Pursuant to 16 USC 551 and 36 CFR 261.50(a) and (b), and to provide for public safety, the following acts are prohibited on National Forest System lands under my jurisdiction. This Order is effective from May 30, 2020, through May 29, 2022.

1. Using an explosive. 36 CFR 261.52(b).

2. Possessing any substance, material, or any combination of substances or materials, with the intent to make any destructive device or any explosive within the State of California, without first obtaining a valid permit from the State of California, as required by California Penal Code 18720. 36 CFR 261.52(k).

3. Possessing, discharging or using any kind of firework or other pyrotechnic device. 36 CFR 261.52(f).

4. Operating or using any internal or external combustion engine, without a spark arresting device properly installed, maintained and in effective working order in accordance with the U.S. Forest Service Standard 5100-1a. 36 CFR 261.52(j).

Pursuant to 36 CFR 261.50(e), the following persons are exempt from this Order:

1. Any Federal, State, or local officer, or member of an organized rescue or fire fighting force in the performance of an official duty.

2. Persons with a permit from the Forest Service specifically authorizing the otherwise prohibited act or omission.

These prohibitions are in addition to the general prohibitions contained in 36 CFR Part 261, Subpart A. A violation of these prohibitions is punishable by a fine of not more than $5,000 for an individual or $10,000 for an organization, or imprisonment for not more than 6 months, or both. 16 USC 551 and 18 USC 3559, 3571, and 3581.

Done at Vallejo, California, this 29th day of May 2020.

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RANDY MOORE
Regional Forester
Pacific Southwest Region

This Regional Order supersedes Regional Order No. 19-02, signed on July 29, 2019.
I have decided to issue Regional Order No. 20-04 to restrict certain fire-related activities on National Forest System lands within the Pacific Southwest Region. There are 18 National Forests in the Region, totaling over 20 million acres, with an average of 27,437,000 recreation visitor days each year. With this Regional Order, Forest Service law enforcement personnel will have the authority to ensure public safety and protect natural resources. Specifically, the following acts are prohibited by this Regional Order:

1. Using an explosive. 36 CFR 261.52(b).

2. Possessing any substance, material, or any combination of substances or materials, with the intent to make any destructive device or any explosive within the State of California, without first obtaining a valid permit from the State of California, as required by California Penal Code 18720. 36 CFR 261.52(k).

3. Possessing, discharging or using any kind of firework or other pyrotechnic device. 36 CFR 261.52(f).

4. Operating or using any internal or external combustion engine, without a spark arresting device properly installed, maintained and in effective working order in accordance with the U.S. Forest Service Standard 5100-1a. 36 CFR 261.52(j).

Exemptions to the Regional Order, pursuant to 36 CFR 261.50(e), include the following:

1. Any Federal, State, or local officer, or member of an organized rescue or fire fighting force in the performance of an official duty.

2. Persons with a permit from the Forest Service specifically authorizing the otherwise prohibited act or omission.

This Regional Order will affect all National Forest System lands under my jurisdiction within the Pacific Southwest Region and will be effective from May 30, 2020, through May 29, 2022.

I have concluded that this decision may be categorically excluded from documentation in an Environmental Impact Statement (EIS) or Environmental Assessment (EA) under the National
Environmental Policy Act. This action falls within the category identified in 36 CFR 220.6(d)(1) - prohibitions to provide short-term resource protection or to protect public health and safety - and does not require documentation in a decision memo, decision notice, or record of decision. I have determined that there are no extraordinary circumstances associated with this temporary closure. Implementation of the decision may begin immediately.

Each of the prohibited acts identified in this Regional Order have been the source of substantial resource damage to National Forest System lands and have resulted in both personal injury and loss of life. The following memorandum discusses my rationale for these prohibitions.

**Prohibited Acts:** Using an explosive. 36 CFR 261.52(b).

Possessing any substance, material, or any combination of substances or materials, with the intent to make any destructive device or any explosive within the State of California, without first obtaining a valid permit from the State of California, as required by California Penal Code 18720. 36 CFR 261.52(k).

The use of explosives on National Forest System lands poses a significant threat to public safety and natural resources. California Penal Code 18710 PC makes it a crime to possess substances or materials intended to create a destructive device, including bombs, grenades, explosive missiles, and projectiles containing any kind of explosive or incendiary material and certain rockets and rocket-propelled projectiles. In recent years, the use of exploding targets has increased in popularity and resulted in a significant threat to public safety and natural resources. In the state of California, between January 1, 2010, and December 31, 2019, Forest Service Law Enforcement Officers issued a total of 91 citations for the use of fireworks and explosives on National Forest System lands.

Exploding targets were first distributed in 2005 and now there are several companies that sell them to the public. They contain binary explosives that typically combine ammonium nitrate (an oxidizer) and aluminum powder (a fuel). Each element is independently classified as inert, but once mixed together they produce what is classified as an explosive. ATF regulations allow the two components to be legally purchased. However, these components once mixed, cannot be transported without following strict regulations including insurance, packaging, and signage on the vehicle. (ATF Federal Explosives Law and Regulations, Public Law 91-452, Chapter 40 - Importation, Manufacture, Distribution and Storage of Explosive Materials, Section 842 - Unlawful Acts)

According to Forest Service records, exploding targets have started at least 17 wildfires since 2012 on National Forest System lands in 8 western states, causing the federal government to spend approximately $33.6 million in suppression costs. As a result of this trend, several Regions within the Forest Service have already issued orders banning the use of exploding targets on National Forest System lands. According to Forest Service Records:

- On August 5, 2013, the Rocky Mountain Region of the Forest Service issued an order to prohibit the use of unpermitted explosives, particularly exploding targets, on all National Forest System lands in the Rocky Mountain Region.
On July 9, 2013, the Pacific Northwest Region of the Forest Service issued a regional order prohibiting the use of exploding targets on National Forest System lands throughout the Region.

