

**Proj. 17J Carney Mine Rd.
Subsidence Abatement**

**Proj. 17J Carney Mine Rd.
Subsidence Abatement**

AML PROJECT 17J, CARNEY MINE SITE RECLAMATION

(AMLIS PAD No. WY072859SGA)

**Sheridan County, Wyoming
(April 2009)**

DETAILED DOCUMENTATION

- A. Transmittal Letter to OSM**
- B. Eligibility Letter**
- C. Environmental Assessment**

Includes:

**State Historic Preservation Office Correspondence
Natural Resource Evaluation Report & Update
Public Notice**

Rock's Grant File



TRANSMITTAL LETTER TO OSM



Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

May 11, 2009

Mr. Jeffrey Fleischman, Director
Casper Field Office
Office of Surface Mining
100 East "B" Street, Room 2128
Casper, WY 82601-1918

Re: Detailed Document for AML Project 17J – Carney Mine Site Reclamation
(AMLIS PAD No. WY072859GA)

Dear Mr. Fleischman:

Enclosed is the Detailed Documentation material for AML Project 17J, Carney Mine Site Reclamation. The coal mine at this location was abandoned prior to SMCRA. The legal location is T57N, R84W, Sections 17 and 20. The hazards present at this site include numerous subsidence pits, some open to workings, in a public use area. AML proposes to excavate subsidence features, install bulkheads as needed, and to backfill and grade the subsidence areas to remove the hazards. Once the mine hazards are addressed, and the site is graded to blend with the surrounding terrain, it will be revegetated.

The Detailed Documentation material provides an eligibility statement and an Environmental Assessment (EA). The EA includes the results of threatened and endangered species surveys, and updates, of the work area. A copy of the State Historic Preservation Office correspondence on cultural resources is also included, as is documentation of the public notice.

Thank you for your timely attention to this request for Authorization to Proceed.

Sincerely,

For

Richard Chancellor
AML Administrator

cc: Richard Chancellor, Grant File
Jack Smith, AML Project Manager
Marcia Murdock, AML NEPA Coordinator
Chron



ELIGIBILITY LETTER



Office of the Attorney General

Governor
Dave Freudenthal

Water and Natural Resources Division
123 State Capitol
Cheyenne, Wyoming 82002
307-777-6946 Telephone
307-777-3542 Fax

Chief Deputy Attorney General
Elizabeth C. Gagen

Attorney General
Bruce A. Salzburg

Division Deputy
Jay A. Jerde

January 28, 2009

Mr. John Corra
Director, Department of Environmental Quality
122 West 25th Street
Herschler Building, 4W
Cheyenne, WY 82002

Re: Eligibility Determination for AML Project 17J – Northern Sheridan County Coal Sites.

Dear Mr. Corra:

A review by the Abandoned Mine Land Division (AML) of the Wyoming Department of Environmental Quality, of available records reveals that the coal mines involved with this reclamation project were abandoned prior to the reclamation requirements of the Wyoming Environmental Quality Act. This project will abate hazards resulting from active subsidence in coal mine workings. The project areas are located as set forth in the Cross Reference Table which is attached.

No person has continuing responsibility to reclaim these mines or correct mine-related safety hazards. Thus, problems associated with this Project qualify for reclamation under Wyoming's Abandoned Mine Land Program.

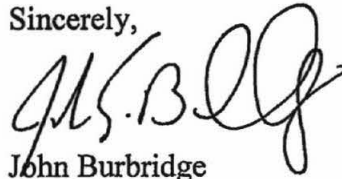
Pursuant to 30 C.F.R. §874.12, the following items concerning eligibility are identified with respect to the above-referenced Project:

- a. The proposed reclamation on this Project is the result of abandonment of coal mines.
- b. All mining activities ceased prior to August 28, 1974.
- c. These sites were left in unreclaimed conditions.
- d. No continuing reclamation responsibility exists at any of the mining sites.
- e. The reclamation is within the Wyoming State Reclamation Plan, which has been approved by the Governor.

- f. Reclamation is necessary at the mining sites for the protection of public health and safety.
- g. Funding is available under Wyoming's AML Program.

Accordingly, it is my opinion that the referenced Project is eligible for funding under the Abandoned Mine Reclamation Fund as set forth in the Abandoned Mine Land Reclamation Act of 1990 and 30 C.F.R. § 874.12.

Sincerely,

A handwritten signature in black ink, appearing to read 'J.S. Burbridge', with a stylized flourish at the end.

John Burbridge
Senior Assistant Attorney General

cc Rick Chancellor, AML Administrator, Grant File
Marcia Murdock, Project Manager/AML NEPA Coordinator

List of Sites Included in Northern Sheridan County Portion of Project 17J

SITE NAME	DATABASE #	AMLIS #	LEGAL DESCRIPTION
Acme No. 1 Mine	033278	WY033278SGA	T57N, R84, W Section 10; T57N, R84W, Section 11
Acme No. 1 North Mine	031906	WY000005SGA	T57N, R84W Section 3; T57N, R84W, Section 2
Acme No. 2 Mine	033362	WY033362SGA	T57N, R84W, Section 15; T57N, R84W, Section 16
Acme No. 3 Mine	032183	WY000098SGA	T57N, R85W, Section 13
Carney Mine	033280	WY072859SGA	T57N, R84W, Section 17; T57N, R84W, Section 16; T57N, R84W, Section 20
Custer Mine	032214	WY032214SGA	T57N, R84W, Section 28; T57N, R84W, Section 33
Dietz 1, 2, 3, 4, 7, 8 Mines	033190	WY033190SGA	T57N, R84W, Section 27; T57N; R84W; Section 26; T57N, R84W, Section 34 ; T57N, R84W, Section 35
Dietz No. 3 Mine	032209	WY032209SGA	T56N, R84W, Section 3
Dietz 5 & 8 Mine	033191	WY033191SGA	T57N, R84W, Section 22 ; T57N, R84W, Section 27
Hotchkiss Mine	033281	WY033281SGA	T57N, R84W, Section 21; T57N, R84W, Section 22
Kleenburn Mine	033363	WY033363SGA	T57N, R84W, Section 21; T57N. R84W, Section 20
Model Mine	033283	WY033283SGA	T57N, R84W, Section 21
Kooi Mine	032042	WY000668SGA	T57N, R85W, Section 23; T57N, R85W, Section 26; T57N, R85W, Section 24
Monarch 45 Mine	031764	WY031764SGA	T57N, R84W, Section 20; T57N, R85W, Section 25; T57N, R84W, Section 19; T57N, R84W, Section 30
Monarch No. 2 Mine	031705	WY031705SGA	T57N, R84W, Section 20; T57N, R84W, Section 29
Old Monarch Mine	032045	WY000106SGA	T57N, R85W, Section 24; T57N, R85W, Section 25; T57N, R84W, Section 19
Plachek Mine	033284	WY033284SGA	T57N, R84W, Section 22
Smith Dietz Mine	032211	WY032211SGA	T56N, R84W, Section 10
Smith Mine	032212	WY032212SGA	T56N, R84W, Section 3
Star Mine	032213	WY032213SGA	T56N, R84W, Section 3

ENVIRONMENTAL ASSESSMENT

ENVIRONMENTAL ASSESSMENT

AML PROJECT 17J – CARNEY MINE RECLAMATION

(WY072859SGA)

Sheridan County, Wyoming

(Sections 17 & 20, T57N, R84W)

Prepared by
Wyoming Abandoned Mine Land Program

In Cooperation with
U.S. Department of the Interior
Office of Surface Mining Reclamation and Enforcement
Casper Field Office
(April 2009)

ENVIRONMENTAL ASSESSMENT

AML Project 17J – Carney Mine Reclamation

A. DESCRIPTION OF THE PROPOSED ACTION

The project area is located northwest of Sheridan, in Sheridan County, Wyoming. The legal location is Sections 17 and 20, T57N, R84W. The Carney Mine Reclamation project will address widespread subsidence features over approximately 50 acres where unstable ground has subsided into dangerous pits, some of which open into hazardous underground mine workings. Excavation and backfill, combined with mass grading to reestablish and improve drainage in this massively subsided area was determined to be the most effective means to eliminate the hazards presented by these subsidence pits. More substantial bulkhead closures will be installed at the bottoms of the open subsidence features before they are also backfilled and graded. Once drainage has been restored, less water will be captured by subsidence features, and there will therefore be less water infiltration to perpetuate continued subsidence. After the backfilling and grading has been completed, the area will be reseeded to native vegetation species.

Photographs at the end of this document illustrate the characteristics of the subsidence and show the extent of subsidence where the workings of the Carney Mine are shallow. Figure 1 shows the general area of the work site.

B. NEED FOR THE PROPOSED ACTION

This area contains multiple subsidence pits with abrupt drops into features that can make driving in the area hazardous, and are in some cases deep enough to trap livestock. Additionally some of the subsidence pits open into dangerous, long-abandoned underground workings. This area is adjacent to a public recreation area, and is used by the public despite private ownership. Off-road vehicle use is common in the area, which increases the risk of serious accident with trespass.

C. ALTERNATIVES CONSIDERED

Alternative 1 –Mass grading of the subsidence features over the abandoned Carney Mine underground workings is the preferred alternative for remediating hazards at this site. Subsidence will be abated through over-excavation of the subsidence pits, then backfilling to grade. Where subsidence opens to the workings, a bulkhead will be installed, with backfill placed over the bulkhead. Final contouring will be done to establish positive drainage away from subsidence and known workings. The filling and reduction of the dangerous subsidence pits will improve public safety, as well as creating safer working conditions for ranching personnel at this site. Alternative 1 provides issuance of authorization to proceed, by the Office of Surface Mining (OSM), for the reclamation of the hazards at the Carney Mine Site.

