Wildlife Conservation Board
Forest Conservation Program
2019 Full Application Form

General Information

- The 2019 Full Application Form (Application Form) for the Forest Conservation Program (Program) is comprised of the Project Information Tables, Narrative Questions, and supporting information required in the Application Checklist, below.
- For additional information regarding the Program or application process, please refer to the Proposal Solicitation Notice (PSN) available at: https://www.wcb.ca.gov.
- Respond to every question in the Application Form. Use "N/A" where applicable.
- Electronic files should be submitted in the following formats:
    - Text: Microsoft (MS) Word (e.g., Application Form)
    - Spreadsheets: MS Excel (e.g., Budget Worksheets)
    - Images: jpg, jpeg, or PDF (e.g., maps and design drawings)
    - Geospatial: ArcGIS-compatible (e.g., shapefiles, KMZ, KML)

  All information submitted with the application is subject to the unqualified and unconditional right of WCB to use, reproduce, publish, or display free of charge. Indicate if image credit is requested for any of the photos and/or maps.
- Applicants must e-mail the completed Application Form and all attachments to Forests@wildlife.ca.gov with "*2019 Forest Conservation Program Proposal"* and the project title in the subject line by:

  September 13, 2019 at 5:00 PM Pacific Standard Time.

APPLICATION CHECKLIST

All applications should include the following supporting information:

☒ Completed Application Form, including applicant's authorized signature (submit responses to Project Information Tables and Narrative Questions in MS Word format)

☒ Budget Worksheets (submit in MS Excel format)

A. Applicant Budget (planning and implementation projects only)
B. Budget Justification (planning and implementation projects only)
C. Cost Share (all planning, implementation, and acquisition projects)
D. Acquisition Costs (acquisition projects only)

☒ Project area boundary (submit geospatial file)

☒ Resolution from applicant's governing board (template on WCB website)

☒ Completed Payee Data Record (Standard Form 204)

☒ Support letters (if available)

For planning and implementation projects, also provide:

☒ Monitoring and Reporting Plan (or the equivalent)

For implementation and acquisition projects, also provide:

☒ Location map (for acquisitions, show parcel boundaries and assessor parcel numbers)

☒ Representative photographs showing project area or property

☒ Land Tenure, Site Control, and/or Landowner Access agreements or templates

For implementation projects, also provide:

☐ Detailed project drawings (include engineering design drawings, if available) N/A

☒ Maintenance and Management Plan (or the equivalent)

For acquisition projects, also provide:

☐ Willing Seller Letter

PROJECT INFORMATION TABLES

Insert responses to every question. Use N/A where appropriate.

SUMMARY			
Title	Upper Mokelumne River Watershed Habitat Restoration and Defense Project		
Abstract	The upper Mokelumne River watershed has experienced catastrophic wildfire over the past two decades, damaging tens of thousands of acres of critical wildlife habitat. This project will restore wildfire damage and reduce risk of future fires in an effort to protect remaining critical habitat and upper watershed forestlands. The project advances Proposition 68 and WCB's program objectives through reforestation and post-fire habitat recovery, restoration and protection of aspen stands, and fuels reduction. Work will accelerate development of old growth forest characteristics, protect surface water quality and supply, benefit the California spotted owl, northern goshawk, aquatic resources and species within including the Sierra Nevada yellow-legged frog, foothill yellow-legged frog and California red legged frog, among others, improve forest and watershed health and climate resilience, and decrease the risk and severity of future wildfire.		
Total Cost (round up to nearest $1,000)	**$4,157,665**	**Amount Requested** (round up to the nearest $1,000)	**$1,931,505**
Start Date	**3/1/2020**	**End Date**	**3/31/2024**
Habitat Type/Acres	**Sierra mixed conifer 1,903 acres; aspen 12 acres.**		
Project Type (check all that apply)	☐ Planning	☒ Implementation	☐ Acquisition

LOCATION INFO			
County(ies)	Amador	**Specific Location** (APN or Address)	024020002000, 025010002000, 025020013000, 025030007000, 025040008000, 025040014000, 025050012000, 025050013000, 025060003000, 025070002000, 026060005000, 026090003000, and 028010004000
Nearest City	Pioneer	**Distance**	17 miles
Latitude (Decimal Degrees)	38.506535	**Longitude** (Decimal Degrees)	-120.255898
What is represented by the lat/lon coordinates? (e.g., center of project site):	**Approximate center of project.**		

APPLICANT INFO

Organization Type	☐ State Government ☐ Local Government	☐ Federal Government ☒ Nonprofit Organization*	
Organization Name	**Calaveras Healthy Impact Product Solutions (CHIPS)**		
Contact Person	**Regine Miller**	**Title**	**Executive Director**
Phone	**530-277-3843**	**E-mail**	**regine.CHIPS@gmail.com**
Address	**P.O. Box 616, West Point, CA 95255**		
Signatory Name	**Regine Miller**	**Title**	**Executive Director**
Address	**P.O. Box 616, West Point, CA 95255**		
Tax ID#	**26-1435215**		

** If qualified under Section 501(c)(3) provide 501(c)(3) nonprofit organization and registered to work in California. Number: Calaveras Healthy Impact Product Solutions EIN 26-1435215*

LANDOWNER INFO

Landowner Type	☐ State Government ☐ Local Government ☐ Private Landowner	☒ Federal Government ☐ Nonprofit Organization ☐ Other _____	
Landowner Name	**USDA Forest Service, Eldorado National Forest, Amador Ranger District**		
Contact Person	**Rick Hopson**	**Title**	**District Ranger**
Phone	**(209) 295-4251**	**E-mail**	**rhopson@fs.fed.us**
Address	**26820 Silver Dr., Pioneer, CA 95666**		
Signatory Name	**Laurence Crabtree**	**Title**	**Forest Supervisor**
Mineral Rights Holder	**N/A**		

