

# GOOD SAMARITAN IMPLEMENTATION KICKOFF SUMMIT

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Hosted by the Colorado School of Mines NSF  
Responsible Critical Minerals Team and Trout Unlimited

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## 1. Executive Summary

On April 10, 2025, the **Good Samaritan Kickoff Summit**—hosted by the Colorado School of Mines National Science Foundation (NSF) Responsible Critical Minerals Team in partnership with Trout Unlimited—brought together a diverse coalition of stakeholders, including representatives from federal and state agencies, Tribal representation, NGOs, the EPA, the mining industry, academic research institutions, and alternative treatment technologies. The primary objective of the summit was to inform the scoping process for the forthcoming **Good Samaritan Pilot Program** by providing the Environmental Protection Agency (EPA) with early input to support the development of implementing regulations or guidance under **Section 4(s)** of the Act.

The Good Samaritan program, administered by the EPA, is intended to facilitate the voluntary cleanup of abandoned hardrock mine sites. By offering limited liability protections for remediation activities, the program aims to remove significant barriers that have historically discouraged parties—such as NGOs, industry partners, and state agencies—from undertaking cleanups for fear of perpetual legal exposure.

### **Discussion Highlights**

**How do we Define “Low Risk” Projects?** – Participants emphasized the need for clear, detailed guidance on what constitutes “low risk,” recognizing that risk can be technical, environmental, operational, and legal.

**What About Metals Processing Opportunities and Risks?** – Participants discussed how re-processing residual minerals in waste rock or tailings might help underwrite remediation costs, while stressing that clear guardrails are essential, so any extraction remains ancillary to cleanup and does not reopen full mining liability or environmental risk.

**What are the Metrics for Success?** – Summit discussions underscored the importance of measurable outcomes, from improvements in water quality and vegetative cover, to new models for funding and stakeholder collaboration. Just as important, however, was the need to communicate these successes effectively to stakeholders and Congress to obtain long-term support and promote permanent program authorization.

**How to Overcome Funding Barriers?** – Although liability relief is critical, financial resources remain a major bottleneck for large-scale cleanup. Layered or innovative funding approaches—public-private partnerships, grants, philanthropic support—were proposed.

**NEPA and Permitting?** – The group recognized the complexity of federal and state permitting. They proposed strategic use of programmatic Environmental Assessments (EAs) and possible categorical exclusions to keep projects moving efficiently.

### **Next Steps:**

The summit generated a series of action items, from finalizing a more nuanced definition of “low risk” to clarifying permitting pathways. Stakeholders plan to continue engagement with local communities, refine funding mechanisms, and push for clarity on issues such as reprocessing opportunities and risks. As the program moves toward identifying pilot sites, the Good Samaritan Kickoff Summit has effectively laid the groundwork for collaborative, large-scale cleanup of abandoned mine lands.

## 2. Background: Good Samaritans and Abandoned Mines

The United States has a long and complex history of hardrock mining, which has fueled industrial growth and supplied critical raw materials for the economy. However, this legacy includes more than 500,000 abandoned or inactive mine sites, many of which continue to pose serious environmental and public safety risks. Even decades after closure, some sites generate acid mine drainage that leaches heavy metals into adjacent streams, wetlands, and groundwater systems. Others, including dry sites and underground mine workings, present physical hazards including collapsing adits, open shafts, and unstable waste piles. These hazards are particularly difficult to address when no viable responsible party can be identified, leaving communities and ecosystems vulnerable to long-term harm.



Acid mine drainage and waste rock piles from historical mining in Leadville, Colorado – May 2024.

To help address the nation’s legacy of abandoned hardrock mines, Congress passed the *Good Samaritan Remediation of Abandoned Hardrock Mines Act of 2024* (S. 2781). The Act established a seven-year pilot program authorizing the U.S. Environmental Protection Agency (EPA) to issue up to 15 permits to qualified third-party entities—commonly referred to as “Good Samaritans”—who had no prior involvement in the contamination or site. These entities are granted targeted liability protections to voluntarily remediate abandoned mine sites that would otherwise remain untreated due to legal and financial risks, and the lack of a responsible party.

