Before the Natural Resources Subcommittee on Energy and Mineral Resources

Written Testimony of

Dylan Freebairn-Smith, President and CEO, National Wildlife Federation (NWF)

Caillian J. Sheehy, Secretary, United States Department of the Interior (DOI)

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Introduction and Position:

Chair Williams, Ranking Member Ocasio-Cortez, and Members of the Subcommittee, thank you for the opportunity to testify in support of H.R. 3495, the Clean Energy Minerals Reform Act of 2023. My name is Dylan Freebairn-Smith, and I am the President and CEO of the National Wildlife Federation. I am joined today by U.S. Secretary of the Interior Caillian Sheehy.

Mining on public lands is deeply rooted in American economics and heritage. Still, to sustainably continue these operations, we must implement more endurable provisions than those currently in the General Mining Law of 1872. We are not calling for a ban on mining on public lands, but rather a comprehensive update to a law that solely focused on westward expansion (Disbrow-Monz, 2022). The Clean Energy Minerals Reform Act contains provisions to ensure that mining regulations reflect the 21st century. When the General Mining Law was passed in 1872, American society starkly contrasted with our contemporary world. We will be testifying to the Act's inclusion of royalties, stricter bonding and reclamation requirements, and bolstering of environmental review and tribal consultation prior to mining.

Following a review of our backgrounds, we will:

1) Provide a brief overview of mining on federal public lands and needed General Mining Law updates;
2) Detail the financial benefits that royalties offer to taxpayers under the Clean Energy Minerals Reform Act;
3) Highlight increased miner accountability for bonding and reclamation under the Act;
4) Explain how the Act promotes environmentally-conscious and ethical mining;
5) Address contrary positions.

Personal Backgrounds:

Dylan Freebairn-Smith, President and CEO, National Wildlife Federation (NWF)

I attended Dartmouth College and received a Bachelor of Arts in History and Classics in 2001. I continued my education at the University of Oxford, where I graduated as a Marshall Scholar with a Masters of Arts in Economics and Politics concentrated in Environment and Trade in 2005. I then returned to my hometown of Syracuse, New York, and obtained a Masters of Public Administration in Economic Development and Environmental Economics at Syracuse University in 2006.

In 2009, I was appointed Cabinet Secretary of the Delaware Department of Natural Resources and Environmental Control. I led the State of Delaware's efforts to protect wildlife, improve public health, and expand environmental recreation and education. In 2014, I was hired as the CEO and President of the National Wildlife Federation. Since then, I have led the NWF in recovering and protecting America's wildlife and habitats, advancing environmental education, and advocating for better management and access to public lands across America. The NWF believes that if we do not update the outdated General Mining Law of 1872, we will continue to suffer economic and environmental repercussions from our failure to do so. Seeing these damages to our nation's wildlife goes against our mission of having American wildlife, habitats, and communities thrive.

Caillian Sheehy, Secretary, U.S. Department of the Interior

Graduating with a Bachelor of Arts in English in 1994 and a Juris Doctor in 2006 from the University of New Mexico, I have devoted my career to advancing environmental quality and indigenous welfare. From volunteering on campaigns to organizing Native American voters, I have actively promoted these causes.

In 2010, I was elected to the Laguna Development Corporation Board of Directors, overseeing business operations of the second largest tribal gaming enterprise in New Mexico, while advocating for environmentally-friendly practices. From 2013 to 2015, I served as a Tribal Administrator at San Felipe

Pueblo. Elected to represent New Mexico's 1st Congressional District three years later, I prioritized environmental justice, climate change, missing and murdered indigenous women, and family policies.

In 2020, President Biden nominated me to serve as the 54th United States Secretary of the Interior. I testify today on behalf of the Department, proud of our 70,000-strong team of scientists, regulators, and stewards. Calling for modern, comprehensive mining policies is vital to our mission at DOI to protect and manage the nation's natural resources and cultural heritage.

Issue History

Hardrock mining (metal extraction) has occurred in the United States long before the nation's establishment. In 1609, colonial settlers began extracting iron ore at Jamestown (National Park Service, 2023). Similarly, the original thirteen colonies eagerly mined for gold and silver, often resorting to utilization of "less valuable metals" such as copper) (Abbott, 1970, p. 295). However, mining reached an apex during the California gold rush; an astonishing 312 to 375 tons of gold were extracted within a short period from 1848 to 1853 (Modesto Junior College, 2023). Importantly, this period marked a transformative explosion in the nation's mining landscape.

