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**STATE OF COLORADO
DEPARTMENT OF LAW**

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Natural Resources and
Environment Section

June 10, 2019

M E M O R A N D U M

AGENDA

Colorado Natural Resources Trustees Meeting
June 24, 2019, 1:00 pm to 2:00 pm
Location: AGO room 1B&1C

Open Session

1. Approval of Minutes from April 23, 2019 Meeting – 5 minutes

Action Item:

- (1) Review and approve minutes from April 23, 2019 meeting

Document:

- (1) Draft Minutes from April 23, 2019 meeting

2. Natural Resource Damage Program Discussion (Staff) – 15 minutes

Action Item:

Decide whether to approve Trustee By-Laws

Document:

- (1) Memo from David Banas
- (2) Draft By-Laws

3. Idarado (Jason King, Ross Davis, Ed Perkins) – 15 minutes

Action Items:

- (1) Decide whether to approve Governor's Basin Project

(2) Decide whether to approve Turn River Restoration Project

Documents:

- (1) Memo from Jennifer Talbert
- (2) Governor's Basin Project Proposal
- (3) Memo from Jason King
- (4) Society Turn River Restoration Project Proposal
- (5) Draft Resolution re Governor's Basin Project Proposal
- (6) Draft Resolution re Society Turn River Restoration Project Proposal

4. Suncor (David Banas, Ed Perkins, Susan Newton) – 5 minutes

Action Items:

None

Documents:

- (1) Memo from David Banas

5. Discussion of Future Activities (All) – 10 minutes

Action Items:

None

Documents:

None

AGENDA #1

Colorado Natural Resource Damages Trustees
Meeting Minutes
April 23, 2019
(Approved: _____)

In Attendance:

TRUSTEES

Phil Weiser, Attorney General

Dan Gibbs, Executive Director, Colorado Department of Natural Resources (DNR)

Jill Hunsaker Ryan, Executive Director, Colorado Department of Public Health and Environment (CDPHE)

STAFF

Amy Beatie, Deputy Attorney General, Natural Resources and Environment Section (NRE)

David Kreutzer, First Assistant Attorney General, NRE

David Banas, Senior Assistant Attorney General, NRE

Jennifer Talbert, Senior Assistant Attorney General, NRE

Tracie White, Remediation Program Director, CDPHE

Susan Newton, Natural Resource Damages Specialist, CDPHE

Laura Kelly, Paralegal, NRE

Open Session

Attorney General Weiser called the meeting to order at approximately 9:05 a.m. on April 23, 2019, at CDPHE. The meeting's purpose was to provide an introduction to the Natural Resource Damages (NRDs) program for the new Trustees, to brief them on the current status of issues relating to NRDs projects, and to request direction and/or approval for various actions.

Attorney General Weiser expressed his appreciation for Trustee staff and their dedication to protecting our land and water. He also welcomed his co-Trustees, Director Gibbs and Director Ryan, and discussed their broad mission as NRD Trustees.

Minutes

David Kreutzer informed the Trustees that staff had reviewed the minutes from the October 9, 2018 meeting and recommended approval. The minutes were amended to correct a name spelling and to clarify the Sand Creek Regional Greenway Partnership Project update. Director Gibbs moved that the minutes be approved as amended. Director Ryan seconded the motion, and the motion was unanimously approved.

Introduction and Overview of the NRD Program

David Banas provided an introduction to the NRD program, noting that the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") and the Oil Pollution Act ("OPA") allow states to seek damages to compensate for injuries to a state's natural resources resulting from releases of hazardous substances or spills of petroleum products. In

Colorado, the Attorney General, the Executive Director of CDPHE, and the Executive Director of DNR (or their delegates) are designated as Trustees. Mr. Banas explained how NRD cases are developed, and that they vary greatly in size and scope. He noted that the Colorado Open Meetings Act applies to meetings between the Trustees and public meetings, which are scheduled as needed. Director Ryan inquired about the Gold King mine spill. Mr. Banas explained that the Gold King site is in the remediation phase as part of the Bonita Peak Mining District Superfund site and is therefore not yet ripe for any possible NRD claim.

Earlier in the meeting, Attorney General Weiser inquired about updates on approved projects. David Kreutzer stated that more specific updates on various sites and projects will be provided at the next Trustee meeting when a larger block of time is reserved. David Banas added that an agenda typically includes any items deemed important or actions that require decision-making by the Trustees. Jennifer Talbert added that sometimes project proponents are asked to come back to a Trustee meeting after a project is completed to illustrate how the NRD funding was used.

Attorney General Weiser inquired specifically about the status of the two Suncor projects that were approved at the October 2018 Trustee meeting. David Banas explained that those projects were subject to EPA's National Environmental Policy Act (NEPA) process, and were consequently delayed by the December 2018 government shutdown. David Kreutzer added that the area impacted by the Suncor spill overlapped with the Rocky Mountain Arsenal (RMA) area of concern and because the stakeholders are the same, it made sense to allocate the significantly larger RMA fund first and not confuse the process by concurrently awarding the smaller Suncor fund.

Attorney General Weiser commented on the interesting nature of CERCLA and how it allows states to cooperatively enforce robust environmental laws. David Kreutzer provided a history of CERCLA explaining that it was the result of two Senate bills relating to hazardous substances in the late 1970s: 1) compensation to States for resources that have been injured (NRDs); and 2) cleanup of old abandoned sites, emergencies, or looming risks (Superfund). Under Superfund, EPA exercises its police power to enforce the statute, whereas the NRD program acts more like tort cases, providing compensation for injuries. Mr. Kreutzer added that it is important to remember that NRD Trustees do not have police power, but they have authority to require responsible parties to pay for injuries to the State's natural resources. (Attorney General Weiser reported that the Natural Resources Section of the Attorney General's Office recently hosted an official delegation from Peru to assist in their efforts to create an environmental protection system governed by the rule of law. In contrast to our established federal and state environmental statutes and enforcement mechanisms, Peru is faced with illegal mining, deforestation, and other barriers to protecting their air, land, and water.)

As a final introductory note, David Banas explained that Assistant Attorneys General typically serve as counsel to State agencies, but when acting as staff to the NRD Trustees, they are co-consultants with Agency staff. Deputy Attorney General Amy Beatie provides legal counsel to the Trustees.

Fountain Creek Spill

Jennifer Talbert reported that, as a result of an August 2016 traffic accident, a tanker owned by Manweiler Trucking overturned spilling approximately 6,000 gallons of unleaded fuel and 2,000 gallons of diesel fuel onto the roadway and into the nearby storm sewer, which outfalls to Fountain Creek. She explained that Trustee staff worked with a consultant to identify injuries and calculate a potential claim for damages in order to complete a preliminary assessment. Trustee staff then worked with Manweiler Trucking to reach a settlement, and with the Colorado Parks and Wildlife Division of DNR (“CPW”) to identify specific restoration projects. Ms. Talbert informed the Trustees that CPW proposed the Chilcott Diversion Fish Passage Structure which was approved, in concept, at the October 9, 2018 Trustee meeting. Director Gibbs asked how staff arrived at the agreed settlement amount of \$345,000. Ms. Talbert explained the difficulties in analyzing a cost estimate and why Trustee staff believed it was appropriate to obtain an early settlement so that restoration could begin. Some discussion ensued about sources of matching funds. Trustee staff recommended that the Trustees approve the Manweiler Trucking settlement agreement and that the settlement funds be allocated to help fund the fish passage project developed by CPW.

Director Gibbs moved to approve the Manweiler Trucking settlement agreement. Director Ryan seconded the motion, and the motion was unanimously approved.

Director Ryan moved to approve the resolution to allocate funding from the Manweiler Trucking settlement to the Chilcott Diversion Fish Passage Structure restoration project. Director Gibbs seconded the motion, and the motion was unanimously approved.

Closing Remarks

Deputy Attorney General Beatie discussed the process for scheduling future Trustee meetings and noted that the next meeting will be held on June 24, 2019, 2:00-4:00 p.m. at the Attorney General’s office. Ms. Beatie also informed the Trustees of an opportunity to visit a completed project at a ribbon-cutting event hosted by Adams County and the City of Thornton. The 88th Avenue Open Space project was financed in part with NRDs funding and the event will be held at the new Pelican Ponds Park on June 6, 2019, at 3:00 p.m.

Attorney General Weiser made closing remarks and at approximately 9:45 a.m., moved to adjourn the meeting. Director Gibbs seconded the motion, and the motion was unanimously approved.

AGENDA #2

PHIL WEISER
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Natural Resources and
Environment Section

June 10, 2019

M E M O R A N D U M

TO: Colorado Natural Resources Trustees
FROM: David Banas
Senior Assistant Attorney General
RE: Natural Resource Damages Program

BACKGROUND

This memo discusses three issues concerning the Colorado Natural Resource Damages (NRD) program: (1) Trustee procedures and by-laws, (2) small spills and screening for NRD claims, and (3) unallocated funds in NRD accounts. Attached to this memo are proposed By-Laws for the Trustees' consideration.

UPDATE

(1) Trustee Procedures and By-Laws

The attached draft By-Laws formalize the process for conduct of Trustee business.

(2) Small Spill and Claim Screening Update

Since 2016, staff have been developing procedures for responding to releases of hazardous substances or petroleum products that could potentially lead to new NRD claims. We are currently working to contact contractors throughout the State – at least one per major watershed – in an attempt to establish long-term standing contracts with firms that can respond immediately to release or spills. We have identified nearly fifty potential contractors and this summer we will contact them to gauge interest. We will report on our progress at the next Trustee meeting.

(3) Unallocated Funds

In 2018, staff reviewed the existing NRD funds managed by CDPHE and DNR to determine how much money remains unallocated and potentially available for new projects. While we discovered that several million dollars remains unallocated, only approximately \$10,000 of that money is free for use anywhere in the State and not limited by a consent decree.

Staff proposes that we develop a plan for spending the unallocated money. This may involve contacting prior project proponents to discuss spending small amounts remaining in certain funds, initiating new RFPs where we think projects may potentially exist for money dedicated to certain regions, or requesting courts amend existing consent decrees to allow money to be used State-wide that currently is earmarked for specific uses.

RECOMMENDATION FOR ACTIONS

Staff recommends and requests the Trustees adopt the attached draft By-Laws.

Staff also requests the Trustees provide guidance concerning small spill screening and our proposal to develop a plan for spending unallocated money.

ATTACHMENTS

1. Draft By-Laws

Colorado Natural Resources Trustees

BY-LAWS OF THE COLORADO NATURAL RESOURCES TRUSTEES

By-Laws adopted _____

These By-Laws replace any existing by-laws adopted by the Trustees.

BY-LAWS OF THE COLORADO NATURAL RESOURCES TRUSTEES

PREAMBLE

For the purpose of providing for the orderly conduct and carrying on of the business, objects and affairs of the Colorado Natural Resources Trustees, the Colorado Natural Resources Trustees hereby make, publish and declare these By-Laws.

ARTICLE I – THE COLORADO NATURAL RESOURCES TRUSTEES

Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 *et seq.* (CERCLA) and the Oil Pollution Act of 1990, 33 U.S.C. § 2701 *et seq.* (OPA), in 1990 Governor Roy Romer, and in 2006, Governor Bill Owens, designated as Colorado’s Natural Resources Trustees the following individuals:

- The Executive Director of the Colorado Department of Health¹
- The Executive Director of the Colorado Department of Natural Resources
- The Colorado Attorney General

These individuals, or their delegates, serve as Colorado’s Natural Resources Trustees.

The Natural Resources Trustees act on behalf of the public as Trustees for the natural resources within the State of Colorado or for resources belonging to, controlled by, or appertaining to the State of Colorado. This includes:

- Providing direction to Trustee staff related to the pursuit of Natural Resource Damages (“NRD”) claims;
- Providing direction to Trustee staff related to restoration of injured natural resources;
- Approving the initiation, litigation and settlement of NRD claims;
- Approving funding of restoration projects.

ARTICLE II – DEFINITIONS

When used herein, the following words, terms and phrases shall have the following meaning:

1. The term “Trustees” shall mean the Colorado Natural Resources Trustees, as described in Article I of these By-Laws.

¹ In 1994, The Colorado Department of Health became the Colorado Department of Public Health and Environment

2. The term “Open Meetings Law” shall mean § 24-6-401 *et seq.*, C.R.S., as it may be amended from time to time.
3. The term “Open Records Act” shall mean § 24-72-201 *et seq.*, C.R.S., as it may be amended from time to time.
4. Other terms shall have the same meanings as provided for in CERCLA and OPA.

ARTICLE III – MEETINGS OF THE COLORADO NATURAL RESOURCES TRUSTEES

A. Frequency of Trustee meetings.

The Trustees shall meet quarterly. Additional meetings may be scheduled as required.

B. Rules Governing Trustee Meetings.

1. Open Meetings.

The Trustees are a “state public body,” subject to the requirements of the Colorado Open Meetings Law.

2. Notice of Meetings.

The Trustees shall provide the public notice of upcoming Trustee meetings via the Natural Resources Trustees’ website.

3. Quorum.

Two Trustees or their delegates constitute a quorum.

4. Meeting Chair.

The Attorney General or his or her delegate shall chair Trustee meetings.

5. Trustee Decisions.

The Trustees shall make formal decisions by motion, second and vote. A simple majority is required to carry a motion.

6. Public Session.

The Trustees shall make any final decisions in open public session.

7. Trustee Resolutions.

The Trustees shall make decisions concerning expenditure of funds in formal Trustee Resolutions.

8. Executive Session.

The Trustees shall deliberate in executive session only pursuant to applicable laws. The Trustees shall make no final decisions in executive session.

ARTICLE IV – STAFF OF THE COLORADO NATURAL RESOURCES TRUSTEES

A. Staff.

Staff of the Colorado Department of Law, Colorado Department of Natural Resources and Colorado Department of Public Health and Environment serve as staff to the Trustees.

B. Trustee Representatives.

Each Trustee agency shall name a Trustee Representative to act as liaison between staff and the Trustees.

C. Legal Counsel.

The Deputy Attorney General of the Natural Resources and Environment Section of the Colorado Department of Law serves as legal counsel to the Trustees.

AGENDA #3

PHIL WEISER
Attorney General

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Natural Resources and
Environment Section

June 06, 2019

M E M O R A N D U M

TO: Colorado Natural Resources Trustees

FROM: Jennifer Talbert
Senior Assistant Attorney General

RE: Idarado Mine NRD/Governor's Basin Proposal

BACKGROUND

As part of the 1992 Idarado Mine Consent Decree, the state received \$1M for natural resource damages, which continues to accrue interest. Currently, the Idarado NRD Fund contains approximately \$195,000 available for additional restoration projects.

UPDATE

The Uncompahgre Watershed Partnership (UWP) submitted the Governor's Basin Restoration Project proposal dated June 6, 2019 (Project) to use approximately \$76,200 of NRD funds to restore alpine, riparian, and aquatic habitat, and improve water quality in Governor Creek, Sneffels Creek, and Canyon Creek by decreasing run-off of acidic metals-laden water and isolating mine waste and tailings from the environment. The total budget of \$197,950 will cover the costs to cap and cover waste rock and tailings, construct drainage channels to capture and divert flow away from the mine waste and tailings, and to revegetate the restoration area. This Project received overwhelming community support as well as support from the County Commissioners of Ouray County and Trout Unlimited.

Eighty-five percent of the project area is on private lands owned by Ouray Silver Mines, Inc. (OSMI) and Caldera Resources, with the remaining properties owned by the United States Forest Service. The project area does not include any active mines, is in a remote location accessible only by backcountry equipment, and

difficult terrain. In the past, these type of projects included a conservation easement to prevent future uses of the property that could interfere with the long-term viability of the restoration project. Unfortunately, conservation easement organizations are unwilling to hold conservation easements on mined lands due to the liability that could be associated with their land management activities. As an alternative, the property owners are willing to provide for public access and place environmental use restrictions on the property to prohibit uses that might adversely affect the Project.