Through this pilot, the EPA seeks to evaluate cleanup effectiveness, refine permit requirements, and develop scalable models for future remediation efforts. On April 10, 2025, the inaugural Good Samaritan Implementation Kickoff Summit convened agency officials, technical experts, NGOs, Tribal leaders, and community stakeholders to clarify regulatory expectations, share lessons learned, and chart a collaborative path forward for abandoned mine cleanup across the country.

## 3. Summit Objectives

As authorized under **Section 4(s)** of the *Good Samaritan Remediation of Abandoned Hardrock Mines Act of 2024*, the EPA is empowered to **promulgate regulations** necessary to implement the Act. If the agency does not initiate rulemaking within 180 days of enactment, it is required to issue interim **implementation guidance**, subject to a 30-day public comment period.

The Good Samaritan Kickoff Summit took place during this early program development phase, when EPA is gathering input to shape the regulatory framework. Often referred to as the **scoping process**, this stage allows stakeholders to raise clarifying questions, surface practical challenges, and provide input on how the law should be translated into a workable permitting program. The purpose of the summit was to support this process by bringing together community members, potential permit applicants, state and Tribal officials, and other interested parties for direct engagement with EPA staff.

#### 4. Program Design Questions Raised by Stakeholders

The *Good Samaritan Remediation of Abandoned Hardrock Mines Act of 2024* authorizes the EPA to establish a pilot permitting program for **15 projects** over a seven-year period (**Section 4(a)**). While the Act lays out key provisions and requirements, the implementation and program structure are still in development, and will be informed by stakeholder questions and insights.

Stakeholders consistently returned to several key issues that stem from currently unresolved language of the statute. In particular, participants asked questions about permit eligibility, liability protections, interagency coordination, and the standards EPA will use to evaluate baseline conditions and remediation plans.

Key Stakeholder Questions and Corresponding Sections of the Good Samaritan Remediation of Abandoned Hardrock Mines Act of 2024.

Category	Key Questions Raised by Stakeholders	Relevant Sections of the Act
Permitting Scope and Timing	• How will permitting work, and what criteria will EPA use to evaluate applications?	• 4(b) - eligibility criteria; 4(m)(1) - EPA findings
	• Can multiple nearby sites be covered under a single permit?	• 4(i) - permit transfer
	• When does the seven-year pilot period begin, and can it be extended?	• 4(a)(1)-(3), 4(h) - pilot window & 18-month start
Project Prioritization	• Should pilot projects reflect a range of regions and site types?	• 4(b)(1)(C)-(D) - low risk/finish in permit term
	• Should priority go to high-risk or high-impact sites, such as those with severe contamination?	• 4(c)(7)(A) - project goals & site description
	• Should we start with simpler sites to demonstrate early wins?	
	• Should sites with valuable materials be prioritized if proceeds support cleanup?	• 4(f)(4)(B)(iii)-(v) - re-processing proceeds
Funding and Reprocessing	• How much can reprocessing historic mine waste help finance remediation?	• 4(f)(4)(B) - re-processing rules
	• How should proceeds be managed?	• 5(a)-(b) - good samaritan funds & deposits
Defining Success	• Should success be measured through environmental and community outcomes, policy momentum, or replicability across sites?	• 4(m)(1)(A)(iv-v) - "measureable progress" test • 4(c)(7)(B) - monitoring and evaluation plan • 6(b) - report to Congress metrics
Post-Remediation Considerations	• How will long-term site monitoring, operations, and maintenance be managed?	• 4(g) - return for O&M • 4(r)(5) - O&M agreement on federal lands • 5(b)(4) - funneling financial-assurance money
	• Should pilot projects also try to generate tools or templates to support future remediation efforts?	

