Lakehills Fire Safe Council
Community Bulletin

**Things to do...**

2018 meetings are concluded for the year, but hopefully efforts to be safe from wildfire continue! Remember, fall and winter months are the best times for performing defensible space yard work, trimming trees and clearing debris. It’s cooler! It’s safer! Prepare now, before winter storms arrive.

⇒ Use EDC Fire Safe Council’s free chipping service: [CLICK HERE FOR INFO](#)
⇒ Dispose of yard trimmings in your green waste bin
⇒ Check if contractor rates are less now for tree removal / big jobs
⇒ Perform a defensible space review of your home and surroundings

All individual efforts contribute to a safer community. If questions come up or assistance is needed before our next community meeting in March, call (916) 933-3238.

**Understanding Insurance in the WUI - webinar**

Last month, a free NFPA webinar was offered discussing how insurance policies for residences located in wildfire-prone areas are frequently inadequate and coverage is often misunderstood. If you missed it in October, check out this recorded webinar to hear from industry experts about choices you can make before a fire, and what to expect in navigating the post-fire process. The recording includes over 20 minutes of audience Q&A, and is available for non-NFPA Members until November 18. Register for NFPA's Xchange for free access: [CLICK HERE](#)

**Fifteen Hundred Homes Gone, but NOT This One**

(from article for Fire Adapted Communities by Yana Valachovic, October 25, 2018)

Randall Hauser knew that building in the Redding, California area meant that his family’s dream home, to be located in a blue oak and pine forest, would likely one day see a wildfire. Consequently, when they began construction in 1994, they kept fire in mind and paid close attention to the home’s design and construction. Fast forward 24 years, to the Carr Fire. Over 1,500 structures were destroyed in that fire, 17 of which were Randall’s neighbors’ homes. But his remained standing, unharmed. What made the difference? Here are a few of my observations after visiting his home.

1) The house includes a well-maintained, simple, **“Class A” metal roof** (see page 4). The house did not have dormers (i.e., small rooms that project from the roof) or other, more complex roof designs. I’ve seen several homes, that despite having metal roofs, did burn. In many of those instances, accumulated leaf litter in the gutters gave fire an entry point into the home.

2) The Hausers incorporated and maintained a **non-combustible zone (3–5 feet wide) around the outside of their home**. There are cement and crushed-rock walkways adjacent to the house, and they regularly rake leaves and cut the dry grass. During the Carr Fire, this helped prevent an ember landing in vegetation adjacent to the house and bringing fire to the house.

3) The **landscaping closest to their home is well maintained**. Tree limbs are pruned, and vegetation is open and includes low-growing cactus and succulents.

4) They designed the house with **boxed-in or soffited eaves** with the venting located at the outside edge, making it more difficult for embers to enter the attic. **Note: The latest research suggests that homeowners should replace ¾-inch attic and foundation vents with ½-inch mesh screen.** (See the NFPA/IBHS fact sheet on vents on page 5).

Read more about the Hausers and 15 other examples of wildfire mitigation that were success stories during 2017-2018 fires. **It does work and your efforts do make a difference!** [CLICK HERE](#)

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**Reporting Numbers to Call**

Report non-desired activities in a proper and timely fashion.

- Report illegal parking or traffic problems to the Highway Patrol (916) 861-1300.
- Report illegal parkland activities to State Parks (916) 358-1300.
- Report illegal activity on non-park properties to the Sheriff (530) 621-6600.

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Lakehills Fire Safe Council is a community organization. Join and Email us at: lakehillsfiresafecouncil@gmail.com
Presidential Memorandum on Promoting the Reliable Supply and Delivery of Water in the West

MEMORANDUM FOR THE SECRETARY OF THE INTERIOR
THE SECRETARY OF COMMERCE
THE SECRETARY OF ENERGY
THE SECRETARY OF THE ARMY
THE CHAIR OF THE COUNCIL ON ENVIRONMENTAL QUALITY

Subject: Promoting the Reliable Supply and Delivery of Water in the West

By the authority vested in me as President by the Constitution and the laws of the United States of America, I hereby direct the following:

Section 1. Policy. During the 20th Century, the Federal Government invested enormous resources in water infrastructure throughout the western United States to reduce flood risks to communities; to provide reliable water supplies for farms, families, businesses, and fish and wildlife; and to generate dependable hydropower. Decades of uncoordinated, piecemeal regulatory actions have diminished the ability of our Federal infrastructure, however, to deliver water and power in an efficient, cost-effective way.

Unless addressed, fragmented regulation of water infrastructure will continue to produce inefficiencies, unnecessary burdens, and conflict among the Federal Government, States, tribes, and local public agencies that deliver water to their citizenry. To meet these challenges, the Secretary of the Interior and the Secretary of Commerce should, to the extent permitted by law, work together to minimize unnecessary regulatory burdens and foster more efficient decision-making so that water projects are better able to meet the demands of their authorized purposes.

