Homeowner’s Guide to Fire in Santa Barbara County

Compiled August 2019 by the Cachuma Resource Conservation District with funding the California Department of Forestry and Fire Protection as part of the California Climate Investments Program
The Homeowners Guide to Fire in Santa Barbara County Program is part of California Climate Investments, a statewide program that puts billions of Cap-and-Trade dollars to work reducing GHG emissions, strengthening the economy, and improving public health and the environment – particularly in disadvantaged communities. The Cap-and-Trade program also creates a financial incentive for industries to invest in clean technologies and develop innovative ways to reduce pollution. California Climate Investments projects include affordable housing, renewable energy, public transportation, zero-emission vehicles, environmental restoration, more sustainable agriculture, recycling, and much more. At least 35 percent of these investments are located within and benefiting residents of disadvantaged communities, low-income communities, and low-income households across California. For more information, visit the California Climate Investments website at: http://www.caclimateinvestments.ca.gov.

Cover photo: 2017 Thomas Fire, photo by Kari Greer, USFS
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Emergency Phone Numbers

IN AN EMERGENCY CALL 911

DANGER
If you smell natural gas, see downed power lines, or suspect another emergency, leave the area immediately and call 911.

STRUCTURES / EMERGENCY INFO
To report structural damage or get information about current fires or other emergency information contact the Santa Barbara County Emergency Operations Center 805-681-5526

SIGN UP FOR ALERTS
https://awareandprepare.org/

RED FLAG WARNINGS
The Santa Barbara County Office of Emergency Management has partnered with local fire officials to create a text messaging system for local residents when a Red Flag Warning is issued in Santa Barbara County. Sign up by texting the word redflag to 888777. Messages from emergency officials can increase your awareness and vigilance in high fire hazard areas.

SANTA BARBARA SHERIFF
805-683-2724 or 911

COMMUNITY INFORMATION AND RECOVERY RESOURCES
https://www.countyofsb.org/fire-recovery.sbc

CAL FIRE
http://www.fire.ca.gov
MENTAL HEALTH SERVICES
Mental health services are available 24/7 through the Santa Barbara County Department of Behavioral Wellness
888-868-1649

SB COUNTY FLOOD CONTROL DISTRICT
805-568-3440

US NATIONAL FOREST SERVICE
805-566-0860

SANTA BARBARA RED CROSS
2707 State Street
Santa Barbara, CA 93105
805-687-1331

Animal Control

IF YOU NEED ASSISTANCE WITH YOUR ANIMALS DURING AN EMERGENCY CALL 805-681-4332

SANTA BARBARA COUNTY ANIMAL SERVICES
805-681-5285

SANTA BARBARA HUMANE SOCIETY
5399 Overpass Road
805-964-4777

If you are unable to take all of your animals in an emergency, coordinate with County Animal Services for assistance. Emergency Hotline
805-681-4332
Gas and Electric

IF YOU SMELL GAS OR SEE DOWNED POWER LINES
LEAVE THE AREA AND CALL 911

PG&E 24-HOUR CUSTOMER SERVICE LINE
1-800-PGE-5000 (1-800-743-5000)

PG&E 24-HOUR POWER OUTAGE INFORMATION LINE
1-800-PGE-5002 (1-800-743-5002)

PG&E RESIDENTIAL CUSTOMER SERVICE CENTER
Monday-Friday, 7 a.m. - 9 p.m.
Saturday, 8 a.m. - 6 p.m.
Sunday and after hours: 24-hour availability for emergencies and automated customer service
English or Español: 1-877-660-6789

SO CAL EDISON REPORT AN OUTAGE (24-HOURS A DAY, 7-DAYS A WEEK)
1-800-611-1911.

SO CAL EDISON CUSTOMER SUPPORT
1-800-655-4555

SO CAL EDISON SPANISH
1-800-441-2233
Agricultural Resources

CACHUMA RESOURCE CONSERVATION DISTRICT (CRCD)
Anna Olsen, Executive Director
920 E Stowell Road
Santa Maria, CA 93454-7008
805-868-4013
aolsen@rcdsantabarbara.org
http://www.rcdsantabarbara.org

PROGRAMS

- **Site Visits and Planning** for landowners to determine resource needs and appropriate actions concerning:
  - Erosion
  - Natural resource permit assistance on a fee for service basis
  - Technical assistance

- **Homeowners Guide to Fire in Santa Barbara County** provides information for landowners as to what services local, county, and state organizations provide. Contact information, ways to acquire additional information, and general descriptions of programs and resources are supplied where applicable.

- **Website** will be updated regularly to include pertinent information regarding services and funding offered by the CRCD and other agencies for fire recovery.
  
  http://www.rcdsantabarbara.org
Post-Fire Assistance for Landowners by the Natural Resources Conservation Service (NRCS), Farm Service Agency (FSA), and Risk Management Agency (RMA). These agencies meet with landowners to assess damages and offer technical and financial assistance where possible.

With the high potential for winter rains, burned areas are at greater risk for erosion and mudflows and Emergency Watershed Protection (EWP) type services are key to preventing further damage. The program requires local government bodies or others to sponsor on-the-ground work including concrete barriers and debris basins, mulching, straw wattles and other damage control measures. Potential sponsors are encouraged to contact NRCS for more information.

Environmental Quality Incentives Program (EQIP)

Environmental Quality Incentives Program (EQIP) and Emergency Conservation Program (ECP) can provide long-term support to repair livestock fencing, remove dead or dying trees, clear dense brush, install new livestock water facilities, and other agricultural services.

Emergency Watershed Protection Program (EWP)

NRCS works with local government entities in the impacted counties to mitigate potential hazards to life and property resulting from fires.
Work may include removing debris, stabilizing streambanks, fixing water control structures, etc. 

Technical and Educational Assistance for landowners impacted by fires that are faced with erosion and flooding in a damaged watershed.