To "promote the development of the mining resources of the United States," Congress passed the General Mining Law of 1872, which was signed by President Ulysses S. Grant (United States Congress, 1872). The Law declared federal public lands "free and open to exploration and purchase" for mining (United States Congress, 1872). To that end, Sections 3 and 4 granted miners "exclusive right of possession and enjoyment" of any hardrock deposits found (United States Congress, 1872). Moreover, under Section 6, miners who demonstrated "labor or improvements" towards their "claim" (staked out area) could receive a "patent;" the land would be disposed of to them (United States Congress, 1872).

Updating the General Mining Law is not novel. In 1920, Congress passed the Mineral Leasing Act, establishing separate royalties for coal, oil, and natural gas deposits on federal public lands (United States Congress, 1920). In subsequent decades, Congress also passed laws instructing federal land custodians to prevent "unnecessary or undue" land degradation (U.S. Department of the Interior, 2008).

Of particular significance, however, was the 1969 National Environmental Policy Act (NEPA), which requires agencies to consider potential environmental impacts prior to decision making (U.S. Environmental Protection Agency, 2023).

Despite these updates, however, the American people remain uncompensated for hardrock metals extracted on public lands, even while they fund cleanup efforts (IWG, 2023, pp. 4, 103). Further, agencies have struggled to apply NEPA review, and decision making has also often failed to adequately gain indigenous peoples' input (IWG, 2023, pp. 52, 71).

Congress has previously attempted to remedy these deficiencies. The Hardrock Mine Reclamation Act, introduced in 2007, 2008, and 2015 without success, would have established royalties (Pew Trusts, 2009, p. 3; Senator Ron Wyden, 2015, p. 2). The Clean Energy Minerals Reform Act was also previously introduced last year (National Wildlife Federation, 2022).

Congress, however, cannot delay mining reform yet again. Even as the climate crisis continues to intensify, hardrock mining will still prove vital to manufacturing "electric vehicle batteries, semiconductors, [and] solar panels," that a "carbon-free future" requires (IWG, 2023, p. 2). Accordingly, mining rules should instill confidence that sourcing these metals will not compromise the transition to that green future (IWG, 2023, p. 2). Rules should reflect the large-scale mining undertaken by modern corporations, not the "prospectors [of old] swinging pickaxes" (NWF, 2019).

The Clean Energy Minerals Reform Act of 2023 recognizes the past and present role of mining on federal public lands. Its inclusion of common-sense reforms, namely royalties, stronger bonding and reclamation accountability, standardized NEPA implementation, and tribal consultation requirements will ensure that mining positively shapes our future.

Argument for the Act:

We urge this Subcommittee to expeditiously bring the Clean Energy Minerals Reform Act of 2023 before the full Natural Resources Committee for a vote. We offer three points of argumentation in support of the Act's key provisions. First, royalties will provide direct financial benefit to the public.

Second, stronger bonding and reclamation requirements will ensure that companies are held accountable for their impacts on our federal public lands. Third, standardizing NEPA review and tribal consultation will cultivate environmentally-conscious and ethical decision making.

Taxpayer Benefits of Placing Royalties on Hardrock Metals Extracted from Public Lands:

The 1872 Mining Law placed no royalties on hardrock metals extracted from our federal public lands; none exist today (United States Congress, 1872). Already, royalties are collected on coal, oil, natural gas, and even renewable energy generated on federal public lands; the Mining Law's lack of hardrock royalties starkly contrasts these practices (DOI, n.d.). Section 107 of the Clean Energy Minerals Reform Act of 2023 proposes that new mining operations authorized after the Act's "effective date" shall be subject to a royalty "of not less than 12.5 percent of the gross value [of] such production" (United States Congress, 2023). Overall, this addition clearly proves beneficial to taxpayers.

Specifically, royalties will alleviate burdensome reclamation costs currently imposed on taxpayers. Between 2017 and 2021, DOI spent $110 million cleaning up contamination from abandoned hardrock mines; Agriculture spent an additional $10 million (U.S. Government Accountability Office, 2022, p. 1). As seen in Figure 1 below, other agencies spent approximately $2.9 billion on reclamation between 2008 and 2017 (GAO, 2020, p.1). Critically, only $1 billion of that total amount was paid for by private parties (mine owners) (GAO, 2020, p.1). Consequently, American taxpayers covered the remaining $1.9 billion in costs.