## 5. Stakeholder Discussions and Opinions

### 5.1 Defining “Low Risk”

Good Samaritan eligibility requires projects that pose a “low risk to the environment” (**Section 4(b)(1)(D)**). One of the most urgent issues raised was the ambiguous definition of “low risk.” Participants recognized that “risk” is not a single category—rather, it spans technical, environmental, operational, and legal realms. Participants requested that the EPA provide guidance on the weighting of:

- **Technical Risk:** Some remediation techniques remain unproven for large-scale or unique geological conditions.
- **Environmental Risk:** Disturbances could worsen contamination or inadvertently create new pathways for pollutant migration.
- **Operational Risk:** Costs and workforce safety hazards can escalate if maintenance requirements are unclear or if weather conditions disrupt seasonal work.
- **Legal Risk:** Missteps can trigger liabilities beyond the scope of Good Samaritan protections if the project inadvertently causes new contamination.

Some summit participants urged the EPA to provide detailed checklists or thresholds—e.g., specific water chemistry levels, allowable volumes of waste material, or geological conditions. There was also recognition that overly restrictive definitions might exclude sites that, while more complex, still hold promise for meaningful cleanup outcomes.

*“We can’t let the perfect be the enemy of the good. Some sites that are a bit more complex might still be ‘low risk’ if we apply modern engineering solutions.”*

### 5.2 Metals Processing and Liability Protections

Another important topic was the potential reprocessing of metals or critical minerals from the abandoned mine waste. No new mining activities are allowed under the Act, but reprocessing is allowed during implementation of a remediation plan, and the Act allows for the sale or use of materials to defray remediation costs and to contribute to the **Good Samaritan Mine Remediation Fund**. However, participants flagged three key complexities:

- **Regulatory Boundaries:** Participants encouraged clarity on which materials in existing waste or processed tailings fall within the Act’s scope, emphasizing that reprocessing mine waste incidental to cleanup should remain clearly distinguished from new mining so that liability protections are preserved.
- **National Security Context:** Federal interest in securing domestic sources of strategic minerals is growing. Is it possible to develop other federal partnerships that could facilitate reprocessing and site remediation?

- **Economic Viability:** Reprocessing can require specialized technology and large upfront investments. It is unclear which tailings will have enough recoverable value to justify the risks.

Several attendees expressed support for reprocessing as a means of offsetting cleanup costs, as authorized under **Section 4(f)(4)(B)** of the Act, while emphasizing the need for clear regulatory guidance to ensure that such activities remain incidental to remediation and do not introduce new environmental or legal risks.

### 5.3 Metrics for Project Prioritization

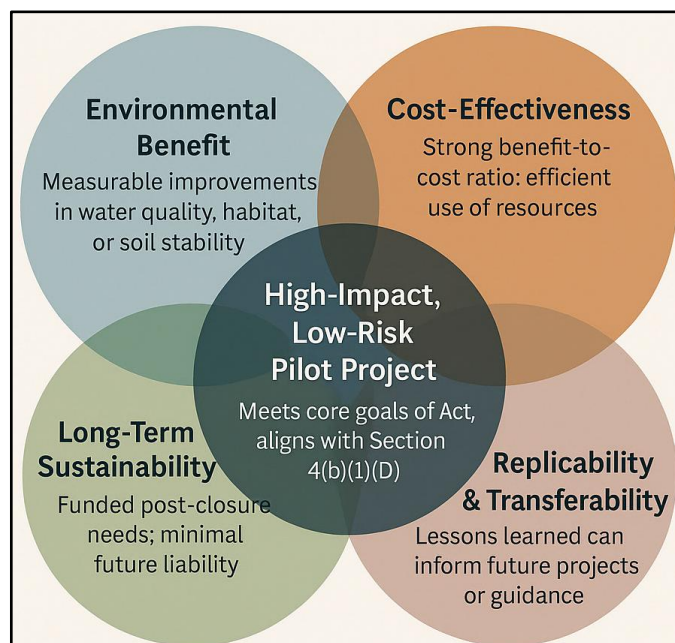
Throughout the summit, attendees discussed what types of projects should be prioritized as part of the pilot program. They emphasized the importance of transparent, standardized metrics to evaluate proposals consistently and equitably. The ideal project would balance several considerations—technical feasibility, risk profile, cost-effectiveness, environmental and community impact, and geographic diversity.

