THE 2020 WILDFIRE YEAR: RESPONSE AND RECOVERY EFFORTS

HEARING

BEFORE THE

SUBCOMMITTEE ON CONSERVATION AND FORESTRY

OF THE

COMMITTEE ON AGRICULTURE
HOUSE OF REPRESENTATIVES

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SUBMITTED MATERIAL

THE 2020 WILDFIRE YEAR: RESPONSE AND RECOVERY EFFORTS

THURSDAY, SEPTEMBER 24, 2020

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CONSERVATION AND FORESTRY,
COMMITTEE ON AGRICULTURE,
Washington, D.C.

The Subcommittee met, pursuant to call, at 1:37 p.m., in Room 1300 of the Longworth House Office Building, Hon. Abigail Davis Spanberger [Chair of the Subcommittee] presiding.

Members present: Representatives Spanberger, O'Halleran, Pingree, Axne, Costa, Cox, Schrier, Panetta, Peterson (*ex officio*), LaMalfa, Allen, Kelly, Balderson, and Johnson.

Staff present: Prescott Martin III, Félix Muñiz, Jr., Anne Simmons, Josh Maxwell, Matthew S. Schertz, Ricki Schroeder, Patricia Straughn, John Konya, Dana Sandman, and Justina Graff.

OPENING STATEMENT OF HON. ABIGAIL DAVIS SPANBERGER, A REPRESENTATIVE IN CONGRESS FROM VIRGINIA

The CHAIR. This hearing of the Subcommittee on Conservation and Forestry entitled, *The 2020 Wildfire Year: Response and Recovery Efforts,* will come to order. Welcome, and thank you for joining today's hearing with Mr. John Phipps, Deputy Chief for State and Private Forestry at USDA. After brief opening remarks, the hearing will open to questions. Members will be recognized in order of seniority, alternating between Majority and Minority Members. When you are recognized, you will be asked to unmute your microphone, and you will have 5 minutes to ask your question or make a comment. In order to get as many questions as possible, the timer will stay consistently visible on your screen.

Thank you for joining us here today in Washington and online for this critical hearing on the wildfires ravaging the western United States. We have all seen the footage from California, Oregon, and Washington. It is surreal, and it is terrifying. I want to talk today about what we can do to meet the needs and face the challenges presented by this unprecedented wildfire season out West and elsewhere. Deputy Chief Phipps, thank you for joining us today, and for this important discussion. I appreciate everything you and the Forest Service do, and did to accommodate our request on such short notice, and I do not want to take any more than a minimum of your focus away from the important work happening to fight wildfires in communities across our country. The Forest Service recently lost one of its own fighting a wildfire in southern California. I ask that before we continue, we pause for a moment

of silence for him, and for all those we have lost to wildfires this year.

As we speak, there are over 70 large fires ranging across 5 million acres in the Southeast, the South, the Rocky Mountains, the Pacific Northwest, and California. For some perspective, that is the equivalent of five million football fields, one million Major League baseball fields, or 2.5 million typical city blocks that are currently burning. There are more than 31,000 firefighters and support personnel on the ground waging this battle, and we have to keep their safety and their needs foremost in our minds. We even have firefighting staff from Canada and Mexico supporting the heroic efforts of U.S. Forest Service staff, who are working under very dangerous and trying circumstances, in addition to a public health crisis unlike anything we have seen in 100 years.

Our communities are trying to manage wildfire evacuations during COVID-19 and protect the electric grid during extreme heat and wildfire, among other challenges. Yet as unprecedented as this moment is, I am reminded of another moment in our nation's history when Americans also faced great uncertainty and hardship. During the 1930s, at the height of the Great Depression and the Dust Bowl that ravaged the Great Plains and much of the United States, there was a sense that Congress did not understand the severity of the problems facing America's farmers and families living in the midst of an environmental crisis, and despite demands for action by both the Administration and those impacted by dust storms, Congress failed to act in a comprehensive manner.

It was not until March of 1935, when the dust from the Midwest reached the Capitol steps, and lawmakers were forced to see it and experience it with their own eyes, that compromise could be reached on what became the first Federal conservation bill, the Soil Conservation and Domestic Allotment Act of 1936. In the 3 years that followed its passage, soil erosion dropped by more than 20 percent. I can only imagine what hardship could have been averted had Congress acted when they first understood that there was a crisis brewing for Americans across the Great Plains. I want to be clear that all those here and listening virtual today, it should not take the ash of these wildfires, or the debris and flood waters of hurricanes ravaging our coasts, or severe heat felt by millions across the nation and across the globe on a daily basis reaching the Capitol steps for this Congress to take action on the environmental crisis that we are currently facing. Climate change is real, it is here, and the failure of this or any committee in Congress to take action will have real human costs.

Still, I do not mean to suggest that there are not other factors that have contributed to these and other recent wildfires. We know that many factors are involved in the current wildfires, and our wildfire risk, and that certainly includes encroachment of housing and development on forested wildlands, forest management decisions and resources, fire management, weather events, like the historic lightning storm that struck California in August, the actions of people, the use of pyrotechnic devices, and the list, unfortunately, continues. I expect that after this fire year we will look to learn from what has happened, have a robust policy discussion and

debate, and do everything in our power to prevent such a drastic situation from happening in the future.

Today we are here to work together on the emergencies that face us right now. That is part of what I enjoy most about this Subcommittee. We focus on how we can work together on behalf of our constituents, and this Subcommittee is here to learn about what is happening since we last spoke in July about the 2020 wildfire season, what you expect may happen as it continues, and to explore how we can work with you to protect our communities from wildfires this season. I look forward to that discussion for our continued work together on the issues related to the U.S. Forest Service. I look forward to discussions about how we can continue our important work with you through the farm bill and annual funding cycle to ensure the health and resilience of our National Forests, which are the economic drivers of small communities across the country. Thank you very much.

[The prepared statement of Ms. Spanberger follows:]

PREPARED STATEMENT OF HON. ABIGAIL DAVIS SPANBERGER, A REPRESENTATIVE IN CONGRESS FROM VIRGINIA

Thank you for joining us here in Washington and online today for this critical hearing on the wildfires ravaging the western United States. We've all seen the footage from California, Oregon, and Washington. It's surreal and it's terrifying. I want to talk today about what we can do to meet the needs and face the challenges presented by this unprecedented wildfire season out West and elsewhere.

Deputy Chief Phipps, thank you for joining us today for this important discussion. I appreciate everything that you and the Forest Service did to accommodate our request on short notice, and I do not want to take more than the minimum of your focus away from the important work happening to fight wildfires in communities across the country.

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As we speak, there are over 70 large fires raging across 5 million acres in the Southeast, South, Rocky Mountains, Pacific Northwest, and California. For some perspective, that is the equivalent of five million football fields, one million Major League Baseball fields, or 2.5 million typical city blocks are burning.

There are more than 31,000 firefighters and support personnel on the ground waging this battle. We have to keep their safety and their needs foremost in our minds.

We even have firefighting staff from Canada and Mexico supporting the heroic efforts of U.S. Forest Service staff who are working under very dangerous and trying circumstances in addition to a public health crisis unlike anything we have seen in 100 years. Our communities are trying to manage wildfire evacuations during COVID-19 and ensure electric grid security and resilience during extreme heat and wildfire, among other challenges.

There is no doubt that these fires and their related horrors are intensifying as the climate warms. Now, I appreciate that there are longstanding disagreements about how and why we are in the position we are in. I am not here to relitigate the past or argue about the future. We are where we are, and today, we're here to work together on the emergencies that face us right now. That is part of what I most enjoy about this Subcommittee, we focus on how we can work together on behalf of our constituents.

This Subcommittee is here to learn about what is happening since we last spoke in July about the 2020 wildfire season, what you expect may happen as it continues, and to explore how we can work with you to protect our communities from wildfires this season.

I look forward to that discussion, and our continued work together on issues related to the U.S. Forest Service. I also look forward to discussions about how we can continue our important work with you through the farm bill and annual funding cycle to ensure the health and resilience of our National Forests, which are economic drivers in small communities across the country.

Thank you.

The CHAIR. In consultation with the Ranking Member, and pursuant to Rule XI(e), I want to make Members of the Subcommittee aware that other Members of the full Committee may join us today. I would like to now welcome Ranking Member Mr. LaMalfa for his opening statement.

OPENING STATEMENT OF HON. DOUG LAMALFA, A REPRESENTATIVE IN CONGRESS FROM CALIFORNIA

Mr. LAMALFA. Well, thank you, Chair Spanberger. I really appreciate the effort it took to cause today's hearing today on this very, very important subject, as well as the participation of our Subcommittee Members, and the full Committee Members that want to take part and weigh in. It is extremely important.

Before I really begin, though, I think it is important we recognize the life and legacy of our former Chairman of Agriculture Committee, Chairman Bob Smith, and right in the back there is a candle burning for him, and a small picture, as well as his large portrait hangs in 1302. Bob was a family man, a team roper, a cattle rancher, banker, a contractor, and a legislator from Oregon. He loved this institution and understood that working across the aisle was the best way to succeed, as we all should know. Bob was a politician's politician, and many sought his quiet counsel. He appreciated the hard work of staff and understood the responsibility of his office. He was a credit to this Committee, and to the House of Representatives. He faithfully served in Oregon's 2nd District from 1983 to 1995, and again from 1997 to 1999, and between 1997 and 1999 that was his tenure as the Chairman of the House Agriculture Committee. Oregonians can be proud of his service and my prayers do go out to his family during this time. So thanks again, Chair Spanberger.

As you mentioned, this year western states have experienced yet another catastrophic fire season, with 7 million acres burned, in California, 3.6 million acres burned so far. I am afraid future fire seasons will only get worse unless we dramatically improve the management and health of our National Forest System. In fact, the Forest Service has identified nearly 50 percent of the 193 million acres of the National Forest System is currently at high risk of a wildfire, or likely to be impacted by insect and disease outbreaks. At current pace it will take the Forest Service nearly 30 years to treat these acres. Our National Forests are facing an epidemic of declining health which is in direct correlation to disastrous policies that have led to a dramatic decrease in management, even on the portions of the National Forests outside of roadless and wilderness areas.

In recent years Congress has addressed fire borrowing with a fire funding fix and provided new authorities in an attempt to streamline forest management. While there is not a single policy solution to solving wildfires, it is clear that our piecemeal approach is not nearly enough. Nearly 2 years ago California experienced its most deadly wildfire on record when a campfire in the Paradise/Magalia area took 85 lives, and destroyed the town of Paradise, as well as outlying areas of Magalia, Yankee Hill, and Concal. At that time, Congress should have acted. The House and Senate Agriculture

Committees were conferencing the 2018 Farm Bill, and we had the opportunity to adapt a number of bipartisan House provisions that would have helped prevent further loss of life and property from wildfires. These bipartisan House provisions were created with input from U.S. Forest Service under both the Obama and Trump Administrations. However, despite good faith efforts by the Republican farm bill conferees, the Senate Democrats refused to even discuss these critical reforms.

Healthy forests require active management in the form of mechanical thinning, prescribed fires, and other activities to ensure they do not become overgrown tinderboxes, as we see now. However, under the *status quo,* addressing at risk acres takes years and years, and these delays harm the very acres we are trying to protect. For instance, the 2018 Musick Fuels Reduction and Landscape Restoration Project in the Sierra National Forest had a proposed treatment area of 12,000 acres to respond to tree mortality and remove fuels along roads. To my knowledge, there was no litigation that delayed the project, yet analysis took nearly 2 years to the day to complete. Unfortunately, these easily identified fire prone acres were consumed in the Creek Fire before the restoration work could even begin.

We can address these issues with common sense approaches that benefit both our forests and our rural communities. There are many ideas we can bring to the table and act on immediately. One example is H.R. 7978, the Emergency Wildfire and Public Safety Act. I am proud to have worked with my colleague, Representative Panetta, to introduce this bill to help protect the West from these catastrophic wildfires and implement common sense forest management reforms that will help prevent these fires in the future. While this is a good start, more work will be needed. Congress could consider any number of individual authorities, from bipartisan legislation, such as categorical exclusions for salvage, to address landscape scale mortality events caused by wildfire, insect infestation, and disease, and drought. I encourage my colleagues to take action on these ideas and others without delay.

We are indeed fortunate to have Mr. John Phipps from the Forest Service—he is the Deputy Chief of State and Private Forestry—testifying for us today. I appreciate that. We hope to hear about his experience with wildfire issues, what tools the U.S. Forest Service has at its disposal, and what tools are needed further to prevent and suppress wildfires. Before I yield back, I would like to take a moment again to thank our Forest Service firefighters, and the other first responders that are currently at risk, and those that already—that was mentioned—have given their lives to protect our forests, homes, and communities. We are indeed forever grateful for their service, and I hope that today's hearing will lead us to comprehensive solutions and make their jobs easier in the future. Thank you, Madam Chair, I will yield back to you.

The CHAIR. The chair would request that other Members submit their opening statements for the record so the witness may begin his testimony, and to ensure that there is ample time for questions.

I would like to welcome our witness. Thank you for being here today. Mr. Phipps began his role as Deputy Chief of State and Private Forestry at USDA's Forest Service in 2019. He started his ca-

reer with the Forest Service in 1976, and has since held a variety of roles within the agency. Prior to his current position Mr. Phipps served as the Station Director for the Rocky Mountain Research Station from 2015 to 2019.

We will now proceed to hearing your testimony. You will have 5 minutes. When 1 minute is left, the light will turn yellow, signaling the time is close to expiring, and you should be able to see a clock ticking down on one of these boxes on the screen before you. Mr. Phipps, please begin whenever you are ready.

STATEMENT OF JOHN PHIPPS, DEPUTY CHIEF FOR STATE AND PRIVATE FORESTRY, U.S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C.

Mr. PHIPPS. Good afternoon, everyone. Chair Spanberger, Ranking Member, and Members of the Committee, I am proud to be representing the Forest Service today as a career professional forester with decades of experience dedicated to our mission of stewarding America's forests and grasslands for current and future generations. I have experience as a firefighter, land manager, research leader, and senior executive currently leading the agency's State and Private Forestry programs, including fire and aviation management. My testimony will outline the current status of Forest Service response to wildfires, the efforts that we have ongoing to take care of our employees and communities before, during, and after fires occur.

Our nation is enduring a devastating wildfire year, one that has cut destructive swaths through states like California, Oregon, Washington, Colorado, and Arizona, and made more difficult by the ongoing COVID-19 pandemic. As of September 19, there have been almost 43,000 fires that have burned more than 7.2 million acres across all jurisdictions. In addition to homes and property damage, these fires have taken lives throughout the country. We are mourning the tragic loss of Charlie Morton, Big Bear Hotshot Squad Boss who died last Thursday in California while fighting the El Dorado fire on the San Bernardino National Forest. Charlie's memorial service is tomorrow in San Bernardino.

It is an understatement to say that this is an unprecedented year. Numerous large fires since mid-August have been in and around very large communities and developed areas across California and the Pacific Northwest. Smoke impacts have been horrendous and widespread across the western United States. One of the most notable challenges this year is the number of fires taking place at the same time, which has stretched us thin. Since August 18 through today, the demand for fire resources has exceeded supply across the system. As with any fire year, it takes all partners, Federal, state, and local government, Tribal, contractors, and volunteers to respond. We all work together to ensure we are making the best use of our resources to protect the public and our firefighters. As of September 19, over 32,700 interagency firefighters were supporting wildfire operations across the country, primarily in California, Oregon, and Washington. This is a record for most firefighters ever deployed.

To bolster our capabilities, we requested assistance from the active military, as well as our international partners. Additionally,

states have requested assistance from their National Guard. Preventing the spread of COVID among our first responders and communities is an important addition to our focus on safety this year. The Forest Service has been successful with implementing our COVID prevention and mitigation measures, like spread out fire camps, social distancing, and mask wearing. I would like to conclude by recognizing efforts of this Committee that took to establish the Congressional fire funding fix. As a result, the Forest Service no longer must delay priority work that results from transfers of funding from other Forest Service programs to pay for ongoing fire operations. I welcome any questions you may have.

[The prepared statement of Mr. Phipps follows:]

PREPARED STATEMENT OF JOHN PHIPPS, DEPUTY CHIEF FOR STATE AND PRIVATE FORESTRY, U.S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C.

Madam Chair, Ranking Member, and Members of the Committee, thank you for the opportunity to appear before you today to discuss Wildfire Management during the 2020 Fire Year. My testimony today will outline the current status of the USDA Forest Service response to wildfires, the efforts that we have undertaken to take care of our employees and communities before, during, and after fires occur, and the outlook for the remainder of this year.

Our nation is enduring a devastating wildfire year, one that has cut destructive swaths through states like California, Oregon, Washington, Colorado, and Arizona, and made more difficult by the ongoing COVID-19 pandemic. As of September 19, 2020, there have been 42,866 fires that have burned 7,236,139 million acres across all jurisdictions. In addition to homes and property damage, these fires have taken lives throughout the country. This includes one of our own firefighters, who died last Thursday in California.

These fires threaten urban and rural communities, farm and ranchland, municipal water supplies, timber, recreation sites, and important wildlife habitat. They are stark reminders of the need to partner with communities to prepare for wildfires, while also proactively conducting forest management projects to create healthy, fire-resilient conditions on our nation's forestlands.

Unprecedented Year

This is an unprecedented year. Since mid-August, numerous large fires have been in and around very large communities and developed areas across California and the Pacific Northwest. Smoke impacts have been widespread across the western United States. Firefighting resources have been prioritized to fires with the greatest threat to public safety. Several tropical cyclones have also made landfall this year, causing damage and requiring the response of firefighting and incident management personnel. One of the most notable challenges this year is the number of fires burning at the same time across the West. Typically, firefighting resources move around the country to meet demand. Right now, that demand for resources is high across the system. As with any fire year, it takes all partners including Federal, state and local government, Tribal, contractors and volunteers to respond. We all work together to ensure we are making the best use of our resources to protect the public and our firefighters.

To bolster our capabilities, we requested assistance from the active military as well as our international partners. Additionally, states have requested assistance from the National Guard. Our partners all around the country are pitching in to help us through this unprecedented event. Our fire response capabilities, both on the front lines and in supporting our fire response and other incident response, is our priority work, and we will need to make trade-offs with other critical work.

We are experiencing a multi-region complex wildland fire event like we have never seen before. The explosive growth of the Labor Day fires was sparked by bone dry conditions, periods of high temperatures and low relative humidity that make forest vegetation and grasslands incredibly receptive to fire. Add in a historic strong wind event that covered the West Coast, and wildfires grew exponentially. In a situation like that, the primary challenge and mission becomes making sure we get people out of the way of fire.

