2024 PROGRAM REVIEW

Name: Yana Valachovic

Pronouns: She/her

Academic Title:

- Forest Advisor Humboldt and Del Norte Counties (65%)
- County Director Humboldt and Del Norte Counties (25%)
- ANR Fire Network Community Resiliency and Built Environment (10% FTE)

Review Type: Merit

Current Rank: Full Title VI
Requested Step: Full Title VII

Time Period: October 1, 2021- September 30, 2024

Thematic Areas

Theme 1. Workforce Development and an Informed Community

Theme 2. Forest Resiliency in the Face of Introduced Pests and Diseases

Theme 3. Fire Research and Education

Theme 4: Natural Resource Policy to Support Economic, Ecosystem and Community Resiliency

Theme 5: Oak Woodland Ecology and Restoration

Theme 6: Team Program Development and Administration





Position Description

Yana Valachovic

Cooperative Extension Forest Advisor (65% FTE)
Fire Network- Community Resiliency and Built Environment (10% FTE)
County Director (25% FTE)

Effective Date: November 8, 2023

PURPOSE & CLIENTELE

The duties for this University of California Cooperative Extension (CE) position are split between 25% administrative and 75% programmatic assignments, with 65% directed at a geographically defined forestry program and 10% directed to support the state-wide UC ANR Fire Network.

The CE County Director is responsible for providing leadership to administer, direct, and provide a comprehensive and effective county-based program in both Humboldt and Del Norte Counties. The CE County Director creates and sustains community partnerships with Humboldt and Del Norte county governments, county administrators, boards of supervisors, local governments, and other appropriate organizations to support and promote UC ANR's Strategic Vision, Mission, and desired impacts. The CE County Director assists staff with mentoring, program evaluation, and long-range planning to ensure that programs are consistent with ANR's mission and vision.

The CE Forest Advisor is responsible for conducting an extension, educational, and research program targeting Humboldt and Del Norte County's forest landowners and managers. The position is responsible for developing and implementing extension and applied research programs to support the sustainability and resiliency of managed forests in response to drought, changes in climate, insect and disease outbreaks, wildfires, regulatory changes, and economic instability and opportunities. This position works with landowners and managers from industrial, non-industrial, tribes, and public lands, as well as resource professionals from various public and private organizations and agencies.

The CE Forest Advisor is also responsible for developing and implementing programs that develop, analyze, gather, and transfer information that allows people and groups of all economic and ethnic backgrounds to analyze natural resource problems, evaluate methods, and make decisions that will develop sustainable solutions. Key issues include redwood and Douglas-fir silviculture, forest policy, workforce development, incentives to improve forest and woodland stewardship, watershed management, wood utilization, fire and fuels management, and insect and disease management.

The position also supports the ANR Fire Network's mission and objectives. Fire and drought are part of California's annual cycle of life; however, the pace and scale of both wildland and community fire adaptation must accelerate, given that California's largest wildfires on record have all burned in the last decade, taking 45,000+ structures and 175 lives. Using a research program focused on the built environment (e.g., single and multi-family homes, modular, and other infrastructure) and experience

in county government and policy development, this position works to accelerate the pace and scale of adaptation in California's forests and communities, linking together research, policy, and strategies to produce positive changes in ecosystem and residential protection and resiliency. The position additionally helps lead, mentor, cross-train, and support other Fire Network academics and staff, where appropriate, in the topical areas of community resiliency and built environment issues.

The CE forestry and fire program of work is anchored to the UC ANR Condition Changes of Improved Management and Use of Land and Increased Preparedness and Resilience to Extreme Weather and Climate Change, with specific activity in ANR Strategic Initiatives of Sustainable Natural Ecosystems, Endemic and Invasive Pests and Diseases, and Water Quality, Quantity and Security. Furthermore, linking natural resources and community activities together helps achieve ANR's public value impacts that simultaneously protect natural resources, build climate-resilient communities and ecosystems, and help develop a qualified workforce.

The CE Advisor communicates through various media to a wide array of clientele interests to affect positive change. The facilitation of communication among conflicting interests will be the focus of many programs.

ACADEMIC PROGRAM MAJOR RESPONSIBILITIES

 Develop and implement effective UC ANR Cooperative Extension applied research and educational programs to address the identified priority needs of the clientele that are consistent with UC ANR's Public Value Statements.

Technical Competence & Impact

- Ensure clientele needs are assessed and develop program goals to successfully meet clientele needs in alignment with UC ANR's strategic vision, initiatives, and Public Value Statements.
- Conduct applied research to solve locally relevant problems and monitor related changes. Specifically, the CE advisor seeks to:
 - Provide tools to balance economic productivity with ecological stewardship and sustainability
 - Respond to new threats and opportunities through education and research to lead to better stewardship of resources and economic opportunities
 - Provide technical advice to a wide range of users and managers, connecting the resources available from a variety of in-state and outof-state universities relevant to our region
 - Extend forestry-related services and information to underserved audiences
 - Where opportunities exist, work to bring research to policy and strategy development
 - Support to the ANR Fire Network through leadership and programmatic focus on community resiliency and improving the built environment
- Maintain and promote UC ANR's credibility by providing science-based knowledge and skills independent of personal or parochial interests.
- Represent UC ANR locally in a professional manner.
- As relevant, oversees the delivery of UC ANR statewide programs at the local, regional, and state-wide levels (as appropriate); works with staff to ensure that outcomes and impacts are measured and communicated.

Communication

- Maintain a system to regularly assess needs and identify priority issues or problems relevant to the local clientele groups being served.
- Disseminate useful, science-based information to inform clientele, using extension methods that are responsive to clientele needs and appropriate for the audience and situation.
- Evaluate programs and report accomplishments, results, and potential or actual impacts to scientific and lay audiences.
- Foster an increased understanding of UC ANR's Cooperative Extension's research and education programs in clientele, the public, and policymakers.
- Effectively use online communication methods and associated software programs to support research and instruction.
- Actively advocate for UC ANR program awareness and support.

o Collaboration, Teamwork & Flexibility

- Develop collaborative teams with other UC ANR academics, campus-based specialists, faculty, and/or others to address priority issues for UC ANR.
- Act as a facilitator in the public policy arena to effectively bridge divergent interests around issues that impact subjects within the UC ANR purview.
- Interact with UC ANR Program Teams, specialists, campus-based Agricultural Experiment Station faculty, and others within the research/extension network to develop, strengthen, and expand program goals.
- Participate in UC and UC ANR leadership through committees, task forces, and other formal or informal structures.
- Serve the California public by participating in activities of public agencies and organizations.
- Interpersonal Relationships: Be an effective listener and communicator, take responsibility for our actions, motivate others, keep commitments, and cultivate political and industry support for UC ANR.
- Build relationships to work with diverse populations and acclimate to varying circumstances.

Professional Development & Lifelong Learning

- Participate in professional organizations and collaborate with federal, state, and county governmental agencies, non-government organizations, and others by providing independent science-based information and leadership.
- Maintain a program of continuous self-improvement by participating in inservice training, seminars, workshops, work group & program team meetings, short courses, professional society meetings, and other relevant opportunities.

LEADERSHIP AND COUNTY DIRECTOR ADMINISTRATIVE DUTIES

Leadership & Vision (includes Inspiring Innovation, Leading Change, and Professionalism)

- Create a positive environment that supports the success of the unit team and team members. This includes modeling and supporting a good team working environment, as well as setting goals and target outputs for shared clarity of vision.
- Other possible areas:
 - Provide active, ongoing support and guidance for UC ANR programs in Humboldt and Del Norte
 - Serve as a Department Head in both Humboldt and Del Norte Counties,

Administrative Policy (Accountability and Governance)

- Understand and ensure unit compliance with University and County policies and procedures.
- Ensure that the unit complies with UC ANR Affirmative Action guidelines and policies, including the administration and management of statewide programs offered in Humboldt and Del Norte (e.g., 4-H, MG, MFP, Nutrition Education).

Budget and funding (Resource Management and Financial Budget)

- Successfully secure and responsibly manage all resources (e.g., County, University) in Humboldt and Del Norte County
- Participate in all aspects of the departmental budget cycle, including developing required fund/budget reports
- Ensure proper use and maintenance of all unit facilities, vehicles, and inventory.

Human Resources (includes Diversity, Health and Safety, and Principles of Community)

• Demonstrate concern for all staff; effectively manage all personnel, including direct supervision of advisor and staff positions, and support to any additional FTE in the unit (e.g., students, active emeritus CE advisors, and any additional academic positions working within the unit). Responsibilities may include oversight of direct reports, conducting and supporting annual evaluations/merits/ promotions, sabbatical leaves, emeritus work plans, professional development planning, coaching, corrective actions, coordinating quarterly all staff meetings, providing regular communications with all unit personnel about University and County updates, and navigating both University and as needed County human resources' policies and procedures.

Advocacy and Communication (includes Client Service, Collaboration and Communication)

 Represent UC ANR (unit and programs) in a professional manner. Maintain positive relationships with stakeholders and clientele in assigned geographical or programmatic area. Meet with and provide responsive communications with key stakeholders (e.g., industry partners, donors, policymakers, and elected officials, and others as required).

AFFIRMATIVE ACTION and DIVERSITY, EQUITY, AND INCLUSION (DEI)

- Comply with all applicable federal and state laws and regulations and all University policies regarding affirmative action, including prohibition of discrimination on the basis of race, color, national origin, religion, sex, sexual orientation, physical or mental disability, age, veteran status, medical condition, ancestry or marital status.
- Promote, in all ways consistent with other responsibilities of the position, accomplishment of the affirmative action goals established by UC ANR.
- Take all measures necessary to assure any employee or volunteer workers supervised by this position fulfill their affirmative action responsibilities.
- Develop a statement of program mission and definition of potential program clientele that embody a commitment to serve diverse ethnic and gender groups.
- Plan and conduct programs in such a manner as to provide equitable service to all ethnic and gender groups that comprise the potential clientele population for the program.
- Identify any barriers to clientele participation related to ethnicity, gender, or other characteristic of concern under the University's affirmative action policies and take corrective action as needed to remove such barriers.

- Collect, and keep current, demographic data identifying the ethnic and gender distribution of the potential clientele populations for the program and describing other characteristics of the population relevant to the pursuit of the Division's affirmative action goals.
- Compile and maintain documentation of service to each ethnic and gender group within the
 clientele population served by the program, including statistical records of clientele contacts,
 quantitative evaluations of benefits realized by clientele and reports of any special efforts to
 serve under-represented groups.

RELATIONSHIPS

Administratively responsible to the Director of County Cooperative Extension for the conduct of the UC ANR program and to the Fire Network Director.

QUALIFICATIONS

Daviource

A master's degree in forest management, forest ecology, resource management, or a closely related field with a sound understanding of applied forest management is required for this position. The position requires skills in both the field and laboratory; knowledge and awareness of North Coast ecology; experience with science delivery and extension; the ability to communicate complex technical information in writing and verbally to a range of audiences; the ability to plan, implement, research, evaluate and publish research results; and the demonstrated capacity to accomplish team-based research and education programs consistent with the values of Cooperative Extension.

Must be able to work independently and collaboratively in teams and provide leadership for research and education activities. Must be adaptable to different work circumstances and work with a diversity of people and collaborators. Must have literacy in internet communications and with software to support research and education programs.

The CE Forest Advisor must have a State of California Registered Professional Forester's license.

Reviewel 5.	
redacted	11/8/2023
Yana Valachovic	Date
Forest Advisor, County Director	
Fire Network- Community Resiliency and B	uilt Environment
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Lynn Schmitt-McQuitty	Date
Director of County Cooperative Extension	
redacted	11/8/23
Lenya Quinn-Davidson	Date
Fire Network Director	
Final Approver:	
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Dr. Daniel Obrist	Date
Vice Provost of Academic Personnel	

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I. PROGRAM SUMMARY NARRATIVE

A. Statement of Assignment

Since 2000, I have been the Forest Advisor for Humboldt and Del Norte Counties. In 2009, I took on a 25% County Director appointment. In 2023, I added a 10% commitment to the newly developed ANR fire network. My program has grown to address local and state-wide needs through education, research, and research to policy development. The ANR Condition Changes of "Improved Management and Use of Land" and "Increased Preparedness and Resilience to Extreme Weather and Climate Change," with specific activities in the Strategic Initiatives of "Sustainable Natural Ecosystems" and "Endemic and Invasive Pests and Diseases," apply. I seek to bridge the forest to the community to help achieve <u>public value</u> impacts that protect natural resources, build climate-resilient communities and ecosystems, support rural economic development, and help develop and sustain a qualified workforce. My work as an advisor, mentor, and state leader takes a cross-cutting approach toward building <u>resilient</u> communities, ecosystems, organizations, and leaders in the face of change and disturbance.

My primary clientele includes a diverse group of landowners and managers from industrial, non-industrial, tribal, and public lands and resource professionals from public and private organizations and agencies. My statewide clientele includes policymakers, state leaders, and other ANR team members. Many others benefit from my work (e.g., building suppliers, contractors, landscapers, architects, rural and suburban homeowners, NGOs, insurance agents, realtors, planners, firefighters, etc.).

Highlights since my last PR

UC service: PRC (2 years), chaired forest advisor searches (Shasta x 2, Santa Cruz), SNE panel member **County Director**: Hired and started mentoring four new advisors in my unit (horticulture/specialty crops; economic development; fire; youth, families, and communities); completed the 10-month CSAC Institute; represented ANR at RCRC, CSAC, Cal Forests; hosted leadership visits in 2022 and 2024.

Programmatic highlights:

- ✓ My research to policy work influenced 3 bills (oaks AB 2276 [2024]; defensible space SB 504 [2024], SB 896 [2023])
- ✓ Wildfire and insurance dominated my work, with 26 invited talks for statewide or national audiences. I took on state leadership through invited roles in the Risk Modelling Committee, Wildfire Mitigation Committee, and Wildfire Forest Resilience Task Force (4 roles). I helped craft the Department of Insurance Safer From Wildfires Program and am a Public Wildfire Model Strategy Group member. I co-chair a Board of Forestry workgroup. I helped establish the ANR Fire Network by initially funding the team, hiring, and mentoring 6 ANR academics.
- ✓ Received \$1.2 M to develop a statewide educational campaign about defensible space (a.k.a. Zone 0)
- ✓ A 2021 paper (pub #206) is in the <u>99th percentile</u> to date of 450,000 papers published in the journal Fire Ecology and has been a focus for much of my extension programming during the review period.
- ✓ Our team research program continued in oak ecology. I helped organize an October 2024 international oak symposium in Tennessee, and I have an IUFRO leadership role.

Statement of special circumstances. Both personally and professionally, this merit covers a very difficult time, and cancer was at the center. First was the 2023 loss of Dorina Espinoza, my office #2, followed by one of my closest UC colleagues, Ryan Tompkins. Unraveling and picking up Dorina's programming, large grants, and staff (4-H, EFNEP, MFP) has taken considerable work. This happened concurrently as our office manager continued to be out on major medical leaves. She retired, and we replaced her in April 2024, as ANR migrated to the new accounting system. The Humboldt team are prolific grant writers, and fiscal management has been especially trying. Additionally, my mom was on hospice care for half of this review period and passed this late summer (I am an only child), along with my uncle and the most father-like person in my life. I have prioritized care for my team above my own work. During this review period, CD responsibilities unexpectedly ballooned, and perpetual crisis management has been the dominant state. I am looking forward to 2025 and calmer waters!

B. Extending Knowledge and Information/ Applied Research and Creative Activity

Theme 1. Workforce Development and an Informed Community

I offer educational workshops, conferences, and other opportunities (examples below) to help landowners, resource professionals, and the interested public build technical skills and make informed management decisions. Some events are repeated annually, and others are held in response to current issues and opportunities.

Forest Stewardship Program

<u>Goals:</u> To support and build the existing workforce and to help forest landowners, managers, and others learn about natural resource management and changes in science and policy, my colleagues and I offer workshops, conferences, and field tours with greater information available through a forestry website.

2021-2024 Outputs, outcomes, and impacts: I help answer "ask an expert" questions submitted to the UC forestry website. Advisor Susie Kocher and I have been writing grants to bolster our advisor ranks, expand our geographic coverage, and respond to post-forest fire issues. This has helped build several statewide forestry programs. I have helped host or support several multi-week "stewardship classes" or one-day "Tree School" programs for forest landowners targeting landowners in my region and throughout California. Participant evaluation surveys (N=225) suggested that 99% agreed or strongly agreed that the information presented was informative and comprehensive, and 86% agreed or strongly agreed that they could use the information within the next six months. Five participants with property in Humboldt-Del Norte have had initial site visits with a forester, developing management plans on 900 acres. I also hosted the annual multi-aged silviculture tours for 185 foresters with advisors Mike Jones and Tori Norville in Humboldt (22), Santa Cruz (23), and Mendocino (24).

Forestry Institute for Teachers (FIT)

<u>Goals:</u> K-12 teachers seek training, knowledge, skills, and tools to effectively teach students about forest ecology and forest resource management practices and to build a future workforce. The annual <u>Forestry Institute for Teachers</u> (FIT) program brings natural resource specialists and teachers together for seven days to learn about natural resource management, available jobs, and how to steward resources.

