

CALIFORNIA FOREST STEWARDSHIP PROGRAM

Forestland Steward

FALL 2017

Promoting Forest Health

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Early snow dusts fall aspens in Tahoe Valley
Joe Chan ©2017



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.

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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.



Planning for wildfire recovery

Fall wildfires are a recurring trend in California, but this year's fires tragically broke records in terms of lives lost, and homes and businesses destroyed.

In proclaiming Oct. 28, 2017, a “Day of Remembrance,” for the 44 persons who lost their lives during the wildfires in Napa and Sonoma counties, Governor Jerry Brown called the events “by far the most lethal and destructive wildfire disaster in the history of California.”

But the damage caused by wildfires wasn't confined to Northern California. At the end of November, CAL FIRE reported 1.1 million acres burned in state and federal jurisdictions in 2017, but wildfires continued to burn in Southern California into December.

The five-year state average for acres burned by wildfire is about 200,000 acres, CAL FIRE said.

Experts said the evidence is clear that increased wildfire results from a century of fire suppression. Whatever the causes, for those directly affected by the fires, there's no replacing much of what was lost—photos, pets and family heirlooms, businesses that sustained families and employees, years of work to improve forestland.

Planning for the future

Moving into winter, it's clear there's much to do to rebuild and recover, including developing plans to repair damage to wildlands and forests.

This issue includes a number of articles—from logging safety to habitat needs for threatened and endangered species to a new report on the growing biomass problem in the state's forestlands and how to fix it.

Recovering from wildfire will be strongly influenced by access to the best information available and the ability to collaborate across ownership boundaries to implement projects on a landscape scale. *Forestland Steward* is dedicated to supporting that effort.

Along with the current issue, the archived Fall 2008 issue, online at <http://calfire.ca.gov/foreststeward/pdf/35-Foreststeward-Fall08.pdf>, also offers a useful primer on approaches to forestland recovery.

There are many resources available to landowners, including technical and some financial assistance. Contact your local CAL FIRE, NRCS, and UC Cooperative Extension offices to learn more (p. 10).

More resources

Although there's limited space in each *Forestland Steward* issue, carefully selected links connect readers to a wealth of information, funding opportunities, new research and forestry experts. Note that the free electronic version of this newsletter has live links... simply click to go directly to more information.

And, it's easy to forward the e-version to friends and neighbors who also need solid information for their own forestland recovery plans, but aren't yet online subscribers.

To help ensure *Forestland Steward* remains a timely and relevant source of good information for private forestland owners, a volunteer group of experts offers advice on the newsletter's content and direction.

They help ensure the best quality information gets to readers' in-boxes and mailboxes.

Members of the *Forestland Steward* Editorial Advisory Committee—new and returning—include **Larry Camp**, Forest Landowners of California; **Lara Buluc**, U.S. Forest Service Stewardship Program Manager; **Danielle Lindler**, RPF and CEO of Jefferson Resource, Co.; and **Stewart McMorrow**, CAL FIRE Deputy Chief of Forestry Assistance.

Editorial advisors also include UC Cooperative Extension experts **Ricky Satomi**, Forestry and Natural Resources Advisor for Shasta, Trinity and Siskiyou counties; **Kate Wilkin**, Forestry/Fire Science and Natural Resource Advisor for Sutter, Yuba, Butte and Nevada counties; and **Yana Valachovic**, Forest Advisor and Humboldt-Del Norte County Director.



A fir tree sprouts this fall in Tahoe National Forest after treatments in a burn area of the 2013 American Fire, which burned about 27,000 acres.

Next steps for wildfire recovery



Aftermath of the 2013 American Fire on Tahoe National Forest where clean up, restoration and research into landscape recovery techniques continues.

Many California forestland owners will face the inevitable: wildfire and damage to their land. That's why experts say planning for future forest resilience is an important part of the wildfire recovery process.

To help land owners assess the impact of a fire and make decisions about a path to recovery, natural resources experts at the University of California have released a free, updated guide, "Recovering from Wildfire: A Guide for California's Forest Landowners. The publication is online at: <http://anrcatalog.ucanr.edu/pdf/8386.pdf>.

"Fire is a dynamic process that typically burns in a mosaic pattern with a broad range of fire effects on forests," said Susan Kocher, a University of California Cooperative Extension forestry and natural resources advisor and co-editor of the updated guide.

