Increasing Resilience of the San Juan - Chama Project Headwaters

Rio Brazos with proposed treatment are on the right side of photo-Dolecek Enterprises Inc.

Chama Peak Land Alliance

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Executive Summary

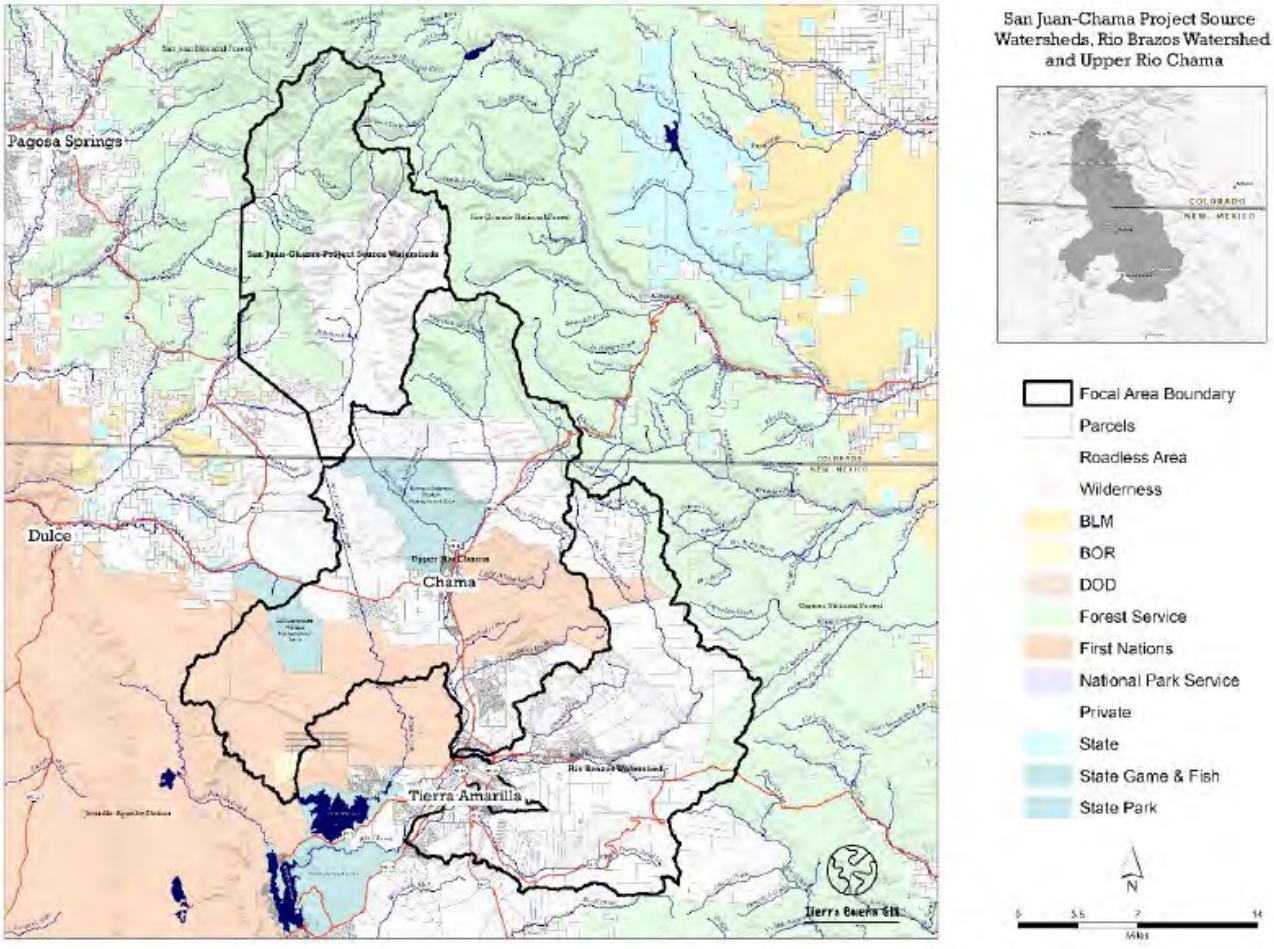
The Chama Peak Land Alliance (CPLA), based in Pagosa Springs, Archuleta County, CO and Chama, Rio Arriba County, New Mexico is a is a diverse group of conservation-minded land stewards committed to embracing, practicing, and sharing responsible land, water and wildlife stewardship in southern Colorado and northern New Mexico for the benefit of our tri-cultural heritage and for generations to come.

CPLA is applying as a Category B applicant in partnership with Albuquerque Bernalillo County Water Authority (please see attached letter of support). The project dates range between Oct. 01, 2023 - September 30, 2026. This project is not located at a federal facility.

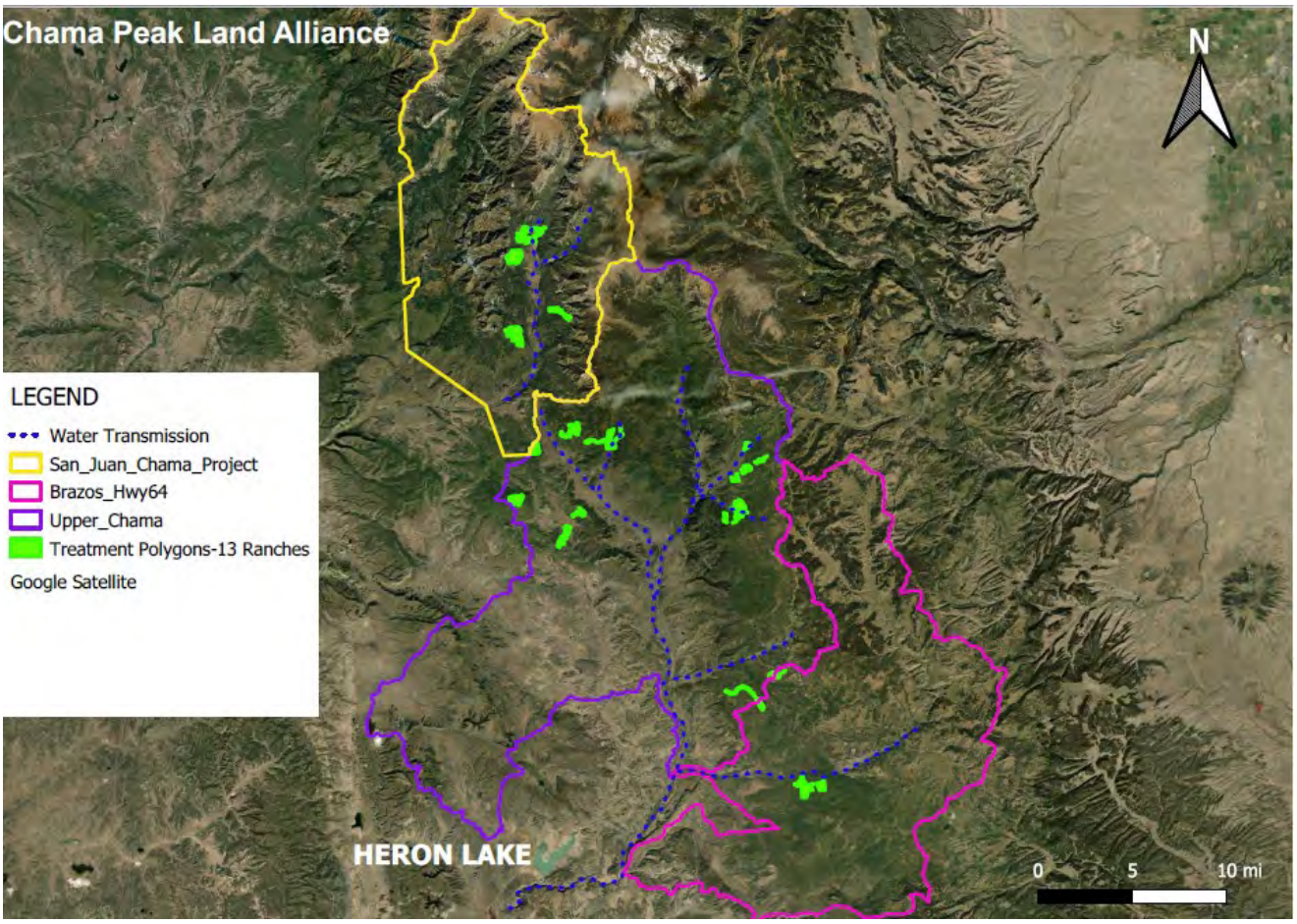
In coordination with the Rio Grande Water Fund, San Juan-Chama Watershed Partnership (SJCWP), the 2-3-2 Cohesive Strategy, and the Albuquerque Bernalillo County Water Utility Authority, CPLA proposes to conduct approximately 2,150 acres of ecological forestry thinning projects in the San Juan-Chama Project source watersheds, Rio Chama Headwaters, and Rio Brazos Headwaters. These watersheds surrounding Chama, NM supply Lake Heron and El Vado Reservoir, which in turn supply approximately 75% of Albuquerque's drinking water, 50% of Santa Fe's drinking water, at least 10 Tribes and Pueblos, and many rural communities, acequia parciantes and agricultural producers in New Mexico. Forests in these watersheds, however, are unnaturally dense and homogenous after more than a century of fire suppression. These conditions combined with warming climatic trends, puts these watersheds at risk of severe wildfire and deterioration of watershed function. Our project will directly leverage the ongoing investments of downstream water users via the Rio Grande Water Fund to increase the scale of ecologically-based forest treatments that will reduce the threat of severe wildfire in these extraordinarily important watersheds.

This project will also leverage the USDA funded Rio Chama Collaborative Forest Landscape Restoration Program (CFLRP) and Building Resilience in the San Juan and Chama Watersheds Projects. This project will directly help meet goals outlined in the 2-3-2 Watershed Partnership's 10 year CFLRP cross-boundary implementation plan, the Rio Grande Water Fund Comprehensive Plan, and the San Juan-Chama Watershed Partnerhip's Focal Area Atlas for reducing the threat of severe wildfire. Specifically for the 2-3-2's Rio Chama CFLRP 10 year work plan, there is a goal to treat 10,619 acres of mechanical thinning on private lands in this geography. This project would help achieve that goal. This project has been endorsed by numerous conservation groups, government agencies, and water users. Given the importance of these watersheds and the threat of severe wildfire, this work is prescient and critical.

Project Location



Centered around Chama Village in New Mexico, the project geography will be on private lands in the Navajo-Blanco Headwaters, Rio Chama Headwaters, and Rio Brazos Headwaters. This area is surrounding Chama, NM, to the southeast of Pagosa Springs, CO, and to the east and northeast of Tierra Amarilla, NM. The lat/long for Chama Village is 36.9028° N, 106.5792° W.



CPLA has laid out and prescribed over 3,500 acres of treatments in the San Juan-Chama region above Lake Heron and El Vado. Our treatments are spread out over several ranches to help reduce the threat of wildfire in multiple areas. In a landscape dominated by private lands, this strategy helps to get more ranches on board working to reduce wildfire risk.

Technical Project Description

For the last several years, partners of the San Juan-Chama Watershed Partnership (SJCWP) have been working together to identify focal areas on the landscape based on ecological and social values and vulnerabilities to those values. Each focal area is supported by data from the New Mexico State Forest Action Plan that identifies areas that are vulnerable to wildfire and post-wildfire erosion and flooding. Applied strategically, this information helps focus our work.

