

**U.S. Department of the Interior  
Bureau of Land Management**

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**Environmental Assessment  
DOI-BLM-NV-L020-2010-0038-EA  
June, 2010**

**Brown Spring Pipeline Replacement**

*Location: Patterson Wash of Wilson Creek Allotment*

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## **Brown Spring Pipeline Reconstruction**

### **1.0 INTRODUCTION**

This Environmental Assessment (EA) has been prepared to analyze the reconstruction of the Brown Spring Pipeline. The pipeline is located in the Wilson Creek Allotment on the east side of HWY 93 just south of the Pony Springs in Lincoln County NV. This EA is a site-specific analysis of potential impacts that could result with the implementation of the proposed action or the alternative. The EA assists the Bureau of Land Management (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 Chapter 40 of the Code of Federal Regulations (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).

This document is tiered to the *Ely Proposed Resource Management Plan/Final Environmental Impact Statement* (RMP/EIS) released in November 2007. Should a determination be made that implementation of the proposed or alternative actions would not result in “significant environmental impacts” or “significant environmental impacts beyond those already addressed in the RMP/EIS”, a FONSI will be prepared to document that determination, and a Decision Record issued providing the rationale for approving the chosen alternative.

#### **1.1 Background:**

This pipeline was originally constructed in 1968 and runs for about 4.5 miles on public land, west of Brown Spring to a water trough and then 7 miles south to 3 water troughs and reservoirs. When the pipe was installed originally it was not buried deep enough. In some locations the pipe is only a few inches below the surface.

The Wilson Creek Permittees (here after referred to as “the permittees”) propose to replace the existing pipeline with a new pipe. The permittees, with the help of the Natural Resource Conservation Service (NRCS), would have a work agreement with the BLM to perform the work and use the BLM’s equipment. The maintenance agreement for this pipeline will be updated to show the new construction.

