

Subcommittee on Federal Lands
Tom McClintock, Chairman
Hearing Memo

May 15, 2017

To: All Committee on Natural Resources Members

From: Majority Committee Staff – Chris Marklund
Subcommittee on Federal Lands (x6-7736)

Hearing: Oversight hearing on “*Seeking Better Management of America's Overgrown, Fire-Prone National Forests.*”
May 17, 2017 at 2:00 PM; 1324 Longworth HOB.

The Subcommittee on Federal Lands will hold an oversight hearing on “*Seeking Better Management of America's Overgrown, Fire-Prone National Forests*” on **Wednesday, May 17, 2017 at 2:00 p.m.** in 1324 Longworth House Office Building. The hearing will focus on the impacts of wildfire, disease and infestation on America’s overgrown and fire-prone federal forest lands and the need to significantly increase forest management activities to improve the health of our nation’s forests.

Policy Overview

- The U.S. Forest Service is entrusted with managing 193 million acres¹ of mostly forested areas in 43 states and Puerto Rico.²
- In written testimony before the Senate Energy and Natural Committee last Congress, Forest Service Chief Tom Tidwell stated, “**58 million acres** of national forest are at high or very high risk of severe wildfire.”³
- Due in part to a lack of active management, insect infestations are killing mature trees on millions of acres of federal forests and catastrophic wildfires are burning unnaturally hot and growing in number and size, with devastating impacts on the environment.
- Forest management activities, such as thinning to reduce stand density, can be employed to promote resiliency against forest health threats and wildfire. On Forest Service lands, thinning is often accomplished through commercial timber harvests.
- From the mid-1950’s through the mid-1990’s, the amount of timber harvested from the national forests averaged 10 to 12 billion board feet.⁴ Since 1996, the average amount of timber harvested from federal forests has fallen to between 1.5 and 3.3 billion board feet

¹ USDA Forest Service, By the Numbers, <https://www.fs.fed.us/about-agency/newsroom/by-the-numbers>

² USDA Forest Service, About the Agency, <https://www.fs.fed.us/about-agency>

³ Chief Tom Tidwell, Testimony before the Senate Committee on Energy and Natural Resources, May 5, 2015

⁴ USDA Forest Service, FY 1905-2015 National Summary Cut and Sold Data and Graphs, January 20, 2016

annually.⁵ Conversely, since 1996, the average annual amount of acres burned due to catastrophic wildfire totaled over 6.2 million acres per year.⁶

Invited Witnesses

Dr. John Ball

Professor, Forest Health Specialist
South Dakota State University
Brookings, South Dakota

Mr. Steven A. Brink

Vice President of Public Resources
California Forestry Association
Sacramento, California

Mr. James L. Cummins

Executive Director
Wildlife Mississippi
Stoneville, Mississippi

Dr. Tania Schoennagel

Dept. of Geography and Institute of Arctic and Alpine Research
University of Colorado Boulder
Boulder, Colorado

Background

America's 154 national forests⁷ are increasingly becoming overgrown, insect and disease infested, fire-prone thickets due in part to a lack of active management, such as thinning forests, to promote resiliency and enhance forest health. As a result, insect infestations are killing mature trees on millions of acres of federal forests and catastrophic wildfires are burning unnaturally hot and growing in number and size, with devastating impacts on the environment.



Map 1: Source: USDA Forest Service

⁵ Ibid. USDA Forest Service, FY 1905-2015 National Summary Cut and Sold Data and Graphs, January 20, 2016

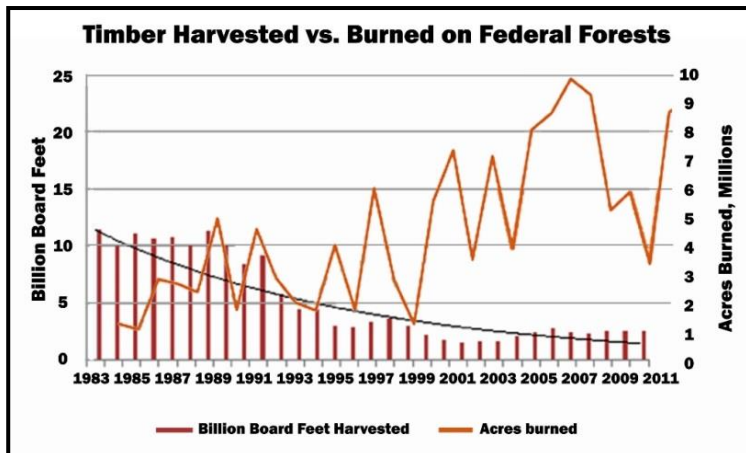
⁶ National Interagency Fire Center, Total Wildland Fires and Acres (1960-2015),

