

This proposed project is located on the Apache-Sitgreaves National Forest in eastern Arizona, 25 miles to the west of Alpine, Arizona. It is located in Apache County, Arizona, within Arizona Congressional District Number 1.



Collaborative Black River Landscape Restoration Planning for Apache Trout Climate Resilience

WaterSMART Cooperative Watershed Management Program Phase 1 Grant

Trout Unlimited

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TECHNICAL PROPOSAL

1.0 Executive Summary

Please provide a one paragraph project summary that briefly describes the location of the watershed area in which the group will work, the activities that will be carried out, any partners involved, watershed concerns in the watershed area, area and how the activities completed through this grant are expected to help alleviate impacts of those conditions.

Date: March 31, 2022

Applicant Name: Trout Unlimited

City, County and State: Tempe, Maricopa County, Arizona

Length of Time: Two years beginning August 1, 2022

Estimated Completion Date: July 31, 2024

Trout Unlimited will be convening a diverse group of stakeholders, including the Apache-Sitgreaves National Forest, Arizona Game and Fish Department, Arizona Wildlife Federation, Arizona Elk Society, Freeport McMoran, Salt River Project, and the Wild Turkey Federation, to engage in a collaborative planning process for a watershed restoration project on the West Fork Black River, Arizona. Warming temperatures, changing patterns of precipitation, and a legacy of fire suppression throughout the West have contributed to overstocked forests at risk of burning catastrophically, damaging aquatic habitat, water quality, and reducing the capacity of downstream water storage facilities. The West Fork Black River is a major tributary to the Salt River, a key source of water for over 2 million people and ten municipalities and is the location of one of the few genetically pure Apache trout populations remaining within its historic range. Creating climate and drought resilience ecosystems will require combining aquatic restoration with upland forest treatments to address multiple drivers and scales of this threat.

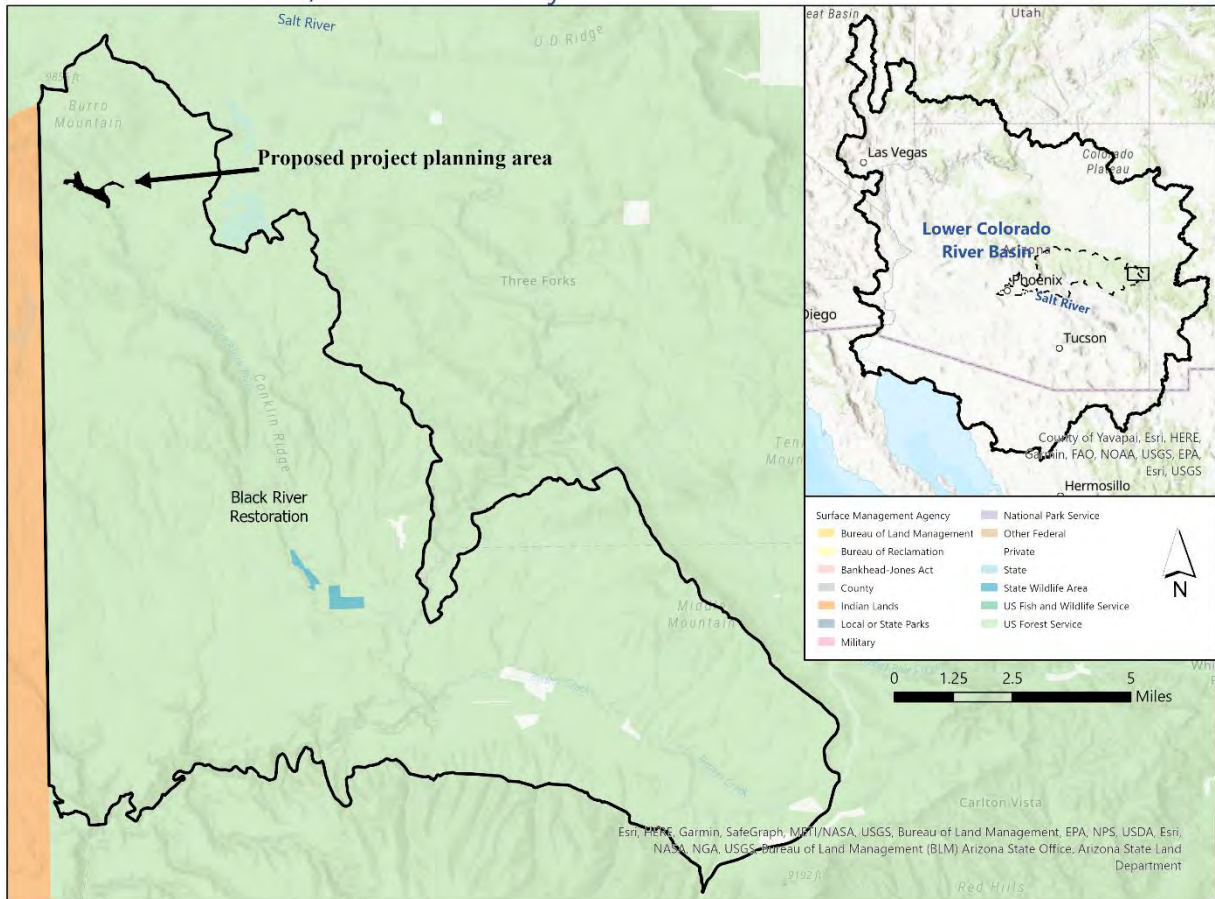
The goal of this partner-led, cross-boundary effort will be to generate designs and permit applications that will meet the readiness requirements for subsequent funding opportunities on a project area located on the West Fork Black River, Arizona. This work will build on existing Trout Unlimited partnerships with the Arizona Game and Fish Department around the monitoring and management of Apache trout, contribute to the larger forest health and climate resilience missions outlined in the Four Forest Restoration Initiative (4FRI), of which Trout Unlimited is an active stakeholder, and develop plans to carry out aquatic restoration and fuels treatment needs identified in the Black River Landscape Restoration Environmental Assessment.

2.0 Project Location

Provide specific information on the geographic location of the area in which the watershed group will work including a map showing the geographic location.

The proposed project location is on the West Fork Black River, 25 miles to the west of Alpine, Arizona. The West Fork Black River drains White Mountain and is a major tributary of the Black River. The Black River watershed is part of the largest, contiguous Ponderosa Pine forest

in the United States and is an important headwater source of water supply to the Salt River. The Salt River is the major water source for the City of Phoenix and supports five Bureau of Reclamation facilities that produce hydropower and manage water, including Theodore Roosevelt Dam and Lake, Horse Mesa Dam and Apache Lake, Mormon Flat Dam and Canyon Lake, Stewart Mountain Dam and Saguaro Lake, and the Granite Reef Diversion Dam.



3.0 Project Description

3.1 Applicant Category

Please indicate whether you are seeking funding as a New or Existing Watershed Group and explain why you chose to apply under that Applicant Category. As part of this discussion, please provide a brief history of the group, including discussion of: (1) when and how the group was initiated, and (2) ongoing projects or efforts (e.g., previous watershed planning activities)

Trout Unlimited (TU) is an eligible applicant as an active participant in an **Existing Watershed Group** that meets the definition of a watershed group in Section A.2-A.3 of the Notice of Funding Opportunity No. R22AS00163 (January 2022) (see, C.1.2.(2) at page 5). TU and its partners in the diverse, multi-stakeholder watershed collaborative called the *Four Forest Restoration Initiative*, or “4FRI” seek Phase 1 Cooperative Watershed Management Program funding for **restoration planning** under **Task C: Watershed Management Project Design**.

About the Watershed Collaborative 4FRI. 4FRI is a non-regulatory, grassroots, collaborative, multi-stakeholder group with a mission to improve and sustain watershed health.

“The Four Forest Restoration Initiative (4FRI) has been created to accelerate an ambitious restoration program to improve and sustain watershed health, improve wildlife habitat, conserve biodiversity, protect old-growth, reduce the risk of uncharacteristic wildland fire and promote the reintroduction of natural fire, and restore natural forest structure and function so that forests are more resilient to climate change.” -[4fri.org](https://www.4fri.org)

4FRI is a non-regulatory, grassroots, public entity with a diverse membership, including: the biomass energy company Novo BioPower, LLC; multiple entities involved in timber production (e.g., Canyon Creek Logging, Northern Arizona Loggers Association, Northern Arizona Wood Products Association, Pioneer Forest Products, and Tri STAR / Novo STAR Wood Products); municipal water suppliers (e.g., Town of Pinetop – Lakeside, Town of Snowflake, and City of Flagstaff); recreation (e.g., Coconino Sportsmen); environmental and conservation groups (e.g., TU, White Mountain Conservation League, Arizona Wildlife Federation, Center for Biological Diversity, Great Old Broads for Wilderness, and The Nature Conservancy); and federal, state, and local governmental entities (e.g., U.S. Fish and Wildlife Service, U.S. Forest Service, Arizona Game and Fish Department (AZGFD), Arizona State Forestry, Navajo County, Apache County, and Coconino Natural Resources Conservation District).

4FRI meets the definition of an “existing watershed group” at Sections A.1-A.3 of the Notice of Funding Opportunity No. R22AS00163 (January 2022), and as defined in Section 6001(6) of the Cooperative Watershed Management Act, as a grassroots, non-regulatory entity that addresses watershed health and the sustainable use of water and natural resources in the watershed, makes decisions on a consensus basis, invites all members of the public, and represents a diverse group of stakeholders (*4FRI Stakeholder Group Charter* included in the appendix to this application, adopted by 40 signatories from 28 different organizations in June, 2010).

Previous Watershed Planning Efforts. The diverse stakeholders of 4FRI have undertaken multiple watershed planning efforts since 2009. These planning efforts culminated in the recent adoption of the [4FRI Restoration Strategy](#) by the U.S. Forest Service on November 9, 2021. The *4FRI Restoration Strategy* re-affirms the long-standing mission of 4FRI to restore forest ecosystems and critical watersheds, conserve natural resources, and continue to build out its work through multi-stakeholder collaboration. The *4FRI Restoration Strategy* calls out this important contribution of the Black River and other headwater watersheds to the success of the overall *4FRI Restoration Strategy*: “These watersheds supply water uses including municipal, domestic, irrigation and industrial uses for millions of people in the Phoenix metropolitan area.” (at 3, *Overview of 4FRI Vision and Objectives*). This proposed project in the Black River watershed’s headwaters advances 4FRI’s key strategic goals to “accelerate the pace and scale of restoration treatments, innovate, and collaborate and engage.” (at 3, *Overview of 4FRI Vision and Objectives*). Of particular relevance to the proposed multi-stakeholder restoration planning and design effort in this CWMP Task C application, the [4FRI Restoration Strategy](#) calls out the Apache-Sitgreaves National Forests’ leadership in advancing forest restoration in Arizona

through collaborative planning and project implementation. (at 8, *Apache-Sitgreaves National Forests*).

Integration of the Requested Restoration Planning Task with On-Going Watershed Planning. Trout Unlimited (TU) is applying for a Phase 1 CWMP, Task C funding award to build out designs for a cross-boundary restoration project in the Black River watershed in eastern Arizona. Of particular importance to this application are *The Black River Landscape Restoration Project Environmental Assessment* (EA) prepared by the U.S. Forest Service that is currently under public comment and the *Apache Trout Recovery Plan* prepared by U.S. Fish and Wildlife Service. TU has worked extensively with Arizona Game and Fish Department to develop an *Apache Trout Monitoring Plan* that includes monitoring plans specifically for this area.

The goal of the restoration planning proposed in this application is to integrate previous planning efforts surrounding Apache trout recovery with the Black River watershed EA for maximum impact. As recognized in the *4FRI Restoration Strategy*, development of a cross-boundary, partnership-led restoration project will be the most effective vehicle for this important work. Although the stakeholders on this application have been working together for several years to assess the health of Apache trout habitat and assess the needs and priorities to reduce the risk of catastrophic wildfire in the watershed, there have been insufficient resources to date to plan large-scale aquatic restoration projects. This planning effort will also provide a venue to develop a first-of-its-kind approach to integrating fuels treatments with aquatic restoration to streamline projects, increase cost effectiveness, and integrate traditionally siloed managers. This application fills these voids.

3.2 Eligibility of Applicant

Please write a narrative summary indicating how the applicant meets the eligibility requirements, as described in Section C.1. Eligible Applicants. Please include an explanation of the applicant's role in the New or Existing Watershed Group.

TU in Arizona has been an active member and participant in 4FRI. TU is listed, [here](#), on 4FRI's website among the organizations involved in the 4FRI watershed collaborative. As detailed above in Section 3.1 of this application, TU has participated in 4FRI's watershed restoration planning and has helped give meaning to the 4FRI goal to simultaneously improve watershed sustainability and reduce the risk of catastrophic wildfire in important headwaters. Because of TU's active participation in 4FRI and in the imperiled Apache trout's restoration planning, and with TU's history of multi-stakeholder collaboration on large-scale projects to improve watershed health and drought resilience, TU is a natural choice among 4FRI stakeholders to anchor this CWMP Task C funding request.

TU is the nation's largest grassroots coldwater conservation organization with a mission to conserve, protect, and restore North America's trout and salmon fisheries and their watersheds. TU works to achieve this mission on a local, state, and national level through an extensive volunteer network and dedicated staff. Headquartered outside of Washington, D.C., TU is a 501c(3) nonprofit organization founded in 1959 that currently has approximately 258 staff

working in 36 offices from Alaska to North Carolina. TU has extensive federal grant management experience, and currently manages over 300 different federal grants, including numerous grants in partnership with the Bureau of Reclamation.

TU has been involved in several watershed groups recently supported by CWMP grant funding, including the Salt River in Wyoming and Idaho, the Blue River Watershed Group in Colorado, the Bitter Root Water Forum in Montana, the Sun River Watershed Group in Montana, and the Willwood Working Group #3 in Wyoming. TU is therefore well-positioned to be the lead applicant on the current proposal as a C.1.2.(2) eligible applicant for a Task C project proposal, as an active participant of an existing, eligible watershed group.

3.3 Goals

Discuss the preliminary goals and objectives of the New or Existing Watershed Group.

The preliminary goals and objectives of this Existing Watershed Group, Task C proposal are to execute watershed management project design in the Black River watershed that align with the goals of 4FRI throughout the larger region:

1. Accelerate pace and scale of restoration treatments
2. Collaborate to increase engagement
3. Facilitate development of sustainable forest restoration industries
4. Pursue technological innovations, partnership opportunities and integration of new resources
5. Improve Forest Service Business practices
6. Learn and adapt ecological restoration treatments and economic strategies based on monitoring and experience.
7. Apply an all-lands approach

TU is applying under this category to develop a joint upland and aquatic restoration project in partnership with many of its stakeholders in the 4FRI watershed collaborative, including the **Springerville District of the Apache-Sitgreaves National Forest (ASNF), Arizona Game and Fish Department (AZGFD, Salt River Project (SRP), Freeport McMoRan (FMI), Arizona Wildlife Federation, National Wild Turkey Federation and Arizona Elk Society**. The development of a the proposed restoration project would fulfill a key 4FRI priority to implement aquatic restoration projects by leveraging cross-boundary partnerships to expand the capacity of federal and state agency staff and other 4FRI stakeholders. The proposed planning for development of a large-scale, joint forest upland and aquatic restoration project through a cross-boundary partnership will be a key milestone in the success of the 4FRI's ambitious vision to increase its headwater watersheds' resilience to climate change.