RECOMMENDATION

The Trustee staff recommend approval of the Project with the conditions that:

1. Prior to providing any NRD funding towards the Project, DRMS will have closed permit P2015-003; and
2. Prior to providing any NRD funding towards the Project, OSMI and Caldera place environmental use restrictions, as approved by CDPHE, on all Project area properties, with CDPHE as a third party beneficiary, that includes use restrictions preventing future mining on the property and any other land disturbances that could interfere with the restoration project; and
3. OSMI and Caldera will provide for public access use of all Project area properties; and
4. UWP receive approval from the United States Forest Service to perform restoration activities on lands owned by USFS.

ACTION ITEMS

We request the Trustees:

Approve the UWP Governor's Basin Restoration Project for \$76,200 to restore alpine, riparian, and aquatic habitat, and improve water quality in Governor Creek, Sneffels Creek, and Canyon Creek with the above conditions.

ATTACHMENTS

Governor's Basin Restoration Project Proposal
Resolution for the Uncompahgre Watershed Partnership Governor's Basin Restoration Project.

NATURAL RESOURCE DAMAGES FUND PROJECT PROPOSAL: GOVERNOR BASIN RESTORATION PROJECT IN OURAY COUNTY, COLORADO



PREPARED BY THE UNCOMPAHGRE WATERSHED PARTNERSHIP

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Cover photo: View from the Terrible #3 Adit drainage. The foreground and middle ground of the photo characterize resource damage common throughout the Terrible mine dumps. The background of the photo characterizes alpine tundra characteristic of the San Juan Mountains. Photo credit: Jeff Litteral, Colorado Division of Reclamation, Mining and Safety.

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NATURAL RESOURCE DAMAGE FUND PROJECT PROPOSAL SIGNATURE PAGE

By signing below, I attest that all project proposal materials are true and accurate to the best of my knowledge on June 6, 2019.



Ashley Bembenek
Technical Coordinator
Uncompahgre Watershed Partnership

1.0 INTRODUCTION

The Uncompahgre Watershed Partnership (UWP) is pleased to submit this Natural Resource Damages (NRD) Funds proposal for the Governor Basin Restoration Project. Since 2015, UWP, the Colorado Division of Reclamation, Mining, and Safety (DRMS), Ouray Silver Mines, Inc. (OSMI), Trout Unlimited (TU), and the United States Forest Service (USFS) have evaluated water quality and environmental conditions, conceptual project designs, and potential funding sources to plan a restoration project in Governor Basin.

Governor Basin is impacted by waste rock and tailings from the Terrible and Virginus mines which leach metals that impair water quality, downgradient aquatic and terrestrial habitat, and watershed health. The goal of this project is to restore alpine, riparian, and aquatic habitat, and improve water quality in Governor Creek, Sneffels Creek, and Canyon Creek.

During the restoration project, waste rock and tailings will be capped and covered. Soil amendments and a custom high alpine seed mix will be used to revegetate the restoration area. Drainage channels will be constructed to capture and divert flow away from mine waste and tailings. The Governor Basin Restoration Project will restore natural resources equivalent to those damaged at the Idarado site.



Photo 1. View from the Terrible #3 Adit drainage channel. The foreground of the photo characterizes resource damage common throughout the project area. Left of center, drainage from the Terrible Mine flows into Governor Creek. The background of the photo includes alpine tundra characteristic of the San Juan Mountains. Photo credit: Jeff Litteral, DRMS.

The project area is approximately 85% private land and 15% public land owned by the USFS. The restoration plan includes environmental covenants for privately owned lands to permanently protect restored areas and land title modifications to allow for public access.

UWP is requesting \$76,200.00 from the NRD Fund to implement the Governor Basin Restoration Project. The total project budget is \$197,950.00 and includes \$121,750.00 in cash and in-kind contributions from UWP, DRMS, the Colorado Water Conservation Board (CWCB), and OSMI.

2.0 SITE DESCRIPTION

Upper Governor Basin is in the headwaters of the Canyon Creek watershed approximately seven miles west-southwest of Ouray, in southwest Colorado (Figure 1). Upper Governor Basin is an alpine basin that ranges in elevation from 11,880 feet near the basin's outlet to 13,267 feet near the summit of Greenback mountain. Portions of the upper basin support alpine tundra with a wide variety of wildflowers, grasses, sedges, cushion plants, and lichens during the short, alpine growing season. Other areas in the basin lack vegetation due to limited soil development, talus and rock outcrops or the presence of mine waste from historic abandoned mines.

Several seeps, springs, and small perennial streams converge near the lower portion of the upper basin to form Governor Creek, a local name for the unnamed tributary that drains Governor Basin. Governor Creek flows through the lower basin and into Sneffels Creek, which flows east-southeast to Canyon Creek. Canyon Creek flows into the Uncompahgre River in Ouray.

Mining in Governor Basin began sometime between 1883 and 1885. The Virginus Mine is located on the upper slopes of Governor Basin. The Terrible Mine is located downslope of the Virginus Mine. Ore from both mines was predominantly hand sorted. High grade ore was shipped directly to smelters throughout Colorado. Low grade ore and overburden was left in mine waste dumps. Only a small portion of the ore was milled in Governor Basin; the tailings are near Governor Basin Road (Ouray County Road 26A).

Historic mining operations generated all the mine waste in upper Governor Basin; mining occurred prior to modern laws and a potentially responsible party has not been identified. Environmental Protection Agency (EPA) Region 8 staff have certified that there are no pending or past Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) actions in Governor Basin (Appendix A).

The Virginus Mine was developed on the Virginus vein in the San Juan Tuff. The Virginus workings are extensive and extend 2,000 feet down to the Revenue Tunnel. The Revenue Tunnel portal is down valley from Governor Basin near the historic townsite of Sneffels. The San Juan Tuff is alkaline with modest buffering capacity and limited metal solubility. The Virginus vein material also has a neutral pH and limited metal solubility. The Virginus Mine waste rock dump is approximately 3.2 acres (Figure 2, blue polygon). The Virginus adit is open, and a steel grate prevents access to the mine workings. Operations at the Virginus Mine ceased in 1895. All subsequent mining of the Virginus vein was conducted from the Revenue Tunnel and accessed from the portal near Sneffels.

The Terrible Mine was developed on the Terrible vein. The Terrible vein formed in the San Juan Tuff. The Terrible Mine has three adits; the adits are numbered from upgradient to downgradient (Figure 2). Waste rock associated with the Terrible Vein tends to be fine-grained and very acidic resulting in high metal solubility. Waste rock from the Terrible Mine accumulated downgradient of each adit (Figure 2). The Terrible #1 and #2 adits are collapsed. The waste rock dump below the Terrible #1 adit is approximately 1.0 acre. The Terrible #2 waste rock dump is approximately 1.7 acres. The Terrible #3 adit is a draining adit; flow from the adit varies and there is limited information about drainage patterns. Flow from the Terrible #3 adit traverses mine waste and tailings. Water samples suggest that metal concentrations in the drainage from the Terrible #3 adit increase substantially as the water flows through the mine waste (Figure 2, red polygon). Future underground development by OSMI could potentially intercept some or all of the flow that exits the mine workings via the adit and redirect it into

the Revenue tunnel where it will be treated by OSMI's passive treatment system before discharge into Sneffles Creek under CPDES permit C00000003.

OSMI estimates that only 20-25% of the ore from the Virginus and Terrible mines was processed before both mines ceased operations in 1895. Over time, erosion has increased the footprint of the tailings area. Erosion and transport issues are exacerbated where Governor Basin road traverses the mine site. Tailings and mine waste limit plant growth throughout this area (Figure 2, red and orange polygons).

Sediment leachate samples indicate that infiltration through the Terrible waste rock and tailings mobilizes metals. Water quality samples collected on site, in Governor Creek, and other downstream locations further confirm that mine waste from Governor Basin, particularly from the Terrible Mine, impairs water quality and aquatic life and degrades the condition of riparian and alpine habitat.

The Humboldt Mine is located in a small upper basin southwest of the Virginus and Terrible mines. Drainage from the Humboldt Mine flows into the San Sophia drainage, just west of the project area. The San Sophia drainage flows into Governor Creek (Figure 2).

Figure 1. Map of the Uncompahgre River watershed in southwest Colorado (UWP, 2013). Governor Basin is located near the star.

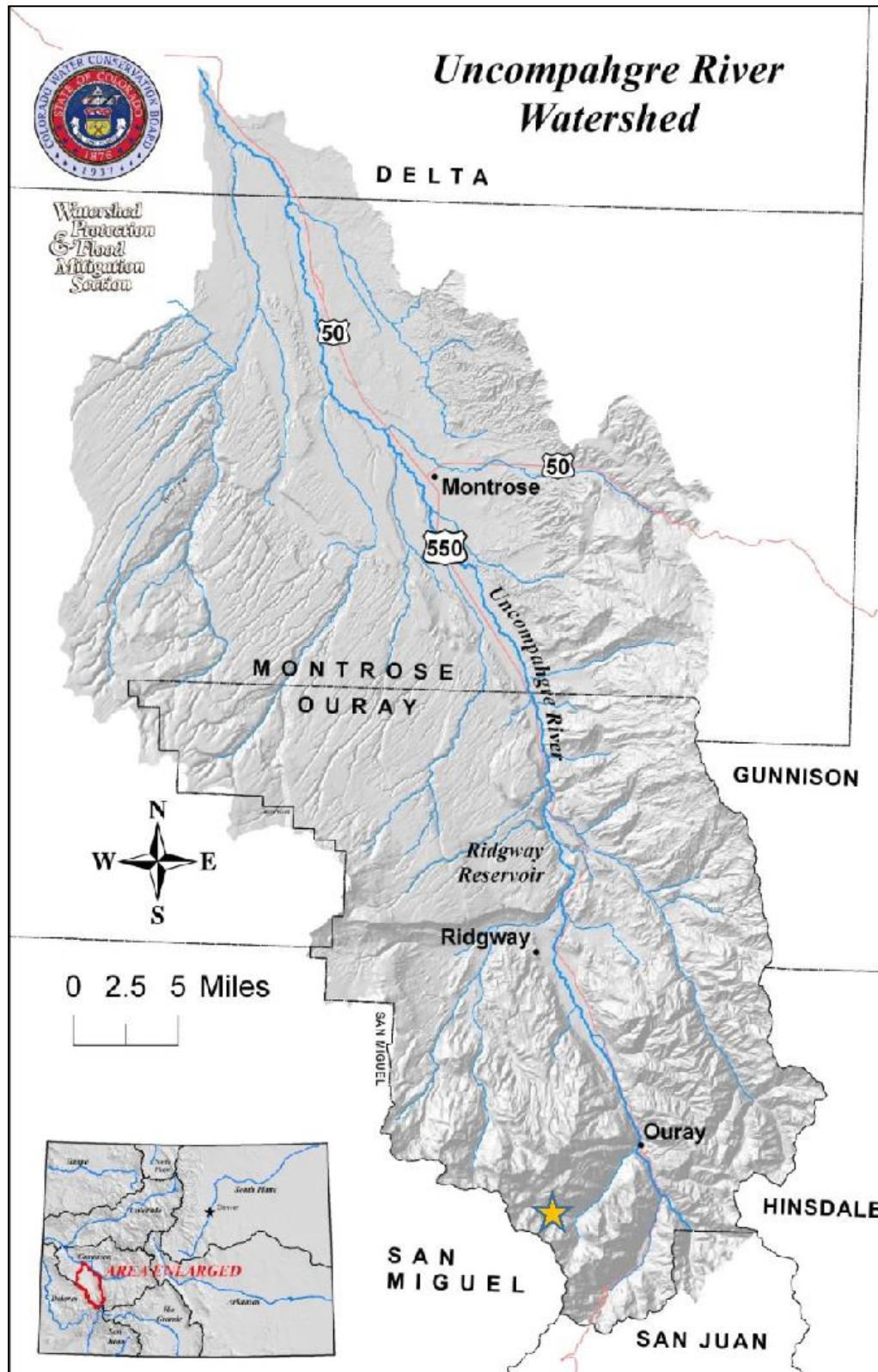
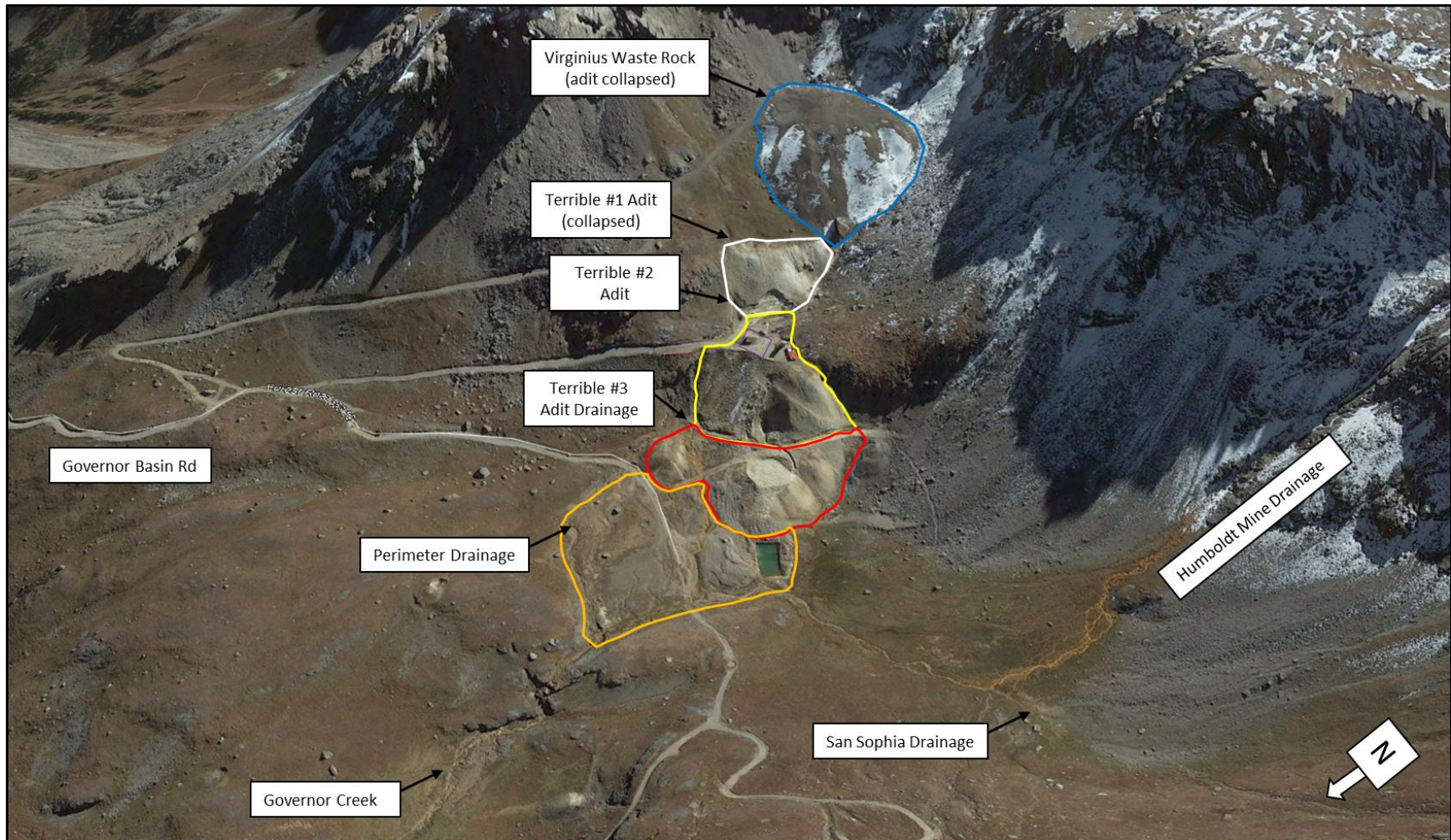


Figure 2. Governor Basin, near Governor Basin Road in Ouray County, Colorado. The Virginius mine dump (blue polygon), The Terrible #1, #2, and #3 mine dumps (white, yellow, red polygons, respectively), and tailings derived from the Terrible and Virginius veins (orange polygon).



