Upper Animas Wetland and Stream Restoration Proposal

Table of Contents

March 29, 2025

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Bonita Peak Mining District NRD Project Manager
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
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Phone: 303-916-2179
Email: mark.rudolph@state.co.us

Re: Bonita Peak Mining District Natural Resource Damages Trust Fund Upper Animas Stream and Wetland Restoration Project Proposal

Dear Mr. Rudolph,

Please find the attached project description provided by the Mountain Studies Institute for submission to the Bonita Peak Mining District Natural Resource Damages Trust Fund. We believe this project is well suited to meet the objectives for the Funds, including restoration, rehabilitation, protection and enhancement of the areas the natural resources and related services injured as a result of historical mining impacts.

This project focuses on wetland, fen, and stream restoration, and community access for recreational use. We have reviewed the proposed project sites to ensure they comply with the criteria provided, provide long-term benefits to both the environment and the community, and represent a community supported, watershed wide effort.

We are happy to provide any additional information or clarification you may need. Thank you for your time.

Sincerely,

Jake Kurzweil

Dr. Jake Kurzweil
Hydrologist
Mountain Studies Institute

1.0 Executive Summary

Upper Animas Stream and Wetland Restoration Project

Legacy mining has profoundly impacted the streams and wetlands of the Upper Animas River Basin. These impacts have been both direct, with mine adits and tailings piles directly disturbing and degrading these systems, or indirect through changes in hydrology and hydrologic conductivity. Examples of indirect impacts include roadways, railways, and mineshafts changing the flow of groundwater, leading to degradation of these natural resources. Unimpacted river systems typically contain a mosaic of constrained single channel systems transitioning into meanders and braided channels when in more open and flat valleys. However, roadways built to access mines have often restricted rivers into single channel systems, which leads to a reduction in floodplain connectivity, habitat complexity, river sinuosity, and wetland function. The resulting altered habitat contributes to increased erosion that impacts the local ecohydrology as well as downstream ecosystems and communities that depend on them.

Through the work of the Animas Headwaters Ecological Action Division (AHEAD), which brought together professional and private stakeholders in San Juan County, we were able to identify and prioritize sites for restoration in San Juan County during 2024. We have utilized this community driven, technical geospatial analysis to select sites to restore the natural resources and the ecosystem services that were degraded by legacy mining in San Juan County. The sites selected and proposed here include restoration of over 10.5 acres of fens, 4 acres of riparian wetlands, more than one mile of stream restoration, and more than 10 acres of improved floodplain connectivity.

Restoration practices include Low-Tech Process Based Restoration (LT-PBR) for river channels that include beaver mimicry, placement of rock structures, woody debris, while increasing geomorphic complexity, habitat niches, floodplain connectivity, and possible improvement of water quality. This work will take place on Mill Creek and the main stem of Mineral Creek.

We also plan to restore two alpine fens that have been degraded by being covered by overburden, a common outcome when the hillslope is destabilized by roads to access high alpine mine sites. We will conduct this work by identifying groundwater levels, excavating to that level, and then planting with appropriate native wetland species. These will take place in Opher and Placer gulches in partnership with the BLM, and USFS.

We will also be restoring riparian wetlands while improving recreational opportunities on South Mineral Creek with the USFS, Columbine District. South Mineral Creek has legacy mining impacts with the Bandora Mine at its headwaters and receives high levels of

summer recreation. With this, our goal is to work with the USFS to restore the degraded riparian wetlands and build educational opportunities for campers as these sites that tend to also be where people frequently recreate and camp. We think that this will not only restore the degraded wetland systems but also provide a buffer from recreation and the river, protecting natural resources further, while also providing an opportunity for campers to learn about these valuable systems.

This effort is being led by the Mountain Studies Institute (MSI), and we have built a strong network of partners including the Bureau of Land Management, United States Forest Service, Michigan Technological Institute, and a private landowner to accomplish this work.

- Project Offeror - Mountain Studies Institute

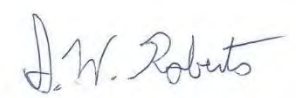
- Dr. Jake Kurzweil, 162 Stewart St Durango, CO 81303, 415-302-9450, Jake@mountainstudies.org

- Total Project cost - $1,264,866.00

- NRD request - $364,210.00

- Match - $770,657.00 has been awarded through the BOR B2E program, but no contract is in place. We do have support from both Congressman Hurd, and Senator Hickenlooper. If this funding does not materialize, we will pursue funding from Colorado Parks and Wildlife, Colorado Water Conservation Board, The Nature Conservancy, Trout Unlimited, Ducks Unlimited, Biophilia, and Colorado RESTORE.

- Signature of the Authorized Offeror:



  Scott W Roberts - Executive Director (signed 5/28/25)

2.0 Scope of Work

2.a Target Natural Resource(s):

Legacy mining has profoundly impacted the streams and wetlands of the Upper Animas River Basin. Unfortunately, our aquatic systems, including streams, wetlands, and fens, have experienced the brunt of this impact. Historically, tailings piles were deposited directly into streams, or onto flat areas that harbored wetlands and fens. Although this practice was halted, the long-term impact of the infrastructure needed to mine has also had a lasting negative impact on these aquatic and wetland systems. These impacts have been both direct, with mine adits and tailings piles directly disturbing and degrading these systems, or indirect through changes in hydrology and hydrologic conductivity. In the case of fens, it is not uncommon to see them completely buried by tailings piles or by overburden that has been mobilized by the destabilization of hillslopes due to roads, tramways, or blasting.

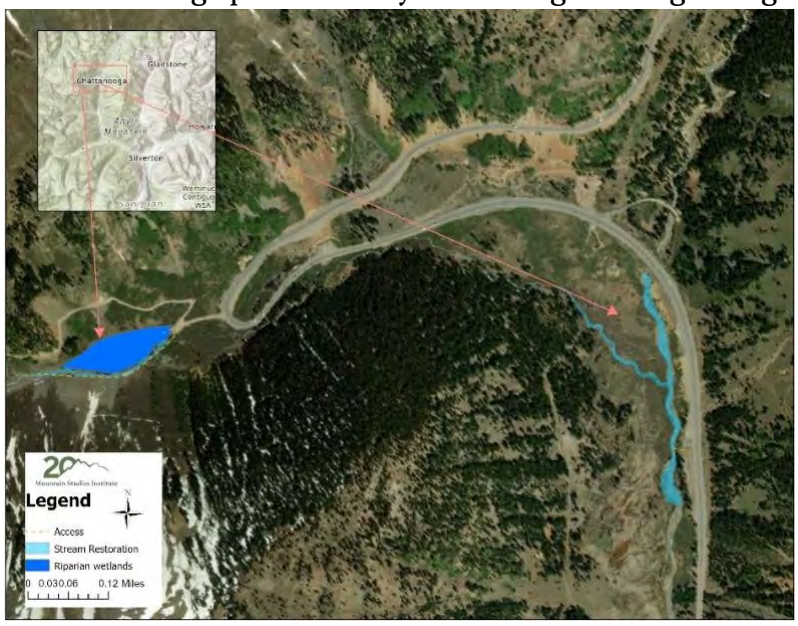


Figure 1. Stream and riparian wetland restoration on private lands and USFS lands. This includes work on both Mill and Mineral Creek close to the historic Chattanooga townsite.

Many riparian wetlands have lost their connection to groundwater as the streams have been forced to one side of a valley floor. By decreasing the sinuosity of the river systems, water does not reach the floodplain, and velocities increase in the channel, leading to incision and lowering of the water table in the floodplains.

Documenting these impacts in our headwater systems, this proposal looks to restore streams, wetlands, and fens, while also improving recreational experiences. We will use a combination of Low-Tech Process Based Restoration (LT-PBR), earth work, rock work, and revegetation, to restore streams and riparian wetlands that have been lost due to legacy mining on Mill and Mineral Creeks (Figure 1). This includes placement of wood and rock structures to restore the sinuosity of our stream channels while also re-establishing floodplain connectivity and riparian vegetation.

Restoration of fens buried by mining overburden will be accomplished by excavating down to the water table and planting native species (Figure 2 and 3). We will also create new riparian wetlands to offset the loss of these systems due to mining (Figure 4). All of these restoration efforts will be multi-beneficial by increasing not only the natural aesthetic beauty of these systems and increasing recreational experiences, but by also re-establishing the ecosystems services that these systems provide including flood mitigation, improvements to water quality, storage of carbon, and habitat improvement. Many of the proposed sites are along the very popular South Mineral Creek, where we propose riparian wetland creation next to campgrounds to serve as both an educational and recreational enhancer while also providing a needed buffer from recreational users and the river.

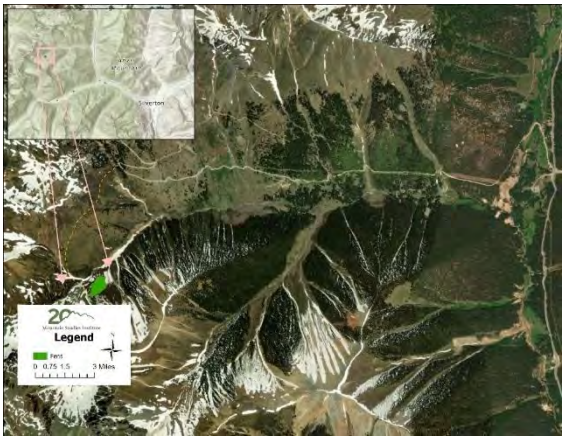


Figure 2. Proposed fen restoration on USFS lands in the Middle Fork of Mineral Creek.

Figure 2. Proposed fen restoration in placer gulch on BLM lands.

Figure 3. Proposed riparian wetland restoration on USFS lands in the South Mineral Creek watershed.

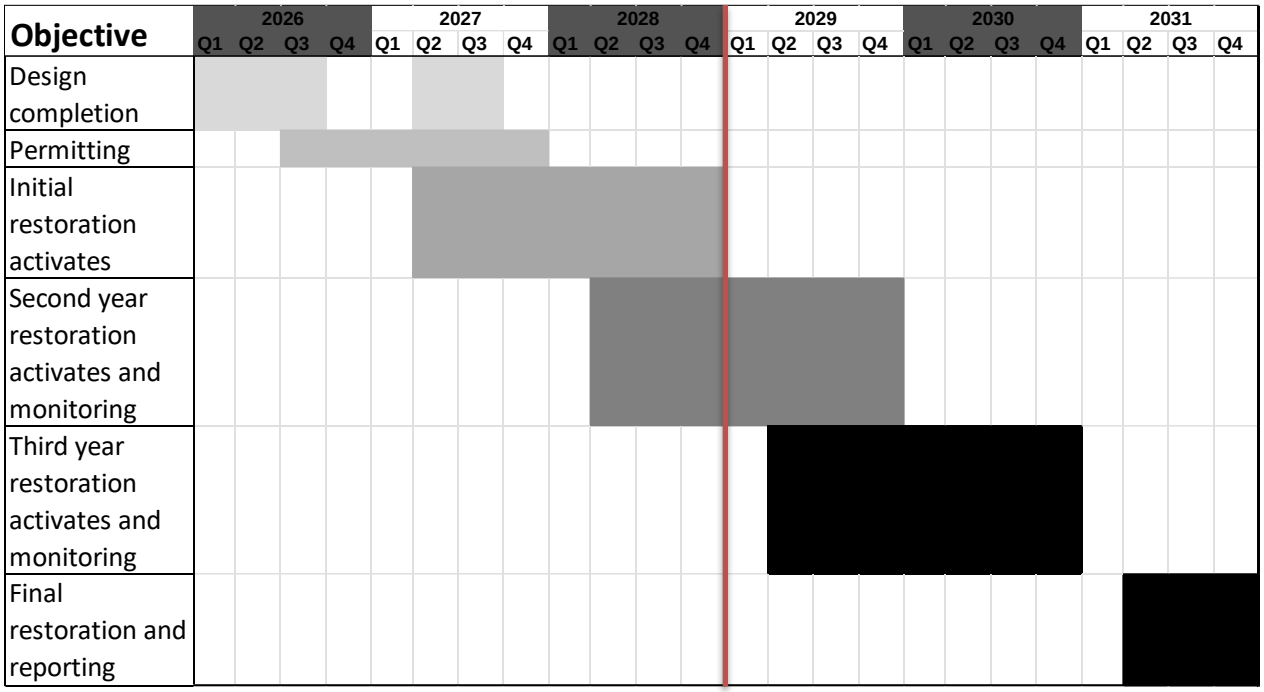
This work will culminate in the restoration of over 10 acres of fens, as well as 4 acres of riparian wetlands and over 1 mile of river restoration.