Alternative 2 – Alternative 2 is the no-action alternative. Under Alternative 2, funding for the proposed reclamation action would be denied, and the potential of public injury accidents would be unabated. Threats to public health and safety and private property near the site would continue.

D. AFFECTED ENVIRONMENT

1. General Setting

The work location is in rolling terrain adjacent to the Tongue River, in uplands above the river valley. The present land use is rangeland, the utility of which is restricted due to severe subsidence features over the abandoned Carney Mine workings.

2. Affected Resources

Historic and Cultural Resources – No cultural resources are present in the work area.

Hydrology – The project site is located adjacent to the Tongue River in relatively dry uplands that have ephemeral drainages. Parts of the area, due to the large number of subsidence features, capture any available runoff, which enters mine workings through infiltration from draining subsidence pits. This exacerbates subsidence.

Vegetation – The general vegetation community is characterized by a mixture of shrub, grass and forb species that include bluebunch wheatgrass, western wheatgrass, Sandberg bluegrass, downy brome, crested wheat grass, basin wildrye, rubber rabbitbrush, big sagebrush, and Rocky Mountain juniper. In lower areas adjacent to the work site, plains cottonwood, willow, Russian olive, and sedges were recorded. Several species of aster were found throughout the area.

No plant species currently listed, or proposed/petitioned for listing, as threatened or endangered (T&E) were observed during surveys of the project area and none are expected.

Fish and Wildlife Resources – No wildlife species currently listed, or proposed/petitioned for listing, as threatened or endangered (T&E) were observed during surveys of the project area. Potential habitat at this location for listed species is unlikely.

Some raptor species frequent the area seasonally. No nests were observed in the immediate area. Wildlife, or sign, observed within the immediate vicinity included several species of riparian-associated passerine species. Though none were observed, coyote, raccoon, mule deer, and desert cottontail are expected to inhabit the area. The river and associated riparian habitat attracts waterfowl, turtles, and other riparian and aquatic life.

Soils – The soils in the area are Haverdad-Draknab Complex, which are sandy loams and loamy sands. This soil type primarily supports grazing and wildlife habitat, though it can be used as hay land as well. No prime or unique soils are present in the project area.

Recreational Resource Values – The project is adjacent to a designated Sheridan County recreation area which had been misused and considerably degraded over a period of years prior to County ownership. This site is also slated for AML reclamation action. The privately owned open area is sometimes used recreationally due to its association with public recreational lands.

Air Quality – Local air quality is typical of a rural rangeland setting.

Noise – The noise level in the area is typical of rural rangeland, however, it is somewhat influenced by the adjacent Interstate highway

Topography – Natural terrain in the vicinity is rolling hills which drop down to the floodplain of the Tongue River. The elevation at the site is between 3,700 and 3,800 feet.

Socioeconomic – The project is situated in rural residential/rangeland with limited local economic influence.

Special Areas – No special areas are located near the proposed reclamation site.

E. ENVIRONMENTAL IMPACTS OF THE ALTERNATIVES

1. Resource Values

Historic and Cultural Resources – No impacts to cultural resources are anticipated from either the proposed action or the no-action alternative.

Hydrology – Drainage patterns in this upland work area are not well developed, and are affected by subsidence pits which capture surface runoff and direct water into the underground workings. Drainage will be maintained as required during and after construction of this project. Surface waters will be controlled through standard construction stormwater control methods as necessary. Impacts from the proposed construction are expected to be short-term and negligible. Longer-term, there is the potential for better quality water runoff to the nearby river system. No impacts are anticipated from the no-action alternative.

Vegetation – No vegetation species currently listed, or proposed/petitioned for listing, as threatened or endangered will be affected by this action. The vegetation in the project area will be temporarily impacted, however work areas will be replanted with appropriate species at the conclusion of construction. Impacts from the proposed action are expected to be short-term and negligible, with longer-term habitat improvement through the revegetation effort. No impacts are anticipated from the no-action alternative.

Wetlands – No wetlands are present, therefore, no wetland impacts would occur from either alternative.

Fish and Wildlife Resources – No wildlife species currently listed, or proposed/petitioned for listing, as threatened or endangered will be affected by this action. Bald eagles and ospreys are

present near the river seasonally, and other raptor species are known to nest in the general area. No appropriate habitat for Canada lynx, Ute ladies'-tresses, or black-footed ferrets exists at the site. More common wildlife species are expected to avoid the construction area, but displacement will be short-term. No impact to water resources is anticipated from this project. Impacts to wildlife from the proposed action are expected to be negligible. No impacts are anticipated from the no-action alternative.

Soils – No prime or unique farmland values exist in the project area, therefore, these will not be affected. Standard construction erosion controls will be used to conserve soils as necessary. No impacts are anticipated from either alternative.

Recreational Resource Values – Impacts to local recreational use are expected to be negligible from either alternative.

Air Quality – Impacts to local air quality from the proposed action are expected to be negligible. Fugitive dust will be controlled by standard methods, and construction will be of short duration. No impacts are anticipated from the no-action alternative.

Noise – Impacts to noise levels from the proposed action are expected to be temporary and will not cause long-term effects. No impacts are anticipated from the no-action alternative.

Socioeconomic – No socioeconomic impacts are anticipated from either alternative.

2. Unavoidable Adverse Impacts

No unavoidable adverse impacts are anticipated from either alternative.

3. Cumulative Impacts

Cumulative impacts from the proposed project are expected to be negligible. Surface disturbance will be revegetated and restored to a beneficial end use. Impacts from the no-action alternative include continued health and safety risks to the public from unabated mine hazards. The risk of public accident and injury will remain unabated under the no-action alternative.

F. PUBLIC PARTICIPATION

A legal notice was published in the Casper Star-Tribune March 23, 2008 and March 26, 2008, and another notice was published on April 19, 2009 to notify the public that AML will undertake reclamation in this area, and to provide an opportunity for public comment on the projects. No comment was received. Copies of the notices are provided in Appendix A.

G. SUMMARY

Reducing the subsidence features, and closing open subsidences at the site will improve the public safety at this site, as well as provide better water quality in the local area. Restoration of

vegetation and improvement of water quality will enhance livestock and wildlife habitat, improve esthetics, and render the site safer for ranch personnel. Approval of the proposed action is recommended.

H. PERSONS, ORGANIZATIONS, AND AGENCIES CONTACTED

The Wyoming Department of Environmental Quality, Abandoned Mine Land Division (AML) prepared this Environmental Assessment. Agency personnel and other professionals involved with preparation of any part of this analysis are listed below as well as personnel contacted in other state and federal agencies during the course of preparing this EA.

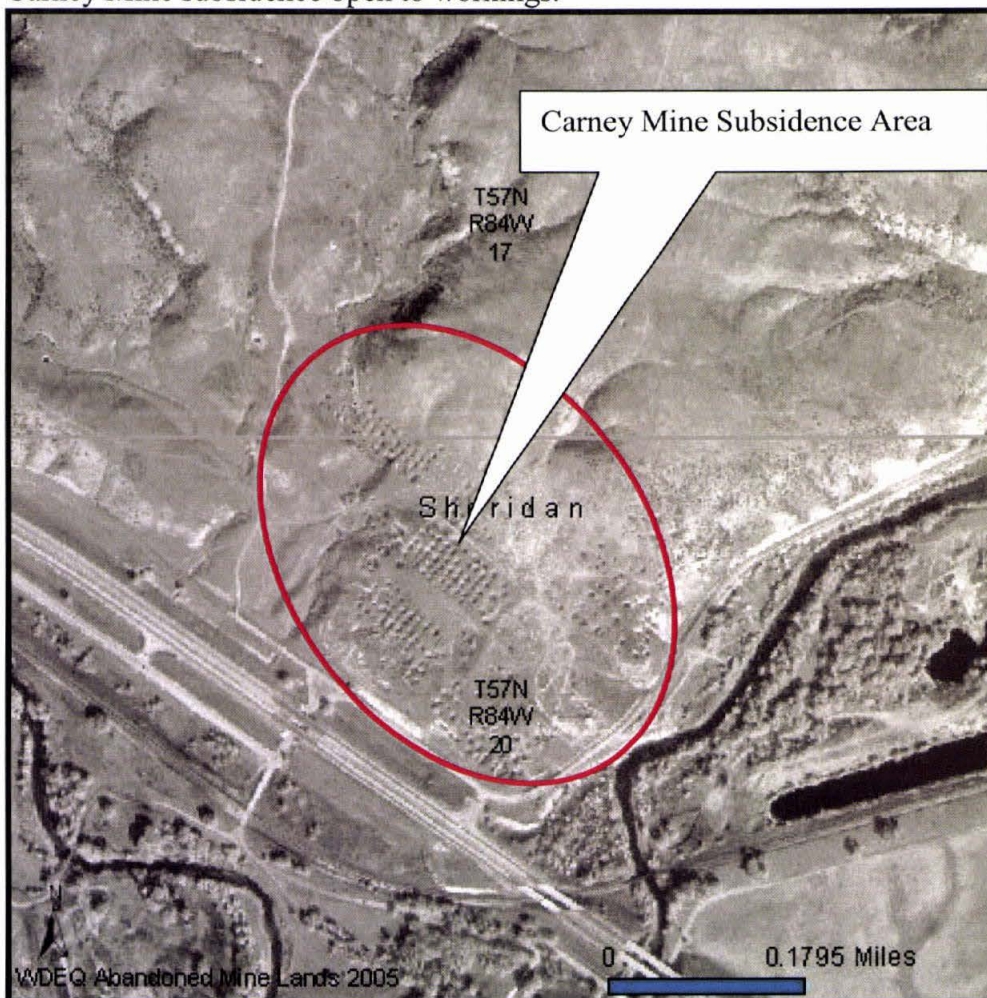
<u>Wyoming Department of Environmental Quality</u>		
Rick Chancellor	AML Administrator	Cheyenne, WY 82002
Marcia Murdock	AML NEPA Compliance Coordinator	Lander, WY 82520
Jack Smith	AML Project Manager	Sheridan, WY 82801
<u>Assessment and Analysis</u>		
Staff	U.S. Fish and Wildlife Service, Ecological Services	Cheyenne, WY 82001
Tom Larson	Cultural Consultant, LTA, Inc.	Laramie, WY 82072
Chris Walla	PHC Rec.; Engineering	Cheyenne, WY 82001
Brian Heath	Natural Resource Evaluation, Arcadis	Cheyenne, WY 82001



Subsidence pits on Carney Mine.



