



SOCIETY FOR AMERICAN ARCHAEOLOGY

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Dr. Steven Feldgus
Deputy Assistant Secretary
Land and Minerals Management
US Department of the Interior
1849 C Street NW
Washington, DC 20240

miningreform@ios.doi.gov

Dear Dr. Feldgus:

The Society for American Archaeology (SAA) congratulates the Biden-Harris administration for creating this Interagency Working Group (IWG) to review existing laws, regulations, and implementation practices governing hardrock mining on federal public domain lands; gathering stakeholder information on the subject; and developing recommendations for improving the statutes, regulations, and permitting processes for mining activities. Mining is and has been a crucial aspect of our economy and government policy. Reform is long overdue, given changes in our society and economy in the 150 years since the General Mining Act was passed. We want to call attention to a particular concern—the preservation of cultural resources impacted by mining. Impacts to cultural resources have wide-ranging ramifications but have yet to receive adequate consideration in policy makers' decisions. As recognized and defined in multiple statutes, cultural resources are the places, objects, and traditions from which the American people and their communities draw diverse and distinctive senses of identity, heritage, and belonging. The US Congress has passed laws protecting cultural heritage because its preservation is deeply meaningful to all Americans, including those in future generations.

The SAA is an international organization that, since its founding in 1934, has been dedicated to research about and interpretation and protection of the archaeological heritage of the Americas. With more than 5,500 members, the SAA represents professional and avocational archaeologists, archaeology students in colleges and universities, and archaeologists working at tribal agencies, museums, government agencies, and the private sector. The SAA has members throughout the United States, as well as in many nations around the world.

The following are the SAA's comments on hardrock mining and its substantial reform.

The Need for Hardrock Mining

The SAA understands the need for hardrock mining and offers two primary rationales for concerted near-term attention to upgrades in mining-related policy and practice.

1. Hardrock mining activity in the United States will likely expand in the near future.

The Biden-Harris administration has made the climate crisis and America's ability to address it a

top priority, both in its policy and legislative and regulatory objectives. The Infrastructure Investment and Jobs Act and its supporting Executive Orders (EO) 14052, EO 14037 (regarding clean vehicle manufacturing in the United States), and EO 14008 (on addressing climate change), and the recently enacted Inflation Reduction Act (IRA)¹ are a few examples of how the administration is facilitating the development of an electric grid that is powered by non-carbon sources and the transition to modes of transportation that run on batteries rather than internal combustion engines.

If nothing else, the emphasis on the electric grid and electric vehicles will require unprecedented amounts of copper and rare earth elements, as well as other minerals. Wind turbines, solar panels, and batteries cannot be manufactured without those materials, which can only be procured through hardrock mining or new types and levels of recycling. While the United States has only about 1.3% of the world's 116 million tons of proven rare earth reserves,² national energy security—which the administration is also emphasizing—demands that we optimize use of available domestic assets. Continued reliance on foreign sources for these resources via long, highly vulnerable supply chains (see EO 14017) is not tenable. For these and other reasons, we can expect a substantial increase in hardrock mining in the United States.

2. The hardrock mining required for green energy development will entail vast, carbon-fueled industrial activity.

The high monetary and environmental costs of the transition to green energy sources might not be within the IWG's purview, but policy makers and agency officials must account for these costs. Harnessing the power of wind and solar requires an infrastructure that cannot be built without enormous expenditures of energy and resources. The rare earth elements mentioned above, along with the other materials needed to build wind turbines, solar panels, storage batteries, and transmission lines, must be mined, refined, manufactured, and installed, with transportation required in between each step. All of this will require the use of carbon-intensive energy sources. The costs of these actions and the certainty of unprecedented federal investments enabled by the IRA must be factored into policy making.

The Need for Reform of the 1872 Statute and the Current Permit Process to Responsibly Meet the Future Increase in Demands of Hardrock Mining

The SAA agrees with the administration's Fundamental Principles for Domestic Mining Reform³ and believes that environmental, cultural, and social issues need to be considered in addressing hardrock mining today and in the future.

1. The existing statute governing hardrock mining on federal lands, the General Mining Law of 1872, was enacted in a very different time than now.

To meet the different environmental, cultural, and social needs we face today, the 1872 statute must be updated to address existing and emerging realities. One core problem with the 1872 law is its lack of provisions for environmental and cultural resource protection. Supporters of the status quo assert that those prospecting and mining on federal land must comply with statutes for resources protection, including the National Environmental Policy Act, National Historic Preservation Act, Clean Air Act, Clean Water Act, Endangered Species Act, and others. The

¹ <https://www.forbes.com/advisor/personal-finance/inflation-reduction-act/>.