2.1 LAND OWNERSHIP

The proposed project area in upper Governor Basin is approximately 85% private land owned by OSMI and Caldera Resources. The USFS owns the remaining 15% of the surface. Figure 3 presents patented and unpatented mine claims in Governor Basin. Table 1 presents the landownership of the Virginus and Terrible mine features. The information provided in Table 1 is based on a survey completed by OSMI in the fall of 2017. USFS will evaluate the landownership survey during the summer of 2019.

Table 1. Historic mine feature, claim number, claim name, and owner.

Feature	Claim Number	Claim Name	Land Owner
Virginus Waste Rock Dump	523	Monongahela	OSMI
	NA	Unpatented	OSMI
	13424B	Hill Top MS	OSMI
Terrible #1 Waste Rock Dump	523	Monongahela	OSMI
	NA	Unpatented	USFS
	1592	Terrible	OSMI
Terrible #2 Waste Rock Dump	1592 & 523	Terrible & Monongahela	OSMI
	1592	Terrible	OSMI
	523	Monongahela	OSMI
	NA	Unpatented	USFS
Terrible #3 Waste Rock Dump	1592 & 523	Terrible & Monongahela	OSMI
	1592	Terrible	OSMI
	523	Monongahela	OSMI
	7096	Terrible No 2	OSMI
	NA	Unpatented	USFS
	459	Blue Grass	Caldera
Terrible and Virginus Tailings	459	Blue Grass	Caldera
	NA	Unpatented	USFS
	18526	Waverly	USFS
	7096	Terrible No 2	OSMI
	1592 & 523	Terrible & Monongahela	OSMI
	1592	Terrible	OSMI

2.2 PUBLIC LAND USE

Governor Basin and the surrounding areas attract recreational visitors for its mining history, wildflowers, and incredible scenery. Governor Basin is accessible by a 4x4 road (Ouray County Road 26A), during the summer months after the snow has melted. During the summer, the road is a popular destination for both private and commercial recreational off-road vehicles. Nearly all public use occurs on Governor Basin Road, as visitors pass through the basin enroute to other destinations.

2.3 PRIVATE LAND USE

Active mining operations occur underground and no additional surface disturbance will occur in upper Governor Basin. OSMI has two active permits in Governor Basin, P2015-003 and M2012-032, both on privately owned land.

P2015-003 is a prospecting permit that allowed for four drill holes with a total footprint of 0.2 acres. One of the four drill holes is located in Governor Basin, on the Terrible #3 mine waste dump. Drilling was

completed in 2015 and all drill holes have been properly abandoned. The reclamation plan for P2015-003 includes regrading with native materials. Reclamation of the drill pads will be completed prior to construction of the restoration project and before the completion date, March 2020, specified in the permit. P2015-003 will be inspected and closed by DRMS prior to the start of the Governor Basin Restoration Project. **Both OSMI and DRMS have provided letters documenting their commitments to closing P2015-003 prior to the Governor Basin Restoration Project (Appendix A).** No additional exploration drilling is planned in Governor Basin.

M2012-032 permits the vent raise and emergency escapeway for the Revenue Virginius Mine. All other mining activities associated with the Revenue Virginius Mine occur outside of Governor Basin. The permitted area for the vent raise and emergency escapeway is a 100 by 100-foot square (Figure 3, red polygon). The reclamation plan includes covering the vent raise with a steel plate, regrading to match local topography with a minimum of three feet of local subsoil and one foot of topsoil. Restoration of the vent raise and emergency escapeway will not disturb areas restored as part of the Governor Basin Restoration Project. Reclamation for permit M2012-032 will not occur until after mining operations are complete. **All restoration activities associated with the NRD funds will occur outside of the permitted area.** Section 4.0 details the construction plan and identifies the techniques to avoid the permitted area.

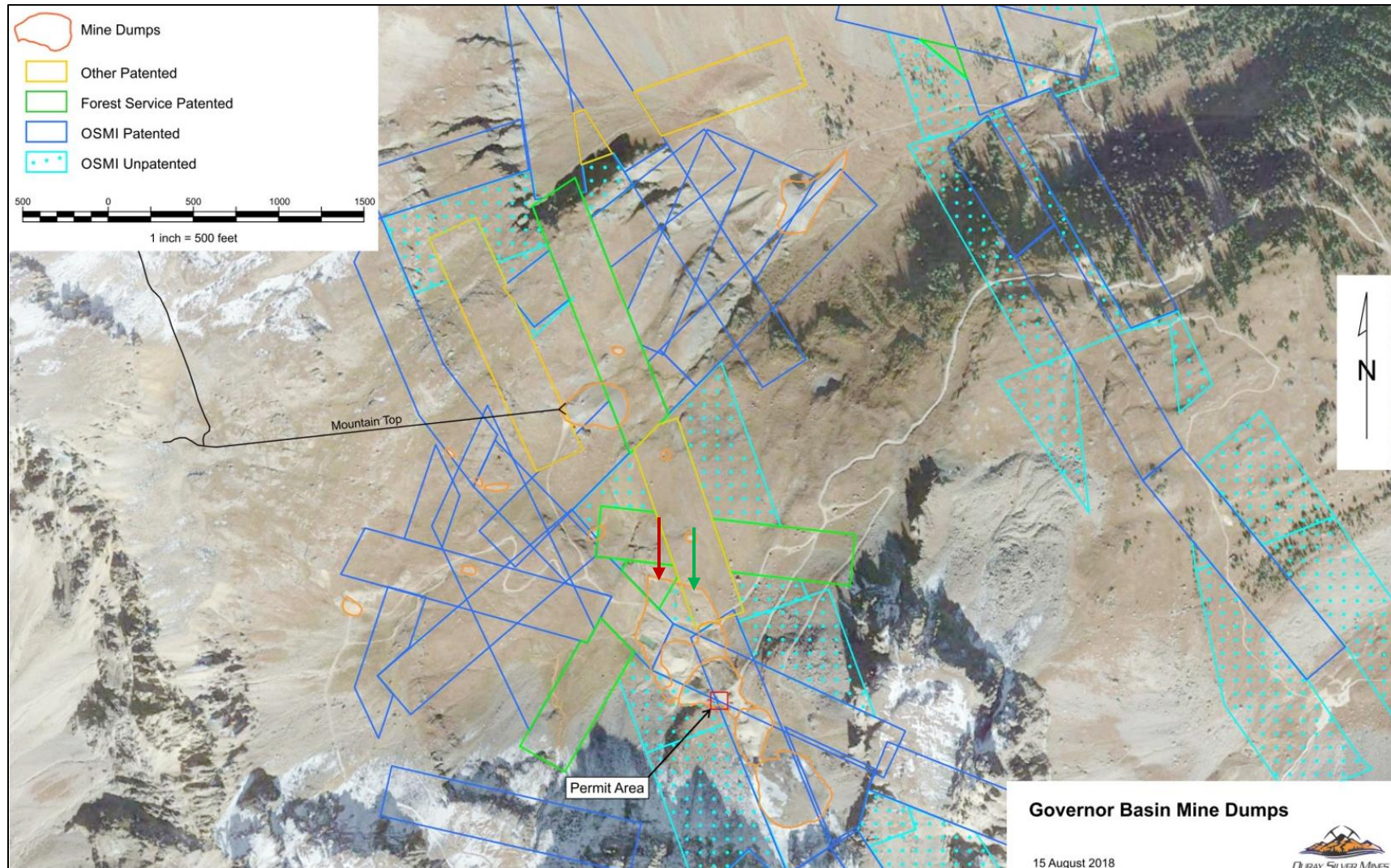
A conservation easement for the proposed restoration area was discussed at length by all project partners. Unfortunately, it was not possible to identify a willing land trust due to potential liability issues associated with the site. **OSMI will apply an environmental covenant to the title of their property to assure that the restoration area is permanently protected from any future surface disturbance and a land title modification to allow public access.**

Project partners are discussing environmental covenants with Caldera Resources (Figure 3: green arrow). Project partners are working with USFS staff to formally approve work for the portion of the restoration area on USFS land (Photo 2: red polygon and Figure 3: red arrow). If necessary, the portion of the proposed restoration area owned by Caldera or USFS could be omitted from the final restoration area.



Photo 2. View of tailings near Governor Basin Road. The tailings limit plant growth in the area. The red polygon shows the *approximate* area of the USFS claim.

Figure 3. Mine claim ownership and active permit area in Governor Basin. The red arrow points to the USFS claim within the restoration area. The green arrow points to the Caldera claim. Map courtesy of OSMI.



2.4 VIRGINIUS AND TERRIBLE WASTE ROCK SEDIMENT CHEMISTRY

The Abandoned Mine Lands Inventory, conducted by Colorado Geologic Society in 1994, estimated that the total volume of mine waste in Governor Basin is approximately 38,000 cubic yards. Further, the mine waste dumps originate from different veins and have different chemistries. The Virginius vein produced alkaline waste with modest buffering capacity which limits metals solubility. The Terrible vein produced fine-grained highly acidic waste which releases substantial metals as the material weathers and erodes at the site.

On October 18, 2016, DRMS, in partnership with OSMI, collected composite sediment samples from seven locations in Governor Basin. Three locations, east, middle, and west, were sampled from the uppermost pile of waste rock associated with the Virginius Mine (Figure 2: blue polygon). The Terrible #2 waste rock pile was sampled downgradient of the vent raise (Figure 2: yellow polygon below vent raise outlined in purple). The Terrible #3 waste rock pile was sampled to the east of the Terrible #3 Adit drainage (Figure 2: red polygon). Waste Rock from the Terrible #1, (Figure 2: white polygon) was not sampled. A mixture of waste rock and tailings was sampled in an area upgradient and east of the sediment pond within the red polygon in Figure 2. The Virginius Tailings (a mixture of material from both the Virginius and Terrible veins) were sampled north of Governor Basin road (Figure 2: orange polygon). The sediment samples were submitted to a laboratory for extraction using synthetic precipitation leachate procedure (SPLP, EPA method 1312). Metal concentrations in the leachate were analyzed using mass spectrometry (EPA methods 200.7 and 200.8). The paragraphs below summarize sediment leachate concentrations which are a conservative estimate of the potential effect of the mine waste and tailings on the environment.

Mine waste associated with the Virginius vein, on the upper portion of the site, had relatively low metal concentrations that were substantially lower than metal concentrations in mine waste and tailings on the lower part of the site. The Virginius mine waste also had modest buffering capacity as measured by pH and total alkalinity.

Lead concentrations measured in the leachate from the Terrible #2 and #3 dumps and in the tailings ranged from 1,090 to 7,710 ug/L (Figure 2, yellow, red, and orange polygons). Lead concentrations in the leachate ranged from 90 to 642 times the acute aquatic life standard and were 22 to 154 times the water supply standard for lead¹. Zinc concentrations measured in the leachate from the Terrible #2 and #3 dumps and in the tailings ranged from 821 to 7,050 ug/L (Figure 2: yellow, red, and orange polygons). Zinc concentrations in the leachate ranged from 13 times to over 110 times the acute aquatic life standard. The mine waste and contaminated surface runoff pose a risk to both human-health and ecological receptors.

¹ It is not a standard practice to evaluate leachate concentrations against surface water quality standards. But is illustrative in this case given limited water quality data from the Terrible Mine site.



Photo 3. View from above Terrible #1 waste rock. Terrible #1 waste rock pile is approximately 1.0 acre.

2.5 IMPACTS TO SURFACE WATER QUALITY

Governor Creek is on the 303(d) List for impairment of aquatic life standards for cadmium, copper, lead, and zinc and for impairment of the manganese water supply standard (Regulation 93, 2018). Sneffels Creek downstream of Governor Creek is on the 303(d) List for impairment of the aquatic life standards for cadmium, lead, and zinc, and for impairment of the manganese water supply standard². Canyon Creek does not attain the aquatic life use for zinc and is also on the 303(d) List.

In recent years, there have been three water quality sample events within Governor Basin. Each event targeted specific areas including the Humboldt, Virginius, and Terrible mines. In 2018, UWP evaluated the existing data in an assessment report which is provided as Appendix B. Water quality data collected during high flow in 2014 from the lower portion of the Terrible Mine site and in Governor Creek are summarized in the paragraphs below.

Dissolved and Total Arsenic

In the Terrible #3 Adit (Figure 2), dissolved and total arsenic concentrations were 5.8 and 180 ug/L, respectively. In the drainage near the perimeter of the tailings area (Figure 2: orange polygon), dissolved and total arsenic concentrations were 0.4 and 15 ug/L, respectively. Drainage from the Terrible waste rock dumps and the tailings area increased metal concentrations in Governor Creek to 1.4 and 25 ug/L for dissolved and total arsenic, respectively. Total arsenic concentrations exceeded the water plus fish and water supply standards in all samples. During high flow, average total arsenic concentrations downstream of the mine sites were approximately 11 times higher than the San Sophia reference stream.

² The lower portion of Sneffels Creek on Segment 9 (from the Revenue Virginius Mine to confluence with Canyon Creek) is not classified as a water supply and is therefore not listed for manganese.

Dissolved and Total Cadmium

In the drainage that flows through waste rock downgradient of the Terrible #3 adit (Figure 2: red polygon), both dissolved and total cadmium concentrations were 27 ug/L. Cadmium concentrations exceeded the chronic and acute aquatic life standards, and the water supply standard. In the drainage near the perimeter of the tailings area (Figure 2: orange polygon), dissolved and total cadmium concentrations were 2 and 2.1 ug/L, respectively. Dissolved cadmium concentrations exceeded the chronic and acute aquatic life standards. The Terrible waste rock dumps and the tailings increased dissolved and total cadmium concentrations in Governor Creek by a factor of ten.

In the Terrible #3 waste rock drainage (Figure 2: red polygon) dissolved copper was 228 ug/L; over 71 times higher than the perimeter waste rock drainage. The dissolved copper concentration measured in the Terrible # 3 waste rock drainage was over 43 times the acute standard. Copper concentrations in Governor Creek (Figure 2) downstream of the Terrible waste rock dumps and tailings were approximately 8 to 12 times higher than copper concentrations in Governor Creek upgradient of the Terrible Mine site. Dissolved copper concentrations in Governor Creek below the Terrible Mine site were 6 to 21 times higher than the chronic standard and 4 to 15 times higher than the acute standard.

Dissolved and Total Lead

In the Terrible #3 waste rock drainage (Figure 2: red polygon) dissolved and total lead concentrations were 127 and 142 ug/L, respectively. Dissolved lead concentrations exceeded the chronic and acute aquatic life standards by a wide margin. The dissolved lead concentration in the Terrible #3 waste rock drainage was over 46 times higher than the perimeter waste rock drainage and 105 times higher than the Governor Creek upgradient of the mine site. The total lead concentration in the Terrible #3 waste rock drainage was nearly three times greater than the domestic water supply standard.

Dissolved and Total Zinc

In the Terrible #3 waste rock drainage (Figure 2: red polygon) the dissolved zinc concentration was 6,130 ug/L. The dissolved zinc concentration was over 13 times higher than the waste rock perimeter channel (Figure 2: orange polygon) and over 11 times higher than in the unnamed tributary upgradient of the site. The dissolved zinc concentration was nearly 100 times the acute standard for aquatic life. In Governor Creek (Figure 2) downstream of the Terrible waste rock dumps and the tailings area the dissolved zinc concentration was 1,170 ug/L or nine times higher than the concentration measured in the unnamed drainage upgradient of the site. The Terrible Mine site substantially increased dissolved zinc in Governor Creek.

2.6 IMPACTS TO AQUATIC LIFE

Macroinvertebrates are sensitive to pollution and are excellent indicators of long-term water quality and overall watershed health. In addition to the metals impairments discussed in the previous section, Sneffels Creek downstream of Governor Basin is also impaired for aquatic life use due to a lack of aquatic invertebrates and insects; Sneffels Creek near the confluence with Canyon Creek is on the monitoring and evaluation list for aquatic life use (Regulation 93, 2018). Macroinvertebrates have not been sampled in Governor Creek. However, impairment of the aquatic community is likely given the water quality and proximity to streams impaired for macroinvertebrates.