The planning effort for the Black River Restoration project will work towards these goals by:

1. Creating a shovel-ready project plan that includes forest restoration treatments and aquatic restoration. By combining these two treatments into a single project, t both

upland fuels treatments and aquatic restoration and creating a model by which new funding sources can be leveraged to support both endeavors.

2. Hosting a series of collaborative field tours as a way to both increase engagement with the project itself, but to improve the likelihood of success for the final project designs by engaging diverse sets of knowledge and resources.
3. Generating information about the specific volumes and types of materials generated by forest restoration treatments that will be necessary for various models of aquatic restoration, thereby facilitating future use of similar project streamlining efforts.
4. Leveraging extensive instrumentation maintained by SRP to document hydrologic conditions up and downstream of the project area and integrating with long-standing AZGFD and TU Apache trout monitoring efforts in the region. This planning effort will make use of new data products being developed by SRP in partnership with Academic institutions for use throughout the 4FRI project area and provide valuable feedback about the different ways these data outputs can be used for design and evaluation. Moreover, this project will contribute to a body of existing knowledge and provide valuable information as to how forest management and aquatic restoration can, together, influence timing and magnitude of downstream flows.
5. Building on existing Forest Service analyses to develop partner-led project designs. This planning effort will be carried out in close partnership with the Alpine District of the Apache-Sitgreaves National Forest, their Aquatic Programs Manager and Timber Management Operation Leads, helping to expand their capacity to plan for, manage, and execute projects across a vast area of land and leverage new sources of funding to bring to bear on priority areas.
6. Deploy new monitoring infrastructure and perform rigorous baseline analyses to create opportunities to quantify specific changes to the timing and magnitude of streamflow, water storage, and ecosystem response that can inform future management actions and transfer to projects elsewhere.
7. Model effective partner-led project development for transferability to other areas.

3.4 Approach

Provide a more comprehensive description of your planned approach for completing watershed group development, restoration planning, and watershed management project design activities. **Please identify which of the Task Areas described in Section C.4.** Eligible Projects you will address as part of this project, including a detailed discussion of what activities you will undertake within each Task Area.

TU is applying for this CWMP Phase I funding opportunity as an eligible participant of an Existing Watershed Group and will be undertaking activities under **Task C – Watershed Management Project Design**. Several sub-tasks related to pre-planning, information gathering, identifying restoration needs, and prioritizing restoration needs have been carried out in the ASNF's *Black River Landscape Restoration Project Environmental Assessment* (EA). TU therefore intends to carry out those sub-tasks that can build on the existing efforts as a way to achieve the goals outlined above in Section 3.3 of this application, and help TU build the

foundation for successful restoration project implementation under a future Phase II CWMP application.

Specifically, TU and its partners on this application have identified the following five primary activities necessary for successful Watershed Management Project Design in the Black River watershed:

- Collaboratively produce a set of specific objectives the project will seek to accomplish and metrics by which progress towards those objectives will be measured through a series of field tours with project stakeholder leadership, technical teams, managers, and community members;
- Select appropriate watershed restoration tactics to achieve objectives of watershed plans through a series of conversations with project stakeholders familiar with the conditions at the project site;
- Install equipment to document baseline conditions at identified specific project locations and at downstream locations, specifically, a stream gage and shallow groundwater monitoring transect;
- Complete site-specific project design and engineering for the prioritized watershed management projects;
 - Generate 30, 60, and 90% designs at key milestones to share with project partners for feedback and discussion. Complete complementary modelling to facilitate discussions about potential outcomes, trade-offs, and mitigating actions;
 - Prepare analyses to assess capacity of restoration designs to reduce erosion and raise water tables to support wet meadow conservation and Apache Trout habitat in combination with upland vegetation treatments to reduce risk of extreme wildfire and subsequent erosion;
 - Develop metrics for demonstrating project efficacy of combining project types in terms of water retention, wildfire risk reduction, and benefits to downstream reservoir operations and water security in coordination with existing monitoring efforts;
- Develop proposed project timelines and milestones in coordination with watershed group members to facilitate future project implementation; and,
- Research requisite site-specific environmental compliance and permits with the watershed group's federal and state agency partners and prepare draft applications or analyses as appropriate.

4.0 Evaluation Criteria

4.1 Evaluation Criterion A—Watershed Group Diversity and Geographic Scope (30 points)

Proposals demonstrating that the New or Existing Watershed Group will represent the maximum diversity of interests.

4.1.1. Sub-criterion No. A1. Watershed Group Diversity

If your proposed project is for site-specific planning or project design, please still discuss the stakeholder diversity throughout the entire watershed in which the watershed group works. In responding to this sub-criterion, please include:

For New and Existing Watershed Groups, a description of the stakeholders within the watershed that affect or are affected by the quantity or quality of water within the watershed (“affected stakeholders”).

The 4FRI watershed collaborative enjoys broad and diverse stakeholder participation, as detailed above in Section 3 of this application. As detailed above, 4FRI includes stakeholders from a biomass energy company, multiple private entities involved in timber production, municipal water suppliers, sportsmen, environmental and conservation groups, and federal, state, and local governmental entities.

A portion of the Black River watershed is targeted for the proposed “Task C” site-specific restoration planning and project design in this funding application. The Black River watershed comes together with the White River, where they form the Salt River. The Salt River is the major water source for the City of Phoenix and supports five Bureau of Reclamation facilities that produce hydropower and manage irrigation and municipal water, including Theodore Roosevelt Dam and Lake, Horse Mesa Dam and Apache Lake, Mormon Flat Dam and Canyon Lake, Stewart Mountain Dam and Saguaro Lake, and the Granite Reef Diversion Dam. The Salt River Project manages these Reclamation facilities and delivers water and power to over 2 million people in central Arizona.

In addition, a diversion that provides water to Freeport-McMoRan Mining Company’s Morenci Mine is located on the Black River. The Morenci copper mine has been in continuous operation since 1939 and produces more than 30% of the U.S. supply of copper. The watershed also supports considerable recreational traffic including, but not limited to, fishing, hunting, camping, skiing, mountain biking, and horseback riding.

This means that the primary affected stakeholders of the proposed restoration project planning in the headwaters of the Black River are: the Salt River Project; Freeport-McMoRan Mining Company; environmental and sportsmen interests; and, the state and federal agencies with jurisdiction in the Black River watershed. All these primary affected stakeholders are represented as partners on this proposed project planning work.

Bolded organizations have expressed an interest in being involved in this proposed collaborative Black River restoration planning work. *Italicized groups* have participated in efforts to date. Groups with an asterisk have provided letters of support; these letters are included in Appendix A (p. 40). All remaining groups will be engaged if the CWMP Task C proposal is funded.

The Fort Apache Indian Reservation lands align with the western border of the Apache-Sitgreaves National Forest within the Black River watershed. While Tribal lands are not within the proposed project area, TU and project partners would have the capacity to undertake

additional outreach to the San Carlos Apache Tribe and the White Mountain Apache Tribe if this CWMP Task C proposal is funded.

TU and project partners would like to engage Tribal members in the restoration planning, listen to their thoughts on the proposed restoration actions, modify proposed restoration actions as appropriate based on Tribal perspectives, and conduct joint field visits with Tribal members to proposed project sites to better convey and understand the proposed restoration actions and Tribal perspectives.

ENTITY	CONTACT	SECTOR
Trout Unlimited – project applicant and watershed group partner lead	Nathan Rees (project lead)	Environmental Conservation and Recreation NGO
Apache-Sitgreaves National Forest*	Stephanie Coleman	Federal Agency
Arizona Department of Fish and Game	Ryan Follmuth	State Agency
U.S. Fish and Wildlife		Federal Agency
Bureau of Reclamation	Bill Stewart	Federal Agency
Salt River Project	Charlie Ester III, Tim Erskine, Stephen Flora, Andrew Volkmer, Elvy Barton, Lacey James	Local Utility
Freeport McMoRan	Sandy Fabritz	Mining
Arizona Elk Society	Steve Clark	Environmental Conservation NGO
White Mountain Lakes		Environmental Conservation NGO
Arizona Wildlife Federation	Scott Garlid	Environmental Conservation NGO
Eastern Arizona Counties Organization	Pascal Berlieux	County
Apache County		County
Greenlee County		County
Wild Turkey Federation	Chuck Carpenter	Environmental Conservation NGO
San Carlos Apache Tribe		Tribal Nation
White Mountain Apache Tribe	Tim Gatewood	Tribal Nation

4.1.2. Sub-criterion No. A2. Geographic Scope

Under this sub-criterion, higher priority will be given to Watershed Groups representing the full geographic extent of the watershed. Applicants will receive points based on the extent to which they intend to do work and include stakeholders from across the entire extent of the watershed.

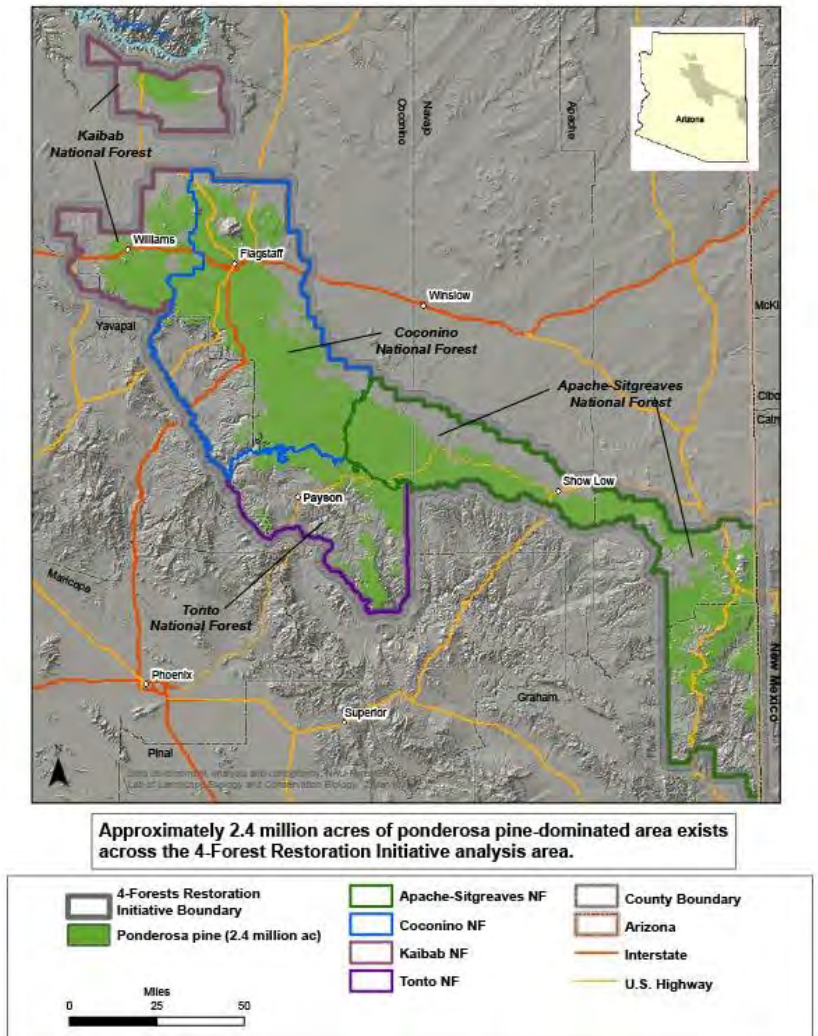
Please provide the following information in response to this sub-criterion:

Provide a map illustrating the geographic boundaries of the area in which the watershed group will work. The map should also identify the location or boundaries of the stakeholder groups within the area and indicate which stakeholders are currently involved in the group and which will be targeted through outreach. If applicable, describe the extent to which the watershed group already represents the geographic scope of the area.

The 4FRI Watershed Collaborative works across the largest intact Ponderosa Pine forest in the United States: a 2.4 million-acre area spanning four national forests. The ambitious landscape-scale planning already undertaken by 4FRI encompasses numerous watersheds, including the Black River.

As detailed above in Section 3.1 of this proposal, the multi-stakeholder commitment of 4FRI means that all of the major stakeholders within the boundaries of the 4FRI initiative are represented as indicated on the above map: the counties, the municipalities, forest product industry representatives, a biomass energy company, conservation and recreation groups with interests within the contiguous Ponderosa Pine forested area, and the federal, state, and local agencies with resource management interests.

Through its involvement in 4FRI, TU has established contacts across this diverse set of stakeholders and has been working with partners at ASNF to identify the individuals and organizations specifically relevant to planning efforts in the West Fork Black River throughout the preparation of this proposal. The majority of the engagement work in this planning effort will occur through a series of four field tours with various stakeholders. TU’s team has allocated considerable time to strategize outreach design, and Project Lead Nate Rees is specifically trained in working across such diverse groups. The team will create opportunities for feedback from stakeholders unable to participate in field tours, including sharing project designs at each of the listed



milestones for feedback, engaging in 1:1 meeting, and giving presentations as requested by entities interested in learning more about the effort.

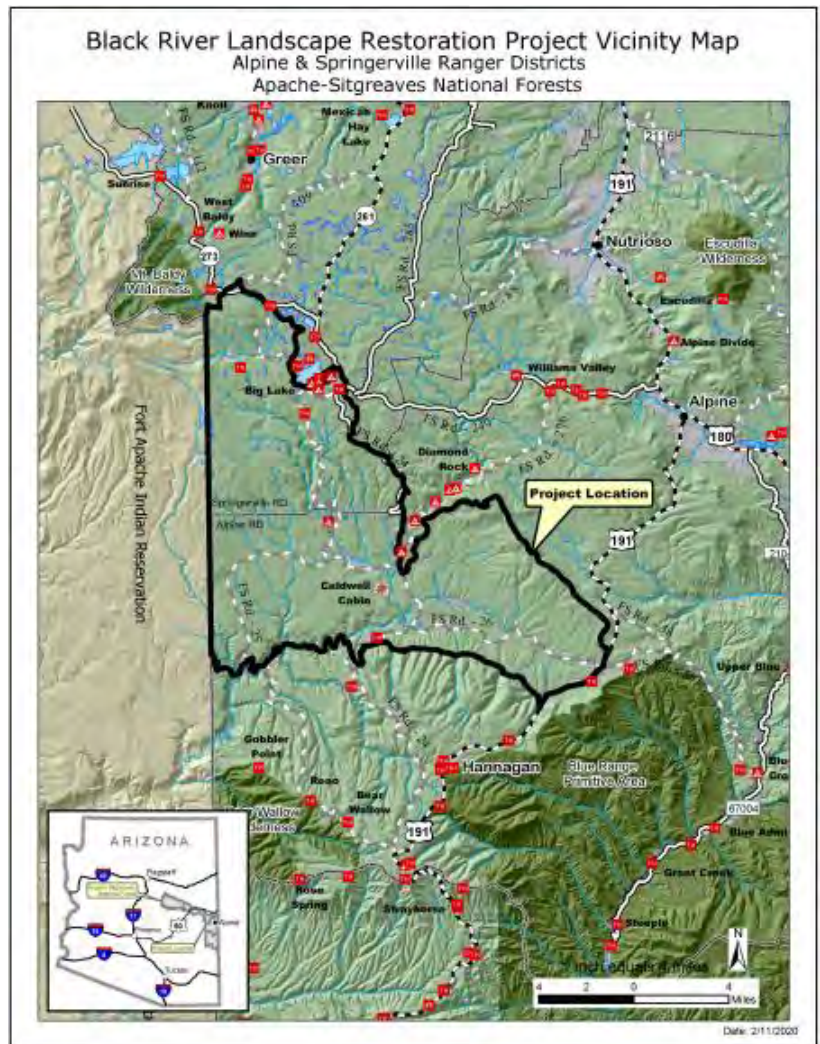
Describe why you have chosen to work within the watershed area you described. For example, if the watershed group is only working along the river corridor, describe why they are not working within the larger watershed area.