https://www.nifc.gov/fireInfo/fireInfo_stats_totalFires.html

⁷ Ibid. About the Agency

The Forest Service manages mostly forested areas in 43 states and Puerto Rico,⁸ an area equivalent to approximately ten percent of the continental U.S. land base (193 million acres).⁹ In written testimony before the Senate Energy and Natural Resources Committee in 2015, Forest Service Chief Tom Tidwell indicated, “58 million acres of national forest are at high or very high risk of severe wildfire”¹⁰ – or nearly one third of all of the Forest Service’s acreage and an area roughly the size of Pennsylvania and New York combined.

The Forest Service’s anemic forest management efforts, both in terms of administrative obstacles (e.g., cumbersome planning processes, high costs and analysis paralysis); and legal obstacles in approving forest management projects, exacerbate the ongoing forest health crisis.



Source: United States Senate Environment and Public Works Committee, Critical Thinking on Climate Change, September 4, 2014

The Forest Service can employ several forest management activities, such as thinning to reduce stand density, to promote resiliency against forest health threats like insects and disease. Commercial timber harvests and stewardship contracts often accomplish these necessary management activities on Forest Service lands.

From the mid 1950’s through the mid 1990’s, the amount of timber harvested from the national forests averaged 10 to 12 billion board feet.¹¹ In FY 2015, the Forest

Service harvested less than 2.9 billion board feet of timber across 204,763 acres,¹² a small fraction of the acreage in need of treatment. Beginning in 1996, the average amount of timber harvested from federal forests fell to between 1.5 and 3.3 billion board feet.¹³ Conversely, since 1996, the average annual amount of acres burned due to catastrophic wildfire totaled over 6.2 million acres per year.¹⁴

Increasingly Overgrown and Risk of Disease and Wildfires

Due to a lack of active management, our nation’s forests are overgrown with more trees and vegetation than the landscapes can sustainably support. According to the Forest Service, 60 to 80 million acres of National Forest lands are overstocked and at a high, to very high, risk of infestation, disease and catastrophic wildfire.¹⁵

⁸ Ibid.
⁹ Ibid. By the Numbers
¹⁰ Ibid. Chief Tom Tidwell Testimony.]
¹¹ Ibid. USDA Forest Service, FY 1905-2015 National Summary Cut and Sold Data and Graphs, January 20, 2016
¹² USDA Forest Service, Fiscal Year 2017 Budget Justification, February 2017
¹³ Ibid. FY 1905-2015 National Summary Cut and Sold Data and Graphs
¹⁴ Ibid. Total Wildland Fires and Acres (1960-2015)
¹⁵ USDA Forest Service, Increasing the Pace of Restoration and Job Creation on our Forests, February 2012

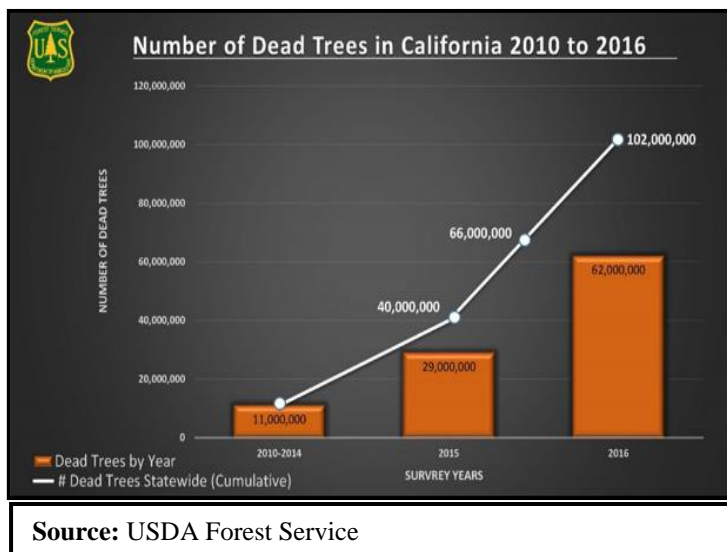
In California, forests average 100 to 200 trees per acre or more on landscapes that only healthily support a density of 40 to 60 trees per acre. More than 20% of forests in Colorado, Montana and Utah are overstocked to the point of causing tree mortality.¹⁶ Overstocking makes forests more susceptible to the impacts of drought, disease and insect infestation by increasing competition among trees for the water, minerals and sunlight necessary to sustain a healthy forest ecosystem.