CPLA has already developed priority treatments designed to mitigate the impacts of severe wildfire through thinning and fuel breaks, while simultaneously promoting increased snow capture and retention. The treatment locations are strategically placed to slow or prevent high intensity fires from reaching stream courses and or extremely erosive soil types that could affect the water transmission systems. Prescriptions are already designed for more than 3,500 acres in the described region and have been prioritized based on high impacts towards watershed protection goals, and opportunities to take advantage of economies of

scale and treatment cost efficiency with landowners committed to conservation goals.

This proposed work is an extension of the work that CPLA is already doing under a subagreement for The Nature Conservancy's Rio Grande Water Fund. For implementation of our ecological forestry projects, we have a streamlined process that includes project layout, UAV drone pre, mid, and post-treatment monitoring (both qualitative and quantitative), pre and post treatment ground photo monitoring, prescription writing, RFP development and contractor selection process, supervision of contractor, coordination with landowners, and completion of regular financial and performance reporting requirements.

Projects will implement a combination of crown thinning, understory thinning, and ground fuels reduction strategies based on best management practices for the region. Corresponding to the average size of the timber, quantity/quality of timber and operability of each treatment area there are corresponding prescribed operation types:

- **Harvesting with post mastication of slash-** This technique is utilized on treatment areas with too much wood volume to adequately address through mastication and grinding. Due to this constraint, wood must be harvested and sent offsite to make a byproduct. By producing a wood product, the overall cost of treatment acres can be driven down (treatment costs still exist due to the cost of post-harvest mastication and low wood values of the region), as well as supporting local economies and producing marketable products. As an additional benefit, certain wood products created from this process store carbon, thus positively benefiting climate change.

- **Mastication-** This technique is utilized in areas where the overly dense wood is non- merchantable dictating that operations are conducted by grinding the standing and down wood to create a mulched result.

- **Lop and Scatter/Pile-** In areas where slopes and terrain are non-conducive to running harvesting and mastication equipment, hand crews will be employed to thin overly dense forested areas and pile or scatter all felled wood.

The below prescription is one example of CPLA's "shovel-ready" projects that are laid out, prescribed, and approved by landowners and managers. Operators are waiting for Request for Proposals so contracting can occur and work can begin.

2023-2026 Proposed Treatments

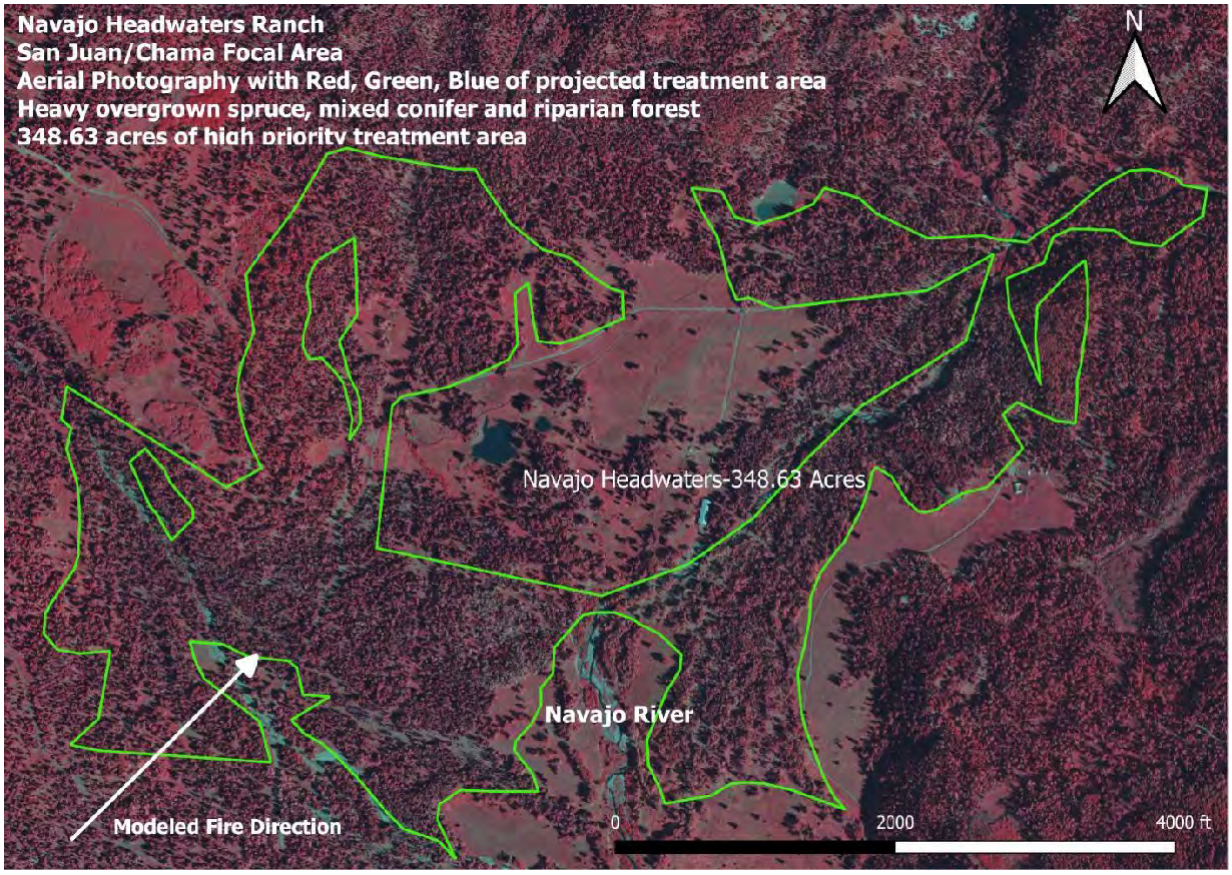
Navajo Peak Ranch | Fire Risk Mitigation/Watershed Protection

Goals	1. Protect Upper Navajo River Watershed 2. Improve forest health and increase resistance to drought, insect, and disease 3. Improve/maintain wildlife habitat 4. Increase snow and water catchment
Date Assessed	October 1st,2021
Date Treated	TBD
Prescription	Thinning from below and ground fuels reduction
Treatment Area	**Mastication –** 348.63 acres

Stand history – The property at large was harvested in a very aggressive and detrimental manner from 1970-1987 when current ownership purchased the property. From 1987 until the fall of 2021 there has been no forestry activities on the property. In the fall of 2021, mastication-based thinning started up again on the property to remove the heavy understory and ground fuels. This has been deemed critical work to protect the water transmission system of the Navajo River.

Purpose Treatment Units 1 is aimed to create a fuel break that would reduce the risk of wildfire damage to infrastructure on Navajo Headwaters Ranch and the Navajo River Watershed. The treatments will also improve wildlife habitat, diversify forest structure and age class, create unique wildlife habitat and increase snow and water catchment.


Navajo Headwaters Treatment


Navajo Headwaters Ranch
San Juan/Chama Focal Area
Aerial Photography with Red, Green, Blue of projected treatment area
Heavy overgrown spruce, mixed conifer and riparian forest
348.63 acres of high priority treatment area
N
Navajo Headwaters-348.63 Acres
Navajo River
Modeled Fire Direction
0
2000
4000 ft

Treatment A

Acres – 348.63 acres

Proposed Area Treatment A consists of one unit

Unit 1 is south and east of a steep backslopes, west and north of previous forest treatments and meadows. The Navajo River runs through the middle of the treatment area.

Prescription- Treatment A is a thinning from below and ground fuels reduction. A thinning from below targets removal of suppressed trees in the sub-canopy. The thinning will focus on removal of white fir, dead standing trees and thinning of spruce pockets. Dead trees or trees exhibiting symptoms of disease should be removed. The average basal area of retention should target 55-60 BA. All ground fuels should be masticated including old slash piles. In cottonwood riparian zones all ground fuels should be masticated using horizontal head configurations.

Extreme care should be taken in riparian areas to protect cottonwood seedlings and saplings as well as willow and alder.

Where trees are overcrowded (e.g. connected canopies), we will implement a judicious crown thinning. The crown thinning will retain all ponderosa pine, Douglas fir and limber pine. White fir spruce and declining aspen will be removed to achieve the desired basal area. Wind firmness should be a consideration when thinning the crown canopy, particularly in areas with a high proportion of spruce given their shallow root structure.

All old growth trees should be retained. Downed wood larger than 30 inches in diameter should be retained. Additionally, 2 large broken off snags should be retained per acre for wildlife nesting and habitat. All trees with nesting cavities should be retained.

Method of Harvest The thinning will be accomplished by using a masticator. The operator should take special care not to damage the residual stand or rut the soil. Residual stand damage and soil rutting increases risk of tree mortality. Also, the owners frequently use this area for travel and recreation, so aesthetics are important.

The full prescriptions and detailed technical project descriptions are available in the Appendices.

As a secondary goal, CPLA plans to implement treatment prescriptions that optimize snow water accumulation and retention, in line with best available science. CPLA is currently working with Dave Moser at USGS and Ryan Webb at The University of New Mexico to implement treatments with varying canopy gap and edge metrics with opening sizes relational to tree heights. The findings from this research will help us fine tune the prescriptions as we are working to systematically enhance the water catchment and transmission from the targeted focal areas. While additional research is warranted,

preliminary literature review and research finding document “a linear increase in water yield with increases in the percentage of forest removed regardless of the forest type or the precise logging method” as noted in The Nature Conservancy’s Water Supply Benefits publication. Ecological Restoration Institute also analyzed several studies and models and published The Influence of Restoration Treatments on Hydrological Outputs in Fire Adapted Forest of the Southwest. In ERI’s study they found “the model predicted annual runoff 32-110 percent greater in the restoration” zones versus non restored areas. Additional studies with our partners to refine and better understand this relationship are planned for within the Upper Chama Focal Area, and CPLA plans to integrate findings from that study into treatment prescriptions where possible.

Evaluation Criteria

Project Benefits

If a severe wildfire burns a large part of this area, water quality and water quantity will suffer. This can have an impact on many fish and wildlife species. This region is home to native Rio Grande Cutthroat and incredibly rare San Juan Strain of Colorado Cutthroat populations. These species are sensitive to water quality and quantity and would be adversely impacted in a severe wildfire. The post-fire loss of soil and creation of hydrophobic soils can create polluting flood cycles for species that depend on clean streams.

Our goal is to have forests that maximize snow water accumulation and retention, and to have healthy forest soils with a mix of herbaceous and forest vegetation for slowed transmission of water into streams. If our treatments prevent a severe wildfire, it will help increase the reliability and quality of clean water in these important stream systems. Post-fire landscapes with hydrophobic soils can affect the timing and quality of water. Hydrophobic soils are known to easily flood and carry organic pollutants and debris that can be extremely detrimental to stream habitat and for human use.

Not only can forest restoration help to decrease the risk of severe wildfire and prevent subsequent watershed degradation, research indicates that forest restoration may lead to water yield increases. Results from a study conducted by Podolok and others (2015) showed “a linear increase in water yield with increases in the percentage of forest removed regardless of the forest type or the precise logging method”. O’Donnell (2016) analyzed several studies and models and found “the model predicted annual runoff 32-110 percent greater in the restoration” zones versus non-restored areas.