2.b Objectives:
We have already begun to scope sites, build partnerships, develop preliminary designs, and initiate permitting for these proposed restoration objectives. Our objectives include the following and are summarized in table 1.

1. **Finish designs of multiple sites.** We plan to work with the United States Forest Service (USFS) Columbine District, Bureau of Land Management (BLM) Gunnison Field office, Dr. Rod Chimner from Michigan Technological University (MTU), and a private landowner to complete our designs in a staged fashion. Ophir and Placer fen restoration designs are slated for completion by Q3 2026. Mill Creek already has a preliminary design, but additional assessments are needed due to the proximity of highway 550, and completion of this design is also slated to be completed by Q3 2026. Riparian wetland restoration designs will be completed by Q3 of 2027 and will be informed by San Juan National Forest's forthcoming recreation planning. Funding from our matching partners will be used to complete all designs.
2. **Secure permits from United States Army Corps of Engineers (USACE), Colorado State, USFS, and BLM NEPA.** All activities will require permits from the state of Colorado (for non-waters of the United States), USACE (for waters of the United States), and federal partners. We plan to work on the permits for the fen and river restoration projects while completing the designs and will submit them by Q1 of 2026. Permitting for South Mineral Creek will start with internal permits by USFS as early as January of 2026, but submissions to USACE will occur in Q3 of 2027. Funding from matching partners will be used to complete all designs.
3. **Implement initial restoration activities and monitoring.** Depending on the response time from USACE and the state, we plan to begin initial restoration efforts for all fen and river restoration sites in the summer and fall of 2027. This will also include pre-and-post monitoring. Riparian and riverine restoration on Mill and Mineral Creek will begin in Q2 of 2026. Riparian restoration efforts in South Mineral Creek will begin in the summer of 2028. NRD and Matching funds will be used to implement and monitor the sites.
4. **Implement second year restoration activities and monitoring.** All sites will need follow up to ensure that vegetation is successfully established and that our structures and methods are accomplishing our objectives. This includes additional planting, additional structures, and follow-up monitoring. We plan to conduct this for all fen and river restoration sites in the summer and fall of 2028 while South Mineral Creek riparian wetland work will take place in the summer and fall of 2029. NRD and Matching funds will be used to implement and monitor the sites.

5. **Implement third year restoration activities and monitoring.** We will conclude our efforts with a third year of restoration and monitoring. For all fen and river restoration projects, this will take place in the summer and fall of 2029, while the South Mineral Creek riparian wetland work will take place in 2030. NRD and Matching funds will be used to implement and monitor the sites.
6. **Complete final restoration and reporting.** We will conclude our work in 2031 with a final round of restoration and a full report on the accomplishments and monitoring analysis. NRD and Matching funds will be used for final restoration efforts and reporting.

Table 1.Timetable of objectives. Phases of the project are indicated by the shades of gray with light gray being phase one, and black being phase 5. The midpoint is noted by the red line at the end of 2028



2.c Operational Plan:

2.c.i Detailed implementation plan

Task 1. Design

Project design has already begun and sites for restoration were selected through a detailed stakeholder and technical GIS analysis through the Animas Headwaters Ecological Action Division (AHEAD). AHEAD is a collaborative group of community members, natural resource managers, ecologists, environmental groups, and recreation industry professionals. AHEAD focused on addressing the needs of San Juan County as it transitions from an economy based on extractive industries to one of outdoor recreation and tourism. Through AHEAD, we mapped and prioritized the headwaters for ecological restoration

projects that aim to restore degraded systems and build resilience of these sensitive and critical natural resources. Building from this analysis, we were able to identify which of these sites were also degraded due to legacy mining impacts.
Sites have been identified, are well-scoped, backed by community input, and many already have partially or fully developed designs. The site on Mill and Mineral Creeks already has designs that are roughly 70% complete (Figure 5). The remaining tasks for design include a simple HEC-HMS model to ensure no impact to HWY 550, as well as final rock work design.

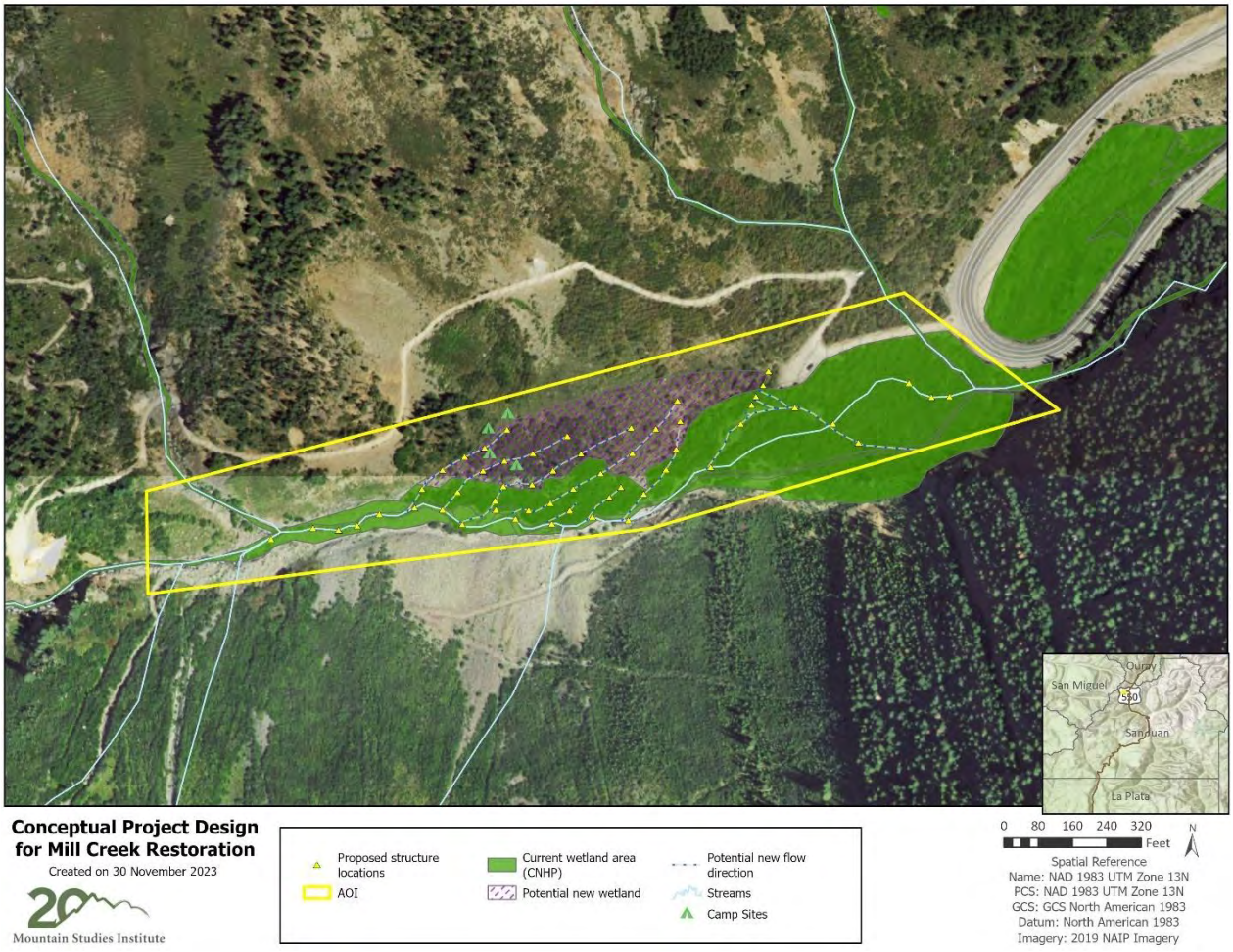


Figure 4. conceptual project design for Mill Creek stream and riparian wetland restoration on private and USFS lands close to the historic mining town site of Chatanooga.

Fen restoration designs are still being developed, and additional pre-monitoring will be needed to understand the depth to groundwater. We will be working with Dr. Rod Chimner from MTU, a global peatland and wetland specialist, to complete these designs.

Designs for South Mineral Creek riparian wetland restoration will be done in partnership with the Columbine District of the USFS during 2026 and 2027. These designs will be in conjunction with the USFS's recreation management plan that is development for the area. We anticipate using matching funds to accomplish these tasks.

Please see figures 1-5 for site locations and initial designs.

Task 2. Permitting

Permits from the State of Colorado, USACE, BLM and the USFS are required. This includes NEPA with the USFS and BLM, and a nationwide permit 27 and a preconstruction notice with the USACE, and a voluntary restoration permit from the state. The USFS has indicated that a categorical exclusion is their preferred permit, and we have already begun this process with their staff. Permits will need to include full wetland delineations as well as mapping of ordinary high-water mark for stream restoration efforts, designs of all structures, and access points. These permits also include wildlife and archaeological clearances. These projects will be intentionally staggered (Table 1) to allow adequate time for permit applications as well as time for permit approval by the respective agencies. We anticipate using our matching funding to accomplish these tasks. No engineering will be required for the restoration activities proposed.

Task 3. Initial restoration

In-stream restoration requires the use of woody debris, and/or rock materials that will be harvested from locally sourced downed trees and rock fields. In the case of Mill Creek, the combination of seasonal avalanche paths and high stream power has precluded beavers from colonization, even though one of the healthiest colonies exists just across the road. With this in mind, we will design and implement rock structures that will help slow water, pushing water onto the floodplain. This rewatering will restore historic paleochannels which will increase habitat complexity and reconnect the abandoned floodplain to the water table. This work will be done with excavators provided by the landowner. In the paleochannels, as well as the main stem of Mineral Creek, we also anticipate placing small Post Assisted Log Structures (PALS). To install the PALS, we will utilize a hydraulic post pounder to pound 6 ft post, 3 ft into the ground that will hold woody debris in place. These structures will be a combination of full channel spanning structures, and bank-attached structures. Channel spanning PALS encourage aggregation of sediment and a raising of the water table, whereas bank attached PALS help increase sinuosity by blowing out cut banks and creating new inset floodplains. As the riparian vegetation is already healthy, just detached from the water table, we do not anticipate a need for planting.

Fen restoration will begin with monitoring groundwater levels. This will be done by installing very simple, perforated PVC pipes, 3 inches in diameter, that are placed 3 ft into the unconfined aquifer. We will then install pressure transducers in the wells alongside a barometric pressure transducer to track groundwater levels throughout the snow off season. This will allow us to determine the average groundwater levels, which will determine how much overburden will be removed. We will use hand tools on the Ophir fen

site as access is restricted, while small mini excavators will be used in Placer gulch to remove the overburden. Once we have removed the overburden and dried out peat, which will be re-used on site to help with upland planting, we will restore the wetland vegetation with seeding, and planting of clones.

Riparian wetland restoration on South Mineral Creek will be similar to the fen restoration efforts. Monitoring groundwater levels will determine the depth to groundwater. We will then use mini excavators supplied by the USFS to remove the overburden to the water table. We will also create small pools to increase habitat complexity. We will then plant native seeds and local clones.

All sites will have pre-monitoring conducted that includes a semi-hyperspectral drone flight that will allow us to track Normalized Difference Vegetation Index (NDVI) which tracks the greenness of vegetation and can be used as a proxy for floodplain connectivity. The drone imagery will also allow us to make a full digital elevation model (DEM) using structure from motion processing. This will allow us to map and track changes in both vegetation and topography. In the fen sites, we will also monitor for fluxes of both methane and carbon dioxide.

Task 4. Follow up restoration, maintenance, and monitoring
For these restoration activities to be successful, follow-up efforts and staggered restoration activities will be important. These include building off previous years' efforts as well as shoring up existing structures or vegetation cover. Monitoring will also be repeated. The methods selected for this restoration will help stimulate positive natural feedback loops that will reduce the need for long-term maintenance. Please see 2.c.v for additional description of maintenance and monitoring.

Task 5. Reporting and analysis
At the end of every calendar year, a report will be provided that summarizes the work completed as well as an analysis of the monitoring that has been conducted. Monthly invoices and progress reports will also be provided. All tasks will be tracked by hour, for every MSI employee and sub-contractor, and reported to the trustees along with an estimate of task completion.

2.c.ii Collaborators
MSI has built strong relationships with multiple partners to accomplish this work. This includes the Columbine District of the San Juan National Forest, the Gunnison Office of the BLM, Dr. Rod Chimner from Michigan Technological University and a private

landowner. We also anticipate partnering Fort Lewis College and Silverton School to have students participate in restoration as an educational resource as well.