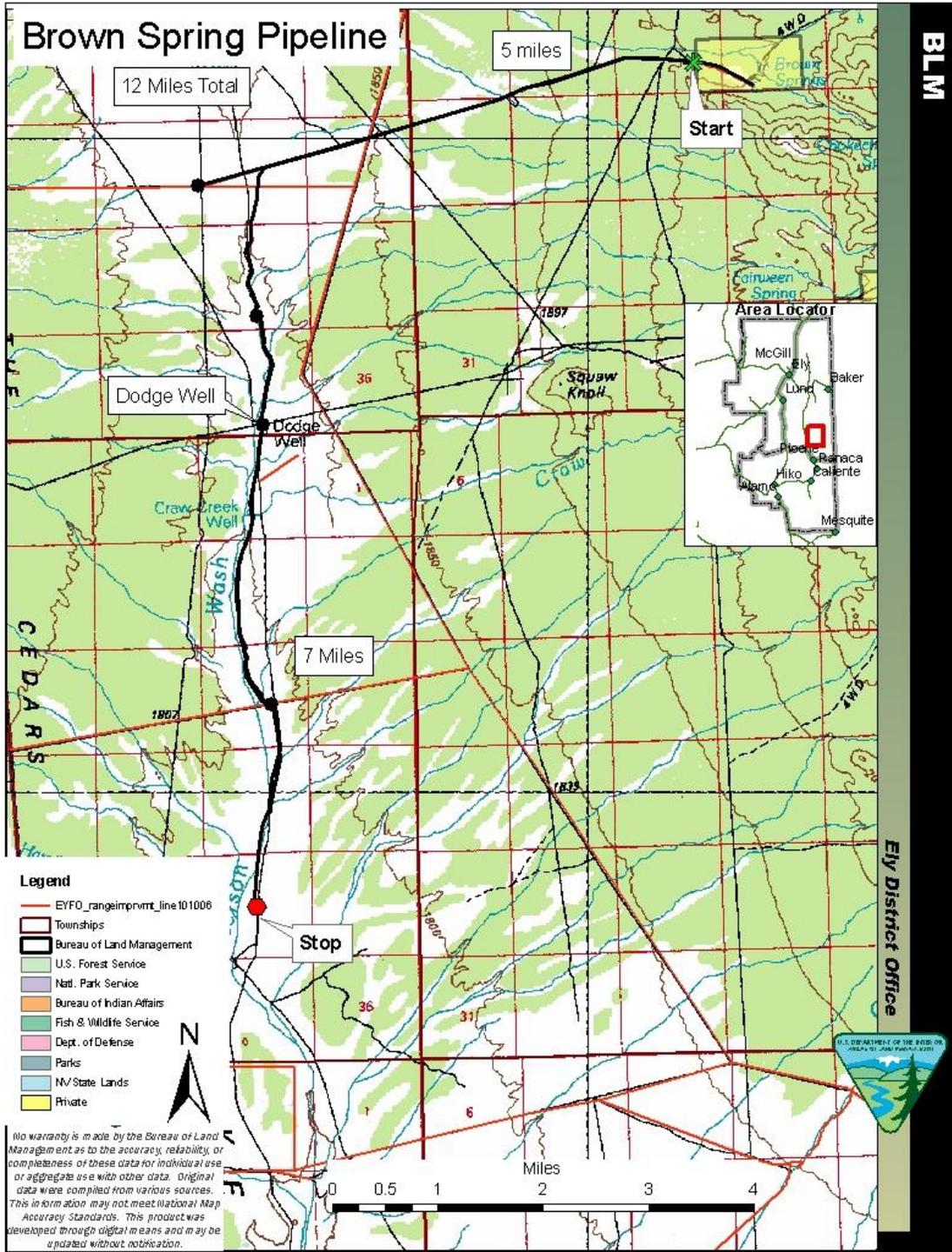


Figure 1: Map showing location of pipeline.

## **1.2 Purpose of the Proposed Action:**

The purpose for this action is to replace the pipeline that is not functioning properly.

## **1.3 Need for the Proposed Action:**

The need for this action is the pipe is in poor condition. The age of the pipe and the shallow depth that it was originally laid made the pipe brittle and easily broken. This pipe has been repaired numerous times but the pipe continues to break in other locations.

The permittees have to use shovels and/or a backhoe to dig up the pipe. The permittees have been repairing the pipeline, on average three to four times a week while cattle occupy the pastures containing the pipeline. The constant repair of the pipe is causing ground disturbance.

In locations where the pipe continues to re-break, water runs over the ground creating a location for livestock to concentrate, and trample that area. The water spraying out of the broken pipe is eroding the soil and causing rills.



**Figure 1:** A picture of the pipe taken 11/10/2009.



**Figure 2:** Disturbance caused by a 2 day old leak.

The kind of disturbance shown in figure 2 is found in several locations along the pipeline. It causes soil erosion, alters vegetation, concentrates livestock and leaves bare soil for weeds to establish.

The BLM needs to consider approval of the reconstruction of the pipeline to allow the permittee to comply with 43 CFR 4120. 3-1 (a)

*Range improvements shall be installed, used, maintained, and/or modified on the public lands, or removed from these lands, in a manner consistent with multiple-use management.*

This pipeline has been regularly maintained but in recent years, the pipe has weakened to. The pipe cannot handle the water pressure within the system.

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

The Proposed Action is in conformance with the Ely District Approved Resource Management Plan (August 20, 2008), which states, “To manage livestock grazing on public lands to provide for a level of livestock grazing consistent with multiple use, sustained yield, and watershed function (Page 85).

This document is tiered to by referencing the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007).