RESOURCES

Publications, Fact Sheets, and Videos can be found on the NRCS website at https://www.nrcs.usda.gov/wps/portal/nrcs/main/ca/newsroom/features/

NRCS is available to help with recovery. The website is updated to have local fact sheets on how to address property damage after the fires. Please contact your local field office before starting work so that you are signed up for any financial assistance that may be available to help pay for practices.

FARM SERVICE AGENCY (FSA)
805-928-9269

If you had damages to your crops, livestock, farm equipment, barns, dairy, etc., you should contact your local Farm Services Agency office to inquire about the USDA's disaster assistance program.

PROGRAMS

Emergency Loan Program to help producers recover from production and physical losses due to natural disasters. Emergency loan funds may be used to:

- Restore or replace essential property
- Pay all or part of production costs associated with the disaster year
- Pay essential family living expenses
- Reorganize the farming operation
- Refinance certain debts

Applications for emergency loans must be received within eight months of the county’s disaster or quarantine designation date. Contact local FSA office for details and more information.
For producers affected by the fires

- Livestock Indemnity Program (LIP)
  - Livestock death due to wildfire
  - Document livestock death

- Emergency Conservation Program (ECP)
  - Cost Share assistance for debris removal, boundary fence, replacement of livestock watering facilities
  - Vineyard and Orchard debris removal, replacement of irrigation

- Tree Assistance Program (TAP)
  - Cost Share assistance for Tree/Vine removal, replacement or rehabilitate

- Emergency Assistance for Livestock Program (ELAP)
  - Grazing Losses
  - Loss of purchased/harvested feed

Detailed information on all of these disaster assistance programs can be found online at http://www.fsa.usda.gov/disaster

Additional information is also available online at https://www.farmers.gov/recover

UNIVERSITY OF CALIFORNIA
DIVISION OF AGRICULTURE AND NATURAL RESOURCES (UCANR)
http://ucanr.edu/

RESOURCES

- Recovering from Wildfire webpage has many resources for landowners after a wildfire in the form of supplemental text documents. Each category below is on their webpage and contains links to documents with information regarding financial aspects, livestock needs, land management after a fire, and commonly asked questions.

- Homeowner’s Guide To Recovering From Wildlife
  http://ucanr.edu/sites/postfire/Homeowners_Guide_to_Recovering_from_Wildfire/
FIRE PREVENTION & PREPAREDNESS

- Landowner’s Guide to Fire
  http://ucanr.edu/sites/postfire/Landowners_Guide_to_Fire/

- Livestock, Agriculture, and Natural Resources Guide to Fire
  http://ucanr.edu/sites/postfire/Livestock_Agriculture_and_Natural_Resources_Guide_to_Fire/

- **Homeowner’s Wildfire Mitigation Guide** webpage contains information regarding what home features make the structure more fire safe. http://ucanr.edu/sites/Wildfire/

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
https://www.cdfa.ca.gov/firerecovery/

PROGRAMS

**The Wildfire Recovery Resources** webpage compiled by the CDFA consists of recovery resources and corresponding information (including agencies, programs, fact sheets, and detailed information). By following the links you will be directed to further information regarding programs offered.

**Residential Resources**

CACHUMA RESOURCE CONSERVATION DISTRICT (CRCD)
Anna Olsen, Executive Director
920 E Stowell Road
Santa Maria, CA 93454-7008
805-868-4013
aolsen@rcdsantabarbara.org
http://www.rcdsantabarbara.org

RESOURCES

**Website** will be updated regularly to include pertinent information regarding services and funding offered by the CRCD and other agencies for fire recovery. http://www.rcdsantabarbara.org
FIRE PREVENTION & PREPAREDNESS

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
FEMA Helpline
(800) 621-3362

Registering with FEMA can provide access to valuable recovery services. If you sustained damages to your home or personal property, you should apply with FEMA for assistance.

RESOURCES

❖ Apply for FEMA Assistance
   (800) 621-3362
   http://www.disasterassistance.gov/
   Spanish
   https://www.disasterassistance.gov/es

❖ Disaster Recovery Center Locator
   https://egateway.fema.gov/ESF6/DRCLocator
   Spanish
   https://www.fema.gov/es/DRC

❖ Transitional Sheltering Assistance Hotel Locator
   http://fema.maps.arcgis.com/apps/webappviewer/index.html?id=d9804d50c7e140e2a659aba91dd9e307
   Help After a Disaster FEMA Guide
   Spanish
   https://www.fema.gov/media-library-data/1559329172013-51733c58df2b636b57c65f149a006de8/FEMATrifoldSpanish.pdf

❖ After the Fire! Returning to Normal FEMA Guide
   Spanish
RESOURCES

- Current Air Quality Conditions
  https://www.ourair.org/todays-air-quality/

- About Smoke and Health
  https://www.ourair.org/sbc/about-smoke-and-health/

- Safe Ash Clean-Up During and After a Fire
  https://www.ourair.org/ash-cleanup/

- Cleanup of Structures Damaged by Flooding and Fire
  https://www.ourair.org/debris-cleanup-asbestos/

RESOURCES

- Website provides information regarding preparedness and recovery efforts related to the Santa Barbara County fires, debris flows, flood, health and safety information and storm readiness.
  - Sign up for alerts
  - Storm Readiness
  - Recovery
  - Health and Safety
RESOURCES

- **Recovering from Wildfire** webpage has many resources for landowners after a wildfire in the form of supplemental text documents. Each category below is on their webpage and contains links to documents with information regarding financial aspects, livestock needs, land management after a fire, and commonly asked questions.
  - Homeowner’s Guide To Recovering From Wildlife
    http://ucanr.edu/sites/postfire/Homeowners_Guide_to_Recovering_from_Wildfire/
  - Landowner’s Guide to Fire
    http://ucanr.edu/sites/postfire/Landowners_Guide_to_Fire/
  - Homeowner’s Wildfire Mitigation Guide webpage contains information regarding what home features make the structure more fire safe.
    http://ucanr.edu/sites/Wildfire