ELECTED OFFICIALS

Project Overview: *In three paragraphs or less, clearly describe the project and how it will advance the priorities and objectives described in the Proposal Solicitation Notice (PSN).*

The Upper Mokelumne River Watershed Habitat Restoration and Defense Project is urgently needed to restore post fire and tree mortality forest areas across the Mokelumne River watershed to advance fire recovery, avoid permanent type conversion, and reduce the risk of stand replacing fires and catastrophic environmental, economic and social loss. The project

Applicant Signature: *"By signing this form, I certify that I am authorized to apply for this grant and the information contained in this Application and its attachments is true and accurate to the best of my knowledge."*

Printed Name: _Regine Miller_____ Title: _Executive Director_____

Signature: _____ Date: _____

Districts	Numbers	Names
State Assembly https://www.assembly.ca.gov/	District 5	Frank Bigelow
State Senate https://www.senate.ca.gov/	District 8	Andreas Borgeas

NARRATIVE QUESTIONS

Concisely respond to each of the following questions. Combined responses to narrative questions, not including figures or tables, are expected to range between 5 to 10 single-spaced, letter-size (8.5" x 11") pages and should not exceed 15 pages.

Applicability to Solicitation Priorities

1. Explain how the proposed project aligns with the PSN priorities and would advance the Proposition 68 objectives described in the PSN.

   Include a detailed description of the project background, rationale for the project need, scientific basis for the proposed work, and expected results from the project. Describe anticipated consequences if WCB does not fund this project at this time. Identify relevant, related projects or phases that have already been planned or implemented.

Project Background. The upper Mokelumne River watershed has experienced catastrophic wildfire over the past two decades, including the 2004 Power Fire which burned approximately 17,005 acres on the Eldorado National Forest (NF) and private timberlands. Nearly 50% of the Power Fire burned at high intensity, killing 75-100% of the trees and burning duff and litter that protects the soil, significantly degrading thousands of acres of critical wildlife habitat. Forest habitat in areas surrounding the Power Fire burn scar, is threatened due to insect attack resulting from previous logging practices and the closing of area mills, resulting in even aged and unnaturally dense stands during a period of drought creating vulnerable conditions. The Upper Mokelumne River Watershed Habitat Restoration and Defense Project will restore damage within the Power Fire boundary and adjacent areas, accelerate development of old forest characteristics, and reduce the risk of future fires in an effort to protect remaining and create new critical habitat across 1,915 acres, while at the same, boost the local restoration and stewardship economy.

This project advances Proposition 68 and WCB's program objectives through reforestation planting and thinning and post-fire habitat recovery, restoration of aspen stands, and fuel reduction. This project will protect and restore upper forest and watershed health that are tributary to major downstream Mokelumne River water storage facilities, as well as aquatic habitat for species such as the Sierra Nevada yellow-legged frog (SNYLF), foothill yellow-legged frog and California red legged-frog. Project activities will accelerate post fire recovery which will improve climate resilience and resistance to insect and disease-related attack and promote structural diversity, leading to the protection of existing and development of new wildlife habitat, including Protected Activity Centers (PACs) for the California spotted owl (CASPO) and

northern goshawk (NOGO). Project activities will restore remnant aspen stands that support distinctive plant and animal communities. Fuels reduction in strategic locations will affect a change in wildfire behavior by lowering the risk, slowing the spread and reducing the intensity of future fires. This project will also enhance fire safe conditions adjacent to developments and private property, and provide for safe evacuation and firefighter deployment.

Project Need. The Mokelumne River watershed is a major drainage of the western Sierra Nevada which contains extensive forestlands supplying water to 1.4MM users, recreation, hydropower generation, tourism, agriculture, and species of significance. Within the North Fork Mokelumne River watershed, steep topography, dense vegetation, easterly dry, hot fall winds, and a Mediterranean climate create conditions capable of producing high intensity catastrophic wildfires driven west toward at-risk communities, as evidenced by CAL FIRE's Very High Fire Hazard Severity designation.

The US Forest Service, Eldorado National Forest, Amador Ranger District (USFS) developed this project with the Amador Calaveras Consensus Group (ACCG), an all lands community-based forest collaborative. This project aligns with the Mokelumne Avoided Cost analysis (MACA) which was undertaken with support from Sierra Nevada Conservancy (SNC), the Nature Conservancy, the USFS, and the ACCG. The MACA demonstrated the importance of forest restoration to saving resources in disproportion to their costs, and included treatment of the proposed project area as part of its priority recommendations.

Proposed Scope. 1) Post fire reforestation interplanting of 300 acres in the Power Fire footprint in groups and individually, utilizing local microsite conditions to increase heterogeneity. Sierra mixed conifer seedlings will be planted within previously planted post-fire plantations that have experienced mortality to help accelerate fire recovery. Tree planting density will vary based on CASPO PACs, sensitive plant occurrences and potential habitat areas, deer critical winter range, riparian areas, and specific site conditions. Planting on unproductive ridge tops will be reduced. Species proposed for planting include Ponderosa pine, Jeffrey pine, sugar pine, white fir, Douglas fir, red fir, and incense cedar. **2) Post fire reforestation thinning of 900 acres of natural stands and young mixed conifer plantings in the Power Fire boundary using methods consistent with PSW GTR 220 and 237, to speed recovery by decreasing competition and increasing growth rates.** Thinning will advance development of old forest characteristics, reduce intertree competition and susceptibility to insect and disease, and increase spatial heterogeneity by creating individuals, clumps and openings using hand treatments such as chain saws (450 acres) as well as mechanical treatment such as masticators (450 acres). **3) Post fire reforestation thinning and release of 400 acres of natural stands comprised of small trees located along strategic roads, to accelerate habitat recovery and development of old-forest characteristics within the Power Fire scar.** Thinning and release in strategic locations will improve fire resiliency, increase tree growth, and reduce the risk of loss of known PACs. Small trees will be thinned, residual trees pruned and brush cut within 25 feet of road edge. Surface fuels smaller than 20" diameter will be chipped and scattered at least 4 feet from leave trees and to a depth of less than 6 inches. **4) Restoration of up to 12 acres of remnant aspen stands, in areas adjacent to the Power Fire area, using**

