

**Determination of NEPA Adequacy (DNA)**  
**U.S. Department of the Interior**  
**Bureau of Land Management**

**Office:** Burns District, Andrews Resource Area

**Tracking Number (DNA #):** DOI-BLM-ORWA-B060-2016-0006-DNA

**Abandoned Mine Site Cleanup Module (AMSCM) Case Files:** Steens Group of Mines (specific to Steens Mountain (10459) and Pike Creek (10461))

**Proposed Action Title/Type:** Maintain, evaluate, and remediate physical hazards

**Location/Legal Description:** Willamette Meridian, T. 34 S., R. 34 E.,  
 sec. 19 S<sup>1</sup>/<sub>2</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> (Steens Mountain Mine)  
 sec. 20 NE<sup>1</sup>/<sub>2</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> (Pike Creek Mine)

**Applicant:** Bureau of Land Management (BLM) and a possible contractor

**Applicable EA:** Steens Group Abandoned Mine Land Remediation Environmental Assessment (EA) OR-06-027-049

**A. Description of the Proposed Action and Project Design Elements  
 (or any applicable mitigation measures)**

This DNA addresses the closure of three adits (i.e., entrances to underground mines), mining features within the Steens Group of Mines. The proposed action includes the following mine locations and associated impacts.

<i>Mine</i>	<i>Mineral(s)</i>	<i>Features</i>	<i>Concerns</i>
Steens Mountain	Mercury (Hg)	At least 270 feet of underground workings including a vertical shaft, and one or more stopes accessed through two adits.	Environmental health: air and soil Physical Hazard of falling and/or caving in on humans and animals.
Pike Creek	Uranium\Mercury (Hg/U)	More than 200 feet of underground workings including a vertical shaft(s) of at least 75 feet in depth, rail car tracks to creek, and misc. mining items.	Environmental health: air and soil Physical Hazard of falling and death to human and animals. One dog is reported to have fallen to its death at the end of September of 2015.

The proposed action is to maintain and remediate significant physical hazards. The mine workings in question are considered Abandoned Mine Lands (AML) and have not been in operation since prior to the 1976 Federal Land Policy and Management Act (FLPMA) went into effect.

The health and safety concerns were discovered after it was reported by a BLM employee and an adjacent land owner that the adits were open in the summer of 2015 and had shafts (i.e., vertical tunnels) inside the mine workings that were open to the public. Consistent with BLM AML Program Policy Handbook (H-3720-1, section 3.2.3, page 19 and section 7.2, page 48) and the Steens Mountain Cooperative Management and Protection Area (CMPA, pages P-5 and P-21 of Appendix P), signs were posted at the adit entrance of the Pike Creek Mine site. Additionally, a trailhead information paper which displayed the mine's location

along the Pike Creek hiking trail was removed. Consistent with BLM policy (H-3720-1), further attempts to secure the gate within the bat grate were attempted at the Steens Mountain Mine site; however, upon returning several weeks later, the gate was open, suggesting human use. Furthermore, BLM employees overheard members of the public that have or were planning on entering the mine workings.

The proposed work is for the purpose of compliance with the BLM's AML (Abandoned Mine Lands) program strategic objective to "Protect public safety and reduce liabilities by eliminating or reducing risks posed by abandoned mines." (H-3720-1, section 1.3, number 2, page 3). The Pike Creek adit is adjacent to the Pike Creek hiking trail and two adits that lead to shafts and at least one collapsing stope (i.e., opening made after extracting rock) within the Steens Mountain Mine which is located at the end of the Weston Basin all-terrain vehicle (ATV) trail (i.e., former mining road); the public has direct access to both.

Both of the mines sites (i.e., Pike Creek and Steens Mountain Mines) are located within the High Steens Wilderness Study Area (WSA) and the Steens Mountain CMPA.

The adit at the Steens Mountain Mine had a bat grate added after 2006, however, is currently not fully secured and will require maintenance to secure due to the unknown vapors and documented shafts and collapsing stopes along narrow fault zones resulting in a highly unsafe human environment. Additionally, there is a second adit that does not have a bat grate and appears to connect to the main adit through a shaft and thus bypass the bat grate. The proposed work and the required tools (drill, welder, and cutting torch) to secure the adit bat grate would have access to the site from Weston Basin Road. The second unsecured adit would be foamed in to a thickness recommended by the foam manufacturer. Note that the face of the foam closest to the adit portal (mine opening) would need to have a concrete face (troweled on a few inches thick with "chicken wire") to avoid future weathering of the foam. The work would include cutting, welding, and bending of metal. The plan is to secure the gate so that a lock is not needed and also to allow future authorized entry (cutting and re-welding after). Thus, future maintenance can be expected. Note that drilling and fastening of metal rods may be required to contain the foam in a defined location in an effort to achieve the desired thickness. If, in the future, the gate or grate is damaged, it would be recommended that the gate be welded such that it would be more permanent.

