



EXHIBIT A PROPOSAL COVER PAGE

Proposal Type

☐ Concept Proposal for Demonstration Projects and Processes

Organization Name (Lead Applicant)

Organization Type

- ☐ Federally recognized Indian Tribe
- ☐ California State Indian Tribe
- ☐ Public agency
- ☐ Local or state agency/special district
- ☐ Resource Conservation District
- ☐ Non-profit organization
- ☐ Public utility
- ☐ Other: _____

Contact Name/Title

Name: _____

Title: _____

Email: _____

Phone Number (include area code): _____

Organization Address (City, County, State, Zip Code):

Authorized Representative (if different from the contact name)

Name: _____

Title: _____

Email: _____

Phone Number (include area code): _____

Certification of Authority

By signing below, the person executing the certificate on behalf of the proposer affirmatively represents that s/he has the requisite legal authority to do so on behalf of the proposer. Both the person executing this proposal on behalf of the proposer and proposer understand that the NCRP is relying on this representation in receiving and considering this proposal. The person signing below hereby acknowledges that s/he has read the entire Request for Proposals document and has complied with all requirements listed therein.

Official Authorized to Sign for Proposal

Signature

Date

STATEMENT OF QUALIFICATIONS

THE CENTER FOR SOCIAL & ENVIRONMENTAL STEWARDSHIP



Founded as Circuit Riders in 1976, the mission of The Center for Social and Environmental Stewardship (The Center) is to support community members to become stewards of their own lives, the lives of others and the environment we share. By providing workforce development, culturally responsive social services, and meaningful nature connection experiences for those facing social and economic disadvantages, we help our diverse human and wild communities thrive.

Over the past 40 years, The Center has designed, planned, implemented, maintained and monitored over one thousand environmental restoration projects and employed hundreds of disadvantaged youth ages 16-25 as part of our environmental crew. In the past two years alone, our small but mighty team has partnered with private landowners, businesses, municipalities, and regional agencies to install almost 10,000 native and water-wise pollinator plants, clear 30 acres of invasive species and fire fuels, and clean up over 17 miles of urban streams. We have both the environmental and human resources experience to successfully carry out this program.

Additional programs at The Center include: *Vista Academy*, a 9-month mindful alternative to juvenile incarceration program; *SonomaWorks*, a work readiness and placement program for low-income parents; and *Windsor Wheels*, a volunteer program to provide transportation for seniors.

The Center provides the full spectrum of ecological restoration services, including:

- Project planning and design that meets state and regional regulatory requirements;
- Fire fuels management
- Hauling, chipping, and disposal of vegetation biomass;
- Invasive plant species removal and treatment
- Installation of trees, shrubs, and herbaceous vegetation using site-specific techniques for restoration of wetland, riparian, coastal, and upland habitats;
- Installation of stream bank stabilization, erosion control, grade control, and habitat enhancement structures such as willow walls, willow brush mattresses, willow wattles, and erosion control fabrics;
- Installation of insectaries and landscaping for habitat enhancement;
- Design, installation and maintenance of irrigation systems for plant establishment;
- Establishment-period maintenance for maximum plant survival;



PREVIOUS PROJECTS & REFERENCES

County Roadways Vegetation Management Project

Partnered with Sonoma County Transportation and Public Works to improve fire safety along 5.5 miles of road right of way. Used industrial chipper, chainsaws, poles saws, and hand saws.

Agency: Sonoma County Transportation and Public Works

Contact: Steven Spacek, Road Crews Coordinator

Phone: (707) 322-7228

Timber Cove Coastal Prairie Restoration Project

Designed restoration plan for, implemented, and maintained a 26,000 square foot invasive ice plant removal and native coastal prairie revegetation project.

Agency: Timber Cove Resort

Contact: Margaret Grahame, Project Manager

Phone: (707) 847-3231

Sweetwater Creek Habitat Enhancement Project

Removed invasive French broom and conducted line transect monitoring and reporting.

Agency: Sonoma Water

Contact: Candace Messner, Environmental Specialist II

Phone: (707) 524-6424

Keiser Park Riparian Enhancement Project

Provided expert services for municipal mitigation requirements including restoration plan design, biological monitoring and consultation, native plant installation, invasive species control, irrigation installation and maintenance, and monitoring/reporting.

Agency: Town of Windsor, Engineering Division

Contact: Jim O'Brien, Project Manager

Phone: (707) 838-1012

Conde Lane Improvement Project – Pool and Pruitt Creek Restoration

Provided expert services for public works mitigation requirements including restoration plan design, biological monitoring and consultation, native plant installation, willow sprigging, invasive species control and disposal, herbicide application, hand-watering, hand-weeding, and monitoring/reporting.

Agency: Town of Windsor, Engineering Division

Contact: Ken Wheeler, P.E., Project Manager

Phone: (707) 838-1209

Starr Creek Habitat Enhancement Project

Performed habitat restoration services, including restoration planning, native plant installation, overstory thinning, invasive species control, hand-watering, hand-weeding, and monitoring/reporting.

