



# Burn Pile Guide

Tips for Building and Extinguishing a Burn Pile - 2024  
—adapted for Napa County by Napa Firewise.



*photos by Napa Firewise*

## Step 1 — Build the piles.

- Make sure brush, limbs, leaves have dried for at least 60 days. The more it dries, the cleaner it burns.
- Place the largest logs on the bottom; small sticks, dry leaves and brush in the center to create an easily combustible “nest”; and lots of medium-sized logs and branches on top.
- The legal “home burner” pile size is 4 feet in diameter and 4 feet tall. You can add to this as it burns down.
- Build piles on the flattest ground possible. If you must build on a hill, dig a “roll out” trench just below it to catch hot coals or logs so they will not roll downhill.
- Place your piles at least 15’ from any structures.
- Clear dead and dry vegetation including grass around the pile at least 4’ or, if possible, up to 10’. Green or wet vegetation does not need to be removed—the moisture will help reduce the heat. Some live vegetation near the pile may get damaged by heat. Place your piles at least 10’ from the base of the trees you don’t want damaged by the fire.
- If your pile is in the rain, consider covering a 2’ x 2’ section with [wax paper](#). Stash fine branches and dry leaves underneath the paper. This allows for burning of piles even on rainy days reducing both the size of the flames and the risk of an “escape” (fire that spreads beyond intended boundaries). You can also use a tarp or piece of plastic to keep your piles dry while it’s raining—these should be removed before burning.
- Do not add non-vegetative materials to your pile. Do not burn trash.

## Step 2 - Pay air quality fees

- Napa County is in the North Section of the Bay Area Air Quality Management District (BAAQMD). Visit [www.baaqmd.gov/permits/open-burn](http://www.baaqmd.gov/permits/open-burn) to find out how and when open burning is allowed, acceptable burn and the notification process.
- Fill out the BAAQMD the online Reg 5 [Open Burn form](#) and pay the annual fee (roughly \$200).

## Step 3 - Get a burn permit

- Burning of residential piles with permits is permitted during “winter preparedness” season, which typically lasts from November 1 to May 1. These dates can change. Always check for details at Cal Fire’s [BURN PERMITS \(ca.gov\)](#).
- Determine if you are in “State Responsible Area” (SRA), “Local Responsible Area” (LRA), or both. Contact your local fire district or your local [Cal Fire station](#) to find out, or visit <https://burnpermit.fire.ca.gov/before-you-burn/>
- If in “SRA,” you will need a burn permit from Cal Fire (in addition to the air quality permit) only if burning between May 1 until the end of the fall fire season (October or November). This info can be found [here](#). The permits are free and informative. **4’x4’ piles or smaller require a LE-62a permit** link here: [BURN PERMITS \(ca.gov\)](#)
- In “SRA,” **piles larger than 4’x4’ require an LE-5 permit**. This is for **very large piles** such as logging slash piles. To obtain this permit you must call your local Cal Fire office and have a captain come out and inspect your piles.
- If you are in the “LRA,” check with the city or county fire district that covers you about burn permitting.

## Step 4 - Checklist for burn day

- Call the hotline to see if it’s a permissible burn day:
  - Napa County is within the BAAQMD: call 800-435-7247 or check online [here](#). Learn more here [What Is Spare the Air?](#)
  - Be prepared to cancel your burn, if it is not a permissible day or if the weather, **especially winds**, changes suddenly. See key markers below.
- Notify **Cal Fire Sonoma-Lake-Napa unit at (707) 963-4112** of the address where you are burning, how many piles and at what time you plan to burn, and to provide your phone number.
- Please visit the Napa Valley Grape growers webpage for information on their [Vineyard Burning Task Force](#). To conduct the most efficient burn with the lowest production of smoke possible, follow the NVG pamphlets on Best Practices for Low Smoke Agricultural Burning: available in [English PDF](#) and [Spanish PDF](#).
- Wear appropriate clothing: Leather work boots, cotton pants or jeans, long sleeve natural fiber shirt, leather gloves and eye protection. Avoid any synthetic materials, as they may melt and cause injuries.
- Clear dead and dry vegetation around the pile (see details in Step 1).