Carney Mine subsidence open to workings.



Aerial photo showing pattern of subsidence pits.

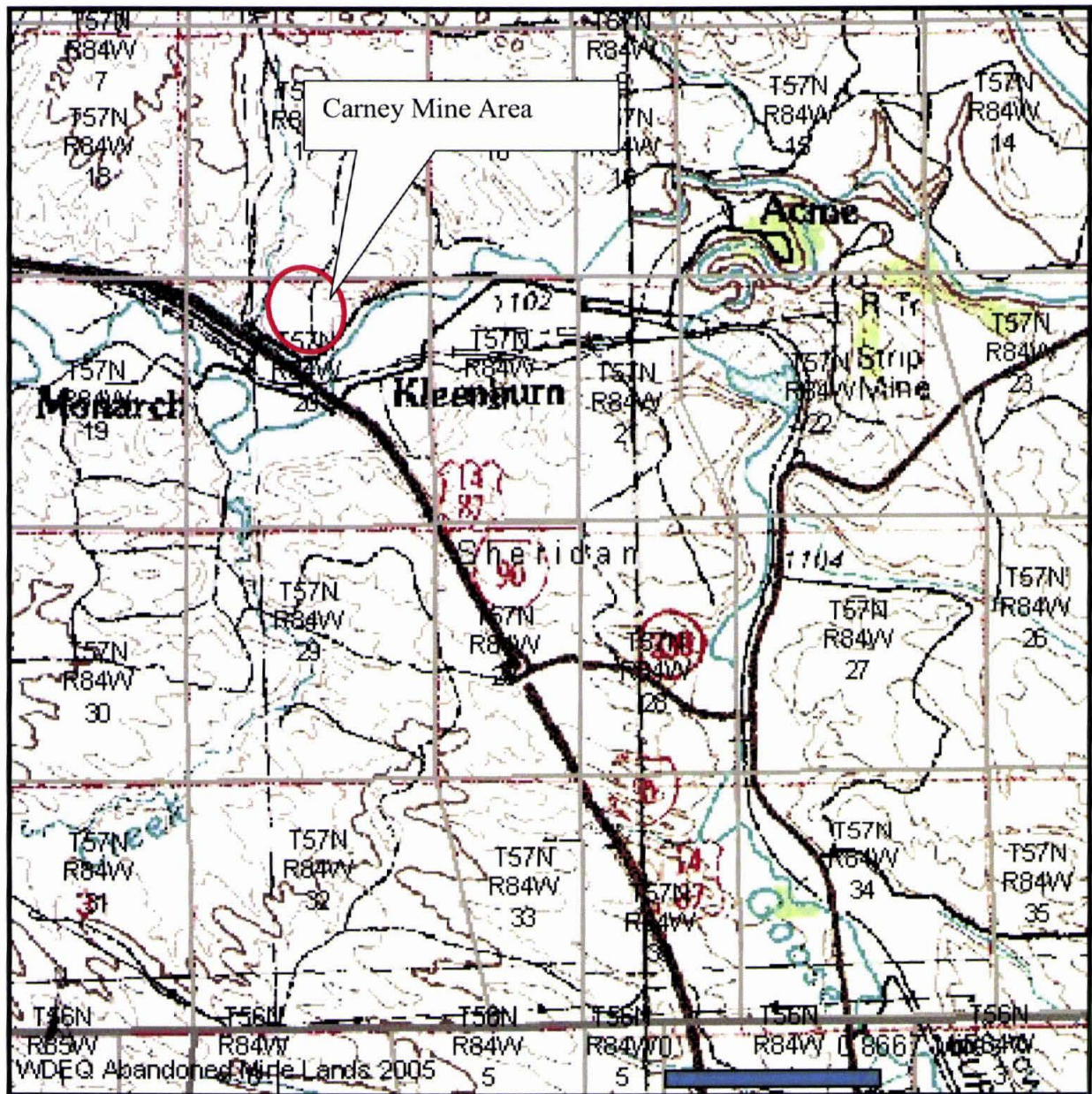


Figure 1. General Area Map of Carney Mine Reclamation Area.

APPENDIX A

NATURAL RESOURCE EVALUATION REPORT

REPORT

**ENVIRONMENTAL RESOURCE EVALUATION
THREATENED AND ENDANGERED SPECIES SURVEY**

**Project: AML Sheridan County 17J Fast Track Sites
T57N-R84W**

**Acme No. 2, Carney Mine, Monarch No. 2, Kleenburn, Model
Mine, Plachek Pit, Hotchkiss, and Dietz 5 and 8**

Prepared for:

Wyoming Department of Environmental Quality
Abandoned Mine Land Division
510 Meadowview Drive
Lander, WY 82520

Prepared by:

ARCADIS U.S, Inc.
189 N. Cedar St.
Buffalo, WY 82834

October 10, 2008



TABLE OF CONTENTS

Introduction	i
Methods.....	i
Weather Conditions During Survey	ii
Vegetation	ii
General Project Area Vegetation.....	ii
Noxious Weeds	ii
Wetland Habitat.....	iii
Wildlife Observed	iii
Migratory Birds of High Federal Interest.....	iii
Threatened and Endangered Species	iv
Sensitive Species	vi
Bat Habitat.....	vii
Summary and Recommendations.....	vii
Literature Cited	viii
Qualifications	x

FIGURES/TABLES

Figure 1. Map of Sheridan County Fast Track sites with wildlife features.....	xi
Figure 2. Photo of wetland vegetation around Kleenburn Pits.....	i
Figure 3. Photograph of mature cottonwood trees and potential bald eagle nest/roost habitat.	i
Figure 4. Photograph of Acme No. 2 site opening, NWSW S15 T57N R84W.	ii
Figure 5. Photograph of Carney Mine site opening, NENE S20 T57N R84W.....	ii

AML Sheridan County 17J Fast Track Mine Sites Wildlife and Habitat Report

Introduction

ARCADIS U.S., Inc. (ARCADIS) was requested by the Abandoned Mine Land (AML) Division of the Wyoming Department of Environmental Quality (WDEQ) to conduct environmental resource evaluations for mine sites within Sheridan County, Wyoming. The evaluations were conducted for eight individual abandoned mine sites categorized as Priority 1 and 2 hazards by the AML. These sites included: Acme No. 2, Carney Mine, Monarch No. 2, Kleenburn, Model Mine, Plachek Pit, Hotchkiss, and Dietz 5 and 8. AML is proposing various reclamation efforts to mitigate highwalls, subsidence, underground mine fires, and mine openings which may pose potential threats to public safety and / or the environment. All areas and access routes identified for reclamation projects were evaluated for the presence of federally listed threatened and endangered (T&E) species and their habitat. In addition, evaluations for other sensitive species identified by the United States Fish and Wildlife Service (USFWS), Bureau of Land Management (BLM) and Wyoming Game & Fish Department (WGFD) were also conducted for each of the mine sites. The following report provides a summary of the evaluations and surveys conducted by ARCADIS biologists.

Methods

Prior to conducting field surveys, the BLM Buffalo Field Office (BLM BFO) and WGFD public databases were reviewed for information regarding T&E and sensitive species within and adjacent to the project area. The data was overlaid onto project work maps along with the locations of all abandoned mine land features. The data included locations of bald eagle (*Haliaeetus leucocephalus*) nests and winter roost sites, raptor nests and big game winter ranges among other features. In addition, ARCADIS downloaded National Wetlands Inventory (NWI) digital data from the Spatial Data Visualization Center and overlaid this data on project work maps. Finally, the list of T&E species and their designated critical habitat within Sheridan County was reviewed prior to conducting field evaluations (USFWS 2008).

ARCADIS biologists conducted biological and habitat surveys for each of the project areas on August 6 and 7, 2008 from 7:30 a.m. to 8:00 p.m. MDT. Pedestrian surveys were primarily conducted as access was limited to foot traffic and vehicles had to be maintained on established roads. Each area was systematically searched by walking ridgelines and drainage bottoms and examining habitats from different angles to ensure complete coverage. A global positioning system (GPS) receiver, using North American Datum (1983) and Universal Transverse Mercator (UTM) coordinates in Zone 13 North, 7.5-minute topographic maps, and a digital camera were used to record relevant wildlife features discovered during the surveys.

Evaluations commenced by first locating the mine features for each of the sites. Once a feature was identified, surveys for T&E and sensitive species were conducted and special efforts were

made to ensure a one-half mile perimeter around each site was thoroughly investigated. The one-half mile boundary delineates the maximum extent of the footprint where disturbance associated with reclamation activities could potentially occur.

Weather Conditions During Survey

Weather was primarily hot and dry with partly cloudy skies. Winds were calm with temperatures ranging between 80 - 95 degrees F during the surveys. No precipitation was encountered during the duration of the surveys.