On September 10, 2020, all 18 National Forests in California announced a temporary closure order due to unprecedented and historic fire conditions. Additionally, the Agency announced temporary closures of several forests in Oregon and Wash-

ington. Implementing fire restrictions, burn bans or associated closures is a particularly difficult decision that is not taken lightly. Criteria for determining when an area should be placed under fire restrictions or burn bans is determined locally with the input of partners, agencies and communities. Recognizing how important public access is to so many, the Forest Service is evaluating these closures daily, and we are committed to lifting the closures as soon as conditions allow.

Key Partnerships with State and Local Partners

Wildfire response is inherently interagency as wildfires do not recognize jurisdictional boundaries. Effective response requires that all the firefighting capability—including Federal, state, local government, Tribal and volunteer partners—work together. These partnerships and relationships have evolved over many years, creating a robust interagency capability to support wildfires across the country. Many of the on-going incidents span jurisdictional boundaries and are in unified command, which means Federal, state and local government resources are jointly managing fires.

As of September 19, 2020, over 32,700 interagency firefighters are currently supporting wildfire operations across the country, primarily in California, Oregon and Washington. This is the highest number of firefighters deployed since record-keeping began. More than 18,500 interagency wildfire personnel are currently deployed to California, and over 9,100 personnel are deployed to Oregon and Washington.

The Department of Defense is a key wildland firefighting partner this year, as they have been for decades, providing aircraft and personnel to serve as wildland firefighters. Over 200 soldiers from Joint Base Lewis-McCord in Washington are currently assigned to the August Complex on the Mendocino National Forest in California; also 200 marines from Marine Base Camp Pendleton in California were deployed to the Creek fire in California on September 22, 2020. In addition to the U.S. Army and Marine activation, four military C–130s equipped with Modular Airborne Fire Fighting Systems (MAFFS) are currently serving as airtankers, providing wildfire support in California.

The Departments of Agriculture and [the] Interior requested assistance from Canada and Mexico, through reciprocal agreements established under the authorities of the Wildfire Suppression Assistance Act (P.L. 100–428). On September 2, 2020, 62 firefighters arrived from Canada. On September 17 and 18, 2020, 444 additional Canadian firefighting personnel arrived in the Pacific Northwest. Mexico is providing firefighters as well. This week, 100 firefighters from Mexico will begin working in southern California. We are in contact with fire agencies in both Australia and New Zealand—the only other countries with which we have reciprocal cooperative fire assistance agreements. While they are interested in providing support, currently they are unable to do so because of the need to meet their own countries' COVID-19 requirements.

COVID-19 and Fire Suppression

Preventing the spread of COVID-19 among our first responders and communities is an important addition to our safety focus this year. The Forest Service and our interagency partners have seen success with our COVID-19 prevention and mitigation measures. In addition to fewer cases than may have been expected, the learning culture of the interagency wildland fire agencies allows for lessons-learned to be shared in real time as fire incidents occur.

All firefighters and fire camp personnel are strictly adhering to current social distancing protocols wherever possible. Large fire camps are no longer the norm. Most firefighting efforts are accomplished in small groups and dispersed into isolated camps to provide firefighters and the public better social distancing and safety from the spread of COVID-19. Smaller fire camps allow local health officials to contain positive cases and limit the spread of disease. Virtual communications ensure internal and external stakeholders receive the most up-to-date information as safely as possible. Spreading out fire camps, issuing personal protective equipment such as masks and gloves, screening and testing firefighters, and developing more contracts for logistical support are all built into our firefighting plans. The Agency continues to work with community leaders and local law enforcement to ensure their needs are met, and wildfire threats and capacity are clearly understood when planning firefighting strategy and evacuations.

Smoke from extreme wildfire events has posed significant risks to public health and safety. The Interagency Wildland Fire Air Quality Response Program has developed approaches for early warning of wildfire smoke impacts through efforts at the Forest Service Pacific Northwest Research Station and partner agencies. Successful products include working with the Environmental Protection Agency to provide fire and smoke information on the popular *AirNow.gov* (*https://www.airnow.gov/*

fires/) website and phone app, which received over ten million views over the last month. A recent pilot project adds data from low-cost sensors and local smoke advisories to the AirNow Fire and Smoke map to provide the public with additional air quality information they can use to protect their health. Currently, 20 Air Resource Advisors are assigned to 21 different fires in three (3) different geographic areas of the western United States. Advisors provide Smoke Outlooks to inform approximately 21 million people, many in rural and under-served communities. Community preparation for wildfire smoke allows public health officials to be aware and prepare for effects on individuals and facilities vulnerable to smoke impacts.

Improving Forest Conditions

To address the threat of wildfire, President Trump issued Executive Order (EO) 13855, directing active management of America's forests and rangelands to reduce wildfire risk. The EO includes specific targets to reduce accumulated vegetation and increase active forest management. Further, as part of its budget request, the Department submitted to Congress a package of legislative reforms to improve forest management and reduce wildfire risk. The proposals are intended to support healthy forests and rangelands and aid in efforts to protect homes, watersheds and critical infrastructure from catastrophic wildfires. The Department would like to work with the Committee to identify solutions that match the threat of the wildfire problem.

We continue to move forward with our shared stewardship approach to improving the conditions of our nation's forests. Actively working with states, Tribes and other partners is a priority to share decisions, risks and mutually beneficial outcomes. In 2019, the Forest Service sold 3.3 billion board feet of timber, the most in 22 years. That same year, we were able to conduct hazardous fuels treatments on 2.7 million acres. Over the last 5 years, more than 700,000 acres were treated annually with mechanical treatments, and more than 2.1 million acres were treated annually through prescribed fire or natural wildfires. Over the last 5 years, approximately 1.7 million acres have been treated annually within the wildland-urban interface. While there is much work to be done, we remain committed to doing the right work, in the right places, at the right scale.

Conclusion

The USDA Forest Service is committed to keeping our communities and firefighters safe. Even as we continue to battle these fires, we are also looking ahead to post-fire recovery and restoration of these forests. The work we will need to do to restore these newly devastated forests is in addition to the hard work already underway to improve conditions at the right scale and right places. The dedication, bravery, and professional integrity of our firefighters is second to none. Many have lost their own homes as they helped save their communities. As we work without pause with our many partners to assist communities impacted by wildfires, we are committed, through shared stewardship, to change this trend in the coming years.

We thank the Committee for your continued focus and help. With the Congressional fire funding fix in place, the Forest Service no longer must transfer money from other Forest Service programs to cover the cost of fire suppression. Further, the authorities and capacity provided by Congress have helped us achieve our highest wildfire fuel reduction and prevention actions in more than 20 years. We are working hard; but we know it's not nearly enough. The scale of our action must match the scale of the problem and, in California that means treating two to three times more acres per year than our current efforts. We look forward to working with the Committee to increase the scale of our tools and capacity to a level that matches the great challenge associated with reducing the wildland fire threat facing the nation.

The CHAIR. Thank you so much, Deputy Chief Phipps. Thank you again for being here and thank you for being patient with us working around a voting schedule. Thank you for your important testimony.

At this time Members will be recognized for questions in order of seniority, alternating between Majority and Minority Members. You will be recognized for 5 minutes each in order to allow us to get as many questions as possible. Please keep your microphones muted until you are recognized in order to minimize background noise. When 1 minute is left the light will turn yellow, signaling

time is close to expiring. I will begin by recognizing myself for 5 minutes.

And I wanted to follow up on—you said a couple noteworthy things—well, many, many noteworthy things, but specific to what I wanted to follow up on, you talked about the record number of firefighters who are currently deployed, fighting fires throughout the West. You talked about the social distancing, and the impact that COVID-19 is having on the work that you all are doing, and you talked about the funding needs, so I would like to follow up on this question of resources.

Of course, Congress appropriated $1 billion for wildfire suppression this year, and in addition to this, as you mentioned, another $1.9 billion is available through the wildfire funding fix. Given the current conditions, do you anticipate the need to utilize this new budget authority, to what full extent, and can you provide the Subcommittee with an update as to any transfers the Department of the Interior has made for wildfire suppression this year?

Mr. PHIPPS. Thank you for the question. I am going to start with the easiest one first. Department of the Interior requested a $47 million transfer, which we made, and earlier we had transferred to them $2 million as normal cost-sharing between the Departments. Relative to where we are in our fire suppression funding, we are still within our appropriated amount for that, and we don't anticipate going over it, and the reason for that is that this particular fire year, all the fires seemed to happen at once later in the summer, and we just—the agency—the interagency community just didn't even have the capability to spend at the rate that it would had to have taken. Normally, fires are spread out across the whole year, and those types of years are when we are more likely to go over the budget and have to dip into the reserve account.

The CHAIR. Okay. And you mentioned interagency, and so I am curious, I have concerns, and I would love your opinion about what the United States has, or doesn't have, currently in terms of a Federal strategy to reduce the risk of destructive wildfires overall. And specifically, in your opinion, could Federal planning, coordination, and development of strategies for community resilience, land use planning, specifically for development along the wildland-urban interface, help reduce the risks posed by destructive wildfires, and what are some of the major risks posed by development along with the WUI, and are there precautions that could be taken to mitigate these risks when building?

Mr. PHIPPS. Thank you. The wildland fire system, our wildland fire problem, is complex. You have mentioned several of the factors. It is development in wild areas, it is climate factors, forest management factors for sure, and what we are seeing on the landscape now is, we used to call them mega-fires, but they are even larger than that. They are landscape scale fires that can go 250,000+. We have one in California that is 800,000 acres. And we currently operate at a lesser scale than that. The agency doesn't have a capacity currently, but we could. We probably need to be scaling up two to three times more at least.

The other problem we have is that we tend to think about these fires as they are all occurring, and as a result of how we manage Federal forests. That is true in part, but it is really an all lands

problem that we, particularly in California, see fires originating on private land and marching up into the forest, and *vice versa,* and so we are going to have to start thinking more comprehensively across ownerships if we want to see a different picture. And I would assure you our scientists suggest that these western landscapes have an incredible capability to absorb fire and keep on going. More, we are going to see much more of the same. And to that, I don't think that is a desirable future, and it is pretty alarming. And, as the Ranking Member suggested, we need to come together and look at this differently. It is on a scale that is hard for people to imagine.

Just one additional fact, again in California, pre-settlement, the average forest had 64 trees per acre. Currently the average forest in California has 320. That is 80 percent more density. And how did that happen? It happened because we have been trying for over 110 years to put out every fire we can, and we have been really successful at that, but it is creating a situation where across all jurisdictions we attempt to put out all those fires, and as a result, we are selecting away the good fire, and the two percent that normally gets away, the catastrophic fire, when that happens under the right conditions, there is no stopping it, basically. We are there to help people get out of the way. We can; but, there is just tragic loss of life, and these fires burn at high severity, and it is just really a bad trajectory that we are on, and it is going to take a paradigm shift in thinking. Thank you.

The CHAIR. Thank you very much Deputy Chief for your testimony, and we have gone a little bit over with my questions, but I want to confirm, you gave the number 64 trees per acre before settlement, now it is up to 320. Just to ensure that I have understood, and the rest of the Committee is following along, that is because natural fires that were coming through would have processed and would have taken out trees over time so that we were at that natural rate of 64? Is that what you are stating?

Mr. PHIPPS. That is exactly right, Chair Spanberger. The way the—these forests evolved with fire and fire did the work routinely.

The CHAIR. Interesting. Okay. Thank you.

Those numbers are really, really interesting to think about in that way. I am going to continue on, and I will now recognize Ranking Member LaMalfa for 5 minutes.

Mr. LAMALFA. Thank you again. Thank you again, Deputy Chief Phipps, as well. I just want to touch on a statement you made there too. I wholeheartedly agree on the idea that the density and population of our forests is much more than what is sustainable, especially if you are talking about drought periods, as we go in and out of in the West. You mentioned that land—private lands that are adjacent—I don't see them as being the initial cause of very many fires, unless there happens to be some kind of an accident on that, because private lands are either grazed or managed, they are logged, and forested, and all those kinds of measures, unless they are able to get the permits to do what they would like to do, which is sometimes a regulatory challenge that private lands would have. I would be hesitant to say that private lands are igniting Federal lands very often. Indeed, it is the Federal lands that are the scary neighbor to private lands. Over in western Tehama Coun-

ty one family that has approximately 70,000 acres has lost about 50,000 of their timber land due to fires occurring on a nearby Forest Service property, I think the 800,000 acre one you are speaking of.

So let us talk a little bit about one of the issues with prevention. What we are seeing you can see from space, from satellite, the amount of smoke plume coming up from the western states, and we see that plume going across the country, and even felt it here in Washington, D.C. It has had an effect on the skies here, as well as massive levels of air quality that is way more than the unhealthy mark more locally there. I understand it is even hitting Europe in the Jetstream. What hasn't happened is preventative measures, including prescribed fire, prescribed fire meaning fires that we intentionally set at a time of year when you can control them. And we lost out this year on the chance, and in other years, to have more prescribed fire to burn when we dictate at a level we dictate, and instead that was shut down, and some of it was because they pointed to air quality issues. I guess my contrast with that would be what kind of air quality issue are we having *versus* a prescribed fire at a given amount of acres that gives you a buffer zone, gives you a fire break? What is it we need to do more of? Is it prescribed fire, or to allow them to burn the way we are burning now?

Mr. PHIPPS. Well, it depends on what we want. If we want to maintain forests we need to start a prescribed—we need to safely return fire to the landscape. The way we are doing it now, it is all well intended, it is just not at a rapid enough pace, or at the right scale, and there are a number of papers in the science literature that would indicate that prescribed fire smoke, particularly given it is to be more on our terms, is much more benign than fire at the worst time of year, in the summer heat, and the amount—every—total consumption of forest. This event this year was just horrendous. It was particulate, $PM_{2.5}$. that is maybe too technical, but it was, like, record levels, and the worst air quality in the world along the West Coast.

Mr. LAMALFA. Horrific, yes. Let me touch on another point here in my allotted time. Talking about the loss of life, loss of lands, loss of livestock, and we have one particularly tragic story on the livestock side right near my home in Butte County, and I would like, with the permission of chair, to submit this for the record from Mr. Dave Daley. He entitles it, *I Cry for the Mountains and the Legacy Lost,* on what is known as the Bear Fire. It breaks your heart to read this. They are still out trying to recover cattle from their area. Many generations of family legacy that is gone there. You must read that. Will the Forest Service make an accommodation for ranchers that still have cattle that are looking for them by extending the grazing permit for grazing off dates, if necessary, and will they work with ranchers on replacement grazing for those who have lost their allotments due to wildfire? These are a couple small things we could do for these folks with their horrendous losses. Can we accommodate those?

[The post referred to is located on p. 39.]

Mr. PHIPPS. I believe we can. There are a lot of allotment management plans. It is complicated, and our grazing process may be

a little bit constraining, but we would certainly have that interest to try to mitigate their loss.

Mr. LAMALFA. Okay. We would try. Do you think this is an effort we can really push hard for? Because these losses are very real, and when they have lost in a given forest unit, tens of thousands of acres, as well as millions across the West, they need a replacement for this, and the losses are already devastating. We need a really concerted effort to do that. Can you pledge that we will push for that here in upcoming weeks?

Mr. PHIPPS. Yes, sir.

Mr. LAMALFA. Okay. Thank you. Well, I am over my time; but, the communication sometimes is a little slow too when there might be a fire impending that these folks need to know about and hear about when they should be clearing their cattle out of a given area, so let us see if we can improve on that as well. Madam Chair, I will yield back. Thank you.

The CHAIR. The chair now recognizes Congressman O'Halleran for 5 minutes.

Mr. O'HALLERAN. Thank you, Madam Chair, for this hearing, and Ranking Member. I would like to thank—I already did that. Fire plays an important role in our environment. My district has all or parts of six National Forests and the Grand Canyon. But if not properly managed and planned for, it causes massive devastation, as we have seen in recent weeks. And, in addition to that, the loss of life is increasing time and time again. And I know that is not just the Forest Service, that is how we put our communities together and everything else, but the urban interface area is critically important when you see whole communities be devastated like they have, and the effect it has on human life, families, the impact to the natural resources, and in Arizona, a lot of our watershed.

This fire year Arizona has seen over 700,000 acres burn. That is more than the last 2 years combined. Working my—time here is—in Congress have seen—we have had expanded Forest Service authorizations to better manage and plan for fire. Mr. Phipps, I have a few questions about those authorizations, and look forward to your responses today, or at a later date, if you cannot answer today. First question: Congress implemented the fire funding fix during the 115th Congress to rapidly fund suppression efforts without the need to use non-fire funding. I would like to know how well this has worked, and has the ensuing budgetary stability resulted in increased efforts related to fire prevention? Particularly, has there been additional work done by the Department in the form of treatment and controlled burns, which you mentioned a little bit ago, are wildland-urban interfaces being prioritized?

Mr. PHIPPS. Thank you for the question. The fire funding fix, it is an understatement to say it is one of the best things that we received. It really helps stabilize the Forest Service, and that was just a lot of chaos every year that we had to transfer, so thank you so much for that. And that is allowing us to better plan for a lot of things, including focusing our treatments and implementing them, and I think that is in large part because of the fire funding fix.

One of the things that happened prior to the fix being put in place was that pretty much systematically over quite some time, say 15 years, the capacity to do that kind of work was reduced because all the money was also in the budget going towards fire suppression. At one time 15 percent of the agency was fire funding related, now it is around 55 percent. And now, just at the right time where we need to ramp up and scale up to these large landscape scales in our planning, we are lacking the capacity. I think that can be remedied, but it is a definite thing that we are looking forward to as now we are trying to get the—now that we have the fire funding fix, we need to ramp up capacity to do the work.

Mr. O'HALLERAN. Thank you. How have stewardship contracts and projects, such as 4FRI in my district, improved forest resiliency? How is the USDA supporting these large-scale projects, on the 4FRI project we have been trying for any number of years to get it up and working at a larger scale, so I would like to hear your——

Mr. PHIPPS. Yes, the stewardship contracting and—projects is a wonderful gift for us because, like I had mentioned earlier, a lot of the treatments on the landscape have to be all lands, and it allows us to pursue that.

Mr. O'HALLERAN. Deputy Director, I only have a couple of seconds. I guess to the core of my question is why is it taking so long to get these projects up and going and sustained?

Mr. PHIPPS. Well, it is complex for us. A lot of the environmental work we have been trying to do things to make life easier for the planners, but between capacity problems and environmental review problems, we haven't implemented as fast as we would like, and we would look forward to continuing to work with the Committee to help streamline those.

Mr. O'HALLERAN. Thank you, Madam Chair, and I just want to say, the district has almost 700,000 acres already NEPA approved. They are all within that stewardship area, and I just can't understand why we haven't gotten to them. Thank you.