Within the larger 4FRI area, a portion of the Black River watershed within the Apache-Sitgreaves National Forest has been selected as the Watershed Management Project Design Area, for Task C activities within this funding application. The Alpine and Springerville Ranger Districts of the Apache-Sitgreaves National Forests have proposed the Black River Landscape Restoration Project (hereafter referred to as the “Black River Project”). TU and project partners have selected the area of the proposed Black River Project to coincide with the area of their Watershed Management Project Design Area and related site-specific project planning, as indicated in this Black River Project map:

TU and project partners have selected the Black River Project area for three primary reasons:

- 1) the Black River Project has been under development since 2016 and significant planning and watershed assessment work has already been completed;
- 2) the Black River Project area contains high-value biological diversity related to an abundance of streams and intact forest cover making it a key source watershed for the many water demands of the downstream Salt River Project and Morenci copper mine; and,
- 3) the Black River Landscape Restoration Project Environmental Assessment (EA) was completed in September of 2020 and is in the process of being finalized in fulfillment of National Environmental Policy Act (NEPA) planning and compliance requirements.

These three reasons are briefly discussed below.



i. Black River Project Planning Has Been Underway Since 2016.

The proposed Black River Project is a vegetation, aquatics, and hazardous fuels reduction project to restore forest resiliency and ecosystem function on approximately 92,434 acres in the project planning area mapped above. The U.S. Forest Service began development of the Black River Project in 2016 and completed an Environmental Assessment (EA) in September of 2020 that analyzed the likely environmental impact of implementation of proposed restoration by mechanical and hand thinning, fuels treatments, prescribed burning, stream channel restoration, watershed restoration, reforestation, and other site-specific actions.

Due to its elevation and location, the Black River Project area has an abundance of ephemeral, intermittent, and perennial streams, particularly relative to the arid Southwest as a whole. These streams provide important wildlife habitat for aquatic and terrestrial organisms alike. Much of the wildlife habitat in the project area has been impacted by the 2011 Wallow Fire. The Wallow Fire burned over 534,000 acres. This 2011 large fire has had acute, immediate effects on survival and growth of aquatic organisms, and less severe effects that have persisted for years. Some streams within the Black River Project area were adversely affected following the 2011 Wallow Fire due to runoff from fire-denuded slopes that overwhelmed the stream systems causing downcutting and loss of instream structure. Watershed specialists assessed conditions using the Forest Service Watershed Condition Framework and the associated indicators, and provided a specialist report with full details.

ii. Black River Project Area is High in Biodiversity and Source Watershed Value.

The Black River Project area provides habitat for many wildlife species, ranging from important game species such as elk, deer, pronghorn, and turkey, to species listed under the federal Endangered Species Act such as the Mexican spotted owl, New Mexico meadow jumping mouse, Apache trout, Mexican garter snake, narrow-headed garter snake, and the Mexican wolf. There are nineteen Protected Activity Centers for Mexican spotted owls in or within a half mile of the project boundary. New Mexico meadow jumping mice have been located within the major water systems in the project, including the East and West forks of the Black River, the main stem of the Black River, as well as Centerfire, Boggy, and Beaver creeks. Multiple Mexican grey wolf packs den or hunt within the project boundary. Twelve Northern goshawk management units have been established within the Black River Project area as a result of survey information.

Riparian areas throughout the Black River Project area have experienced reductions in the amount of stabilizing vegetation such as alders, willows, sedges and rushes. The Apache trout is considered present in only about 6 miles of the project area, while it could potentially occur in approximately 59 miles.



Figure 1 Photo of WFBR in November, 2021 showing limited riparian vegetation along channel banks. Photo by Stephen Flora, SRP.

Across the Black River Project area, forested stands are overstocked and have altered species composition. The existing forest structure does not comprise the desired range of diameter classes and habitat components, such as openings or interspaces. Historic management practices around fire suppression have resulted in the loss of frequent low-severity surface fire. This has allowed for the establishment of trees which has increased forest density and the potential for uncharacteristic fires. In high severity burned areas, insects and disease are contributing to tree mortality in the remaining live trees that then contributes to further surface fuel loading as trees fall.

These conditions make the Black River Project area an ideal candidate to design a landscape-scale restoration project combining valley floor aquatic restoration with upland forest treatment. Detailed pre-project baseline condition monitoring combined with planning for post-project monitoring will help quantify the water supply benefits of the proposed restoration actions in terms of water quality, water quantity, and reduction of catastrophic wildfire risk in the watershed.

iii. Public Involvement and Tribal Consultation Undertaken to Finalize Black River Project EA.

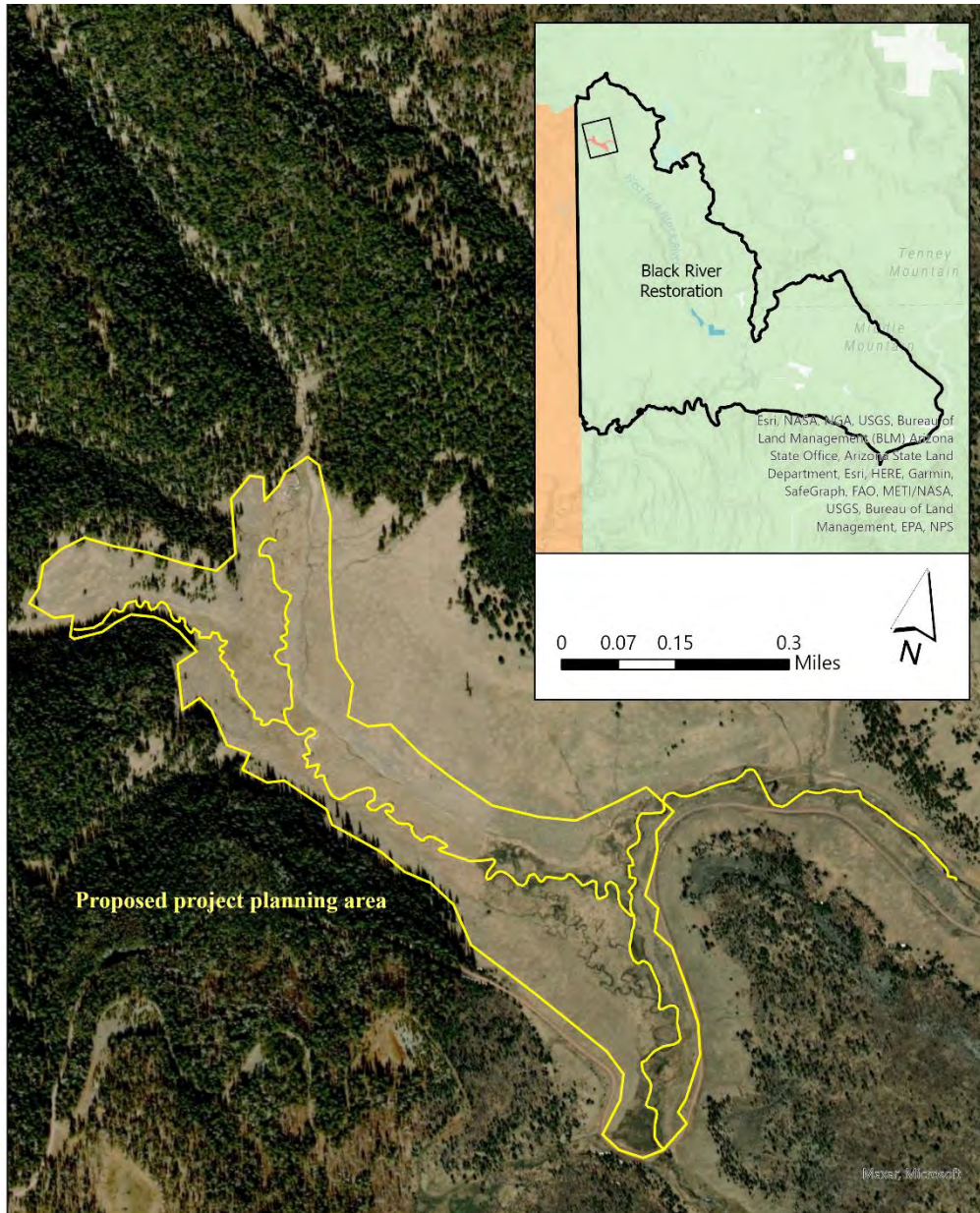
Partners such as the Natural Resources Working Group which includes state and federal agencies, universities, counties, conservationists, and industry representatives weighed in on the project proposal during quarterly meetings with the U.S. Forest Service. On March 21, 2018, the U.S. Forest Service sent a letter to approximately 200 agency and local government officials, tribes, landowners bordering the project area, and any identified possibly interested parties. A legal notice published in the White Mountain Independent Newspaper, both Apache and Navajo County editions on March 21, 2018, initiated the combined scoping and official comment period on the project. The published notice included a brief description of the proposed action for the project. The comment period extended the required 30-calendar days closing on April 25, 2018, as required by 36 CFR 218. Eleven letters with multiple comments were received. Tribal Consultation Initial consultation letters were mailed on January 18, 2018 to inform the tribes of the project and invite participation in the planning effort. Letters included were sent to 29 tribes, two of which responded. The letter informed the tribes about the types of activities proposed for the Black River Project area, the number of known sites in the project area, the number of previously surveyed acres, and plans for additional, phased cultural resource surveys.

The Black River Project EA contains a detailed discussion of needed aquatic restoration actions within the Black River watershed area and covers a wide range of approaches. Similarly, the EA contains an analysis of the recommended upland forest treatment and forest restoration actions to reduce fuel loads, reduce fire risk, and to create landscape patterns of uneven-aged forested landscapes more resilient to disturbances so natural ecological processes may return to their characteristic roles within the ecosystem.

As detailed below in Section 4.2 of this application, the work completed in the Black River Project EA and selection of this project area create an ideal candidate to demonstrate the effectiveness of a restoration project combining upland forest treatment with valley-floor aquatic restoration.

Provide a map illustrating the location of the planning or design and briefly describe why you have chosen to complete site-specific planning or project design in this location

As discussed in detail in the response to sub-criterion No. B.2, TU has chosen to pursue a restoration design planning effort because several partners identified the WFBR as both important for Apache trout habitat as well as a location to build on numerous existing planning, analysis, monitoring, and conservation efforts.



4.2 Evaluation Criterion B—Addressing Critical Watershed Needs (35 points)

Up to 35 points may be awarded under this criterion based on the extent of the critical issues or needs within the watershed that can be addressed by the New

or Existing Watershed Group. Subcriteria are listed in descending order of importance.

4.2.1. Sub-criterion No. B1. Critical Watershed Needs or Issues

Please describe in detail the critical issues or needs occurring within the watershed, for example: declining ecological resiliency, water shortages, flooding, structural impairments, water supply, water quality issues (e.g., addressing Total Maximum Daily Loads), endangered species issues, conflicts over water supply, and other related issues faced by affected stakeholders. Endangered species issues may focus on, but are not limited to, activities prioritized by resource agencies such as National Oceanic and Atmospheric Administration's (NOAA) Fisheries or U.S. Fish and Wildlife Service (USFWS), and appropriate state natural resource agencies.

The proposed planning effort will be working across traditionally siloed management groups to integrate fuels treatments with aquatic restoration to advance three key critical watershed needs that have been identified by the diverse stakeholders within 4FRI as pertinent to the Black River Watershed.

1. Reduction of Catastrophic Wildfire Risk.

As thoroughly documented in the Black River Project EA, the project area has had a history of fire suppression management. As a result, most of the forested stands within the Black River Project area are overly dense, reducing their health and making them susceptible to drought, insects and disease and uncharacteristic wildfires. In the past twenty years, the area comprising 4FRI has had five “mega-fires”, or fires over 100,000 acres in size. Projected future climate change impacts are expected to increase the severity of this risk even further. Stand density is the dominant factor affecting the wildfire threat throughout most of this region and activities to reduce stand density and ensure that resulting forest structure reflects current and projected water availability for the region are critical to ensuring long-term wildfire and climate resilience.

A key mission for 4FRI has been developing new forest products markets for the pole-sized and smaller trees that dominate the entire region to facilitate economically scalable forest management. This has been particularly challenging in remote regions like the Black River watershed, given the distance to population centers. Projects that can identify creative end-uses for pole-sized wood that can leverage and activate new sources of funding will enable the vision of massively expanding the scale and pace of forest treatments in the region. **This planning effort will consider aquatic restoration as one potential new “market” for pole-sized materials and develop the necessary relationships and plans to ensure alignment across projects. This aligns with priorities identified during recent National Forest Foundation and U.S. Forest Service Wildfire Strategy Roundtable in Region 3.**

Because the Black River watershed is an important headwater of the Salt River, and the Salt River Project manages five Reclamation facilities that deliver hydropower, irrigation water, and municipal water supply, catastrophic wildfire in the Black River watershed will have both immediate and long-term adverse impacts on the Salt River and Reclamation's facilities downstream of the Black River. Following wildfire, ash and debris wash into stream systems and increase the treatment requirements for the **ten municipalities and over 2 million people to which SRP provides water. Treating**



Figure 2 Photo of cut stream bank on WFBR. Photo by Stephen Flora, SRP

organics, ash, metals and other wildfire-generated materials reduces water storage in downstream reservoirs and can cost the cities hundreds of millions of dollars, and in some cases is not possible because of the levels of contamination that occur. Reducing the treatment needed after wildfire and increasing the capacity of watersheds higher in the system to collect ash, debris, and other outflows is therefore a critical watershed need for the Black River.

2. Restoration of Forest Ecosystem Habitat and Function.

Reduction of wildfire risk creates the opportunity to restore ecological function and habitat values in forest ecosystems. Thinning treatments would target individual stands of trees to increase the heterogeneity within the stands by delineating groups of trees and increasing their spacing. This both reduces the total density of trees, increases the amount of water available for individual trees to withstand fire, insects, and disease, and allows ecologically important grasses, herbs, and shrubs to re-establish. Large oaks would be considered underrepresented in the landscape and would be retained whenever possible. Areas would be treated with periodic low severity prescribed burns or allow natural ignited wildfires to be managed on the landscape when and where feasible. Specific vegetation treatments would address the forest characteristics needed to support the imperiled northern goshawks and Mexican spotted owls as well as other unique ecosystem types while still providing for forest health and climate resilience.

