

# Forestland Steward

Forestland Steward is a joint project of CAL FIRE, Placer County Resource Conservation District, UC Cooperative Extension and USDA Forest Service to provide information on the stewardship of private forestlands in California.

#### **CA Forest Stewardship Program**

P.O. Box 944246 Sacramento, CA 94244 http://bit.ly/2FbSwEs

#### **Editorial Committee**

Larry Camp,
Forest Landowners of CA
Danielle Lindler,
Jefferson Resource Co.
Amanda McAdams, USFS
Stewart McMorrow,
CAL FIRE
Ricky Satomi, UCCE
Yana Valachovic, UCCE

#### Editor

Kate Campbell

**Governor** Gavin Newsom

Secretary for Natural Resources

Wade Crowfoot

**CAL FIRE Director** 

Thom Porter

Forestland Steward is produced under a grant from USDA Forest Service. In accordance with federal law and US... Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age or disability.

To file a complaint of discrimination: write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Ave SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

The ideas contained in this newsletter are meant as general information and opinion, not management prescription. Consult a Registered Professional Forester or a qualified technical advisor (see page 10) for management advice specific to your needs.



# Forest Management Task Force: New leadership and project updates

Along with efforts by private forest landowners, California state and local agencies are making progress to reduce fuel loads and improve forest health and resilience throughout the state.

In addition, the state's Forest Management Task Force (FMTF) has been moving ahead on 2020 projects and task force objectives outlined in the Governor's Executive Order B-52-18, as well as recommendations included in the California Forest Carbon Plan.

"With an emphasis on science-based forest management, community protection and sustainable economic development, it's important to recognize that we're making progress," said former FMTF Director Jennifer Montgomery.

"Covid-19 has complicated our efforts, but working with our partners, we're having a significant impact on the landscape."

Montgomery announced at the end of June that she has been posted to the state's Covid-19 Contact Tracing effort.

Patrick Wright, Executive Director of the California Tahoe Conservancy, has temporarily stepped into the role of FMTF director for the next 6 to 9 months.

Wright has previously directed the CALFED Bay-Delta Program and served in other state and federal leadership roles.

## **Selected 2019 project updates**

FMTF co-chair Helge Eng, CAL FIRE Deputy Director, reported that the 35 Emergency Vegetation Projects identified in the 2019 Executive Order have been completed.

The projects protect 90,000 acres and about 200 communities by directly treating 12,000 acres. The emergency pace paid off as several fuel breaks helped save Santa Barbara communities during the November 2019 Cave Fire.

CAL FIRE's 45-Day Report with a link to an interactive map of emergency projects is online at: https://bit.ly/32E3gcu

Another 84 projects are planned for 2020 and beyond. The California Vegetation Treatment Program (CalVTP) is scaling up fuel treatment and forest restoration projects to help meet the state's goal of treating 500,000 acres of nonfederal lands a year.

Last year, the FMTF approved funding for the new and popular California Forest Stewardship Workshop for private forest landowners, organized by UC Cooperative Extension and partners.

The workshops help landowners develop individual forest management plans and consist of classroom and forest-based instruction on ecological concepts and measurement skills.

Participants who develop a plan are eligible for a free site visit with a California Registered Professional Forester. Workshop details and registration information are online at: <a href="https://bit.lv/3ja6A51">https://bit.lv/3ja6A51</a>

Private partners focusing on biomass utilization identified three BioMAT success stories. See a March 2020 report from Sierra Institute on the role biomass plays in efforts to improve forest health at: <a href="https://bit.ly/2WjGmDa">https://bit.ly/2WjGmDa</a>

The Lawrence Livermore National Labs identified improved forest management and enhanced biomass utilization as ways to capture and sequester carbon and reduce climate change impacts. Find the report at: <a href="https://bit.lv/2xIfTWG">https://bit.lv/2xIfTWG</a>

The Office of the State Fire Marshal made recommendations to allow for up to 18-story mass timber structures in California, clearing the way for use of more California-grown wood products.

Through the Mass Timber Building Competition, the state has awarded a total of \$500,000 to four projects that demonstrate mass timber's potential as an emerging building material. Information about the competition is online at: <a href="https://bit.ly/2ziecQq">https://bit.ly/2ziecQq</a>

CalTrans has developed a map and work plan that prioritizes state roadway treatments for safer evacuations in the event of a wildfire. Find the report "Caltrans Wildfire Vulnerability Highway Assessment," online at: https://bit.ly/3fZFjzw

The Watershed Research and Training Center completed the report "Investment Opportunities for Increasing Forest and Fire Management Capacity in California: A Capacity and Needs Assessment of Local Groups, Non-Profits, and Tribes."

Funded by the California Natural Resources Agency as part of California Climate Investments, the report offers a road map for public and private funding of forest management and wildfire protection projects in Northern California.