The Pike Creek Adit has had part of the bat grate removed and is currently accessible by the public by going around the damaged metal grate. Near the entrance to the adit is a vertical shaft that is reported to be 75 feet in depth which leads to collapsed and partially collapsed horizontal mine workings. A dog is reported to have fallen to its death in late September of 2015. The proposed work is to straighten the bent 1-inch steel using oxygen and acetylene, hammers, and pulleys, then drill holes measuring 1 and 1/8 inch into the adit rock walls around the location of the adit and fasten 1-inch solid steel into the rock wall with epoxy behind and possibly in front of the adit grate. Welding may be needed to secure the grate to the anchor rods. The tools needed include a gasoline powered electric generator, drill, bits,

hammers, welder, pulleys, cutting and rosebud ends for oxygen and acetylene tanks, water containers, and miscellaneous hand tools. The supplies and tools would be carried into and out of the WSA with the use of pack animals (such as horses).

Consistent with the Abandoned Mine Land Program Policy Handbook (H-3720-1 section 9.3.2, page 59 and section 9.3.6, page 64), it is proposed that a temporary fence and wire be used to temporarily secure the gate within the bat grate at the Steens Mountain Mine and a fence (either wooden or wire mesh) be used to temporarily secure the Pike Creek Adit until the more permanent work can be completed in the spring of 2017.

Other options were considered, however, physically connecting the grate to the rock wall is the goal and provides a more permanent long-term solution. The work allows for the possibility of future access at the Steens Mountain Mine, but not the Pike Creek Mine workings.

The bat grate work could require up to five people over a five-day period; however, it is probable that it will only take three people three days for each site (plus one day to pack in and one day to pack out). All unsecured supplies, tools, and trash would be hauled out of the site. The work would take place between Monday and Friday, thus avoiding the higher use times of the weekends.

## **B. Land Use Plan (LUP) Conformance**

The proposed action is in conformance with the LUP because it is consistent with the following resource management plan (RMP) decisions (objectives, terms, and conditions):

The Steens Mountain CMPA Record of Decision (ROD) and RMP completed in 2005 is the current BLM LUP for this area. The RMP at "Issues Eliminated from Detailed Study" states AML reclamation actions were not analyzed in the RMP Final Environmental Impact Statement (FEIS) but will be dealt with on a case-by-case basis through individual environmental analyses.

- The July 15, 2005, Steens Mountain CMPA ROD and RMP states that, "*Exceptions to the nonimpairment criteria include emergencies such as fire suppression and search and rescue operations; reclamation of effects from WSA IMP[Interim Management Plan] violations, emergencies and pre-FLPMA impacts; grandfathered uses or facilities, or valid existing rights; or uses and facilities to protect or enhance wilderness values or [that] are the minimum necessary for public health and safety in use and enjoyment of wilderness values.*" (RMP - 80)
- "*The decision will not change the BLM's responsibility to comply with applicable laws and regulations including the Clean Air Act (CAA), Clean Water Act (CWA), Endangered Species Act (ESA), National Environmental Policy Act (NEPA), Federal*

*Land Policy and Management Act (FLPMA), Steens Mountain Cooperative Management and Protection Act of 2000 (Steens Act)(Public Law [PL]106-399)(Appendix A), or any other Federal law.” (ROD - 1):*

- The AML program’s overall objective is to support core BLM programs by providing solutions to environmental and physical safety hazards associated with abandoned hardrock mines on or affecting lands administered by BLM.
  - The proposed work is consistent with the Department of the Interior’s (DOI) BLM AML Program Policy Handbook H-3720-1.
  - FLPMA (43 U.S.C. 1701, et seq.) section 302(b) authorizes the Secretary of the Interior, through the BLM, to take actions that prevent unnecessary or undue degradation of public lands.
  - The Endangered Species Act of 1973 (ESA) (16 U.S.C. 1531) says that where abandoned mines may impact endangered or threatened species (e.g., bats or fish), the BLM will use ESA authority to ensure environmental risks are addressed through ecologically protective reclamation efforts.
- Impacts to sage-grouse habitat were reviewed within the context of the recently approved Greater Sage-Grouse RMP Amendment for Oregon. The sites are within designated sage-grouse general habitat management area (GHMA) and the habitat would not be affected by these actions since the actions are in mine adits which do not possess characteristics of sage-grouse habitat. The area surrounding the adits is moderate to steep terrain and sage-grouse use of the area is not expected. Disturbance would be less than a week at each site and would be outside of the breeding/early brood rearing time period.