3. Restoration of Aquatic Systems and Function.

The 2011 Wallow Fire burned a large area of the Black River watershed. Streams within the Black River Project area were adversely by the Wallow Fire due to runoff from fire-denuded slopes that overwhelmed the stream systems causing downcutting and loss of instream structure. Combining upland forest treatment with aquatic restoration strategies to reverse stream downcutting and restore stream and floodplain function would address key aquatic habitat needs

while also improving the watershed's climate resilience. For example, the Apache trout is listed as threatened under the Endangered Species Act (ESA). Implementation of the aquatic restoration strategies would increase the miles of Black River watershed stream reaches capable of providing high-quality Apache trout habitat while meeting water quality targets and drought resilience. This would be accomplished by improving riparian and wetland conditions, hydrologic function, and habitat for native fish and aquatic species as well as by minimizing sedimentation.

4.2.2. Sub-criterion No. B2. Developing Strategies to Address Critical Watershed Needs or Issues

Please describe in detail how the group plans to positively contribute to the management of the issues and needs of the watershed through the proposed activities. Only address those Task Areas that you propose to complete with this grant funding.

Task C: Watershed Management Project Design. Describe the Task C Watershed Management Project Design activities that will be completed as part of this grant project and explain why these activities are an important step for addressing the critical watershed needs and issues in the watershed discussed in sub-criterion No. B1.

As described in sub-criterion No. B1. Critical Watershed Needs or Issues, the three critical watershed needs are: reduction of catastrophic wildfire risk; restoration of forest ecosystem habitat values and function; and restoration of aquatic systems and hydrologic function. Presently, planning efforts for these three needs are carried out separately due to the requirements of ASNF structures. Region 3 Forest Service leadership has identified partner-led projects as a critical tool towards improving planning and implementation, particularly of aquatic restoration projects. This collaborative planning process is critical to accelerating the pace of all three critical needs in the watershed in a way that ensures buy-in from all stakeholders and leverages resources they can bring to bear on the process, like the extensive monitoring networks provided by SRP and the long-standing surveying work by AZGFD. Convening field tours to review engineering designs will help engage more voices in the process of preparing, producing, and finalizing the designs, which will help ensure that project planning proceeds in the same outcome-oriented, consensus based manner that governs 4FRI as a whole.

To the extent known, describe the project(s) for which the watershed group will complete a design.

This group will be completing designs for a project at the confluence of the West Fork Black River (WFBR) and Burro Creek that was analyzed in the Black River EA for aquatic restoration, forest stand density management, and wildlife management.

Will the group complete an analysis to prioritize watershed management projects and identify specific project locations? If yes, describe this analysis.

The process by which the group of stakeholders prioritized and ultimately selected this project location included geographic analyses, field tours, and numerous small group discussions among stakeholders to identify priorities. The selection began with an inventory of locations analyzed in the Black River EA for aquatic restoration that were adjacent to locations analyzed for mechanical or hand thinning of fuels. These locations represent projects areas resource managers at the Forest Service had already identified as having high priority and clear need. This criterion is critical to using pole-sized and smaller ponderosa thinned from the forest as raw material for the restoration effort, ensuring a whole-watershed scale of the treatment instead of just streamside.

Having filtered the project locations down to six that met those criteria, the project partners toured the sites to evaluate ground conditions, accessibility, and potential area of impact. Sites were further narrowed to three that were sufficiently accessible for subsequent tours, planning, and, eventually, construction. Accessibility is a key budgetary constraint in project development and was also valued by project partners for ensuring the ability of diverse stakeholders to visit the site.

Finally, project partners discussed existing projects and plans, identified key data sources and other resources, and agreed that the WFBR confluence with Burro Creek would be best suited for this initial planning. **Several partners identified the WFBR as both important for Apache trout habitat as well as a location to build on numerous existing efforts.** The Upper West Fork Black River (including Burro Creek and Lower Thompson Creek) provides 6.7 miles of habitat for Apache trout. This is among the largest continuous stretches of aquatic habitat available for re-established Apache trout populations within their historical range. Artificial barriers were installed in 1996 to protect Apache trout from existing non-native fishes, which are considered a threat to the population. Non-native trout were removed from this area to re-establish pure Apache trout between 1981 and 2008, and AZGFD is presently coordinating with Tribal partners to carry out subsequent treatments in 2023. Because isolated headwater streams may be more vulnerable to catastrophic and stochastic events (Fausch et al. 2006), Tribal, State, and Federal biologists regularly monitor this populations in case intervention (e.g., supplemental stockings, removal due to severe drought) is necessary. The WFBR area is explicitly identified in the USFWS *Apache Trout Recovery Plan* as a potential location to try to establish an interconnecting population of Apache trout following the construction of a barrier in the lower watershed that would enable connectivity among the mainstem and tributary recovery populations (mainstem WFBR, Hayground, Stinky, and Thompson Creeks). TU and AZGFD have collaborated on a temperature monitoring program to evaluate habitat constraints, and AZGFD has repeat habitat transects through the reach. These transects are informed by a monitoring program developed in partnership with TU Science Staff.

This project location provides a strategic opportunity to evaluate restoration as another tool by which to manage water timing and availability for downstream users. The selected project area is downstream of the Maverick Fork SNOTEL station, a site SRP visits biweekly throughout the winter and is presently engaged in new monitoring and modeling efforts with university partners to understand the impact of forest treatments on snowpack, and upstream of a historic USFS

stream gage. Both SRP and ASNF partners expressed enthusiasm at the opportunity to re-establish stream gaging in the WFBR. This data set, combined with the information from the SNOTEL station, will be critical both to informing the design of the project as well as its evaluation with regards to managing streamflow timing and magnitude.

Freeport McMoRan maintains a water diversion on the Black River and was interested in any efforts to increase the resilience of the watershed to future disturbance to protect the infrastructure and water supply on which they currently rely.

What type of site-specific project design and engineering will the watershed group complete?

The project design and engineering will include a desktop analysis of existing datasets; field sampling and surveys; hydraulic modeling; and collaborative review. The desktop analysis will involve aggregating existing datasets (e.g., streamflow, temperature, SNOTEL records, soil hydraulic properties, geologic maps) and remotely sensed data products (e.g. LiDAR, OpenET, NDVI). These data will be subset and analyzed to identify 20, 50 and 80% exceedance flows at the site, timing of typical peak flows, interannual patterns in temperature and potential morphological drivers, historic and present patterns of precipitation and vegetation growth, annual evapotranspirative use in valley floors and uplands, and potential sources of sediment. This information will inform sediment yield modelling to estimate the size and total volume of material moving through the project site in an average year and set expectations about response timelines. Together, these data will produce a baseline understanding of current water partitioning in the valley floor from which changes will be measured following project implementation.

Field sampling will include the collection of substrate samples, channel cross-sections and longitudinal profiles. These data will be necessary for producing engineering typicals and estimates of the total material that will need to be removed or filled. They will also inform sediment yield models and provide baseline information from which to evaluate changing conditions through the channel. Permanent cross-sections will be established for the latter purpose, including the establishment of permanent photo-points to visually document changing conditions.

Hydraulic modeling (e.g., HEC-RAS) will leverage field and remotely sensed data to develop 2-D flow models that evaluate the capacity of designs to alter the depth, velocity, and inundation extent of typical flows. This modelling will also be necessary to carefully design any channel modifications in the quarter mile upstream of the County Road Crossing and produce maps of expected inundation extents and frequencies to share with the counties to minimize the likelihood of disturbances to the road.

How will the watershed group develop a project timeline and milestones for the project?

The management of this planning effort will center around four collaborative site tours.

Tour	Date*	Milestones	Outcomes
Leadership tour	September 2022	2-page project concept; planning effort timelines and milestones; list of participants; contact information for partner leads	Mission statement for restoration project; list of potential future funding sources; consensus on project objectives; communications plan.
Collaborative Design #1	October 2022	Desktop analysis, 30% designs (concept), mock-up drawings	List of additional data sources and relevant plans; consensus on design approach; feedback on initial design concept; design partner communication plan.
Collaborative Design #2	June 2023	Field sampling/survey and Hydraulic modeling results; 60% designs; draft permit map	Feedback on designs; list of final analyses necessary; revised permit map; initial project timeline and milestones.
Agency Permitting	September 2023	75% designs; fill/removal estimates; proposed project timeline and milestones	Feedback on designs and permit map; consensus to move forward with seeking funding for project implementation.

*Timelines based on assumption that award notice will occur in or before July 2022.

The second collaborative design tour will center on translating the 60% designs into timelines and milestones that can be shared with regulatory agencies on the final, Agency Permitting tour for feedback. The team will work with a trained project management consultant to ensure timelines and milestones are appropriate, reasonable, and clearly defined.

Throughout the four collaborative site tours, the group will identify all relevant plans and projects in the area so any opportunities to streamline work are taken, and the groups avoid duplicative or cross-purposed work. For instance, in developing this proposal, AZGFD indicated that any aquatic restoration actions on the WFBR should occur following planned piscicide treatments in Summer 2023, as the increased spatial heterogeneity of surface water resulting from aquatic restoration would reduce the effectiveness of their treatment. The project leads will work closely with partners to ensure they are kept apprised of other relevant efforts to ensure that the timing of the project and key milestones align with others.

Will the watershed group work with Reclamation’s environmental and cultural resource staff to determine what type of site-specific environmental compliance will be necessary for the project(s) upon implementation

The group plans to work with Reclamation’s environmental and cultural resource staff to determine what types of site-specific environmental compliance will be necessary for the project, and will consult with local Reclamation staff through the permit mapping and application preparation process to ensure all Federal environmental compliance requirements are met.

If the watershed group will build on previous efforts, describe these efforts and how the watershed group will expand upon them through the proposed work

As discussed previously, the group will be developing plans based off existing analyses in the *Black River EA*, incorporating design recommendations from the *Apache Trout Recovery Plan*, and expanding on monitoring and evaluation programs developed and managed by AZGFD, ASNF, TU and SRP. The project will offer an opportunity to test models recently developed by partners, including a forest hydrology developed by SRP and ASU that will evaluate the potential hydrologic impact of forest treatments as well as the OpenET toolset SRP is already using to evaluate evapotranspirative use before and after aquatic restoration actions.

4.3 Evaluation Criterion C—Implementation and Results (25 points)

Up to 25 points may be awarded to proposals based on the extent to which the proposal demonstrates that the applicant understands program requirements, is able to implement planned activities within the required two-year time frame, and the extent to which the proposed activities will complement existing Federal, state, or regional planning efforts.

4.3.1. Sub-criterion No. C1—Project Implementation

Applicants should describe their plan for implementing the proposed scope of work. Please include an estimated schedule that shows the stages and duration of the proposed work. The schedule should include Major tasks, milestones for each task, start and end dates, and costs for each task.

The proposed scope of work is detailed in Section 3.4, Approach (p. 5). The table below describes key activities, milestones, estimated start and end dates for each activity/milestone, and estimated costs. Please note that the proposed schedule and costs will likely depend upon the COVID-19 pandemic and repercussions for the group’s ability to hold events, meet in person, or meet via an online platform. These costs reflect the hours of effort from each team member (and associated overhead and fringe), materials and supplies, equipment, contracts associated with each task. This does not include time, overhead and fringe associated with contract administration, grant agreements or grant reporting.

Task	Milestone	Start*	End	Cost
Select appropriate restoration tactics	Project mission statement, site-specific objectives shared with group	July 2022	September 2022 (Leadership Tour)	\$ 6,463.92
Develop monitoring plan	Monitoring map, schedule, and task leads shared with group	July 2022	September 2022	\$ 4,663.92
Install monitoring equipment	Data successfully telemetered to SRP	September 2022	December 2022	\$ 25,800.00

Complete site-specific project designs (refer to specifics in 4.2.2)	30% designs delivered to group	August 2022	October 2022 (Collaborative Design Tour #1)	\$ 25,322.82
	60% designs delivered to group	November 2022	June 2023 (Collaborative Design Tour #2)	\$ 20,471.09
	90% designs delivered to group	June 2023	December 2023	\$ 20,132.89
Develop project timelines and milestones	Project Gantt chart delivered to group	June 2023	December 2023	\$ 7,500.00
Research requisite environmental compliance and permits	Final Permit Map delivered to group	March 2023	October 2023 (Agency Permitting Tour)	\$ 11,012.96
Prepare permit applications	Permit applications delivered to group, consensus to move forward	November 2023	June 2024	\$ 39,488.47

*Timelines based on assumption that award notice will occur in or before July 2022.

TU is a 501C3 non-profit organization with an annual budget of \$62 million and currently manages over 300 different federal grants. During the past five-year period, TU has received \$55,409,665 of federal direct and pass-through funding. TU is subject to annual audits every year under the OMB’s Uniform Guidance for federal grants. TU is a low-risk auditee and has received a clean federal grant audit the past two years with no reportable conditions. The fiscal aspects of the TU-Reclamation partnership are overseen by Matt Renaud, Chief Financial Officer. He oversees 11 staff members who handle a variety of fiscal and administrative tasks for federal grants including the TU-Reclamation partnership. Nationally, approximately 48% of TU’s revenue in FY2020 consisted of federal funding and the share in FY2021 is projected to be 44%.

TU has control measures in place to ensure federal funding is managed in adherence to the Uniform Guidance. Each specific grant award is set up as an independent cost center to avoid the co-mingling of funds and a system of checks and balances is used to ensure financial integrity.

Accounting staff at both the field and national office levels monitor grant expenditures and invoicing. Training on a variety of compliance topics—procurement, grants administration, cost principles, federal reporting, cost-share, subrecipient management, vendor screening and the grant life cycle—is offered to project managers and support staff on a regular basis. TU’s associated policies, procedures and guidance on managing federal funds are assessed at least annually and updated as needed.

4.3.2. Sub-criterion No. C2—Building on Relevant Federal, State, or Regional Planning Efforts

Please describe how the proposed activities that are part of this grant project will complement, build upon, or meet the goals of relevant Federal, state, or regional planning efforts.

The restoration planning activities and site-specific project design work that comprise this Task C, CWMP funding application build upon and help meet the goals of multiple, regional planning efforts. Because the proposed work of this project takes place almost entirely on National Forest ground (other than scattered private inholdings within the National Forest), the most relevant planning efforts have been undertaken by the U.S. Forest Service, its partners, and participating stakeholders.

In 2015, the Forest Service completed its Final Environmental Impact Statement for the Land Management Plan for the Apache-Sitgreaves National Forests (2015 MB-R3-01-10), and adopted the Forest Plan for the Apache-Sitgreaves National Forests shortly thereafter.

A year later, the Forest Service published its *Ecosystem Restoration Policy* at 81 Federal Register 24707-24714 (April 27, 2016). The Springerville and Alpine Ranger Districts of Apache-Sitgreaves National Forests began initial scoping work on the *Black River Landscape Restoration Project Environmental Assessment* in 2016, informed by the U.S. Forest Service's national *Ecosystem Restoration Policy*.