The CHAIR. The chair now recognizes Congresswoman Pingree from Maine, seeing no Minority Members currently present. Congresswoman Pingree, we cannot hear you. Congresswoman Pingree, we cannot hear you. As we continue to work out the technical issues for Congresswoman Pingree, the chair now recognizes Congressman Cox from California for 5 minutes.

Mr. COX. Well, thank you so much, Chair Spanberger. And just before I ask my question, Mr. Phipps, you were saying earlier that the recommended density is, what 64 trees, and it is 320, or something like that, per acre?

Mr. PHIPPS. Yes, that is correct.

Mr. COX. Okay. I don't know if it is an arithmetic type thing, but you were saying that was 80 percent over capacity, but it is really 500 percent, isn't that——

Mr. PHIPPS. Yes, that is——

Mr. COX. So it is five times, not just 80 percent?

Mr. PHIPPS. That is correct.

Mr. COX. Right. Okay. Great. Yes. A bit of a difference there. But certainly in a year that has seen record heat waves and the coronavirus pandemic, hazardous smoke from wildfires across the

West are presenting the latest danger for the essential men and women who pick America's fruit and vegetable crops, and health advisories have recommended that individuals remain indoors to abate health impacts. Farmworkers simply don't have that option, while working in poor air quality conditions that can damage their lungs. You certainly can't pick a peach by Zoom. And despite efforts to distribute N95 masks to farmworkers, the unfortunate reality is that many still do not have access to these masks, and we, as Members of Congress, must remain vigilant in ensuring that all of our front-line workers, especially those ensuring food remains on America's tables, are protected. And so I certainly support the Forest Service's decision to protect public health with the temporary forest closures in California, and I was also glad that this wasn't just a national decision, but one that was made with the Board of Supervisors within the region.

And a wildfire's path, as you very well know, it is not limited to just the structures or the trees that are burned. And even once a wildfire has been contained, communities remain at risk for a variety of post-wildfire impacts, such as harmful air quality, mudslides, soil erosion, poor water quality, and all these linger well after the flames are put out. Debris runoff from destructive wildfires can enter our watersheds to have negative water quality impacts. Subsequent rains can wash toxic runoff, ash, and heavy debris into our watersheds, harming streams, rivers, municipal water systems.

And I know that the agency has several programs to help this, including BAER (Burned Area Emergency Response), a new program from the 2018 Farm Bill, and that the Department itself has even more beyond this one agency, but the agency has not requested a funding increase for the Water Source Protection Program authorized by the 2018 Farm Bill, and my worry—and we are getting to the question—is that the agency will already have to stretch their budget in order to maintain these vital programs. And so the question, why hasn't the agency asked for funding increases for these programs, and what can be done to mitigate these negative water quality impacts on wildfires? What steps is the Forest Service taking to address this during both the wildfire response and the recovery phases?

Mr. PHIPPS. Thank you for the question. You are correct, in that the BAER process—we have been doing that for 15 years at least, maybe 2 decades, and we have our hydrologists, fish scientists, you name it, go out and do an assessment, and then plan for emergency application of seed, and maybe creating dikes, and just removing wood. Currently, across the country there are 7 million acres that have burned, and we have teams doing the assessment. They haven't completed it yet. We think that we have enough funding, because it is paid out of suppression, to take care of it, and there is probably going to be a capacity problem, and we are going to have prioritize, and make sure that we implement the projects that have the most meaningful effect. And it is probably going to go, the effort is aimed at making sure we get that done before the winter rains come, and there may be some need to go on into the following year.

Mr. COX. Well, no, thanks very much, and the meat of the question is are funding increases for these programs warranted, and something that the agency needs?

Mr. PHIPPS. Could you repeat that?

Mr. COX. The funding increases, what we are asking is that the Department hasn't yet requested a funding increase for the Water Source Protection Programs. Is this something that the budget is okay with? Do you need additional investments and capital, or what?

Mr. PHIPPS. Well, I—we have the—adequate funding for BAER, but I am not familiar with that program that you just mentioned, and—but I would be happy to get back with you.

Mr. COX. Great, and thanks so much.

Mr. PHIPPS. Thank you.

Mr. COX. I will yield.

The CHAIR. It is the chair's understanding that Minority Members are on their way, but in their current absence, I will continue recognizing Congresswoman Pingree from Maine, if we can connect this time.

Ms. PINGREE. Can you hear me this time?

The CHAIR. It appears there are ongoing technical issues here, local to us, Congresswoman Pingree, so we will come back to you. The chair now recognizes Congresswoman Schrier, who is suffering with the continued technical difficulty, the chair now recognizes Mr. Costa for 5 minutes.

Mr. COSTA. I thank the Chair. If you would give me a moment before the clock starts until I can pull up my memo on the effort, let me start on a question that is based upon a Congressional briefing that—a bipartisan California Congressional briefing that Congressman LaMalfa and I and others participated in last week with the head of Cal-Fire, Tom Porter, and the head of OES from California. And he cited, Mr. Phelps—Phillips? Phipps? That, based upon the incredible amount of wildfires we have had in California, as well as in Oregon and Washington, and other western states, that he thought it was necessary that we revisit the National Management Forest Plan in terms of resources, in terms of forest management. We have tried to work on that over the last 18 months with some changes that have been made. Clearly, given the fact that the intensity and the impacts, it seems to me, in California's instance, over 60 percent of the fires have been on Forest Service land, less than ten percent on state forest land, and then a lot of private land, of course. Would you care to comment, Mr. Phipps?

Mr. PHIPPS. Yes. The interagency community has something called the Cohesive Wildland Fire Strategy, and that was done maybe 7, 8 years ago, has some good intentions. The Federal agencies had something called the Fire Plan, we call it Fire Plan 1.0, and currently we are working on Fire Plan 2.0 that would——

Mr. COSTA. Okay. For a lot of folks those are just numbers, so what do they mean?

Mr. PHIPPS. Yes.

Well, it is an update to the nation's interagency fire plan, specifying how much we should be putting into hazardous fuels treatment, what kind of resources do we need, what do we need in communities, that kind of thing.

Mr. COSTA. Well, what do you think, under lessons that have been learned in the last 6 months, are the changes you are looking at?

Mr. PHIPPS. Well, the big lesson is we need to think big. We have to have, if we are going to try to get a managed landscape that is resilient to fire, we need to do much more than we are doing now, and that has to be with participation of communities, state lands, Federal lands, and private lands.

Mr. COSTA. And in that effort, the resources, the last couple years, a lot of the money that we have had for forest management has been transferred over to putting fires out, and do you have an assessment of how much appropriation really needs to be set aside to manage U.S. Forest Service lands? Have you made that assessment?

Mr. PHIPPS. Real rough, we think, two to three times more in the land management area and fuels management.

Mr. COSTA. And last year, how much was that?

Mr. PHIPPS. We had probably about $1 billion total.

Mr. COSTA. You are saying somewhere between $2 and $3 billion?

Mr. PHIPPS. Yes.

Mr. COSTA. Over what period of time?

Mr. PHIPPS. Annually.

Mr. COSTA. Annually?

Mr. PHIPPS. It took us 110 years to get here. It is going to take at least 10 years to get to a more desirable future because the extent of the fuels on the landscape, it is almost everywhere you look. It is——

Mr. COSTA. On the Creek Fire that I have been exposed to, went out a week ago, probably go back out on Saturday to survey the update on that, one of the devastating fires, Chief Dave Schloss, a 30 year veteran from San Diego area, but he is up there trying to deal with this, indicated to me that, frankly, we are stretched too thin. And in this is an area that is predominantly forest land that you have given jurisdiction to Cal-Fire to manage this particular fire here. That seems unusual, but we have 14,000 firefighters out there, we have the National Guard, just in California alone, and we are short.

Mr. PHIPPS. Yes, this year was an extraordinary year, and the system was not designed, it broke the system to try to respond to all that amount of fire all at the same time. And it is likely the case that we need to maintain the fire suppression capability while we are working to manage the landscape better over at least a 10 year period.

Mr. COSTA. All right. And I am sure my time has expired, but I finally found my memo, in terms of the questions that I wanted to direct, so I can either do that afterwards, or if you allow a second round for questioning, I will be happy to stay here and take that opportunity.

The CHAIR. Thank you for being so responsive when we needed you to take your turn. We will be happy to put you back on the list, Mr. Costa.

Mr. COSTA. Okay. Thank you.

The CHAIR. The chair now recognizes Mr. LaMalfa for 5 minutes.

Mr. LAMALFA. Thank you again, Madam Chair. It is unfortunate that we currently have votes on the floor on a whole list of amendments, and a bill, as well as other concurrent committees happening now. We would have more of our Members here, but, that said, let me pick back up, we were talking about grazing when I left off. And, you can talk to any rancher, anybody that works the land in an area that has a valley and forest interface, or much more forested areas, and they will tell you that grazing is a very important tool not only to keep their livestock going, but it actually helps with the fire, helps suppress the fire. We talked about this. And then you can take anecdotal photographic evidence where a grazed field, you have a fire that burns right up to the fence line, and it stops.

So there has been reluctance to have grazing be a more widespread use. It is not anything new under the sun, and they act like it is. Like, let us have a pilot program on grazing. What is there to prove? We know it works. It reduces the fire fuels down there. And, again, we don't talk about grazing everything off, but there is certainly strategic zones where this is useful for keeping the loads down, fuel loads, and as well as the type of fire break zones that would be helpful for firefighters when a fire does occur, they can have an area where they can manage. Has the Forest Service—is it really ready to—because we see the—what is known as AUMs, animal unit months, the amount of feed that cattle and others can use during a given time. Those numbers are decreasing AUMs being put out for grazing purposes, for cattle, sheep, even goats. We have goat herds that are going out, helping out in small zones. Why are we seeing a downward trend in this when this is a very effective tool?

We talked a minute ago about fire, prescribed fire, and you have the unpopular component of smoke coming from that, air quality issues, but, as you mentioned there, the air quality is going to be a lot different under a controlled fire than the masses we have here. But if you want to get away from that, why isn't grazing used as a much broader tool that benefits—several win-win categories here?

Mr. PHIPPS. Thank you for that question. I think, yes, there are areas where grazing can be very helpful. As I would mentioned earlier, a lot of the nation's western forests have an incredible density. It really wouldn't lend itself to grazing. In the aftermath of fires, of course, that changes, and salvage, so I think that range managers are always looking for opportunities to increase the animal unit months.

Mr. LAMALFA. Do the range managers consult with livestock owners on what they think that density is? Because they have turned them loose in some pretty dense stuff. You might not have every thicket be grazable, but there is area in between.

Mr. PHIPPS. Yes, as——

Mr. LAMALFA. Is that a strong consult with those that own the livestock?

Mr. PHIPPS. Yes. Routinely, I would say, in my experience—I actually administer grazing permits in Idaho. I believe that we are always attending to relationships with ranchers, and asking them

what they think about things, and how can we better manage the grazing resource together.

Mr. LAMALFA. Can we get a greater commitment to this as an effective tool? There are those that don't want to cut trees, there are those that don't want to have prescribed burns. This seems like a win-win to me. Can we get a bigger push for this?

Mr. PHIPPS. Yes. The Forest Service will look into this and get back to you.

Mr. LAMALFA. Okay. Thank you. Mr. Costa was alluding too to the, and you responded, to the talk about readiness. Of course, an unprecedented bout of lightning strikes happened at one time in California, and turned out a lot of fires from that, but we run into the problems with VIPR (Virtual Incident Procurement) contracts, you know what those are, that contract with people ahead of time, and the system seems broken, such that if you don't do it exactly the perfect way, on timing or what have you, they kick you out, and you can't talk to them for 3 years. A Mr. McNeil has talked about how he was working with one person in one office in Sacramento, and, as he had been for many years, he is a contractor to help service heavy equipment that would be out on the fire line. Then he finds out he gets rejected, and he was told after the fact, you have to talk to this other office to get your contract going. Well, how is he supposed to know that, especially since he has a track record of working with the one? They work with the other office, and they submit the thing by FedEx and—timely, and they get rejected on that.

So now we have a person who has been an ace mechanic for many years, helping with these contracted pieces of equipment out there, helping on the fire lines, being kicked out until they decide later, we would better reinstate him. So that, as well as many other stories you could talk about with the VIPR system, the e-mails not being returned, the website being not timely, folks not processing these. If we want to have a state of readiness, there is so much private equipment—I drove past some in Siskiyou County today. There are still about 20 water tender trucks sitting along the freeway there that had not been contracted because of a breakdown in the ability to process them. What can we see in improvement in that area for, in this case this mechanic, Mr. McNeil, and others just trying to be part of a solution, whereas, we are overwhelmed with Forest Service and other agencies, the personnel and equipment they have?

Mr. PHIPPS. Yes, thank you for that. We acknowledge that we had problems in California not with the VIPR system, *per se,* but how it was staffed. There are technical and administrative issues, and we brought in more people, and I understand that the contracting issues have pretty much subsided.

Mr. LAMALFA. Okay, because there needs to be a makeup opportunity for that. If it is a 3 year term, then that needs to be waived so that people can get signed up back into the system, because we are still not by any means out of the fire——

Mr. PHIPPS. Yes.

Mr. LAMALFA.—woods yet, so to speak, in the north, and in the south, probably year-round. I will yield back. I see Mr. Balderson has come into the room, and I would like to welcome him as a

newer Member of the Committee, and as a Member of the Subcommittee as well, good to see you here, thank you, Madam Chair, I will yield back.

The CHAIR. The chair now recognizes Congresswoman Pingree for 5 minutes. Deputy Chief Phipps, thank you for bearing with us through these technical challenges. We truly appreciate it. While we are working out the technical challenges, and continuing to do so, the chair now recognizes Congressman Costa for 5 minutes.

Mr. COSTA. I thank the Chair again for allowing me a second round of the questioning. I wanted to follow up on some of the comments that were made by my colleague from California as it relates to some of the health issues. But, as you know, Deputy Chief, these fires are not only major issues for western states, but for our constituents. Even if you are not in a—directly in the fire, the smoke has been like a nuclear winter, I mean, when you have been able to see the sun it is been orange, and ash coming from 30, 40 miles away. And they, obviously impact air quality, as well as water quality, in an area in—that is a closed-in basin, the San Joaquin Valley, that already is a non-attainment area.

I know the Forest Service and meteorologists are working with Federal and state leaders to improve the use of satellites modeling to predict things like smoke movement. These smoke impacts, in terms of smoke maps, are critical for public health efforts. Have you folks looked at doing more in that area in research so that you can provide efforts—we have a lot of people who are asthmatic, a lot of people who have other health issues, pre-existing conditions, and, of course, we have the pandemic, COVID-19.

Mr. PHIPPS. Yes, thank you for that question. We are very concerned about that because we know that smoke does have quite an impact on the American public. This last event, friends out on the West Coast, even quite some distance from the fire, just like you said, had less than ¼ of a mile of visibility.

Mr. COSTA. We had three Category One fires, and smaller fires.

Mr. PHIPPS. Yes, I mean, it is just terrible, and people had to stay inside, and I had heard that people that stayed inside were coughing, and it was quite an impact. The best option for us, I believe, is to manage the landscapes to prevent that, but until we do, the best thing we can do is give notification in advance. We have a lot of modeling and efforts that we have been working with, NOAA and others, on these different models to try to give as much notice as we can so people that are particularly sensitive to smoke can get out of harm's way.

Mr. COSTA. Well, I want to make a suggestion to the Chair, and the Subcommittee, in working with the full Committee. The impacts of this throughout the country, but certainly in the West, are such that I would hope that the Subcommittee would—and Congress Member Panetta has had his own fire in his constituency, so it's important that we try to focus on this—not only this—the end of this year, but next year, in terms of providing the support necessary for the U.S. Forest Service. And I know both Congresswoman Spanberger and Congress Member Panetta are concerned, as well as Congressman LaMalfa, but, Deputy Chief, you ought to come back with recommendations to us as we look at the two—

what would you call them? Plan One and Plan Two? What did you call them? What was the technical term?

Mr. PHIPPS. Yes, updated fire plan. Yes.

Mr. COSTA. Yes, the updated fire plan. And this ought to be the subject, Congressman Panetta, because I know your concern, as we try to reassess next year with the budget, with the appropriations process. While you were gone, Congressman Panetta, they estimated that if we are really to try to manage this, it is somewhere between $2 to $3 billion to do the forest management service, and that is nowhere near where we have provided budget for management of the forests, right?

Mr. PHIPPS. That is correct.

Mr. COSTA. So let me close on this note. I gave a speech last week about this after Chief David Schloss took me through the Creek Fire, and I learned a lot, and I am going to go back to Saturday. One, we have to better manage our forests from every element that is contained therein, and that is from thinning, to clearing brush, to dealing with both the forests and the chaparral country that is different in different regions of the country, and different regions of California.

Number two, we have to re-examine land use policy. We have hundreds and thousands of people living where they did not live before 30 years ago. And three, climate change is a part of this, and we are going to have to focus on all of the above. The climate change is a little longer-term, the other issues are more immediate, but we have to have a strategy, Congressman Panetta, that employs all of the above, both with long-term efforts, as well as the short-term efforts that we can apply in the next Congress. There will be some other questions I want to raise, and I will submit them to the Subcommittee afterwards, and I thank you for giving me this second round.

Mr. PANETTA [presiding.] Thank you, Jim, I appreciate that. The gentleman's time has expired. I now yield 5 minutes to the gentleman from Ohio, Mr. Balderson.

Mr. BALDERSON. Thank you, Mr. Chairman. It changed on me. There is—thank you. Thank you for being here today, Mr. Phipps, and in your role as the Deputy Chief for State and Private Forestry within the USDA, I look forward to your comments. And I have missed most of them, obviously, but thank you. In your testimony you described the unprecedented challenges millions of Americans have faced this year. You say that as of last week over 7 million acres of land have burned. This has devastating impacts to those who have lost their loved ones, their homes, and their livelihoods.

These fires have even impacted the State of Ohio through changes to the air quality, and stretched Federal resources in the middle of a pandemic. Of the land that is burned this year, what is the breakdown of Federal *versus* non-Federal land?

Mr. PHIPPS. Well, I don't have the exact figures, but roughly half of it, maybe a little bit more, was on Federal lands.

Mr. BALDERSON. Okay. Thank you. In your testimony also you talk about the steps being taken by the White House to reduce the risk of wildfire. Specifically I am referring to President Trump's Executive Order 13855. I support these types of actions, but I also believe Congress should be more active. What tools can we in Con-

gress provide to the Forest Service that would enable you to better prevent these fires?

Mr. PHIPPS. Well, it is not only the authorities. We have a lot of them, and right now it is an organizational capacity and funding problem to ramp up to the scale of the problem. That is probably the biggest one. And then we need incentives for private landowners to contribute and be part of the solution, because it doesn't do any good to manage forests on one side of the line when you have non-fire resilient private land on the other.