"Fire's effect on forest ecology can be both positive and negative—even within the same fire," she said. "One way scientists measure a fire's effect is by assessing the vegetation that was killed, also called assessing fire severity."

Fire severity is commonly grouped into three classes: low, moderate and high, depending on how much was killed. At first burned areas will look severely burned, but Kocher said a closer inspection and time will determine what was killed or what will leaf out or sprout later.

Many dominant, mature trees survive when fires burn with a mixture of low and moderate severity. Fire promotes growth of many native

understory species adapted to fire and California's historically more open forests.

High-severity fire results in the greatest change to forests. Large areas of high severity fire raise the greatest number of concerns for private landowners, who face loss of timber, as well as scenic and recreational values.

Added to that is the threat of further damage due to dead and falling trees, landslides, soil erosion and flooding.

The guide offers help with decisions like revegetation, ways to prevent soil erosion, salvage logging and using professional help for forestland recovery. The guide also covers tax implications for loss of trees and land productivity, as well as a comprehensive listing of professional services to support rebuilding.

More information on forest stewardship in California is covered in the 25-part Forest Stewardship Series developed by the university's experts in Agriculture and Natural Resources. Find the free online series at: <http://anrcatalog.ucanr.edu/pdf/8323.pdf>

And for landowners who've experienced wildfire in oak woodlands, the ANR catalog offers a free, online guide to assessing oak tree survival after a wildfire. <http://anrcatalog.ucanr.edu/Details.aspx?itemNo=8445>.

Many decisions need to be made after a wildfire, some very quickly. Depending on an owner's goals and the unique characteristics of particular forestland, helping craft and tend a future forest stand can be an exciting and rewarding process.

Need More Help?

With the many decisions and actions forestland owners will need to make in coming months to begin recovery after wildfire, Forestland Steward is a resource for landowners who want to get it right.

Visit the newsletter archive to read more details about forest recovery at: <http://calfire.ca.gov/foreststeward/pdf/news-fall-15win16.pdf>

And, contact your local UC Cooperative Extension forester for advice. See page 12 for contact information.

Plan for Retreat When Falling a Tree

- *Don't turn your back on a falling tree.*
- *Place tools and equipment away from your escape paths.*
- *Walk quickly away to a distance of 20 feet from a falling tree.*
- *Position yourself behind a standing tree, if possible.*

For more details on recovery and safety practices, visit the Forestland Steward online archive at: <http://calfire.ca.gov/foreststeward/pdf/news-fall15win16.pdf>

When working with hazardous trees, plan for putting personal safety first



Protective clothing—chaps, pants, jackets, gloves, hardhats or helmets, face guards, hearing protectors and steel-toe boots—increase personal safety when operating power tools. Source: Adobe Stock

If you live in a wooded area, chances are wildfire and increased tree mortality have created hazardous trees near your home that need attention. But, falling trees can be dangerous and forestry experts recommend both caution and an action plan before starting work.

What is a Hazardous tree?

Hazardous trees are those with structural defects likely to cause failure of all or part of the tree. They have high potential to fall on structures, roads, power lines or public spaces. Most importantly, know when to ask for help and, when possible, hire an expert.

Studies by the National Institute for Occupational Safety and Health find logging among the most dangerous occupations in the U.S. Falling debris causes about 50 percent of fatal injuries.

When it comes to removing dead or hazardous trees, experts say safety must always come first. There's a lot of information on how to fall trees safely.

Consider those sources a place to start. Hands-on training with a professional is the best way to learn how to do it right and avoid injury.

Check safety regulations

An eTool developed by the U.S. Occupational Safety & Health Administration helps landowners comply with logging work practices and safety programs on their property to reduce risks whether they must do the removal themselves or hire professionals for the job.

The eTool reviews the requirements of the OSHA Logging Standard in relation to employer safety and health, and refers to various state standards and recommended safe-work practices.

The online guide covers manual tree falling

in detail since this operation presents the greatest risks in logging.

The OSHA Standard applies to:

- All types of logging, regardless of the end use of the wood. Examples of logging activities include pulpwood and timber harvesting and the logging of sawlogs, veneer bolts, poles, pilings and other forest products.
- All logging operations from pre-falling planning to the transport of logs and forest products to the point of delivery, with the exception of the construction site, and use of cable yarding systems.
- Tree marking activities—including marking trees posing a danger or wildlife trees—which take place in advance of and separate from tree harvesting, are not covered by these regulations.
- Logging operations include: falling, limbing, bucking, debarking, chipping, yarding, loading, unloading, storing and transporting forest products, as well as transporting logging equipment and personnel to and from logging sites.
- Agricultural employers who are engaged in logging incidental to their agricultural operations also are covered by these logging regulations.

