

**Yuba Watershed Forest Collaborative
South Yuba River Citizens League (SYRCL)**

<i>Checklist for Watershed Coordinator Program Grant Application</i>	
	<i>1. Cover Sheet COMPLETE</i>
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1. Cover sheet for watershed coordinator program

Project Information	
Project Title	<i>Yuba Watershed Forest Collaborative</i>
Location (County and/or City)	<i>Nevada, Sierra, Placer, and Yuba counties</i>
District Number(s):	<i>Senate: 1</i>
	<i>Assembly: 1</i>
Watershed Coordinator Zone	<i>Sierra Nevada & Cascade</i>
Target Watershed(s) (HUC 10 and/or HUC 8)	<i>HUC 8 Watersheds: 16050102, 18020123, 18020125, 18020126, and 18020159</i>
Grant Request Amount	<i>\$234,995</i>
Watershed Coordinator Costs	<i>\$194,219</i>
Administrative Costs	<i>\$40,776</i>
Applicant Information	
Applicant Name	<i>South Yuba River Citizens League</i>
Organization Type	<i>Non-Profit Organization</i>
Department/Office	<i>River Science</i>
Federal Employer ID Number	<i>68-0171371</i>
Mailing Address	<i>313 Railroad Ave. Suite 101</i>
	<i>Nevada City, CA 95959</i>
Contact Person	<i>Rachel Hutchinson</i>
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Narrative questions

2. *Executive summary*

Description of the Watershed: The Yuba River watershed encompasses just over 1,300 square miles, and includes the North, Middle, and South Yuba River sub-watersheds as well as parts of parts of Yuba, Nevada, Sierra, and Placer counties. The Yuba flows through old growth forest of pine and fir, plunges through incised canyons of middle mountain elevations, and then cuts through deeply carved canyons along the Sierra Nevada foothills. About 90% of this area is made up of forested or shrubland habitats. Due to the range of elevations and latitudinal extent, the watershed is made up of diverse forest types that include old growth conifer forests with large trees, early seral stage forests, hardwood forests, dense chaparral, foothill woodlands, stands of invasive Scotch broom and other mixed forest types.

The Tahoe National Forest (TNF) owns about 50% of the land area in the Yuba River watershed and state or privately held lands make up the other 50%. Often, TNF parcels and private parcels are side by side, creating a “checkerboard” of public and private ownership with varied management approaches. Two large, high severity fires have occurred in the Yuba River watershed in recent years placing the health of these forested lands at risk and threatening communities across this region.

The Yuba River watershed provides water to millions of local and downstream users as well as containing important hydroelectric facilities at New Bullards Bar, Englebright and Spaulding dams. Historically the watershed also contained numerous saw mills and a forest product industry that was sustained by logging. This industry collapsed as forest logging practices were found to be inconsistent with healthy forest habitat and the expertise and skills of that industry have been largely lost due to low supply and the import of forest products from other countries. Today, there is a strong demand to create a new forest product and biomass industry to support projects that work to restore forest health and protect key habitats and communities that have difficulty removing material from high risk forests.

In the Yuba watershed, the communities of Camptonville, Dobbins, Oregon House, Nevada City, Grass Valley, North San Juan, Downieville and Sierra City are designated as lying in High or Very High Fires Severity Zones as designated by CalFire. In addition to the 100,000 people who live in the watershed, more than a million people visit the South Yuba State Park and other parts of the Yuba annually to recreate in the summer and winter seasons bringing a major economic boon to the region. The State Park includes the longest single-span covered bridge in the world and the Independence Trail is the first identified wheelchair-accessible wilderness trail in the country.

Within the watershed there are more than 150 spotted owl territories (M. Tierney, TNF pers comm) and a diversity of critical habitats for deer, listed amphibian, bird, and other wildlife species.

Purpose of the Proposal: The Yuba Watershed Forest Collaborative Project proposes to use Department of Conservation funding and pledged matching funds to hire two Watershed Coordinators for four years to work throughout the Yuba River watershed. Funding from the DOC grant will fund a total of 1 FTE for two years of work, the remaining funding will be sourced from matching funds. Pledged matching funds will extend DOC funding for an additional two years for both Watershed Coordinators. The Watershed Coordinators will work with the Yuba Watershed Forest Collaborative partners (YWFC) to provide technical support and promote community and stakeholder engagement to further the YWFC goals, which include:

- Improve forest health and forest resiliency in the Yuba River watershed.
- Implement an economically viable and environmentally sustainable forest products industry in the Yuba River watershed by promoting projects that will support the Forest Biomass Business Center (FBBC),

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Watershed Coordinator Program

Application

which includes the 3MW Camptonville biomass to energy (bioenergy) facility in addition to potential co-located forest product business. The bioenergy facility will expand wood products manufacturing in line with the region's forest productivity and health needs.

- Engage diverse stakeholders throughout the Yuba River watershed to promote and implement Forest Health and Forest Product projects.
- Raise funds, through collaborative grant requests and alternative funding streams, for projects that are identified as high priority in the Yuba River watershed.

Participating Partners: Spearheaded by the South Yuba River Citizens League (SYRCL), the Yuba Watershed Forest Collaborative project has a number of committed partners including the United States Forest Service (Tahoe National Forest, TNF), Camptonville Community Partnership (CCP), Yuba Water Agency (YWA), and Sierra Nevada Conservancy (SNC). We anticipate that this will be the core group of partners, but expect that others (like Nevada County, etc.) will join when this project is funded and outreach occurs.

Relationship of Project to Forest Carbon Plan: The Yuba Watershed Forest Collaborative project directly supports two of the Forest Carbon Plan's three goals and multiple plan actions and recommendations. More specifically it directly supports:

Goal 1: *Enhance*: Expand and improve forest management to enhance forest health and resilience resulting in enhanced long-term carbon sequestration and storage potential.

- Objective 1: Improve health and resilience on private and State/local public forestland
- Objective 2: Improve health and resilience on Federal forestlands
- Objective 5: Restore Mountain Meadow Habitat

Goal 3: *Innovate*: Pursue innovations in wood products and biomass utilization in a manner that reduces or offsets GHG emissions; promotes land stewardship; and strengthens rural economies, and communities.

Forest Carbon Plan Actions: The Yuba Watershed Forest Collaborative project directly supports the following actions listed in the Forest Carbon Plan:

- **A1:** By 2020, increase the rate of forest restoration and fuels treatment, including prescribed fire, from the recent average of 17,500 acre/years to 35,000 acres/year.
- **A2:** By 2030, further increase the rate of forest restoration and fuels treatment to 60,000 acres/year.
- **A5:** By 2025, expand areas of high priority habitat by 5 percent above current levels, as provided in the State Wildlife Action Plan.
- **A6:** Promote increasing the acreage of forest carbon projects and remove barriers to their implementation.
- **A7:** Increase rate of treatment to approximately 500,000 acres per year on non-federal lands to make an ecologically meaningful difference at a landscape scale.
- **A8:** By 2030, lead efforts to restore 10,000 acres of mountain meadow habitat in key locations.
- **B1:** By 2020, on lands managed by the USDA Forest Service, increase health and resiliency treatments from the current approximately 250,000 acres/year to 500,000 acres/year, and on BLM managed lands increase from approximately 9,000 acres/year to 10-15,000 acres/year.
- **B2:** By 2030, eliminate the current USDA Forest Service Reforestation Need balance and sustain future treatments at levels where annual additions are matched by treatments.

- **B3:** By 2030, increase forest resilience through treatments including fuels reduction, managed fire, prescribed fire, noxious weed removal, and road improvements to reduce sedimentation, resulting in resource benefits to approximately 9 million acres on National Forest System Lands in California.
- **B4:** By 2030, bring resource benefits to approximately 1.2 million acres of forests and woodlands on Bureau of Land Management lands in California through national landscape conservation networks, landscape mitigation strategies, native seed rehabilitation and restoration, and vegetation treatments including fuels reduction, managed and prescribed fire, and weeds management. Forestry and fuel reduction targets will expand from a current average of 9,000 acres/year to 20,000 acres/year.
- **B5:** By 2030, the USDA Forest Service will restore 10,000 acres of mountain meadow habitat and target reliable funding for such activities on National Forest System lands in California.
- **D1:** Expand wood products manufacturing in California and take actions to support market growth scaled to the longer-term projections of forest productivity and resource management needs.
- **D2:** Increase the total volume of carbon stored through greater use of durable wood products from California forests, particularly in buildings.
- **D3:** Continue public investment to build out the 50 megawatt (MW) of small scale, wood-fired bioenergy facilities mandated through SB 1122 (Rubio, 2012)
- **D4:** Maintain existing bioenergy capacity at a level necessary to utilize materials removed as part of forest restoration. In the short term, it is critical to meet the public safety and tree disposal needs stemming from widespread tree mortality in the central and southern Sierra Nevada
- **D6:** Develop and support the generation of and markets for soil amendments from forest biomass for agricultural, rangeland, municipal, and residential use, to advance the goals of the Healthy Soils program and other efforts.
- **E4:** Develop and disseminate tools to assist landowners and local and regional land use planners and forest managers in assessing current forest conditions and desired future conditions.
- **E5:** Develop a better understanding of how different fire types and different forest fuels affect black, brown, super-aggregate, and GHG carbon emissions.

3. Application questions

Demonstrated need (20 Points)

1. Current Watershed Conditions/Potential Benefit to the Watershed

a. Describe how the watershed encompasses forest lands with characteristics and indicators prioritized by the Forest Carbon Plan:

The Yuba River watershed encompasses just over 1,300 square miles and includes the North, Middle, and South Yuba River sub-watersheds. About 90% of this area is made up of forested or shrubland habitats and is the source of water for several large capacity reservoirs that provide water supply and flood protection to downstream communities and farmers as well as hydroelectric power. Due to a range of elevations and latitudinal extent, the watershed is made up of a diversity of forest types that include old growth conifer forests with large trees, hardwood forests, chaparral shrublands, foothill woodlands, and other mixed forest types. One of the biggest challenges that the Yuba watershed faces is determining where to prioritize forest health treatments since there are many regions that are susceptible to high-severity fires, dispersed population centers, and a high diversity of different forest types. In addition, the Yuba River watershed is estimated to be home to over 100,000 people and draws over a million people annually to recreate in the summer and winter seasons.

Forests projected to be at risk due to climatically driven stressors and type conversion

Climatic shifts in the Yuba watershed are anticipated to reduce the snow pack, placing higher elevation forest stands at risk to changes in water availability, tree mortality, and type conversion. Type conversion after high severity fire events is an issue that is anticipated to become more prevalent under a changing climate. If the Yuba River watershed loses the heterogeneity of forest types, it is anticipated that there will be large, long term impacts on the watershed from water supply to wildlife habitat. Restoring the landscape of the Yuba River watershed supports forest health by making forests more resilient to the stresses of insects, disease and fire, which are predicted to increase under changing climatic conditions.

Forests at greatest risk to high-severity events: Stands with large trees

Forest and fire modeling conducted by Cal Fire and the US Forest Service indicate that there are regions within each sub-watershed that are classified as either very high or high wildfire hazard severity zones and contain dead and diseased trees largely resulting from the recent drought and bark beetle infestation. The Tahoe National Forest has identified the North Yuba watershed as at risk for high-severity fires that would result in the loss of old growth forest stands with large trees. Placing at risk the majority of the Yuba spotted owl population, the communities that live there, the water supply for local and downstream users, and hydroelectric and flood protection infrastructure that is supported by this watershed. The communities of Camptonville, Dobbins, Oregon House, Nevada City, Grass Valley, North San Juan, Downieville, Sierra City, and other outlying areas are also at high risk due to the high risk for ignition and the large swaths of unmanaged forest. The cities of Nevada City and Grass Valley and the communities in the Middle Yuba watershed are all listed as Very High Fire Severity Zone by CalFire. Over 30% of the watershed has burned at least once in the last 100 years, including most recently the Cascade Fire which burnt 9,989 acres and destroyed 143 residences and 123 outbuildings in 2017.

Areas with high habitat values at risk

Within the watershed there are over 150 spotted owl territories (M. Tierney, USFS pers comm) and a diversity of critical habitats for deer, listed amphibian, bird, and other wildlife species. Spotted owl populations require a diverse range of habitats that include stands of large trees.

Areas that need to be reforested after high mortality events or are in-need of reforestation

Severe wildfires have resulted in large areas that are in varying stages of recovery or in need of reforestation or maintenance treatments to allow for recovery and avoid forest conversion to dense, early seral shrubland. In 1999, the Pendola Fire swept through over 12,000 acres of mid-elevation forest adjacent to the largest reservoir in the Yuba watershed and, after twenty years, is still under active management and reforestation by the Tahoe National Forest. The region is now primarily composed of early seral stage forest and is dominated by dense chaparral, young forest, and invasive Scotch broom. In 1988, the 49'er fire engulfed over 36,000 acres of the lower elevations of the South Yuba watershed, much of it within private ownership.

Previously treated areas that are in need of follow-up “maintenance” treatments

Across the Yuba watershed, there are abundant opportunities to reduce wildfire behavior on both public and private lands through removal of surface and small ladder fuels, and to improve or restore wildlife habitat using a variety of treatments. This work includes follow up treatments in areas that have been previously treated or burnt. Proposed prescribed treatments include, but are not limited to, hand thinning and piling, control of the spread and removal of existing invasive weed infestations, fuel break creation and maintenance, roadside clearing, and prescribed under-burning.

Forests at risk of conversion to other uses, including development and agriculture

N/A

- b. Describe the watershed’s current condition and cite any formal studies, reports, or research papers that support the description. Do not attach the actual studies or reports; citations are sufficient.***

The Yuba River watershed is 90% forested. Forest health work to protect the region and the role forests play as a carbon sink and in increasing resiliency in the face of climate change is a critical and urgent need. High priority regions within the Yuba watershed have been identified based on the results of the LiDAR Augmented Fire Risk Index (LAFRI) analysis that identifies where uncontrolled, high severity fires are most likely to occur (TNF 2016). This index utilizes LiDAR to analyze forest structure and elevation to augment on-the-ground fuel assessments and vegetation types and is used by the TNF and local communities to highlight priority treatment areas. This prioritization tool is useful in determining project boundaries, but the collaborative stakeholder involvement proposed in this grant is required for large-scale projects to be successful across different agencies and management plans.

The LAFRI dataset is being used by an interdisciplinary team from the Yuba River Ranger District Tahoe National Forest, USFS Region 5 ecologists, and the USFS Rocky Mountain Research Station to apply an innovated landscape disturbance succession model to the upper Yuba River watershed. This model simulates landscape scale changes to forest habitat types in the Yuba River watershed under historical disturbances and results in a dataset showing the watershed’s Historic Range of Variability (HRV) (McGarigal et al. 2017). The

Upper Yuba River HRV Model is a powerful tool as it allows stakeholders in the region to evaluate the potential consequences of different land management decisions within a framework of pre-defined desired conditions. Restoring the landscape of the Yuba River watershed to its HRV supports forest health by making forests more resilient to the stresses of insects, disease and fire, which are predicted to increase under changing climatic conditions.

Understanding the HRV for the Yuba River watershed is imperative to determine effective, forward thinking restoration actions that focus on forest resiliency and carbon sequestration, particularly in the face of rapidly changing climatic conditions. The Upper Yuba River HRV Model can prescribe the size, scale and timing of varying management treatments that are needed to restore the Upper Yuba River watershed to its HRV. The model also has the capability to compare different management scenarios, compare the outcomes, and to inform managers regarding tradeoffs of varying treatment types, applied at a varying pace and scale. This model is being used to plan large, landscape scale projects (15,000+ acres/per project) in the North Yuba watershed, including the Yuba Project, Trapper, and Brandy.