A link to the report is on the Forest Management Task Force website under "What's New" tab at: <a href="https://fmtf.fire.ca.gov/">https://fmtf.fire.ca.gov/</a>

# New options for managing conifer encroachment on oak woodlands

It's not uncommon to see Oregon white oak and black oak woodlands swallowed up by encroaching conifers. For years landowners have wanted tools to manage this process.

Unfortunately, there were barriers in the California Forest Practice rules that made this difficult.

There's good news and new options available for private forest landowners who want to remove these encroaching trees and sell some of the byproducts of restoration.

The "White and Black Oak Woodland Management Special Prescription," approved by the State Board of Forestry in 2019, provides a new silvicultural method allowed under a Timber Harvest Plan/Non-industrial Timber Management Plan.

Deciduous oak woodlands are ecologically and culturally important, providing myriad habitat and ecosystem services. And, there has been increasing interest in conservation and restoration of these important habitats.

The increased flexibility is designed to promote oak woodland ecosystem health and resilience. The new policy and permits apply to portions of the Coast and Northern Forest Districts.

The silviculture method allows a Registered Professional Forester (RPF) to prescribe removal of conifers to reduce the water, light and nutrient competition of conifers to promote the sustainability and health of the oaks.

Under this new prescription, conifers of all sizes may be removed, and post-project stocking requirements can be met by retaining at least 35 square-feet of basal area of Oregon white oak or California black oak.

The special prescription will most likely be used when other THP/NTMP activities are occurring on the property and when there are conifers of merchantable size," said Yana Valachovic, University of California Cooperative Extension director for Humboldt and Del Norte counties and an RPF.

"If a landowner has conifer encroachment on oaks and wants to commercialize thinning or remove trees with circumferences greater than 26 inches at stump height—and the project is on the larger side—this is the way to go," she said.

## An option for small projects

As an alternative to filing a THP/NTMP to conduct oak woodland restoration, a new exemption offers landowners with smaller



Oaks struggling with conifer encroachment. Source: Yana Yalachovic, UCANR

projects a faster, less costly option.

It's intended for projects that won't significantly impact the surrounding environment.

Valachovic said an exemption from filing a THP for limited oak woodland management projects is not an exemption from following Forest Practice Rules or other regulations.

With the new Oak Woodland Exemption, the stand needs to have 35 sq. ft. of living oak basal area. The harvest area cannot cumulatively exceed 300 acres (in a 5-year period) per ownership, per planning watershed.

An RPF must prepare a notice of exemption and no tree larger than 26 inches at stump height may be removed for commercial purposes.

Because these permit changes and exemptions from Forest Practice Rules are new and have narrowly defined application, Valachovic recommends private forest landowners discuss these options for oak woodland restoration projects with an RPF to determine project benefits.

Danielle Lindler, RPF, Jefferson Resource Company, contributed this report.

# Resources for managing oak woodlands

See presentations from the April UCCE-sponsored workshop about management of California oak woodlands, online at: https://bit.ly/2CMmPUZ

Visit the newly updated UC Oaks website to see more oak resources and guidance at: <a href="https://bit.ly/2CPySkn">https://bit.ly/2CPySkn</a>

Review free "Guidelines for Managing California's Hardwood Rangelands" at: https://bit.ly/3eGsXLK

Learn more about "Conifer Encroachment in California Oak Woodlands," from forest researchers, at: https://bit. ly/3hjLfnU

Living Among the Oaks: A Management Guide for Oak Woodland Owners and Managers, may be found at: https://bit. ly/30vIRDK

# Managing for frogs

- Survey habitat and look for signs of species to assess potential project impact to frogs and reduce incidental take.
- Visual encounter surveys are recommended in late summer along river and stream margins.
   Tadpole surveys are best from June through early August.
- Restrict project work to periods outside breeding season, roughly April to June.

## Guides to identify and manage FYLF on private forestland:

"Foothill Yellow-Legged Frog Conservation Assessment in California" <a href="https://bit.ly/2C6l3y1">https://bit.ly/2C6l3y1</a>

"Considerations for Conserving the Foothill Yellow-Legged Frog" https://bit. ly/3er7VAu

Source: CDFW, USDA FS

# Foothill yellow-legged frog's ESA listing poses landowner challenges

New protections for the stream-breeding foothill yellow-legged frog (*Rana boylii*) were approved in February by the California Fish and Game Commission. The listing decision adds another layer of species protections for a growing number of native amphibians.

The U.S. Fish and Wildlife Service is reviewing scientific information and said it expects to have a proposed finding on a federal listing for the species by the end of 2021.