Mr. BALDERSON. All right, thank you very much. Mr. Chairman, I yield back my remaining time.

Mr. PANETTA. Thank you, Mr. Balderson.

Mr. BALDERSON. Thank you.

Mr. PANETTA. I appreciate that. At this point I will yield myself 5 minutes, not just because it is my prerogative as chair, but I guess I am in order, so I will do that.

Chief, good afternoon, and thank you for being here. I appreciate, not only your expertise, but I appreciate you being able to talk about such a relevant and topical topic, especially concerning this type of issue, with the 2020 wildfire year response and recovery efforts, especially with someone like me, who comes from the Central Coast of California, and actually had to be evacuated within the last couple months because of the Carmel Fire that was coming up over the hill about ½ mile from my house, in which I saw the flames. But that being said, I was one of the fortunate ones, one of the fortunate many thanks to the good work of Cal-Fire, and our firemen and first responders, who did a good job battling that blaze, and we were able to return to our home.

Obviously this is something that literally is not just relevant, it is something that is important to all of us, obviously, in California, and I echo what Congressman Costa was saying in regards to how we have to address this. But with you I want to hit on four areas in my questioning, just to let you know, kind of lay it out for you, forest management, or reforestation, Forest Service staffing, and prescribed burns. The first thing is I want to start with forest management projects and wildfire risk reduction. In your testimony you highlighted the importance of proactively conducting forest management projects to create healthy fire resilient conditions on our forest lands.

Mr. PHIPPS. Yes.

Mr. PANETTA. Can you provide your vision of what I just said, *proactive forest management,* and does it include wildfire risk reduction projects? And if so, how should we best implement those types of projects?

Mr. PHIPPS. Thank you, great question. Yes, my vision of this is that we have these large landscapes that we have to plan across the entire landscape, all lands. And, yes, a lot of the work has to be done on National Forests, and we have to strategically treat these landscapes—if they are too dense, we will have to thin them out, but ultimately we have to do prescribed fire. That is really the only thing that is going to get a large landscape, particularly in California, back into a fire resilient condition. And it takes a lot of cooperation, and imagination, by the way, to make that happen, particularly in a state like California, with so much population.

Mr. PANETTA. Yes, understood, and I appreciate that. And obviously I believe, as you heard Congressman LaMalfa talk about, that one of these first steps, at least how we can help out, is through the Wildfire and Public Safety Act. And then obviously—I know I am running short on time. I want to just kind of remind you about the REPLANT Act, H.R. 7843, when it comes to forest restoration, but then I also want to hit on another topic that is important, near and dear to my district in the Las Padres National Forest, Forest Service staffing. I have spoken with Chief Christensen, I have spoken with Under Secretary Hubbard, about the shortages that are not just affecting but really plaguing our National Forests, and so I want to basically let you know that I understand the 2020 fire funding fix will kick in soon, but I have also gotten mixed reviews on whether this funding fix will actually help address the shortages of staffing. In your opinion, Chief, will the fire fix—what will it due in terms of filling those vacancies of non-fire positions, and what can we do in Congress to help you?

Mr. PHIPPS. Well, it does provide the opportunity, we think, because it is putting some of the fire suppression off the books, if you will. There is an amount of money, if it were to be reinvested into staffing, that could make an incredible difference, because, on average, everything other than fire is about 60 percent less than what it used to be.

Mr. PANETTA. Understood, understood. And just going back, actually, to forest restoration, when it comes to reforestation, would lifting the spending cap on the Reforestation Trust Fund help address the issue of reforestation post-disaster?

Mr. PHIPPS. I think there are a number of other constraints, but the Forest Service could use that, I am sure.

Mr. PANETTA. Okay, great. Now, in regards to prescribed burns, I know we have had a pretty good discussion on this during the time you have been here, can you talk to me about Forest Service plans to better utilize prescribed burns in the state, moving forward, as compared to the past 50 years, and would a prescribed fire center that trains individuals in prescribed fire methods, would that help as well?

Mr. PHIPPS. I believe it would. I would say that in the Southeast, that is quite a fire culture there, both on private and Federal lands, and they are burning through their acreages at quite a frequent basis, and there is a lot of skill. We need to develop that out West as well.

Mr. PANETTA. Understood. Thank you, my time is up. I appreciate your answers. Thank you very much, Chief. I now yield 5 minutes to the gentleman from South Dakota, Mr. Johnson.

Mr. JOHNSON. Thank you, Mr. Chairman, I appreciate it. Of course there has been a lot of attention, and rightfully so, given to all of the wildfires. I mean, the images are just tragic. The numbers, the data, is just tragic. We don't see as much news coverage, it seems to me, on how proactive fuels management can really reduce that risk. There are not anywhere near as many projects on Forest Service land as I would like to see that make it all the way through to implementation, and so sometimes those mitigation stories are fewer and further between than we would like. To that end, I want to highlight for my colleagues some of the examples

from South Dakota where this proactive forest management really worked.

I mean, we really can break the fire triangle by managing fuel loads, and we can protect lives, and property, and, of course, the critical habitat, not just for creatures, but for obviously humans who use that area for all manner of recreation. And so one example is just 3 weeks ago, and it was a hot, dry, windy day, and the Bear Fire started on the Black Hills National Forest. This was southwest of Deerfield Lake, and that is a highly popular recreation area. The fire was started by a lightning strike, which obviously is not that uncommon. And even though the weather conditions were critical, this fire only burned for 5 acres.

It could have been so much worse, so why was it only 5 acres? And a large part of that is because the fire burned in an area that had recently been thinned because of timber sales. And, frankly, another timber sale was active nearby. And that harvest, it reduced the fuels, and it improved the roads, the access crisscrossing the area, and that made for a quick response, obviously, for our firefighters. And having that fuel out of there meant that what did burn didn't burn anywhere near as hot. And, of course, Chief, I am not telling you anything you don't know, you are the professional, but I do want to highlight some of these successes.

And that is certainly not the only example. It is the most recent. How about—I brought some pictures from 2015 where we had a very similar situation happen. The North Pole Fire started, and so here we can see—this has been actively managed. There had just been a timber sale here, and so you see a relative thinning of the trees. The burn area was far more modest than you would expect. And, again, because we had these access roads that had been improved for the timber sales, the men and women whose job it is to go out and fight these fires were able to get there so much more quickly, and were able to put this fire out so much more effectively than they otherwise would have.

And so that framework, that preface, sir, really creates the jumping off point for my questions. And I would—Mr. Chairman, I would like to enter in—or Madam Chair, enter into the record these photos, smaller versions, as well as an article from 2015 in the *Rapid City Journal* that lays out this story well. And if there is no objection, I would like to have that entered into the record, Madam Chair.

The CHAIR [presiding]. Without objection, so entered.

[The article, and photos, referred to are located on p. 53.]

Mr. JOHNSON. Very good. Thank you. Deputy Chief, the 2014 Farm Bill—and in response from individual states, the Forest Service designated 46.7 million acres as eligible to use the expedited NEPA authorities, and then in the 2018 Farm Bill we made some tweaks to that. What is the status of those 46.7 million acres? This was all about treatment for infection for bugs. I mean, to what extent has that treatment worked or is ongoing?

Mr. PHIPPS. Thank you for your question, and your model that you laid out, it works. Thinning and then doing prescribed fire really makes a difference, particularly if it is at an adequate scale. And thank you for those authorities that allowed us to increase our pace and scale. And I don't have the exact figures about what that—but

I know that we have been actively treating fuels, and harvesting timber to reduce density so we can do prescribed fire.

Mr. JOHNSON. And I understand you don't have the exact number, but if you could follow up with my office, sir, I would be interested to know the status of the 46.7 million acres, because if, for whatever reason, the Forest Service hasn't been able to attack that full flexibility granted by the 2014 and 2018 Farm Bills, then we would like to know if there is something more we can do to help you all do your job better.

Mr. PHIPPS. Okay. Be happy to do that.

Mr. JOHNSON. And then, given my short time, I won't ask another question, but I will just note that I also have an interest in making sure that we continue to have a vibrant forest products industry. I think a managed forest is a healthy forest. That has absolutely been the case in South Dakota, although we are falling short with our targets for the number of hundred cubic feet that have been harvested, and so I will be following up with your office, sir, your agency, so we can talk about the size of that gap, and the most appropriate way to deal with it.

Mr. PHIPPS. Okay.

Mr. JOHNSON. Thank you very much.

Mr. PHIPPS. Yes. Thank you.

Mr. JOHNSON. Thanks for your indulgence, Madam Chair.

The CHAIR. The chair now recognizes Congresswoman Schrier for 5 minutes.

Ms. SCHRIER. Thank you, I have forgotten how to do this. Thank you, Madam Chair, for allowing me to participate in this Subcommittee hearing today, and thank you, Deputy Chief Phipps, for being here and taking our questions. Right at the beginning, when our Chair spoke she said that this was terrifying, and I would wholeheartedly agree. Coming from Washington State, many parts of my district were on fire. In my own home, we were essentially locked in the house for a week with hazardous air quality, with AQIs over 300 for over a week. And one of the scariest and most terrifying parts is that this may be our new normal, and it should lend a real urgency and seriousness to how we address climate change, how we manage our forests and forest resiliency, but also about being thoughtful about where we build, with respect to the WUI.

I wanted to bring up one issue before I ask a question. One of the areas in my district that was on fire was the Evans Canyon Fire. It was big enough that it spanned two big counties. Most of it was in the neighboring county, but much of it was in the one in my district. Our full force of firefighters contributed to the effort to put it out, but because of some rules about FMAG grants, only one of the counties got assistance, and the one in my district didn't. And so we are working with FEMA to get that assistance, but I may at some point need to call on you to see if perhaps we could lend your weight to that discussion.

My question—and we have spoken before about COVID, I will get to that in a moment, if I have time, but I wanted to talk about what happens after a fire, the landslides, the erosion, the lack of habitat. And I know that there is something called the Burned Area Emergency Response Teams, the BAER Teams, and I wanted

to talk about the fact that, just like the Evans Canyon Fire spanned different areas, it is not just confined to National Forest, the same thing happens really everywhere in the State of Washington, National Forests, state forests, community forests, and they all essentially feed to the same place. And I was just wondering how the BAER Teams coordinate the national, or the Federal, and some of those more local efforts, because when there is a landslide, it rushes through all of it, it affects all of the surrounding water areas. Can you help me understand that?

Mr. PHIPPS. Yes. BAER Teams are quite resourceful. A lot of them are out there even sometimes before the fire is totally out, working to do assessments. They do coordinate with local interests, and other governments, and within the USDA, the NRCS, for example, to try to bring the BAER everything that is needed to prevent further tragedy once rains come, basically.

Ms. SCHRIER. Right.

Mr. PHIPPS. They try to do seeding, scarification, re-establishing drainage. And they are quite effective at it, and we do have funding to do that. It is going to be a challenge, because doing that over 7 million acres this year will require prioritization to make sure we go after the most potentially impactful areas first.

Ms. SCHRIER. And do you do that also in community forests and state lands, or do you just confine those efforts to Federal lands?

Mr. PHIPPS. Well, the BAER teams would coordinate, there is probably not any large—well, let me put it this way. All these large fires include private lands. If they happen to be state lands, they would coordinate with them as well to make sure that collectively they get the best outcome.

Ms. SCHRIER. Great. One more question. We spoke back in July about COVID plans. You had phenomenal plans, keeping fires small, keeping firefighters in cohorts, doing whatever you could to prevent the spread within a cohort, but also to prevent mingling, and then all those best laid plans—I don't know, I won't say went up in smoke, but it became very challenging when all of a sudden now we have all these forest fires raging at the same time, they are all too big, mingling of groups, even people coming in from out of state or out of country. How are you doing with testing, and people converting to coronavirus positive? How are you handling the pandemic?

Mr. PHIPPS. Well, we have actually done a lot. Thank you for that question. Before the fire season really got going, we did an assessment on a state by state basis about testing. We had a number of teams developing our protocols. We decided that if somebody tested positive, we would pay for the test, if it wasn't free, that we would pay for lodging for quarantine, trying to manage the incentive system of that, the social distancing, the fire camps spread out. And, I was quite concerned, particularly after this big fire siege that we have had, but we are not seeing the rate of infections. In fact, we are—not yet. I think people have been—they have been modulizing, trying to stay away, and it is been quite remarkable. I think the fire community did a really nice job this year.

Ms. SCHRIER. That is great, thank you, and congratulations. That is great news. Thank you.

Mr. PHIPPS. Thank you.

The CHAIR. Again, Deputy Chief Phipps, thank you for being here today. Thank you for your testimony. How we come together to help our western states respond to, recover from, and build stronger can be a defining act in these times. In addition to our important conversation today, there is so much more work to be done beyond the jurisdiction of the Subcommittee, including support for community and home rebuilding for rural development, for healthcare services, for emergency management and response needs in areas devastated by wildfires, and taking meaningful actions to further reduce our carbon footprint across all sectors of the economy, and work to build a more resilient and sustainable economy.

There is so much more work that needs to be done by this Subcommittee, and this Committee, on both questions of what are the solutions we can look for within the agricultural and forestry sectors. I stand ready to continue this work, and as I said at the top of this hearing, we should not have to wait for the ash of the wildfires to reach the Capitol steps to take action. I look forward to our continued work together as a Subcommittee, Committee, Congress, and a nation as we support these efforts. I would like to thank the USDA staff and our witness today for being here. Thank you for being patient with our technological challenges and thank you for being patient during our vote timeframe. The chair now recognizes the Ranking Member for a closing statement.

Mr. LAMALFA. Thank you again, Madam Chair. It is too bad on the competing votes, and committees, and such today, but we have covered a lot of good ground in our time here. With your permission too, I would like to submit a statement as well from the Federal Forest Resource Coalition.

The CHAIR. So ordered.

[The letter referred to is located on p. 49.]

Mr. LAMALFA. Thank you, that is speaking about a lot of the issues with critical habitat designations, and the hands-off approach to management that has actually failed us for so long. I will submit that. And thank you again, Mr. Phipps, for your attention to these important issues, because our fires are still burning, and it is going to take an incredible amount of effort. As you mentioned, we have a 110 year problem that we hope we can catch up in only 10 or less. But it will require going at what is known as a pace and scale much higher than what we have seen in the past. We need to be able to work through restrictions that are caused by NEPA. NEPA is well intended, but—and a lot of times we are plowing the same old ground on that. We don't need a NEPA document for doing the types of practices we already know are good practices. We can do this on a one-pager, instead of 18 months or more of study, and lawsuits, and all that.

I talk about the Ranch Fire, from a couple years ago, over on the west side of the northern part of California, 400,000 acres, and, after 2 years of wrangling, they wanted to put in a process to do some accelerated work along roadways and other key areas, 7,000 acres. 7,000 out of 400,000 that had been burned, of salvage, of revitalization along roadways, as a strategic area to recover and more hardened from fire. So what happens on that? A lawsuit, and the court throws out all that work, and we have yet more delay.

We can't keep having these sorts of things happening, so help us help you with the U.S. Forest Service. Bring to us, please, legislative ideas to help with the roadblocks that you face for so many in the Service that would like to get these projects done at a pace and scale that is going to be realistically helpful in the short-term so we have a better long-term. My constituents are very, very tired of it. They are tired of the roadblocks to the work, they are tired of the hurdles to getting contracts to be part of a solution there for equipment. They are tired of constantly being in danger, and the air quality problems are right there in their backyard, ten times the scale of what would be deemed unhealthy in some cases. We are all feeling it, and when we see our urban friends even feeling it, not only in the Bay Area, but all of California, and even here on the East Coast, then I hope it really sounds the alarm that we have to do something, and it has to be a lot more dramatic.

And some of it might, on its surface, be unpopular, when we are talking about prescribed burning. On one of those burn days, it is not going to be popular, but we need to be able to educate people and say, "This is necessary, because when we don't do it, we have a scale of fire that is multiple times worse for air quality, and, of course, for habitat, for wildlife, the forest asset on public lands that belongs to all of us." And so we will have to be bold, and step over lines, say, "No, we must do this, because, as we have talked about, 110 years of putting the fire out without doing the other half of the equation that nature used to do." Now, when nature did it, you can go back a long ways in history and find nature used to burn millions of acres at a time, and it would go all year, until whenever the next rainy season would be. That is nature's way, and we respect that, but if we have the hybrid of mankind helping out, using nature's tools, using what the Native Americans used to use, we can have a winning equation here, and that is what we really need. That is what the public demands. That is what they cry out for when—in the letter that Mr. Daley, and others, many others wrote, or could write to us. Thank you again for your appearance, and for taking this back to the surface there. And, again, Chair Spanberger, I really, really appreciate you putting this together for us today, and having this opportunity before Congress might adjourn for the year, we will see, but thank you so much.

The CHAIR. Thank you very much, Ranking Member LaMalfa, and thank you for always advocating for this Subcommittee's strong work in the area of forestry, and my heart is with your constituents, as I know they continue to face challenges.

Under the Rules of the Committee, the record of today's hearing will remain open for 10 calendar days to receive additional material and supplementary written responses from the witness to any question posed by a Member. This hearing of the Subcommittee on Conservation and Forestry is adjourned.

[Whereupon, at 3:09 p.m., the Subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

SUBMITTED COMMENT LETTER BY HON. ABIGAIL DAVIS SPANBERGER, A REPRESENTATIVE IN CONGRESS FROM VIRGINIA; *RE:* S. 4431 and H.R. 7978

September 16, 2020

Hon. DIANE FEINSTEIN,
United States Senate,
Washington, D.C.

Re: Comments on The Emergency Wildfire and Public Safety Act of 2020 (S. 4431)

Dear Senator Feinstein:

On behalf of the undersigned organizations, we write to express our concern with certain sections and attributes of S. 4431, The Emergency Wildfire and Public Safety Act of 2020 introduced by Senator Diane Feinstein and Senator Steve Daines and the companion bill, H.R. 7978, introduced by Congressman Doug LaMalfa and Congressman Jimmy Panetta.

The 2020 fire season in California is having an unprecedented impact on our communities, forests, and other natural landscapes. Collectively, we have been working with Federal and state agencies, landowners, Tribes, and other stakeholders to harden communities and vital infrastructure and improve the resilience of forest landscapes to extreme fire. We believe it is appropriate and necessary for policymakers to seek solutions to the tremendous challenges posed by today's unprecedented wildfires, including taking actions to aggressively reduce greenhouse gas emissions and tackle the climate crisis.