2.c.iii Matching funds

We have a cash match of $90,000.00 and an in-kind match of $40,000.00 for equipment and labor for the Mill Creek project provided by the private landowner. Additionally, we have been awarded $770,657.00 through the BOR B2E as a cash match, but no contract in place and this is under review at the federal level. Both Congressman Hurd and Senator Hickenlooper have been vocally supportive of this project. If this funding does not materialize, we will pursue funding from Colorado Parks and Wildlife, Colorado Water Conservation Board, The Nature Conservancy, Trout Unlimited, Ducks Unlimited, Biophilia, Colorado RESTORE.

2.c.iv Designs, timeline and maps

Current designs and site maps can be found in Figures 1-5. No projects require engineering. We will use minimally invasive and nature-based solutions. A full timeline with phases, midpoint, and major project components can be seen in Table 1, a detailed schedule can be seen in Table 2. As-built survey documents of all sites will be provided at the end of their individual completion.

2.c.v Operation, maintenance and monitoring

We will use a combination of process based and landscape informed restoration techniques that leverage natural, positive feedback loops that reduce the need for long-term maintenance. Our goal is to establish naturally functioning systems that sustain themselves. However, we anticipate that we will use this funding to provide three years of maintenance on each of these sites. Maintenance for the restoration activity includes building on the previous year's work, replanting and seeding, understanding how the system has responded to the restoration efforts, and expanding the restoration efforts in an iterative manner. We will inspect and document all structures and restoration efforts during and after restoration. We plan to use a robust method to monitor and inspect the effectiveness of our projects. This will happen twice a year, once during the spring, and once during the fall. For stream restoration, we plan to monitor via drone imagery, in combination with on the ground RTK surveys to create a full topographic model that will allow us to quantify where shifts in geomorphology take place and classify the system by riffle, glides, and pools to understand how we created new habitat. Additionally, our drone is semi-hyperspectral which will allow us to track vegetation vigor, a proxy for floodplain connectivity. For fen and wetland monitoring, we will implement shallow groundwater wells to track groundwater location and direction. We will also implement vegetation plots

to document the species present and their cover, co-located with groundwater wells. We can also track carbon dioxide and methane fluxes and monitor with drone imagery. We will also fly the sites with our drone to map and monitor the wetlands. For monitoring that occurs after this funding is exhausted, we will pursue funding from Colorado Parks and Wildlife wetlands program, Biophilia, Colorado RESTORE, and private foundations.

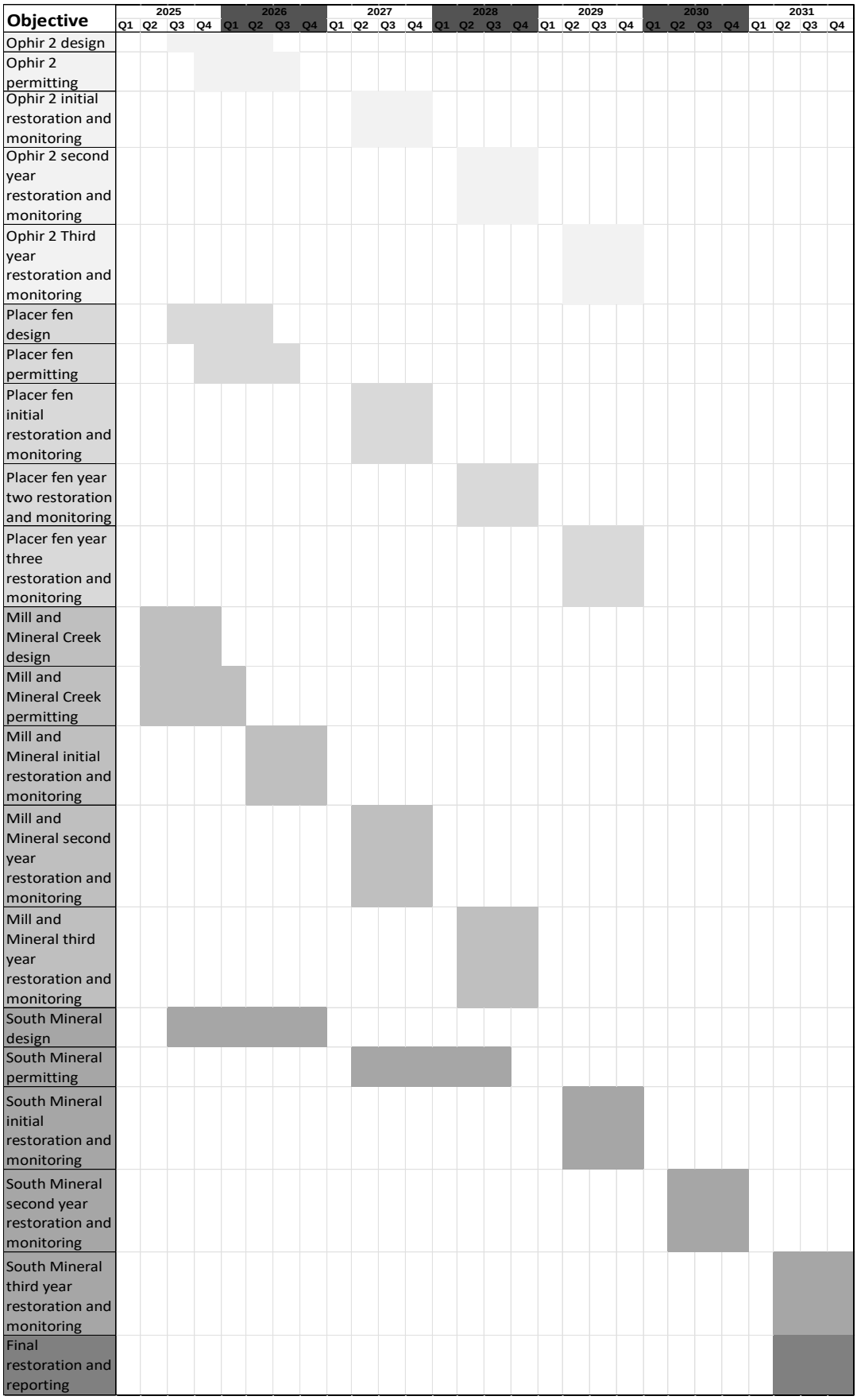
2.c.vi Permits/Approvals/Certifications

We will need USACE Nationwide Permit 27 and Pre Construction Notice Permits as well as NEPA clearance from the USFS and BLM. We will also need voluntary restoration permits from the State of Colorado when not in waters of the United States. We have already begun to work on NEPA with USFS and plan to get a categorical exclusion. We have also already conducted wetland delineations on part of the private land on Mill Creek, which will be required for all permits. All others will begin with additional funding when the project begins. Matching funds will be used to cover permits.

2.c.vii Project Schedule

A detailed schedule is provided below in Table 2. This outlines the design and permitting phases for each project that will be covered by our matching funds, as well as the three years of restoration and monitoring for each project. Milestones for each project include completion of design, completion of and acceptance of permits, first, second, and third years of restoration and monitoring. These are intentionally staggered to allow for staff capacity and the development of the Recreation plan for Mineral Creek by the USFS. Pre-and-post inspections will be part of our monitoring efforts and will be conducted before and after every year of work.

Table 2. Detailed schedule of tasks by project site.



2.c.viii Monthly Invoice and Status Report

All activities in the operational plan will be tracked by task and reported on monthly invoices as hours of labor and expenses.

2.c.ix Project Documentation and Deliverables:

We will provide an annual report that outlines our accomplishments and describes our deliverables. This includes completion of site designs, completed and approved permits, maps and photos of installation of stream channel structure, maps and photos of fen restoration efforts, maps and photos of the riparian wetlands. We will also report on the findings of our monitoring and inspection efforts.

3.0 Budget Spreadsheet

A budget summary can be found in Table 3 below. Table 3 shows the project broken into personnel, fringe, travel, equipment, supplies, contractual and indirect. Table 3 also shows the breakdown of source of match, and where it will be applied. A detailed budget spreadsheet can be found in Appendix C. This detailed budget breaks down staff hours by each task and sub task. Dr. Jake Kurzweil will serve as project manager. Dr. Colin Tucker and Dr. Rod Chimer will serve as the lead restoration ecologists. Scott Roberts will assist with implementation and monitoring of benthic macroinvertebrates. Anthony Culpeper will serve as the lead botanist. Alex Handlof will be the drone pilot, Lenka Doskocil and Julia Ledford will coordinate and lead field efforts. Field technicians will assist with restoration and monitoring. NRD funds will be used in tandem with our matching funds to support on the ground restoration efforts including materials, labor, travel, fringe, indirect and subcontractors. Matching funds will also cover restoration activities as well as fully cover design and permitting.

Table 3. Budget summary

Budget Summary	Totals	NRD Request	Private Cash and In Kind Match	BOR Match
Total	**$1,264,895.93**	**$364,238.61**	**$130,000.00**	**770,657**
Personnel	$546,700.16	$146,152.16	$90,000.00	$310,548.00
Fringe	$223,300.07	$123,300.07		$100,000.00
Travel	$33,264.00			$33,270.60
Supplies	$104,575.00	$37,845.40		$66,729.60
Equipment	$10,450.00			$10,450.00
Contractual	$232,400.00	$12,800.00	$40,000.00	$179,600.00
Indirect	$114,206.70	$44,140.98		$70,059.00

4.0 Public Communications Strategy

We are fortunate to have already built a strong community and outreach strategy that resulted in the selection of the proposed sites. We are utilizing our network of stake holders assembled during our AHEAD efforts to listen and incorporate feedback from our partners and larger community network. AHEAD is a collaborative group of community members, natural resource managers, ecologists, environmental groups, and recreation industry professionals. AHEAD focuses on addressing the needs of San Juan County as it transitions from an economy based on extractive industries to one of outdoor recreation and tourism. AHEAD has mapped and prioritized the headwaters for ecological restoration projects that aim to increase the climate resilience of these sensitive and critical systems. We plan to lean on this already established network to clearly communicate and solicit feedback. This will include meeting with the group twice a year for updates from our project as well as soliciting feedback from the group.

5.0 Relationship to Ranking Criteria

Our proposed project complies with the requirements of this solicitation and complies with all applicable federal, state, and local laws, rules, regulations, and permits. This project does not pose a threat to the health and safety of the public. We have demonstrated in this proposal that the natural resources that the proposed work would restore are directly connected to the natural resources injured by legacy mining at this Site.

a. Likelihood of Success:

This project aims to restore natural resources that have been damaged by legacy mining impacts that includes restoration of over 10.5 acres of fens, 4 acres of riparian wetlands, more than 1 mile of stream, and more than 10 acres of improved floodplain connectivity. We plan to do this at four different sites, and this effort includes strong partnerships with the USFS, BLM, MTU and a private landowner.

MSI has over 20 years of experience restoring streams and wetlands in the high alpine of San Juan County. In addition, we will also partner with Dr. Rod Chimner, a global peatland and wetland restoration expert. Dr. Chimner recently published a new restoration book on restoring high alpine systems, this work largely focused on systems in the San Juan mountains demonstrating the commitment to and knowledge of restoring these systems locally. MSI and its team have the skills, equipment and operations to implement and manage the restoration efforts and is familiar with an adaptive management style to work in these harsh and dynamic environments.

b. Multiple Natural Resource Benefits:
This project benefits multiple natural resources including riparian wetlands, fens, streams, aquatic life habitat, and water quality. Additionally, this project provides improved recreational access and education.

c. Project Utilizes Multiple Approaches:
We plan to utilize multiple types of restoration methods including LT-PBR, hardened rock features, wetland creation, all while incorporating the recreation management plan that will be developed alongside this project by the USFS. We also plan to utilize fen restoration methods that have been pioneered by Dr. Rod Chimner here in the San Juan Mountains. This is particularly important as one of our sites is likely an iron fen, a particularly acidic and metal laden system, that needs particular restoration methods including acidic tolerant plant species.

d. Long-term Project Benefits:
The methods that we are using for restoration are designed to ensure that our efforts are maintained for generations to come. We utilize natural, positive feedback loops that help ensure that the systems can maintain themselves, ensuring lasting, long-term benefits to the ecosystem and communities that depend on them.

e. Project Alignment with Regional Planning:
The sites proposed in this project were selected via the county wide AHEAD effort. This effort took in all available geospatial data that included environmental data such as streams, wetlands, tundra, wildlife, as well as recreational, and resource extraction data to understand where systems were in need of restoration, preservation, and where recreation could be enhanced. This was a process that included over five work sessions with over 50 regional and local stakeholders. The projects presented here represent the next steps of this process which aim to restore and protect the identified areas.

f. Protection of Implemented Project:
These projects will largely take place on federal lands and are protected by these agencies. We are currently working with the private landowner to explore a possible conservation easement to preserve the work done on private land.

g. Project Benefit versus Expected Cost:
We anticipate that benefits to the ecosystems and to the public will occur within the first year that restoration occurs for each project. The methods we will utilize work directly with the surrounding ecology and hydrology to promote rapid improvements to the sites.