These treatments will all be above Reclamation water projects and are designed to protect the Reclamation water project and improve watershed health.

The project is not for the purpose of meeting *existing environmental mitigation or compliance obligations* under Federal or State law.

As we have seen in many nearby watersheds, wildfires are decimating aquatic and riparian ecosystems in the southwest. If this region burns in a severe wildfire at the scale of the recent Hermit's Peak/Calf Canyon Fire, while difficult to quantify, the impacts to aquatic and riparian ecosystems will be substantial.

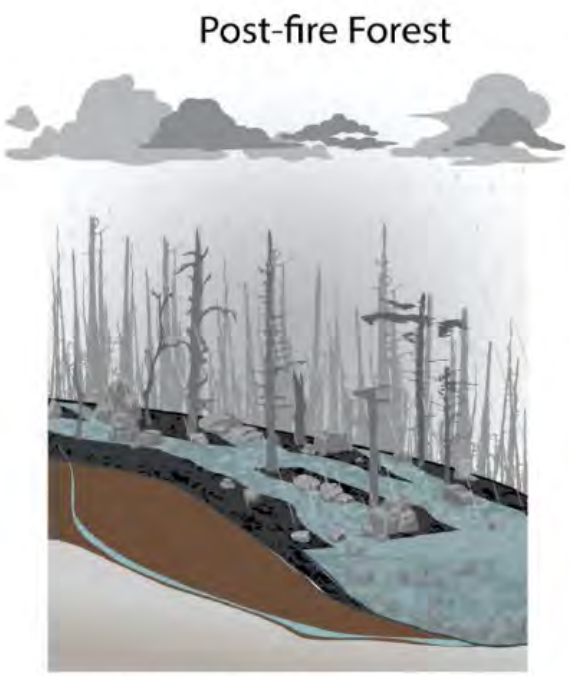
USDA GTR-423: An assessment of forest and woodland restoration priorities to address

wildfire risk in New Mexico (USDA GTR-423) indicates that approximately 30% of a watershed area at risk of wildfire may need to be treated to significantly reduce the threat of severe wildfire. Greatly scaling up acres of treatment will be needed to reduce the risk of severe wildfire.

Recent analysis conducted by the San Juan-Chama Watershed Partnership (and funded by the BoR Watersmart CWMP) indicate that more than 85,000 acres may need to be treated in the San Juan Chama Project source watersheds, the Upper Chama watersheds, and the Rio Brazos Headwaters to reduce the risk of high severity fire from easily moving across the landscape. The SJCWP analysis showed possible locations for approximately 167,670 acres of dry and mesic forest treatment opportunities that are located on operable terrain (under 40% slope) AND are both at risk of both severe wildfire and post-fire erosion. 97,373 of these acres are on private lands. This analysis can be found at this link to the Call to Action: Invest in critical watersheds BEFORE a severe wildfire https://chamapeak.org/landowner-resources.

These treatments will only provide a portion of what is needed on the multi-jurisdictional landscape to reduce wildfire risk, but the strategy of the SJCWP, 2-3-2, and RGWF watershed partnerships are to bring in multiple funding sources.

In a healthy forest water runoff collects in small streams that drain towards rivers, creating watersheds and basins. The forest stabilizes the soil and prevents erosion, filters contaminants, enhances soil moisture storage and groundwater recharge, reducing the likelihood of flooding. Water slowly percolates through the soil, or runs off with a low sediment load. Source: USGS and Water Education Colorado.



During a fire, ash, firefighting chemicals, and other contaminants settle on streams and reservoirs as trees burn. Severe wildfires can result in water-repellent or "hydrophobic" soils. After the fire, burned debris and vulnerable soils pose a long-term risk to nearby waterways. Massive erosion and flooding can occur. Ash and debris that enters reservoirs and pipes can have long-term drinking water impacts, sometimes to the point where the water or infrastructure becomes unusable. Source: USGS and Water Education Colorado.

Species Benefits

Our intent is to treat forests that share a fireshed with native Rio Grande Cutthroat and San Juan Strain of Colorado Cutthroat. This work will increase resiliency of several native populations of fish.

The project will benefit *federally listed threatened or endangered species* such as the silvery minnow. This species is subject to a recovery plan or conservation plan under the ESA.

The silvery minnow relies on San Juan-Chama Project water. Our project is designed to make the SJCP watersheds more resilient, which benefits the downstream users (including the silvery minnow). The minnow is adversely affected by the Reclamation San Juan - Chama project and our work may improve the status of the species.

Drought and Water Quality

We expect drought to be a more regular feature in the San Juan - Chama landscape. The biggest impact ecologically is increased risk of wildfire. Our treatments could help lower wildfire risk associated with drought impacts.

As we have seen in nearby watersheds, severe wildfire is causing long-term severe degradation in water quality. There has not been a thorough analysis of what a large severe wildfire could do to the San Juan-Chama Project diversion and transmission system. We do know that there is a large risk of severe wildfire and post-fire erosion above the diversion systems. If multi-year post-fire flooding and sediment/debris flows were to disrupt the functioning of the SJCP, it could lead to widespread consequences throughout New Mexico reaching from irrigation use in the Middle Rio Grande Conservancy District to Albuquerque and Santa Fe having to find alternative water sources, not to mention impacts to local communities that rely on surface water, including Chama, Dulce (hometown of the Jicarilla Apache Nation) and the many acequia users and irrigators in the Chama/Tierra Amarilla region.

Restoration Project Benefits

With over a century of forest fire suppression, the current forest conditions in this region are unnaturally dense. Through BoR CWMP funding, the San Juan-Chama Watershed Partnership conducted analysis, using information from the 2020 New Mexico Forest Action Plan, to determine wildfire risk in the region. As the maps below show, the watersheds supplying Lake Heron and El Vado Reservoir are at high risk of severe wildfire and post-fire erosion. Specifically, out of the almost 500,000 acres in this region - 273,379 acres are at moderate-very high risk of severe wildfire, and 348,206 acres are at a moderate to very high risk of post-fire erosion.

In terms of risks to water delivery to about half New Mexico's population, this is concerning. These watersheds are extremely important, as evidenced by the following map showing areas of the Rio Grande basin in terms of "water users per drop of runoff".

Figure 1. *Map showing the Rio Grande Water Fund basin footprint with darker blue areas showing "most water users per drop of runoff". The Upper Blanco and Navajo River basins above the SJCP diversions are illustrated here in dark blue as the most important public water source for much of New Mexico's population (The Nature Conservancy, Rio Grande Watershed Wildfire Risk Assessment and Treatment Effectiveness Analysis, presentation slide Nov. 16, 2022.*

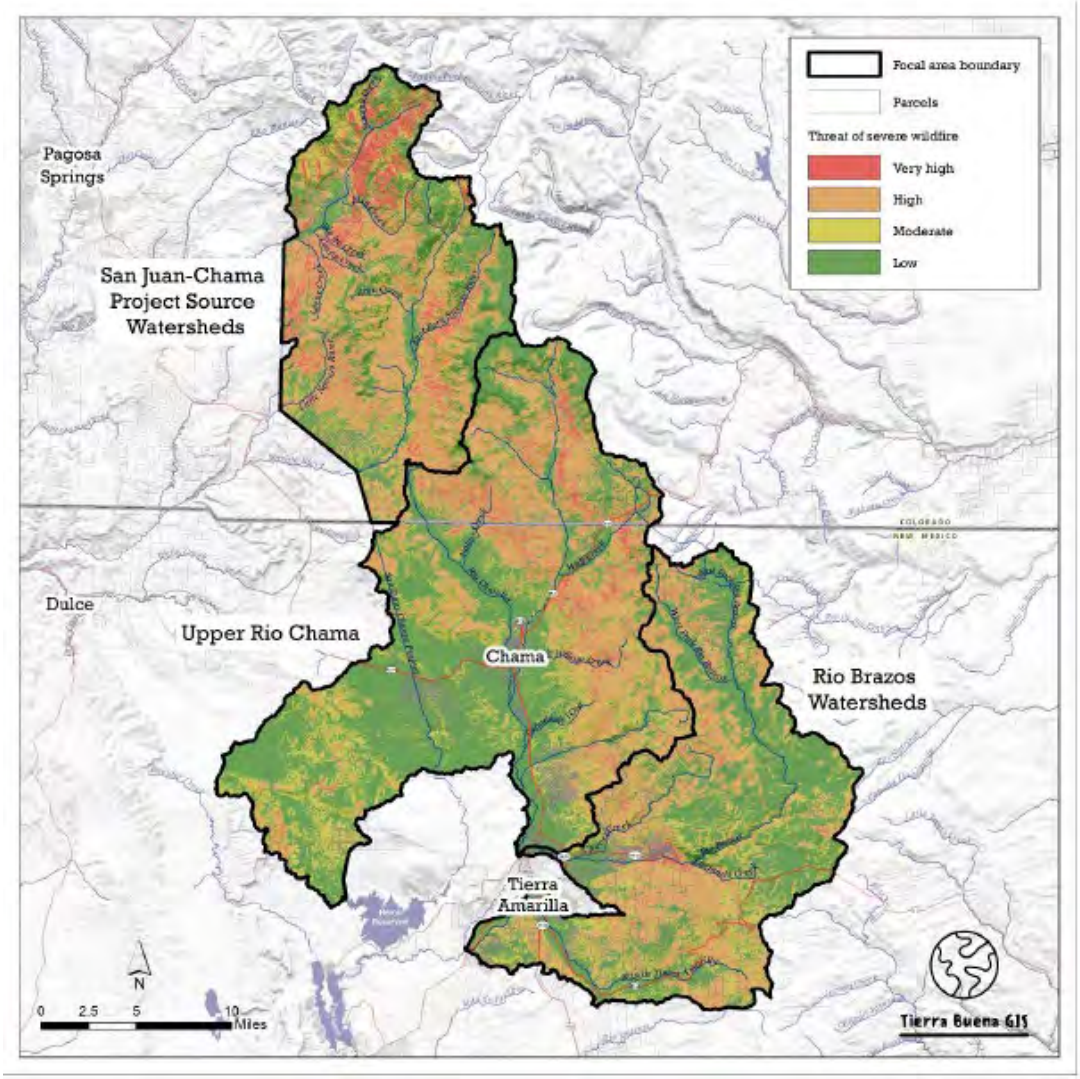


Figure 2. *Using spatial information from the New Mexico Forest Action Plan, the SJCWP has identified 273,379 acres at moderate – very severe threat of severe wildfire.*