2021-2024 Outputs, outcomes, and impacts: Since 2001, I have led the Humboldt FIT (one of 4). I design the schedule, coordinate 40 guest speakers, and provide lectures for ~30 teachers per session. The teachers develop a forestry or natural resource educational unit to integrate into their teaching. As a result, thousands of California's youth are being exposed to new curricula and inspired teachers. Since 2017, after attending, participants scored 45% higher on understanding forestry concepts in the pre-post survey; trust in natural resource professionals grew by 26%; and 131 participants have incorporated forestry curriculum into their classroom. This a typical graduate quote; "It was amazing to meet such passionate, knowledgeable, and sharing people. The commitments to these trees, the land, the water, and the community are without equal. The wider public needs to know more about the great work the forestry community is doing, and I will do what I can to help spread the word."

Theme 2. Forest Resiliency in the Face of Introduced Pests and Diseases

<u>Goals</u>: With the partnerships of Staff Research Associates (SRAs), advisor Mike Jones, CAL FIRE regional forest health specialist, and collaborations with faculty at UC Davis, specialists at UC Berkeley, and scientists at other universities, agencies, and countries, we have created a research and monitoring program to address introduced, invasive plant pathogens and other tree pests to the North Coast. These grant funded projects seek to provide public and private managers with tools to manage invasives, support ecosystem resiliency, and bridge two strategic initiatives anchoring my work.

Example 1: Sudden Oak Death Monitoring and Management

Goals: Since discovering the pathogen in Humboldt County in 2002, my team and I have implemented an early detection and monitoring program utilizing ground, stream, and aerial detection techniques with collaborators throughout Mendocino, Humboldt, and Del Norte counties. The goal is to provide information of the pathogen's location and rate of spread to 1) assist in control efforts, 2) understand pathogen epidemiology, 3) assist in regulatory compliance, and 4) help public, private, and tribal land managers and owners manage the disease and associated impacts.

2021-2024 Outputs, outcomes, and impacts: Since 2004, we have annually surveyed 75 recreation areas; sampled 65 watercourses that have found new infection areas and documented within-county spread; provided focused delimitations of infested areas covering hundreds of private parcels; and assisted the Forest Service in aerial detection. We established special survey efforts to support tribal areas and unique habitats. To share our results, we host many local and regional educational programs for diverse audiences, publish findings and maps on the California Oak Mortality Task Force website and newsletters, and produce technical papers. After years of vigilance, in 2020, I found the first wildland detection of the European strain of the disease in California and, unfortunately, transitioned Del Norte, the last CA coastal county, to the infested list. In 2024, we discovered an additional pathogen strain in Del Norte, a first for the US, and are working with State Parks, the Tolowa tribe, private timber, USDA FS, and others to try to prevent the three strains from interacting and creating a new super virulent *Phytophthora* in the wildland.

Example 2: Balsam Wooley Adelgid

<u>Goals</u>: This project investigates the impact of the non-native balsam woolly adelgid (BWA) on coastal grand firs, identified as a species of concern in the 2017 USDA Forest Service California Forest Action Plan. It also explores the co-occurrence of other native and introduced forest pests in BWA-infested stands that might have contributed to grand fir decline.

<u>2021-2024 Output</u>, <u>outcomes</u>, <u>and impacts</u>: After data collection, we have concluded that coastal grand fir decline is much more complex than originally anticipated and is related to a combination of different factors, including stand composition and density, land use history, changes in precipitation and temperature, and a myriad of pathogens and pests in addition to BWA. It has now become clear that understanding the interaction of these other contributing factors is essential in addressing land management questions related to coastal grand fir decline in northern California. Our findings have been shared at state and national meetings, and a 2025 forest health workshop series and a Pest Note are in development.

Theme 3. Fire Research and Education

Background and Goals: The last ten years have demonstrated that the seemingly new type, frequency, and size of wildfires are here to stay. Wildfires are burning with greater intensity and hurting our economy, health, and our future. The impacts are unacceptable, with more than 45,000 structures being destroyed, 175+ lives have been taken, and the state is on the edge of economic collapse given the changes in fire insurance availability. My profession, in response, has advocated for more fuel breaks, but addressing the fire crisis events requires a broader approach and immediate actions at every level, from the family to the community, homes to wildlands, and through government agencies. ANR is uniquely capable of helping accelerate the pace and scale of adaptation and help shift the fire paradigm from suppression and exclusion to stewardship and adaptation. As an integrator and systems thinker with experience in state policy development and local government, in 2017, I retooled to respond to the fire crises and help Californians adapt.

My programmatic goals have evolved to improve the resiliency of the forest, community, and economy by 1) hardening the built environment, 2) improving fuels and forestry management, both pre-and post-fire, 3) promoting prescribed fire to accomplish a variety of cultural and ecosystem management goals, 4) helping develop, sustain, and professionalize a workforce, 5) championing infrastructure investments, and 6) helping California achieve wildfire resiliency through changes in policy and practice at broad scales. I am utilizing my full skill set in research, writing, and public speaking to provide guidance and empower change.

2021-2024 Outputs, outcomes, and impacts: My fire-related research investigates how fires transmit to communities and learning how to mitigate those pathways, often called "home hardening". During this review period, I had two post-fire research opportunities, one with the 2021 Marshall Fire in Boulder, Colorado, and the other after the 2022 Coastal Fire in Orange County. Both fires provided evidence to support changes to the CA's Building Code and Defensible Space Code. The Marshall Fire demonstrated a strong linkage between grass ignition leading to fence ignition and the fence carrying the fire to the house via fence attachment. The Coastal Fire demonstrated the problems with vent screens that allowed embers to penetrate buildings. I also went to So. Carolina to participate in an experiment at the IBHS lab, evaluating window vulnerability to the radiant heat from a burning shed. I shared these findings throughout my extension programming and policy work with the Board of Forestry, the legislature, and the CA Department of Insurance (CDI). Additionally, I continued to extend the findings of pivotal research (pub. # 206) that evaluated the impact of the 2008 CA building code designed to mitigate a building's exterior wildfire exposure. Our team used the 2018 Camp Fire that burned Paradise for our analysis. The paper is widely read by land-use planners, building inspectors, fire marshals, insurance companies, firesafe councils, and policymakers. Since published (10/2021), this paper has had 12,000 downloads, ranking it in the 99th percentile for all papers published in Fire Ecology. Various groups have also reanalyzed our data (who knew that was a thing!). The momentum on home hardening is akin to where we were as a state 5+ years ago with prescribed fire. I want to take my research to modular and multi-family construction next. It is rewarding to be in cutting-edge and impactful science!

My fire-related <u>outreach and extension</u> program has been my most impactful work. I have shared my knowledge with local, national, and international media in print, radio, and documentaries (PBS <u>Home Diagnosis</u>). I have spoken before conferences for scientists, local governments, fire safe councils, and state and national policy groups (e.g., CSAC, National Fire Protection Association, International Association of Wildland Fire, UN Climate Summit). I have given over 100 fire-related talks and reached at least 7,000+ attendees, with many programs posted on YouTube for continued access. I have learned to use LinkedIn effectively. I have engaged with community groups across California and even pioneered fire science trivia nights similar to "Science on Tap". I have trained the ANR's fire advisors, RCDs, and other community groups across California in home hardening and defensible space assessment. As a result, in Mariposa, 170 homes, and in Shelter

Cove (Humboldt County), all 500 properties have been assessed with mitigation plans in development. I have <u>developed</u> and edited educational materials for local and state fire safe councils, produced curriculum for other people's trainings, reviewed the developing curriculum for a new 6-12 grade education program, and helped Utah and Oregon with their approach to home hardening. I also provide fire science outreach through the <u>Fire Science Consortium</u>, and with my SRA, together we produced 20+ learning opportunities during this review period. I also wrote an 8000 series publication to demystify forest fuel permitting (Pub #213).

My <u>fire-relate policy work</u> has focused on modernizing defensible space standards as data shows that windblown embers cause the majority of wildfire home ignitions by entering a home's vents or igniting vegetation or materials on or near the house. This means California's 2006 defensible space standards are insufficient. I am co-chair of the Board of Forestry workgroup developing the enabling regulations for AB 3074 (2020), creating Zone 0 adjacent to the house. In 2023, the Governor's team stalled the regulation development; I contributed to SB 504 [2024] and SB 896 [2023]) to help resolve the Governor's concerns. I lead a \$1.2M statewide Zone 0 educational campaign with a marketing team set to launch in 2025.

My role within ANR continued to evolve over this review period. In 2019, I received funding from CAL FIRE to pilot an expanded ANR fire advisor program. Before we launched, the CA Natural Resource Agency set aside \$2M to formalize the program (later allocating ANR \$4M more). In 2022, I worked with Provost Mark Bell to help develop the concept and find locations for fire advisors across CA, and I successfully championed the Program Council to allow ANR to establish a Fire Network. In 2023, Lenya Quinn-Davidson was asked to become a director, and I then updated my PD to have a formal role supporting the network and my role in the fire and remained PI on the initial round of grant funding, helping achieve grant deliverables and reporting. I helped hire six academics, mentored this team, and trained them in built environment issues. I am working with ANR's master gardeners and bringing up-to-date science to their work and curriculum. I used the state MG mailing list (11,000) to test Zone 0 slogans, finding a preference for "protect your home with a 5-foot zone".

I have become a <u>fire policy</u>, <u>science</u>, <u>and education leader</u>. I have four roles on the <u>Wildfire and Forest Resilience Task Force</u> as a member of the Private Land Management and Fire Adapted Communities workgroups, the Science Advisory Panel, and the CORE team. I also serve the Wildfire Mitigation Committee, and given my understanding of fire insurance, I participated in the Risk Modelling Committee (pub #225) and the new CDI's Public Wildfire Model Strategy Group. I see signs of change everywhere: my work is helping to unify fire messages from the state to the local level, policymakers have greatly expanded their fire awareness and vocabulary, and the state is investing billions in fire mitigation strategies.

Theme 4: Natural Resource Policy to Support Economic, Ecosystem, and Community Resiliency

<u>Goals</u>: I am involved in several statewide and regional working groups seeking to incentivize stewardship and promote economic sustainability. The closure of bioenergy facilities is a current crisis due to PG&E's disinterest in purchasing this power. These critical infrastructure facilities convert heat into power and help dispose of drought and pest-killed trees, small-diameter trees from overgrown forests, and bark, chips, and sawdust from milling lumber. The expansion of forest processing facilities and forest management is dependent on an economically affordable way to utilize sawmill residues.

<u>2021-2024 Outputs</u>, <u>outcomes</u>, <u>and impacts</u>: I take a multifaceted and systems thinking approach to my policy work, including state committee participation and policy changes identified in Themes 3 and 5. Compounding is a challenge in implementing California's Climate Action strategies in the face of the wildfire crisis, leading to debate over creating energy from wood products. I am frequently asked to participate in regional and state discussion groups with legislators, aides, and conservation investors. During this review period, I was an invited speaker for the Governor's Wildfire Forest Resilient Task Force (4 times for 200+ sized audiences), the 2024 California Biomass Symposium, and the North Coast Resource Partnership. By invitation, I helped plan, design, and spoke at a 2024 conference that UC ANR and the Sonoma Mendocino Economic Development District convened on developing a regional biomass strategy.

Theme 5: Oak Woodland Ecology and Restoration

Goals: With UCB and UCD faculty and specialists, advisors L. Quinn-Davidson (fire), J. Stackhouse (livestock), Brendan Twieg (SRA), and I are studying California black and Oregon white oak woodlands and how their loss to conifer encroachment impacts wildlife habitat, rangeland health, cultural values, and drought resiliency since 2012. Our research has provided land managers, landowners, conservation programs, and policymakers with science-based guidance and tools.

<u>2021-2024 Outputs</u>, <u>Outcomes</u>, and <u>Impacts</u>: Our work led to a "research to policy" activity that solved one of my clientele's most challenging, multi-decadal issues and provided a very appreciated public service. In brief, fire suppression has led to

the loss of oak woodlands because of conifer encroachment, and California's forest rules prevented conifer removal from oak woodlands. I took our findings to drive research to a policy pathway that led to a legal standing for oak restoration and greater status for oaks, which had long been undervalued and unprotected in the California Forest Practice Act and Rules. To do this I led the development of two new forestry permits, granting legal coverage to the landowners and the Natural Resources Conservation Service for oak conservation efforts. These permits provide additional incentives because landowners can sell the restoration byproducts (or cut conifer trees). In 2024, using state databases, I learned that 75 permits have been written since 2018, supporting 3000 acres of oak woodland restoration. This is the only state exemption-type permit that is growing in usage. In 2023, I surveyed foresters about their experiences with these permits. I used this data to support a revision to one of the permits to reduce costs and increase utility [AB 2276 (Wood, 2024)]. Following passage, the permit is now before the Board of Forestry to finish the enabling regulations. The legislation sailed through the legislature in 2024, indicating the sea change in supporting forest restoration and resiliency.

During this review period, we continued with our research to evaluate the economic and ecological costs of encroachment under "Silent Straws: Understanding Water Demands from Woody Encroachment in California's Oak Woodlands," an ANR Competitive Grant. Manuscripts are in development. I also extended our 12 years of research through extension events and the 2022 CA Oak Symposium. I was also invited to join a planning committee to host an October 2024 International Oak Symposium in Tennessee, where I will speak and we will produce a special oak science and management journal issue. I was invited to be deputy coordinator for an oak team of the International Union of Forest Research Organizations (IUFRO).

Theme 6: Team Program Development and Administration

I manage UCCE programs and county budgets in Humboldt and Del Norte counties. I am a full Department Head in the county government structure. This status helps maintain county support because of my visibility in monthly Department Head meetings and other events. Our offices are on firm ground, with a fantastic Board of Supervisors, Chief Administrative Officer (CAO), and other Department Heads administrative and financial support in both counties. Our Humboldt budget has grown, and the Del Norte budget has been stable, even when other Departments have taken cuts.

I seek opportunities to collaborate with County Departments to maintain internal support for our programs and be a team partner. I have a role in the Humboldt County Drought Task Force and the Climate Mitigation Working Group, and I provide technical support to the Fire Safe Councils in both counties. I serve as a technical resource to the North Coast Resource Partnership that brings financial and technical resources to a 7-county region to address regional water availability and fuels management challenges, among other issues. I review internal county planning documents related to energy, natural resource, or climate policy, or assist county economic development teams with addressing barriers that stand in the way of attracting new wood-products businesses and energy development opportunities to the region. In 2024, I was invoited and joined the Humboldt County staff delegation to review offshore wind in Massachusetts because both counties are actively looking at offshore wind development. In 2024, I promoted Jeff Stackhouse to the #2 in my office, and the CAO paid for us to attend a 10-month leadership institute to build rapport and a stronger county leadership team (CSAC). I also attended the CSAC and RCRC annual meetings, representing UC and helping to build relationships with county staff and supervisors. These opportunities enable me to develop my skills and be recognized as a valued county partner. Achieving support from other department heads is part of my strategy to sustain discretionary county budgets.

I have also had the privilege and opportunity to bring on new advisors and staff. During this review period, I hired four new advisors [horticulture/specialty crops; economic development (adding the first resident advisor to Del Norte in 15 years); fire (backfilling Lenya); youth, families, and communities (refilling Dorina's position)], and an office manager (following a retirement) and two Staff Research Associates. I write grants to have a team of early-career scientists (SRAs) to help us expand our office's natural resources research and outreach programs. Our unit has seven advisors and ~ 9 additional staff with some fluctuations (~10 are my direct reports). I work to create a mutual support and development culture. I mentor and support staff by coaching and promoting them to grow into project leadership and grant management and have them recognized for their talents with UC leadership. I seek opportunities for team building, fun, and skill development. I feel fortunate to work with a dynamic and talented team widely recognized for its skills and leadership.

In 2020, I became a monthly guest on a live conservative-leaning daily talk show on KINS radio to raise awareness, interest, and visibility for our programs and create another outlet for disseminating information. I rotated other staff through the monthly shows to help build their skills and bring them local visibility.

The Director position also comes with many unexpected and unique duties. When problems develop, it falls to my shoulders to weather the issues and navigate the team through the challenges. Managing the migration to the new Aggie Enterprise

software, picking up the pieces when an advisor dies, and surviving when our office manager goes out on months of unexpected medical leave are all parts of the job. Fortunately, our budget has grown, and I have found a sweet spot in cultivating and maintaining county relationships.

C. Professional Competence and Professional Activity

During 2021-2024, I presented at 26 professional conferences and out-of-state events (plus 121 additional talks) and two PBS films. I supported two grant-funded SRAs, lab assistants, and one advisor. My expertise is utilized by various agencies, policymakers, and community groups, as illustrated throughout my themes and public service work.

D. University and Public Service

<u>University</u>: Over the last three years, I have been asked to represent UC ANR at many events, including the <u>Rural Counties Representatives of California</u> (RCRC, two times), the <u>California State Association of Counties</u> (CSAC, two times), UC President's Advisory Council, and during state Legislative Analyst Office's audits. Through these multi-day events, I have built strategic relationships, become a trusted partner, and demonstrated the capacities of ANR. I have also shared ideas about supporting UCCE County Directors with county supervisors and administrative staff across the state. Since my first participation in 2019 with CSAC and RCRC, when many supervisors did not know who we were, ANR has made significant progress and gained visibility and organizational awareness. I hosted a leadership visit (2022) and represented UC at Cal Forests (2023 and 2024).