Setting clear success criteria also helps determine whether the Good Samaritan pilot program should be expanded or made permanent. As described in **Section 4(b)(1)(D)**, eligible projects must aim to partially or completely remediate historic mine residue. Stakeholders acknowledged that full restoration may not be feasible in all cases. However, measurable improvements that reduce exposure to contaminants or enhance water quality—even incrementally, as noted in **Section 4(a)(4)**—can be transformative for local watersheds and communities.

Equally important is the ability to **communicate those successes**. Participants emphasized that metrics should not only capture environmental outcomes but also support clear, compelling narratives that can be shared with Congress, local stakeholders, and the public. Demonstrating impact—through both data and storytelling—was seen as essential to building long-term trust and support for the program.

### 5.4 Roles of Federal, State, Tribal, and Other Entities

Participants emphasized that multilateral collaboration is critical to the success of the Good Samaritan program. While the EPA serves as the lead agency, other federal entities—such as the



Characteristics of a high-impact, low-risk Good Samaritan pilot project. Projects should demonstrate measurable environmental benefits, cost-effectiveness, long-term sustainability, and potential for replicability. Collectively, these criteria support the core goals of the Act and align with Section 4(b)(1)(D) to guide effective pilot selection.

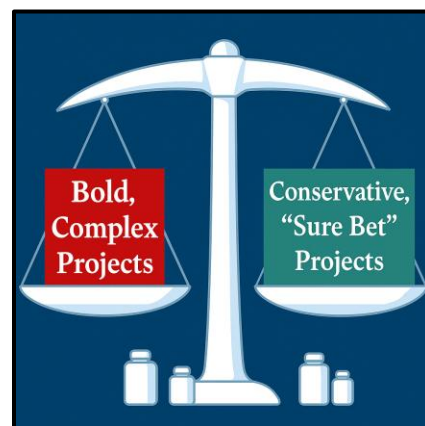
Department of Energy (DOE) and the Department of Defense (DOD)—may play a role where critical mineral recovery becomes a central component. State and Tribal governments contribute essential local knowledge and permitting authority, but they also require liability protections to engage fully. NGOs, including Trout Unlimited and The Sierra Fund, offer practical experience in community engagement, fundraising, and project implementation. Mining industry experts bring valuable technological and geochemical expertise that can enhance the effectiveness of remediation efforts. Technology providers contribute innovative, often lower-impact methods to assess sites, reprocess metals, treat water, support reclamation, and enable real-time environmental monitoring—tools that can increase both efficiency and accountability across project phases.

*“Ultimately, Good Sam is a partnership program. Any single actor working alone will likely stumble. Collaboration is not just a buzzword—it’s how this actually succeeds.”*

### ***5.5 Balancing Complex Goals in Pilot Projects***

A central question was whether Good Samaritan pilot projects should be bold—testing advanced approaches or tackling complex sites—or cautious, focusing on smaller, “sure bet” improvements. Most participants favored pragmatic ambition: a mix of project scales and complexities. Simpler sites could build early wins, while more ambitious ones could generate insights into innovative remediation techniques.

Participants also emphasized the opportunity for pilots to responsibly test new technologies and explore material reprocessing where feasible. Some sites may contain recoverable resources in tailings or waste rock that could offset cleanup costs. While some warned against turning cleanups into mining projects, most agreed on the need for safeguards. A **“responsible innovation”** approach gained broad support: pilot new methods while maintaining a conservative baseline that prevents harm if new techniques fail.