Agency: Sonoma County Water Agency

Contact: Candace Messner, Environmental Specialist II

Phone: (707) 524-6424

KEY PERSONNEL

ANYA PERRON-BURDICK, Consulting Restoration Ecologist, led the environmental programs at The Center for many years before transitioning to a consulting role. She holds a M.S. in Conservation Biology from San Francisco State University and has over 12 years' experience implementing environmental restoration projects in Northern California. Anya is well-versed in project management, erosion control techniques, native plant identification and installation, and Cal/OSHA safety compliance. Ms. Perron-Burdick provides biological opinions and consultation on restoration techniques.

KELLEN JOHNSTON, Restoration Projects Manager, manages the contracts, planning, permitting, scheduling, field supervisors, maintenance, monitoring and reporting for our projects. She also holds our California State Contractor's License, under which all of The Center's environmental programs operate. She has a BA in Environmental Studies and 11 years of experience in environmental restoration, native and insectary landscape design and installation, ecology research, community conservation engagement, and environmental education. Kellen is well-versed in California native plants.

KAHTARINA KLJAVIN, Ecological Program Coordinator/Crew Leader, has completed a BS degree in Environmental Science at the University of Oregon with minors in both Geology and Geography. She has relevant field-work and lab skills relating to soil classification, sampling, recording and reporting data, using topographic maps and photographs to identify land morphology and species distribution, and a working knowledge of GIS, Excel, PowerPoint, and the EIA process. Kahtarina has volunteered on restoration projects in Oregon and New Zealand.

BREECE SKAGGS, Crew Leader, has worked as a crew leader for 3+ years and has conducted work for many federal, state, municipal and private partners, including: fire fuels management; trail building; invasive species removal; native landscaping; riparian restoration implementation, maintenance, and monitoring; debris removal and disposal; and stream maintenance. He provides training to our crew members on safe use and maintenance of all tools, including chainsaws and weed eaters.

BILLABLE RATES

Project Manager	\$110/hour
Crew Leader	\$50/hour
Crew Member	\$35/hour
Dump Truck Mileage	\$1.00/mile
Regular Vehicle Mileage	\$0.58/mile
Chainsaw/Polesaw/Weedeater Fuel & Maintenance Fee	\$35/day

Example of Previous Work - Invasive Species/Fuels Removal at Sweetwater Creek



PARTNER OVERVIEWS AND KEY STAFF

UC COOPERATIVE EXTENSION SONOMA COUNTY

True to the mission of the land grant universities, UC Agriculture and Natural Resources (UC ANR) connects the power of UC research in agriculture, natural resources, nutrition and youth development with local communities to improve the lives of all Californians. Statewide programs focus research and extension on solving priority problems that engage ANR academics and UC faculty in integrated teams to work on complex issues that need trans-disciplinary approaches.

DR. STEPHANIE LARSON, Director, promotes research and extension programs in Sonoma County, along with being the Livestock and Range Management Advisor. She has a BS and MS in Animal Science and a PhD in Rangeland Management. Dr. Larson assists local livestock producers to improve production and marketing of livestock, conducting research in the wise stewardship of lands, humane methods of predator control, and sustainable agriculture for the livestock industry. Her program documents and integrates the ecosystem services provided by rangelands, highlighting the benefits of using grazing animals as tools to address vegetation management reduced fire fuels and improve habitat. She is a licensed certified rangeland manager; she brings public and private land owners and managers together to make science- based decisions and policies to manage working landscapes for the benefit of all users.

NORTHERN SONOMA COUNTY FIRE PROTECTION DISTRICT

Northern Sonoma County Fire Protection District (NSCFPD) has expertise and experience in conducting vegetation management including staffing “fuels crew.” The fuel crews operate District owned chainsaws, pole saws, and a wood chipper to conduct vegetation management following developed prescriptions in conformance with environmental regulations. The District completed critical vegetation management that assisted with stopping the spread of the 2019 Kincadee fire and protected several residences. The District will bring their staff, expertise, and apparatus to train and mentor youth. The District is currently managing two large CAL FIRE grants for fuels reduction and fire prevention.

MARSHALL TURBEVILLE, Fire District Chief, is a second generation fire fighter who has been leading the NSCFPD since 2013 after working full time for CAL FIRE since 2000. Chief Turbeville teaches forestry and other courses to aspiring firefighters at the CAL FIRE academy in Amador County and at Santa Rosa Junior College. He has civil engineering and natural resources degrees from Cal Poly. He has been a fixture in northern Sonoma County for 44 years and has an uncanny ability to show up where and when he’s most needed. He stands out with a textbook recall of historic wildfires and a photographic memory of Sonoma County’s landscape.