Online information sources to help prepare

- OSHA eTool <https://www.osha.gov/SLTC/etools/logging/manual.html>
- Chainsaw safety guidelines in English and Spanish https://www.osha.gov/dte/grant_materials/fy10/sh-20823-10/chainsawsafety-eng.pdf
- Chainsaw safety tips from university cooperative extension experts http://www.aces.uiuc.edu/vista/html_pubs/saw/saw.html

Report calls for beefing up California's biomass economy and forest health

With unprecedented volumes of dead and decaying trees in Sierra forests, a California Natural Resources Agency working group has developed recommendations for rebuilding wood processing capacity by increasing demand for California forest products.

In an October report <http://resources.ca.gov/wp-content/uploads/2014/07/Wood-Products-Recommendations.pdf>, the group outlined actions, policies and pilot programs to promote forest health, improve carbon sequestration and bolster rural economies. The report outlines actions, policies and pilot programs to accomplish these goals.

"There's a critical need to bolster our biomass processing capacity and expand uses for wood products, not only to handle dead trees in the short term, but also to assist with ongoing forest management and restoration," said California Natural Resources Secretary John Laird.

"This can and should be done in a manner that advances California's climate change goals and creates opportunities for rural communities."

The report notes that increased forest management and associated wood and biomass process-

ing infrastructure is needed in every forest-dependent region of the state. Expanding markets for higher-value wood products and promoting localized manufacturing would help serve parts of the Sierra hardest hit by tree mortality, as well as other forested regions where wood processing infrastructure has been lost.

The working group said there's an urgent need to utilize dead and dying trees in the Sierra and for long-term forest management projects statewide.

"There's a critical need to bolster our biomass processing capacity."

**John Laird,
Natural Resources Secretary**

"Forests in California are under increasing stress associated with climate change and underinvestment in management and restoration," the report said.

Despite high precipitation last winter, the unprecedented die-off in the Sierra is expected to continue for another decade, experts said.

Gov. Brown issued an executive order in September to, among other things, loosen restrictions on timber harvesting licensees to increase the number of people who are legally able to provide tree removal services. Landowners are reporting long waits for tree removal services. Executive Order B-42-17 is online at: <https://www.gov.ca.gov/news.php?id=19936>



At Blodgett Forest Research Station near Georgetown, an excavator (left) loads forest slash into a horizontal grinder. Wood chips from the grinder go into trucks for transport to Buena Vista Biomass Power Plant near Lone (right). Source: CalAg

Report Highlights Key Strategies

- Remove state barriers to redeveloping sites, permitting both new manufacturing operations and the use of new materials.
- Provide gap financing to incentivize broader investment.
- Focus on building the infrastructure necessary to bring new wood products to market.
- Invest in human capital, with a focus on assuring an available workforce trained to staff new wood products operations.
- Provide training in California's public technical schools and higher education systems. (See page 6-7)

Workforce of the Future

Program helps prepare the next generation of forestry professionals

For teens participating in the El Dorado Forestry Challenge in October, doing math calculations on the fly is a breeze. So are measuring the height of tall timber using a Biltmore stick and pacing a surveyor's chain to get a feel for the size of an acre—10 square surveyor chain lengths equals one acre, they'll explain.

But for hundreds of high school and community college students who join their school teams each year to compete in the academically rigorous science and math challenge held in forests around the state, all share the same desire—to work outside in forests and other natural settings.

Competing teams come from both rural and urban schools. Some participants have competed before; others are new to the experience.

"My family spends a lot of time outdoors fishing and hunting," said Stephanie Cudney, a junior at Mountain Oaks Charter School in Calaveras County. "It's how I grew up. I like being outside and think I might want to work in the forest when I graduate, maybe become a game warden."

Since its inception in 2003, the program has grown from one event to five, with the possibility of expanding the program outside California, said Forestry Challenge Founder and Director Diane Dealey Neill.

"The challenge is designed to provide an opportunity for a diverse student population to experience outdoor recreation and at the same time develop an appreciation for forest management and its benefits to all of us," Neill said.

