

EXHIBIT A PROPOSAL COVER PAGE

Proposal Type

Concept Proposal for Demonstration Projects and Processes

Organization Name (Lead Applicant)

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Orann	ization	Typo
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____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:	Patrick Higgins		
Title:	ERRP Managing Director		
Email: phiggins@humboldt1.com			
	Number (include area code):		

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

P.O. Box 214, Loleta, CA 95551

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

Patrick Higgins 2020.05.22 12:41:50 -07'00'

Signature 5/22/2020

Date

<u>Attachment 1</u>: Qualifications, Map, Photos of Demonstration Sites, and Scientific References for NCRP Demonstration Project – ERRP Tenmile Creek Forest Health Pilot Project











Heather Morrison is a Registered Professional Forester with a specialty in botany. She served as the Executive Director of the Society of American Foresters and the California Licensed Foresters Association. She consulted as a forester and botanist with North Coast Resources Management and has 15 years of experience as an independent forestry consultant in Mendocino County working on timber harvests, forest management plans for CFIP and EQUIP, and administering fuels reduction programs and planting projects. Heather will be the Field Manager for this project and coordinate surveys, help design the Forest Health Survey template, create plans, and contribute to the *Tenmile Creek Watershed Forest Health Action Plan* (hereafter *Action Plan.*) \$75/hr.

Imil Ferrara was raised in the Salmon River basin and in Round Valley and has a deep understanding of forest health. He was recently the Co-Coordinator of the Mendocino Fire Safe Council and aspires to help his community of Covelo and the Round Valley Tribes to implement forest health in the Middle Fork Eel River watershed. In this project, Imil will assist with the Forest Health Plan template, help write forest health plans, collect field data, participate in the testing of new technology by groundtruthing, and assist in writing the *Action Plan*. \$65/hr.

Steve Brown has a passion for forest health and is a practitioner on his 250-acre property on Peterson Creek in the lower Tenmile Creek watershed. His relevant job history includes operating a tree service, working for the Carmel Volunteer Fire Department, being a licensed salmon and steelhead guide, and the managing partner for a decade of the North Coast Land and Stream Company, an environmental restoration business. Steve is having luck winning cooperation from his neighbors to also get forest health plans and implement projects, and is working towards becoming a certified master burner so he can help facilitate use of fire in the Tenmile Creek basin to restore forest health. \$50/hr.

Vernon "Woods" Wilson operates a tree service in Laytonville, owns 160 acres in the Tenmile Creek watershed. He was formerly the Chairman of the Cahto Tribe Tribal Council and will be the liaison with the Tribe, helping tap traditional ecological knowledge (TEK) of tribal elders that can be integrate into forest health planning at every level. Woods will help organize the local community of potential workers, who could be trained as the labor force for Tenmile Creek basinwide forest health implementation. He help plan forest health harvests, including lay outs into forest health plans. \$50/hr.

Kenneth Baldwin has been practicing forestry since 1964, and has worked in the forests of northwestern California since 1972. He is a founding member of BBW & Associates. He has expertise in fire and fuels management planning, timber sale planning and preparation, watershed analysis, forest inventory and design, stocking and survival surveying, reforestation, forest worker training, forest research, fire control, fire damage appraisals, forest recreation, forestry and fisheries restoration. Ken will participate in all aspects of this project, including assisting with forest health plans in the field. \$90/hr.





Bill Wilkinson is a Registered Professional Forester who has been actively practicing forestry for over 40 years. Until recently he was the Contract Forester for the Round Valley Indian Tribes and previously served as the Timber Management Officer for the Hoopa Valley Tribe. Bill was the Senior Forester with the Forest Stewardship Council-US, where he helped develop certification standards for sustainable forestry and now serves on their Board. He will review and help refine the Forest Health Plan template, audit some completed plans, and contribute to the *Action Plan*, including integration of TEK. \$90/hr.

Stephen Smith is a licensed Registered Professional Forester and recently retired as the Chief Forester for the Usal Redwood Forest Company, which is part of the Redwood Forest Foundation, Inc. He is the owner/operator of S.G. Smith and Associates that specializes in ecological restoration of forests. Steve was also the State Stewardship Forester for CDF/CAL FIRE and the USDA NRCS State Forester for California for three years. Steve will help devise the Forest Health Plan template and *Action Plan*. He will also go into the field to mentor teams on the ground. \$100/hr.







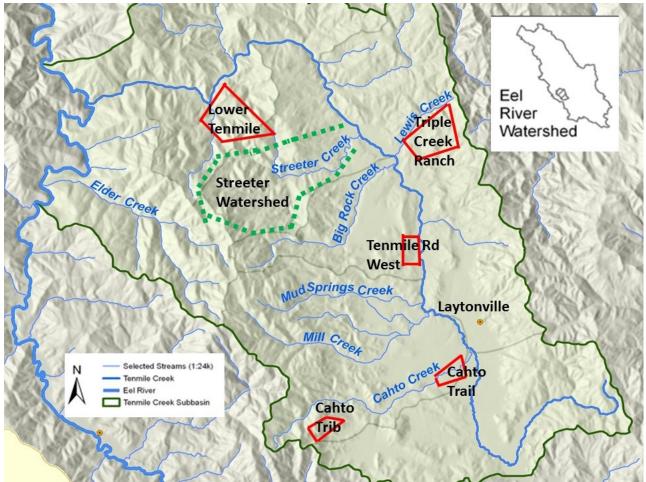


Eric Lassotovich is a resident of Laytonville, active in the Forest Reciprocity Group (<u>https://www.forestreciprocity.org/</u>) and a partner in a business called Polecraft Solutions that aim to create value-added products from small diameter trees that come from forest health implementation. He will be involved in Forest Health Plan template development, visit planning sites in the field, and make sure data generated included the types and diameter of trees from implementation to anticipate supply for value-added manufacturing. \$50/hr.

Diane Higgins is the fiscal manager of grants for ERRP, developed and updates their website (<u>www.eelriverrecovery.org</u>), and is a professional editor. She will manage the budget for the project, set up the accounting system, get sub-contractors invoice forms and organize monthly billings. As the project fiscal manager, she will be responsive to the Humboldt County contract manager to assure contract compliance. Outreach associated with the grant involve Diane augmenting the ERRP website and posting photos to Facebook of project activities. She will serve as the copy and formatting person for the forest health plan template, plans and the *Action Plan*. \$50/hr.