temporary fencing to prevent damage to sprouts from browsing deer and cattle, support sapling vigor and age class diversification, and creating valuable wildlife habitat. Up to 1.4 miles of fencing at 8 locations will be erected. Fence will consist of 7-foot nylon deer mesh supported by t-posts on 10 foot centers and, where both cattle grazing and deer browse occur, an additional 3 strands of barbed wire over the mesh. Mesh and wire will be dropped prior to the onset of snow fall each year then re-installed upon snowmelt. Fencing will be removed at the end of the grant term. **5) Fuels reduction of 303 acres along roads adjacent to Power Fire area to protect existing high-value habitat, including known PACs and facilitate fire management.** Surface and ladder fuels will be hand treated, raising canopy base height and reducing the potential for crown fire and spotting. Fuel models will convert to lower intensity and competing vegetation will be reduced to improve remaining tree growth and vigor. Specifications will follow those outlined in No. 3 above.

Scientific Basis and Expected Results. Without reforestation planting and thinning intervention, post-fire mixed conifer forests within the Power Fire area may convert to chaparral habitat which burn at high severity further inhibiting conifer regeneration and leading to permanent type-conversion to shrub fields. The proposed reforestation will develop new and protect existing mixed conifer habitat, leading to the protection and creation of new desired conditions for CASPO and NOGO PACs. Reforestation planting and thinning will support long term development of the desired conditions, namely high levels of structural diversity over large areas comprised of roughly even-aged vegetation groups, varying in size, species composition, and structure.

Thinning of post-fire planted and naturally regenerated stands within the Power Fire footprint is necessary to reduce overcrowding and the potential for insects and disease. Project activities will meet objectives specified in the Eldorado National Forest Plan, as amended by the Sierra Nevada Forest Plan Amendment Environmental Impact Statement Record of Decision (ROD) (2001), and are needed to accelerate the development of old forest characteristics, by reducing intertree competition for moisture, sunlight, and nutrients and susceptibility to insect attack; increasing stand variability, by achieving the desired tree species composition and increasing spatial heterogeneity; promoting hardwoods, by retaining and releasing desirable hardwoods; reducing the risk of loss to wildfire, by maintaining or increasing diameter growth rates, increasing bark thickness, and facilitating the nearterm introduction of fire via under burning in each stand, and; improving stand health by reducing the number of trees that have poor stem form and have been damaged.

To create fire resilient forest and old-forest conditions in the project area requires the survival and growth of individual trees and forested stands for many years without the occurrence of stand replacing fires. Currently, trees along roads are at high risk of fire-related mortality due to their small size and high density. Increased growth resulting from thinning of small diameter trees will accelerate habitat development, and reduce fire intensity and size and risk of loss to fire.

Aspen stands support distinctive and diverse plant and animal communities in spite of only comprising a small percentage of the region's landscape. Conifer encroachment, fire suppression, and browsing have resulted in a decline in the health of aspen stands across the Sierra Nevada. Aspen is shade intolerant and needs full sunlight for successful establishment and growth. The stands proposed for fencing were previously shaded; the USFS has removed competing conifers to maximize sun exposure and reduce the litter layer, stimulating sprouting. These stands have one mature age class, which will diversify through the establishment of saplings leading to the addition of a younger age class and potential stand expansion. Fencing will reduce browse impacts to sprouts, allowing them to reach invulnerable height more quickly and with more viable stems, than without fencing.

Decreased fire hazard along strategic roads is necessary to protect critical natural resources and facilitate safe ingress/egress. Fuels reduction will limit the size of wildland fires, further reducing tree mortality and allow trees to continue to accelerate growth. Fuel loading will be reduced as directed by the Federal Land, Assistance, Management, and Enhancement Act report (2009) and the National Cohesive Wildland Fire Management Strategy (2009) resulting in lower flame lengths and rate of spread with the ideal being 4 feet or less.

Anticipated consequences if funding request is denied. This project leverages partner strengths and was collaboratively developed in an effort to build on past work, and continue momentum toward an increase in the pace and scale of forest restoration beyond CFLRA funding. Current CFLRA and Power Fire settlement agreement funding is coming to a close. Without WCB funding, old growth forests within the fire area will convert to chaparral. CHIPS is dedicated to establishing a self-sustaining environmental restoration and stewardship economy in the wake of closing of numerous local mills. CHIPS has worked for 14+ years to develop biomass utilization infrastructure which will provide an outlet for excess biomass. This project represents the next phase in a 14 year continuum. Without post CFLRA and fire settlement funding, regional momentum and prior investments will be lost.

Related projects. This project is part of a larger reforestation and fire recovery effort under the Power Fire Reforestation Project Environmental Impact Statement (EIS), Power Fire Road Maintenance Categorical Exclusion (CE), Power Fire Road Hazard Tree CE, Power Fire Pre-commercial Thinning Project CE, and the View 88 Fuels Reduction and Forest Health Project Environmental Assessment (EA). The USFS has and will perform additional reforestation and fuels reduction activities within and adjacent to the project area via the Cole Creek, Panther Creek and View 88 projects. CHIPS has conducted the majority of the hand treatment on these projects. ACCG partners are also working in the vicinity, including Sierra Pacific Industries and Pacific Gas & Electric who are implementing the Beaver Ridge, Henley Ridge and Rattlesnake Creek shaded fuel breaks and the power line fuel breaks, respectively, and the Upper Mokelume River Watershed Authority (UMRWA) who will implement the Power Fire Culvert and Erosion project which will repair culverts and improve roads. Taken together, the proposed

project and those in nearby areas will promote landscape scale forest restoration and watershed protection.