I am a PRC member and a member of the Sustainable Natural Ecosystem Strategic (SNE) Initiative panel. I chaired the search committee for Forest Advisor for Shasta+ counties (Christian Jordan) and Santa Cruz+ counties (Brian Woodward). I am now mentoring and collaborating with all new hires. I am an editor for the Forest Land Steward, a joint UC, Forest Service, and CAL FIRE quarterly publication for landowners and resource professionals with a statewide electronic and hard-copy distribution (750 and 3000 recipients, respectively).

<u>Public Service</u>: I serve on the Board of Forestry's Professional Forestry Exam Committee and host the foresters exam twice yearly. I am a member of the Humboldt County Forest Review Committee, which assists with forest policy development and reviewing forest plans. I am a Cal Poly Humboldt advisory committee member and an adjunct professor. I am a member of the Arcata Community Forest Management Committee and the McKay Community Forest Advisory Committee to help guide forest operations. I am the California Oak Mortality Task Force management committee co-chair.

E. Affirmative Action and Commitments to Equity, Diversity, and Inclusion

I come from a rural, low-income family and qualified for free lunch in school and Medical. I have been in a male-dominated field for my entire career, and I had to bootstrap the way out of poverty. For these reasons, I seek to uplift everyone—including all cultures, women, and the underrepresented. As an example, during this review period, I took my staff to a SOGI training (sexual orientation and gender identity). I am also passionate about community equity. I seek opportunities to support women through participation in career days, job fairs, and one-on-one mentoring. I use radio because it is the most trusted and reliable means of communication in rural communities, and for me, it helps extend our information and reduce barriers to participation. I have worked to align state programs to protect and support vulnerable and disabled populations to benefit from early evacuation warnings and other community protection strategies. Additionally, my work in fire involves tribal engagement (Theme 3) to help uplift cultural burning practices and rights. I have dedicated my limited sudden oak death monitoring budget to protecting culturally important forest ecosystems and tribal heritages (Theme 2). I know diversity and opportunity are multi-faceted, and I am always seeking ways to innovate and improve my approaches with this in mind. My program is in parity through A.R.E.

F. Conclusions

My program has statewide and national impacts on forest health, oak woodland management, and wildfire resiliency, supporting ANR condition changes and public values. I have demonstrated my research-to-policy capacity and expanded my skills to address California's wildfire crisis. I feel fortunate to have found a career that feeds my soul and allows me to help make the world a better place. VP Allen-Diaz once asked how I think about my work; I responded, "to be positive, solution-oriented, and empowering." After 24 years, I have become an accomplished extension agent widely regarded as a trusted source of reliable information and a problem solver. I am a good communicator, giving over 120 talks in 3 years. I effectively use science to unify regional and statewide strategies and envision a better and more resilient California ahead.

II. PROFESSIONAL COMPETENCE

A. Professional Development and Training

Begin Date- End Date	Location	Duration (hours)	Name and/or Description of Activity
5/23-26/2022	Pasadena	32	I attended and presented at the International Association of Wildland Fire Conference to get the most up-to-date information on fire science.
1/26-8/11/2023	Humboldt	70	 The California State Association of Counties (CSAC) Institute for Excellence in County Government. Ten classes, some examples below January 26 – #369 County Financial Reporting and Budgeting for Nonfinancial Professionals January 27 – #116 County Budgeting and Financial Planning February 9 – #151 Financing California Counties: The History April 13 – #371 Building and Maintaining a Team Environment May 11 – #120 The Art and Practice of Organizational Leadership May 12 – #380 Talent Development and Succession Planning June 8 – # 389 Communicating and Presenting Complex Issues and Data July 13- #389 World Class Contracting, Contract Management August 8- #392 Inclusive Leadership August 11- #128 Leading with Emotional Leadership
12/4-8/2023	Monterey	32	Association of Fire Ecology's 10th International Fire Ecology and Management Congress. I attended the conference to get the most upto-date information on fire science.

B. Disciplinary Society / Professional Association

Disciplinary Society/Professional Association Name	Membership/Meetings – Attended/Activities
Society of American Foresters	I am a member to grow my skills and connections. This
	organization is also the fiscal sponsor for the Forestry Institute for
	Teachers, which I host annually.
California Licensed Foresters Association	Member and attend annual meetings
Forest Stewards Guild	Member and help host regional meetings
The Buckeye	Attend and present at the annual meetings.
Northern California Prescribed Fire Council	Steering committee member, helping organize and attend annual meetings throughout northern California
International Association of Wildland Fire	Member and gave a presentation in 2022 at their annual meeting
Association of Fire Ecology	In 2021, I gave a presentation at their annual international
	conference.

C. Evidence of Professional Competence

Licenses

— I have been a California Board of Forestry Registered Professional Forester (RPF) #2740 since 2002

University Status

— I am an adjunct faculty member of Cal Poly-Humboldt's Forestry and Wildland Resource Department. This relationship enables me to have a library card and recruit students to work on my research projects.

Papers reviewed

 Peer-reviewed Headwaters Economics Report titled, Retrofitting a Home For Wildfire Resistance Costs and Considerations. August 2024.

Other

- Invited by architects to review building plans in areas following wildfire in Santa Cruz, Paradise, Lake County, and Napa for guidance on designing and protecting new buildings for future wildfire exposure.
- Invited by the Chief Administrative Officer of Portola Valley to review their fire planning policies related to secondary units and building density. January 2022.
- Reviewed a fire planning document for the Association for Bay Area Governments. January 2022.
- Invited in 2022 by Humboldt and Del Norte County building staff to guide the revision to the state Fire Safe Regulations. This later evolved into supporting all counties through engagement with RCRC and CSAC technical and legal teams.
- Judge for CSAA insurance-sponsored competition for UC Berkeley landscape architecture students to submit plans for a beautiful and functional Zone 0. August 2024.
- Peer reviewed a new education curriculum, "Wildfire Lessons and Activities for grades 6-12", based on a popular fire-related 2022 documentary film, Elemental: Reimagine Wildfire. July 2024.
- Invited by the Shasta Resource Conservation District to review their approach to the newly developing California Wildfire Mitigation Program (a.k.a. model Home Hardening Program) in Whitmore, CA.
- A PBS film crew interviewed me, and my work appears in the Home Diagnosis Season 3 episode, "Where there is smoke, there is fire" 3/7/2024: https://www.pbs.org/video/where-theres-smoke-theres-fire-4pll11/
- A PBS film crew filmed me the landscape restoration strategies and I am one of 5 experts featured in "Harmony in the Eel River Basin". Fall 2021. https://www.pbs.org/show/harmony-eel-river-basin/

State leadership

- Since 2021, I have held four roles with the Governor's <u>Wildfire and Forest Resilience Task Force</u>. I am helping develop action plans for two workgroups (Small Landowners and Fire Adapted Communities) and serve on the Science Advisory Panel that supports the whole effort, and the CORE team helps update the umbrella action plan. For this review period, these committees have had monthly calls and work between meetings, such as editing strategy plans for the different workgroups, where I can help insert or secure a future role for ANR in work ahead. It is time-consuming, but together, we are framing California's multi-organizational fire strategy.
- Since 2022, I have been a Wildfire Mitigation Advisory Committee member. The California State Fire Marshal chairs the committee to provide a forum for addressing wildfire preparedness and mitigation issues, sharing best practices, seeking comments and specific input on programs and technical issues, and informing local agencies and the public of applicable new laws and regulations. It was established by AB 9 (2021). I represent the California Fire Science Consortium seat. In 2022, was asked to join the Risk Modelling Advisory Workgroup, formed by AB 642 (2021), to advise CAL FIRE, the State Fire Marshal, and the Insurance Commissioner on wildfire risk modeling (see our report pub #225).
- In September 2024, I was asked to join the California Department of Insurance <u>Public Wildfire Catastrophe Model Strategy Group</u>. As a team of ten researchers and wildland fire experts, we have been asked to make recommendations to the Insurance Commissioner for steps to create the nation's first public wildfire catastrophe model. The hope is that the model can help predict future losses and be a benchmark for use in reviewing catastrophe risks for the insurance sector, provide accessible data for wildfire safety efforts, and create educational and career opportunities for California students.

UC Workgroup Memberships

- Fire
- Oak Woodland Conservation
- Forest Ecosystems and Communities
- Wildlife workgroup
- California Communities
- Ecological Restoration

- Woody Biomass Utilization
- Near-home vegetation focus group (involved monthly meetings during 2022)

Invited Presentations at Professional Conferences (Bold indicates who gave the presentation)

- **Valachovic, Y.** 2021. A call to action for fire investments. California State Association of Counties. December 1, 2021. Monterey. 150 people in attendance.
- **Valachovic, Y.** 2021. Land use planning for wildfire resiliency. Association of Bay Area Governments. December 2, 2021. Online. 65 people in attendance.
- **Valachovic, Y.** and S. Kocher. 2022. Small landowner action plan. California Wildfire Forest Resilience Task Force. January 27, 2022. Online presentation. 250 people participated.
- **Valachovic, Y.** and S. Kocher. 2022. Small landowner action plan. California Wildfire Forest Resilience Task Force. February, 2, 2022. Online presentation. 100 people participated.
- **Valachovic, Y**. 2022. What is happening in California fire prevention efforts? Lessons from the Camp and Marshall fires offer insights for fire adaption. Oregon Deschutes Fire Adapted Communities Program. March 15, 2022. 35 Attendees.
- Valachovic, Y., E. Knapp, S. Quarles, and N. Johnson. 2022. What can we learn from the single-family homes that survived the 2018 Camp Fire in Paradise, California? WUI Conference. March 22, 2022. Reno, NV. 150 in attendance.
- **Valachovic, Y.** 2022. Regulatory Changes Impacting Civic Wildfire Prevention and Mitigation. Protecting your City from Wildfire- virtual conference. April 19, 2022. 170 in attendance.
- **Valachovic, Y.** 2022. Overcoming Land Use Challenges: What's Happening in the WUI? Protecting your City from Wildfire- virtual conference. April 20, 2022. 170 in attendance.
- **Valachovic, Y.** 2022. What Can We Learn from the Single-family Homes that Survived the 2018 Camp Fire in Paradise, California? Protecting your City from Wildfire- virtual conference. April 20, 2022. 170 in attendance.
- **Valachovic, Y.** 2022. A call to action for fire investments. Wildfire Restoration Symposium Feather River College. May 13, 2022. Quincy. 60 in attendance.
- **Valachovic, Y.**, E. Knapp, S. Quarles, and N. Johnson. 2022. What can we learn from the single-family homes that survived the 2018 Camp Fire in Paradise, California? International Association of Willand Fire. May 26, 2022. Pasadena, CA. 45 in attendance.
- **Valachovic, Y.**, E. Knapp, S. Quarles, and N. Johnson. 2022. What can we learn from the single-family homes that survived the 2018 Camp Fire in Paradise, California? California Fire Science Consortium State Webinar. June 28, 2022. 75 in attendance. https://www.youtube.com/watch?v=6yb-ACw307M 573 views
- **Valachovic, Y.** 2022. Key lessons from home hardening research. United Policy Holders Webinar. June 28, 2022. 45 in attendance.
- **Valachovic, Y**. 2022. What is happening in California fire prevention efforts? Lessons from the Camp and Marshall fires offer insights for fire adaption. Oregon Office of the Fire Marshal. June 28, 2022. 80 Attendees
- **Valachovic, Y**. 2022. Lessons from California and other Western US wildfires. National Fire Protection Association Fire and Life Safety Ecosystem Symposium. September 29, 2022. College Park, Maryland. 150 in attendance.
- **Valachovic, Y.** 2022. Key lessons from home hardening research relevant to insurance. Discussion with California Department of Insurance Commissioner Lara. United Nations Climate Summit COP 27. November 17, 2022. 50,000 in attendance.
- Lee, C., Y. Valachovic, L. Quinn-Davidson, and J. Stackhouse. November 2022. Resistance to Armillaria in Encroached and Open True Oak Woodlands of the North Coast. Abstract for 8th California Oak Symposium: Sustaining oak woodlands under current and future conditions. San Luis Obispo. 75 in attendance. (Presented by C. Lee)
- **Stackhouse**, J. and Y. Valachovic. November 2022. North Coast Oak Woodland Restoration: Assessment of Post-treatment Understory Conditions. Abstract for 8th California Oak Symposium: Sustaining oak woodlands under current and future conditions. San Luis Obispo. 75 in attendance. (Presented by J. Stackhouse)
- Valachovic, Y, J. Stackhouse, L. Quinn-Davidson, B. Twieg, W. Robinson. November 2022. North Coast Oak Woodland Restoration: Oregon White Oak and Black Oak Tree Response to Release from Douglas-fir Encroachment. Abstract for 8th California Oak Symposium: Sustaining oak woodlands under current and future conditions. San Luis Obispo. 75 in attendance.

- **Valachovic, Y.** and S. Quarles. 2023. History of Defensible Space Policy. Wildfire Resilient Structures Conference and Tradeshow. February 9, 2023. San Diego, CA. 100 in attendance.
- **Valachovic, Y.** 2023 Lessons from the 2022 fire Season offer reasons for hope. Wildfire Forest Resilience Task Force March 30, 2023. Sacramento, CA. 400 in attendance.
- **Valachovic, Y.** 2023 Lessons from the 2022 fire Season offer reasons for hope. UC ANR Statewide Conference. April 27, 2023. Fresno, CA. 70 in attendance
- **Valachovic, Y**. 2023. What is happening in California fire prevention efforts? Lessons from the Camp and Marshall fires offer insights for fire adaption. Utah Division of Forestry, Fire, and State Lands Wise about Wildfire webinar series. April 2023. 35 in attendance. https://www.youtube.com/watch?v=gIUhe2xWg4U 236 views
- **Valachovic, Y**. and E. Knapp. 2023. Why do houses burn, and what can we do about it? California Fire Science Consortium webinar. August 4, 2023.
- **Valachovic, Y.** 2023. How the Fire Safe Councils can prepare to deliver Zone 0 educational messages. California Fire Safe Council Coordinators Webinar. August 15, 2023. 40 in attendance.
- **Valachovic, Y.** 2023. What is happening in wildfire insurance? California League of Cities- Redwood Empire Division. Fortuna. August 18, 2023. 30 in attendance
- **Valachovic, Y.** 2023 Northcoast resilience strategies. Wildfire Forest Resilience Task Force October 5, 2023. Redding, CA. 350 in attendance.
- **Valachovic, Y.** 2024. Vegetation and landscape guidance to protect buildings from wildfire. Halfmoon Seminars- Current Issues in Landscape Architecture for Western US. January 29, 2024. Virtual. 15 in attendance.
- **Valachovic, Y.** 2024. Community Support for Fuels and Forest Management. California Biomass Symposium. January 31, 2024. Sacramento, CA. 150 in attendance.

III. UNIVERSITY AND PUBLIC SERVICE

A. University Service

Begin Date- End Date	Activity	Org Level	Your Contribution and Leadership Role
Since 2010	Editor of Forest Land Steward a UC, CALFIRE, USDA Forest Service quarterly publication	State	Edit and assist in writing for the 12- page publication that is produced four times a year. Each issue takes 1-2 days of my time. See examples of the publication at https://www.fire.ca.gov/what-we-do/natural-resource-management/wildfire-resilience/forest-stewardship
Spring 2011- present	I answer the "Ask and Expert" questions on the UC Forestry website	State	Research and answer submitted questions for a few inquiries a month. I split this task with Susie Kocher.
ongoing	ANR leadership tours	State	This is a regular task. During this review period, I hosted Glenda Humiston on a tour of Humboldt and wood products manufacturing and prepared for the AVP visit in October 2024.
ongoing	Shasta, Siskiyou, and Trinity forest advisor search chair and mentor	State	After Ricky Satomi transitioned to another county, I was asked to chair the search for his replacement. It took two rounds, and Christian Jordan was the successful candidate. Unfortunately, he left in October 2024 after taking the position. I anticipate I will need to support the search once again.
ongoing	Santa Cruz, San Mateo & Santa Clara search chair	State	Led the search committee for this new forest advisor position and recruited Brian Woodward.
ongoing	Mendocino, Lake, and Sonoma forest advisor mentor	State	After chairing Mike Jones' search committee, I transitioned into a mentoring role. I introduced Mike to clientele and colleagues, invited him to join research projects, and provided a regular sounding board for issues and opportunities. He passed the RPF exam and now no longer works under my license.
October 2018- present	ANR leadership in wildfire	State	In response to the wildfires that devastated communities in northern California, I have been working to internally coordinate ANR's fire messaging and helping revitalize UC's work in home hardening, including aligning the Master Gardeners with the latest information. I worked with an advisor team to create a comprehensive fire website. I help support ANR's visibility in fire by responding to media calls for national and state media outlets. I also have represented UC with the legislature in Sacramento and via conference calls. I received \$1 M to pilot an expanded fire advisor

Begin Date- End Date	Activity	Org Level	Your Contribution and Leadership Role
End Date		Level	program in 2020, and then in 2021-2023, ANR was allocated \$6 M to develop the program further. I created an external advisory committee to help coordinate the effort. I also developed the position descriptions, worked with Mark Bell to place the grant-funded advisors, and served on seven fire-related search committees. I also write grants to expand ANRs fire and forestry programming with a few colleagues. We received funding to develop a post-fire landowner outreach program (\$2 million from the Forest Service, where advisor Kocher leads). I helped promote the idea of formally establishing an ANR Fire Network through outreach to ANR leadership, and I presented before the PAC in August 2022. I now mentor the Fire Network advisors on landscaping and built environment technical and political issues.
2019 to present	Represented ANR at various organizations and events	State	Attended the 2022, 2023, and 2024 Rural Counties Representatives of California and California State Association of Counties annual meetings to help build greater recognition of UC ANR programming in counties and gain visibility of our UCCE partnerships. I also help several subcommittees of these organizations with technical information to help them develop their policy strategies. During this review period, I have been involved in their review of the State's Fire Safe Regulations and fire insurance challenges.
2/2022	Represented ANR	State	Interviewed by the Office of Planning and Research on the capacity of the Cooperative Extension system to address natural resource challenges
2018- present	Sustainable Natural Ecosystems	State	I help support ANR's strategic planning and internal coordination and frequently help with writing ANR's natural resource impact reports.
2/16/2023 and 10/30/2023	Mentoring	State	I participated in two training sessions for new academics. 1) So you would like to work with a specialist- tips and tricks, and 2) How to leverage the ANR network
2022, 2023, 2024	Represented ANR	State	I attended and tabled at the Cal Forests annual conference with natural resource leaders, industry executives, and lead agency staff to discuss the challenges and opportunities of forest management in California. Over 200 people attend these events, and it has become one of the most well-attended networking sessions in California natural resource circles.