Patrick Higgins is the Managing Director of the Eel River Recovery Project and has had a 30-year career as a consulting fisheries and watershed scientist on the North Coast. Pat has been organizing in the Tenmile Creek watershed while managing a State Coastal Conservancy Prop 1 grant and has helped win support of the residents of the watershed for forest health improvement, and is ready to lead a team of professionals to begin planning for Tenmile Creek forest health implementation. He will manage this project and assist with creation of the *Action Plan.* \$75/hr.

Dr. Michael Jones has been the University of California Cooperative Extension Forestry Advisor for Sonoma, Mendocino, and Lake counties since 2018. He has a Ph.D. from State University of New York in Entomology and experience in integrated pest management. Mike has a passion to serve land owners and managers who want to create healthy and resilient forests. He will be involved in education and outreach, participate on the team evaluating experimental use of drones for data collection related to forest health planning, and will review the *Action Plan*. \$75/hr.



Map of the Tenmile Creek watershed with the five proposed demonstration sites and the Streeter Creek sub-basin highlighted, which will be the target for future forest health project to restore watershed hydrology.

Lower Tenmile Creek/Peterson Creek

Three properties that comprise 560 acres in lower Tenmile Creek and the Peterson Creek watershed will be targeted under this grant for forest health planning. The project area is adjacent to Bureau of Land Management (BLM) lands that have old growth fir forests, and the 250-acre ownership of Steve Brown who is a restoration practitioner and a sub-contractor to ERRP on this project. One of his three neighbors is Virgil "Woods" Wilson who will be contracting with ERRP under this project to help organize labor and as a liaison with the Cahto Tribe. Steve is updating his own forest health plan and there is intent to bundle his and adjacent landowners in a future large-scale implementation grant in one of the most important areas for biodiversity in the Tenmile Creek watershed. The BLM and Brown properties also abut the Angelo Reserve and the Fox Creek watershed, and the expansion of wildlife habitat will function synergistically with the reserve holdings in securing better wildlife strongholds. Forest health implementation in Peterson Creek could help augment flows and further improve its ecological function and its ability to serve as a salmonid refugia. The basin shares a ridge with Streeter Creek, so a partnership that works for landowners here may set an example and help build trust in the adjacent watershed where forest health implementation is expected to rejuvenate stream base-flow, if cooperation can be won.

Cahto Creek Trail

The Cahto Trail is a popular community recreational resource with an ancient history. Retired Laytonville High School teacher Dennis Hogan owns property where the trail runs and is cooperating with ERRP on a separate 319h grant to repair streambank erosion to improve fish habitat and save the trail. However, forest health conditions in the outer band of the riparian zone constitute and extreme fire hazard and Dennis would like help with forest health planning and implementation. His property also includes meadows and native old growth white oaks. His neighbors Deborah Kelly and Paula Mulligan are ready to participate. This location is not far from Laytonville and would make a great forest health demonstration site. The entire site area is 30 acres.



The Peterson Creek basin and lower Tenmile Creek re one target for this grant. 10/15/19.



Peterson Creek and habitat improvement structures installed with a grant won by landowner Steve Brown (at left). 10/15/19.



Dennis Hogan on the Cahto Creek Trail.

The Triple Creek Ranch

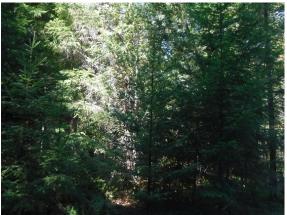


Jim Hochgraef on Triple Creek Ranch in Lewis Creek watershed.

The Triple Creek Ranch is on the east side of the Tenmile Creek watershed and is comprised of grasslands, oak woodlands, and coniferous forest along the ridges of the Lewis Creek watershed in which the ranch is located. James Hochgraef and Michael Hembree operate a cow-calf organic beef business with very few animals and light impacts on the rangeland. They have implemented many conservation measures recommended by the Natural Resources Conservation Service, such as guzzlers for their cows and strategic fencing to reduce grazing impacts to wetlands and help protect grassland hydrology. Although they have received some assistance from NRCS to reduce fuels, they want a forest plan that is ecologically sound so they can be sure how to improve forest health. Their location not far from Laytonville makes this location an ideal demonstration site. The Triple Creek Ranch is 165 acres, but only 40 acres are forested.

Upper Cahto – Unnamed Tributary

Patricia Kovner is a senior citizen who has owned 21-acres on an unnamed tributary of Cahto Creek since 1974. She is extremely concerned about her forest because it is over-stocked with young conifers and hardwoods that create a substantial risk of stand-replacing catastrophic fire. Her neighbors are also in need of similar forest health implementation, and Patricia hopes that they will come forward as cooperators after she has allowed a demonstration project on her land. The unnamed tributary of Cahto Creek that crosses her property loses surface flow just downstream in late summer, but maintains pools that support steelhead and native rainbow trout. It is her hope that, if forest thinning takes place all over her small sub-basin, that perennial flows could be revived that would greatly benefit the carrying capacity for young steelhead and trout.



Over-stocked forest on Patricia Kovner's property on an unnamed tributary of Cahto Creek.



Grace Chappelle and Margaret Andrews of the Tenmile Creek Road Association.

Tenmile Creek Road Association

A group of four landowners who are part of the Tenmile Creek Road Association and live on the west side of the Tenmile Creek not far north of the town of Laytonville wish to participate collectively in forest health planning with the intent to subsequently seek funds for implementation. The properties comprise 31 acres and their forest is over-stocked and has excessive numbers of dead and dying trees creating fuels build up and, therefore, a high susceptibility to catastrophic fire. Eric Lassotovich and his wife Cindy have won the cooperation of their neighbors, Margaret Andrews, Grace and Don Chappell, and Kirt Rohlack. The community includes elderly and economically disadvantaged residents who otherwise would not be able to obtain similar services. These folks are willing to let their property be a demonstration project for public education and they hope that their neighbors will also become educated and implement forest health measures and fuel reduction for wider-community safety.