**C. Identify applicable National Environmental Policy Act (NEPA) documents and other related documents that cover the proposed action.**

The proposed actions are addressed within Steens Group Abandoned Mine Land Remediation EA (OR-06-027-049) and Decision Record (DR), signed on August 22, 2006. The EA listed the following:

- *“Installing bat grates would eliminate human access into the abandoned mines.” (DR, page 5).*
- *“Steens Mountain Mine and Pike Creek Adits are occasionally explored by public land users.*
- *The sites are not safe due to potential for rockfall from the roof, near-vertical drop-offs, air lacking sufficient oxygen, mercury vapor from natural mercury*

mineralization, radiation from natural uranium mineralization, animal bites, and rodent droppings.” (EA, page 12).

- “The government could be held liable for safety hazards to recreationists venturing into the Steens Mountain, Pike Creek Adit, and Weston Site subsidence area.” (EA, page 14).
- “Safety hazards to recreationists would be reduced by emplacement of grates near the entrance to Steens Mountain Mine and Pike Creek Adit.... Government liability would be reduced by remediating known safety hazards at Steens Mountain Mine, Pike Creek Adit, and Weston Site.” (EA, page 19).

**D. NEPA Adequacy Criteria**

**1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?**

The current proposed action is a feature of and essentially similar to the alternative analyzed existing NEPA document as it is talking about securing the adits for public health and safety.

2006 EA	Steens Mountain	Pike Creek
Impact < 1 acre	Impact < 0.1 acre	Impact < 0.1 acre
@ 1 day per site of work	@ 1 week of work (M-F)	@ 1 week of work (including packing in and out) (M-F)
Use of backhoe and welder (would need electric power source)	Use of cutting torch, welder, generator, foaming supplies, concrete, and miscellaneous supplies and hand tools	Use of drill, cutting torch, welder, generator, and miscellaneous supplies and hand tools
Animal or helicopter supplies to Pike Creek	Not Applicable	Animals to pack in on established trail
Possible seeding in backfill area	Not Applicable	Not Applicable
Use of metal bat grate to secure opening.	Maintain installed bat grate and foam in additional adit with a thin concrete veneer to provide protection from the sun.	Maintain installed bat grate and secure to solid rock.

- 2. *Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action given current environmental concerns, interests, and resource values?***

Yes, the options were to either secure the mining feature due to health and safety reasons or not. Currently, with the reported death of a dog, the health and safety situation has been elevated and is considered more critical than previously.

- 3. *Is the existing analysis valid in light of any new information or circumstances (such as rangeland health standard assessments, recent endangered species listings, and updated lists of BLM sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action?***

Yes, BLM can reasonably conclude that new information and new circumstances would not substantially change the NEPA analysis of the new proposed action. The BLM specialists evaluated the impacts based upon the need for health and safety. The proposed action was put into place; however, the work which was completed to protect the public was vandalized and thus the proposed needed maintenance will allow a stronger and more permanent result.

- 4. *Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?***

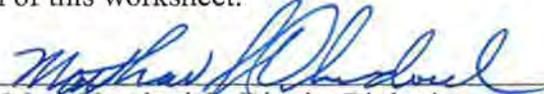
Yes, the proposed action is specific to securing the same mining features as those analyzed in the existing NEPA document and methods planned to be utilized are similar both quantitatively and qualitatively as pertain to impacts.

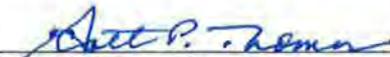
- 5. *Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action?***

BLM has consulted with the nearby private land owner on the need to perform environmental and other investigation at the mine sites as it pertains to health and safety. Further, the owner of the dog which fell to its death also requested securing the adit at Pike Creek.