2. Describe how the project aligns with the goals, objectives, and priorities outlined within the WCB Strategic Plan (e.g., Goals B.1 or B.5 from the 2014 Strategic Plan).

- Goal A.1. Project will improve forest climate resilience by thinning to support accelerated development of large tree characteristics and reducing fuels in the immediate vicinity of California spotted owl and NOGO PACs to help offset the impacts of climate change and decrease potential wildfire impacts on wildlife.
- Goal A.2. Project will protect and restore the upper North Mokelumne River watershed which supports critical habitat for SNYLF (Federally-endangered), FYLF (FYLF) (USFS Sensitive Species) and California red-legged frog (CRLF) (Federally-threatened), and is tributary to the lower Mokelumne River which supports downstream anadromous fish species, including spring run chinook salmon (Federally-threatened) and steelhead trout (Federally-threatened).
- Goal A.3. Project will support protecting habitat and advancing recovery of listed species by improving forest and watershed health, including water resources. Beneficiaries include the SNYLF, FYLF, CRLF, CASPO, and NOGO habitats.
- Goal B.1. This project will increase fire resilience, accelerate development of old forest characteristics, and protect water resources thereby protecting existing and developing new habitat for the CASPO and NOGO, and conserving habitat for the SNYLF, FYLF and CRLF. The project will protect and restore forests which are tributary to downstream aquatic habitat supporting anadromous fish species in the lower Mokelumne River.
- Goal B.5. This project was developed in coordination with the ACCG, an all lands community based collaborative group. The project will offer continued opportunities for ACCG/public engagement and learning through potential field tours, presentations and monitoring which may help to inform future fire recovery and restoration efforts.
- Goal C.1. This project protects and restores upper watershed health and supports USFS multiple land use objectives, including recreation.
- Goal C.4. This project is located on Federal land and is within and adjacent to DACs who will benefit from continued public access and use.
- Goal E.1. This project leverages significant partner staffing and financial matching contributions as well as CHIPS' ability for flexible contracting which is expected to support local contracting, hiring and vending to benefit high poverty communities and the establishment of a local forest restoration and stewardship economy.

Significance of the Benefits

3. Explain how this project will result in multiple tangible benefits (e.g., wildlife habitat, water quality, carbon storage, nutrient cycling, etc.) and their significance to the PSN priorities and Proposition 68 objectives.

Project activities will speed post fire recovery through interplanting to help to prevent the permanent conversion to shrub fields and through thinning by lowering vegetation densities and decreasing competition for water and other limited resources. This will improve forest resilience, resistance to insect and disease-related attack, and promote structural heterogeneity in line with GTR 220 protecting CASPO and NOGO PAC's. The project will reduce the extent and severity of future wildfires through reforestation thinning and fuels reduction, and allow faster suppression access thereby minimizing fire damage and reducing the potential number of PACs and acres of suitable habitat impacted. By reducing the potential extent and severity of future fire, the project will protect forest health and lands tributary to critical Mokelumne River surface water resources for human consumption, hydroelectricity generation, and sensitive wildlife species, advance fire safe communities, protect life and property, allow for safe ingress/egress, and access for fire suppression. These benefits align with PSN Priority 1 Reforestation and Post Fire habitat Recovery and with Proposition 68 in that the project is advances reforestation and post fire habitat recovery, and improves climate resiliency and protects lands tributary to critical water resources.

This project will restore remnant aspen stands that support distinctive plant and animal communities increasing their habitat quality and the percentage of the landscape they comprise on the Eldorado NF. Expected benefits include providing a source of food and shelter for a diversity of wildlife such as blue grouse, quail, flycatchers, bluebirds, NOGO, cottontail rabbit, snowshoe hare, porcupine, beaver, and mule deer. This aligns with PSN Priority 1 Restoration of Aspen Stands and with Proposition 68 in that it protects and enhances biodiversity and supports restoration of a State Wildlife Action Plan (2005) priority habitat.

Fuels reduction along strategic roads will slow the spread and reduce the intensity of future fires thereby reducing potential damage to both treated and untreated areas and the impacts of large, severe wildfires. Fuels reduction will protect current known PACs from the threat of wildfire and protect surface water quality and supply for downstream users. The project will enhance fire safe conditions adjacent to developments and private property, and provide for safe ingress/egress. This aligns with PSN Priority 2 Hazardous Fuels Reduction and with Proposition 68 in that the project is benefiting forest and watershed health, including wildlife within, and improving climate resiliency and protecting lands tributary to critical water resources.

Durability of Investment/Climate Change Considerations

4. Describe the extent to which a project will deliver enduring, sustainable benefits. What are the provisions to maintain the benefits and for what period of time? Are there any protections or restrictions affecting the project (e.g., carbon offset projects, conservation easements, etc.)?

   Implementation project proposals must include a Long-Term Management Plan (or the equivalent) addressing how the project will be maintained for a minimum of 25 years. Acquisition projects should outline a 25-year management strategy for the property.

Project work will provide lasting environmental benefits by: 1) restoring mixed conifer habitat in clusters and as individuals in post fire areas which will increase forest heterogeneity and create a natural seed source; 2) reducing excess fuels in the vicinity of CASPO and NOGO PACs to protect them from fire; 3) stimulating aspen reproduction and stand expansion to provide ongoing unique and diverse habitat; 4) reducing risk of stand replacing fire and associated impacts thereby protecting water resources for wildlife, human consumption, and hydroelectric generation; 5) improving forest and watershed health and climate resilience, and increasing carbon sequestration and avoiding uncontrolled emissions from wildfire, and; 6) protecting important cultural resources. Environmental benefits will be sustained in perpetuity by the USFS managing toward the goals and objectives outlined in the Sierra Forest Plan Amendment EIS (SNFPA) (2001), with support from ACCG partners.