Formal consultation with the U.S. Fish and Wildlife Service took place in the development of and finalization of the *Forest Plan for the Apache-Sitgreaves National Forests* and the *Black River Landscape Restoration Project Environmental Assessment*. The U.S. Fish and Wildlife Service issued its *Biological Opinion for the 2015 Apache-Sitgreaves National Forests Land Management Plan*, 165 pp., in 2015.

Underlying the U.S. Fish and Wildlife Service's *Biological Opinion* is over a decade of study, analysis, and planning linked to key imperiled species listed under the Endangered Species Act within the Black River watershed, including the Mexican spotted owl and the Apache trout. The U.S. Fish and Wildlife Service published *Final designation of critical habitat for the Mexican spotted owl*, 69 Federal Register 53182- 53298 (August 31, 2004). Similarly, the U.S. Fish and Wildlife Service finalized in 2009 its second revision to its *Apache Trout Recovery Plan* (2009, 84 pp, Albuquerque, NM). These and other ESA-listed species analyses informed the Service's *Biological Opinion* covering the Black River watershed.

Most significant to this CWMP Task C project proposal, the Springerville and Alpine Ranger Districts of Apache-Sitgreaves National Forests finalized their *Black River Landscape Restoration Project Environmental Assessment* in September of 2020. As described in more detail in this proposal, the specific restoration planning and site-specific project designs to be completed under this proposal are intended to help achieve the landscape-scale restoration goals described in the *Black River Landscape Restoration Project Environmental Assessment* for forest and aquatic health in the Black River watershed. These goals include expanding the occupied habitat of the Apache trout by improving stream conditions, improving ecosystem services from

forest habitat including providing improved Mexican spotted owl and Mexican wolf habitat, and increasing the Black River watershed's resilience to drought and wildfire risk.

Relevant state planning efforts include work led by AZGFD in cooperation with ASNF to develop Apache trout habitat improvement plans and a partnership between AZGFD and TU create a monitoring program to track progress in Apache trout recovery. The habitat improvement plans included the installation of riparian fencing, installation of strategic stream barriers and the treatment of non-native species threatening Apache trout.

4.4 Evaluation Criterion D—Presidential and Department of the Interior Priorities (10 points)

Up to 10 points may be awarded based on the extent that the project demonstrates support for the Biden-Harris Administration's priorities, including E.O. 14008: Tackling the Climate Crisis at Home and Abroad, E.O. 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, and the President's memorandum, Tribal Consultation and Strengthening Nation-to Nation Relationships.

Sub-criterion No. E1. Climate Change

Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis. Does this proposed project strengthen water supply sustainability to increase resilience to climate change? Does the proposed project contribute to climate change resiliency in other ways not described above?

Water scarcity is the most dire of the predicted expressions of climate change in the Western United States, and one being felt dramatically in Arizona as projected water shortages continue. Western snowpack is diminishing as year-round temperatures continue to rise and a greater percentage of precipitation falls as rain. Springtime flooding is becoming less predictable, with flood peaks rising higher, arriving earlier and occurring more frequently than in historical records. Annual and interannual drought cycles are affecting larger areas, persisting longer and occurring more frequently, leading to longer and more devastating wildfire seasons. These challenges have made the work of partners like SRP challenging as they seek to ensure continued water service to over 2 million people. The threat of water scarcity to the people and ecosystems of Arizona is compounded by increased wildfire risk, which can not only devastate natural resources, but degrade water quality and reduce storage in reservoirs. Long-term water



storage is a critical element of maintaining drought and climate resilience in the face of increasing wildfire.

Reestablishing hydrologic processes will give watersheds tools to respond resiliently to the increasingly unpredictable disturbances of climate change. It also increases the resilience of the system to a wider range of potential disturbances, including wildfire and drought. Figure 3 demonstrates the resilience provided by healthy aquatic habitat and the critical role it provides as habitat refugia for imperiled aquatic species.

Figure 3 Dixon Creek, Klamath County, OR following the 2021 Bootleg Fire. Photo by Charlie Erdman (TU)

As has been emphasized by this administration, it is more critical than ever we create transferable models of collaborative project approaches that can rapidly address these threats at an increased pace and scale. Combining forest management with aquatic restoration is one such new model of cross-boundary project development that can increase the efficiency of resources and leverage new sources of funding.

Sub-criterion No. E3. Tribal Benefits

Does the proposed project directly serve and/or benefit a Tribe? Will the project improve water management for an Indian Tribe? Does the proposed project support Tribal resilience to climate change and drought impacts or provide other Tribal benefits such as improved public health and safety by addressing water quality, new water supplies, or economic growth opportunities?

The Fort Apache Indian Reservation lands align with the western border of the Apache-Sitgreaves National Forest within the Black River watershed. The White Mountain Apache have been integral in protecting the Apache trout population in the WFBR and are coordinating with AZGFD around treatments planned for 2023. Their fisheries biologist has expressed interest in efforts to improve habitat conditions for this population of Apache trout.

While Tribal lands are not within the proposed project area, TU and project partners would have the capacity to undertake additional outreach to the San Carlos Apache Tribe and the White Mountain Apache Tribe if this CWMP Task C proposal is funded. TU and project partners plan to invite Tribal scientists and managers to the Collaborative Design Tours and will extend invitations to Tribal leadership for the Leadership Tour. The project team will listen to their thoughts on the proposed restoration actions, modify proposed restoration actions as appropriate based on Tribal perspectives, and conduct joint field visits with Tribal members to proposed project sites to better convey and understand the proposed restoration actions and Tribal perspectives.

If requested by either the San Carlos Apache Tribe and/or the White Mountain Apache Tribe, TU and its project partners would be able to explore Tribal partnerships in planning and executing similar restoration strategies on neighboring Tribal lands within the Black River watershed. Such subsequent partnered project proposals would be undertaken in order to improve watershed resilience to climate change and drought on Tribal lands.

OVERLAP OR DUPLICATION OF EFFORT STATEMENT

Applicants must provide a statement that addresses if there is any overlap between the proposed project and any other active or anticipated proposals or projects in terms of activities, costs, or commitment of key personnel. If any overlap exists, applicants must provide a description of the overlap in their application for review.

Applicants must also state if the proposal submitted for consideration under this program is or is not in any way duplicative of any proposal or project that has been or will be submitted for funding consideration to any other potential funding source—whether it be Federal or non-Federal. If such a circumstance exists, applicants must detail when the other duplicative proposal(s) were submitted, to whom (Agency name and Financial Assistance program), and when funding decisions are expected to be announced. If at any time a proposal is awarded funds that would be duplicative of the funding requested from Reclamation, applicants must notify the NOFO point of contact or the Program Coordinator immediately

There is no overlap or duplication between this proposed Black River project restoration planning and project design and any other anticipated projects. No other proposals are anticipated that would cover any of the restoration planning or site-specific design work proposed here. If this proposal is funded, and if at any time during the period of performance another project proposal is funded that overlaps or duplicates the work undertaken under this application, TU will immediately notify Reclamation’s CWMP Program Coordinator.

PROJECT BUDGET

Budget Proposal

Table 1. Summary of Non-Federal and Federal Funding Sources

FUNDING SOURCES	AMOUNT
Non-Federal Entities	
1. Blueshift (In-Kind)*	\$102,060.00
Non-Federal Subtotal	\$102,060.00
REQUESTED RECLAMATION FUNDING	\$191,672.71

Table 2. Total Project Cost Summary

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal funding	\$293,732.71
Costs to be paid by the applicant*	\$102,060.00
Value of third-party contributions	
TOTAL PROJECT COST	\$293,732.71

BLACK RIVER CWMP BUDGET PROPOSAL

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST	Grant Funding/Cost Adjustments	
	\$/Unit	Quantity			In-Kind Contribution	Funding Request
Salaries and Wages						
<i>Trout Unlimited</i>						
Nate Rees	\$ 33.60	263.00	Hours	\$ 8,810.50		\$ 8,810.50
Sara Porterfield	\$ 34.84	55.00	Hours	\$ 1,918.20		\$ 1,918.20
<i>Blueshift (Partner, see support letter)</i>						
Caroline Nash	\$ 220.00	450.00	Hours	\$ 99,000.00	\$ 45,000.00	\$ 54,000.00
Laura Ziemer	\$ 458.00	140.00	Hours	\$ 64,120.00	\$ 31,080.00	\$ 33,040.00
Blueshift support staff	\$ 80.00	180.00	Hours	\$ 9,800.00		\$ 9,800.00
Fringe Benefits						
Nate Rees	48% of salary		Benefit rate	\$ 4,229.04		\$ 4,229.04
Local/Regional T U Staff	48% of salary		Benefit rate	\$ 919.78		\$ 919.78
Travel						
Nate Rees	See detail	4/12	Trips/Overnights	\$ 1,076.00		\$ 1,076.00
Sara Porterfield	See detail	2/6	Trips/Overnights	\$ 1,710.00		\$ 1,710.00
Caroline Nash	See detail	5/16	Trips/Overnights	\$ 4,541.00		\$ 4,541.00
Laura Ziemer	See detail	2/6	Trips/Overnights	\$ 2,556.00		\$ 2,556.00
Blueshift support staff	See detail	3/10	Trips/Overnights	\$ 1,076.00		\$ 1,076.00
Equipment						
Flowtopgraphy Installation Materials	See detail			\$ 7,500.00		\$ 7,500.00
Supplies and Materials						
Tour Handouts	\$ 0.50	720	Printed Pages	\$ 360.00		\$ 360.00
Shallow Groundwater Installation Materials	See detail			\$ 3,000.00		\$ 3,000.00
Contractual/Construction						
Flowtopgraphy Installation (SRP)	\$ 7,500.00	1		\$ 7,500.00		\$ 7,500.00
Shallow Groundwater Installation (SRP)	\$ 2,000.00	1		\$ 2,000.00		\$ 2,000.00
Monitoring Site Maintenance and Data Download (SRP)	\$ 4,000.00	1		\$ 4,000.00		\$ 4,000.00
Project Management Consultant (Blueshift)	\$125	40	Hours	\$ 5,000.00		
Environmental and Regulatory Compliance Costs						
Recipient Compliance Costs	See detail			\$ 57,254.10	\$ 25,980.00	\$ 31,274.10
Reclamation Compliance Costs	See detail			\$5,000		\$ 5,000.00
TOTAL DIRECT COSTS				\$ 291,168.62	\$ 102,060.00	\$ 184,108.62
Indirect Costs						
Overhead (TU)	13.74% MTDC		Overhead Rate	\$ 2,564.09		\$ 2,564.09
TOTAL ESTIMATED PROJECT COST \$				\$ 293,732.71	\$ 102,060.00	\$ 186,672.71

Budget Narrative

Salaries and Wages

Funds from this grant will be used to support Trout Unlimited and its core implementation partners. Personnel costs have been calculated on a total estimated-hours-of-effort basis. Travel time to and from site is not included in these hours-of-effort estimates; given the remote location of the project sites and the substantial time in travel that is therefore likely to be required for many of the participating personnel to reach the sites, these estimated hours-of-effort should be regarded as deliberately conservative.

Project Manager: Nate Rees, Arizona Coordinator, (Trout Unlimited).

Nathan Rees is the coordinator for all Arizona-related programs for Trout Unlimited, working primarily on public lands issues, forest planning, and native trout reintroduction in Arizona. He has extensive experience navigating Arizona's conservative landscape to create effective and pragmatic change and has developed strong working relationships with multiple conservation organizations in the state ranging from the traditional hunting/fishing groups to environmental organizations like the Grand Canyon Trust as well as congressional staff, federal/state agency leaders and Indigenous Tribes.

As the project manager, Mr. Rees will oversee the design, coordination and outreach of collaborative engagement based on his extensive experience working within 4FRI and other collaborative restoration efforts in Arizona. He will identify key stakeholders, prepare appropriate outreach, and ensure distributed materials effectively communicate project goals to ensure open communication among project partners. Mr. Rees will be the main point of contact for numerous project partners interested in getting involved or receiving updates. Mr. Rees will stay apprised of 4FRI efforts elsewhere, new funding opportunities and provide timely updates regarding the status of the project development to relevant members of the Stakeholder Group.

Outreach coordination, collaborative management, and ongoing communications associated with this project are estimated to occupy approximately 263 hours of his time over the latter half of 2022, calendar years 2023 and 2024 at an hourly cost of \$33.50.

Dr. Caroline Nash, Principal (Blueshift)

Dr. Caroline Nash, a principal of Blueshift (key project partner to Trout Unlimited), will provide primary support to Trout Unlimited and Mr. Rees on numerous aspects of the project. Dr. Nash is a professional hydrologist and geomorphologist with experience in rangeland conservation and stream restoration, including field work, remote sensing, and modeling, and has extensive knowledge of the scientific fields and regulatory constraints relevant to watershed-scale restoration and conservation efforts. Dr. Nash has worked closely with Trout Unlimited on several similar project planning efforts and is co-located with their staff in Boise.

Dr. Nash will undertake many of the core activities associated with planning and design of in-stream restoration projects, development of monitoring protocols and monitoring approaches, the selection of monitoring sites, synthesis of existing baseline data, and assistance preparing requisite permits. These activities are expected to occupy approximately 530 hours of her time

(approximately 15% of her total client service efforts) over the latter half of 2022, calendar years 2023 and 2024.

As a private consultant and principal of Blueshift, Dr. Nash's regular (market) hourly rate for 2022 will be \$220/hr for services to private sector clients in her field of expertise. However, as a core project partner, and consistent with its public benefit mission and support for non-profit organizations like Trout Unlimited and innovative efforts of this type, Blueshift has committed to provide many of these key supporting services at no cost, including absorbing all overhead costs, and to provide all services at a substantial discount from its regular rates to reflect the public-interest nature of the project. After accounting for its donated and discounted time, this translates to a net hourly rate of \$120.00/hour for services that will be provided by Dr. Nash in connection with this project. These donated and discounted services are reflected in the in-kind contribution shown in the project budget. It should be noted that this in-kind contribution value is calculated without accounting for any future increases in hourly consulting rates.

Laura Ziemer, Of Counsel, Culp & Kelly, LLP

Laura Ziemer, the former Senior Counsel and Water Policy Advisor for Trout Unlimited and presently *Of Counsel* with Culp & Kelly, LLP (C&K), an experienced regional water and natural resources law and policy firm. C&K is the corporate parent of Blueshift and frequently provides direct, integrated support with Blueshift for projects of this type. Ms. Ziemer is a trained water and natural resources attorney, and has worked extensively on the planning, permitting, and implementation of restoration projects of this type throughout Wyoming, Montana, and Idaho, and has also participated in the development of related funding programs and policies at the federal and state level.

Ms. Ziemer will provide direct support to Mr. Rees on a range of specific project activities, will aid in the development of grant agreements and compliance with federal grant reporting, will support required project permitting, local/regional agency outreach, and support some aspects of landowner/land management relations. These activities are expected to occupy approximately 230 hours of her time over the latter half of 2022, calendar years 2023 & 2024.

