

***Effectiveness Monitoring Committee  
Full Project Proposal Form***

***Deadline for Submission: October 31, 2022***

**Project #:**

**Date:** October 31, 2022

**Project Title:** Santa Cruz Mountains Post-Fire Redwood Defect Study

**Principal Investigators:** Nadia Hamey, RPF #2788 [REDACTED]; and

Donald Campbell, University of California, Berkeley, [REDACTED]

**Collaborators:** Peninsula Open Space Trust, Justin Garland, Redwoods Program Manager,

[REDACTED]  
Sempervirens Fund, Ian Rowbotham, Senior Land Stewardship Manager

[REDACTED]  
Save the Redwoods League, Anthony Castaños, Land Stewardship Manager,

[REDACTED]  
Cal Poly Swanton Pacific Ranch, Grey Hayes, Education and Research Manager,

**Contact Information:** Nadia Hamey, [REDACTED]  
[REDACTED]

**Project Duration (Years/Months):** 3 years

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**1. Project Description**

This study will attempt to understand how post fire measurements correlate with the amount of defect in individual coast redwood trees. This research could have important ecological implications that enhance land management decisions as well as understanding the development of wildlife habitat.

We will attempt to determine the correlation, if any, between fire damage and bole decay from fire indicators and post-fire effects on live redwood. We will look at the likelihood of sapwood rot when the wet rot fungus (*Coniophora puteana*) grows on the bark. Trees will be monitored from the spectrum of burn severities and will be scaled following harvesting over the next three years. The aim is to increase our understanding of decay in redwoods as a result of varying

degrees of burn damage. We will produce a Redwood Defect Field Guide to share with the Board of Forestry and the California Licensed Foresters Association.

After a wildfire, timberland owners often use a matrix of visual assessments in conjunction with fire severity maps to inform their management decisions. Percent remaining crown, visible root damage, exposed cambium and/or location, and amount of epicormic or basal sprouts on fire affected redwoods are the most likely variables to be considered. To make the results of this study easily accessible, these visual, secondary effects were incorporated into the study in addition to more scientific metrics related to fire severity and intensity.

This research seeks to enrich a relatively small body of knowledge concerning the relationship between fire severity and redwood mortality, wood quality, and defect. Results of this study may better inform timberland owners faced with timely decisions after a wildfire, and aid in the use of Emergency Notices, Substantially Damaged Timberland determinations, and overall prioritization of sanitation salvage timelines, methodologies, and reforestation needs.

Decisions based on the potential long-term defect introduced to redwood trees after a fire have broad implications and influence critical question themes such as: appropriate harvest cycles, prescribed fire return intervals, type conversions, and stocking standards.

Understanding defect implications is important for ecological restoration and other scientific questions. The retention of trees with defect is important for the preservation of wildlife habitat on the landscape. This research will shed light on the impact of fires on the creation of rot pockets that could potentially lead to basal hollows.

#### **a. Background and Justification**

In August 2020, the CZU Lightning Complex Fire burned nearly 87,000 acres in the Santa Cruz Mountains, including extensive redwood timberland. The resilience of redwood to different fire severities and the lasting implications of fire damage on wood quality and mortality is not well understood.

To continue stewarding this forest with the standard of care it needs, we need to better understand how the redwood trees were impacted by the fire and how that damage impacts merchantability. Predicting merchantability rates across the broader landscape will help project managers know how to treat surplus logs thinned from overstocked forests for future forest health projects and create a more fire resilient region. Furthermore, this information will be helpful in predicting where post-fire salvage logging should be prioritized after future fires.

This research seeks to inform land managers what to look for when trying to decide whether to conduct a salvage harvest in a redwood forest following a wildfire. Based on the findings of the potential for rapid onset of defect given the severity of the post-fire effects, foresters may elect to proceed with filing an Emergency Notice or making a Substantially Damaged Timberland

determination. The impact of this research includes the potential for circumstances warranting redwood salvage harvests to go on for many years post-fire.

This research falls under the purview of the Board of Forestry & Fire Protection and the Effectiveness Monitoring Committee because it addresses a fundamental determinant of post-fire salvage operations. The determination of Substantially Damaged Timberland has implications for the use of Emergency Permits.

The impacts of defect introduced in redwood as a result of fire are not well understood. Trees with habitat features such as basal hollows, created by fire scars from repeat fires, are critical habitat for species such as Townsend Big-eared Bat (*Corynorhinus townsendii*). Redwood trees have been known to rot internally when burned significantly and can rot to the pith through all the wood that grew prior to the fire. Less burned trees will compartmentalize the rot.



1948 Fire Damage – Defect Throughout Center



1948 Fire Damage – Defect Compartmentalized

The degree of damage sustained by a redwood tree post-fire influences the future merchantability and the development of unique habitat features.

#### **b. Research Questions, including Objectives and Scope**

The study will explore what combination or severity of post-fire effects corresponds to burn damage that affects the merchantability of a redwood tree in the short term, and what are the potential implications for long-term redwood forest management.