References

Asarian, J.E., P. Higgins, P. Trichilo. 2016. Stream Temperatures in the Eel River Basin 1980-2015, Phase I: Compilation and Preliminary Analysis. Prepared by Riverbend Sciences and the Eel River Recovery Project for State Water Resources Control Board, Sacramento, CA. 73p. + appendices.

Bouma-Gregson, K. and P.T. Higgins. 2015. Cyanobacteria and Cyanotoxins in the Eel River, 2013 – 2014. White paper of March 19, 2015 by UC Berkeley and Eel River Recovery Project. 18 p.

Eel River Recovery Project. In Press. Tenmile Creek Watershed Conservation and Restoration Action Plan. Funded by the CA State Coastal Conservancy from Prop 1 (Agreement #18-012). ERRP, Loleta, CA. 48 p.

Higgins, P.T. 2017. Eel River Recovery Project Final Report: Citizen Assisted 2016-2017 Fall Chinook Salmon Assessment. Prepared for the Eel River Recovery Project with funding from Patagonia World Trout Initiative and the Salmon Restoration Association. ERRP, Loleta, CA. 30 p.

McKane, R.B, A. Brookes, K. Djang, M. Stieglitz, A.G. Abdelnour, F. Pan, J.J. Halama, P. Pettus, and D. Phillps. 2014. VELMA Version 2.0 - User Manual and Technical Documentation. U.S. Environmental Protection Agency, Corvallis, OR. 180 p.

Stubblefield, A., Kaufman, M., Blomstrom, G., & Rogers, J. (2012). Proceedings of the coast redwood forests in a changing California: A symposium for scientists and managers (PSW-GTR-238; p. PSW-GTR-238). U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station.

Thomas Gast Associates Environmental Consultants (TGAEC). In Press. Big Rock and Streeter Creek Baseflow Analysis; Pilot Study for Tenmile Creek Watershed. Performed under contract to ERRP with funding from the CA Coastal Conservancy Prop 1 fund. TGAEC, Arcata, CA.

NCRP DEMONSTRATION PROJECT AND PROCESSES CONCEPT PROPOSAL BUDGET AND SCHEDULE

Project Name: ERRP Tenmile Creek Forest Health Pilot Project

Major Tasks	Task Description		Funding Match *	Total Task Budget	Scaled NCRP Budget **	Start Date	End Date
T1. Project Management	Execute Hum Co Contract, sub-contracts, fiscal system, invoicing, payments	\$7,500.00	\$0.00	\$7,500	\$0.00	7/1/20	6/30/20
T2. Project Reporting	Monthly, draft Final & Final Rpt.	\$6,000.00	\$0.00	\$6,000	\$0.00	7/1/20	6/30/20
T3. Devise Plan Template	Create cost-effective ecologically sound forest health plan template	\$7,500.00	\$0.00	\$7,500	\$0.00	7/1/20	7/31/20
T4. Create Plans	Field data, test technology, create databases, write plans	\$84,750.00	\$0.00	\$84,750	\$0.00	8/1/20	3/31/20
T5. Oraganize Labor Force	Networking, consulting w/ MCED, MCC, LHS	\$2,500.00	\$0.00	\$2,500	\$0.00	8/1/20	5/15/20
T6. TC Basin Action Plan	Create watershed forest health action plan	\$17,500.00	\$0.00	\$17,500	\$0.00	10/1/20	6/1/20
T7. Outreach	Mtgs, field trips, schools, press, social media/web, video, radio, hall rental	\$10,000.00	\$0.00	\$10,000	\$0.00	7/1/20	6/30/20
Operating Costs	Mileage, Per diem, supplies	\$6,750.00		\$6,750.00			
Indirect Costs (5%)		\$7,500.00	\$0.00	\$7,500.00	\$0.00	7/1/20	6/30/20
Total NCRP 2020 Demonstra	ation Project Request	\$150,000.00	\$0.00	\$150,000	\$0.00		
* List the sources and status of matching funds: [PLEASE LIST]							
** Is Requested Budget scalable? If yes, indicate scaled totals; if no leave as \$0. Project scalability information for the reviewers (optional):							

NCRP DEMONSTRATION PROJECT AND PROCESSES CONCEPT PROPOSAL BUDGET AND SCHEDULE

Project Name: ERRP Tenmile Creek Forest Health Pilot Project

Assignments	Contractor	Amount	Hourly	Hours
Planning & Field	Steve Smith	\$5,000.00	\$100	50
Planning & Tribal Liaison	Bill Wilkinson	\$5,000.00	\$90	56
Plan Development & Field	Ken Baldwin	\$10,000.00	\$90	111
Project Field Manager	Heidi Morrison	\$27,500.00	\$75	367
Plan Data, Set Ups, Networking	Steve Brown	\$21,500.00	\$50	430
Plan, Watershed Plan, Field	Imil Ferrara	\$17,500.00	\$65	269
Planning & Tribal Liaison	Woods Wilson	\$5,000.00	\$50	100
Project Mgr, PR, Reporting	Patrick Higgins	\$24,000.00	\$75	320
Fiscal	Diane Higgins	\$7,500.00	\$50	150
FRG Liaiison, Value Added Products	Eric Lossotovish	\$2,000.00	\$50	40
Outreach & Education	Dr. Michael Jones	\$2,500.00	\$75	33
Direct Costs	Travel, Supplies	\$5,000.00		
Drone	Humbots	\$10,000.00		
Admin (5%)		\$7,500.00		
Project Closeout		\$0.00		
Total NCRP 2020 Demo	Total NCRP 2020 Demonstration Project Request \$150,000.00			



EXHIBIT C: CONCEPT PROPOSAL FOR DEMONSTRATION PROJECTS AND PROCESSES

Project Name: Eel River Recovery Project (ERRP) Tenmile Creek Watershed Forest Health Pilot Project