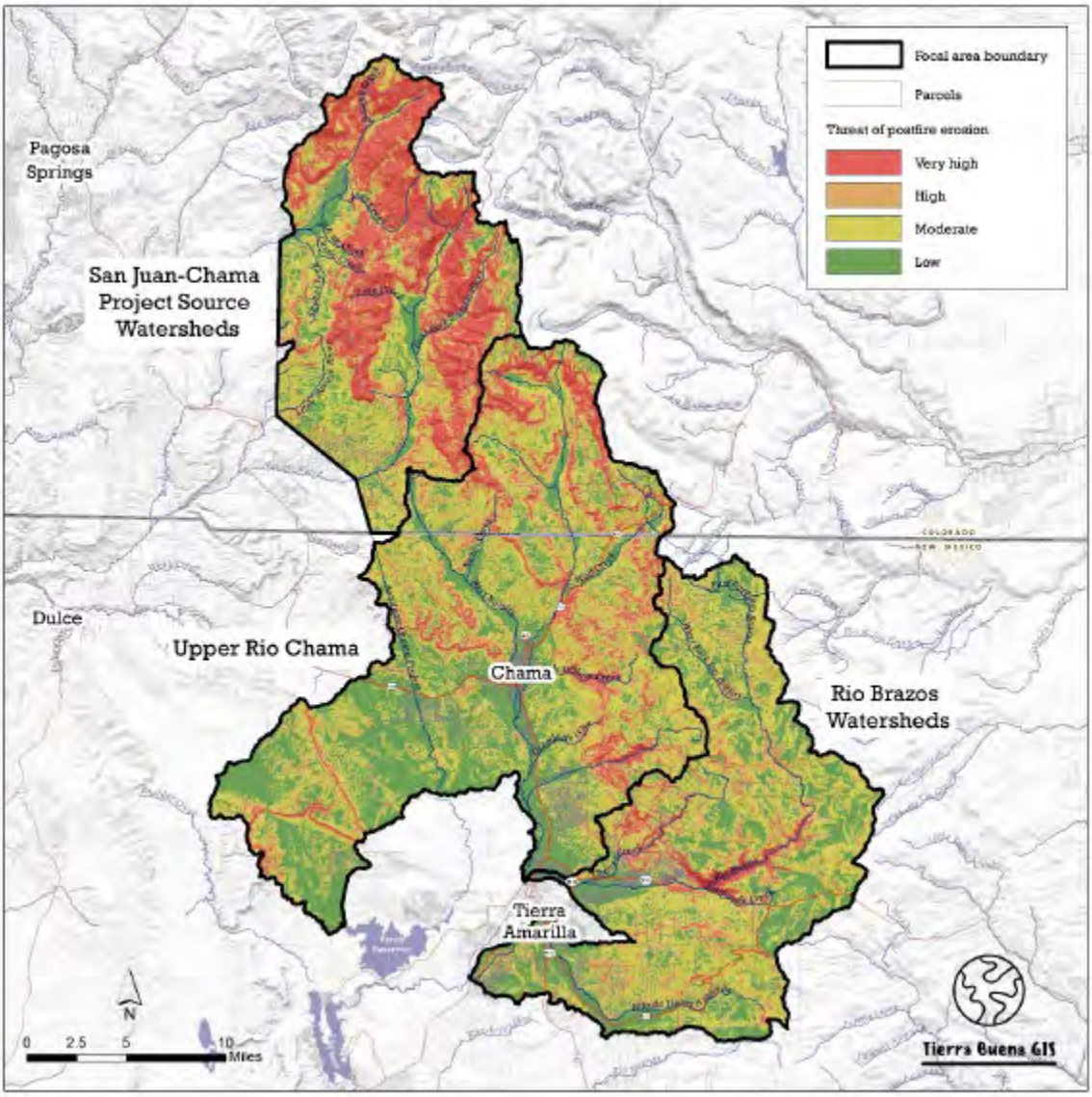


Figure 3. *Using spatial information from the New Mexico Forest Action Plan, the SJCWP has identified 348,206 acres at moderate – very severe threat of post-fire erosion. Note the large area of severe post-fire erosion threat in the San Juan-Chama Project source watershed.*

Multiple Benefits

The diversity of water users and diversity of water uses that will benefit from this project is extraordinary. The following table shows beneficiaries of San Juan-Chama Project water. It is impossible to quantify how each of these beneficiaries uses water, but it includes municipal, agricultural, Tribal, commercial, recreational, and subsistence.

San Juan Chama Project Contractor	Full Allocation (acre-feet)
Albuquerque Bernalillo County Water Utility Authority	48,200
Middle Rio Grande Conservancy District	20,900
Jicarilla Apache Nation	6,500
City of Santa Fe	5,230
Taos Pueblo	2,215
Ohkay Owingeh	2,000
County of Los Alamos	1,200
City of Española	1,000
City of Belen	500
Town of Bernalillo	400
Town of Taos	400
Town of Taos Settlement	366
Village of Los Lunas	400
County of Santa Fe	375
Town of Red River	60
El Prado Water and Sanitation District	40
Village of Taos Ski Valley	15
Pojoaque Valley Irrigation District	1,030
Aamodt Settlement	1,079
Cochiti Recreation Pool	4,290
TOTAL	96,200

Figure 4. *Full annual allocations to beneficiaries of San Juan-Chama Project, or "contractors." According to the Bureau of Reclamation, since diversions began in 1970, there have been 6 years when supply was insufficient to make a full annual allocation, beginning in 2014. A large-scale severe wildfire in the SJCP source watersheds would further threaten these allocations over a timespan of multiple years.*

Forest restoration benefits ecological values, fish and wildlife habitat, and availability of water users. One recent example of how a large severe wildfire impacted all of these values can be found in the Hermit's Peak/Calf Canyon Fire. Massive disruptions to all of these values occurred, and residents of this region want to avoid the same fate. The project reduces water conflicts within the watershed by helping to reduce the risk of severe wildfire and associated water management.

Collaborative Planning

The work of the San Juan - Chama Watershed Partnership is part of a multi-state collaborative planning process over the last ten years including numerous partners and a variety of plans as described in the project benefits sections.

Relevant plans include the 2016 Resiliency Strategy for the Navajo-Blanco Watersheds by the Navajo-Blanco Working Group and the 2023 SJCWP Focal Area Atlas. The Rio Chama CFLRP (Collaborative Forest Landscape Restoration Project) and the Rio Grande Water Fund Comprehensive Plan has also noted many thousands of private lands treatments in this region as part of a multi-year cross-boundary strategy. Archuleta County and Rio Arriba County Community Wildfire Protection Plans specify the need for treatments in our region for protection of community values. Other relevant planning includes CO and NM Forest Action Plans, in which these areas meet prioritization criteria.

These plans address water quantity and quality issues and ecosystem and watershed health or the health of species and habitat within the watershed. Several of the plans mentioned above identified a high risk of severe wildfire in the region and the need for treatments to address water quantity and quality issues, as well as ecosystem and watershed health. All of these planning efforts work to increase the reliability of a water supply for ecological values as well as human use.

These plans were developed through a collaborative process and the San Juan - Chama Watershed Partnership, of which Chama Peak Land Alliance is a steering committee member, is a watershed group as defined in Section 6001(6) of the Cooperative Watershed Management Act. The project involves a watershed group, water users, and multiple stakeholders. The Navajo-Blanco Resiliency Strategy for example, includes signatories by representatives from the Chama Peak Land Alliance, San Juan Headwaters Forest Health Partnership, Firewise of Archuleta County, San Juan National Forest, Archuleta County Board of County Commissioners, Bureau of Reclamation, The Nature Conservancy, Colorado State Forest Service, New Mexico State Forestry, Natural Resources Conservation Service, San Juan Conservation District, and Rio Grande Restoration.

With all of the variety of plans (at least 8) not to mention individual Forest Management Plans on individual ranches, there is a massive amount of stakeholders with diverse interests who participated in these. All of the aforementioned plans specify the needs for forest treatments on private lands in this region.

This collaborative strategy provides support for the proposal project by implementing a goal and needs identified in all of the plans because all stakeholders have agreed that treatments on private lands to reduce the risk of severe wildfire. Below, we identify the plans and associated needs in each that the project addresses:

- **SJCWP Focal Area Atlas** identifies specific areas of high risk for wildfire and post fire erosion, we want to focus on these areas. These areas are incorporated into the NM Shared Stewardship Portal which has identified New Mexico's top 10 priority landscapes. The Rio Chama is the largest of these statewide priority landscapes. The Portal will help track investments made from multiple agencies working in a similar area. Further, the focal areas identified for the work of this project were developed by the San Juan Chama Watershed Partnership. Representatives from state forestry, the

Bureau of Reclamation, the USFS, soil and water conservation districts, and various nonprofits came together to develop focal areas for the landscape that captured both vulnerabilities and values. The proposed Rio Chama project is an evolution of this collaborative effort funded by BoR CWMP, taking some of those focal areas to the implementation phase.

- **Navajo-Blanco Resiliency Strategy** calls for treatments on private lands to protect The San Juan Chama Project, which is arguably New Mexico's most important and vulnerable watershed.
- **Rio Grande Water Fund Cohesive Strategy** has identified the San Juan-Chama area as a top priority. RGWF funnels investments from downstream water users into the crucially important SJCP watersheds. The Rio Grande Water Fund has over 100 signatories in an impressive display of diverse stakeholder support.
- In the **2020 New Mexico Forest Action Plan**, the Rio Chama headwaters area was identified as having the highest possible importance ranking for serving both Tribal Communities and Mexican/Spanish land grant communities.
- **The Archuleta County and Rio Arriba County CWPPs** identify private lands in these areas and CPLA specifically as an important partner for implementation. In particular, the Brazos Canyon community is at a very high public safety risk due to its location at the base of a canyon which is vulnerable to a "chimney effect" if a wildfire starts in the area, and one-way out egress of the community.
- **Rio Chama CFLRP** is a ten year US Forest Service Project that ranked second in the nation, partly for the nature of its cross-boundary values and nexus to crucially important water resources, and risk of severe wildfire. Private land treatments are an important part of the CFLRP 10-year strategy for leveraging the federal land treatments and crucial for achieving landscape impact. Specifically for the 2-3-2's Rio Chama CFLRP 10 year work plan, there is a goal to treat 10,619 acres of mechanical thinning on private lands in this geography. This project would help achieve that goal.
- For the **Rio Chama** CFLRP, they require a 50/50 matched leverage. As the attached support letter from USFS says the CFLRP "project requires a 50/50 match to landscape scale investment by funds such as those applied for by the Chama Peak Land Alliance. Fundamental to the CFLRP is working with collaborators to attract/leverage/or match funds from other sources to treat the areas that the Forest Service cannot."

Stakeholder Support for the Project

The project is supported by a diverse set of stakeholders within the project area representing agricultural, municipal, Tribal, environmental, or recreation uses. Furthermore, the project is supported by entities responsible for the management of land, water, fish and wildlife, recreation, or forestry within the project area and is consistent with the policies of those agencies. There is no known opposition to the project.A variety of letters of support and associated stakeholder engagement can be found in the Appendices. The level of engagement is high. The number of groups partnering in the San Juan - Chama region is numerous and CPLA is at the center of the watershed work. The list below includes many of the groups we are

working with as well as those that have submitted letters of support:

- San Juan - Chama Watershed Partnership
- Mountain Studies Institute
- U.S. Forest Service
- Colorado State Forest Service
- NM State Forestry
- The University of New Mexico
- USGS
- BoR
- The Nature Conservancy (Rio Grande Water Fund)
- Albuquerque Bernalillo County Water Authority
- Middle Rio Grande Conservancy District
- US Fish and Wildlife Service - Partners Program
- Rio Chama Collaborative Forest Landscape Restoration Program (CFLRP)
- 2-3-2 Watershed Partnership
- Rio Arriba County, NM and Archuleta County, CO

Readiness to Proceed

Environmental and Cultural Resources Compliance

We have reached out to the BoR-Chama office to discuss environmental compliance and hope to work through compliance quickly. Furthermore, the proposed treatments and prescriptions DO NOT entail any earth moving or other activities that impact the environment as described above. During operations we will buffer all stream courses and ensure that operators take great caution not to disturb soils. These treatments and prescriptions are built to enhance the surrounding environment and ecosystems and our contract administration and monitoring programs will document these audits.