Location: The study area is on the west slope of Ben Lomond Mountain at San Vicente Redwoods and Swanton Pacific Ranch in thinning projects planned as part of the Big Jim THP, #1-19-00043 SCR, and the Swanton Pacific Ranch NTMP, #1-07NTMP-020 SCR.

Approximately 1,000 acres of redwood forest burned with moderate to high severity in 2020 will be thinned over the next 3-5 years. Hamey Woods will work cooperatively on this research with the owners and operators of San Vicente Redwoods and Cal Poly Swanton Pacific Ranch.

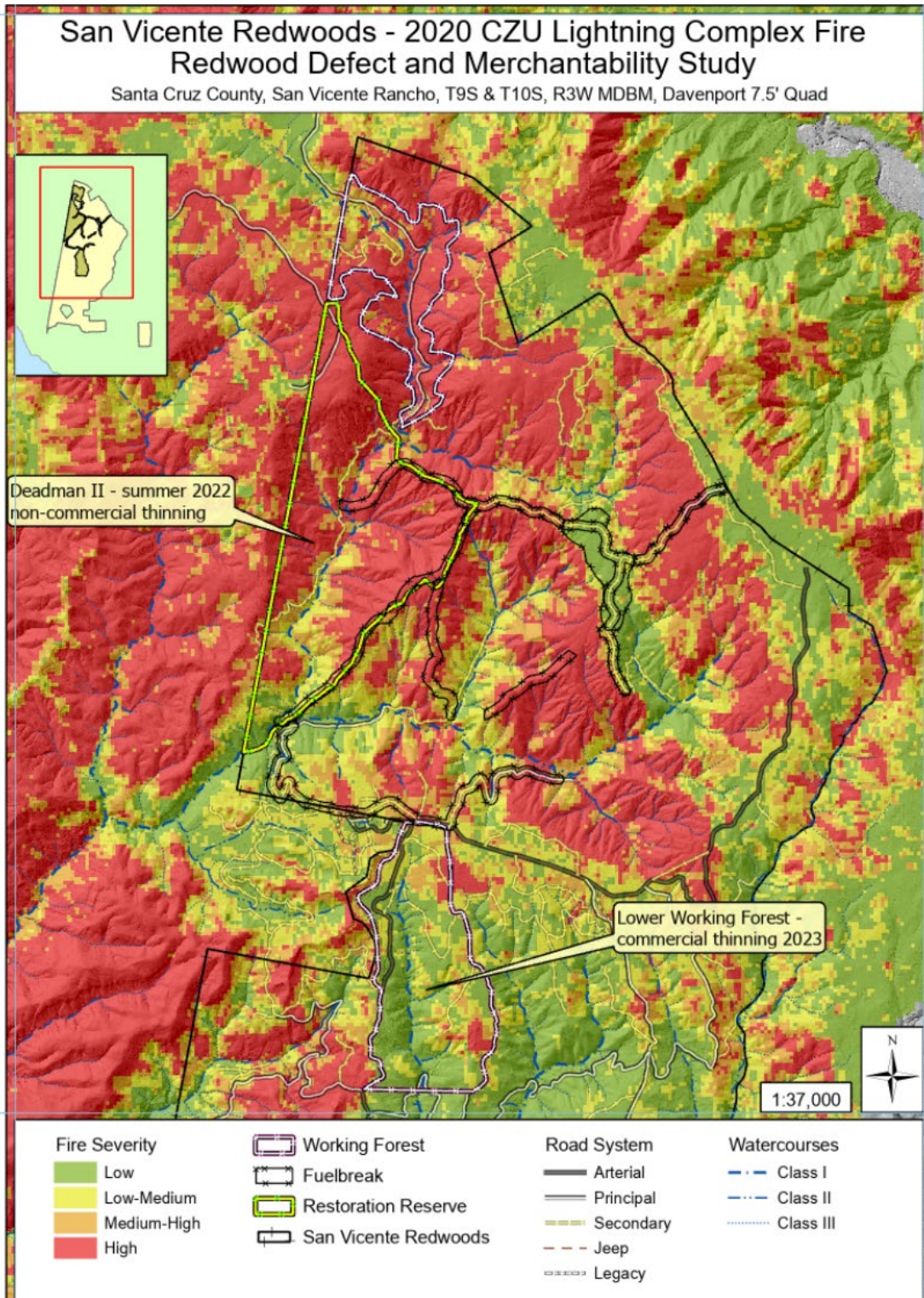
The geographic applicability of this study stretches throughout the redwood range, an area

covering approximately 2.2 million acres. The topic is increasingly important as severe wildfire is on the rise. The application of using post fire measurements to assess redwood soundness has utility throughout the redwood region.

The study will be carried out by a University of California, Berkeley Graduate Student Researcher, and forestry staff at Hamey Woods who will oversee timber operations at San Vicente Redwoods and Swanton Pacific Ranch. We will dissect and analyze redwood trees harvested for restoration and salvage operations. Local foresters have collaborated with the study design, monitoring protocol, and shared experiences.