According to the Upper Yuba River HRV Model technical report, prior to Euro-American settlement, wildfire was the major source of disturbance in Sierran forests, shaping the composition and configuration of vegetation communities. Fires were primarily lightning-caused, although Native Americans had major influences on fire regimes at lower elevations (Safford and Stevens 2017). In general, fires burned primarily at low intensities and high mortality (over 75% overstory canopy mortality) was relatively uncommon (Collins et al 2007). For most of the cover types in the upper Yuba watershed, high severity fire rates were low enough to allow most stands to succeed into late-development and old-growth conditions with a variety of canopy structures (Mallek et al. 2013; Safford and Van de Water 2014; SNEP 1996a,b).

During the pre-settlement period wildfires were frequent, with a mean rotation as short as 20 years in ponderosa pine (*Pinus ponderosa*)-dominated forests. Wetter mixed conifer areas are predicted to have had a mean fire rotation of 30 years. Fire rotations increased with increasing moisture and elevation. Variance around the mean fire rotation was high, as some parts of the forest experienced fire much more frequently, while others were fire free for long periods. (Agee 1993; Van de Water and Safford 2011; Mallek et al. 2013)

The arrival of Euro-Americans in the 1850s sparked a transformation of this landscape as people harvested timber, extracted gold using hydraulic mining techniques, grazed large numbers of livestock, and suppressed most wildfires, while at the same time setting some fires under severe weather conditions (Storer and Usinger 1963). Although many uses of the forest led to changes in vegetation structure and composition, logging and wildfire suppression in combination have altered the historical fire regime and vegetation patterns the most (Knapp et al. 2013; Stephens et al. 2015).

It is generally believed that prior to Euro-American settlement in the mid-1800s the Sierra Nevada landscape had been shaped by a set of environmental conditions – including climate, topography, vegetation, and Native American management – that over thousands of years had led to high resilience to major ecological change (Van Wagtenonk and Fites-Kaufman 2006). Although climate is always changing, for approximately the last 4,000 years, the general outlines of modern Sierra Nevada ecosystems have been in place (Van Wagtenonk and Fites-Kaufman 2006). Since Euro-American settlement, grazing, logging, mining, and fire suppression have interacted to greatly and rapidly alter the historical fire regime and vegetation patterns, and the current landscape has come to be dominated by early- to mid-seral stage, and largely overstocked forests comprised disproportionately of

less fire-tolerant species (Storer and Usinger 1963; Stephens et al. 2015; Knapp et al. 2013; Hessburg et al. 2005). Given the uncharacteristically high canopy cover and the continuity of abundant surface fuels owing to the lack of fires over the past century, it is believed that the landscape has become less resilient to the occurrence of future disturbances (e.g. fire, insect and disease outbreaks) and is especially susceptible to extensive and uncharacteristically severe fires (Hessburg et al. 2005; Beaty and Taylor 2007; Meyer et al. 2008). Thus, pre-settlement disturbance regimes, characterized by the historic range of variability, created a forest that was resilient to fire.

Today, as a result of all the factors above, forested lands in Yuba River watershed are largely overgrown and require active management to improve forest health to reduce the risk of large, high severity fires that can result in the conversion of forest community types, loss of human life and infrastructure, loss of water supply capacity, loss of stored carbon, and the increased release of carbon to the atmosphere. Implementing the Yuba Watershed Forest Collaborative project will spearhead landscape level forest health projects (such as Trapper, Brandy, and projects in Yuba and Nevada counties) and create a forest product and biomass energy facility that together, will result in a more robust forest and forest health focused economy.

c. *Describe how the watershed coordinator would benefit the watershed. The response should address:*

- *The watershed-related goals in your organization’s strategic or long-range plan, the connection between the Forest Carbon Plan and those goals, and how a watershed coordinator would help your organization achieve these goals. Specific problems and issues on public and/or private land within the watershed, and how a watershed coordinator would help to address these problems.*
- *Direct benefits a watershed coordinator would provide to the watershed and what methods will be used to measure and evaluate the watershed coordinator's direct benefits to the watershed. Any existing watershed coordination efforts currently in place, gaps in coordination, and how the watershed coordinator will fill those gaps*

SYRCL was formed in 1983 to protect the Yuba River from development and has since become one of the most effective watershed groups in the US. SYRCL works with multiple partners to protect the river and restore watershed health across all three forks of the Yuba River. Notable achievements include:

- Achieving State Wild and Scenic status for the South Fork of the river
- Monitoring water quality at the watershed scale since 2000,
- Working to restore headwater meadows and floodplain habitat for fish, and
- Bringing the community together to keep the Yuba River clean and safe and to protect it from unnecessary development and dam proposals.

The watershed-related goals in SYRCL’s strategic or long-range plan:

Relevant goals from SYRCL’s Strategic Plan include:

- Improve the resiliency of the Yuba watershed by implementing projects that create salmon habitat, restore the health of mountain meadows, and protect the river corridors from threats.
- Identify threats and collect scientifically defensible data to address impacts to the Yuba River watershed
- Build lasting protections for the Yuba through strong and collaborative partnerships.
- Serve as the “voice for the river” in public policy, planning, and collaborative processes.

The connection between the Forest Carbon Plan and SYRCL’s goals:

SYRCL’s goals match the goals, objectives and recommended actions of the Forest Carbon Plan as follows:

Forest Carbon Plan Goal 1: *Enhance:* Expand and improve forest management to enhance forest health and resilience resulting in enhanced long-term carbon sequestration and storage potential.

- Objective 1: Improve health and resilience on private and State/local public forestland
- Objective 2: Improve health and resilience on Federal forestlands
- Objective 5: Restore Mountain Meadow Habitat
- Actions: A1, A2, A5, A6, A7, A8, B1, B2, B3, B4, B5, E1, E3, E4, E5

Relevant SYRCL Goals:

- Improve the resiliency of the Yuba watershed by implementing projects that create salmon habitat, restore the health of mountain meadows, and protect the river corridors from threats.

- Identify threats and collect scientifically defensible data to address impacts to the Yuba River watershed.
- Build lasting protections for the Yuba through strong and collaborative partnerships.
- Serve as the “voice for the river” in public policy, planning, and collaborative processes

Forest Carbon Plan Goal 3: *Innovate*: Pursue innovations in wood products and biomass utilization in a manner that reduces or offsets GHG emissions; promotes land stewardship; and strengthens rural economies, and communities.

Actions: D1, D2, D3, D4, D6

Relevant SYRCL Goals:

- Improve the resiliency of the Yuba watershed by implementing projects that create salmon habitat, restore the health of mountain meadows, and protect the river corridors from threats.
- Identify threats and collect scientifically defensible data to address impacts to the Yuba River watershed.
- Build lasting protections for the Yuba through strong and collaborative partnerships.
- Serve as the “voice for the river” in public policy, planning, and collaborative processes

How a watershed coordinator would help your organization achieve these goals

The Yuba Watershed Forest Collaborative watershed coordinator positions will support SYRCL’s strategic plan goals and the goals of the Forest Carbon Plan by bringing together the community to protect and restore the Yuba River watershed through large-scale, collaborative, and science-based forest health projects. These forest health projects will provide benefits to the forest itself, the wildlife that utilize the forest, the water that flows through the forest, the forest product industry, and the people who live and play in the watershed. This will be achieved by working on a watershed and all-lands scale to identify, plan and implement projects that will increase the scale of forest health projects which will reduce the threat to forest health, restore resilience, and support the forest product industry in partnership with other organizations. This work will have cascading impacts and benefits that are in direct alignment with the Forest Carbon Plan, including increasing watershed resiliency, increasing the pace and scale of forest health projects, sequestering carbon, reducing the risk that the Yuba watershed will become a carbon source rather than a carbon sink by lowering the risk of high severity fires, integrating the biomass and wood product industry into forest health work, monitoring project benefits, and inviting scientific researcher to study pre- and post-forest conditions.

The DOC Watershed Coordinator grant funding matched by funding from YWA and SNC will allow for two watershed coordinators to work together and support the collaboration between SYRCL, CCP, YWA, and TNF over a period of nearly four years. This team will work with key partners to implement large scale forest health projects, plan new projects, engage with the community and new stakeholders to increase regional capacity, and fundraise through grants or alternative funding streams for the funds to create a sustainable forest health program in the Yuba watershed for the next decade. The watershed coordinator positions will tie together the forest health (supply) and forest product (demand) industries so that they will be developed in a mutually beneficial way that is supportive of the goals of the Forest Carbon Plan to reduce carbon emissions and stimulate local collaboration. Currently, watershed coordination efforts are conducted at a more local scale and are more focused on specific project plans and implementation rather than working together to prioritize and plan large

scale watershed efforts. The watershed coordinators will work to tie together some of these disparate programs so that they are working in coordination with one another to move forward a forest health program in the Yuba watershed that is at an all-lands, landscape scale.

Specific problems and issues on public and/or private land within the watershed, and how a watershed coordinator would help to address these problems.

Management Coordination of Forest Lands

- The checkerboard pattern of ownership throughout the Yuba Watershed has resulted in an uncoordinated approach to forest management and a lack of large-scale projects that cross ownership boundaries. Various planning efforts over the years have resulted in collaborations, for example the South Yuba River Management Plan – a partnership between the USFS, CA State Parks and the Bureau of Land Management, but there has not been a collaborative effort aimed specifically at forest management throughout the watershed to plan large, landscape level projects. In order to be successful, land owners, like the TNF, must also work with private land owners to protect forest health on a large scale. The Watershed Coordinators will work with different landowners to make all-lands, watershed scale projects possible. In addition, the Watershed Coordinator will tie in work from other regions, such as Butte County RCD, to ensure that work conducted within the Yuba watershed is in alignment with, learns from, and is supported by what is occurring across the region.
- There is a lack of funding for rural, disadvantaged communities to manage for forest health due to a lack of fundraising capacity. The Watershed Coordinator positions will work to bring together rural, disadvantaged communities, fundraising through grant writing or alternative funding streams to leverage key strengths and increase the overall resiliency of the Yuba watershed. Many of these communities are also considered disadvantaged and lack a strong economy.

Lack of Forest Products Infrastructure

- The Yuba River watershed does not have resources to process non-saleable timber that cannot be burned in place for existing and future forest health projects. The Watershed Coordinators will promote what is currently unavailable in the Yuba River watershed: an economically viable outlet for excess forest biomass residuals, non-merchantable timber and dead and dying trees.

Direct benefits a watershed coordinator would provide to the watershed and what methods will be used to measure and evaluate the watershed coordinator's direct benefits to the watershed.

Management Coordination of Forest Lands

- Using the advanced modeling techniques of the Upper Yuba River HRV Model (see above Section), the two Watershed Coordinators proposed by the Yuba Watershed Forest Collaborative will promote scientifically sound projects to multiple agencies and private landowners throughout the watershed and develop collaborative partnerships between different landowners. Equipped with this new technology that provides clear benefits, we anticipate that management coordination across ownership boundaries will become an easier task for the Watershed Coordinators than it has been for individual agencies and owners up until now, to promote large landscape level projects across the watershed.

The Yuba Watershed Forest Collaborative aims for real, tangible results to occur as a result of hiring the two Watershed Coordinators. Evaluation of direct benefits will be performed by the YWFC core group. The group will use the following Performance Measures to measure and evaluate the Watershed Coordinators' direct benefits to the watershed:

- *Number of high priority projects identified*
- *Number of forest health project plans completed*
- *Types of prescriptions prescribed*
- *Number of projects fully permitted and compliant with environmental regulations*
- *Number of acres of at-risk forested lands restored and risk of wildfire impacts reduced*
- *Number acres treated to reduce hazardous loads*
- *Acres of high value habitat restored*
- *Number of new shaded fuel breaks created*
- *Number of communities that have reduced risk of wildland fire*
- *Potential carbon sequestered through implementation of forest health projects*
- *(Use ARB Greenhouse Gas Calculator Tool)*
- *% of identified high priority projects completed*
- *Number of researchers recruited and # studies produced*
- *Number monitoring studies completed*
- *Number and type of stakeholders engaged in process*
- *Number and type of stakeholders attending*
- *% of participants actively engaged in forest health projects*
- *Number sub-group meetings held*
- *Number of funding opportunities identified*
- *% of identified funding opportunities applied for*
- *% of applications awarded*

Forest Products Infrastructure

- The Watershed Coordinators will promote what is currently unavailable in the Yuba River watershed: an economically viable outlet for excess forest biomass residuals, non-merchantable timber and dead and dying trees. Development of this infrastructure through the planned Forest Biomass Business Center (FBBC) will offset forest management costs and support implementation of on the ground forest management projects, such as hazardous fuels reduction and climate adaptation or timber harvest projects. These projects will re-create a forest products industry and provide multiple environmental and socio-economic benefits within the Yuba River watershed and into neighboring watersheds.

Evaluation of direct benefits will be performed by the YWFC core group. The group will use the following Performance Measures to measure and evaluate the Watershed Coordinators' direct benefits to the watershed:

- *# of new manufacturing activities housed at the FBMC*
- *# and types of wood products produced at FBMC*
- *# of long-term fuels contracts signed*
- *# of funding opportunities identified*
- *% of identified funding opportunities applied for*
- *% of applications awarded*

Any existing watershed coordination efforts currently in place, gaps in coordination, and how the watershed coordinator will fill those gaps

Within the Yuba River watershed there are many ongoing collaboratives, including the Cosumnes American Bear Yuba Integrated Regional Water Management Group (CABY IRWM), the Yuba Integrated Regional Water Management Group (Yuba IRWM), and efforts to implement firesafe communities in Nevada, Yuba, and Sierra counties. This work has focused on specific forest health projects rather than looking at watershed wide priorities and impacts, which is one area where the Watershed Coordinators are expected to fill this gap. The IRWM's have focused on water supply, water quality, and meadow restoration projects and have not yet received funding to work on forest health projects. The Watershed Coordinator will work directly with both IRWM's to ensure that any planning activities that are ongoing within each IRWM will be reflected in the projects that are considered for grant funding. In addition, the Watershed Coordinators will fill the gap between what is happening on forested lands or in the Wildlife Urban Interface (WUI) to coordinate with private land owners ensuring that forest health projects are carried out in a way that is ecologically significant and reduces the risk of high severity fires on more than public lands.

Consistency with the recommendations of the Forest Carbon Plan (25 Points)

- II. ***List the overall goal(s) that the watershed coordinator will focus on during the grant period. Goals are a statement of the long-term, broad vision for the watershed; they should exhibit significant benefits for the watershed and may take a while to achieve. For example, a goal may be: To improve forest health in the XYZ River watershed.***

Goal 1. Improve forest health and forest resiliency in the Yuba River watershed.

Goal 2. Implement an economically viable and environmentally sustainable forest products industry in the Yuba River watershed.

Goal 3. Engage diverse stakeholders throughout the Yuba River watershed to promote and implement Forest Health and Forest Product projects.

Goal 4. Raise funds, through collaborative grant requests and alternative funding streams, for projects that are identified as high priority in the Yuba River watershed.

- a. Describe how each goal relates to at least one recommendation or action outlined in the Forest Carbon Plan.***

Goal 1. Improve forest health and forest resiliency in the Yuba River watershed.