- <u>Project Abstract</u>: ERRP has assembled an elite team of forest health experts and local people who can help plan and build capacity for forest health implementation at the Tenmile Creek watershed scale. The team will devise a new ecologically sound Forest Health Plan template and publish a *Tenmile Creek Watershed Forest Health Plan*. These can serve as models to adopt elsewhere on the North Coast. This project will integrate remote sensing and use of drone photography for analysis and monitoring with the intent of reducing plan cost elements needed to calculate carbon sequestration. ERRP is working closely with the Tenmile Creek Watershed Council that is building capacity to help administer larger scale resources expected from CalFire CCI grants. We are also collaborating with the Forest Reciprocity Group to organize use of forest health derived wood products and guided by the Cahto Tribe and TEK.
- 2) Project Location/Area Served: The Project area is the Tenmile Creek watershed in northern Mendocino County and the population center for the basin is Laytonville. This geographic area meets the definition of a disadvantaged community at each of the three geographic scales identified by census tract, census place, and community block groups. Consequently, this project benefits a disadvantaged community with an annual median household income that is less than 80 percent of the statewide annual median household income. Laytonville itself is recognized as a "severely disadvantaged community place" (Place ID#: 0640928), and the surrounding area as a "severely disadvantaged community block group" (Block Group ID#: 060450102005).
- 3) Project Description: The Tenmile Creek watershed has a great deal of over-stocked coniferous and hardwood-conifer forests, and also oak woodlands being over-topped by fir trees. Both conditions lead to a build-up of fuels that increase the threat of catastrophic fire, and cause increased tree evapotranspiration that is significantly depleting stream flow. ERRP wishes to promote forest health implementation to thin forests and restore oak woodlands and this project would create a Forest Health Plan template, plans for 12 participating land owners, create demonstration sites, and a watershed scale planning document to prioritize activities.

CalFire Climate Change Initiative (CCI) grants are a major potential funding source for forest health improvement, but associated Air Resources Control Board Greenhouse Gas plan protocols require a huge amount of treediameter data to calculate carbon savings; which make it cost prohibitive. The ERRP forest health team will devise a new plan template that will be more reliant on remote sensing and drone photos and less labor-intensive and costprohibitive. The new innovative technique will then be tested in the field as plans are completed for 12 willing landowners, whose lands have high ecological value and/or are suitable for serving as demonstration sites for community education. New plans will provide quantitative data that clearly define forest health problems, information on carbon sequestration and permitting hurdles, and a detailed plan for subsequent implementation. The latter would include the layout for forest health harvests, labor needs, cost estimates, and the type and quantity of wood products that would be produced. The Forest Reciprocity Group, which is participating in this project, needs these data for planning as they create value-added products from wood materials coming from project implementation in the future.

ERRP is working with the newly formed Tenmile Creek Watershed Council (TCWC) that will be the conduit for future forest health implementation, bringing in millions of dollars in grants, creating full employment, and restoring forest health over the next decade. Improved community fire and water security, climate change resilience, flows for salmon and steelhead, and sequestration of carbon to help offset climate change would be benefits after implementation.

- 4) Specific Project Goals/Objectives: 1) Create a new stream-lined ecological Forest Health Plan template that can be used in this project, subsequent Tenmile Creek watershed projects, elsewhere in the Eel River basin, and on the North Coast. 2) Test technology applications by having a drone operator available to the forest ecologist to capture imagery in remote, steep areas that are difficult to access; to understand tree species diversity and community type; and to detect forest health problems. 3) The new Forest Health Plan template will be tested by creating plans for 12 private landowners in the Tenmile Creek watershed whose properties have significant ecological values and/or can serve as demonstration sites. 4) Create the Tenmile Creek Watershed Forest Health Plan that prioritizes forest health implementation at the basin scale, includes Cahto Tribe traditional ecological knowledge (TEK), and can also serve as a template for other North Coast sub-basins. 5) Estimate the amount of labor necessary for each forest health project, and begin to organize human resources for the coming wave of implementation money. 6) Clearly recognize and define potential regulatory and permit hurdles for each plan so additional resources can be sought to meet challenges. 7) Coordinate with and support Forest Reciprocity Group in its goal to find value-added forest health derived products, and include inventory of suitable raw materials anticipated from each forest health implementation project. 8) Continue public education in coordination with the TCWC by holding forest health workshops and field trips as well as using, press releases, video, electronic media, and web and social media updates to widen cooperation.
- 5) How Grant Meets NCRP Goals and Objectives and NCRP Regional Forest and Fire Capacity Program Block Grant: ERRP's grant for planning basin-wide forest health implementation in the Tenmile Creek watershed in Mendocino County meets many NCRP goals and objectives and speaks to the needs defined in their block grant program. The project will test use of cutting-edge technology that includes drones in this round, and plans will be capable of being augmented with LIDAR data for assessment of carbon sequestration. The idea is to supply photographic and remote sensing data that can be used in lieu of thousands of tree measurements necessary to meet ARB HGH standards that are cost prohibitive and an impediment to widespread forest health implementation. The FRG embodies innovation in its energetic pursuit of value-added forest health derived products to develop a revenue stream beyond grants. They are embedded in this project for participation in deriving the Forest Health Plan template so that it provides data to anticipate the flow of wood products associated with forest health implementation.

Fuel load reduction, which is also an NCRP goal, is an ultimate objective of the ERRP Tenmile Creek pilot project, with a vision of restoring the landscape to a pre-contact condition as much as possible. It is also ERRP's intent to change the perspective of watershed residents about their role in maintaining forest health in the future and to encourage their participation in active management (i.e. participation in periodic controlled burns). This cultural shift is essential for climate change adaptation because build up of fuels will occur cyclically, threatening destructive fire storms such as the nearby Redwood Fire of 2018, if routine forest health maintenance activities are not conducted. The Wilderness Lodge Fire burned along the western ridge to the Tenmile Creek valley for several months in 2014, and reducing fire risk and fire prevention remain a priority for watershed residents as a result.

