FINDING OF NO SIGNIFICANT IMPACT
Allison Mine Subsidence Mitigation Project – Phase IV
eAMLIS Key: NM-069

Introduction

The Office of Surface Mining Reclamation and Enforcement – Denver Field Branch (OSMRE – DFB) has reviewed the Environmental Assessment (EA) submitted by the New Mexico Energy, Minerals and Natural Resources Department – Abandoned Mine Land Program (AMLP) in support of Phase IV of the Allison Mine Subsidence Mitigation Project. Under Alternative 1 (Preferred Alternative), OSMRE would provide Authorization to Proceed (ATP) to AMLP to expend federal abandoned mine land (AML) grant funds to address several hazardous mine subsidence and erosional features in the Community of Allison, New Mexico. The project area is located on private land with approved right-of-entry. Safeguarding activities would include geophysical investigations, exploratory drilling, and test pit excavations to better understand the location and extent of the underground voids. Voids and subsidence features would then be mitigated using fencing and signage, backfilling, or capping. Each closure method would be dependent on the nature of the subsidence feature and the presence of historic, cultural, and natural resources. In addition, work would be done to improve or update various drainage features contributing to the erosion and subsidence of the underground mine voids. Lastly, monitoring would be conducted to observe and address any settling, damage to structures, or disrupted drainages. Under Alternative 2, subsidence features within the project area would be addressed with the same methods as the Preferred Alternative; however, no work would be done to fix drainage features or mitigate erosion. Under the No Action Alternative, the hazards associated with the Allison Mine Subsidence Mitigation Project would remain and the threats of injury or personal property damage would persist.

Reason

The mine hazards associated with Phase IV of the Allison Mine Subsidence Mitigation Project have been ranked as Priority 1 extreme safety hazards by the New Mexico AMLP. This classification and the need for the Preferred Alternative are based on the physical safety hazards posed by abandoned mine features to the public. Many of the hazardous features present in the project area are readily accessible to the public and are located within or near residential areas. Hazards to the public include sinkholes, tension cracks, and other subsidence features.

Under the Preferred Alternative, OSMRE would authorize the New Mexico AMLP to investigate and mitigate approximately 78 acres of subsidence features and one portal. In addition, several drainage features would be improved and reconstructed to reduce the potential for future erosion and additional subsidence. Following construction, the New Mexico AMLP would be responsible for monitoring the site to identify any settling or damage to structures. Existing access routes would be used to the maximum extent practical, and overland access would only be utilized when necessary.

Context 40 CFR 1508.27(a)

To determine whether the Preferred Alternative would have a significant effect on the human environment, impacts related to the Preferred Alternative were analyzed in terms of context and intensity based on the criteria at 40 CFR 1508.27(b). The Preferred Alternative project area is located within the Community of Allison, New Mexico, located approximately 2.5 miles west of Gallup, New Mexico. The project area consists of private lands where right-of-entry has been granted. The Preferred Alternative is project specific, and any impacts would likely be realized at the local, rather than regional, national, or global levels. Affected interests include landowners, the New Mexico Department of Transportation (NMDOT), and the general public.

Intensity 40 CFR 1508.27(b)

(1) The following resources were analyzed in the Allison Mine Subsidence Project – Phase IV EA for beneficial and adverse impacts. A significant effect may exist even if OSMRE believes that on balance the effect will be beneficial.

Historic and Cultural Resources

In 2017 the Office of Contract Archaeology (OCA) completed an intensive archaeological survey of the entire project area. A total of seven sites (LA 188339 – LA 188345) and 21 historic architectural properties (HCPI 43727 – HCPI 43746) were recorded within the Area of Potential Effect (APE). Sites LA 188343 and LA 188345 are eligible for inclusion in the National Register of Historic Places (NRHP) under Criterion D, and sites LA 188340 and LA 188344 are potentially eligible for inclusion in the NRHP under Criterion D. Additionally, HCPI 43741 and HCPI 43737 are eligible and potentially eligible, respectively, for inclusion in the NRHP. The remaining historic buildings are not eligible for inclusion in the NRHP. The Preferred Alternative would employ the following measures to minimize impacts to cultural resources: historic buildings HCPI 43741 and HCPI 43737, and archaeological features contributing to the NRHP eligibility of sites LA 188340, LA 188343, LA 188344, and LA 188345 would be avoided by all construction activity. Additionally, an archaeologist would monitor construction activity near important resources to avoid accidental damage and to identify any potential unanticipated subsurface cultural deposits. Consequently, a determination of *no historic properties affected; eligible sites present but not affected* as outlined in 36 CFR 800 was reached for the Preferred Alternative. The New Mexico State Historic Preservation Officer offered its concurrence with this determination on June 14, 2021. No sites of tribal importance are known to exist within the APE and no concerns were raised in response to tribal outreach.