LANDPATHS

LandPaths was created in 1996 based on the need for public access and land stewardship in Sonoma County. Since that time, LandPaths has established its role as one of the County’s leading public access and education organizations and developed a local preserve system totaling over 1500 acres in Sonoma County. LandPaths, with over 20 years of experience offering field-based education and stewardship for all people in Sonoma County, is uniquely qualified to be a cornerstone for meaningful outdoor experiences combining land stewardship and fuel reduction on our Preserves. LandPaths’ core competencies are to provide diverse interpretive opportunities for all residents to experience the beauty, understand the value and help to steward wild and working landscapes.

CRAIG ANDERSON, Executive Director, has been the leading LandPaths since 1997. Since then, LandPaths has pioneered new ways to nurture citizen engagement with open space, promoting the concept of "people-powered parks" that encourages citizen participation in providing stewardship and public access for protected natural areas. In close partnership with Lee Hackeling, Craig also helps engage the county's Latino population in open space enjoyment and stewardship through the development of Bayer Farm, a combined urban farm, green

space, and community center in the Roseland neighborhood of Santa Rosa. His education and training include: *University of California, Berkeley* M. S. in Range Ecology; *Principia College*, B.S. in Environmental Science; *University of California, Santa Barbara*, Single Subject (Science) Teaching Certificate. He sits on the Bay Area Open Space Council Advisory Council; participated in *Native, Land, Trust*: A combined total of 20 First Nation Conservation Elders and Non-native Land Trust Leaders from across North America – first ever dialogue on working together; was awarded Bay Nature Conservation Hero Award.

ERIN MULLIGAN, Stewardship/Community Care Manager, has been with LandPaths since 2013. She inspires volunteers to become life-long stewards of land and community and develops long-term management goals and strategies for each LandPaths preserve. During her tenure at LandPaths Erin has gained expertise in forest land management, including leading workshops for private large parcel landowners on Forest Management for Fire Safety. She has successfully completed courses in Wildland Fire Training, Prescribed Burning on Private Land, Forest Stewardship, and Basic Fire Fighting. Before joining LandPaths, Erin worked for the National Park Service in California and New York, and the California Fish and Wildlife Service, where she gained experience monitoring rare and endangered plant and animal populations and received extensive training in habitat restoration. During her time with the Golden Gate National Parks Conservancy, a bay area non-profit, Erin led habitat restoration volunteer workdays, melding her two passions, land conservation and community. Altogether, Erin has over 14 years of experience in the conservation field. Her education and training includes: *San Francisco State University*, M.S. Ecology, Evolution, and Conservation Biology; *University of California, Davis*, B.S. Biological Sciences, Minor Environmental Policy and Analysis.

KYLE GIFT, Stewardship & Facilities Specialist, joined LandPaths in 2015. With LandPaths Kyle has received training in resource management and trail building. He is currently completing Santa Rosa Junior College Fire 206, as part of their Wildland Fire Academy. This course is an intensive study of wildland firefighting, fire control strategy and tactics, mobile attack, wildland hose lays and handline construction and wildland safety and survival. Prior to joining LandPaths Kyle had over 15 years working in the facilities and constructions field, with the City and County of San Francisco, and a General Contractor.

ELIAS LOPEZ, Bilingual Education & Stewardship Specialist, brings a wealth of field experience and ecological knowledge to youth education and stewardship programs. He holds a BS in Biology from SSU, and a MS from Cal State Stanislaus in Turlock in Ecology and Sustainability graduating with distinction. Joining LandPaths in 2019, Elias has been training in environmental education and working with youth and young adults, mentoring them through science curriculum and a connection to nature. Prior to joining LandPaths, Elias was a Restoration Technician at Laguna Foundation and Ecology Crew Intern at Conservation Corps North Bay.

SONOMA RESOURCE CONSERVATION DISTRICT

Since 1946, the Sonoma RCD has facilitated natural resource conservation through community involvement, education, technical expertise and scientific research.

JASON WELLS, California Registered Professional Forester (RPF), whose focus at the RCD is to provide technical and planning assistance to landowners, help build a forestry program capable of addressing vegetation and fuels management concerns throughout the county, as well as address post-fire recovery efforts. Jason's work supports the missions of the Sonoma and Gold Ridge RCDs. Born and raised in Petaluma, he graduated from Humboldt State University with a B.S. in Forestry with an emphasis in Forest Conservation; He then worked for six years in private industry throughout Humboldt and Mendocino Counties. His experience includes writing CEQA equivalent Timber Harvest Plan documents, integrating knowledge of forest operations with environmental impact mitigations, silviculture (applied forest ecology), forest health and protection, economics of forest management, and road design and layout. Jason has also been certified by the California Department of Forestry and Fire Protection (CALFIRE) to conduct archaeological surveys for plans in which CALFIRE is lead agency.