The NCRP also focuses on watershed health, Pacific salmon recovery, and improvement of water quality and water supply, and there is a strong overlap with the ERRP Tenmile Creek pilot project with regard to these issues. ERRP has been organizing in the Tenmile Creek watershed since 2018, with help from a State Coastal Conservancy (SCC) Prop 1 grant pilot project, to restore riparian zones, heal gully erosion and to work with the community on water conservation. As we studied the flow of Streeter Creek, one of the pilot project streams targeted for flow restoration, it became apparent that over-stocked forests were the source of flow depletion, not agricultural diversions. Modeling by Thomas Gast Associates Environmental Consultants (TGAEC In Press) helped determine that the likely cause of baseflow depletion was increased evapotranspiration in 40-60-year-old headwater forests, similar the findings of Stubblefield et al. (2012) in the upper Mattole watershed. Firs over-topping oaks in the Streeter Creek watershed are also causing a fuels build up, loss of acorns as food for animals, and a diminution of stream flow. Therefore, thinning from below in this watershed and removing firs over-topping oaks will not only protect the community from catastrophic fire, but also help restore stream flow in Streeter Creek that has a strong run of steelhead, and use by Chinook and coho salmon in some years.

ERRP has baseline and trend flow data for Streeter Creek, and would like to attract all of the 20 landowners from this watershed to participate in future forest health projects because of the benefit of restoring base-flow. There is a synergy with this NCRP project, as some of the parcels slated for forest health planning are immediately adjacent to

the Streeter Creek watershed. Satisfaction of land owners there could help with building trust. The problem identified in Streeter Creek is likely also prevailing in other Tenmile Creek sub-basins with a similar land use history; therefore, flow improvement will likely be accrued across the watershed as forest health is implemented, with Tenmile Creek itself once again flow perennially as it did historically. This would increase the standing crop of steelhead many-fold and bring back very cold habitats suitable for coho salmon over time. ERRP has applied for a second round of SCC Prop 1 funding for water conservation implementation, which will couple with the benefits derived from forest health implementation and restoration of watershed hydrology.

ERRP is measuring water temperature at 20 locations in Tenmile Creek and at about 100 locations annually, Eel River watershed-wide. Previous ERRP publications on water temperature (Asarian et al. 2016) have noted the relationship of flow and water temperature; therefore, an improvement in flow related to forest health implementation will help cool water temperatures, as the volume of water increases and transit time decreases. ERRP cooperated with UC Berkeley (Bouma-Gregson and Higgins 2015) in an Eel River basin-wide study of toxic cyanobacteria, and found that toxic species thrived in warm water and that flow depletion of South Fork Eel River tributaries was contributing to the problem. Consequently, if Tenmile Creek summer flows are restored it should have a positive ripple impact on reaches of the South Fork Eel River downstream and their tendency to be dominated by toxic cyanobacteria. ERRP water temperature data in Tenmile Creek and elsewhere in the South Fork Eel River will provide trend data for adaptive management. Therefore, long term goals of this project meet NCRP objectives for increasing water flow and improving water quality.

As noted above, the region of Mendocino County where this project would take place is very economically disadvantaged. The transition to legal and regulated cannabis has devastated the local economy and there is no work, which causes ripple sociological impacts. Therefore, job creation is a major objective of this project and forest health implementation could lead to near full employment, if the community organizes. ERRP contractors will be estimating the amount of type of labor that will be needed for watershed-wide forest health implementation, and effort made to alert community members of the opportunity. Partnerships with businesses or non-profit frameworks for organizing employment will also be explored. ERRP is working the newly formed TCWC, which will be largely dedicated to forest health implementation and wishes to emulate the model of the Middle Klamath Watershed Council in working with the Cahto Tribe and BLM, similar to the working relationship of MKWC, the Karuk Tribe and USFS. The Tenmile Creek Watershed Council (TCWC) will be an integral part of managing local human resources and coordinating planning and funding when CalFire CCI grant monies are tapped.

There is also recognized opportunity for an articulated program between Laytonville Elementary School, Laytonville High School and Mendocino Community College to start a vocational education track. The program would target youth growing up in poverty, including Native American students, and provide career tracks in forest health both as scientists or as forest health practitioners. Visits to Laytonville schools are planned under this grant, but more substantial future resources will be needed to attain the latter vision.

6) Describe Scalable, Replicable, Measurable, Innovative Results from the Project and Multiple Benefit for Forest Management on the North Coast: The Forest Health Plan template that will be derived under this project is desperately needed across the North Coast region, if CalFire CCI funds are to be channeled into our watersheds. There also needs to be North Coast sub-basin plans, and the Tenmile Creek watershed (65 square miles) is an appropriate scale for articulated planning for forest health implementation. The forest health plan developed for the Tenmile Creek watershed could be subsequently used for nearby basins, such as the upper South Fork Eel River or the Mid-Eel from Dos Rios to Dyerville. ERRP is fostering interest similar to the TCWC in the latter geographic area, and the Mid-Eel Watershed Stewards (MEWS) has formed as a sponsored group of the Trees Foundation with the intent to further organize to become a conduit for forest health resources.

Multiple benefits anticipated from the Tenmile Creek Forest Health Pilot Project are as follows. 1) Forest health plans for 12 Tenmile Creek watershed landowners that are ready for implementation in future grant rounds. 2) A new Forest Health Plan template suitable for use at a regional scale. 3) A watershed scale forest health plan that helps prioritize actions, that can provide a model for other the North Coast basins. 4) New technology will be tested that can be duplicated in other North Coast watersheds to support economical forest health planning. 5) Work with FRG on value-added products. 6) Set up forest health demonstration sites, and use them for educating the community. 7)

Start forest health outreach at public schools. 8) Help organize labor so the community fully benefits economically from future forest health implementation funding. 9) Restore stream flow. 10) The project will also promote cultural harmony as the Cahto Tribe is increasingly recognized for their role in maintaining forest and watershed health in the past and valued for providing TEK that helps guide forest health restoration going forward.

7) Describe the need for the project and how the project addresses forest health and climate change/extreme event resiliency: The trajectory of forest health in the Tenmile Creek is downward, if people do not organize and intervene. It is clear that over-stocked forests need to be thinned and that oak woodlands be restored by removing competing Douglas fir trees. Climate change is already advanced and manifest in the Eel River watersheds, with fall rains needed by fall Chinook salmon failing, and recurring prolonged droughts becoming the norm. Forest health implementation is sorely needed for the attendant reduction in forest evapotranspiration, which will increase stream baseflows to somewhat counter the effects of climate change. Salmon and steelhead face an uncertain future with changes in the timing of flow and variable ocean productivity, but increased flows associated with forest health improvement could improve their chances for survival and recovery.