Document Recovery & Government Services

RESOURCES

- **Disaster Unemployment Assistance**
  1-800-300-5616
  http://www.edd.ca.gov/Unemployment/Disaster_Unemployment_Assistance.htm
  Spanish
  https://www.edd.ca.gov/informacion_general_en_espanol.htm

- **Copies of Vital Records**
  https://www.cdc.gov/nchs/w2w/index.htm

- **Replacement Social Security Card**
Spanish


- **California Department of Motor Vehicles**
  Fire victims can receive support at local DMV field offices, by calling DMV customer service at 1-800-777-0133 (during business hours) or by visiting [http://www.dmv.ca.gov](http://www.dmv.ca.gov)

- **IRS Disaster Relief Page**

  Spanish

Prepare

ESSENTIAL EMERGENCY DOCUMENTS

Keep these records or copies in a safe and easy to access location

- DRIVERS LICENSES/ I.D. CARDS
- EMERGENCY CONTACT LIST (including out of state contact)
- PASSPORTS, BIRTH CERTIFICATES & SOCIAL SECURITY CARDS
- MEDICAL INSURANCE CARDS, IMMUNIZATION RECORDS, PRESCRIPTION LISTS
- INSURANCE POLICIES
- CASH (small bills & coins), TRAVELER’S CHECKS
- BANK ACCOUNT NUMBERS, CREDIT CARD & COMPANY NUMBERS

LINKS

❖ CAL FIRE Ready For Wildfire
Preparation for a wildfire starts with three simple steps: Ready, Set, Go!

READY Defensible space and hardening your home

SET Get prepared to evacuate before wildfire strikes

GO Wildfire evacuation guide
PRE-EVACUATION PREPARATION STEPS

When an evacuation is anticipated, follow these checklists (if time allows) to give your home the best chance of surviving a wildfire:

OUTSIDE

1. Gather up flammable items from the exterior of the house and bring them inside (patio furniture, children’s toys, door mats, trash cans, etc.) or place them in your pool.

2. Turn off propane tanks.

3. Move propane BBQ appliances away from structures.

4. Connect garden hoses to outside water valves or spigots for use by firefighters. Fill water buckets and place them around the house.

5. Don’t leave sprinklers on or water running; they can affect critical water pressure.

6. Leave exterior lights on so your home is visible to firefighters in the smoke or darkness of night.

7. Put your Emergency Supply Kit in your vehicle.

8. Back your car into the driveway with vehicle loaded and all doors and windows closed. Carry your car keys with you.

9. Have a ladder available and place it at the corner of the house for firefighters to quickly access your roof.

10. Seal attic and ground vents with pre-cut plywood or commercial seals.

11. Monitor your property and the fire situation. Don’t wait for an evacuation order if you feel threatened and need to leave.

12. Check on neighbors and make sure they are preparing to leave.

INSIDE THE HOUSE

13. Shut all windows and doors, leaving them unlocked.


15. Move flammable furniture to the center of the room, away from windows and doors.

16. Shut off gas at the meter. Turn off pilot lights.

17. Leave your lights on so firefighters can see your house under smoky conditions.

18. Shut off the air conditioning.

ANIMALS

19. Locate your pets and keep them nearby.

20. Prepare farm animals for transport and think about moving them to a safe location early.
FIRE PREVENTION & PREPAREDNESS

Homeowners' Checklist
How To Make Your Home Fire Safe

March 2009

OUTSIDE

1. Design/Construction

(a) Use ignition resistant construction (effective January 1, 2006) for all residential construction.
(b) Include an emergency generator to operate the pump during a power failure.
(c) Contact your local fire department to install a CO2 detector in your home.

2. Access

(a) Make sure that your street name sign is clearly visible from the street, especially at night.
(b) Address numbers should be at least 3 inches tall and on a contrasting background.
(c) Identify at least two exit routes from your neighborhood.

3. Roof

(a) Install a fire resistant roof. Contact your local fire department for current roofing requirements.
(b) Remove dead branches from your roof.
(c) Remove dead branches from your surrounding area.

4. Landscape

(a) Create a Defensible Space of 100 feet around your home. It is required by law.
(b) Create a "LEAN, CLEAN and GREEN ZONE" by removing 30 feet immediately surrounding your home.
(c) Turn your "REDOX FUEL ZONE" into a "LEAN, CLEAN and GREEN ZONE" by removing 100 feet or to your property line.

5. Yard

(a) Shade woodlots of at least 10 feet from all structures and remove vegetation within 30 feet of all structures.
(b) Above-ground Liquefied Petroleum Gas (LP-gas) containers (LPG) should be located no closer than 5 feet from the garage, public areas, and 50 feet of any shoreline area.
(c) Install a fire resistant roof. Contact your local fire department for current roofing requirements.

6. Emergency Water Supply

(a) Maintain an emergency water supply. Even the smallest government standards are set at 300 gallons per day.
(b) Have a contingency plan to enable family members to contact each other. Establish a family/friend phone tree.
(c) Make sure that all family members understand the plan and the size of your plants.

For more information contact your local CAL FIRE office, fire department or Fire Department. www.fire.ca.gov

Get Your Community Involved
www.readyforwildfire.org/neighbors.net

INSIDE

1. Kitchen

(a) Install smoke detectors in the kitchen and bedroom areas.
(b) Remove all combustible materials from the stove area.
(c) Install a fire extinguisher in the kitchen.

2. Living Room

(a) Install smoke detectors in the living area and garage.
(b) Install a fire extinguisher in the garage.
(c) Install a fire extinguisher in the bedroom.

3. Hallway

(a) Install smoke detectors in the hallway and bedroom areas.
(b) Install a fire extinguisher in the bedroom.
(c) Install a fire extinguisher in the garage.

4. Bedroom

(a) Install a fire extinguisher in the bedroom.
(b) Install a fire extinguisher in the garage.
(c) Install a fire extinguisher in the hallway.

5. Bathroom

(a) Install smoke detectors in the bathroom and hallway areas.
(b) Install a fire extinguisher in the hallway.
(c) Install a fire extinguisher in the bedroom.