The lack of macroinvertebrates in upper Sneffels Creek, which is in part due to metals loading from Governor Creek, suggests that Sneffels Creek lacks the food chain necessary to support a robust fishery. Fish have been observed in Sneffels Creek, but not sampled to characterize community composition, structure, size or density. Water quality conditions suggest that the fishery in Sneffels Creek would not be as robust as fisheries in undisturbed reference streams.

The proposed Governor Basin restoration project will reduce metal concentrations within the restored area and in Governor Creek and create more suitable habitat within the Canyon Creek watershed including in Governor Creek, Sneffels Creek, and Canyon Creek.

2.7 IMPACTS TO ALPINE HABITAT, RIPARIAN CORRIDOR, AND WATERSHED HEALTH

The lower portion of the site lacks vegetation and is susceptible to erosion. On-going erosion poses a risk to downgradient alpine and riparian habitat and reduces the overall resiliency of the watershed.

3.0 PROJECT GOALS

The goal of the proposed Governor Basin restoration project is to restore alpine, riparian, and aquatic habitat and water quality in Governor Creek, Sneffels Creek, and Canyon Creek by decreasing run-off of acidic metals-laden water and isolating mine waste and tailings from the environment. Due to its location in the headwaters of the Canyon Creek watershed, the Governor Basin restoration project has the potential to improve riparian and watershed health in up to eight miles of downstream waters.

These goals will be accomplished through a series of best management practices including: capping and covering mine wastes with neutralizing material, establishing designated drainage channels to minimize surface water contact with contaminated materials, and re-vegetation. Section 4.0 provides a more detailed explanation of the project plan.

4.0 PROJECT DESCRIPTION

The proposed restoration project will use several best management practices, in a cost-effective approach, to minimize the effect of mine waste on water quality, aquatic life, riparian habitat, and sensitive alpine tundra. Briefly, the Governor Basin restoration project will cap and cover contaminated materials, recontour, cover, and revegetate disturbed areas to restore alpine, riparian, and aquatic habitat; and improve water quality to create additional downstream benefits. The sub-sections below further describe the steps required to implement the Governor Basin restoration project.

4.1 DESIGN, ENGINEERING, AND PERMITTING: 2019 AND 2020

The existing conceptual design for the Governor Basin restoration project is provided in Section 4.2. The UWP technical committee, which includes OSMI, DRMS, USFS, and TU staff, will further refine the conceptual project design. Any changes to the conceptual design will be shared with CDPHE and all funding partners (see Section 5.2).

Landownership in Governor Basin will be definitively confirmed in 2019. This proposal uses data provided by OSMI based on a survey completed in late 2017. The survey corners in Governor Basin are

staked. During 2019 USFS staff will conduct a review of the 2017 survey data to assure it satisfies their requirements.

A licensed engineer will develop the final project design in mid to late 2019. The existing Governor Basin Assessment Report (Appendix B) was written to support the development of an Environmental Assessment (EA) or an Engineering Evaluation Cost Estimate (EE/CA). The existing assessment report and the engineered design will be used as the basis for CERCLA review. UWP staff will coordinate with technical committee members and USFS staff to navigate the CERCLA process. **Project design and engineering costs will be covered by UWP, OSMI, DRMS, TU, and CWCB funds. CDPHE will be provided an opportunity to comment on all conceptual and final engineering design plans.**

4.2 CONSTRUCTION AND IMPLEMENTATION: 2020

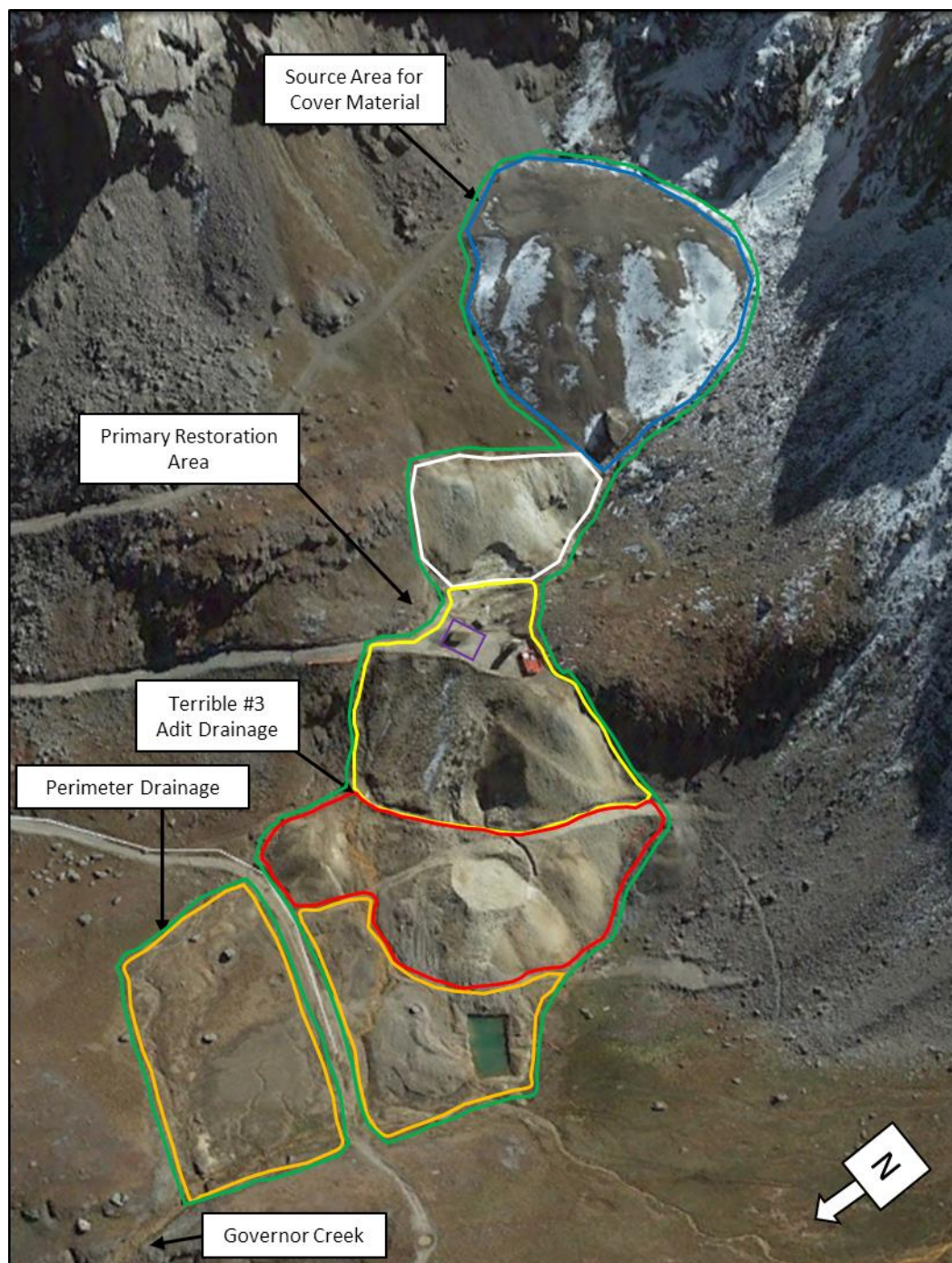
The restoration area is approximately 7.6 acres (Figure 4). No substantial work will take place in the Governor Basin road corridor. Waste rock from the Terrible #1, #2, and #3 waste rock dumps and tailings will be capped and covered. Cover soil and rock from the Virginus waste rock dump (Figure 4: blue polygon), which has substantial neutralizing capacity and low metal content, will be used to create a cap, of at least a one-foot depth, throughout the restoration area. Some fine-grained tailings may be removed from drainage areas, if necessary.

In-situ amendments and a custom high alpine seed mix will be used to revegetate the area. The seed mix will be weed-free and approved by DRMS and Ouray County. The seed bed will be scarified to promote seed germination and the surface will be roughened to minimize erosion within the restored area. All construction activities will occur outside of the permitted area near the vent raise and emergency escapeway. The portion of the Virginus mine dump used to supply cover material will be regraded to contour local topography and seeded. All equipment and materials will be inspected and cleaned to reduce the likelihood of non-native plants and weeds.

Three drainage channels will be constructed in the restoration area to limit surface water interaction with covered mine waste. The Governor Creek channel will capture flow from the San Sophia drainage. The Governor Creek channel will use the existing channel to the extent possible. The Terrible #3 Adit drainage channel will be constructed to convey water from the adit. The channel will be sinuous and terminate in a catch-basin to prevent erosion in the restored area and promote water infiltration into the subsurface. The perimeter drainage channel be used for run-on control, so that flow from seeps in the bedrock outcrop upgradient of restoration area will not interact with mine waste. The drainage channels will convey water to Governor Creek to minimize erosion within the restored area. The channels will be designed to accommodate flows during runoff. The channels will have moderately sloping sides to facilitate plant growth. Low water crossings will be installed where Governor Creek flows over Governor Basin Road.

Currently, the Terrible Mine dumps and downgradient tailings erode into Governor Creek. The restoration project will substantially reduce erosion, reduce metal loading, and improve habitat. The project will predominantly use existing roads. Appropriate stormwater BMPs will be used to prevent erosion during the construction phase of the project. **The long-term benefits of the project greatly outweigh the short-term impacts associated with construction.**

Figure 4. Conceptual project design for the Governor Basin restoration project; restoration will not occur in the permitted area (purple polygon) or on the access road.



4.3 MEASURING OUTCOMES: 2019 TO 2030

In 2019 UWP will develop a monitoring and evaluation plan to support pre and post-project monitoring to evaluate project outcomes. The monitoring and evaluation plan will include vegetation, erosion, and water quality monitoring. Vegetation and erosion monitoring will occur for a ten-year period following completion of the restoration project. Water quality monitoring will occur for the first three years following the restoration project.

Vegetation and Erosion Monitoring

Prior to the project, vegetation will be evaluated in the restoration area and at an appropriate reference site adjacent to the project area. For the first three years following construction, post-project vegetation monitoring will occur once per year, typically in mid-August. At a minimum, the vegetation monitoring program will include species identification and percent cover estimates. For years four to ten post-project vegetation monitoring will occur every other year using the same protocols as prior monitoring events.

Erosion monitoring will be conducted weekly during construction. During construction, erosion monitoring will be used to evaluate the effectiveness of erosion control measures. Erosion monitoring will continue annually for three years following construction and will occur every other year in post-project years four through ten. Following construction, erosion monitoring will be used to determine whether follow-up actions are required.

Vegetation and erosion monitoring will occur at the same time to reduce monitoring costs.

Water Quality Monitoring

Water quality monitoring will occur during high and low flow conditions the year prior to construction and for three years following construction. Seven locations, identified below, will be sampled:

- Drainage channel downstream of the Terrible #3 Adit: reference to characterize mine drainage. Previous studies indicate adit concentrations are typically lower than drainage channel concentrations.
- Terrible #3 Adit drainage channel immediately upstream of confluence with Governor Creek: characterize the extent of contamination due to Terrible #3 mine dump and tailings. This location will be critical to evaluating the benefit of the restoration project.
- Perimeter channel upgradient of restored area: reference location to characterize loading from native groundwater.
- Perimeter channel immediately upstream of confluence with Governor Creek: characterize the extent of contamination due to tailings. This location will be critical to evaluating the benefit of the restoration project.
- Governor Creek upgradient of the site: reference location to characterize conditions upstream of the restoration site.
- Governor Creek downstream of the restoration site: characterize conditions downstream of the restoration project. This location will be critical to evaluating the benefit of the restoration project.

The water quality monitoring associated with the Atlas Mill restoration project, funded by OSMI through the supplemental environmental project (SEP) program³, and implemented by Trout Unlimited, may support data evaluation of the Governor Basin project, due to proximity. Water quality data collected to evaluate the Atlas Mill restoration project will provide additional data to evaluate the outcomes of the Governor Basin restoration project. The Atlas Mill monitoring program includes water quality sampling in Governor Creek immediately upstream of the confluence with Sneffels Creek and at several locations in Sneffels Creek. Data sharing will reduce post-project monitoring costs and allow for additional evaluation of downstream locations (i.e. Sneffels Creek). Water quality monitoring is not planned for post-project years four through ten.

4.4 PROJECT COORDINATION AND ADMINISTRATION: 2019 TO 2030

The proposed Governor Basin restoration project utilizes funding from multiple sources, including funds requested from the NRD program. Project administration and coordination will be led by UWP. Project reports and updates will be provided as specified in the contract with the NRD program. UWP staff have extensive experience with project management and reporting.

Ouray County will assist with public communication, road access, and weed control.

NRD funds will not be used for project coordination or public outreach and communication. Other funding sources have been secured to implement these tasks.

4.5 POST-PROJECT MAINTENANCE

For ten years following construction, post-project monitoring will provide an opportunity to evaluate project maintenance needs. Anticipated project maintenance tasks include: reseeding, weed removal, or maintenance of erosion control measures. OSMI will be responsible for post-project maintenance for the portion of the restoration area on private lands. The USFS will be responsible for post-project maintenance for the portion of the restoration area on public lands. The Ouray County roads section will maintain the Governor Basin road right of way. Additional maintenance, beyond ten years, is not anticipated or necessary based on the project design.

³ Funding for the project is a result of an enforcement action taken by the Colorado Department of Public Health and Environment for violations of the discharge permit at the Revenue Virginius Mine.

4.6 PROJECT DELIVERABLES

UWP staff will collaborate with project partners to provide the following project deliverables:

- Reports or analyses generated during the project planning process (e.g. CERCLA documents).
- Engineered project design. CDPHE staff will be provided an opportunity to comment on conceptual and engineered designs.
- Construction schedule and regular updates during construction.
- As-built drawings.
- Pre-project monitoring data.
- Post-project monitoring data. Post-project monitoring reports for years zero through three will include vegetation, erosion, and water quality results. Post-project monitoring reports for years four through ten, when monitoring occurs every other year, will rely on templates developed in years zero through three and will present information in a more streamlined format.
- Final project report including all data evaluation to characterize measurable benefits associated with the project.

Project reporting will occur on twice per year prior to construction and for post-project years one through three. For post-project years four through ten reports will be generated every other year following vegetation and erosion monitoring events. Annual reports will be submitted to the NRD staff and trustees by December 31 for the duration of the project. Project deliverables will be provided during project updates and as part of regular project reporting. CDPHE will receive all project reports following their completion. Funds requested from the NRD program will be used to provide the project deliverables listed above. **Reporting requirements associated with other funding sources are paid by those funding sources.**

5.0 BUDGET

The project budget is divided into two elements. The conceptual project design was used to create the project cost estimate. Project funding and in-kind match were developed in recent conversations with project partners. UWP is requesting \$76,200.00 from the NRD Fund to implement the Governor Basin Restoration Project. The total project budget is approximately \$197,950.00 and includes in-kind support and cash from UWP, OSMI, DRMS, TU, and the CWCB.

5.1 PROJECT COST ESTIMATE

The estimated project cost to implement the Governor Basin restoration is \$197,950.00 based on the conceptual project design presented in Section 4.0 and local rates for project services (e.g. UWP technical coordinator, heavy equipment operators, etc).

Table 2. Governor Basin restoration project budget; estimated total of \$197,950.00.