Local economic and social benefits to DACs resulting from this project will be sustained through ongoing collaborative efforts of ACCG members, including project partners, working to maintain fire safe communities and create a local restoration and stewardship economy in alignment with ACCG's 5-Year Strategic Plan (2018). CHIPS, and also the ACCG has, a deep and long lasting commitment to environmental stewardship, sustainable economic development and local community restoration. There are no known protections or restrictions affecting the project.

5. Explain how the proposed project will provide climate change adaptation and resilience benefits to wildlife, habitat, and ecosystem function.

Project activities will promote climate change adaptation and resilience through increased growth rates and decreased time required to reach mature forest conditions, concentrating biomass in trees, not surface fuels, and sequestering carbon. Additional carbon sequestration will be achieved upon development of CHIPS' parallel effort, a 3 MegaWatt forest bioenergy gasification facility located in nearby Wilseyville, CA. The facility will provide an outlet for biomass generated from local restoration projects and produce biochar as a value added product, storing high levels of carbon.

Increased spacing between trees and increased growth on retained trees will improve snow depositing and associated potential increases in snow pack retention and available water. Mature forest conditions will provide key habitat for sensitive wildlife species. Work is strategically located to protect and retain existing refugia for the CASPO and NOGO. Where treatments retain existing habitats, and promote faster development of late seral habitats, project activities will shift the project area toward a state that will support late seral/old forest habitats. In addition, thinning and fuels reduction work will reduce the potential for wildfire severity and spread, and help to avoid greenhouse gas emissions resulting from uncontrolled burns.

6. For implementation projects, describe applicable Management and/or Monitoring plans and how they pertain to the project.

- Who will be responsible for implementing ongoing management and/or monitoring? Provide specific contact information if another agency, program, or individual will be collecting, storing, and evaluating the data.
- How will long-term management and monitoring activities be funded after the project is complete?

The USFS is responsible for the long-term management and monitoring of the project area which is expected to be funded through a combination of the Federal budget, stewardship contracts and appropriations, and will be guided by the SNFPA (2001). Additionally, under this grant, the ACCG Monitoring Work Group (ACCG MG) proposes to conduct monitoring of planted and thinned areas based upon the Cornerstone Collaborative Forest Landscape Restoration Program (CFLRP) Monitoring Strategy (2016). All monitoring results will be reported to WCB during the grant term.

Eldorado NF, Amador Ranger District
Rick Hopson, District Ranger
209-295-5910
rick.hopson@usda.gov
26820 Silver Drive
Pioneer, CA 95666

ACCG Monitoring Work Group
Becky Estes, Central Sierra Province Ecologist
Forest Service, Pacific Southwest Region
530-642-5161
Becky.estes@ysda.gov
100 Forni Road
Placerville, CA 95667

Approach and Feasibility

7. Describe how the proposed project will be carried out. Explain how the approach and methodology are appropriate for the project objectives.

This project will be implemented by CHIPS in close coordination with the USFS and UMRWA, a joint power authority comprised of six water agencies and the Counties of Amador, Calaveras and Alpine. CHIPS staff will lead project administration and management. Treatments will be implemented through contracts awarded and managed by CHIPS and funded by this grant. A contracted Registered Professional Forester will ensure contract and field operations compliance. Under this grant, all project partners are committed to local contracting, hiring and vending to benefit high poverty communities.

The USFS will support project implementation by preparing the silvicultural prescriptions, reviewing the contractor Request for Proposals and selection criteria, participating in the selection of contractor(s), designating treatment units, flagging PACs, cultural sites, endangered plants, water ways, etc., building site maps, and documenting completed work with site maps. The USFS will perform these activities and additional reforestation and hazard fuels activities within the project area using Federal matching funds.

UMRWA will partner on project planning and implementation by serving as CEQA lead agency, leveraging its Master Stewardship Agreement with the USFS, on which ACCG is a partner and leveraging its recently awarded NFWF grant for the Power Fire Culvert and Erosion project which will repair/replace culverts and conduct road improvements to benefit surface water quality and sensitive aquatic species, and access for forest health restoration and maintenance.

Monitoring and Reporting

8. Describe how the effectiveness of the project will be monitored, assessed, and reported. All project proposals must include a Monitoring and Reporting Plan (or the equivalent) addressing project-specific performance measures, opportunities to extend the monitoring activities beyond the term of the grant, and how monitoring results and progress towards objectives will be reported.

CHIPS will prepare and submit annual monitoring reports to the WCB detailing project progress toward meeting objectives, status of deliverables, challenges encountered, budget tracking, and next steps. Photo-documentation and maps showing completed work will be included as will an accounting of the number of acres treated as compared to the target acreages.

Performance measures to be monitored by the USFS Amador Ranger District include:

- **Plant survival**. Within planted areas, the USFS will conduct post treatment efficacy and plant survival monitoring after the first and third growing seasons. Results will determine if corrective action is necessary. .
- **Thinning efficacy.** Within thinned plantations and naturally regenerated stands, the USFS will monitor efficacy within a random grid distribution of sample plots to ensure spacing, stocking, and crop tree selection and stump and slash treatment criteria are met.
- **Aspen stand vigor and height.** Stands will be monitored seasonally to ensure successful protection and resulting vigor and height, as well as condition and maintenance of the fence.
- **Fuel treatment effectiveness.** Any treated area within the project footprint that is subject to wildfire that has been completed within the previous 10 years will be monitored for fuel treatment effectiveness consistent with the USFS Interim Directive 5140-2012-1.

ACCG Monitoring. The ACCG Monitoring Work Group (ACCG MW) formed in 2013 and consists of USDA Forest Service specialists, non-profits, environmental groups, and other agencies. They developed a monitoring strategy (2016) and have been involved in a number of research projects throughout the Cornerstone project area, and will monitor this project. The ACCG's monitoring questions evaluate achievement of Cornerstone CFLRP objectives, several of which address reforestation efforts within the Power fire:

- Did reforestation planting and thinning encourage a structure consistent with a more resilient forest stand (variable spacing designed to maintain the individual, clump and

opening pattern, a desired future tree density consistent with historic forest conditions and moderate levels of shrub cover)?
- Do different planting densities affect competition with the dominant cover type?
- Do different planting densities affect survival and growth of planted seedlings?