We agree that it is essential to prioritize actions that reduce wildfire risk to communities and to take prudent science-based steps to restore resiliency and manageable fire conditions to degraded forest lands, including expanded use of prescribed and managed fire. The actions and programs defined in Sections 102, 106, 201, 401, 402, 403, and 404 of S.4431 are much needed and would increase the capacity of agencies and stakeholders to reduce risk and improve resiliency; in the case of Section 201 we see opportunities to refine the language and improve the effectiveness of the program. These sections also highlight the critical need to increase funding to Federal agencies to support new programs like these and expand existing efforts to reduce fire risk to communities and increase the resilience of forest landscapes.

However, we believe, based on our many years of experience with these issues in California, that other sections of the bill do not improve our ability to reduce the impacts of extreme wildfire in ways that are collaborative, strategic and use the best available science. The following summarizes our concerns with several provisions that affect the management of Federal public lands.

Section 101. Forest Landscape Projects.

Many of our organizations support and are actively participating in the Collaborative Forest Landscape Restoration Program (CFLRP) established in 2009. Similar to the program proposed in Section 101, the successful CFLRP encourages collaboration within National Forest landscapes to reduce wildfire risk to communities and improve forest resilience. However, CFLRP has enjoyed success because it does not alienate stakeholders by undermining environmental and judicial review procedures as proposed in Section 101. We cannot support shortcuts to environmental review and limits posed on judicial review because they undermine collaborative public engagement, diminish the role of science, and can lead to bad decisions that degrade the forests, watersheds and wildlife habitat. Based on the evidence of CFLRP and other collaborative forest restoration efforts, we also know that legal shortcuts are not necessary to achieve restoration and wildfire risk reduction outcomes. We believe that the intent of this section could be achieved by expanding the successful CFLRP program.

Section 103. Establishment of Fuel Breaks in Forest and Other Wildland Vegetation.

We are generally skeptical of efforts to legislate categorical exclusions because it undermines established NEPA procedures and because Congress lacks the knowledge and expertise to conclude that certain management actions will not have significant effects on the environment. We object to this provision because it would enable damaging activities that could affect wildlands and other high value areas that are remote to communities at risk, without adequate public review and comment. Furthermore, the Forest Service already has considerable legislative authority to create fuel breaks, including authority under the 2018 amendment to the Healthy Forest Restoration Act of 2003 (HFRA) that applied expedited judicial review re-

quirements to firebreaks and fuel breaks, as well as numerous other authorities for these types of management actions.

Section 104. Emergency Actions.

We agree that the agency should prioritize actions to mitigate harm to life, property, and important natural or cultural resources, but we object to this section because it expands the Forest Service's authority to declare "emergency situations" in terms that are overly broad and allows for reduced environmental and judicial review of actions, including controversial salvage logging on up to 10,000 acres. Salvage logging and logging to treat insect and disease infestations are controversial, and there is a lack of agreement among scientists about the efficacy of such practices. These types of actions are therefore among those that benefit from application of best available science and robust evaluation, including the development of alternatives to refine and improve the land management decision. Use of the programmatic and tiered decision-making available to the agency now will generate better outcomes than emergency waivers for controversial actions. Finally, the provision would remove the legal requirement that projects must be consistent with land management plans; waiving this requirement ignores this foundational legal element of land management.

Section 105. New Information in Land Management Plans.

We object to this section because it undermines the integrity of the Endangered Species Act (ESA) by excusing Federal land managers from reinitiating consultation with the U.S. Fish and Wildlife Service on both plans and projects in some circumstances when "new information" comes to light indicating the need to list imperiled species or designate critical habitat for a listed species under the ESA. This is problematic and harmful to the conservation of imperiled species because the limitations imposed on "new information" allows the best available science to be ignored and therefore impacts to imperiled species to occur in the absence of corrective action. The issue of reinitiating consultation for new species listings and critical habitat designations was debated and addressed in the 2018 Omnibus Appropriations Act.

In summary, we appreciate the bill's sponsors' commitment to improving wildfire management and support many aspects of the legislation. Unfortunately, we cannot support the entire bill at this time as written given the significant concerns noted above. As stakeholders engaged in on the ground efforts to reduce risk to communities and restore resiliency to California's forests, we look forward to working with you and other policymakers to solve our wildfire challenges.

Sincerely,

PAMELA FLICK,
California Program Director,
Defenders of Wildlife;

SUSAN BRITTING,
Executive Director,
Sierra Forest Legacy;

RYAN HENSON,
Senior Policy Director,
California Wilderness Coalition;

ISABELLA LANGONE,
Conservation Analyst,
California Native Plant Society;

STEVEN FRISCH,
President,
Sierra Business Council.

SUBMITTED COMMENT LETTER BY HON. ABIGAIL DAVIS SPANBERGER, A REPRESENTATIVE IN CONGRESS FROM VIRGINIA; *RE:* H.R. 7978

September 23, 2020

Dear Members of Congress,

On behalf of our millions of members and supporters nationwide, we write to urge opposition to H.R. 7978 the "Emergency Wildfire and Public Safety Act of 2020" introduced by Representatives Panetta (D–CA) and LaMalfa (R–CA). With devastating fires burning in the West, we certainly recognize the extraordinary pressure to legislate solutions. But H.R. 7978 is a misguided step in the wrong direction that will

not adequately protect communities from wildfire. Rather than advancing best scientific practices to safeguard communities, the bill promotes logging of National Forests many miles from communities while undermining bedrock environmental laws and an independent judiciary. Some provisions in the bill could actually exacerbate the wildfire crisis and divert limited resources from where they are most needed

Rather than supporting H.R. 7978 in the name of fire safety, we urge support by the House for legislation which focuses on science-based methods to mitigate wildfire risk. The most effective way to protect communities from wildland fires through cost-share grants to create defensible space and fire-safe retrofits, rather than logging miles away from communities. Empirical evidence, including the Forest Service's former top fire science researcher, has demonstrated that the most effective means of protecting structures is to create defensible space immediately around the building and install fire safe retrofits—not logging miles away from communities.

Most important to this issue is the reality that human caused climate change has increased droughts; in turn, this has increased fire risk and prevalence in the West. In addition to mitigation efforts, we urge the House to address the root causes of climate change.

Our primary concerns with H.R. 7978 include:

- Section 101 seeks to establish "three pilot projects" that would proceed through expedited environmental and judicial processes. These "forest landscape projects," which could each be as large as 117[2] miles, will leave forests with diminished environmental protection and legal protections.

Moreover, management activities including but not limited to logging/thinning and creating firebreaks up to ½ mile wide would be governed by short-circuited environmental and judicial review procedures. This would happen by undercutting the National Environmental Policy Act (NEPA) to limit the number of alternatives (Sec. 101(d)(2)) and the scope of environmental analysis topics to be analyzed. (Sec. 101(d)(3)).

- Section 103 of H.R. 7978 creates a categorical exclusion for the creation of fuel breaks, but the efficacy of these treatments is speculative at best (flying embers do not stop at firebreaks), and would be permitted in roadless areas and other sensitive areas. Congress already has given the Forest Service considerable legislative authority to expedite the creation of fuel breaks and other hazardous fuel reduction activities in the "Fire Funding and Forest Management Fix" that was signed into law March 23, 2018, and the agency has more than 30 other authorities for this kind of land management. There is no evidence suggesting that the Forest Service needs additional authority to reduce hazardous fuels including doing work adjacent to communities.
- Section 104 codifies and broadens existing agency authority to declare an "emergency situation" to implement actions purportedly to mitigate harm to life, property, or important natural or cultural resources on National Forest System land or adjacent land. Of significant concern is that this section is designed to expedite post-fire logging that the best available science concludes is a very destructive land management practice, causing harm to soils, water quality, and wildlife habitat that sets back natural regeneration and reduces carbon sequestration in the forest. H.R. 7978 will lead to rushed and poorly planned logging projects with major impacts on soil, streams, and wildlife, and could result in increased wildfire risk.
- The goal of Section 105 of the bill is to exempt the Forest Service and Interior Department agencies from the requirement to re-initiate Endangered Species Act Section 7 consultation based on new information, thereby reducing protections for threatened and endangered species even if those activities would hasten extirpation. The bill would disqualify new information about endangered species produced by Federal, state, Tribal and fish and wildlife agencies, nongovernmental organizations, and other scientific experts. This section goes significantly beyond the "Cottonwood" language included in the 2018 Omnibus Act that overrode a Ninth Circuit Court of Appeals decision and threatens the integrity of the ESA consultation process by allowing Federal land managers to ignore most sources of relevant scientific information.
- Section 301 would lift the current export ban on unprocessed timber from Federal lands in the West. We oppose this precedent-setting provision that could result in the unintended consequence of creating unsustainable demand for Federal timber.

In short, this bill does not advance policies that will adequately mitigate fire risk to homes and communities most at risk from wildfires. Over 50% of freshwater supplies in the West come from National Forests. Increased levels of intensive logging could result in the dumping of sediments into watersheds, pollution of critical drinking water supplies, and potentially cost taxpayers and counties hundreds of millions of dollars.

Again, we appreciate the urgency with which Members want to address the fire crises in the West. However, we encourage Members to support legislation that is science-based and better suited to protect communities than H.R. 7978. Moreover, to truly address fires and their root causes, the House must address the climate crisis—which is exacerbating grassland, chaparral, and forest wildfires. Rather than proposals to expedite backcountry logging, Congress should enact policies that provide communities with grants to develop community plans, update wildfire hazard maps, improve emergency response, and implement home and critical infrastructure hardening.

Respectfully submitted:

Center for Biological Diversity
Earthjustice
Natural Resources Defense Council
National Parks Conservation Association
Sierra Club
Southern Environmental Law Center
The League of Conservation Voters
The Wilderness Society
Western Environmental Law Center
Endangered Species Coalition
Environmental Protection Information Center
Forest Issues Group
Friends of the Bitterroot
Friends of the Inyo
Gallatin Yellowstone Wilderness Alliance
GreenLatinos
Greenpeace USA
High Country Conservation Advocates
Idaho Conservation League
John Muir Project
Kettle Range Conservation Group
Klamath Forest Alliance
Klamath-Siskiyou Wildlands Center
Los Padres ForestWatch
Montana Wilderness Association
New Mexico Spor[ts]men
Oregon League of Conservation Voters
Oregon Wild
Rio Grande Indivisible
Rio Grand Valley Broadband of the Great Old Broads for Wilderness
San Juan Citizens Alliance
San Luis Valley Ecosystem Council
Santa Fe Forest Coalition
Sequoia ForestKeeper®
Soda Mountain Wilderness Council
Swan View Coalition
The Nuestra Tierra Conservation Project
The Forest Advocate
The Lands Council
Upper Gila Watershed Alliance
Ventana Wilderness Alliance
Western Watersheds Project
Wild Watershed
WildEarth Guardians
William Community Forest Project
Yaak Valley Forest Council

SUBMITTED LETTER BY HON. ABIGAIL DAVIS SPANBERGER, A REPRESENTATIVE IN CONGRESS FROM VIRGINIA; ON BEHALF OF CHAD HANSON, PH.D., CHIEF SCIENTIST AND DIRECTOR; JENNIFER MAMOLA, D.C. FOREST PROTECTION ADVOCATE, JOHN MUIR PROJECT

October 7, 2020

Hon. COLLIN C. PETERSON,
Chairman,
House Committee on Agriculture,
Washington, D.C.;

Hon. K. MICHAEL CONAWAY,
Ranking Minority Member,
House Committee on Agriculture,
Washington, D.C.;

Hon. ABIGAIL DAVIS SPANBERGER,
Chair,
Subcommittee on Conservation and Forestry,
House Committee on Agriculture,
Washington, D.C.;

Hon. DOUG LAMALFA,
Ranking Minority Member,
Subcommittee on Conservation and Forestry,
House Committee on Agriculture,
Washington, D.C.

Re: The 2020 Wildfire Year: Response and Recovery Efforts Hearing

Dear Mr. Chairman, Ranking Member, Members and Staff;

We virtually attended your September 24th Conservation and Forestry Subcommittee Legislative Hearing. We were specifically interested in the Subcommittee's treatment of *H.R. 7978, Emergency Wildfire and Public Safety Act of 2020,* and the overall discussion between Subcommittee Members and the witness related to the current wildfire season and forests in the West. While we applaud the recognition, by the Subcommittee chair, that the climate crisis is the driving force behind

the 2020 Wildfires and appreciate the acknowledgement that these extreme weather events are largely due to the failure of Congress to take meaningful steps to mitigate climate change we were dismayed by the overall focus of the hearing. Rather than focusing on constituents and their communities, or recognizing that more than half of the acreage burning in California was not in forests or on public land, Members of this Subcommittee focused almost exclusively on how we can ways to continue to manipulate vegetation through the logging of our National Forests. In fact, most of the 'solutions' proposed at the hearing for addressing western wildfires simply repackage old policies which are not only ineffective against fire, but will push us further into the climate driven crisis our western communities are currently facing. Policies such as funding and promoting the use of fossil fuels to accelerate the removal of trees and native vegetation from our forest and shrubland ecosystems, ecosystems which are constantly pulling CO_2 out of the atmosphere, under the guise of "hazardous fuels reduction", "thinning", and logging. Livestock grazing was also mentioned as a solution to mitigate wildfires, yet not only does this historic practice increase greenhouse gas emissions, it also exacerbates fire behavior by replacing fire adapted native plant species with easily ignitable invasive grasses.

We are writing this letter to hopefully bring some balance to the testimony that was presented and to address the problematic underlying narrative which is shifting Members' attention away from actions that will actually make a positive difference for people and the planet. It is imperative that Congress refrain from oversimplifying the complex ecosystems that make up the American West and demonizing fires that burn in our wildlands and instead focus attention and resources on the true issue at hand, hardening homes and protecting people from the inevitable wildfire season.

1. To protect communities, we must focus on communities

   Fires, and especially the ones the West has experienced this year, are ultimately weather and climate driven events, similar to hurricanes. Accepting this will enable us to pursue policies which will ensure that our communities will be protected and remain resilient to the extreme weather events that are becoming more frequent as our climate changes. Outside of putting resources into stopping human ignitions via more recreational and law enforcement patrols near communities during high fire weather and educating the public about fire-safe activities, once a fire starts under extreme weather conditions it is going to burn until the weather changes.

   According to the scientific research the only effective way to protect homes from wildland fire is to focus on making the homes themselves more fire-safe, and to conduct annual defensible space pruning within 100′ of homes. Beyond 100′ from houses, there is *no additional benefit* to home protection from altering vegetation.[1] Congressional resources should be put into such efforts, and there is currently a bill in both houses of Congress that takes a first step in this direction, S. 2882/H.R. 5091, the *Wildfire Defense Act.*

   Because we cannot suppress weather-driven fires, we cannot stop the smoke that they create. What we can and must do is promote measures that will keep people safer and help communities adapt: by devoting resources to help create better wildland fire warning and evacuation systems; by developing programs which ensure that homes have air filters for smoke and access to appropriate respiratory masks (as mentioned at the hearing); by creating community smoke centers for sensitive groups to find relief from smoke on particularly heavy days; by creating options for emergency housing and daycare; by facilitating rideshares to work and always ensuring that these services are available to everyone, regardless of income.

   Unfortunately, employing forest "management", by way of logging and removal of vegetation from our forests, as a "fire fix" as H.R. 7978 recommends, not only diverts scarce resources away from measures that would actually make people safer, but also gives communities a dangerous and false sense of security because such actions will neither stop nor alter weather driven fires, like the fires of 2020. We saw an example of this in the Camp fire of 2018, which burned so rapidly through a heavily "managed" landscape during the first 6 hours of the fire, that people within the towns of Paradise and Concow had very little time to evacuate, with tragic results. The so-called fuels reduction thinning and extensive post-fire removal of dead trees did not

[1] Syphard, A.D., T.J. Brennan, and J.E. Keeley. 2014. *The role of defensible space for residential structure protection during wildfires.* INTL. J. WILDLAND FIRE 23: 1165–1175.

save these towns from this weather driven fire, it made the tragedy worse.[2] Our forests are already resilient to fire, having evolved with fire over hundreds of thousands of years, but our homes remain flammable. In order to protect homes and communities our resources need to be directed towards homes and communities, and not into the forest.

2. Vegetation is not driving wildfires: our forests aren't overstocked

Contrary to the statements made at the hearing, a century of fire suppression has not exacerbated fire risk or intensity in our forests. Our forests are not "overgrown". Forests don't actually do that, they grow in accordance with the variation in soil and weather conditions. Their vegetation changes, sometimes dramatically, over time. This is completely natural. They get denser, then growing conditions change, causing trees and plants to die off, reducing density, then conditions change and they once again become dense and so on, and so on. In fact, the densest forests do not burn more intensely than less dense forests, nor do dead trees increase fire risk or intensity. Forests are not static or in need of human intervention in order to manicure them into something that resembles your backyard. These are dynamic ecosystems that evolve with fire.

The number one driver of fire behavior and extent is the climate, specifically high temperatures, extreme wind speeds and very low humidity. Climate change is making these conditions more prevalent, more often. The result is not more intense forest fires, or an excess of fire in forests. We have always had fires in the West and always will, and there is wide agreement among scientists that we currently have less mixed-intensity fire in our forests than we did historically, before fire suppression, and fire intensity in forests is not increasing.[3] The real issue is that, increasingly, climate and weather factors drive fires that humans are not able to suppress. Fires that cannot be suppressed, especially when they are started by human ignitions or infrastructure, have the potential to burn into and affect communities.

There are several ways that we know it is climate conditions, rather than the density of forests or presence of dead trees, that is driving fire behavior. First, and most informative are the field-based studies that have looked at the effect, if any, that decades of successful fire suppression have had on fire intensity. Specifically, seven studies have investigated whether areas that have not experienced fire in a very long time (*i.e.,* areas that have had the chance for vegetation to grow unimpeded for nearly a century or more) burn at higher intensity than areas which have experienced fire more recently. Three of the seven studies found unequivocally that areas that have not burned in a very long time *do not burn at higher intensities* than areas that have burned in recent decades, three of the remaining four studies found that the most long-unburned forests (the densest forests) *burned at lower intensities* than other forests, and the final of the seven studies speculated that long-unburned forests would burn *slightly* more intensely but would still be dominated by lower-intensity fire effects (and this study, unlike the other six, involved a theoretical model, and its conclusion was not based on actual fire data from long-unburned forests).[4]

Next, we have empirical research which has investigated whether the number of dead trees in a given area drives fire behavior. The most comprehensive scientific studies (including one prepared by NASA) found that forests with more dead trees burn *the same* as other forests or burn at *lower* inten-

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[2] *https://johnmuirproject.org/2019/01/logging-didnt-stop-the-camp-fire/*.