Goal 1 will address Actions A and B and Recommendation A, B, and D in the Forest Carbon Plan by increasing the annual acreage goals for forest treatment areas (restoration, thinning, prescribed fire, etc.) by completing planning and beginning fuels treatment at the sub-watershed scale (100,000-300,000 acres each sub-watershed). The Yuba Watershed Forest Collaborative project will provide resources to ensure that at both the landscape and local scales, prescribed treatments will be ecologically meaningful and feasible given the capacity and needs within the Yuba watershed. The resulting increase in treatment area will improve the health and resiliency

(Action B) of federally managed lands and will create a pipeline of projects that can be sustained over the next decade, if not longer. The project partners will leverage existing relationships with universities to encourage research that will document the benefit of this work on forest health and standardize methods for quantification of carbon sequestration and forest health project successes. In addition, with \$2 million in funds from the California Department of Fish and Wildlife, SYRCL and the TNF will continue to work towards restoring at least 1,000 acres of meadows and quantifying carbon sequestration rates in Loney, Deer, Upper Loney, and Van Norden meadows in the Yuba watershed within the next five years.

Specifically, Goal 1 will address:

- **A1:** By 2020, increase the rate of forest restoration and fuels treatment, including prescribed fire, from the recent average of 17,500 acre/years to 35,000 acres/year.
- **A2:** By 2030, further increase the rate of forest restoration and fuels treatment to 60,000 acres/year.
- **A5:** By 2025, expand areas of high priority habitat by 5 percent above current levels, as provided in the State Wildlife Action Plan
- **A6:** Promote increasing the acreage of forest carbon projects and remove barriers to their implementation.
- **A7:** Increase rate of treatment to approximately 500,000 acres per year on non-federal lands to make an ecologically meaningful difference at a landscape scale.
- **A8:** By 2030, lead efforts to restore 10,000 acres of mountain meadow habitat in key locations.
- **B1:** By 2020, on lands managed by the USDA Forest Service, increase health and resiliency treatments from the current approximately 250,000 acres/year to 500,000 acres/year, and on BLM managed lands increase from approximately 9,000 acres/year to 10-15,000 acres/year.
- **B2:** By 2030, eliminate the current USDA Forest Service Reforestation Need balance and sustain future treatments at levels where annual additions are matched by treatments.
- **B3:** By 2030, increase forest resilience through treatments including fuels reduction, managed fire, prescribed fire, noxious weed removal, and road improvements to reduce sedimentation, resulting in resource benefits to approximately 9 million acres on National Forest System Lands in California.
- **B4:** By 2030, bring resource benefits to approximately 1.2 million acres of forests and woodlands on Bureau of Land Management lands in California through national landscape conservation networks, landscape mitigation strategies, native seed rehabilitation and restoration, and vegetation treatments including fuels reduction, managed and prescribed fire, and weeds management. Forestry and fuel reduction targets will expand from a current average of 9,000 acres/year to 20,000 acres/year.
- **B5:** By 2030, the USDA Forest Service will restore 10,000 acres of mountain meadow habitat and target reliable funding for such activities on National Forest System lands in California.
- **E1:** Centralize and standardize tracking of implementation activities to meet Forest Carbon Plan targets to account for all efforts; quantify carbon sequestration and GHG and black carbon emissions outcomes; identify areas of underperformance; and effectively work toward the ultimate performance objective of maintaining California's forests as net sinks of carbon. Develop a centralized database or other information management system to track implementation.
- **E3:** Standardize methods, data, and modeling across state agencies (and Federal agencies, where possible) to facilitate planning for forest health and resilience management activities across ownership boundaries.
- **E4:** Develop and disseminate tools to assist landowners and local and regional land use planners and forest managers in assessing current forest conditions and desired future conditions.
- **E5:** Develop a better understanding of how different fire types and different forest fuels affect black, brown, super-aggregate, and GHG carbon emissions.

Goal 2. Implement an economically viable and environmentally sustainable forest products industry in the Yuba River watershed.

Goal 2 will address Action A, B and D of the Forest Carbon Plan and will create innovative solutions for wood products and biomass utilization to support ongoing forest management activities by utilizing biomass material generated from timber harvesting, forest health, restoration and hazardous fuels treatments for bioenergy and wood product manufacturing. This will minimize net GHG and black carbon emissions relative to standard practices of open pile burning or decomposition. In addition, implementation of the Forest Biomass Business Center (FBBC), which includes 3MW Camptonville biomass to energy facility, at Camptonville will expand wood products manufacturing in line with the region’s forest productivity and health needs. The FBBC has support from the Governor’s Office of Planning and Research, Sierra Nevada Conservancy, Sierra Business Council, Yuba Sutter Economic Development Corporation, Yuba One Stop, and Rural County Representatives of California who will all be invited as stakeholders under Goal 3. This goal will support the SB 1122 mandate to build out the 50MW of forest bioenergy through the implementation of Camptonville bioenergy project’s 2017 \$4.9 million grant award from the California Energy Commission’s Electric Program Investment Charge Program.

Specifically, Goal 2 will address:

- **D1:** Expand wood products manufacturing in California and take actions to support market growth scaled to the longer-term projections of forest productivity and resource management needs.
- **D2:** Increase the total volume of carbon stored through greater use of durable wood products from California forests, particularly in buildings.
- **D3:** Continue public investment to build out the 50 megawatt (MW) of small scale, wood-fired bioenergy facilities mandated through SB 1122 (Rubio, 2012)
- **D4:** Maintain existing bioenergy capacity at a level necessary to utilize materials removed as part of forest restoration. In the short term, it is critical to meet the public safety and tree disposal needs stemming from widespread tree mortality in the central and southern Sierra Nevada
- **D6:** Develop and support the generation of and markets for soil amendments from forest biomass for agricultural, rangeland, municipal, and residential use, to advance the goals of the Healthy Soils program and other efforts.

Goal 3. Engage diverse stakeholders throughout the Yuba River watershed to promote and implement Forest Health and Forest Product projects.

Goal 3 will address Action A, B, D, E, and Recommendations A, B, C, and D of the Forest Carbon Plan through a stakeholder process that will bring together a diverse array of stakeholders with differing interests and levels of capacity to implement forest health projects and forest product projects across the watershed. The Watershed Coordinators will work with stakeholders to prioritize, plan, permit, and implement forest health projects that will increase the overall resiliency of the Yuba watershed while building local capacity to sustain forest health, and forest product work over the next several decades. This goal will include coordination outside of the watershed, specifically with neighboring watersheds (Butte RCD) and with other DOC Watershed Coordinators.

Specifically, Goal 3 will address:

- **A1:** By 2020, increase the rate of forest restoration and fuels treatment, including prescribed fire, from the recent average of 17,500 acre/years to 35,000 acres/year.
- **A2:** By 2030, further increase the rate of forest restoration and fuels treatment to 60,000 acres/year.
- **A5:** By 2025, expand areas of high priority habitat by 5 percent above current levels, as provided in the State Wildlife Action Plan
- **A6:** Promote increasing the acreage of forest carbon projects and remove barriers to their implementation.
- **A7:** Increase rate of treatment to approximately 500,000 acres per year on non-federal lands to make an ecologically meaningful difference at a landscape scale.
- **A8:** By 2030, lead efforts to restore 10,000 acres of mountain meadow habitat in key locations.
- **B1:** By 2020, on lands managed by the USDA Forest Service, increase health and resiliency treatments from the current approximately 250,000 acres/year to 500,000 acres/year, and on BLM managed lands increase from approximately 9,000 acres/year to 10-15,000 acres/year.
- **B2:** By 2030, eliminate the current USDA Forest Service Reforestation Need balance and sustain future treatments at levels where annual additions are matched by treatments.
- **B3:** By 2030, increase forest resilience through treatments including fuels reduction, managed fire, prescribed fire, noxious weed removal, and road improvements to reduce sedimentation, resulting in resource benefits to approximately 9 million acres on National Forest System Lands in California.
- **B4:** By 2030, bring resource benefits to approximately 1.2 million acres of forests and woodlands on Bureau of Land Management lands in California through national landscape conservation networks, landscape mitigation strategies, native seed rehabilitation and restoration, and vegetation treatments including fuels reduction, managed and prescribed fire, and weeds management. Forestry and fuel reduction targets will expand from a current average of 9,000 acres/year to 20,000 acres/year.
- **B5:** By 2030, the USDA Forest Service will restore 10,000 acres of mountain meadow habitat and target reliable funding for such activities on National Forest System lands in California.
- **D1:** Expand wood products manufacturing in California, and take actions to support market growth scaled to the longer-term projections of forest productivity and resource management needs.
- **D2:** Increase the total volume of carbon stored through greater use of durable wood products from California forests, particularly in buildings.
- **D3:** Continue public investment to build out the 50 megawatt (MW) of small scale, wood-fired bioenergy facilities mandated through SB 1122 (Rubio, 2012)
- **D4:** Maintain existing bioenergy capacity at a level necessary to utilize materials removed as part of forest restoration. In the short term, it is critical to meet the public safety and tree disposal needs stemming from widespread tree mortality in the central and southern Sierra Nevada
- **D6:** Develop and support the generation of and markets for soil amendments from forest biomass for agricultural, rangeland, municipal, and residential use, to advance the goals of the Healthy Soils program and other efforts.
- **E4:** Develop and disseminate tools to assist landowners and local and regional land use planners and forest managers in assessing current forest conditions and desired future conditions.
- **E5:** Develop a better understanding of how different fire types and different forest fuels affect black, brown, super-aggregate, and GHG carbon emissions.

Goal 4. Raise funds, through collaborative grant requests and alternative funding streams, for projects that are identified as high priority in the Yuba River watershed.

Goal 4 will address Action A, B, D, E, and Recommendation A, B, C, and D by raising funds that will be spent on forest health implementation and forest product industry work. Watershed Coordinators will spearhead South Yuba River Citizens League

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funding requests for large priority project implementation and the grouping of smaller projects to reduce small landowners' financial barriers to land management. The Watershed Coordinators and the Yuba Watershed Forest Collaborative will work together to write grant proposals and investigate alternative funding streams (such as through Blue Forest Conservation) to increase the scale of work, provide monitoring funds to evaluate project effectiveness and co-benefits (carbon, water storage, etc.) and attract researchers to work in the Yuba watershed to evaluate forest health.

Specifically, Goal 4 will address:

- **A1:** By 2020, increase the rate of forest restoration and fuels treatment, including prescribed fire, from the recent average of 17,500 acre/years to 35,000 acres/year.
- **A2:** By 2030, further increase the rate of forest restoration and fuels treatment to 60,000 acres/year.
- **A5:** By 2025, expand areas of high priority habitat by 5 percent above current levels, as provided in the State Wildlife Action Plan
- **A6:** Promote increasing the acreage of forest carbon projects and remove barriers to their implementation.
- **A7:** Increase rate of treatment to approximately 500,000 acres per year on non-federal lands to make an ecologically meaningful difference at a landscape scale.
- **A8:** By 2030, lead efforts to restore 10,000 acres of mountain meadow habitat in key locations.
- **B1:** By 2020, on lands managed by the USDA Forest Service, increase health and resiliency treatments from the current approximately 250,000 acres/year to 500,000 acres/year, and on BLM managed lands increase from approximately 9,000 acres/year to 10-15,000 acres/year.
- **B2:** By 2030, eliminate the current USDA Forest Service Reforestation Need balance and sustain future treatments at levels where annual additions are matched by treatments.
- **B3:** By 2030, increase forest resilience through treatments including fuels reduction, managed fire, prescribed fire, noxious weed removal, and road improvements to reduce sedimentation, resulting in resource benefits to approximately 9 million acres on National Forest System Lands in California.
- **B4:** By 2030, bring resource benefits to approximately 1.2 million acres of forests and woodlands on Bureau of Land Management lands in California through national landscape conservation networks, landscape mitigation strategies, native seed rehabilitation and restoration, and vegetation treatments including fuels reduction, managed and prescribed fire, and weeds management. Forestry and fuel reduction targets will expand from a current average of 9,000 acres/year to 20,000 acres/year.
- **B5:** By 2030, the USDA Forest Service will restore 10,000 acres of mountain meadow habitat and target reliable funding for such activities on National Forest System lands in California.
- **D1:** Expand wood products manufacturing in California, and take actions to support market growth scaled to the longer-term projections of forest productivity and resource management needs.
- **D2:** Increase the total volume of carbon stored through greater use of durable wood products from California forests, particularly in buildings.
- **D3:** Continue public investment to build out the 50 megawatt (MW) of small scale, wood-fired bioenergy facilities mandated through SB 1122 (Rubio, 2012)
- **D4:** Maintain existing bioenergy capacity at a level necessary to utilize materials removed as part of forest restoration. In the short term, it is critical to meet the public safety and tree disposal needs stemming from widespread tree mortality in the central and southern Sierra Nevada
- **D6:** Develop and support the generation of and markets for soil amendments from forest biomass for agricultural, rangeland, municipal, and residential use, to advance the goals of the Healthy Soils program and other efforts.
- **E1:** Centralize and standardize tracking of implementation activities to meet Forest Carbon Plan targets to account for all efforts; quantify carbon sequestration and GHG and black carbon emissions outcomes;

identify areas of underperformance; and effectively work toward the ultimate performance objective of maintaining California's forests as net sinks of carbon. Develop a centralized database or other information management system to track implementation.

- **E3:** Standardize methods, data, and modeling across state agencies (and Federal agencies, where possible) to facilitate planning for forest health and resilience management activities across ownership boundaries.
- **E4:** Develop and disseminate tools to assist landowners and local and regional land use planners and forest managers in assessing current forest conditions and desired future conditions.
- **E5:** Develop a better understanding of how different fire types and different forest fuels affect black, brown, super-aggregate, and GHG carbon emissions.

b. Identify and discuss the tasks that will be implemented to support each goal. Each goal must have one or more tasks. A task is a significant step that must be completed to achieve a goal. Tasks must focus on outcomes rather than the methods used. For example, a task related to the goal above may be: Conduct thinning and removal of dead and dying trees in XYZ Watershed. Tasks must be directly related to the required and eligible activities outlined in the Guidelines.

Goal 1. Improve forest health and forest resiliency in the Yuba River watershed.

Task 1. Identify and implement forest health projects throughout the Yuba River watershed

The Watershed Coordinators will lead SYRCL staff, TNF, CCP, YWA and other stakeholders to identify and prescribe forest health projects based on outcomes of the Upper Yuba River HRV Model across the upper Yuba River watershed, on the ground surveys, project location characteristics, target forest condition, fire risk, and important habitat type identification. All the work within Task 1 will be in support of increasing the pace and scale of forest health treatments as underlined in the Forest Carbon Plan. This task will include working with partners and regulatory agencies to streamline the permitting and environmental compliance (NEPA/CEQA) processes required to implement multiple forest health projects. Under this task, the Watershed Coordinators will implement forest health projects through project management and grant administration, hiring contractors, establishing treatment schedules and timeframes, and working with partners to ensure that forest health and carbon sequestration goals are met. While both Watershed Coordinators will work together on this task, one of the coordinators will take the lead on this task. The Watershed Coordinators, SYRCL staff, and TNF will work to attract researchers to collect data and monitor whether forest health projects are providing benefits to water supply, carbon sequestration, habitat, and other co-benefits. Successful implementation of this task and all related subtasks will be contingent on funding availability.

Goal 2. Implement an economically viable and environmentally sustainable forest products industry in the Yuba River watershed.