Item	Quantity	Unit	Unit Cost	Item Cost	Notes
Design, Engineering, and Permitting Costs: 2019 and 2020					
Finalize conceptual design	30	hours	\$ 75.00	\$ 2,250.00	In-kind support from UWP technical committee members.
Finalize conceptual design	70	hours	\$ 50.00	\$ 3,500.00	UWP staff
Engineered design	1	LS	\$ 24,000.00	\$ 24,000.00	
CERCLA and permitting	50	hours	\$ 75.00	\$ 3,750.00	Multiple partners. In-kind time at technical committee meetings to support NEPA process.
CERCLA and permitting	100	hours	\$ 50.00	\$ 5,000.00	UWP staff
Confirm landownership	20	hours	\$75.00	\$ 1,500.00	In-kind support from UWP technical committee members.
Confirm landownership	10	hours	\$50.00	\$ 500.00	UWP staff
Subtotal for Design, Engineering, and Construction Costs:				\$ 40,500.00	
Construction and Implementation Costs: 2020					
Bid project and secure contractors	60	hours	\$ 50.00	\$ 3,000.00	UWP and TU
Contract management	60	hours	\$ 50.00	\$ 3,000.00	UWP and TU
Mobilization/demobilization	1	LS	\$ 5,000.00	\$ 5,000.00	
Erosion control	1	LS	\$ 5,000.00	\$ 5,000.00	Erosion control BMPs during active construction.
Excavate waste rock	120	hours	\$ 200.00	\$ 24,000.00	2 Excavators and operators.
Place cover materials	80	hours	\$ 175.00	\$ 14,000.00	Combination of dozer and excavator
Grade and fill to direct drainage	40	hours	\$ 175.00	\$ 7,000.00	Combination of dozer and excavator
Construct drainage channels	40	hours	\$ 175.00	\$ 7,000.00	1500 linear feet.
Road improvements and low water crossings	1	LS	\$ 2,500.00	\$ 2,500.00	Gravel and grading work to minimize erosion
Grading and seed bed preparation	60	hours	\$ 200.00	\$ 12,000.00	Combination of dozer and excavator
Amendments, seed, and cover materials	7	acres	\$ 2,425.00	\$ 17,000.00	
On-site project manager	290	hours	\$ 50.00	\$ 14,500.00	
Lodging for project manager	40	nights	\$ 125.00	\$ 5,000.00	UWP supplies lodging in-kind.
Subtotal for Construction and Implementation Costs:				\$ 119,000.00	
Monitoring and Evaluation Costs: 2019 to 2030					
Monitoring and evaluation plan	40	hours	\$ 50.00	\$ 2,000.00	UWP
Vegetation and erosion evaluations	202	hours	\$ 50.00	\$ 10,100.00	UWP and TU. Pre-project, weekly during construction, annually for years 0-3 post-project, and every other year for years 4-10 post-project.
Water quality monitoring	90	hours	\$ 50.00	\$ 4,500.00	UWP and DRMS. Pre-project and post-project high and low flow (3 years total).
Lab analysis costs	48	EA	\$ 200.00	\$ 9,600.00	Estimate based on quote from commercial lab and recent shipping charges
Monitoring reports	150	hours	\$ 50.00	\$ 7,500.00	biannual reports and updates to project manager
Subtotal for Monitoring and Evaluation:				\$ 33,700.00	
Project Coordination and Administration Costs: 2019 to 2023					
Project coordination	55	hours	\$ 50.00	\$ 2,750.00	UWP
Public outreach and communication	50	hours	\$ 40.00	\$ 2,000.00	UWP, biannual updates to the community and general outreach via monthly newsletter and coverage in local newspapers.
Subtotal for Coordination and Administration:				\$ 4,750.00	
Total Cost of Governor Basin Restoration Project:				\$ 197,950.00	

5.2 PROJECT FUNDING AND IN-KIND MATCH

UWP and project partners have secured \$121,750.00 in cash and in-kind contributions to implement the project. UWP respectfully requests \$76,200.00 from the NRD program for the Governor Basin restoration project.

OSMI will provide staff, contractors, and equipment during the construction phase of the project. UWP board members will provide lodging to UWP contractors during the construction phase of the project. UWP will also provide \$5,250 to support project design, engineering, and permitting. The funds requested for monitoring and evaluation will only be used to satisfy requirements of the NRD program. Monitoring and evaluation tasks are not required by other grant funding sources. The project funding allocations are presented in Table 3.

Table 3. Summary of funding allocations for the Governor Basin restoration project. The total requested for NRD funds is \$76,200.00 and the percent match for the project is 116%.

Item	Item Cost	Funding Source					
		UWP	OSMI	DRMS	TU	CWCB	NRD
Design, Engineering, and Permitting Costs: 2019 and 2020							
Finalize conceptual design (in-kind: project partners)	\$ 2,250.00	\$ -	\$ 750.00	\$ 750.00	\$ 750.00	\$ -	\$ -
Finalize conceptual design (UWP staff)	\$ 3,500.00	\$ 2,500.00	\$ -	\$ -	\$ -	\$ 1,000.00	\$ -
Engineered design	\$ 24,000.00	\$ 2,000.00	\$ -	\$ -	\$ -	\$ 22,000.00	\$ -
CERCLA and permitting (in-kind: project partners)	\$ 3,750.00	\$ 750.00	\$ 750.00	\$ 1,500.00	\$ 750.00	\$ -	\$ -
CERCLA and permitting (UWP staff)	\$ 5,000.00	\$ -	\$ -			\$ 5,000.00	\$ -
Confirm landownership (in-kind: project partners)	\$ 1,500.00	\$ -	\$ 750.00	\$ 750.00	\$ -	\$ -	\$ -
Confirm landownership (UWP staff)	\$ 500.00	\$ -				\$ 500.00	\$ -
Subtotal for Design, Engineering, and Permitting Costs:	\$ 40,500.00	\$ 5,250.00	\$ 2,250.00	\$ 3,000.00	\$ 1,500.00	\$ 28,500.00	\$ -
Construction and Implementation Costs: 2020							
Bid project and secure contractors	\$ 3,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000.00
Contract management	\$ 3,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000.00
Mobilization/demobilization	\$ 5,000.00	\$ -	\$ 5,000.00	\$ -	\$ -	\$ -	\$ -
Erosion control	\$ 5,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000.00
Excavate waste rock	\$ 24,000.00	\$ -	\$ 24,000.00	\$ -	\$ -	\$ -	\$ -
Place cover materials	\$ 14,000.00	\$ -	\$ 14,000.00	\$ -	\$ -	\$ -	\$ -
Grade and fill to direct drainage	\$ 7,000.00	\$ -	\$ 7,000.00	\$ -	\$ -	\$ -	\$ -
Construct drainage channels	\$ 7,000.00	\$ -	\$ 7,000.00	\$ -	\$ -	\$ -	\$ -
Low water crossing	\$ 2,500.00	\$ -	\$ 2,500.00	\$ -	\$ -	\$ -	\$ -
Grading and seed bed preparation	\$ 12,000.00	\$ -	\$ 12,000.00	\$ -	\$ -	\$ -	\$ -
Amendments, seed, and cover materials	\$ 17,000.00	\$ -	\$ -	\$ -	\$ -		\$ 17,000.00
On-site project manager	\$ 14,500.00	\$ -	\$ -	\$ -	\$ -		\$ 14,500.00
Lodging for project manager	\$ 5,000.00	\$ 5,000.00	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal for Construction and Implementation Costs:	\$ 119,000.00	\$ 5,000.00	\$ 71,500.00	\$ -	\$ -	\$ -	\$ 42,500.00
Monitoring and Evaluation Costs: 2019 to 2030							
Monitoring and evaluation plan (measurable benefits)	\$ 2,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00
Vegetation and erosion evaluations	\$ 10,100.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,100.00
Water quality monitoring	\$ 4,500.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,500.00
Lab analysis costs	\$ 9,600.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,600.00
Monitoring reports	\$ 7,500.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,500.00
Subtotal for Monitoring and Evaluation:	\$ 33,700.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 33,700.00
Project Coordination and Administration Costs: 2019 to 2023							
Project updates to NRD and CWCB project managers	\$ 2,750.00	\$ -	\$ -	\$ -	\$ -	\$ 2,750.00	\$ -
Public outreach and communication	\$ 2,000.00	\$ -	\$ -	\$ -	\$ -	\$ 2,000.00	\$ -
Subtotal for Coordination and Administration:	\$ 4,750.00	\$ -	\$ -	\$ -	\$ -	\$ 4,750.00	\$ -
Total funding by organization: cash and in-kind donations:		\$ 10,250.00	\$ 73,750.00	\$ 3,000.00	\$ 1,500.00	\$ 33,250.00	\$ 76,200.00
Total Cost of Governor Basin Restoration Project:							\$ 197,950.00
Percent Match to NRD Funds:							116%

6.0 PROJECT TIMELINE

The project timeline is presented below.

Table 4. Anticipated project timeline for the Governor Basin Restoration Project for project planning, construction, and first three years of post-project monitoring. Vegetation and erosion monitoring and reporting will occur every other year for years four to ten post-project.

Task	Item	2019			2020				2021				2022				2023			
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Design, Engineering, and Permitting: 2019 and 2020	Finalize conceptual design																			
	Engineered design																			
	CERCLA and permitting																			
	Confirm landownership																			
Construction and Implementation: 2020	Bid project and secure contractors																			
	Contract management																			
	Mobilization/demobilization																			
	Erosion control																			
	Excavate waste rock																			
	Place cover materials																			
	Grade and fill to direct drainage																			
	Construct drainage channels																			
	Road improvements and low water crossings																			
	Grading and seed bed preparation																			
	Amendments, seed, and cover materials																			
	On-site project manager																			
Monitoring and Evaluation: 2019 to 2023	Monitoring and evaluation plan																			
	Vegetation and erosion evaluations																			
	Water quality monitoring																			
Project Coordination and Administration: 2019 to 2023	Project coordination																			
	Grant reports and project updates																			
	Public outreach and communication																			

Notes

Dark blue: anticipated CWCB grant contract notice to proceed.

Teal: key project milestones and expected completion times.

Grey: tentative or estimated timelines.

Yellow: tasks that continue for the duration of the project.

Purple: deliverable due dates for design, construction, and monitoring activities.

7.0 ROLES AND RESPONSIBILITIES

UWP will partner with OSMI, DRMS, TU, and USFS to implement the project. UWP will oversee project funds, on-site project management, administration, reporting, and project evaluation. Qualified and insured contractors with experience in the San Juan mountains will complete the project engineering and construction. DRMS, TU, and USFS will provide technical expertise throughout project implementation and post-project monitoring and evaluation.

8.0 STRATEGY FOR PUBLIC COMMUNICATION

UWP will lead public outreach and communication. Community input will be discussed at the Board of County Commissioner's meetings and UWP board meetings. The City of Ouray and County of Ouray will provide space for community meetings.

To date, local stakeholders have participated in three Ouray County Board of County Commissioners meetings, along with ten UWP technical committee and board meetings to develop the Governor Basin NRD application.

NRD funds will not be used for public communication tasks. Other funding sources have been secured to facilitate public communication from 2019 to 2023.

8.1 POINT OF CONTACT FOR PROJECT

Ashley Bembenek, technical coordinator for UWP, will be the primary point of contact for this project.

9.0 PROJECT ELIGIBILITY

The Governor Basin Restoration Project advances the objectives of the NRD Program by restoring equivalent natural resources to those injured by the Idarado Project including alpine, riparian, and aquatic habitat. Due to its location in the headwaters, improvements to watershed health and function in Governor Creek have the potential to improve riparian and aquatic health throughout the Canyon Creek Watershed, a large tributary to the Uncompahgre River. An estimated 8 miles of surface waters and adjacent riparian areas from Governor Creek to Canyon Creek would benefit from the proposed restoration activities. The health of the Uncompahgre River Watershed is impaired due to the Idarado project. Watershed health and water quality improvements in the Canyon Creek watershed, which is immediately adjacent to the Red Mountain Creek Watershed where the Idarado site is located, will benefit the Uncompahgre River Watershed.

9.1 PROPONENTS, PARTNERS, AND ABILITIES

The partnerships associated with the proposed Governor Basin further increase the likelihood of successful project implementation. UWP, DRMS, OSMI, and the USFS have been exploring opportunities to complete a restoration project in Governor Basin since 2015. The parties are very pleased to apply for project funding through the NRD program.

9.2 PROPONENTS: UNCOMPAHGRE WATERSHED PARTNERSHIP

The Uncompahgre Watershed Partnership (UWP) was formed in 2007. Stakeholders make decisions on a consensus basis to promote sustainable use of water resources, improve water quality, and ecological resiliency in the Uncompahgre Watershed. In 2013, UWP was incorporated as a 501c(3) non-profit organization. In 2012, UWP was awarded a nonpoint source (NPS) grant to complete three restoration projects: Sneffels Creek bank stabilization and restoration, Michael Breen Mine restoration, and the Vernon Mine restoration.

The Sneffels Creek bank stabilization project was designed to minimize erosion of the Atlas Mill tailings by reshaping the stream channel. In the summer of 2016, a 450-foot reach of Sneffels Creek was reshaped to form a single-thread channel with three lateral stages to increase channel capacity during high flows. The western stream bank was further stabilized with three vane features made with large boulders, rip-rap, and log-cribbing. Native willows were transplanted onto the vanes to further stabilize the western stream bank.

In October 2014, restoration of the Michael Breen adit began. Previously, the adit drainage flowed over and infiltrated into fine-grained mine waste, increasing metal concentrations in both surface and groundwater. Drainage was consolidated into a ditch to prevent further contamination. In October 2015, a one-acre contaminated area between the adit and the Uncompahgre River was amended with biochar, seeded with a native seed mix, and covered with a shredded aspen mulch to facilitate plant growth. Additional maintenance to improve vegetation cover occurred in 2016.

In the fall of 2015, approximately 1,500 cubic yards of waste rock was removed from areas adjacent to Gray Copper Gulch and placed in a consolidation area as part of the Vernon Mine restoration project. Soil amendments and aspen mulch were applied in the waste removal area. A drainage ditch was constructed to convey water draining from the adit to minimize erosion and interaction with contaminated materials. Disturbed areas, including the removal area, were seeded with a custom high alpine seed mix. Site maintenance continued in 2017, including additional seeding, amendments, and hydromulch.

Together, the successful implementation of these projects demonstrates UWP's ability to collaborate, plan, and implement projects that restore stream structure and function to improve the ecological resiliency of the Uncompahgre Watershed.

In early 2018, UWP completed three water quality assessment reports using data collected from the Uncompahgre Watershed from 2012 to 2017. The reports informed UWP's strategic plan which identifies restoration in Governor Basin as a top priority for UWP in their continued effort to improve watershed health in the upper Uncompahgre Watershed.

The UWP Board of Directors has provided a letter of support for the Governor Basin Restoration Project (Appendix A).

9.3 PROJECT PARTNERS

Ouray Silver Mines Incorporated

OSMI owns and operates the Revenue-Virginus Mine located near the historic Sneffels townsite, approximately 6.0 miles outside of Ouray. OSMI has a road maintenance agreement, that includes substantial in-kind donations, with Ouray County to maintain Camp Bird Road which is used to access Governor Basin. OSMI and UWP have collaborated to complete a bank stabilization project in Sneffels Creek. OSMI and their consultants are active members of the UWP technical committee.

OSMI has provided a letter of support for the Governor Basin Restoration Project (Appendix A).

US Forest Service

The USFS is an active member of the UWP technical committee. Initial discussions regarding the proposed Governor Basin restoration project started in late 2016. Local parties have discussed the steps necessary to navigate CERCLA requirements related to work on Forest Service Lands.

Colorado Department of Reclamation Mining and Safety

DRMS is one of UWP's longest standing partners. DRMS staff will provide technical expertise to assist UWP as the Governor Basin Restoration Project is implemented and during the post-project monitoring

period. Local DRMS staff have extensive expertise regarding geology, historic mine sites, CERCLA, and restoration in the San Juan Mountains.

Trout Unlimited

TU is a nationally recognized organization that has implemented several successful mine reclamation and stream restoration projects throughout Colorado. The Colorado Abandoned Mine Land Program Manager for TU will provide assistance to support project planning, design, and implementation.

Ouray County and City of Ouray

Ouray County and the City of Ouray are supportive of the proposed Governor Basin restoration project. Ouray County and the City of Ouray have assisted and plan to continue assisting with public communications related to the project. Ouray County is also interested in evaluating revegetation and supporting weed management following project construction.

Ouray County has provided a letter of support for the Governor Basin Restoration Project (Appendix A).