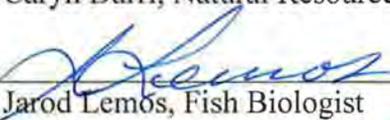
BLM specialists have determined that the EA was adequate in reviewing conditions within the National Historic Preservation Act (NHPA) and the ESA because the proposed actions are for the same purpose and need as evaluated in the existing 2006 NEPA EA document.

**E. Interdisciplinary Analysis:** Identify those team members conducting or participating in the NEPA analysis and preparation of this worksheet.

Specialist Signature and Date:  10-21-2015  
Matt Obradovich, District Biologist

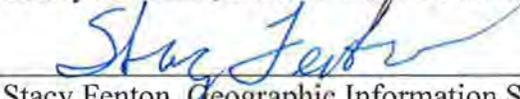
Specialist Signature and Date:  10-21-2015  
Scott Thomas, District Archaeologist

Specialist Signature and Date:  10-21-2015  
Caryn Burri, Natural Resource Specialist (NRS), Botany

Specialist Signature and Date:  10-21-2015  
Jarod Lemos, Fish Biologist

Specialist Signature and Date:  10-21-2015  
Tom Wilcox, Wilderness Specialist

Specialist Signature and Date:  10-21-2015  
*for* Lesley Richman, District Weed Coordinator

Specialist Signature and Date:  10-21-2015  
Stacy Fenton, Geographic Information Specialist

## F. Others Consulted

Identify other individuals, agencies, or entities that were consulted with as part of completing the NEPA analysis.

Adjacent property land owner

## G. Conclusion

Based on review of the document above; I conclude that this proposal conforms to the applicable LUP and that the existing EA and the NEPA documentation fully cover the proposed action and constitute BLM's compliance with the requirements of the NEPA.

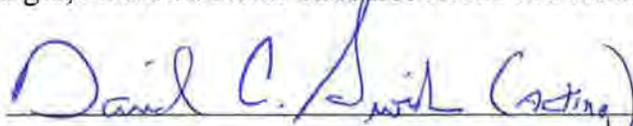
Rick Wells, Geologist

Signature:  Date: 10-29-15

Emily Erwin, District Planning and Environmental Coordinator

Signature:  Date: 10-29-15

Rhonda Karges, Andrews/Steens Resource Area Field Manager

Signature:  Date: 10-29-15

## Decision

It is my decision to implement the proposed action with project design elements (if applicable) as described above.

## Appeal Procedure

You have the right to appeal to the Interior Board of Land Appeals (IBLA), Office of the Secretary, within 30 days of receipt of this decision in accordance with regulations at 43 Code of Federal Regulations (CFR) 4.4. An appeal should be in writing and should specify the reasons, clearly and concisely, why you think the decision is in error. A notice of appeal

and/or request for stay electronically transmitted (e.g., email, facsimile, or social media) will not be accepted. A notice of appeal and/or request for stay must be on paper. If an appeal is taken, your notice of appeal must be filed with Rhonda Karges, Andrews/Steens Resource Area Field Manager, Burns District Office at 28910 Highway 20 West, Hines, Oregon 97738. The appellant has the burden of showing that the decision is in error.

A copy of the appeal, statement of reasons, and all other supporting documents should also be sent to the Regional Solicitor, Pacific Northwest Region, U.S. Department of the Interior, 805 SW Broadway, Suite 600, Portland, Oregon 97205. If the notice of appeal does not include a statement of reasons for the appeal, it must be sent to the IBLA, Office of Hearings and Appeals, 801 North Quincy Street, Arlington, Virginia 22203. It is suggested appeals be sent certified mail, return receipt requested.

The appellant may wish to file a petition for a stay (suspension) of this decision during the time that the appeal is being reviewed by the IBLA. Pursuant to 43 CFR 4.21(b), the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must be submitted to each party named in this decision and to the IBLA and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for obtaining a stay - except as otherwise provided by law or other pertinent regulation, a petition for a stay of decision pending appeal shall show sufficient justification based on the following standards (43 CFR 4.21(b)):

- (1) The relative harm to the parties if the stay is granted or denied,
- (2) The likelihood of the appellant's success on the merits,
- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

As noted above, the petition for a stay must be filed in the office of the authorized officer. It must be printed or typed on paper and must be served in person or by certified mail.