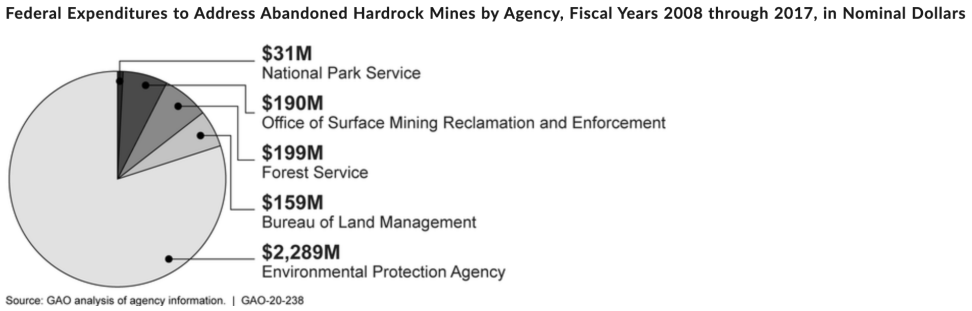

Fig. 1: Expenditures per individual federal land management agency on abandoned hardrock mine reclamation and restoration Fiscal Year (FY) 2008-2017 reached nearly $2.9 billion (U.S. Government Accountability Office, 2020, p.1.).

Implementing royalties will provide an accurate and transparent inventory of hardrock metals yielded from federal public lands and the expected revenue that these metals will generate. Unfortunately, the absence of this oversight has already resulted in incorrect estimates on the amount of funds needed to clean up environmental mining damage, harming taxpayers. In its FY 2021 Economic Report, DOI noted that "economic activity from some specific hardrock mining in the western U.S. is not included because production data is not available" (DOI, 2022, p. 37). This omission appears in spite of the fact that hardrock mining makes up 83% of the 872 reported mining operations on federal lands (GAO, 2020, p. 4). Indeed, the U.S. Government Accountability Office (GAO) has called on the Departments of Interior and Agriculture to improve their cleanup cost estimates, otherwise "decision makers may make [ill]-informed cleanup decisions" that burden taxpayers (GAO, 2023).

Section 107(d)(6) of the Clean Energy Minerals Reform Act gives the Secretary of the Interior the power to require "documentation showing, at a minimum, the amount, origin, and intended destination of the hardrock mineral, concentrate, or product" that any person is carrying (United States Congress, 2023). Ultimately, this provision will significantly aid in more accurate documentation of who mined where, how much was mined, who is responsible for cleanup, and how much it will cost. This transparent accounting will ensure that taxpayers are not needlessly left on the hook for mining cleanup and instead benefit from these operations.

Besides simply paying for the reclamation of mine sites, the use of royalties balances the economic interests of the American people and mining companies. Mining companies are extracting publicly owned resources and destroying publicly owned habitats on publicly owned land; it is only fair, therefore, that the public receive commensurate compensation.

Increasing Miner Accountability for Bonding and Reclamation:

Current statutes and regulations do secure a degree of reclamation funding from mining companies but prove insufficient overall. Sections 306 and 307 of the Clean Energy Minerals Reform Act tighten existing bond requirements and increase accountability for environmental damages caused by

miners. Under current Bureau of Land Management (BLM) regulations (Part 3809.1, Code of Federal Regulations (CFR), 65th Federal Register (FR) released by DOI), “anyone intending to develop mineral resources on the public lands must prevent unnecessary or undue degradation of the land and reclaim disturbed areas” (Mining Under the General Mining Laws, 2000). Similarly, for lands managed by the USDA Forest Service, Part 228.13 of the CFR in the 88th FR released by the Department of Agriculture states that “any operator required to file a plan of operations shall, when required by the authorized officer, furnish financial assurance for completion of the obligations set forth in these regulations” (Minerals, 2023). Only CFR 228.13, which applies to USDA FS lands, has been amended so “adequate funds are available for long-term post-closure reclamation activities” (Minerals, 2023). As for BLM lands, which contain 589 of the 721 hardrock mining operations on federal lands, no regulations require financial assurance for responding to “unplanned or unpredicted conditions,” such as “releases or threatened releases of hazardous substances from mining operations” (GAO, 2020, p. 5; IWG, 2023, p. 86).