Program goals include teaching students the basic principles of forestry, connecting classroom math and science to hands-on experiences with real-world applications and enabling them to make recommendations about techniques for managing natural resources.

In the process, students explore careers by interacting with natural resources professionals, including foresters, hydrologists, soil scientists, wildlife biologists and fire scientists. Many experienced professionals volunteer their time during the four-day residential events to pass on their knowledge to the next generation of forestry workers.

"It's amazing to be out in the woods," said Drake Cha, a senior at Grant Union High School in Sacramento. "I'm doing what I love and talking with the instructors has really opened me up to the possibilities of doing this work."

Extracurricular activities during the El Dorado challenge included a night hike in the woods with a biologist

and recreational activities, like riding a zip line and an evening bonfire.

Neill said that while the students gain scientific knowledge and learn practical skills, they also have a lot of fun.

"Students who may never have set foot in a forest environment leave with an increased appreciation for the woods and a desire to incorporate outdoor activities into their lives," she said. "And, students who participate in our program are more likely to choose a career path in natural resources and attend college."

For the challenge, students participate as 2- to 5-person teams representing their school and, in addition to technical skills, learn the values of cooperation, teamwork and public speaking.

The competition involves a comprehensive field test, which includes identifying and measuring trees, analyzing stand data, and making forest management decisions.

Scores earned at the testing stations are combined, and become 60 percent of the team's final score.

During a field trip into the forest, students are presented with a current focus topic and visit the site of a case study to ask questions and collect data. They use the information they collect to weigh-in on the topic, often influencing decisions made by professionals about proposed projects and managing the forest in the future.

Guided by consultation sessions with a Registered Professional Forester, students use all available informa-



Emma Kampp, Foresthill High School, records data as teammates survey their assigned forest area.



Alexis Flint, Golden Sierra High School team member, uses a D-Tape to measure the diameter of a tree



Forestry experts talk with teams about how to identify tree species before the Forestry Challenge competition.

tion to put together a 15-minute Power Point presentation. A panel of three judges scores the presentation, which is worth 40 percent of the final event score.

At the El Dorado event in October, the first place score went to the team from Sacramento New Technology High School. Out of a possible 250 points, the team earned 231, currently the highest score statewide.

View the team's winning presentation online at: <http://forestrychallenge.org/2017/10/30/2017-el-dorado-forestry-challenge-highest-scoring-team-presentation/>

In the past, top teams have gone on to make their forest management presentations to the California Board of Forestry, the California Licensed Foresters Association and the Forest Landowners of California.

For students and parents who wonder where these skills and a love of the outdoors might lead, the U.S. Bureau of Labor Statistics, which tracks all U.S. jobs and employment trends, reports that through 2024 jobs in forestry-related occupations are expected to grow about 6 percent, similar to other employment fields.

California has the largest number of U.S. forestry-related jobs and workers. Overall, most jobs are located in the West.

The bureau's analysts say the need for workers to control wildfires, along with increased demand for timber and wood pellets, is expected to increase employment in forestry occupations. Productivity gains resulting from use of technology in the coming decades, however, is expected to contribute to a slowing and eventual decline in forestry-related employment.

Analysis of education requirements and job

outlook for forestry-related jobs is online at:

<https://www.bls.gov/careeroutlook/2016/article/forestry-careers.htm>

While the outlook for forestry-related occupations is of interest to high school students like Dylan Spencer, Golden Sierra High School in El Dorado County, the attraction to the work goes beyond dollars and working conditions.

"I'm here because I want to help keep our forests secure and protected from wildfire and other things that damage the environment," said Spencer, who has also participated in two California Watershed Summits. "I've seen what large fires can do and I don't want to see our forests get into conditions that lead to disaster."

Information about the Forestry Challenge program and ways to participate, is online at: www.forestrychallenge.org or contact Diane Dealey Neill at dianedealeyneill@gmail.com or 530-417-1960.



Forestry Challenge Director Diane Dealey Neill, left, works with Golden Sierra High School teammates Chase Sherman, center, and Blake Borello, right.

Nature's Office Suite

Workers in forestry jobs spend a lot of time outside, but these jobs also involve a lot more than a walk in the woods.

Occupations

- **Land Managers:** Manage and protect forests, parks, and natural resources through work with government agencies and private landowners.
- **Foresters:** Manage timber harvests, forest land and budgets, create forest project plans, and supervise forest and conservation technicians and workers.
- **Forest conservation technicians:** Measure forest details and help with quality improvement using tools such as GIS technology.
- **Forest conservation workers:** Under supervision of foresters and forest technicians, these workers maintain and protect forests.