Other sections in this article:

Sec. 2. Streamlining Western Water Infrastructure Regulatory Processes and Removing Unnecessary Burdens.
Sec. 3. Improve Forecasts of Water Availability
Sec. 4. Improving Use of Technology to Increase Water Reliability
Sec. 5. Consideration of Locally Developed Plans in Hydroelectric Projects Licensing.
Sec. 7. General Provisions.

You can read this entire memorandum here: <<CLICK HERE>>

Count our Blessings!

It’s time to count our blessings! Thanks to those who partner with LHFSC and provide their help, expertise and time:

- El Dorado Hills Fire Department
- CAL FIRE
- US Bureau of Reclamation
- CA State Parks / Folsom Lake SRA
- El Dorado County Board of Supervisors
- El Dorado County Dept. of Transportation
- California Conservation Corp
- El Dorado County Fire Safe Council
- Elected state officials
- And our many energetic volunteers, neighbors & supporters!

Happy Thanksgiving!
2-1-1 El Dorado - clarification about this upcoming service

The article from last month provided information about El Dorado County’s planned 24 hour information and referral network, expected to be operational in 2019. Although 2-1-1 will support the community as a referral system for needed resources, services and programs, it will **not** change or replace 9-1-1. For emergencies, please continue to call 9-1-1.

It’s STILL Fire Season!

Below is a map of active fires from CAL FIRE’s site (*info captured prior to current Chico fire*). The closest is the **Branscombe Fire** which is 4,500 acres and 90% contained. It’s located off Branscombe Road, south of Hwy 12, Suisun City (Solano County). CAL FIRE is assisting Suisun FPD.

The **Donnell Fire**, in Stanislaus National Forest, last updated on Sept. 12, burned 36,450 acres and destroyed 54 structures plus 81 minor structures and incurred 9 injuries.

The **Wilson Fire** burned in Lassen National Forest near the junction of Wilson Lake and Lost Creek roads. 261 acres were burned with no fire growth as the fire received scattered rainfall. It is no longer being update by CAL FIRE.

**BE CAREFUL—IT’S STILL FIRE SEASON!**

Learn about Home Fires!

- **Fire is FAST!** In less than 30 seconds a small flame can turn into a major fire. It only takes minutes for thick black smoke to fill a house or for it to be engulfed in flames.
- **Fire is HOT!** Heat is more threatening than flames. Room temperatures in a fire can be 100 degrees at floor level and rise to 600 degrees at eye level. Inhaling this super-hot air will scorch your lungs and melt clothes to your skin.
- **Fire is DARKEST!** Fire starts bright, but quickly produces black smoke and complete darkness.
- **Fire is DEADLY!** Smoke and toxic gases kill more people than flames do. Fire produces poisonous gases that make you disoriented and drowsy. Asphyxiation is the leading cause of fire deaths, exceeding burns by a three-to-one ratio.

Learn about how to prepare and plan to ensure you and your family’s safety. In just 2 minutes, a fire can become life-threatening. In five minutes, a residence can be engulfed in flames. Whether the cause is from a wildfire or a kitchen fire, plan ahead to protect yourself!

<<CLICK HERE>> to find out where to begin!
Roofing Materials:

Roofs are a highly vulnerable part of a home during wildfires

HOMEOWNERS NEED TO IMPLEMENT RISK REDUCTION ACTIONS THAT MAKE HOMES BETTER ABLE TO SURVIVE A WILDFIRE - AND THE ROOF IS A GREAT PLACE TO BEGIN!

HOW HOMES IGNITE
Homes ignite in one of three ways: embers/firebrands, radiant heat exposure or direct flame contact. An example of an ember ignition is when wind-blown embers accumulate on combustible materials such as a wood shake roof. An untreated wood shake or shingle roof covering is the greatest threat to a home.

ROOF COVERINGS AND ASSEMBLIES
Roof covering fire ratings are Class A, B, C, or unrated; with Class A providing the best performance. Common Class A roof coverings include asphalt fiberglass composition shingles, concrete and flat/barrel-shaped tiles. Some materials have a “by assembly” Class A fire rating which means, additional materials must be used between the roof covering and sheathing to attain that rating. Examples of roof coverings with a “by assembly” fire rating include aluminum, recycled plastic and rubber and some fire-retardant wood shake products. If a wood shake roof does not have the manufacturer’s documentation specifying the fire retardant, assume it’s untreated.

TILE AND ROOF COVERINGS WITH GAPS BETWEEN THE COVERING AND ROOF DECK
Flat and barrel-shaped tiles, metal, and cement roof coverings can have gaps between the roof covering and sheathing, which typically occur at the ridge and edge of roofs. These openings can allow birds and rodents to build nests with materials that are easily ignited by embers. Flames from this type of ignited debris can spread to the structural support members, bypassing the protection offered by a Class A rated roof covering. Plugging these openings between the roof covering and the roof deck, is commonly called “bird stopping”. Regularly inspect and maintain these areas.