### **1.4.1 Relationship to Other Plans**

The proposed action is consistent with the following Federal, State, and local plans to the maximum extent possible:

- State Protocol Agreement between the Bureau of Land Management, Nevada and the Nevada Historic Preservation Office (1999).
- Northeastern Great Basin Resource Advisory Council (RAC) Standards and Guidelines (February 12, 1997).
- White Pine County Land Use Plan (2007)
- White Pine County Elk Management Plan (2007 revision)

### **1.5 Identification of Issues:**

While many issues may arise during scoping, not all of the issues raised warrant analysis. Issues raised through scoping are analyzed if:

- Analysis of the issue is necessary to make a reasoned choice between alternatives;
- The issue is significant (an issue associated with a significant direct, indirect, or cumulative impact or where analysis is necessary to determine the significance of impacts); or
- There is a disagreement about the best way to use a resource, or resolve an unwanted resource condition, or potentially significant effects of a proposed action or alternative.

An interdisciplinary (ID) team analyzed the potential consequences of the proposed action during internal scoping held on January 25, 2010. No other issues have been found.

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

### **2.1 Introduction:**

The previous section presented the Purpose and Need of the proposed project, as well as the relevant issues, i.e., those elements that could be affected by the implementation of the proposed project. In order to meet the purpose and need of the proposed project in a way that resolves the issues, the BLM has developed a range of action alternatives. This alternative, as well as a no action alternative, are presented below. The potential environmental impacts or consequences resulting from the implementation of each alternative are then analyzed in Section 3 for each of the identified issues.

## **2.2 Proposed Action:**

### **2.2.1 Introduction and Pipeline Location**

The BLM Schell Field Office received a request in August 2009, from the Wilson Creek Allotment permittees for permission to replace the Brown Spring Pipeline. The pipeline is located in the Patterson Seedings of the Wilson Creek Allotment.

Legal Description:

T. 5 N. R. 67 E Sec. 16, 17, 19;

T. 5 N. R. 66 E Sec. 23, 24, 26, 35; and

T. 4 N. R. 66 E Sec. 2, 11, 14, 23, 26.

This location was surveyed by a private company to allow for adequate gradient in the pipeline. The pipe starts at Brown Spring and carries water approximately 5 miles west. At 4.5 miles a second pipe connects to the first and supplies water approximately 7 miles south along the bottom of Patterson Wash. Along the path of the project the pipeline encounters 3 types of roads.

- 1) A dirt road runs along approximately 8 miles of the pipeline.
- 2) A two track road runs along approximately 3.5 miles of the pipeline.
- 3) This pipeline crosses only 1 county road.

The pipeline is located either within a two track road or directly adjacent to a dirt road. Since the old pipe will be removed, the new pipe will be placed in the same location as the old pipe. This area has already been disturbed by the past action of installing the old pipe. No new surface disturbance will be made to replace this pipeline. Some vegetation will be run-over by the equipment, however should re-grow without additional treatments. The pipeline will cross a county road. A backhoe will be used to dig a trench across the road. A sleeve will be placed at the bottom of the trench and the new pipe will be threaded through the sleeve. The trench will be filled in with the same material that was taken out and the dirt will be smoothed and compacted back to its original state. Once the road has been filled in and restored, the LCR Assistant Supervisor will inspect the road to make sure it meets the county's standards.

According to the Lincoln County Road Department (LCRD) neither the BLM nor the Permittees need a permit to trench across the road. The BLM is required to notify both the LCRD and any private residents that use the road for access before we start work on the road. While the road is under construction we have two options.

- 1) The BLM can provide the private residents on the road enough warning ahead of time to close the road and provide a map of alternative routes.
- 2) The BLM can provide a detour route around the project area. This option would need flaggers to direct traffic.

Both options would require signs that would be provided by the LCRD.

Once the old pipe is removed the permittee is responsible for removing it from public lands and disposing of it properly.

### 2.2.2 Method to replace the pipeline

A D-7 high track dozer with a ripper claw attached to the back, a flatbed pickup truck and a backhoe would be used to install the new pipeline. The pipe comes on large rolls with 5,000 ft of pipe. This roll is placed on the back of the flatbed pickup truck as shown in figure 3. The pipe is then threaded over the dozer into the ripper claw in the back (shown in figure 4).