Source: U.S. Bureau of Labor Statistics

Preventing Infestation

Research into targeted GSOB management is under way. In the meantime, experts recommend these measures:

- **Plant Less**

- **Susceptible Species:**

- *The primary oak species GSOB has killed in infested areas are coast live oak and California black oak.*

- **Plant Non-oak**

- **Species:** *Treatments shouldn't be required on less susceptible species.*

- **Remove Severely**

- **Infested Trees:** *As trees die, there's potential for falling limbs and fire hazard.*

- **Diversify Planting:**

- *In infested areas, consider replanting with other native oak species, for example white oaks. Consult your local UCCE or other experts (see page 10)*

- **Treat Cut Wood:**

- *Human-assisted movement of infested cut wood or logs represents the most significant threat of spread. Tarp and hold on site, debark or grind infested wood.*

Source: UCANR, CAL FIRE

Experts warn oak woodlands are at risk



Adult goldspotted oak borer, a bark beetle about 0.35 inches long, is threatening California oaks. Source: U.S. Forest Service

California's oak populations are under a new threat from an invasive beetle that is causing significant oak mortality in southern California.

Recent studies have concluded that goldspotted oak borer is capable of surviving throughout the state. With about 13 million acres of oak forest at risk in California—much of it privately owned—threats to these trees are a concern.

Since 2008, when the beetle was first detected in San Diego County, researchers estimate more than 100,000 native oaks have died in that county alone. The invasive pest has no natural predators in California.

Susceptible oak species are found throughout much of the state, with the largest concentration in the Central Valley, and the beetle is spreading.

Halting the spread

"GSOB can easily be transported on infested firewood to much of California in a day's drive," said Kevin Turner, CAL FIRE Southern California Invasive Pest Coordinator. "We want to prevent the spread of this pest to any place with susceptible oak species."

In addition to CAL FIRE researchers, he said a large team of experts from federal, state and county agencies, as well as the University of California, are working on ways to contain and eradicate the pest, adding, "We're not aware of any weather or climate conditions yet that would impair GSOB's ability to become established elsewhere. We're greatly concerned."

The California Board of Forestry and Fire Protection in 2017 enlarged the Zone of Infestation for the pest and scientists are in the field now assessing infestation levels to determine the rate of expansion.

GSOB is impacting areas of Los Angeles, Orange and Riverside counties, as well as extended

areas of San Diego County. Areas of Cleveland and San Bernardino national forests are infested, with the Angeles and Los Padres national forests at immediate risk.

Experts think the beetle was introduced to California on firewood brought from its native habitat along the Arizona-Mexico border, and said it could have been in the state five to 10 years before detection.

Natural spread rate at the edge of an infestation seems to be slow, Turner said. "That's the good news. The bad news is GSOB leapfrogged over long distances of susceptible oaks to get to Riverside County and other areas.

"We're in agreement that these jumps occurred because infested firewood from San Diego County was transported to distant areas," Turner said. "We fear infested wood continues to be moved."

Details on the pest threat and methods for preventing infestations and eradication are online at: http://ucanr.edu/sites/gsoinfo/Diagnosis_and_Management/Management_Options/



Female beetles bore into oak trees to lay eggs. When they hatch, larvae and pupa feed on the trees' phloem and xylem. In mature oaks, death can occur within a couple of years. Source: Kevin Turner, CAL FIRE/UCANR

Protections adopted for Cascades frog

The Cascades frog has been added to the candidate list of California species being considered for protection as threatened or endangered under the California Endangered Species Act.

The decision by the California Fish and Game Commission in October has the potential to affect future land management decisions in areas where the species is found, including grazing, logging and hydroelectric dam operations.

Forestry experts say management of forestland damaged by wildfires or invasive insects may impact CESA candidate and listed species.

Under state and federal ESA listings, more than two million acres are now designated critical habitat for Sierra amphibian species – Sierra Nevada yellow-legged frog, mountain yellow-legged frog, Yosemite toad and now the state candidate listing of the Cascades frog. Much of the critical habitat for the frogs is on federal land, with significant overlapping lands designated for each species.

Critical habitat for species survival is land considered essential for conservation of a threatened or endangered species and recognizes that areas where candidate species are found may require special management.