These sites are in the Animas River headwaters, having a positive impact not only for San Juan County, but also for ecosystems and residents in downstream communities.

h. Non-NRDs Match:
$770,657.00 has been awarded through the BOR B2E program, but no contract is in place. We do have support from both Congressman Hurd and Senator Hickenlooper. If this funding does not materialize, we will pursue funding from Colorado Parks and Wildlife, Colorado Water Conservation Board, The Nature Conservancy, Trout Unlimited, Ducks Unlimited, Biophilia, and Colorado RESTORE.

i. Multiple Partners:
This project represents a collaboration between MSI, Michigan Technological University, a private landowner, the BLM, and the USFS. This group has a strong track record of over 20 years of collaboration and is excited to continue work that betters our watersheds for all.

j. Monitoring:
Monitoring methods will be multi-model and look to understand how the system is responding in a holistic manner. This will include areal drone mapping that will allow us to create terrain models from structure from motion image processing. The drone is also semi-hyperspectral which will allow us to track vegetation vigor, a proxy for wetland connectivity. We will also monitor vegetation via vegetation monitoring plots, groundwater levels from monitoring wells, and gas fluxes of methane and carbon dioxide. In the stream and riparian wetland restoration projects, we will monitor aquatic life via benthic macroinvertebrate monitoring. We will also monitor changes in geomorphology via a combination of drone and on the ground surveys.

k. Disproportionately Impacted Community:
Silverton's score on the CDPHE Enviroscreen tool is 10.54. Trustees should also consider several other factors that contribute to our disproportionately impacted status:

- Public lands account for 80 percent of county lands, which has property tax revenue and infrastructure implications (e.g., the county road and bridge budget maintains infrastructure to public lands).
- The Gold King Mine release and resulting impacts consumes significant community leadership capacity, which means less capacity for other projects.
- San Juan County has an estimated 800 residents/infrastructure rate payers; our visitorship includes millions, which puts a disproportionate burden on our public infrastructure (roads, water, sewer, trash).

Appendix A. Description of the offeror's Organization

The Mountain Studies Institute (MSI) as well as our collaborators have extensive experience in the methodologies proposed in these projects. MSI has been restoring wetlands and fens in the San Juan Mountains for over twenty years and has many examples of successful projects. One to highlight is the Chattanooga Fen restoration project which restored a fen degraded by dredging. We have also been leaders in stream restoration in Southwest Colorado and have several successful projects in the Mancos River Watershed. We have all the implementation and monitoring equipment needed to be successful in this project including a hydraulic post pounder, hand tools, chain saws, drones, flow meters, gas flux meters, and vehicles. We also have a full administrative staff to manage grant funding.

Our restoration philosophy is to understand and quantify environmental system mechanics and their interaction with human and natural history to repair the composition, form, processes, and function within a degraded ecosystem. We do not adhere to either a form or process-based approach but instead utilize all strategies to select the best methods to obtain our restoration goals given economic, cultural, or resource constraints. Our aim is to provide restoration methods that utilize the system's natural strengths to reduce long-term maintenance and encourage natural functions to produce stabilizing feedback loops. With this in mind, we make restoration plans that account for historical site conditions, while planning for future climate and land use to ensure that the restoration product is long-lasting and resilient to a changing climate.

MSI and Dr. Rod Chimner have abundant experience implementing and monitoring restoration efforts as practitioners. Dr. Chimner and MSI's past work demonstrates the team's unique position as both academics and restoration practitioners. This combination of academic and professional experience provides a diverse set of skills that produces long lasting restoration efforts, backed by a high level of data collection, at both an efficient pace and cost. Dr. Chimner and MSI stand behind a mission of science that people can use, and this project is well within the expertise and capacity of the team, highlighted by the accomplished work detailed in Appendix B.

Appendix B. Statement of Capabilities and Qualifications

MSI is capable and prepared to meet all contractual requirements that have been proposed in this project. We have partnered with our federal land managers as well as private landowners needed to accomplish this work. MSI has a long-standing history of very successful restoration efforts in the San Juan Mountains, and will be bolstering this experience further by partnering with Dr. Rod Chimer, a global wetland expert. MSI and its partners have all the equipment needed to complete this work including mini excavators, hydraulic post pounders, chainsaws, hand tools, drones, gas flux meters, and GIS software. MSI has a strong administrative team and has the systems and financial needs in place to receive and manage this grant. MSI has a strong track record of grant writing and is able to find multiple funding sources to achieve match requirements.

Our primary project leaders will include Dr. Jake Kurzweil, and Dr. Rod Chimer. An explanation of their experience is provided below.

Dr. Rod Chimner is a Professor of Wetland Ecology at Michigan Technological University and an MSI research associate. Dr. Chimner is an expert on mountain fen restoration and will serve as the lead restoration ecologist. Dr. Chimner has been conducting research in peatland ecology and restoration for 30 years (https://www.researchgate.net/project/Mountain-Peatland-Ecology-and-Restoration). Currently, Dr. Chimner has projects in Colorado restoring two fens near Silverton with the BLM and several mountain fens in Colombia and Ecuador, plus several ongoing wetland/peatland restoration projects in the Great Lakes region and Indonesia.

Dr. Jake Kurzweil is the hydrologist for MSI and adjunct professor at Fort Lewis College and will be the project manager. Dr. Kurzweil has expertise in watershed systems science, wetland and spring systems, hydrologic monitoring and modeling, and restoration. Dr. Kurzweil has successfully developed large-scale prioritization plans for spring and wetland systems in coastal California across multiple landowners both public and private demonstrating the recent efficiency of large-scale efforts. Additionally, Dr. Kurzweil is currently working on multiple restoration efforts in the SW including process-based restoration of stream channels in the Mancos watershed of Colorado as well as assisting on the restoration for multiple high alpine fens in the San Juan Mountains of Colorado with Dr. Chimner.

Below is a list of relevant restoration projects

- **Chattanooga fen** - MSI and Dr. Chimner designed and implemented the Chattanooga Fen project that restored 1,482 linear feet of anthropogenic ditches to improve the

hydrologic regime of Chattanooga Fen. The restoration plan consisted of: building and installing check-dams, filling select ditch sections with peat and excelsior bales, and revegetating 450 square feet of bare peat. Transplanted native vegetation plugs and mulch were used to promote the growth of new vegetation and deter frost heaving. This successful project saw 2.27 acres of restored fen and is now incorporated into the surrounding system which has led to the recolonization of the area by beavers.

- **Ophir fen** - MSI and Dr. Chimner designed and implemented the restoration of the Ophir fen near Silverton Colorado, which is a unique iron fen located at almost 12,000ft on Ophir pass, CO. The Ophir Pass Fen project combined the use of heavy equipment and hand work to grade 0.32 acres of bare area, infill 200 linear feet of ditches, install check-dams, and transplant and seed 0.53 acres of native vegetation. The project is still ongoing and will ultimately restore the hydrologic regime (3.62 acres), reduce erosion and sedimentation into Mineral Creek, and revegetate 0.53 acres of exposed bare peat.
- **Developing Mountain Fen Restoration Techniques** - Dr. Chimner conducted 4 years of research to develop restoration techniques for restoring ditches, gullies, and vegetation in mountain peatlands in Colorado. These techniques were fundamental to restoring fens in the San Juans (Chimner, R.A. 2011). Restoring sedges and mosses into frost-heaving iron fens, San Juan Mountains, Colorado. Mires and Peat 8: Art. 7. (Online: http://www.mires-and-peat.net/map08/map_08_07.htm).
- **Grasshopper fen** - Dr. Chimner conducted a site visit and wrote a restoration plan for restoring a fen with a gulley located in the San Juan Mountains, Colorado. The fen was restored by the US Forest Service starting in 2019.
- **Warren Lakes fen** - Dr. Chimner conducted a site visit in 2011 and wrote a restoration plan for restoring a fen with ditches and frost-heaving soil for the US Forest Service.
- **Tambillios fen** - Dr. Chimner assessed and designed a restoration plan to restore a ditched and gullied fen in Huascaran National Park, Peru funded by USAID. The fen was restored in October 2015 by blocking 120 m of the ditch by hand with 22 wooden check dams that ranged in size from 1–4 m wide, and 0.4–1.5 m high by researchers and local community members (Planas-Clarke et al. 2020).
- **Guatavita fen** - Dr. Chimner is working with Colombian peat scientists to develop a restoration plan and restore a very large, ditched peatland in the Colombian Andes. Restoration is scheduled to occur in 2023.

- **Pictured Rocks** - Dr. Chimner designed and restored a steeply eroding section of riparian ecosystem in 2015 along a river in Pictured Rocks National Lakeshore, Michigan.
- **Peepsock wet meadow** - Dr. Chimner conducted a site assessment and designed and conducted the restoration of a wet meadow in Houghton, MI (2020-2023). The wet meadow was degraded from altered hydrology and invasive species and was funded by the Great Lakes Restoration Initiative.
- **Ecuador fens** - Dr. Chimner (2016-current) has conducted training workshops and helped design fen restoration projects in the Ecuador Andes degraded by ditching and overgrazing (e.g., Suarez et al. 2022). Funding by USAID.
- **Forested wetland creation** - Dr. Chimner worked with the Michigan Department of Transportation in 2008 to design and help restore two forested wetlands for wetland mitigation credit. MDOT forested wetlands design and restoration (Kangas et al. 2016).
- **Forested wetland creation** - Dr. Chimner designed and conducted experiments (2018-2022) to develop techniques to create forested wetlands on post-mining sites.
- **Indonesian tropical peatland restoration** - Dr. Chimner collaborated on several peatlands' restoration projects in Indonesia (2017-current), including writing a restoration plan, conducting a workshop, and conducting restoration experiments (e.g., Tata et al. 2022.).

Appendix C. Full Budgets by Project and Task

Table 4C. Detailed budget of Contracting, Reporting, and PM

Contracting, Reporting, PM				**Task 1. Contracting, Annual reporting, PM**		**Total**	
Time Frame				**2025-2028**			
PERSONNEL		**Cost**	**Fringe**				
Staffing	Project Role	Rate		Hours	Budget	Hours	Budget
Roberts, Scott	Scientist	$83.46	$33.38		$0.00	0.00	$0.00
Kurzweil, Jake	PM	$83.46	$33.38	120.00	$14,021.28	120.00	$14,021.28
Tucker, Colin	Scientist	$83.46	$33.38	80.00	$9,347.52	80.00	$9,347.52
Culpepper, Anthony	Scientist	$76.51	$30.60		$0.00	0.00	$0.00
Handloff, Alex	Drone Pilot	$69.55	$27.82		$0.00	0.00	$0.00
Field Tech	FT	$37.56	$15.02		$0.00	0.00	$0.00
Ledford, Julia	RA	$69.55	$27.82		$0.00	0.00	$0.00
Doskocil, Lenka	RA	$69.55	$27.82	80.00	$7,789.82	80.00	$7,789.82
Personnel Subtotal	**$31,159**			280.00	$31,158.62	9042.00	$31,158.62
EXPENSES							
Description		Unit	Rate	# Units	Budget	# Units	Budget
Travel - Mileage		per mile	$0.80		$0.00	0.00	$0.00
Seeds		per year	$1,000.00		$0.00	0.00	$0.00
Erosion control		per year	$1,500.00		$0.00	0.00	$0.00
Air fair		per unit	$1,400.00		$0.00	0.00	$0.00
car rental		per week	$1,000.00		$0.00	0.00	$0.00
Lodging		per week	$1,200.00		$0.00	0.00	$0.00
Llama rental (eqp haul)		per day	$75.00		$0.00	0.00	$0.00
msc supplies		per unit	$500.00		$0.00	0.00	$0.00
Drone		Per day	$350.00		$0.00	0.00	$0.00
Posts		per unit	$40.00		$0.00	0.00	$0.00
Post delivery		One time	$300.00		$0.00	0.00	$0.00
Post pounder rental		per day	$250.00		$0.00	0.00	$0.00
Per Diem		per day	$125.00		$0.00	0.00	$0.00
Subcontractor - Excavation		Per event	$10,000.00		$0.00	0.00	$0.00
Subcontractor - USFS		per hour	$140.00		$0.00	0.00	$0.00
Subcontractor - Chimner		per hour	$80.00		$0.00	0.00	$0.00
Expenses Subtotal					$0.00		$0.00
Direct Expenses Total	**$31,158.62**				$31,158.62		$31,158.62
Overhead/Indirect Rate For Labor					*$ -*		*$ -*
Overhead/Indirect Rate For Direct Expenses			*0.30*		*$ -*		*$ -*
Indirect Expenses Total					$ -		
Project Subtask Totals	**$ 31,158.62**				$31,158.62		$31,158.62