[3] (a) DellaSala, D.A., and C.T. Hanson (Editors). 2015. *The ecological importance of mixed-severity fires: nature's phoenix.* Elsevier Inc., Waltham, MA, USA; (b) Keyser, A.; Westerling, A. *Climate drives inter-annual variability in probability of high severity fire occurrence in the western United States.* ENVIRON. RES. LETT. 2017, 12, 65003.

[4] (a) Miller J.D., Skinner C.N., Safford H.D., Knapp E.E., Ramirez C.M. 2012a. *Trends and causes of severity, size, and number of fires in northwestern California, USA.* ECOLOGICAL APPLICATIONS 22, 184–203; (b) Odion, D.C., E.J. Frost, J.R. Strittholt, H. Jiang, D.A. DellaSala, and M.A. Moritz. 2004. *Patterns of fire severity and forest conditions in the Klamath Mountains, northwestern California.* CONSERVATION BIOLOGY 18: 927–936; (c) Odion, D.C., and C.T. Hanson. 2006. *Fire severity in conifer forests of the Sierra Nevada, California.* ECOSYSTEMS 9: 1177–1189; (d) Odion, D.C., and C.T. Hanson. 2008. *Fire severity in the Sierra Nevada revisited: conclusions robust to further analysis.* ECOSYSTEMS 11: 12–15; (e) Odion, D.C., M.A. Moritz, and D.A. DellaSala. 2010. *Alternative community states maintained by fire in the Klamath Mountains, USA.* JOURNAL OF ECOLOGY, doi: 10.1111/j.1365-2745.2009.01597.x; (f) van Wagtendonk, J.W., K.A. van Wagtendonk, and A.E. Thode. 2012. *Factors associated with the severity of intersecting fires in Yosemite National Park, California, USA.* FIRE ECOLOGY 8: 11–32; (g) Steel, *et al.* 2015. T3Ecosphere 8: Article 8.

sities.[5] While it may seem counterintuitive, soon after trees die (such as from drought and native beetle activity), they shed their needles and small twigs, which fall to the ground and decay into soil, after which there is no real mechanism to carry flames. Thus the provisions in H.R. 7978 which would eliminate the export ban on raw laws from public lands and expedite the logging of not just dead, but dying trees as well, would do nothing to mitigate future fire behavior or protect communities as the title of this bill misleadingly implies.

Importantly, our forests currently have significantly *less* tree biomass in them than they did historically, due to decades of logging. Claims that our forests are "overstocked" are quite simply misleading.[6]

Finally, fire behavior is driven by climate and weather—fires are anticipated to grow when the weather forecast is for hot, dry, windy conditions (conditions which facilitate the issuance of a *Fire Weather Watch* or *Red Flag Warning* from the National Weather Service),[7] whereas relief that the fires will stop growing is expressed when there is a forecast of rain and cooler temperatures. These statements are universal, around the world, regardless of the ecosystem or vegetation involved and whether logging activities or prescribed burning had preceded the fire. *(Please contact us for press stories)*.

3. Since weather and climate are overwhelmingly driving wildfires, vegetation management, thinning and other forms of logging, and prescribed burning are not necessary and are often counterproductive

Climate and weather are driving wildfire behavior, but to the extent that density of vegetation has an influence, it is the opposite of what many assume. Numerous studies have investigated this issue, measuring forest density directly and how it relates to fire behavior. These studies, similar to the ones referenced above, also found that *the densest mature forests generally burn at lower intensities.* This is because denser forests have more trees, which provide more shade, which keep conditions cooler and more moist. Whereas forests with fewer trees, especially as a result of logging/mechanical-thinning, burned at higher intensities. This is because logging/thinning reduces the cooling shade of the forest canopy, creating hotter, drier conditions, while also removing trees which have a buffering effect on wind speeds, eliminating the forest's ability to slow fire spread. Far from being a "fire" solution, logging/thinning does not stop fires, and fires often move more rapidly through these areas. Further, the most comprehensive scientific study ever conducted on this question found that forests with the most logging, *a.k.a* . "forest management", burn the most intensely, not the least.[8]

Prescribed fire does not stop wildland fires either. In fact, vegetation subject to prescribed burning can return within as little as 10 months depending on the ecosystem. A recent example of wildland fire burning unabated through an area that was intentionally burned for "fuels reduction" only 2 years prior was seen in the Australia fires of 2019. There, the fires driven by extreme weather similar to our current experiences with fire here, burned right through the largest prescribed burn ever done in Australia's Morton National Park.

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[5] (a) Hart, S.J., T. Schoennagel, T.T. Veblen, and T.B. Chapman, 2015. *Area burned in the western United States is unaffected by recent mountain pin beetle outbreaks.* PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE USA 112: 4375–4380; (b) Meigs, G.W., H.S.J. Zald, J.L. Campbell, W.S. Keeton, and R.E. Kennedy. 2016. *Do insects outbreaks reduce the severity of subsequent forest fires?* ENVIRONMENTAL RESEARCH LETTERS 11: 045008.

[6] (a) McIntyre, P.J., *et al., 2015. Twentieth-century shifts in forest structure in California: Denser forests, smaller trees, and increased dominance of oaks.* PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA 112: 1458–1463; (b) Erb, K.H., *et al., 2018. Unexpectedly large impact of forest management and grazing on global vegetation biomass.* NATURE 553: 73–76.

[7] (a) *https://www.fire.ca.gov/programs/communications/red-flag-warnings-fire-weather-watches/;* (b) *https://www.weather.gov/mqt/redflagtips*.

[8] (a) Bradley, C.M. C.T. Hanson, and D.A. DellaSala. 2016. *Does increased forest protection correspond to higher fire severity in frequent-fire forests of the western USA?* ECOSPHERE 7: article e01492; (b) Zald, H.S.J., and C.J. Dunn. 2018. *Severe fire weather and intensive forest management increase fire severity in a multi-ownership landscape.* ECOLOGICAL APPLICATIONS 28: 1068–1080; (c) Meigs, G., D. Donato, J. Campbell, J. Martin, and B. Law. 2009. *Forest fire impacts on carbon uptake, storage, and emission: The role of burn severity in the Eastern Cascades, Oregon.* ECOSYSTEMS 12: 1246–1267; (d) Cruz, M.G., M.E. Alexander, and J.E. Dam. 2014. *Using modeled surface and crown fire behavior characteristics to evaluate fuel treatment effectiveness: a caution.* FOREST SCIENCE 60: 1000–1004; (e) DellaSala, D.A,, C.T. Hanson. 2019. *Are wildland fires increasing large patches of complex early seral forest habitat? Diversity* 11: Article 157.

While we do currently have a deficit of all types of fire in essentially all of our forest ecosystems in the west (as discussed below), historically, forests burned every few decades, not every 2 years.[9] If we attempt to "fireproof" the landscape with prescribed fire, we would be imposing far more fire than is natural on ecosystems and we would be doing so at a time of year when it is not natural for fires to burn, impacting biodiversity and damaging soils and forest productivity all while creating vastly more smoke than currently occurs with wildland fires. All of this would be happening, and none of it would ensure that weather driven wildland fires would not burn during the summer and fall anyway.

Pursuing a "vegetation management" approach to fire fundamentally ignores and denies that climate is driving fire behavior. Logging, clearing vegetation and prescribed fire in the wildlands will not solve our community protection problem, will not eliminate or lessen smoke impacts or assist with climate adaptation, but such activities will exacerbate rather than mitigate the climate and extinction crises we currently face, and will likely increase, not decrease fire impacts to communities.

4. Forests, as they exist right now, are a climate solution, **not** a climate problem

Our forests are currently substantial carbon sinks, absorbing more carbon than they emit, but they could absorb much more carbon than they currently do, if they were protected from logging. Logging is the real source of carbon emissions from forests. In U.S. forests, for example, logging of all types (*e.g.,* thinning, clear-cutting, group selection, *etc.*) emits ten times more carbon than is emitted from wildland fire and tree mortality from drought and native bark beetles *combined.* Dead trees and downed logs decay extremely slowly (decades to a century or more), and eventually return their nutrients to the soil, which helps maintain the productivity and carbon sequestration capacity of the forest.[10]

Wildland fires, including large mixed-severity fires, only consume about 1% to 2% of the biomass of trees in the forest, and therefore only release this small portion of the carbon stored in trees into the atmosphere, and the carbon emitted is soon re-absorbed by post-fire regrowth, which is enhanced by nutrient cycling resulting from the fires. We know this from field-based studies of actual fires in actual forests. The problem is that Federal and state agencies use theoretical models to estimate carbon emissions from forest fires and dead trees, but the models wildly exaggerate carbon emissions from decay and fire. For example, in the 257,000 acre Rim fire of 2013, field-based data determined that only *1/10 of 1% of the carbon in trees was actually consumed,* whereas the theoretical models falsely assume levels of consumption that are dozens, or hundreds, of times higher than this.[11]

5. The proposals supported by the witness will harm our environment, biodiversity and the climate

There was much discussion at this hearing of logging as an answer to the "fire" problem. But we actually don't have a fire problem in our forest ecosystems. We have *substantially* less mixed-intensity fire now than we had historically, before fire suppression. Any increase in wildland acres burned this year, as opposed to previous years, is merely getting us closer to the amount of fire we had on the landscape before fire suppression. It should also be noted that fires burning in our forests, especially the large fires that burn at mixed-severity, transform forest ecosystems but do not destroythem. In fact, such fires create natural heterogeneity across large areas, creating and rejuvenating wildlife habitat to such a degree that the biodiversity in mature forests that experience high-intensity fire is similar to levels of biodiversity

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[9] DellaSala, D.A., and C.T. Hanson (Editors). 2015. *The ecological importance of mixed-severity fires: nature's phoenix.* Elsevier Inc., Waltham, MA, USA.

[10] (a) Harris, N.L., *et al., 2016. Attribution of net carbon change by disturbance type across forest lands of the conterminous United States.* CARBON BALANCE MANAGEMENT 11: Article 24; (b) Meigs, G., *et al., 2009. Forest fire impacts on carbon uptake, storage, and emission: The role of burn severity in the Eastern Cascades, Oregon.* ECOSYSTEMS 12:1246–1267; (c) Campbell, J.C., J.B. Fontaine, and D.C. Donato. 2016. *Carbon emissions from decomposition of fire-killed trees following a large wildfire in Oregon, United States.* JOURNAL OF GEOPHYSICAL RESEARCH: BIOGEOSCIENCES 121: 718–730.

[11] Stenzel, J.E., *et al., 2019. Fixing a snag in carbon emissions estimates from wildfires.* GLOBAL CHANGE BIOLOGY 25: 3985–3994.

found in unlogged old-growth forests.[12] The same is true for forests which have experienced drought and high levels of new snags from native beetles.[13] These natural processes create "snag forest habitat", which is an ecological treasure, not a loss. In addition, forests are naturally regenerating vigorously, even in the largest high-intensity fire patches.[14]

While we do not have a fire in our forests problem, we most certainly do have a problem with fire affecting our communities and a climate change problem. We therefore need solutions to protect and adapt communities and to combat climate change. Logging, whether you call it thinning, vegetation management, forest management or biomass removal, will remedy neither of these problems and is simply another part of the carbon economy. Since no one at the hearing addressed ***the carbon cost of logging,*** we thought we would share some statistics here. Because most of the carbon in trees that are logged is incinerated as "slash" (branches and tree tops) and milling/manufacturing waste for energy production, approximately 81% of the carbon in trees that are logged ends up in the atmosphere almost immediately, with only 19% ending up being stored in wood products.[15] Logging also removes nutrients from forests and compacts soils, reducing the overall productivity and function of the forest ecosystem as well as its carbon sequestration and storage capacity.[16]

The witness at the hearing repeatedly promoted increased logging—*i.e.* , increased removal of carbon from our forests—supposedly as a wildfire solution. This is a form of climate change denial because it not only denies the ability of our forests to continue acting as carbon sinks, but also denies the role of logging in making climate change worse. Notably, numerous studies find that logging conducted under the guise of "thinning", "fuels reduction" and fire management actually causes a large net loss of forest carbon storage and a substantial net increase in carbon emissions.[17]

6. The Proposals for Woody Biomass Supported by the [Witness] and [Representatives] Would Harm our Environment, Biodiversity and the Climate

Cutting and incinerating trees for energy production (biomass logging) generates substantially more greenhouse gas emissions than burning coal, for equal energy produced.[18] Biomass logging will exacerbate the climate crisis through increased greenhouse gas emissions, which will in turn exacerbate the potential for fires driven by extreme weather events. In addition to releasing more carbon dioxide (CO_2) than coal, incinerating trees to create energy also releases all of the same types of pollutants as burning coal, including carbon monoxide (CO), particulate matter (PM), nitrogen oxides (NO_X), sulfur dioxide (SO_2), dioxins/furans, acid gases, radioactive pollutants and toxic metals

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[12] See hundreds of scientific studies summarized in chapters 1 through 5 of: DellaSala, D.A., and C.T. Hanson (Editors). 2015. *The ecological importance of mixed-severity fires: nature's phoenix.* Elsevier Inc., Waltham, MA, USA.

[13] (a) Mosher, B.A., *et al., 2019. Forest birds exhibit variable changes in occurrence during a mountain pine beetle epidemic.* ECOSPHERE 10: Article e02935; (b) Matseur, E.A. 2017. *Abundance of black-backed woodpeckers and other birds in relation to disturbance and forest structure in the Black Hills and Bear Lodge mountains of South Dakota and Wyoming.* Master's Thesis, University of Missouri-Columbia; (c) Stone, W.E. 1995. *Impact of a mountain pine beetle epidemic on wildlife habitat and communities in post-epidemic stands of a lodgepole pine forest in northern Utah.* Doctoral Dissertation, Utah State University.

[14] (a) Owen, S.M., C.H. Sieg, A.J. Sanchez Meador, P.Z. Fule, J.M. Iniguez, L.S. Baggett, P.J. Fornwalt, and M.A. Battaglia. 2017. *Spatial patterns of ponderosa pine regeneration in high-severity burn patches.* FOREST ECOLOGY AND MANAGEMENT 405: 134–149; (b) Hanson, C.T. 2018. *Landscape heterogeneity following high-severity fire in California's forests.* WILDLIFE SOCIETY BULLETIN 42: 264–271.

[15] Hudiburg, T.W., Beverly E. Law, William R. Moomaw, Mark E. Harmon, and Jeffrey E. Stenzel. 2019. *Meeting GHG reduction targets requires accounting for all forest sector emissions.* ENVIRONMENTAL RESEARCH LETTERS 14: Article 095005.

[16] (a) Walmsley, J.D., *et al., 2009. Whole tree harvesting can reduce second rotation forest productivity.* FOREST ECOLOGY AND MANAGEMENT 257: 1104–1111; (b) Elliot, W.J., *et al., 1996. The effects of forest management on erosion and soil productivity.* SYMPOSIUM ON SOIL QUALITY AND EROSION INTERACTION. July 7, 1996, Keystone, CO.

[17] (a) Campbell, J.L., M.E. Harmon, and S.R. Mitchell. 2012. *Can fuel-reduction treatments really increase forest carbon storage in the western U.S. by reducing future fire emissions?* FRONTIERS IN ECOLOGY AND ENVIRONMENT 10: 83–90; (b) Hudiburg, T.W., *et al., 2013. Interactive effects of environmental change and management strategies on regional forest carbon emissions.* ENVIRONMENTAL SCIENCE AND TECHNOLOGY 47: 13132–13140.

[18] Sterman, J.D., L. Siegel, and J.N. Rooney-Varga. 2018. *Does replacing coal with wood lower CO_2 emissions? Dynamic lifecycle analysis of wood bioenergy.* ENVIR. RESEARCH LETTERS 13: Article 015007.

like arsenic, chromium and mercury. A lose, lose for communities and the planet.

Even given this reality, H.R. 7978 dedicates $100,000,000 to incentivize the cutting and incinerating of trees and other native vegetation for energy production (biomass logging), as well as the creation of new biomass energy facilities. However, new biomass incinerators are not held to the same air pollution control requirements as new coal power plants are, making them not only worse for climate, but also worse for communities. Across the country biomass energy facilities are currently located in either communities of color or lower-income white communities creating an environmental justice issue. In fact, H.R. 7978 specifically offers incentives for biomass burning facilities that are placed in low income areas, guaranteeing a perpetuation of this environmental injustice. By prioritizing grants for biomass energy facilities that are in low income areas, H.R. 7978 would continue with the trend of climate, racial, and environmental injustices that is currently plaguing our country.

Given the above, it was truly disheartening to see that many of the Subcommittee, including legislators who care about climate change and racial and social justice issues, promote biomass energy from forests as a climate and wildfire mitigation policy.

7. Targeted Livestock Grazing Won't Preclude Large Wildfires

As we've previously stated above, the fires that H.R. 7879 is purportedly designed to "halt"—are being driven by extreme fire weather conditions including drought, low humidity, high temperatures, and high winds and not by vegetation. Thus focusing on removing native vegetation will not mitigate the impacts of these fires on people and will merely damage the environment and further exacerbate climate change. Though the bulk of H.R. 7978 is aimed at increasing the logging of our public lands, there is also a provision for targeted livestock grazing as a claimed solution for wildfire.

First, livestock grazing, in an attempt to alter fire behavior, has a slew of unavoidable ecological impacts. These include: water pollution, soil compaction, negative influence on soil carbon stores, loss of plant and animal biodiversity, the social displacement of wildlife (like elk), the loss of forage wildlife and insects, greenhouse gas emissions, and exorbitant costs.[19]

In addition, livestock grazing, just like logging, often exacerbates fire behavior, specifically because it facilitates the spread of cheatgrass, an annual exotic, that is extremely flammable.[20] Livestock grazing not only spreads cheatgrass, but it also facilitates its colonization via the trampling of biological soil crusts (BSC) which, when intact, naturally inhibit the growth of this flammable invasive.[21] Maintaining healthy stands of perennial grasses, not eliminating them via grazing, has been shown to inhibit cheatgrass spread.[22] Targeted livestock grazing in the wildlands is simply not a solution for wildfires or climate change.

We hope that you have found the above information helpful and we urge you to reject the false claims made about how increased logging and targeted grazing while rolling back environmental laws as proposed by H.R. 7978 will supposedly protect our communities, reduce fire occurrence, or do anything to eliminate the weather and climate driven fires we are experiencing today. We would be happy to answer questions or provide additional information, so please feel free to contact us if you would like to continue this dialogue.

