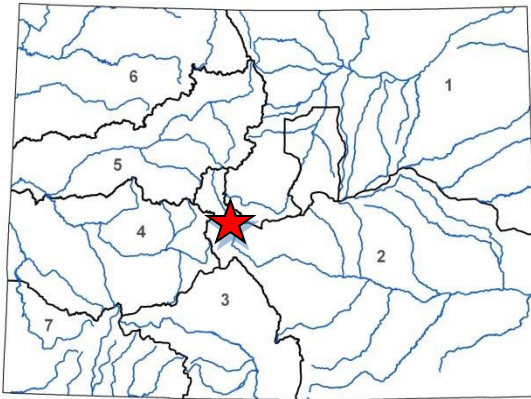




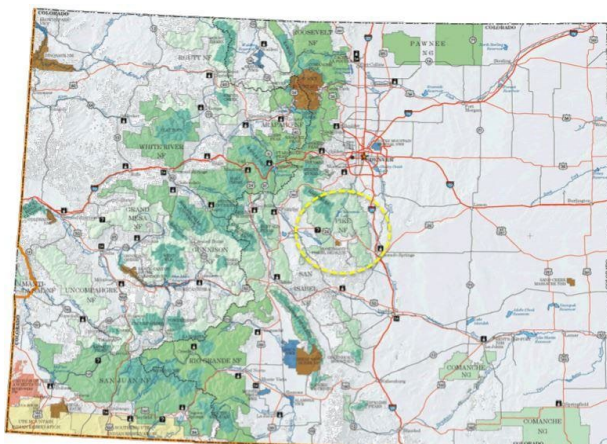
Colorado Watershed Restoration Program Application



LOCATION	
County/Countries:	El Paso
Drainage Basin:	Arkansas

DETAILS	
Total Project Cost:	\$577,500
Colorado Watershed Restoration Program Request:	\$250,000
Recommended amount:	\$100,000
Other CWCB Funding:	\$0
Other Funding Amount:	\$327,500
Applicant Match:	\$0
Project Type(s):	Project
Project Category(Categories):	Watershed Restoration
Measurable Result:	Final Implementation Plan, constructed process-based restoration

This multi-year project seeks to enhance watershed resiliency in key areas of the Pike National Forest through implementation of multi-faceted watershed health improvement projects on trails, roads, and recreational use areas; stream crossings; stream channels; hillslopes; and riparian areas. Specific watershed health improvement projects include, but are not limited to: conducting landscape restoration to facilitate improved water quality; simulated beaver structures and floodplain improvements; wildfire resiliency; native vegetation rehabilitation; invasive species control; erosion control techniques and mitigation; trail design, reconstruction, and maintenance; improvements to road and trail drainage and sustainability; improvements to recreational facilities; providing educational opportunities; aquatic and terrestrial wildlife habitat improvements; and assessment and monitoring. All projects will complement ongoing landscape planning efforts and will focus on improving the resiliency of all vegetation types to sudden change.



This project will work to achieve the following objectives:

1. Reduce run-off and sedimentation from roads, trails, impaired hillslopes, and other recreational use.
2. Improve stream channel conditions and streambanks resulting in improved aquatic habitat and water quality.
3. Improve stream crossings and culverts to reduce sedimentation and better withstand potential effects caused by wildfire and flood.
4. Enhance riparian vegetation to reduce fuels, increase structural diversity, break canopy continuity where uniform canopy cover exists, perpetuate vigorous aspen clones, and protect and enhance the large conifer component of these systems.
5. Reduce the potential impacts from wildfire to limit erosion impacts to municipal water sources.
6. Share project outcomes and results with relevant stakeholders through distribution of educational materials, preparation of final reports, and meeting/conference presentations.

1.0 PROJECT PROPOSAL SUMMARY SHEET

Project Title:

Enhancing Watershed Resiliency in the Pike National Forest Through the Implementation of Multi-Year and Multi-Faceted Watershed Health Improvement Projects

Project Location:

Multiple locations within the Pike National Forest including, but not limited to: Pikes Peak Ranger District, South Platte Ranger District, and South Park Ranger District.

Grant Type:

Watershed/Stream Restoration Grant

Grant Request Amount:

\$250,000 over 5 years (\$50,000/year)

Cash Match Funding:

\$300,000 (over 5 years)

In-Kind Match Funding:

\$27,500 (over 5 years)

Project Sponsor:

Rocky Mountain Field Institute (RMFI)

Contact Person:

Jennifer Peterson, Ph.D.
Executive Director
Rocky Mountain Field Institute
815 South 25th Street, Suite 101
Colorado Springs, Colorado 80904
Email: Jennifer@rmfi.org
Phone: 719-471-7736, ext. 1#

Brief Description of Project:

This multi-year project seeks to enhance watershed resiliency in key areas of the Pike National Forest through the implementation of multi-faceted watershed health improvement projects on trails, roads, and recreational use areas; stream crossings; stream channels; hillslopes, and riparian areas. Specific watershed health improvement projects include, but are not limited to: conducting landscape restoration to facilitate improved water quality; simulated beaver structures and floodplain improvements, wildfire resiliency; native vegetation rehabilitation; invasive species control; erosion control techniques and mitigation; trail design, reconstruction, and maintenance; improvements to road and trail drainage and sustainability; improvements to recreational facilities; providing educational opportunities; aquatic and terrestrial wildlife habitat improvements; and assessment and monitoring. All projects will complement ongoing landscape planning efforts and will focus on improving the resiliency of all vegetation types to sudden change.

2.0 APPLICANT QUALIFICATIONS

2.1 Project Sponsors and Cooperators

Lead Project Sponsor: Rocky Mountain Field Institute

Rocky Mountain Field Institute (RMFI) will be responsible for all project planning, coordination, implementation, evaluation, volunteer recruitment/training, and youth corps contracting activities.

Project Cooperators: U.S. Forest Service (primary cooperator), Bear Creek Roundtable, El Paso County Regional Resiliency Collaborative

As the primary project cooperator, the U.S. Forest Service (USFS) will provide direct technical assistance as well as project and deliverable overview. Secondary project cooperators will primarily serve as a sounding board for project updates, guidance, and findings. The Bear Creek Roundtable is a collaborative group that formed in 2012 in response to the discovery of the last remaining genetically pure population of the greenback cutthroat trout, Colorado's state fish, in a 4-mile stretch of Bear Creek. The broad coalition of partners including municipal, county, state and federal agencies; conservation groups; diverse user-groups; and an informed and concerned public, have met regularly since 2012 to provide invaluable assistance and guidance in the development and implementation of the Bear Creek Restoration Project. The El Paso County Regional Resiliency Collaborative (Collaborative) grew out of the Waldo Canyon Regional Recovery Group, which formed in 2012 as a response to the Waldo Canyon Fire. The Collaborative meets annually to discuss and coordinate watershed projects within El Paso County. RMFI sits on the Collaborative's Leadership Team.

2.2 In-Kind Services and Cash Contribution

RMFI is requesting \$250,000 over the course of 5 years (\$50,000/year) from the Colorado Water Conservation Board Watershed Restoration Program. We will be providing \$300,000 in cash match over the 5-year project period. The cash match will come from a grant through the Colorado Parks & Wildlife; El Paso County; and a multi-year agreement between Colorado Springs Utilities, U.S. Forest Service, and RMFI (see attached most recent Supplemental Project Agreement in Section 5.5 signed in 2018 detailing scope of watershed projects. This has been modified several times to add financial resources and extend the deadline to match our Challenge Cost Share Agreement, which is set to expire October 15, 2023. We will work to renew this for another 5-year term prior to the expiration date of the agreement). The match also includes \$27,500 in in-kind services over the 5-year project period from the U.S. Forest Service and volunteer labor (currently pending, but will be promptly secured with approval of this proposal).