Her 2022 regular (market) hourly rates is \$458 for services to private sector clients in their fields of expertise. However, as a core project partner, and consistent with the public benefit mission of Blueshift and provision of low-cost support for non-profit organizations like Trout Unlimited and innovative efforts of this type, C&K has committed to provide some of these key supporting services at no cost, including absorbing all indirect costs and the direct costs of legal research, and to provide all of its services at a substantial discount from its regular rates to reflect the public-interest nature of the project. After accounting for its donated and discounted services, this translates to a net discount of \$222 per hour for the services. The value of these donated and discounted services are calculated based on the number of hours that C&K is committing to provide to the project, and are reflected in the in-kind contribution shown in the project budget. It should be noted that this in-kind contribution also reflects a commitment not to raise hourly rates charged to the project during its 2-year term; while this will further increase the actual value of the in-kind contribution, that additional value is not claimed as part of the project budget.

Other Core Personnel

Sara Porterfield, Water Policy Associate, Trout Unlimited

Dr. Porterfield is a Water Policy Associate for Trout Unlimited, with a geographic focus on the Colorado River Basin. Dr. Porterfield is a seasoned partner for TU field staff in navigating federal grant contracting. Dr. Porterfield will be responsible for supporting grant administration activities, including maintenance of budgets that will be provided in grant reporting, as well as supporting Mr. Rees in stakeholder outreach, design and coordination. These activities are expected to occupy approximately 320 hours of additional TU staff time over the latter half of 2022, calendar years 2023 & 2024, and the first half of 2025 at an hourly cost of \$34.84.

Forestry Specialist (Blueshift support)

Blueshift will also provide required support for the design and layout of the complementary forest treatment designs relevant to the collection and preparation of woody materials for the construction of BDAs and improvement of upland habitat for mule deer and wildfire resilience. Blueshift will also provide on-site support for the planning and oversight of treatment efforts, contracting, and related compliance. These activities are expected to occupy approximately 245 hours of additional staff time over the latter half of 2022, calendar years 2023 & 2024, and the first half of 2025.

To provide a cost figure associated with these total hours-of-effort, we have provided the discounted hourly cost (\$60) that Blueshift incurs for these services via its affiliated professional forester that has participated in the design of the project. It should be noted that this rate reflects the raw hourly cost that will be incurred by Blueshift for the services, with no markup for overhead. These costs should therefore be regarded as conservative; although the actual costs of providing these services are higher than this raw cost, no in-kind contribution is claimed in the budget for those higher costs.

Fringe Benefits

Benefits costs figures reflect costs associated with all Trout Unlimited employees. Based on 2021 actuals, the fringe benefit rate for TU is equivalent to 48% of the grant-funded salary. To calculate this fringe benefit rate figure, we included the following individual components in the fringe benefits rate: health insurance, workers' compensation, paid time off, retirement, as well as federally mandated taxes such as FICA & Medicare that are provided by Trout Unlimited to each of the full-time employees included in the proposal. Collectively, these expenses determine the percentage of these costs as 48% relative to salary. The salary hour amounts identified in the personnel portion of the project budget were then multiplied by this percentage to determine the amount of benefits costs that should be fairly attributed to the time invested by each person in this project.

Where included as part of in-kind contributions, fringe benefits costs associated with participating personnel from other partners are reported at the rates reported by those individual partners. Note that the inclusion or exclusion of those costs in in-kind contribution amounts from those partners does not materially affect the cost-sharing ratio under this application.

Travel

Travel costs will be associated with core project personnel’s travel to field tours and to carry out field work. Mr. Rees and Dr. Nash will attend all four tours, while Ms. Ziemer, TU Regional Staff and Blueshift Support staff will each attend only two. These tours are expected to be two days on-site, requiring 3 hotel nights given the long drive from the nearest major airport. These tours will be necessary to generate buy-in from leadership at partnering agencies and ensure alignment with larger 4FRI goals; to collaboratively identify key design features and considerations from project partners; to provide feedback and ground-truth designs; and to host agencies to review the site and provide final feedback on the proposed project prior to submitting permit applications.

Dr. Nash and Blueshift support are each allocated an additional trip for data collection and layout relevant to project design, though the assumption was made that both would integrate as much field collection and design work into travel for field tours as was feasible.

Travel Costs					
	Nash	Ziemer	Rees	Porterfield	Blueshift Support
Number of Trips	5	2	4	2	3
Overnights	16	6	12	6	10
Average round-trip air travel cost	\$250.00	\$250.00	\$-	\$250.00	\$250.00
Hotel cost (per overnight)	\$96.00	\$96.00	\$96.00	\$96.00	\$96.00
Project Site RT mileage	600		600		
Airfare	\$1,250.00	\$500.00	\$-	\$500.00	\$750.00
Mileage	\$1,755.00	\$-	\$1,404.00	\$-	\$-
Lodging (Site Visit Overnights)	\$1,536.00	\$576.00	\$1,152.00	\$576.00	\$960.00
Subtotal Cost (Travel)	\$4,541.00	\$1,076.00	\$2,556.00	\$1,076.00	\$1,710.00

Cost Assumptions

To estimate the costs associated with each of the trips and overnights as shown in the table, the following cost assumptions were used:

The closest community with available meals and lodging opportunities to the project site is Alpine, AZ which is approximately 30 miles from the project area (approximately 50 minutes driving time). The closest major airport is Phoenix (approximately 250 miles from the project site). Flying into the semi-local Show Low airport (e.g. \$200 roundtrip from Phoenix per person) was regarded as inefficient as it would still require a rental car and two hours of driving. Flying to Phoenix and incurring the additional mileage was considered a better use of funds, particularly if most partners car-pool.

Travel costs for non-local personnel assume round trip air travel from their respective home cities of Bozeman, MT (Ziemer), Boise, ID (Nash, Blueshift support staff), and Denver (Porterfield) to Phoenix. A check of prices for these flights showed that they were typically in the range of \$250-300 per round trip from either Bozeman, MT or Boise, ID or Denver, CO for a coach-class ticket on a discount airline, assuming reasonable advance purchase. Local Trout Unlimited staff (Rees) reside and work in Phoenix, AZ and will not require a flight.

No costs for staff time in travel for either Trout Unlimited or Blueshift staff were incorporated into these estimates. Travel costs for contractors are assumed to be included in the estimated contract costs.

2022 GSA Rates for Hotels in Alpine are \$96, and 2022 POV mileage reimbursement rates are \$0.585. Meals and Incidental Expenses were not included.

Given these various assumptions, the travel cost figures presented here (and in-kind contributions that could otherwise have been claimed for excluded costs) should be regarded as intentionally conservative.

Equipment

Funds from the grant will be used to purchase equipment for the installation of monitoring sites to collect important baseline information that will inform project design. These costs are based on recent experience procuring similar materials for installation projects elsewhere in the region.

Installation Site	Materials	Date	Cost
Flowtography Installation Materials	Pressure transducer/logger, cell camera/backup, solar panel, batteries, enclosure, pole, etc.	October 2022	\$7500

The materials for instrumentation will include those materials needed to collect, store, and house the flowtography station (stream gage) and shallow groundwater. The stream gage will replace the lost capacity associated with out-of-service Forest Service gage being removed from the WFBR, and will provide critical data about flow volume, timing and visual estimates of sediment movement to inform project design and engineering specifications.

Detailed monitoring is a critical piece of 4FRI’s mission to quantify outcomes from treatments to ensure progress towards meeting the desired conditions of a fire-adapted ecosystem with resilient ecological processes. It will also provide ancillary physical habitat suitability information to

inform Trout Unlimited and AZGFD’s Apache Trout Monitoring Plan, which will help inform habitat management actions planned for Summer 2023.

Supplies and Materials

Funds from the grant will be used to print materials to share with participants on field tours and purchase materials <\$5000 to install in the shallow groundwater transect

Tour	Date	# Handouts	Cost
Leadership tour	September 2022	12	\$90
Collaborative Design #1	October 2022	12	\$90
Collaborative Design #2	August 2023	12	\$90
Agency Permitting	October 2023	12	\$90
TOTAL		48	\$360

The print materials will include project overview write-ups, color maps and photos and preliminary designs. It is expected that 12 people will be present for each of the four field tours, requiring 48 handouts, each likely to total 15 printed pages based on previous experience hosting similar tours. These materials facilitate communication and collaborative design process among project partners. Costs were estimated at \$0.50/printed page.

Installation Site	Materials	Date	Cost
Shallow Groundwater Install	Pressure transducer/logger, enclosures, other materials for installation	October 2022	\$3000

The shallow groundwater monitoring will provide data about baseline soil moisture and groundwater levels to calculate estimated water storage capacity in the proposed research area, predict effects on outgoing streamflow, and will contribute to ongoing research efforts by SRP to estimate the hydrologic effect of forest treatments and restoration projects.

Contractual/Construction

Funds from this grant will be used to support the installation of a flowtography station below the planned restoration site and shallow groundwater monitoring through the proposed project site.

These sites will be installed as soon as possible once funds are awarded and contracted, provided site conditions permit access. Dates in the table are based on best guess estimates of timing of fund contracting.

Task	Date	Cost
Flowtography Telemetry Installation	November 2022	\$2500
Prep work and installation of Flowtography site	November 2022	\$5000
Prep work and installation at Shallow Groundwater site	November 2022	\$2000
Maintenance and data collection for both sites	October 2023	\$4000

Project Management Consultant	June 2023	\$5000
TOTAL		\$13,500

The contract for installation will be awarded to SRP, as permitted for contracts with values <\$10,000 by 2 CFR §200.317 - §200.32. Moreover, SRP developed the ‘flowtography’ technique that is used elsewhere in the Salt River and is the only operator qualified to ensure the installation of this station matches the specifications of the sites elsewhere in the Salt River System. SRP performs routine maintenance elsewhere in the region at SNOTEL stations, snow transects, and other gage stations. Though they are exploring the possibility of wrapping maintenance into existing work at their other sites in the White Mountains, we have included their estimated costs associated with maintenance and data collection to provide a conservative budget estimate.

As described in the response to Criterion C, the project team plans to engage a project management consultant for 40 hours of work to help refine the collaboratively developed tasks, milestones and timelines for the designed project into a plan with appropriate, reasonable, and clearly defined steps. Margot Molloy, a principal at partner firm CK Blueshift and project manager with over a decade of experience developing similar project plans for multi-stakeholder efforts in the natural resources space, has offered to provide those 40 hours of work at a discounted rate of \$125, rather than her market rate of \$220, to reflect the alignment of this project’s goals with the mission of the firm. This strategic consulting will be critical to ensuring success of the project’s implementation.

Environmental and Regulatory Compliance Costs

Costs associated with environmental and regulatory compliance will be carried out by project partners in partnership with Reclamation. The contents of this project, itself, do not require environmental or regulatory compliance, but preparing the project for implementation will require considerable time researching permitting and water rights, preparing permit applications, and addressing other issues related to state and federal environmental, water rights, and other regulatory compliance.

Partner	Hourly Rate	Compliance Time		Total Cost	In-Kind Contribution	Funding Request
Trout Unlimited						
Nathan Rees	\$33.50	43	Hours	\$1,440.50		\$1,440.50
Sara Porterfield	\$34.84	40	Hours	\$1,393.60		\$1,393.60
Blueshift (Partner, see support letter)						
Caroline Nash	\$220.00	60	Hours	\$13,200.00	\$6,000.00	\$7,200.00
Laura Ziemer	\$458.00	90	Hours	\$41,220.00	\$19,980.00	\$21,240.00
Blueshift support staff	\$60.00	0	Hours	\$-		\$-

TOTAL - Recipient				\$57,254.10	\$25,980.00	\$31,274.10
ESTIMATED - Reclamation				\$5,000.00		

These estimates are based on experience with similar projects in which TU has had to take the lead on environmental compliance activities. This project site is located within the Black River Landscape Restoration Area Environmental Assessment, and 4FRI partners associated with the Apache-Sitgreaves National Forest have performed those analyses for the range of activities that may be included in the ultimate project design. To the extent that Reclamation may intend to take the lead on one or more aspects of this regulatory compliance and permitting, these costs may be lower than projected.

Indirect Costs

TU has a federally negotiated indirect cost rate (NICRA) of 13.74%. This indirect cost rate is applied against (1) TU’s in-kind contributions for salary/fringe benefit costs and (2) the modified direct costs for which federal funding is being requested pursuant to this grant application, each as calculated pursuant to 2 CFR Part 200.68.

ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants should consider the following list of questions focusing on the NEPA, ESA, and NHPA requirements. Please answer the following questions to the best of your knowledge. If any question is not applicable to the project, please explain why. The application should include the answers to:

Will the proposed project impact the surrounding environment (e.g., soil, air, water quality and quantity, animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please explain the impacts of such work on the surrounding environment and steps that could be taken to minimize the impacts.

ANSWER: Because this CWMP Phase I, Task C proposal is for restoration planning and site-specific project design, there is no project implementation component. The only “earth-disturbing” work contemplated in this proposal is the installation of base-line condition monitoring wells to measure current groundwater depth and surface water measurement stations. The installation of these monitoring systems will follow best management practices and have only a near-imperceptible impact on air, water, or animal habitat in the project area. To the extent that installation of monitoring wells or stations could have any anticipated impact, it has been assessed in the *Black River Landscape Restoration Project Environmental Assessment*, Springerville and Alpine Ranger Districts of Apache-Sitgreaves National Forests (September 2020), and found to be insignificant.

Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?

ANSWER: Yes, the *Black River Landscape Restoration Project Environmental Assessment*, Springerville and Alpine Ranger Districts of Apache-Sitgreaves National Forests (September 2020), identifies and discusses numerous ESA-listed species within the project area. Because this CWMP Phase I, Task C proposal is for restoration planning and site-specific project design, there is no project implementation component. Therefore, no adverse impact to any listed species will result from the planning and restoration design work or baseline condition monitoring.

Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as “Waters of the United States”? If so, please describe and estimate any impacts the proposed project may have.

ANSWER: Yes, the *Black River Landscape Restoration Project Environmental Assessment*, Springerville and Alpine Ranger Districts of Apache-Sitgreaves National Forests (September

2020), identifies numerous surface waters and associated riparian wetlands that would likely be within Clean Water Act jurisdiction.

Because this CWMP Phase I, Task C proposal is for restoration planning and site-specific project design, there is no project implementation component. Therefore, no proposed actions under this proposal would require a Section 404 permit or other Clean Water Act permit.

When was the water delivery system constructed?

ANSWER: There is no water delivery system associated with this project proposal.

Will the proposed project result in any modification of or effects to, individual features of an irrigation system? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.

ANSWER: No. There is no water delivery system associated with this project proposal.

Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.

ANSWER: No. There is no water delivery system associated with this project proposal.

Are there any known archeological sites in the proposed project area?

ANSWER: None have been identified at present. A complete archaeology survey is planned for Summer 2022. Because this CWMP Phase I, Task C proposal is for restoration planning and site-specific project design, there is no project implementation component. Therefore, no proposed actions under this proposal would interfere with any archaeological sites should they be identified. If this proposal is funded, and if at any time during the period of performance an archaeological site is found in the proposed project area, TU will immediately notify Reclamation's CWMP Program Coordinator.

Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?

ANSWER: No.

Will the proposed project limit access to, and ceremonial use of, Indian sacred sites or result in other impacts on tribal lands?