A detailed monitoring plan for the Power Fire, built upon the 2018 pilot monitoring, will be developed in partnership with ACCG MW following grant award. A monitoring crew will be contracted through UC Davis. Monitoring data will be collected pre-treatment, post-treatment, and year 3 after treatment.

In addition to monitoring within the Power Fire area, the ACCG MW is conducting ongoing socioeconomic monitoring that is intended to help ACCG meet its goals and objectives, and evaluate how the group's efforts toward rebuild local economy and communities.

ACCG intends to continue monitoring beyond the grant term and plans to seek other potential funding opportunities.

Project Team Qualifications

Describe your organization's relevant experience, resources, and capacity to successfully complete the proposed project. Provide examples of similar grant-funded projects previously completed by your organization. Identify key partners or subcontractors who will contribute to project work.

CHIPS is project applicant and will lead project implementation in close coordination with the USFS and UMRWA. Since inception in 2004, CHIPS has successfully administered and managed nearly $5 million in Federal and State grants and over $5 million in Federal, State and private contracts and agreements. CHIPS and the USFS have partnered together since 2012 under their Participating Agreement to complete roadside hazard fuels reduction, shaded fuel break maintenance, cultural site restoration, fire mitigation (replanting), fencing, fire safe work around homes and communities, and fire wood for elders on over 2,400 acres within the Mokelumne River watershed. CHIPS is currently administering and managing two SNC implementation grants for the South Fork Mokelumne River Watershed Restoration project which total $1.36M and include thinning of over 500 acres of mixed conifer plantations on Federal Bureau of Land Management and private forestlands. The projects are currently ahead of schedule and under budget. UMRWA and the USFS similarly have a strong working relationship and are currently working together to implement the SNC-funded Black Springs, Pumpkin Hollow, and Cabbage Patch Projects which total $2MM and include 2,313 acres of fuels reduction treatments. Both CHIPS and UMRWA are experienced at issuing Request for Proposals and hiring and managing contractors.

Key team members are listed below:
Steve Wilensky, Calaveras Healthy Product Impact Solutions. Retired Calaveras County Supervisor, and Board Chair CHIPS, a local non-profit that performs forest stewardship and is

developing a community scale forest biomass utilization campus, including a bioenergy plant. Mr. Wilensky will contribute his experience negotiating multiple Federal contracts and overseeing field operations.

Regine Miller, Calaveras Healthy Product Impact Solutions. Executive Director whose responsibilities include project administration, assisting with field operations, program and fund development, and ACCG administration. Ms. Miller will lead project administration and management.

Rick Hopson, Eldorado National Forest, Amador Ranger District. District Ranger for the Amador Ranger District on the Eldorado National Forest. Mr. Hopson has worked for over 20 year in various USFS locations, including as District, Supervisor's Office and Regional Office Hydrologist in Regions 4 and 5 of the USFS.

Jesse Plummer, Eldorado National Forest, Amador Ranger District. District Fuels Specialist/Battalion Chief. Mr. Plummer is responsible for planning and implementation of prescribed burning and fuel reduction as well as wildfire management.

Chuck Loffland, Eldorado National Forest, Amador Ranger District. District Wildlife Biologist. Mr. Loffland has worked on the district since 1989, conducts/supervises wildlife survey work, and provides input to all NEPA projects on the Amador District.

Marc Young, Eldorado National Forest, Amador Ranger District. Silviculturist. Mr. Young is responsible for silviculture prescriptions and action plans for reforestation management objectives, prepares environmental analysis, conducts plantation and natural regeneration survival and timber unit examinations, participates in timber sale unit layout and sale administration.

Robin Wall, Eldorado National Forest, Amador Ranger District. Eldorado National Forest Coordinator for the Cornerstone Project, a CFLRP working closely with the ACCG and affiliated parties within Mokelumne River Watershed.

Becky Estes, USDA Forest Service, Pacific Southwest Region. Central Sierra Province Ecologist for 8 years. Ms. Estes previously worked in the Sierra Nevada as a postdoc with the Pacific Southwest Research Station where she worked with a number of research scientists studying relevant questions throughout Mediterranean climates. She assists forests with complex management needs, including the importance of managing post-fire landscapes to ensure future resilience in the face of a changing climate.

Gwen Starrett, Volunteer Ecologist and ACCG Community Member. Ms. Starrett is focused on meadow restoration projects and watershed monitoring within the ACCG. She helped to found Stewardship Through Education, LLC to bring place-based education to local school children. She worked as an Environmental Specialist at the State Water Board, creating their first statewide citizen science monitoring program and providing scientific expertise to help resolve water quality issues.

Richard Sykes, Upper Mokelumne River Watershed Authority. Executive Officer of UMRWA. Mr. Sykes has extensive experience in land management and restoration and served for 10 years as the Director of Water and Natural Resources for the East Bay Municipal Utility.

Karen Quidachay, Upper Mokelumne River Watershed Authority. UMRWA Forest Management Program Director and owner of Landmark Environmental, Inc. a small environmental consulting firm which assists clients with environmental regulatory compliance

including CEQA and NEPA. Ms. Quidachay will contribute her direct experience working on the Power Fire Reforestation EIS and the crosswalk between NEPA and CEQA.

Schedule and Deliverables

9. Detail the sequence and timing of project tasks, milestones, and deliverables to complete the project within the grant term (i.e., project must be complete, and funds expended, no later than March 31, 2024).

The proposed project will commence March 1, 2020 and conclude March 31, 2024.