3.0 ORGANIZATIONAL CAPABILITY

3.1 History of Accomplishments in the Watershed

RMFI has been working directly with the USFS and other partners to implement a variety of watershed restoration and trail projects on the Pike National Forest for nearly two decades. Projects have included wetland restoration and stabilization in the montane and alpine ecosystems of the Pikes Peak massif; habitat protection, trail construction, erosion control/stabilization, and decommissioning of system/non-system trails in the Bear Creek Watershed; forest health, aspen regeneration, and fuels mitigation projects in Upper Monument Creek; and post-fire restoration, recovery, and monitoring projects in the Waldo Canyon and Hayman Fire burn scars. Other partners worked with to complete these projects have included the City of Colorado Springs, City of Manitou Springs, El Paso County, Mile High Youth Corps, Volunteers for Outdoor Colorado, and members of the El Paso County Regional Resiliency Collaborative and the Bear Creek Roundtable, both comprised of a diversity of agency, nonprofit, and user group representatives.

Throughout the past two decades of work on the Pike National Forest alone, RMFI has actively engaged thousands of community volunteers and youth conservation corps members; constructed dozens of miles

of new trail; restored and decommissioned dozens of miles of social trails and system/non-system routes; constructed thousands of erosion control and stabilization structures (check dams, cross veins, log erosion barriers); and transplanted thousands of native species vegetation plugs in various restoration efforts. Since 1982, RMFI has been a key player in the conservation and stewardship of Southern Colorado's public natural landscapes. The RMFI restoration model centers on community involvement as a means of connecting people to the outdoors, promoting a healthy lifestyle, and fostering an ethic of environmental responsibility and stewardship. We tackle a diverse array of projects including trail construction and maintenance, post-fire restoration and stabilization, creating sustainable recreation access, habitat protection, and many others. To carry out our mission, RMFI implements three interrelated programs focused on volunteer stewardship, environmental education, and restoration research.

3.2 Level of Staffing to Implement Proposed Project

At this time, RMFI employs 7 full-time staff and 20-25 seasonal staff who are responsible for on-the-ground implementation of all stewardship and conservation projects. It is anticipated RMFI staff (full-time and seasonal staff and volunteers) will spend approximately 2,000 hours on the proposed project per year (6,000+ hours total). It is also anticipated that volunteers will be used on this project to help complete project objectives. Brief resumes for key members of the active project team (full-time staff) are included below. For a complete listing of seasonal staff, please visit: <https://www.rmfi.org/about-rmfi/staff>.

Jennifer Peterson, Ph.D., Executive Director

Jennifer oversees program development and administration, communications, personnel and staffing, budget and finance, and fundraising needs for the organization. Jennifer has been with RMFI since 2014.

Carl Woody, Program Director

Carl provides overall leadership, administration, technical expertise, and management of RMFI's trail, restoration, and education field programs. Carl has been with RMFI since 2020.

Jamie Goins, Lindsay Williams, and Alex Hladkyj, Program Managers

Jamie, Lindsay, and Alex provide leadership and management of RMFI's field-based programs by overseeing the logistics and implementation of all projects, and by managing seasonal staff. All 3 employees were seasonal employees for multiple field seasons before joining RMFI in a full-time capacity. Alex began in 2016, Jamie began in 2017, and Lindsay began in 2018.

3.4 Realistic Project Budget and Schedule

The CWCBC has supported many RMFI-led watershed restoration projects over the years. The most recent project was a 3-year watershed restoration grant (2019-2021) that supported a variety of erosion control, habitat restoration, riparian revegetation, and recreational opportunity improvement projects in the Pike National Forest. Prior to this, the CWCBC supported a multi-year willow propagation program, a highly successful riparian restoration and revegetation project focused on restoring highly-impacted watersheds. All projects to date have been completed on time and within in budget. Please reference proposed budget and project implementation table in the "Attachments" section for additional information.

4.0 PROPOSAL EFFECTIVENESS

4.1 Information Used to Guide Proposed Project

This project is being guided by a tremendous amount of work, research, collaborative initiatives, and other information that have been generated over the past several years by RMFI and other project partners. RMFI will also draw upon its 40-year history as an environmental stewardship organization to guide the proposed project as well as its long-standing partnership with the U.S. Forest Service Pikes Peak Ranger District. Since 2003, RMFI has led restoration efforts on Pikes Peak, repairing fens,

wetlands, and stream channels that were inundated with several thousand cubic feet of sediment originating from the Pikes Peak Highway corridor. Since 2009, RMFI has been working with project partners to complete a variety of trail and restoration projects in the Bear Creek Watershed designed to protect the aquatic habitat of the threatened greenback cutthroat trout, Colorado's state fish. After the Waldo Canyon Fire burned 18,000 acres west of Colorado Springs in 2012, RMFI worked with a variety of partners to complete hillslope stabilization, erosion control, and riparian restoration projects, including a multi-year willow propagation project supported by the CWCBC. In 2016, RMFI began working with the U.S. Forest Service to complete forest health and watershed improvement projects in the Upper Monument Creek Landscape, and in 2017 began a multi-year project with the U.S. Forest Service and National Forest Foundation to complete trail improvement and landscape restoration projects in the Devils Playground Trail corridor. In 2021, RMFI had its largest season in the organization's history, completing over 500 individual stewardship workdays in public parks, open spaces, National Forests, and Wilderness areas in Southern Colorado and the Pikes Peak Region. Projects focused on trail construction, trail maintenance, erosion control, hillslope stabilization, habitat restoration, forest health, and environmental education. In addition, a key component of RMFI's mission is effectiveness monitoring and research. Data collection and annual observations made at various project locations help to inform future techniques, objectives, and approaches. Consequently, RMFI has dozens of final reports, photographs, and data to help guide this multi-year project.

Finally, a number of other reports and plans external to RMFI have been developed that will help guide proposed project objectives. All project documents and guidance for the Upper Monument Creek Landscape can be found here:

<https://www.fs.usda.gov/detail/psicc/landmanagement/projects/?cid=stelprd3800976>. For documents and reports related to the Bear Creek Watershed including the Bear Creek Watershed Final Decision and Finding of No Significant Impact along with the Bear Creek Watershed Restoration Environmental Assessment, please visit: <https://www.fs.usda.gov/detail/psicc/home/?cid=stelprdb5397304>. For a comprehensive summary of reports for RMFI's work on Pikes Peak, please visit: <https://www.rmfi.org/projects/pikes-peak-watershed-erosion-control-and-restoration-project>.

4.2 Multi-Objective Aspects of Project and How They Relate to Each Other

Watersheds are critical components of ecosystem health and function. Water from Colorado's forests support a variety of uses including public drinking water, agriculture, industrial uses (including mining), recreation, and habitat for aquatic life (USFS 2008). Forests exert a strong influence on the quantity and quality of water within watersheds by protecting soil and preventing erosion, enhancing soil moisture storage and groundwater recharge, reducing flooding, filtering contaminants and maintaining the plant communities that also contribute to this process (CSFS 2009).

National Forest System lands contribute nearly 20 percent of the nation's water supply and in arid western states system lands may contribute over 50 percent of the supply. Forest plant communities have a direct and significant effect on both the production and quality of stream health and fresh water supply. Properly functioning riparian corridors and stream channels are essential in managing pre- and post-wildfire behavior and storm events. They act as a buffer to fire extremes and manage flood and debris flows and kinetic energy release. However, wetland, riparian, and stream health conditions vary considerably across the Nation. In the U.S. Forest Service Rocky Mountain Region (Region 2), insect and disease, livestock grazing, transportation, recreation, mining, conifer encroachment, and urban encroachment account for many of the historical and ongoing concerns. As a result, the most common water quality problems on national forests are increases in nutrients, streamwater temperatures, and sediment loads (turbidity and bedload). Addressing these issues across a landscape scale with simple management techniques can effectively improve stream health and watershed resiliency.