Task 2: Implement and promote a sustainable forest products industry in the Yuba River watershed

The Watershed Coordinators will work closely with CCP staff, YWA, TNF, SYRCL, and other stakeholders to complete critical developmental milestones such as execution of a power off-take agreement, completion of the plant's engineering and design, establishment of the facility's ownership and business models, completion of

project finance, securing of construction and operations permits, and selection of an Engineering Procurement and Construction contractor. All the work within Task 2 will advance the goals and actions in the Forest Carbon Plan to implement a biomass facility and a sustainable forest product industry. While both Watershed Coordinators will work together on this task, one of the coordinators will take the lead on this task. The Watershed Coordinators will work closely with CCP staff and stakeholders to review existing assessments and studies that explore the feasibility of wood products business opportunities and markets to begin to identify business opportunities suited to the FBBC. The Watershed Coordinators will work with CCP and TNF to evaluate and execute a fuel procurement contract for biomass off federal lands.

Goal 3. Engage diverse stakeholders throughout the Yuba River watershed to promote and implement Forest Health and Forest Product projects.

Task 3: Engage diverse stakeholders throughout the Yuba River watershed.

The Watershed Coordinators will work closely with SYRCL, CCP, TNF, YWA, and others to outreach to and recruit stakeholders, coordinate and facilitate stakeholder meetings, and push forward agenda items and meeting outcomes throughout the duration of this project. This task will require a lot of communication, creating space for people to share projects, developing relationships, and will be the key component of the long-term sustainability of a forest health program in the Yuba River watershed. While both Watershed Coordinators will work together on this task, one of the coordinators will take the lead on this task. Both Watershed Coordinators will attend DOC Watershed Coordinator trainings and meetings in Sacramento under this task and will work with neighboring watersheds and other DOC Watershed Coordinators to leverage information.

Goal 4. Raise funds, through collaborative grant requests and alternative funding streams, for projects that are identified as high priority in the Yuba River watershed.

Task 4: Raise funds to support high priority project implementation.

The Watershed Coordinators will work closely with SYRCL, CCP, TNF, and YWA to raise funds for forest health projects in the North Yuba (Trapper, Brandy), the FBBC, and other forest health projects that are determined to be priority from Tasks 1 and 3. Both Watershed Coordinators will work together to fundraise for project planning and implementation funds for these projects. They are anticipated to write grants and have conversations with groups like Blue Forest Conservation to determine if alternative funding streams can be leveraged for on the ground work in the Yuba River watershed.

- c. For each task, discuss the sub-tasks that will be completed. Describe why this approach was chosen to address issue(s) within the watershed. Describe the connection between sub-tasks and tasks and how they will contribute to the completion of each goal.*

Task 1. Identify and implement forest health projects throughout the Yuba River watershed

- *Subtask 1.1 Identify and prescribe forest health treatments for forest health projects that are still in the planning phase.*

The Watershed Coordinators will work with the SYRCL, TNF, CCP, and YWA and stakeholder groups to utilize existing information from the TNF's Upper Yuba River HRV Model, CalFire fire severity maps, on the ground surveys, and other information to identify priority forest health projects and then

apply forest treatments to achieve forest health goals. This subtask will result in specific project area plans that will include forest health prescriptions that are ready to implement. This approach is important to identify specific and action-based projects that can be implemented on the ground. This subtask will be one of the first steps to accomplish Task 1 and Goal 1 and will be followed up by Subtask 1.2 and 1.3. This subtask will rely on input from work completed under Task 3 and funds that are raised under Task 4. In addition, lead project organizations for each project will be identified at this stage to clarify who is responsible for fiscal management and project management.

- *Subtask 1.2 Complete permitting and environmental compliance for all prioritized projects.*

The Watershed Coordinators will work with the TNF and SYRCL to complete NEPA, CEQA (if necessary), and any permits that are required to implement project plans completed as part of Subtask 1.1. This work will follow plans created as part of Subtask 1.1 and will be required to move on to Subtask 1.3. This task will dependent on funding from Task 4 and will likely pull in expertise from the work conducted by the stakeholder group in Task 3. SYRCL may hire consultants with expertise in permitting and NEPA or work directly with TNF NEPA Coordinators and specialists to complete all environmental documents.

- *Subtask 1.3 Implement forest health projects, including the removal of dead and dying trees, thinning treatments, and prescribed burning treatments across the Yuba River watershed.*

The Watershed Coordinators will work with the landowners, lead project organizations, and any other stakeholders to assist with project management, hiring of contractors, and training of contractors, ensuring that project plans are properly implemented and that project goals are met. We expect to hire local contractors to complete this work, which is an approach that will allow for the long-term success of forest health projects in the Yuba River watershed. This work will be a direct result of the completion of subtasks 1.1 and 1.2 and will be supported by funding raised from Task 4 and through community support generated from Task 3. This subtask will result in thousands of acres treated over the life of this proposal.

- *Subtask 1.4 Conduct monitoring and attract researchers to investigate how forest health is improved by the implementation of forest health projects.*

The Watershed Coordinators will work with SYRCL, TNF, CCP, YWA, and other stakeholders to conduct project monitoring and attract researchers to quantify whether forest health has improved due to treatment. This will include monitoring to determine if forest health treatment prescriptions were implemented correctly. In addition, co-benefit monitoring will be encouraged by this collaboration and may include supporting monitoring or research on the following topics: water supply, water quality, groundwater recharge, stream flow, wildlife habitat quality, carbon sequestration, carbon emissions, changes in biodiversity, and others. This approach is key to understanding how forest health projects implemented under Subtask 1.3 and how planning efforts undertaken within Subtask 1.1 are benefiting the forest. This work will be funded through work completed under Task 4.

Task 2: Implement and promote a sustainable forest products industry in the Yuba River watershed

- *Subtask 2.1 Advance late stage project development and construction of the 3MW Camptonville biomass to energy facility leading to commercial operations.*

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The Watershed Coordinators will work closely with CCP staff, YWA, and stakeholders to support completion of critical developmental milestones such as execution of a power off-take agreement, completion of the plant's engineering and design, establishment of the facility's ownership and business models, completion of project finance, securing of construction and operations permits, and selection of an Engineering Procurement and Construction contractor. This work will be supported by stakeholders identified in Task 3 and will benefit from fundraising efforts completed under Task 4.

- *Subtask 2.2 Identify, outreach to, and potentially contract with existing or new biochar businesses, value-added wood products manufacturing businesses or thermal hosts to co-locate and improve project financial feasibility and help offset the costs of forest management activities.*

The Watershed Coordinators will work closely with CCP staff and stakeholders to review existing assessments and studies that explore the feasibility of wood products business opportunities and markets to begin to identify business opportunities suited to the FBBC. The Watershed Coordinators will work with CCP staff and stakeholders, including the Yuba Sutter Economic Development Corporation, the Pacific Combine Heat and Power Technical Assistance Partnership, the Governor's Office of Planning and Research and Rural County Representatives of California, to leverage existing business relationships and further identify existing or potential entrepreneurial businesses and evaluate their interest in co-location. This could potentially include a co-located business developed by CCP or its subsidiary corporation, such as a biochar or composting manufacturing facility. Should the Watershed Coordinators and CCP's efforts be successful, the Watershed Coordinator will work with CCP and its project team members to support contracting with business partners. Work under this subtask will be influenced by the project implementation schedule for the 3MW Camptonville biomass to energy facility identified in Subtask 2.1.

- *Subtask 2.3. Evaluate potential alternatives for a long-term fuel supply agreement for biomass originating from National Forest lands.*

The FBBC bioenergy project has a significant need for guaranteed long-term fuel supply contracts which are required to complete project finance. CCP has begun working with the regional private timber industry to discuss fuel procurement and expects to negotiate and execute fuel contracts for biomass originating from private lands in mid-2019 under the organization's existing grants. However, there remains a need to procure fuel originating from National Forest lands, keeping in line with CCP's and the Camptonville community's goals and objectives. The Watershed Coordinators will review existing USFS fuel supply agreements and contracts, as well as evaluate their potential applicability to the FBBC project. The Watershed Coordinators and CCP will present this information to the TNF and discuss the most suitable option for a biomass supply contract. Possible alternatives include a Master Stewardship Agreement (MSA) with the USFS or TNF, or Supplemental Project Agreement's (SPA's) with an entity that has an existing MSA with the USFS such as the National Forest Foundation or an entity that is working to develop an MSA with the USFS such as the SNC. Work under this subtask will be influenced by the project implementation schedule identified in Subtask 2.1.

- *Subtask 2.4 Negotiate and execute a long-term fuel supply agreement for biomass originating from National Forest lands, preferably a Master Stewardship Agreement*

Upon determining a mutually agreeable biomass supply contract for fuel originating from National Forest lands, the Watershed Coordinator, together with CCP, will work with the TNF and other entities, as necessary, to draft, negotiate and execute a fuel supply agreement for a target term of 10 years. This sub-task will be given a high level of attention by the Watershed Coordinator and CCP under this DOC grant because fuel supply contracts are required to complete project finance and begin plant construction. Work under this subtask will be influenced by the project implementation schedule identified in subtasks 2.1 and 2.3

Task 3: Engage diverse stakeholders throughout the Yuba River watershed

- *Subtask 3.1 Conduct outreach to local governments, agencies, non-profits, private industry, private land owners, and other stakeholders.*

The Watershed Coordinators will work with the YWFC team and all interested stakeholders to generate interest in and increase the capacity to work on forest health and the forest product industry within the Yuba River watershed. This subtask will include conducting interviews with agencies and organizations already working on forest health projects in the watershed to create a stakeholder outreach list, reaching out to those stakeholders, and continually revisiting the list to update, add, or remove stakeholders based on their stated interest in participating in a stakeholder group. Outreach will be conducted by phone, email, social media, in person meetings, presentations to local groups and organizations like the Yuba Bear Watershed Council, local Rotaries, and others. Outreach is an essential first and ongoing step in the Yuba Watershed Forest Collaborative process. The Watershed Coordinators will continually work to engage with existing and new partners that work on forest health and in the forest product industry. This work will directly influence outcomes of subtasks 1.1, 1.3, and 2.1. This subtask will also include attending DOC Watershed Coordinator meetings and developing relationships with other DOC Watershed Coordinators.

- *Subtask 3.2 Convene and facilitate quarterly stakeholder group meetings pulling together and prioritizing project concepts, providing technical support, and identifying other needs within the Yuba River watershed.*

The Watershed Coordinators will convene up to 8 quarterly stakeholder meetings to prioritize project concepts, identify regional technical strengths and weaknesses, and to develop priority projects, regions, or forest health targets. The stakeholder group will work together to bring forward project concepts and prioritize how to package individual smaller projects together to be more competitive for larger pots of funding. One of the two Watershed Coordinators will be the lead facilitator at stakeholder meetings and will work with stakeholders to disseminate action items and ensure that actions items are completed in between meetings. This group is the key to creating a sustainable forest health and forest product program within the Yuba watershed for the next several decades and beyond. This work will be the result of work conducted under Subtask 3.1 and will directly influence outcomes of subtasks 1.1, 1.3, and 2.1.

- *Subtask 3.3 Convene and facilitate additional meetings with sub-groups of the stakeholder group to focus on specific geographic regions (Yuba County, Nevada County, North Yuba River, etc.) or specific topic areas (treatment types, forest products, etc.).*

The Watershed Coordinators will work together to coordinate additional stakeholder meetings that are focused on specific regions, projects, or technical areas. These working groups are intended to be comprised of stakeholders that are actively engaged in planning specific projects or adding technical capacity to the overall effort. These meetings will occur on an as needed or as scheduled basis. We anticipate that the watershed coordinators can track and help facilitate these meetings over the grant term. These groups would report back to the larger stakeholder group and the YRFC on project progress. This work will be the result of work conducted under Subtask 3.1 and 3.2 and will directly influence outcomes of subtasks 1.1, 1.3, and 2.1.

Task 4: Raise funds to support high priority project implementation.

- *Subtask 4.1 Identify funding sources and apply for funding to implement forest health projects.*

The Watershed Coordinators will work directly with SYRCL, TNF, YWA, and CCP to identify funding sources (e.g. CalFire, DOC, CADFW, SNC, CEC, Blue Forest Conservation, etc.) to plan and implement forest health work in support of the Forest Carbon Plan. The Watershed Coordinators will pull expertise from each organization and draw from existing project plans, like for the Trapper and Brandy project areas, to complete grant requests. In addition, the Watershed Coordinators will complete grant proposals for forest health projects that are determined to be a priority based on the input of stakeholders. This work is key to implementing plans and forest health work in Task 1. Products that are created from Task 1 will be used to write grant requests under this subtask.

- *Subtask 4.2 Identify funding sources and apply for funding to implement of the Forest Biomass Business Center, including the 3MW bioenergy facility.*

The Watershed Coordinators will work directly with CCP, TNF, YWA, and SYRCL to identify funding sources to complete plans and implement the FBBC. This work will be influenced by work undertaken as part of Task 2 and products that are created from Task 2 will be used to write grant requests.

a. Performance Measures:

<i>Task</i>	<i>Performance Measures</i>	<i>Method of Measurement</i>
Task 1: Identify and implement forest health projects throughout the Yuba River watershed		
Subtask 1.1 Identify and prescribe forest health treatments for forest health projects that are still in the planning phase.	<p><i>Number of high priority projects identified</i></p> <p><i>Number of forest health project plans completed</i></p> <p><i>Types of prescriptions prescribed</i></p>	<p>This metric will be measured by counting the number of projects that were identified by project partners and stakeholders.</p> <p>This metric will be measured base on the number of forest health project plans completed because of this project.</p> <p>This metric will be measured based on how many different types of treatments were prescribed in forest health project plans.</p>
Subtask 1.2 Complete permitting and environmental compliance for all prioritized projects.	<i>Number of projects fully permitted and compliant with environmental regulations</i>	This metric will be measured by counting the number of projects that are “shovel ready.”
Subtask 1.3 Implement forest health projects through treatments, including the removal of dead and dying trees, thinning treatments, and prescribed burning treatments across the Yuba River watershed.	<p><i>Number of acres of at-risk forested lands restored and risk of wildfire impacts reduced</i></p> <p><i>Number acres treated to reduce hazardous loads</i></p> <p><i>Acres of high value habitat restored</i></p>	<p>This metric will be measured by assessing the number of acres treated and by re-running models based on updated vegetation data.</p> <p>This metric will be measured by assessing how many acres were treated where fuel loads were reduced.</p> <p>This metric will be measured by assessing how many acres of high value habitat were restored or protected.</p>

	<p><i>Number of new shaded fuel breaks created</i></p> <p><i>Number of communities that have reduced risk of wildland fire</i></p> <p><i>Potential carbon sequestered through implementation of forest health projects (Use ARB Greenhouse Gas Calculator Tool)</i></p> <p><i>% of identified high priority projects completed</i></p>	<p>This metric will be measured by the linear feet of shaded fuel breaks</p> <p>Number of people protected</p> <p>This metric will be measured by quantifying the tons of carbon sequestered</p> <p>This metric will be measured by the percentage of priority projects that are completed.</p>
Subtask 1.4 Conduct monitoring and attract researchers to investigate how forest health is improved by the implementation of forest health projects.	<p><i>Number of researchers recruited, and number of studies produced</i></p> <p><i># monitoring studies completed</i></p>	These metrics will be measured by the number of studies that have been started or completed.
Task 2: Implement and promote a sustainable forest products industry in the Yuba River watershed		
Subtask 2.1: Advance late stage project development and construction of the 3MW Camptonville biomass to energy facility leading to commercial operations.	<p><i>Number of new manufacturing activities housed at the FBBC</i></p> <p><i>Number and types of wood products produced at FBBC</i></p>	<p>This metric will be measured by the number of new activities that are occurring at the FBBC</p> <p>This metric will be measured by the different types of products and the total amount sold that the FBBC produces.</p>
Subtask 2.2: Identify, outreach to, and potentially contract with existing or new biochar businesses, value-added wood products manufacturing businesses or thermal hosts to co-locate and improve project financial	<p><i>Number of long-term fuels contracts signed</i></p> <p><i>Number of types of businesses</i></p>	<p>This metric will be measured by the number of contracts signed.</p> <p>This metric will be measured by the number of new business owners, the number of new</p>

feasibility and help offset the costs of forest management activities.		employees, and the amount of revenue generated.
Subtask 2.3: Evaluate potential alternatives for a long-term fuel supply agreement for biomass originating from National Forest lands.	<i>Number of alternatives identified</i>	This metric will be measured by the number and type of alternatives evaluated.
Subtask 2.4 Negotiate and execute a long-term fuel supply agreement for biomass originating from National Forest lands, preferably a Master Stewardship Agreement.	<i>Final contract</i>	This metric will be measured by the signing of a final contract.
Task 3: Engage diverse stakeholders throughout the Yuba River watershed		
Subtask 3.1 Conduct outreach to local governments, agencies, non-profits, private industry, private land owners, and other stakeholders. Participate in regional planning meetings.	<i>Number and type of stakeholders engaged in process</i> <i>% of participants actively engaged in forest health projects</i>	This metric will be measured by the number of stakeholders that participate and identification of where they live in the watershed. This metric will be measured by estimating the number of new projects started.
Subtask 3.2 Convene and facilitate quarterly stakeholder group meetings pulling together and prioritizing project concepts, providing technical support, and identifying other needs within the Yuba River watershed.	<i>Number and type of stakeholders attending</i> <i>% of participants actively engaged in forest health projects</i>	This metric will be measured by the number of meetings and number of projects that are prioritized.
Task 3.3 Convene and facilitate additional meetings with sub-groups of the stakeholder group to focus on specific geographic regions (Yuba County, Nevada County, North Yuba	<i>Number of sub-group meetings held</i>	This metric will be measured by the number of new project areas identified and the number of meetings held.

