

FEATHER RIVER AIR QUALITY MANAGEMENT DISTRICT  
MEMORANDUM  
December 9, 2019

TO: FRAQMD BOARD OF DIRECTORS  
FROM: Christopher D. Brown, AICP, APCO  
SUBJECT: Report on the District's Open Burn Program

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**BACKGROUND:**

Open burning in Yuba and Sutter Counties must be done in accordance with the FRAQMD Regulations, the California Health and Safety Code, and the California Code of Regulations.

These rules apply to Agricultural, Non-Agricultural, and Residential Open Burning. Recreational and cooking fires are generally exempt provided there are no prohibited materials in these fires.

The District currently issues about 1500 burn permits a year.

The intensive fall burn season is the short window to time between harvesting the rice fields and the rainy season. Rice fields with invasive species or disease can get a permit and be placed on a list to burn as part of their Best Management Practices. The District balances the economic and public health impacts of the program as directed in the Health and Safety Code by the State of California and authorizes burning when conditions are optimal to minimize public impact from the smoke.

**BURN DAY DECISIONS**

Primarily in response to the challenges of the field crop burning activities, the Sacramento Valley Air Basin (SVAB) developed the first regional, coordinated burning management program, called the Sacramento Valley Smoke Management Program, which was adopted into regulation in 1983 and established the Basin Control Council (BCC) and a regional Burn Coordinator. The Program, together with the requirements of the Connelly-Areias-Chandler Rice Straw Burning Reduction Act of 1991, sets forth the requirements for managing the burning of rice straw each year.

The fall “intensive” burn season (casually referred to as “fall burn”) officially begins annually on or about September 15th and ends on or about December 31<sup>st</sup>. After the end of fall burn and during the rest of the year, the process for burn decisions differs.

During fall burn, the BCC Burn Coordinator works in conjunction with ARB meteorology evaluating multiple meteorological and air quality factors to determine the burn day decision and the acreage allocation that will be given to each district in the basin. Once this information is disseminated, usually around 9:00 a.m. to 9:30 a.m., the District evaluates the local meteorological and other factors and either concurs with the burn day decision or restricts open burning further.

During the remainder of the year, the air district retrieves the burn day decision from ARB directly, usually around 8:30 a.m. to 9:00 a.m.

During both the Fall Burn and the remainder of the year, the District can be more restrictive than the BCC or ARB Burn Day decision based on location conditions, including fire hazard concerns. The District cannot allow burning on a day designated a “no-burn day,” except in emergencies.

## BURN AUTHORIZATION

All local daily decisions for field crops, levees, ditch banks, and orchard removals must be made by the District’s burn coordinator. The District maintains a specific cell phone for access to the burn coordinator on any given day. The coordinator makes decisions for placement, timing, and quantity of material to be burned based on multiple factors in the local area including; air quality AQI, ozone, and PM numbers both locally and in the Sacramento nonattainment area; relative humidity, temperature, inversion heights, mixing layer heights, cloud cover, wind speed and direction at the surface, wind speed and direction aloft (transport winds), rainfall, topography, location of nearest receptor and sensitive receptors, and ARB and BCC coordinator comments.

During the fall burn, all rice fields are placed on a ready to burn list once the District is notified of the field harvest. The District uses the ready to burn list to contact individual growers when it is their time to burn and the conditions are optimal for their burning. All other fields crops, levees, ditch banks and orchard removals call in to discuss their options for burning with the coordinator. The District makes every effort to work with all growers to allow burning that is health and air protective.

During the remainder of the year, growers wishing to burn fields, levees, ditch banks, and orchard removals still must get approval from the coordinator to allow burning.

## SUMMARY - TYPES OF OPEN BURNING

**Agricultural Burning** – a wide category including agricultural operations, empty paper container of chemicals, forest management, range improvement, improvement of land for wildlife or game, disease or pest prevention, maintenance of waterways, wildland vegetation management, and prescribed burning. All agricultural burning requires a permit from the air district and must follow all the rules in the regulation. Agricultural burning for orchard removals or pushouts also requires the full orchard to be permitted.

Orchard removals require special allocation from the District since they have a tendency to smolder overnight and sometimes for multiple days. When the District authorizes an orchard removal, this authorization is approving the overnight smolder. If the grower wishes to continue burning the next day, they must call and log that day as well and work with the District until the fires are extinguished.

**Non-Agricultural Burning** – includes the following:

1. Fires set by a fire official in the performance of their official duty. No permit required except for large training burns.
2. Industrial site fire training
3. Land clearing for a single-family residence – permit required.
4. Right-of-way, levee, reservoir, and ditch cleaning when conducted by a public entity – permits are required.
5. Fire hazard reduction at multi-unit and commercial entities. Only allowed if a written letter is provided by responsible fire agency.
6. Residential properties greater than 2 acres – permits are required if the material from the property is determined to be greater than the normal accumulation surrounding the residence.

It is prohibited to conduct open burning at any commercial, industrial or public building, for land clearing on land being developed for commercial or industrial purposes, and at multi-unit dwellings and commercial entities.

**Residential** – permits are not generally required by the District (Fire Agencies may require them)

SUMMARY OF FISCAL YEAR 2018-2019

The district logged a total of 3,277 burns during FY 2018-2019 and burned a total of 10,718.65 acres of agricultural and non-agricultural material. The table below breaks down the information by type of crop.

Table 1

<u>Crop Type</u>	<u>Acres</u>
Rice/Wild Rice	3,315.95
Prunings/Trimmings	3,121.70
Removals	1,597.10
Wheat/Weeds/Other Fields	1,360.55
Ditchbanks/Levees	862.65
Forest Management	460.70
Chemical Sacks	60 events (not counted as acres)

During FY 2018-2019 there were 244 permissive burn days in the district and 116 no burn days. No burn days included 65 ARB declared days, 18 APCO declared days, and 33 Fire Agency declared days.

The 2018 wildfire season was the deadliest and most destructive wildfire season ever recorded in California, with a total of 8,527 fires burning an area of 1,893,913 acres, the largest area of burned acreage recorded in a fire season. The smoke impacts from these wildfires caused most of our declared no burn days.

In mid-July to August 2018, a series of large wildfires erupted across California, mostly in the northern part of the state, including the destructive Carr Fire and the Mendocino Complex Fire. On August 4, 2018, a national disaster was declared in Northern California, due to the extensive wildfires.

In November 2018, strong winds aggravated conditions in another round of large, destructive fires that occurred across the state. This new batch of wildfires included the Woolsey Fire and the Camp Fire, which killed at least 85 people with 2 still unaccounted for. It destroyed more than 18,000 structures, becoming both California's deadliest and most destructive wildfire on record.

Northern California and the Central Valley saw drastic increases in air pollutants during the height of the July and August fires. Air quality remained poor until mid-September 2018, when fire activity was drastically diminished. However, during the November Camp Fire, air quality diminished again, with the majority of the area being subjected to air quality indexes (AQIs) of 200 and above, in the "unhealthy" region.