ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States House of Representatives

COMMITTEE ON ENERGY AND COMMERCE 2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6115

> Majority (202) 225-2927 Minority (202) 225-3641

MEMORANDUM

October 3, 2017

To: Subcommittee on Environment Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: Hearing on "Air Quality Impacts of Wildfires: Perspectives of Key Stakeholders"

On <u>Wednesday, October 4, 2017, at 10:00 a.m. in room 2123 of the Rayburn House</u> <u>Office Building</u>, the Subcommittee on Environment will hold a hearing on "Air Quality Impacts of Wildfires: Perspectives of Key Stakeholders."

I. CURRENT STATE OF WILDFIRES

Over the past decade, an annual average of over 70,000 wildfires have burned approximately 6.6 million acres in the United States. ¹ Already this year, over 49,000 fires have burned approximately 8.5 million acres. There are currently 23 active large fires: 11 are in Oregon, five are in California, Montana and Washington each have two, and Arizona, Colorado, and New Mexico each have one large fire. The U.S. Forest Service recently announced that the cost of fighting these fires has exceeded \$2 billion, making 2017 the most expensive fire-fighting year to date.²

II. WILDFIRES AND THE CLEAN AIR ACT

Wildfire management and response is handled by a number of federal agencies, including the Forest Service, within the National Forest System, and the Department of the Interior, which handles wildfires on public lands. Wildfires that occur on nonfederal lands are the responsibility of the states. The Environmental Protection Agency (EPA), under its Clean Air Act (CAA)

¹ National Interagency Fire Center, *Statistics* (www.nifc.gov/fireInfo/fireInfo_statistics.html).

² U.S. Department of Agriculture, *Forest Service Wildland Fire Suppression Costs Exceed \$2 Billion* (www.usda.gov/media/press-releases/2017/09/14/forest-service-wildland-fire-suppression-costs-exceed-2-billion) (Sept. 14, 2017).

authority, is tasked with managing the smoke from wildfires. While EPA does not regulate the use of fire, it is within the Agency's purview to enforce the CAA's requirements to ensure public health and the environment are protected. The agency is required to set national ambient air quality standards (NAAQS) for certain pollutants that endanger public health and the environment, including particulate matter (PM_{2.5} and PM₁₀) and carbon monoxide (CO) which are major components of smoke.³ As with many CAA programs, EPA sets the NAAQS, and state and local air managers are in charge of implementing the necessary requirements to meet the standard. Areas that fail to meet the NAAQS are considered to be in nonattainment.

Both wildfires and prescribed fires drastically increase the amount of atmospheric pollution, which can lead to ambient air pollution above what the NAAQS establishes is safe to breathe. In such situations, states are not penalized for the pollution from natural events like wildfires. States can discount this pollution in accordance with EPA's Exceptional Events Rule.⁴ EPA recently updated this rule to allow the pollution from prescribed fires – fires intentionally set for resource management – to be considered exceptional, as long as a smoke management program (SMP) or basic smoke management practices were used.⁵ States use SMPs to establish procedures to minimize the public health and environmental impacts of smoke from prescribed fires, such as requiring prior authorization to burn.⁶

III. WILDFIRES AND CLIMATE CHANGE

Climate change is driving more frequent, larger, and more intense wildfires, especially across the western United States. The average number of large wildfires per year in the western

³ U.S. Environmental Protection Agency, *Wildfire Smoke A Guide for Public Health Officials* (www3.epa.gov/airnow/wildfire_may2016.pdf) (May 2016).

⁴ U.S. Environmental Protection Agency, *Guidance on the Preparation of Exceptional Events Deonstrations for Wildfir Events that May Influence Ozone Concentrations* (www.epa.gov/sites/production/files/2016-09/documents/exceptional_events_guidance_9-16_final.pdf) (Sept. 16, 2016).

⁵ U.S. Environmental Protection Agency, *Treatment of Data Influenced by Exceptional Events*, 81 Fed. Reg. 68216 (Oct. 3, 2016) (Final Rule) (www.epa.gov/sites/production/files/2016-09/documents/exceptional_events_rule_revisions_2060-as02_final.pdf); U.S. Environmental Protection Agency, *Guidance on the Preparation of Exceptional Events Deonstrations for Wildfir Events that May Influence Ozone Concentrations* (www.epa.gov/sites/production/files/2016-09/documents/exceptional_events_guidance_9-16-16_final.pdf) (Sept. 16, 2016).

⁶ U.S. Environmental Protection Agency, *Guidance on the Preparation of Exceptional Events Deonstrations for Wildfir Events that May Influence Ozone Concentrations* (www.epa.gov/sites/production/files/2016-09/documents/exceptional_events_guidance_9-16_final.pdf) (Sept. 16, 2016).

U.S. has tripled, and the area burned by these fires is six times greater than in the 1970s.⁷ The combination of wildfires, drought, and insect and disease damage—all of which are made worse by climate change—has doubled tree mortality in the western states since 1955.⁸ Warmer temperatures have doubled the death-rate for trees in the Pacific Northwest over the past several decades.⁹ As climate change progresses and global temperatures continue to rise, the area burned in the Rockies each year is projected to double. Burned areas in California are projected to increase by over 70 percent by the end of the century.¹⁰ Fires also exacerbate climate change as large amounts of carbon stored in trees and surface soils are released into the atmosphere when they burn.¹¹

IV. WITNESSES

The following witnesses have been invited to testify:

Dr. John Bailey

Professor

Oregon State University, College of Forestry

James R. Karels

Director

Florida Forest Service(On behalf of the National Association of State Foresters)

Knox Marshall

Vice President of Resources Murphy Company

Christopher Topik, Ph.D.

Director Restoring America's Forests The Nature Conservancy

⁷ Climate Central, *Western Wildfires: A Fiery Future* (assets.climatecentral.org/pdfs/westernwildfires2016vfinal.pdf) (Jun. 2016).

⁸Environmental and Energy Study Institute, *Drier and Hotter: Managing Climate Risks in the Southwest* (www.eesi.org/briefings/view/040214southwest) (Apr. 2, 2014).

⁹ Regional warming hurting NW forests, study says, Seattle Times (seattletimes.com/html/localnews/2008659500_webtrees22m.html) (Jan. 22, 2009); Mantgem et al., Widespread Increase of Tree Mortality Rates in the Western United States, Science (www.sciencemag.org/content/323/5913/521.short) (Jan. 23, 2009).

¹⁰ U.S Global Change Research Program, *Climate Change Impacts in the United States*, at 468 (nca2014.globalchange.gov) (May 2014).

¹¹ U.S. Environmental Protection Agency, *Climate Change Indicators in the United States: Wildfires* (www.epa.gov/sites/production/files/2016-08/documents/print_wildfires-2016.pdf) (Aug. 2016).