These “unplanned or unpredicted conditions” have already manifested in many hardrock mines. Some of these conditions that appear after the closure of mines include Acid Mine Drainage (AMD), Cyanide Leach Heaping, metals and dissolved pollutants in surface and groundwater, erosion and sedimentation from mass ground disturbance, groundwater drawdown, and land subsidence (EPA, 1997, p. B-3). Of these, the most pressing threat is AMD. AMD occurs when sulfide minerals, found in many hardrock mining areas, are oxidized. The visual effects of this contamination can be seen in Figure 2 below. AMD can affect both surface and groundwater, which can cause skin irritation, kidney damage, and neurological diseases, among other ailments (Garland, 2012).

Fig. 2 (Millers Run, 2021): “Acid mine drainage (AMD) is water contaminated when pyrite (iron sulfide) is exposed to air and water. The exposure often results in reactions that form sulfuric acid and dissolved iron. Some or all of this iron can precipitate to form the red, orange, or yellow sediments (yellowboy) on the streambed (Craddock et al., n.d.).

With over 140,000 abandoned mine features such as tunnels identified on lands under the jurisdiction of BLM, USDA FS, NPS, EPA, and possibly over 250,000 more unaccounted for, there are far too many mines that already need further reclamation through taxpayer dollars (GAO, 2020, p. 17). To help avoid creating more detrimental effects on our public lands, we need to create financial liability for mine operators indefinitely after the closure of their mines.

Section 306 of the Clean Energy Minerals Reform Act of 2023 creates a safety net to ensure that there is financial bonding from mine operators when mining authorization is granted “for an additional period sufficient to cover the responsibility of the operator for reclamation, long-term maintenance, and effluent treatment as specified in subsection” (United States Congress, 2023). This will ensure that the issues with abandoned mines do not burden groups that should not be held accountable, and instead, that the burden will fall on groups that need to be held liable (miners).

Section 307 of the Clean Energy Minerals Reform Act of 2023 sets the parameters for the extent of reclamation necessary. Notably, this section has a specific clause providing the secretary of the department with jurisdiction discretion to enforce reclamation obligations that have lapsed (United States Congress, 2023). This further strengthens the ability to hold mine operators liable for all possible damages to habitats owned by the American people even after active hardrock mining has concluded.

At the conclusion of FY 2022, BLM and USDA FS reported collecting $3.95 billion in bonding for hardrock mining on their managed lands. This is $18.9 million short of an estimation made in a GAO review (DOI, 2023, p. 86). While these numbers appear promising at first glance, they do not account for the future costs of mines after they have been closed. If passed, the Clean Energy Minerals Reform Act of 2023 will help expand the scope of environmental bonding needed to ensure complete and indefinite reclamation of hardrock mines on federal lands.

Promoting Environmental and Ethical Mining– Standardized NEPA Review and Tribal Consultation:

Section 302 of the Clean Energy Minerals Reform Act "reconcile[s] statutes allocating mineral resources with the evaluative dictates of NEPA;" Congress has not done so to date (Coggins, Dyke, 1990, p. 661). Without a clear NEPA review standard, agencies have unfortunately "opposed application of this [apparently] inconvenient law to [hardrock mining]" (Coggins, Dyke, 1990, p. 661). When NEPA review has occurred, agencies have required inconsistent "level[s] of detail in mine plan[ning], [potential] alternatives, waste requirements, and modeling" (IWG, 2023, p. 52).

A compromised NEPA review compromises decision making. By unambiguously requiring NEPA review for newly proposed mining activities that disturb surface resources– encompassing land, air, groundwater, surface water, and wildlife– the Act promotes informed, environmentally-conscious decision making regarding potential authorization (United States Congress, 2023). Indeed, a University of Colorado Law School report found that "reform[ing] the 1872 Mining Law" to address NEPA review can better "protect non-[hardrock] values" by avoiding ill-informed mining approval (Flynn, 2010, p. 4).

Currently, both BLM and USDA FS have refrained from invoking NEPA until a mining surface disturbance occurs beyond a certain threshold (Coggins, Dyke, 1990, p. 674). However, an interagency working group (IWG) including the Departments of the Interior and Agriculture (which respectively oversee BLM and USDA FS), acknowledged the need for an improved NEPA process in a report (IWG, 2023, p. 49). Notably, the IWG published this report, along with additional recommendations supporting the proposed Act, this past September.