While we have long-recognized the importance of watershed, wetland, riparian, and stream health, management activities have often overlooked the need to proactively manage these systems. Restoring functionality within these systems will help improve their resiliency to catastrophic events including fire and flooding, resulting in increased ecological diversity, improved stream health, and water quality. Given the critical role stream channels and riparian corridors play in maintaining watershed resiliency to insect and disease, fire, flooding and other natural events, this project proposes to implement a multi-year, coordinated, and multi-faceted approach to enhancing watershed resiliency, health, and function. Multi-objective aspects of the proposed project include implementing a suite of different trail and restoration activities that, collectively, function as an interrelated set of actions to help protect water quality, improve habitat conditions, minimize erosion, and enhance watershed health and function. Projects are designed to reduce erosion and sedimentation resulting from highly erodible soils combined with heavily used roads, trails, and other recreational uses. Water quality will benefit through the maintenance and restoration of damaged and un-improved roads and trails that contribute a considerable source of sedimentation and erosion. Other activities that may occur in the project areas include, but are not limited to: stream channel and hillslope improvements, and riparian vegetation enhancements. Examples of stream channel improvements include large wood placement in streams, stream habitat improvement such as bank stabilization techniques, and floodplain connectivity enhancement. Examples of hillslope improvements include log erosion barriers, directionally felling trees, noxious weed treatment, reseeding bare ground, and reducing hydrologic connectivity from abundant sediment sources. Examples of riparian vegetation enhancements include willow staking and transplanting, noxious weed treatment, removal of conifer encroachment from riparian corridors, and aspen enhancement.

The proposed suite of projects will help to support and enhance watershed health by:

- Reducing run-off and sedimentation from roads, trails, impaired hillslopes, and other recreational use;
- Improving stream channel conditions and banks resulting in improved aquatic habitat and water quality;
- Improving stream crossings and culverts to reduce sedimentation and better sustain potential effects caused by wildfire and flood;
- Enhancing riparian vegetation to reduce fuels, increase structural diversity, break canopy continuity where uniform canopy cover exists, perpetuate vigorous aspen clones, and protect and enhance the large conifer component of these systems;
- Reducing the potential impacts from wildfire to limit erosion impacts to municipal water sources.

4.3 Proposed Implementation/Monitoring Plan

The proposed 5-year implementation/monitoring schedule for the project is detailed below. Note that we proposed each of the 4 phases in each of the 5 years of the project.

Phase 1: Complete project planning.

- a. *Task 1 (January 14 – March 31, 2022, 2023, 2024, 2025, 2026):* Complete site visits, scope of work, and identify/prioritize work locations. Project planning, logistics. Interview/hire seasonal field staff. Begin volunteer recruitment.

Phase 2: Complete work objectives.

- a. *Task 2 (April 1-November 15, 2022, 2023, 2024, 2025, 2026):* Implement watershed health improvement projects in key locations within the Pike National Forest through the utilization of the RMFI Stewardship Crew of ~6 seasonal field instructors and community volunteers where appropriate.

Phase 3: Complete effectiveness monitoring.

- b. *Task 3 (May 15-December 31, 2022, 2023, 2024, 2025, 2026):* Monitor project activities to determine success of treatments implemented to improve watershed health and function.

Phase 4: Post-project evaluation, assessment, and reporting.

- a. *Task 4: (December 1-December 31, 2022, 2023, 2024, 2025, 2026):* Develop interim reports and a final report detailing project outcomes and results.

Implementing a suite of wetland, riparian, and stream management actions will make these systems more resilient. Many benefits to ecosystem services will be realized including: groundwater recharge, water quality, aquatic biota and wildlife habitat, and erosion management. Monitoring will be performed through on-site observations to identify the need for annual maintenance such as cleaning or repairing water-bars and dips, cross drains, and culverts. The management activities will be measured and analyzed to determine if the riparian, wetland, or stream is moving towards a properly functioning condition.

Fundamental questions to be addressed through monitoring include:

1. Is the work achieving the desired objectives for the targeted ecosystem and/or its component parts?
2. Can methods and techniques be improved to optimize recovery of the ecosystem and/or its component parts?
3. What modifications are possible to improve the cost-effectiveness of the work?

The effectiveness of prescriptions implemented will be assessed, analyzed, and reported. Specific methods that will be utilized include census counts, monumented photopoints, ocular estimates, and success/failure rate of structures. Most of RMFI's monitoring and evaluation research is undertaken over a period of three years after project implementation. Results analyzing the overall effectiveness of prescriptions implemented will be reported at the conclusion of the monitoring period.

5.0 ATTACHMENTS

5.1 Scope of Work

GRANTEE and FISCAL AGENT (if different)

Rocky Mountain Field Institute

PRIMARY CONTACT

Jennifer Peterson, Executive Director

ADDRESS

815 South 25th Street, Suite 101
Colorado Springs, Colorado 80904

PHONE

719-471-7736, ext. 1#

PROJECT NAME

Enhancing Watershed Resiliency in the Pike National Forest Through the Implementation of Multi-Year and Multi-Faceted Watershed Health Improvement Projects

GRANT AMOUNT

\$250,000 over 3 years (\$50,000/year for 5 years)

INTRODUCTION AND BACKGROUND

Provide a brief description of the project. (Please limit to half a page)

This multi-year project seeks to enhance watershed resiliency in key areas of the Pike National Forest through the implementation of multi-faceted watershed health improvement projects on trails, roads, and recreational use areas; stream crossings; stream channels; hillslopes, and riparian areas. Specific watershed health improvement projects include, but are not limited to: conducting landscape restoration to facilitate improved water quality; simulated beaver structures and floodplain improvements, wildfire resiliency; native vegetation rehabilitation; invasive species control; erosion control techniques and mitigation; trail design, reconstruction, and maintenance; improvements to road and trail drainage and sustainability; improvements to recreational facilities; providing educational opportunities; aquatic and terrestrial wildlife habitat improvements; and assessment and monitoring. All projects will complement ongoing landscape planning efforts and will focus on improving the resiliency of all vegetation types to sudden change.

OBJECTIVES

List the objectives of the project. Please include objectives for all aspects of the project whether funded by the CWCB or not.

Project objectives include:

1. Reduce run-off and sedimentation from roads, trails, impaired hillslopes, and other recreational use;
2. Improve stream channel conditions and streambanks resulting in improved aquatic habitat and water quality;
3. Improve stream crossings and culverts to reduce sedimentation and better withstand potential effects caused by wildfire and flood;
4. Enhance riparian vegetation to reduce fuels, increase structural diversity, break canopy continuity where uniform canopy cover exists, perpetuate vigorous aspen clones, and protect and enhance the large conifer component of these systems;
5. Reduce the potential impacts from wildfire to limit erosion impacts to municipal water sources.
6. Share project outcomes and results with relevant stakeholders through distribution of educational materials, preparation of final reports, and meeting/conference presentations.

TASKS

Provide a detailed description of each task using the following format. Detailed descriptions are only required for CWCB funded tasks. Other tasks should be identified but do not require details beyond a brief description.

TASK 1 – Complete Project Planning.

Description of Task

This project involves close coordination with the U.S. Forest Service to help in identifying key project locations each year of the project period. Extensive planning will need to be completed to determine project locations, project objectives, timelines, staffing and volunteer needs, and other project logistics including camping locations and transportation.