River, etc.) or specific topic areas (treatment types, forest products, etc.).		
Task 4: Raise funds to support high priority project implementation		
Task 4.1 Identify funding sources and apply for funding to implement forest health projects.	<i>Number of funding opportunities identified</i>	This metric will be measured by creating and disseminating a list of funding agencies and opportunities.
Task 4.2 Identify funding sources and apply for funding to implement of the Forest Biomass Business Center, including the 3MW bioenergy facility.	<i>% of identified funding opportunities applied for</i> <i>% of applications awarded</i>	These metrics will be measured by number of applications submitted and total dollars awarded.

Collaboration (25 Points)

- III. Describe any existing partnerships that will be leveraged to meet the goals identified above. Identify all partners and describe their contribution to the proposal, including cash or in-kind match, and the history of the partnership. Provide letters of support from partners that clearly outline the partner's role in the proposal and any direct support they will provide the watershed coordinator. Letters of support should include:***

Overview of Partnerships

Camptonville Community Partnership (CCP)

SYRCL and CCP began working together in 2018 to forge an important link between forest health work and the forest product industry. CCP is based out of Camptonville and its mission and vision is to see rural people working together for a safe, sustainable, and healthy community. CCP works primarily in the Middle and North Yuba watersheds at lower elevations. SYRCL and CCP are both community-based non-profit organizations that have been working within the same watershed, with similar partners, have similar goals, but have different expertise. A partnership between these two organizations will ensure that an all lands approach at the watershed scale is implemented successfully.

Tahoe National Forest (TNF)

Over 50% of the Yuba watershed is within the TNF, making them a key landowner for headwaters and mid-elevation forest and watershed management work. The TNF will be contributing matching funds of staff time to develop project plans, provide data analysis support through HRV modeling, conduct biological and archeological surveys and support to contractors, support the NEPA process, and provide on the ground staff for project implementation.

SYRCL and the TNF have been working together across the Yuba watershed on forest health, water management, and restoration projects for nearly a decade. The partnership between SYRCL and the TNF has resulted in over \$5 million in on the ground project funds raised from federal, state, and foundation grants secured by SYRCL in the last five years. SYRCL's work on the TNF has ranged from 90 acres of meadows restored, 700 acres of meadow restoration projects in the planning phase, 50 acres of invasive species removed, eight reservoirs monitored for aquatic invasive species, 10 sites monitored monthly for water quality, five abandoned mines assessed for mercury and sediment pollution, among others. The US Forest Service Pacific Northwest Region 5 awarded SYRCL "Partner of the Year" in 2017 for this successful collaboration. SYRCL awarded the Tahoe National Forest with a "SYRCL Partner of the Year" award in 2014.

CCP and the TNF have worked successfully since inception of the Forest Biomass Business Center project in 2013 to address forest health and biomass utilization. A significant share of the bioenergy facility's feedstock service area (FSA) includes TNF lands. Given this, CCP has collaborated with the TNF Yuba River Ranger District and Supervisor's Office staff, including working with the District Ranger and District Vegetation Management Specialist, who has served on the bioenergy project's Steering Committee for the past four years, to discuss key project development milestones, biomass procurement and long-range TNF planning efforts. In 2016, the TNF wrote a letter of feedstock intent as part of the Camptonville bioenergy project's CEC EPIC grant application expressing its plans to supply up to 20,000 bone dry tons (BDT) of biomass to the bioenergy facility during the project's 12-month operating window under the grant term. The DOC Watershed Coordinator grant will support continuing this work through execution of a long-term fuel supply contract, preferably a Master

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Stewardship Agreement. The CCP has been awarded USFS Wood Innovations grants (Award Nos. 15-DG-1105-2021-216 and 17-DG-11052021-228) for a total of \$524,949. These grants have funded the bioenergy project's site plan, Conditional Use Permit and CEQA compliance, utility interconnection study, and late stage project development. CCP has leveraged the USFS Federal financial support and TNF technical support to advance the bioenergy project helping it to become one of the leading BioMAT forest bioenergy projects in the State. In addition to working with the TNF, CCP has collaborated with the Plumas National Forest (PNF) Feather River Ranger District since project inception. The PNF strongly supports the bioenergy project and has stated its intent to supply 15,000 to 20,000 BDT per year of small woody material.

Yuba Water Agency (YWA) and Yuba County

YWA's board voted to provide \$235,000 in matching funds to the DOC Watershed Coordinator Grant Proposal and will provide staff time to develop priority projects, attend stakeholder meetings, and provide forestry expertise. YWA's board is made up of the Yuba County Supervisors plus two additional members. YWA owns and operates the Yuba River Development Project which stores water at New Bullards Bar Reservoir in the North Yuba watershed, Our House and Log Cabin reservoirs in the Middle Yuba watershed and creates hydropower at New Colgate Powerhouse and Narrows 2 Powerhouse below Englebright Dam. YWA has a specific interest in protecting forest health above their water supply and flood protection reservoirs, which includes the entire Upper Yuba watershed.

SYRCL and YWA have worked together on collaborative river management in the Lower Yuba River since 2008, focusing on the health of the fishery and restoration of floodplain and river habitat. YWA cooperatively manages water releases to the Lower Yuba River through a collaborative water agreement called the Yuba River Accord. SYRCL and YWA successfully worked together to execute the Yuba River Accord in 2009, an unprecedented agreement that secured water transfers and healthier flow conditions for fish in the Lower Yuba River. SYRCL and YWA sit on the Lower Yuba River Management Team and meet monthly to discuss river flows, fish populations, and scientific studies that advance our understanding of and restoration projects within the Lower Yuba River. SYRCL and YWA also worked together to implement the Feather River Setback Levee Project, which resulted in flood protection for Yuba County residents. In 2019, SYRCL and YWA will partner to send over 1,000 4th grade students on a watershed excursion to view salmon spawning in the Lower Yuba River.

YWA has been a key stakeholder in CCP's Forest Biomass Business Center since project inception in 2013, recognizing the project's potential to provide a means of disposal for excess forest biomass in the region, reduce wildfire hazard, boost the local economy, and protect and improve water quality, quantity and reliability for the YWA's hydropower generation facilities and downstream water users including eight local water districts and environmental uses. CCP and its bioenergy project developer are currently working to complete 100 percent of project finance, to which YWA has approved a non-binding term sheet for up to \$7M in either debt or equity finance, subject to Board approval. In addition to this significant financial commitment, YWA has granted CCP a total of \$276,500 through five separate grants which has been used to address unexpected technical, permitting, grid interconnection, policy, and legal hurdles and overall capacity building for the project.

The Sierra Nevada Conservancy (SNC)

The SNC is a state agency that works to support environmental, economic, and social well-being of the Sierra Nevada Region. The SNC will contribute \$200,000 in project matching funds that are restricted to work to coordinate forest health implementation projects in the North Yuba watershed. The SNC will provide ongoing assistance with grant research and writing, co-located business development, technical support, and peer networking. SYRCL and CCP have both been grant recipients from the SNC in the past to move forward their work in forest health and the forest product industry, respectively. In 2013, SYRCL was awarded \$49,265 by the SNC in 2013 to restore aspen stands in Loney Meadow and complete an interpretive trail around the meadow. SYRCL leveraged that funding and brought in over \$700,000 to complete a full hydrologic restoration of Loney Meadow and study carbon sequestration and greenhouse gas exchange. CCP has been awarded two SNC grants including a \$68,590 grant for the bioenergy project's site-specific feasibility study and a 2018 Timber Regulation Forest Restoration Fund grant of \$250,000 for the project's engineering and design. In addition to its financial support, SNC has provided \$5,000 of in-kind technical assistance to CCP as part of its 2015 Wood Innovations grant and has been actively engaged in the project development process.

IV. Describe any existing or planned collaborations with other organizations operating in the watershed. What efforts are currently under way to encourage cooperation between organizations?

There are many regional, watershed wide, and local collaborative efforts underway to plan and implement forest treatments on private and other federal and state-owned public lands. They are significant in acreage, represent key strategies to managing forests in a changing climate and are consistent with the Forest Carbon Plan goals including finding innovative solutions for biomass utilization and wood product manufacturing, maximizing forest health within the context of ongoing sustainable commercial timber harvest operations, and improving forest health and resilience on forests across all land ownership.

SYRCL, TNF, Blue Forest Conservation, YWA, The Nature Conservancy, National Forest Foundation, SNC, Governor's office of Planning and Research are engaged in planning forest health projects that will cover the entire 190,000 or so acres of the North Yuba watershed. This work has been prioritized by the TNF due to its classification as high probability for large, high severity fires within high value forest habitat that includes old growth forest with important wildlife habitat, including most of the spotted owl territories within the TNF. This work was catalyzed in 2018 with the funding of the Forest Resiliency Bond that invested nearly \$5m into a forest health implementation project called "The Yuba Project." The project partners will continue to meet and plan to incorporate the Watershed Coordinators to assist with planning and implementing new forest health projects within the North Yuba watershed. The SNC has provided \$200,000 of match for this effort (see section above).

Currently, CCP is actively engaged with a diversity of project partners as part of the FBBC project development including the project site landowner, the Yuba Watershed Protection and Fire Safe Council, local, state and federal natural resource agencies including the SNC, TNF and PNF, elected government officials, tribal representatives, regional environmental organizations including SYRCL, industrial timberland owners and operators, peer forest bioenergy projects, the National Forest Foundation, Blue Forest Conservation, the University of California Cooperative Extension, the Yuba Sutter Economic Development Corporation, Yuba County, Rural County Representatives of California, and the Governor's Office of Planning and Research, to name a few. The FBBC bioenergy facility is in line with the State's water and bioenergy planning priorities

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including the Human Right to Water, California Water Action Plan and 2016 California Water Plan Update, the 2012 Bioenergy Action Plan, and Safeguarding California. The facility also supports the Sierra Nevada Watershed Improvement Program, the SNC's Strategic Plan, the Yuba Foothills Community Wildfire Protection Plan, and Yuba Water Agency's strategic planning goals.

Nevada County will vote on a Letter of Support for this project at their February 26th board meeting and invited SYRCL to present on this proposed project at a February 7th meeting of the Nevada County Community Wildlife Prevention Stakeholders Meeting. This stakeholder group is focused on community wildlife prevention and preparedness, is headed up by Nevada County and is made up of law enforcement, Cal Fire, and local nonprofits.

The Yuba Watershed Protection and Fire Safe Council (YWPFSC) functions to bring together a diversity of stakeholders within the north and middle Yuba River watersheds to identify, develop, fundraise for, and implement forest health projects. CCP has served key roles as a participant in and the fiscal agent for the YWPFSC since 2014 and is expected to continue to do so for the foreseeable future. Within the past year, CCP has outreached to the YWPFSC and to Yuba Water Agency to cite the growing need for more comprehensive, landscape scale forest planning and implementation. Forest health issues have attained a critical mass in the region, and CCP and its partners see that now is the time to marry local planning efforts with those of others in the region including SYRCL, the TNF, YWA, and the SNC through establishment of a diverse, all-lands forest collaborative encompassing the Yuba River watershed.

The Nevada City Rancheria plans to attend stakeholder meetings and will provide traditional ecological knowledge about forestry practices.

Butte County RCD will be submitting a DOC Watershed Coordinator grant and the YWFC will coordinate any bordering or overlapping activities with their Watershed Coordinator(s).

Other stakeholders who have expressed an interest in participating as a stakeholder in the Yuba watershed: The Sierra Fund, Sierra Streams Institute, and the Yuba Watershed Institute.

Consistency with additional planning efforts (15 Points)

V. Describe how the proposal will complement other planning efforts in the watershed. How does the proposal support published watershed goals identified by the State or other entities?

The focus of this grant request is to work with partners and watershed stakeholders to implement large scale forest health projects and create a sustainable biomass facility and forest product industry. This will require a significant amount of collaboration with state and local government entities, private landowners and other key stakeholders, many of which have already initiated forest health projects on lands that they manage. In addition, the project team will work towards creating and encouraging a forest product industry that will improve implementation success and reduce carbon sources through the processing of material that is removed from the forest rather than being burned onsite. This proposal will work in direct coordination with planning efforts that are ongoing within the Yuba River watershed with special consideration for planning efforts that are ongoing within the Tahoe National Forest, Nevada, Sierra, and Yuba counties, and any plans or work that is ongoing by other landowners or agencies (such as the BLM, State Parks, NID, Bear Yuba Land Trust, etc.).

SYRCL will work with the Tahoe National Forest to design, implement, and monitor large scale forest health projects across the upper Yuba River watershed. The Tahoe National Forest is in the process of planning forest health treatments on more than 190,000 acres across forest land in the North Yuba watershed alone and plans to work with private landowners to assess and prescribe treatments for an additional 50,000 acres. These projects, the Yuba, Trapper, and Brandy projects are in various stages of planning, environmental compliance, or implementation. We will work to replicate this landscape scale model across the middle and south Yuba watersheds and leverage existing projects and ongoing planning efforts. This work will be consistent with the Tahoe National Forest, Forest Plan and the Sierra Nevada Forest Plan documents in that it will improve forest health and reduce the risk of fire. In addition, these documents provide importance guidance for dealing with special status species and habitats, and how to reduce impacts and improve habitat for California Spotted Owls.

At a county level, SYRCL and CCP will coordinate efforts to ensure that this project is in alignment with ongoing efforts by the individual counties and CalFire. This project will work to be in alignment with The Community Wildlife Protection Plans (CWPP) for Nevada, Yuba, and Sierra counties, efforts and plans that the Yuba, Nevada, and Sierra county Fire Safe Councils have undertaken, and efforts that CalFire has begun within the Yuba watershed at the county level. This includes working with CalFire to understand the state responsibility areas within each of the counties and how the Yuba Watershed Forest Collaborate can advance or support work that has already begun in this area. The Watershed Coordinators will work with Nevada County to add to or leverage work that occurs as part of the Nevada County Wildlife Prevention and Preparedness Stakeholders Working Group, which meets quarterly.

