Testimony of Trout Unlimited for an oversight hearing on the General Mining Law of 1872
The Toxic Legacy of the Mining Law of 1872

House Natural Resources Committee, Subcommittee on Energy and Mineral Resources
July 27, 2021.

Chairman Lowenthal, Ranking Member Stauber, and members of the subcommittee:

Thank you for the opportunity to testify to draw attention to the issue of abandoned mines across the West. My name is Lauren Duncan. I have a master's degree in environmental engineering and am on track to become a licensed environmental engineer in the State of Colorado. I work as an Abandoned Mine Land Restoration Project Manager for Trout Unlimited (TU), based in Rollinsville, Colorado, in the heart of Colorado's mineral belt. I am a Colorado native and have spent my life living, recreating, and working in areas impacted by abandoned mines. I have seen, first-hand, the negative impacts of these sites on the environment and the communities of my home state, but I have also seen the opportunities and hope that reclamation of these sites can bring. When considering the future of mining, it's important to first account for the past. My testimony will share with you Trout Unlimited' s perspective on the scale, scope and economic impact of abandoned mines on the environment and communities of the West. I will highlight the work of our program and partners at Trout Unlimited and detail the challenges and obstacles to addressing abandoned mines.

Spurred by the General Mining Law of 1872, anyone with a claim was able to mine with little if any oversight – polluting waterways, stripping mountainsides and changing the landscape of the West with little regard to health, safety or environmental impacts. The impacts of those historic mines are still felt today on rivers like the Animas in Colorado and the Clark Fork in Montana. Fast forward to the 21st century and we can see how environmental regulations have helped to stem some of the worst effects. However, we must continue to learn, adapt and improve to provide the necessary protections for our land, air and water. Moving forward, we must also expand efforts to clean up thousands of abandoned mines that are impacting communities today throughout the West, including providing the resources, funding and programs that enable state and federal agencies, watershed groups, the mining industry and non-governmental organizations like Trout Unlimited to all lend a hand and clean up abandoned mines. There is much work to do.

A recent Government Accountability Office report estimates that there could be as many as 533,000 abandoned hardrock mines on lands within Forest Service, Bureau of Land Management, Park Service, and Environmental Protection Agency (EPA) jurisdiction. On average, these agencies spend approximately $287 million annually to address physical safety and environmental hazards at abandoned hardrock mines, equating to approximately $2.9 billion in spending between 2008 through 2017. The impacts of mine-related contamination are prevalent and the EPA estimates that 40% of

western watershed headwaters are polluted with mine wastes. In Colorado alone, there are an estimated 23,000 potentially hazardous abandoned hardrock mine features, and over 80% of the most impaired waterways owe their status to mine-related pollution. This contamination typically manifests in the form of colorful mine waste or tailings piles that dot the slopes of our western mountains while orange, acidic water cascades out of adjacent abandoned workings. The exposed soils and contaminated water associated with these mine sites have become increasingly accessible to the public and communities given the development and population growth seen across the West.

To help address widespread environmental impacts associated with abandoned mines, Trout Unlimited (TU) has developed a robust abandoned mine reclamation program. Since 2004, TU's team has completed over 40 individual abandoned mine reclamation projects across six Western states. In each of these projects, TU and our partners have implemented a holistic approach to mine reclamation; with solutions that focus on improvement of water quality while also promoting stream restoration, aquatic habitat development, revegetation, and sustainable land use. To date, these projects have restored over 200 stream miles across the West and reclaimed 155 acres of mine-impacted lands. In the last decade, our program in Colorado has grown from completing one project annually to completing three to seven projects each field season. Our technical, partner-based approach has enabled us to become an industry leader in abandoned mine lands (AML) reclamation today.

My experiences in the private, permitting, and non-profit fields have taught me how valuable and important collaboration and partnerships are to a successful project. AML projects are incredibly complex and typically require expertise in chemistry, engineering, planning, community outreach, land-use, and project management. The complexities of these mine reclamation projects have led to the development of a Mixed Ownership Group in Colorado. This Group, comprised of multiple Federal, State, local and non-governmental organizations, works together to prioritize, characterize and complete reclamation at abandoned mines on private and public lands across the State. Many of those projects would not be possible without the financial and technical support from our private industry partners. Those organizations like Freeport McMoRan, Newmont Mining, Tiffany & Co. Foundation, Integra Resources, Kinross Gold Corporation, and Ouray Silver Mines Incorporated provide valuable financial support that allows TU to leverage matching funds to accomplish meaningful reclamation, with measurable environmental improvements. As an example, over the past five years TU has raised $4.452 million in funding for mine reclamation from USFS in Region 2 through grants and agreements. Our program and our financial partners have matched these funds with $4.407 million dollars, essentially doubling the amount of reclamation that could be completed with the initial federal investment.