Once the pipe is feed into the ripper claw, the claw is buried into the ground about 3 feet deep. As the dozer moves forward, the pipe is laid into the ground with little surface disturbance (See figure 5). At a depth of 3 feet the pipe should be safe from freezing and will not be uncovered by a normal year erosion.



**Figure 3.** The roll of pipe on the back of the flatbed pickup truck.



**Figure 4.** The pipe being threaded over the dozer and into the ripper claw.



**Figure 5.** The ground disturbance left after the pipeline has been placed in the ground.

The backhoe drives behind the dozer and over the disturbed area to fill in the hole over the pipe. The backhoe is also used to load each new roll of pipe onto the back of the flatbed truck.

The new pipe being used has the following specs. The Iron Pipe Size (IPS) is 1 ½", the Pounds per Square Inch (PSI) is 160lb. The model of this High-Density Polyethylene pipe is 50R11.

At each intersection of the pipe there will be an air vent to prevent back pressure from putting undue stress on the new pipeline.

The measures listed in the Weed Risk Assessment will be followed during implementation of this project to minimize the spread of weeds.

### **2.3 No Action Alternative:**

The proposed action would not occur and the pipeline would not be replaced. Leaks would continue to occur along the pipeline causing livestock concentration, altered vegetation and bare ground.

### **2.4 Alternatives Considered, but Eliminated from Further Analysis:**

1) Shutting off the pipeline at the spring source was considered, but was dismissed. This alternative would not provide for adequate livestock distribution in the pastures, and would have a negative impact on the rangeland health in the area.

2) Due to initial archeology concerns a new route was proposed for the pipeline. Since then the concerns have been addressed and the new route was dismissed because of the unnecessary new ground disturbance.

## **3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS**

### **3.1 Resources/Concerns Analyzed:**

The following items have been evaluated for the potential for significant impacts to occur, either directly, indirectly or cumulatively, due to implementation of the proposed action. Potential impacts were evaluated in accordance with criteria listed in section 1.6 of this paper to determine if detailed analysis was required. Consideration of some of these items is to ensure compliance with laws, statutes or Executive Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general, and to the Ely District BLM in particular.

**Table 3-1 Resource/Concerns**

Resource/Concern	Issue(s) Analyzed? (Y/N)	Rationale for Dismissal from Detailed Analysis or Issue(s) Requiring Detailed Analysis
Air Quality	N	There could be a slight temporary increased particulate matter (dust) resulting from the proposed action. The affected area is not within an area of non-attainment or areas where total suspended particulates or other criteria pollutants exceed Nevada air quality standards. Direct, indirect or cumulative impacts do not approach a level of significance. Detailed analysis is not required.
Cultural Resources	N	<p>A Class III intensive cultural resource inventory will be conducted on all new ground disturbance and high cultural sensitive areas of this project. All known cultural resource sites eligible for the National Register of Historic Places will be avoided.</p> <p>If any cultural resource sites are discovered during the implementation of this project, all work will cease within 100 yards of the site and the BLM Archaeologist will be contacted immediately.</p>
Forest Health	N	Project location occurs outside of forest and/or woodland areas. No impacts to forest health will occur directly, indirectly or cumulatively.
Migratory Birds	N	The construction will take place outside of the May 15 <sup>th</sup> through July 15 <sup>th</sup> nesting season. Some birds may be temporarily displaced. Due to location of pipeline within an existing dirt road, no impacts to migratory birds are expected.
Rangeland Standards and Guidelines	N	This project will move water to the established locations and allow the permittees to properly disperse cattle grazing on public lands. By dispersing grazing use, the area is better able to meet the Rangeland Standards and Guidelines.
Native American Religious and other Concerns	N	This resource is not present within this project location.
FWS Listed or proposed for listing Threatened or Endangered Species or critical habitat	N	There are no Threatened or Endangered Species within the project area.