NCRP DEMONSTRATION PROJECT AND PROCESSES CONCEPT PROPOSAL BUDGET AND SCHEDULE

Project Name: FIRE SCHOOL PILOT PROGRAM AT LAKE SONOMA & DRY CREEK

Major Tasks	Task Description	NCRP Task Budget	Funding Match *	Total Task Budget	Scaled NCRP Budget **	Start Date	End Date
Project Administration	In cooperation with NSCFPD and UCCE, sign a sub-grantee agreement for work to be completed on this project. Develop invoices with support documentation.	\$3,226.00	\$0.00	\$3,226.00	\$2,521.75	July 2020	July 2021
Project Reporting	Data collection, performance measures, and project reporting of outcomes/lessons learned	\$9,678.00	\$0.00	\$9,678.00	\$7,565.25	July 2020	July 2021
Fuels Reduction Projects (Labor)	Wages for a crew of 6 from The Center for 28 days of on-the-ground fuels reduction projects (1344 crew hours). Additional wages for a crew of 5 from NCRFPD for 7 days (350 hours).	\$65,944.00	\$0.00	\$65,944.00	\$53,606.00	Sept 2020	Mar 2021
Fuels Reduction Projects (Materials)	Chainsaws, chipper, weed eaters, fuel, environmental compliance, camping gear, food	\$10,438.00	\$12,680.00	\$23,118.00	\$9,438.00	Sept 2020	Mar 2021
Crew Training	Wages for a crew of 6 from The Center for 12 days of crew training, including Wildland Fire Fighter Type 2 Certification, career exploration, chainsaw use, native plant ID, basics of project permitting and planning. Includes course fees.	\$22,630.00	\$0.00	\$22,630.00	\$13,628.00	Aug 2020	June 2021
Geospatial Tool Development	UCCE will identify 3-7 project sites, develop project plans, and use feedback to improve tool functionality and interface	\$17,874.00	\$91,598.00	\$109,472.00	\$12,055.00	July 2020	June 2021
Public Education and Outreach	UCCE will host at least 1 educational workshop for the public on fuels reduction and use of geospatial tool	\$5,400.00	\$1,500.00	\$6,900.00	\$5,400.00	June 2021	June 2021
Project Management & Curriculum Development	Plan projects, coordinate with partners, plan and schedule educational offerings, develop curriculum	\$6,750.00	\$9,240.00	\$15,990.00	\$5,500.00	July 2020	July 2021
Total NCRP 2020 Demonstration Project Request		\$141,940.00	\$115,018.00	\$256,958.00	\$109,714.00		
* List the sources and status of matching funds: CAL FIRE Grant: Geospatial Tool Creation - funded and in process Sonoma County Vinters Foundation Community Grant: Tools, PPE - funded and in process LandPaths: Staff Time, Food, and Camping Gear - committed Sonoma RCD: Staff Time and Technical Expertise - committed NSCFPD: Chipper, Staff Time - committed							
** Is Requested Budget scalable? If yes, indicate scaled totals; if no leave as \$0. Project scalability information for the reviewers (optional): If this project needs to be scaled back, these figures represent 6 weeks of on-the-ground projects and 1 week of crew training. It also reduces UCCE's time from 20% to 15% FTE and reduces the Fire District's crew to 3 people. It reduces acres treated to ~26.							

FIRE SCHOOL PILOT PROGRAM AT LAKE SONOMA & DRY CREEK

1) PROJECT ABSTRACT (750 Characters)

The Center for Social & Environmental Stewardship will partner with Northern Sonoma County Fire Protection District, the UC Cooperative Extension, Sonoma RCD, and LandPaths to pilot a fire-focused, paid workforce development and training program for underserved youth (ages 16-25). Youth will learn about and implement diverse fuels management strategies, as well as participate in a Wildland Fire Fighter Type 2 Certification course and other educational career-building activities. This project will allow for testing of UCCE's innovative new web-based geospatial tool, which helps landowners identify, estimate costs for, and prioritize fire fuels management strategies for their unique properties. It will also protect critical high-risk infrastructure, including Lake Sonoma which provides water for 600,000 people, and Dry Creek, a key salmonid spawning stream.

2) PROJECT LOCATION AND AREA SERVED

Lake Sonoma & Dry Creek Watersheds, Northern Sonoma County

3) PROJECT DESCRIPTION [2000 CHARACTERS MAX.]

With two major wildfires sweeping Sonoma County in the past three years (causing the loss of 22 lives, over 5,600 homes, and mass evacuation of 200,000 people), landowners are urgently seeking contractors to conduct home hardening and fuels management projects that may prevent the next catastrophe. However, there are very few contractors available to conduct fire fuels reduction work on private lands; a Google search does not turn up anyone for hire. At the same time, low-income youth face daunting higher education and employment prospects due to the global pandemic.