ANSWER: No.

Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known in the area?

ANSWER: No.

REQUIRED PERMITS OR APPROVALS

During the NEPA process, potential impacts of a project are evaluated in context and in terms of intensity (e.g., will the proposed action affect the only native prairie in the county? Will the proposed action reduce water supplied to a wetland by 1 percent? Or 95 percent?). The best source of information concerning the potentially significant issues in a project area is the local Reclamation staff that has experience in evaluating effects in context and by intensity

Because this CWMP Phase I, Task C proposal is for restoration planning and site-specific project design, there is no project implementation component. The location selected for project designs has been evaluated through the *Black River Landscape Restoration Environmental Assessment*. The project team will coordinate with local Reclamation staff through the permit mapping process for the project design to ensure any potentially significant issues, permit requirements or approvals are identified.

APPENDIX A – LETTERS OF SUPPORT



File Code: 2670
Date:

Ms. Avra Morgan

Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
P.O. Box 25077
Denver, CO 80225

Dear Ms. Morgan,

Please accept this letter of support from Springerville Ranger District, Apache-Sitgreaves National Forests for Trout Unlimited's (TU) proposal to the Cooperative Watershed Management Program Phase 1 Grant (CWMP) to lead a cross-boundary partnership to design a restoration project on the West Fork Black River, Arizona. West Fork Black River is within the Black River Restoration Project which the District and Forest is in the process of completing an environmental analysis for Black River under the National Environmental Planning Act (NEPA). The District is also contributing heritages clearances and our timber program is working to provide wood resources for use in the project. Forest and district personnel have been working in partnership with Trout Unlimited on the West Fork Black River project as it is a priority stream for federally threatened Apache trout. The District and Forest have a long history of working with Trout Unlimited as well as state and federal partners to recover Apache trout and improve its stream habitat. This project is focuses on restoration in the most upstream portions of West Fork Black River on the District

I respectfully urge your favorable consideration of Trout Unlimited's proposal and offer my full support of this collaborative project which will facilitate the development of a shovel-ready project that can address stream habitat restoration for Apache trout, protect water resources, and create a template for future cross-boundary partnerships to accelerate the pace and scale of aquatic restoration in the region.

Sincerely,

ROBERT LEVER
District Ranger



cc: stephanie.coleman@usda.gov

Four Forest Restoration Initiative (4FRI) Stakeholder Group Charter

I. PURPOSE OF THE CHARTER

The Four Forest Restoration Initiative (4FRI) is a joint effort of the United States Forest Service (USFS) and portions of four National Forests (Coconino, Kaibab, Apache-Sitgreaves, and Tonto) along the Mogollon Rim and the 4FRI Stakeholder Group (the stakeholder group). The purpose of the Charter is to provide operating guidelines for stakeholders who intend to work collaboratively with the USDA Forest Service in planning, designing and implementing the Four Forest Restoration Initiative.

This Charter is one of several documents developed or that may be developed by the stakeholder group. These documents include: The Path Forward that presents initial guidance for restoration activities, a Strategic Plan, and a Memorandum of Understanding (MOU) that defines the working relationship between the Stakeholders and the USFS.

II. VISION

The vision of the Four Forest Restoration Initiative is restored forest ecosystems that support natural fire regimes, functioning populations of native plants and animals, forests that pose little threat of destructive wildfire to thriving forest communities and support sustainable forest industries that strengthen local economies while conserving natural resources and aesthetic values.

III. MISSION

The Mission of the 4FRI is to: 1) integrate comprehensive restoration, fire management, and community protection planning at the landscape scale; 2) strategically prioritize and place restoration treatments; 3) safely re-establish natural fire regimes at the landscape scale; 4) identify and implement sustainable cost offset opportunities through wood and biomass utilization; 5) employ monitoring and adaptive management supported by the best available science; (6) build public support for accomplishing restoration and community protection through public education, and 7) support land use policies that enable landscape-scale restoration while meeting the ecological goals of the 4FRI.

IV. ACTIONS

We agree that the following actions will be necessary to fulfill this vision and mission:

- A. Carry forward principles and agreements contained within the *Path Forward* and translate them into proposed actions for landscape-scale, ecologically-based forest restoration within the 4FRI area.
- B. Design and implement innovative strategies for collaboration, planning (both programmatic and project-level), contracting, research, monitoring, adaptive management, and project implementation in order to effectively and efficiently accelerate forest restoration across the 4FRI area.

- C. Work with the Forest Service at multiple stages prior to, during, and following the NEPA process on such products as the purpose and need statement, proposed action, alternatives, collection and use of data, impact analysis, development of a preferred alternative and/or recommendations regarding mitigation of environmental impacts, and the development and adoption of monitoring and adaptive management processes.
- D. Work with the Forest Service prior to, during, and following implementation and monitoring to help ensure that treatments achieve our goals. We will provide timely feedback in order to help the Forest Service adapt implementation, as well as help find resources to integrate all aspects of comprehensive restoration.
- E. Advocate for development of and/or continuation of long-term contracts and/or agreements that support appropriately-scaled industry involvement in thinning of 50,000 acres annually over a 20-year period within the 4FRI area, as outlined within the *Path Forward*. As part of this process, participate in the development and evaluation of various utilization strategies/opportunities, including their economic feasibility, potential for cost-offsets, and contribution to the overall 4FRI mission and vision.
- F. Support public and private investments needed to carry forward landscape-scale forest restoration with maximum efficiency and effectiveness.
- G. In conjunction with the Forest Service implement the Landscape Strategy and future strategic plans.
- H. Identify and support necessary policy changes to support comprehensive restoration.

V. ORGANIZATIONAL STRUCTURE

The stakeholder group is an informal organization with open membership. The organization structure consists of three nested and interrelated entities: the stakeholder group, a steering committee, and work groups. Operating rules for the stakeholder group and the steering committee are in Section X.

Stakeholder Group- The stakeholder group is the primary decision making body. Stakeholders can represent individuals or organizations. Membership is open to the public. Individual stakeholders or one individual representing a stakeholder organization is entitled to participate in decisions before the group after fulfilling the requirements in Section X.

The Steering Committee- The steering committee consists of individuals from the whole stakeholder group. The Steering committee's role is to manage the logistics of the stakeholder group, set agendas, organize meetings, maintain appropriate documentation, and suggest work groups to the stakeholder group. Operating rules are established in Section X.

Work Groups- Work groups are a subset of the whole stakeholder group, and are coordinated by the steering committee. Work groups should be small and efficient, should represent different perspectives, should include those with expertise on the topic and should be formed and disbanded as work arises and is completed. Work group products are final subject to the agreement of the stakeholder group.

VI. DECISION RULES AND DELIBERATION

A. Process for developing Stakeholder Group recommendation, Stakeholder Group positions and internal decisions according to the 4FRI Charter

These decision rules guide the internal process for providing collaboratively developed Stakeholder Group recommendations and Stakeholder Group positions to external audiences, such as the USFS or general public, as well as arriving at internal decisions. The Decision Process will be invoked by the facilitator.

B. Relevant definitions:

Stakeholder Group recommendation: Recommendations to decision authority (Land Manager, USFS) on land management actions, including but not limited to project planning, forest plan revision, implementation techniques.

Stakeholder Group position: Formal statement from 4FRI stakeholder group designed for public or agency education, awareness, or advocacy. Examples include (but not limited to): Expressing support or advocating for public funds; developing and delivering key messages or press packets to press; developing proposal for private foundation funding.

Internal Decision: Decisions that affect the internal operations of the Stakeholder Group and that will not be formally shared with external audiences, such as the USFS or general public, such as assigning tasks and decision-making authority to work groups and the Steering Committee or making decisions regarding the awarding of money in accordance with established fiscal policies.

C. The Stakeholder Group will always strive to reach the highest level of agreement (Agreement without Reservations) (see Table 1). Where we have agreement, it will be documented and communicated to the appropriate entity.

However, if all stakeholders have made every effort to reach an “Agreement without Reservations” and find that it is not possible, the stakeholder group will use the decision rules to measure the level of agreement among the stakeholders. This approach will enable stakeholders to see where everyone stands, as well as to provide a standard approach for characterizing, documenting and communicating agreements.

If agreement w/o reservations, agreement w/ reservations, or agreement by acquiescence cannot be met (i.e., any Stakeholder Group member disagrees) after an established time period, the stakeholder group shall attempt to narrow the scope of its recommendation/position/decision to those specific issues or areas where some level of agreement (i.e., agreement w/o reservations, agreement w/ reservations, or agreement by acquiescence) exists, and then proceed in accordance with Table 2 to reach resolution on the disagreement items.

TABLE 1: PROCESS FOR DEVELOPING AND COMMUNICATING STAKEHOLDER RECOMMENDATIONS, POSITIONS, AND INTERNAL DECISIONS

Level of Agreement by Individual/ Organization	Internal Outcomes and Expectations	Communication of Outcomes
Agreement w/o Reservations	All members will support and advocate for the decision. Before moving to other levels of agreement the group will make every effort to arrive that this level.	All members will collectively communicate the decision to the appropriate entity (i.e., USFS, public, internal stakeholder group)
Agreement w/ Reservations	All members will support the decision, and those who had reservations must express them and have them recorded.	All members will collaboratively identify areas of agreement and communicate those to the appropriate entity. Recorded reservations will be for internal and agency documentation only.
Agreement by Acquiescence	All members support the decision, abstain, or are opposed but are willing to allow the collaborative effort to move forward. Those who abstained or are opposed must express their reasons and have them recorded.	All members will collaboratively identify areas of agreement and communicate those to the appropriate entity. Recorded reservations will be for internal and agency documentation only.
Disagreement	<p>There is recognition that disagreement is not the desired end point.</p> <ol style="list-style-type: none"> 1. If there is disagreement, a written report will be produced, identifying specific points of disagreements and explaining the interests or rationale underlying the specific points of disagreement. The written report will be for internal use only. The written report will identify the individuals or organizations supporting specific interests or rationales and, when possible, include constructive alternatives to remove the disagreement. 2. A process and timeframe will be established for writing the report, addressing concerns, and for moving to a higher level of agreement. 3. In the process, only interests or rationale included in the document will be considered. Failure to include any interests or rationale that lead to disagreement in written form in the established time frame for inclusion within the report will result in the loss of ability to consider such interests or rationales moving forward, which may result in Agreement by Acquiescence. 4. When that timeframe has ended and there is still no agreement, the stakeholder group shall move forward in accordance with Table 2. 	All members will collaboratively identify areas of agreement and communicate those to the appropriate entity in accordance with the process and communication described in Table 2.

TABLE 2: COMMUNICATION OF DISAGREEMENT

Internal Process and Documentation	Communication of Disagreement to General Public <i>(mostly stakeholder group positions)</i>	Communication of Disagreement to Forest Service <i>(mostly recommendations but can also be stakeholder group positions)</i>
<p>1. All individual Stakeholder positions will be clearly recorded in meeting minutes.</p>	<p>The Stakeholder Group has no final position to communicate on the specific issue. Communication may be crafted stating items of disagreement if agreed to by all members. Nothing regarding that specific issue shall be conveyed to the general public by the Stakeholder Group until this is decided upon.</p> <p>Individual stakeholders may convey their individual concerns or support for positions for which the Stakeholder Group has no position, so long those comments do not disparage the collaborative process.</p>	<p>Report from Table 1:</p> <p>A written report will be produced, identifying specific points of disagreement and explaining the interests or rationale underlying the specific points of disagreement, which will each be qualified with the following language referring to stakeholders:</p> <p>Most=Strong Majority Many=More than Half Some=Less than Half Few=2 or 3 One=Singular</p> <p>Individual stakeholders may convey individual concerns to the USFS.</p>

Decisions, agreements, and reservations will be clearly documented and made available on BASECAMP (<https://ffri.basecampHQ.com/login>) and the public website as part of the public record.

VII. STAKEHOLDER RESPONSIBILITIES AND CONDUCT

A. General Stakeholder Responsibilities

The stakeholder group will work to achieve the vision, mission, and actions identified in sections II-IV. In order to accomplish this, the stakeholder group will:

1. Hold open meetings: Make all meetings open to the public to ensure a full and complete engagement.
2. Mentor: Welcome and actively reach out to new members. It can be intimidating to join and actively participate in any established body. Help new participants understand the 4FRI, its protocols and its members. Encourage their active participation.
3. Actively participate. To help make the initiative successful, individual stakeholders will:
 - a. Endeavor to attend all monthly meetings and remain informed of actions taken at meetings they could not attend.

- b. Be prepared to offer alternative language or examples during discussions
 - c. Volunteer for the steering committees, work groups, and leadership positions
 - d. Get involved early in work groups and deliberations where you will want to provide active input and feedback
 - e. Encourage other stakeholders in the group to assume responsibility and leadership
4. Communicate with the Forest Service: Maintain communication with the Forest Service in order to track ongoing processes and upcoming decisions so that the group can provide timely input.
 5. Deliver recommendations: Develop agreement-based recommendations that are intended as the basis for Forest Service action and implementation, and when agreement is not possible, capture and present to the Forest Service levels of agreement. Provide recommendations to the Forest Service in a timely manner.

B. Individual Stakeholder Conduct Standards

These standards are the governing principles of conduct and behavior among stakeholders. They are intended to foster respect and trust. In the spirit of progress and cooperation the stakeholders commit to the following standards:

1. Operate in good faith.
 - a. Address difficult issues directly with individual stakeholders or the larger stakeholder group.
 - b. Any action undertaken to undermine an individual stakeholder's membership (outside of the formal processes outlined in Section X of the Charter) is considered a flagrant violation of the Charter.
 - c. Stakeholders shall assume that other members are acting with the best of intentions. Members should be willing to discuss their actions in advance with the stakeholder group in order to minimize the potential for any misunderstandings.
 - d. As possible, according to organizational policy, members will alert the stakeholder group of any imminent legislative, legal, or administrative review actions that would significantly affect the efforts of the stakeholder group.
 - e. Members are encouraged to share all relevant information pertinent to the stakeholder group. Members should disclose issues and concerns during meetings of the full stakeholder group in order to enable the stakeholder group to attempt to address challenges.
2. Honor the Charter and the work of the stakeholder group.
 - a. Hold oneself and other members accountable in adhering to the purpose, convening values, and goals of the 4 Forest Restoration Initiative and this Charter.
 - b. Honor work completed in stakeholder groups, work groups, and the steering committee. All members are invited to participate in any subgroup. Large and diverse stakeholder groups can be inefficient at completing detailed work. The full Stakeholder Group should focus its efforts on actions that will help achieve the 4FRI vision and mission.
 - c. Outside communications by individuals/organizations with decision makers, the media, and the public are expected but should not undermine agreements made by 4FRI. When formally representing the 4FRI collaborative, individual stakeholders must clearly and specifically differentiate when they are representing the collective

interests of the group, and when they are referencing their own organizational interests.

3. Support the work of the 4 Forest Restoration Initiative
 - a. Each member will support the efforts of the 4FRI among colleagues and the public, even (especially) when it involves risk-taking beyond the comfort zone of one's core constituency.
 - b. Where the stakeholder group has agreed to proceed but there are members that provide "agreement with reservations" or "agreement by acquiescence," the intent of any outside expression of those reservations will not be to undercut the group's agreement. In addition, members with reservations shall be treated respectfully.
 - c. Work to ensure that any agreement developed by the stakeholder group is acceptable to your constituents or organization.