These actions are in response to widespread population declines, with disappearance in some areas of the species' range. Historically, the FYLF was found in foothill and mountain streams that drain to the Pacific Ocean, ranging from northern Baja California to southern Oregon.

Biologists say a number of factors are responsible for the species' decline.

The state listing includes five of the six identified "clades" of the species as either endangered or threatened under the California Endangered Species Act (ESA).

A clade is a biological grouping of species that share a common ancestor as determined through molecular, anatomical and genetic testing. Foothill yellow-legged frogs have been a candidate species for protection under the state and federal ESAs since 2017.

Which clades have been listed? A map of clade boundaries and analysis of the listing's impact on public and private projects is online at California-based environmental engineering firm Dudek's website. https://bit.ly/38LrYZv

### Improving habitat for forest species

"There are a significant number of threatened, endangered, and species of special concern within California's forested ecosystems," said Jason Wells, a Registered Professional Forester with the Sonoma County Resource Conservation District. "Licensed foresters understand species impacted by land management activities."

The list of species of concern is evolving, Wells said, "but at any level of forest management planning, we identify resource concerns, such as soil and road erosion, watercourse protection and biological resources.

Often times an RPF can find ways to protect biological resources while also meeting management goals, he said.

Commenting on what the state's ESA listing of FYLF means for private forest landowners, Wells said, "Most private landowners I've worked with



Jason Wells, RPF, Sonoma County RCD. Source: Jason Wells



Stream-dwelling foothill yellow-legged frog. Source: www.californiaherps.com



FYLF egg sacs laid under a protective creek rock. Source:www.californiaherps.com

have a positive response to species conservation."

And, local resource conservation districts can work with landowners to access grant funds to help make species management projects happen, he said, adding there are options within the California Forest Practice Rules to include harvesting riparian trees for in-stream habitat improvement projects.

Researchers say a number of stressors have contributed to the frog's decline: river and stream regulation and diversions; habitat alteration; aerial drift of pesticides; and invasive species.

Among these multiple stressors, they say changes to stream and river flow regimes and downstream habitat alteration have had the greatest negative impact because of FYLF's dependence on riverine environments for reproduction.

Landowner projects along the West Coast, in the Central Valley and the Sierras will be required to avoid or mitigate impacts to foothill yellow-legged frog populations, biologists say.

At a minimum, habitat assessment will be necessary to identify areas where the species is likely to occur, or where they will not or are unlikely to occur.

## **Locating protected species**

Environmental engineering firm Dudek's Senior Biologist Mike Henry said, "Enlisting expertise to determine where the species won't occur is crucial to avoid unnecessary and time-consuming survey efforts, or having to provide compensatory mitigation for impacts to non-habitat lands."

It's true, he said, that state and federal listings can have significant financial impacts on forest landowners' plans.

The presence of foothill yellow-legged frogs has already added management costs for some landowners, especially on the coast where their numbers have always been normal, he said

And there have been significant limitations on who is qualified to survey for the frogs, and differences of opinion about what scenarios prevent a legitimate threat to the species.

"The foothill yellow-legged frog is known to travel something like a quarter mile from watercourses during wet conditions, which could technically impact hauling on rocked roads during that time," Wells said. "I'm aware of at least one Pre-Harvest Inspection (PHI) in which agency personnel refused to drive an ATV over a creek out of concern for potential impacts to the frogs."

U.S. Fish & Wildlife spokesperson Pam Bierce said, "Until we have fully assessed the status of



Prime FYLF habitat along the American River North Fork. Source: USDA FS

this species, we are not setting any conservation requirements."

Part of the Service's evaluation process is to identify other species that are found in the same range. Some amphibians that have overlapping ranges with the foothill yellow-legged frog include the California red-legged frog (*Rana draytonii*), mountain yellow-legged frog (*Rana muscosa*, northern distinct population segment), and Sierra Nevada yellow-legged frog (*Rana Sierrae*).

Bierce said conservation actions taken by the U.S. FWS or partners to help one species would likely benefit overlapping species, too.

"The Service is committed to working with willing landowners on restoration activities that help conserve habitat for listed and unlisted species," she said.

### Working with wildlife experts

Private forestland owners who may be affected by this state listing should reach out to their forester to learn what changes may be required, Wells said.

"This should be a starting point for any forest landowner," he said "As part of the process, the forester will run a query of the California Natural Diversity Database to determine if there are any nearby sightings of rare or threatened species.

"But, the best way to know if your planned management activities are going to be problematic is to pre-consult with the California Department of Fish and Wildlife," he advised.

"As a rule of thumb, you're always going to have a better time in the woods with agency personnel if you contact them outside a pre-harvest inspection (PHI).

"You don't want to be in the situation where some new evidence comes to light about a species on your property when your harvest plan is being actively judged for compliance with environmental regulations."