This project will address these issues and NCRP RFFC objectives by creating a Fire School Pilot Program that will provide nine weeks of hands-on, paid workforce development training for underserved youth (ages 16-25), with a focus on developing skills needed for career pathways as fire fuels management contractors. The trainees funded by this grant will receive training from our expert partners on fire ecology, the basics of planning and permitting, and fire BMPs, while implementing a diversity of fuels management demonstration projects in the critically important Lake Sonoma and Dry Creek watersheds.

Additionally, these demonstration projects will serve as testing grounds for improvement of an innovative web-based geospatial tool, currently in the final stages of development by UCCE Sonoma County. This tool will assist landowners in developing and prioritizing fuels reduction activities on their properties. The tool uses datasets and information gathered from fire specialists to estimate the potential cost of various fuel reduction strategies, and the reports generated can serve as jumping off points for landowners to apply for cost-share grants through NRCS or CAL FIRE for implementation of vegetation management projects.

We expect to directly treat approximately 30 acres, including clearing periphery fuel breaks and fence lines for much larger acreage to be later treated through prescribed fire and grazing. Projects will integrate with community preparedness efforts funded by other sources, including a CAL FIRE grant currently being utilized by this group of project partners in the Lake Sonoma watershed. Key practices will be shared, with the goal of expanding this program and supporting the creation of similar programs elsewhere in the region.

4) SPECIFIC PROJECT GOALS/OBJECTIVES

The goals and associated objectives of this project are to:

- 1) ***Help meet demand for fire safety contractors in Sonoma County and surrounding regions while improving economic vitality for underserved populations by piloting a workforce development program for disadvantaged young adults, focused on fire fuels management and home hardening.***
 - a) Conduct nine weeks of experiential learning projects as career training for underserved youth
 - b) Partner with experts to provide weekly educational activities in the field and in the classroom
 - c) Adapt available curriculum from partners to be audience-specific and career focused
 - d) Teach the basics of fire ecology, tool use, planning, permitting, and fuels reduction methods
 - e) Arrange participation in a Wildland Fire Fighter Type 2 Certification course or similar training
- 2) ***Protect critical water infrastructure, salmonid habitat, and homes by conducting fuels management in the Lake Sonoma and Dry Creek watersheds, which provide municipal water for 600,000 people and spawning grounds for endangered coho salmon and threatened Chinook salmon and steelhead***
 - a) Conduct ~ 30 acres of strategic fuels management within aforementioned watersheds
 - b) Use GIS and LIDAR data, and local knowledge, to prioritize high fire risk areas and neighborhoods
 - c) Leverage an existing CAL FIRE grant currently being implemented within these watersheds
 - d) Conduct fuels reduction at Riddell Preserve, where perennial springs feed salmonid habitat
- 3) ***Test and fine tune a new web-based geospatial tool being developed by UCCE Sonoma County to help landowners identify, estimate costs for, and prioritize fuels reduction projects***
 - a) Work with 3-4 larger scale or 5-7 smaller scale landowners to develop project plans using new tool
 - b) Use landowner feedback to improve user interface and functionality of new tool
- 4) ***Reduce barriers for disadvantaged youth to follow fire-related career pathways***
 - a) Make higher education more financially feasible for youth by compensating for hands-on educational hours
 - b) Provide access to free housing/camping as well as tools, PPE, transportation, and social services
 - c) Introduce trainees to relevant career fields
 - d) Help trainees build a network of professional references and develop resumes
 - e) Camp and enjoy nature to build a culture of stewardship and nature-connection among trainees
- 5) ***Develop key practices for future expansion and replication of fire-related workforce development programming***
 - a) Conduct pre- and post-project surveys of youth
 - b) Ask youth for feedback on lessons and take detailed notes
 - c) Expand on program success in future years by incorporating curriculum into a year-long, housing-provided stewardship training program currently being developed at The Center
 - d) Share model with other groups through the UCCE network, school systems, and other non-profits and agencies

5) DESCRIBE HOW THE PROJECT OR PROCESS ADDRESSES THE NCRP GOALS AND OBJECTIVES AND THE INTENT OF THE NCRP REGIONAL FOREST AND FIRE CAPACITY PROGRAM BLOCK GRANT.

This project directly addresses NCRP Goals and Objectives through:

- **Active Collaboration** among diverse regional stakeholders (UCCE, non-profits, fire department, community COPE groups, ranchers, ecologists, US Army Corps, Sonoma County Water Agency)
- **Providing Jobs, Training, and Housing** for disadvantaged community members
- **Protecting Water Supply Quality** by reducing the likelihood of toxic fire-caused runoff near Lake Sonoma, the municipal water source for 600,000 people

- **Conserving the Economic Benefits of North Coast Regional Working Landscapes and Natural Areas** by conducting fuel load reduction activities in two watersheds that serve as significant agriculture, tourism, and recreation destinations
- **Enhancing Watersheds and Ecosystems** that provide salmonid habitat
- **Improving Public Safety** by focusing work near habitable structures and egress routes
- **Monitoring** project effectiveness and adapting and sharing management based on results