The feasibility and interest in the study have been demonstrated by the partial completion of a Pilot Study. We have tagged, geo-located, and collected post-fire effects data on 96 redwood trees in the Deadman Gulch Restoration project, where falling is in progress. We have scaled and collected log merchantability data/photos on six trees after falling. In partnership with the EMC, we hope to monitor and track many more for the benefit of foresters grappling with burn damage following high severity wildfire in a redwood forest.

The goal is to gather post-fire effects data on as many trees as possible and scale approximately 100 trees per year as they're cut to determine the defect implications of the burn damage. We will summarize the post-fire measurements and run a statistical analysis to correlate with the amount of defect in individual coast redwood trees. The trees will be selected from several planned thinning projects, including those shown on the map of San Vicente Redwoods, below.



## 2. Research Methods

Redwood trees of various sizes will be tagged and assessed for burn damage while standing, as outlined below. Following cutting, they will be bucked and graded on-site with notes and photos

to document the decay introduced by the 2020 fire. The data will be compiled and analyzed to develop a correlation between external post-fire effects and internal wood quality and merchantability.

Burn damage assessment:

The following data will be collected for trees burned in the 2020 CZU Lightning Complex Fire, across the spectrum of Burn Severity (Low, Low-Moderate, Moderate, High)

- % crown scorch: Estimate the percent canopy with scorched leaves/needles
- % crown torch: Estimate the percent canopy with branches without leaves/needles
- % live: Estimate the percent live canopy present
- % scorch, % torch, and % live
- Scorch height (ft): Highest height of crown scorch
- Torch height (ft): Highest height of crown torch
- Max bole char (ft): Highest point where bole is charred (black)
- Total height (ft)
- Diameter at breast height (DBH) (in)
- Sprouting on branches and/or bole
- % Sprouting: Estimate the percent of the tree that is sprouting on bole and branches
- # of sprouts at base: Estimate # of sq. ft of sprouts
- Proportion of bole exhibiting external signs of fungal infection
- Proportion of cambium that is dead: An axe was used to cut into the cambium in each quadrant
- Max height of visible bark mold or wet rot (*Coniophora puteana*) on the tree bark. (inches)
- Total surface area of external fungus
- Other damages or abnormal characteristics
- Burn Severity according to the Burned Area Reflectance Classification (BARC) Map
- Photo Documentation

Following thinning, the redwood logs will be graded with the Scribner Decimal C log scaling rule. We will summarize the post-fire measurements and run statistical analysis to correlate individual and combined measurements with the amount of defect in individual coast redwood trees.

### **3. Scientific Uncertainty and Geographic Application, including monitoring locations:**

This project will have broad implications in forest land within the coastal ranges of California stretching from the Oregon border in Del Norte County to the groves of redwoods in the Big Sur region of Monterey County. The counties that would benefit from this research include; Del Norte, Humboldt, Mendocino, Sonoma, Marin, San Mateo, Santa Clara, Santa Cruz and Monterey. This research would also be applicable to the small part of the Oregon coast with naturally occurring redwood stands. The implications of this research will be useful for researchers, landowners, restoration practitioners, sawmills, etc.

### **4. Critical Questions and Forest Practice Regulations Addressed**

The EMC's Strategic Plan (Husari and Henly 2018) identifies Emergency Notices as an area of

interest. Emergency Notices are intended to give a landowner a head start on timber salvage operations following tree mortality events related to fire, insect, or disease outbreaks. This evaluation will inform the damage determination made for redwood trees post-fire, which will have implications for the application of Emergency Notices for Substantially Damaged timberland.

The study will address the critical questions outlined for Theme 6 (Wildfire Hazard). The investigation of a relationship between post fire measurements and the corresponding internal defect will influence all of the following standards.

- o Minimum stocking standards (14 CCR § 912.7 [932.7, 952.7])
- o Silvicultural methods and stocking requirements (14 CCR § 913.8)
- o Silvicultural objectives and regeneration methods (14 CCR § 913 [933, 953])
- o Exemptions which facilitate removal of dead, dying or diseased trees (14 CCR § 1038),
- o Emergency notices which also facilitate removal of burned, dead, dying or diseased trees (14 CCR § 1052)

The study will address the critical questions outlined for Theme 7 (Wildlife habitat: species and nest sites). This study may help land managers make more informed decisions on which trees to leave during a salvage harvest, which in turn would allow a more intact habitat to remain.

This study informs critical questions outlined for Theme 8 (Wildlife habitat: seral stages), as it will help foresters decide whether a tree will remain sound in the future, allowing for more trees to remain and accelerating the return of late seral stage features.

The study will also shed light on the critical questions for Theme 10 (Wildlife habitat: structures). Wildlife habitat is created in redwood forests and trees through repeated fires creating fire scars that introduce rot and burn out basal hollows. Although this study has implications for timber production, it also has the potential to inform managers concerned with overall forest health and wildlife habitat.

## **5. Roles, Collaborations, and Project Feasibility**

The Project will be co-led Nadia Hamey of Hamey Woods, and Donald “Spike” Campbell, a Graduate Student Researcher at the University of California, Berkeley. Spike Campbell is a Masters of Forestry student working in Scott Stephens Lab at UC Berkeley. The involvement of the Stephens Lab will benefit the project by bringing a great depth of resources from UC Berkeley and the ability to collaborate with and receive input from a highly regarded team of fire ecologists. The methods and statistical analysis will be refined and vetted, allowing for the results to be sound and useful for land managers and the Board of Forestry.