The impact of this reclamation work reaches beyond the environmental improvements associated with addressing each mine site. By hiring local contractors, purchasing local materials and utilizing local services during construction, our reclamation projects support the economies of the communities where we work and live. TU's 2018-2020 Atlas Mine and Mill Reclamation outside of Ouray, Colorado, generated $174,281 in construction revenue for a Colorado-based contractor, including $64,369 in mobilization and locally-sourced materials from six different suppliers. This project also contributed $14,744 in lodging and per diem costs to local businesses, for a total of $253,394. As TU's Colorado

Abandoned Mine Lands program typically completes up to seven reclamation projects of this size each year, the revenue generated for local businesses would correlate to approximately $1.18 million dollars annually contributed to the Colorado economy as a result of TU's reclamation projects.

TU's Abandoned Mine Lands program starts at ground-zero in severely degraded watersheds with the goal of eventually establishing native and wild trout habitat and populations through improvement of environmental conditions and downstream water quality. No other project exemplifies this approach like our Kerber Creek project, outside of Villa Grove, Colorado. Through decades of industry and agency partnership, along with twelve years of work by Trout Unlimited (TU), a previously-dead watershed that conveyed contaminated, orange water, now sustains a wild trout fishery. TU's reclamation efforts have also allowed for the establishment of native vegetation on over 80 acres that now supports agricultural production. Projects like Kerber Creek and the Atlas Mine and Mill Reclamation showcase the positive impact that mine reclamation can have on landowners and small, rural communities.

One of the long-standing TU projects that is near and dear to my heart is the Leavenworth Creek Project, outside of Georgetown, Colorado. Reclamation in the Leavenworth basin has been a part of my five years with the organization and represents nearly a decade of partner-based efforts to improve water quality and environmental conditions in the watershed. Since 2015, Trout Unlimited, the USFS and project partners have developed drainage solutions, expanded wetland habitat, safeguarded open adits, reclaimed waste piles, restored a historic mill building and preserved key sites for historic and cultural interpretation. This work was supported by approximately $1 million dollars of Federal, State and private funding, helping to enhance habitat for key species like the endangered boreal toad, improving drinking water quality for downstream communities and reducing exposure and safety concerns for site visitors.

While TU and our partners have successfully completed four phases of construction in the Leavenworth Basin, significant barriers still exist when approaching any abandoned mine cleanup. These challenges include the need for Good Samaritan Legislation, liability concerns, and a need for a dedicated funding source. Despite a concerted effort to work together, Federal, State, local and NGO groups struggle with how to address and navigate liability concerns at abandoned mine sites. In many cases these concerns prevent projects altogether because well-intended, necessary environmental laws treat those who want to clean up pollution the same as those who cause it. Even those projects that move forward are impeded by delays, lack of funding, and an inordinate amount of time and expense to plan and implement. There have been numerous examples of negotiations with landowners, attorneys and agency staff taking more than two years to negotiate liability agreements and documentation for relatively simple, month-long cleanups. We can and must do better.

The only current legal mechanism to tackle draining abandoned mines with a "point source" of pollution is a federal Superfund cleanup. However, Superfund only addresses sites on the National Priorities List (NPL), which typically correlate to the worst cases, and is not well-suited for smaller discharges. Thousands of these smaller mines bleed toxic lead, arsenic, zinc and mercury every single day without a

legal mechanism authorizing state agencies and private organizations to build upon federal cleanup capacity and take-on smaller, low risk remediation projects.

Groups like Trout Unlimited with proven track records who have no legal or financial responsibility or connection to the project - true Good Samaritans - want to volunteer to help remediate some of these sites but are prevented from doing so by these enormous liability risks associated with the Clean Water Act and CERCLA. By passing Good Samaritan legislation, Congress can provide targeted liability protections while also holding Good Samaritans accountable to terms of their permits. In the changing western United States where drought is the new normal, the water quality improvements associated with abandoned mine reclamation should be a welcomed opportunity to provide invaluable water resources to downstream water users into the future. Moreover, a federal Good Samaritan abandoned mine remediation program would allow numerous cleanups to move forward, helping to foster a restoration economy and creating jobs in local communities.

To address funding shortfalls, Trout Unlimited is encouraged to see the Senate Energy and Natural Resources Committee adopt an amendment to the Energy Infrastructure Act that authorizes up to $3 billion for a program that would inventory, assess, decommission, reclaim and remediate abandoned hardrock mine land. We hope that this legislation moves forward to provide financial resources to begin addressing some of the estimated 533,000 abandoned mines across the West that pose environmental hazards. More resources are needed however, and a portion of the revenues generated from mineral development on public lands would help offset expenses for mitigation and abandoned mine reclamation.

The scale of the abandoned mine lands problem is staggering, and the environmental and human health impacts that these mines may have is severe. Coordination between Federal, state, local and NGO groups offers an opportunity to address these sites through cooperative reclamation efforts, and there are numerous positive project examples to show the economic, social and environmental advantages of this work. However, liability barriers, the need for Good Samaritan protections, and the lack of a dedicated funding source have hindered the scale of reclamation efforts. As these challenges are addressed, new opportunities for expanded abandoned mine reclamation efforts will arise and organizations like ours will be able to continue to work toward cold, clean, fishable water for all.

Thank you for the opportunity to testify today. Trout Unlimited appreciates the leadership of this committee. Thank you to the Chairman, Ranking Member, and members of the subcommittee for holding this hearing. We look forward to working with all of you to advance abandoned mine reclamation.

Sincerely,

Lauren Duncan