Table 5C. Detailed budget of Ophir fen restoration

Ophir Fen Restoration Budget by Task				Task 2.1 Ophir Design		Task 2.2 Ophir Permitting		Task 2.3 Ophir Initial restoration		Task 2.4 Ophir second year follow up and monitoring		Task 2.5 Ophir third year follow up and monitoring		Total	
Time Frame				Summer 2025		Fall 2025		Summer 2026		Summer 2027		Summer 2028			
PERSONNEL		Cost	Fringe												
Staffing	Project Role	Rate		Hours		Hours		Hours	Budget	Hours	Budget	Hours	Budget	Hours	Budget
Roberts, Scott	Scientist	$83.46	$33.38		$0.00		$0.00	50.00	$5,842.20	20.00	$2,336.88	20.00	$2,336.88	90.00	$10,515.96
Kurzweil, Jake	PM	$83.46	$33.38	40.00	$4,673.76	64.00	$7,478.02	60.00	$7,010.64	50.00	$5,842.20	50.00	$5,842.20	264.00	$30,846.82
Tucker, Colin	Scientist	$83.46	$33.38	20.00	$2,336.88	20.00	$2,336.88	60.00	$7,010.64	50.00	$5,842.20	50.00	$5,842.20	200.00	$23,368.80
Culpepper, Anthony	Scientist	$76.51	$30.60		$0.00	20.00	$2,142.34	50.00	$5,355.84		$0.00		$0.00	70.00	$7,498.18
Handloff, Alex	Drone Pilot	$69.55	$27.82		$0.00	8.00	$778.98	50.00	$4,868.64	30.00	$2,921.18	30.00	$2,921.18	118.00	$11,489.99
Field Tech	FT	$37.56	$15.02		$0.00	1.00	$52.58	320.00	$16,826.88	160.00	$8,413.44	160.00	$8,413.44	641.00	$33,706.34
Ledford, Julia	RA	$69.55	$27.82		$0.00		$0.00	50.00	$4,868.64	30.00	$2,921.18	30.00	$2,921.18	110.00	$10,711.01
Doskocil, Lenka	RA	$69.55	$27.82	40.00	$3,894.91	80.00	$7,789.82	60.00	$5,842.37	50.00	$4,868.64	50.00	$4,868.64	280.00	$27,264.38
Personnel Subtotal	**$155,401**			100.00	$10,905.55	193.00	$20,578.62	700.00	$57,625.85	390.00	$33,145.73	390.00	$33,145.73	1773.00	$155,401.48
EXPENSES															
Description		Unit	Rate	# Units	Budget	# Units	Budget	# Units	Budget	# Units	Budget	# Units	Budget	# Units	Budget
Travel - Mileage		per mile	$0.80		$0.00	896.00	$716.80	1200.00	$960.00	960.00	$768.00	960.00	$768.00	4016.00	$3,212.80
Seeds		per year	$1,000.00		$0.00		$0.00	1	$1,000.00	1	$1,000.00	1	$1,000.00	3.00	$3,000.00
Erosion control		per year	$1,500.00		$0.00		$0.00	1	$1,500.00	1	$1,500.00	1	$1,500.00	3.00	$4,500.00
Air fair		per unit	$1,400.00		$0.00		$0.00	1	$1,400.00		$0.00		$0.00	1.00	$1,400.00
car rental		per week	$1,000.00		$0.00		$0.00	1	$1,000.00		$0.00		$0.00	1.00	$1,000.00
Lodging		per week	$1,200.00		$0.00		$0.00	1	$1,200.00		$0.00		$0.00	1.00	$1,200.00
Llama rental (eqp haul)		per day	$75.00		$0.00		$0.00	21	$1,575.00	20	$1,500.00	20	$1,500.00	61.00	$4,575.00
msc supplies		per unit	$500.00		$0.00		$0.00	1	$500.00	1	$500.00	1	$500.00	3.00	$1,500.00
Drone		Per day	$350.00		$0.00	1	$350.00		$0.00	1	$350.00	1	$350.00	3.00	$1,050.00
Posts		per unit	$40.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Post delivery		One time	$300.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Post pounder rental		per day	$250.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Per Diem		per day	$125.00		$0.00		$0.00	10	$1,250.00	10	$1,250.00	10	$1,250.00	30.00	$3,750.00
Subcontractor - Excavation		per event	$10,000.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Subcontractor - USFS		per hour	$140.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Subcontractor - Chimner		per hour	$80.00	20	$1,600.00		$0.00	50	$4,000.00	40	$3,200.00	40	$3,200.00	150.00	$12,000.00
Expenses Subtotal					$1,600.00		$1,066.80		$14,385.00		$10,068.00		$10,068.00		$37,187.80
Direct Expenses Total	**$192,589.28**				$12,505.55		$21,645.42		$72,010.85		$43,213.73		$43,213.73		$192,589.00
Overhead/Indirect Rate For Labor					*$ -*		*$ -*		*$ -*		*$ -*		*$ -*		*$ -*
Overhead/Indirect Rate For Direct Expenses			*0.30*		*$ 480.00*		*$ 320.04*		*$ 4,315.50*		*$ 3,020.40*		*$ 3,020.40*		*$ 11,156*
Indirect Expenses Total					$ 480.00		$ 320.04		$ 4,315.50		$ 3,020.40		$ 3,020.40		$ 11,156.34
Project Subtask Totals	**$203,745.89**				$12,985.55		$ 21,965.04		$ 76,326.50		$ 46,234.40		$46,234.40		$203,745.34

Table 6C. Detailed budget of the South Mineral Creek Restoration project.

South Mineral Creek Restoration Budget by Task				Task 3.1 South Mineral design		Task 3.2 South Mineral Permitting		Task 3.3 South Mineral Initial Restoration		Task 3.4 South Mineral second year follow up and monitoring		Task 3.5 South Mineral third year follow up and monitoring		Total	
Time Frame				Summer 2025 - Summer 2026		Fall 2026 - Winter 2027		Summer 2028		Summer 2029		Summer 2030			
PERSONNEL		Cost	Fringe												
Staffing	Project Role	Rate		Hours	Budget	Hours	Budget	Hours	Budget	Hours	Budget	Hours	Budget	Hours	Budget
Roberts, Scott	Scientist	$83.46	$33.38		$0.00		$0.00	50.00	$5,842.20	20.00	$2,336.88		$0.00	70.00	$8,179.08
Kurzweil, Jake	PM	$83.46	$33.38	60.00	$7,010.64	100.00	$11,684.40	80.00	$9,347.52	60.00	$7,010.64	55.00	$6,426.42	355.00	$41,479.62
Tucker, Colin	Scientist	$83.46	$33.38	60.00	$7,010.64	40.00	$4,673.76	80.00	$9,347.52	60.00	$7,010.64	60.00	$7,010.64	300.00	$35,053.20
Culpepper, Anthony	Scientist	$76.51	$30.60	10.00	$1,071.17	40.00	$4,284.67		$0.00		$0.00		$0.00	50.00	$5,355.84
Handloff, Alex	Drone Pilot	$69.55	$27.82		$0.00	8.00	$778.98	50.00	$4,868.64	30.00	$2,921.18	30.00	$2,921.18	118.00	$11,489.99
Field Tech	FT	$37.56	$15.02		$0.00		$0.00	640.00	$33,653.76	320.00	$16,826.88	320.00	$16,826.88	1280.00	$67,307.52
Ledford, Julia	RA	$69.55	$27.82		$0.00		$0.00	50.00	$4,868.64	30.00	$2,921.18	30.00	$2,921.18	110.00	$10,711.01
Doskocil, Lenka	RA	$69.55	$27.82	60.00	$5,842.37	100.00	$9,737.28	60.00	$5,842.37	50.00	$4,868.64	50.00	$4,868.64	320.00	$31,159.30
Personnel Subtotal	**$210,736**			190.00	$20,934.82	288.00	$31,159.09	1010.00	$73,770.65	570.00	$43,896.05	545.00	$40,974.95	2603.00	$210,735.55
EXPENSES															
Description		Unit	Rate	# Units	Budget	# Units	Budget	# Units	Budget	# Units	Budget	# Units	Budget	# Units	Budget
Travel - Mileage		per mile	$0.80		$0.00	946.00	$756.80	2400.00	$1,920.00	2400.00	$1,920.00	2400.00	$1,920.00	8146.00	$6,516.80
Seeds		per year	$1,000.00		$0.00		$0.00	1	$1,000.00	1	$1,000.00	1	$1,000.00	3.00	$3,000.00
Erosion control		per year	$1,500.00		$0.00		$0.00	1	$1,500.00	1	$1,500.00	1	$1,500.00	3.00	$4,500.00
Air fair		per unit	$1,400.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
car rental		per week	$1,000.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Lodging		per week	$1,200.00		$0.00		$0.00	1	$1,200.00		$0.00		$0.00	1.00	$1,200.00
Llama rental (eqp haul)		per day	$75.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
msc supplies		per unit	$500.00		$0.00		$0.00	10	$5,000.00	10	$5,000.00		$0.00	20.00	$10,000.00
Drone		Per day	$350.00		$0.00	3	$1,050.00	3	$1,050.00	3	$1,050.00	3	$1,050.00	12.00	$4,200.00
Posts		per unit	$40.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Post delivery		One time	$300.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Post pounder rental		per day	$250.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Per Diem		per day	$125.00		$0.00		$0.00	10	$1,250.00	10	$1,250.00	10	$1,250.00	30.00	$3,750.00
Subcontractor - Excavation			$10,000.00		$0.00		$0.00	5	$50,000.00	5	$50,000.00		$0.00	10.00	$100,000.00
Subcontractor - USFS		per hour	$140.00	40	$5,600.00	60	$8,400.00	60	$8,400.00	50	$7,000.00	50	$7,000.00	260.00	$36,400.00
Subcontractor - Chimner		per hour	$80.00	40	$3,200.00		$0.00	50	$4,000.00	50	$4,000.00	50	$4,000.00	190.00	$15,200.00
Expenses Subtotal					$8,800.00		$10,206.80		$75,320.00		$72,720.00		$17,720.00		$184,766.80
Direct Expenses Total	**$395,503.00**				$29,735.00		$ 41,366.00		$149,091.00		$116,616.00		$58,695.00		$395,502.00
Overhead/Indirect Rate For Labor					*$ -*		*$ -*		*$ -*		*$ -*		*$ -*		*$ -*
Overhead/Indirect Rate For Direct Expenses			*0.30*		*$ 2,640.00*		*$ 3,062.04*		*$ 22,596.00*		*$ 21,816.00*		*$ 5,316.00*		*$ 55,430*
Indirect Expenses Total					$ 2,640.00		$ 3,062.04		$ 22,596.00		$ 21,816.00		$ 5,316.00		$ 55,430.04
Project Subtask Totals	**$ 450,933.04**				$32,375.00		$ 44,428.04		$171,687.00		$138,432.00		$64,011.00		$450,932.04

Table 7C. Detailed budget of Placer fen restoration project.