The collaborators, Cal Poly’s Swanton Pacific Ranch and the landowners and conservation

easement holders at San Vicente Redwoods – Peninsula Open Space Trust (POST), Sempervirens Fund, and Save the Redwoods League, all support this research. Their enthusiastic involvement will allow the implementation of the treatments that make possible dissection of the redwood logs. Their involvement will also benefit the project by increasing exposure to the research for students and stakeholders.

## **6. Project Deliverables**

The anticipated products resulting from this research will include a Field Guide and Report summarizing the categories and combinations of post-fire effects and the corresponding implications on defect. The principal investigators will make presentations to the professional forester community, the Board of Forestry, and the EMC. A timeline for deliverables is on the next page:



ACTIVITY OR DELIVERABLE	TYPE		YEAR 1 7/1/23 - 6/30/24				YEAR 2 7/1/24 - 6/30/25				YEAR 3 7/1/25 - 6/30/26			
	Act.	Del.	A	B	C	D	A	B	C	D	A	B	C	D
	Establish Study Sites	X		9										
Collect Post-Fire Effects Data	X					6								
Summarize Post-Fire Effects Data	X						9							
Grade Logs Cut in 2022-23	X						9							
Analyze the Correlation of Post-Fire Effects and Defect using statistical analysis	X							12						
Grade Logs Cut in 2024		X							3					
Analyze the Correlation of Post-Fire Effects and Defect		X								6				
Grade Logs Cut in 2025		X									10			
Analyze the Correlation of Post-Fire Effects and Defect		X										3		
Prepare a Field Guide and Report Summarizing the Categories and Combinations of Post-Fire Effects and the Corresponding Implications on Defect		X											3	
Project Update to funders/collaborators		X				12		6		12				
Project Presentation of funders/collaborators		X							8			8		
Final Project Presentation of funders/collaborators		X												4
Complete Research Assessment (CRA) presentation to EMC														5
CRA presentations to the Board		X												6
Conference presentation(s)		X											3	
Submission of Redwood Defect Field Guide to the Board and CLFA		X												4
Graduate Project report submission		X												4

Key: A = Fiscal Year (FY) Quarter 1 (Jul 1 - Sept 30); B = FY Quarter 2 (October 1 - Dec 31); C = FY Quarter 3 (Jan 1 - Mar 31); D = FY Quarter (Apr 1 - Jun 30)

Act = Activity; D = Deliverable

Include Month in the cell, if known; Identify month as numbers 1-12, Jan-Dec.

This study will use well documented, repeatable methods for ease of increasing the scale and duration of this study. Lengthening the time period over which defect is assessed would be informative regarding the compartmentalization of rot pockets.

## 7. Requested Funding

We are requesting \$214,476.00 to complete the work described in this proposal (See detailed budget, below). This includes all field time, log grading, data analysis, and field guide/report preparation. Hamey Woods will contribute \$6,600 in tracked labor to this project. The project cost estimate has increased since the Initial Concept Proposal because of bringing on an academic collaborator and amending the proposal. Work on the pilot study, gathering data on


fire-damaged trees and collaborating with local foresters to try to understand the defect issue will continue regardless of EMC involvement; however, the funding would help us better understand and communicate the body of knowledge about redwood defect as a factor of fire damage.

Category	Role	Description	Hourly Rate	Year 1 Hours	Year 1 Total	Year 2 Hours	Year 2 Total	Year 3 Hours	Year 3 Total	TOTAL
					7/1/23 - 6/30/24		7/1/24 - 6/30/25		7/1/25 - 6/30/26	
<b>Personnel Salaries and Wages</b>	Forester	Pre- and Post-treatment Data collection, Data analysis	\$ 90	80	\$ 7,200	90	\$ 8,100	90	\$ 8,100	\$ 23,400
	Field technician	Pre- and Post-treatment Data collection, Data analysis	\$ 50	200	\$ 10,000	200	\$ 10,000	120	\$ 6,000	\$ 26,000
			<b>Fringe (%)</b>		<b>Year 1 Fringe</b>		<b>Year 2 Fringe</b>		<b>Year 3 Fringe</b>	
<b>Fringe Benefits % Personnel Cost</b>	Forester		23%		\$ 1,656		\$ 1,863		\$ 1,863	\$ 5,382
	Field technician		23%		\$ 2,300		\$ 2,300		\$ 1,380	\$ 5,980
<b>Contractual Expenses</b>	Tree Faller	Fall and Buck	\$ 200	40	\$ 8,000	40	\$ 8,000	40	\$ 8,000	\$ 24,000
	Log Grader	Inspect defect and grade redwood	\$ 200	100	\$ 20,000	100	\$ 20,000	100	\$ 20,000	\$ 60,000
	Graduate Student Researcher	Pre-and post-treatment Data collection, Data analysis	\$ 90	200	\$ 18,000	200	\$ 18,000	200	\$ 18,000	\$ 54,000
<b>Indirect Costs</b>	15% indirect on total labor + fringe		15%		\$ 3,173		\$ 3,339		\$ 2,601	\$ 9,114
<b>EMC FUNDING REQUESTED</b>					<b>\$ 70,329</b>		<b>\$ 71,602</b>		<b>\$ 65,944</b>	<b>\$ 207,876</b>
<b>Matching or In-Kind Contribution</b>	Forester	Pre- and Post-treatment Data collection, Data analysis, Project Management	90	20	\$ 1,800	10	\$ 900	10	\$ 900	\$ 3,600
	Field technician	Pre- and Post-treatment Data collection, Data analysis	50	20	\$ 1,000	20	\$ 1,000	20	\$ 1,000	\$ 3,000
<b>Total Budget</b>					<b>\$ 73,129</b>		<b>\$ 73,502</b>		<b>\$ 67,844</b>	<b>\$ 214,476</b>