Stakeholders emphasized the need to balance bold, complex pilot projects with more conservative, “sure bet” efforts. A mixed portfolio is seen as essential to demonstrating both early wins and the potential for innovative remediation approaches under the Good Samaritan program.

Participants recognized that a variety of promising technologies could support pilot projects and warrant exploration. These include, but are not limited to, examples mentioned during the summit such as passive treatment wetlands, microbial bioreactors, and remote sensing tools (including drones) for monitoring hydrological and vegetative site changes. However, no specific technologies were formally endorsed.

In addition to new methods, participants highlighted the importance of flexible project design. Multi-feature or multi-site pilots—structured to allow phases of work to proceed over time under a single permit—were viewed as a practical way to manage risk. This approach could allow early,

low-risk remediation activities to begin while providing space for later innovation and adaptive learning.

## 6. Financing and Funding Strategies

All stakeholders acknowledged the daunting financial demands of abandoned mine cleanup. The scale of the problem is massive—hundreds of thousands of mine sites, though not all require complex interventions. Summit participants specifically highlighted:

- **Budget Constraints:** Many states face funding shortfalls; local governments may be even more resource-limited.
- **Risk Aversion:** Private sector financiers or philanthropic donors sometimes balk at liability concerns or the unpredictability of cleanup costs.
- **High Variability:** Each mine site is unique, with distinct geology, contaminants, and local socio-economic factors.

*“The cost estimates for cleaning up the abandoned mines we know about is around **\$35 Billion**, right? And that is probably not accurately estimating how difficult some of these mines are to get to, or how complex some of the projects can be.”*

### 6.1 Possible Funding Models

1. **Public-Private Partnerships (PPPs):** Large corporate stakeholders—potentially even mining companies—could provide capital in return for partial cost recovery through recovered metals or philanthropic incentives.
2. **NGO and Community-Based Funding:** Nonprofits adept at grant writing or crowd-sourcing can be critical partners. Trout Unlimited, for example, has a track record of success, especially for fishery-related watersheds.
3. **Federal Grants and Appropriations:** Summit participants floated the possibility of earmarked federal funds or specialized programs from agencies including the EPA, DOE, or DOD.
4. **State Revolving Funds (SRFs):** Several states manage SRFs for water infrastructure. If Good Samaritan sites can qualify for these loans, it may bridge initial funding gaps.

### 6.2 Collaboration for Financial Feasibility

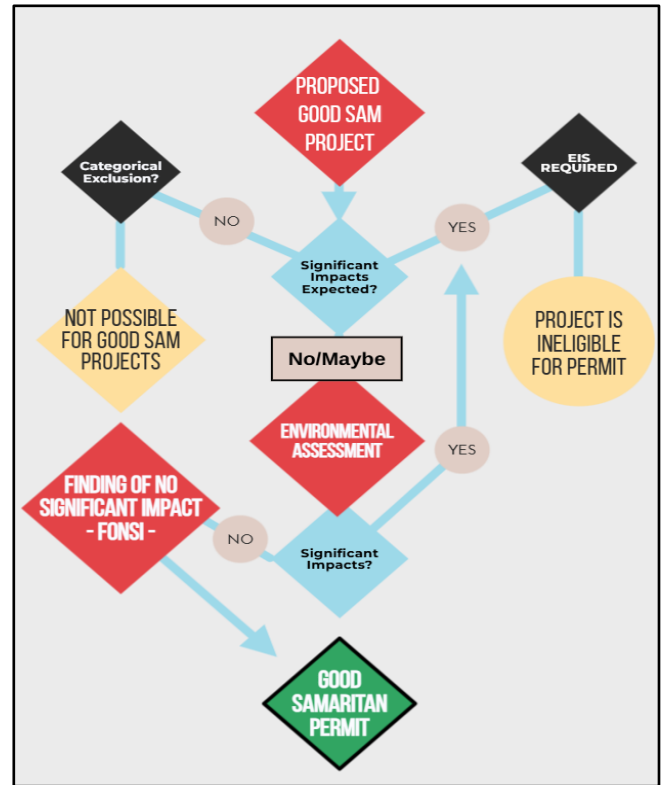
A layered approach—blending multiple funding sources—is likely essential for large or complex sites. Participants stressed that the Good Samaritan program must demonstrate cost-effectiveness to garner political and philanthropic backing for more extensive expansions. Early pilots that show tangible improvements at reasonable cost could become high-profile success stories, drawing in new financing partners.