Fish and Wildlife

The U.S. Fish and Wildlife Service (USFWS) was informally consulted on August 31, 2018 through its Environmental Conservation Online System – Information for Planning and Consultation (ECOS-IpaC) database as part of the Biological Assessment and Biological Evaluation (BA/BE). The consultation identified five threatened, endangered, or candidate species potentially located in the project area including three birds, one fish, and one plant

species. The BA/BE included a 100% pedestrian survey conducted in December of 2017 and May and July of 2018. The BA/BE was completed in December of 2018 per 42 U.S.C. 4332(2)(C). The BA/BE considered all federal and state-listed plant and animal species with the potential to occur within the project area. Through the BA/BE, four state-listed species including two plants and two birds were identified in the project area. Under the Preferred Alternative, if construction could not be completed outside of the bird breeding season, defined as March 15 through September 15, a pre-construction nest survey would be conducted prior to construction activity in compliance with the Migratory Bird Treaty Act (MBTA). If any active nests were found, AMLP would initiate formal consultation with the USFWS and construction activities at the nesting sites would be delayed until fledging occurs or a nest removal permit is obtained from the USFWS. All state-listed plant species identified within the project area would be avoided by construction activities. No critical habitat was identified within the project area. One wetland approximately 1.23 acres in size is present in the southeastern corner of the project area and is defined as a palustrine emergent system. A large gunnison's prairie dog colony is located in the southeastern corner of the project area and was designated as inactive as of May 2018. Under the Preferred Alternative, construction activities would avoid the wetland and prairie dog colony. Little to no impact to fish and wildlife resources is expected under the Preferred Alternative and Alternative 2. Under the No Action Alternative, there would be no impact to fish and wildlife resources.

(2) The degree to which the Preferred Alternative affects public health or safety

The Preferred Alternative's effect on local public health and safety would be moderate and positive. The features within the project area are located close to or within residential areas in the Community of Allison, New Mexico. Visitation to the project area could result in the formation of sinkholes, potentially causing serious injury or death. Sinkholes also pose a threat to property and may impact building foundations and infrastructure critical to the Community. Additional hazards include the release of dangerous gasses or the sudden discharge of fluid from tension cracks or sinkholes. Under the Preferred Alternative, AMLP would safeguard the project area by investigating and mitigating approximately 78 acres of subsidence features and one portal. In addition, several drainage features would be improved or reconstructed to reduce the potential for future erosion and additional subsidence. Under Alternative 2, AMLP would perform the same mitigation efforts for the subsidence features as mentioned for the Preferred Alternative but would not perform any work related to drainages or erosion. This Alternative would only partially address the concerns for public health and safety since the underlying cause of the subsidence features would be left unmitigated. Under the No Action Alternative, the risk of injury or property damage from subsidence features would remain.

(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

There are no prime farmlands, wild and scenic rivers, wilderness areas, refuge lands, or ecologically critical areas within the Preferred Alternative project area. AMLP consulted with the U.S. Army Corps of Engineers (USACE) in December of 2016 requesting a determination on whether a Department of the Army permit would be required for the Allison Mine Subsidence Mitigation Project. The USACE determined that no jurisdictional waters of the United States are present within the project area, and that a Department of the Army permit would not be required. One wetland approximately 1.23 acres in size is present in the southeastern corner of the project area. This wetland would be avoided by all construction work; therefore, no impacts are anticipated.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The Preferred Alternative would have no effects on the human environment that would be highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The Preferred Alternative would have no effects on the human environment that would be highly uncertain or involve unique or unknown risks. Since OSMRE's approval of the New Mexico AMLP in 1981, program staff have safeguarded numerous AML hazards across the state utilizing similar techniques as those presented under the Preferred Alternative.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

Actions under the Preferred Alternative would not establish precedent for future actions with significant effects and would not represent a decision in principle about future considerations. The issues considered in the EA were developed by the interdisciplinary team within the context of past, present, and reasonably foreseeable actions.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

Past activities in the project area include mining and the residential development of the Community of Allison, New Mexico. Under the Preferred Alternative, appropriate coordination between AMLP and the contractor would help to ensure both short and long term cumulative environmental impacts are insignificant.