On July 23, 2014, the Intermountain Region of the Forest Service issued an order banning the use of exploding targets because of wildfire and public safety concerns.

The use of explosives, in particular the use of exploding targets, has increased rapidly in recent years and the incidence of misuse and abuse of the product is common. Based on this and the evidence linking exploding targets to igniting wildland fires, it is clear that the use of these products poses both a risk to public safety and threatens natural resources.

**Prohibited Act:** Possessing, discharging or using any kind of firework or other pyrotechnic device. 36 CFR 261.52(f).

The use of fireworks on National Forest System lands poses a significant threat to public safety and natural resources. According to the FIRESTAT database, between the years of 2009 to 2019, there have been a total of 267 wildland fires on National Forest System lands caused by the use of fireworks, resulting in 67,662 acres burned. In the state of California, between January 1, 2010, and December 31, 2019, Forest Service Law Enforcement Officers issued a total of 91 citations for the use of fireworks and explosives on National Forest System lands. In 1997, the Hemlock Fire on the San Bernardino National Forest was started by an illegal firework. This fire resulted in 3,737 acres burned and the death of an aerial firefighter.

According to the National Fire Protection Association, fireworks start an average of 18,500 fires per year, including 1,300 structure fires, 300 vehicle fires, and 16,900 outside and other fires. These fires caused an average of three deaths, 40 civilian injuries, and an average of $43 million in direct property damage. Additionally, in 2017, U.S. hospital emergency rooms treated an estimated 12,900 people for fireworks related injuries. (https://nfpa.org/Public-Education/Fire-causes-and-risks/Seasonal-fire-causes/Fireworks)

In order to prevent wildland fires and protect natural resources, the use of fireworks on National Forest System lands has become increasingly restricted in recent years. Many regions and forests have chosen to prohibit the use of all fireworks during the fire season, and in some cases, all year long. According to Forest Service records:

- The Intermountain Region issued a regional order prohibiting the possession, discharge, or use of any kind of firework or other pyrotechnic device on all National Forest System lands throughout the region. This order has been in effect since September 2, 2005.

- Effective December 17, 2010, the Coconino and Kaibab National Forests in Arizona prohibited fireworks year-round, regardless of weather conditions or holidays.

- In the Pacific Southwest Region, several national forests include a fireworks prohibition in their seasonal fire restriction orders.

Based on this and the evidence linking the use of fireworks to igniting wildland fires resulting in natural resource damage, personal injury and loss of life, it is clear that the use of these products
poses both a risk to public safety and threatens natural resources on National Forest System lands.

**Prohibited Act:** Operating or using any internal or external combustion engine, without a spark-arresting device properly installed, maintained and in effective working order meeting the Department of Agriculture, Forest Service Standard 5100-1a. 36 CFR 261.54(i).

The operation and use of internal and external combustion engines without a spark arrester or with a faulty or non-functioning spark arrester poses a significant threat to public safety and natural resources. According to the FIRESTAT database, since 1970 there have been 536,445 acres burned from 3,066 wildland fires started by the exhaust of internal and external combustion engines. The suppression of these fires cost a total of $128,605,693.

According to the publication *An Introduction to Spark Arresters: Spark Arresters and the Prevention of Wildland Fire*, 03511304-SDTDC, Forest Service San Dimas Technology & Development Center, Forest Service efforts to combat equipment-related fires began in the 1920s. By the 1950s, research demonstrated that exhaust particles with a diameter of 0.023 inches or larger were responsible for the majority of fire ignitions and in 1968, the Society of Automotive Engineers (SAE), in conjunction with the Forest Service and small-engine manufacturers, published the SAE Standard 1335. Standard 1335 not only prohibits the escape of carbon particles, but also regulates the allowable temperature of exhaust gases and the surface of the exhaust system. Forest Service Specification 5100-1 defines performance specifications for spark arrester exhaust systems used on general-purpose engines (generators, motorcycles, agricultural equipment, etc.).

The authors of *An Introduction to Spark Arresters* at the Forest Service Technology and Development Center in San Dimas, California, confirm that spark arresters have been used on significantly more pieces of machinery in the past several years. The engineers at the Technology and Development Center certified 557 spark arresters as meeting fire safe standards in their laboratory between the years of 2014 and 2019. They believe that the use of spark arresters as well as modern technology applied to the manufacture of engines most likely accounts for the decrease in the number of fires caused by engines in the recent decade. Because of the evidence linking fire ignitions to combustion engines without proper spark arresting devices, this prohibition is essential for the protection of public safety and natural resources on National Forest System lands.

X

Signed by: RANDY MOORE

RANDY MOORE
Regional Forester Pacific Southwest Region

Enclosure: Regional Order 20-04