP/NI/PI NC	Resource	Date Reviewed	Signature	Review Comments (required for all NIs and PIs. PIs require further analysis.)
<b>CRITICAL ELEMENTS</b>				
NI	Air Quality (C. Gubler)	10-28-15	/s/ C. Gubler	Air Quality would not be impacted in a measurable amount due to implementation of this project
NP	Areas of Critical Environmental Concern (C. Stewart)	11/13/15	/s/ Clay Stewart	The proposed project is not within an ACEC
NI	Cultural Resources (L. Glidden)	01/20/16	/s/ Laurel H. Glidden	The area has been previously inventoried (U86NI0487, "Alton Coal Project Survey") and as a result of that inventory several archaeological sites were identified immediately adjacent to the project location. Because the previous inventory was conducted 30 years ago, another pedestrian inventory will be conducted to reassess the condition and extent of the adjacent sites. It is reasonable to assume, however, that sites are likely to be present but so long as the pipeline can be moved to avoid those sites the project will result in No Historic Properties Affected.
NI	Environmental Justice (K. Rigrup)	12/15/15	/s/ K. Rigrup	No low income or minority populations present in the project area.
NP	Farmlands (Prime or Unique) (J. Reese)	11/2/15	/s/ J. Reese	No prime or unique farmlands present in proposed project area.
NI	Floodplains (J. Holland)	1/6/2016	/s/ James R. Holland	The proposed action will avoid all floodplains by way of pipeline alignment.
NP	Invasive, Non-native Species (L. Lefevre)	01/06/2016	/s/ L. Lefevre	No Known Infestations of Invasive, Non-Native Species within project area.

NP/NI/PI NC	Resource	Date Reviewed	Signature	Review Comments (required for all NIs and PIs. PIs require further analysis.)
NI	Native American Religious Concerns ( <i>L. Glidden</i> )	01/20/16	/s/ Laurel H. Glidden	No Traditional Cultural Properties or Sacred Sites are known to exist within the project area. Further, construction of the pipeline is unlikely to be of concern to Native American Tribes based on previous consultations in the area and on similar projects.
NP	Threatened, Endangered or Candidate Plant Species ( <i>C. Gubler</i> )	10-28-15	/s/ C. Gubler	No T and E Plants are found within the project
NI	Threatened, Endangered or Candidate Wildlife Species ( <i>L. Church</i> )	12-10-15	/s/L. Church	The project lies with in 4 miles of a lek, however disturbance cap analysis puts this outside mapped habitat, and the project is located in pinyon and juniper outcrops , and would be buried, and allow for surface water for grouse. ( see attached writeup for anlysis and documentation)
NI	Wastes (hazardous or solid) ( <i>G. Pepper</i> )	1/6/2016	/s/G.Pepper	The existing pipeline may cause waste conditions if left in place and should be removed at the completion of the project. The sediment in the existing pipeline may be considered solid waste (depending on the amount accumulated) and all federal, state and local regulations should be followed when removing.
NI	Water Resources ( <i>J. Holland</i> )	1/6/2016	/s/ James R. Holland	While the proposed action is a water resource action, it is merely a realignment of an existing pipeline. No new water will be diverted and the delivery system or water right will not be expanded by this action.
NI	Wetlands/Riparian Zones ( <i>L. Church</i> )		/s/L. Church	The new sytem would allow for the maintance of riaparian habitat characteristics
NP	Wild and Scenic Rivers ( <i>C. Stewart</i> )	11/13/15	/s/ Clay Stewart	The proposed project is not within a Wild and Scenic River designation.
NP	Wilderness ( <i>C. Stewart</i> )	11/13/15	/s/ Clay Stewart	The proposed project is not within a Wilderness Area or a Wilderness Study Area.
<b>OTHER RESOURCES / CONCERNS*</b>				
NI	Rangeland Health Standards and Guidelines ( <i>C. Gubler</i> )	10-27-15	/s/ C. Gubler	Project utilizes existing disturbances where possible i.e.. Fences, road etc. New disturbance would not be large enough to impact Rangeland Health standards and Guides.
PI	Livestock Grazing ( <i>J. Reese</i> )	11/2/15	/s/ J. Reese	Proposed project would positively impact livestock grazing. Having the current above ground pipeline buried would prevent freezing and air entering pipeline system thus allowing for a more reliable water source for livestock grazing.
NI	Woodland / Forestry ( <i>J. Reese</i> )	11/2/15	/s/ J. Reese	Proposed project utilizes existing disturbance, no anticipated impacts to woodland/forestry.
NI	Vegetation ( <i>J. Reese</i> )	11/2/15	/s/ J. Reese	Proposed project utilizes existing disturbance, no anticipated impacts to vegetaion.
NI	Fish and Wildlife ( <i>L. Church</i> )	12/10/15	/s/ L. Church	Consturction of new pipeline should occur outside of nesting dates for neo tropical migratory birds ( April 15- July 15)
NI	Soils ( <i>J. Reese</i> )	11/2/15	/s/ J. Reese	Proposed project would not have measurable impacts to soils. Distrubed area should be re- contoured and water bars constructed where necessary to prevent extreme runoff and soil erosion.
NI	Recreation ( <i>C. Stewart</i> )	11/13/15	/s/ Clay Stewart	This area receives low recreation use. The recreation use that does occur is mostly hunting during the fall months. The proposed pipeline extension would not displace or disrupt recreation activities occurring in the area.
NI	Visual Resources ( <i>C. Stewart</i> )	11/13/15	/s/ Clay Stewart	The proposed project is located in an area where agricultural facilities are common. The pipeline would be buried and not visible from the Alton Road. The project wouldn't draw attention from the casual observer.