# Risks for foothill yellow-legged frogs

Foothill yellowlegged frogs face many risks. Biologists say a single factor may not cause die-off, but several factors working together can adversely affect species survival.

Private forestland owners who need to manage their land to protect the species should begin by being aware of all species in their area and know habitat requirements and life stages.

Some factors affecting FYLF survival include:

- Releases from dams and reservoirs during sensitive life stages, such as breeding.
- Land use changes, including planting and cultivating.
- Shifts in stream flows due to climate change.
- Parasites and disease.
- Invasive species.
- Habitat alteration, including fire/fuel management.
- Habitat fragmentation and urbanization.
- Use of suctiondredges for river and stream mining.

# Fuels reduction: Taking action to protect private forestland and clear powerline rights of way



View from LBS Ranch where SMUD's powerline right of way crosses the property.

During the fall, El Dorado County's Apple Hill buzzes with harvest and families picking apples and buying juices to bring home from local farms. More than a million visitors a year flock to the area tucked into a stretch of Sierra Nevada foothill forests.

During spring and summer, however, land stewardship is the theme for many forest owners in the surrounding area, including Ben Sher, whose family has owned about 280 acres there since 1987, much of it in forestland.

He is in the process of thinning trees, reducing ladder fuels and masticating native shrubs like manzanita that have become overgrown and fire prone, work that will take several years. His goal is to reduce wildfire risk and improve forest resilience on his property.

He says the family's land used to include pear orchards, with trees producing fruit into the late 90s. Although new crops in El Dorado County, including winegrapes and novel apple varieties, are making bigger economic contributions to the county's agricultural production, timber remains the top crop.

"The areas that were never farmed on our land include stands of ponderosa pine, western red cedar and oak woodland, mostly black oak," Sher said during a tour and demonstration of vegetation management techniques on his ranch.

"We encourage wildlife and no longer maintain old fencing to allow wildlife to move freely," he said. "We have lots of deer, bear and mountain lion, not to mention growing numbers of resident Canada geese and wild turkeys, as well as a variety of migrating ducks on our ponds."

Along with local landowners, Sher was joined during the demonstration event by utility and government agency representatives interested in learning about the strategy and talking about the collaboration behind Sher's private landowner project.

## Finding financial assistance

The event highlighted work to clear part of a Sacramento Municipal Utility District power line corridor and to highlight the work Sher has accomplished through a grant from the federal Natural Resources Conservation Service Environmental Quality Improvement Program (EQIP).

Owners of forested private land are eligible for EQIP financial assistance for fire safety land management improvements. Funds come from the 2018 Farm Bill or Agricultural Improvement Act, which authorizes \$867 billion for such uses.

EQIP allows individuals to invest in equipment to maintain their land or to contract with professionals, Sher said. "The program allows landowners to decide which areas they want to improve, using a variety of best management practices."

He said a property the size of LBS Ranch justifies buying mastication machinery. Vegetation management and maintaining fuel breaks is ongoing work that requires the right equipment to stay on top of natural growth and maintain fire-safe conditions, he said.

"If you have the ability to run equipment yourself," it's worth it," said Sher, who works with son Nate and ranch foreman Jaime Suarez on ranch vegetation management.

"It'll take quite a few years for us to do fuels reduction everywhere on the ranch because of the topography," he said. "And then, because things grow back, we'll start over again."

In all cases, go for EQIP grants, he advises, "Pay yourself and do the work yourself; or contract with others, pay them, and get reimbursed for half the cost from the grant.

## Getting bang for the buck

He says there's a good link with his project to the work SMUD is doing to clear vegetation under powerlines.

"I selected areas adjacent to their powerlines, which run across my land, to gain additional bang for the buck in terms of treated lands and fuels breaks," he says. "I'm also trying to build concentric fuel breaks leading up to my house that provide areas where wildfire can be stopped before reaching where we live."

While the utility doesn't serve El Dorado County, the company does work with property owners to plan powerline work, that in some cases crosses private property.

"In many cases, property owners request removal of trees and brush on their properties as wildfire danger has become considerably more threatening in recent years," said Chris Capra, SMUD spokesman

For example, in 2018 SMUD managed 100 acres of fuel reduction on privately owned lands stretching from Camino to Rescue. In 2019 the utility managed a 45-acre project on privately owned land in El Dorado Hills to create shaded fuel brakes for fire protection.

Calculating the cost of the work conducted under his EQIP grant, Sher says, counting his own labor, machinery, fuel and equipment repair, the grant paid him about \$1,500 per acre to do the work himself.

This included two components: pruning up trees to remove lower limbs and removing shrubs and dead trees, followed by mastication. So far 11 acres have been treated. Sher recently received \$16,500 for the completed work.