B. Public Service

Begin	Activity	Org Level	Your Contribution and Leadership Role
Date- End Date			
2010- present	Assist the Humboldt County Fire Safe Council in delivering a fuel reduction cost-share program for landowners and resource materials.	County	I provide technical assistance to the staff, help develop educational materials, participate in training sessions, and edit or write publications.
2011- present	Member of the Arcata Community Forest Management Committee	County	I attend monthly meetings and help the staff with guidance on managing the 2400-acre forest. The committee also serves as a sounding board for the Arcata City Council on policy matters. The forest provides me with a demonstration location for field tours.
2015- present	Member of the McKay Community Forest Advisory Committee	County	After helping to establish this forest, I now attend quarterly meetings and provide guidance to the staff on the overall management of the 1200-acre forest. The committee also serves as a sounding board for the Humboldt County Public Works Department on policy matters. I also interact with potential funders to secure resources for property expansion to better facilitate access and operational ease and with infrastructure development.
2004- present	Committee member of the County of Humboldt Forest Review Committee	County	I attend meetings 6-8 times a year and help the Humboldt County Board of Supervisors, the Planning Commission, and the Planning Department review Joint Timber Management Plans and policy matters. Established in the 1980s, this committee comprises 7 Registered Professional Foresters and has a permanent seat for the UC Forest Advisor.
2010- present	Assisting the agriculture producers and the County of Humboldt in their efforts to secure a new lease with the USDA agencies that are currently colocated in the building with UCCE and the Humboldt County Ag Commissioner	County	I have organized meetings with all affected parties and have focused on the issues during the long periods without communication from the Government Services Agency (GSA). The year's accomplishment was the transition of the GSA-controlled lease to the Natural Resources Conservation Service. In 2024, the USDA decided to move from our building (effective December 2024). My role has been to help find new compatible tenants to support the Ag Center's clientele and team synergy and acquire more space for our UC team.
2002- present	Cal Poly- Humboldt Department of Forestry and Wildland Resources	County/ State	Member of the advisory committee. I currently help the Department stay informed of the needs of current employers, and promote educational and career opportunities for students. Additionally, I advise the Department on specific issues such as curricular revisions, tenure-line hires, and land acquisitions that can enhance education and future employment, and maintain accreditation with the Society of American Foresters. I also serve as an advocate of

Begin	Activity	Org Level	Your Contribution and Leadership Role
Date- End			
Date			
			the Department with employers, the administration of both Cal Poly-Humboldt and the CSU, as well as with the State, and enhance research opportunities for Department faculty and students
2015- present	Leavy Agriculture Committee	County	I help recommend management options to a local non-profit organization who received this forest and rangeland parcel as a donation. The donor explicitly directed that the parcel remain a working forest and farm and that it could be used for regional educational opportunities.
2006- present	California Oak Mortality Task Force	State/ National/ International	I serve as co-chair of the management committee. I attend and present at annual meetings and participate in conference calls and email discussions throughout the year. The executive committee helps coordinate the organization's three staff members and the work of aligned organizations. The committee also works with media and politicians to help communicate the significance of the disease. The Task Force is recognized as the international leader in this disease. Most work occurs within California, but the products are used nationally and internationally.
2021 to present	Member of the Professional Foresters Examining Committee	statewide	I participate in monthly calls to help review the professional foresters exam, compare results, and develop exam questions. We also review licensing complaints and infractions. I host the all-day exam twice a year at my office. Providing a location on the North Coast is critical to reducing stress on examinees and increasing the passing rate.
2020 to present	Advisor to the North Coast Resource Partnership	Regional	The Board of Supervisors asked me to serve as a technical advisor to this multi-county and multi-organizational collaborative group, which assists in reviewing and developing restoration projects and other fire resiliency strategies across a seven-county area.
2023 to present	Biomass Technical Advisory Committee	Local	I am an invited professional to help Redwood Coast Energy Authority, a Joint Powers Authority, with technical issues related to biomass. Quarterly meetings.

IV. BIBLIOGRAPHY

- Publications appear in chronological order (i.e., most recent at the end).
- Those produced during this review period are included, plus one that had tremendous usage from 2021.

Review Period #	<u>In Career</u>	Publication Categories
10	130	A= Popular articles, newsletters, UC Delivers, websites
	15	B= Peer-reviewed scholarly journal
1	38	C= Other peer-reviewed publications
1	18	D= Technical reports
4	25	E= Published abstracts
16	226	Totals

В	206	Knapp, E. E., Valachovic, Y. S., Quarles, S. L., & Johnson, N. G. 2021. Housing arrangement and vegetation factors associated with single-family home survival in the 2018 Camp Fire, California. Fire Ecology, 17(1), 1-19. https://doi.org/10.1186/s42408-021-00117-0 My role: I was a study design collaborator and provided significant content for the article. I include this as I reference it in the narrative.
С	213	Valachovic, Y., J. Gerstein, B. Goldstein. 2021. Planning and Permitting Forest Fuel-Reduction Projects on Private Lands in California. UC ANR Publication #8716. https://doi.org/10.3733/ucanr.8716 My role: Lead author, found a consulting forester to help.
A	214	Stackhouse, J. and Y. Valachovic. December 2021. Virtual workshops: poisonous mushrooms and livestock protection. North Coast Highlights. Online office publication. https://cehumboldt.ucanr.edu/Publications/Northcoast_UCCE_highlights/?newsletteritem=91643 My role: publication editor.
Е	215	Valachovic. Y. and S. Quarles. February 2022. Background and History of California's Defensible Space Regulations. Abstract for the Wildfire Resilient Structures (WiReS) Conference and Tradeshow. San Diego. My role: Lead in developing the concept.
A	216	Hsu, M. and Y. Valachovic. June 2022. Free wildfire publication simplifies the understanding of fuel reduction permits on private lands. UC ANR Green Blog. https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=53530. My role: Mike approached me about helping get out fire-related content. We discussed this latest 8000 series publication, and we hatched together this blog. I primarily edited the information.
Е	217	Lee, C., Y. Valachovic, L. Quinn-Davidson, and J. Stackhsouse. November 2022. Resistance to Armillaria in Encroached and Open True Oak Woodlands of the North Coast. Abstract for 8th California Oak Symposium: Sustaining oak woodlands under current and future conditions. San Luis Obispo. My role: Lead PI on the project where Stackhouse led in the component of data presented in this talk.
Е	218	Stackhouse, J. and Y. Valachovic. November 2022. North Coast Oak Woodland Restoration: Assessment of Post-treatment Understory Conditions. Abstract for 8th California Oak Symposium: Sustaining oak woodlands under current and future conditions. San Luis Obispo. My role: Lead PI on the project where Stackhouse led in the component of data presented in this talk.

A	220	Encroachment. Abstract for 8th California Oak Symposium: Sustaining oak woodlands under current and future conditions. San Luis Obispo. My role: I am the lead author of collaborative research, synthesizing the team's findings. Kan-Rice, T. and Y. Valachovic. December 2022. Can homes be designed to withstand wildfire? UC ANR Green Blog. https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=50562 My role: We were invited to do an embargoed release of the Paradise paper. I pitched the idea to Pam, and together, we developed the
A	221	blog. Valachovic, Y. February 2023. Lessons from the 2022 wildfire season offer hope. UC ANR Green Blog.
		https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=56213
A	222	Valachovic, Y. March 2023. Welcoming our two newest advisors: Alec Dompka and Eddie Tanner. North Coast Highlights. Online office publication. https://cehumboldt.ucanr.edu/Publications/Northcoast_UCCE_highlights/?newsletteritem=96914
A	223	Valachovic, Y. June 2023. How can we navigate changes in the home insurance market. UC ANR Green Blog. https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=57206
A	224	Tanner, E., W. Robinson, and Y. Valachovic. September 2023. Invasive jumping worm and spruce decline. North Coast Highlights. Online office publication. https://cehumboldt.ucanr.edu/Publications/Northcoast_UCCE_highlights/?newsletteritem=100035 My role: publication editor.
D	225	Office of the Fire Marshall (including Valachovic). October 2023. Risk Modelling Advisory Workgroup Report. https://osfm.fire.ca.gov/committees/risk-modeling-advisory-workgroup (under the report tab). My role: 6 of the 16 committee members drafted the 58-page report. I authored two sections, wrote the executive summary, and edited the document. It took over a year for the Governor's office to approve the publication.
A	226	Valachovic, Y. and E. Tanner. December 2023. Hiring an office manager and cauliflower trail. Northcoast Highlights. Online publication. https://cehumboldt.ucanr.edu/Publications/Northcoast_UCCE_highlights/?newsletteritem=100036 My role: Lead author, editor.
A	227	Kan-Rice, P. and Y. Valachovic. July 2024. Report: Making homes more resistant to wildfire can be affordable. UC ANR Green Blog. https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=60269 My role: I pitched the idea to Pam, and she took the lead, and I wrote a bunch of the content.
A	228	Zink, J. and Y. Valachovic Septmeber 2024. 4-H fundraiser and enrollment. Northcoast Highlights. Online publication. https://cehumboldt.ucanr.edu/Publications/Northcoast_UCCE_highlights/?newsletteritem=103693 My role: editor.

V. SUMMARY OF PUBLICATION EXAMPLES

I have two publications that I am most proud of during this review.

- 1) I would like to share the 2024 final report that we created to summarize the Fire Network's activities. I cocreated the publication with Katie Low, ANRs Fire Network's Academic Coordinator, who did a fantastic job in the publication's layout and overall feel. We designed this report to reach non-technical audiences and demonstrate the ability of the Fire Network's advisors to engage on both the grant deliverables (that is, the first round of funding piloting the program) and to be easily recognized as relevant in helping address California's fire challenges. The report has not been published online, so I have attached it to my dossier. For some fun statistics, the team delivered 212 workshops, reached 15,000 people, and had over 100 media engagements.
- 2) This publication illustrates my ability to summarize complex information for non-technical audiences and builds up the Forest Stewardship Series my colleagues and I developed in 2002. The California Forest Practice Rules are very technical and are not easy to read, even for trained professionals. I worked with ANR Communication Services to develop the graphics for the publication and create a flow chart to help readers know which permit pathway might be best for their developing project. This guidance document is a critical tool to help RCDs, NGOs, foresters, and landowners help facilitate forest fuel treatments. The publication also offers insight into permitting larger projects that include multiple landowners, substantially increasing permitting complexity. Familiarity with permitting has been a substantial barrier to increasing the pace and scale of forest restoration projects. I was the paper's primary author and managed all the steps in its development.
 - ➤ Valachovic, Y., J. Gerstein, B. Goldstein. 2021. Planning and Permitting Forest Fuel-Reduction Projects on Private Lands in California. UC ANR Publication #8716. https://doi.org/10.3733/ucanr.8716

VI. PROJECT SUMMARY TABLE

Project Title/	Role	Duration	Collaborators with Affiliation	Financial Support, if any	Support Source			
Theme 1: Workforce Development and Informed Community								
Stewardship Curriculum and Workshop Series	Collaborator and regular host of workshops and trainings in support of these educational efforts	2001-2007, 2011- present	UCCE Forest Workgroup		Originally funded by the California Department of Forestry and Fire Protection (2001), RREA to S. Kocher, and presently by CAL FIRE			
Forestry Institute for Teachers (FIT)	Director of Humboldt FIT	2000- present	Northern CA Society of American Foresters; CA Department of Forestry and Fire Protection Project Learning Tree; UC's R. Satomi; and over 50 local resource professionals volunteer services	\$120,000 annually	Annual grants and donation sources vary.			
Redwood Region Forest Science Symposium	Co-lead	2003-2007, 2009- 2011, 2015-2018	UC team members included R. Standiford, and G. Giusti, plus a large steering committee from HSU, CAL Poly, CAL FIRE, USFS, NGOs, and industry leaders. When we host the next event, that was postponed by COVID, I will be the UC lead. Advisors Jones and Woodward will help for our next event.	~\$35,000 \$6,000 (RREA 2015)	UC Center for Forestry, Save the Redwood League, USDA Forest Service, CAL FIRE; CSU/UC grant, RREA			
Defining Community Forestry	Collaborator	2007, 2010- present	UCCE began as champions for the concept. Several new community forests have been established. My current role is as an advisor to two of them, and periodically, I speak about my experiences in forest management, organizational structures, and community interactions, including overlaying recreational activity.	\$5000	RREA (2007)			

Project Title/	Role	Duration	Collaborators with Affiliation	Financial Support, if any	Support Source
Theme 2: Forest Resilie	ency in the Face of	Introduced P	ests and Diseases		
Sudden Oak Death Education	PI	2001- present	UC Team (D. Rizzo, M. Garbelotto, W. Robinson, B. Twieg), California Oak Mortality Task Force members, Humboldt County Agriculture Commissioner, California. Department of Forestry and Fire Protection	\$62,000 \$45,420 \$110,000 \$103,112 \$67,334 \$78,452 \$84,002 \$343,443 \$214,000	CAL FIRE, USDA FS, Six Rivers National Forest
Sudden Oak Death Monitoring	PI	2001- present	UC Team (D. Rizzo, M. Garbelotto, D. Stark, B. Twieg), Six Rivers National Forest, USFS Aerial Detection Team, State and National Parks, Humboldt County Agriculture Commissioner, CALFIRE, BLM, Hoopa Tribal Forestry, Yurok Tribal Forestry	\$195,500 \$61,932 \$44,750 \$35,234 \$20,000 \$250,000	CAL FIRE Donor support
Sudden Oak Death Management	PI	2004- present	UC (B. Twieg, D. Rizzo), California Oak Mortality Task Force, CALFIRE, numerous landowners	\$90,000 \$622,298 \$527,396	USDA FS CAL FIRE- Greenhouse Gas Reduction Program
Sudden Oak Death Long-term Wildland Management	PI; working on manuscripts of the research	2005- present	California Oak Mortality Task Force, CALFIRE, numerous landowners	\$99,964 \$180,186	USFS
Understanding the Long-term Fire Risks in Tanoak Forests Affected by Sudden Oak Death	PI; currently focusing on the outreach phase as the disease intensifies	2008-2010 2014 to present	D. Rizzo (UC), D. M. Varner (HSU), H. Scanlon (CAL FIRE), C. Lee (CAL FIRE)	\$53,579	USFS (2008)

Project Title/	Role	Duration	Collaborators with Affiliation	Financial Support, if any	Support Source
Characterizing Grand Fir Decline and Mortality Caused by Balsam Woolly Adelgid in North Coastal California	Co-PI	2018 to present	Advisor M. Jones, SRA W. Robison, and CAL FIRE Pest Specialist C. Lee	\$82,213	USDA Forest Service
Theme 3: Wildfire Rese	earch and Educati	on			
Northern California Prescribed Fire Council Fire Science Education Networks	Collaborator; help develop policy to support the tool of fire and to produce educational events Co-PI; manage budgets, support staff and produce educational events	2010- present	L. Quinn-Davidson (UCCE), HSU, USFS, CAL FIRE, BLM, NGOs, State and National Parks, Air Quality UC Team includes: L. Quinn-Davidson, S. Kocher, S. Stephens, L. Carmignani; USFS, CAL FIRE, BLM, National Park Service, USGS, non-governmental organizations	\$144,636 \$181,490 \$68,800 \$120,000	Joint Fire Sciences
Fire Advisor Development	PI	2020- present	External to UC Advisory Committee	\$1M	Legislature to CAL FIRE
Zone 0 Educational Campaign	P1	2023 to present	ANR's Linda Forbes, TRAFFIX (marketing team), CAL FIRE, Board of Forestry staff, and a long group of technical advisors.	\$1.2 M	Board of Forestry