While the definition of Waters of the United States is actively being fought in the supreme court, there are currently no Waters of the United States within these project areas. There are no Water Delivery systems within the scope of this project.

The project will not result in any modification of or effects to, individual features of an irrigation system.

There are no National Registered Historic Places within the treatment areas. The Cumbres-Toltec Railroad does pass through one of the ranches in this watershed restoration project, however it is miles from the nearest treatment area.

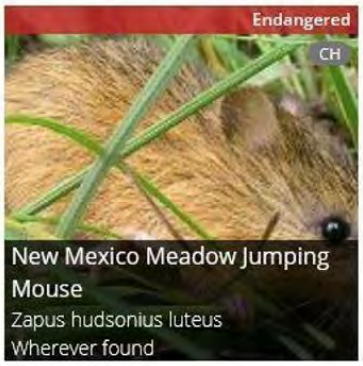
There are no known archeological sites in the proposed treatment areas as dictated by landowners and the available Forest Management Plans for the ranches within the scope of this project.

The project will not have a disproportionately high and adverse effect on low income or minority

populations and will not limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands.

There have been no Threatened or Endangered species sighted in the project's areas, however the following list of T&E species exist in Rio Arriba County, New Mexico and Archuleta County of Colorado. The operators and administrators will keep a vigilant watch for the following species and if they are noted onsite all operations will cease until further studies can be completed:

Mammals



Birds

Detailed Implementation Plan

A detailed implementation plan already exists for all of the proposed treatments. This plan includes an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates. Please see the Appendices for the report entitled "CPLA Targeting Package Prescriptions."

Chama Peak Land Alliance has access to the land or water source where the project is located.

Performance Measures

The most important measure for our short-term and long-term performance will be whether our work helped to prevent a large-scale severe wildfire. Two shining examples in our region occurred in 2022 when the Midnight Fire near El Rito, NM and the Plumtaw Fire near Pagosa Springs, CO occurred in the driest and windiest parts of the season. Both fires had potential to become catastrophic, but treatments in both of these areas gave firefighters an opportunity to put the fire out before getting very large.

CPLA's annual performance will primarily be measured by the number of acres treated. We will compare annual acres treated to our annual performance plan in annual reports. To make sure that we are utilizing adaptive management practices, we will implement a robust monitoring program for our forestry and watershed protection projects, and document outcomes in annual performance reports.

The CPLA monitoring program is centered on drone monitoring workflows as described below, however we also utilize ground-based monitoring methods. These performance measures ensure that CPLA attains the best return on investment with these treatments and that the overall goals are met for watershed restoration/protection with maximized ecological benefit.

- **Drone monitoring program**
    - Pre, mid, and post-treatment monitoring
    - Multi-hundred image automated flight missions and imagery stitching using to create orthomosaics.
    - Post process orthomosaics to quantify canopy metrics and compare the pre, post-treatment outcomes of the treatment to analyze the treatment outcomes and to ensure the desired outcome is achieved.
    - CPLA's hires FAA part 107 drone pilots for commercial drone flight operations ensuring safe operations that target forest monitoring.
- **Ground based monitoring program**
    - Installation of six ground-based photo monitoring plots per treatment with photos in each cardinal direction. The same photos are replicated pre, post and long-term using GPS and photo alignments to create "before and after" qualitative and quantitative analysis.
    - For certain areas with merchantable timber, sub-sampling inventory techniques with full biometrics/volumetrics for harvested areas with any significant value. This process is costly and intensive, however for contracting it is necessary and the treatment efficiencies gained typically outweigh these costs.

The most important measure for long-term performance will be whether our work helped to prevent a large-scale severe wildfire. This is easily monitored through observation and will be monitored over a 5-year period once the project has been completed using the monitoring described above and below.

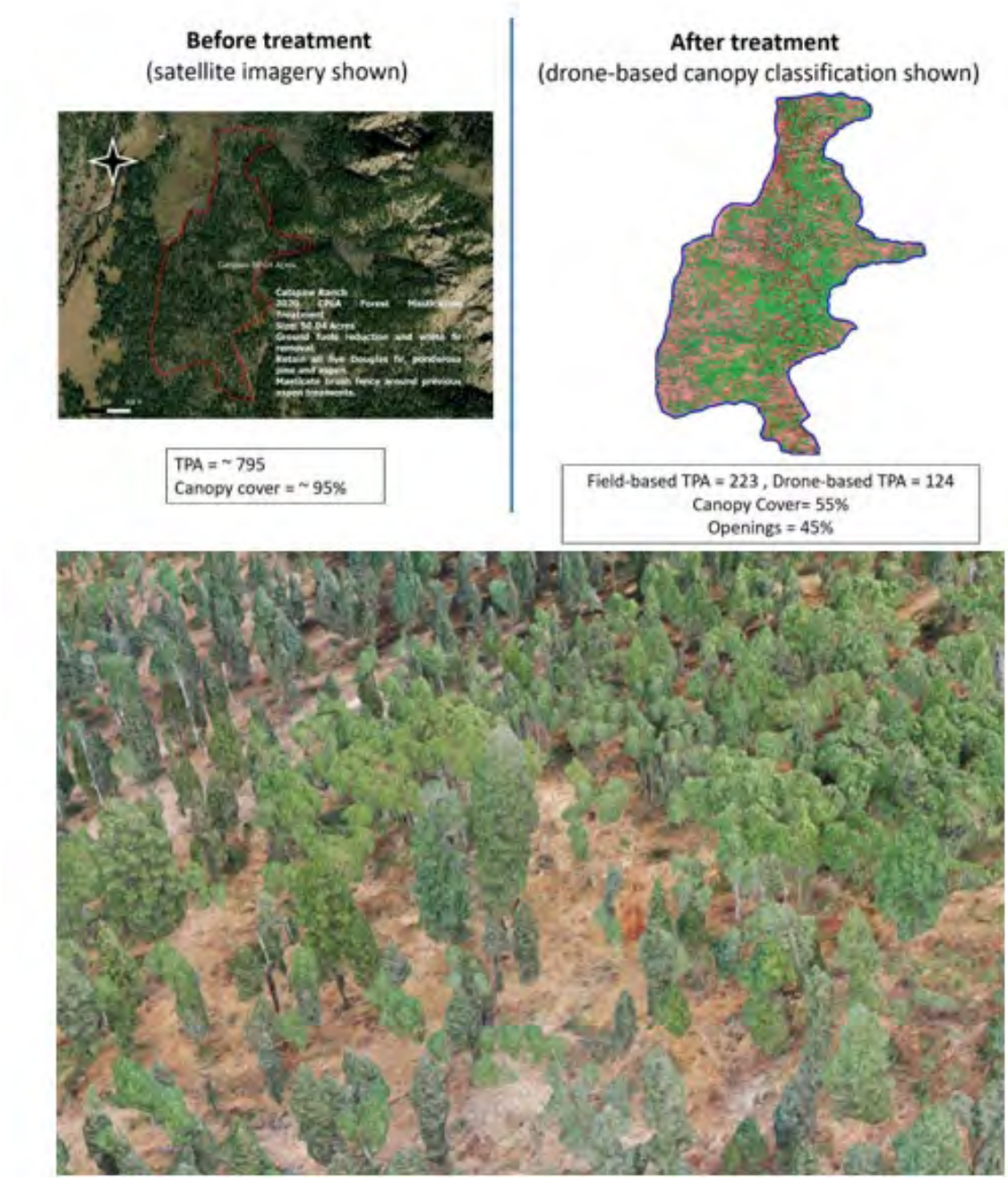


Figure 5. *The above 3D models were built by stitching hundreds of drone-based images together to create high resolution orthomosaics for inspection and monitoring purposes of Rio Grande Water Fund treatments. In 2022, CPLA published 2 technical papers on using UAVs for operational forest monitoring purposes. These publications can be found at https://chamapeak.org/landowner-resources.*

Figure 6. *Ground photo monitoring methods used by CPLA for RGWF treatments. Note the retention of larger trees and reduction of dense ground fuels and smaller "ladder fuels" vegetation. These outcomes are common in ecological forestry practices.*

Presidential and DOI Priorities

Climate Change

The entire project falls within a disadvantaged tract as identified by the Biden-Harris Administration's Climate and Economic Justice Screening Tool. This tract is considered disadvantaged because it meets more than 1 burden threshold as well as an associated socioeconomic threshold. The region is in the 92nd percentile in regards to the expected agriculture loss rate and the economic loss to agricultural value resulting from natural hazards each year as a result of climate change. In addition to these climatic factors, the region is also identified as low income and is in the 87th percentile for households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher education.

The project will build long-term resilience to drought as it relates to increased wildfire risk. Forest treatment lifespans typically do not exceed 10-20 years, so follow up treatments will be necessary. In addition to drought resiliency measures, the proposed project includes other natural hazard risk reductions through post-fire flooding which is a huge concern. If we are successful at preventing a large severe wildfire in this landscape, it will have great benefits for avoided costs for emergency response and recovery.

The project also establishes and uses a renewable energy source because a portion of the wood will end up as firewood which is a renewable energy source. We are hoping that biochar or biofuel business development is a result of increased investments in this region.

The project reduces greenhouse gas emissions by sequestering carbon in soils, grasses, trees, and other vegetation. Research indicates that massive carbon reserves exist when an area is able to avoid a large severe wildfire. Best management practices for GHG storage in southwestern forests is to have certain basal areas and large tree retention (with less competition from bunches

of small trees). We strive for these old growth forest characteristics in our treatments.
The proposed project seeks to reduce or mitigate climate pollution such as air or water pollution because post fire flooding can result in polluted water from natural organic compounds found in soil, and we seek to avoid this type of water pollution.

The project has a conservation or management component that will promote healthy lands and soils or serve to protect water supplies and its associated uses. The entire project is all about responsible management and conservation of forest and water resources. The project also contributes to climate change resiliency because thinning forests will make the forests more resilient to wildfire, drought, and insects. These risks are all associated with climate change.

Disadvantaged or Underserved Communities

Our proposed fuel treatments will safeguard vital water resources for small, low-income, predominantly (83.5%) Hispanic and tribal communities in Rio Arriba County. These historically underserved communities are at imminent risk of losing their primary water source to wildfire. Our proposed fuel treatments in the Rio Chama, Navajo River, and Blanco River watersheds are prioritized by wildfire risk and post-fire debris threats to these water sources.