Wastes, Hazardous or Solid	N	The old pipe will be removed from the location and disposed of properly.
Water Quality, Drinking/Ground	N	The water within the pipe is classified as livestock water. This project will not affect ground water. Detailed analysis is not required.
Environmental Justice	N	No minority or low-income groups would be disproportionately affected by health or environmental effects.
Floodplains	N	This area is not within a flood plain.
Farmlands, Prime and Unique	N	This resource is not present within this project area.
Wetlands/Riparian Zones	N	The water supplied to this pipeline is from the Brown Spring. This spring is located on private land. No work to the project is required on the private land. Therefore, the riparian area will not be disturbed during the replacement of this pipeline.
Noxious & Invasive Non-native Species	Y	See sections 3.2 and 3.3
Wilderness/WSA	N	This resource is not present within this project location. The closest Wilderness Area is more than 10 miles east of the project site.
Heritage Special Designations (Historic Trails, ACEC's designated for Cultural Resources, White River Archaeological District and Rock Animal Corral Archaeological Area)	N	This resource is not present within this project location.
Human Health and Safety	N	All personnel are current with trainings and licensing required to operate heavy equipment. No other health or safety issues are foreseen after the project has been completed.
Wild and Scenic Rivers	N	This resource is not present within this project location.
Special Status Animal Species, other than those listed or proposed by the FWS as Threatened or Endangered.	N	There are no sage-grouse leks within or near the project area. The pipeline runs through sage-grouse nesting and summer habitat; however negligible impacts are expected due to construction of pipeline within existing dirt and two track roads. No analysis required.
Special Status Plant Species, other than those listed or proposed by the FWS as Threatened or	N	There are no Special Status Plant Species within the project area.

Endangered.		
Fish and Wildlife	N	Wildlife may be temporarily displaced. Impacts are negligible due to construction of pipeline within existing dirt and two track roads. No analysis required.
Wild Horses	N	This area is not within a wild horse herd management area.
Soils/Watershed	N	Affects to soil resources from implementation of the proposed action would include some loss of soil productivity resulting from soil compaction related to surface disturbing activities. Total amount of soil disturbance over the entire extent of the proposed pipeline would not exceed 12 acres and is expected to be less than 6 acres. If maximum soil disturbance did occur (12ac.), the total land affected in the Brown Spring Use Area as part of the North Wilson Creek grazing allotment would amount to about 0.02 percent of total use area. As such, it is not believed that a demonstrative amount of soil resource will be taken out of production and given the scope and degree of impacts expected no further or detailed analysis is needed.
VRM	N	This project is located in a VRM class 3. Since this project is an underground pipeline there are no foreseeable, long term impacts to the visual quality of the area.
Grazing Uses/Forage	N	The surface disturbance caused by the project is insignificant in this pasture grazing system. Grazing livestock will not need to be removed from the area to allow re-growth.
Land Uses	N	No right-of-ways are in the project area.
Transportation/Access	N	Most of this project is within or next to a dirt and two track road that is traveled, primarily, by the permittee to perform maintenance on the pipeline. Portions of this road may be closed during construction. The Mt. Wilson Guest Ranch Road is a Lincoln County road. A trench will be dug across a portion of this road, and during that time the road will have to be closed or detoured around.
Public Safety	N	During the construction of the pipeline, the BLM will work with the LCRD to insure that all safety percussions are followed. Also, that

		adequate notice of the 4 hour, Mt. Wilson Ranch Road closure and alternative routes are given to the public.
Fire Management	N	There are no fire projects within the project area.
Socioeconomics	N	No socioeconomic concerns are present regarding this project.
Paleontological Resources	N	All known vertebrates, rare invertebrates and plant paleontological resource will be avoided. If any are discovered during the implementation of this project, all work in the vicinity will cease and the BLM Archaeologist/Paleontologist will be contacted immediately.
Water Resources (Water Rights)	N	The permittee has provided proof of water rights ownership for all waters effected by this pipeline.
Mineral Resources	N	There are no mineral claims in the project area and this project will not prohibit future access to minerals.
Vegetative Resources (Forest or Seed Products)	N	The ground disturbance is no more than 3 feet wide within/next to an existing road. Since the sites close proximity to a dirt road, and the adequate seed production in the project area, reseeding the area is not necessary.