Vegetation

General Project Area Vegetation

General topography of the abandoned mine sites included steep rocky slopes covered with shrubs, junipers and native and introduced grasses. The slopes transition down to the Tongue River and Goose Creek floodplains and terraces. Vegetative and soil characteristics remained similar among the various abandoned mine sites. The general community is characterized by the following shrub, grass and forb species: bluebunch wheatgrass (*Agropyron spicata*), western wheatgrass (*Pascopyrum smithii*), Sandberg bluegrass (*Poa Sandbergi*), downy brome (*Bromus tectorum*), crested wheat grass (*Agropyron cristatum*), basin wildrye (*Elymus cinereus*), Rocky Mountain juniper (*Juniperus scopulorum*), cottonwood trees (*Populus deltoids*), willow (*Salix spp.*), Russian olive (*Elaeagnus angustifolia*), rubber rabbitbrush (*Chrysothamnus nauseosus*), big sagebrush (*Artemisia tridentata*), sedges (*Carex spp.*), and several species of *Asteraceae*.

The Tongue River and Goose Creek drain the project area. Both of these are perennial waterways and are warm water fisheries. Several small manmade or natural impoundments occur within the project area. Minnows and panfish were also observed within the small ponds and pits during the surveys. Major land uses within the area include: transportation of coal, gravel mining, outdoor recreation, fishing, and agriculture/farming.

Noxious Weeds

Weed species of concern were identified using the current Wyoming Weed and Pest Council's *Declared List of Weed and Pests* for Sheridan County (WWPC 2008). The noxious weed species listed included: curly dock (*Rumex crispus*), plains pricklypear (*Opuntia polyacantha*), puncturevine (*Tribulus terrestris*), wild licorice (*Glycyrrhiza lepidota*), showy milkweed (*Asclepias speciosa*), buffalobur (*Solanum rostratum*), common cocklebur (*Xanthium strumarium*), and common mullein (*Verbascum thapsus*). Plains pricklypear was located within prairie dog towns and common cocklebur occurred sporadically around the perimeter of surface impoundments and areas seasonally flooded. None of the other noxious weeds were observed within the project areas by ARCADIS biologists during the site investigations.

Wetland Habitat

As referenced above, data obtained from the NWI was overlaid onto project maps (Figure 1). As depicted on Figure 1, various palustrine and riverine wetlands occur within the project area and based on our field reconnaissance, the NWI delineations accurately depict perimeters of the wetlands. The acres of each wetland class are presented within Table 1. Classification follows Cowardin's (1979) system documented in *Classification of Wetlands and Deepwater Habitats of the United States*.

The majority of riverine wetlands occur along Tongue River and Goose Creek. The vegetation along these perennial drainages is dominated by cottonwood stands and a deciduous shrub understory. A narrow band of emergent vegetation occurs along the streambanks and in oxbows stands of cattails (*Typha spp.*) and rushes (*Juncus spp.*) were observed. Palustrine wetlands occur within the immediate vicinity of the Kleenburn and Plachek sites. The majority of these ponds were open water, with submersed aquatic vegetation visible within the shallows. Again a narrow band of emergent vegetation dominated by rushes was located around the perimeter of the ponds.

Wildlife Observed

Avian species observed during the surveys included: black-billed magpie (*Pica hudsonia*), mourning dove, (*Zenaida macroura*), western meadowlark (*Sturnella neglecta*), red-tailed hawk (*Buteo jamaicensis*) and osprey (*Pandion haliaetus*).

Mammal species observed includes: cottontail rabbit (*Sylvilagus audubonii*), mule deer (*Odocoileus heminous*), least chipmunk (*Tamias minimus*) and black-tailed prairie dog (*Cynomys ludovicianus*).

Migratory Birds of High Federal Interest

The USFWS recommends maintaining disturbance free zones around nesting raptors to avoid the possibility of "take" under the MBTA. As referenced above, raptor nest data was obtained from the BLM-BFO and overlaid on project maps prior to conducting field surveys. A review of this information indicated that no raptor nests had been previously recorded within a 0.5-mile perimeter of the mine sites. Ground searches by ARCADIS resulted in locating 21 new nests within a 0.5-mile perimeter of the mine sites. There were an additional five nests that were located outside the 0.5-mile perimeter boundary, but were still documented by ARCADIS biologists. Since the field survey occurred outside of the nesting season, nests were examined for diagnostic sign (i.e. feathers, whitewash, prey remains) indicating use during the previous breeding season.

Of the 26 nests documented, it was determined that four were most likely active during the 2008 breeding season. Nests OSPR57N84W1503, RETA57N84W1601, UNRA57N84W2005, and GRHO57N84W2101 either had juveniles within the nest during field checks or had abundant white-wash staining or prey remains around the nest tree. Two additional osprey nests, OSPR57N84W1502, OSPR57N84W1504, were defended by adults during the field survey and classified as occupied. Information on all of the nests identified during the field surveys is presented in Table 2 and displayed graphically on Figure 1. Note that the area was also surveyed aerially for raptor nests on March 18, 2008 and some of the nests within the table were initially recorded during this survey. One nest, UNRA57N84W2003, which was documented during the flight, could not be relocated during ground surveys.

If surface disturbing activities are proposed between February 1 and July 31 and activities will occur within 0.5-miles of a raptor nest, occupancy surveys should first be conducted to determine the current breeding status for the nests. If a nest is determined to be active, consultation with the USFWS should occur to determine if timing stipulations on construction activities should be implemented to reduce disturbance or displacement to nesting raptors.

Threatened and Endangered Species

Those species federally listed as threatened or endangered that could potentially occur in Sheridan County, Wyoming and the likelihood of their occurrence on the project area are described below.

Black-footed ferret (*Mustela nigripes*)

Black-footed ferrets are a federally listed endangered species that depend on prairie dog (*Cynomys spp.*) colonies as a source of food and shelter (USFWS 1989). Proposed actions which disturb prairie dog colonies could prove detrimental to ferrets that may occupy the colony. USFWS guidelines state colonies can be cleared for ferret surveys if they meet certain criteria.

Ten black-tailed prairie dog (*Cynomys ludovicianus*) colonies spanning a combined 233 acres were delineated on topographic maps within Sections 15-17, 20-22, 27 and 29, T57N-R84W (Table 3). All towns were occupied and density of burrows within the towns was considered to be moderate. The Carney Mine is located within a black-tailed prairie dog town and the other seven sites were not located within a colony.

The USFWS no longer recommends black-footed ferret surveys within black-tailed prairie dog towns statewide or within white-tailed prairie dog (*C. leucurus*) towns not listed in the February 2, 2004 letter (USFWS 2004). Based on the minimal disturbance to prairie dogs within the Carney Mine project area and clearance of all black-tailed prairie dog towns by the USFWS, no impacts to black-footed ferrets are expected to occur from the proposed reclamation activities. Some prairie dogs might be impacted or displaced during construction activities; however,

avoidance of towns where possible will help minimize the impact or displacement to prairie dogs.

Canada Lynx (*Lynx canadensis*)

The Canada lynx is currently listed as a threatened species and the designated critical habitat within Wyoming occurs within Greater Yellowstone Area. In the Western U.S., the majority of lynx occurrences were associated with Rocky Mountain Conifer Forests within the 4,920 to 6,560 feet elevation zone (McKelvey et.al. 2000). Primary vegetation includes lodgepole pine, subalpine fir and Engelmann spruce (Aubry et. al. 2000). Lynx feed primarily on snowshoe hare (*Lepus americanus*) which live in dense shrub thickets at these elevations. In most places, lynx are so tied to snowshoe hares that lynx populations rise and fall in cycle with snowshoe hare numbers (Ruediger 2000).

ARCADIS biologists did not observe lynx tracks or scat during investigation of the project area. Mature conifer forests were not found within the project area and the elevation within the project boundary does not exceed 4,000 feet. Furthermore, dense riparian thickets typically inhabited by snowshoe hares were not located within the immediate mine site areas. Because lynx are dependent upon snowshoe hares as a prey source, the lack of habitat for the hare further diminishes potential lynx use within the immediate project area. Based on the lack of suitable habitat for Canada lynx and snowshoe hares, no disturbance or impacts to this species are expected from the reclamation activities associated with the mine sites.

Ute Ladies'-Tresses Orchid (*Spiranthes diluvialis*)

Ute ladies'-tresses (ULT) orchids occur at elevations between 4,200 and 7,000 feet within areas that maintain moist soils throughout summer and into early autumn (USFWS 2005). Typically the orchid has been found in alluvial substrates along riparian areas, gravel bars, wet meadows or old oxbows. The USFWS *Recommendations and Guidelines for Ute ladies'-tresses Orchid Recovery and Fulfilling Section 7 Consultation Responsibilities* (USFWS 1995) were used to identify features that would either qualify or disqualify the area as suitable potential orchid habitat.

Marginal Ute ladies'-tresses orchid habitat was found along the Tongue River, Goose Creek and impoundments located within the project area. Typically, only a small narrow band of wetland vegetation occurred along these drainages or surface water impoundments. The width of the segment typically varied between one to three feet where ground water tables maintained saturated soils into late summer. Soils along the stream channels did not contain high clay content nor large alkali deposits which are characteristics that disqualify habitat for the orchid.

The vegetation outside of the narrow bands along stream channels or impoundments was dominated by upland grasses and forbs, where the soils were not saturated. The stream channels were well vegetated and stable but were often steep with an abrupt transition to upland areas. Some stream segments had been stabilized with rip-rap or channels were re-routed through culverts by previous mine reclamation activities. Surface impoundments typically contained

cattails (*Typha sp.*), bulrushes (*Scirpus sp.*) within shallower depths or along the shorelines (Figure 2).

Depending on the disturbance proposed for each of these mine sites, surveys during the orchids flowering period may need to be conducted to determine if the orchid is present. However, based on the initial observation of potential orchid habitat in relation to project areas and mine features, it appears these areas can be avoided to eliminate impacts to potential habitat for the orchid.