Project Title/	Role	Duration	Collaborators with Affiliation	Financial Support, if any	Support Source				
Theme 4: Natural Reso	Theme 4: Natural Resource Policy to Support Economic, Ecosystem, and Community Resiliency								
Buckeye Conservancy	Advisory team member, facilitator, workshop host	2003- present	A landowner-driven discussion group that seeks input and support from state and federal land and wildlife managing agencies, policymakers, and public interest groups						
Understanding the biomass potential and now merging into understanding community choice energy aggregation options	Collaborator	2007- present	UC Woody Biomass Workgroup members UCCE advisor R. Satomi, H. Giliani, C. Chen, and specialist D. Sanchez	\$13,5000 (2015)	RREA (2015)				
Theme 5: Oak Woodlan	d Ecology and Re	storation							
Tools for a Changing Landscape: Understanding Disturbance and Vegetation Dynamics in Northern California Oak Woodlands	Co-PI; currently finishing manuscripts	2012- 2020	UC Team: R. Standiford, L. Quinn-Davidson, M. Kelly, M. Potts, G. Giusti; Humboldt State Univ. Team: R. Sherriff, M. Varner, Y. Everett; Redwood National Park Team: L. Arguello; NRCS Team: S. Smith, M. Cocking	\$94,370 to me as a part of \$249,617 total budget;	UC ANR				
Oak Woodland Restoration: Assessing Treatment Effectiveness, Cost, and EQIP Practices	Co-PI	2015-2018 2022-2023	UC Team: J. Stackhouse, R. Standiford, L. Quinn-Davidson, G. Giusti, R. Satomi; NRCS Team: M. Cocking 2022-2023 Activity included following our research areas impacted by the August 2020 fire. A rare learning opportunity.	\$75,000	USDA Natural Resource Conservation Service Conservation Innovation Grant				

Project Title/	Role	Duration	Collaborators with Affiliation	Financial Support, if any	Support Source
Silent Straws: Understanding Water Demands from Woody Encroachment in California's Oak Woodlands	Co-PI	2018- present	Lenya Quinn-Davidson, E. Bruno, D. Lewis, J. Stackhouse, W. Robinson, N. Polasek, DJ Eastburn, L. Roach	\$199,936	UC ANR (2018)
Oak Woodland Conservation and Restoration	collaborator	2020 to present	S. Kahn, D. Macon, D. Rao, R. Ozeran, S. Swain, D. Lewis, M. Jones, and R. Satomi	\$100,000	Hardy Family Foundation
Theme 6: Program Deve	elopment and Adn	ninistration			
General UCCE Humboldt office/ resource improvements I provide trainings; coordinate computer upgrades; manage a server for file sharing and backups; and continually seek to improve hardwire and wireless connectivity. I worked with IGIS and had server GIS installed and had staff trained in the program. I manage the UC and County IT relationships. I work with UC Risk Management to bring	County Director;	2011- present	UC's IGIS program County IT staff UC IT staff UC Risk Management	\$5000	Donor funds

Project Title/	Role	Duration	Collaborators with Affiliation	Financial Support,	Support Source
safety training and				if any	
resources.					
Humboldt- Del Norte	County	2002-	Humboldt and Del Norte staff		
County UCCE visibility,	Director		Humboldt and Der Norte stam		
marketing materials.	Director	ongoing			
marketing materials.					
I oversee the website,					
brochures, electronic					
newsletters and other					
media development. I					
communicate our					
office's broad programs					
to our clientele and the					
public through					
production, design and					
editing of an Annual					
Year in Review (a					
newsletter I established					
in 2002), electronic					
newsletters, brochure					
and poster development,					
and participate live					
radio shows that brings					
the office visibility,					
reaches diverse					
audiences, and helps					
listeners understand of a					
range of ag. and natural					
resource topics.					
Advisor mentoring-	County	On-going	Advisors: Jeff Stackhouse and I meet with		
Youth, Families, and	Director		the new advisors regularly to discuss goals		
Communities Advisor;			and help secure resources to support their		
Fire Advisor,			activities. I help promote staff into		

Project Title/	Role	Duration	Collaborators with Affiliation	Financial Support, if any	Support Source
Horticulture and Specialty Crops, Rural Economic Development			community and UC leadership positions. I promote individual growth and career development opportunities. I work to cultivate, reward, and retain talented staff.		
Office Leadership	County Director	On-going	I advocate for ANR programs and represent UC in local and regional capacities. I maintain relationships with two different boards of supervisors, county administrators, and with ANR leaders, I work to build community connections to promote relationships with key clientele and within ANR.		
Financial Management	County Director	On-going	I work with two boards of supervisors and their staff to maintain and grow county support. I cultivate donors and annual donor appeal opportunities. I seek grantfunding to maintain base programming and to respond to emerging needs and opportunities.		
Strategic Development	County Director	On-going	I have now achieved most of my plan for our core staffing needs in the Humboldt-Del Norte unit. I have developed advisor justifications and have been able to hire: 1) a horticulture and specialty crops advisor (to replace retired advisor Deborah Giraud), 2) an area fire advisor (replacing Lenya), 3) a YFC advisor (replacing Dorina, and 4) I finally secured a resident advisor for Del Norte. On my future list is a water quality advisor for Del Norte.		

VII. EXTENSION ACTIVITIES TABLES

A. Meetings Organized

Begin Date-	Event	Topic/ Number of	Role	Location	# of
End Date	Event	Repetitions	Kole	Location	Atten
Ellu Date		Repetitions			dees
Theme 1: Wo	rkforce Developm	ent and an Informed Comm	unity		uccs
4/28-	Multi-aged	Redwood silviculture	Lead	Orick	55
4/29/2022	forestry tour	Redwood silviculture	Lead	Office	
7/10-16/2022	Forestry	Bringing natural resources	Lead	Arcata	30
//10-10/2022	Institute for	curriculum to the K-12	Leau	Alcata	30
	Teachers	classroom			
7/9-15/2023		Bringing natural resources	Lead	Arcata	35
//9-13/2023	Forestry Institute for	curriculum to the K-12	Lead	Arcata	33
6/1 6/2/2022	Teachers	classroom	0	G G	70
6/1-6/2/2023	Multi-aged	Post-wildfire restoration	Co-	Santa Cruz	70
6/11/0004	forestry tour	strategies	Lead	T . D	60
6/11/2024	Multi-aged	Redwood silviculture	Lead	Fort Bragg	60
	forestry tour				
7/14-20/2024	Forestry	Bringing natural resources	Lead	Arcata	30
	Institute for	curriculum to the K-12			
	Teachers	classroom			
		he face of Introduced Pests a			
Ongoing*	North Coast	SOD management	Lead	Virtual	5-10
	SOD advisory	activities (quarterly)			
	committee	organized by SRA			
		Robinson			
2022, 2023,	SOD Blitz	How to recognize SOD	Lead	Del Norte	5-10
2024		(organized by SRA			
		Robinson)			
Theme 3: Fire	Research and Ed	ucation			
10/2 and	Future	I set up a series of	Lead	virtual	10
12/5/2022	Redwood	meetings with climate			
	Climate	scientists to talk about			
		what we might expect with			
		redwood for Humboldt			
		Redwood Company			
		Home hardening and			
	UC ANR Fire	defensible space cross-	Collabo	Orange	
1/23-25/2023	Advisor retreat	training	rator	REC	10
3/12-13/2024	UC ANR Fire	Understanding the Smith	Field	Del Norte	25
	Network retreat	River Complex	trip		
	tour	_	leader		
Theme 4: Nati	ural Resource Poli	icy to Support Economic, Ec	onomic, a	nd Communit	y
Resiliency		•			
11/18/2021	Moxy	Wood products utliziation	Co-lead	Arcata	20
	manufacturing	1			
4/24-25/2022	Discussion	Wood products utliziation	Co-lead	Arcata	33
	group with	1			
	107	ļ.	L	ı	

Begin Date- End Date	Event	Topic/ Number of Repetitions	Role	Location	# of Atten dees		
	USDA and						
	Glenda						
	Humiston						
12/15/2022	Policy tour with	The future of the	Co-lead	Crescent	10		
	Assemblymember	Northcoast dairy industry		City			
	Jim Wood			-			
5/3/2024	Sonoma	What the Northcoast has to	Co-lead	Hopland	100		
	Mendocino	offer		REC			
	Biomass						
	Utilization						
	Symposium						
Theme 5: Oak	Theme 5: Oak Woodland Management						
9/8/2023	UCCE and	Using fire to restore oak	Co-lead	Eureka	40		
	Buckeye	woodlands					

Educational Presentations

Additional presentations are under the professional competence section, where I was invited to give a variety of conference talks

variety of conference Begin Date-	Event	Presentation Topic/no of	Location(s)	Number
End Date	Event	Presentation Topic/no. of repetitions	Location(s)	of Attendees
Thoma 1. War	rkforce Development and	an Informed Community		Attendees
10/13/2021	Women in Timber	Women in Natural Resources	Online	40
10/13/2021	Wollien in Timber	Career Panel	Offinic	10
2/1/2022	Women in Timber	Women in Natural Resources	Online	40
		Career Panel		
7/10-16/2022	Forestry Institute for	Three talks- Forest Ecology,	Arcata	30
	Teachers	Silviculture, and Silviculture Field Exercise		
10/13/2022	Cal Poly Humboldt Career Panel	Career options in the natural resources	Arcata	40
4/11/2023	Forest Stewardship	Forest management rules and	Virtual	25
5/23/2023	Class Trinity Cohort Forest Stewardship	regulations Role of the forest advisor	Virtual	25
31 431 4043	Class Trinity Cohort	Role of the folest advisor	viituai	43
7/9-15/2023	Forestry Institute for	Three talks- Forest Ecology,	Arcata	35
	Teachers	Silviculture, and Silviculture		
		Field Exercise		
10/12/2023	Post-fire resilience workshop	Post-fire decision making	online	20
7/14-20/2024	Forestry Institute for	Three talks- Forest Ecology,	Arcata	30
	Teachers	Silviculture, and Silviculture		
		Field Exercise		
		of Introduced Pests and Pathog		
11/16/2021	San Matteo Weed	Cleaning equipment for	online	27
4/2022 *	Management Area	pathogens	1.	120
4/2022 *	Western International	Sudden oak death in Del	online	120
	Forest Disease Work Conference	Norte		
4/29/2022 *	Cal Poly Humboldt	Sudden oak death	Arcata	75
11 471 4044	Dendrology class	Sadden our death	1 Houta	15
9/9/2022	USDA FS Treatment	Sudden oak death in Del	Smith River	4
	tour	Norte		
10/5/2022 *	College of the	Sudden oak death	Eureka	20
	Redwoods Dendrology			
	class			
11/21/2022 *	Tolowa Tribal Council	Sudden oak death in Del Norte	Smith River	15
11/ 2022 *	California Forest Pest	Sudden oak death in Del	Davis	75
	Council Annual	Norte		
	Meeting			
5/ 2023 *	Western International	Sudden oak death in Del	Sonoma	85
	Forest Disease Work	Norte		
	Conference			

Begin Date- End Date	Event	Presentation Topic/no. of repetitions	Location(s)	Number of Attendees
11/7/2023	California Oak Mortality Task Force	EU1 and NA1 detection in Del Norte	On line	65
3/7 & 9/ 2024	College of the Redwoods Forest Health	Sudden oak death identification	Weott	24
Theme 3: Wile	dfire Research and Educat	tion		
10/11/2021	UC Berkeley Huntsinger graduate class	Oakwoods and fire management	virtual	7
11/16/2021	Whale Gulch Fire Safe Council	Designing and retrofitting rural homes for wildfire resilience	virtual	11
11/17/2021	San Matteo County Fire Prevention Officers	Paradise paper findings	virtual	30
12/15/2021	UC ANR Facebook Live	Wildfire resiliency	virtual	15
1/18/2022	Board of Forestry	Zone 0 options	virtual	55
1/20/2022	Wildfire Defense Seminar	Paradise paper findings	virtual	15
1/26/2022	Friends of the Lost Coast	Home hardening	virtual	25
2/9/2022	Fire Safe San Mateo County	Paradise paper findings	virtual	69
3/8/2022	Senate Natural Resources Committee	SB 896 and defensible space	Sacramento	20
3/10/2022	Sonoma Master Gardeners Training	Defensible space	virtual	45
4/4/2022	Cal Poly Humboldt Fire Ecology Seminar	Paradise paper findings	Arcata	25
4/5/2022	Board of Forestry	Zone 0 options	Sacramento	45
4/6/2022	Southern Humboldt Fire Safe Council	Home hardening and defensible space	virtual	18
5/4/2022	Board of Forestry	Zone 0 options	Sacramento	140
5/14/2022	Wildfire Fair Quincy	Home hardening and defensible space	Quincy	40
5/17/2022	Humboldt -Del Norte Master Gardeners	Defensible space	Eureka	30
5/17/2022	Del Norte Fire Season Preparation	changes in defensible space rules	Crescent City	20
7/22/2022	Humboldt FSC and RCD train-the-trainer	Home hardening and defensible space	virtual	15
8/11/2022	Plumas Fire Safe Council	Zone 0 options	virtual	38
8/15/2022	Mono-Inyo Citizen's Wildfire Academy	Home hardening and defensible space	virtual	35
8/17/2022	Sonoma Master Gardeners Training	Home hardening and defensible space	virtual	50

Begin Date- End Date	Event	Presentation Topic/no. of repetitions	Location(s)	Number of Attendees
9/14/2022	Office of Planning and Research	Fire Hazard Planning	virtual	125
10/6/2022	CA's 5th Climate Change Assessment Research Gap Roundtables	Working lands, waters, and biodiversity	virtual	75
10/11/2022	UC Presidents Ag Advisory Committee	UC ANR's fire propgram	virtual	25
10/12/2022	Inyo-Mono Master Gardener Class	Home hardening and defensible space	virtual	18
10/20/2022	Willits Fire Safe Council	Home hardening and defensible space	Willits	50
10/27/2022	Cal Poly Humboldt Natural Resources Planning class	Lessons from CA and western wildfires	Arcata	22
10/28/2022	Workshop funding for small landowners and forest resiliency	State initiatives	virtual	50
11/30/2022	Humboldt SAF	lessons from CA and western wildfires	Arcata	30
12/9/2022	College of the Redwoods Landscaping Class	defensible space	Eureka	10
12/12/2022	Quincy Fire Safe Council	Permitting fuel reduction projects	Virtual	17
1/25/2023	Bishop home hardening class and webinar	Protect your home, fire safe solutions for design, building, and upkeep	Bishop	45
3/28/2023	Humboldt MG training	Learn to protect your home from wildfire	virtual	
3/28/2023	Humboldt MG training	Learn to protect your home from wildfire	virtual	5
4/4/2023	Forest Stewardship class- oak ecology	stewarding oaks in the face of climate change	virtual	25
4/15/2023	Southern Humboldt Fire Safe Council	Learn to protect your home from wildfire	Garberville	100
4/22/2023	Southern Humboldt Fire Safe Council	Learn to protect your home from wildfire	Shelter Cove	50
5/20/2023	Willow Creek Fire Fair	Home Hardening	Willow Creek	50
5/25/2023	Ukiah Fire Safe Council	Learn to protect your home from wildfire	Ukiah	75
5/25/2023	California Native Plant Society	Wildfire recovery	Arcata	45
6/11/2023	Science on Tap- June Lake	Wildfire Prevention Week	June Lake	40

Begin Date- End Date	Event	Presentation Topic/no. of repetitions	Location(s)	Number of Attendees
6/12/2023	Contractors Lunch and Learn Mammoth	Wildfire Prevention Week	Mammoth	15
6/12/2023	Realtors Fire and Insurance	Wildfire Prevention Week	Mammoth	12
6/12/2023	Community presentations	Wildfire Prevention Week	Mammoth	15
6/12/2023	Mono County Board of Supervisors	Wildfire Prevention Week	Bridgeport	15
6/12/2023	Inyo County Board of Supervisors	Wildfire Prevention Week	Independence	15
6/13/2023	HOA Defensible Space	Wildfire Prevention Week	Bishop	12
6/14/2023	Crowley Lake Community Presentation	Wildfire Prevention Week	Crowley Lake	30
6/15/2023	Bishop Paiute Tribe	Wildfire Prevention Week	Bishop	20
6/15/2023	Science on Tap Bishop	Wildfire Prevention Week	Bishop	40
6/16/2023	one-hour radio show KZYX	Learn to protect your home from wildfire	virtual	
6/16/2023	Fort Indpendence Tribe	Wildfire Prevention Week	Independence	15
6/16/2023	Contractors Focus- Bishop	Wildfire Prevention Week	Bishope	15
7/17/2023	Science on Tap- Mariposa	Wildfire Preparedness Workshop Series Mariposa	Mariposa	15
7/18/2023	Mariposa Master Gardeners	Wildfire Preparedness Workshop Series Mariposa	Mariposa	10
7/18/2023	Mariposa Board of Supervisors	Wildfire Preparedness Workshop Series Mariposa	Mariposa	25
7/18/2023	Mariposa Community Meeting	Wildfire Preparedness Workshop Series Mariposa	Mariposa	10
7/19/2023	Mariposa Realtors and Insurance Agents	Wildfire Preparedness Workshop Series Mariposa	Mariposa	10
7/19/2023	Mariposa Fire Advisory Committee	Wildfire Preparedness Workshop Series Mariposa	Mariposa	17
8/22/2023	Science on Tap- Grass Valley	Wildfire Preparation Week	Grass Valley	80
8/23/2023	Auburn Community workshop	Wildfire Preparation Week	Auburn	45
9/12/2023	Del Norte Board of Supervisors	State of wildfire insurance	Crescent City	45
9/27/2023	Lee Vining Community workshop	Wildfire Prevention Series	Lee Vining	35
9/27/2023	Bridgeport Community workshop	Wildfire Prevention Series	Bridgeport	25
10/2/2023	Master Gardener Conference Coordinators meeting	prepping for Zone 0	Lake Tahoe	45