6. Garage

(a) Install a fire extinguisher in the garage.
(b) Install a fire extinguisher in the bedroom.
(c) Install a fire extinguisher in the hallway.

For more information contact your local CAL FIRE office, fire department or Fire Department. www.fire.ca.gov

Get Your Community Involved
www.readyforwildfire.org/neighbors.net

Download this brochure:

HOMEO WNE ORS G UIDE T O F IR E PR E TEC TION

19
Defensible Space

Use noncombustible materials such as gravel, brick, or concrete in this critical area adjacent to your home. Remove shrubs under trees, prune branches that overhang your roof, thin trees, and remove dead vegetation. Move trailers/RVs and storage sheds from area, or build defensible space around these items. Burning fencing can generate embers and cause direct flame contact to your home. Use noncombustible fences and gates.

ZONE 1: 30 feet of Lean, Clean & Green
- Remove all dead plants, grass and weeds.
- Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
- Keep tree branches 10 feet away from your chimney and other trees.

ZONE 2: 30–100 feet of Reduced Fuel
- Cut or mow annual grass down to a maximum height of 4 inches.
- Create horizontal spacing between shrubs and trees.
- Create vertical spacing between grass, shrubs and trees.

Use Equipment Properly To Keep From Sparking A Wildfire
- Mow before 10 a.m., and never on a hot or windy day. String trimmers are a safer option (vs. lawn mowers) for clearing vegetation.

Vertical Spacing
- Large trees do not have to be cut and removed as long as all of the plants beneath them are removed. This eliminates a vertical “fire ladder.”
WILDFIRE IS COMING. ARE YOU READY?

Defensible Space is your property’s front line defense against wildfire. Creating and maintaining defensible space around your home can dramatically increase your home’s chance of surviving a wildfire and improves the safety of firefighters defending your property. 100 feet of defensible space is required by law.*

TWO ZONES MAKE UP THE REQUIRED 100 FEET OF DEFENSIBLE SPACE:

ZONE 1: 30 feet of Lean, Clean & Green
1. Remove all dead plants, grass and weeds.
2. Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
3. Keep tree branches 10 feet away from your chimney and other trees.

ZONE 2: 30-100 feet of Reduced Fuel
4. Cut or mow annual grass down to a maximum height of 4 inches.
5. Create horizontal spacing between shrubs and trees.
6. Create vertical spacing between grass, shrubs, and trees.

Use Equipment Properly to Keep from Sparking a Wildfire
7. Mow before 10 a.m., and never on a hot or windy day. String trimmers are a safer option (vs. lawnmowers) for clearing vegetation.

VERTICAL SPACING
Large trees do not have to be cut and removed as long as all of the plants beneath them are removed. This eliminates a vertical “fire ladder.”

HORIZONTAL SPACING
Create horizontal and vertical spacing between plants, the amount of spacing will depend on how steep the slope is and the size of the plants.

*For more information on creating defensible space and legal requirements visit READYFORWILDFIRE.ORG
Infrastructure Hardening

Protecting Your Property from Wildfire

1. **Maintain Defensible Space** (see above)

2. **Reduce Siding Risks** - Maintain 6-inch ground-to-siding clearance, and consider noncombustible siding. Use multi-pane, tempered glass windows, and close them when a wildfire threatens.

3. **Reduce Roof Risks** - Class A fire-rated roofing products offer the best protection for homes. Use 1/8-inch mesh to cover vents, and box-in open eaves to create a soffited eave. Regularly remove debris from your roof, since debris can be ignited by wind-blown embers. Keep debris out of gutters since debris can be ignited by wind-blown embers. If used, gutter covers should be noncombustible.

4. **Reduce Deck Risks** - At a minimum, use deck boards that comply with California requirements for new construction in wildfire-prone areas, remove combustibles under deck, and maintain effective defensible space.

LINKS

- **CAL FIRE** - Defensible space and hardening your home

- **UC DIVISION OF AGRICULTURE AND NATURAL RESOURCES** - Defensible Space
  https://ucanr.edu/sites/fire/Wildfire_Preparation_-_Recovery/Landscaping/DefensibleSpace/

- **UC DIVISION OF AGRICULTURE AND NATURAL RESOURCES**
  - Homeowner Wildfire Assessment
    https://ucanr.edu/sites/cfro/Fire_Information_Toolkit/Homeowner/
  - Preparing Your Home
    https://ucanr.edu/sites/fire/Prepare/Building/

- **DISASTERSAFETY.ORG** – Protect Your Home from Wildfire
  https://disastersafety.org/wildfire/protect-your-home-from-wildfire/
HARDENING YOUR HOME

FLYING EMBERS CAN DESTROY HOMES UP TO A MILE AHEAD OF A WILDFIRE. PREPARE (HARDEN) YOUR HOME NOW BEFORE FIRE STARTS.

SOME THINGS YOU CAN DO TO HARDEN YOUR HOME:

Roof: Your roof is the most vulnerable part of your home. Homes with wood or shingle roofs are at high risk of being destroyed during a wildfire.

Build your roof or re-roof with materials such as composition, metal or tile. Block any spaces to prevent embers from entering and starting a fire.

Vents: Vents on homes create openings for flying embers.

- Cover all vent openings with 1/8-inch to 1/4-inch metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.
- Protect vents in eaves or cornices with baffles to block embers. (Mesh is not enough.)

Eaves and Soffits: Eaves and soffits should be protected with ignition-resistant or non-combustible materials.

Windows: Heat from a wildfire can cause windows to break even before the home ignites. This allows burning embers to enter and start fires inside. Single-paned and large windows are particularly at risk.

- Install dual-paned windows with one pane of tempered glass.
- Consider limiting the size and number of windows that face large areas of vegetation.

Decks: Surfaces within 10 feet of the building should be built with ignition-resistant, non-combustible, or other approved materials.

- Remove all combustible items from underneath your deck.