² <https://www.mining.com/web/rare-earth-elements-where-in-the-world-are-they/>.

³ <https://www.doi.gov/sites/doi.gov/files/biden-harris-administration-fundamental-principles-for-domestic-mining-reform.pdf>.

resulting matrix of regulations implementing these laws and governing hardrock mining activities is complex and fragmented, and has thus far failed to address the views and interests of frontline communities, particularly Indigenous ones. Worse, compliance and oversight are often viewed as the pro forma cost of doing business rather than, as Congress intended, as ways of improving project planning and reducing adverse effects. There is a common belief that approvals for proposed mining activities are foregone conclusions. The mere presence of an economically valuable mineral on federal land often leads to a claim approval before cultural or environmental assessments are initiated. Even when these foundational assessments are completed and indicate unacceptable levels of cultural resource and community harms, attitudes prevailing across land-managing agencies discourage critical and creative attention to mining impacts and mitigations. In consequence, many of the cultural resource assessments and impact treatment plans are cursory, consisting of records checks and a brief ground inspection for historic properties *after* the extractive company submits a mining plan. By that point, it is often too late or too costly to effectively modify the plan.

One example of how this dynamic works can be found in New Mexico. The Roca Honda uranium mine was proposed to mine 15 million pounds of uranium ore over a 19-year period through an underground network, with tunnels extending thousands of feet; equipment, stockpiling areas, and roads would cover 777 hectares on the surface. Underground water, intermixed with the ore, would be pumped at an estimated rate of 15 cubic meters per minute, treated to remove contaminants, and discharged into a nearby stream bed. The Roca Honda uranium mine was located within the Mt. Taylor traditional cultural property, a historic property that the US Forest Service previously determined eligible for inclusion in the National Register of Historic Places because of the important role this mountain plays in the cultural identities of the Pueblos of Acoma, Laguna, and Zuni, the Hopi Tribe, and the Navajo Nation. The proposed mine would have numerous adverse impacts to the mountain landscape and ecology, as well as traumatic impacts—psychological, emotional, and spiritual—to the five traditional Native American communities.⁴ In February of 2014, the New Mexico Supreme Court upheld the mountain’s listing as a traditional cultural property under the New Mexico Cultural Properties Protection Act. Notwithstanding, the Forest Service, in its National Environmental Policy Act compliance assessment of alternatives, excluded the “no action” alternative because of dubious Forest Service beliefs that mining companies have undeniable rights to underground hardrock minerals.

The second core issue is the reality that under existing regulatory compliance regimes, hardrock mining disproportionately impacts and harms American Indian and descendant communities. Tribal and place-based communities suffer and endure the worst negative effects of extraction industries, including degraded environmental conditions and transformations of homelands into industrial wastelands. Because tribal cultural resources are intrinsic to physical landscapes and are inseparable from natural values (see below), most mining operations degrade cultural and spiritual conditions and traumatize individuals and communities. This disproportionate harm reflects profound inattention to American Indian trust responsibilities, to First Amendment Free Exercise Clause issues, to Treaty Rights, to the Religious Freedom Restoration Act, and to the US-supported United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the US policy, yet to be implemented, for obtaining free, prior, informed, written consent from Indigenous Territory stewards and original owners. Too often, the very act of mining itself prolongs and perpetuates environmental injustices while serving as a barrier and obstacle to equity toward Indigenous and other communities. This has been identified as “slow violence,” or “a violence that occurs gradually and out of sight, a violence of delayed destruction that is

⁴ Colwell, Chip, and T. J. Ferguson. 2014. “The Snow Capped Mountain and the Uranium Mine: Zuni Heritage and the Landscape Scale in Cultural Resource Management.” *Advances in Archaeological Practice* 2(4):234–251.

dispersed across time and space, an attritional violence that is typically not viewed as violence at all” (Nixon 2011:2).⁵ What America needs and deserves is reforms to the 1872 law and to mining regulations that are grounded in principles of equity, justice, transparency, and accountability.

It bears specific mention that mining companies too often fail to follow through with mine reclamation work. Through lack of sufficient staffing, federal agencies cannot always ensure that abandoned mines are reclaimed in a manner that is compliant with federal law, and with the terms of the mining plans on file.

2. Protecting cultural resources is important and valuable for all Americans.

Preservation of cultural resources is not an ancillary issue. It is central to sustaining personal and collective identities and to the economic well-being and quality of life of all Americans, especially Indigenous Americans. Archaeological sites, for example, not only inform us of the lives of our forebears but also contribute to the multibillion dollar heritage tourism industry and its benefits to every state in the Union. American individuals and communities value the material representations of our past and the knowledge that they contain. They give us a sense of who we are and where we’ve come from. For many Native American communities, in particular, these places are not simply of interest, they are vital to the tribes’ very survival as distinct peoples. Mining activities can irreparably damage these connections to the heritage and history of Indigenous and descendant peoples, causing serious negative physical and psychological impacts to communities least equipped to withstand these assaults.