Begin Date- End Date	Event	Presentation Topic/no. of repetitions	Location(s)	Number of Attendees
10/2/2023	Master Gardener Conference intensive workshop	prepping for Zone 0	Lake Tahoe	20
10/5/2023	SAF Bay Area Oct Meeting Webinar	Utility of prescribed fire for coastal California	virtual	10
10/19/2023	RCD training	home hardening skill development	virtual	35
10/25/2023	Wildfire Conference Ventura	Fire Adapted Communities	Ventura	250
10/30/2023	Mendocino Botanical Gardens	fire smart landscaping	Mendocino	50
11/2/2023	Cal Poly Humboldt	Fire Adapted Planning and Mitigation	Arcata	20
2/22/2024	California Department of Insurance Virtual Wildfire Insurance Town Hall	Mitigating wildfire and holding on to fire insurance	virtual	75
3/12/2024	Sierra Institute for Community and enviornment	Home Hardening	virtual	25
3/12/2024	RCEA Community Team review of biomass	Connection between wildfire and forest management	Eureka	45
4/1/2024	Rx Fire For Ranchers	Workshop	Eureka	35
4/20/2024	Willow Creek Good Fire Symposium	Presentation	Willow Creek	50
4/27/2024	Southern Humboldt Fire Safe Council	Defensible space, home hardening, insurance	Redway	85
5/8/2024	NACO Western Interstate Region Conference	Forest health	Mariposa	80
5/15/2024	Southern Humboldt Fire Safe Council	home assessment skill Garberville building and insurance		20
5/21/2024	Wildfire strategies for farmers and ranchers	Ranch hardening and preparedness	virtual	77
5/29/2024	Cultural Burn Awareness Seminar	Presentation in person		80
6/1/2024	California Tree School- Placerville	How to navigate fuels reduction permitting	Placerville	15
6/3/2024	Eastern Sierra Wildfire Alliance	Future of wildfire funding Bishop		15
6/4/2024	Wildfire Resilience Week Inyo	Community Wildfire Protection	Bishop	21
6/7/2024	Wildfire Resilience Week Mono	Wildfire Insurance	Mammoth	40
6/14/2024	Lost Fire Tour	Fire in old-growth redwood	Orick	40

Begin Date- End Date	Event	Presentation Topic/no. of repetitions	Location(s)	Number of Attendees
6/28/2024	Shasta Fire Safe Council	Future of home insurance	Anderson	45
8/9/2024	Fire history in Prairie Creek	Redwood tour series, signs of fire in old-growth redwood	Orick	25
8/16/2024	20 years after the Canoe Fire	Redwood tour series, growth redwood resiliency	Weott	35
9/12/2024	UCANR Fire Network Tour	Fire in the redwood forests; and Smith River Complex	in person	25
9/15/2024	Humboldt County PBA Presentation - Redwood Creek	How to plan and conduct a Rx fire	Redwood Creek	20
Theme 4: Natu	ral Resource Policy to Su	pport Economic, Ecosystem, a	nd Community	Resiliency
10/12/2023	North Coast Resource Partnership	Biomass opportunities in the North Coast	Loleta	80
Theme 5: Oak V	Woodland Ecology and Ro	estoration		
10/10/2022	UC ANR Oak workgroup retreat	Northcoast oak woodlands	Sierra REC	30
Theme 6: Program Development and Administration				
April 2022, 2023, 2024	Humboldt Board of Supervisors	Departmental Update	Eureka	45
8/23/2022	Del Norte Board of Supervisors	Introduced UC Specialist Keith Taylor	Crescent City	30
2/14/2023	Del Norte Board of Supervisors	Introduced advisors Eddie Tanner and Alec Dompka	Crescent City	45
5/9/2023	Del Norte Board of Supervisors	Economic Development opportunities	Crescent City	40

^{*=} Given by SRA Wallis Robinson *= Gven by SRA Henri Holbrook

B. Other (including websites, social media, blogs, collaborations with other agencies, organizations, policy engagement)

Begin Date-	Description	Number of Instances	
End Date			
2020- to present	I worked with the Natural Resource Committees of the California Senate and Assembly to help develop ideas for AB 3074, which triggers an update to the CA defensible space code (PRC 4290). I brought science to answer questions from the media and other interested groups. AB 3074 was approved by the Governor (2020). In 2021, the Board of Forestry staff began to develop the enabling regulation to support the policy change. I was asked to cochair a workgroup to synthesize the science and guidance for Board consideration. In 2023, the governor's office paused the regulatory development. I have continued to work with the Governor's team to address their concerns and was also tapped by the Senate to address remaining policy issues. This eventually translated into SB 504 (2024) and SB 896 (2023). At the time of this writing, the Governor has not released the pause on the regulatory development. LAOs office 2022.	50+ meetings and phone calls. Multiple trips to Sacramento to testify or talk through policy options.	
2020	Steve Quarles and I helped write and deliver 10 videos for the Mendocino Fire Safe Council that gives detailed home hardening information https://firesafemendocino.org/homehardening/ I have been trying to migrate copies of these for our ANR Fire Network website.	15 meetings	
2020-	I help reinstate interest in addressing the crisis that has	20 meetings with the state	
present	resulted from the loss of rendering facilities across California and explore how to facilitate composting animals.	Farm Bureau, Western United Dairymen, and ag organizations	
2022	I was invited to two multi-day conversations with a small group to explore how to better fund home hardening from federal sources. The National Fire Protection Association convened the meeting.	Two in-person meetings	
2022	The Berkeley Law Conference convened a discussion group to discuss biofuels' role in wildfire resilience.	Two meetings and one report was drafted.	
2022	The newly formed Climate Wildfire Institute invited me to discuss fire-related research and education needs and explore how ANR's fire team could participate.		
2022	I worked with the Insurance Institute for Business and Home Safety team and United Policy Holders to synthesize the best available science to aide the Department of Insurance in developing the Safer from Wildfires discount program, which summarizes the mitigations that matter. This has resulted in admitted insurance companies beginning to offer discounts to policyholders who complete certain listed mitigations.	Multiple meetings over a 6 month period	

C. Media (including news media interviews)

Begin Date-	Interviewed/Wri	Topic	Media/Publication	
End Date	tten by			
Theme 1: Workforce Develoment and an Informed Community				
11/18/2021	Times Standard	Drought conditions persist for the North Coast	newspaper	
10/14/2021	SF Gate	Future of Jackson Demonstration State Forest	newspaper	
9/12/2023	Book author	Forest health and climate	Columbia University Professor	
Theme 2: Forest	Resiliency in the F	ace of Introduced Pests and	Diseases	
TD1 2 XX/11 100				
Theme 3: Wildfi	re Research and Ed	lucation	 	
10/6/2021	KQED California Report	Paradise paper findings	radio	
10/00/00/1	7	climate change and		
10/28/2021	Bay Nature	wildfire	newsprint	
11/3/2021	Associated Press	Venado Declaration	newsprint	
11/9/2021	Association of Fire Ecology	Paradise paper findings	Online posting	
11/9/2021	The Lookout	Paradise paper findings	blog	
		Wildfire and development		
11/23/2021	New York Times	patterns	newspaper	
11/25/2021	Redding Spotlight	Paradise paper findings	newspaper	
5/16/2022	Press Release	Dodd's defensible space bill	Media release	
6/1/2022	KZYX	prep for the fire season 1- hour radio show	radio	
0,1,2022	PBS- filming in	Extreme weather and	radio	
6/29/2022	Davis	home construction	TV	
8/8/2022	Sierra Wave	Citizens Wildfire Academy	newspaper	
8/30/2022	Sierra Sun Times	Governor signs Dodd's Defensible Space bill	newspaper	
		Learn to protect your		
1/24/2023	Inyo Register Redheaded	home from wildfire Learn to protect your	newspaper	
4/13/2023	blackbelt	home from wildfire	Online media	
	Eastern Sierra			
6/7/2023	Wave	Wildfire Prevention Week	newspaper	
6/8/2023	Inyo Register	Wildfire Prevention Week	newspaper	
	What to put in a			
8/17/2023	go bag?	Redwood News- TV	TV	
		California Town of Paradise deploys warning	Newsprint (This story got 188	
8/17/2023	Associated Press	sirens as 5-year	pickups and 564 clips)	

Begin Date-	Interviewed/Wri	Topic	Media/Publication
End Date	tten by		
		anniversary of the Camp	
		Fire approaches.	
	wildfire		
	preparation and		
9/14/2023	insurance	KIBS KBOV	radio
	Good Morning	Maui Power Shut-off	
9/21/2023	America	Challenges	TV
		Maui Power Shut-off	
9/21/2023	ABC 10	Challenges	TV
		Maui Power Shut-off	
9/21/2023	NBC News	Challenges	TV
			An hour-long podcast
			https://www.youtube.com/watch?
9/28/2023	IBHS	Fire in California	v=E0_KJl2ggp4
		climate change and	
10/6/2023	KEET	wildfire	TV
		Review of the Radeloff	
		Paper embargoed in	
	Scientific	Science about wildfire	
11/7/2023	American	losses and vegetation.	Online publication and print
		Five years after the Camp	
		Fire- Can we stop it from	
11/8/2023	LA Times	happening again?	newspaper
	Jefferson Public		
2/14/2024	Radio	fire insurance	radio
	San Jose Mercury		
3/27/2024	News	fire insurance	newspaper
		What is going on with	
5/9/2024	Politico	Zone 0	Online media
	Morning Ag	Ranch hardening and	
5/13/2024	Clips	preparedness	Online media
	Media release on		
	Headwaters	Pam Kan Rice and I put	
	Economics	out a media release that	
7/23/2024	Report	got picked up 5 times	Newspaper

Theme 4: Natural Resource Policy to Support Economic, Ecosystem, and Community Resiliency

Theme 5: Oak Woodland Ecology and Restoration

Theme 6: Team Program Development and Administration



University of California Division of Agriculture and Natural Resources

Fire Network Final Grant Report

August 2024





Introducing the UC ANR Fire Network

No matter where you are in California, you are likely affected by fire. Whether you are a landowner interested in using prescribed fire, a homeowner retrofitting your home to be more fire resilient, a policy maker looking for technical resources to help their constituents, or someone in between, the UC ANR Fire Network is here to help! The UC ANR Fire Network is a statewide team with expertise across a wide range of disciplines, including fire science and ecology, prescribed fire, home hardening and defensible space, community and regional planning, and much more. The Network includes specialists on UC campuses, advisors and staff in local communities, and broad networks of partners and volunteers. The goal of the Fire Network is to inspire and empower Californians to address fire issues through research, education and outreach, policy, and training.

At the core of the Fire Network is a team of UC Cooperative Extension fire professionals (hereafter, Fire Team), who are financially supported by the California Greenhouse Gas Reduction Fund (award #SCA05056) and allocations from the California legislature. The Fire Team works with California residents, landowners, agencies, local governments, tribes, and other organizations to advance California's fire adaptation and resilience at all levels.

Fire Team Strategic Goals

- Empower use of prescribed fire to reduce fuels and restore ecosystem function.
- **Implement various fuel reduction strategies** to improve treatment efficacy and reduce ecosystem impacts.
- Incorporate home hardening techniques to build and retrofit homes for improved wildfire resilience.
- Incorporate defensible space standards to reduce "near home" fire vulnerabilities.
- **Engage with local planners** to support wildfire resiliency and best management practices.

Meet Our Team of Fire Advisors and Key Staff

UC Cooperative Extension's Fire Team adds to and complements the UC Division of Agriculture and Natural Resources (UC ANR)'s existing network of forest and natural resources advisors and specialists that are distributed throughout California, bringing new talent in wildland ecosystem stewardship, community fire adaptation, and the built environment.

* Team members who are partially or wholly financially supported by the California Greenhouse Gas Reduction Fund Award #SCA05056.

*Lenya Quinn-Davidson, Director

Serving California, based in Humboldt County



Lenya Quinn-Davidson is a Fire Advisor and the Director of UC ANR's Fire Network. Over the last 15 years, Lenya's work has centered on the human connection with fire, and empowering fire-resilient communities and landscapes. Lenya works on prescribed fire issues at various scales, including locally with private landowners in Humboldt to put good fire back on the land; at the state level, where she collaborates on prescribed fire-related policy and research, and helps mentor prescribed burn associations; and nationally,

through her leadership on prescribed fire training exchanges (TREX). As Network Director, she aims to better support fire academics and practitioners, both within UC ANR and across geographies, partnerships, and fields.

*Katie Low, Coordinator

Serving California, based in Placer & Nevada Counties



Katie Low is the Statewide Coordinator of UC ANR's Fire Network. Katie works with the Network to deliver fire-related extension programs and educational materials to communities and professionals across California. She collaborates with regional Advisors and partners to deliver science-based workshops around fuel reduction treatments and wildfire preparedness to communities in Placer and Nevada Counties. She researches fuel treatment efficacy including prescribed fire, thinning, and grazing in the Sierra Nevada.

Alison Deak, Fire Advisor

Fresno, Madera, & Mariposa Counties



Alison Deak is a Fire Advisor based in Mariposa County. Alison leverages her prior experience as a wildland firefighter and a fire scientist to build a critical regional research and extension program centered around prescribed fire and wildfire preparedness. She researches fuel treatment efficacy in her region and evaluates the fire-related needs of residents and community fire groups across the state and nation. Alison works with local fire practitioners to provide prescribed fire trainings through the Yosemite Gateway Prescribed Burn Cooperative.

*Tori Norville, Fire Advisor

Marin, Napa, and Sonoma Counties



Tori Norville is a Fire Advisor serving communities and regional partners in the North Bay. She is a registered professional forester who is building a research and extension program emphasizing vegetation management and land stewardship. Her research currently involves assessing the efficacy of fuel reduction treatments in oak woodland and redwood forest ecosystems. Through the delivery of science-based trainings and workshops, Tori is encouraging residents and professionals to be more familiar with fire as a stewardship tool, educating them about fire-smart landscaping strategies, and increasing community fire science literacy.



Barb Satink Wolfson, Fire Advisor Monterey, San Benito, Santa Clara, & Santa Cruz Counties



Barb Satink Wolfson is a Fire Advisor based in the Central Coast Region. Barb brings 20 years of experience in fire, including science communication and research. She aims to reduce wildfire risk to Central Coast communities and ecosystems through a robust research program focused on prescribed fire effects monitoring and post-wildfire impacts and regular outreach events centered on building regional prescribed fire workforce capacity with the Central Coast Prescribed Burn Association. Barb is also actively engaging with fire-related workgroups at the county, regional, and national levels.

*Yana Valachovic, Forest Advisor

Humboldt & Del Norte Counties



Yana Valachovic is the County Director and Forest Advisor in Humboldt and Del Norte Counties. She is a registered professional forester and forest scientist whose skills and interests cover a broad set of natural resource fields with a strong focus on wildfire mitigation and resilience. Yana has over 20 years of experience rooted in county government and community engagement. She works at many scales and has roles in the State's Wildfire Forest Resilience Taskforce, the Wildfire Mitigation Committee, and the Risk Modeling Committee. She brings key insights into building and landscaping design and

maintenance that make a difference in building survivability and property protection. For the Fire Network, she serves as the team's lead on built environment topics.

*Cleo Woelfle Hazard, Fire Advisor

Humboldt & Del Norte Counties



Cleo Woelfle Hazard began serving as Fire Advisor in January 2024. His research and extension programs focus on climate resilience (including working with climate modelers to understand future vegetation patterns under different prescribed burning scenarios), cultural burning, and fire-water interactions, and training a diverse fire workforce. Previously, he was an Assistant Professor in the School of Marine and Environmental Affairs at the University of Washington, Seattle, where he developed and taught courses to undergraduate and graduate students, delivered in-person and online courses

using Canvas and other learning management systems, and conducted numerous workshops for the public on river health and water quality. Cleo holds a bachelors degree in interdisciplinary geosciences from the University of Montana and a masters and PhD degree in Energy and Resources from UC Berkeley.

*Luca Carmignani, former Fire Advisor Los Angeles, Orange, Riverside, & San Diego Counties



Luca Carmignani is the former Fire Advisor based at the South Coast Research and Extension Center from 2022-2024. He works to improve fire resilience for communities through home hardening, defensible space, and collaborations with other regional fire agencies, organizations, and universities. His research program focuses on understanding plant flammability, specifically, the effects of irrigation and other growing conditions on the fire behavior or native and ornamental plants in southern California. Luca delivers trainings and workshops to communities focusing on home hardening, implementing defensible space, and improving building fire resistance.