Blowout Penstemon (*Penstemon haydenii*)

Blowout penstemon is a perennial herb which is presently known to occur in Wyoming only within sand dunes south of the Ferris Mountains, in northwestern Carbon County. The USFWS indicates surveys for this plant are warranted where sand blowouts occur below 6,700 feet. No sand dunes were documented during surveys conducted for the Sheridan County sites. The likelihood of this plant occurring within the project areas is extremely limited at best.

Sensitive Species

Bald Eagle (*Haliaeetus leucocephalus*)

Bald Eagle winter roost habitat is defined as all mature conifers or cottonwood stands present within one mile of the project area with a fish-bearing water body within 18 miles of the project area. (USFWS 2002). Winter roost areas are typically associated along major rivers that remain unfrozen during the winter and have concentrations of prey, which would include fish, waterfowl, and ungulates.

Mature stands of cottonwood trees occur along the Tongue River and Goose Creek within the project area (Figure 3). These trees were capable of supporting roosting eagles and fish were observed within each of these waterways during our surveys. Additional prey sources available to wintering bald eagles within the project area include fish within the surface impoundments and terrestrial prey sources including black-tailed prairie dogs and carrion (deer and antelope carcasses along the interstate).

The BLM BFO public database includes numerous bald eagle observations along the Tongue River. Many of these observations were located east of Acme within Section 14 & 23, T57N-R84W. A single observation was also recorded within Section 16, T57N-R84W in the same tree where nest RETA57N84W1601 was documented.

Consistent bald eagle use of the mature cottonwood trees within one mile of the mine sites has been documented during recent surveys. Surface disturbing activities are typically restricted from November 1 to April 1 within one-mile of a communal winter roost. Any surface

disturbing activities within one mile of suitable winter roost habitat should be scheduled from April 1 to November 1 to reduce displacement or disturbance to wintering bald eagles.

If reclamation activities proposed for the mine sites will result in removal of cottonwood or evergreen trees, it is recommended protocol bald eagle winter roost surveys are conducted prior to removing the trees. Three surveys, one each during December, January and February, during the early morning or late evening would document whether bald eagles are roosting within the trees proposed for removal.

One nest structure observed within the project area (RETA57N84W1601) appeared to be of sufficient size for use by nesting Bald Eagles. However, this nest was still occupied by a red-tailed hawk during the survey and is located greater than one-half mile from the mine sites proposed for reclamation activities.

Mountain Plover (*Charadrius montanus*)

Mountain plover breeding habitat includes flat, short-grass prairies and shrub-steppe landscapes where bare ground accounts for a minimum of 30% (USFWS 2002). Plovers usually nest where vegetation has been removed by prairie dogs or domestic livestock grazing. There were 10 prairie dog colonies located within the general project area. These prairie dog colonies provide suitable breeding and nesting habitat for mountain plover. Negative mountain plover nesting habitat indicators outside of the prairie dog towns include: encroaching shrubs, vegetative height > 4 inches, and uneven terrain. Any proposed construction activities associated with the proposed mine reclamation that impacts prairie dog towns could also adversely impact or disturb mountain plover habitat. Avoiding or minimizing disturbance to prairie dog colonies will reduce potential impacts to mountain plover during the breeding/nesting periods.

Bat Habitat

No abandoned mine site features were observed that appeared to be used by bats as hibernacula. However, the Acme No. 2 and Carney Mine sites were noted as having open shafts that could make use by bats possible (Figures 4 & 5). Both of these sites had small openings and the depths of the shafts beyond the openings were unknown. Based on the small openings close to the ground and lack of bat droppings around the entrances, it is unlikely these sites are used by bats.

Summary and Recommendations

The following should be considered during reclamation of the AML mine sites in Sheridan County, Wyoming:

1. The construction activities associated within the abandoned mine sites are not anticipated to directly impact threatened, endangered, or sensitive species. Surface disturbances will be localized and should not pose a threat to sensitive species or habitats.
2. Conduct occupancy surveys for the raptor nests identified within 0.5-mile of the proposed reclamation activities during the breeding season (April 15 – June 15). If nests are determined to be active, determine appropriate timing limitations on construction or surface disturbing activities associated with the project. Consult with the appropriate agency to determine if a raptor nest occupancy check will be required for the twenty-three nests located in the project area.
3. Avoid direct disturbance to wetland habitats associated with all project areas and respective access routes. If wetlands cannot be avoided and a loss of wetland habitat will occur as a result of reclamation activities, determine if pre-construction notifications need to be submitted to the USACOE to authorize coverage of the project(s) under Nationwide Permits. Ute orchid surveys may also be required depending upon the site specific conditions of any disturbance to the areas with wetland vegetation.
4. Avoid disturbance to cottonwood trees within the project area. If construction activities require the removal of mature cottonwood trees, protocol bald eagle winter roost surveys should be conducted to ensure the tree(s) are not part of a communal roost. Any surface disturbing activities proposed within one-mile of cottonwood trees (in this case the Tongue River) should be scheduled to occur between April 1 and November 1 to minimize disturbance or displacement to wintering eagles.
5. Minimize disturbance to black-tailed prairie dog towns to the extent practicable in order to reduce habitat loss relating to sensitive species particularly mountain plover.

Literature Cited

- Aubry, K. B., G. Koehler, and J. R. Squires. 2000. Ecology of Canada lynx in southern boreal forests. Pages 373-396 In Ruggiero, L. F., K. B. Aubry, S. W. Buskirk, G. M. Koehler, C. J. Krebs, K. S. McKelvey, and J. R. Squires. (Tech. Eds.) Ecology and conservation of lynx in the United States. Univ. Press of Colorado. Boulder, CO. 480 pp.
- Cowardin, L.M. Classification of Wetlands and Deepwater Habitats of the United States. U.S Department of the Interior, 1979.
- McKelvey, K. S., K. B. Aubry, and Y. K. Ortega. 2000b. History and distribution of lynx in the contiguous United States. Pages 207-264 In Ruggiero, L.F., K. B. Aubry, S. W. Buskirk, G. M. Koehler, C. J. Krebs, K. S. McKelvey, and J. R. Squires. (Tech. Eds.). Ecology and conservation of lynx in the United States. Univ. Press of Colorado. Boulder, CO. 480 pp.

- Ruediger, B., et al. 2000. Canada lynx conservation assessment and strategy, 2nd edition. USDA Forest Service, USDI Fish and Wildlife Service, USDI Bureau of Land Management, and USDI National Park Service. Forest Service Publication #R1-00-53. Missoula, Montana. 142 pp.
- U.S. Fish and Wildlife Service. 2008. Wyoming Species List. Endangered, Threatened, Proposed and Candidate Species, and Designated Critical Habitat in Wyoming State, as Prepared by the U.S. Fish and Wildlife Service, Wyoming Field Office. 8 pp.
- U.S. Fish and Wildlife Service, 2004. Letter from B. Kelly ES-61411/BFF/WY7746 date February 2, 2004. 4 pp.
- U.S. Fish and Wildlife Service. 2002. Final Biological and Conference Opinion for the Powder River Basin Oil & Gas Project. U.S. Fish and Wildlife Service.
- U.S. Fish and Wildlife Service. 1995. Recommendations and guidelines for Ute ladies'-tresses orchid (*Spiranthes diluvialis*) recovery and fulfilling Section 7 consultation responsibilities. 5 pp.
- US Fish and Wildlife Service. 1989. Black-footed Ferret survey guidelines for compliance with the Endangered Species Act. U.S. Fish and Wildlife Service. Denver, CO and Albuquerque, NM.
15 pp.
- Wyoming Weed and Pest Council. 2006. Declared List of Weeds and Pests. [Web Page]. Located at <http://www.wyoweed.org/>. Accessed: August 16, 2008.

Qualifications

Brian Heath, Ryan Bombeck, and Matt Strauser, ARCADIS conducted the field survey and prepared this report.