## 8. Additional Required Forms

The following forms are attached.

- a. Employer Identification Number (EIN)
- b. Proof of active business registration with the California Secretary of State
- c. Letters of Support
- d. Nondiscrimination Compliance Statement – Form Std 19
- e. Drug-Free Workplace Certification – Form Std 21
- f. Payee Data Record – Form Std 204

 **IRS** DEPARTMENT OF THE TREASURY  
INTERNAL REVENUE SERVICE  
CINCINNATI OH 45999-0023

Date of this notice: 08-04-2020

Employer Identification Number:

Form: SS-4

Number of this notice: CP 575 A

For assistance you may call us at:  
1-800-829-4933

IF YOU WRITE, ATTACH THE  
STUB AT THE END OF THIS NOTICE.

HAMEY WOODS

**WE ASSIGNED YOU AN EMPLOYER IDENTIFICATION NUMBER**

Thank you for applying for an Employer Identification Number (EIN). We assigned you [REDACTED] This EIN will identify you, your business accounts, tax returns, and documents, even if you have no employees. Please keep this notice in your permanent records.

When filing tax documents, payments, and related correspondence, it is very important that you use your EIN and complete name and address exactly as shown above. Any variation may cause a delay in processing, result in incorrect information in your account, or even cause you to be assigned more than one EIN. If the information is not correct as shown above, please make the correction using the attached tear off stub and return it to us.

Based on the information received from you or your representative, you must file the following form(s) by the date(s) shown.

Form 941	10/31/2020
Form 940	01/31/2021
Form 1120	04/15/2021

If you have questions about the form(s) or the due date(s) shown, you can call us at the phone number or write to us at the address shown at the top of this notice. If you need help in determining your annual accounting period (tax year), see Publication 538, *Accounting Periods and Methods*.

We assigned you a tax classification based on information obtained from you or your representative. It is not a legal determination of your tax classification, and is not binding on the IRS. If you want a legal determination of your tax classification, you may request a private letter ruling from the IRS under the guidelines in Revenue Procedure 2004-1, 2004-1 I.R.B. 1 (or superseding Revenue Procedure for the year at issue). Note: Certain tax classification elections can be requested by filing Form 8832, *Entity Classification Election*. See Form 8832 and its instructions for additional information.

**IMPORTANT INFORMATION FOR S CORPORATION ELECTION:**

If you intend to elect to file your return as a small business corporation, an election to file a Form 1120-S must be made within certain timeframes and the corporation must meet certain tests. All of this information is included in the instructions for Form 2553, *Election by a Small Business Corporation*.



**California Secretary of State**  
Electronic Filing



## Corporation - Statement of Information No Change

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Entity Name: HAMEY WOODS

Entity (File) Number: C4616219

File Date: 10/11/2021

Entity Type: Corporation

Jurisdiction: CALIFORNIA

Document ID: GX37662

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*There has been no change in any of the information contained in the previous complete Statement of Information filed with the California Secretary of State.*

By signing this document, I certify that the information is true and correct and that I am authorized by California law to sign.

Electronic Signature: Nadia Hamey

Use [bizfile.sos.ca.gov](http://bizfile.sos.ca.gov) for online filings, searches, business records, and resources.

Document ID: GX37662

October 31, 2022

Effectiveness Monitoring Committee  
[REDACTED]

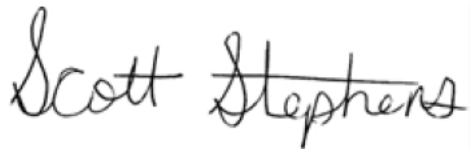
Dear Effectiveness Monitoring Committee,

I am writing this letter of support for the Redwood Defect Study being performed by Hamey Woods and submitted to the Effectiveness Monitoring Grant Program.

Nadia Hamey and her team have a comprehensive understanding of coast redwoods and their relationship with fire, decay, ecosystems and timber production.

My lab and I are in full support of Hamey Wood's efforts to attempt to understand how post fire measurements correlate with the amount of defect in individual coast redwood trees. This research could have important ecological implications that enhance land management decisions as well as understanding the development of wildlife habitat.