While the Wilderness Lodge Fire to the west of Laytonville in 2014 was mostly low intensity and burned undergrowth and improved forest health, more recent fires to the south in Mendocino County have been highly destructive and exhibited 'fire-storm" behavior. Recollection of the Lodge Fire and now the Redwood Complex Fire of 2017 and Mendocino Complex Fire (2018) have the community on edge and extremely receptive to forest health improvement. Many residents of Tenmile Creek have moved there from urban areas for communion with nature and do not have plans for commercial extraction of resources. Therefore, these land owners are likely willing to participate in carbon sequestration strategies that in aggregate can go a long way to making the Tenmile Creek watershed a carbon sink. As each private land owner commits to forest health, their fire security improves, but if there is widespread cooperation and implementation, it provides an added degree of fire safety at the community level. This project will also try to foster a cultural shift where individual land owners come to understand that they have a role in tending the natural world, just as the Cahto Tribe did for 10,000 years or more.

- 8) Describe the size of the project and the communities served by this project: This project will cover five sites (12 properties) in the Tenmile Creek watershed comprising 815 acres.
 - 1) Lower Tenmile/Peterson Creek: See Attachment #1 for pictures and description.
 - 2) <u>Tenmile Creek Road Association (Middle Tenmile)</u>: See Attachment #1 for pictures and description.
 - 3) Lower Cahto Creek (Cahto Trail): See Attachment #1 for pictures and description.
 - 4) <u>Unnamed Cahto Creek Tributary</u>: See Attachment #1 for pictures and description.
 - 5) Triple Creek Ranch (Lewis Creek): See Attachment #1 for pictures and description.
- 9) List and describe the partnerships involved in the project and local and/or political support: ERRP is working closely with the TCWC with the intent that the latter expand its capacity to implement forest health plans for the watershed and create employment for the community. The Laytonville County Water District provides water to the residents of Laytonville, but wants to see water security for Tenmile Creek residents outside their service area and supports ERRP and TCWC efforts. Mendocino County Supervisors want to see innovation in forest health implementation and the job and economic benefits derived. Senator Mike McGuire and Assemblyman Jim Wood also support ERRP/TCWC efforts for similar reasons. ERRP has a strong working relationship with the UC Berkeley Angelo Reserve and they support this project. We look forward to joint forest health planning with them in the future at a larger scale. Finally, ERRP has had an active partnership with the Arcata Office of the U.S. Bureau of Land Management (BLM) and they have a nexus to this project in lower Tenmile Creek, where they own old growth fir forests with spotted owls. This project could help provide a buffer and accelerate succession toward suitable habitat for them as a result of subsequent forest health implementation. ERRP has also worked with BLM related to improving access to the Cahto Peak Wilderness Area and on a potential forest health project there. All of the above named entities have written letters of support for this project, and are available for transmission, in the event that they are not accepted as attachments to this project.

10) List the estimated quantifiable, measurable benefits expected to result from the proposed project:

- a. Develop an ecological Forest Health Plan Template suitable for use in Tenmile Creek and North Coast basins.
- b. Drone-collected forest stand data incorporated as an essential planning tool for use in the Forest Health Plan template and the watershed forest health plan.
- c. *Tenmile Creek Watershed Forest Health Plan* as a blueprint for implementation at a watershed scale and as a template for other sub-basins in Eel River watersheds and elsewhere on the North Coast.
- d. Forest health plans for ecologically and culturally important sites that cue up 815 acres for forest health implementation.
- e. Creation of at least two demonstration project sites for public education under this and future projects.
- f. Community and public-school outreach to increase understanding of forest health and the benefits of cooperation to include brochures, posters, web and social media, and video.
- g. An integrated strategy for job creation and economic development will be included as part of the watershed plan, but value-added forest health products will also be anticipated and useful data collected for Forest Reciprocity Group.

An integrated strategy for job creation and economic development will be included as part of the watershed plan, but value-added forest health products will also be anticipated and useful data collected for FRG in each forest health plan.

- 11) List any scientific studies, plans, designs or reports completed for the project or process: ERRP (In Press) is completing a Tenmile Creek Watershed Conservation and Restoration Action Plan as a culminating activity of its SCC Prop1 pilot project that will layout strategies for riparian restoration, gully erosion control and water conservation. The watershed plan for forest health funded under this project is a perfect companion document. because forest health has a profound impact on water supply. ERRP has reported on water temperature and fish monitoring at 20 locations in the Tenmile Creek watershed, but also at the basinwide scale (Asarian et al. 2016). Reports related to annual ERRP fall Chinook salmon assessments (Higgins 2017) document that some of the highest spawning densities in the Eel River basin are in lower Tenmile Creek. Thomas Gast Associates Environmental Consultants (TGAEC In Press) conducted a scientific study comparing the flow regime of Elder Creek, a USGS benchmark stream flowing from an old growth watershed in the Angelo Reserve, with two Tenmile Creek tributaries adjacent to the east, Streeter Creek and Big Rock Creek. They adapted the U.S. Environmental Protection Agency (McKane et al. 2014) eco-hydrologic model VELMA (Visualizing Ecosystem Land Management Assessments) to determine likely ranges off historic flows in the disturbed watersheds of Streeter and Big Rock. Model results supported the conclusion that the driving factor for desiccation of Streeter Creek was likely as a result of increased forest evapotranspiration. TGAEC collected flow data at four Tenmile Creek locations, including in tributary Streeter Creek. The baseline and trend flow data will be ideal for measuring the benefits of watershed wide forest health implementation in Streeter Creek in the future. The coincidence with the SCC Prop 1 pilot project sets up an ideal setting to test scientifically and quantitatively the benefit of forest health implementation and restoration of watershed hydrology and base flows, which is a core goal of this project.
- 12) Describe the approach to data collection, performance measures, and project reporting of outcomes and lessons learned. High quality data will be collected in association with each forest health plan suitable for aggregation in studies of climate change and carbon sequestration, labor needs for forest health implementation, cost factors for budgeting implementation and the amount of forest health wood products produced. Performance will be judged in key deliverables like the new ecological Forest Health Plan template, forest health plans for the 12 cooperating landowners and the *Tenmile Creek Watershed Forest Health Action Plan*, which will capture lessons learned during the project. Lessons learned will also be conveyed through outreach in press release, at meetings, on field trips, in classroom visits and in brochures and on posters. The ERRP website (www.eelriverrecovery.org) will be augmented with information about the project and the ERRP Facebook page will be updated frequently to engage the community. Outreach will help win support for forest health implementation and to over-come fears that attendant logging will harm the environment, when the reverse is true. Monthly reports and project interim and final report necessary to comply with NCRP grant protocols will also be created.