This project directly addresses intent of the NCRP Regional Forest and Fire Capacity Program Block Grant by achieving the following activities:

- **Demonstration** of a project that effectively **Reduces Hazardous Fuel Loads**
- **Enhancing High Habitat-Value Ecosystems** by reducing encroachment and invasive species, and by allowing for the reintroduction of beneficial prescribed fire and grazing
- **Workforce Development, Local Jobs, and Local Revenue** through on-the-ground trainings and career support for future restoration practitioners from **Disadvantaged Communities**
- **Capacity Enhancement** for prescribed fire and grazing through projects that clear fence lines for managed grazers and fuel breaks for prescribed burns
- **Innovation** through testing and improving a new online tool that will increase landowners ability to plan, cost out, and prioritize fuels reduction projects on their unique properties
- **Carbon Sequestration** through protecting long-term fire adapted carbon sinks (large trees and grasslands) and decreasing the likelihood of high-intensity/large fires that will release carbon in the event of a wildfire (overstocked forests and shrub and conifer-encroached grasslands)
- **Creation of Fire-Safe Communities and Protecting Human Assets** by creating fuel breaks, clearing defensible space around structures, creating fire-safe roads, and protecting the reservoir
- **Alignment** with the Lake Sonoma Community Wildfire Protection Plan
- **Research and Development** of a scalable tool for project development, costing, and prioritization

6) DESCRIBE HOW THE PROJECT IS SCALABLE, REPLICABLE, MEASURABLE, INNOVATIVE AND RESULTS IN OUTCOMES THAT WILL INCREASE THE SCOPE AND SCALE OF MULTI-BENEFIT FOREST MANAGEMENT IN THE NORTH COAST.

Crew members currently work on an on-call basis, and opportunities for more transformative education and career development are budget limited. If awarded, this grant will allow The Center to scale the Fire School Pilot Program to create an ongoing, full-time, paid training program for the next generation of land stewardship practitioners, including free housing. We currently have housing available for 5 crew members, and are in the pre-development phase to build 17 additional 2 bedroom units for low-income crew members. If even a few trainees go on to careers in fuels management in the North Coast Region, the amount of acreage treated will grow tremendously. We plan to share curriculum and lessons learned with other non-profits who may want to host similar programs.

Additionally, UCCE Sonoma County's new web-based geospatial tool is innovative, scalable, replicable, and results in multi-beneficial outcomes such as prescribed fire and grazing. Using each parcel's biophysical attributes and vegetation, the decision support tool will assist landowners on prioritizing land areas based on relationship to structures, roads, and/or resource goals. This tool will address a major bottleneck for landowners by minimizing the complexities of developing, prioritizing, and costing out project plans. Improving the planning process through use of the tool will serve as a launching point for more implementation, including more CFIP and EQIP grants. It will then be scaled to a greater landscape-scale prioritization analysis, so that more landowners can avoid GHG emissions for catastrophic fire, improve economic viability and enhance public safety. While this tool is currently based on data from Sonoma County, it utilizes publically accessible datasets and could be replicated and scaled by other regional UCCE branches through outreach, open-source software, and sharing of lessons learned.

7) DESCRIBE THE NEED FOR THE PROJECT AND HOW THE PROJECT ADDRESSES FOREST HEALTH AND CLIMATE CHANGE/EXTREME EVENT RESILIENCY.

Since the devastating Sonoma County wildfires of 2017 and 2019, landowners are highly aware of the need for preventative fuels management but are coming up against a major shortage of ecologically-knowledgeable contractors available to implement fuels reduction work. Because our area no longer supports a large timber industry, forestry professionals are few and far between. The Center's and partners' direct experience with youth ages 16-25 has shown that most are not aware of this gap in the labor market and the potential for meaningful, well-paying careers available in fire management. At the same time, young adults are facing significant career barriers due to the high tuitions for college and the inability to support themselves with entry-level service jobs while in school, even prior to the pandemic. By connecting the need for fuels management contractors with the need for jobs and training, this project will create a more resilient North Coast.

The watersheds chosen for demonstration projects also have a high need for fuels management, due to their importance for regional water supply and salmonid habitat. Approximately 82% of land surrounding Lake Sonoma and the Dry Creek valley is in High fire hazard severity zones (FHSZ), and 15% in Very High FHSZ.

This project addresses forest health and climate change/extreme event resiliency by protecting long-term fire adapted carbon sinks such as large, mature trees and native grasslands, and decreasing the abundance of overstocked forests and shrub and conifer-encroached grasslands that would release massive carbon in a wildfire. Furthermore, to reduce the amount of carbon released through daily transportation to and from project sites, crew members will have the opportunity to camp at Riddell Preserve three nights per week during project implementation. This will also be an opportunity for trainees, most of who have never been camping before, to experience the outdoors in a way that creates a true nature connection and encourages climate stewardship. Additionally, by participating in a Wildland Fire Fighter 2 Certification course, crew members will be trained and able to help their community in the event of a wildfire.