Sincerely,



Dr. Scott Stephens, Professor of Fire Science  
Henry Vaux Professor in Forest Policy  
Co-Director, Berkeley Forests  
Department of Environmental Science, Policy, and Management  
University of California, Berkeley  
[REDACTED]



October 31, 2022

Board of Forestry  
Effectiveness Monitoring Committee

[Redacted]  
[Redacted]

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- Matt Miller
- Sanjay Vaswani
- Emerick Woods
- Ken Yeager

**President**

Walter T. Moore

SENT VIA ELECTRONIC MAIL: {nadiahamey@gmail.com}

**Re: Support for the Santa Cruz Mountains Post-Fire Redwood Defect Study**

Dear Effectiveness Monitoring Committee:

On behalf of Peninsula Open Space Trust (POST), I enthusiastically support the Redwood Defect Study Project (Project) led by Hamey Woods and submitted to the Effectiveness Monitoring Grant Program.

The Project will investigate post-fire defect in redwoods at San Vicente Redwoods (SVR) and the surrounding region. As a co-owner of the San Vicente Redwoods property, POST is one of the SVR partners which includes Sempervirens Fund (SVR co-owner), Save the Redwoods League, and the Land Trust of Santa Cruz County. The SVR partners co-manage SVR as a model demonstrating the compatibility between conservation and sustainable timber harvest. The SVR partners budget operational funds to improve forest health, maintain the roads, improve the waterways, and create more fire resilient conditions on this property through the strategic dispensation of donor and grant funds. The landowners (Sempervirens Fund and POST) have recouped portions of the operational cost of stewarding this important property through sustainable timber harvest for the past 10 years, and this fairly predictable revenue stream has enabled continued investment into the property to ensure long-term sustainable management and numerous public benefits. This financial model is key to our understanding of how to keep forestland healthy and biologically functional in a landscape where development pressure could replace forests with housing or other uses.

Through limited opportunistic sampling, the SVR partners are learning that, post-fire, significant portions of trees in overstocked second growth forests are no longer merchantable due to damage caused by the extreme heat of the 2020 CZU fire. In order to continue stewarding this forest with the standard of care it needs, we need to better understand how these trees were impacted by the fire and how that damage impacts merchantability. Predicting merchantability rates across the broader landscape will help project managers know how to treat surplus logs thinned from overstocked forest for future forest health projects and create a more fire resilient region. Furthermore, this information will be helpful to predict where post-fire salvage logging should be prioritized after future fires.



Thank you for considering this grant request. If you have any questions regarding POST's support of this project, please contact POST's Director of Institutional Engagement, Joanna Devers at [REDACTED]

Sincerely,



Walter T. Moore  
President



Preserving redwood forests since 1900

Executive Director  
Sara Barth

Deputy Director  
Michael Kawalek, CFRE

Chief Financial Officer  
Patrick Gibbons

Chief of Philanthropy  
Julie Seelen, CFRE

Chief Marketing and  
Communications Officer  
Matthew Shaffer

Director of Land Conservation  
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Gage Dayton, Ph.D., Chair  
Anthony R. Ambrose, Ph.D. Emily  
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Chris Wilmers, Ph.D.

The Redwood Circle  
Philippe Cohen, Ph.D.  
Richard Conniff  
Robert L. Katz  
Fred Keeley  
Elinor & Richard Mansfield  
Dan Martin  
Emily Thurber  
Cole Wilbur

October 31, 2022

Effectiveness Monitoring Committee



**RE: Support for the Santa Cruz Mountains Post-Fire Redwood Defect Study**

Dear Effectiveness Monitoring Committee:

I am writing this letter of support for the Redwood Defect Study being performed by Hamey Woods and submitted to the Effectiveness Monitoring Grant Program.

We are in full support of Hamey Wood's efforts to attempt to understand how post fire measurements correlate with the amount of defect in individual coast redwood trees. This research could have important ecological implications that enhance land management decisions as well as understanding of the development of wildlife habitats.

The proposed Project aims to study the redwood defect introduced by the 2020 CZU Lightning Complex Fire, which burned nearly 87,000 acres in the Santa Cruz Mountains in 2020. The study will take place on the San Vicente Redwoods property, among others, and may inform future redwood forest management potentially throughout the redwood range.

Please give this project special consideration. If you have any questions, my contact information is below.

Sincerely,

**Laura McLendon**  
Director of Land Conservation  
Sempervirens Fund

Contact:





STATE OF CALIFORNIA

**NONDISCRIMINATION COMPLIANCE STATEMENT**

STD. 19 (Rev. 10/2019)

COMPANY NAME

Hamey Woods

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), medical condition (cancer), age (over 40), marital status, denial of family care leave and denial of pregnancy disability leave.