"Had I hired a contractor, EQIP would probably have quoted the value of the work done at around \$3,000 per acre, Sher said. "I would've paid the contractor the full amount, and then sought reimbursement from the grant for half of that so my net out of pocket would've been \$15k."





Sher said there's still funding in his grant for about 65 more acres of vegetation management work, with a couple more years to complete it under the EQIP grant. Steep foothill terrain will require expensive handwork.

"We can't work year round owing to the fire hazard of running equipment in the fire season," he said. "And we can't work when it's too wet, because we don't want to create muddy roads and hillsides. This sometimes means our equipment is standing idle while we wait for good conditions."

Danny Marquis, NRCS District Conservationist for El Dorado County, said he has noticed a significant increase in EQIP applications since the 2018 Farm Bill broadened the definition of timber producer.

"You don't have to have had a timber harvest plan in the past, a timber management plan or demonstrate agricultural income to apply as a private, non-commercial timber operator . . . just having forest species or the ability to produce forest products and a qualified resource concern is all that's needed," Marquis explained.

## **Generating program interest**

"We can even assist small producers on as little as 1 acre with qualified dead and dying trees that present a safety concern," Marquis said. "The recent wildfires in California and problems with fire insurance are generating a lot of interest in this program."

LBS Ranch foreman Jaime Suarez said, "I'm glad to do this work to protect the forest and make it safer for everyone, especially my family. We live here on the ranch, me, my wife and kids. This work matters to us."

For more information about EQIP, contact a NRCS field office in the county where you own land or have an agricultural operation. Visit the office locator at <a href="https://bit.ly/2TIL7uh">https://bit.ly/2TIL7uh</a> to find the NRCS office for your county.



Photos clockwise: The right vegetation management equipment is essential, said Camino forest landowner Ben Sher (center) during a May project tour on his property the group viewed an area cleared of ladder fuels; and Sher's new Takeuchi track loader with masticating head going after overgrown manzanita to reduce encroachment on oak trees.

# Rethinking forest resilience

- Think outside the box: Seek innovative actions that will move toward resiliency.
- Practice ad-hoc scenario planning by evaluating every project through the lens of what conditions could be in 25-50 yrs.
- Ensure adequate funds, staff, resources and community support to successfully conduct selected projects.
- Keep options open. Check that a proposed action augments future opportunities.
- Prioritize among multiple potential projects to decide which is the most important to complete.
- Prepare for change. Plan for increases in the amplitude and frequency of extreme weatherrelated events.

Source: USDA California Climate Hub Forest Resilience in the 21st Century

# Fresh take on managing Sierra forests



Crowded forest near Yuba Gap. Source: USFS

Forest health has never been a more urgent concern in California than now. Experts at the USDA Climate Hub, located at the University of California, Davis, say in the past 100-plus years significant changes have occurred in Sierra Nevada forests that create a number of risks.

Multiple factors, including fire exclusion, historic logging practices, and climate change have intersected to increase potential for highseverity wildfire.

To better understand the threats and how to navigate them, Climate Hub researchers have created a forest management road map, "The Climate Change Primer for Forest Managers in the Sierra Nevada." The guide offers recommendations to managers responding to changes taking place on forestlands.

### **Climate change impacts**

The evidence is clear: climate conditions in the Sierra Nevada have changed. Temperatures and precipitation patterns will continue to transform in the foreseeable future, climate scientists say.

Projected climatic trends suggest large-scale changes to forests will continue.

Longer summer periods of higher evapotranspiration, coupled with extended periods of low soil moisture will lead to a "Climatic Water Deficit" (CWD), scientists warn. Anticipated increases in the CWD will further stress trees and shrubs, driving changes in forests through disturbance—wildfire, species encroachment, less predictable public water supplies.

Modeling scenarios suggest average annual temperatures could increase by 3 to 9 degrees F by the end of the century. Seasonal and geographic variability may become more pronounced.

Future precipitation is less certain, but models suggest slightly increased overall precipitation with a higher proportion coming as rain versus snow, and possible patterns of multi-year droughts with occasional years of extreme precipitation.

"We are in an era of extreme variability, which compels us to try innovative tactics in forest management guided by the best available science," said Steve Ostoja, Director of the USDA California Climate Hub.

Ostoja said the Climate Hub has formed partnerships with research groups and is "learning from inventive approaches to silviculture, fire management and other resource management efforts to accelerate our ability to learn as we apply new management ideas."

## Key themes in landscape management

Some overarching management themes and directions have emerged in the last few decades, Ostoja said. An important change is the trend toward management at a landscape scale, rather than managing stands.

The general consensus among scientists is that we have ample information with which to move forward with efforts to increase resilience in Sierra Nevada ecosystems, he said.

The USDA Climate Hub provides detailed information and tools for landowners at: <a href="https://bit.ly/2EwXBuJ">https://bit.ly/2EwXBuJ</a>.