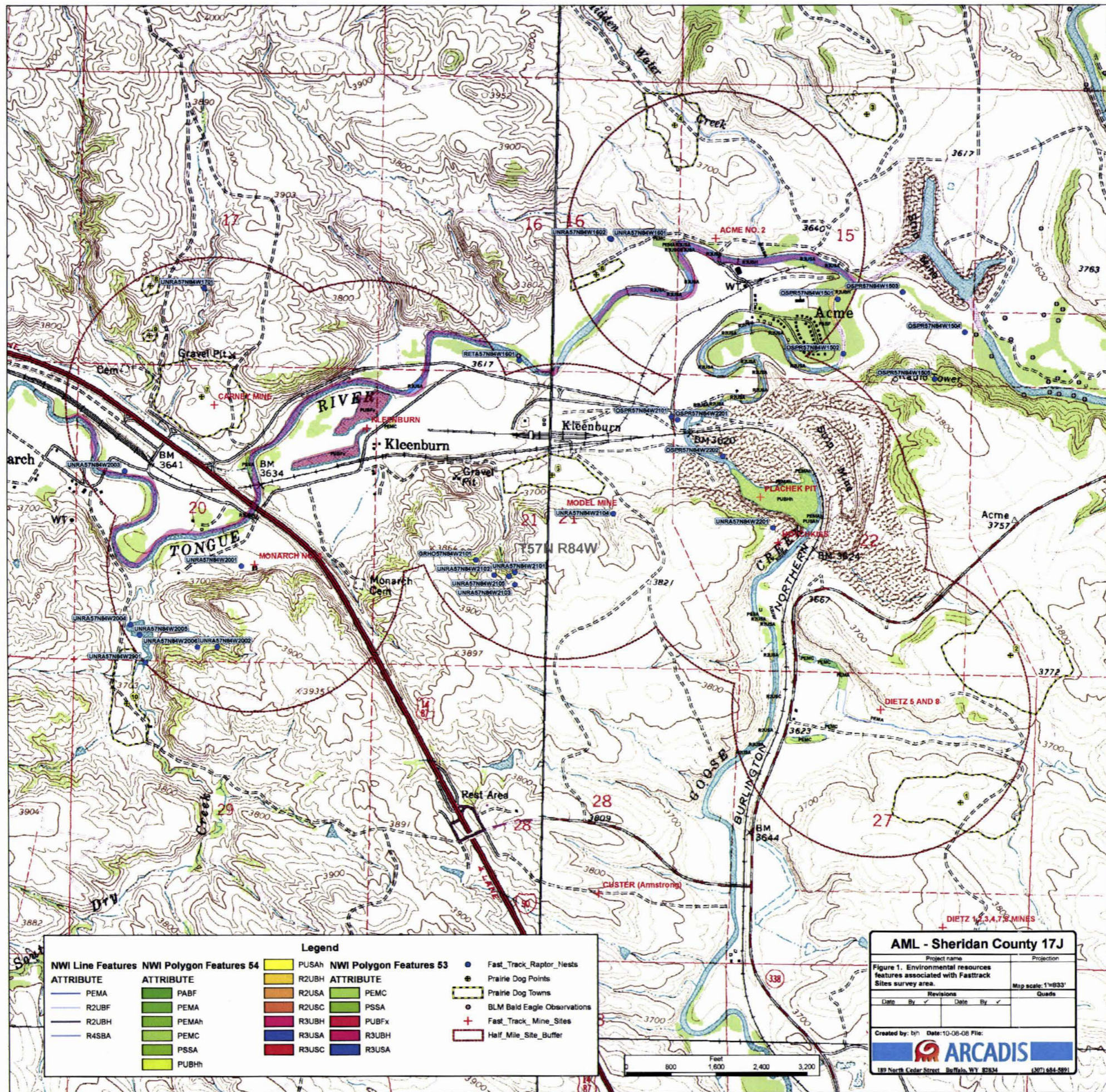
Brian Heath holds a B.S. in Wildlife Biology (1987) from Colorado State University and a M.S. in Zoology and Physiology (1994) from the University of Wyoming. He is currently a wildlife biologist and water specialist with ARCADIS U.S., Inc. based in Laramie County, Wyoming. Mr. Heath has 10 years of professional experience with federal and state wildlife agencies. His direct work experience includes applied field research and studies for terrestrial and aquatic avian species. Wildlife species of study included Greater Sage-Grouse, waterfowl, shorebirds, and songbirds. Mr. Heath has conducted research projects on Greater Sage-Grouse productivity, survival and seasonal habitat use throughout Wyoming. He served as the co-chair for the State of Wyoming's Greater Sage-Grouse Working Group and consulted with various publics on Greater Sage-Grouse issues in Wyoming. Mr. Heath has extensive experience in aquatic ecological studies in both palustrine and riparian habitats. He has conducted waterfowl, shorebird and passerine bird surveys, as well as habitat assessments.

Ryan Bombeck holds a B.S. in Zoology – Fisheries and Wildlife Management (2007) from North Dakota State University, Fargo, North Dakota. He is currently a Field Technician with ARCADIS U.S., Inc. based in Gillette, Wyoming. Ryan's direct work experience includes conducting wildlife and vegetation surveys with ARCADIS U.S., Inc.

Matthew L. Strauser holds a B.S. in biology with an emphasis in ecology and evolution (2005) from Montana State University. He is currently employed as a seasonal field technician for ARCADIS US., Inc. in Gillette, Wyoming. Matt has four seasons of wildlife research and survey experience and has worked with forest, grassland, and shrubland species from various taxonomic groups.

Figures and Tables

Figure 1. Map of Sheridan County Fast Track sites with wildlife features.



Legend	
NWI Line Features	NWI Polygon Features 54
— PEMA	■ PABF
— R2UBF	■ PEMA
— R2UBH	■ PEMAh
— R4SBA	■ PEMC
	■ PSSA
	■ PUBHh
	NWI Polygon Features 53
	■ PUSAh
	■ R2UBH
	■ R2USA
	■ R2USC
	■ R3UBH
	■ R3USA
	■ R3USC
	■ PEMC
	■ PSSA
	■ PUBFx
	■ R3UBH
	■ R3USA
● Fast_Track_Raptor_Nests	● Prairie_Dog_Points
● Prairie_Dog_Towns	● BLM_Bald_Eagle_Observations
● Fast_Track_Mine_Sites	■ Half_Mile_Site_Buffer

AML - Sheridan County 17J

Project name: _____ Projection: _____

Figure 1. Environmental resources features associated with Fastrack Sites survey area. Map scale: 1"=833'

Revisions		Quads	
Date	By	Date	By

Created by: bjh Date: 10-08-08 File: _____

ARCADIS

187 North Cedar Street, Buffalo, WY 82804 (307) 684-5821



Figure 2. Photo of wetland vegetation around Kleenburn Pits.



Figure 3. Photograph of mature cottonwood trees and potential bald eagle nest/roost habitat.



Figure 4. Photograph of Acme No. 2 site opening, NWSW S15 T57N R84W.



Figure 5. Photograph of Carney Mine site opening, NENE S20 T57N R84W.



**AML Project 17J – Carney Mine Reclamation Project
Threatened and Endangered Species Survey and Natural Resource Evaluation**

General Area Description – The project area is located northwest of Sheridan, in Sheridan County, Wyoming. The legal location is Sections 17 and 20, T57N, R84W. The Carney Mine Reclamation project will address widespread subsidence features over approximately 50 acres where unstable ground has subsided into dangerous pits, some of which open into hazardous underground mine workings. The locale is rolling hills that drop to a wide riparian zone surrounding the Tongue River. The lower terraces of the site are pocked with subsidence depressions and tufted with sagebrush. Some of the more stable subsidence features support small trees and patches of chokecherry. There are several very active subsidence features that have clean soil faces and openings to underground workings.

An update survey was conducted on May 5, 2009 by Marcia Murdock, AML Ecologist.

Vegetation – The proposed work area is predominantly open grass areas with some areas of sagebrush on uplands. Subsidence features which capture additional moisture support some tight clumps of chokecherry, isolated cottonwood trees, or boxelder trees. Vegetation recorded during the survey included, cheatgrass (*Bromus tectorum*), milkvetch (*Astragalus sp.*), goldenweed (*Haplopappus sp.*), prickly pear (*Opuntia polyacantha*), Russian thistle (*Salsola tragus*), alyssum (*Alyssum minus*), dandelion (*Tragopogon dubius*), sagebrush (*Artemisia tridentata*), fringed sage (*Artemisia frigida*), rabbitbrush (*Chrysothamnus nauseosus*), Hood’s phlox (*Phlox hoodii*), biscuitroot (*Lomatium orientale*), scarlet mallow (*Sphaeralcea coccinea*), draba (*Draba sp.*), skunkbush sumac (*Rhus aromatica*), boxelder (*Acer negundo*), cottonwood (*Populus deltoides*), chokecherry (*Prunus virginiana*), common mullien (*Verbascum thapsus*), yucca (*Yucca glauca*), wavyleaf thistle (*Cirsium undulatum*), dockweed (*Rumex sp.*), star lily (*Leucocrinum montanum*), and yellow violet (*Viola nutalli*).

Wildlife – Wildlife species observed in the area included bird species such as red-tailed hawk (*Buteo jamaicensis*), black-billed magpie (*Pica hudsonius*), western meadowlark (*Sturnella neglecta*), European starling (*Sturnus vulgaris*), bald eagle (*Haliaeetus leucocephalus*), Swainson’s hawk (*Buteo swainsoni*), tree swallow (*Tachycineta bicolor*), dark-eyed junco (*Junco hyemalis*), white-crowned sparrow (*Zonotrichia leucophrys*), rock wren, Say’s phoebe (*Sayornis sayi*), and rock wren (*Salpinctes obsoletus*). No raptor nests were observed.

Mammals, or sign observed included jackrabbit (*Lepus sp.*), coyote (*Canis latrans*), desert cottontail rabbit (*Sylvilagus audubonii*), mule deer (*Odocoileus hemionus*), and pronghorn (*Antilocapra americana*). A variety of small mammals would be expected in the vicinity.

The one reptile recorded was a yellowbelly racer (*Coluber constrictor flaviventris*). Other snake species are also expected to be present.

Wetlands – No wetlands occur in the work area.

Threatened or Endangered Species – No threatened or endangered species were observed nor are any expected.

Summary and Recommendations – No specific wildlife or vegetation concerns were identified during these surveys. It is recommended the project proceed without temporal constraints.



Pock marked subsidence area viewed from a nearby hilltop.



General area of subsidence abatement project viewed from below.

STATE HISTORIC PRESERVATION OFFICE CORRESPONDENCE

ARTS. PARKS. HISTORY.

Wyoming State Parks & Cultural Resources

State Historic Preservation Office
Barrett Building, 3rd Floor
2301 Central Avenue
Cheyenne, WY 82002
Phone: (307) 777-7697
Fax: (307) 777-6421
<http://wyoshpo.state.wy.us>

April 21, 2009

RECEIVED

APR 23 2009

DEQ-AML Lander

Ms. Marcia Murdock
AML NEPA Compliance Coordinator
Wyoming Department of Environmental Quality
510 Meadowview Drive
Lander, WY 82520-0000

Re: Class III Cultural Report for AML Project 17J, Carney Mine Subsidence (SHPO File # 0409NAW004)

Dear Ms Murdock:

Thank you for consulting with the Wyoming State Historic Preservation Office (SHPO) regarding the above referenced project. We have reviewed the project report and find the documentation meets the Secretary of the Interior's Standards for Archaeology and Historic Preservation (48 FR 44716-42). We concur with your finding that no historic properties, as defined in 36 CFR § 800.16(l)(1), will be affected by the project as planned.