**CERTIFICATION**

*I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.*

OFFICIAL'S NAME

Nadia Hamey

DATE EXECUTED

10/31/2022

EXECUTED IN THE COUNTY OF

Santa Cruz

PROSPECTIVE CONTRACTOR'S SIGNATURE

Nadia Hamey

Digitally signed by Nadia Hamey  
Date: 2022.10.31 14:18:17 -07'00'

PROSPECTIVE CONTRACTOR'S TITLE

Owner

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

Hamey Woods

STATE OF CALIFORNIA

**DRUG-FREE WORKPLACE CERTIFICATION**

STD 21 (Rev 10/2019)

**CERTIFICATION**

*I, the official named below, hereby swear that I am duly authorized legally to bind the contractor or grant recipient to the certification described below. I am fully aware that this certification, executed on the date below, is made under penalty of perjury under the laws of the State of California.*

CONTRACTOR/BIDDER FIRM NAME Hamey Woods	FEDERAL ID NUMBER [REDACTED]
BY (Authorized Signature) [REDACTED]	DATE EXECUTED 10/31/2022
PRINTED NAME AND TITLE OF PERSON SIGNING Nadia Hamey, President	TELEPHONE NUMBER (Include Area Code) [REDACTED]
TITLE Owner, Hamey Woods	
CONTRACTOR/BIDDER FIRM'S MAILING ADDRESS [REDACTED]	

The contractor or grant recipient named above hereby certifies compliance with Government Code Section 8355 in matters relating to providing a drug-free workplace. The above named contractor or grant recipient will:

1. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations, as required by Government Code Section 8355(a).
2. Establish a Drug-Free Awareness Program as required by Government Code Section 8355(b), to inform employees about all of the following:
  - (a) The dangers of drug abuse in the workplace.
  - (b) The person's or organization's policy of maintaining a drug-free workplace.
  - (c) Any available counseling, rehabilitation and employee assistance programs, and
  - (d) Penalties that may be imposed upon employees for drug abuse violations.
3. Provide as required by Government Code Section 8355(c), that every employee who works on the proposed contract or grant:
  - (a) Will receive a copy of the company's drug-free workplace policy statement, and
  - (b) Will agree to abide by the terms of the company's statement as a condition of employment on the contract or grant.
4. At the election of the contractor or grantee, from and after the "Date Executed" and until 6/30/2026 (NOT TO EXCEED 36 MONTHS), the state will regard this certificate as valid for all contracts or grants entered into between the contractor or grantee and this state agency without requiring the contractor or grantee to provide a new and individual certificate for each contract or grant. If the contractor or grantee elects to fill in the blank date, then the terms and conditions of this certificate shall have the same force, meaning, effect and enforceability as if a certificate were separately, specifically, and individually provided for each contract or grant between the contractor or grantee and this state agency.

STATE OF CALIFORNIA – DEPARTMENT OF FINANCE

**PAYEE DATA RECORD**

(Required when receiving payment from the State of California in lieu of IRS W 9 or W 7)

STD 204 (Rev. 03/2021)

**Section 1 – Payee Information****NAME** (This is required. Do not leave this line blank. Must match the payee's federal tax return.)

Hamey Woods

**BUSINESS NAME, DBA NAME or DISREGARDED SINGLE MEMBER LLC NAME** (if different from above)**MAILING ADDRESS** (number, street, apt. or suite no.) (See instructions on Page 2)**E-MAIL ADDRESS****Section 2 – Entity Type****Check one (1) box only that matches the entity type of the Payee listed in Section 1 above.** (See instructions on page 2) **SOLE PROPRIETOR / INDIVIDUAL** **SINGLE MEMBER LLC Disregarded Entity owned by an individual** **PARTNERSHIP** **ESTATE OR TRUST** **CORPORATION** (see instructions on page 2) **MEDICAL** (e.g. dentistry, chiropractic, etc.) **LEGAL** (e.g., attorney services) **EXEMPT** (e.g. nonprofit) **ALL OTHERS****Section 3 – Tax Identification Number**Enter your Tax Identification Number (TIN) in the appropriate box. The TIN must match the name given in Section 1 of this form. Do not provide more than one (1) TIN. The TIN is a 9-digit number. **Note:** Payment will not be processed without a TIN.

- For **Individuals**, enter SSN.
- If you are a **Resident Alien**, and you do not have and are not eligible to get an SSN, enter your ITIN.
- Grantor Trusts (such as a Revocable Living Trust while the grantors are alive) may not have a separate FEIN. Those trusts must enter the individual grantor's SSN.
- For **Sole Proprietor or Single Member LLC (disregarded entity)**, in which the sole member is an individual, enter SSN (ITIN if applicable) or FEIN (FTB prefers SSN).
- For **Single Member LLC (disregarded entity)**, in which the sole member is a business entity, enter the owner entity's FEIN. Do not use the disregarded entity's FEIN.
- For all other entities including LLC that is taxed as a corporation or partnership, estates/trusts (with FEINs), enter the entity's FEIN.

**Social Security Number (SSN) or Individual Tax Identification Number (ITIN)**

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

**OR****Federal Employer Identification Number (FEIN)**

\_\_\_\_\_ - \_\_\_\_\_

**Section 4 – Payee Residency Status** (See instructions)

- CALIFORNIA RESIDENT** – Qualified to do business in California or maintains a permanent place of business in California.
- CALIFORNIA NONRESIDENT** – Payments to nonresidents for services may be subject to state income tax withholding.
- No services performed in California
- Copy of Franchise Tax Board waiver of state withholding is attached.