Method/Procedure

1. Coordinate with U.S. Forest Service to identify and prioritize project locations within the Pike National Forest (Pikes Peak Ranger District, South Platte Ranger District, South Park Ranger District).
2. Complete site visits to determine project objectives.

3. Recruit community volunteers to assist in completion of project objectives.
4. Interview and hire seasonal RMFI field staff to assist in the completion of project objectives.
5. Develop scope of work each year.

Deliverables

1. Annual scope of work detailing project objectives, maps, schedule, and timeline.
2. Hiring and scheduling of seasonal RMFI field staff.
3. Annual volunteer statistics including hours, activities, demographics, and work accomplished.

TASK 2 – Complete Work Objectives.

Description of Task

RMFI will work with the U.S. Forest Service to implement a suite of watershed health improvement projects in the Pike National Forest that will help to reduce runoff and sedimentation, improve stream channel conditions, improve aquatic habitat, improve water quality, increase resiliency, enhance riparian vegetation, and reduce potential impacts from wildlife and flood. These projects complement ongoing landscape planning efforts and will focus on improving the resiliency of all vegetation types to sudden change.

Method/Procedure

RMFI will utilize its own paid stewardship crew to accomplish annual work objectives. The stewardship crew will be comprised of approximately 6 individuals who bring extensive experience and knowledge surround watershed restoration projects. Where possible, RMFI will recruit community volunteers to help with completing project objectives, particularly those projects that are easily accessible, don't require an extensive hike, and are located within a reasonable distance from Colorado Springs and other surrounding communities.

Deliverables

1. Quantitative metrics documenting project accomplishments including miles of trail maintained, miles of trail/road closed and restored, number of trees/saplings planted, number of erosion control/stabilization structures built, number of trees felled, and others.
2. Photographs, including pre/post photos documenting project accomplishments and impact.
3. Volunteer satisfaction survey results.

TASK 3 – Complete Effectiveness Monitoring.

Description of Task

This task involves monitoring project activities to determine success of treatments implemented to improve watershed health and function. RMFI will work closely with the U.S. Forest Service to create and implement relevant monitoring protocols to determine project success. On at least an annual basis, RMFI will complete monitoring visits to all project sites over the course of the 5-year project period.

Method/Procedure

1. Work with the U.S. Forest Service to create and/or implement specific monitoring protocols to determine project effectiveness.
2. Complete annual monitoring site visits to determine effectiveness of treatments implemented at key project locations within the Pike National Forest.

Deliverable

1. Pre/post photographs documenting project progress, success, and impacts.
2. Compiled observations and data sheets.

TASK 4 – Complete Post-Project Evaluation, Assessment, and Reporting

Description of Task

This task involves the analysis, documentation, and assessment of project progress and results for the purpose of evaluating project success and informing not only the broader field of watershed health and restoration, but also future management considerations and decisions within the Pike National Forest.

Method/Procedure

RMFI staff with the assistance of USFS personnel will summarize results and findings into a final project report. Results will be shared with the broader community as well as with Bear Creek Roundtable and Collaborative members.

Deliverable

1. 6-month progress reports.
2. Final report detailing project outcomes and results.

BUDGET AND TIMELINE TABLE

TASK	Target Start Date	Target Completion Date	CWCB Funds	Other Funding Cash – U.S. Forest Service	Other Funding Cash – Colorado Parks & Wildlife, Manitou Springs, Athletic Brewing Co.	Other Funding In-Kind – U.S. Forest Service, Volunteers	Total
<i>Task 1: Complete project planning.</i>	1/14/2022 (2023, 2024, 2025, 2026)	03/31/2022 (2023, 2024, 2025, 2026)	\$3,000/year (\$15,000 total)	\$1,000/year (\$5,000 total)	\$1,000/year (\$5,000 total)	\$1,000/year (\$5,000 total)	\$6,000/year (\$30,000 total)
<i>Task 2: Complete work objectives.</i>	04/01/2022 (2023, 2024, 2025, 2026)	11/15/2022 (2023, 2024, 2025, 2026)	\$40,000/year (\$200,000 total)	\$47,000/year (\$235,000 total)	\$8,000/year (\$40,000 total)	\$4,000/year (\$20,000 total)	\$99,000/year (\$495,000 total)
<i>Task 3: Complete effectiveness monitoring.</i>	05/15/2022 (2023, 2024, 2025, 2026)	12/31/2022 (2023, 2024, 2025, 2026)	\$4,000/year (\$20,000 total)	\$1,000/year (\$5,000 total)	\$500/year (\$2,500 total)	\$500/year (\$2,500 total)	\$6,000/year (\$30,000 total)
<i>Task 4: Complete post-project evaluation, assessment, and reporting</i>	12/01/2022 (2023, 2024, 2025, 2026)	12/31/2022 (2023, 2024, 2025, 2026)	\$3,000/year (\$15,000 total)	\$1,000/year (\$5,000 total)	\$500/year (\$2,500 total)	\$0	\$4,500 (\$22,500 total)
Total			\$50,000/year (\$250,000 total)	\$50,000/year (\$250,000 total)	\$10,000/year (\$50,000 total)	\$5,500/year (\$27,500 total)	\$115,500/year (\$577,500 total)