United States Department of the Interior BUREAU OF LAND MANAGEMENT

Arcata Field Office 1695 Heindon Road Arcata, CA 95521-4573 www.blm.gov/california



May 22, 2020

In Reply Refer To: 7000 (CA330)P

Ms. Sandra Perez and Mr. Dale Roberts Co-Chairs - NCRP Technical Peer Review Committee PO Box 262 Healdsburg, CA 95448

Dear Ms. Perez and Mr. Roberts,

I am writing on behalf of the Bureau of Land Management's (BLM) Arcata Field Office to support the Eel River Recovery Project's (ERRP) Tenmile Creek Watershed Forest Health Pilot Project proposal to the North Coast Resource Partnership Demonstration Project grant program. The BLM manages lands on the western edge of the Tenmile Creek watershed, including the Cahto Peak Wilderness, where we have worked with ERRP on recreational development and forest health issues. The ERRP has also assisted BLM with trespass marijuana grow clean-ups, public land access improvements, and temperature monitoring in BLM-managed Eel River tributaries. We support the proposal because it would improve community involvement and increase our understanding of fire risk and forest health issues in areas adjacent to BLMmanaged lands.

Sincerely,

Molly Brown Field Manager

COMMITTEES CHAIR: HEALTH BUDGET JOINT LEGISLATIVE AUDIT WATER, PARKS, AND WILDLIFE

SUBCOMMITTEE BUDGET SUBCOMMITTEE NO. 1 ON HEALTH AND HUMAN SERVICES





JIM WOOD ASSEMBLYMEMBER, SECOND DISTRICT STATE CAPITOL P.O. BOX 942849 SACRAMENTO, CA 94249-0002 (916) 319-2002 FAX (916) 319-2102

DISTRICT OFFICES 200 S SCHOOL STREET, SUITE D UKIAH, CA 95482 (707) 463-5770 FAX (707) 463-5773

> 50 D STREET, SUITE 450 SANTA ROSA, CA 95404 (707) 576-2526 FAX (707) 576-2297

1036 5TH STREET, SUITE D EUREKA, CA 95501 (707) 445-7014 FAX (707) 455-6607

May 18, 2020

Ms. Sandra Perez and Mr. Dale Roberts Co-Chairs - NCRP Technical Peer Review Committee PO Box 262 Healdsburg, CA 95448

RE: Tenmile Creek Watershed Forest Health Pilot Project Grant Endorsement

Dear Ms. Perez and Mr. Roberts:

I am writing in support of Eel River Recovery Project's (ERRP) Tenmile Creek Watershed Forest Health Pilot Project grant proposal.

This project will create an improved, ecologically sound and cost-effective forest health plan. This plan will be at the watershed scale and we will create plans for private land owners of key parcels that are important for biodiversity. These parcels will also be forest health demonstration sites. Once this project is completed, these land owners will be ready to participate in future grant rounds for implementation from the CalFire Climate Change Initiative grant fund.

Forest health implementation will reduce the risk of catastrophic fire, help recover Pacific salmon populations, improve water supply and water security, improved biodiversity, and promote resilience to climate change.

The Laytonville area that this grant would serve would benefit greatly from the services provided, not only for the improvement in forest health but the jobs created and local economic development. ERRP has watershed residents ready to participate in forest health planning and implementation and is devising a process to serve their needs that can be used as a model for other North Coast sub-basins.

Thank you for your consideration of this project. Please do not hesitate to contact my office with any questions.

Respectfully,

JIM WOOD Assemblymember, 2nd District





Mendocino County

890 N. Bush Street Ukiah, CA 95482 (707) 463-4495 office (707) 463-4477 fax cemendocino@ucdavis.edu http://cemendocino.ucdavis.edu

Patrick Higgins, Managing Director Eel River Recovery Project P.O. Box 214 Loleta, CA 95551 phiggins@sonic.net

May 19, 2020

Dear Patrick Higgins,

This letter is to serve as my endorsement of the Eel River Recovery Project's proposed demonstration project titled "Tenmile Creek Watershed Forest Health Pilot Project".

This collaborative project proposes to manage forestland across multiple landowners using a suite of management tools, exploring new resources, incorporating TEK, and demonstrating outcomes to the community. It is an excellent first step towards addressing forest health and resiliency issues and wildland fire safety concerns in underrepresented and disadvantaged communities in northern Mendocino County. The results of this project could serve as an excellent example of forest and natural resources management for the larger Eel River Watershed.

The proposed project appears well suited for the NCRP Demonstration Projects and Processes grant as the goal is to develop a forest management plan that includes a comprehensive and integrated set of strategies, actions, and projects to support forest, watershed, and community health and long-term resilience to wildfire.

If you have any question, please feel free to contact me.

Sincerely,

Michael I. Jones, Ph.D. UC Cooperative Extension Forest Advisor <u>mjones@ucanr.edu</u> Cell: 707-338-7457



May 15, 2020

Ms. Sandra Perez and Mr. Dale Roberts Co-Chairs - NCRP Technical Peer Review Committee PO Box 262 Healdsburg, CA 95448

RE: Support for Eel River Recovery Project Tenmile Creek Watershed Forest Health Pilot Project to the North Coast Resource Partnership Demonstration Project Grant

Dear Chairperson Perez and Chairperson Roberts,

I am writing this letter in support of the Eel River Recovery Project (ERRP) proposal to the North Coast Resource Partnership for a Tenmile Creek Watershed Forest Health Pilot Project. The North Coast encompasses the Eel River watershed, and ERRP is having success organizing watershed residents to participate in forest health planning and implementation and with the prospect of creating living-wage jobs in a severely economically disadvantaged community.