Creating partnerships with researchers and stakeholders can be an effective way to explore climate-change challenges that carry uncertainty and to gain public support for new management approaches, Ostoja said.

Find "A Climate Change Primer for Forest Managers in the Sierra Nevada," online at https://bit.ly/2yjwaSe

# Creating more resilient private forests through active management practices

A lot has happened in California's forests since the devastating wildfires of 2017-18. In addition to adopting sweeping legislation (Senate Bill 901) in late 2018 to address conditions in California's forests, major steps to increase public safety continue in the state's wildfire-prone areas.

These efforts are part of a larger push to improve forest resiliency statewide as dynamic environmental changes are taking place.

Helping to implement SB 901 is Chris Anthony, CAL FIRE Staff Chief of the newly created Wildfire Resilience Program, mandated under the adopted legislation.

The program is in development, but when fully operational, it will provide assistance to nonindustrial timberland owners to increase wildfire resilience on privately owned forestland. That will include education, public outreach, technical support and project funding.

The goal is to help private landowners identify sources of assistance, navigate the permitting process and access funding.

"When we talk about building resilience in the context of forestry, we're talking about the ability of forest ecosystems to withstand disruptions as conditions are changing," Anthony explained. "That not only means recovering from larger wildfires, but also helping forests adapt to rapidly changing climate conditions in the future.

"The healthier the stand, the better it's able to withstand these forces," he said. "Many fuels reduction programs have the ability to improve resilience of forest ecosystems and we strongly support them. But, there's more we can do."

With nearly three decades of forestry experience, Anthony is well matched to his new assignment. He holds a Bachelor of Science degree in Forestry from the University of California, Berkeley, and did advanced resource management study at the University of British Columbia.

During his career, he has worked in disciplines ranging from forest management, fuels reduction, urban forestry, firefighter training, law enforcement, fire investigation, land-use planning and fire suppression.

In 2015 he was appointed Deputy Task Force Leader for the Governor's Tree Mortality Task Force. In that role, he helped lead an effort of over 80 federal, state and local entities responding to the massive tree die off in the Sierra Nevada.

Chief Anthony said, "We know the work we all



Chris Anthony, CAL FIRE Staff Chief of the Wildfire Resilience Program. Photo: Jonah Paulhamus.

do every day to improve forest conditions—but now we have the opportunity to shape what kind of forests the next generation will inherit. It's an opportunity we have to take. And now there are so many options, so much support from agencies and organizations delivering resources needed to help us do it."

He said CAL FIRE will continue to operate the L. A. Moran Reforestation Center and support landowner education programs through the California Forest Stewardship Program, a collaborative project of CAL FIRE and USDA Forest Service.

Find information about the Forest Stewardship Program online at <a href="https://bit.ly/3dmGGHA">https://bit.ly/3dmGGHA</a>

CAL FIRE Forestry Assistance Specialists are always available to pre-consult on potential projects and answer questions, he said. See page 10 for a directory of forestry specialists

To subscribe to CAL FIRE's email updates about cost-share funding opportunities and grants go to <a href="https://bit.ly/3hIa2lK">https://bit.ly/3hIa2lK</a>

## SB 901 Forestry Highlights

# **Key points for landowners**

- Provides \$200 million per year for five years for forest health and resilience.
- Streamlines rules for prescribed fire, thinning and fuel reduction projects.
- Requires state funded conservation easements be maintained for improved forest health.
- Creates a new Small Timberland Owner Program for landowners with fewer than 100 acres, includes a new timber harvest plan exemption to support projects on private land.
- Expands existing wildfire prevention efforts through a pilot program allowing temporary roads to help treat and thin forests.
- Clarifies that multiple landowners can work together to manage their lands for wildfire resiliency and submit a single work plan.

Full text of the adopted legislation is online at <a href="https://bit.ly/2yK4k1T">https://bit.ly/2yK4k1T</a>

# An enterprise approach to wildfire resilience

by Deb Kollars

Senior Policy Advisor for CA Forward

Solving California's wildfire crisis is complicated and costly. But innovative approaches to increasing the pace and scale of forest health and wildfire resilience are being tested statewide.

Among those innovative approaches is an "enterprise-driven" initiative being tested in the North Bay counties of Sonoma, Napa, Lake and Mendocino.

The goal is to promote safer, healthier landscapes on private and public lands by quantifying benefits that come through new economic activities, partnerships and investments to support large-scale wildfire resilience work.

The effort is being advanced by a collaborative nonprofit team, "Taking Action for Living Systems (TALS), Inc." <a href="https://bit.ly/3eHQPik">https://bit.ly/3eHQPik</a>

TALS is coordinating with local government and resource conservation districts, private and public landowners,

Fire Safe Councils, Sonoma Ecology Center, and local foundations.