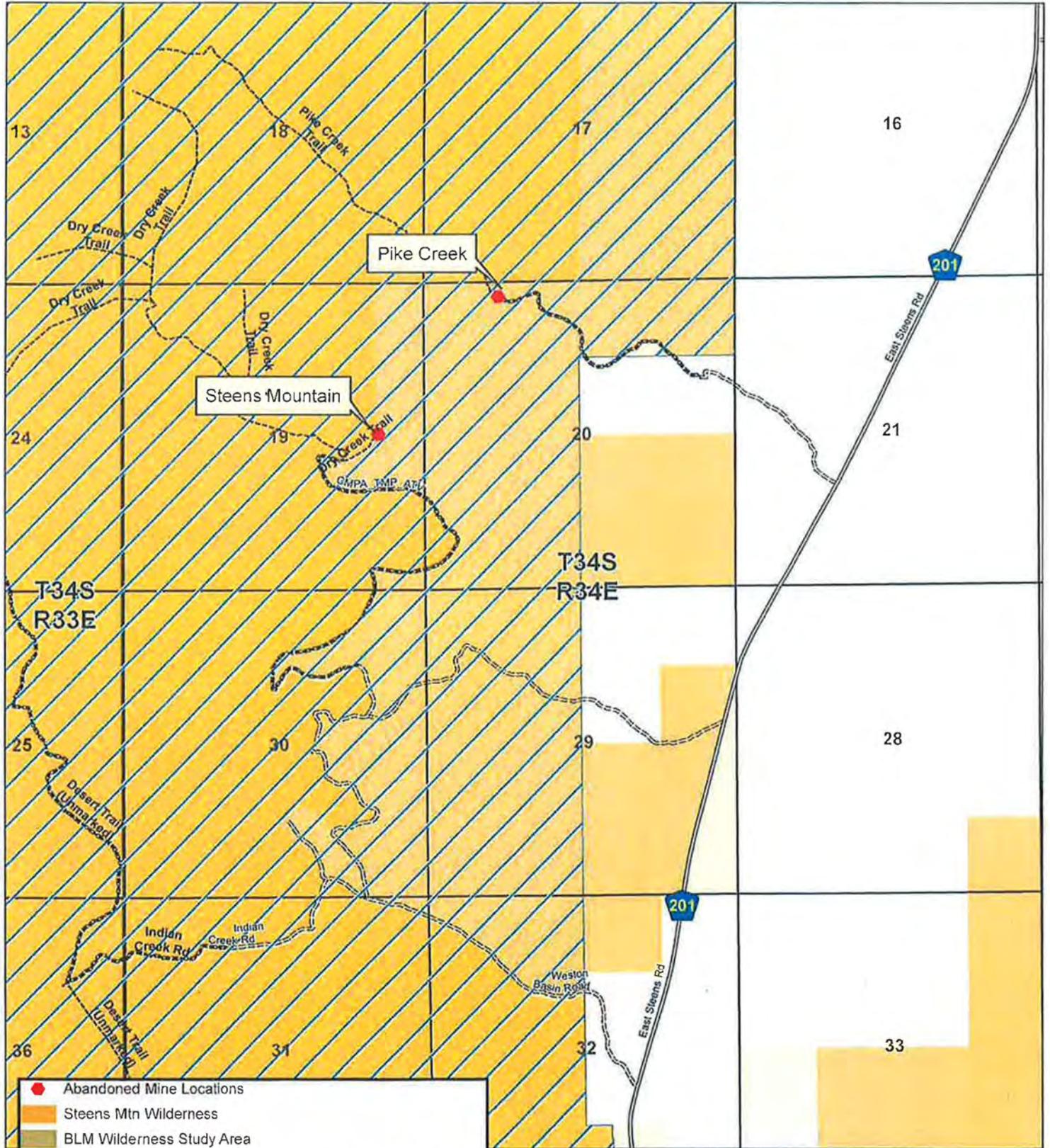
Authorized Officer: Rhonda Kargas, Andrews/Steens Resource Area Field Manager

Signature: David L. Auer (acting) Date: 10-29-15

**Note:** The signed conclusion on this worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision.

Figure 1

Abandoned Mine Maintenance (Pike Creek & Steens Mountain)



- Abandoned Mine Locations
- Steens Mtn Wilderness
- BLM Wilderness Study Area
- Steens Mountain Cooperative Management and Protection Area
- Non-Paved Improved Road
- Primitive/Unknown Surface
- Bureau of Land Management
- Private/Unknown



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 Bureau of Land Management  
 Burns District, Oregon  
 Note: No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of these data for individual or aggregate use with other data. Original data was compiled from various sources and may be updated without notification see BLM-ORWA-0060-2016-0005-DNA 10/20/2015 revell  
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