The proposal will help create templates for forest health plans, a watershed scale plan, and also get some key parcels and landowners cued up for forest health implementation grants. When forest health is implemented, benefits derived will be many, including prevention of catastrophic fire, improved water supply and water security, improved biodiversity, recovering Pacific salmon populations and a new relationship for the community with the land to maintain fire safety into the future.

I strongly encourage you to favorably consider the ERRP proposal, which would help accelerate implementation of forest health in Mendocino County and on the North Coast. If my office can be of any further assistance please do not hesitate to contact me at (707) 445-6508.

Warmest Regards,

MIKE McGUIRE Senator

STATIONARY Mendocino County Supervisors

May 19, 2020

Ms. Sandra Perez and Mr. Dale Roberts Co-Chairs - NCRP Technical Peer Review Committee PO Box 262 Healdsburg, CA 95448

RE: Support for Eel River Recovery Project Tenmile Creek Watershed Forest Health Pilot Project Proposal to the North Coast Resource Partnership Demonstration Project Fund

Dear Ms. Perez and Mr. Roberts,

The Mendocino County Board of Supervisors would like to support the Eel River Recovery Project's (ERRP) Tenmile Creek Watershed Forest Health Pilot Project proposal to the North Coast Resource Partnership. Recent fires have pointed out the need to improve forest health in Mendocino County and this proposal would create tools for accelerating implementation. An exciting aspect of this proposal is that it assists the community with organizing a forest health labor force so that local residents can play a role as living-wage contractors assisting with implementation.

When forest health is implemented, benefits derived will be reduction of risk of catastrophic fire, improved water supply and water security, flourishing biodiversity, increased Pacific salmon populations, and the ability of the community to better respond to challenges related to climate change.

We hope the ERRP proposal is funded to help accelerate the implementation of forest health in northern Mendocino County and on the North Coast. This project is in Supervisor John Haschak's District, and he would be happy to answer questions about our support, should you have any (707 972-4214).

Sincerely,

John Haschak

John Haschak Chair, Mendocino County Board of Supervisors

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SANTA BARBARA • SANTA CRUZ

MARY E. POWER, Faculty Director ANGELO COAST RANGE RESERVE 42101 Wilderness Lodge Road PHONE (707) 984-6653 http://angelo.berkeley.edu

BRANSCOMB, CALIFORNIA 95417

May 15, 2020

Ms. Sandra Perez and Mr. Dale Roberts Co-Chairs - NCRP Technical Peer Review Committee PO Box 262 Healdsburg, CA 95448

RE: Support for Eel River Recovery Project's Tenmile Creek Watershed Forest Health Pilot Project Grant Proposal

Dear Ms. Perez and Mr. Roberts,

I write in strong support of the Eel River Recovery Project's (ERRP) request for funding for their Tenmile Creek Watershed Forest Health Pilot Project. I am the faculty director of the Angelo Coast Range Reserve, an 8000-acre research reserve in Mendocino County that I have managed for 30 years. As a part of the UC Natural Reserve System, the Angelo Reserve is managed for university-level teaching, research, and outreach to better inform stewardship of natural ecosystems in and around the Eel River watershed (www.Angelo.berkeley.edu). The natural-human ecosystems of this region, including the Eel watershed, are at a historic threshold as we enter the era of climate change. We must adapt quickly if we are to thrive.

Berkeley scientists based at Angelo have partnered closely with Patrick Higgins and the Eel River Recovery Project to understand the impacts of drought, water diversion, and land use on the health of the Eel River food webs, and the sustainability of water supplies that support them. We have greatly benefitted from their monitoring, data and timely dissemnation of information on the state of the river to a wide audience of stakeholders, including university researchers.

ERRP is doing important work in helping the community of Laytonville and the surrounding Tenmile Creek watershed engage on forest health. They have assembled a highly qualified team of forest health experts and their scientific approach to planning is sound. Their two plan templates, one for landowners and the other at the watershed scale, will be useful both within this watershed and elsewhere in the Eel River and other North Coast basins.

UC Berkeley and the Angelo Reserve are very glad to have ERRP forest health projects initiated in lower Tenmile Creek, adjacent to BLM old growth that has connectivity with our property. Forest health implementation, including Doug fir thinning, in this key

natural habitat will improve habitat for broad-leafed trees that provide nuts and berries critical for wildlife, and have been increasingly suppressed by "Doug firification". Substantial forest thinning will also reduce the severity of future fires in the basin. In addition, ERRP's experimental hypothesis, that thinning forests could improve river baseflows, builds on traditional ecological knowledge of several northern California tribes and is worth testing in our upper South Fork Eel watershed. Benefits from this project could assist in healing watershed hydrology and saving Pacific salmon, despite the viscistudes of climate change.

Please feel free to contact me if I can provide further information.

Sincerely,

Mary & Power

Mary E. Power Professor, Integrative Biology, UC Berkeley Faculty Director, Heath and Marjorie Angelo Coast Range Reserve Member, National Academy of Sciences



May 6, 2020

Ms. Sandra Perez and Mr. Dale Roberts Co-Chairs - NCRP Technical Peer Review Committee PO Box 262 Healdsburg, CA 95448

RE: Support for Eel River Recovery Project Tenmile Creek Watershed Forest Health Pilot Project to the North Coast Resource Partnership Demonstration Project Grant

Dear Ms. Perez and Mr. Roberts,

The Tenmile Creek Watershed Council is a non-profit restoration group based in Laytonville and currently operating as a sponsored group of the Trees Foundation in Garberville. We would like to express strong support for the Eel River Recovery Project's proposal to the North Coast Resource Partnership Demonstration Project fund for the Tenmile Creek Watershed Forest Health Pilot Project. Our group has strong interest in forest health and we would like to help bring resources into our basin to heal the watershed and to create jobs.

The ERRP proposal embodies goals greatly desired by the community, including fire safety, more water for fish and people, better wildlife habitat and full employment in restoring our watershed. This grant represents an important step forward in organizing on our watershed around forest health and we hope that you select the project for funding.

We would be happy to answer any questions regarding our support, and those should be directed toward TCWC Board member Philip Buehler at 707 513-6010.

Sincerely,

Sum Bausott

Susan Barsottti TCWC, Board Chair