Tree Mortality Threatens Forests and Communities

Overstocked landscapes made up of densely populated, over-mature, large diameter timber create an ideal environment for a bark beetle infestations to take hold.¹⁷ When drought and other environmental factors exacerbate these conditions, the impacts can be catastrophic.

Beginning in the 1990s, very large outbreaks of pine beetle spread across millions of acres of forest in the western United States, causing significant tree mortality that affected entire landscapes. In the Rocky Mountain region, a bark beetle outbreak moving since the mid-1990s impacted more than 116 million acres.¹⁸ Between 1998 and 2002, a bark beetle infestation in the Southern Appalachian Mountains impacted more than one million acres of forests across five states, causing an economic loss of more than one billion dollars. Annually, the estimated economic loss in the southern United States due to pine beetle alone totals more than \$40 million dollars per year in lost forest production.¹⁹

In some regions of the country, tree mortality due to insect infestation is accelerating at an unprecedented pace. In California alone, the Forest Service estimated that since 2010, more than 102 million trees died across 7.7 million acres of forests in the state. More than two-thirds of that acreage is federally managed forests.²⁰ The State of California identified millions of acres of dead trees across Forest Service land as posing a direct threat to public safety, threatening communities and critical infrastructure with falling trees and increased fire risk.²¹



¹⁶ USDA Forest Service, Idaho’s Forest Resources, 2004-2009, July 2012

¹⁷ Michael J. Jenkins, Justin B. Runyon, Christopher J. Fettig, Wesley G. Page, and Barbara J. Bentz, Interactions among the Mountain Pine Beetle, Fires, and Fuels, Forest Science, June 2014

¹⁸ Gail Wells, Bark beetle kill leads to more severe fires, right? Well, maybe, High County News, May 14, 2012

¹⁹ John T. Nowak, James R. Meeker, David R. Coyle, Chris A. Steiner, and Cavell Brownie, Southern Pine Beetle Infestations in Relation to Forest Stand Conditions, Previous Thinning, and Prescribed Burning: Evaluation of the Southern Pine Beetle Prevention Program, Journal of Forestry, April 30, 2015

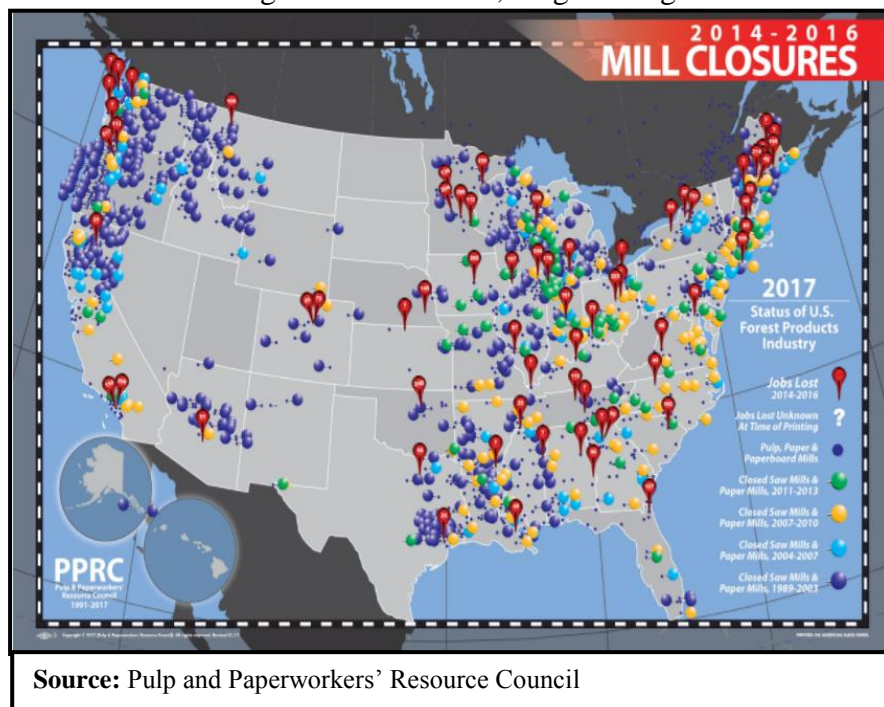
²⁰ California Tree Mortality Task Force, Tree Mortality: Facts and Figures, April 2017