Task 1. Project Management and Administration. CHIPS will manage the project schedule and budget, inform participants of progress of deliverables, manage billing, keep records, prepare, solicit, and award contracts, manage contractors, report accomplishments and financials, coordinate regularly with project partners, and provide media outreach.
Milestones: Administrative work, as needed.
Deliverables: Executed grant agreement, invoices and backup documentation, media releases, progress reports, final report.
Schedule: Q1 2020-Q1 2024.

Task 2. Project Implementation: Field Site Preparation, Contract and Administration. CHIPS and/or its contractors, with support from the USFS, will perform on-the-ground flagging and acreage determination of treatment units based on the project's NEPA documents, and develop maps, treatment prescriptions, and specifications for preparing contracts for implementation. Treatments include planting, hand thinning, piling of surface and ladder fuels, follow-up prescribed and pile burning, mastication of brush and other surface fuels, and put up/take down of temporary aspen stand fencing. CHIPS will perform contract administration and field work to implement on the ground activities in close coordination with the USFS, including development and publishing of contractor RFP(s), pre-work bid tour(s), contractor selection, pre-work conferences, quality control, photo-documentation, and contract performance monitoring and compliance.
Milestones: Identify units for treatment, prepare written prescriptions and specifications, select contractors and execute agreements, and provide field administration of contracts in coordination, with support from the USFS.
Deliverables: 1,815 acres field prepared and complete, requests for proposals, progress reports and final report.
Schedule: Q2 2020-Q1 2024.

Project Readiness

10. Demonstrate how property access, environmental compliance, permitting, planning, engineering design, and any other necessary preparations have been addressed and are sufficient to ensure prompt project implementation. For acquisition projects, other relevant preparations include appraisal, purchase and sales agreement, option agreement,

preliminary title report, etc. If the applicant must be granted site access to implement the project or conduct long-term management or monitoring, provide the access agreement (draft agreement will suffice) and evidence that the party authorized to grant access is willing to do so.

Project site tenure is secure through the existing Eldorado NF-UMRWA Master Stewardship Agreement (MSA).

NEPA documents for the proposed activities are complete and available upon request. CEQA will be completed for the reforestation component of the project prior to the WCB February Board meeting based upon the Power Fire Reforestation Project EIS NEPA document. No other preparations are expected to be required prior to implementation. All project partners will follow protection measures identified in the NEPA documents, including but not limited to, protection of natural and cultural resources.

The USFS has completed project design specifications which will be incorporated into the contractor RFPs.

11. List each environmental document and permit that will be required for the project and provide the date completed or current status and date anticipated to be completed. If the proposed project may qualify for a CEQA exemption, identify which exemption(s) and explain why. If the project does not qualify for a CEQA exemption, identify the "lead agency" under CEQA, which type of environmental document may be required and its current status. Provide the State Clearinghouse Number, if available.

NEPA is required and complete for the project. The USFS prepared the following documents in compliance with NEPA and other relevant Federal and State laws and regulations:

- View 88 Decision Notice/Environmental Assessment (2011)
- Power Fire Road Hazard Tree Categorical Exclusion (2018)
- Power Fire Road Maintenance Categorical Exclusion (2016)
- Power Fire Pre-commercial Thinning Project Decision Memo (2019)
- Power Fire Reforestation Project Record of Decision/Environmental Impact Statement (2017)

All other project activities except for reforestation are exempt from CEQA under SB901 (2018) Minor Alteration 18.36.070 because the activities will occur on federal land and are covered under NEPA. A Negative Declaration is the anticipated environmental review document for reforestation activities. UMRWA will serve as CEQA lead agency, pending Board approval in October 2019. The planned filing date is January 20, 2019.

Budget

12. Complete the Budget Worksheets referenced in the PSN (A. Applicant Budget; B. Budget Justification; C. Cost Share). See the PSN for information regarding project budgets and cost share. Submit the completed Budget Worksheets as attachments to the Application Form.

See attached budget.

Cost Share

13. Provide evidence (e.g., letters, contact information) of secured cost share. In the absence of secured cost share, describe any budget shortfall and how it will be addressed.

The cost share for this project is $2,226,160. See the letters of match commitment from CHIPS, USFS and UMRWA for detail.

Community Support and Collaboration

14. Provide evidence of broad-based public and/or institutional support for the project at the local, regional, or larger scale. Discuss local community or other stakeholder engagement in project delivery (e.g., involvement with project planning/design, outreach, implementation, monitoring, maintenance, etc.).

Project partners are CHIPS, UMRWA, and the USFS. The USFS developed the project with the ACCG, an all lands community-based CFLRP committee to the triple bottom line balancing environmental, social and economic goals. ACCG has CFLRA status and is partnered with UMRWA in two Master Stewardship Agreements. ACCG fosters partnerships among a diversity of private, nonprofit, local, State, and Federal entities, businesses, citizens and others with a common interest in health and well-being of the landscape and communities in the Mokelumne and Calaveras watersheds. The group is advancing an all-lands strategy to increase the pace and scale of forest restoration and to foster environmental stewardship, local jobs, greater local economic stability, and healthy forests and communities. ACCG has been in operation for over ten years, involving over 40 non-profit organizations, agencies and community groups. The group is broad based, nationally recognized and has met consistently every month since inception. As a mature collaborative, ACCG has secured millions of dollars for stewardship and restoration purposes, include CFLRA funding.

Within the ACCG Cornerstone CFLRP planning area, many forest health projects have been implemented on private, federal, and industrial lands creating a landscape scale restoration approach in the area surrounding the proposed project (see here for treatment map). This project complements ACCG principles and projects, and supports restoration beyond CFLRA funding to continue to increase the pace and scale of forest restoration.

CHIPS, as a non-profit community-based organization, has a long history of collaborating with local Native American communities. The organization employs a staff of 45 field crew members, including cultural site monitors. Over 70 percent of the staff are Native American representing Miwok, Paiute, and Washoe (Hung A Lel Ti) tribes. CHIPS holds working agreements with the Washoe tribe of California and Nevada and the Mariposa Indian Council.