Sincerely,

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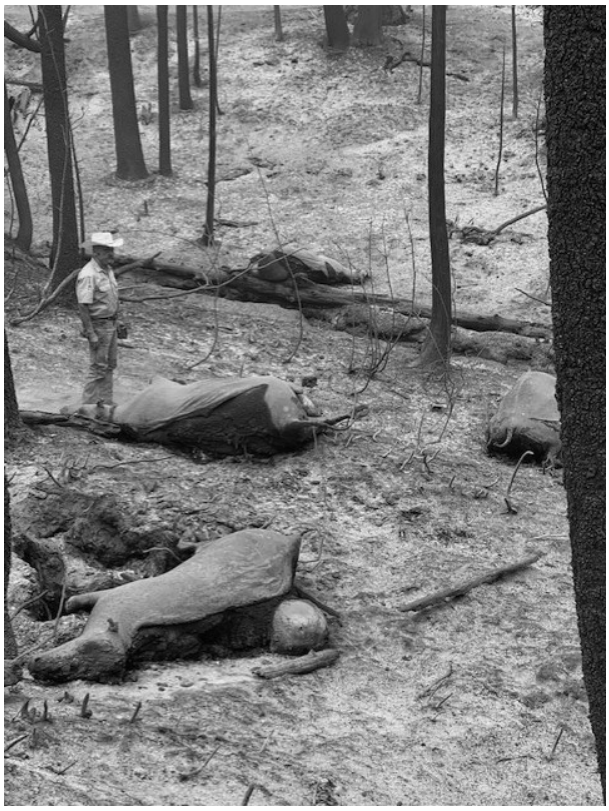
SUBMITTED POST BY HON. DOUG LAMALFA, A REPRESENTATIVE IN CONGRESS FROM CALIFORNIA

[*https://calcattlemen.org/2020/09/23/legacy/*]

I cry for the mountains and the legacy lost

The Bear Fire

By Dave Daley, Butte County Rancher & CCA Immediate Past President
[September 23, 2020]



Rancher observing damage to land, cattle and legacy, post fire.

It is almost midnight. We have been pushing hard for 18–20 hours every day since the Bear Fire tore through our mountain cattle range on September 8th, and there is so much swirling in my head I can't sleep anyway. The fire destroyed our cattle range, our cattle, and even worse our family legacy. Someone asked my daughter if I had lost our family home. She told them "No, that would be replace-

able. This is not!" I would gladly sleep in my truck for the rest of my life to have our mountains back.

I am enveloped by overwhelming sadness and grief, and then anger. I'm angry at everyone, and no one. Grieving for things lost that will never be the same. I wake myself weeping almost soundlessly. And, it is hard to stop.

I cry for the forest, the trees and streams, and the horrible deaths suffered by the wildlife and our cattle. The suffering was unimaginable. When you find groups of cows and their baby calves tumbled in a ravine trying to escape, burned almost beyond recognition, you try not to [retch]. You only pray death was swift. A fawn and small calf side by side as if hoping to protect one another. Worse, in searing memory, cows with their hooves, udder and even legs burned off who had to be euthanized. A doe laying in the ashes with three fawns, not all hers I bet. And you are glad they can stand and move, even with a limp, because you really cannot imagine any more death today. Euthanasia is not pleasant, but sometimes it's the only option. But you don't want more suffering. How many horrible choices have faced us in the past 3 days?

We have taken cattle to the Plumas National Forest since before it was designated such. It is a steep and vast land of predominantly mixed conifers and a few stringer meadows on the western slope of the Sierra Nevada mountains straddling Butte and Plumas Counties. My Great, Great Grandfather started moving cattle to the high country sometime after he arrived in 1852 to the Oroville area looking for gold. The earliest family diary of driving cattle to our range in the mountains dates back to 1882. Poor Irish immigrants trying to scratch a living from the land.

The range is between the South Fork and Middle Fork of the Feather River, the drainage that fills Lake Oroville. It is 80″ rainfall country from October to May with deep snow at the high end, and then it goes completely dry. Three major streams/rivers and hundreds of creeks and springs punctuate the land. My friends from the arid west can't understand why it is hard to gather—"don't you just go to the water?" Not that simple in this environment. It is difficult country, in some ways more suited to sheep because of the browse, but politics and predators killed the sheep industry in the country years ago. But the cows love the range and do well. Cool days and nights, no flies, higher elevations avoiding the hot summers in the valleys. A great place to summer cattle. They actually like to go as much as we do!

For those of you who have never seen this land, this isn't riding a horse into a meadow or open ridge where you can see cattle. This is literally "hunting" through a vast forest of deep canyons, rivers and creeks, and the high ridges in between. It is not an easy place to gather or even find cattle in the best conditions.

> *There are six generations who have loved that land, and my new granddaughter, Juni, is the seventh. And I find myself overcome with emotion as I think of the things she will never see, but only hear in stories told to her by Grandad. We all love the mountains. They are part of us and we are part of them. All destroyed. In one day. I am angry.*

As a child in the early 1960s, days "going to the mountains" were the greatest ever for my family. It was our playground and our quiet spot. Sure, we worked, but we learned so much about the world, the trees, birds and flowers. And in my family sometimes that may have included learning the scientific name or at least the family of the plant. There were lessons on botany, forestry, geology, archaeology. We didn't even know we were learning but we imbibed it until it became a part of our souls.

And then my kids. For them, the mountains were the best! Rolling into a little seat behind Grandma and Grandpa to "go hunt for cows" as we gathered in the Fall. Hot chocolate from Grandma as soon as we got there. On cold, dusty or wet days, it was sometimes discouraging, but they loved it and still do. It was their sanctuary where "no matter what happens, this will always be here." And now it is gone. It is a death and we are still in shock and not sure how to move forward. What will my granddaughter know of the truth and grounding that comes from nature? Will we gather cows in the mountains while I sing cowboy tunes off key and she sips hot chocolate? I am overcome.

When the news broke of the fire in our cattle range, my son Kyle, who ranches with me, and I were sure it could not be as bad as it sounded. We had close to 400 cows, most of them calving or close to calving in our mountain range, ready to gather and bring home in early October. They were the heart of the herd. Old cows, problems, bought cows and first calf heifers stayed in the valley. Only the good cows who knew the land were there. That first day, we had no access and were relying on spotty reporting posted to local news or social media. My daughter Kate, a veterinarian, who practices about 4 hours away, "I'm on the way." My youngest son, Rob (named for his Grandad) a soldier stationed in Louisiana, "I have a lot of leave and

I'm on a plane tomorrow." All three have been unbelievable and we have all needed each other to navigate this heartbreak.

At first, we couldn't get into the range and were frantic as it was completely locked down because of safety. We knew cattle were dying as we waited. I received a call from a Pennsylvania number and answered before thinking. A wonderfully nice man from the Forest Service was calling to tell me about the fire since I had a cattle allotment in the Bear Fire area. I had to help him find it on the map! Frustrating. And he knew less than me. Later I got a call from San Bernardino (500 miles south), another fire resource officer from the Forest Service. I asked about access. "Well," he said, "maybe next week and only if we provide an escort. We have to make it safe first." He, too, had no idea where the allotment was or the challenge that I faced. All the cattle would be dead if I waited a week. I politely told him I would figure out an alternative—through private timber land and common sense!

I called our County Sheriff who has been a great friend of the cattle community. I had to wait one day, but he provided two sergeants to navigate the road-blocks until I was in the range. Was it dangerous? Yes. Were animals dying? Absolutely. Local solutions are always better. Thanks to Sheriff Honea, of Camp Fire and Lake Oroville Dam breech fame, and Sergeants Tavelli and Caulkins who got us access. All incredible people who get it. Local.

On our first day, Kyle and I make a fast trip up to reconnoiter. We are unprepared for the total destruction of everything we have always known. Nothing left and active flames on both sides burning trees and stumps. Shocking. Surreal. We make it to our Fall River corral somewhat hopeful that there would be green and water to mitigate the disaster. Everything is completely gone and we see dead cows as we start down the hill. Everywhere. This is our first step in what will be an impossible week. We go home hoping against hope that we have seen the worst. Little did we realize that it was just the beginning and it could get worse.

It is 3:30 in the morning now and time to start this nightmare again. To find the courage to throw some things in the truck, run with the kids to check and feed the survivors, and hit repeat. I dread it but know we must. And I work to be optimistic because that is who I am. Not easy.

As we make a plan and split up to run four-wheelers up and down logging roads hunting life and death, I think how lucky I am. So many people have offered to help. I am grateful but it is difficult to explain how challenging it is to gather in almost 90,000 acres of incredibly difficult terrain (and that's on a flat map!). Each canyon and ridge is dotted with logging spur roads that could be choked with down and burning trees. Much of it is unrecognizable, even to me. Only those with deep, local knowledge of these mountains can help. Fortunately, my family, the Carter boys (Devin and Doyle), Brian Jones—all friends of my kids—and now friends of mine, plus my best friend Sean Earley all stepped up. They know the mountains well and have helped us for years. They just showed up and said, "We're here. We're going.

What can we do?" So, we strap chainsaws and some alfalfa on four-wheelers and set out hoping against hope to find something alive.

> *We split up and my crew takes the Lava Top and Ross Creek drainage, while the other half goes towards Twin Bridges and Fall River. It is eerie, and as Rob said, "There is no sound in the Forest, just death." We are learning. When we traditionally gathered cows, they were always towards the ridge top in the morning and down by water in the afternoon. Now, we find nothing high up, except the occasional dead cow that wasn't fast enough. We just hunt for the deep holes where there was a chance for water and life.*

You learn as you ride through the apocalyptic murk. Rob's head goes up and I catch the scent at the same time. The scent of death and charred flesh mingled with the acrid smoke that burns your eyes. You begin looking in the draws hoping it is not cattle. It always is. Eight cows and three baby calves in a pile at the bottom of a ravine, rushing in terror to escape. A sight you won't soon forget.

But today, when we meet up, Kyle and Kate had great news. They found sixteen head at our Twin Bridges corral! The largest group to date. I had baited it with alfalfa last night and there were cattle standing in the little corral of temporary panels. Remarkable. Two of them are heifers that I gave Kyle and Jordan (my daughter in-law and Juni's mom) for their wedding. Kyle branded them with my Dad's original brand just to keep them straight. Someone in our crew said Dad gathered them for us so we wouldn't miss them. Maybe he did. My Dad was a cow whisperer who has been gone over 4 years after roaming the mountains for almost 90. Maybe he is still helping lead us and the cattle home. I turn away as I feel emotion begin to rise. Again. For some reason, I am more emotional when I find the live cattle than those that died. I don't know why? Maybe thinking what they went through and I wasn't there to help? And, more frightening, death has become more expected than life.

I completely dread taking my Mom to see this tragedy. She will be 90 in less than a month and still loves the mountains and gathering cows. She is tough but this could break anyone. She worked these mountains with my Dad from 1948 when she was 18, he was 21, and they had just married. She told me in later years that she had always loved the outdoors but really was "sort of afraid of cows" since she had not ever been around them. She never told Dad though and learned to be one of the best trackers and gatherers the mountains have ever seen, knowing every plant, tree and road.

You can learn more from old people. They may not use PowerPoint or Zoom. They may not be elegant in politics, but they have life experience. We are quickly losing that vital perspective from the land before we have allowed them to teach us. Far more valuable than a visiting scholar or great consultant. Local knowledge and observation. I wish we would listen.

I am again angry at everyone and no one. Why did this happen? I am absolutely tired of politicians and politics, from both the left and the right. Shut up. You use tragedies to fuel agendas and raise money to feed egos. I am sick of it. And it plays out on social media and cable news with distorted and half-truths. **On both sides.** Washington, D.C. is 3,000 miles away and is filled with lobbyists, consultants and regulators who wouldn't know a sugar pine from a fir. Sacramento is 100 miles south and feels even more distant than D.C. And to the regulators who write the *Code of Federal Regulations,* the policies and procedures and then debate the placement of a comma, you mean well, I know. And I am sure you are good people. But you are useless when it comes to doing things to help the land. And the "nonprofits" (yea, right), lawyers and academics, this is all too often a game for you to successfully navigate your own institution. "How do I get a grant to study something that if I looked closely, generations before already knew?" Nothing happens on the ground to make change. I do understand that most folks truly care and start with the best intentions.

For those of you on the right who want to blame the left and California, these are National Forest lands that are "managed" by the feds. They have failed miserably over the past 50 years. Smokey the Bear was the cruelest joke ever played on the western landscape, a decades long campaign to prevent forest fires has resulted in mega-fires of a scope we've never seen. Thanks, Smokey.

The U.S. Forest Service is constantly threatened with litigation from extremists who don't want anyone to "use" the Forest. It is to be "preserved." Great job in helping to get us where we are. And I feel bad for Forest Service personnel. Most of them are great people who work there because they love the land like I do. But they are chained to desks to write reports and follow edicts handed down from those who don't know. One size fits all regulations are not a solution in diverse ecosystems.

And, the Forest Service budget is consumed by fire suppression and litigation. What funds are left to actually work on the land?

And, for those of you on the left who want to blame it all on climate change, the regulations at the state and Federal level have crippled—no, stopped—any progress towards changing the unmitigated disasters facing our landscapes. I wonder how many of you have walked the canyons or ridges or seen the wildlife and beauty at a secret stream?

Politicians stage drive by photo-ops to raise money at the fringe. None of us really like you. We just are forced to deal with you. Of course, there are many exceptions and you know who you are. I hate to visit an office to discuss issues when the legislator is far more interested in talking than listening. It seems that nobody can be a centrist and make sense and win. There is plenty of blame to go around on both sides of the aisle.

> *And just maybe it's both—horrible forest management and climate change. Don't you think months of massive smoke covering the West may impact the climate, especially added to our other pollutants? Does it matter which came first? Why not invest in solutions rather than using sound-bites to gin up the base? And locally, we know the solutions. And those investments should be locally conceived and locally driven.*

I grew up hearing the stories from my Dad and Grandad of the "last man out" lighting the forest floor to burn the low undergrowth. Their generations knew to reduce the ladder fuels that spread the fire to the canopy, to open it up for the wildlife. It was a pact between our friends the Native Americans who had managed it this way for 13,000 years, the loggers, miners and ranchers. They knew ecology and botany and wildlife. They worked together because they loved and knew the land.

It was the early 1960s and snow was already on the ground in December on our foothill ranch. I would have been about 4 and holding my Grandfather's hand as he lit some piles of brush on fire to open the landscape. It was the practice he had learned from generations before. And the CDF (now Cal-Fire) crew showed up, put out the fire, and lectured him for burning. My Grandad was the kindest, gentlest and funniest man I have ever known. And he was mad. It was the beginning of the end for our forest home. And it has proceeded at an unprecedented rate.

I am angry. Try a control burn in the winter now and watch someone cite you because it is not an approved "burn day," you had the wrong permit and approval and you might impact air quality. It is beyond moronic. How is the choking air quality that has blanketed the west this past month, when people can't go outside without a mask, a better alternative? Are you kidding me? Bureaucrats and well-intentioned regulators who don't know they don't know have tied our hands, and the blame is shared at the both the state and Federal levels.

Lest you think I am a complete rube, I earned my PhD in Animal Science 35 years ago at Colorado State. I loved teaching and ranching—so I did both. But I am a cattleman at heart. And, I have been involved in industry activities for many years, serving as Past President of the California Cattlemen's Association, current Chair of the California Cattle Council, Chair of the Forest Service committee for the Public Lands Council and Chair of Federal Lands for the National Cattlemen's Beef Association. I have walked the halls of Congress, met with legislators in both Sacramento and DC and I am willing to advocate for the cattle community to anyone who will listen. I have dined with legislators in D.C., Chicago and Sacramento at wonderful restaurants noted for fine dining. The company, food and conversation were enjoyable. And I have had bologna sandwiches and beer in the mountains with ranchers and loggers. Somehow, the air seemed cleaner and the food was better with the latter. Something about straight forward honesty and hard work is appealing.

I invite any legislator or regulator, state or Federal, to come with me to this devastation. Leave your photographer behind, put on boots and let's go. I will buy the bologna. We have created tragedy after tragedy across the West, and we need solutions.

Look at the mega-fires California has experienced in recent years. If you study them closely, almost all of them start on state or federally owned land. Fifty percent of California is owned by the feds or state, land that has unmanaged fuel loads because of the restrictions to do anything on the land. Right now, the only buffer to these disasters are private, well managed, grazed landscapes. They may still burn, but the fires are not as catastrophic and can be controlled. Butte County alone has recently had the Camp Fire which destroyed the town of Paradise, population of 20,000 where almost a hundred people died. And now the Bear Fire where Berry

Creek, a small community of about 1000 residents had at least 14 deaths, an even higher percentage.

Our segmented view of the landscape has led us to tragedy after tragedy. As a rancher on the Forest, I am required, in the name of ecosystem health, to monitor meadow utilization, browse of willows and streambank alteration. Fine. I comply. If I hit 41% meadow utilization I can get a letter of non-compliance since 40% is considered the maximum. The Bear Fire did not leave 60% of the meadow! I wonder if I will get a letter of non-compliance? Again, the forest for the trees.

It is not the Forest Service range conservationist's fault that I have to monitor these three factors. It is the guidelines they were handed. But they are arbitrary and ineffective measures to "protect" the environment, and of no use against decades of unmitigated fuel growth. Can anybody look up and see the meadows and water disappearing? Is the health of the meadow crippled by unchecked understory growth that sucks the water out and allows invasion of conifers? It is easier to blame the cow. Look up. Watch nature. She will talk to you . . . .

I think it is as simple as not seeing the forest for the trees. And in my academic life, it was the norm. I worked with wonderful faculty, staff and students who were committed to research and teaching. However, we rarely looked at the big picture because we were encouraged to publish in our disciplines without seeking out how our work connected with others or how our small piece was part of a larger solution. That "siloed" thinking plagues most bureaucracies and agencies. We only know what we know. And, in most disciplines in the academy, most faculty are now several generations removed from a direct connection with the land.

> *Listen to the generations before. Mega-fires are a recent product of lack of use of fire, less grazing and over-regulation. And if you look at recent history, almost every mega-fire that I can recall has started on state and Federal lands. Mismanagement. And those catastrophic fires contribute to climate change. Yet the guidelines followed by the feds on National Forest and the state on state parks lands are "one size fits all." It is beyond dumb. And no one's fault. And everyone's fault. Listen to the Forest. Listen to the locals.*

The fire in Santa Rosa in 2018 was estimated to produce more CO_2 and pollutants in 1 week than all of the cars in California in 1 year. We have already had six of the largest twenty fires in California history in 2020. The Bear Fire has eclipsed 250,000 acres and is still burning. To me this is very personal, but this is a much bigger problem than my family having our cattle killed.

I get frustrated with experts and consultants who drive by and "know just what to do." For 35 years I have attended conferences, given presentations and listened. What I have learned is solutions are local and specific. What happens in one watershed in Plumas or Butte County may be entirely different in the Lassen National Forest just next door. But experts of all kinds are glad to tell you how to do it. "Let's prescribe graze, use virtual fences, change your timing, change your genetics." Prescribe graze the forest and canyons? Yea. Right. They don't know what they don't know but they will take the honorarium anyway and have a great dinner on your dime. Another game where the people who live here and the land rarely benefit.