- Start burning **no earlier than 10AM** so that any inversion layer may lift. Do not ignite or add new material to burn piles later than 3PM. This will help with better smoke dispersal and cleaner air.
- **Never burn if weather conditions are unsafe!**
  - ▲ Do **NOT** burn when winds exceed 8 mph as this substantially increases the chance of a fire accident or “escape.” The liability is on the person lighting and landowner.
  - ▲ Do **NOT** burn, if relative humidity is below 30%.
  - ▲ Do **NOT** burn, if the temperature is above 80° Fahrenheit.
- Check your weather—**especially winds, for several days out**—as it can take several days for piles to finish burning. [Weather Underground](#) or [PG&E](#) are a few good sites to check for weather. [Windy](#) is a great resource for wind predictions.
- Have a water source and shovel at the burn site.
- If possible, light the pile near the top. This will help to reduce smoke.
- An adult is required to be in attendance at the fire. Invite friends too!

## Step 5 - Extinguish burn pile

- Let the pile burn down to ash or coal (if the weather is permissive; see below how to establish that). Moving smoldering logs and coal toward the center with a rake or a shovel will speed up the burn-down process.
- Douse the pile with lots of water, while stirring with a shovel. It may take between 50 to 100 gallons of water, but aggressive stirring significantly reduces the total amount of water needed. It’s very hard to extinguish piles completely when it’s windy (winds above 8 mph). Water evaporates, if you don’t stir it in.
- Spread the coals out from the center, if there is room; working with a larger surface area is easier to extinguish.
- If you have hot logs, scrape all of the heat from these logs with a shovel, hoe or other metal hand tool. You can chop up, scrape and mix all of it with dirt. Covering hot logs with wet dirt is a great way to increase the effectiveness of water.
- The pile is fully extinguished when the ashes and coals at the bottom of the pile are completely cold to the touch of your ungloved hand.
- Check the burn area once on the night of the burn and twice during the following day—in the morning as the sun begins to shine on the burned area, and again at the hottest hour (typically between 2-4PM).
- For the next 10 days, continue to check your burn area once a day—even if you are certain your piles are extinguished. Check the more than once a day, if:
  - ▲ Winds exceed 8mph. [Windy](#) website is a great resource for wind speed predictions.
  - ▲ Relative humidity drops below 30%
  - ▲ Temperature climbs above 80° F.
- If you are unable to stay for at least 10 days to check on the piles, ask a neighbor or hire help to check for you. Night patrols are necessary during windy or dry conditions, as you may be able to see burning embers that are not visible during the day. Use the backside of your ungloved hand to sense any heat coming from the pile.

## When to extinguish burn piles with water

- Extinguish piles with water if there is no forecasted rain in the next five days, if the weather is entering a warming and drying trend, or if the heat of the burning piles has visibly dehydrated and killed surrounding vegetation.
  - Consider purchasing an electronic fuel moisture probe (see links below). Put it into sticks that you plan to burn that measure approximately the diameter of a quarter (those are called 10-hour fuels). If those sticks are reading humidity lower than 12%, you are in the dry season regardless of the month and must water your piles. Use this gauge even during the wet season (November to May) because we no longer have a reliable rainy season.
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## Fuel moisture probes recommended by fire experts and foresters:

[AccuMASTER Duo Pro Pin and Pinless Moisture Meter for Wood and Building Materials](#) (\$52)  
[Protimeter Mini C Wood Moisture Meter](#) (\$189)

## To learn more about pile burns

- Visit [Before you Burn \(ca.gov\)](#), for more education
- Visit Cal Fire's [instructions](#) for safe pile burns.
- Pepperwood Preserve hosts pile burning workshops. Visit their [classes page](#) to check for availability and to sign up.
- Visit [Napa Firewise](#) for more tips on cleaner burning.
- Sonoma County's prescribed burn association, Good Fire Alliance, offers hands-on opportunities to learn everything about controlled burns in our area. To join the Good Fire Alliance community listserv, which allows you to sign up for collective burns, volunteer days, and classes, email: [main+subscribe@gfa.groups.io](mailto:main+subscribe@gfa.groups.io).
- Pepperwood Preserve hosts pile burning workshops. Visit their classes page to check for availability and to sign up.
- UC extension produced an excellent series of videos on "[Pile Burning Fundamentals](#)." You can [Tori Norville](#), UCCE Fire Science Advisor, at [trnorville@ucanr.edu](mailto:trnorville@ucanr.edu), to set up a free site visit. To stay in touch with Tori's announcements about pile burning classes and grant opportunities, and to sign up for information on Napa's Prescribed Burn Association [here](#).

## About this guide

To access this guide online, visit: [NapaFirewise.org](http://NapaFirewise.org) or for the original Sonoma County guide and more forest information, visit: <https://sonomaforests.org/library/biomass/>

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