As previously discussed, this project aligns with the MACA which evaluated the costs and benefits of fuel treatments in the Upper Mokelumne River Watershed, and is included in the Amador County Community Wildfire Protection Plan (CWPP) which identifies at risk communities through the Wildland Urban Interface (WUI) and Federal areas for hazardous fuel reduction treatments that will protect WUI communities (Buckley et. al. 2014). The project area and fuels reduction treatments are consistent with those recommended and prioritized in the CWPP.

Letters of support from project proponents and partners are enclosed demonstrating broad support. CHIPS has requested a letter of support from the ACCG which was not secured by the grant deadline but will be made available to WCB prior to grant award.

Serving Disadvantaged Communities

Explain whether the project provides direct benefits to severely disadvantaged communities and/or is located within a disadvantaged community. See the PSN for instructions how to make these determinations.

CHIPS is committed to hiring at-risk personnel, and has a 14 year history of hiring native Americans and others at-risk since closing local mills, to conduct forest restoration and stewardship. CHIPS' pioneering efforts and commitment to this goal are absolute. CHIPS believes that the restoration of local communities is not an add on, but rather, essential to the people of the Sierra Nevada are playing their rightful to restore the region.

This project will benefit DACs that have been affected by extreme poverty resulting from the timber industry collapse. CHIPS will create local restoration and stewardship jobs through this project, and lower wildfire risk to nearby communities. Fuels reduction hand treatments will be conducted by CHIPS' field crew as part of a joint effort to help to lift local residents out of poverty while at the same time building USFS capacity to increase the pace and scale of forest restoration. All other contracted work is expected to be sourced locally which will provide additional local economic and social benefit to DACs. CHIPS has good working relations with local contractors, who have only recently now reassembled following the timber industry collapse. The project site itself is located within a disadvantaged community (Block Group 060050001021).

CCC/CALCC Services

15. Describe whether and to what extent the project will utilize California Conservation Corps (CCC) and/or California Association of Local Conservation Corps (CALCC) services. The Corps Consultation Review Document can be used to determine feasibility for CCC or CALCC to provide project services.

CHIPS completed the Proposition 68 Consultation Process with the CCC and CALCC which indicated Corpsmembers can assist with the seasonal put up/take down of temporary aspen stand fencing and hazardous fuels reduction hand treatments. The CCC recognizes that much of the work can be done by the local CHIPS' crew and is open to supporting CHIPS as a support or on-call to assist crew.

END OF APPLICATION

CITATIONS

ACCG 5 Year Strategic Plan (2018-2023). 2018. Retrieved from http://acconsensus.org/wp-content/uploads/2018/06/STRAT-PLAN-FINAL-v1.pdf

Buckley, M., N. Beck, P. Bowden, M. E. Miller, B. Hill, C. Luke, W. J. Elliot, N. Enstice, K. Podolak, E. Winford, S. L. Smith, M. Bokach, M. Reichert, D. Edelson, and J. Gaither. 2014. "Mokelumne watershed avoided cost analysis: Why Sierra fuel treatments make economic sense." A report prepared for the Sierra Nevada Conservancy, The Nature Conservancy, and U.S. Department of Agriculture, Forest Service. Sierra Nevada Conservancy. Auburn, California. Retrieved from https://sierranevada.ca.gov/wp-content/uploads/sites/236/2019/05/MACA_Full_Report.pdf

California State Wildlife Action Plan. 2005. Retrieved from https://www.wildlife.ca.gov/SWAP/Final

Cornerstone Collaborative Forest Restoration Landscape Program Monitoring Strategy. 2016. Retrieved from http://acconsensus.org/wp-content/uploads/2015/08/01_Cornerstone_Monitoring_Strategy_Final.pdf

Federal Land, Assistance, Management, and Enhancement Act Report to Congress. 2009. Retrieved from https://www.forestsandrangelands.gov/documents/strategy/reports/2_ReportToCongress03172011.pdf

Jain, Theres B.; Battaglia, Mike A.; Han, Han-Sup; Graham, Russel, T.; Keyes, Christopher R.; Fried, Jerremy S.; Sandquist, Jonathan E. 2012. A comprehensive guide to fuel management practices for dry mixed conifer forests in the northwestern United States. GTR RMRS-GTR-292. Fort Collins, CO: US Department of Agriculture, Forest Service, Rocky Mountain Research Station. 331p. Retrieved from https://www.fs.fed.us/rm/pubs/rmrs_gtr292.pdf

North, Malcolm, ed. 2012. Managing Sierra Nevada Forests. GTR PSW-GTR-237. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 184p.

North, Malcolm; Stine, Peter; O'Hara, Kevin; Zielinski, William; Stephens, Scott. 2009. An ecosystem management strategy for Sierran mixed-conifer forests. GTR PSW-GTR-220. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 49 p.

Pacific Southwest Region 5 Common Stand Exam Field Guide. 2012. Retrieved from https://www.fs.fed.us/nrm/documents/fsveg/cse_user_guides/R5FG.pdf

Record of Decision, Sierra Nevada Forest Plan Amendment Environmental Impact Statement. 2001. Retrieved from https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5415882.pdf

The National Cohesive Wildland Fire Management Strategy. 2009. Retrieved from https://www.forestsandrangelands.gov/documents/strategy/strategy/CSPhaseIIINationalStrategyApr2014.pdf

Thompson, M. P., B. G. Marcot, F. R. Thompson, III, S. McNulty, L. A. Fisher, M. C. Runge, D. Cleaves & M. Tomosy. 2013. The science of decisionmaking: applications for sustainable forest and grassland management in the National Forest System. In *Gen. Tech. Rep.*, 54 p. Washington, DC: U.S. Department of Agriculture, Forest Service.

USDA Forest Service Fuel Treatment Effectiveness. Interim Directive 5140-2012-1. Retrieved from https://fireportal.usda.gov/ftem/