The proposed work is in support of the ongoing plans and collaborations in Yuba county including work that is planned and undertaken by CCP, through the Yuba Foothills Community Wildfire Protection Plan and Yuba Water Agency's strategic planning goals. CCP actively collaborates with its diverse group of partners in the watershed including the project site landowner, the Yuba Watershed Protection and Fire Safe Council, local, state and federal natural resource agencies including the SNC, TNF and PNF, elected government officials, tribal representatives, regional environmental organizations including SYRCL, industrial timberland owners and operators, the National Forest Foundation, Blue Forest Conservation, the University of California Cooperative Extension, the Yuba Sutter Economic Development Corporation, and Yuba County.

Within the watershed there are two the Integrated Regional Water Management (IRWM) Groups: the Cosumnes American Bear Yuba (CABY) and another focused on Yuba County. Both have forest management goals in their IRWM plans but neither have ever received funding to support forest health projects, beyond meadow restoration (see SYRCL capacity section below). The Watershed Coordinators will work in alignment with both IRWMG's to ensure that they understand what work is being accomplished and will be invited to join the stakeholder groups.

Planning Efforts at the State or other level

On a state level, this project address forest health, forest resiliency, wildlife habitat, water supply and quantity, fire resiliency, and many other objectives that will advance goals, objectives, and actions within the Forest Carbon Plan, the State Wildlife Action Plan, the California Climate Plan, the State's Human Right to Water, California Water Action Plan and the 2016 California Water Plan Update, the 2012 Bioenergy Action Plan, Safeguarding California, Sierra Nevada Watershed Improvement Program, the CalFire 2018 Strategic Fire Plan and SNC's Strategic Plan. These plans have shed light on some of the California's largest priorities and have led the way to producing meaningful and actionable programs that will provide benefits to all of California. This project will contribute to each of these plans by restoring acres of forested lands and through the implementation of a biomass facility and a forest product industry in the Yuba River watershed.

Co-benefits (10 Points)

- VI. Provide a qualitative description of the co-benefits anticipated to result from successful completion of the proposed tasks, as well as any quantitative information to support your claims (e.g., support biodiversity, promote a clean water supply, support local economies, provide recreational and educational opportunities, protect spiritual and cultural resources.***

The DOC Watershed Coordinator grant will help to meet the critical need to establish an all lands forest collaborative group in the Yuba River watershed through the implementation of the Forest Carbon Plan by (1) advancing forest health projects already scoped in the North Yuba River watershed, (2) advancing a minimum of two additional projects in the broader Yuba River watershed that are to be identified by the collaborative group, and (3) stimulating late stage project development and construction of the Camptonville biomass to energy facility, including execution of a long term fuel supply agreement. This work will also provide the following co-benefits to the region:

Carbon Sequestration

Forest health work is anticipated to increase overall carbon sequestration in forests by removing many small trees, allowing for the large trees to grow and dominant forest stands in the future. Forest health work is also anticipated to increase overall forest soil carbon sequestration, which is a major driver of the carbon budget. The Camptonville facility will utilize approximately 32,500 BDT/year of biomass, with a considerable portion of the material coming from forest restoration projects some of which will include Cal Fire High Hazard Zones I and II, supporting treatment of approximately 2,500 acres of forested land per year or 50,000 acres over the facility's expected 20-year power purchase agreement term. These projects will maintain forests' ability to store and sequester carbon, an important GHG. Sierra Nevada forests store significant amounts of carbon through growth, with one acre of mixed conifer trees estimated to store 55 tons of CO₂. According to a 2012 study that completed a carbon life cycle analysis, Sierra Nevada forests that were treated and whose biomass was utilized for generation for bioenergy sequestered more CO₂ than untreated forests who experienced a frequent fire regime. Based upon this, it is likely that the FBBC 3MW Camptonville biomass to energy facility will support increased carbon sequestration by serving as an outlet for biomass.

Air Quality

The bioenergy facility will reduce uncontrolled air emissions in the region. Due to high costs and few market outlets, fuels reduction biomass is typically piled and burned in the forest with concomitant criteria pollutant and GHG emissions. The Camptonville bioenergy facility will reduce regional emissions by offsetting emissions from open-pile burns that would have otherwise occurred. In-forest pile burns have higher emission factors than controlled combustion with flue gas after treatment (Table 3). The bioenergy plant is projected to offset up to 9,500 metric tons of CO₂eq/year of GHGs. The proposed biomass power plant will demonstrate a low emissions biomass combustion technology that could potentially reduce the inventory of excess woody biomass in forests bordering the valley floor, substantially reducing air pollution risks across the region when compared to open-pile burning.

Water Availability

Water supply is anticipated to increase when forest health projects are implemented. This is because, with fewer trees and shrubs on the ground, less water will be taken up by the plants resulting in evapotranspiration to the atmosphere. Modelling completed by UC Merced's Sierra Nevada Research Institute in support of Blue Forest

Conservation's Forest Resilience Bond presentation to Yuba Water Agency, indicates that water yield may increase as a result of a decrease in forest vegetation in the upper Yuba River watershed. SNRC estimated that with a 10 percent removal of forest vegetation there is an increase in 12,500 acre-feet of water yield. Several studies across the Sierra Nevada have estimated how much water is expected to be made available for the environment after the completion of forest health projects but many factors, like slope, groundwater recharge, mean annual rainfall, and others will impact these values (Podolak 2015). Studies to understand the impacts of these factors are underway in the Kings River experimental Watershed, at Sagehen, and at the Sierra Watershed Ecosystem Enhancement Project, among others. In the North Yuba watershed, Blue Forest Conservation and the TNF are spearheading an effort to use remote sensing to determine whether there is a water supply benefit to the 15,000-acre forest restoration project that began in 2018. Forest health projects that reduce the overall forest canopy may also provide benefits during periods of extended drought, lessening competition for water and improving the overall survival of the trees that remain (Asner et al. 2016). The improved water availability is expected to be an economic driver as well, providing more water for hydropower generation, agricultural lands, and municipal use.

Water Supply and Quality

The reduction of the risk of large, high severity fires will help to protect water storage facilities in the Yuba River watershed from post-fire impacts like sedimentation, water quality concerns, and large woody debris accumulation. Catastrophic wildfires can create hydrophobic soil conditions causing decreased infiltration, increased overland flow and increased sediment transport. Post-fire sedimentation can degrade water quality, leading to sediment and debris trapping behind dams, decreasing the available water storage capacity for downstream users. Sedimentation and instream woody debris can also damage important hydroelectric infrastructure, such as that at New Bullard's Bar Reservoir, disrupting electricity generation. After both the Rim and King fires in the Tuolumne and American river watersheds, local water agencies were very concerned about the loss of reservoir capacity from these large, high severity fires. Studies from past fires in California have shown that there is an increase in sedimentation and water quality impacts from ash (Burton et al. 2016). Many studies are still underway to understand how large fires (like the Rim and King fires, and now Camp Fire) have impacted storage capacity and water quality.

Wildlife Habitat

Forest health projects are anticipated to be implemented under this grant in a way that is beneficial to wildlife in the region through the restoration or protection of forested stands that provide habitat to target species. Through the HRV modeling process, the TNF has identified a diverse array of forest types that will be targeted to improve forest health with a focus on wildlife habitat (spotted owl, deer, and others). Wildlife that are dependent of forest communities often require more than one habitat type to be successful and complete their lifecycles. Forest health projects will consider the wildlife that utilizes habitat to ensure that both grazing/hunting and nesting habitats are targeted and protected. The restoration of forested lands to benefit specific species is in direct alignment with the California Wildlife Action Plan.

Recreation

Improving forest health throughout the region is anticipated to benefit recreational users of the forest and Yuba River watershed through improved forest aesthetics, improved safety through the reduction of fire risk, and improved access to areas that may not have been accessible in the past due to dense forest understories.

Local economy: Forest Products and Forest Health Crews

Development of forest health projects and biomass utilization infrastructure will offset forest management costs and support multiple environmental and socio-economic benefits within the Yuba River watershed. The FBBC bioenergy project, including the 3MW Camptonville biomass to energy facility, will foster forest and watershed health and climate resiliency by providing a desperately needed outlet for biomass generated because of implementation of forest restoration projects. On the ground forest management projects will create a sustainable job market and the FBBC will create a forest product industry that will bring in a diverse array of businesses and products that will stimulate the economy. Social and economic capacities of the Yuba River watershed will increase as a result of the bioenergy facility by revitalizing the regional timber industry and expanding the local forest products economy. Approximately 13 full-time jobs will be created to operate and maintain the bioenergy facility up to 14 additional jobs created to process and transport feedstock. For perspective, the unemployment rate in Camptonville is 8.8%, or 52 unemployed local residents. Jobs created by the Camptonville project will cut this unemployment rate by more than half (i.e., down to approximately 4%).

The communities of Camptonville, Dobbins and Oregon House, which are within closest proximity to the FBBC bioenergy project, are not disadvantaged communities under CalEnviroScreen 3.0. Nevertheless, they are economically distressed with the collapse of the region's timber economy and will benefit from the bioenergy project's advancement of wildfire risk and air emission reductions and water quality protection, quantity and supply. The communities of Marysville and Olivehurst located downstream within Yuba County are disadvantaged communities with CalEnviroScreen3.0 scores of 85-90% and 65-70%, respectively. These disadvantaged communities will benefit from the FBBC bioenergy project, including the Camptonville biomass to energy facility, in that it will help to foster on the ground forest management leading to a decrease in wildfire hazard and pollutant emissions, and maintenance and protection of water quality, quantity and supply.

Protection of Life and Property

Protection of life and property within the Yuba River watershed is expected improve and be maintained by an increase in pace and scale of forest health work and the FBBC Camptonville biomass to energy facility. The Yuba County Foothills Community Wildfire Protection Plan identified the FBBC bioenergy project as a key means of disposal for biomass generated within the region. Support and maintenance of fire safe communities will help to minimize loss of life and property damage in the event of a fire, protecting individual and local community social, economic and environmental capacities. It may also help to reduce economic costs associated with wildfire suppression, insurance, direct and indirect economic losses, and recovery expenditures. Biomass is expected to originate from forest restoration and watershed health projects but also from fuels reduction projects located within the Wildland Urban Interface (WUI), including areas immediately surrounding residences, structures and roadsides.

Power Generation

Utilization of forest biomass to generate renewable bioenergy will function as a stable baseload back-up to wind and solar-derived energy. It will also reduce peak load on the grid by 3 MW and help to diversify California's aggressive Renewable Portfolio Standard goals.

Long-term success (5 Points)

- VII. Describe any methods or plans to sustain the watershed coordinator position and build upon the accomplishments of the work plan beyond the life of the grant. Include an explanation of how the organization will attempt to maintain funding for the watershed coordinator position after the grant term.***

The project partners have secured additional grant funds from SNA and YWA to sustain the Yuba watershed coordinator positions beyond the term of the DOC grant for up to two additional years (through mid-2023). We anticipate that grant funding for planning and implementation of forest health projects will result in additional funding for the watershed coordinator positions further leveraging this grant funding to provide a long-term benefit to the Yuba watershed. The State of California allocated over \$200 million in funding for forest health and fire protection work and authorized the California Climate Investment (CCI) Program to leverage Cap-and-Trade funds for forest health work. The Forest Resiliency Bond launched the North Yuba Forest Collaborative, bringing an alternative funding mechanism that leveraged state, federal, private, and local agency funding to hire staff and implement a \$4.6 million investment in the health of the forest in the North Yuba watershed. The YWFC will fundraise through grant programs and alternative funding sources to support the Yuba watershed coordinators and implement the Forest Carbon Plan.

Additionally, CCP aims to secure an equity position in the bioenergy facility, or the Camptonville biomass to energy facility, ownership by means of its subsidiary corporation, the Forest Biomass Business Center Inc. This effort will support the organization's existing programs and will create new programs using a portion of the revenue generated through electricity sales. As part equity owner, it may be possible for CCP's portion of the electricity sales revenue to be used to help sustain the watershed coordinator position beyond the life of the grant. The bioenergy facility legal entity is expected to be established with project financing completed in 2019, followed by plant construction in 2020 and eventual commercial operations as soon as early 2021. The equity owner split is expected to be negotiated once project financing is complete. At that time, CCP will have a clearer understanding if revenue from electricity sales could be available to help sustain the watershed coordinator.

4. Work plan

TASK 1. Identify and implement forest health projects throughout the Yuba River watershed	Timeline [Start and End Date]	Total Requested Grant Funds
<p>Subtask 1.1: Identify and prescribe forest health treatments for forest health projects that are still in the planning phase.</p> <p>Subtask 1.2: Complete permitting and environmental compliance for all prioritized projects.</p> <p>Subtask 1.3: Implement forest health projects, including through the removal of dead and dying trees, thinning treatments, and prescribed burning treatments across the Yuba River watershed.</p> <p>Subtask 1.4: Conduct monitoring and attract researchers to investigate how forest health is improved by the implementation of forest health projects.</p> <p>Performance Measures: Number of high priority projects identified, Number of forest health project plans completed, Types of prescriptions prescribed, Number of projects fully permitted and compliant with environmental regulations, Number of acres of at-risk forested lands restored and risk of wildfire impacts reduced, Number acres treated to reduce hazardous loads, Acres of high value habitat restored, Number of new shaded fuel breaks created, Number of communities that have reduced risk of wildland fire, Potential carbon sequestered through implementation of forest health projects.</p>	<p>5/1/19-5/31/21</p> <p>5/1/19-5/31/2021</p> <p>5/1/19-5/31/2021</p> <p>5/1/19-5/31/2021</p>	<p>\$66,348</p>
TASK 2: Implement and promote a sustainable forest products industry in the Yuba River watershed		
<p>Subtask 2.1: Advance late stage project development and construction of the 3MW Camptonville biomass to energy facility leading to commercial operations.</p> <p>Subtask 2.2: Identify, outreach to, and potentially contract with existing or new biochar businesses, value-added wood products manufacturing businesses or thermal hosts to co-locate and improve project financial feasibility and help offset the costs of forest management activities.</p> <p>Subtask 2.3: Evaluate potential alternatives for a long-term fuel supply agreement for biomass originating from National Forest lands.</p>	<p>5/1/19-5/31/21</p> <p>5/1/19-5/31/21</p> <p>5/1/19-5/31/21</p>	<p>\$60,208</p>