Placer Fen Budget by Task				Task 4.1 Placer design		Task 4.2 Placer Permitting		Task 4.3 Placer Initial Restoration		Task 4.4 Placer second year follow up and monitoring		Task 4.5 Placer third year follow up and monitoring		Total	
Time Frame				Summer 2025		Fall 2025		Summer 2026		Summer 2027		Summer 2028			
PERSONNEL		Cost	Fringe												
Staffing	Project Role	Rate		Hours	Budget	Hours	Budget	Hours	Budget	Hours	Budget	Hours	Budget	Hours	Budget
Roberts, Scott	Scientist	$83.46	$33.38		$0.00		$0.00	50.00	$5,842.20	20.00	$2,336.88		$0.00	70.00	$8,179.08
Kurzweil, Jake	PM	$83.46	$33.38	40.00	$4,673.76	100.00	$11,684.40	80.00	$9,347.52	80.00	$9,347.52	80.00	$9,347.52	380.00	$44,400.72
Tucker, Colin	Scientist	$83.46	$33.38	40.00	$4,673.76	40.0000	$4,673.76	80.00	$9,347.52	80.00	$9,347.52	80.00	$9,347.52	320.00	$37,390.08
Culpepper, Anthony	Scientist	$76.51	$30.60		$0.00	20.00	$2,142.34		$0.00		$0.00		$0.00	20.00	$2,142.34
Handloff, Alex	Drone Pilot	$69.55	$27.82		$0.00	8.00	$778.98	50.00	$4,868.64	30.00	$2,921.18	30.00	$2,921.18	118.00	$11,489.99
Field Tech	FT	$37.56	$15.02		$0.00		$0.00	320.00	$16,826.88	280.00	$14,723.52	280.00	$14,723.52	880.00	$46,273.92
Ledford, Julia	RA	$69.55	$27.82		$0.00		$0.00	50.00	$4,868.64	30.00	$2,921.18	30.00	$2,921.18	110.00	$10,711.01
Doskocil, Lenka	RA	$69.55	$27.82	40.00	$3,894.91	100.00	$9,737.28	70.00	$6,816.10	60.00	$5,842.37	60.00	$5,842.37	330.00	$32,133.02
Personnel Subtotal	**$192,720**			120.00	$13,242.43	268.00	$29,016.76	700.00	$57,917.50	580.00	$47,440.18	560.00	$45,103.30	2228.00	$192,720.16
EXPENSES															
Description		Unit	Rate	# Units	Budget	# Units	Budget	# Units	Budget	# Units	Budget	# Units	Budget	# Units	Budget
Travel - Mileage		per mile	$0.80		$0.00	1,120	$896.00	1,400	$1,120.00	1,400	$1,120.00	1,400	$1,120.00	5320.00	$4,256.00
Seeds		per year	$1,000.00		$0.00		$0.00	1	$1,000.00	1	$1,000.00	1	$1,000.00	3.00	$3,000.00
Erosion control		per year	$1,500.00		$0.00		$0.00	1	$1,500.00	1	$1,500.00	1	$1,500.00	3.00	$4,500.00
Air fair		per unit	$1,400.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
car rental		per week	$1,000.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Lodging		per week	$1,200.00		$0.00		$0.00	1	$1,200.00	1	$1,200.00		$0.00	2.00	$2,400.00
Llama rental (eqp haul)		per day	$75.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
msc supplies		per unit	$500.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Drone		Per day	$350.00		$0.00	1	$350.00		$0.00		$0.00		$0.00	1.00	$350.00
Posts		per unit	$40.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Post delivery		One time	$300.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Post pounder rental		per day	$250.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Per Diem		per day	$125.00		$0.00		$0.00	10	$1,250.00	10	$1,250.00	10	$1,250.00	30.00	$3,750.00
Subcontractor - Excavation		per event	$10,000.00		$0.00		$0.00	4	$40,000.00		$0.00		$0.00	4.00	$40,000.00
Subcontractor - USFS		per hour	$140.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Subcontractor - Chimner		per hour	$80.00	20	$1,600.00		$0.00	50	$4,000.00	50	$4,000.00	50	$4,000.00	170.00	$13,600.00
Expenses Subtotal					$1,600.00		$1,246.00		$50,070.00		$10,070.00		$8,870.00		$71,856.00
Direct Expenses Total	**$264,575.00**				$14,842.00		$ 30,263.00		$107,987.00		$ 57,510.00		$53,973.00		$264,576.00
Overhead/Indirect Rate For Labor					*$ -*		*$ -*		*$ -*		*$ -*		*$ -*		*$ -*
Overhead/Indirect Rate For Direct Expenses			*0.30*		*$ 480.00*		*$ 373.80*		*$ 15,021.00*		*$ 3,021.00*		*$ 2,661.00*		*$ 21,557*
Indirect Expenses Total					$ 480.00		$ 373.80		$ 15,021.00		$ 3,021.00		$ 2,661.00		$ 21,556.80
Project Subtask Totals	**$ 286,131.80**				$15,322.00		$ 30,636.80		$123,008.00		$ 60,531.00		$56,634.00		$286,132.80

Table 8C. Detailed budget of Mill and mineral Creek stream and riparian restoration project.

Mill and Mineral Creek Riparian Restoration by Task				Task 5.1 Mill and Mineral Creek design		Task 5.2 Mill and Mineral Creek Permitting		Task 5.3 Mill and Mineral Creek Initial Restoration		Task 5.4 Mill and Mineral Creek second year follow up and monitoring		Task 5.5 Mill and Mineral Creek third year follow up and monitoring		Total	
Time Frame				**Summer 2025**		**Fall 2025**		**Summer 2026**		**Summer 2027**		**Summer 2028**			
PERSONNEL		**Cost**	**Fringe**												
Staffing	Project Role	Rate		Hours	Budget	Hours	Budget	Hours	Budget	Hours	Budget	Hours	Budget	Hours	Budget
Roberts, Scott	Scientist	$83.46	$33.38		$0.00		$0.00	50.00	$5,842.20	20.00	$2,336.88		$0.00	70.00	$8,179.08
Kurzweil, Jake	PM	$83.46	$33.38	40.00	$4,673.76	100.00	$11,684.40	60.00	$7,010.64	70.00	$8,179.08	70.00	$8,179.08	340.00	$39,726.96
Tucker, Colin	Scientist	$83.46	$33.38	40.00	$4,673.76	20.00	$2,336.88	60.00	$7,010.64	60.00	$7,010.64	60.00	$7,010.64	240.00	$28,042.56
Culpepper, Anthony	Scientist	$76.51	$30.60		$0.00	20.00	$2,142.34		$0.00		$0.00		$0.00	20.00	$2,142.34
Handloff, Alex	Drone Pilot	$69.55	$27.82		$0.00	8.00	$778.98	50.00	$4,868.64	30.00	$2,921.18	30.00	$2,921.18	118.00	$11,489.99
Field Tech	FT	$37.56	$15.02		$0.00		$0.00	320.00	$16,826.88	320.00	$16,826.88	320.00	$16,826.88	960.00	$50,480.64
Ledford, Julia	RA	$69.55	$27.82		$0.00		$0.00	50.00	$4,868.64	30.00	$2,921.18	30.00	$2,921.18	110.00	$10,711.01
Doskocil, Lenka	RA	$69.55	$27.82	40.00	$3,894.91	100.00	$9,737.28	60.00	$5,842.37	50.00	$4,868.64	50.00	$4,868.64	300.00	$29,211.84
Personnel Subtotal	**$179,984**			120.00	$13,242.43	268.00	$26,679.88	700.00	$52,270.01	580.00	$45,064.49	560.00	$42,727.61	2158.00	$179,984.41
EXPENSES															
Description		Unit	Rate	# Units	Budget	# Units	Budget	# Units	Budget	# Units	Budget	# Units	Budget	# Units	Budget
Travel - Mileage		per mile	$0.80		$0.00	1,120	$896.00	1,448	$1,158.40	1,400	$1,120.00	1,400	$1,120.00	5368.00	$4,294.40
Seeds		per year	$1,000.00		$0.00		$0.00	1	$1,000.00	1	$1,000.00	1	$1,000.00	3.00	$3,000.00
Erosion control		per year	$1,500.00		$0.00		$0.00	1	$1,500.00	1	$1,500.00	1	$1,500.00	3.00	$4,500.00
Air fair		per unit	$1,400.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
car rental		per week	$1,000.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Lodging		per week	$1,200.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Llama rental (eqp haul)		per day	$75.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
msc supplies		per unit	$500.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Drone		Per day	$350.00		$0.00	1	$350.00		$0.00		$0.00		$0.00	1.00	$350.00
Posts		per unit	$40.00		$0.00		$0.00	480	$19,200.00	480	$19,200.00	480	$19,200.00	1440.00	$57,600.00
Post delivery		One time	$300.00		$0.00		$0.00	1	$300.00	1	$300.00	1	$300.00	3.00	$900.00
Post pounder rental		per day	$250.00		$0.00		$0.00	6	$1,500.00	6	$1,500.00	6	$1,500.00	18.00	$4,500.00
Per Diem		per day	$125.00		$0.00		$0.00	10	$1,250.00	10	$1,250.00	10	$1,250.00	30.00	$3,750.00
Subcontractor - Excavation		per event	$10,000.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Subcontractor - USFS		per hour	$140.00		$0.00		$0.00		$0.00		$0.00		$0.00	0.00	$0.00
Subcontractor - Chimner		per hour	$80.00	40	$3,200.00		$0.00	20	$1,600.00	20	$1,600.00	20	$1,600.00	100.00	$8,000.00
Expenses Subtotal					$3,200.00		$1,246.00		$27,508.40		$27,470.00		$27,470.00		$86,894.40
Direct Expenses Total	**$266,878.81**				$16,442.43		$27,925.88		$79,778.41		$72,534.49		$70,197.61		$266,878.81
Overhead/Indirect Rate For Labor					*$ -*		*$ -*		*$ -*		*$ -*		*$ -*		*$ -*
Overhead/Indirect Rate For Direct Expenses			*0.30*		*$ 960.00*		*$ 373.80*		*$ 8,252.52*		*$ 8,241.00*		*$ 8,241.00*		*$ 26,068.32*
Indirect Expenses Total					$ 960.00		$ 373.80		$ 8,252.52		$ 8,241.00		$ 8,241.00		$ 26,068.32
Project Subtask Totals	**$ 292,947.13**				$ 17,402.43		$ 28,299.68		$ 88,030.93		$ 80,775.49		$ 78,438.61		$292,947.13

Appendix D. Organizational status

IRS Department of the Treasury
Internal Revenue Service
P.O. Box 2508
Cincinnati OH 45201

In reply refer to: 0248156166
Jan. 18, 2013 LTR 4168C E0
73-1644103 000000 00
00015233
BODC: TE

MOUNTAIN STUDIES INSTITUTE SAN JUAN
MOUNTAINS COLORADO
PO BOX 426
SILVERTON CO 81433-0426

012275

Employer Identification Number: 73-1644103
Person to Contact: MR. GALLUPPI
Toll Free Telephone Number: 1-877-829-5500

Dear TAXPAYER:

This is in response to your Jan. 09, 2013, request for information regarding your tax-exempt status.

Our records indicate that you were recognized as exempt under section 501(c)(3) of the Internal Revenue Code in a determination letter issued in AUGUST 2003.

Our records also indicate that you are not a private foundation within the meaning of section 509(a) of the Code because you are described in section(s) 509(a)(1) and 170(b)(1)(A)(vi).

Donors may deduct contributions to you as provided in section 170 of the Code. Bequests, legacies, devises, transfers, or gifts to you or for your use are deductible for Federal estate and gift tax purposes if they meet the applicable provisions of sections 2055, 2106, and 2522 of the Code.

Please refer to our website www.irs.gov/eo for information regarding filing requirements. Specifically, section 6033(j) of the Code provides that failure to file an annual information return for three consecutive years results in revocation of tax-exempt status as of the filing due date of the third return for organizations required to file. We will publish a list of organizations whose tax-exempt status was revoked under section 6033(j) of the Code on our website beginning in early 2011.

0248156166
Jan. 18, 2013 LTR 4168C E0
73-1644103 000000 00
00015234

MOUNTAIN STUDIES INSTITUTE SAN JUAN
MOUNTAINS COLORADO
PO BOX 426
SILVERTON CO 81433-0426

If you have any questions, please call us at the telephone number shown in the heading of this letter.

Sincerely yours,

Richard McKee, Department Manager
Accounts Management Operations

Appendix E. Letters of Support

Colby Barrett
Bonanza Boy Millsite (Old Chattanooga) San Juan County, Colorado
Mailing Address: PO Box 992, Montrose, CO 81402`
cbarrett17@gmail.com

May 20, 2025

Mark Rudolph
Bonita Peak Mining District NRD Project Manager
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South
mark.rudolph@state.co.us

Re: Bonitia Peak Mining District NRD Solicitation for Project Proposals – Letter of Support

Dear Mark Rudolph,

I am writing to express my strong support for the projects submitted by the local workgroup for funding to support mining reclamation projects in the Animas River Basin in Colorado through the Bonita Peak Mining District Natural Resources Damage Funds (NRD).

As a local landowner who is actively conducting voluntary restoration of both s mine site and natural resources that have been degraded by mining, we have participated in and tracked the developments related to the NRD funding, and have a vested interest in the sites proposed for restoration. I am deeply impressed by the NRD workgroup participants' commitment to environmental stewardship and their dedication to support these mining mitigation and reclamation projects.

While we are supportive of all proposed projects, as a partner and landowner, I am deeply invested in the Upper Animas Stream and Wetland Restoration Project. The work on my property includes restoration of Mill Creek and the abandoned floodplain close to the historic town site of Chattanooga. This project is of critical importance to the ecological health of our watershed as it directly works to restore our headwaters, providing a large lift to improve ecological function for headwaters and downstream stakeholders. These aspects of the project align with my families' priorities of ensuring that our natural resources are not only preserved, but improved for generations to come. The Mountain Studies Institutes (MSI) improvements to an injured resource, as outlined in their grant application, demonstrate a thorough understanding of the challenges involved and a commitment to implementing effective and sustainable solutions.