²¹ Ibid.

The Devastating Impacts of Catastrophic Wildfires

The impacts of increasing catastrophic wildfires as a result of decreased on-the-ground forest management projects are significant. In 2015, wildfires burned 10.1 million acres of forests, including 7.4 million acres of federal lands.²² From 2006 to 2016, 116 wildfires consumed 100,000 acres or more, compared to only 60 large fires over the preceding decade.²³ In total, from 1996 to 2016, these 100,000 acre fires burned nearly 25 million acres,²⁴ an area roughly the size of the Commonwealth of Virginia.

Agency staff rate catastrophic wildfire as one the biggest threats to endangered species habitat and as wildfires continue to increase in size, number and intensity, their adverse impacts to wildlife habitat grow as well. Hot, long burning fires burn nutrients out of the soils and reduce



Source: Pulp and Paperworkers' Resource Council

water retention, both of which are critical to the reestablishment of vegetation after a fire. Mudslides, flooding and erosion, which often occur on the heels of a severe wildfire, threaten water availability and water quality for forest wildlife and human populations alike.²⁵

The direct costs to the Forest Service for responding to the impacts of catastrophic wildfire, including landslides, flooding and other threats to life, property, water

quality and ecosystems have topped \$166 million from FY 2011 to FY 2016.²⁶ This figure does not include costs to private lands owners, counties, municipalities and water districts.

The impact of wildfires devastates homes, businesses and communities as well. Between 2006 and 2016, the Forest Service reported that wildfires destroyed 36,827 structures.²⁷ In the

²² CRS Report R43077, Wildfire Management Appropriations: Data, Trends, and Issues, August 2016

²³ National Interagency Fire Center, 1997-2016 large fires (100,00+ acres),

https://www.nifc.gov/fireInfo/fireInfo_stats_lgFires.html

²⁴ Ibid.

²⁵ Doug Inklely, 5 Ways Wildfires Threaten Western Wildlife, National Wildlife Federation, June 19, 2012

²⁶ Total expenditures for the Burned Area Emergency Response program FY 2011 to FY 2016. Data provided by the U.S. Forest Service in response to a request from the Committee.

²⁷ National Interagency Coordination Center (NICC) Wildland Fire Summary and Statistics Annual Reports, <https://www.predictiveservices.nifc.gov/intelligence/intelligence.htm>

last two years alone, wildfires burned nearly 9,000 structures. Tragically, there have also been 349 wildfire-related fatalities over the past twenty years.²⁸

Forest Infrastructure

The ability to thin the forest depends to a significant extent on having timber processing capacity (saw mills, biomass plants, etc.) and capabilities in proximity to the area requiring thinning. Lack of supply from federal forests significantly diminished this capacity in the past several decades. Across the West, between 1986 and 2003, the timber processing capacity decreased by one-third.²⁹ Without the commercial component, which often pays for thinning through the sale of commercially viable wood products, thinning becomes a much more expensive proposition for the taxpayer.

²⁸ National Interagency Fire Center, Wildland Fire Accidents and Fatalities by Year, https://www.nifc.gov/safety/safety_documents/year.pdf

²⁹ Timber-Processing Capacity and Capabilities in the Western United States, Journal of Forestry, July/August 2006