Where frogs are found

Within California, there are two separate Cascades frog populations. In the northern area, the species' range extends from the Klamath-Trinity region, along the Cascades in the vicinity of Mt. Shasta, southward to the headwater tributaries of the Feather River at elevations from 750 to 8,200 feet.

The range of the Southern Cascades population encompasses parts of Butte, Lassen, Plumas, Shasta and Tehama counties. The range of the Klamath Mountains population encompasses parts of Shasta, Siskiyou and Trinity counties.

The total area of the Cascades frog range in California is about 800,000 acres, biologists said in their evaluation report to the commission, noting the species prefers still water. It inhabits lakes, ponds, wet meadows and streams.

Active during the day and typically found close to water, it's often seen basking in open, sunny areas along shorelines. However, the frog can move between basins by crossing over mountain ridges, biologists said.

Because many CESA listed species also occur on privately owned property, the California Department of Fish and Wildlife says it's critical to species' recovery to collaborate with private landowners to "conserve, protect, restore and enhance listed species and their habitats."

Helping species recover

Private landowners often participate in efforts to recover listed species, CDFW said, but noted some landowners may be reluctant to support or attract listed species onto their properties, due to concerns about land-use restrictions that may occur if listed species colonize on their property or increase in numbers as a result of land management activities.

CDFW is authorized to enter into incidental take permits for species listed as endangered, threatened, candidate, or for a rare plant, through a Safe Harbor Agreement, if implementation of the agreement is reasonably expected to provide a conservation benefit to the species, among other provisions.

SHAs are intended to encourage landowners to voluntarily manage their lands to benefit CESA-listed species without subjecting those landowners to additional regulatory restrictions as a result of their conservation efforts. In addition, at the end of the agreement period, participants may return the enrolled property to the baseline conditions that existed at the beginning of the SHA.

Information on SHAs is online at <https://www.wildlife.ca.gov/Conservation/CESA>



Cascades frog, newly designated a candidate species for listing under the California Endangered Species Act. Source: USGS

CSEA Candidate Species

- Northern Spotted Owl
- Pacific Fisher
- Livermore Tarplant
- Tricolored Blackbird (since 2015)
- Humboldt Marten
- Coast yellow leptosiphon
- Lassics Lupine
- Foothill Yellow-legged Frog
- Cascades Frog

See candidate listings and background at <http://www.fgc.ca.gov/CESA/>

The Foothill Yellow-legged frog was designated a "threatened" candidate species in June under the CESA. That has implications for Timber Harvest Plans. See CAL FIRE background at: http://calfire.ca.gov/resource/mgt/downloads/FYLF_InfoDoc_June2017_Final.pdf

Grants fund forest resilience and emissions

More than \$21 million in six separate grants have been awarded to local groups across California by CAL FIRE.

An August announcement said the funds will be used for projects to help reduce emissions and sequester carbon.

Three of the six grants will enable purchase of conservation easements on private land in Mendocino, San Bernardino and Siskiyou counties.

The easements will protect the land from being used in ways that would increase greenhouse gas emis-

sions—such as urban or agricultural development—and harness the natural ability of trees to “sink” or sequester carbon from the atmosphere.

Landowners will retain ownership of their land and will not be restricted from using it for activities such as timber harvest, hunting, fishing and hiking.

The grants will protect more than 28,285 acres of forests from development.

The grants use proceeds from California’s cap-and-trade program to combat climate change.

Through the Green-

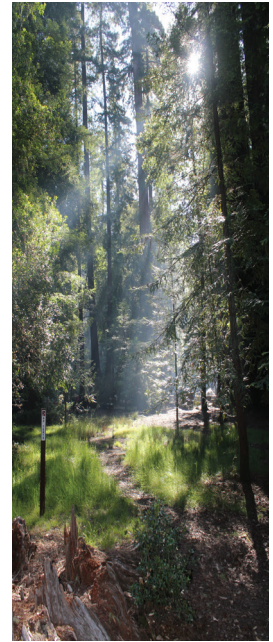
house Gas Reduction Fund, CAL FIRE and other state agencies are investing in projects that directly reduce greenhouse gases while providing a wide range of additional benefits in California communities.

CAL FIRE’s voluntary Forest Legacy Program has so far conserved more than 111,000 acres of working forest lands in California.

The other three grants, also funded by cap-and-trade proceeds, represent CAL FIRE’s landscape-scale forest health initiatives.