Specifically, I am particularly supportive of the restoration of high alpine wetlands and streams and we are excited to partner with MSI by providing $90,000 as a cash match and $40,000 in-kind contributions to complete the restoration of Mill Creek and the abandoned floodplain which

was degraded due to access to the Silver Cloud mine, which we are also completing voluntary remediation on, and improving recreation by providing unique in mine lodging, hiking improvements, and a via ferrata. Additional in-kind work will include project management time, landowner's consultation time, We will also perform a stream improvement along a quarter mile section of the stream with the hope/possibility of reintroducing native cutthroat Trout and extending beaver range.

These settlement funds provide a significant opportunity for our watershed, as it will support restoration projects for water resources impacted by mining activities. We are excited by the opportunities these settlement funds are providing southwestern Colorado. Thank you for your consideration of this worthy proposal.

Sincerely,

Colby Barrett

Colby
Barrett
Property
Owner

USDA United States Department of Agriculture | Forest Service | Columbine Ranger District

P.O. Box 439
367 South Pearl Street
Bayfield, CO 81122
(970) 884-2512

File Code: 2500
Date: May 12, 2025

Mr. Mark Rudolph
Project Manager
Bonita Peak Mining District NRD
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South
Glendale, CO 80246
mark.rudolph@state.co.us

Dear Mr. Rudolph:

I am writing to express my strong support for the projects submitted by the local workgroup for funding to support mining reclamation projects in the Animas River Basin in Colorado through the Bonita Peak Mining District Natural Resources Damage Funds (NRD).

At the Columbine District of the United States Forest Service (USFS), I have been participating in the visioning and development of projects appropriate for these funding efforts and many align with the goals of the district. I am deeply impressed by the NRD workgroup participants' commitment to environmental stewardship and their dedication to support these mining mitigation and reclamation projects.

While we are supportive of all proposed projects, the upper Animas Stream and Wetland Restoration project is of critical importance to support the values of the district and USFS that looks to serve the American people, restore natural resources, and value the diversity of our ecosystems and the people that depend on them. We are excited to partner with the Mountain Studies Institute to ensure improvements to a damaged resource, as outlined in their grant application, demonstrate a thorough understanding of the challenges involved and a commitment to implementing effective and sustainable solutions.

These settlement funds provide a significant opportunity for our watershed, as they will support restoration projects for water resources impacted by mining activities. We are excited by the opportunities these settlement funds are providing Southwestern Colorado. Thank you for your consideration of this worthy proposal.

If you have any questions, please contact Clay Kampf at clayton.kampf@usda.gov or 970-385-1385.

Sincerely,

X

Signed by: NICHOLAS GLIDDEN
NICHOLAS GLIDDEN
District Ranger

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Gunnison Field Office
2500 E New York Ave
Gunnison, Colorado 81230

In Reply Refer To:
1703 (CO-S06)

May 23, 2025

Mark Rudolph
Bonita Peak Mining District NRD Project Manager
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South
mark.rudolph@state.co.us

Re: Bonita Peak Mining District NRD Solicitation for Project Proposals – Letter of Support

Dear Mr. Rudolph:

I am writing to express my strong support for the projects submitted by the local workgroup for funding to support mining reclamation projects in the Animas River Basin in Colorado through the Bonita Peak Mining District Natural Resources Damage Funds (NRD).

The Bureau of Land Management (BLM) Gunnison Field Office has participated in and tracked the developments related to the NRD funding and we have a vested interest in the sites proposed for restoration. I am deeply impressed by the NRD workgroup participants' commitment to environmental stewardship and their dedication to support these mining mitigation and reclamation projects.

While we are supportive of all proposed projects, the Upper Animas Stream and Wetland Restoration Project and the Animas River Corridor project are of critical importance to the ecological health of our watershed as these directly work to restore our headwaters, providing improvements to the ecological function for upstream and downstream stakeholders. These aspects of the project align with the BLM's priorities regarding sustaining the health and diversity of public lands. The Mountain Studies Institutes (MSI) and Town of Silverton's (TOS) improvements to an injured resource, as outlined in their grant application, demonstrate a thorough understanding of the challenges involved and a commitment to implementing effective and sustainable solutions.

Specifically, the BLM is supportive of the restoration of high alpine fens and wetlands and streams along the Animas River near Silverton. The BLM is working through the process of transferring the Kendall Mountain Recreation and Public Purposes Lease area to the Town of Silverton with a goal of transferring this property in early 2026.

This parcel is key to the Animas River Corridor project. The BLM will also work directly with MSI on the restoration of an alpine fen in California Gulch that has been degraded by mass wasting events stimulated by mining and road access.

The NRDA settlement funds provide a significant opportunity for the Upper Animas River watershed, as it will support restoration of water resources impacted by past mining activities. We are excited by the opportunities these settlement funds are providing southwestern Colorado. Thank you for your consideration of this worthy proposal.

If you would like to discuss further, please contact me at (970) 642-4941 or jkaminsky@blm.gov.

Sincerely,

Digitally signed by JON KAMINSKY
Date: 2025.05.23 15:12:02 -06'00'

Jon F. Kaminsky
Field Manager
Gunnison Field Office

Michigan Technological University

College of Forest Resources and Environmental Science

March 4, 2025

Mark Rudolph
Bonita Peak Mining District NRD Project Manager
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South
mark.rudolph@state.co.us

Re: Bonitia Peak Mining District NRD Solicitation for Project Proposals – Letter of Support

Dear Mark Rudolph,

I strongly support the projects proposed by the local workgroup for funding consideration through the Bonita Peak Mining District Natural Resources Damage (NRD) Funds. These initiatives aim to advance critical mining reclamation efforts in the Animas River Basin in Colorado.

I have been actively collaborating with Dr. Kurzweil, the Bureau of Land Management, and the U.S. Forest Service to help design fen and wetland restoration projects that address natural resource damage resulting from legacy mining activities. Through this work, I have been impressed by the NRD workgroup participants' commitment to environmental stewardship and dedication to advancing meaningful mining mitigation and reclamation efforts.

While I am supportive of all the proposed projects, I believe the Upper Animas Stream and Wetland Restoration Project and the Animas River Corridor Project are of particular significance to the ecological health of the San Juan Mountain watersheds. These initiatives directly target the restoration of critical headwater systems, offering substantial benefits for both upstream and downstream stakeholders. The goals are closely aligned with my research priorities in wetland and riparian restoration.

The Mountain Studies Institute (MSI) and the Town of Silverton have demonstrated a strong grasp of the complexities involved in restoring damaged natural resources. Their proposals, as outlined in their grant applications, demonstrate a thorough understanding of the challenges involved and a commitment to implementing effective and sustainable solutions.

I am particularly supportive of the restoration of high alpine fens, wetlands, and stream systems, and I am enthusiastic about partnering with MSI and Town of Silverton to provide technical support for both projects proposed in San Juan County. These Natural Resource

Damage settlement funds present a vital opportunity for our watershed by enabling much-needed restoration of water resources impacted by historical mining activities. We are excited about the potential these funds offer for advancing ecological restoration in southwestern Colorado. Thank you for your consideration of this important proposal.

Sincerely,

Rod Chimner, Ph.D.

Chris Chambers – Southwest Colorado Project Manager
205 Weston Drive Durango, CO 81301
chris.chambers@tu.org – (828) 361-7814

April 16, 2025

Mark Rudolph
BPMD NRD Project Manager
Colorado Department of Public Health and Environment Hazardous
Materials and Waste Management Division
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Dear Mr. Rudolph,

I am writing to express Trout Unlimited's (TU) support for the Bonita Peak Mining District Natural Resource Damages Trust Fund stakeholder group's project proposals. The stakeholder's group has met monthly since the Solicitation for Project Proposals was received in March 2024. The meetings have resulted in a community-supported, watershed-wide list of projects intended to address recent and historic hazardous substance releases from the Bonita Peak Mining District. The proposed projects will restore the natural resources injured from the legacy of mining-related impacts in the upper Animas watershed.

As one of the leading cold-water conservation organizations, TU strives to protect, restore, reconnect, and sustain our nation's waterways. Since TU was founded in 1959, on-the-ground restoration of streams, watersheds, and fisheries has been our hallmark. TU has completed over 30 reclamation and restoration projects across Colorado since 2012 that focus on water quality improvement, non-point source contamination reduction, stream restoration, and revegetation of degraded landscapes.

TU respectfully requests the approval of this proposal to amplify this community effort and restore the natural and cultural heritage of Southwest Colorado's Animas River Basin. In addition, it is worth noting that the stakeholder's group has support from national and local non-profits that will help ensure a collaborative approach to projects. Please do not hesitate to contact me if I can provide any additional information.

Best Regards,

Chris Chambers

Town of Silverton
1360 Greene Street
P.O. Box 250
Silverton, CO 81433
Phone: 970-387-5522
Email: townadministrator@silverton.co.us

May 12, 2025

To the Trustees of the Natural Resources Damages Fund:

On behalf of the Town of Silverton, I write to express our full support for the suite of regional projects proposed by the **Natural Resources Damages (NRD) Regional Work Group** in response to the legacy mining impacts associated with the Bonita Peak Mining District Superfund Site.

These projects are the product of a broad and sustained collaboration between counties, municipalities, non-profits, landowners, and conservation groups across the region. They reflect years of coordinated planning, relationship-building, and community engagement, with a shared goal of addressing the long-term damages to our watershed and enhancing the Animas River Corridor for ecological, recreational, and public benefit.

As a community at the epicenter of historical mining activity, the Town of Silverton has seen firsthand the impacts to our natural resources and our quality of life. The regional projects advanced by the NRD Work Group not only address critical restoration needs, but also support enhanced access, conservation, and recreation for both residents and visitors. These projects embody the spirit of environmental stewardship, partnership, and local commitment, and we believe they represent highly appropriate and effective uses of NRD funding.

The Town of Silverton supports the regional partnerships behind these efforts and strongly encourages the Trustees to fund the proposed projects. We are grateful for the opportunity to participate in this process and look forward to continued collaboration in restoring and revitalizing our shared watershed.

Sincerely,
Dayna Kranker
Mayor
Town of Silverton, Colorado

THE SOUTHWESTERN WATER CONSERVATION DISTRICT
Developing and Conserving the Waters in the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
West Building – 841 East Second Avenue
DURANGO, COLORADO 81301
(970) 247-1302

05-08-2025

Mark Rudolph
Bonita Peak Mining District NRD Project Manager
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South
mark.rudolph@state.co.us

Re: Bonitia Peak Mining District NRD Solicitation for Project Proposals – Letter of Support

Dear Mark Rudolph,

I am expressing my strong support for the projects submitted by the local workgroup for funding to support mining reclamation projects in the Animas River Basin in Colorado through the Bonita Peak Mining District Natural Resources Damage Funds (NRD).

At the Southwestern Water Conservation District, I have been participating in their meetings and following their collaborative efforts throughout the region. I am deeply impressed by the NRD workgroup participants' commitment to environmental stewardship and their dedication to support these mining mitigation and reclamation projects.

Established by legislative action in 1941, the Southwestern Water Conservation District (SWCD) was created to protect, conserve, and manage the waters of the San Juan and Dolores River Basins. The collaborative and far-reaching nature of these projects reflects SWCD's ongoing mission to support regional water users and safeguard the water resources of the San Juan River Basin.

We are excited by the opportunities these settlement funds are providing southwestern Colorado, they will provide significant opportunity for the Animas Watershed. Thank you for considering this worthy proposal.

Sincerely,

Monika Rock

Monika Rock

Programs Coordinator

May 27, 2025

Mark Rudolph
Bonita Peak Mining District NRD Project Manager
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South
mark.rudolph@state.co.us

Re: Bonita Peak Mining District NRD Solicitation for Project Proposals – Letter of Support

Dear Mark Rudolph,

I am expressing my strong support for the projects submitted by the local workgroup for funding to support mining reclamation projects in the Animas River Basin in Colorado through the Bonita Peak Mining District Natural Resources Damage Funds (NRD).

As part of the steering committee for the Animas Watershed Partnership, I have been closely following their work in the region. I am deeply impressed by the NRD workgroup participants' commitment to environmental stewardship and their dedication to support these mining mitigation and reclamation projects.

While we are supportive of all proposed projects, the Animas Valley Bank Stabilization is of critical importance to the ecological health of our watershed and mitigating the negative impacts of historical mining activities. These aspects of the project align with River Network's priorities regarding Healthy, Resilient Rivers that are threatened by pollution, habitat destruction, depletion and climate change.