NP/NI/PI NC	Resource	Date Reviewed	Signature	Review Comments (required for all NIs and PIs. PIs require further analysis.)
PI	Geology /Paleontology (J. Holland)	1/6/2016	/s/ James R. Holland	No unique geology is located in the project area. No energy, minerals, or leasables will be removed from production because of this proposed action. Portions of the pipeline realignment would be located in a geologic formation that is known to have a high occurrence of paleontological resources. A foot survey of the pipeline route will need to be conducted before construction takes place and a monitor will need to be onsite during pipeline installation to watch for any paleontological resources that may be encountered.
NI	Lands / Access (M. Foley)	11/30/2015	/s/ Mark Foley	Project takes place on public land, within an Intrap Wdl PW Res 107 area under case number UTU-52734. Action would have no impact to access, land tenure, or potential future uses. <i>Construction should take care to avoid the adjacent water pipeline facility issued under right-of-way UTU-69492, as well as preserve survey markers, bearing trees, and witness corners.</i>
NI	Fuels / Fire Management (C. Gubler)	10-28-15	/s/ C. Gubler	Project would not have a measurable impact on fire and fuels management within the project area.
NI	Socio-economics (K. Rigtrup)	12/15/15	/s/ K. Rigtrup	Small project, part of an existing system would not affect socio-economics.
NP	BLM Natural Areas (C. Stewart)	11/13/15	/s/ Clay Stewart	The proposed project is not within a BLM Natural Area.

**FINAL REVIEW:**

Reviewer Title	Date	Signature	Comments
NEPA Coordinator (W. Bunting)	1/25/16		
Manager (H. Barber)	1/25/16		

**NOTE:** Review Comments should include information explaining how the specialist came to their conclusion - how does he/she know the element/resource is not present (site visit and date of visit, familiarity with location, etc.). For all 'NIs' give a brief explanation as to why that element/resource would not be impacted.

\* The list of Other Resources / Concerns to be considered may vary by individual field office. Note: Native American Trust Responsibilities should be considered for FO's with Indian Mineral interests.