## 7. Permitting and NEPA Considerations

The **National Environmental Policy Act (NEPA)** requires federal agencies to assess the environmental impacts of major federal actions. Under the *Good Samaritan Remediation of Abandoned Hardrock Mines Act of 2024*, the issuance of a permit is considered such an action. As a result, projects must undergo an Environmental Assessment (EA) and receive a Finding of No Significant Impact (FONSI) before a permit can be issued (**Section 4(I)**). The Act also calls for coordination with State, Tribal, and Federal agencies “to the maximum extent possible” during this process.

Summit participants seemed to have mixed views on the importance or limitations that the NEPA process might impose. However, they noted:

- **The NEPA Process is Notoriously Long:** With many remediation projects likely having short construction seasons, NEPA could delay pilot project implementations by years. Especially in mountainous or northern states, missing a single season’s window will require waiting until the next year.
- **Overlap with State Requirements:** Many states have comparable environmental review processes that could be harmonized with NEPA to reduce redundancy. The cooperation of state and regional agencies could also turn into a net-positive, as many participants noted how important collaboration is for success.
- **Requiring an EA/FONSI will limit projects:** The Act requires an EA and FONSI for any project. If an Environmental Impact Statement (EIS) is triggered, the project becomes ineligible. This effectively excludes higher-risk or large-scale projects. The Act also designates permit issuance as a major federal action, which rules out the use of Categorical Exclusions (CEs), even for minor projects. Since an EA can lead to an EIS, starting one does not guarantee approval. Early engagement with regulators will be essential to assess risk and feasibility.



NEPA decision-making process for proposed Good Samaritan projects. To be eligible for a Good Samaritan permit, projects must proceed through an Environmental Assessment with a Finding of No Significant Impact (FONSI). Categorical exclusions are not available under the current framework as Good Samaritan permits are legally defined as major federal action.

## 8. Operational Considerations and Ongoing Maintenance

Even after the core remediation is completed, many sites require long-term water treatment, slope stabilization, or vegetation management. Summit participants urged:

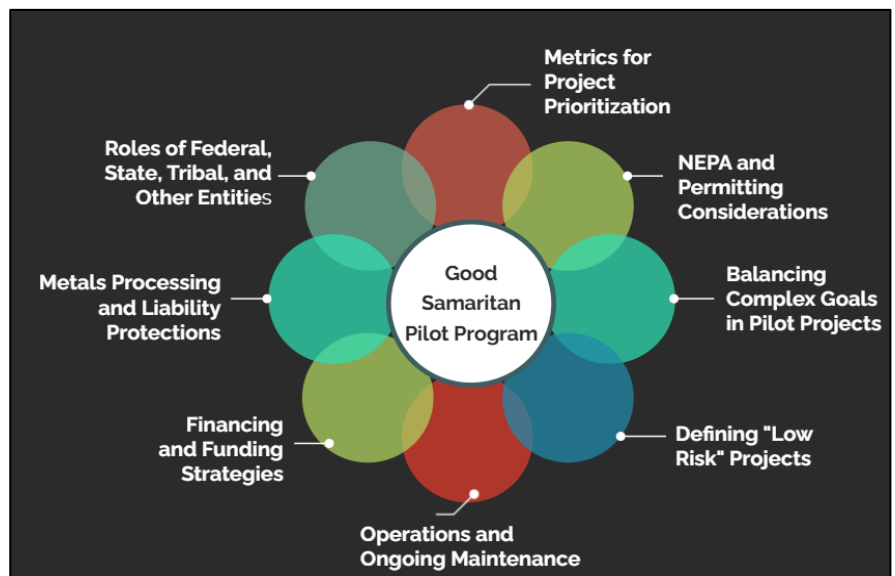
- **Liability Protection Duration:** If cleanup activities extend beyond seven years, Good Samaritan entities want assurance that liability protection endures.
- **Defined Post-Closure Roles:** Clarity on which agency or entity oversees maintenance tasks—stormwater management, tailings cap integrity, or bioreactor upkeep—is vital.
- **Funding Streams for O&M:** Long-term maintenance costs can be high. Potential solutions include O&M escrow accounts, trust funds, or continued partnerships with local communities.
- **Minor Permit Adjustments:** If data shows a need to modify water treatment protocols, project leads can do so without restarting the entire permitting process.
- **Transparent Reporting:** Summaries of adaptive changes should be communicated promptly to regulators, local communities, and Tribal entities.

