

ISSUE: Smoke Management and Regulations with Prescribed Fire

Brief description

Prescribed fire is a commonly used forest management tool utilized by land management agencies (i.e. Cal Fire, Forest Service, BLM, Tribes, and Park Service) and by some private land owners and timber operations to provide forests with greater resiliency against climate change, pests, invasive species, and human caused fires. In the public land management arena, prescribed fires are categorized in two ways. The first category is fires ignited by the staff of land management agencies to achieve a desired resource management objective such as ecological restoration. The second category includes fires that are naturally ignited by lightning that occur in an area designated as a fire use area by the land management agency. These naturally ignited fires that are also managed to achieve particular resource management objectives and are also considered prescribed fires by the California Air Resources Board (CARB). It should be noted that land management agencies use different terminology to describe naturally occurring fires that are allowed to burn in a designated area; but for the purposes of this document, a prescribed fire refers to either a purposefully initiated burn or a naturally occurring fire that is not suppressed by the land management agency, for consistency with state and federal air quality regulations.

Smoke Management Guidelines for prescribed burning is described in Title 17 of the California Code of Regulations. On an annual basis, each land management agency develops a Fire Management Plan that specifies when and where they will ignite prescribed fires and/or allow naturally ignited fires to burn. In addition to their prescribed fire planning, the agency must also submit Smoke Management Plans for all burns greater than 10 acres in size (Title 17, §80160 (b)).

The determination of whether or not a prescribed burn can occur is made on a daily basis by each Air District according to the expected meteorological conditions in the air basin of interest (Title 17, §80110 (e)). Prescribed fires require time and money to plan, and require staff and equipment to be on hand ready the day of a burn. However, if meteorological conditions the day before or day of the burn do not meet the meteorological criteria specified in Title 17, the Air District cannot authorize the burn to occur. A prescribed burn that may require multiple days to complete must meet the appropriate meteorological conditions each day. The only exception to suppressing a prescribed burn is if the suppression would threaten imminent and substantial economic loss (Title 17, §80120(e)).

The regulations set forth in Title 17 regarding prescribed fire are based on the Environmental Protection Agency's (EPA) 1998 Interim Air Quality Policy on Wildland and Prescribed Fires amendment to the Clean Air Act. Since 2007, the EPA has been working on the revision of this policy to enable land management agencies to allow prescribed fires to occur as "exceptional events" despite exceeding the National Ambient Air Quality Standards. Depending upon the outcome of this policy revision

amendment to the Clean Air Act, land management agencies may have the same, more or less latitude to conduct prescribed burns.

This document does not address restrictions and permitting related to point source emissions associated with biomass to energy facilities; however, it may be of interest for future consideration by the Coordinating Council.

How does/has the policy issue impact(ed) the Sierra Nevada?

In the Sierra Nevada, "burn days", the days of the year when a prescribed burn may occur, do not frequently coincide with scheduled, prescribed burns or naturally ignited wildfires. Therefore, land management agencies have faced significant challenges in implementing their Fire Management Plans in terms of conducting prescribed fire over significant forested areas. These agencies are also financially constrained by amassing staff and equipment to burn on a particular day only to discover the morning of a scheduled burn that the burn cannot occur due to meteorological criteria not being met. Since the forests in the Sierra Nevada are departed from their natural fire regime, particularly mixed conifer hardwood forests in the mid-elevations, the inability to allow prescribed fire on a more frequent and wide scale basis has resulted in a number of forests throughout the Sierra continuing to be outside their normal fire regime and at risk to disease, pests and perturbations associated with climate change. Most significantly, many forests in the Sierra Nevada continue to be and increasingly are at risk of high fire severity from unplanned human caused fires and Wildland fires outside of the desirable management areas.

If the EPA and Title 17 policies could be updated to provide greater flexibility to allow prescribed burning, the land management agencies may be able to better meet their goals in conducting this management action and more quickly allow forests to achieve greater resiliency.

What is the current status?

Title 17 of the California Code of Regulations and the Environmental Protection Agency's (EPA) 1998 Interim Air Quality Policy on Wildland and Prescribed Fires amendment to the Clean Air Act are currently being revised. However, it is unknown if these revisions will be neutral, benefit or restrict prescribed fire by land management agencies.

How does the policy relate to achieving SNFCI objectives?

Prescribed fire is one of many tools necessary to achieving forest management throughout the Sierra. The best available science should be used to support policy that allows all forest management tools to occur in order to return forests to a more healthy condition and avoid significantly exceeding air quality standards as a result of large, unplanned fires, which supports SNFCI's objectives of cooperatively achieving forest health.

Is there a potential role for the Coordinating Council?

The Coordinating Council may wish to take a position to support the best available science to recommend policy regarding appropriate air quality regulations related to smoke emissions for prescribed fires managed by land management agencies.