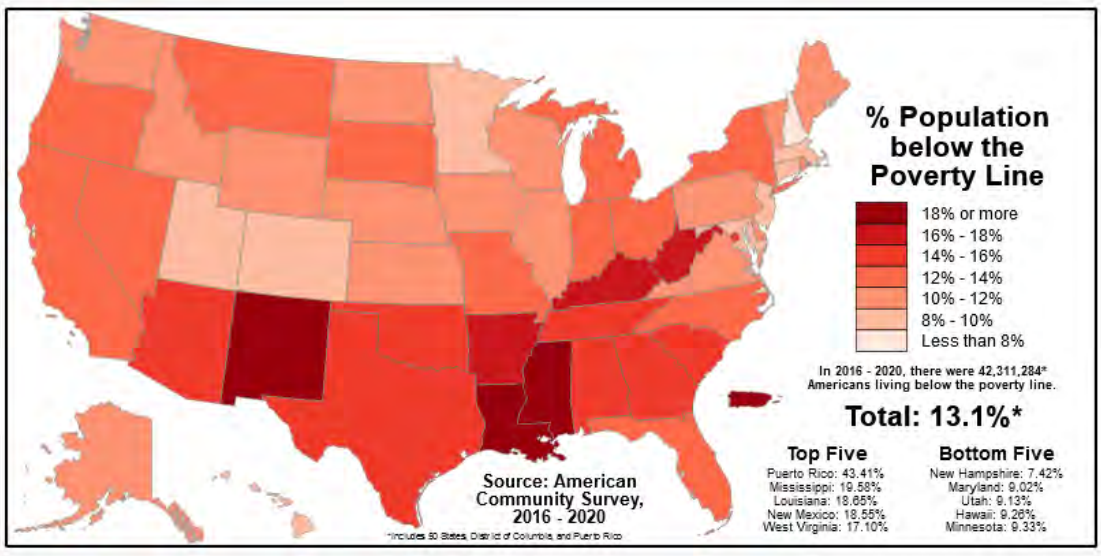


Figure 7. New Mexico has one of the highest poverty rates in the nation.

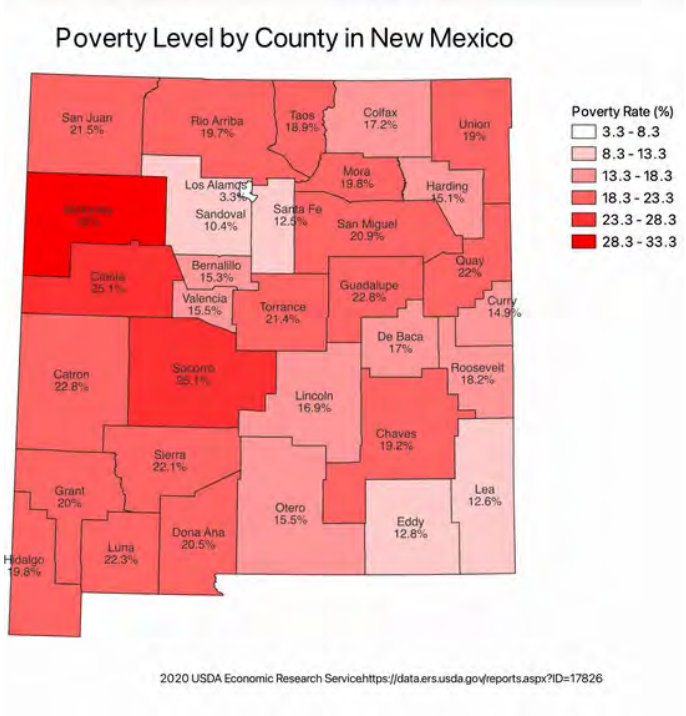


Figure 8. Rio Arriba has a county-wide poverty rate of 19.7%, which is very high by national standards.

These villages are unique, with lineages dating back to the mid-1500s. Census data is lacking for some of these communities. Below we document the median household income and poverty rate for each community based on 2020 US Census data. (https://datausa.io) The local WUI interface communities adjacent to our proposed fuel reduction treatments are listed below:

Community	2020 Population	2020 Median Household Income($)	2020 Poverty Rate (%)
Chama, NM	909	$35,561	16.5%
Dulce, NM	2,584	$47,045	17.8%
Los Ojos, NM	48	N/A	52.1%
Tierra Amarilla, NM	455	N/A	75.5%
Rio Arriba County, NM	38,962	$42,264	22.8%
New Mexico	2.1M	$51,243	18.6%

United States	327M	$64,994	12.8%

Income Table 1.

Further downstream, the communities that depend on these watersheds are listed in Income Table 2.

Community	2020 Population	2020 Median Household Income($)	2020 Poverty Rate (%)
Abiquiu, NM	150	$19,920	N/A
Canjilon, NM	228	N/A	N/A
Chamita, NM	863	$33,333	20.6%
Espanola, NM	10,071	$37,206	23.4%
Hernandez, NM	931	$16,181	33.8%
Medanales, NM	224	N/A	N/A

Income Table 2.

These watersheds also provide water for the San Juan-Chama Project that diverts water across the Continental, Divide into the Rio Grande Basin. This diversion project supplies water to over a hundred small, low-income farming communities, Spanish Land Grants, and ten different tribal communities in New Mexico.

The 2016 CDC Social Vulnerability Index (SVI) for Rio Arriba County is 0.8946, which is very high compared to national standards. (https://www.nmhealth.org/news/awareness/2021/8/?view=1628).

Recently (2022), the catastrophic Hermit's Peak/Calf Canyon fire (Santa Fe NF) resulted in the destruction of the acequias and watersheds of many low-income communities in the Sangre de Cristo mountains. These villages and their irrigation systems are very similar to the situation in the Rio Chama region. The main purpose of our proposed fuel treatments is to avoid a disaster like this impacting the low-income dependents on the Rio Chama, Blanco River, and Navajo River watersheds.

Tribal Benefits

The proposed project directly serves and benefits the Jicarilla Apache Nation that receives almost all of its water from the Navajo River. Our treatments are designed to protect these source watersheds. If a severe wildfire were to happen in the Navajo/Blanco area, it could be detrimental to the Nation. Other Tribal beneficiaries of SJCP and native Rio Chama water include the Navajo Nation, Taos Pueblo, Ohkay Owingeh, Aamodt Settlement and more. The New Mexico Forest Action Plan noted the Rio Chama as serving 10 tribal communities.
The project also supports Reclamation's Tribal trust responsibilities or a Reclamation activity with a tribe in regards to reliability of allocations for the San Juan-Chama Project. It also supports Tribal resilience to climate change and drought impacts through availability of clean water.

Project Budget

CPLA is engaged with various partners who are committed to financing the non-federal match requirement of 25%. The foremost partner who is committing this match is Rio Grande Water Fund, administered by The Nature Conservancy - New Mexico. These RGWF matching funds are provided by the Albuquerque Bernalillo County Water Utility Authority, which is acting as our Category A partner in this project. These funds will directly act as cost-share, increasing the number of acres treated for this proposal. RGWF is working to secure more matching funds over the next few months for this project. Numerous landowners have also provided verbal commitments to provide matching funds.

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal funding	$3,000,000
Value of third-party contributions	$1,000,000
TOTAL PROJECT COST	**$4,000,000**

FY24 -FY26 (Oct 1, 2023-- Sep 31, 2026)	Unit Cost ($/ac)			# of Acres	costshare acres	Total	Environmental Water Resource Protection (federal)	Rio Grande Water Fu	Other (non-federal)
	harvest/mastication	mastication	lop and scatter			$ 4,000,000.00	$3,000,000.00	$ 450,000.00	$ 550,000.00
Direct Costs							$2,727,272.73		
CPLA Admin - 10% of direct costs							$ 272,727.27		
CPLA staff							$ 97,275.00		
Fringe Benefits							$ 20,427.75		
Travel							$ 5,895.00		
Supplies							$ 16,808.35		
Contractual									
Contractual NEPA and NHPA compliance							$ 250,000.00		
Contractual Forester							$ 396,755.63		
Navajo-Blanco Focal						$ -	$ -		
Banded Peak Ranch		$ 1,350.00		120		$ 162,000.00	$ 12,000.00	$ 100,000.00	$ 50,000.00
Navajo Headwaters Ranch		$ 1,750.00		100		$ 175,000.00	$ 75,000.00	$ 100,000.00	
Catspaw Ranch		$ 1,350.00		100		$ 135,000.00	$ 35,000.00	$ 100,000.00	
Knight Ranch		$ 1,200.00		285		$ 342,000.00	$ 42,000.00	$ 150,000.00	$ 150,000.00
Other ranches		$ 1,350.00		100		$ 135,000.00	$ 135,000.00		
Upper Chama Focal						$ -	$ -		
Rancho Del Oso Pardo		$ 1,350.00		300		$ 405,000.00	$ 285,000.00		$ 120,000.00
Wolf Creek Ranch		$ 1,600.00		120		$ 192,000.00	$ 192,000.00		
Binkley Ranches		$ 1,500.00		100		$ 150,000.00	$ 150,000.00		
Quinlan Ranch		$ 1,600.00		150		$ 240,000.00	$ 150,000.00		$ 90,000.00
Lobo Ranch	$ 1,550.00			225		$ 348,750.00	$ 258,750.00		$ 90,000.00
Other ranches		$ 1,350.00		100		$ 135,000.00	$ 135,000.00		
Brazos-TA Focal						$ -	$ -		
Fishtail Ranch, Kirkpatrick, Freeman	$ 1,400.00			250		$ 350,000.00	$ 300,000.00		$ 50,000.00
Rare Earth	$ 900.00			50		$ 45,000.00	$ 45,000.00		
Wilderness and CRT Properties		$ 1,350.00		50		$ 67,500.00	$ 67,500.00		
Other ranches		$ 1,350.00		100		$ 135,000.00	$ 57,861.00		
Total				2150			$3,000,000.00	$ 450,000.00	$ 550,000.00
				Total acres =	2150.00				

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Indirect/Administrative: We do not have a NICRA and therefore apply an indirect/admin rate of 10% of direct costs for federal grants, including with the US Bureau of Reclamation and other federal funding sources through contracts with The Nature Conservancy.

CPLA staff: Executive Director salary of $69,500. Plan to put in 15% of 40 hour work week annually into this project. Plan to hire a part-time (avg. 16 hrs per week) Forestry Project Coordinator position to coordinate with contractual foresters and consultants, landowners, industry partners and other stakeholders including US Forest Service and colleagues in multiple watershed partnerships. Program manager figured at $55,000 per year x .4 = $22,000 per year.
$10,425 per year for 3 years = $31,275
$22,000 per year for 3 years = $66,000
Total = $97,275

Fringe Benefits: We figure 20% of our salaries going to fringe benefits, with increasing costs over 5 years we can figure 21% of our salary towards fringe benefits. $97,275 x .21 = $20,427.75

Travel: Transportation costs for landowner meetings, project check-ins, and partner meetings for two staff is expected to amount to 3,000 miles per year. At a .655 mileage reimbursement rate we figure $1,965 per year.
$1,965 per year for 3 years = $5895

Supplies: Misc. supplies over 3 years = $16,808.35

Contractual Expenses:

NEPA and NHPA compliance contractor: It is unclear what extent we may or may not require a NEPA and NHPA compliance budget but we went ahead and put a tentative budget for $250,000. We are currently in communications with US BoR NEPA compliance team and a compliance contractor to understand what we need to do.