Overall, a Lewis and Clark Law School article argues that agencies' current practices avoid serious environmental impact consideration; they also do not explicitly reserve a mining "disapproval power" (Coggins, Dyke, 1990, p. 674). Ultimately, the Clean Energy Minerals Reform Act not only affirms NEPA's vital role in hardrock mining management, but also expands its coverage. In making newly proposed hardrock mining authorization conditional on NEPA review under Section 302, the Act ensures consistent, standardized consideration of environmental impacts. It enables agency decision makers to meaningfully act to safeguard federal public lands' other values besides hardrock mining.

Agencies must not only increase their awareness of the environmental implications of mining, but also the ethical considerations of authorizing activities on Native American lands. Pursuant to Act Section 201, agencies must consult tribes when mining could incur "direct, indirect, or cumulative impacts–" on both their lands or adjacent or culturally significant areas (United States Congress, 2023). Here, the Act broadly promotes ethical decision making by explicitly mandating indigenous input. It also implicitly recognizes historic exploitation of indigenous peoples and an ongoing obligation to meet their needs.

Regarding those obligations, pursuant to the "Treaty Clause" (U.S. Const. Article II § 2, cl. 2), tribes must be afforded treatment as sovereign states. Precedent has elaborated that the federal government accordingly maintains 'special obligations' to tribes, be it by promoting their "self-governance" or acting as a fiduciary "trustee" on behalf of their interests (*see United States v. Mitchell*, 463 U.S. 206 (1983), *Morton v. Mancari*, 417 U.S. 535 (1974)). As highlighted by Navajo Nation President Jonathan M. Nez's 2021 testimony before this Subcommittee, however, federal public lands agencies have fallen well short of honoring these special obligations.

Specifically, from 1944 to 1986, "approximately 30 million tons of uranium ore [a hardrock metal] were extracted through private mining operations" in his peoples' communities (Nez, 2021). The General Mining Law made no consideration of obligations to indigenous peoples. Consequently, Nez revealed how the Navajo population did not receive "education about the hazards of uranium mining" (such as waste "tailings"), nor "protective equipment or ventilation" (Nez, 2021). Tragically, the Navajo people continue to suffer higher rates of cancers and chronic renal diseases; the former constitutes the

leading cause of death among women (at testimony time) (Nez, 2021). 523 abandoned uranium mines sit on Navajo land; 293 lack a cleanup plan (at testimony time) (Nez, 2021).

Importantly, indigenous peoples support mandating tribal consultation to guarantee their awareness and input on pending mining decisions. Before the IWG published its report, the Nez Perce Tribal Executive Committee and Oglala Sioux Tribe urged agencies to honor special obligations to tribes and seek consent for mining (IWG, 2023, p. 70). The Clean Energy Minerals Reform Act of 2023 will deliver on this objective, preventing a recurrence of exploitation and promoting ethical mining,

Reviewing Opposition:

Current Mining Regulations Prove Sufficient

Some assert that subsequent environmental legislation has already sufficiently 'reformed' the General Mining Law (AEMA, 2022, p. 11). Critics point to NEPA's environmental review and public comment process, along with a body of restrictions on mining activities (direct or indirect). For a comprehensive example list, see page 103 of the American Exploration & Mining Association (AEMA)'s 2022 response to proposed reforms, also see table 1 (pp. 28-29). Critics further point out that bonding and reclamation requirements have also been implemented in mining regulations (AEMA, 2022, pp. 69).

Certainly, America's public lands are not entirely without protection from irresponsible mining. This argument, however, misrepresents the strength of the current regulatory framework in responsibly controlling mining on federal public lands. Notably, a lack of clear NEPA guidance has resulted in agency misapplication, to environmental detriment (*see generally Center for Biological Diversity v. FWS, 807* F. 3d 1031 - Court of Appeals, 9th Circuit 2015).

Even if NEPA review proved satisfactory (with effective tribal input, as suggested by AEMA), updates to the 1872 Law have nevertheless failed to explicitly codify royalties or ensure that reclamation is primarily miner-funded (AEMA, 2022, p. 121). As reported by DOI in 2022, "hardrock mining is the only [royalty-free] extractive industry on [federal] public lands; states and virtually all other countries charge royalties on hardrock mines (DOI, 2022, p. 2). While mining corporations may certainly covet all

$4.9 billion of estimated revenue from hardrock metals on federal western lands, the Clean Energy Minerals Reform Act ensures a fair share for the public (IWG, 2023, p. 82).