Exterior Walls: Wood products such as boards, panels or shingles are common siding materials. However, they are combustible and not good choices for fire-prone areas.

- Build or remodel your walls with ignition-resistant building materials, such as stucco, fiber or cement siding, fire-retardant-treated wood, or other approved materials.
- Be sure to extend materials from the foundation to the roof.

Rain Gutters: Screen or enclose rain gutters to prevent accumulation of plant debris.

Patio Covers: Use the same ignition-resistant materials for patio covers as a roof.

Fences: Consider using ignition-resistant or non-combustible fence materials to protect your home during a wildfire.

Additional Home Fire Safety Steps:
Go to ReadyForWildfire.org/hardening for more important information on the following:

- Driveways and Access Road Information
- Garage Safety
- Address Visibility
- Water Supply Access
- Equipment Use Safety
- Ignition-Resistant Materials
Landscaping

Landscaping can help create a defensible space when using high moisture and low flammability plants. This can also include drought tolerant and plants with low sap/resin.

Some considerations are:

Create space between buildings, roofs, decks and powerlines
- Clear all flammable vegetation from within 10 feet of touching any structures and propane tanks
- Use rock mulches and hard surfaces to create a noncombustible area at least 5 feet wide around the base of the house
- Remove limbs that are within 10 feet of the chimney or touching the house or deck

Remove limbs that are within 6 feet of touching the roof or powerlines
- Design with fire in mind in the 30-70 feet surrounding the home
- Do not use wood or plastic mulches
- Low growing plants are better than taller plants (less than 2 feet tall)
- Green, herbaceous, moist broadleaf plants are better than shrubs and trees
- Deciduous is better than evergreen
- Space shrubs and trees by a distance of one to two times their height, be watchful of vertical and horizontal spacing up to 100 feet around the home

Be mindful of maintenance
- Keep up with garden and vegetation surrounding home on a regular basis, including dead-head, prune, rake and maintain vertical gaps
- Keep grasses mowed and clear any dead grass within at least 70 feet of home
- Remove any ignitable litter, trash, and wood within 70 feet
- Control unwanted plants and weeds
- Remove dead and diseased plants
LINKS

❖ **UC DIVISION OF AGRICULTURE AND NATURAL RESOURCES**
  - Preparing Your Landscape
    [https://ucanr.edu/sites/fire/Prepare/Landscaping/](https://ucanr.edu/sites/fire/Prepare/Landscaping/)
  - Fire Preparation Throughout the Year
    [https://ucanr.edu/sites/SAFELandscapes/Fire_preparation_throughout_the_year/](https://ucanr.edu/sites/SAFELandscapes/Fire_preparation_throughout_the_year/)

❖ **California Native Plant Society FIRE RECOVERY GUIDE**
AFTER THE FIRE

Before entering a home or property that has burned, check with local fire officials for clearance to go in. Hazards on the property may include hotspots, unstable structures, trees, and power lines, landslides, mudslides, and toxic ash and debris. Vegetation ash is not toxic, but ash from human made materials may contain asbestos, heavy metals, or other hazardous substances.

LINKS

- **US FIRE Administration + FEMA** | After the Fire
  Spanish

- **CAL FIRE Ready For Wildfire** | Returning Home After a Wildfire

- **California Department of Food and Agriculture** | Wildfire Recovery Resources
  https://www.cdfa.ca.gov/firerecovery/

Erosion Control & Restoration

Channel water and debris away from your home and property, but not onto neighboring property. Don’t try and dam water and prevent the flow, but evaluate the natural flow patterns on the landscape. Ditches can be dug for larger than usual flows and sandbags can be used to build small embankments to guide flows.

**Slow It, Spread It, Sink It**

- Slowing down the water movement across your property will also slow down soil movement. Different erosion control measures, such as wood chips, straw wattles, and silt fencing, can slow runoff.
• Allow the water to spread across the soil. Wattles, mulch, rocks and branches can slow water down to spread and sink into the ground.

• Keep culverts, gutters, infiltration and detention basins clear to allow drainage. Slowing the water and reducing the volume of runoff in the culverts and drains will help to prevent soil erosion. Water can be diverted to storm drain system by diversion ditches, staked boards, landscaping, etc.

Erosion Reduction Measures

• Concrete barrier wall
• Contour sandbags
• Dike
• Diversion
• Erosion control mats
• Hand raking
• Hazard tree removal
• Hillside home drainage
• Hydromulching
• Log erosion barriers
• Sandbag barrier

Details on the above measures can be found at: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ca/newsroom/features/?cid=nrcseprd1289661

• Try to use only seed-free material, like chipped mulch from known sources, hydro mulch without seed or certified weed-free straw.

Revegetation

• Seeding and revegetation after the fire is usually not effective. Seeds can introduce unwanted weeds and flammable invasive grasses. Even “native” grasses and seed mixes can be short lived and create a fire hazard over time. If you do seed, use locally sourced native perennial plants.
• Burned areas are prone to invasion by non-native weeds. Control of invasive plants is the most important action that can be taken to promote recovery.

• In the long term, fire-adapted native plants will often recover within the first few months to few years after a fire, even if they look scorched. If trees on your property were scorched, try to wait as long as possible to see if they will recover – only remove burnt trees that pose an immediate hazard. Even if they do not recover, dead snags can provide important habitat for animals that have lost their homes to fire.
Dos and Don’ts

**DO:** Consult with the Natural Resources Conservation Service (NRCS) and your local Resource Conservation District (RCD) and/or a private land restoration consultant before starting any landscape, slope or soil restoration effort on areas damaged by wild fire.

**DO:** Gather as much information as possible from Cal Fire, U.S. Forest Service, local fire district officials, Fire Safe Councils, NRCS, RCD, and/or local fire restoration consultants regarding reducing fire hazard and making your property fire safe when planning your property restoration.

**DO:** Evaluate and map out locations of existing and/or pre-fire subsurface drainage, irrigation and utility facilities on your property, including underground pipe drains and outlets; roof runoff/gutter drain outlets; culverts; irrigation systems; utilities, etc. Determine if still operable and/or degree of damage, if any.