C. Stakeholder Meeting Ground Rules

The stakeholder meeting ground rules govern the interactions at Stakeholder Group meetings. Ground rules ensure meetings are efficient and effective, and help maintain a group focus on issues, goals, and objectives. Stakeholders attending meetings agree to participate according to the following ground rules:

1. **COME PREPARED:** Read materials in advance and complete assignments on time. Stay on track with the agenda. Secure approval within your organization for permission (within limits) to reach agreement.
2. **LISTEN ACTIVELY AND AVOID DISRUPTIONS:** Turn off cell phones sounds and avoid side conversations. Listen carefully to other participants. Be attentive to ensure efficient discussions. Only one participant may speak at a time.
3. **TREAT OTHERS WITH RESPECT:** Everyone brings different perspectives to the 4FRI, and others may have viewpoints you had not considered. Allow expression of other ideas, even if you disagree. As the group works to achieve agreement, strive to also develop a deeper understanding. Discussions should focus on interests, not positions.
4. **PARTICIPATE CANDIDLY:** Share your views fully and honestly with everyone. Be forthright, avoid creating false expectations, and recognize that disagreement will be part of many deliberations. Be willing to explain the reasoning behind statements, questions, and actions. Openly discuss controversial issues that could undermine the effectiveness of the process if left unspoken. Represent the interests and concerns of your organization and constituents as accurately and thoroughly as possible and inform the group when the limits of your authority are reached.
5. **COLLABORATE:** During deliberation, explore ideas, without committing, as a way of opening up the collaborative problem-solving process. Avoid generalities and be specific. Help define and agree upon what important words mean. All are encouraged to respectfully challenge an idea or ask questions.

VIII. ROLE OF FACILITATION

Facilitation - At the outset, the group will employ the services of a professional facilitator. The Facilitator is neutral and directs the flow of meetings. The facilitator will work with the steering committee to develop and implement meeting agendas, will help the stakeholder group establish and convene work groups and will produce meeting summaries. The facilitator will help the stakeholder group maintain accountability, resolve differences, and construct agreements and recommendations for the Forest Service. The facilitator will assist the group to transition to self-facilitation.

IX. COMMUNICATION

The stakeholder group will maintain an environment that promotes open, frank and constructive discussion. Members recognize that such an environment must be built on mutual respect and trust, and each commits to avoid actions that would damage that trust. Therefore, in communicating externally about the group's work, including communicating with the news media, elected officials, political appointees, and agency employees, each member agrees to:

1. Speak for themselves or the organization they represent.
2. Where the stakeholder group has agreed to proceed but there are members that provide "agreement with reservations" or "agreement by acquiescence," the intent of any outside expression of those reservations will not be to undercut the group's agreement. In addition, members with reservations should be treated respectfully.
3. Avoid characterizing the personal or organizational positions or comments of others; and,
4. Consider the impact that a public statement may have on the group, mutual trust, and the ability for the stakeholders to complete their work.

The communications work group works proactively to prepare communication documents for approval by the stakeholder group and assists (when appropriate) with Forest Service media releases and communications as well. The group identifies significant milestones in the stakeholders' activities, and prepares documents and activities that capitalize on the 'headline-worthiness' of such events. Documents and activities will include: media events, talking points, maintaining a list of subject matter experts, updates for the website, and other materials as needed.

A. Very Time-Sensitive Actions

We will strive to avoid crisis management situations; however, when there is a time sensitive need to respond to the news media such as when a response to media query is necessary within a very short timeframe, any 4FRI member will:

1. Represent him/herself and/or organization, making it clear he/she is not speaking on behalf of the stakeholder group.
2. Respond in a manner supportive of 4FRI, and where appropriate using reference documents approved by the stakeholder group.
3. Immediately provide the media representative with an up-to-date contact list consisting of a contact person for every 4FRI member organization.

4. Immediately email all members on the 4FRI contact list to inform them that a media representative has expressed interest in 4FRI and has been given the contact list.

B. Time-Sensitive Actions

If there is more than 24 hours to work with the media, but communications need to occur before the next stakeholder group meeting:

1. The communications work group will develop draft materials and submit them for review by the steering committee. Such materials will be subject to approval by the steering committee, upon which time the steering committee will distribute the materials to the stakeholder group. The stakeholder group will evaluate and critique such communications at the next stakeholder group meeting.

C. Non Time-Sensitive Actions

If communications can wait until the next stakeholder group meeting, the communications work group will develop materials for review by the stakeholder group that will then approve them and discuss needed actions at the next meeting

Notes and Communication- In order to facilitate smooth operation, the stakeholder group will use a web-based utility (currently BASECAMP: <https://ffri.basecampHQ.com/login>) and the public Website to maintain meeting schedules, notes and agreed upon or final documents.

The notes from the 4FRI meetings will capture agreements, reservations, and next steps. The notes will be returned to the stakeholder group for review and corrections. The notes will be finalized within a specified timeframe and posted to BASECAMP and the public website.

Each work group should keep notes that include agreements and next steps. The notes will be returned to the work group members for their review and corrections. The notes will be finalized within a specified timeframe and posted to BASECAMP.

X. PARTICIPATION AND OPERATING RULES

The 4FRI stakeholder group is open to any individual or organization interested in participating in the effort. The 4FRI stakeholder group will use the decision rules in Section VI on issues pertaining to the Four Forest Restoration Initiative.

A. Four Forest Restoration Initiative Stakeholder Group – General Membership

1. **Organization.** The 4FRI stakeholder group (hereafter the stakeholder group), is an informal organization.
2. **Membership.** Membership in the stakeholder group is open to organizations and individuals. Multiple individuals may join representing the same organization.
3. **Establishing Membership.** There are two forms of membership: An individual membership (Individual member) or an individual representing an organization membership (Organizational member). To become a member of the 4FRI stakeholder group, an individual, or an individual representing an organization must sign the 4FRI Stakeholder Group Charter and agree to uphold the spirit and guidelines of the Charter.

4. **Member eligibility to participate in 4FRI decision-making.** Individual stakeholders or one individual representing a stakeholder organization are eligible to participate in 4FRI decisions:
 - a. At the next general meeting after joining as a member, if the individual or an organization is in good standing (see section 5 below); or
 - b. A member in good standing who is unable to attend a stakeholder meeting may send an alternate to represent them during decision making. It is the responsibility of the member to ensure that their alternate is well informed on the matter before the group.

5. **Member or organization in good standing.** During their first year, an Individual or Organizational member will be considered in “good standing” if they have attended at least half of the stakeholder meetings since joining. After the first year, an Individual or Organizational member will be considered in good standing if they have attended at least four stakeholder meetings during the previous twelve months. Attendance at a meeting can be either physical or electronic (i.e. teleconference or webinar). As per X.A.4.b, an alternate attending in place of a member will be considered equivalent to the actual member attending.

6. **Removal of a Member.** A member may be removed from the stakeholder group for good cause, including lack of attendance at meetings or flagrant disregard or violation of the Charter. A petition to remove a member shall be submitted to the steering committee, provided the petition states why the member should be removed, and is signed by at least half of the stakeholder group members in good standing. The steering committee must seek a response from the member in question, and will attempt to resolve the matter discreetly before presenting it to the stakeholder group. The steering committee will use the decision rules in making an initial determination, which will then be presented to the stakeholder group for final resolution. The member being considered for removal may not participate in either the steering committee or stakeholder group vote.

B. General Meetings of the Four Forest Restoration Initiative Stakeholder Group

1. **Meeting Logistics.** Meetings will be held on the fourth Wednesday of each month unless otherwise specified at the previous general meeting.

C. The Steering Committee

1. **Committee.** The Steering Committee (hereafter referred to as the “Committee”) is a continuing body that serves the stakeholder group.
2. **Committee Membership.** Membership on the committee is voluntary and open to any member in good standing.
3. **Composition.** Ideally, the Committee should consist of a minimum of eight members with representation from:
 - a. A 501(c)(3) nonprofit environmental organization
 - b. A forest commercial use representative (can be wood products based or other)

- c. An organization representing woods workers or restoration based employment opportunities
- d. A state or federal agency
- e. A tribal representative
- f. An academic institution
- g. Local government
- h. At large from the 4FRI stakeholder group

4. **Committee Member Responsibilities.** Rotation of committee members is encouraged to promote broad participation, diversity, and renewal. Those individuals that volunteer will:

- a. Commit to serving a two year term
- b. Seek to be responsible to the needs of the 4FRI stakeholder group
- c. Attend and prepare for meetings and conference calls
- d. Attend general stakeholder group meetings
- e. Share the workload
- f. Not miss three consecutive committee meetings (notwithstanding excused absences where the coordinator has been notified in advance)

5. **Removal of Committee Member.** A member may be removed from the steering committee for good cause, including lack of attendance at meetings or flagrant disregard or violation of the Charter. A petition to remove a member of the steering committee shall be submitted to the steering committee, provided the petition states why the member should be removed, and is signed by at least half of the stakeholder members in good standing. The steering committee must seek a response from the member in question and will attempt to resolve the matter discreetly before presenting it to the stakeholder group. The steering committee will use the decision rules in making an initial determination, which will then be presented to the stakeholder group for final resolution. The member being considered for removal may not participate in either the steering committee or stakeholder group vote.

6. **Filling Vacancies.** Should committee membership fall below the threshold established in Section 3 the Committee will actively recruit new members representing gaps in representation.

7. **Duties and Responsibilities of the Committee**

- a. The Committee is responsible for coordinating the activities of the stakeholder group in an open and transparent manner.
- b. The committee shall meet at least monthly to transact business. Meeting notices and notes will be posted on BASECAMP.
- c. In carrying out its responsibilities, the committee will:
 - i. Select a facilitator, develop an appropriate Scope of Work, and coordinate and evaluate their work on an ongoing basis
 - ii. Develop agendas for the stakeholder group meetings

- iii. Coordinate the development and distribution of documents of general importance to the stakeholder group
 - iv. Recommend the formation of work groups to the stakeholder group
 - v. Coordinate with and between work groups
 - vi. Coordinate timelines and activities with the Forest Service
 - vii. Report activities to the stakeholder group in a timely manner including press releases
 - viii. Manage and monitor membership
 - ix. Offer monthly reports to the stakeholder group
- d. The officers and committee will have responsibilities as delegated by the stakeholder group and this Charter.
- e. The committee will recognize the establishment of work groups and coordinate the creation of a short document that clearly articulates the goals, objectives, and tasks of each work group.

8. Committee Officers

- a. The committee will select officers from within the committee by requesting volunteers. The officers will consist of two co-chairs. The terms and the duties of the co-chairs are:
- i. The term for each co-chair is six months.
 - ii. The terms will be staggered by three months in order to maintain continuity.
 - iii. The responsibility of the co-chairs will be divided as follows:
 - (a) Co-chair one: Develops committee meeting agendas in cooperation with the committee, conducts the meeting; ensures notes are taken, edited and posted to BASECAMP
 - (b) Co-chair two: Facilitates meeting logistics including taking or delegating note taking responsibilities.
- b. The co-chairs shall act in each other's stead if one should not be available to perform its functions. If a co-chair resigns before the end of their term the committee will recruit a committee member to fill that vacancy and complete the term of the co-chair that resigned. Co-chairs who have completed a six month term are encouraged to wait six months before becoming co-chair again. This is in order to encourage broad participation and diverse leadership.
- c. The committee shall be responsible for the maintenance of the official records that document membership and members in good standing.

XI. ANNUAL EVALUATION

The stakeholder group will set aside time at least once a year (early October) to systematically evaluate the 4FRI program and actions to ensure regular adaptation and improvement; during the annual evaluation, the stakeholder group will also consider changes to foundation documents, including the Charter of the 4FRI.

XII. FUNDING

All stakeholders recognize that they are working in collaboration with the USFS to support comprehensive restoration and advance the long-term ecological, social, administrative, and economic goals of the 4FRI. Comprehensive restoration includes more than just thinning trees and managing fire; it involves a wide range of activities that include (but are not limited to) road rehabilitation and/or obliteration, erosion control, riparian protection and/or rehabilitation, invasive species prevention and/or removal, etc. Implementation, monitoring, and adaptation of these comprehensive restoration activities will likely require funds above and beyond USFS capabilities. Stakeholders will support these efforts by seeking out, applying for, and/or advocating for funding whenever opportunities arise. If and when funding is received by the stakeholder group, the stakeholder group will make decisions regarding funding allocation, and will determine an appropriate mechanism for monitoring and accounting for this funding.

We the undersigned affirm our commitment to the 4FRI process and this Charter:

Signatures (attached)

Revisions to the Charter were adopted at the Stakeholder Group Meeting on 2/27/13. With the following “Agreement with Reservations” expressed by Arizona Game and Fish Department:

“The Department has reservations about “Communication of Disagreement” (Table 2). Providing different messages to the general public and the U.S. Forest Service could be seen as a lack of openness and transparency by the 4FRI collaborative. Since the group includes agencies subject to Freedom of Information and Public records requests, deliberative materials will be readily available regardless.”

APPENDIX B – OFFICIAL RESOLUTION

The official resolution will be submitted immediately following Trout Unlimited's next board meeting, within 30 days of the application deadline.



Trout Unlimited Board of Trustees Resolution

Authorizing Application to Bureau of Reclamation Notice of Funding Opportunity
No. R22AS00163, Cooperative Watershed Management Program Phase I Grants for FY2022:

***“Supporting the Collaborative Black River Landscape Restoration Planning for Apache Trout
Climate Resilience”***

Whereas: Trout Unlimited has prepared an application for funding to support the collaborative Black River landscape restoration planning project. The Cooperative Watershed Management Program Phase 1 grant would provide funding to convene project partners to develop project designs, map out requisite permits, and complete the necessary pre-development to get the project shovel ready.

The Board of Trustees of Trout Unlimited, upon motion made, seconded, and duly carried, it is hereby **RESOLVED** that:

1. Trout Unlimited is authorized to submit an application to the Bureau of Reclamation for grant assistance for the above-titled project.
2. Trout Unlimited has prepared and reviewed the application, and Chris Wood, President and Chief Executive Officer of Trout Unlimited, or his designee, is authorized to sign the application and enter into a funding agreement, if awarded.
3. Any grant assistance received under this application will be used for costs associated with implementation of the above-titled project. Trout Unlimited is authorized to commit to the provision of in-kind contributions and other resources identified in the funding application, and will work with Reclamation to timely meet all deadlines associated with an award of funding.
4. Trout Unlimited acknowledges that if the Bureau of Reclamation approves grant assistance for the project, the Bureau of Reclamation will pay Trout Unlimited only on a reimbursement basis. Trout Unlimited understands reimbursement basis means that Trout Unlimited will only request payment from the Bureau of Reclamation after Trout Unlimited incurs eligible and allowable costs and pays them.

Trout Unlimited
Board of Trustees

Attested by: Patricia Guizyama
Position: Secretary
Date: 4/28/22