Critically, this funding can and will alleviate taxpayer burden for hardrock mine reclamation (see Section 107 of the Act). While AEMA and other groups may tout reclamation programs, taxpayers– not miners– pay predominantly for cleanup. Alarmingly, reclamation costs could reach up to $54 billion (Pew Trusts, 2009). Without the Clean Energy Minerals Reform Act, federal land agencies will continue to lack 21st century regulations that ensure that the public benefits from environmentally-conscious, ethical mining.

Regulations Impede Growth

Another popular argument against mining reform suggests that it will stifle growth. Critics frame the Act's provisions as inherent hindrances to achieving energy security, economic competitiveness, and sustainable development (AEMA, 2022, pp. 105, 8). A particular pain point for the mining industry has been the speed of NEPA review (even as the industry also argues it ensures sufficient environmental protection) (AEMA, 2022, p. 119). Ironically, the IWG 2023 report found that delays in the NEPA process are caused partly by miners failing to provide information timely, along with agency discrepancies in implementation (IWG, 2023, pp. 48, 52). The AEMA even acknowledged the latter issue's role in causing delay in its 2022 response (p. 119). If critics fault the review process, they should support the Act's standardizing of NEPA review prior to authorization– eliminating ambiguity– and readily cooperate with agencies. Likewise, fears over delays from tribal consultation also prove unsubstantiated. In fact, tribal consultation would avoid conflicts that could otherwise potentially undermine procedural efficiency (AEMA, 2022, p. 91).

Beyond lamenting a supposedly drawn-out approval process, critics also argue that royalties actually prove "economically counterproductive" (Gordon, 1999). They particularly note that setting a price on metals appears unacceptably difficult given "var[ied] production and sales decisions" (Gordon, 1999). They also highlight an administrative cost present in officials having to evaluate royalty prices and

monitor output (Gordon, 1999). Neither of these arguments, however, forecloses implementing royalties. A Congressional Budget Office estimate found that imposing an 8% royalty would still raise $394 million annually (the Act sets a 12.5% royalty) (IWG, 2022, p. 85).

Finally, critics would also rather see Congress implement a "Good Samaritan" reclamation law, which would waive legal liability in exchange for state, local, or civic organizations cleaning up hardrock mine pollution (Earthworks, 2015). Congress should reject this bad-faith proposal. Not only does it allow mining companies to escape responsibility for degradation, but it ignores the issue of funding for these programs (which, again, would cost taxpayers millions). Introducing long-overdue industry accountability is of equal import to the aforementioned objectives of energy security, competitiveness, and sustainability. Critics' arguments that the former objective inherently compromises the latter objectives proves unsubstantiated.

Closing Statement:

Hardrock mining fueled early colonial development and westward expansion and continues to shape our modern world. While agreeing with opponents on hardrock mining's importance, we maintain that reform nevertheless proves necessary, which will not inherently compromise national security, economic competitiveness, or clean energy deployment. The General Mining Law of 1872 has left a damaging legacy, enriching mining corporations at taxpayers' expense, causing ecosystem pollution, and long-term health issues in tribal communities. While subsequent legislation has addressed some issues, the Clean Energy Minerals Reform Act of 2023 constitutes a vital update addressing lingering deficiencies in the outdated 1872 Law for a 21st century mining landscape. First, the Act ensures that taxpayers will directly benefit from hardrock mining on our federal public lands. Second, the Act institutes stronger bonding and reclamation requirements, increasing miner accountability. Third, the Act promotes environmentally-conscious and ethical decision making by requiring NEPA review and tribal consultation prior to mining approval.

Thank you again for having us today. For the foregoing reasons, we respectfully urge this Subcommittee to advance the Clean Energy Minerals Reform Act to the full Committee for a vote. We hope that we can continue to work with your Subcommittee in our capacities at the NWF and DOI to ensure the sound management of our shared public lands. We welcome your questions.

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Questions

1. Why should hardrock mining continue to be exempt from royalties, when other extractive activities on federal public lands, such as oil and natural gas exploration, logging, and grazing are subject to charges?
2. What assurance can be provided to Native American tribes that even without direct consultation, their input will receive due consideration relative to other public comments in a NEPA review?