8) DESCRIBE THE SIZE OF THE PROJECT AND THE COMMUNITIES SERVED BY THIS PROJECT.

Approximately 50% of The Center's crew members qualify as disadvantaged in that they have annual median household incomes of less than 80% of the statewide annual median household income (MHI). Approximately 40% of the Center's crew members are severely disadvantaged and have annual household incomes of less than 60% of the statewide MHI. In addition to being low-income, many of The Center's crew members face barriers such as a history in the foster-care system, learning disabilities, and limited higher education within the family. Approximately 50% of crew members are of Hispanic or other non-white heritage.

The Lake Sonoma Watershed is a rural community that is geographically (and therefore economically) quite removed from the major economic and employment centers of Sonoma County. There are approximately 306 homes in the Lake Sonoma & Dry Creek defensible space inspection areas and approximately 3,000 habitable structures in the adjacent area that are part of the communities of Asti, Cloverdale, Geyserville, and Healdsburg, that will be threatened by a wildfire that starts and spreads outside of the Lake Sonoma Watershed. We expect to treat approximately 30 acres during the pilot program.

9) LIST AND DESCRIBE THE PARTNERSHIPS INVOLVED IN THE PROJECT AND LOCAL AND/OR POLITICAL SUPPORT.

The Center for Social & Environmental Stewardship (The Center) is a culturally diverse organization whose multifaceted programs are designed to address the interdependent links between the health of the individual person, the greater community and the natural environment. Since 1976, The Center has planned, implemented, and maintained over 1,000 environmental restoration projects and provided mentoring and pro-social service-learning activities for at-risk youth. The Center will employ, pay, and train the youth crew, as well as offer social services.

UC Cooperative Extension, Sonoma County (UCCE) is part of the UC Division of Agriculture and Natural Resources and provides a vital link between public universities and communities. In Sonoma County, the UC Cooperative Extension academic staff is at the forefront of change, working to preserve agriculture, helping

communities shape wise public policy, and strengthening community development and leadership in our youth and adults. UCCE will provide training, technical support, planning tool development, and assistance in identifying landowners for demonstration projects.

Northern Sonoma County Fire Protection District (NSCFPD, formerly the Geyserville Fire Protection District) protects over 200 square miles in Northern Sonoma County. The District serves Alexander Valley, Chalk Hill, Dry Creek Valley, the Geysers, Geyserville, parts of unincorporated Healdsburg and Lake Sonoma. NSCFPD will provide a chipper and a crew of five people for vegetation management to work alongside and train The Center's crew. They will also use their local expertise to help identify landowners for demonstration projects.

Sonoma Resource Conservation District (Sonoma RCD) has facilitated natural resource conservation through community involvement, education, technical expertise and scientific research since 1946. Sonoma RCD will provide technical support and lead career exploration activities for trainees related to forestry and fire fuels management.

LandPaths was founded in 1996, with a mission to foster a love of the land in Sonoma County. LandPaths currently owns or manages seven preserves across Sonoma County, and hosts hundreds of outdoor experiences per year. LandPaths will host trainees at their Riddell Preserve for 3 weeks and provide camping support, ecology training, and nature connection activities.

The Northern Sonoma County COPE (Citizens Organized to Prepare for Emergencies) Group was formed after the 2017 Tubbs fires. The leadership team, including neighbors, Northern Sonoma County Fire Protection District, Cloverdale Fire Protection District and Healdsburg Fire Department, meets monthly. The COPE group will be engaged as potential hosts for demonstration projects through this grant.

10) LIST THE ESTIMATED QUANTIFIABLE, MEASURABLE BENEFITS EXPECTED TO RESULT FROM THE PROPOSED PROJECT.

- 6-12 youth trained in fuels management practices (with more in future years upon completion of pilot)
- 1920 hours of training provided
- ~30 acres of direct fuels reduction and dozens to hundreds more acres protected through secondary measures such as prescribed grazing and prescribed fire
- 3-7 pilot projects (depending on size), demonstrating the use of the data driven decision support tool to reduce fire fuels.
- At least 1 educational workshop hosted by UCCE to increase awareness of landscape attributes related to fire risks.
- Improvement of the UCCE tool following pilot project feedback

11) LIST ANY SCIENTIFIC STUDIES, PLANS, DESIGNS OR REPORTS COMPLETED FOR THE PROJECT OR PROCESS.

Since this is a new, innovative project, we currently don't have any scientific studies to report. However, the decision support tool uses the five-meter fire fuel model developed by Pepperwood, which was created using peer reviewed research.

12) DESCRIBE THE APPROACH TO DATA COLLECTION, PERFORMANCE MEASURES, AND PROJECT REPORTING OF OUTCOMES AND LESSONS LEARNED.