Note: we are currently in the process of refilling the Southern California Fire Advisor position.



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Understanding Fire-Related Needs in California

In 2023, Fire Network members conducted a survey to understand the wildfire-related needs of communities throughout California and inform the strategic development of programming through the Fire Network. The Team surveyed 1,084 California residents and natural resource professionals between January and June 2023. The Team asked respondents questions about their wildfire-related concerns and experiences, the actions they have taken to mitigate and prepare for wildfire, and the barriers they perceive to taking action.

TOP WILDFIRE RELATED CONCERNS

of 719 California Residents

AFFORDABLE FIRE selected INSURANCE OPTIONS

COMMUNITY WILDFIRE MITIGATION AND/OR HAZARD REDUCTION

selected

EMERGENCY PREPAREDNESS AND **EVACUATION**

of 357 Natural Resources Professionals in California

COMMUNITY WILDFIRE MITIGATION AND/OR HAZARD REDUCTION

INCREASED WILDFIRE RISK DUE TO FUELS BUILDUP

BARRIERS TO PRESCRIBED FIRE

When asked about barriers to implementing necessary home hardening measures, residents reported that cost was the primary concern (70%). Twenty-six percent of residents reported getting their home hardening information from UC Cooperative Extension. When asked about fuels reduction and prescribed fire, 82% of residents reported completing fuel reduction work on their properties; however, cost (51%), time (40%), and lack of technical knowledge and resources (36%) continue to be barriers to implementing or maintaining fuels reduction work.

Resources that respondents reported would make them more likely to conduct a prescribed fire (n=274)



HELP PREPARING PROPERTY



TRAINING



CLARITY ON RELEVANT LAWS



INFO ABOUT PLANNING & IMPLEMENTATION & LIABILITY



HELP NAVIGATING PERMITTING PROCESS



PREFERENCES FOR ENGAGEMENT

of 682 California Residents

WATCHING

SHORT **VIDEOS**

WEBINARS

IN-PERSON WORKSHOPS of 342 Natural Resources Professionals

IN-PERSON WORKSHOPS

PROPERTIES

FIELD TOURS TO LOCAL

WEBINARS

These results highlight the importance for the Fire Network to continue providing community education and trainings to residents and resource professionals to assist them in implementing science-based fire resilience projects on their properties and within their communities.

Program Themes

Empower use of prescribed fire to reduce fuels restore ecosystem function.

The Team is working locally to build community capacity around prescribed fire by providing workshops and hands-on, live-fire trainings and supporting and formalizing Prescribed Burn Associations (PBAs). Team members also work regionally and across the state to support policy development for prescribed fire. The Team is also conducting prescribed fire research to help answer critical fire science questions to support the restoration and management of fire-adapted landscapes.

Key Accomplishments

Selected Research Projects

- Can you practice pyrosilviculture in the redwoods? Tori Norville is collaborating with UCCE
 Advisors on a research project to determine if fire can be used as a management tool for timber
 species in the coast redwood and Douglas-fir mixed forest types. This project will introduce fire to
 a stand pre-harvest in the hopes that trees will express vulnerabilities to fire; those trees will then
 be harvested, leaving the residual stand with trees that are more fire-resilient.
- Documenting the formation, accomplishments, and challenges of establishing Prescribed Burn
 Associations (PBAs) Alison Deak and Lenya Quinn-Davidson are collaborating with extension
 colleagues across the nation to understand the formation, structure, goals, accomplishments, and
 challenges of PBAs across the United States. This research provides valuable insight into the
 growing number and broad spectrum of PBAs and the critical work they are doing to increase the
 application of beneficial fire. Results will inform the development of future PBAs as stakeholders
 increasingly seek to apply the PBA model to increase the application of community-led prescribed
 fire. Alison Deak gave multiple presentations on project results to national audiences.
- Can technology help us remove invasive grasses? Luca Carmignani participated in Burnbot research trials on the Cleveland National Forest in April 2024. Project goals are to determine if Burnbot can remove invasive grasses.

Policy Development and Implementation

- California launches first-of-its-kind Prescribed Fire Claims Fund Lenya Quinn-Davidson helped lead the policy group that designed and executed SB 926, which fills the insurance gap for prescribed fire and cultural fire practitioners. The Fire Network hosted a public webinar, led by Quinn-Davidson and colleagues, to introduce the Claims Fund and review enrollment processes. In 2024, the Claims Fund resulted in conversations with private insurers around the development of policies to provide additional coverage for prescribed fire.
- California State-Certified Burn Boss Program Lenya Quinn-Davidson served on the curriculum development committee that designed the state's burn boss program. Over the last several years, UC ANR has been instrumental in advocating for and advancing the program, hosting the CARX course, and bringing in grant funding to provide pre-requisites and training opportunities. In the three years since the program's inception, California has certified 45 burn bosses, and approximately 100 more people are in the process of certification.



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Trainings and Workshops

- Women-in-Fire Training Exchange (WTREX) Program Lenya Quinn-Davidson is the Director of
 the WTREX program, which provides intensive, 2-week training opportunities centered on women
 and other under-represented fire practitioners (but including men, too). This program started in
 northern California, but has grown nationally and even internationally, with the support and
 partnership of The Nature Conservancy, federal agencies, and other local and non-governmental
 organizations. From 2022-24, the program offered trainings in Virginia, North Carolina, Nebraska,
 South Africa, Canada, and Portugal, and partnered with the Karuk Tribe on two Indigenousfocused events in northwestern California.
- Training CAL FIRE employees on the use of prescribed fire Tori Norville organized a training for CAL FIRE's Mendocino Unit in Spring 2024 where she covered the ecological benefits and application of prescribed fire in rangelands and oak woodlands.
- Increasing opportunities for historically underrepresented communities in fire Katie Low coorganized the Foothill Fire Practitioner Workshop with UCCE colleagues and the Placer RCD to give community members the opportunity to practice preparing units for broadcast burning in 2023. This workshop allowed folks who identified as women, nonbinary, trans, femme, Black, Indigenous, People of Color more opportunity to engage with prescribed fire.
- Helping residents prepare burn units Cleo Woelfle Hazard collaborated with local cultural burners to host a workshop where participants prepared an 8-acre unit for fall broadcast burning. This coming fall, Woelfle Hazard will host live fire trainings for members of the queer community in September - October 2024 to get workshop participants experience with applying broadcast burns in various ecosystems. Cleo and collaborators are planning an associated webinar series, which is expected to reach 125 participants.



Building Capacity of Local Prescribed Burn Associations (PBAs)

- Mentoring and providing resources to California's PBAs and community-based prescribed fire groups Lenya Quinn-Davidson works closely with PBA leaders throughout the state, providing networking and training opportunities. She has also provided specialized training for volunteer fire departments and PBA members in Humboldt County. In 2023, Lenya successfully brought \$200,000 in grant funding to support UC ANR-led PBAs in California. With this funding, the UC ANR Fire Network has been able to host statewide PBA Leaders' Retreats, which enable crosstraining, connection, and shared learning among the state's PBA leaders.
- Facilitating connections between PBAs at the national level Alison Deak and Lenya Quinn-Davidson co-organized virtual information meetings for PBAs at the national scale to meet and share updates about PBAs in their region.
- Central Coast PBA Barb Satink Wolfson co-led the Central Coast prescribed fire training
 exchange (TREX) in 2023. During the TREX, she led a tour during firing operations for local media
 and the public. The TREX resulted in 28 people increasing their fire qualifications. Satink Wolfson
 co-organized the first Foresters TREX with the CCPBA June 3-6, 2024. Over 50 forestry
 professionals learned how to apply prescribed fire in a timber-based redwood forest.
- Humboldt County PBA Lenya Quinn-Davidson co-founded and continues to serve on the Board
 of the Humboldt County PBA, which was California's first PBA in 2017 and inspired many of the
 groups that have developed since then.
- Napa and Solano PBAs Tori Norville is working in collaboration with local partners to formalize
 the two PBAs in the region. In addition to building membership, Tori is hosting events for PBA
 members, including a tri-county 'Firelighter' training in August 2024, which aims to equip
 members with the knowledge to be prepared for fall and winter burning.
- Yosemite Gateway PBA Alison Deak secured \$800,000 in grant funding to support a full-time coordinator in 2024 and to support PBA activities and trainings. As Coordinator in 2023, Deak conducted 25 site visits with landowners and agencies to prepare properties for prescribed fire and implemented 27 acres of broadcast and pile burning in Mariposa and Madera Counties. In December 2023, Deak organized a two-day Learn and Burn Workshop where 44 participants learned about fire ecology, prescribed burn planning and permitting, liability, and landowner resources. Participants, a third who had no prior prescribed fire experience, received handson experience conducting prescribed burns.
- UC ANR advisors and staff support many other established and newly developing PBAs throughout California, including in Mendocino, El Dorado, Placer, Plumas, Santa Clara, Los Angeles, and San Diego counties.



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Agriculture and Natural Resources

■ Fire Network

Implement fuel reduction strategies to improve treatment efficacy and reduce ecosystem impacts.

Fuel reduction and vegetation management is essential for protecting communities and restoring fire-adapted ecosystems. Team members are working to test treatment alternatives and understand real-world limits to treatment performance in different ecosystem types. The Team also provides workshops to help landowners across the state on how to apply science-based management practices and connect with local fire and natural resource professionals who can help implement these treatments.

Key Accomplishments

Selected Research Projects and Publications

Shaded fuel breaks create fire-resilient forest stands – Katie Low and colleagues published an
article assessing the long-term (20-year) impacts of fuel treatments on forest structure and
impacts of wildfire on subsequent treatment efficacy.

Low et al. (2023) Shaded fuel breaks create wildfire-resilient forest stands: lessons from a long-term study in the Sierra Nevada. Fire Ecology 19:29. https://fireecology.springeropen.com/articles/10.1186/s42408-023-00187-2

- Permitting fuel reduction projects can be challenging. Yana Valachovic and colleagues published
 a guide to help landowners and project proponents navigate CEQA. The publication scales from
 single-property projects to community-scale, multi-jurisdiction forest fuel reduction projects.
 - Valachovic et al. (2022) Planning and permitting forest fuel-reduction projects on private lands in California. UC ANR Publication 8716. https://anrcatalog.ucanr.edu/pdf/8716.pdf.
- Understanding decay rates and fire behavior in redwood forests Tori Norville was awarded a \$91,000 grant from the Effectiveness and Monitoring Committee of the California Board of Forestry and Fire Protection to study woody debris decay rates and their impacts on fire behavior. Monitoring is currently underway with plans to implement experimental prescribed fire treatments in Fall 2024.
- Assessing the efficacy of targeted grazing Katie Low, UCCE Advisors, and Specialists are
 studying the efficacy and commercial viability of targeted grazing for fuels reduction. Through
 experimentally applying small ruminant (goat and sheep) grazing on over 50 acres of young
 conifer plantations, Low and collaborators hope to compare the impacts of grazing to traditional
 site preparation and release treatments (i.e., herbicide). In 2024, they were awarded a \$75,000
 grant from WSARE to continue this project and have since hosted 5 field tours and produced
 numerous factsheets from their findings.
- Studying the impacts of fire and fire surrogate treatments in redwood forests Tori Norville is a
 member of a collaborative research project with CAL FIRE, UCCE Specialists and Advisors, and Cal
 Poly Humboldt. In Summer 2023, 366 acres of mechanical and hand thinning treatments were
 implemented with follow-up surface fuel treatments expected to be implemented in 2024.
- Assessing best ways to remove eucalyptus Tori Norville is starting a new project in
 collaboration with the San Rafael Fire Department to determine how to control eucalyptus
 sprouts with herbicide treatments after larger stems have been removed.



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Trainings and Workshops

- Hosting multi-age silviculture tours Yana Valachovic, Tori Norville and colleagues hosted the 5th Multi-aged Forestry Working Group field tour in June 2024 on the Jackson Demonstration State Forest (JDSF) for a technical audience of Registered Professional Foresters. The tour had over 60 participants and focused on utilizing prescribed fire in multi-aged stands within the Coast Redwood Forest. The tour highlighted the prescribed fire work that JDSF has been conducting over the last few years, as well as UCCE research into pyrosilviculture that has been occurring around those burns. Yana Valachovic and other UCCE colleagues hosted the 4th Multi-aged Silviculture tour in June 2023, which focused on redwood post-fire recovery and fuels management following the CZU fire in the Santa Cruz mountains. 70 foresters were in attendance.
- Leading critical skills-based trainings Alison Deak organized an S212 chainsaw certification at
 the Yosemite Adult School. After the training, Deak supervised training participants to conduct
 two acres of thinning treatments across four properties. Deak also plans on hosting a women's
 specific chainsaw training in collaboration with The Nature Conservancy and Sierra Foothills
 Conservancy in fall 2024.
- Educating the public about the benefits of fuel treatments Tori Norville presented on fuel
 treatment benefits at the Ecologically Sound Practices Group Meeting in Marin County. Norville
 also gave a similar lecture to students at Santa Rosa Junior College and Fire Foundry participants
 enrolled in the Frontiers of Fire Program.
- Continuing to educate residents on pile burning Alison Deak reached 26 people and treated 9.5
 acres over the course of three pile burning workshops with the Yosemite Gateway PBA. Tori
 Norville reached 18 people through a pile burning workshop in collaboration with Circuit Riders.
- Educating our UC Master Gardener Community Alison Deak led a Master Gardener Training about fire behavior and fuels reduction techniques.
- Coming together to educate forest landowners on wildfire preparedness In collaboration with
 the UCCE Forest Stewardship Program, the Fire Network co-sponsored the first ever 2024
 California Tree School sessions in both Hopland and Placerville. Alison Deak and Katie Low cofacilitated a course on residential pile burning in Placerville. Deak and Yana Valachovic also
 presented about permitting fuels reduction projects while Low presented on home hardening and
 defensible space strategies.



Fire Network Offers First Statewide Webinar on Pile Burning

In January 2023, all Fire Network Members hosted a virtual webinar for 406 landowners across California to learn more about residential burn pile construction, safety and liability considerations, and permitting requirements. The webinar was followed up by 9 local field trips hosted by Fire Team Members in 7 different counties.

The Fire Network also produced a series of digital content related to residential pile burning for residents, which can be viewed here: https://ucanr.edu/sites/fire/RXFire/Pile_Burning/.

Incorporate home hardening techniques to build and retrofit homes for improved wildfire resilience.

Team members work with the Insurance Institute for Business and Home Safety, the California Board of Forestry and Fire Protection, the California Office of the State Fire Marshall, the California Department of Insurance, United Policy Holders, Office of Planning and Research, Fire Safe Councils, UC Master Gardeners, and others in California to host science-based workshops and trainings, help support broad-scale action, policy development, and funding allocations. Team members are actively involved in post-fire reviews to help understand building vulnerabilities and the performance of building codes.

Key Accomplishments

Selected Research Projects

Assessing home survival following the 2018 Camp Fire study – Yana Valachovic published a
paper outlining which housing arrangement and vegetation factors were associated with home
loss and survival.

Knapp et al. (2021) Housing arrangement and vegetation factors associated with single-family home survival in the 2018 Camp Fire, California. Fire Ecology 17: 25. https://doi.org/10.1186/s42408-021-00117-0.

Trainings and Educational Materials

- Hosting science-based home hardening trainings for local communities.
 - Barb Satink Wolfson hosted a workshop in Aromas where she introduced home
 hardening example materials, discussed defensible space strategies, and led a work party
 at a disabled community member's home.
 - Katie Low reached over 120 residents through hosting several wildfire preparedness workshops targeting firewise communities, Master Gardener programs, and Fire Safe Councils in the Sierra Foothills.
 - Tori Norville hosted a home hardening booth at the Napa Fire Resource Fair where she introduced home hardening example materials and foundational fire ecology concepts.

Helping California's Farmers and Ranchers Prepare for Wildfire

Recognizing the need to help California's agricultural communities and businesses prepare for wildfire, Luca Carmignani, Katie Low, and Tori Norville collaborated with Network members on a number of extension documents outlining best practices for applying principles of structure hardening and defensible space to agricultural operations. In May 2024, Carmignani and Yana Valachovic hosted a statewide ranch hardening webinar, which reached over 100 backyard and commercial livestock owners. The Network also collaborated with UCCE Livestock and Natural Resources advisors to host a follow up webinar on managing livestock health during wildfire evacuations; this webinar reached over 100 people from across the western US. Katie Low and Tori Norville each hosted in-person trainings and field tours around ranch hardening. Low and Norville also coauthored popular press articles around this topic to extend fire preparedness information to agricultural communities. Wildfire preparedness for farms, ranches, and agricultural operations documents can be viewed here: https://ucanr.edu/sites/fire/Preparedness/Preparing Your Farm or Ranch/.