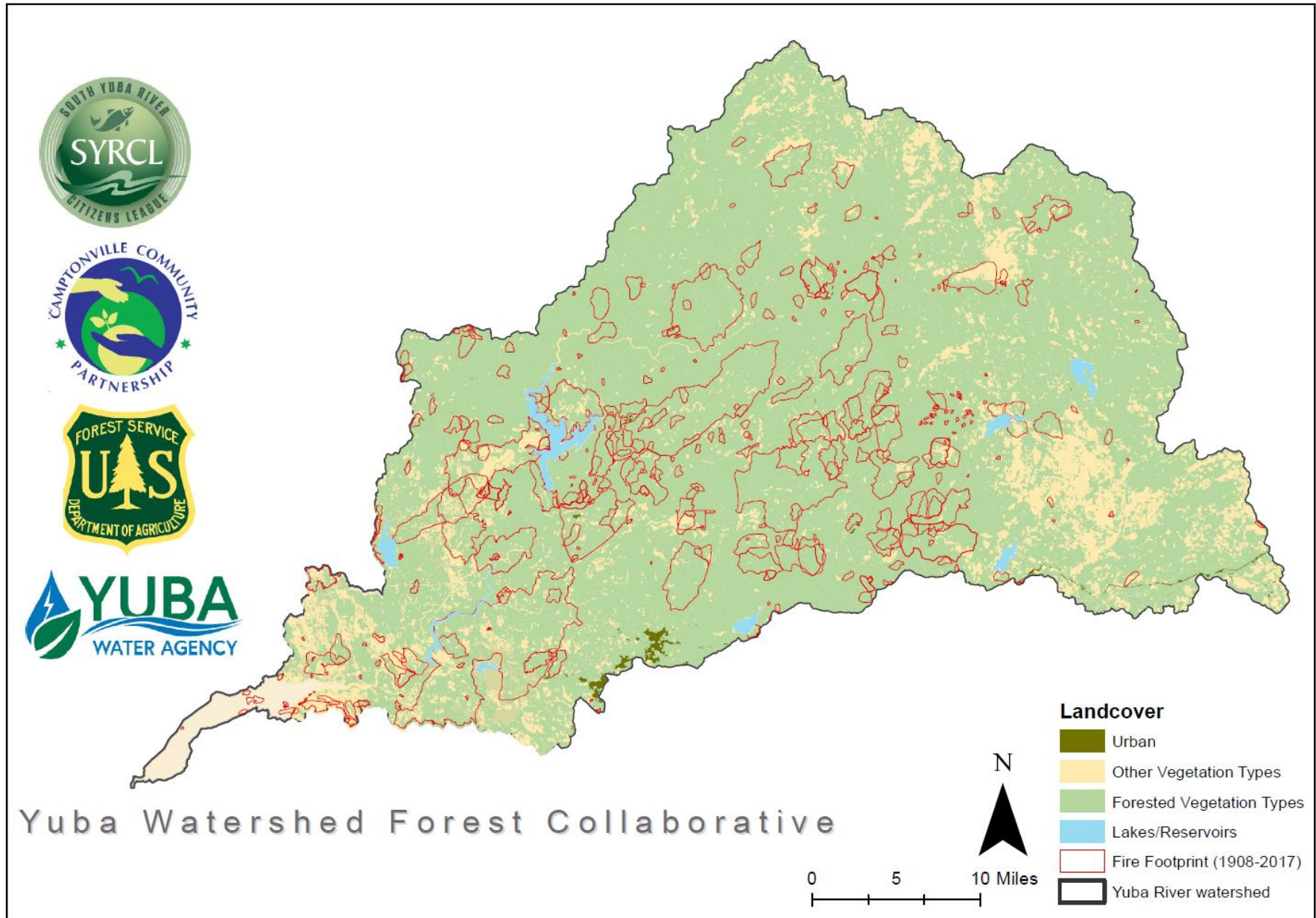
<p>Subtask 2.4 Negotiate and execute a long-term fuel supply agreement for biomass originating from National Forest lands, preferably a Master Stewardship Agreement.</p> <p>Performance Measures: Number of new manufacturing activities housed at the FBMC, Number and types of wood products produced at FBMC, Number of long-term fuels contracts signed</p>	5/1/19-5/31/21	
TASK 3: Engage diverse stakeholders throughout the Yuba River watershed		
<p>Subtask 3.1: Conduct outreach to local governments, agencies, non-profits, private industry, private land owners, and other stakeholders.</p>	5/1/19-5/31/21	\$56,600
<p>Subtask 3.2: Convene and facilitate quarterly stakeholder group meetings pulling together and prioritizing project concepts, providing technical support, and identifying other needs within the Yuba River watershed.</p>	9/1/219-5/31/21	
<p>Subtask 3.3: Convene and facilitate additional meetings with sub-groups of the stakeholder group to focus on specific geographic regions (Yuba County, Nevada County, North Yuba River, etc.) or specific topic areas (treatment types, forest products, etc.).</p> <p>Performance Measures: Number and type of stakeholders engaged in process, Percent of participants actively engaged in forest health projects, Number and type of stakeholders attending, Number of sub-group meetings held</p>	9/1/19-5/31/21	
TASK 4: Raise funds to support high priority project implementation.		
<p>Subtask 4.1: Identify funding sources and apply for funding to implement forest health projects.</p>	5/1/19-5/31/21	\$51,839
<p>Subtask 4.2: Identify funding sources and apply for funding to implement of the Forest Biomass Business Center, including the 3MW bioenergy facility</p> <p>Performance Measures: Number of funding opportunities identified, Percent of identified funding opportunities applied for, Percent of applications awarded</p>	5/1/19-5/31/21	
	GRAND TOTAL	\$234,995

5. *Budget applicants must provide a budget broken down by cost type and by task. All costs must be eligible. Applicants may use the Excel template provided. If awarded funding, this Budget will be incorporated into the Grant Agreement.*

Matching funds in the amount of \$235,000 from YWA and \$200,000 from SNC will increase the DOC grant budget from \$234,995 to just under \$670,000 in total funds. This will extend this project to nearly four years and increase the total hours for Watershed Coordinator A from 2080 to 7812 (3.76 FTE) and Watershed Coordinator B to from 2080 to 6634 (3.19 FTE).

<i>PERSONNEL</i>	<i>Hourly Rate/ Unit Cost</i>	<i>Number of hours/units</i>	<i>Task 1 Total</i>	<i>Task 2 Total</i>	<i>Task3 Total</i>	<i>Task4 Total</i>	<i>Total Requested Grant Funds</i>
<i>Watershed Coordinator A: Forest Health/Forestry Focus</i>	\$ 46	2080	\$ 36,800	\$ 13,800	\$ 23,000	\$ 22,080	\$ 95,680
<i>Watershed Coordinator B: Stakeholder and Forest Product Focus</i>	\$ 46	2080	\$ 13,800	\$ 36,800	\$ 23,000	\$ 22,080	\$ 95,680
		<i>Subtotal</i>	\$ 50,600	\$ 50,600	\$ 46,000	\$ 44,160	\$ 191,360
TRAVEL COSTS							
<i>Travel: Within watershed</i>	0.58	2930	\$ 348	\$ 348	\$ 580	423	\$ 1,699
<i>Travel: To required meetings 8 trips to Sacramento x 2ppl</i>	0.58	2000			\$ 1,160		\$ 1,160
		<i>Subtotal</i>	\$ 348	\$ 348	\$ 1,740	423	\$ 2,859
ADMINISTRATIVE COSTS (maximum of 20% of grant)							
<i>Office Space (SYRCL)</i>	\$3000 per person per year	4	\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	\$ 12,000
<i>Computer Supplies</i>	\$1100 per person	2	\$ 2,200				\$ 2,200
<i>Finance Manager</i>	\$40/hr	200	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 8,000
<i>Science Director</i>	\$50/hr	252	\$ 6,000	\$ 2,500	\$ 2,100	\$ 2,000	\$ 12,600
<i>Executive Director</i>	\$55/hr	120	\$ 2,200	\$ 1,760	\$ 1,760	\$ 256	\$ 5,976
		<i>Subtotal</i>	\$ 15,400	\$ 9,260	\$ 8,860	\$ 7,256	\$ 40,776
		TOTAL	\$ 66,348	\$ 60,208	\$ 56,600	\$ 51,839	\$ 234,995

6. Map(s) of the project geographic area



7. Signed authorizing resolution

RESOLUTION NO. 2019-001

The undersigned hereby certifies that the following resolutions were duly adopted by the board of directors of the South Yuba River Citizens League, the applicant, on January 31, 2019 and that such resolutions have not been modified or rescinded as of the date hereof:

BE IT HEREBY RESOLVED by the Board of Directors of the South Yuba River Citizens League that this Board:

- Approves the submittal of an application for the Department of Conservation Forest Health Watershed Coordinator Grant Program; and
- Certifies that Applicant can enter into and perform under the terms of the template Grant Agreement (see Attachment); and
- Certifies that Applicant or title holder will have sufficient funds to operate and maintain the resource(s) consistent with the long-term benefits described in support of the application; or will secure the resources to do so; and
- Appoints Melinda Booth, or designee, as agent to conduct all negotiations, execute and submit all documents, including but not limited to: applications, agreements, payment requests, and so on, which may be necessary for the completion of the aforementioned project(s); and
- Certifies that board members do not have any conflict of interest in association with the work proposed in the grant application.

PASSED AND ADOPTED by the South Yuba River Citizens League on the 31st day of January 2019.

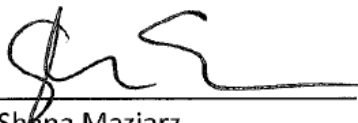
Ayes: 12

Noes: 0

Abstentions: 0

Absent: Janet Peake

Signed and approved by:



Shana Maziarz
Co-President, Board of Directors



Debra Weistat
Co-President, Board of Directors

8. Collaboration and support letters

See Next Page for letters



File Code: 1560
Date: February 12, 2019

California Department of Conservation
801 K St., MS 24-01
Sacramento, CA 95814

To Whom it May Concern:

I am writing in support of the Yuba Watershed Forest Collaborative proposal being submitted to the Department of Conservation by the South Yuba River Citizens League (SYRCL).

The South Yuba River Citizens League (SYRCL) and Camptonville Community Partnership (CCP) propose to work collaboratively with the Tahoe National Forest (TNF) and Yuba Water Agency (YWA) to bring capacity to this region by hiring two employees over a period of four years. These employees will work across the watershed to provide technical support and community and stakeholder engagement. These facilitated stakeholder meetings will provide a forum for small and large landowners, public agencies, private industry, and the general public to unite and cultivate high priority forest health and forest product projects, in benefit to the entire Yuba River watershed.

The Tahoe National Forest has historically worked with project team members to improve forest health and the forest product industry in the Yuba River watershed. If this grant is successful, we anticipate continued collaborative and positive work to improve forest and watershed health in the Yuba River watershed.

Sincerely,



ELI ILANO
Forest Supervisor





Camptonville Community Partnership, Inc
 P.O. Box 218, Camptonville, California 95922
 Phone: (530) 288-9355 Fax: (530) 288-1908
corrin@theccp.org

Board of Directors

James Garrison
President

Stephanie Williams
Treasurer

Sidonie Christian
Secretary

Barbara Ramirez
Board Member

Rita Ortega
Board Member

Executive Director
Cathy LeBlanc

**Programs at
The Camptonville
Resource Center**

"1,2,3 Grow"

Outreach

Community Advocacy

**Camptonville Bio-
Energy Project**

**Fiscal Management:
Yuba**

**Watershed Protection
& Fire Safe Council**

STAFF:

Cathy LeBlanc
Corrin Burdett
Regine Miller
Christina Dondono
Yakshi Vadeboncoeur
Melody Dilka
Cathy Balan

www.camptonville.com
Stephanie Korney

"Rural people working together for a safe, sustainable, and healthy community"

Department of Conservation
Division of Land Resources Protection
Watershed Coordinator Program Manager

February 11, 2019

Dear Watershed Coordinator Grant Review Team,
I am writing in support of the Yuba Watershed Forest Collaborative proposal being submitted to the Department of Conservation by the South Yuba River Citizens League (SYRCL) on behalf of the project team that includes SYRCL, Camptonville Community Partnership (CCP), Yuba Water Agency, and The Tahoe National Forest.

The project team will work in partnership to catalyze landscape scale planning and implementation for forest and watershed health projects across the Yuba River watershed and expand the local forest product industry which will serve as an economically and environmentally viable means for the disposal of forest biomass residuals and non-merchantable timber.

The South Yuba River Citizens League (SYRCL) and Camptonville Community Partnership (CCP) propose to leverage their existing relationship and work collaboratively with the Tahoe National Forest (TNF) and Yuba Water Agency (YWA) to bring capacity to this region. The Collaboration will hire two employees over a period of four years that will work across the watershed to provide technical support and community and stakeholder engagement through facilitated stakeholder meetings where small and large landowners, public agencies, private industry, and the general public can come together to cultivate high priority forest health and forest product projects that will provide a benefit to the entire Yuba River watershed.

Camptonville Community Partnership has been working with the project team members to improve forest and watershed health and the forest products industry in the Yuba River Region. If this grant is successful, we anticipate participating as an active stakeholder to work together to advance forest and watershed health and to maintain and enhance the benefits of the Yuba River watershed.

Sincerely,

Cathy LeBlanc
Executive Director CCP

South Yuba River Citizens League
Yuba River watershed

Department of Conservation
Division of Land Resources Protection
Watershed Coordinator Program Manager

February 11, 2019

Dear Watershed Coordinator Grant Review Team,

I am writing in support of the Yuba Watershed Forest Collaborative being submitted to the Department of Conservation by the South Yuba River Citizens League (SYRCL) on behalf of the project team that includes SYRCL, Camptonville Community Partnership (CCP), Yuba Water Agency, and The Tahoe National Forest (TNF). Also, in support of this effort our board of directors has awarded the project proponents a matching grant of \$235,000 to strengthen the effectiveness of the collaborative.

The project team will work in partnership to catalyze landscape-scale planning and implementation for forest and watershed health projects across the Yuba River watershed and expand the local forest product industry which will serve as an economically and environmentally viable means of disposal for excess forest biomass residuals and non-merchantable timber.

SYRCL and CCP propose to leverage their existing relationships and work collaboratively with the TNF and Yuba Water Agency to build capacity and strengthen coordination in this region. The collaborative will hire two employees for a period of four years that will work across the watershed to provide technical support and community and stakeholder engagement through facilitated stakeholder meetings where small and large landowners, public agencies, private industry, the general public, and others can come together to cultivate high priority forest and watershed health and forest product projects that will provide environmental, social and economic benefits and increase the pace and scale of forest and watershed improvements in the Yuba River watershed.

Yuba Water Agency has been working with the project team members to improve forest and watershed health and the forest product industry in the Yuba River region. If this grant is successful, we anticipate participating as an active stakeholder to work together to advance forest and watershed health and to maintain and enhance the benefits of the Yuba River watershed.

Sincerely,

A handwritten signature in blue ink that reads "Curt Aikens".

Curt Aikens,
General Manager



AUBURN OFFICE
11521 Blocker Drive, Ste. 205
Auburn, CA 95603
p (530)823-4670 f (530)823-4665

February 12, 2019

Ms. Melinda Booth, Executive Director
South Yuba River Citizens League
313 Railroad Avenue
Nevada City, CA 95959

Dear Ms. Booth:

This letter confirms a commitment to invest \$200,000 of funds from the Sierra Nevada Conservancy to support the Yuba River Watershed and Forest Restoration Project. The Conservancy is excited to partner with a strong set of stakeholders to help plan, and ultimately implement a forest restoration project that will explore innovative approaches to increasing the number of acres to be treated in a watershed critical to the state of California. We strongly believe this project will serve as an example of how the Sierra Nevada Watershed Improvement Program can be used restore forests at a very large scale. Collaboration among a diverse set of interested parties is expected to result in a more comprehensive and efficient planning process that will enable steady progress towards forest resiliency. It is also expected to improve workforce capacity and help to restore a sustainable wood products industry.

We are hopeful this investment will serve as a matching contribution or leverage additional investments from other partners interested in developing forest restoration projects. We anticipate funds to be available beginning in June 2019.