### 3.2 Noxious Weeds

Diffuse knapweed, spotted knapweed and Scotch thistle occur along the project area. Most of these weed occurrences are near the Dodge Well. Surface disturbance and use of heavy equipment can spread these weeds and introduce others. However, the design features of the proposed action will help prevent noxious and non-native, invasive weeds from being introduced or spreading.

### 3.3 No Action Alternative

Not replacing the pipeline will not introduce new weeds. However, leaving the leaking pipeline could provide a water source for noxious weeds to establish and out compete native vegetation.

No additional analysis is needed.

## 4.0 CUMULATIVE IMPACTS

### 4.1 Introduction:

As required under NEPA and the regulations implementing NEPA, this section analyzes potential cumulative impacts from past, present, and reasonably foreseeable future actions combined with the Proposed Action within the area analyzed for impacts in Section 3 specific to the resources for which cumulative impacts may be anticipated. A cumulative impact is defined as “the impact which results from the incremental impact of

the action, decision, or project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions.

The comprehensive analyses of cumulative impacts are analyzed in the Ely Proposed Resource Management Plan/Final Environmental Impact Statement (November 2007).

**Cumulative Effects:**

In 1952, this area was disked and seeded with crested wheatgrass. The Brown Spring Pipeline was installed sometime around 1967. The crested wheatgrass is still healthy and allowing Wyoming Sagebrush to return to the area. Currently this area is used for livestock grazing. The only reasonably foreseeable projects in the area would be continued maintenance on range improvements.

**5.0 CONSULTATION AND COORDINATION**

**5.1 Introduction:**

The permittee contacted the BLM with the project idea. The BLM Rangeland Management Specialist (RMS) helped them to write up a proposal. The RMS proposed the project to the interdisciplinary team. Once the process was started I received a cost quote for the project from the operations crew. The permittee took the quote and presented the project to the Natural Resource Conservation Service (NRCS). The NRCS, through the Farm Bill, provided partial funding for the project.

While reviewing the project map BLM noticed that the pipeline would cross one county road. The permittee was already in contact with the Lincoln County Road Department and received instructions regarding closing the road, setting up detours, flagging, digging the trench across the road, and returning the road to its original state after work is completed.

**5.2 Persons, Groups and Agencies Consulted:**

<b>Name</b>	<b>Purpose &amp; Authority for Consultation or Coordination</b>
Pat Gloeckner	Permittee
Pete Delmue	Permittee
James Gatzke	Natural Resource Conservation Service
Shane Cheeney	Lincoln County Road Department Assistant Supervisor

## 5.4 List of Preparers / Reviewers:

### 5.4.1 BLM

<b>Name</b>	<b>Title</b>	<b>Responsible for the Following Section(s) of this Document</b>
Chelsy Simerson	Range Specialist	Author, Project Lead, Vegetation, grazing allotment
Dave Davis	Geologist	Minerals
Mindy Seal	Natural Resource Specialist	Noxious and Invasive, Non-native Species
Nancy Williams	Wildlife Biologist	Wildlife, Migratory birds, Special Status Species
Zach Peterson	Forester	Air Quality, NEPA requirements
Dave Jacobson	Wilderness	Wilderness values, ACEC/Special Designations
Ben Noyes	Wild Horse & Burros Specialist	Wild Horse & Burros
Melanie Peterson	Hazardous Material Coordinator	Wastes, Hazardous & Solid
Shawn Gibson	Archeologist	Archeological/Historic Paleontological
Lorie Leshar	Archeology Technician	Cultural Needs Assessment & review
Mark D'Aversa	Hydrologist	Water Quality, Flood plains, Soils, Watershed, Water Resources
Elvis Wall	Tribal Coordinator	Native American Religious Concerns
William Panagopoulos	Renewable Resource	
Mary D'Aversa	Schell Field Office Manager	

## **6.0 REFERENCES**

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