Contractual forester: With a goal of approximately 2150 acres over 3 years, we want to complete 800 acres annually. These projects need to be coordinated with CPLA staff, landowners and other partners, updated prescriptions, GPS'ed and flagged on the ground, entered into GIS and quantified into differentially calculated acreages for bid, conduct pre-treatment monitoring/inspections, put out RFP's to operator list, Interface with operators and conduct bidders tours, evaluate bids with CPLA administration, provide guidance on awarding contracts to operators, conduct inspections and deal with issues in timber sale administration, conduct post-treatment monitoring/inspections, pull together final reports for treatments showing actual acreages accomplished. For monitoring, we intend to use photogrammetry based drone (UAV) monitoring technology paired with ground monitoring, methods are documented in our 2022 publications for protocols on using drone monitoring for forestry treatments viewed on chamapeak.org/landowner-resources. Based on contractual rate of $75 per hour x 1.33 to adjust for cost of inflation = $99.75 per hour. We currently use 2.74 hours of contractual forester's time per acre completed. Assuming that we can be more efficient at greater scales we can figure 1.85 hours of contractual forester's time per acre completed, which would amount 2,150 x 1.85 x 99.75 = $396,755.63.

Harvest/Mastication-

Based on the 3,262 acres that we have already conducted pre-layout and known forest conditions in adjacent areas, we breakdown our estimates below based on local/regional market conditions. Actual per-acre costs will be known through competitive RFP processes with local and regional operators.

CHAMA PEAK
· LAND ALLIANCE ·
RESPONSIBLE LAND STEWARDSHIP

Bureau of Reclamation
P.O. Box 25007
Denver, Colorado 80225

To whom it may concern:

The Board of the Chama Peak Land Alliance hereby resolves that the Chama Peak Land Alliance shall apply to the Bureau of Reclamation for the WaterSMART Environmental Water Resources Program to conduct watershed protection activities.

It is also further resolved that:

- Caleb Stotts, the Executive Director of the Chama Peak Land Alliance, shall have full authority to sign and submit all required documents, including but not limited to the grant application and the grant agreement, and that such signature is binding on the Chama Peak Land Alliance.
- The Board of the Chama Peak Land Alliance supports the application submitted and has the authority to do so.
- The Chama Peak Land Alliance will work with Reclamation to meet established deadlines for entering into a financial assistance agreement.

I, Tim Haarmann, Chairman of the Board of Directors of the Chama Peak Land Alliance, hereby declare that the Board has agreed to the above resolutions and that I am authorized to sign this resolution on behalf of the full Board of Directors.

Tim Haarmann, Chair

Dated this __28th__ of March, 2023

USDA United States Department of Agriculture | Forest Service | Santa Fe National Forest

Supervisor's Office
11 Forest Lane
Santa Fe, NM 87508
505-438-5300

File Code: 1560 **Date:** March 13, 2023

To Whom it May Concern:

I am writing on behalf of the Forest Service's Rio Chama Collaborative Forest Landscape Restoration Project (CFLRP) to express support for the Chama Peak Land Alliance proposal, titled *Building Resilience in the San Juan – Chama Project Headwaters* to the WaterSMART Environmental Water Resources Project grant opportunity administered by the Bureau of Reclamation.

The Rio Chama CFLRP is funded at $3million annually for FY22-31 to work at landscape scale to undertake forest and watershed restoration. The CLFRP boundary includes 3.77 million acres, of which about 1.9million acres lies within National Forest System lands managed by the Santa Fe National Forest, Carson National Forest, Rio Grand National Forest, and San Juan National Forest. Our project requires a 50/50 match to landscape scale investment by funds such as those applied for by the Chama Peak Land Alliance. Fundamental to the CFLRP is working with collaborators to attract/leverage/or match funds from other sources to treat the areas that the Forest Service cannot. Among those Collaborators is Chama Peak Land Alliance. Their proposed forest thinning treatments on private lands in the Navajo/Blanco Headwaters, Rio Chama Headwaters, and Rio Brazos Headwaters would aide significantly in treating priority watersheds at scale.

Recent fires have created a pressing call to action for proactive watershed management. It is our collective responsibility to help promote the resiliency of this natural infrastructure which provides so much water to downstream water users. The pace and scale of forestry treatments must increase in order to build resiliency in this era of warming climate and megafires. In order to achieve this, we need more avenues of sustainable funding to complete the work on-the-ground and support local restoration economies. We strongly encourage the WaterSMART program to invest in this region.

This project will not exist in a silo—instead, it will serve to complement and advance similar efforts happening in this highly prioritized and highly vulnerable watershed. As part of a landscape strategy to leverage the efforts of many organizations, this effort will build on multiple efforts already in place. Your full funding support of this project will help us leverage the efforts of others and build resiliency in this critical landscape.

If you have any questions regarding the Rio Chama CFLRP, please reach out to me at sandra.dingman@usda.gov or by phone at 505-526-7129.

Sincerely,

Sandra J Dingman

SANDRA J. DINGMAN, Rio Chama CFLRP Project Coordinator (acting)

Albuquerque Bernalillo County
Water Utility Authority

PO Box 568
Albuquerque, NM 87103-0568
505-289-3000
www.abcwua.org

March 22, 2023

Department of the Interior
Bureau of Reclamation, Water Sources and Planning Office
WaterSMART Grant Program

Subject: Chama Peak Land Alliance Proposal

To the WaterSMART Review Panel:

On behalf of the Albuquerque Bernalillo Water Utility Authority (Water Authority), I offer our support to the Chama Peak Land Alliance (CPLA) proposal, Increasing Resilience of the San-Juan Chama Project Headwaters, to protect the source watersheds of the San-Juan Chama Project.

The Rio Grande Water Fund (RGWF) was created to protect these water sources that are critical for the Water Authority. The RGWF has become a model for collaboration in New Mexico, bringing together diverse and disparate groups (over 100 signatories) to achieve a common goal – that of water security for our great state benefiting half its population. The Water Authority is a charter signatory and participates in Rio Grande Water Fund meetings. The RGWF lent time to the Water Authority's 100-year water resource management strategy, Water 2120, which resulted in including strategies to protect the Rio Grande watershed and water security via forest restoration work. The Water Authority has committed to investing $2 million over 10 years in the Rio Grande Water Fund, primarily funding forest treatments in these source watersheds.

Through direct funding to The Nature Conservancy's Rio Grande Water Fund, we are acting in partnership and participating with Chama Peak Land Alliance on this project. We approve of the proposal and along with providing funding to these forest treatments, we will continue our work with The Nature Conservancy and project partners to explore how we can further protect these source watersheds.

We are excited to be a partner in the Rio Grande Water Fund and are very supportive of Chama Peak Land Alliance's FY23 Environmental Water Resources Project (EWRP) proposal. If awarded, EWRP funded treatments will leverage existing investments in crucial watersheds.

Sincerely,

Mark Kelly, PE
Water Resources Division Manager

The Nature Conservancy

1613 Paseo de Peralta, Suite 200
Santa Fe, NM 87501
(505) 988-3867
nature.org/newmexico

March 14, 2023

Department of the Interior

Bureau of Reclamation, Water Resources and Planning Office

WaterSMART Grant Program

To the WaterSMART Review Panel:

I am writing on behalf of the New Mexico chapter of The Nature Conservancy and the Rio Grande Water Fund (RGWF) to express our full support for the Chama Peak Land Alliance (CPLA) proposal, *Increasing Resilience of the San-Juan Chama Project Headwaters* to the Bureau of Reclamation's WaterSMART, Environmental Water Resources Project Program for the fiscal year of 2024.

The RGWF is a wildfire risk reduction and water source protection project encompassing a 7-million acre landscape in north-central New Mexico. Over 100 signatory organizations support our ambitious goal to generate sustainable funding to restore 600,000 acres in the Upper Rio Grande Basin to be more resilient to wildfire, drought and climate change. Since 2014, the RGWF has made significant investments in the Navajo-Blanco watersheds of southwestern Colorado, which include providing spatial analysis to planning partners and over $1,000,000 in funding, primarily to CPLA, to reduce wildfire risk and improve forest health. Bureau of Reclamation contributions to this work will be leveraged by funds and strong committed efforts to increase the pace and scale of restoration in these watersheds, a key source of drinking water for one-third of New Mexico's population.

We commit to providing at least $450,000 in non-federal match to this project and to work with CPLA and our partners, including Albuquerque Bernalillo County Water Utility Authority and the Middle Rio Grande Conservancy District to secure further sources of funding and support to improve and accelerate this work. There is incredible collaborative work happening in the Headwaters region that will benefit from and contribute to this project, including the San Juan Chama Partnership and the U.S Forest Service Rio Chama Collaborative Forest Landscape Restoration Project, which is bringing in $30,000,000 over ten years to increase resiliency of forests and watersheds accelerate fire mitigation on national forest lands in the region.

I encourage you to prioritize forest and watershed resiliency in the San-Juan Chama Headwaters region by fully funding this proposal and thereby providing water security for nature and millions of people in New Mexico.

Sincerely,

Terry Sullivan
State Director

2-3-2
COHESIVE STRATEGY PARTNERSHIP

March 27, 2023

WaterSMART Project Selection Committee,

The 2-3-2 Cohesive Strategy Partnership (2-3-2) offers its support for the Chama Peak Land Alliance (CPLA) proposal, **Watershed Protection in the San Juan-Chama Headwaters**, to the Bureau of Reclamation's WaterSMART, Environmental Water Resources program for fiscal year 2023. The project will help to proactively protect critical source watersheds from large scale wildfire and post fire erosion by improving the ecological conditions of the private lands forests that house them.

The 2-3-2 is dedicated to the stewardship of natural resources within the proposed project footprint and shares many of the same values and concerns about critical water resources in the headwaters of the San Juan-Chama Watershed. Specifically, the 2-3-2 is invested in private lands management above the San Juan-Chama Project diversions within the proposed project area. Relationships are gaining momentum between the 2-3-2 and the San Juan-Chama Contractors Association, contractors that utilize water from the diversions. In this increasingly arid landscape, water is the force that binds these groups together. From the faucets in Sante Fe to the private ranch above the Oso Diversion in the South San Juan Mountains, funding of CPLA's proposal will enhance water security for the whole region.

As part of a larger landscape strategy, this project will also strengthen regional understanding of methods for improving forest ecosystem function and watershed resilience to disturbances, including wildfire. As such, the 2-3-2 looks forward to learning together with our partners from the successes and challenges of this and other projects. Additionally, the project plans to leverage the efforts of many organizations, partners, and efforts already in place.

As the impacts of climate change amplify and accelerate landscape scale disturbances, it is our collective responsibility to help promote the resiliency of natural infrastructure and the accompanying engineered infrastructure which conveys so much water to downstream water users. The pace and scale of forestry treatments must increase to build resiliency and increase the security of these vital watersheds, and the Watershed Protection in the San Juan-Chama Headwaters project is part of this change.

This project will complement and advance similar efforts happening in this highly vulnerable watershed including efforts across jurisdictional boundaries. The prioritization tools being utilized are robust, informative, and rooted in the values of landowners and the community. Full funding for this project will help CPLA and its partners leverage resources together and improve resiliency in this critical landscape.

Sincerely,

Dana Guinn
2-3-2 Partnership Co-Coordinator

Eytan Krasilovsky
2-3-2 Partnership Co-Coordinator

UNITED STATES
DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
Partners for Fish and Wildlife
New Mexico Ecological Services Field Office
2105 Osuna Road NE
Albuquerque, NM 87113-1001
Phone (505)761-4711 Fax (505)346-2542
gwen_kolb@fws.gov

December 3, 2021

RE: Watershed Protection in the San-Juan Chama Headwaters proposal.