We recommend the project proceed in accordance with state and federal laws subject to the following stipulation:

If any cultural materials are discovered during construction, work in the area shall halt immediately, the federal agency must be contacted, and the materials evaluated by an archaeologist or historian meeting the Secretary of the Interior's Professional Qualification Standards (48 FR 22716, Sept. 1983).

This letter should be retained in your files as documentation of a SHPO concurrence on your finding of no historic properties affected. Please refer to SHPO project #0409NAW004 on any future correspondence regarding this project. If you have any questions, please contact Nancy Weidel at 307-777-3418.

Sincerely,


Nancy Weidel, Historian



Dave Freudenthal, Governor
Milward Simpson, Director

PUBLIC NOTICE

LEGAL NOTICE

The Wyoming Department of Environmental Quality, Abandoned Mine Land Division, is planning to remediate hazards from open shafts and adits, pits, spoils, and other mining-related dangerous features in Sheridan County, Wyoming. Remediation and reclamation will include closures of abandoned mine openings and other mine related hazards. The AML program hereby provides public notice of its intent to enter and perform work in T57N, R84W, Sections 20 & 21; T57N, R84W, Section 22; and T57N, R84W, Section 10 in Sheridan County, Wyoming.

The abandoned underground and surface mine workings are from past coal, metal, and mineral mining practices and constitute hazards to the safety and general welfare of the public. This project will be conducted under the Wyoming Abandoned Mines Program authorized by W.S. §§ 35-11-1201 through 1207 and associated regulations. Comments on this project are hereby solicited from the public. Anyone desiring a public hearing on this matter should contact, in writing, the individual below giving reasons for their request. Further information may be obtained from:

Marcia Murdock, NEPA Compliance Coordinator
Wyoming Department of Environmental Quality
Abandoned Mine Land Division
510 Meadowview Drive
Lander, Wyoming 82520
(307) 335-6946

Written comments and requests must be received by April 26, 2008.

Published in the Casper Star-Tribune Sunday, March 23, 2008 and Wednesday, March 26, 2008.

LEGAL NOTICE

The Wyoming Department of Environmental Quality, Abandoned Mine Land Division, is planning to enter and perform work to reclaim abandoned mine lands in Sheridan County, Wyoming. The AML program hereby provides public notice of its intent to enter and perform work in T57N R84W Sections 2, 3, 10, 11, 15, 16, 17, 19, 20, 21, 22, 23, 26, 27, 28, 29, 30, 33, 34 & 35 ; T57N R85W Sections 13, 24, 25 & 26; T56N R84W Sections 3 & 10, and T55N, R85W, Section 3.

The abandoned underground and surface mine workings are from past coal, metal, and mineral mining practices and constitute hazards to the safety and general welfare of the public. This project will be conducted under the Wyoming Abandoned Mines Program authorized by W.S. §§ 35-11-1201 through 1207 and associated regulations. Comments on this project are hereby solicited from the public. Anyone desiring a public hearing on this matter should contact, in writing, the individual below giving reasons for their request. Further information may be obtained from:

Marcia Murdock, NEPA Compliance Coordinator
Wyoming Department of Environmental Quality
Abandoned Mine Land Division
510 Meadowview Drive
Lander, Wyoming 82520
(307) 335-6946

Comments and requests must be received by May 18, 2009.

Published in the Casper Star-Tribune April 19, 2009.



Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



Dave Freudenthal, Governor

John Corra, Director

January 26, 2009

175

Mr. Jeffrey Fleischman, Director
Casper Field Office
Office of Surface Mining
100 East "B" Street, Room 2128
Casper, WY 82601-1918



Re: Categorical Exclusion, Carney Mine Road Subsidence Abatement
(AMLIS PAD No. WY072859SGA)

Dear Mr. Fleischman:

Enclosed is a Categorical Exclusion document for the proposed action to abate subsidence features associated with the Carney Mine which are expressing themselves within and adjacent to Sheridan County Road 345. An open and active subsidence is visible adjacent to the roadside guardrail, and the County has had an ongoing problem with a failing spot in the road surface that is clearly in line with an old mine entrance. AML proposes to excavate and backfill the features, using local fill materials, thereby removing the likelihood of a catastrophic subsidence within the road. No environmentally sensitive issues were identified at the location, and all work is anticipated to remain within the previously disturbed road right-of-way.

With this transmittal, we are requesting Authorization to Proceed on the proposed Carney Mine Road Subsidence Abatement project.

Sincerely,

for Richard Chancellor
AML Administrator

cc: Richard Chancellor, Grant File
Jack Smith, AML Project Manager
Marcia Murdock, AML NEPA Coordinator
Chron



EXHIBIT X5-11-1

**ABANDONED MINE LANDS
CATEGORICAL EXCLUSION CERTIFICATION AND DETERMINATION**

State: Wyoming

PA # WY072859SGA

Project Name: Project 17J, Carney Road Subsidence Abatement

Project Description: The Carney Mine underground mine workings map indicates two entryways entering the mine workings immediately south of Sheridan County Road 345. These entry ways proceed in a northwesterly direction under the road and into the mine area. The larger of the two entries appears to be the main haulage way. Historic photographs identify the concrete piers immediately to the southeast in Tongue River to be part of the trestle used to haul coal from the mine to the Carney Tipple. The smaller mine entry shown on the mine map is approximately 600 feet to the east of the main haul way and was possibly used for ventilation. County Road 345 has an ongoing failure that manifests to the surface exactly in line with the main haulage way. The County Road Department contacted AML to request action on what appears to be an active mine subsidence that involves the shoulder and pavement of the roadway.

The dip in the road, dip in the guardrail, and the blacktop patch work above this main haulage way are easily located on the county road (Photo 1). The legal and coordinates for this subsidence feature are: NE $\frac{1}{4}$ NE $\frac{1}{4}$, Sec. 20, T.84W, R.57N. N. 44.9068° W. 107.0160°.

The open subsidence feature adjacent to the road is approximately 7 feet in diameter with a maximum depth of 3 feet. Exposed plant root material and recently deposited material in the bottom of the pit indicates the feature is active and migrating toward the guardrail. This subsidence feature is in direct line with the trestle abutments and there is no doubt it is the result of subsidence over the Carney Mine main haulage way (Photo 2).

The AML has determined that the mine subsidence condition at the Acme Road has the potential to become a serious threat to human safety. The current subsidence hole currently does not pose a significant risk to human safety, however it is quite evident this active feature is migrating to the north, and is likely connected to the failure in the road surface. If not repaired immediately it will soon impact the guard rail post, and may cause a catastrophic failure in the road itself. Although the Carney mine is currently scheduled for reclamation in 2010, this particular feature cannot wait until that time for repair and abatement action. Site features and an area of potential effect are shown in Photo 3.

AML is proposing to take immediate action on abating the active subsidence, and stabilizing the mine entry as it passes beneath the County Road. The work will include excavating the subsidence, and probing the mine passageway to a point where competent ground is reached, then using compacted backfill to rebuild the area. This work is intended to provide stable ground across the entire width of the roadway, thereby removing the potential for future failure of the road surface, and removal of the potential hazard to traffic passing over the location. The repair project is also anticipated to probe the minor entrance to determine the structural integrity of that feature, and if necessary to also excavate and backfill the failing mine passage there. Work is anticipated to remain within the previously disturbed road right-of-way, and therefore will not disturb native ground surface that could hold cultural artifacts. Previous surveys in the area have not identified any T&E concerns. No wetlands are present in the work area.

Yes responses require submission of an environmental assessment.

I. GENERAL EXCEPTIONS

Does the project type specifically require an EA in 516 DM 6, Appendix 8, as specified in Item I of the attached instructions? No [X] Yes []

II. DEPARTMENT OF INTERIOR EXCEPTIONS

Will the project have any of the following:

A significant adverse effect on public health or safety? No [X] Yes []

An adverse effect on any of the following unique geographic characteristics? No [X] Yes []
If yes, check the ones that apply.

- Parks (State, Local, or National)
- Wild or Scenic Rivers
- Recreation or Refuge Lands
- Wetlands
- Wilderness Areas
- Floodplains
- Ecologically Significant or Critical Areas
- Sole or Principal Drinking Water
- Prime Farmlands
- Aquifers

Highly controversial environmental effects? No [X] Yes []

Highly uncertain and potentially significant environmental effects or unique or unknown environmental risks? No [X] Yes []

A precedent for future action or a decision in principle about future actions with potentially significant environmental effects? No [X] Yes []

Directly related to other actions with individually insignificant but cumulatively significant environmental effects? No [X] Yes []

Adverse effects on properties listed or eligible for listing on the National

Register of Historic Places? No [X] Yes []

Adverse effects on species listed or proposed to be listed on the List of

Endangered or Threatened Species, or have adverse effects on designated

Critical Habitat for these species? No [X] Yes []

Require compliance with Executive Order 11988 (Floodplain Management),

Executive Order 11990 (Wetlands Protection) or The Fish and Wildlife Coordination Act? No [X] Yes []

Threaten to violate a Federal, State, Tribal or local law or requirement imposed for the protection of the environment? No [X] Yes []

III. RESOURCE IMPACT EXCEPTIONS

Are there any unresolved issues, or adverse effects requiring specialized mitigation, for any of the following resources? No [X] Yes []

If yes, check the ones that apply.