UNIVERSITY OF CALIFORNIA Agriculture and Natural Resources

- Training the trainer Luca Carmignani hosted home assessment trainings for staff of the Inland Empire and Greater San Diego RCDs. Since the completion of the trainings, RCD staff in San Diego have assessed more than 280 homes and helped residents improve their wildfire preparedness.
- Yana Valachovic taught home hardening classes and trainings for the state Fire Safe Council, Mendocino Fire Safe Council, Marin Fire Safe, Sonoma Fire Safe, Master Gardener programs around the state, WUI Conference, Quincy Fire Safe Council, California Fire Science Consortium, Humboldt County Fire Safe Councils, Shasta RCD, Humboldt RCD, Sacramento Valley RCDs throughout 2022 and 2023.
- New home hardening digital content has reached 1000's of people Luca Carmignani created
 various digital materials (videos, infographics, etc.) to educate residents on home hardening and
 wildfire preparedness. Carmignani worked with agencies to produce video tutorials to learn how
 to harden structures.
- Master Gardeners (MG) receive targeted trainings.
 - Luca Carmignani and Yana Valachovic delivered two presentations and two workshops at the 2023 State MG Conference, inspiring attendees and MG coordinators around the state to help understand how landscaping can be designed to mitigate oncoming wildfires and create property resilience.
 - Alison Deak, Katie Low, and Luca Carmignani led home hardening and wildfire preparedness trainings for MG volunteers in their areas.
 - Lenya Quinn-Davidson, Yana Valachovic, and other Network members are helping revamp the statewide MG curriculum to help California's residents prepare for wildfire and adopt Zone Zero.
- Yana Valachovic and Katie Low developed resource kits for the Fire Network team to help support home-hardening outreach and demonstrations. These kits include vents and other Chapter 7A building materials.

Fire Network Rolled Out Wildfire Preparedness Workshop Series

In 2023, Fire Network Members collaboratively hosted a series of events centered around home hardening, defensible space, and wildfire preparedness. Event types ranged from presentations to local Board of Supervisors, conversations with local contractors associations, and public workshops at local restaurants. Yana Valachovic reached 290 people through 14 events in collaboration with local partners in Inyo and Mono Counties. Valachovic and Alison Deak collaborated on 7 events in Mariposa County, reaching 46 residents and professionals. Valachovic and Katie Low delivered another set of events in Placer and Nevada Counties, where they reached 140 residents through 4 events. Team members established new relationships with contractors, realtors, and insurance agents, who are nontraditional clientele for UCCE academics. The demand for these events statewide underscores the need for Fire Team members to continue collaborating on similar events to deliver to clientele across California. Yana Valachovic continued this work into 2024.



Incorporate defensible space standards to reduce "near home" fire vulnerabilities.

Defensible space implementation is a key component of community fire protection. Aligning California's defensible space guidance and regulations requires all hands-on-deck. The Fire Team is developing and leading workshops focused on implementing defensible space standards to reduce fire risk. Team members are also researching the flammability of common plants. Members are also contributing to defensible space regulations through the development of Zone Zero with the Board of Forestry and Fire Protection and the Office of the Fire Marshal.

Key Accomplishments

Selected Research Projects

- Evaluating the effects of irrigation on plant flammability Luca Carmignani led a study assessing
 how different environmental factors impact the flammability of native and ornamental plants
 commonly found in southern California. In 2023, Carmignani received \$10,000 to fund this
 research. Preliminary burn trials were conducted in 2023 with the full range of experiments
 occurring in 2024 following the construction of a novel experimental setup.
- Testing messaging for the rollout of Zone 0 Yana Valachovic worked with the CAL FIRE communications team and UC ANR's Master Gardener program and surveyed 13,000 past graduates of the program to test what messages best resonated with this audience to help inform the developing educational campaigns. Over 1000 people responded. These messages are being incorporated into the Zone Zero educational campaign for the Board of Forestry and Fire Protection, scheduled to launch in Fall 2024.
- Impacts of vegetation and landscaping on fire risk reduction study Yana Valachovic and colleagues published guidance about how defensible space actions prevent building loss and distributed the guide in 2022.

Valachovic et al. (2021) Reducing the vulnerability of buildings to wildfire: vegetation and landscaping quidance. UC ANR Publication 8695. https://anrcatalog.ucanr.edu/pdf/8695.pdf



Community-Based Trainings and Workshops

- Revamping a defensible space demonstration garden Barb Satink Wolfson revived an ongoing
 partnership with the Santa Clara County Master Gardeners and CAL FIRE's Santa Clara Unit to
 update an existing "defensible space demonstration garden" in Morgan Hill. The updated garden
 will incorporate Zone Zero, illustrate current best practices, and be used for defensible space
 education events by regional partners once complete.
- Educating residents through demonstration Cleo Woelfle- Hazard implemented defensible space treatments at Fancyland and trained workshop participants on the principles and practices of defensible space maintenance.
- Educating residents about Firewise Community status Alison Deak hosted a webinar about Firewise Community recognition for members of the Yosemite Gateway Prescribed Burn Association.
- Collaborating with local organizations to implement defensible space treatments Alison Deak
 collaborated with Mariposa County to host the Americorps NCCC Crew to complete local fire risk
 reduction and beautification projects. Deak oversaw the crew implement defensible space
 treatments and clearing evacuation zones for low-income, elderly, and disabled residents.
- Educating landscapers Tori Norville hosted a training for 40 landscaping professionals on firewise landscaping in collaborating with the Habitat Corridor Project and the Marin County Fire Department. Participants learned about fire behavior, defensible space, lessons learned from other landscape architects, and more.
- Sharing how principles of defensible space apply to agricultural operation Luca Carmignani
 delivered wildfire preparedness trainings to farmers and ranchers at workshops in collaboration
 with the Community Alliance of Family Farmers and the California Small Farms Conference.
- Delivering critical defensible space trainings to other UC colleagues Luca Carmignani and Tori
 Norville co-lead a workshop for 150 UC Master Gardener (MG) volunteers in the North Bay
 focused on implementing a successful defensible space strategy, plant and mulch flammability
 and fundamental principles of fire ecology.
- Leveraging local partnerships to expand defensible space treatments Alison Deak collaborated
 with an AmeriCorps NCCC crew based in Mariposa County and the Mariposa Fire Safe Council to
 expand defensible space treatments for low-income, elderly, and disable residents in Mariposa
 County.

UC's Defensible Space Research Makes National News

In November 2023, Luca Carmignani was featured on Good Morning America. Luca and colleagues at UC Irvine were invited to share their research on plant flammability and even do some test burns on live television. Carmignani was able to demonstrate that removing invasive grasses and maintaining native vegetation are critical ways residents can prepare for wildfires.





Engage with local planners to promote wildfire resiliency and best management practices

Land use planners can influence the design, layout, and placement of homes built in wildfire-prone areas through zoning, general plans, the adaptation of building codes, and safety elements. The Team is engaging with local governments, state and local policymakers, and local, regional, and state committees to help bring the best science-based guidance to these crucial conversations.

Key Accomplishments

Wildfire Preparedness and Planning Projects

- Creating a forest management plan for Sonoma County Tori Norville organized a community
 meeting with Fire Safe Sonoma and the Gold Ridge RCD to help landowners create a joint forest
 management plan for the Bohemian Corridor in Sonoma County.
- Developing a regional prioritization plan for San Benito County Barb Satink Wolfson helped secure \$758,000 to update San Benito County's Community Wildfire Protection Plan, develop fuel reduction project plans, and fund two positions at local partner organizations in 2023.
- Promoting forestry vegetation management in Sonoma County Tori Norville co-lead the Sonoma Forest Conservation Workgroup Meeting in June 2023. Over 120 landowners received training and guidance on how to manage vegetation, reduce fuels, and steward their forestlands.
- Advising the Risk Modeling Advisory Workgroup Yana Valachovic's technical expertise supported the Risk Modeling Advisory Workgroup final report in 2023 (pending state approval) focused on modeling the risk to structures and communities.

Engaging with Policy Makers and Other Professionals

- Hosted a field tour to introduce state legislators to the Fire Network Lenya Quinn-Davidson and Katie Low organized a field tour for California legislators and staff at UC's Blodgett Forest Research Station to highlight ongoing fire-related research projects from Network members.
- Organized a field tour to showcase the benefits of prescribed fire Alison Deak organized a field tour during the California Civic Leadership Institute High Sierra Workshop showcasing the benefits of prescribed fire and the importance of local PBAs for facilitating this work. Deak also presented on the Fire Network, prescribed fire policy, and community-led burning to political candidates.
- Engaging with insurance agents Alison Deak organized a webinar with insurance agents so local residents could discuss issues related to fire insurance in California. Yana Valachovic has given numerous talks to insurance agents and real estate agents about the state's insurance challenges and the importance of being an early adopter of Zone 0 and home-hardening actions.



Providing Leadership Roles in Local, Regional, and State Planning

- Luca Carmignani is a member of the County of Orange Area Safety Taskforce and Community
 Alliance with Family Farmers Advisory Council Member.
- Alison Deak is the Secretary for the Mariposa Fire Advisory Committee and Member of the Eastern Madera County Fire Safe Council. Nationally, Deak is on the Leadership Committee for the Association of Natural Resources Extension Professionals National Extension Wildland Fire Initiative
- Tori Norville is a member of the Marin Wildfire Prevention Authority Advisory Board and Sonoma County's Vegetation Management Technical Advisory Board. Norville was also instrumental in forming the Marin Prescribed Burn Cooperative - a regional group aimed at increasing communication and collaboration among agencies working on prescribed fire projects in Marin County.
- Lenya Quinn-Davidson serves on many state-commissioned committees and advisory groups, including the Wildfire Mitigation Advisory Committee, and the Governor's Wildfire and Forest Resilience Task Force's (WFRTF) Science Advisory Panel and the Prescribed Fire Subgroup. Quinn-Davidson is the Director of the Northern California Prescribed Fire Council, Chair of the Humboldt County Fire Safe Council, and the lead of the council's Beneficial Fire Working Group. She is also newly serving on the Board of the Association for Fire Ecology.
- Barb Satink Wolfson is a Steering Committee Member for the Western Region of the National Cohesive Wildland Fire Management Strategy via the Wildland Fire Leadership Council. She is also a member of the Southwest Fire and Climate Adaptation Partnership and the Diversity and Inclusivity Committee for the Association for Fire Ecology.
- Yana Valachovic works at the state level with the Wildfire Forest Resilience Task Force (WFRTF), serving three committee roles (Science Advisory, Small Landowner, and Fire Adapted Communities) and is on the Wildfire Mitigation Advisory Committee and Risk Modelling Committee. She is the co-chair of the Board of Forestry's Zone 0 workgroup. She gave two plenary presentations to the WFRTF in 2023. She also worked extensively with planners with the Association of Bay Area Governments, Portola Valley city staff, San Matteo County Fire Prevention officers, and supported the League of Cities in their 2022 annual Protecting your City from Statewide Wildfire Conference and in the 2023 Redwood Regional meeting. In 2021, she spoke at the CSAC annual meeting about land use planning in the Wildland Urban Interface.



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Other Key Accomplishments

The Team has also made great strides in other thematic areas including workforce development and fire science, management, and policy education.

Developing a qualified workforce and promoting a restoration economy.

Developing and retaining a qualified workforce is a critical and well-recognized need to achieve California's fire adaptation and resilience goals. Team members are researching current and ongoing barriers and challenges to maintaining a robust workforce in order to make recommendations for employers and policymakers. Members host critical community workshops and events that promote greater fire science literacy and planning and also inspire the next generation of fire professionals.

Research

Understanding the scope and scale of labor-intensive forestry contracts – Alison Deak published
an article documenting the extent of labor-intensive contracts performed on National Forests and
the potential implications it has for the workforce and its relationship to marginalized populations
in 2023.

Deak, A., H. Huber-Stearns, M. Crandall, K. Poudel, E.J. Davis, M.R. Coughlan, C. Wilmsen. 2023. Documenting twenty years of the contracted labor-intensive forestry workforce on national forest system lands in the United States. Journal of Forestry, fvad026. https://doi.org/10.1093/jofore/fvad026

Determining fire and forestry workforce barriers for justice-impacted individuals in California –
Katie Low and colleagues are researching the best ways agencies can best support justiceimpacted individuals pursuing careers in fire or forestry. Interviews of individuals who identify as
justice-impacted or formerly-incarcerated and fire and forestry professionals were conducted in
2023. Results as well as hiring recommendations are anticipated in Fall 2024.

Community Education

- Helping tribal members plan for climate change and wildfire Barb Satink Wolfson co-hosted
 the Fire and Climate Change Adaptation Planning for Tribes Workshop on the Central Coast
 alongside local tribal leaders, the Climate and Wildfire Institute, and the Institute for Tribal
 Environmental Professionals in 2023.
- Fire Ecology and management in oak woodlands youth-focused education program Tori
 Norville organized and led two workshops in 2023 for youth in Marin and Sonoma Counties. The
 Fire Science and Fire Career Workshop for Teens featured content about home hardening,
 defensible space, and vegetation management.
- Women-in-Fire Training Exchange (WTREX) Program Lenya Quinn-Davidson leads an
 international fire training program focused on women and other under-represented groups, in
 partnership with The Nature Conservancy and other partners. In 2023, WTREX trained more than
 150 practitioners from 20 countries and 5 continents, with events in North Carolina, South Africa,
 and Canada. The first two WTREX events (2016 and 2017) were hosted by Lenya in California, and
 many Californians participate in these events.

Cross-training and mentoring staff from partner organizations – Yana Valachovic trained
Resource Conservation District employees across the state to conduct home inspections. She also
engages with the cohort of California Fire Safe Council Coordinators, providing extensive
mentoring and support for the three new coordinators in Inyo and Mono Counties. As of June
2024, the Mariposa RCD had conducted 130 home assessments, and 50 homeowners are
scheduled for this fall. Valachovic's training has provided critical support to this region to help
residents address home hardening and defensible space implementation.

Making fire science, management, and policy education available for all.

Ensuring all people have access to the latest fire ecology and management-related research is fundamental to getting residents and communities onboard with adopting fire-resilient practices. Our Team actively engages with professional organizations, residents, and communities to disseminate novel applied fire science with the goal of inspiring residents and professionals to apply science-based management strategies in their region.

Sponsoring the 10th International Fire Ecology and Management Congress

• The UC ANR Fire Network was a major sponsor of the Association of Fire Ecology's 10th International Fire Ecology and Management Congress in December 2023. As Co-Chair of the Congress, Fire Network Director, Lenya Quinn-Davidson, was closely involved with securing the historic sponsorship from UC ANR as well as the development and planning of all aspects of the event. Barb Satink Wolfson was involved with the Diversity, Equity, and Inclusion Committee for the event and helped organize and encourage local tribal participation in the Congress. Most Team members attended the 4-day Congress with thousands of other fire scientists and practitioners from around the world. Alison Deak, Katie Low, and Lenya Quinn-Davidson all presented their recent work during the Congress as well.

Hot Topics in Fire Science and Stewardship Webinar Series

- Bringing the latest in fire science and management to all The UC ANR Fire Network hosted a series of webinars to hundreds of residents and resource professionals featuring the following talks:
 - Restoring fire to meadows and other cultural landscapes Barb Satink Wolfson and Cleo Woelfle Hazard organized this session featuring Alice Lincoln-Cook from the California Indian Basketweavers Association and Brian Peterson from Fire Forward.
 - How can we assess plant flammability? Luca Carmignani organized this session featuring Dr. Jane Cawson from the University of Melbourne and Dr. Max Moritz, UCCE Wildfire Specialist and Professor at UC Santa Barbara.
 - Nuances in fire history and management: lessons from Oregon Alison Deak and Yana Valachovic organized this session featuring Dr. Andrew Merschel from the US Forest Service Pacific Northwest Research Station and Dr. Chris Dunn from Oregon State University.
 - Forestry and fuel profiles Katie Low and Tori Norville organized this session featuring
 Don Radcliffe from the University of Washington and Dr. Eric Knapp from the US Forest
 Service Pacific Southwest Research Station.

Since 2021, the UC ANR Fire Network is active at local, regional, statewide, and national scales and is growing.



212 trainings and workshops taught



14,750 people reached through events

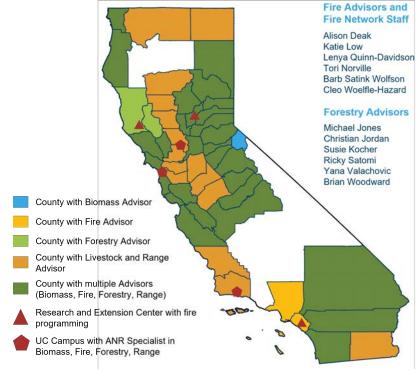


102 media engagements



150 partner organizations

The UC ANR Fire Network is amplifying and expanding fire programming statewide in partnership with existing UC ANR Advisor and Specialist Networks.



Biomass Advisors

Cindy Chen Haris Gilani

Livestock and Range Advisors

Shelia Barry
Theresa Becchetti
Josh Davy
Morgan Doran
Royce Larsen
Stephanie Larson
David Lile
Dan Macon
Fadzayi Mashiri
Chris McDonald
Devii Rao
Tracy Schohr
Laura Snell
Jeff Stackhouse
Grace Woodmansee

ANR Specialists

Van Butsic (Land Use at UCB)
Nina Maggi Kelly (GIS at UCB)
Paul Mayencourt (Wood Products at UCB)
Max Moritz (Fire at UCSB)
Leslie Roche (Range at UCD)
Dan Sanchez (Biomass at UCB)
Kristen Shive (Forestry and Fuels at UCB)
Robert York (Forestry at UCB)

For more information about **UC ANR Fire Network**, visit our website: https://ucanr.edu/sites/fire/.