To Whom It May Concern:

I am writing on behalf of US Fish and Wildlife Service's (USFWS) Partners for Fish and Wildlife (PFW) Program to express our strong support for the Chama Peak Land Alliance proposal, titled **Watershed Protection in the San-Juan Chama Headwaters**, to the Bureau of Reclamation's WaterSMART, Environmental Water Resources program for fiscal year 2022.

Providing so many New Mexicans with critical water supplies, the watersheds in the San Juan-Chama region are extremely important, but highly vulnerable to severe wildfire. It is our collective responsibility to help promote the resiliency of this natural infrastructure which provides so much water to our arid state. While efforts such as Rio Grande Water Fund's "Navajo-Blanco Resilience Strategy for San Juan Chama Project" the US Forest Service and 2-3-2's "Rio Chama Collaborative Forest Landscape Restoration Program" and the East Rio Arriba Soil and Water Conservation Department's "Building Resiliency in the San Juan and Chama Watersheds" are synergistically working towards the same goals in this large geography, the pace and scale of forestry treatments must increase by an order of magnitude in order to build resiliency in this era of warming climate and megafires.

In addition to benefiting water users, promoting resilience to severe wildfire on the landscape will also have benefits for wildlife and aquatic species that rely on healthy upland forests and streams for habitat needs. I am especially supportive of efforts to help protect two vulnerable populations of Rio Grande Cutthroat Trout near Chama.

The USFWS PFW program mission is to efficiently achieve voluntary habitat restoration on private lands, through financial and technical assistance, for the benefit of Federal Trust Species. Our number one goal is to restore and protect priority habitats to increase and maintain federal trust species population. We also understand that this cannot be accomplished without the efforts of many organizations and the communities that they serve. This project will complement the mission of the PFW program and build upon multiple efforts already in place.

This project will not exist in a silo—instead, it will serve to compliment and advance similar efforts happening in this highly prioritized and highly vulnerable watershed. Your full funding support of this project will help us leverage the efforts of others and build resiliency in this critical landscape.

Sincerely,

Gwen J. Kolb
NM State Coordinator, Partners for Fish and Wildlife

JICARILLA GAME AND FISH DEPARTMENT

P.O. Box 313 Dulce, NM 87528
575-759-3255 / 575-759-3457 (fax)
jicarillahunt.com

December 7, 2021

RE: Bureau of Reclamation, WaterSMART

To Whom It May Concern:

I am writing on behalf of the Jicarilla Apache Nation (Nation) to express our upmost support for the Chama Peak Land Alliance proposal, titled the **San Juan-Chama Headwaters Project** to the Bureau of Reclamation's WaterSMART, Environmental Water Resources program for fiscal year 2022.

The Nation are downstream users *and* headwater property owners. The Nation has water delivery authority of senior water rights in both the San Juan and Rio Grande basins. These watersheds provide the sole source of drinking water to the community of Dulce, and a multitude of existential benefits to native fish and wildlife, including one of the most in-tact stretches of riparian habitat in the region. Further, portions of Jicarilla lands fall within the San Juan-Chama Headwaters Project (The Lodge at Chama Land and Cattle, and Mossman ranches). We fully support work that promotes healthy watersheds and would like to contribute as better neighbors, and stakeholders in this endeavor.

It is critical that the Nation tirelessly advocates for the stewardship and conservation of natural resources not only within the boundaries of the reservation, but also the proposed project area as we share many of the same values and concerns about critical water resources in the headwaters of the San Juan-Chama Watershed. This work is timely; recent fires have underscored the precarious situation most forests are in, and calls for action in proactive watershed management. The pace and scale of forestry treatments in the San Juan-Chama watersheds must increase in order to build watershed resiliency in this critical landscape.

It is our belief that creating landscape scale resiliency requires a cross-jurisdictional strategy that leverages the efforts of many organizations and jurisdictions. This powerful approach mitigates threats and enhances the strengths of this ecosystem and underscores our collective responsibility to help promote the resiliency and functionality of this natural infrastructure. As a result, the Nation is currently exploring options to contribute to the San Juan-Chama Headwaters Project proposal in a more meaningful way. Specifically, non-federal matching funds (Nation-funded) for current and on-going wildlife, terrestrial and aquatic habitat projects, forestry work, and more are on the table.

Sincerely,

Mr. Kyle J. Tator, M.S., CWB
Wildlife Biologist
Jicarilla Game and Fish Department

Mr. Eudane Vicenti
Director
Jicarilla Game and Fish Department

Mr. Edward Velarde
President
Jicarilla Apache Nation

MIDDLE RIO GRANDE CONSERVANCY DISTRICT

12/9/2021

Bureau of Reclamation
Upper Colorado Regional Office
125 South State Street, Room 8100
Salt Lake City, Utah 84138

The Middle Rio Grande Conservancy District (District) would like to express its the support of the proposed project by the Chama Peak Land Alliance to conduct forest thinning treatments within the headwaters of the San Juan-Chama Project and the Rio Chama Headwaters. We recognize the threat to water storage due to the increased risk of wildfire in dense upland forests and value protecting this precious forest to river system connection.

As a beneficiary of the San Juan-Chama Project, the District receives a significant portion of its water supply from the Rio Chama and has a vested interest in supporting projects that will increase the resilience of these headwaters and reduce severe fire risks.

The District has a history of collaborating on upland forest projects as a contributing member of the Rio Grande Water Fund. The District is pleased to partner with the Chama Peak Land Alliance on this important work.

Sincerely,

Mike Hamman
CEO/ Chief Engineer

P.O. Box 581

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City of Santa Fe, New Mexico

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Alan Webber, Mayor

Councilors:
Signe I. Lindell, Mayor Pro Tem, District 1
Renee Villarreal, District 1
Michael J. Garcia, District 2
Carol Romero-Wirth, District 2
Roman "Tiger" Abeyta, District 3
Chris Rivera, District 3
Jamie Cassutt-Sanchez, District 4
JoAnne Vigil Coppler, District 4

December 8, 2021

Bureau of Reclamation, WaterSMART

To Whom It May Concern:

I am writing on behalf of the City of Santa Fe to express our support for the Chama Peak Land Alliance proposal to the Bureau of Reclamation's WaterSMART Environmental Water Resources program for fiscal year 2022 titled, "San Juan-Chama Headwaters Project."

The City of Santa Fe is dedicated to the stewardship of natural resources within the proposed project footprint and we share many of the same values and concerns about critical water resources in the headwaters of the San Juan-Chama Watershed. As part of a landscape strategy to leverage the efforts of many organizations, the San Juan-Chama Headwaters Project will build on multiple efforts already in place.

This work is timely. In nearby locations, recent fires such as the Los Conchas Fire and East Troublesome Creek Fire have created a call to action for proactive watershed management. It is our collective responsibility to help promote the resiliency of this natural infrastructure, which provides so much water to downstream communities. The pace and scale of forestry treatments must increase in order to build resiliency in this era of warming climate and megafires.

This project will not exist in a silo. Instead, it will serve to complement and advance similar efforts happening in this highly prioritized and highly vulnerable watershed. Your full funding support of the San Juan-Chama Headwaters Project will help us leverage the efforts of others and build resiliency in this critical landscape.

Sincerely,

Alan Webber
Mayor

Forest Stewards Guild
putting the forest first

November 30, 2021

Bureau of Reclamation
WaterSmart, Environmental Water Resources Program

RE: Letter of Support, Chama Peak Land Alliance San Juan-Chama Headwaters Project

To Whom It May Concern:

On behalf of the Forest Stewards Guild, I am writing to express our sincere support and commitment to Chama Peak Land Alliance's (CPLA) proposal to the Bureau of Reclamation's WaterSMART program titled the *San Juan-Chama Headwaters Project*.

The Forest Stewards Guild is a small national organization dedicated to ecologically based forest management with roots in New Mexico going back 40 years. The Guild's approach to forest management puts the forest first while balancing ecological, social, and economic factors. In the project area, the Guild has worked to conserve lands from development, address forest health issues stemming from drought and climate change, and implement and add capacity to thousands of acres of prescribed fire. In addition, the Guild manages the Women Owning Woodlands Network that supports women forest managers and landowners, the Fire Adapted New Mexico Learning Network to support communities at-risk from wildfire, and manages the All Hands All Lands Burn Team focused on prescribed fire.

The Guild is aligned with CPLA on the need to protect these critical headwaters that serve so many downstream users from drought, erosion, wildfire and climate change impacts in the face of forest dieback, forest conversion to shrublands, and uncharacteristic high-severity wildfire.

This project will compliment other planned investments on neighboring lands managed by the USDA Forest Service and on state and tribal lands. Together all these management activities will have a landscape scale impact both in the project area and for all the downstream communities.

I look forward to continuing to work with CPLA as project moves from proposal through to implementation.

Sincerely,

Esme Cadiente
Assistant Southwest Director

Eytan Krasilovsky
Deputy Director

2019 Galisteo St., Suite N7
Santa Fe, NM 87505

phone 505-983-8992
fax 505-986-0798

www.ForestStewardsGuild.org

Bureau of Reclamation, WaterSMART

To Bureau of Reclamation,

I am writing on behalf of San Juan-Chama Watershed Partnership (SJCWP) to express our upmost support for the Chama Peak Land Alliance proposal, titled the Watershed Protection in the San Juan-Chama Headwaters Project to the Bureau of Reclamation's WaterSMART, Environmental Water Resources Program.

SJCWP and CPLA have been working collaboratively to plan these proposed actions. A major deliverable for SJCWP's WaterSMART CWMP is watershed restoration planning, including building a catalogue of restoration projects and outreach to landowners/managers. Working in partnership with CPLA, SJCWP consider this proposal to be a Phase II of our WaterSMART CWMP scope of work. While SJCWP is not directly applying for the EWRP funds, this proposal is directly building off of our CWMP work.

As a collaborative effort that includes federal, state, tribal, NGO's, and residents of the area, the SJCWP is dedicated to the stewardship of natural resources within the proposed project footprint. We share many of the same values and concerns about critical water resources in the headwaters of the San Juan-Chama Watershed. Our landscape strategy to leverage the efforts of many organizations, and the San Juan-Chama Headwaters Project will build on multiple efforts already in place.

CPLA is focusing their efforts on 3 SJCWP Focal Areas that are of huge importance, supplying and conveying approx. 80% of Albuquerque's municipal water, 50% of Santa Fe's water, and water to at least 10 Tribes and Pueblos. Additionally, this water is crucial to many small communities, acequia parciantes and agriculturnl users. Information in SJCWP's Forest Planning Atlas has helped to highlight the importance of these Focal Areas, and has helped CPLA plan out the proposed activities.

This work is timely - In nearby locations, recent "megafires" have created a call to action for proactive watershed management. Indeed, we consider severe wildfire as one of the biggest threats to the reliable water supply of our regional watersheds. It is our collective responsibility to help promote the resiliency of this natural infrastructure which provides so much water to downstream water users. The pace and scale of forestry treatments must increase by an order of magnitude if we are to build resiliency in this era of warming climate and megafires.

This project will not exist in a silo—instead, it will serve to compliment and advance similar efforts happening in this highly prioritized and highly vulnerable watershed. Your full funding support of this project will help us leverage the efforts of others and build resiliency in this critical landscape.

Sincerely,

Claudia Segnese