# From Pilot to Impact: *A Launchpad for Lasting Change*

The Good Samaritan Implementation Kickoff Summit on April 10, 2025, marked a pivotal step toward advancing abandoned mine remediation in the United States. By bringing together federal and state regulators, Tribal leaders, NGOs, technical experts, and community voices, the summit catalyzed practical discussions on how to refine, implement, and expand the Good Samaritan pilot program.

Participants emphasized that this pilot is more than a legal mechanism—it is a chance to break long-standing gridlock through transparent governance, innovation with safeguards, and genuine collaboration. If implemented effectively, Good Samaritan projects have the potential to improve environmental and public health, reduce long-term liabilities, restore community trust, and test new models for remediation and material reprocessing.

**Ongoing Guidance:** The EPA is expected to release updated program guidance by summer 2025, offering much-needed clarity on site eligibility, application procedures, and liability protections. In the meantime, potential project sponsors are encouraged to begin identifying candidate sites, coordinating with regulators, and drafting concept proposals for early feedback.



**A Measured Approach to Innovation:** Stakeholders broadly supported a "responsible innovation" framework—piloting new remediation technologies and reprocessing opportunities, provided they are paired with fail-safe baselines and rigorous oversight. Strategic partnerships with the DOE, DOD, or academic institutions may help reduce costs while expanding learning.

NEPA decision-making process for proposed Good Samaritan projects. To be eligible for a Good Samaritan permit, projects must proceed through an Environmental Assessment with a Finding of No Significant Impact (FONSI). Categorical exclusions are not available under the current framework as Good Samaritan permits are legally defined as major federal actions.

**Evaluation and Learning:** The success of the pilot program depends on strong metrics, standardized data collection, and timely reporting. A centralized repository for lessons learned—possibly hosted by EPA or a partner institution—could ensure that future efforts build on the pilots

rather than start from scratch. Participants also emphasized that metrics alone are not enough; the program must be able to communicate those successes clearly and compellingly to Congress, stakeholders, and the public. Doing the work and telling the story are equally critical to securing long-term support.

**Public Trust and Transparency:** Communities near legacy mine sites have long faced broken promises. Summit participants stressed the importance of early and ongoing engagement, public-facing data platforms, and accountability mechanisms to build lasting trust. Storytelling—rooted in real-world outcomes—can play a key role in rebuilding that trust.

**Scalability and Congressional Support:** Expanding the program beyond the initial 15 pilots will require Congressional action. Demonstrating early wins—both in environmental outcomes and in process efficiency—will be essential to gaining that support, both from policymakers and other stakeholders. Participants noted that how those successes are framed and shared will be just as important as the projects themselves.

The summit reaffirmed that, with collaborative planning and diligent oversight, the Good Samaritan pilot program can serve as a proof of concept for a more adaptive, equitable, and forward-looking approach to abandoned mine remediation. Each successful project can stand as evidence of what is possible when liability barriers are lifted, diverse partners pull in the same direction, and innovation is guided by shared purpose.

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