APPENDIX A: LETTERS OF SUPPORT

**APPENDIX B: ASSESSMENT REPORT: GOVERNOR BASIN: HUMBOLDT, VIRGINIUS,
AND TERRIBLE MINE SITES NEAR OURAY, COLORADO**



133 N. Lena St. #3, POB 743
Ridgway Colorado 81432
970-626-3236

Mr. Ross Davis
Idarado Project Manager
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver CO 80246

ross.davis@state.co.us

June 11, 2019

RE: UWP/Governor Basin Project Conservation Easement

Dear Mr. Davis,

The Trust for Land Restoration has been in consultation with the Uncompahgre Watershed Partnership for the past several months regarding UWP's Governor Basin Project and their request to us that TLR agree to hold a conservation easement (CE) in perpetuity to assure that the site continues to be legally protected from future development, and remain open to public access.

While we whole-heartedly support the project, TLR currently is not in the position now, nor do we anticipate in the near future, able to accept a CE on this property. Likewise, we know of no other land trust that would be interested in holding a CE on this property, though we have inquired on UWP's behalf to a couple.

While it is true that the Trust for Land Restoration is one of just a few land trusts in the entire nation that has the interest, expertise and experience taking conservation easements on previously mined lands, the primary obstacle inhibiting our ability to accept a CE on the Governor Basin site is our long standing policy of accepting only CEs that we can someday transfer to another qualified land trust organization. TLR has never intended itself to be a land trust in perpetuity. All of the conservation easements we have taken have been written in a way, and represented to the donor, to be legal agreements with appropriate long-term stewardship funds, that can be transferred to a perpetual land trust. Of the thirteen conservation easements TLR has accepted in its nineteen years as a land trust, eleven have been transferred to perpetual organizations. We still hold two and are close to having

agreements with partner organizations to assume the transfer responsibility for those two remaining CEs.

For the same reasons we do not think another land trust would be interested and willing to accept a conservation easement on the Governor Basin property now (the fear of unwanted liability, the small acreage involved, the incompatibility with mission and strategic plan, the necessary expenditure of staff time and resources for a low priority project), we are concerned TLR would find it extremely difficult, if not impossible, to transfer this easement to another land trust when that day comes in the future that TLR decides to transfer out all of its conservation easements, and close its doors.

For the Silver Mountain Mine project, TLR is lining up the Colorado West Land Trust to accept that easement, either initially or as a transfer at a still-to-be-determined time in the future, when it feels to the CWLT Board that all potential mined-land related liabilities have been mitigated. It's worthwhile to note that the anticipated total conservation-easement related costs of the Silver Mountain CE that CWLT is requesting, which include their legal costs, their staff time, and their stewardship endowment requirements, total about \$42,000. That number will be the highest total amount of any CE that TLR has so far worked with, but it is within the range of easements being taken by other land trusts around the county the last five years. It's also indicative of the potential costs of a CE for the Governor Basin site, if TLR or another land trust were to be involved.

Again, we recognize the value of this project to the environment and the importance to the State to assure that the site is protected, monitored, and, if necessary, the terms of the State's agreement enforced with the current landowner and landowners to follow. It seems to us that CDPHE's Environmental Covenant program is the best fit for protecting the site, post remediation. We have witnessed the State's EC program in action in Rico, and have discussed it with CDPHE's Mark Rudolph as a possibility for another project we are contemplating. Another, very simple, alternative might be for the current landowner to agree to a permanent deed restriction, prohibiting any new construction of buildings, roads, wells, septic fields and perhaps fences. The deed restriction would be recorded with the Ouray County Clerk, would show up in any title search or title commitment, and would notify the Ouray County Planning Department that any such future development incompatible with the intent of the deed restriction not be allowed. A third option might be a conservation easement held by the County of Ouray.

By law, governmental entities can hold conservation easements. Many do. Though we have not spoken to anyone with the County of Ouray on this particular matter, we have in the past and are currently working on several acquisitions of previously-mined lands with Ouray County as a partner. We think it worth a conversation with Ouray County, asking them to consider holding a conservation easement on the Governor Basin site. As a bonus, one would expect the cost of doing a conservation easement with Ouray County to be significantly less than the cost of doing one with a land trust. We'd be happy to make an initial inquiry on behalf of UWP, and help guide the proponents and the County through the process, if the State and interested parties would like us to pursue.

We thank the Trustees of Idarado Natural Resource Damages Fund for their good work in seeing that these dollars are utilized wisely and true to the intent to which they've been designated. We believe the Governor Basin Project meets that standard. Please do not hesitate to contact if we can answer any questions, comments or concerns related to the long term protection of this site beyond what we have provided here.

Sincerely,

A handwritten signature in blue ink that reads "Patrick Willits". The signature is written in a cursive, flowing style.

Patrick Willits
Executive Director
The Trust for Land Restoration



Uncompahgre Watershed Partnership
P.O. Box 392, Ridgway, CO 81432
970-325-3010 • uwpcoordinator@gmail.com

June 10, 2019

Ross Davis, Idarado Project Manager
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530
Delivered via email: ross.davis@state.co.us

RE: Challenges related to a conservation easement for the Governor Basin Restoration Project

Dear Mr. Davis,

For the past year, the Uncompahgre Watershed Partnership and our partners have further refined conceptual designs for the Governor Basin Restoration Project, with valuable feedback from the Natural Resource Damages (NRD) program. The purpose of this letter is to summarize the challenges that we have encountered in the process to secure a conservation easement for the restoration site. During this process, we spoke with staff from the Trust for Land Restoration, the Lake Fork Valley Conservancy, the Colorado West Land Trust, and the Nature Conservancy.

In discussions with staff from local and regional land trusts, we've learned their top concern with our restoration site is CERCLA liability. Land Trusts lack the financial and technical resources to manage a CERCLA site, even following restoration. The risk, whether real or perceived, associated with CERCLA actions is too great for the land trusts to pursue a conservation easement. Additionally, even restored mine sites lack the conservation values that land trusts typically prefer in conserved properties.

Although, we have learned about conservation easements in the past several months we have certainly not become experts. We remain open to pursuing a conservation easement if a willing land trust or additional tools can be identified.

Sincerely,

A handwritten signature in black ink, appearing to read "Ashley Bembenek", written in a cursive style.

Ashley Bembenek
Technical Coordinator
Uncompahgre Watershed Partnership

PHIL WEISER
Attorney General
NATALIE HANLON LEH
Chief Deputy Attorney General
JUNE TAYLOR
Chief Operating Officer
ERIC R. OLSON
Solicitor General



RALPH L. CARR
COLORADO JUDICIAL CENTER
1300 Broadway, 10th Floor
Denver, Colorado 80203
Phone (720) 508-6000

STATE OF COLORADO
DEPARTMENT OF LAW

Office of the Attorney General

June 7, 2019

M E M O R A N D U M

TO: Colorado Natural Resources Trustees

FROM: Jason King
Senior Assistant Attorney General

RE: Idarado Mine Site, Society Turn Tailings Pile #1 (ST-1) River
Restoration Project Proposal

BACKGROUND

The State settled natural resource damage claims against the Idarado Mining Company for \$1M pursuant to a 1992 CERCLA Consent Decree. The Idarado NRD Fund contains approximately \$195,000 available for additional projects. Two proponents currently seek Idarado NRD funds: the Town of Telluride for the ST-1 River Restoration Project described below; and the Uncompahgre Watershed Partnership for the Governor's Basin Restoration Project described in a separate memo.

UPDATE

On June 3, 2019, the Town of Telluride submitted the ST-1 River Restoration Project Proposal (Project) requesting approximately \$118,800 of Idarado NRD funds. The Project will restore two segments of the San Miguel River in the 560 acre western portion of Telluride known as the "Valley Floor." Railroad construction in the early 1900s channelized these segments from their natural alignment to flow adjacent to the railroad grade. Idarado's upstream mining activities also deposited fluvial tailings with high concentrations of heavy metals throughout the Valley Floor and led to further channelization. These activities resulted in injuries to aquatic and riparian habitat including riverbed sediment and vegetation.

The Project will re-align the river segments away from the ST-1 tailings through clean soils and re-establish natural river channel dimensions, patterns and

floodplains. This will restore injured natural resources by creating natural instream riffle-pool aquatic habitat and re-connecting the river with the riparian floodplain. The Project will also restore and maintain native vegetation along the new and abandoned segments.

Telluride will undertake the Project in conjunction with complementary remediation work to relocate fluvial tailings away from contact with the river, consolidate and cover with clean soil. The remediation work is required under the 1992 Consent Decree's Remedial Action Plan (RAP). As owner of the effected property, Telluride agreed to partially fund and perform the remediation work. CDPHE approved the remediation plan and believes concurrent implementation with the Project affords addition protection for human health and the environment.

The Project's total cost is approximately \$1.5M. Telluride will contribute \$700k. Partners providing matching funds include: the Colorado Water Conservation Board (\$290k); Valley Floor Preservation Partners (\$400k); Trout Unlimited (\$10k).

RECOMMENDATION

The Trustee staff recommend approving the funding request for the Project - plus the remaining balance in the Idarado NRD Fund after funding the Governor Basin Project.

ACTION ITEMS

We request the Trustees:

Approve Telluride's ST-1 River Restoration Project for \$118,800 - plus the remaining balance in the Idarado NRD Fund after funding the Governor Basin Project - to restore aquatic and riparian habitat for two segments of the San Miguel River.

ATTACHMENTS

ST-1 River Restoration Project Proposal
Resolution for the Town of Telluride's ST-1 River Restoration Project.



Office of the Town Manager
Ross Herzog

Ross Davis
Idarado Project Manager
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246

June 3, 2019

Dear Ross:

Enclosed is the Town of Telluride's request for funds to assist with remediation and river restoration.

Should you have any questions, do not hesitate to contact me via rherzog@telluride-co.gov or 970-728-2155.

Thank you.

Sincerely,



Ross Herzog
Town Manager

Society Turn Remediation and River Restoration Proposal

Subject: Society Turn River Restoration Proposal

Proponent: Town of Telluride

NRD Fund Request: \$118,800.00

Date: 6/3/2019

1.0 Introduction

The Town of Telluride (Town) valley floor property has been heavily impacted by past land use practices including historical mining and historical rail road activity resulting in an unnatural fluvial landscape. Building upon previous upstream river restoration activities, the Town proposes to restore the San Miguel River through the valley floor and reconnect the river to its natural floodplain.

To best preserve the integrity of the valley floor, the Town proposes to restore the San Miguel River adjacent to the Society Turn Tailings Pile #1 (ST-1). To compliment this river rerestoration project, the Town also proposes to remediate ST-1 using funding provided by the Idarado Mining Company (Idarado) pursuant to the 1992 Consent Decree between the State of Colorado (State) and Idarado. To promote an efficient use of resources, these projects will be conducted concurrently.

The Town is requesting \$118,800 in Idarado Natural Resource Damage (NRD) funding to assist in the river restoration portion of the project. Other restoration financial project partners include the Town of Telluride, Colorado Water Conservation Board, Valley Floor Preservation Partners and Trout Unlimited together bringing the river restoration component of the project to \$1,521,360.71. Funding source detail is attached.

Colorado Department of Public Health and Environment (CDPHE) has reviewed the concept alternative plan and has determined that concurrent implementation of both projects will afford additional protection to human health and the environment when compared to the remedial activities for ST-1 set forth in Consent Decree administered Remedial Action Plan (RAP).

Because the NRD funding is being requested for the river restoration portion of the project, this proposal primarily focuses on river restoration. However, to gain an understanding of the combined benefits of the project, ST-1 remediation is briefly included.

1.2 Consent Decree and RAP Allowances

As set forth in Section 37.2 of the RAP, the landowner of any Society Turn Tailings Pile may at any time submit to the State a plan for alternative remediation of that tailings pile. The State will review the plan and approve it if the State determines that the alternative plan is at least as protective of human health and the environment as the remedial activities set forth in the RAP. If an alternative plan is approved by the State, that plan will replace activities set forth in the RAP for that portion of ST-1. If the plan provides for the landowner to execute the plan, then the landowner will be bound by the Consent Decree for the purposes of completing the work and for Idarado to be released from any obligation to perform work at that portion of ST-1.

2.0 Site Description

The Telluride valley floor is a 560 acre parcel of land on the western boundary of the town. Rail road alignment and deposition of historical mining tailings have created an unnatural fluvial landscape that inhibits aquatic habitat, riparian ecosystems and negatively effects water quality.

ST-1 is a 25-acre area immediately north and south of the San Miguel River approximately 3 miles west of the Town of Telluride in San Miguel County, Colorado. ST-1 lies entirely within the 560 acre valley floor and consists of fluvial tailings from historic Idarado mining operations. These tailings negatively impact the water quality of the San Miguel River as well as stunt vegetation growth which inhibits riparian habitat. Characterization of the tailings has confirmed the presence of elevated heavy metal concentrations in the soil, sediment and stream bank material.

The Town proposes to conduct the ST-1 remediation and restoration of the San Miguel River concurrently to prevent multiple contractor mobilizations as well as multiple handling of construction material. This proposal describes the project at a concept level as survey and construction sequencing plans are currently being developed.

CDPHE will retain an oversight role of the project to ensure the principal goal of protecting public health and the environment remains present.

2.2 Background

The Idarado Mine Complex has roots in the Telluride valley starting in the late 19th century. Mining expanded and continued until 1978 when the mine closed. During mining operations a number of mills were constructed to process the ore excavated from the mine. Tailings are a fine grained waste product of the milling process and are commonly laden with heavy metals. During mine operation some of these tailings were deposited in the San Miguel River and transported to the area known as Society Turn. This is where the tailings were deposited and are described as fluvial tailings.

This rapid deposition of fine grained tailings created an unnatural morphological landscape along the San Miguel River. The channel sinuosity was shortened and floodplains abandoned as a result of continuous tailings deposition. This tailings deposition occurred for an undocumented amount of time.

After mining stopped and tailings were no longer sent down the San Miguel River, deposition ceased and erosion of the tailings has persisted. The presence of tailings as river sediment and bank material continues to degrade water quality and creates poor conditions for aquatic life in the San Miguel River. Furthermore, negative impacts to surrounding riparian habitat is obvious from the large bare areas of scolded land.

Land access has delayed implementation of the ST-1 remediation. While land access issues prevailed, the State and Idarado entered into a settlement agreement for the construction costs for ST-1 remediation in 2002. In 2008 a court ruling granted the Town of Telluride title to the 560 acre valley floor which included ST-1. Then in 2009 the Telluride Town Council approved the Valley Floor conservation easement, thus preserving the Valley Floor as open space in perpetuity.

Since 2002, construction and material costs have significantly risen. Due to the difference in current day project costs and the funding available, the Town has been working with CDPHE to develop two projects that shall be implemented concurrently. One is continued restoration of the San Miguel River and the second, remediation of ST-1.

3.0 Project Description

As mentioned, the concurrence of the ST-1 remediation and San Miguel River restoration offer a unique opportunity to realize cost savings for both aspects of the project. The ST-1 remediation is focused on consolidating and capping material containing elevated levels of heavy metals while the river restoration is dedicated to improving water quality, terrestrial habitat and aquatic habitat. Aside from cost reduction as a result from construction sequencing; repositioning the San Miguel River farther away from ST-1 reduces the risk of erosion on consolidated tailings during flood events. The State has determined that the concept plan provided by the Town provides additional protection of human health and the environment when compared to the remedial activities outlined in Section 37.0 of the RAP.

The concept construction drawings are attached for reference.

3.1 Tailings Remediation

ST-1 characterization conducted by the Town confirmed the fluvial tailings contain elevated concentrations of lead, cadmium, copper and zinc. The elevated concentrations of these metals within the sediment and along the banks of the San Miguel River persist as a threat to water quality and aquatic life. The majority of the ST-1 tailings lies north of the San Miguel River. Soil samples from these tailings also confirm elevated levels of heavy metals that are harmful for terrestrial habitat.

