# **Prescribed Burning and Smoke Management**

# The Need for Prescribed Burning

Prescribed burning is the intentional use of fire to reduce wildfire hazards, clear downed trees, control plant diseases, improve rangeland and wildlife habitats, and restore natural ecosystems. Approximately 150,000 acres of wildlands are treated each year in California using prescribed burning. The area between urban communities and wildlands (known as the wildland/urban interface) is especially vulnerable to the effects of catastrophic wildfires and may be most in need of protection. As catastrophic wildfires continue to be a growing concern in California, the use of prescribed burning to reduce hazardous fuels is projected to increase.

## **Air Quality Impacts of Prescribed Burning**

Prescribed burning produces smoke, which is a mixture of toxic particles and gases. If not carefully managed, smoke can be a nuisance to residents and businesses, and it can adversely impact community health. Smoke can contribute levels of pollution that exceed health protective air quality standards. However, to minimize smoke impacts and protect public health, burners and air regulators work together to match burning with appropriate atmospheric conditions.

## **How Prescribed Burns are Regulated**

California's smoke management program is an integrated State and local effort. The State Smoke Management Guidelines, adopted by the California Air Resources Board (ARB), establish the fundamental framework for the program. Additionally, individual local air districts implement and enforce local rules and regulations. The Smoke Management Guidelines also require burners to consider alternatives to burning in planning their burn projects; however, when alternatives to burning are not feasible -- due to technical inability, ecological needs, potential to cause adverse environmental impacts, or excessive costs -- burning may be the only option.

#### **Smoke Management Planning**

Effective smoke management requires appropriate planning prior to conducting a prescribed burn. Before obtaining air district permission to burn, a burner must complete the following planning steps:

1) Register their burn with the air district; 2) Obtain an air district and/or fire agency burn permit; 3) Submit a smoke management plan (SMP) to the air district; and 4) Obtain air district approval of the SMP. The SMP specifies the "smoke prescription," which is a set of air quality, meteorological, and fuel conditions needed before burn ignition may be allowed. Depending on the size and complexity of the burn, the SMP will contain some or all of the following information:

- Burner name and contact information
- Burn method and fuel type
- Nearby population centers
- Planned burn time
- Acceptable burn ignition conditions
- Contingency planning
- Burn monitoring procedures

- Location and size of the burn
- Expected air emissions
- Smoke travel projections including maps
- Duration of the burn
- Smoke minimization techniques
- Description of alternatives to burning
- Public notification procedures

## **Obtaining Burn Authorization**

After the air district approves all the burn planning requirements, including the permit and smoke management plan, the burner may begin making the final preparations to carry out the burn. This includes putting into place the resources needed to conduct the burn, notifying the public about the planned timing and specifics of the burn, and obtaining a final air district authorization to burn. The burner may contact the air district up to 96 hours prior to the desired burn time to obtain ARB or air district forecasts of meteorology and air quality needed to safely conduct the burn. The burner will continue to work with the air district and the ARB until the day of the burn to update the forecast information. Air district authorization to conduct a prescribed burn is provided to the burner no more than 24 hours prior to the burn.

#### **Conducting Prescribed Burns**

The individual granted authority to burn (burn manager) is responsible for assuring that all conditions in the SMP and burn permit are met throughout the burn. Once the fire has been ignited, burners must make all reasonable efforts to assure the burn stays within it's smoke plan prescription. If a burn goes out of its prescription, or adverse smoke impacts are observed, the burn manager will implement smoke mitigation measures as described in the SMP.

# **Need More Information?**

You may obtain more information about prescribed burning at ARB's smoke management website: <a href="http://www.arb.ca.gov/smp/smp.htm">http://www.arb.ca.gov/smp/smp.htm</a> You may obtain information about a planned or on-going prescribed burn in your area by getting in touch with your local air district or, if listed, the contact below. If you are unsure which air district you are in, you can either contact the Air Resources Board at (800) 952-5588, or go online to: <a href="http://www.arb.ca.gov/app/dislookup/dislookup.htm">http://www.arb.ca.gov/app/dislookup/dislookup.htm</a>

#### **Local Air Districts**

Amador County (209) 257-0112 Antelope Valley (661) 723-8070 Bay Area (415) 771-6000 Butte County (530) 891-2882 Calaveras County (209) 754-6504 Colusa County (530) 458-0590 El Dorado County (530) 621-6662 Feather River (530) 634-7659 Glenn County (530) 934-6500 Great Basin Unified (760) 872-8211 Imperial County (760) 482-4606 Kern County (661) 862-5250 Lake County (707) 263-7000 Lassen County (530) 251-8110 Mariposa County (209) 966-2220 Mendocino County (707) 463-4354 Modoc County (530) 233-6419 Mojave Desert (760) 245-1661

Monterey Bay Unified (831) 647-9411 North Coast Unified (707) 443-3093 Northern Sierra (530) 274-9360 Northern Sonoma County (707) 433-5911 Placer County (530) 889-7130 Sacramento Metro (916) 874-4800 San Diego County (858) 650-4700 San Joaquin Valley (559) 230-6000 San Luis Obispo County (805) 781-4247 Santa Barbara County (805) 961-8800 Shasta County (530) 225-5674 Siskiyou County (530) 841-4029 South Coast (909) 396-2000 Tehama County (530) 527-3717 Tuolumne County (209) 533-5693 Ventura County (805) 645-1400 Yolo-Solano (530) 757-3650

#### **Additional Contact Information:**

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see the ARB's Website: http://www.arb.ca.gov.