- Topography
- Historic and Cultural
- Land Use (includes prime farmland)
- Recreation
- Soils
- Air Quality
- Vegetation (includes wetlands)
- Noise
- Hydrology
- Other (includes socioeconomics)
- Fish and Wildlife

IV. ATTACH CONSULTATION LETTERS AND A LOCATION MAP

No consultation is required for this action. It will occur within a previously disturbed road right-of-way.

IV. CONSULTATION LETTERS AND LOCATION MAP

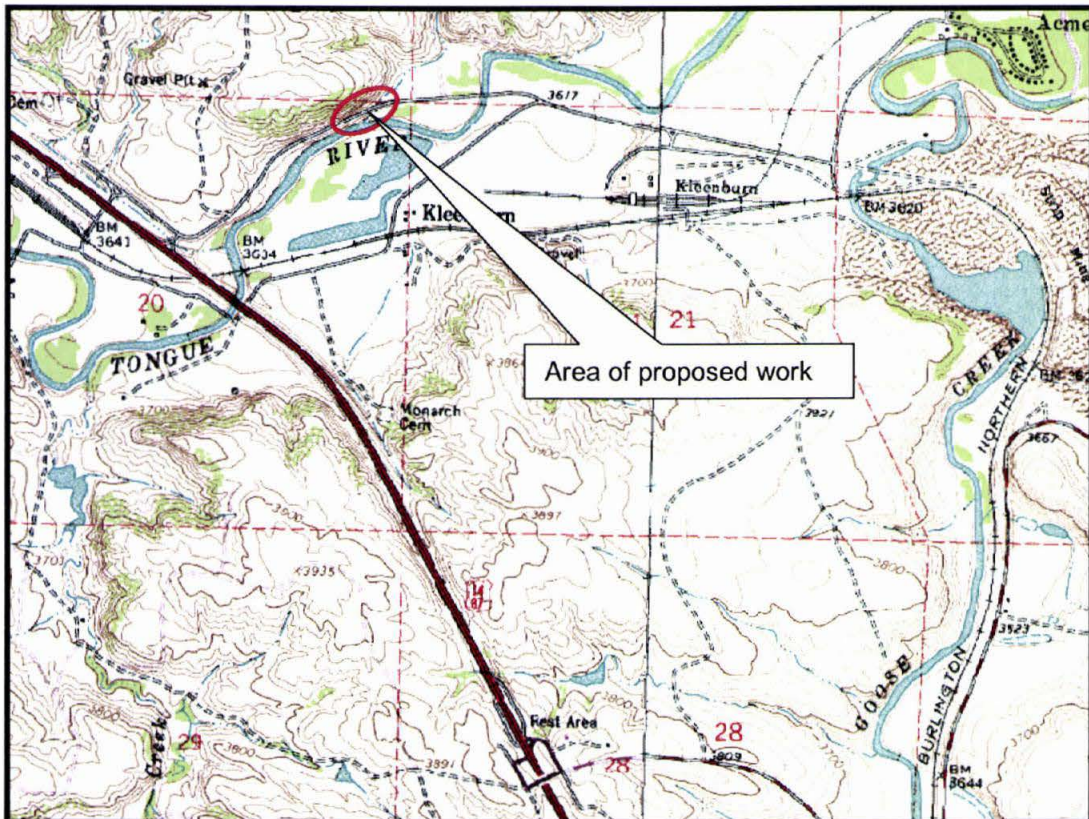




Photo 1. Looking east down the Acme Road (County Road 345). Note asphalt patch where subsidence has occurred under the road in the past. Note active subsidence pit immediately right of the guardrail.



Photo 2. Looking south-southeast across subsidence pit to Carney Mine trestle abutments in Tongue River.



Photo 3. Aerial photograph of immediate project area. Red line represents an approximate project APE. Green arrow identifies where main haul way crosses under county road. The darker blacktop patch can be seen on the county road. Orange arrow identifies approximate location of the smaller, eastern mine entry. Blue arrow identifies Carney trestle abutments in Tongue River.

V. RESPONSIBLE OFFICIAL CERTIFICATION

Signature: Bill Joels Date: 1/26/09
 for
 Name and Title: Richard Chancellor, AML Administrator

VI. OSM DETERMINATION

This project conforms with the exclusion criteria in 516 DM 6, Appendix 8, and is excluded from further NEPA compliance.

This project does not conform with the exclusion criteria in 516 DM 6, Appendix 8, and requires an environmental assessment.

Signature: _____ Date: _____

Name and Title: _____

EXHIBIT X5-11-2

INSTRUCTIONS FOR CATEGORICAL EXCLUSION DETERMINATION

The attached checklist is used to determine if an abandoned mine land project funded through Title IV of the Surface Mining Control and Reclamation Act (SMCRA) is eligible for a categorical exclusion under the National Environmental Policy Act (NEPA). A yes answer to any question means that the project is not eligible and requires preparation of an environmental assessment. Additional guidance in complying with NEPA is found in the OSM NEPA Handbook.

A brief description of the project using AML Inventory keywords is required for the title block.

I. GENERAL EXCEPTIONS

Abandoned Mine Land projects that include any of the following problems, situations, or activities require an EA.

1. Subsidence projects involving the placement of any material into underground mine voids through drilled holes to address more than one structure.
2. Mine fires and refuse fires.
3. Hazardous or explosive gases. For instance, projects involving the venting of methane or carbon dioxide.
4. Dangerous impoundments, both surface and underground, as defined in the inventory guidelines (AML 1).
5. Dangerous slides where the abatement work can result in damage to inhabited property.
6. Undisturbed, non-commercial borrow or disposal sites.
7. Hazardous wastes as defined by EPA.
8. The use of explosives.
9. Projects over 100 acres in size.

DEPARTMENT OF INTERIOR EXCEPTIONS

These exceptions are presented in 516 DM 2, Appendix 2. The Department's procedures were published in the Federal Register on April 29, 1980 (45 FR 27541) and revised on May 21, 1984 (49 FR 21437).

III. RESOURCE IMPACT EXCEPTIONS

The resource values correspond to those listed in OSM's NEPA Handbook. If any agencies, persons, or groups have unresolved issues with the proposed project, an EA must be prepared.

If project activities result in impacts that must be mitigated through the use of techniques beyond common construction practices, an EA must be prepared to analyze the potential environmental effects, and alternatives. Specialized mitigation is an indicator of the potential for significant adverse effects. Please refer to the NEPA Handbook for more discussion on resource values and definitions.

The following examples are provided to help the reviewer determine when mitigating measures require preparation of an EA. These examples are for guidance only and are not inclusive.

Common Mitigation Practices Not Normally Requiring an Environmental Assessment:	Specialized Mitigation Practices Normally Requiring an Environmental Assessment:
Watering roads to suppress dust.	Developing detailed dust control plans in response to air quality zone requirements, or public health considerations.
Installation of silt fence and hay bales to control sediment.	A specialized sediment control plan required to protect sensitive off-site resources.
Routine traffic control such as flagmen, safety barricades.	The use of road closures and detours resulting in a substantial alteration of traffic patterns.
Replanting of trees, shrubs and grass to replace lost vegetation types.	Developing a specialized revegetation plan in response to concerns over adverse impacts on plant communities.
Placement of brush piles and rock piles to replace wildlife habitat.	Developing a specialized plan in response to concerns over adverse impacts on wildlife communities.
The routine placement of barriers that allow continued use of mines by non-endangered bats or other species.	Specialized mine closure procedures in response to site specific concerns about bat habitat.

IV. ATTACH CONSULTATION LETTERS AND A LOCATION MAP

Attach the SHPO consultation letter, the endangered species consultation letter, and any other consultation letters required by the state reclamation plan. The location map should be from a 7.5 minute quadrangle map, with the map name, project name, and project location legibly marked.

V. RESPONSIBLE OFFICIAL CERTIFICATION

Please complete block as indicated. The official signing this block is certifying the accuracy and completeness of the statements on the form. The persons name and title should be typed on the second line.

VI. OSM DETERMINATION

The OSM official making the determination is to review this document, check the appropriate block, and sign as indicated. The person's name and title should be typed on the second line.

EXHIBIT X5-11-3

Categorical Exclusion Authorization to Proceed

State Agency
Address

Dear [State AML Director]

OSM has reviewed the categorical exclusion certification regarding [name of project] and determined that the project conforms with exclusion criteria in 516 DM 6, Appendix 8, and is excluded from further NEPA compliance. Accordingly, pursuant to section 5-11-20D.3 of the Federal Assistance Manual, you are authorized to proceed with this project and expend Federal funds in accordance with AML grant terms and conditions.

Sincerely

Regional Coordinating Center Representative
Field Office Director



Department of Environmental Quality



To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

7007 1490 0002 1550 3806

JC

April 14, 2009

Ms. Mary Hopkins, Interim State Historic Preservation Officer
Wyoming Department of State Parks and Cultural Resources
Barrett Building, 3rd Floor
2301 Central Avenue
Cheyenne, WY 82002

Re: Class III Cultural Report for AML Project 17J, Carney Mine Subsidence

Dear Ms. Hopkins:

Attached is a copy of the Class III Cultural Inventory Report for AML Project 17J, Carney Mine Subsidence. The reclamation proposed for this area is mass grading to reduce the risks of human injury from substantial areas of mine subsidence. No National Register-eligible properties exist within the boundaries of this proposed undertaking. The recommendation of this report is that no eligible cultural resources exist at the work area, and no impacts to cultural resources are anticipated.

This transmittal by AML is on behalf of the Office of Surface Mining (OSM). It is our finding that there will be no effect on eligible cultural properties. Please provide a letter of concurrence with these findings at your earliest convenience.

Should you require further information, please contact me at (307) 335-6946.

Sincerely,

Marcia B. Murdock
AML NEPA Compliance Coordinator

cc Rick Chancellor, Grant File (w/o attachments)
Chron File