In areas where tailings may be in conflict with the proposed river alignment, tailings will be excavated to an average depth of five feet below ground surface and transported to a tailings consolidation area. In other areas, tailings will be left in place. A cap of 26,000 cubic yards of natural soils will be placed over the tailings to a depth of one foot. The area of tailings removal will be back filled with 3,900 cubic yards of clean soil. Once the tailings cap is contoured into a naturalized form, it will be revegetated with native plants.

3.2 River Restoration

The river restoration component of the project is broken down into two segments, San Miguel River reach 5 and reach 6. As depicted in Sheet 01 – Overall Plan View, Reach 5 (Sheet 03) primarily addresses river restoration with minor tailings remediation while Reach 6 (Sheet 02) addresses the primary area of ST-1 remediation and river restoration.

3.2.1 River Restoration Objectives

The river restoration objectives of the project complement the ST-1 remediation and afford additional protection to human health and the environment. The addition of the following river restoration objectives are critical to achieving community goals:

1. Eliminate artificial channelization caused by deposition of fluvial tailings and re-establish natural channel dimensions, patterns and floodplains.
2. Realign the San Miguel River away from the ST-1 tailings through clean, native soils.
3. Re-establish instream riffle-pool aquatic habitat, connection with the riparian floodplain and restore ecological functions.
4. Maintain existing mature native vegetation to the greatest extent possible.

This project will restore a naturally functioning river system by establishing a total of 3,300 feet of river away from the ST-1 tailings (Reach 6). The current 900 foot channelized section (Reach 5) through and adjacent to ST-1 will be abandoned and revegetated. This section of the San Miguel will be realigned into 1,300 feet of

meandering channel with riffles which will reconnect the river to its floodplain, establish critical habitat for cold water fish and restore riparian habitat. In total, approximately 4,600 feet of river will be restored as part of Reach 5 and 6.

3.2.2 River Restoration Area – Reach 5

Reach 5 has been extensively affected by past human actions. In the early 1900s, this section of river was removed from its natural alignment and channelized along a railroad grade to the north. This has resulted in degradation to the natural form and function of the river system, as well as altered the ecological characteristics of the valley. The channelization has eliminated the ability of the river to access its floodplain, negatively altering the instream and surrounding environment, including wetlands. Reach 5 will establish a more natural channel and reconnect the river to its floodplain, improving natural riparian and aquatic functions.

Gravel and cobbles will be salvaged and stockpiled to be reused to form the substrate of the new channel. Native materials will be excavated to create the new channel. Spoils will be backfilled into the abandoned channel, contoured into a natural landform and covered with salvaged topsoil material. The new channel will be graded to form riffles. Riprap will be placed and buried across the abandoned channel to prevent the river from re-establishing the old channel.

3.2.3 River Restoration Area – Reach 6

Reach 6 will realign the river to the south and away from tailings consolidation area and through clean, native soils. The active stream and flood plain will be kept farther away from any tailings, minimizing the leaching and transport of tailings into the river. The project will excavate native materials to create the new 3,300-foot length of river. Riffle/pool features, which will be designed to maintain a minimum flow depth during low-flow periods, will be constructed in the new channel to establish critical habitat for cold-water fish.

The abandoned channel will be filled and seeded with a custom native seed mix and stabilized with hydrologically applied wood fiber mulch.

4.0 Construction Operations and Project Management

The project will be completed through a design-build contract between the Town of Telluride and Ecological Resources Consultants Inc. The project is anticipated to start and finish in a single construction season. The project will be implemented in either 2019 or 2020.

Implementation of the project will include construction water control and best management practices in accordance with federal, state and local jurisdictions, mobilization/demobilization, expenses associated with equipment and personnel, project management and three years of annual monitoring reporting. This task has assumed that Tailings Remediation, Reach 5 Restoration and Reach 6 will be completed simultaneously as a single and complete project.

4.1 Budget

Below are detailed budgets from funding sources, ST-1 and river rehabilitation. The funding sources budget illustrates that greater than 50% funding match is exceeded compared to the NRD funding request. NRD funding will be applied among items 2 and 3 of the river restoration budget.

5/28/2019

ST-1 Tailings Remediation and River Restoration

Project Expenses

Component

Tailings Remediation \$1,848,730.04

River Restoration \$1,521,359.71

Total: \$3,333,900.00

Funding Sources

<u>Component</u>	<u>State/Idarado</u>	<u>CWCB</u>	<u>NRDS</u>	<u>Town of Telluride</u>	<u>Valley Floor Preservation Partners</u>	<u>Trout Unlimited</u>	<u>Totals</u>
Tailings Remediation	\$1,648,730.04	\$200,000.00					\$1,848,730.04
River Restoration		\$290,000.00	\$118,800.00	\$702,560.71	\$400,000.00	\$10,000.00	\$1,521,360.71
Project Totals:	\$1,648,730.04	\$490,000.00	\$118,799.00	\$702,560.71	\$400,000.00	\$10,000.00	\$3,370,090.75

Town of Telluride San Miguel River Reach 5 and 6 Restoration and ST-1 Tailings Remediation Project Overall Project Budget-5/30/2019					
Item ID	Item Description	Unit	Unit Cost	Quantity	Subtotal
1	Tailings Remediation				\$ 1,848,730.04
a	Tailings excavation (removal Areas A, B, C) to Consolidation Areas 1 and 2	Cubic Yards	\$ 20.00	23,000	\$ 460,000.00
b	Provide Tailings Cap Material from Town Sources (Excavate, Haul, Place, Contour)	Cubic Yards	\$ 24.00	26,000	\$ 624,000.00
c	Provide Tailings Excavation Areas Clean Backfill from Town Sources (Excavate, Haul, Place, Contour)	Cubic Yards	\$ 24.00	3,900	\$ 93,600.00
d	Tailings Cap Revegetation (includes soil amendments, seeding and stabilization of cap, haul roads and borrow areas)	Acre	\$ 7,400.00	21.0	\$ 155,400.00
e	Tailings handling (equipment cleaning, personnel)	Lump Sum	\$ 25,000.00	1	\$ 25,000.00
f	Soil/tailings testing (soil-metals)	Each	\$ 200.00	20	\$ 4,000.00
g	Construction Operations, Water Control, BMPs, Mob/Demob, Expenses, Construction Management and Contingency	Lump Sum	\$ 767,825.00	0.53	\$ 406,298.47
h	Final Design and Permitting	Lump Sum	\$ 84,000.00	0.53	\$ 44,449.02
i	Annual monitoring program (3-year, no maintenance)	Lump Sum	\$ 36,000.00	0.53	\$ 19,049.58
j	Project Bond	Lump Sum	\$ 32,000.00	0.53	\$ 16,932.96
	RIVER RESTORATION COMPONENT TOTAL				\$ 1,485,169.96
2	River Corridor Restoration Reach 6 (Station 0+00 to 35+00)				\$ 780,600.00
a	Salvage abandon channel substrate and material sorting	Cubic Yards	\$ 11.50	3,000	\$ 34,500.00
b	New channel-clear and grub (salvage/separate topsoil)	Cubic Yards	\$ 30.78	8,500	\$ 261,440.75
c	New channel-excavation	Cubic Yards	\$ 17.50	9,500	\$ 166,250.00
d	Spoils placement (backfill) in abandon channel	Cubic Yards	\$ 9.50	18,000	\$ 171,000.00
e	Construct riffle-pool features in new channel	Each	\$ 2,500.00	12	\$ 30,000.00
f	Import and place riprap for abandon channel grade controls (Type M, purchase, haul and place from outside source)	Cubic Yards	\$ 200.00	500	\$ 100,000.00
g	Revegetate tailings removal backfill Areas A, B, C (soil amendments, native seeding, 25% ECB-75/75% hydromulch)	Acres	\$ 12,000.00	2	\$ 24,000.00
h	Revegetate abandon channel backfill (soil amendments, native seeding and hydromulch)	Acres	\$ 7,400.00	4	\$ 29,600.00
3	River Corridor Restoration Reach 5 (Station 35+00 to 46+76)				\$ 307,665.75
a	Salvage Abandon Channel Substrate and Material Sorting	Cubic Yard	\$ 11.50	950	\$ 10,925.00
b	New Channel-Clear and Grub (salvage/separate topsoil)	Cubic Yards	\$ 26.50	1,200	\$ 31,800.00
c	New Channel-Excavation	Cubic Yard	\$ 17.50	4,500	\$ 78,750.00

d	Improve Existing Secondary Channel (Dimension Shaping)	Cubic Yards	\$ 19.00	700	\$ 13,300.00
e	Spoils Placement (Backfill) to Reach 5 Abandon Channel	Cubic Yard	\$ 9.50	5,200	\$ 49,400.00
f	Construct Riffle/Pool Features (with Salvaged Abandon Channel Substrate)	Each	\$ 2,500.00	5	\$ 12,500.00
g	Spoils Placement (Backfill) to Reach 6 Abandon Channel	Cubic Yards	\$ 9.50	1,200	\$ 11,400.00
h	Import and place riprap for abandon channel grade controls (Type M, purchase, haul and place from outside source)	Cubic Yards	\$ 180.00	200	\$ 36,000.00
i	New Channel Tie-in Bank Stabilization	Linear Feet	\$ 100.00	200	\$ 20,000.00
j	Reclamation of Abandon Channel and Access-Staging Areas	Acres	\$ 7,400.00	1	\$ 7,400.00
4	Construction Operations and Project Management (River Corridor Component Only)				\$ 361,526.53
a	Construction Operations, Water Control, BMPs, Mob/Demob, Expenses, Construction Management and Contingency	Lump Sum	\$ 767,825.00	0.47	\$ 361,526.53
5	Miscellaneous Project Expenses (River Corridor Component Only)				\$ 71,568.43
a	Final design and permitting (Corps 404 with cultural, Town Floodplain and Wetland)	Lump Sum	\$ 84,000.00	0.47	\$ 39,550.98
b	Annual monitoring program (3-year, no maintenance)	Lump Sum	\$ 36,000.00	0.47	\$ 16,950.42
c	Project Bond	Lump Sum	\$ 32,000.00	0.47	\$ 15,067.04
	TOTAL:				\$ 3,370,090.75

5.0 Monitoring and Maintenance

The Town has engaged CDPHE in the planning and design of the tailings remediation as well as the river restoration. Continued state involvement is considered critical to ensure project objectives are achieved. To facilitate this involvement, the Town anticipates that CDPHE staff will provide project oversight during construction as well as conduct annual monitoring focused on the performance of the project.

5.1 State Project Oversight

While working toward an acceptable alternative for the ST-1 remediation and San Miguel River restoration the Town has solidified a working relationship with CDPHE project managers and Ecological Resource Consultant managers. The Town will maintain this relationship with CDPHE through the final design and construction phase of the project by allowing CDPHE to review documents and have a presence on site.

The Town will distribute construction sequencing and final design plans to CDPHE for feedback. Additionally, CDPHE staff will be notified prior to implementation of milestone construction tasks.

5.2 Annual Inspections

Since the Town is the landowner and is proposing to conduct the ST-1 remediation and that remediation involves covering tailings with soil; Section 37.11 of the RAP, provides a remediation performance objective exemption for the landowner. As a result, CDPHE has proposed criteria for success elements to be inspected annually for the ST-1 remediation and river restoration. The Town accepts that State will submit annual recommendations for maintenance if specific criteria are observed that threaten the integrity of the project.

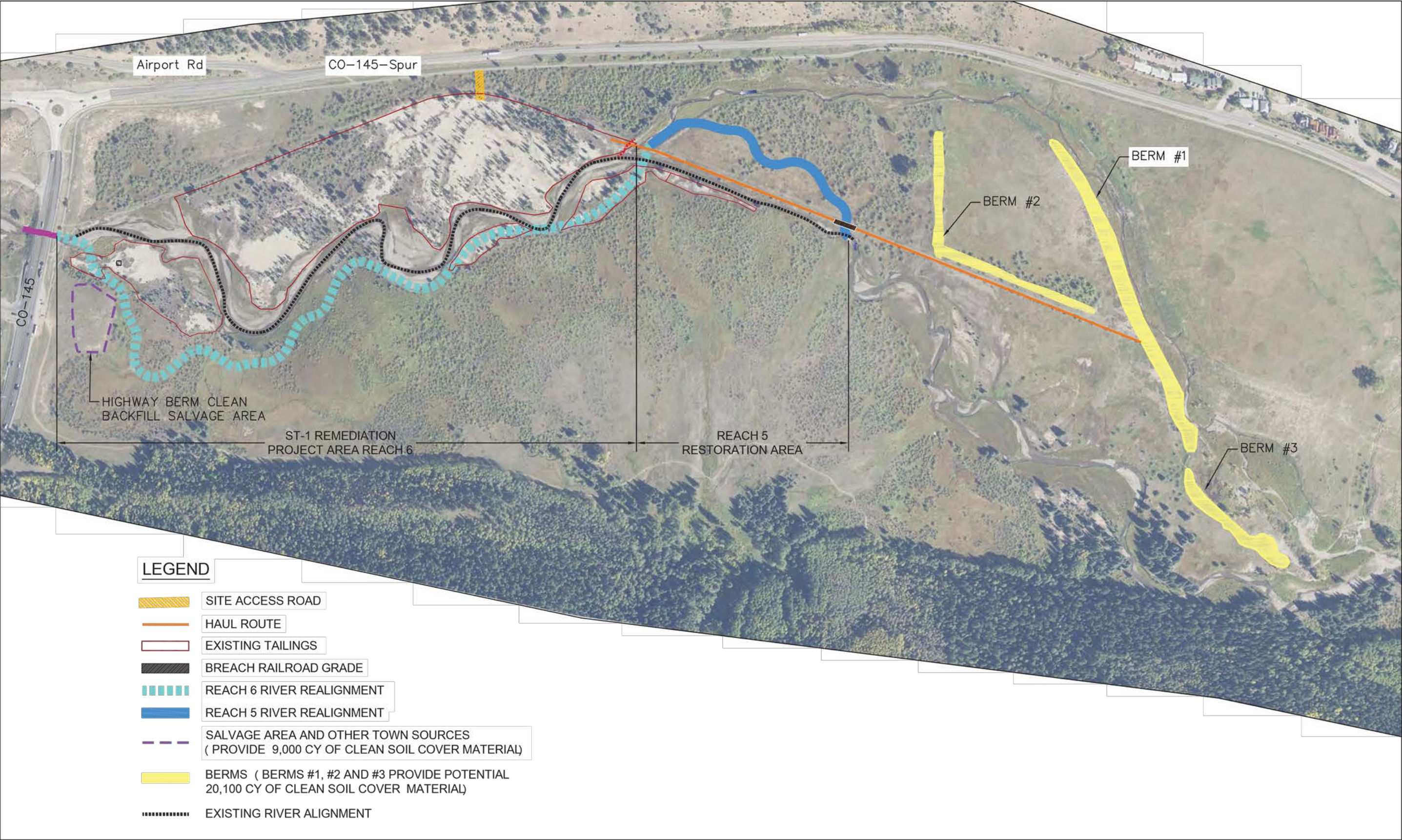
5.2.1 Criteria for Success

The ST-1 remediation/San Miguel River Restoration criteria for success focus on maintaining a healthy vegetated tailings cover as well as minimizing any erosion of that cover. Additionally, river restoration criteria for success will focus on ensuring the new river alignment is stable and river migration does not threaten the stability of capped tailings. The specific criteria for success are outlined below:










- Tailings Cover – Any bare areas on revegetated tailings cover that exceeding 10ft x 10ft shall be revegetated.
- Tailings Cover – Any erosional features (that are not vegetated) greater than 10ft in length and determined to expose tailings shall be mitigated.
- New River Alignment – Any evidence of erosion or avulsion of the new alignment shall be recorded and reported to the Town of Telluride.
- New River Alignment – Any channel migration that threatens the stability of the tailings consolidation area shall be recorded and reported to the Town of Telluride.

5.3 Long-term Maintenance

The Town of Telluride Open Space Fund will provide financial assurance for long-term maintenance for the project, subject to annual appropriation.