DEBRIS ACCUMULATION – ROOF AND GUTTERS
Wind-blown debris (including leaves and pine needles from nearby and overhanging trees) will accumulate on roofs and in gutters. Dry debris can be ignited by wind-blown embers. These flames can extend to the edge of the roof and adjacent siding. Even with Class A fire-rated roof coverings, vertical surfaces next to the roof edge will be exposed to flames from the ignited debris. Regularly remove vegetative debris from your roof and gutters.

ATTICS, CRAWLSPACES, SOFFITS AND EAVES
Post-fire research has shown attic vents, roof and gable end vents and under-eave areas are entry points for embers and flames. Reduce the size and number of embers that pass through vents into attic and crawlspace by covering them with a 1/8-inch metal mesh screen. When wildfires threaten, vents can be covered with 1/4-inch or thinner plywood, or a thin metal plate. Ensure these are removed when the threat has passed.

REDUCE YOUR ROOF’S VULNERABILITY TO WILDFIRE

1. Roofs should be Class A fire-rated, such as asphalt composition shingles. If you’re unsure about your roof’s rating, hire a professional roofer to make a determination.

2. Remove debris on the roof and in the gutters at least twice a year, or more often if necessary.

3. Remove tree branches that overhang the roof.

4. Periodically inspect exposed areas under eaves and soffits to ensure construction materials are in good condition.

5. Cover vents, e.g., with noncombustible, corrosion-resistant 1/8-inch metal mesh screens.

6. Inspect and maintain your roof on a regular basis. Replace when necessary.
INSTALLING THE RECOMMENDED MESH SCREENING AND ELIMINATING STORAGE IS CRITICAL TO REDUCING BUILDING IGNITIONS DURING A WILDFIRE.

VENTS IN ATTICS AND CRAWL SPACES
Attic and crawl space vents, and other openings on the vertical wall of a home, serve important functions, including providing ventilation to remove unwanted moisture from these typically unoccupied spaces and oxygen for gas appliances such as hot water heaters and furnaces. Wind-blown embers are the principal cause of building ignition and can readily enter these spaces, which are often hot and dry. Providing air for ventilation, while also keeping out embers can present a dilemma. Dry materials are more easily ignited by embers, so limiting the entry of embers into attic spaces is critical. Adding to the problem are the combustible materials we tend to store in these spaces (e.g., cardboard boxes, old clothes and other combustible materials) because embers accumulate against them and they can be easily ignited.

HOW VENTS FUNCTION
Ventilated attic spaces have openings in two locations. Inlet air comes from vents located in the under-eave area at the edge of your roof. Exiting air leaves through vents located on the roof or at the gable ends of your home. If your home is built over a crawl space, you will typically have vents on each face of your home to provide cross-ventilation. Experiments conducted at the IBHS Research Center demonstrated that regardless of whether a vent had an inlet or outlet function, when wind blows against its face, it is an inlet vent. Therefore, any vented opening on your home should be able to resist the entry of embers. Unvented attic and crawlspace designs are available for some areas of the country. These designs are more easily implemented with new construction. Check with local building code officials to see if this is an option where you live.

USE MESH SCREENING TO REDUCE EMBER ENTRY INTO VENTS
Building codes require vent openings to be covered by corrosion resistant metal screens, which are typically 1/4-inch to keep out rodents. However, research shows that embers can pass through 1/4-inch mesh and ignite combustible materials, particularly smaller materials such as saw dust. Embers also can enter smaller screening, such as 1/16-inch, but cannot easily ignite even the finer fuels; however, this size screening is more easily plugged with wind-blown debris and is easily painted over if you are not careful when re-painting your house. Installing 1/8-inch mesh screening is suggested in wildfire prone areas, as it effectively minimizes the entry of embers. It’s important to note that 1/8-inch screening only minimizes the size and number of embers and does not eliminate them entirely; making it very important to reduce what’s stored in the attic and crawl space.

WIND AND THE VENTED OPENING
Wind blowing against the opening of a vent is critical to its function. The wind can blow embers against the vent opening, causing embers to enter the attic or crawl space. To reduce ember entry, it is important to keep the vent opening free of debris and to install mesh screening to prevent embers from entering the attic or crawl space.

FOR INLET VENTS
For (under-eave) inlet vents, opt for a soffit eave design. IBHS research demonstrates that gable end vents and other vent openings are vulnerable to wind-blown embers when the face of the vent is perpendicular to the wind flow, while embers are less likely to pass through vents with a face that is parallel to the wind flow. Therefore, soffit eave construction is preferred to open eave.

FOR OUTLET VENTS
For outlet vents, opt for a ridge that is rated to resist wind driven rain. These vents have an external baffle at the vent inlet. Vents that have been approved for use by the California Office of the State Fire Marshal.

TURBINE VENTS
Turbine vents also help keep embers out, but you should attach a piece of 1/8-inch mesh to the bottom of the roof sheathing at the opening for the vent.