**Section 5 – Certification**

*I hereby certify under penalty of perjury that the information provided on this document is true and correct. Should my residency status change, I will promptly notify the state agency below.*

**NAME OF AUTHORIZED PAYEE REPRESENTATIVE**

Nadia Hamey

**TITLE**

Owner

**E-MAIL ADDRESS**

\_\_\_\_\_

**SIGNATURE**

Nadia Hamey

Digitally signed by Nadia Hamey  
Date: 2022.10.31 14:25:31 -0700**DATE**

10/31/2022

**TELEPHONE** (include area code)

\_\_\_\_\_

**Section 6 – Paying State Agency**

Please return completed form to:

**STATE AGENCY/DEPARTMENT OFFICE****UNIT/SECTION****MAILING ADDRESS****FAX****TELEPHONE** (include area code)**CITY****STATE****ZIP CODE****E-MAIL ADDRESS**

## REVISED BUDGET AND TIMELINE FEBRUARY 2023

Category	Role	Description	Hourly Rate	Year 1 Hours	Year 1 Total	Year 2 Hours	Year 2 Total	Year 3 Hours	Year 3 Total	TOTAL
					3/1/23 - 6/30/23		7/1/23 - 6/30/24		7/1/24 - 6/30/25	
<b>Personnel Salaries and Wages</b>	Forester	Pre- and Post-treatment Data collection, Data analysis	\$ 90	60	\$ 5,400	110	\$ 9,900	90	\$ 8,100	\$ 23,400
	Field technician	Pre- and Post-treatment Data collection, Data analysis	\$ 50	80	\$ 4,000	240	\$ 12,000	200	\$ 10,000	\$ 26,000
			<b>Fringe (%)</b>		<b>Year 0 Fringe</b>		<b>Year 1 Fringe</b>		<b>Year 2 Fringe</b>	\$ -
<b>Fringe Benefits % Personnel Cost</b>	Forester		23%		\$ 1,242		\$ 2,277		\$ 1,863	\$ 5,382
	Field technician		23%		\$ 920		\$ 2,760		\$ 2,300	\$ 5,980
<b>Contractual Expenses</b>	Tree Faller	Fall and Buck	\$ 200	40	\$ 8,000	40	\$ 8,000	40	\$ 8,000	\$ 24,000
	Log Grader	Inspect defect and grade redwood	\$ 200	100	\$ 20,000	100	\$ 20,000	100	\$ 20,000	\$ 60,000
	Graduate Student Researcher	Pre-and post-treatment Data collection, Data analysis	\$ 90	100	\$ 9,000	300	\$ 27,000	200	\$ 18,000	\$ 54,000
<b>Indirect Costs</b>	15% indirect on total labor + fringe		15%		\$ 1,734		\$ 4,041		\$ 3,339	\$ 9,114
<b>EMC FUNDING REQUESTED</b>					\$ 50,296		\$ 85,978		\$ 71,602	\$ 207,876
<b>Matching or In-Kind Contribution</b>	Forester	Pre- and Post-treatment Data collection, Data analysis, Project Management	90	10	\$ 900	20	\$ 1,800	10	\$ 900	\$ 3,600
	Field technician	Pre- and Post-treatment Data collection, Data analysis	50	20	\$ 1,000	20	\$ 1,000	20	\$ 1,000	\$ 3,000
<b>Total Budget</b>					\$ 52,196		\$ 88,778		\$ 73,502	\$ 214,476

ACTIVITY OR DELIVERABLE	TYPE		YEAR 1 3/1/23 - 6/30/23				YEAR 2 7/1/23 - 6/30/24				YEAR 3 7/1/24 - 6/30/25			
	Act.	Del.	A	B	C	D	A	B	C	D	A	B	C	D
Establish Study Sites	X					4								
Collect Post-Fire Effects Data	X					5			3					
Summarize Post-Fire Effects Data	X						9			6				
Grade Logs Cut in 2022-23	X					6	9							
Analyze the Correlation of Post-Fire Effects and Defect using statistical analysis	X							12						
Grade Logs Cut in 2024		X								6				
Analyze the Correlation of Post-Fire Effects and Defect		X								6				
Prepare a Field Guide and Report Summarizing the Categories and Combinations of Post-Fire Effects and the Corresponding Implications on Defect													3	
Project Update to funders/collaborators		X						10				10		
Project Presentation of funders/collaborators		X							3				3	
Final Project Presentation of funders/collaborators		X												4
Complete Research Assessment (CRA) presentation to EMC														5
CRA presentations to the Board		X												6
Conference presentation(s)		X											3	
Submission of Redwood Defect Field Guide to the Board and CLFA		X												6

Key: A = Fiscal Year (FY) Quarter 1 (Jul 1 - Sept 30); B = FY Quarter 2 (October 1 - Dec 31); C = FY Quarter 3 (Jan 1 - Mar 31); D = FY Quarter (Apr 1 - Jun 30)

Act = Activity; D = Deliverable

Include Month in the cell, if known; Identify month as numbers 1-12, Jan-Dec.