5.2 Project Maps

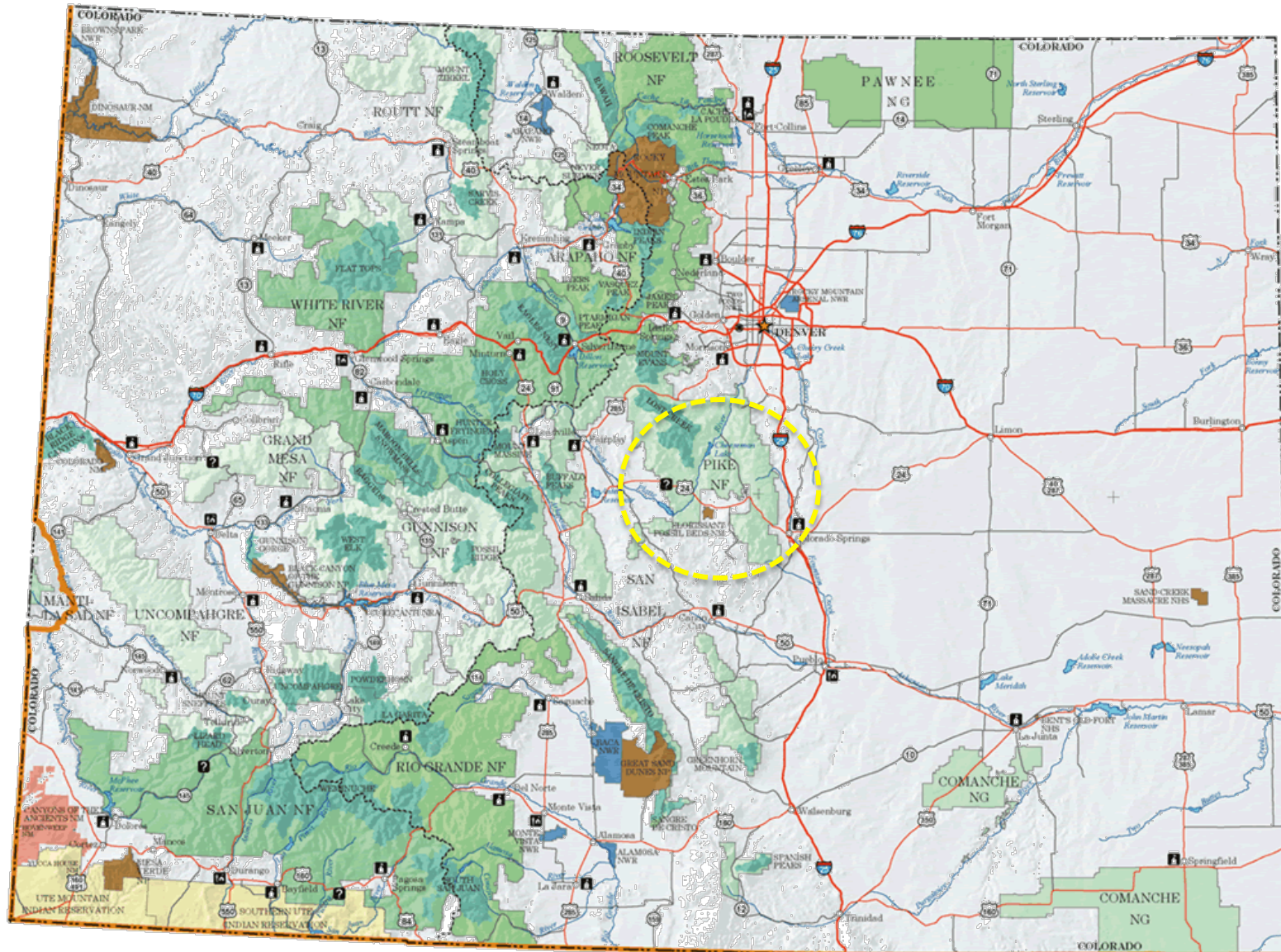
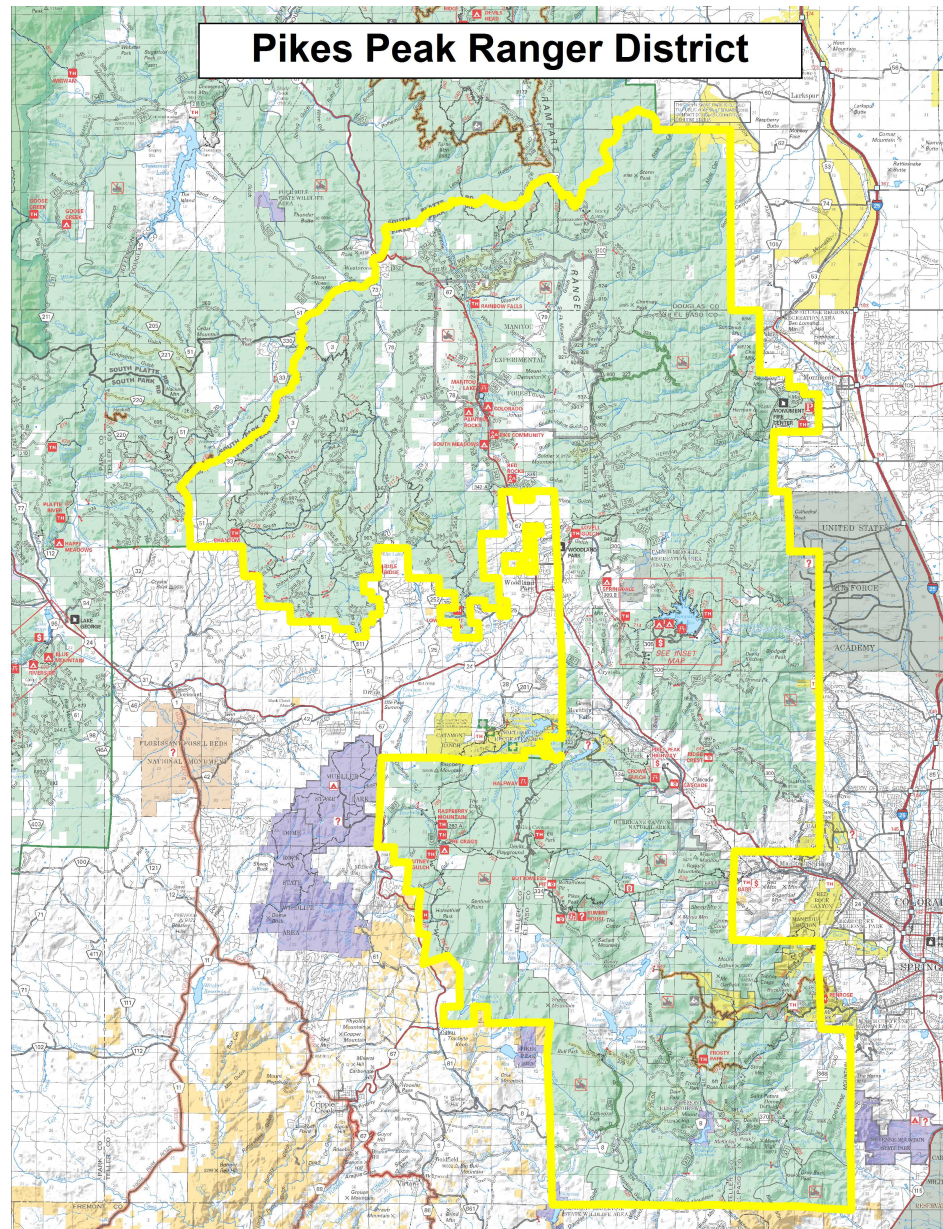