Specifically, I am particularly supportive of their innovative approach to addressing mining impacts and their focus on restoring hydrological function to the affected area. It will also improve water quality in the Animas River which is a vital resource for our community.

These settlement funds provide a significant opportunity for our watershed, as it will support restoration projects for water resources impacted by mining activities. We are excited by the opportunities these settlement funds are providing southwestern Colorado. Thank you for considering this worthy proposal.

Sincerely,

Cheryl Cwelich
Healthy Rivers Program Manager

CITY of DURANGO
Parks and Recreation

2700 N. Main Avenue
Durango, CO 81301
(970) 375-7321
rec@DurangoCO.gov
www.DurangoCO.gov

5/27/2025

Mark Rudolph
Bonita Peak Mining District NRD Project Manager
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South
mark.rudolph@state.co.us

Re: Bonita Peak Mining District NRD Solicitation for Project Proposals – Letter of Support

Dear Mark Rudolph,

On behalf of the citizens and municipality of the City of Durango, I would like to express my strong support for the projects submitted by the local workgroup for funding to support mining reclamation projects in the Animas River Basin in Colorado through the Bonita Peak Mining District Natural Resources Damage Funds (NRD), and specifically for the Animas Valley River Bank Stabilization project.

The City of Durango owns & manages a significant amount of public lands within the project area which has been identified for possible stabilization work, we are deeply supportive of the proposed work and are eager to see the proposed work take place. Whether or not the final scope occurs on the City's lands, the stabilization work will reduce the loss of conservation easement-protected agricultural land and wildlife habitat to erosion, improve the ecological health of the Animas River and its water quality, and make this stretch of river more resilient to flood events. These impacts will benefit the general public, not just the landowners whose properties are selected for stabilization work under this proposal.

By establishing gentler bank slopes, installing wetland bench buffer zones, installing log and rock structures to direct forces towards the channel center, and restoring impacted areas with native plantings, the proposed project presents a comprehensive solution to the high sediment loads and increased rates of erosion resulting from upstream mining activities.

These settlement funds provide a significant opportunity for our watershed, as it will support restoration projects for water resources impacted by mining activities. We are excited by the opportunities these settlement funds will provide to Southwest Colorado. Thank you for considering this worthy proposal.

Sincerely,

Owen Tallmadge
Natural Resource Manager
City of Durango

Teamwork | Dependability | Professionalism | Service | Respect | Innovation | Well-Being

WESTERN LANDOWNERS ALLIANCE

The Western Landowners Alliance advances policies and practices that sustain working lands, connected landscapes and native species.

May 30, 2025

Mark Rudolph
Bonita Peak Mining District NRD Project Manager
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South
mark.rudolph@state.co.us

Re: Bonita Peak Mining District NRD Solicitation for Project Proposals – Letter of Support

Dear Mark Rudolph,

I am writing to express Western Landowners Alliance's (WLA) support for the project proposals submitted to the Bonita Peak Mining District Natural Resource Damages Trust Fund. These five proposals have been developed and agreed upon by the local workgroup, which has met monthly since the March 2024. This collaboration has resulted in a suite of community-supported, watershed wide projects that address recent and historical impacts and restore the natural resources of the Animas River impacted by mining within the Bonita Peak Mining District.

WLA has been working closely with the local workgroup providing administrative support to assist in compiling a selection of projects that supports communities and ecosystems across the watershed. I am deeply impressed by the NRD workgroup participants' commitment to community-lead collaboration, environmental stewardship and their dedication to support these mining mitigation and reclamation projects.

WLA is dedicated to preserving whole and healthy landscapes across the West. The collaborative and far-reaching nature of these projects reflects WLAs ongoing mission to support healthy watersheds through community support and engagement. These projects will positively impact public access, wildlife habitat, restore degraded stream banks, and improve water quality within the Animas Basin.

These settlement funds provide a significant opportunity for our watershed, as it will support restoration projects for water resources impacted by mining activities. We are excited by the opportunities these settlement funds are providing southwestern Colorado. WLA respectfully requests approval of these NRD proposals. Please do not hesitate to reach out with questions.

Sincerely,
Morgan Wagoner,
Western Water Director
Western Landowners Alliance

La Plata County Colorado
ACCOUNTABILITY · INTEGRITY · RESPECT

Board of County Commissioners,
Marsha Porter-Norton, Chair
Matt Salka, Vice Chair
Clyde Church, Commissioner

1101 East 2nd Ave
Durango, CO 81301
(970)382-6219

May 27, 2025

Mark Rudolph
Bonita Peak Mining District NRD Project Manager
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Re: Support for Bonita Peak Mining District Natural Resource Damages Trust Fund Local Workgroup Project Proposal

Dear Mr. Rudolph:

On August 5, 2015, approximately three million gallons of acid mine drainage (also referred to as the Gold King Mine spill) was accidentally released into Cement Creek in San Juan County, Colorado, contaminating the Animas, San Juan and Colorado Rivers as it traveled through Colorado, New Mexico, Utah and the Southern Ute, Ute Mountain Ute and Navajo reservations.

The ensuing environmental, economic and cultural impacts on downstream communities, businesses and state, tribal and local governments were significant. The establishment of the Bonita Peak Mining District Natural Resource Damages Trust Fund (NRD Trust Fund) is an important element of the wide-ranging response to the incident and the historic mining activity that has contaminated soil, groundwater and surface water with heavy metals.

The local workgroup that convened to identify and propose projects for NRD Trust Fund dollars has established a list of endeavors that focus on habitat restoration, ecosystem preservation, and community access for recreational use. The work group has reviewed the proposed projects to ensure they comply with the criteria provided, provide long-term benefits to both the environment and the community, and represent a community-supported, watershed-wide effort.

We offer strong support for funding the five projects the workgroup proposes for NRD Trust Fund dollars, as follows:

- Upper Animas Stream and Wetland Restoration for Mill, Mineral, Placer and South Mineral creeks
- The Animas River Corridor Project, restoring damaged resources affected by legacy mining and expanding recreational access
- Durango Fish Hatchery Packed Columns Water Treatment Project to rebuild the water treatment system at the Colorado Parks and Wildlife state fish hatchery

- Animas River Bank Stabilization Project to restore up to 3.7 miles of bank restoration and stabilization on the north end of the City of Durango.
- San Juan County & Town of Silverton Animas River Preservation and Access Project to preserve riparian areas and provide access to the river corridors for recreational opportunities.

Taken together, these projects address habitat restoration, ecosystem preservation and community recreational in the Upper Animas River watershed, spanning two counties from the headwaters to the southernmost reaches of Southwest Colorado. The collective impact of these projects will serve to improve and restore critical resources affected by historic mining activities, culminating in the Gold King Mine Spill in 2015. We offer our full support for these projects and encourage an award of NRD Trust Fund resources for their completion.

Sincerely,

LA PLATA COUNTY
BOARD OF COUNTY COMMISSIONERS

Marsha Porter-Norton
Chair

Matt Salka
Vice Chair

Clyde Church
Commissioner

Mike Wight, Southwest Program Officer
mwight@goco.org, (720)-576-4062

May 13th, 2025

Mark Rudolph
BPMD NRD Project Manager
Colorado Department of Public Health and Environment Hazardous
Materials and Waste Management Division
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Dear Mr. Rudolph,

I am writing to express Great Outdoors Colorado's (GOCO) support for the Bonita Peak Mining District Natural Resource Damages Trust Fund stakeholder group's project proposals. Ongoing stakeholder meetings have resulted in a community-supported, watershed-wide list of projects intended to address recent and historic hazardous substance releases from the Bonita Peak Mining District. The proposed projects will restore the natural resources injured from the legacy of mining-related impacts in the upper Animas watershed.

GOCO was created by a voter approved constitutional amendment in 1992 to distribute a portion of state lottery proceeds to preserve and enhance the state's parks, trails, wildlife, rivers, and open spaces. Since our inception, GOCO has distributed over $1.4 billion in support of 5,800 projects across all of Colorado's 64 counties.

The five projects identified by the NRD stakeholder group in this proposal represent a collaboratively developed suite of timely efforts which together will positively impact public access and recreation, improve wildlife habitat, restore degraded stream banks, and improve water quality throughout the Animas River basin in Colorado. The selected projects showcase clear alignment with GOCO's values of Resource Conservation, Outdoor Stewardship, Community Vitality, and Equitable Access. The benefits to residents, visitors, wildlife, and natural resources include improved river function, increased public access for outdoor recreation, positive contributions to the tourism economy and improved resiliency of wildlife and habitat in Southwest Colorado.

The NRD stakeholder group is a diverse, community-led collaborative displaying leadership in project planning and implementation with a strong track record of success in watershed management and recreation development. GOCO applauds this effort and respectfully requests approval of this NRD proposal. Please do not hesitate to reach out with any questions.

Sincerely, Mike Wight

May 14, 2025

Mark Rudolph
Bonita Peak Mining District NRD Project Manager
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South
mark.rudolph@state.co.us

Re: Bonita Peak Mining District NRD Solicitation for Project Proposals
Letter of Support

Dear Mark Rudolph,

On behalf of the Animas Watershed Partnership (AWP), I am expressing my strong support for the projects submitted by the local workgroup for funding to support mining reclamation projects in the Animas River Basin in Colorado through the Bonita Peak Mining District Natural Resources Damage Funds (NRD).

AWP's mission is *to protect and improve the quality of water resources to benefit the Animas River, now and into the future*. As a participation of the NRD workgroup, AWP is deeply impressed by the NRD workgroup participants' commitment to environmental stewardship and their dedication to support these mining mitigation and reclamation projects.

While we are supportive of all proposed projects, the Animas Valley River Bank Stabilization project is of critical importance to AWP and furthering our mission. This project will reduce the loss of conservation easement-protected agricultural land and wildlife habitat to erosion, improve the ecological health of the Animas River and its water quality, and make this stretch of river more resilient to flood events. These impacts will benefit the general public, not just the landowners whose properties are selected for stabilization work under this proposal. By establishing gentler bank slopes, installing wetland bench buffer zones, installing log and rock structures to direct forces towards the channel center, and restoring impacted areas with native plantings, the proposed project presents a comprehensive solution to the high sediment loads and increased rates of erosion resulting from upstream mining activities.

San Juan Resource Conservation and Development Council is the fiscal agent for AWP and is applying on behalf of AWP for this project. The project's improvements to an injured resource, as outlined in their grant application, demonstrate a thorough understanding of the challenges involved and a commitment to implementing effective and sustainable solutions.

These settlement funds provide a significant opportunity for our watershed, as they will support restoration projects for water resources impacted by mining activities. We are excited by the opportunities these settlement funds are providing southwestern Colorado. Thank you for considering this worthy proposal.

Sincerely,

Carrie Padgett
Animas Watershed Partnership Chair

SAN JUAN COUNTY
COLORADO

1557 GREENE STREET
P.O. BOX 466
SILVERTON, COLORADO 81433
PHONE/FAX 970-387-5766 admin@sanjuancolorado.us

San Juan County Board of Commissioners
P.O. Box 466
Silverton, CO 81433

May 14, 2025

To the Trustees of the Natural Resources Damages Fund:

On behalf of the San Juan County Board of Commissioners, we write to express our strong support for the Town of Silverton's Animas River Corridor Project, a critical and community-driven initiative that directly addresses restoration of long-damaged natural resources and improves public access to one of the region's most significant waterways.

This project represents the culmination of decades of work by the Animas River Stakeholders Group and the Community Advisory Group (CAG) and is rooted in a broad community and stakeholder collaboration. The Animas River Corridor Project directly restores impaired natural resources by improving water quality, stabilizing riparian areas, and repairing degraded riverbanks. It also enhances community access and recreational opportunities through the construction of thoughtfully designed trails, bridges, and interpretive features that promote sustainable and respectful use of the river corridor.

The Animas River flows through the heart of Silverton and has long been impacted by the legacy of mining. San Juan County and the Town of Silverton have been disproportionately affected by these historic activities, and we believe the Animas River Corridor Project is a highly appropriate and timely application of Natural Resources Damages (NRD) funding. The project will not only restore ecological health, but will also support our local economy by attracting visitors, improving recreational infrastructure, and contributing to the vibrancy and resilience of our community.

The San Juan County Commissioners also support the broader set of projects proposed by the NRD Regional Working Group, and we endorse the Animas River Corridor Project as a priority effort within that portfolio. We urge the Trustees to consider this project for NRD funding and recognize its potential to deliver lasting environmental, recreational, and economic benefits to our region.

Thank you for your consideration, and for your ongoing commitment to restoring the natural resources of southwest Colorado.

Sincerely,

Austin Lashley, Chairman
San Juan County Board of Commissioners