These initiatives include efforts to combat the state’s unprecedented bark beetle epidemic, improve watershed protection and provide for increased use of tools such as prescribed fire and hazardous fuels reduction treatments in California’s forests.

CAL FIRE’s Forest Health Program Grant Guidelines 2016-2017 can be found at: http://calfire.ca.gov/Grants/downloads/ForestHealth/CALFIRE_16-17_GGRF_ForestHealth-Program-Procedural-Guide-FINAL_050517.pdf



Big Basin Redwoods State Park, Santa Cruz County

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Learn tips and tricks to become a confident and proficient forest steward and keep current on the latest information, funding and events. Send a note to kcamp300@yahoo.com and specify whether you wish to receive either the electronic or paper version, or get both. It’s free.

California Stewardship Helpline

1-800-738-TREE; foresthelp@gmail.com

California Dept of Forestry & Fire Protection

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

CAL FIRE Forestry Assistance Specialists (FAS)

(Find the FAS for your county at calfire.ca.gov/resource_mgt/downloads/ForestAdvisorList.pdf)

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USDA Forest Service

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Calendar

January 16 - 18, 2018

Forest Vegetation Management Conference

Location: GAIA Hotel & Spa, Anderson CA

Information: www.fvmc.org

February 1-3

California Native Plant Society Conservation Conference

Location: Los Angeles Airport Marriott

Information: <https://conference.cnps.org/>

Note: Held every three years, the event more than 1,000 participants for workshops, seminars and field trips.

April 3-4

World Forest Institute Conference on Changing Dynamics of the Asia-Pacific Wood Trade

Location: Portland OR

Information: <https://www.worldforestry.org/event/changing-dynamics-asia-pacific-wood-trade/>

Note: Event will feature international speakers covering current and future trends in logs, lumber, and wood biomass trade in Asia.

April 14

California Botanical Society Annual Meeting

Location: UC Davis Arboretum and Public Garden

Information: <http://calbotsoc.org/>

Coming Soon!

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

Board of Forestry and Fire Protection 2017-18 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 Board meets almost every month to discuss forestry issues and make decisions. The public can attend the meetings. Find online information is at <http://bofdata.fire.ca.gov>.

December 5-6	Resources Building, Sacramento
January 23-24	Resources Building, Sacramento
February	No Meeting
March 6-7	Resources Building, Sacramento
April 10-11	Resources Building, Sacramento

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Fill out this box and send it to CAL FIRE, Forestry Assistance, P.O. Box 944246, Sacramento, CA 94244-2460.
 Fax: (916) 653-8957; email: Stewart.McMorrow@fire.ca.gov.
 For address changes, send this box or contact Stewart McMorrow...be sure to reference *Forestland Steward* newsletter.

NOTE: For address updates or to make comments or suggestions about this newsletter, please contact Stewart.McMorrow@fire.ca.gov. A limited number of extra printed copies may be available. Please send your shipping information and the number of copies you would like to Stewart.McMorrow@fire.ca.gov or mail your request directly.

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Got Questions? We've got answers

Richard Harris the voice—and the brain—behind the California Stewardship Helpline says when it comes to forest management and environmental issues, he has been asked nearly every question in the book.

With more than 40 years of experience as a Registered Professional Forester, educator, environmental expert and UC Cooperative Extension forestry advisor, he's equipped to handle most calls. For curve balls, he has a full roster of experts on tap.

The work of fielding questions from forestland owners is part of the support provided through the California Stewardship Program, which encourages good management of the state's private forestland.

When property owners call the Helpline, they get expert answers to technical questions and information on a variety of natural resources subjects.

Sometimes, Helpline callers also play a role in keeping the state's forests and wildlands healthy by alerting

agencies to a threat.

"I was getting calls from landowners in San Diego County about oak trees dying," Harris recalls. "I kept hearing about the problem and reached out to UC Cooperative Extension advisors in that county and then contacted experts at UC Riverside. We found the cause of the die-off was goldspotted oak borer." (See story, page 8)

Realizing the growing pest threat, Harris and other experts put together a series of public workshops to help landowners deal with the problem.

During the past six months, Harris said calls are coming in related to tree mortality, noting Helpline calls usually follow immediate forest issues and concerns.

The California Forest Stewardship Helpline (1-800-738-TREE) is a free information resource for private forestland owners. If getting answers by email is easier, send a message to Harris at foresthelp@gmail.com.