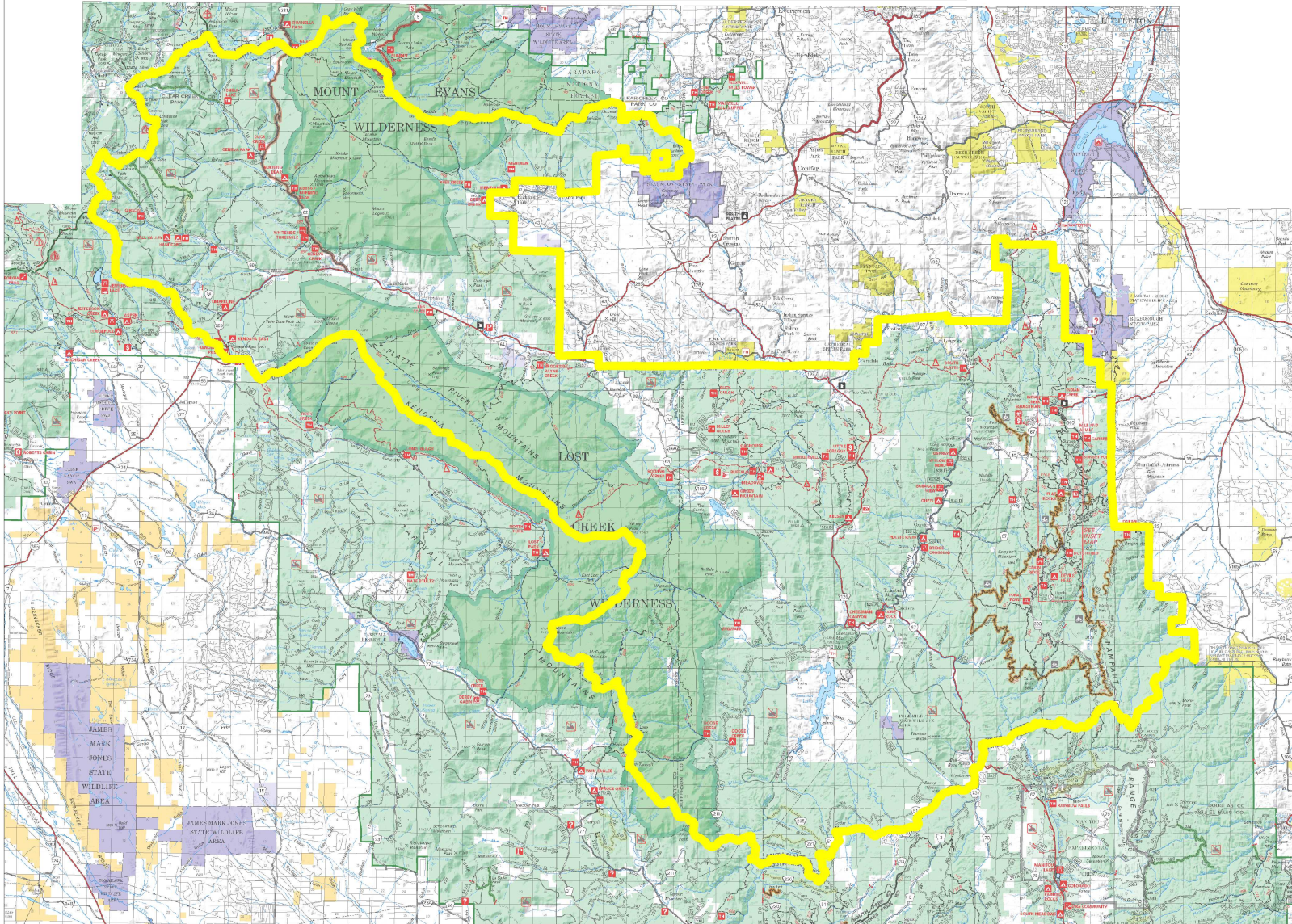
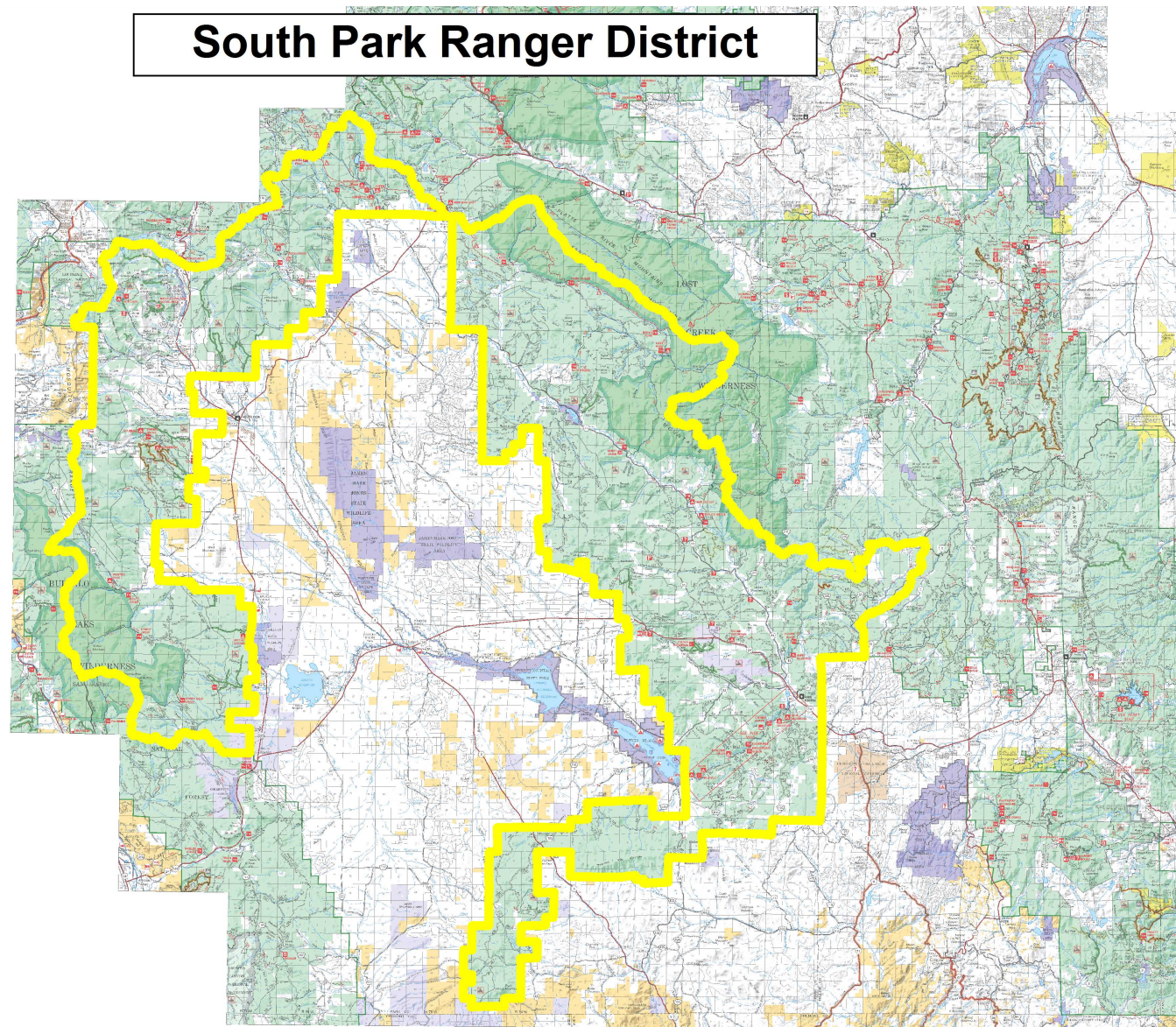