Sincerely,

Angela Avery
Executive Officer

WWW.SIERRANEVADA.CA.GOV

South Yuba River Citizens League
Yuba River watershed

TOLL FREE (877)257-1212



CALIFORNIA LEGISLATURE

STATE CAPITOL
SACRAMENTO, CALIFORNIA
95814

February 12, 2019

California Department of Conservation
Division of Land Resources Protection
Watershed Coordinator Program Manager
801 K Street, MS 24-01
Sacramento, CA 95814

RE: Yuba Watershed Forest Collaborative Proposal Support

Dear Watershed Coordinator Grant Review Team:

Assemblyman James Gallagher and I are writing to express our strong support of the Yuba Watershed Forest Collaborative proposal being submitted to the California Department of Conservation by the South Yuba River Citizens League (SYRCL) on behalf of the project team that includes SYRCL, Camptonville Community Partnership, Yuba Water Agency, and The Tahoe National Forest.

The requested funding of \$235,000 per year over two years that would be used to create the Yuba Watershed Collaboration Coordinator position. The funding would be matched by the Yuba Water Agency to allow the project team to work together to hire two employees over a period of four years.

The project team will work in partnership to continue to move forward forest health projects across the entire Yuba River watershed from the eastern Sierra to the local foothills. It will function to improve forest health and the forest product industry across all lands private, state, and federal, and will further develop a local forest product industry to receive material generated from local forest health projects.

The Watershed Collaboration Coordinator will work across the watershed to provide technical support and community and stakeholder engagement through facilitated stakeholder meetings. These stakeholder meetings will allow small and large landowners, public agencies, private industry, and the general public, to come together to cultivate high priority forest health and forest product projects that will provide a benefit to the entire Yuba River watershed.

Assemblyman Gallagher and I have worked closely with these agencies, and we are confident of their professionalism and expertise in managing our critical forest habitat and sustaining the

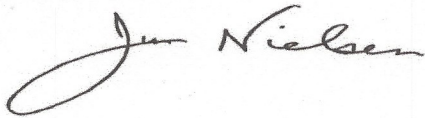
South Yuba River Citizens League
Yuba River watershed

overall positive health of the Yuba River watershed. We are committed to participating as stakeholders to work together with the project team to manage and sustain the overall positive health of the Yuba River watershed.

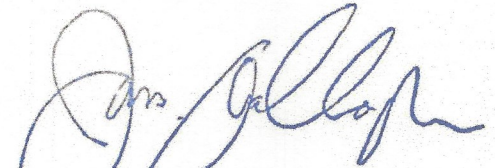
In conclusion, Assemblyman Gallagher and I offer our wholehearted endorsement of the South Yuba River Citizen's League application for funding for the Yuba Watershed Forest Collaborative. We appreciate your consideration of this request, and for your continued support of residents and businesses in the State of California.

If you need further information, please contact my Deputy Chief of Staff, Rob Olmstead, at (916) 772-0571, or Assemblyman Gallagher's Chief of Staff, Curtis Grima, at (530) 671-0303.

Sincerely,



JIM NIELSEN
Senator, Fourth District



JAMES GALLAGHER
Assemblyman, Third District

JN/ln



Department of Conservation
Division of Land Resources Protection
Watershed Coordinator Program Manager

February 12, 2019

Dear Watershed Coordinator Grant Review Team,

My name is Zach Knight and I serve as Managing Partner of Blue Forest Conservation. I am writing in support of the Yuba Watershed Forest Collaborative proposal being submitted to the Department of Conservation by the South Yuba River Citizens League (SYRCL) on behalf of the project team that includes SYRCL, Camptonville Community Partnership, Yuba Water Agency, and The Tahoe National Forest. The project team will work in partnership to catalyze landscape-scale planning and implementation for forest and watershed health projects across the Yuba River watershed and expand the local forest product industry which will serve as an economically and environmentally viable means of disposal for excess forest biomass residuals and non-merchantable timber.

Blue Forest launched the first ever Forest Resilience Bond with members of this project team in 2018, raising \$4 million in private investment to help restore the upper watershed of the North Yuba River in the Tahoe National Forest. Blue Forest is currently working with this project team to develop another Forest Resilience Bond financing to raise private investment for the implementation of future, large landscape projects that are borne from this group's planning discussions.

The South Yuba River Citizens League (SYRCL) and Camptonville Community Partnership (CCP) propose to leverage their existing relationships and work collaboratively with the Tahoe National Forest (TNF) and Yuba Water Agency (YWA) to build capacity and strengthen coordination in this region by hiring two employees over a period of four years that will work across the watershed to provide technical support and community and stakeholder engagement through facilitated stakeholder meetings where small and large landowners, public agencies, private industry, the general public, and others can come together to cultivate high priority forest and watershed health and forest product projects that will provide environmental, social and economic benefits and increase the pace and scale of forest and watershed improvements in the Yuba River watershed.

If this grant is successful, Blue Forest Conservation anticipates participating as an active stakeholder to work together to advance forest and watershed health and maintain the Yuba River watershed as a carbon sink, rather than a carbon source.

Sincerely,

Zach Knight
Managing Partner, Blue Forest Conservation

South Yuba River Citizens League
Yuba River watershed



Nevada City Rancheria Tribal Council

P.O. Box 2624 Nevada City, Ca. 95959

530-265-6563 (Chairman) 530-570-0846 (Secretary)

Department of Conservation
Division of Land Resources Protection
Watershed Coordinator Program Manager

February 14, 2019

Dear Watershed Coordinator Grant Review Team,

I am writing in support of the Yuba Watershed Forest Collaborative proposal being submitted to the Department of Conservation by the South Yuba River Citizens League (SYRCL) on behalf of the project team that includes SYRCL, Camptonville Community Partnership, Yuba Water Agency, and The Tahoe National Forest. The project team will work in partnership to catalyze landscape-scale planning and implementation for forest and watershed health projects across the Yuba River watershed and expand the local forest product industry which will serve as an economically and environmentally viable means of disposal for excess forest biomass residuals and non-merchantable timber.

The South Yuba River Citizens League (SYRCL) and Camptonville Community Partnership (CCP) propose to leverage their existing relationships and work collaboratively with the Tahoe National Forest (TNF) and Yuba Water Agency (YWA) to build capacity and strengthen coordination in this region by hiring two employees over a period of four years that will work across the watershed to provide technical support and community and stakeholder engagement through facilitated stakeholder meetings where small and large landowners, public agencies, private industry, the general public, and others can come together to cultivate high priority forest and watershed health and forest product projects that will provide environmental, social and economic benefits and increase the pace and scale of forest and watershed improvements in the Yuba River watershed.

The Nevada City Rancheria and our non-profit entity, California Heritage: Indigenous Research Project, have been working to improve the counties fire preparedness and forest health over the last several years and supports the efforts of this collaborative. As the Indigenous Tribe who once lived and thrived in these lands, we have worked for many years to create partnerships with local organizations, among them, these same stakeholders. Each partnership

increases the Tribe's visibility and provides the Nisenan people of the Nevada City Rancheria, ever new opportunities and platforms to reengage with our land that was taken from us so long ago. We also agree that our forests are in a disastrous condition never seen before. Without the hands of humans to intervene, catastrophic wildfire will only be one disaster we will have to deal with in conjunction with learning to deal with climate change. Tending to our forests is the only way to curb these catastrophes. These partnerships also bring economic opportunity to the Tribe that does not exist elsewhere. We recently partnered with SYRCL to employ several Tribal members to work directly in forest health clearing brush and non-native vegetation and planting important native plants. The economic opportunity directly impacted the Tribal membership which is currently living far below the poverty level in multi-generation households. We have worked closely with the Camptonville Community Partnership exploring biomass business opportunities, we have worked with the Tahoe National Forest continually to do Native Nisenan site assessments and opionate on projects held within the forest, and we continue to work with the Yuba Water Agency in similar capacity especially during the FERC process where Nisenan lands are impacted.

Our organization has been working with one or all of the project team members to move improve forest and watershed health and the forest product industry in the Yuba River region. If this grant is successful, we anticipate participating as an active stakeholder to work together to advance forest and watershed health and maintain the Yuba River watershed as a carbon sink, rather than a carbon source.

Sincerely,

A handwritten signature in black ink that reads "Shelly Covert". The signature is written in a cursive, flowing style.

Shelly Covert

Tribal Council Secretary and Spokesperson for the Nevada City Rancheria Nisenan Tribe and Executive Director of the California Heritage: Indigenous Research Project (CHIRP).



California Regional Office
201 Mission Street, Fourth Floor
San Francisco, CA 94105

tel [415] 215-7238
nature.org
nature.org/california
dedelson@tnc.org

February 15, 2019

Department of Conservation
Division of Land Resources Protection
Watershed Coordinator Program Manager

Dear Watershed Coordinator Grant Review Team:

I am writing on behalf of The Nature Conservancy of California in support of the Yuba Watershed Forest Collaborative proposal being submitted to the Department of Conservation by the South Yuba River Citizens League (SYRCL) on behalf of the project team that includes SYRCL, Camptonville Community Partnership, Yuba Water Agency, and The Tahoe National Forest. The project team will work in partnership to catalyze landscape-scale planning and implementation for forest and watershed health projects across the Yuba River watershed and to expand opportunities to make economic use of forest biomass residuals and non-merchantable timber.

The Nature Conservancy recently completed a [Regional Prioritization of Forest Restoration across California's Sierra Nevada](#). The report identifies priority watersheds for forest restoration based upon biodiversity, fire risk to infrastructure, and other factors. We concluded that there are significant lands within the Yuba watershed and the Tahoe National Forest that are high priorities for restoration based upon these criteria.

The Nature Conservancy is working closely with SYRCL, the Tahoe National Forest, Yuba Water Agency, Sierra Nevada Conservancy and others to develop a landscape-scale, ecologically-based proposal to restore forests and reduce the risk of high-severity wildfire within the North Yuba watershed, an area covering approximately 240,000 acres. The groups are working towards signing a Memorandum of Understanding to formally launch the project. To succeed, the project will require a watershed coordinator to help manage the project, outreach to the local community, and help raise additional funds. A grant from the Department of Conservation for the Yuba Watershed Forest Collaborative could play a catalytic role in advancing the North Yuba partnership

Thank you for your consideration and please let me know if you have any questions.

Sincerely,

David Edelson
Forest Program Director
The Nature Conservancy of California

9. Proof of applicant capacity

SYRCL's mission is to unite the community to protect and restore the Yuba River watershed. Through this work SYRCL has worked for 36 years to bring the community together to work on large watershed issues such as new dam proposals, water quality, restoration, and forest health. Today, SYRCL has an annual budget of \$2.1 million that supports an Executive Director, Science Director and four science staff, a Development Team, an Outreach Team, a Finance Manager, and is home to the Wild and Scenic Film Festival. SYRCL's board is made up of 12 community members that have expertise and insight from many different disciplines and from different regions of the Yuba watershed. SYRCL works to protect and restore the Yuba River watershed. In the past several years, SYRCL's science staff have focused their work on grant funded programs that are similar in size and scope as the proposed Forest Health Watershed Coordinator Grant Program. These grants are overseen by SYRCL's Executive Director and Science Director.

Melinda Booth, Executive Director, Ms. Booth holds an MS Environmental Studies, has worked in the conservation field for over 15 years, and oversees all of SYRCL's work. Rachel Hutchinson, River Science Director, Ms. Hutchinson holds an MS in Water Resources and has over 15 years of experience managing projects and collecting scientific data in relation to restoration projects in river systems. The science program has a \$1 million annual budget that is focused on watershed restoration, conservation, science, and education programs and projects. SYRCL plans to recruit two new members to the SYRCL team to act as Watershed Coordinators. These new team members will have forest ecology, forestry, outreach skills, and facilitation.

Throughout SYRCL's 36-year tenure it has worked in partnership with other entities and organizations. SYRCL will leverage the partnerships mentioned in this grant proposal, with CCP, TNF, YWA, SNC, and beyond to ensure that this project is executed successfully and that watershed wide collaboration and coordination around forest health projects and the forest product industry is sustainable over the long-term.

SYRCL has secured matching funds from Yuba Water Agency (\$235,000) and The Sierra Nevada Conservancy (\$200,000) for this grant program to be spent specifically on the goals and tasks that are outlined in this proposal. This funding will extend the watershed coordinator program into 2023.

SYRCL's membership is actively engaged in watershed stewardship, with over 700 volunteers picking up thousands of pounds of trash each year at the Yuba River Clean-Up, signing over 3000 letters to Governor Newsom in early 2019 to ask that clean water and salmon restoration be prioritized by the new administration, and writing nearly 200 letters to the Federal Energy Regulatory Commission asking that fish habitat in the Lower Yuba River be better protected. We anticipate that as applicable, SYRCL volunteers can participate in implementation or monitoring work associated with this project.

Examples of Successfully Executed Grants

Yuba Headwaters Meadow Restoration

Funders: California Department of Fish and Wildlife Greenhouse Gas Reduction Fund

Timeframe: 2015-2019

Grant Amount: \$567,480 (with \$201k match from NFWF, \$50k match from Earthwatch, \$20k match from the Nevada County RAC)

Project Director: Rachel Hutchinson

Brief Project Description:

The Yuba Headwaters Meadow Restoration Project aimed to restore three meadows in the South and North Yuba River watersheds (including managing all phases of planning and implementation) and work in collaboration with a Sierra-wide network of scientists and non-profits to standardize data collection methods and collect carbon cycling and greenhouse gas data using the same methodology to provide an understanding of how meadows might contribute California's carbon budget. SYRCL worked in partnership with The Tahoe National Forest, The University of Nevada, Reno, UC Merced, Stillwater Sciences, Cal Trout, Plumas Corps, San

Francisco State, Earthwatch, HRS, CDFW, Nevada County, NFWF, Sierra Nevada Conservancy, and others to complete this work. SYRCL brought together teams of volunteer citizen scientists to add capacity for data collection and community support. To date, this project has resulted in over 120 acres of restored meadows, one peer-reviewed publication published, and another submitted.

Long Bar Floodplain Restoration Project

Funders: United States Fish and Wildlife Service

Timeframe: 2016-2022

Grant Amount \$2.3 million

Project Director: Rachel Hutchinson

Brief Project Description:

The Long Bar Floodplain Restoration Project aims to restore 50 acres of degraded floodplain habitat in the Lower Yuba River where hydraulic mining debris still occupies once highly productive floodplain habitat. SYRCL works in partnership with a private landowner, Silica Resources (mining company), Cramer Fish Sciences, CBEC, USFWS, CDFW, Yuba County, and others to accomplish this work. The team expects to remove up to 300,000 cubic yards of hydraulic mining debris to be sold as aggregate and carve out perennial and ephemeral side channel habitat across a 50-acre section of Long Bar on the Lower Yuba River. This project is one of two projects that have successfully negotiated agreements with mining companies to support local jobs and restore habitat. This project is in the planning phase and project implementation is anticipated to begin in 2020.

Meadow Restoration in the Cosumnes, American, Bear, and Yuba River Watersheds

Funders: California Department of Water Resources, CABY IRWM Grant

Timeframe: 2014-2018

Grant Amount: \$308,015

Project Director: Rachel Hutchinson

Brief Project Description:

SYRCL received a sub-grant to manage the meadow restoration work across the Cosumnes, American, Bear, and Yuba Integrated Regional Water Management (CABY IRWM) Region. This involved conducting conifer removal at 3 meadows in the South Yuba watershed, invasive species removal at one meadow in the Middle Yuba watershed, creating a restoration design and building a fence at a fen in the Middle Yuba watershed, and managing subcontracts that totaled in about \$140k of work to American Rivers, American River Conservancy, and The Tahoe National Forest to complete work across the region.

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