Acreage treated as part of demonstration projects will be measured using GPS. For the workforce development portion of this project, pre- and post-project surveys will be used to assess changes in trainees' knowledge and skills. UCCE also plans to conduct pre- and post- surveys of landowners on their understanding of fire fuel hazards and methodologies to reduce risk. Rate of improvement on survey scores will be used as a performance measure and reported. Detailed notes of outcomes and lessons learned will be kept for all activities so that improvements can be made and the program can be replicated, both by The Center and other regional service providers.



May 18, 2020

RE: Support for The Center for Social & Environmental Stewardship's Fire School Pilot Program at Lake Sonoma & Dry Creek

Dear Grant Reviewer,

I am writing to urge your support of The Center for Social and Environmental Stewardships' proposal to create the Fire School Pilot Program at Lake Sonoma & Dry Creek. This proposal combines two critical needs at this moment—job creation and workforce development for underserved youth, and fire fuel management in high risk fire areas of Sonoma County. It also brings together strong partners in Northern Sonoma County Fire Protection District and the UC Cooperative Extension. We have partnered with The Center previously and welcome the opportunity to do so again.

LandPaths, is a community-based non-profit organization whose mission is to *foster a love of the land in Sonoma County*. LandPaths creates ways for people to experience the beauty, understand the value, and assist in stewardship of the land in our local communities. LandPaths designs and manages a wide variety of restoration, stewardship, educational and outreach activities to engage the whole community in the land and its care.

LandPaths is dedicated to work with the community to reduce the risk of catastrophic fire. We have worked with various fire departments, CalFire work crews, and Summer Youth Ecology Job Corps to reduce fuel ladders and install shaded fuel breaks at high priority site on several preserves—our own and those of agency partners. We are also intimately familiar with challenges and the methods of engaging underserved communities. LandPaths eagerly supports this proposal as it recognizes the critical need for both skill development for well-paid careers, and connecting this next generation with the land in this time of fire crisis and climate change. I am thrilled to offer our Riddell Preserve as a location to develop these skills, to compare our forest management strategy with the UCCE geospatial tool, and complete our planned priority fire fuel reduction work at this property.

The 400-acre Riddle Ecological Preserve supports significant biodiversity with its un-fragmented size and complex of habitat within an Oak Woodland dominant landscape. Riddell is the largest protected wildland between Healdsburg and Lake Sonoma, and west to coastal parks. The work conducted under this grant will reduce the risk of intense fires starting or growing quickly by decreasing fuel loads.

I strongly support The Center's application and, again, urge your support. Funding this proposal would enable important work to be accomplished while strengthening our communities' economic recovery, especially for communities hardest hit by the pandemic.

Sincerely,

Craig Anderson, Executive Director
LandPaths



May 15, 2020

North Coast Resource Partnership

Re: Letter of Support for Fire School Pilot Program at Lake Sonoma & Dry Creek

Dear Review Committee:

The UC Cooperative Extension (UCCE) is pleased to offer its support and partnership with The Center for Social & Environmental Stewardship (The Center), along with the Northern Sonoma County Fire Protection District, the Sonoma RCD, and LandPaths, to provide nine weeks of hands-on, paid workforce development training for underserved youth. This project will enable a robust partnership with UCCE to provide outreach to private landowners to address forest health, vegetation management and fire fuel reduction, along with training to help meet demand for fire fuels management contractors and improve economic vitality for underserved populations in our region by providing workplace development training and career pathways for disadvantaged young adults.

We will assist in the project, with the following tasks:

- Identify land owners to host projects (3-7 landowners)
- Conduct site visits and use geospatial tool to determine best practices for each host site
- Advise "The Center" staff on preferred practices; aiding with the crew's training. These practices will include cutting fire breaks for prescribed burns and cutting new fence lines for prescribed grazing.
- Hosting at least 1 educational workshop on fire fuels projects and planning using the new tool

Thank you for your consideration of the proposed project. UCCE is enthusiastic about this opportunity and looks forward to being part of this exciting and innovative endeavor.

Sincerely,

Stephanie Larson, PhD
Livestock & Range Management Advisor
Certified Rangeland Manager #73





NORTHERN SONOMA COUNTY FIRE PROTECTION DISTRICT

20975 Geyserville Avenue • PO Box 217 • Geyserville • California • 95441 • (707) 857-4373 • geyservillefire.com

March 19, 2019

To Whom it May Concern,

The Northern Sonoma County Fire Protection District looks forward to partnering with The Center for Social and Environmental Stewardship on a hands-on, paid workforce development training program for underserved youth (ages 16-25). The District and The Center have previously partnered on a grant and enjoy a great working relationship.

The District will use grant funding to assist with training one day per week with a chipper as a match and provide planning insight regarding high-risk fire areas.

Please contact me if you have any questions.

Thank you,

A handwritten signature in blue ink, appearing to read 'MT', with a stylized flourish at the end.

Marshall Turbeville
Fire Chief

mturbeville@geyservillefire.com