Figure 1. U.S. Forest Service Rocky Mountain Region (Region 2). Circled in the center is the Pike National Forest where our proposed suite of projects will occur. District maps are included on the following pages.



South Platte Ranger District





5.3 Photos Representing RMFI's Restoration Work in the Pike National Forest

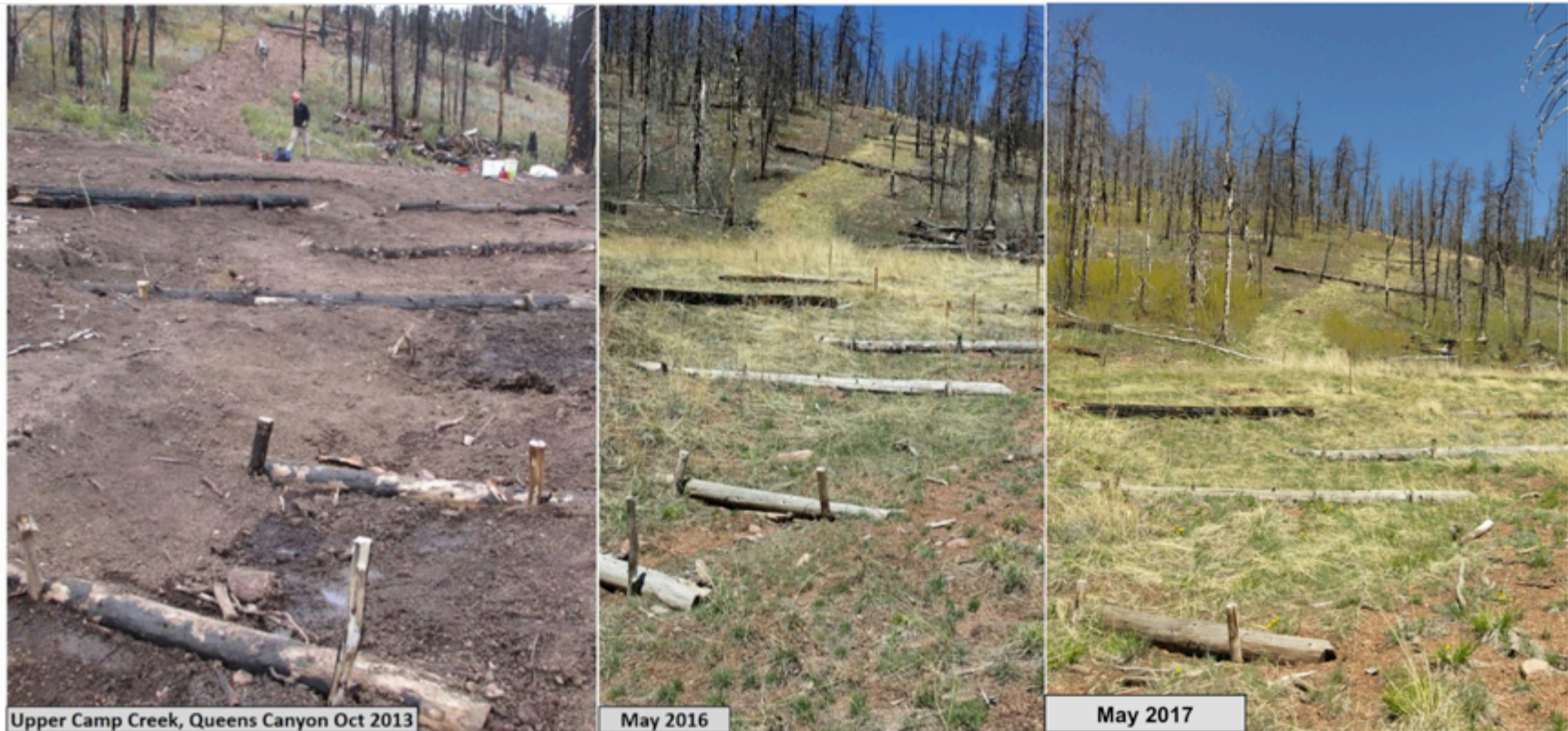


Figure 2. Three-year photo series showing the impact of RMFI's restoration work in the upper Camp Creek drainage of the Waldo Canyon burn scar.



Figure 3. Pre/post photo of hillslope stabilization work completed by RMFI crews adjacent to Rampart Reservoir.



Figure 4. Pre/post photos (above and below) showing puncheon structure constructed by RMFI crews in 2021 to mitigate erosion and create a more durable trail surface.





Figure 5. Example of a brush filter constructed between the trail and Bear Creek to help capture sediment.



Figure 7. RMFI staff removing conifer encroachment in the Rainbow Gulch area of the Upper Monument Creek Landscape.



Figure 6. A volunteer transplants a native bunchgrass along High Drive in the Bear Creek Watershed.



United States
Department of
Agriculture

Forest
Service

Pikes Peak Ranger District

601 South Weber
Colorado Springs, CO 80903
719-636-1602
Fax: 719-477-4233

File Code: 3500
Date: October 26, 2021

Colorado Watershed Conservation Board
Attn: Chris Sturm
1313 Sherman St, Room 718
Denver, CO 80203

Dear Members of the Review Panel:

I am pleased to support the Rocky Mountain Field Institute's (RMFI) Watershed Health Improvement Project proposal for consideration under the Colorado Watershed/Stream Restoration program. RMFI has been instrumental to watershed health improvements by providing project planning, training, and field crew support on National Forest managed lands. As well as the assessment and monitoring of implementation sites. RMFI is an overall key component in promoting watershed resiliency and partner collaboration.

The intent of the Watershed Health Improvement Project is to enhance watershed resiliency in key areas of the Pike National Forest through the implementation of multi-faceted watershed projects. Our objectives mesh well with the intent of the Colorado Watershed/Stream Restoration Program. As we continue our efforts towards watershed recovery and resiliency, we must rely on our partners, like RMFI, to help carry these objectives forward. We need to continue the collaborative efforts with RMFI and our other partners who have experience in this region to help find and implement sustainable solutions.

I strongly support the RMFI proposal and hope you can as well.

Please contact Leah Shipstead, of my staff at phone: 719-203-0549 or email:
leah.shipstead@usda.gov

Sincerely,

OSCAR
MARTINEZ-
POLANCO

Digitally signed by OSCAR
MARTINEZ-POLANCO
Date: 2021.11.02 12:13:02
-06'00'

OSCAR MARTINEZ-POLANCO
District Ranger



Caring for the Land and Serving People

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5.5 Financial Commitments



**CHALLENGE COST SHARE SUPPLEMENTAL PROJECT AGREEMENT
19-CS-11021200-005**

To

MASTER CHALLENGE COST SHARE AGREEMENT 19-CS-11021200-002

Between

ROCKY MOUNTAIN FIELD INSTITUTE
(RMFI)

And The

USDA, FOREST SERVICE
PIKE AND SAN ISABEL NATIONAL FORESTS
CIMARRON AND COMANCHE NATIONAL GRASSLANDS
(PSICC)

This Supplemental Project Agreement (SPA) is hereby made and entered into by and between Rocky Mountain Field Institute, hereinafter referred to as "RMFI," and the USDA, Forest Service, Pike and San Isabel National Forests and Cimarron and Comanche National Grasslands hereinafter referred to as the "U.S. Forest Service," as specified under the provisions of Master Agreement 19-CS-11021200-002.

Title: RMFI Watershed Health Improvement Program

- I. GENERAL PROJECT DESCRIPTION:** The U.S. Forest Service has obtained funding from Colorado Springs Utilities (CSU) to complete watershed health improvement projects across the Pike and San Isabel National Forests. RMFI will work with the U.S. Forest Service to assess, implement, and monitor mitigation methods for watershed health improvements across the Pike and San Isabel National Forests. The U.S. Forest Service and RMFI are also partnering with multiple organizations to complete adaptive management projects. Watershed health improvements are a part of the adaptive management process and focus on landscape restoration and resiliency to a changing environment. Potential wildfire, climate change, and increasing demands on recreational opportunities, municipal water supplies, and natural resources are among some of the many drivers for an adaptive management approach. Adaptive management methods will include, but are not limited to: improving recreation opportunities and wildlife habitat, and facilitating watershed health with a variety of sustainable practices. RMFI is experienced in watershed health improvement projects on National Forest managed lands and has the capacity to accomplish targets identified by the U.S. Forest Service. Therefore, the U.S. Forest Service is partnering with RMFI to complete watershed health improvements on the Pike and San Isabel National Forests.

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II. RESPONSIBILITIES:

A. The RMFI Shall:

1. WATERSHED. The RMFI shall perform improvements related to watershed resources and health. Watershed improvements include but, are not limited to; conducting landscape restoration to facilitate improved water quality, wildfire resiliency, native vegetation rehabilitation, invasive species control, erosion control techniques and mitigation, and the reconnaissance, assessment, and monitoring of watershed resources and health.
2. RECREATION. The RMFI shall perform improvements and mitigation work related to recreation opportunities. Recreation work may include but, is not limited to; road, trail or campsite design, reconstruction, and maintenance, improvements to road and trail drainage and sustainability, improvements to recreational facilities, providing educational opportunities, and the reconnaissance, assessment, and monitoring of recreational opportunities.
3. WILDLIFE. The RMFI shall perform wildlife habitat improvements and protection measures corresponding to project and wildlife program objectives. Improvement and protection measures may include but, are not limited to; aquatic and terrestrial wildlife habitat improvements and the reconnaissance, assessment, and monitoring of wildlife and wildlife habitat.
4. MONITORING AND RECONNAISSANCE. The RMFI shall perform reconnaissance, assessment, and monitoring for wildlife, recreation, and watershed related resources.