The effort is focused on advancing climate adaptation and forest health strategies to reduce wildfire risks and losses, and improve ecosystem resilience through creation of forest renewal areas.

Using an areawide approach, the pilots are designed to test the feasibility of integrated plans designed to generate revenue to fund wildfire protection and create new resource-based businesses. The intention is to develop a model for enterprise-driven approaches that can be applied elsewhere in the state.

## **Financing Forest Benefits**

The idea is to quantify financial benefits and potential revenue streams that can flow from healthy, resilient forests and other fire-prone landscapes.

Benefits may include improved public health and economic vitality; carbon sequestration; biomass energy generation; water supply and water quality enhancement; and sustainable commercial wood products.

"The goal is to identify what it will take to make these living systems whole and sustainable over time," said Robert Ewing, who is heading up the TALS team and has provided consulting services on wildfire resiliency issues to the Sonoma County Office of Recovery and Resiliency.

This work included preparation of a guidance document and a later report that formed the basis for the Natural Enterprise Complex approach.

Alongside the business strategies, the effort is exploring effective institutional responses at the state, regional and local levels, and the formation of partnerships among landowners, businesses, service organizations, and public agencies.

A list of projects, appears on the California Economic Summit website at <a href="https://bit.ly/3dvFuSx">https://bit.ly/3dvFuSx</a>

## On the Go?

More Forestland Steward subscribers get the latest forestry news in multiple ways—on mobile devices, by home delivery, on office desktops and through social media.

Get the information you need when you need it. It's free!

Send a request to kcamp300@yahoo. com to add an email address to your subscription.



# California Department of Forestry & Fire Protection (CAL FIRE)

Deputy Chief of Forestry Assistance Stewart McMorrow, Stewart.McMorrow@fire.ca.gov

#### **CAL FIRE Forestry Assistance Specialists (FAS)**

Find the FAS for your county:

https://bit ly/2FD7eZp

Guy Anderson/Mayra Negrete (Fresno, Imperial, Inyo, Kern, Kings, Los Angeles, Merced, Mono, Monterey, Orange, Riverside, San Benito, San Bernardino, San Diego, San Francisco, San Joaquin (East), San Luis Obispo, San Mateo, Santa Barbara, Santa Cruz, Stanislaus (East), Tulare, Ventura) 559-243-4109

Topher Byrd (Alameda, Contra Costa, San Joaquin (West) Santa Clara, Stanislaus (West) 408-499-4255

Mary Bourriague (Alpine, Amador, El Dorado, Nevada, Placer, Sacramento, Sierra, Sutter, Tahoe Basin, Yuba) 916-718-6258

Brook Darley (Glenn, Shasta, Tehama) 530-226-8940 Dave Derby (Butte) 530-872-6334

Zsolt Katay (Calaveras, Madera, Mariposa, Tuolumne) 209-754-2707

Al Klem (Lassen, Modoc, Plumas, Shasta, Siskiyou, Trinity) 530-226-8941

Dale Meese (Del Norte, Humboldt) 530-226-8941

Dawn Pederson (Colusa) 530-528-5199

Meghan Reeves (Lake, Marin, Mendocino, Napa, Solano, Sonoma, Yolo) 707-888-7331

### California Association of Resource Conservation Districts (RCDs)

916 457-7904; staff@carcd.org

# Natural Resources Conservation Service (NRCS)

Chris Zimny, State Forester; 530-792-5655

### **UC Cooperative Extension Forest Advisors**

Mike Jones (Mendocino, Lake) 707-463-6344; mjones@ucanr.edu

Susie Kocher (El Dorado, Amador, Calaveras, Tuolumne) 530-542-2571; sdkocher@ucanr.edu

Lenya Quinn-Davidson, Area Fire Advisor, (Humboldt, Trinity, Siskiyou, Mendocino), 707-445-735; |quinndavidson@ucanr.edu

Rick Satomi (Shasta, Siskiyou, Trinity); 530.224.4900; rpsatomi@ucanr.edu

Ryan Tompkins (Plumas, Sierra) 530-283-6125; rptomkins@ucanr.edu

Bill Stewart, Statewide, 510-643-3130; billstewart@berkeley.edu

Yana Valachovic (Humboldt, Del Norte) 707-445-7351; yvala@ucanr.edu

Rob York, Statewide, 530 333-4475; ryork@berkeley.

### **USDA Forest Service**

Amanda McAdams, Forest Legacy and Stewardship 530-233-8700; amcadams@fs.fed.us

# Calendar

Editor's Note: Due to the ongoing Covid-19 public health emergency, many landowner education opportunities are being offered through electronic formats.