Shortly before the D-Day landings, General Dwight Eisenhower famously ordered Allied forces to protect European cultural monuments if at all possible, because “they symbolize to the world all that we are fighting to preserve.” Though the context in which he issued those orders was starkly different from the situation confronting us today, the imperative is the same. In our efforts to address climate change and renewable energy independence, we must not destroy the physical and cultural connections to the past that make us who we are today. The efforts of archaeologists and other scientists to preserve and mobilize cultural resources help us understand how people contended with and adapted to a changing climate and environment, thereby providing useful perspectives on how earlier humans adjusted to climate change, perspectives that are relevant to our approaches to the problem today.

3. Current hardrock mining practices negatively impact landscapes and cultural resources.

The fact is that mining—whether using open pit, tunnel, block caving, or other methods—causes great changes to affected lands and communities. Work by organizations such as the National Association of Abandoned Mine Lands Programs⁶ and the Abandoned Mines federal agency coalition⁷ has demonstrated that good environmental outcomes stem from good planning. These efforts confirm two inescapable facts when it comes to mine remediation. First, the scale of the existing problem is enormous—according to some sources, there may be as many as 500,000 abandoned mines in the United States.⁸ Second, no matter what, abandoned mines and their surrounding landscapes can never be completely restored to provide the types and levels of ecosystem services provided prior to mining. Topographies, soils, and hydrologies are irrevocably

⁵ Nixon, Rob. 2011. *Slow Violence and the Environmentalism of the Poor*. Harvard University Press, Cambridge, Massachusetts.

⁶ <http://naamlp.net/>.

⁷ <https://www.abandonedmines.gov/>.

⁸ *Ibid.*

altered, sometimes catastrophically, by mining. While careful remediation sometimes allows native plant and animal species to reclaim impact areas, the same cannot be said for cultural resources, which are fragile, finite, and nonrenewable. Because effects on cultural resources—direct, indirect, and cumulative—are especially difficult to avoid or mitigate, it is essential that thorough scoping and inventory work be done well in advance of project construction and in close cooperation with Indigenous Territory stewards.

Descendant communities and tribes, especially those in the West, are disproportionately burdened when it comes to mining compliance processes. Tribes can be inundated with consultation requests and notices, far exceeding the ability of their staffing and financial resources to address in a meaningful way. In addition, when tribes respond to requests for consultation, often the tribal input falls on seemingly deaf federal agency ears, or the federal agency decision-making process is not transparent enough for the tribe to understand how the agency considered their concerns. For these reasons, tribes need and deserve extra time and support to participate meaningfully in planning mining activities and mitigations.

The SAA Recommends These Vital Provisions Be Included in Reform Efforts

The following are core items that the SAA believes must be included in a federal hardrock mining reform proposal:

1. Ensure that cultural resources are considered in all decisions affecting every stage of a mining proposal—preplanning, construction, operation, and reclamation.
2. Address, pursuant to established policies, such as EO 13985, “Advancing Racial Equity and Support for Underserved Communities Through the Federal Government,”⁹ the needs of underrepresented communities whose natural and cultural resources are disproportionately impacted by mining. Addressing such needs includes but is not limited to
 - a. Giving commensurate consideration of American Indian ontologies and their respective knowledge systems that are derived from those ontologies;
 - b. Respecting tribal sovereignty and tribal knowledge;
 - c. Accounting for the unfair burden that underrepresented communities bear with respect to mining.
3. Require engagement with tribes and descendant communities to enable their participation, as they see fit, in planning regional and proposal-specific mining and mining mitigation and in the implementation of those plans.
4. Broaden the definition of cultural resources to include facets of nature that do not conform to the traditional definition of historic or cultural resources—e.g., water as a natural asset that also carries great cultural and spiritual meaning to Indigenous peoples—OR require NEPA and NHPA reviews that place greater focus on a broader range of cultural values.

⁹ <https://www.presidency.ucsb.edu/documents/executive-order-13985-advancing-racial-equity-and-support-for-underserved-communities>.

The SAA supports the goals of the IWG and looks forward to working with the panel in the weeks and months ahead to develop a reform proposal that will result in a new era for hardrock mining in the United States, one that is not only economically productive but also just and equitable for all citizens, and that protects our irreplaceable cultural resources.

Sincerely,

A handwritten signature in blue ink, appearing to read 'D. Sandweiss', with a horizontal line underneath.

Daniel H. Sandweiss, Ph.D., RPA
President, Society for American Archaeology