**Note:** Many underground plastic drains and irrigation lines may have melted or otherwise been destroyed in the fire or by fire-fighting equipment.

**DO:** Install sediment control measures, such as straw waffles, mulching, plantings, slash, sediment traps and/or other properly designed and located sediment control measures, if necessary, and as directed by NRCS, RCD or other resource restoration specialist, such as a Certified Professional in Erosion and Sediment Control (CPESC).

**Note:** Sediment control measures will help to prevent eroded and displaced soil from entering streams, roadside ditches and waterways, and help protect water quality and water supplies. Consult with licensed landscape contractors or other licensed contractors with erosion and sediment control experience for design and installation assistance.

**DO:** Coordinate and plan restoration efforts with neighbors and/or road and neighborhood associations.

**DO:** Re-plant damaged landscapes with drought tolerant, fire retardant native plants with re-sprouting ability. Use planting stock and/or seed that are native to the area and is from a locally collected source. Consult with NRCS/RCD for a list of plants to consider.

**DO:** Obtain any necessary permits before cutting down trees, performing any major land grading activity, building any retaining wall, constructing a permanent sediment or erosion control structure, or doing any work in a riparian area, wetland, stream course or other natural area.

**Note:** Permits and/or consultations may be needed from your county office, California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, California Regional Water Quality Control Board, U.S. Army Corp of Engineers, and NOAA/National Marine Fisheries Service.

**DO:** Monitor and maintain fire and fuel breaks that may have been created by fire fighters on your property. Water barrel breaks should be provided and maintained on these fire control measures so that runoff water does not concentrate and cause erosion. Consult with CalFire regarding maintenance assistance of fire and fuel breaks constructed by fire fighters on your property during the Fire.

**DO:** Monitor and maintain all existing and planned erosion, sediment, and drainage control measures, including vegetative treatments, before during and after all future rainfall events. Correct deficiencies as soon as possible.

**Note:** One of the main reasons why recommended treatment practices fail following installation is the lack of long term maintenance by the landowner or responsible party.

**DO:** Hire and/or consult with licensed contractors, preferably ones that are certified and/or experience in soil erosion and sediment control, for design and installation assistance of vegetative and structural measures needed to restore slopes, soils, proper drainage conditions and landscape.

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DOS AND DON'TS

DON'T: Be too quick to remove fire damaged vegetation, including trees that were not completely burned. Many of the damaged and scorched native plants will re-sprout and come back, including oaks trees that were severely burned.

Note: Consider pruning first before removing the entire plant.

DON'T: Place loose debris, prunings, discarded fire-damaged vegetation in gullies, drainage swales or watercourses, over stream banks, etc. in an attempt to protect bare soil without first consulting with NRCS. Piles of brush will prevent plants from re-establishing under dense brush piles and may dislodge if in contact with concentrated runoff or stream flows causing other problems.

Note: Removed brush can sometimes be used as mulch if chipped or spread thinly over the critical soil areas.

DON'T: Plant Erosion Control Seed Mixes. These mixes are likely to contain non-native mix of grasses and legumes or California natives that are indigenous to other areas of the state and/or are not intended for wild land or fire damaged soil/slope restoration. Don’t plant other non-native, invasive plants or grasses, such as annual ryegrass as well.

Note: In some situations bare and disturbed soil and slopes can be re-seeded/di-ned with native grasses and plants but only if the seed and plant materials are from local known sources and indigenous to the area that needs treatment. Other native grasses and plants may discourage local natives from re-establishing on their own, and/or compete with, and/or slow down native re-establishment. If white ash is present, then resident seed from pre-existing native plants may no longer exist. White ash is an indicator that the fire burned very hot. Any resident seed bank in the soil was likely killed during the fire in these white ash areas. Re-seeding these areas to native grasses and/or re-planting with native plants of the same genotype, according to a re-vegetation plan developed by an experienced fire ecologist/natural plant specialist, may be a good idea.

DON'T: Use materials such as broken asphalt or concrete, inorganic debris or other objects as an emergency or permanent erosion control measure, especially if these materials can come in contact with runoff water, natural drainageways and stream courses.

Note: In some cases, rock and broken concrete can be used as velocity dissipaters and placed at the outlets of road culverts or other drains to protect the soil from erosion and washout, provided these dissipaters are designed by an appropriate professional.

DON'T: Cover fire damaged slopes with plastic sheeting in an attempt to prevent slope failure and protect bare or disturbed soil from next year’s rainfall. Plastic sheeting will: increase runoff and the likelihood of erosion; retain moisture in the ground increasing the possibility of slope saturation and instability; and kills root systems of native plants trying to re-establish naturally. Plastic sheeting is almost always the wrong thing to do.

Note: Depending on site conditions, an alternative to plastic sheeting might be the use of hydro-mulch, a proper application of rice straw, or an erosion control blanket if recommended by a Certified Professional Erosion and Sediment Control (CPESC) or geo-technical consultant.

DON'T: Control and concentrate future property drainage and runoff without a proper drainage control design that considers proper drainage facility sizing, location, and dispersion method. Whenever possible keep surface runoff in natural “sheet” flow and incorporate practices such as vegetative cover to slow runoff and improve the water infiltration capacity of the soil.

Note: Consult with NRCS/RCD for general planning information on controlling drainage around your home and property before proceeding with drainage repairs and improvements following fire damage. For design and installation assistance contact a landscape contractor experienced in erosion and drainage control.

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**DOS AND DON'TS**

**DON'T:** Use straw bales (in whole bale form) as water diversion and detention devices or for sediment control in burn areas. Contrary to popular belief and use these devices require a great deal of maintenance and are not right for most situations. Their design, location, and installation should only be done by a qualified contractor certified in erosion and sediment control. Straw wattles and loose straw that is simply spread over bare and disturbed soil is much more effective in protecting soil than keeping it in bale form.