(8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

AMLP worked to make determinations of eligibility and effect as required by Section 106 of the National Historic Preservation Act. A total of seven sites (LA 188339 – LA 188345) and 21 historic architectural properties (HCPI 43727 – HCPI 43746) were recorded within the APE. Sites LA 188343 and LA 188345 are eligible for inclusion in the NRHP under Criterion D, and sites LA 188340 and LA 188344 are potentially eligible for inclusion in the NRHP under Criterion D. Additionally, HCPI 43741 and HCPI 43737 are eligible and potentially eligible for inclusion in the NRHP. Under the Preferred Alternative, all historic buildings and sites eligible or potentially eligible for listing in the NRHP would be avoided by construction activities. Additionally, an archaeologist would be onsite to monitor construction activity to avoid accidental damage to contributing elements and to identify any unanticipated subsurface cultural deposits. As a result, the Preferred Alternative and Alternative 2 would result in *no historic properties affected; eligible sites present but not affected.* Under the No Action alternative there would be no historic properties affected.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

Five threatened, endangered, or proposed species have the potential to exist within the project area including the Mexican Spotted Owl, Southwestern Willow Flycatcher, Yellow-billed Cuckoo, Zuni Bluehead Sucker, and Zuni Fleabane. None of these species were identified during the field survey, nor does suitable habitat exist within the project area to support them. No critical habitat exists within the project area. Little to no impact to fish and wildlife resources is expected under the Preferred Alternative or Alternative 2. The No Action Alternative would have no impact to fish and wildlife resources.

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The Preferred Alternative would not violate any known federal, state, local, or tribal law or requirement imposed for the protection of the environment. The Preferred Alternative is consistent with applicable plans, policies, and programs.

Mitigation Measures

Under the Preferred Alternative, AMLP would ensure the following mitigation measures are implemented:

- Avoiding all historic buildings and archaeological sites eligible or potentially eligible for listing on the NRHP during construction;

- Having an archaeologist on site during construction to assure avoidance of cultural and historic resources, and to help identify any unanticipated subsurface cultural resources;
- Installing protective fencing along the western boundary of the wetland to avoid accidental trespass or damage during construction;
- Implementing erosion control measures in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) permit under Section 402 of the Clean Water Act;
- Seeding and mulching areas affected by construction disturbance with certified weed-free seed, mulch, matting, and straw / hay;
- Inspecting and cleaning construction equipment prior to and after use to limit the potential for the spread of noxious weeds;
- Completing nest surveys prior to commencing construction if work must occur within the breeding season defined as March 15 to September 15;
- Contacting the USFWS if active nest are identified during the nest survey, and delaying construction activities until fledging occurs or until a nest removal permit is obtained from the USFWS;
- Avoiding the two New Mexico rare plants (navajo muhly and threadleaf blazingstar) identified within the APE during construction activities;
- Avoiding the gunnison's prairie dog colony in the southeast corner of the project area during construction;
- Liming fugitive dust generation by implementing speed restrictions and wetting access roads and exposed soils during construction.

Statement of Environmental Significance

The Preferred Alternative would not have a significant impact on the human environment and an Environmental Impact Statement is not required. Under Alternative 2 the subsidence features would be mitigated, reducing some threat to human health and safety; however, the erosion contributing to ongoing subsidence would be left unmitigated. Under the No Action Alternative, the public would remain exposed to various subsidence features that threaten human health and property. In addition, the threat of potential releases of dangerous gasses or fluids from tension cracks and subsidence features would remain. The Preferred Alternative would have a moderately beneficial impact on the local human environment. OSMRE selects the Preferred Alternative for the Allison Mine Subsidence Mitigation Project – Phase IV.

Reviewed

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