LEGEND

-  SITE ACCESS ROAD
-  HAUL ROUTE
-  EXISTING TAILINGS
-  BREACH RAILROAD GRADE
-  REACH 6 RIVER REALIGNMENT
-  REACH 5 RIVER REALIGNMENT
-  SALVAGE AREA AND OTHER TOWN SOURCES
(PROVIDE 9,000 CY OF CLEAN SOIL COVER MATERIAL)
-  BERMS (BERMS #1, #2 AND #3 PROVIDE POTENTIAL
20,100 CY OF CLEAN SOIL COVER MATERIAL)
-  EXISTING RIVER ALIGNMENT

REV	DATE	DESCRIPTION
A	05/30/19	



PREPARED BY
ECOLOGICAL RESOURCES CONSULTANTS, INC
35715 US HIGHWAY 40, SUITE D204113 W. Columbia Avenue • PO Box 897 • Telluride, CO 81415
EVERGREEN, CO 80439

CLIENT
TOWN OF TELLURIDE

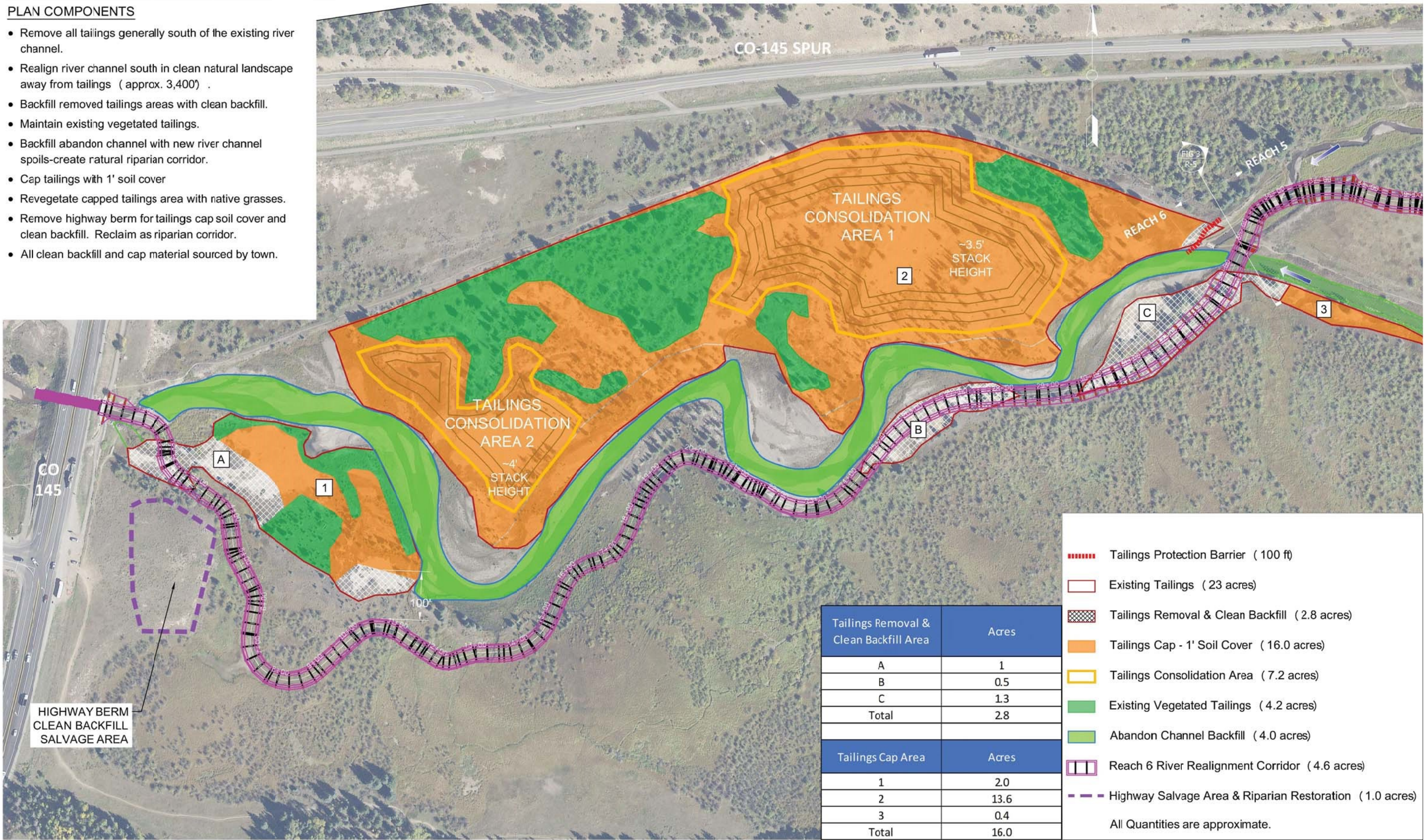
PROJECT
ST-1 REMEDIATION REACH 5 AND 6

TITLE
OVERALL PLANVIEW

SHEET
01

PLAN COMPONENTS

- Remove all tailings generally south of the existing river channel.
- Realign river channel south in clean natural landscape away from tailings (approx. 3,400') .
- Backfill removed tailings areas with clean backfill.
- Maintain existing vegetated tailings.
- Backfill abandon channel with new river channel spoils-create natural riparian corridor.
- Cap tailings with 1' soil cover
- Revegetate capped tailings area with native grasses.
- Remove highway berm for tailings cap soil cover and clean backfill. Reclaim as riparian corridor.
- All clean backfill and cap material sourced by town.



REV	DATE	DESCRIPTION
A	05/30/19	DRAFT



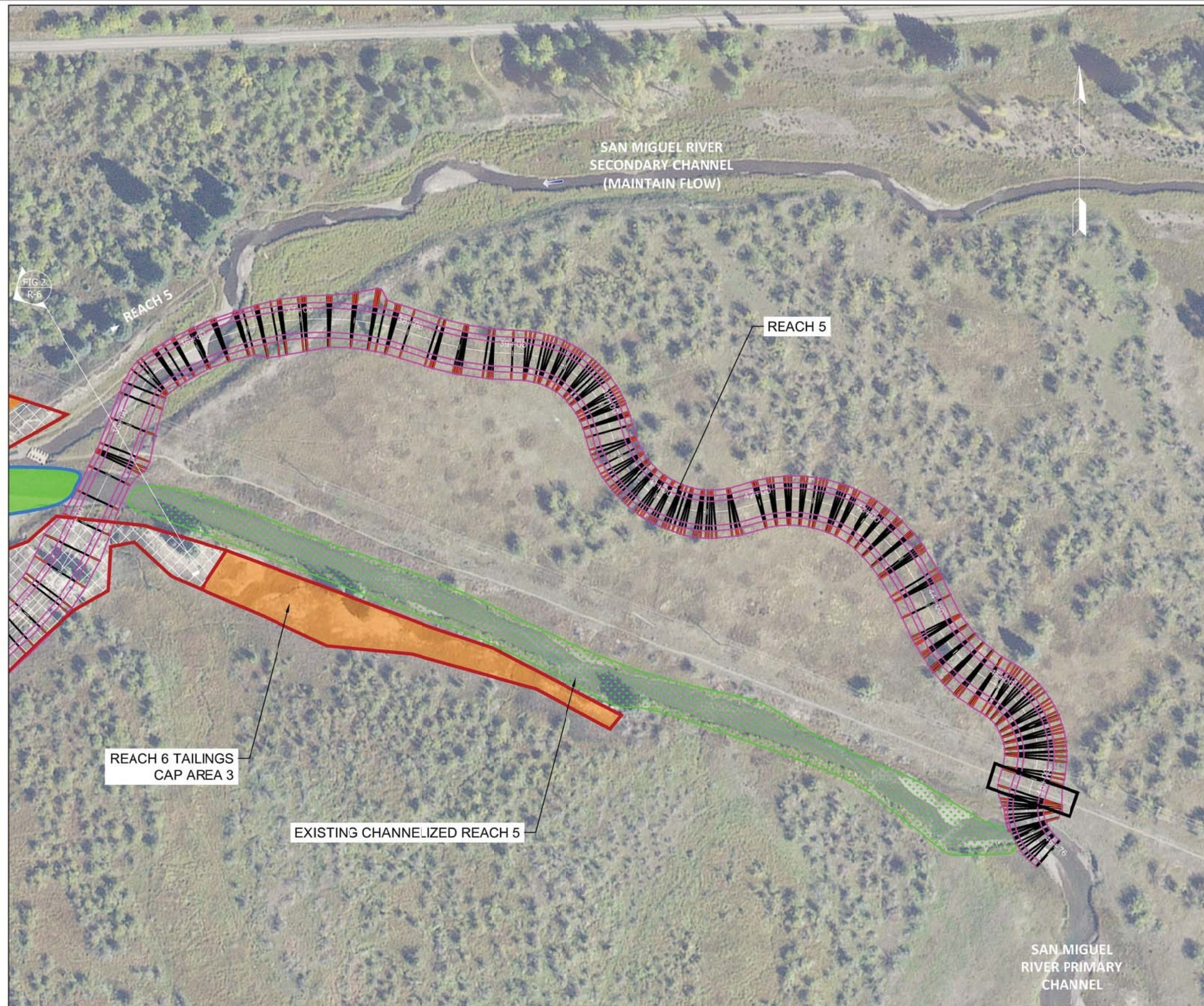
PREPARED BY
ECOLOGICAL RESOURCES CONSULTANTS, INC
35715 US HIGHWAY 40, SUITE D204
EVERGREEN, CO 80439

CLIENT
TOWN OF TELLURIDE

PROJECT
ST-1 REMEDIATION - REACH 5 AND 6

TITLE
PRELIMINARY
REACH 6

SHEET
02



- Existing Tailings
- Breach Railroad Grade
- Abandoned Channel Backfill

REV	DATE	DESCRIPTION
A	05/30/19	



PREPARED BY
ECOLOGICAL RESOURCES CONSULTANTS, INC
35715 US HIGHWAY 40, SUITE D204
EVERGREEN, CO 80439

CLIENT
TOWN OF TELLURIDE

PROJECT
ST-1 REMEDIATION - REACH 5 AND 6

TITLE
PRELIMINARY
REACH 5

SHEET
03

**COLORADO NATURAL RESOURCES TRUSTEES
RESOLUTION OF JUNE 24, 2019
CONCERNING GOVERNOR'S BASIN RESTORATION PROJECT**

WHEREAS, the Colorado Natural Resources Trustees ("Trustees") are responsible for the management and direction of Colorado's natural resource damages program;

WHEREAS, the Trustees are responsible for administering State funds to restore, replace or acquire the equivalent of injured natural resources;

WHEREAS, the Idarado Mine Site natural resource damages ("NRDs") settlement established a fund of \$1,000,000 through a Consent Decree dated July 6, 1992 for restoration projects; and

WHEREAS, the Uncompahgre Watershed Partnership ("UWP") submitted a proposal dated June 6, 2019 requesting \$76,200 from the Idarado NRD funds to restore alpine, riparian, and aquatic habitat, and improve water quality in Governor Creek, Sneffels Creek, and Canyon Creek ("Proposal").

NOW THEREFORE, the Colorado Natural Resource Trustees resolve as follows:

The Trustees do hereby approve the release of \$76,200 from the Idarado NRD funds ("Funds") to be applied towards the Uncompahgre Watershed Partnership Governor's Basin Restoration Project proposal dated June 6, 2019 ("Project") and subject to the following conditions:

- 1) Release of the Funds is contingent upon Uncompahgre Watershed Partnership contributing matching funds as presented in the Proposal, which may be obtained through other state or federal grant programs, or otherwise;
- 2) Release of the Funds is contingent upon compliance with all laws and regulations, including but not limited to: State and Federal laws, local regulations and ordinances, permitting and zoning requirements, and water rights requirements, including any necessary discharge permits;
- 3) Release of the Funds is contingent upon the Division of Reclamation, Mining and Safety having closed permit P2015-003;
- 4) Release of the Funds is contingent upon OSMI and Caldera providing to CDPHE a copy of the recorded environmental use restrictions preventing future mining on the property and any other land disturbances that could interfere with the restoration project; and

- 5) Release of the Funds is contingent upon OSMI and Caldera providing for public access and use of all properties in the Project area;
- 6) Release of the Funds is contingent upon UWP receiving approval from the United States Forest Service to perform restoration activities on lands owned by USFS.
- 7) In order to use the Funds, UWP must enter into a contract with CDPHE, consistent with this resolution, no later than June 23, 2023. Funds will remain available from CDPHE through the term of the CDPHE contract.

Phil Weiser ,
Colorado Attorney General

Date

Jill Hunsaker Ryan,
Executive Director, CDPHE

Date

Dan Gibbs, Executive Director, DNR

Date

**COLORADO NATURAL RESOURCES TRUSTEES
RESOLUTION OF JUNE 24, 2019
CONCERNING SOCIETY TURN TAILINGS PILE #1 (ST-1)
RESTORATION PROJECT**

WHEREAS, the Colorado Natural Resources Trustees (“Trustees”) are responsible for the management and direction of Colorado’s natural resource damages program;

WHEREAS, the Trustees are responsible for administering State funds to restore, replace or acquire the equivalent of injured natural resources;

WHEREAS, the Idarado Mine Site natural resource damages (“NRDs”) settlement established a \$1,000,000 fund through a Consent Decree dated July 6, 1992, for restoration projects (“Idarado NRD Fund”); and

WHEREAS, the town of Telluride submitted the ST-1 Restoration Project proposal dated June 3, 2019, requesting \$118,800 from the Idarado NRD Fund to restore aquatic and riparian habitat on two segments of the San Miguel River (“Proposal”).

NOW THEREFORE, the Colorado Natural Resource Trustees resolve as follows:

The Trustees do hereby approve the release of \$118,800 - plus the remaining balance after funding the Governor Basin Project – from the Idarado NRD Fund to be applied towards the ST-1 Restoration Project as described in the Proposal and subject to the following conditions:

- 1) Release of the Funds is contingent upon Telluride:
 - a. contributing and obtaining matching funds as described in the Proposal, which may be obtained through other state or federal grant programs, or otherwise; and
 - b. complying with all laws and regulations, including but not limited to: State and Federal laws; local regulations and ordinances; permitting and zoning requirements; water rights requirements; and any necessary water quality discharge permits.
- 2) In order to use the Funds, Telluride must enter into a contract with CDPHE, consistent with this resolution, no later than June 23, 2023.

Funds will remain available from CDPHE through the term of the CDPHE contract.

Phil Weiser
Colorado Attorney General

Date

Jill Hunsaker Ryan
Executive Director, CDPHE

Date

Dan Gibbs
Executive Director, DNR

Date

AGENDA #4

PHIL WEISER
Attorney General

NATALIE HANLON LEH
Chief Deputy Attorney General

JUNE TAYLOR
Chief Operating Officer

ERIC R. OLSON
Solicitor General



STATE OF COLORADO
DEPARTMENT OF LAW

RALPH L. CARR
COLORADO JUDICIAL CENTER
1300 Broadway, 10th Floor
Denver, Colorado 80203
Phone (720) 508-6000

Natural Resources and
Environment Section

June 10, 2019

M E M O R A N D U M

TO: Colorado Natural Resources Trustees

FROM: David Banas
Senior Assistant Attorney General

RE: Suncor

BACKGROUND

Since 2015, staff have been working with the United States Fish and Wildlife Service (USFWS) to find projects for the approximately \$1.23 million the State and USFWS jointly received from Suncor to compensate the public for injury to natural resources caused by the discharge of oil from its Commerce City refining facility into Sand Creek in 2011. At the October 2018 meeting, the Trustees approved two projects for these funds: (1) the USFWS's "Restoration/Rehabilitation of Rocky Flats National Wildlife Refuge" project proposal in the amount of \$148,000; and (2) the "Ducks Unlimited Suncor Remediation Proposal" in the amount of \$1,082,000.

UPDATE

Because some of the funds are held by USFWS, project approval is contingent, in part, on the completion of the federal National Environmental Policy Act (NEPA) process.

The federal government shutdown in December 2018 and January 2019 delayed commencement of the NEPA process. USFWS informs us that they plan to begin the process this summer.