**Note:** Rice or weed-free straw should only be used to prevent the possibility of nonnative grasses and weeds, contained in straw bales, from colonizing treatment areas.

**DON'T:** Disturb the hydrophobic soil layer that forms on some soils following fire on slopes susceptible to land sliding. Hydrophobicity is a natural phenomenon that actually gives the soil a water repellent ability that reduces infiltration and the capacity of the soil to hold water. The hydrophobic layer is normally found within 6 inches of the surface. In other areas, it may be advisable to break up this layer to aid in plant establishment and water infiltration lessening the impacts of runoff and erosion. For more information on soil hydrophobicity and/or an on-site soil evaluation and site assessment contact NRCS.

**DON'T:** Disturb potentially unstable slopes, especially those in fault areas and/or with signs of previous movement or known historic instability. Disturbances such as grading, cuttings, removing trees root wads or other deep excavations will increase the likelihood of future slope failure.

**Note:** If these slope alterations are absolutely necessary, then consult with a registered geologist or geo-technical expert before slope disturbance/ restoration activity.

**DON'T:** Do anything. This may be the best solution on some properties. Doing nothing will allow nature and time to heal soil and vegetation damage naturally, especially in wild land and other natural areas. In fact, tampering with natural processes may very well delay natural recovery and re-establishment of pre-existing native cover.

**DON'T:** Do what your neighbor is doing. Every situation is unique whether or not the neighbor had expert advice or not before installing temporary or permanent land and water protection measures. Your property is different in many respects including soil type, slopes, drainage conditions, type and condition of plant cover, degree of fire damage, etc. Get expert advice and a site damage assessment, including treatment recommendations, from NRCS before proceeding with your property restoration efforts.

**Note:** Practices such as sandbags, plastic, straw bale basins and check dams, etc. are all temporary and require a great deal maintenance. Furthermore, they are not right for every situation and can actually make problems worse or create new ones.

**DON'T:** Wait until the last minute to plan, design and install erosion, sediment or drainage control practices that may be necessary to safeguard your home and property before next winter.

**Note:** The nature and extent of your restoration effort will depend on the degree of damage; time needed to get a site assessment; acquiring an appropriate plan and design; securing any necessary permits; lining up a contractor and doing the work.

DO: Have an on-site assessment of fire damage done to your property by NRCS or another qualified fire restoration specialist that is certified in soil erosion and sediment control.

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NRCS is a non-regulatory federal agency under the U. S. Department of Agriculture whose mission is to “Help People Help the Land.” The agency was formed more than 80 years ago with the help of landowners. Additionally, all information provided or resource data collected on private properties by NRCS is kept confidential and only shared with the property owner or legal agent unless NRCS has written permission, by the property owner, to release the information to others.

Contact Information
Santa Barbara County
Emma Chow
District Conservationist
805-928-5269 x 9925
Emma.Chow@usda.gov

Ventura County
Dawn Alman
District Conservationist
805-984-2356 x 101
Dawn.Alman@ca.usda.gov

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Preparation for Winter Following Fire in Vineyards, Orchards, and Rangelands

The sound of falling rain this winter may take on a whole new meaning for those who either suffered property damage from wildfires or who live directly downstream of fire damaged watersheds.

If you have an existing Napa County-approved Erosion Control Plan (ECP) for your vineyard, a Sonoma County-approved Vineyard and Orchard Site Development Ordinance (VESCO) permit for your orchard or vineyard, or a Ranch Water Quality Plan (RWQP) for your grazed land in the Sonoma Creek or Napa River watershed, follow it. Further guidance may be found in Sonoma County’s Best Management Practices for Agricultural Erosion and Sediment Control and the Napa County Code (Chapter 18.108, Conservation Regulations).

10 Basic Rules

If you don’t have one of the above plans and/or are concerned about the possibility of erosion, mudslides, flooding, or other winter storm impacts following fire, then these 10 Basic Rules may help you prepare your property and family for future winter storm runoff.

1. **Cover disturbed areas.** Protect remaining plant cover. Spread mulch (straw, wood chips, etc.) and establish vegetation by seeding bare or disturbed soils before winter rains, especially around buildings, structures, firebreaks, and access roads and driveways. Seed mixtures should either be native or, if non-native, should be non-invasive species. Note: seeding and mulching is generally not recommended in rangeland and wildland areas.

2. **Prevent soil disturbance.** Minimize travel on, and tillage of, burned areas during the rainy season. Slopes are less stable, and soils are more erodible, when vegetation is burned, soil has been impacted by heat, and when soil becomes saturated.

3. **Evaluate roads and drainage facilities.** Look for damage on earthen and gravel roads, firebreaks, culverts, and stream crossings. Runoff control treatments, including armored outlets, may be needed to protect downslope areas from erosion, slope failure, and flood hazards. Use the “4-D formula” to:
   a. Decrease volumes and velocity of runoff by providing energy dissipation (rock or other armoring) at culvert and drain outlets and dividing large flows from roofs and landscapes into smaller, less erosive forms.
   b. Detain or collect runoff and either release it over time or store it for later use to lessen impact on saturated soils and slopes during large storms.
   c. Dissipate runoff where ever concentrated flows come in contact with bare soil and/or steep slopes by installing practices that spread runoff (grass, mulch, rock aprons, etc.) and reduce soil erosion and runoff volume. Extend culverts to a safer discharge location or install velocity dissipaters at culvert and drain outlets if they have been denuded by fire.
   d. Divert runoff as a last resort and do so with extreme caution. It may be helpful to re-route runoff and drainage away from unstable slopes, eroded areas, or unprotected soils.

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4. **Monitor and maintain existing measures.** Check existing erosion and sediment control structures and treatments (including vegetative cover) before and throughout the rainy season. Correct deficiencies as soon as possible. Leaf litter may clog roof, driveway, and surface drainage systems because of the fire and heat damage done to evergreen vegetation. Properly designed and installed trash racks, debris barriers, gutter guards, and other devices will reduce maintenance and allow home and property drainage systems to function properly.

