



Yosemite Fire Management Plan: Prescribed Fire and Wildland Fire

What is a prescribed fire?

A prescribed fire is any fire intentionally ignited to meet specific land management objectives. For nearly one hundred years, fire managers attempted to exclude fire from many natural areas. This has led to an increase of fuel, made up of live and dead vegetative material, which threatens homes and property, as well as ecosystem health. Typical objectives of prescribed fire include the reduction of flammable fuels, such as brush, logs, etc. on forest floors, or to help restore ecosystem health.

These fires are preplanned ignitions, with predetermined boundaries. Land managers must obtain approval of written prescribed fire plans from applicable federal or state agencies before conducting planned burns. In addition, on federal lands, all applicable requirements under the National Environmental Policy Act (NEPA) must be met.

NEPA requires that environmental impacts of land management activities (i.e., trail building, timber harvesting, use of fire, etc.) be analyzed prior to start of the activity to assess potential impacts on cultural resources, wetlands, soil, water quality, air quality, visibility, and other resources. In the case of prescribed fire, *not burning* may have more adverse impact on fire- adapted ecosystems than the reintroduction of fire.

What is a wildland fire?

What is wildland fire use?

All fires, excluding prescribed fires, which consume fuel are called *wildland fires*. Fires ignited by humans and those that threaten human safety or property are considered to be unwanted wildland fires, and in Yosemite, are suppressed. This type of fire is most often portrayed in the media with characterizations such as “catastrophic” or “devastating.” Unwanted wildland fire has been occurring with alarming regularity throughout the United States for the past decade and a half, leading to annual suppression costs of over a billion dollars. Fire experts believe that these large fires are the result of almost a century of fire suppression, giving rise to massive increases in fuel accumulations.

Some wildland fires, however, are not unwanted. In the cooler, upper elevations of Yosemite National Park, fires started by lightning are often allowed to burn under strictly monitored conditions. These fires help to maintain healthy forests in less accessible areas, where fire has continued to play out its natural role, largely unhindered by modern fire suppression. *Wildland fire use* is the management of these naturally-ignited wildland fires to accomplish specific resource management objectives within pre- defined geographic areas as outlined in the approved final Fire Management Plan.

What determines whether or not a prescribed fire is ignited on any given day?

Prescribed fires are only conducted under certain weather conditions (i.e., during periods of low winds) when flames and heat can be controlled. The condition of the fuels in an area is also considered. Prescribed fires are not ordinarily lit after a period of prolonged drought, since fuels have become so dry that the effects of the fire are not within prescription standards and would not meet management objectives. Prescribed fires are only conducted when impacts to air quality can be minimized. Other considerations include the availability of firefighting resources to staff the prescribed fire.

What measures will be taken to make sure a prescribed fire does not escape and become a catastrophic fire?

Depending on the expected fire behavior, fire managers must ensure that enough qualified professional firefighters are available to ignite the prescribed fire and keep it within the project boundaries. Prescribed fires that escape containment lines are often the result of unpredicted winds. Fire managers study historic weather data, current weather trends, and collaborate closely with fire weather meteorologists to ensure that winds will remain within prescribed limits for the duration of the prescribed fire project. Firefighters or automated instruments transmit weather data on a regular basis, so that changes in weather patterns do not catch firefighters off-guard.

Nonetheless, as with any business, a certain risk exists in the undertaking of a prescribed fire. Land managers must weight these risks with the risk of taking no action, which might include the impacts of a large, uncontrollable wildland fire or a continued decrease in forest health (i.e., disease, insect infestations, etc.).

In the event of an unwanted wildland fire, what are the emergency evacuation procedures?

Should a wildland fire threaten road corridors or a developed area within the park, visitors should contact the nearest uniformed park ranger for information on safe refuges and evacuation plans. Oftentimes, one of the safest locations during a wildland fire is a large open space devoid of vegetation, like a parking lot or large cluster of buildings surrounded by lawn. Confusion, panic, and smoke-obscured roadways are the most likely cause of accidents and injury, rather than the fire, itself. Should you be asked to leave an area by vehicle and encounter smoke on the roadway, roll up your windows, turn on your headlights, and move forward at a slow, steady rate of speed. Do not stop, as this increases the likelihood of a car striking yours from behind.