RMFI shall perform the above duties in various focus locations on the Pike and San Isabel National Forest including, but not limited to:

PROJECT LOCATIONS
Ensign Gulch
Rainbow Gulch/Rampart Reservoir
Upper Monument Creek
Bear Creek/South Slope
PPHWY/Severy Creek
Devils Playground
Waldo Trail
Barr Trail

B. The U.S. Forest Service Shall:

1. PAYMENT/REIMBURSEMENT. The U.S. Forest Service shall reimburse the RMFI for the U.S. Forest Service's share of actual expenses incurred, not to exceed \$125,000,



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as shown in the Financial Plan Exhibit A. In order to approve a Request for Reimbursement, the U.S. Forest Service shall review such requests to ensure payments for reimbursement are in compliance and otherwise consistent with the terms of the agreement. The U.S. Forest Service shall make payment upon receipt of the RMFI's annual invoice. Each invoice from the RMFI must display the total project costs for the billing period, separated by U.S. Forest Service and the RMFI's share. In-kind contributions must be displayed as a separate line item and must not be included in the total project costs available for reimbursement. The final invoice must display the RMFI's full match towards the project, as shown in the financial plan, and be submitted no later than 90 days from the expiration date.

Each invoice must include, at a minimum:

- 1) The RMFI's name, address, and telephone number
- 2) U.S. Forest Service agreement number
- 3) Invoice date
- 4) Performance dates of the work completed (start & end)
- 5) Total invoice amount for the billing period, separated by U.S. Forest Service and RMFI share with in-kind contributions displayed as a separate line item.
- 6) Display all costs, both cumulative and for the billing period, by separate cost elements as shown on the financial plan.
- 7) Cumulative amount of U.S. Forest Service payments to date.
- 8) Statement that the invoice is a request for payment by 'reimbursement'
- 9) If using SF-270, a signature is required.
- 10) Invoice Number, if applicable

The invoice shall be forwarded:

EMAIL: asc_ga@fs.fed.us

FAX: 877-687-4894

POSTAL: USDA Forest Service
Albuquerque Service Center
Payments – Grants & Agreements
101B Sun Ave NE
Albuquerque, NM 87109

A copy must be sent to:

Leah Shipstead
601 South Weber Street
Colorado Springs, CO 80903

2. LIMITATION OF FUNDS. U.S. Forest Service funds in the amount of \$125,000 are currently available for performance of this agreement through 05/30/2022. The U.S. Forest Service's ability to provide additional funding is contingent upon the availability

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of appropriated funds from which payment can be made. There is no legal liability on the part of the U.S. Forest Service for any payment above this amount until RMFI receives notice of availability confirmed in a written modification by the U.S. Forest Service.

3. **TEXT MESSAGING WHILE DRIVING.** In accordance with Executive Order (EO) 13513, "Federal Leadership on Reducing Text Messaging While Driving," any and all text messaging by Federal employees is banned: a) while driving a Government owned vehicle (GOV) or driving a privately owned vehicle (POV) while on official Government business; or b) using any electronic equipment supplied by the Government when driving any vehicle at any time. All Cooperatives, their Employees, Volunteers, and Contractors are encouraged to adopt and enforce policies that ban text messaging when driving company owned, leased or rented vehicles, POVs or GOVs when driving while on official Government business or when performing any work for or on behalf of the Government.
4. Provide funding per Exhibit A in the amount of \$125,000 to RMFI for salary, maintenance of RMFI's owned equipment, supplies and materials.
5. Perform reconnaissance to conduct watershed health improvement projects.
6. Provide project oversight and work cooperatively with RMFI to develop specific plans and schedules.
7. Assist RMFI in completing these projects by contributing funding when budgets allow, project design, instructions, subject matter expertise, and other project assistance requested by RMFI when possible.
8. Provide properly trained and qualified personnel as field project coordinators at project work sites to provide technical guidance and ensure projects are completed safely and in accordance with U.S. Forest Service requirements.

III. CONTACTS & TIME LIMITS:

- A. **PRINCIPAL CONTACTS.** Individuals listed below are authorized to act in their respective areas for matters related to this agreement.

Principal Cooperator Contacts:

Cooperator Program Contact	Cooperator Administrative Contact
Name: Joe Lavorini Address: 815 S. 25 th Street, Suite 101 City, State, Zip: Colorado Springs, CO 80904 Telephone: 719-471-7736 ext. 3# Email: joe@rmfi.org	Name: Jennifer Peterson Address: 815 S. 25 th Street, Suite 101 City, State, Zip: Colorado Springs, CO 80904 Telephone: 719-471-7736 ext. 1# Email: jennifer@rmfi.org

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Principal U.S. Forest Service Contacts:

U.S. Forest Service Program Manager Contact	U.S. Forest Service Administrative Contact
Name: Leah Shipstead Address: 601 South Weber Street City, State, Zip: Colorado Springs, CO 80903 Telephone: 719-477-4215 Email: lshipstead@fs.fed.us	Name: Oscar Martinez Address: 601 South Weber Street City, State, Zip: Colorado Springs, CO 80903 Telephone: 719-477-4202 Email: omartinez@fs.fed.us

- B. ASSURANCE REGARDING FELONY CONVICTION OR TAX DELINQUENT STATUS FOR CORPORATE ENTITIES. This agreement is subject to the provisions contained in the Department of Interior, Environment, and Related Agencies Appropriations Act, 2012, P.L. No. 112-74, Division E, Section 433 and 434 as continued by Consolidated and Further Continuing Appropriations Act, 2013, P.L. No. 113-6, Division F, Title I, Section 1101(a)(3) regarding corporate felony convictions and corporate federal tax delinquencies. Accordingly, by entering into this agreement RMFI acknowledges that it: 1) does not have a tax delinquency, meaning that it is not subject to any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, and (2) has not been convicted (or had an officer or agent acting on its behalf convicted) of a felony criminal violation under any Federal law within 24 months preceding the agreement, unless a suspending and debarring official of the United States Department of Agriculture has considered suspension or debarment is not necessary to protect the interests of the Government. If RMFI fails to comply with these provisions, the U.S. Forest Service will annul this agreement and may recover any funds RMFI has expended in violation of sections 433 and 434.
- C. COMMENCEMENT/EXPIRATION DATE. This agreement is executed as of the date of the last signature and is effective through 05/30/2022, at which time it will expire. The expiration is the final date for completion for all work activities under this agreement.
- D. SYSTEM FOR AWARD MANAGEMENT REGISTRATION REQUIREMENT (SAM). RMFI shall maintain current information in the System for Award Management (SAM) until receipt of final payment. This requires review and update to the information at least annually after the initial registration, and more frequently if required by changes in information or agreement term(s). For purposes of this agreement, System for Award Management (SAM) means the Federal repository into which an entity must provide information required for the conduct of business as a Cooperative. Additional information about registration procedures may be found at the SAM Internet site at www.sam.gov.

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E. AVAILABILITY FOR CONSULTATION. Both parties will make themselves available at mutually agreeable times, for continuing consultation to discuss the conditions covered by this agreement and agree to actions essential to fulfill its purposes.

IV. APPROVAL

A. AUTHORIZED REPRESENTATIVES. By signature below, each party certifies that the individuals listed in this document as representatives of the individual parties are authorized to act in their respective areas for matters related to this agreement. In witness whereof, the parties hereto have executed this agreement as of the last date written below.



11/30/18

JENNIFER PETERSON, Executive Director
Rocky Mountain Field Institute, RMFI

Date

DAVID CONDIT Digitally signed by DAVID CONDIT
Date: 2018.12.04 07:36:30 -07'00'

DAVID CONDIT, Deputy Forest & Grassland Supervisor
U.S. Forest Service, PSICC

Date

The authority and format of this agreement have been reviewed and approved for signature.

RICHARD MAESTAS Digitally signed by RICHARD
MAESTAS
Date: 2018.12.03 17:03:15 -07'00'

RICK MAESTAS
U.S. Forest Service Grants Management Specialist

Date