## October 21

# **Project Learning Tree Educator E-Unit** workshop

**Details:** Engaging activities to help teach students how to think about the environment and their place within it. Workshops make teaching and learning fun.

Time: 4:00 pm - 6:00 pm, online.

Contact: Sandy Derby, (530) 394-7003 stderby@

ucanr.edu.

Sponsor: Forest Research and Outreach

## October 29-31

# Society of American Foresters "virtual" National Convention

**Details:** Full agenda of presentations, panel discussions and keynote speakers. Earn Continuing Forestry Education credits (CFEs), network with forestry professionals, find a new job. And, at a savings of 45 percent over an inperson convention.

Register: Online at <a href="https://bit.ly/325iE0M">https://bit.ly/325iE0M</a>

## Ongoing

# Sierra Nevada Conservancy grant writing workshops

**Details:** Designed to help build the capacity of organizations that serve the Sierra Nevada Region. Workshops are now available as an online webinar.

**Contact:** To organize or attend a workshop, contact your SNC Area Representative, online at <a href="https://bit.ly/2Mpg3pB">https://bit.ly/2Mpg3pB</a>

# Coming Soon!

Reforestation workshops are being planned for wildfire and tree mortality areas. Contact Stewart McMorrow for details: stewart.mcmorrow@fire.ca.gov

# Board of Forestry and Fire Protection 2019–2020

## Meeting Schedule

The California Board of Forestry and Fire Protection's mission is "to lead California in developing policies and programs that serve the public interest in environmentally, economically and socially sustainable management of forest and rangelands, and a fire protection system that protects and serves the people of the state." The public may participate in meetings to learn about the background related to board decisions. Information about meeting times and online access is at <a href="https://bit.ly/36wVSiK">https://bit.ly/36wVSiK</a>.

August 18-19 TBD
\*September 22-24 TBD

October No meeting

\*September is designated as a potential travel meeting date. Travel is contingent on federal, state and/or local public health guidance and Orders.

How can Forestland Steward newsletter serve you?  Comments / Suggestions:
Add me to the mailing list /Change my address:  Name Organization
Address City, Zip Phone E-mail
To save on printing costs and paper, we encourage you to get the e-version of Forestland Steward. Check here to become an e-mail subscriber.
Fill out this box and send it to CAL FIRE, Forestry Assistance, P.O. Box 944246, Sacramento, CA 94244-2460. Fax: (916) 653-8957; e-mail: Stewart.McMorrow@ fire.ca.gov. For address changes, send this box or contact Stewart McMorrow. Be sure to reference Forestland Steward newsletter.

CAL FIRE & Placer County RCD Forest Stewardship Program 1500 W. El Camino Ave. #633 Sacramento, CA 95833 PRESORTED STANDARD U.S. POSTAGE PAID CPS

# After a Wildfire: Help for forest landowners

Wildfire after-effects on private forestland can be drastic. Fires cause both immediate and long-term issues related to forest health and resilience.

But keep in mind, recovery often starts before the smoke has cleared.

CAL FIRE implements post-fire suppression repairs before leaving a burned area. This work includes:

- Installing waterbars on dozer lines.
- Removing soil and organic debris from streams where fire lines crossed, and mulching fire line approaches.
- Bringing road drainage structures back to pre-fire condition.
- Treating/reducing large concentrations of downed trees (slash) near roads and structures.
- Repairing water pipes, fences and gates damaged during fire suppression activities.
- Addressing public safety issues, such as flagging/marking hazard trees threatening roads or structures for removal by professional fallers, and

mapping/reporting downed power and phone lines.

And, following selected wildfires, California Watershed Emergency Response Teams (WERTs) are deployed to conduct post-fire assessments.

WERT members develop preliminary emergency protection measures for identified locations and communicate the findings to responsible local emergency management agencies.

Local jurisdictions may be able to obtain funding for emergency protection measures and mitigation projects from FEMA or the Natural Resources Conservation Service (NRCS).

This work may include installation of structure protection for identified areas at risk, using materials such as K-rails; sand bags; and Muscle Wall, a portable barrier used to contain or divert water.

NRCS also can help private landowners recover from catastrophic fires that have occurred in the past 36 months

Covered recovery practices include planting conifer seedlings, spreading woody residue or mulch, and removing dead or dying trees.

Because wildfire is inevitable in California, private forestland owners are encouraged to understand what they need to do to address wildfire impacts on their property and how to get help with recovery.

Here are links to help with advance planning for post-fire recovery:

CAL FIRE: Ready for Wildfire:
https:// bit.ly/32rpRcd
NRCS After the Fire-Recovery
https://bit.ly/30e2Kin
UC Cooperative Extension:
Recovering from Wildfire: A Guide
for California Landowners
https://bit.ly/3gZ1yX1