5. **Use caution with emergency treatments.** Use caution when employing sand bags, brush and slash, plastic sheeting, and hand-dug drainage ditches; or don’t use them at all without professional guidance. For example, covering slopes with plastic sheeting can speed up rainfall runoff and dumping brush into gullies may clog downstream drainage structures. An improperly designed or placed emergency practice can be worse than not doing anything at all, adding new hazards and a false sense of security.

6. **Treat high hazard, fire damaged trees.** Prune or remove trees that may fall onto people, animals, structures, or roadways before winter storms. Note: don’t remove healthy or slightly damaged trees unnecessarily. Healthy tree root systems still hold soil and slopes in place and the tree canopy protects soil from the impact of falling raindrops while reducing winter runoff. Consult Cal Fire and/or a Registered Professional Forester for assistance.

7. **Consider debris barriers below rocky slopes.** There is an increased threat of falling rocks from steep slopes and shallow, rocky soils in affected watersheds. Debris barriers are effective for catching smaller rocks, but larger rocks will require more substantial measures. If there is a threat of large rocks releasing from slopes on your property or adjacent properties, then seek professional assistance. Contact the USDA Natural Resources Conservation Service (NRCS) or your local Resource Conservation District (RCD).

8. **Seek professional assistance.** For the design and installation of any temporary or permanent practices to control runoff and/or prevent erosion, services from NRCS and RCDs are here for you. www.ca.nrcc.usda.gov

9. **Work with neighbors.** Permanent solutions for drainage and runoff issues may be better with the cooperation of neighboring landowners since runoff rarely follows property boundaries. You may be liable for both controlled and uncontrolled releases of collected runoff on to downslope properties if you do not consider potential off-site impacts.

10. **Be prepared with an evacuation plan.** Don’t stay if it becomes unsafe to do so. Prepare a property and neighborhood evacuation plan and an emergency plan for pets and livestock. Stockpile emergency supplies including sandbags, straw mulch, etc. Pay close attention to weather forecasts, flash flood and storm warnings, and creek water levels throughout the winter. Evacuation plans should include at least one alternative escape route and a list of emergency phone numbers, including those of neighbors. Roadblocks, flooding, gullies and streambank erosion are often worse in the first winter following fire. Sediment levels in creeks and waterways are expected to rise, reducing channel flow capacities and increasing the likelihood of flooding on properties and downstream. Note: do not attempt to drive through flowing water or mud on roads.

Some signs of impending danger from debris flows, landslides, severe erosion, and/or imminent flooding include: an intense storm event (1” to 2” per hour) especially following recent rainfall; water flowing over the landscape where it hadn’t appeared in previous winters; leaning or falling trees; tension cracks along the top edge of slopes and along driveways and roads; seeps and increased spring activity in slopes; severely disturbed and unprotected slopes caused by firefighting work or from recent removal of fire damaged trees or other stabilizing vegetation.

For more information, helpful publications, erosion control plant lists for fire-prone areas, drainage control and road maintenance guides, or other natural resource information for your property, contact the USDA Natural Resources Conservation Service or your local Resource Conservation District.

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AFTER THE FIRE

LINKS

- **Sonoma Valley Groundwater Management Program**

- **NRCS Post-Fire Disaster Publications**
  [https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ca/newsroom/features/?cid=nrcs142p2_1289661](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ca/newsroom/features/?cid=nrcs142p2_1289661)

- **UC Agriculture and Natural Resources**
  - Sustainable and Fire Safe Landscapes - Winter
    [https://ucanr.edu/sites/SAFELandscapes/Fire_preparation_throughout_the_year/Winter/](https://ucanr.edu/sites/SAFELandscapes/Fire_preparation_throughout_the_year/Winter/)
  - UC Agriculture and Natural Resources – Wildfire Resources

- **California Native Plant Society Fire Recovery Guide**

**Sandbag Information**

- **COUNTY OF SANTA BARBARA**
  Flood Control & Water Conservation District
  805-568-3440

Sand bags are not pre-filled and persons are limited to 25 bags. Please call locations for current availability:

- Santa Barbara Flood Control Shop
  4568 County Road (off Calle Real)
  Santa Barbara
  805-568-3440

- Santa Maria Flood Control Shop
  912 West Foster Road
  Santa Maria
  805-568-3440
Santa Barbara Fire Station #31
168 W Hwy 246
Buellton
805-686-5062

Sandbag Disposal

Sand from sandbags can be mixed with soil and used in landscaping or taken to a construction and demolition recycling plant. Bags can be reused or, if not usable, should be thrown in the trash.

❖ CITY SAND AND BAG LOCATIONS

Please contact cities for current availability or more information.

City of Buellton
805-688-5177

City of Carpinteria
805-684-5405 x-443
5775 Carpinteria Ave. (City Hall)

City of Goleta
Fire Station 11 805-681-5511
6901 Frey Way
805-967-1237
5679 Hollister Ave
Fire Station 14
805-681-5514
24 hours, self-serve, bags and sand included
320 N. Los Carneros Road

City of Guadalupe
805-356-3905
Fire Station 2
918 Obispo Street

City of Lompoc
805-736-4513
Fire Station 1
115 S. G Street
### City of Santa Barbara
805-564-5413
401 E. Yanonali Street

### City of Santa Maria
805-925-0951
Sand only at all locations
no bags
City Public Works Yard
830 W. Cypress
8AM-4PM M-F except holidays
Suey Crossing (at all times)
2000 Block of Western
in cul-de-sac (at all times)
West Carmen Lane just West of
Depot Street (at all times)
San Ysidro Street West of Miller
Street (at all times)

### City of Solvang
805-688-5575
1745 Mission Dr. (Veteran's Hall)

### Montecito Fire Protection District
805-969-7762
Lower Manning Park
449 San Ysidro Road

### Santa Ynez Community Services District
805-688-3008
Bags and sand available
1070 Faraday Street