I have traveled and given presentations nationally and internationally for decades as the odd "academic cowman." I learned quickly that it is insulting to make suggestions if you don't know the land, the people and the culture. I love these canned "you should do this and this" PowerPoint talks. It is frustrating. My approach has always been "this is what I do and why—it may not fit here so don't force it." I loved those trips not because of what I taught but of what I learned from the locals.

Cattle, like the wildlife, follow the season in this wildland we love. They start at low elevation in June and work east and higher until early October. As leaves begin to change, they start west and down. How and why would you fence this land? Again, an expert from afar who wrote a text or did it in a different ecosystem thought it was a great idea. It is exhausting.

Yesterday was day four of the recovery effort. I now understand what first responders mean when they say, "rescue to recovery." I hold out little hope for live cattle. We have to get to Hartman Bar ridge between the middle fork and south branch of the Feather River. It is the furthest north, most breathtaking and the hardest to access. One road in and one road out, choked with downed and sometimes burning trees. We see a burnt bear cub trying to climb a tree, 2 miles further a mature bear, burnt but staying in the water trying to ease the pain. We give them both a chance because they made it this far. We don't euthanize even though our brains say we should. Our hearts say let them try.

We have about 6 miles of road to make passable to get stock trailers through, but we make short work of it. Sometimes you can travel ¼ mile and sometimes 100′. But chainsaws and strong hands get us there.

> *I have passed several streams today and tried to wade across one looking for cattle. It strikes me as strange. All the creeks have close to double the flow of last week. I see some springs running that haven't been active for years. And it hits me. We have released the water that the brush was sucking from the land. The Native Americans were right again. Observe. Let nature talk.*

We pulled up the grade to Hartman and Whiskey Hill, and there were cattle tracks in the burn! Lots of them. I couldn't believe it. The fire roared up out of the middle fork so quickly I expected nothing to be alive. I had myself prepared. But we found cattle and some in pretty good shape. It was slow going. Incredibly steep and rugged with lost, hungry cattle. In one pocket we picked up 14 head with nary a scratch. Two old cows (12+ years which is old for a cow) and a bunch of young stock. Those old ladies knew where to hide! Wisdom from days gone by.

After a long day, we had 32 alive and loaded. Some may not make it but we had to bring them home to give them a chance. They made it this far. More jarring, though, was to walk down the drainage by the old Mountain House Ridge corral and find 26 dead, spread from top to bottom. That fetid smell of death permeated the walk I used to love.

Even with the dead cattle on Hartman Ridge that we found, why did we find over half alive here and nowhere else? If anything, I assumed this steep ridge gave them no chance at all. And I realized that there had been a much smaller fire here about 5 years ago. The country was more open and the fire moved quickly. Less fuel and more things lived. Trees, wildlife, and cows.

I observed the same phenomenon in the remnants of the town of Feather Falls—where only a school and cemetery remain. The school had over 80 students less than 50 years ago, until the lumber mill closed and the village died. The school was destroyed by fire. The cemetery, however, still stands with green stately pines respecting the graves of mostly Native American veterans with flags at each grave. The cemetery was maintained free of deadfall and litter by family members. All the trees lived.

Day five begins.

We move as fast as we can, opening roads with saws and running four-wheelers down every logging spur. We hope against hope for cow tracks but there are none. Hartman Ridge is about 10 miles long with the only narrow paved Forest Service road in the entire mountains. Nothing new but the cow tracks from those we found yesterday. Nothing at Socrates Spring, Harry Waite's, the Lower Reservoir, DeJonah, Sheep Tank Meadow, Stag Point, Steward Ravine—and a hundred more name places that are being lost. Nothing.

Up by Tamarack Flat, I run into five pick-ups belonging to timber reps from Sierra Pacific, the private land holder who we lease from and who has private property throughout our range. I am walking the logging road looking and listening, as I had run out of gas a mile or so ago. Too much country to cover! They were no doubt shocked to see me in that desolation striding down the road, covered in ash from head to foot. I know most of them. Foresters by trade who, like me, love the land. "It is all gone," they say. Almost. I told them I could show them a few pockets where trees survived. But very few. We are sad and angry together.

By the end of a grueling day, we have seven head loaded. Five of them are cattle we had seen before and were just able to get portable panels to and load, three of which are badly burned and will get a chance for feed and water before they will most likely die or need to be euthanized. We know of three more live cattle that we have seen and not loaded. That may be it. Over 100 brought home, so far, but I will be surprised if eighty live. Many of those who live will have lost their baby calves to fire. **There are no words. 20% of the herd we drove to the mountains on June 1. Maybe.**

Our crew will be smaller today. Rob flies back to his duty station in the army. Kate is back working as a veterinarian. They leave with overwhelming sadness and "we will help any way we can." Most of the rest of our crew have to get back to their jobs, but "are a phone call away with a stock trailer" if we find something to load beyond the two trailers we will haul ourselves. I doubt we will. Kyle and I will start the search, compulsively walking creeks and canyons that we have already searched, hoping something straggles in behind. You never know and you can't quit. That is not who we are.

And now we go on. What will happen? This is devastating emotionally and financially. And I am not sure of the next steps. I do know this: We must change our land management practices if we expect the West to survive. It is best done locally, not from D.C. or Sacramento, but I have tilted at windmills before.

We won't quit. We need to get tougher and stronger. We never have quit for 140 years and I won't be the first. Suffer the bureaucratic maze and try to make incremental change. And, as always, work with nature. I have to. Juni Daley, and the next generation, needs to see the mountains the same way we have seen them forever, to have hot chocolate on a cold fall morning and gather cows. It can't be just stories from her Grandad.

We found an orphan heifer calf today, about 2 weeks old. Her mother didn't make it. Kyle stumbled on her hiding in one of the few living willow patches

along a stream. He followed her for over an hour straight up from the bottom of a canyon. We caught her and she is now on a bottle getting milk replacer. That rescue was good for my heart. My Granddaughter Juni's first heifer I decide! They can grow up together.

We saw life at Fall River today. Green grass trying to sprout at a spring. Life is resilient. So are we. Next year. And the next 100.

Dave Postscript

It is day 12 and we still are at the same pace because we have no choice. We are finding one or two per day that have lived so it is difficult to stop, but that is dwindling so we have to shift our focus to those that lived. It is hard to do. We have put 1,200 miles on the four-wheelers on old logging roads and skid trails in the last few days. I quit counting the number of tires we have ruined and how much chainsaw work we are doing. Unfortunately, today we had to begin euthanizing some of the cattle that we brought home. But they were home, fed and watered.

The fire is still not contained and takes runs depending on the wind. I am not sure what next year will bring.

SUBMITTED STATEMENT BY HON. DOUG LAMALFA, A REPRESENTATIVE IN CONGRESS FROM CALIFORNIA; ON BEHALF OF FEDERAL FOREST RESOURCE COALITION

The 2020 Fire Season Should be the Watershed Moment for Federal Forest Management

The wildfires that came in the late summer of the 2020 Fire Season have created unprecedented challenges for our public and private forest landowners. Yet these fires are just the latest in a series of catastrophic fire seasons over the last decade. The Wallow Fire in Arizona in 2011 scorched over ½ million acres mostly on the Apache National Forest, burning stands of Ponderosa pine in a stand replacing fire because of overly dense conditions. The King Fire of 2014 was one of many serious and fast-moving fires that summer which burned across Federal forests and on to private lands. The summer of 2017 saw a season-long fire siege in Montana and Idaho that stretched until the fall rains arrived, while the Chetco Bar fire blew up late in the season and devastated parts of Oregon.

The fire storms of early September 2020 have more than eclipsed these traumatic experiences. In Oregon alone, about 800,000 acres of forests—about half of which is Federal lands—has burned in the last several weeks. These fires consumed forests at all stages of development, although they largely began during a wind event that brought down powerlines, mostly on Federal lands. In California, about three percent of the land area of the state burned this year, and five of the ten largest fires in state history were burning at one time in September. Three Forests in particular, the Mendocino, the Plumas, and the Sierra, have been impacted. While the final fire perimeters will take some time to establish, it appears that most of the Mendocino has been burned in high intensity fire. The Sierra National Forest, which had experienced a large-scale forest mortality event in recent years, saw the majority of the acres impacted by that event destroyed in the Creek Fire, which is still burning and is expected to burn until Halloween. The North Complex on the Plumas is approaching 300,000 acres and containment isn't expected till mid-November.

We're already aware of two fires—including the Creek Fire on the Sierra National Forest and the White River on the Mount Hood National Forest—that destroyed areas where the Forest Service had attempted to reduce hazardous fuel loads but were stymied because of red tape or litigation. The Crystal Clear Restoration Project on the Mount Hood, which sought to reduce fuels on about 11,000 acres, was the subject of nearly 4 years of analysis and litigation, which led to the Forest Service publishing over 1,900 pages of analysis on this relatively minor project. This analysis concluded that "if a fire were to move through the area without reducing fuels, it would likely be more severe." A portion of the project area burned in intense fire conditions during the White River fire. The project had been sent back to the Forest Service for additional analysis by a misguided decision from the Ninth Circuit Court of Appeals.

On the Sierra, the Musick Fuels Reduction project moved relatively quickly through the analysis process, but the Creek Fire began 2 years almost to the day from the initial scoping effort for the project. The entire project area was destroyed in this highly predictable fire.

The story of this September's Oregon and California fires has been repeated across the National Forest System, as noted in Arizona, Colorado, Montana, and elsewhere. Millions of acres have burned, frequently in uncharacteristically hot,

stand-replacing fires. Some of these events have been primarily wind driven, others have been big and hot enough to generate their own weather. We have no doubt that both a warming and drying climate and the generally overstocked conditions on our National Forests have contributed to both the extent and intensity of recent blazes. The conditions on California's National Forests are emblematic of this problem.

According to Forest Inventory Data and research conducted by Dr. Malcolm North of the Forest Service's Pacific Southwest Research station, by 2015, California's National Forests were carrying an average of over 320 conifer trees per acre. Historically, these forests supported less than ⅕ of that number, about 64 trees per acre. These less dense forests in California were historically able to survive multiple disturbances, including wind, fire, and insect outbreaks. As we've seen dramatically in the last several years, our current, overstocked forests cannot.

This basic pattern repeats itself across of much of the National Forest System. Forests which typically had frequent fires are overstocked, full of suppressed trees that help create intense fires they cannot survive. Forest types adapted to higher intensity fires lack age class diversity, meaning that fires which would have burned in a mosaic of intensities instead scorch entire watersheds and destroy wildlife habitat. Together, they create a dangerous setting in which we ask our firefighters to risk their lives, and which threatens entire communities with obliteration.

We appreciate the opportunity to submit this testimony, and provide comments in two major areas, first, the immediate response required to begin restoring these forests so they can once again sequester carbon and begin to reestablish wildlife habitat and future timber supplies, and second, taking steps to make it easier to manage acres on the National Forest that are not in restricted land uses such as Wilderness and inventoried roadless areas.

Immediate Response: Focus on restoring access for forest management, prioritizing reforestation, converting NEPA ready projects to salvage: While we are still sorting through the results from this fire season, it's clear that there are several main tasks which will require immediate action and—it seems likely—a significant investment of additional resources: restoring access, prioritizing reforestation, and allowing NEPA ready projects to go forward without delay.

Damage to timber along both state highways and Forest Service roads will severely restrict access to these forests if immediate action is not taken to remove hazard trees and restore damaged infrastructure. Failure to quickly remove hazard trees will only increase future fire danger by restricting access for firefighters and egress for homeowners, residents, and recreationists.

Congress should immediately authorize the Forest Service and Bureau of Land Management to conduct roadside hazard tree removal out to 200′ on either side of roads impacted by wildfires in the last 2 years. Existing administrative authorities for such removal are limited, and if experience is any guide, in many areas, the Forest Service will opt to close roads indefinitely unless they receive relief from administrative review and adequate funding to complete this task.

We also believe that a significant contributing factor to increased fire activity in the west is decreasing road access to our Federal lands. This factor is often overshadowed by both climate change and fuels accumulation when the topic of wildfire is discussed in public forums. However, we believe that the deteriorating road infrastructure on our National Forests has also significantly contributed to recent spikes in wildfires. This deterioration has been a result of both reduced funding for road maintenance and the Federal agency's subsequent direction to reduce their overall road networks to through road decommissioning. The outcome is a forested landscape that is increasingly inaccessible to fire suppression agencies, delaying direct attack on nascent fires. Reversing this trend is vital to effective initial attack, as well as providing safe evacuation routes for impacted communities.

Second, the Forest Service should prioritize salvage and reforestation of as many acres as possible. In many places, salvage logging can help take some of the standing dead trees off the landscape. Using these trees for lumber will lock up carbon in long-lasting wood products while creating better growing conditions for the next stand of trees, which will sequester more carbon. The Forest Service should be able to remove hazard trees and take aggressive steps towards reforestation on non-reserved (*i.e.,*—not Wilderness or Inventoried Roadless Areas) acres without further environmental review. The Forest Service should consider using aerial seeding techniques on high-cost, steep slope acres to keep reforestation costs down.

Third, the 2020 fires damaged millions of board feet of timber under contract, and tens of thousands of acres which had recently been through NEPA review in preparation for fuels reduction work. While some of the volume under contract will have lost all remaining value, Congress should direct the Forest Service and BLM to rapidly survey burned areas, and allow the agencies to convert projects that were dam-

aged to salvage sales without further environmental review if they determine that the project still meets the original purpose and need statement. These projects should be converted to salvage sales within 60 days. All such sales should be allowed to proceed under HFRA's judicial review provisions.

Going Forward: We Need to Manage Unreserved Forests Like Their Future—and Ours—Depends on it.

Since the mid-1990's, Forest Management on National Forests west of the Mississippi has proceeded from one relatively simple premise: That the best way to conserve sensitive wildlife species is to not manipulate forests through management or timber harvests. This has been expressed through recovery plans and critical habitat designations for a wide variety of species, including the various Spotted Owls, Canada Lynx, Grizzly Bear, Wolves, and others.

This 'hands off' approach to management was adopted, in our view, without much regard for how much of our Federal estate is already off limits to much—if any—management. Fully ⅓ of all National Forest acres in the Northwest Region (Oregon and Washington) are either Congressionally designated Wilderness Areas or Inventoried Roadless Areas. In California, the total in these two restrictive categories is 47 percent. Nation-wide, some 94 million acres of National Forests is either Wilderness or Roadless, fully 48 percent of the entire National Forest System. This tally does not include the millions of acres set aside as National Parks, including over 1.7 million acres of mostly forested National Parks in California. Millions more acres are difficult to manage because of assumptions about harm to species due to disturbance from harvest. As we've seen, if we don't manage unreserved forests, we will wind up with disturbances from wildfires far more disruptive than a modest thinning project.

Americans should be proud of the conservation legacy they have created by setting up the Federal land management agencies and establishing protected areas like Wildernesses. However, the simple fact is that when the Forest Service tries to manage unreserved Federal lands, activist groups have abused a series of well-meaning laws to delay or stop needed management. As these forests mature after a century of fire suppression and decades of passive management, the slow pace of management the Forest Service has been able to achieve is simply slower than the fires we are experiencing.

The Congress has, over the last 17 years, provided the Forest Service with some tools which can help them put forest management projects on slightly faster tracks. The Healthy Forest Restoration Act was first passed in 2003, and has been amended several times, including in the 2014 and 2018 Farm Bills. The Forest Service has a few legislated Categorical Exclusions, Designation by Prescription authority, Good Neighbor Authority, and some other tools to expedite the NEPA process. This Committee deserves much of the credit for enacting these laws.

While we've seen an uptick in management, and a slow increase in timber harvests in the last 12 years, we still see Forest Service staff shy away from managing what should be unreserved acres because of concerns that harvest will disrupt wildlife habitat. Instead of managing unreserved lands, we see small projects which leave many overstocked acres untouched, and even these go forward only after a laborious process that often involves administrative objection and litigation.

We are aware of legislation, including H.R. 7978, that would authorize a few larger projects on some National Forests, while also allowing work on some fuel and fire breaks. We are supportive of the concepts in this bill and look forward to expanding them to make them more relevant to the scale of the challenges we are confronting.

Passive management, reduced access, combined with climate change and the development of homes in the wildland urban interface, have led us to spot where wildfires have likely caused more emissions than either cars or electric power generation in both Oregon and California this year, according to some early estimates. An equally passive approach to restoring these forests—and managing the remainder outside of Wilderness areas—will not help the global carbon balance. It's time for Congress to weigh in here in favor of actively managing unreserved lands. Leaving the Forest Service to wrangle with environmental litigants and the vagaries of the court system is not an option.

We look forward to working with this Committee to restore our National Forests so that future generations can look back and thank us for the legacy we are passing on to them.

About the FFRC: FFRC is a national coalition of wood products companies, local governments, conservation groups united by concern for the National Forests. FFRC supports improving the management of the Federal lands to support healthy forests and vibrant rural communities.

SUBMITTED STATEMENT BY HON. DOUG LAMALFA, A REPRESENTATIVE IN CONGRESS FROM CALIFORNIA; ON BEHALF OF DEE SANDERS, GENERAL MANAGER, TRINITY RIVER LUMBER COMPANY

August to September

It is Monday morning and I am driving north on Interstate 5 in northern California.

Off to the west I can see the smoke rising from a few fires started from the recent lightning storm the day before. I am also aware that there are some other lightning caused fires started across the north end of California. Not unusual for late August and September in northern California.

My mind quickly focuses on the hope that the U.S. Forest Service will quickly get on top of the fire starts and not try and manage the fire with the current risky extreme conditions. We have burned so many acres in the last several years by not being aggressive enough at the start.

Unfortunately, very few of those acres have been logged and reforested after the devastation but only left to grow back as brush fields to fuel future fires.

I think of the decline in Forest Management over the last 50 years since my career started in the National Forest of northern California. How did we get here? A little bit at a time. Passing laws with good intentions only to tie the hands of the professionals hired to manage the forest we are trying to protect. Unfortunately, again we have destroyed all the resources we were trying to protect, Fish, Wildlife, Timber, Recreation, Water and clean air. Oh! How I wish for some fall days that were not filled with smoke.

Arriving back home I drive by our local airport to see several helicopters that have been brought in to provide support for fighting fire started in the Wilderness Area. Hopefully, the Forest Service is aggressive and not risk burning up a large acreage.

It is now several weeks later, and the weather forecast is for strong north winds early in the week. The lightning fires are still burning, and my concern grows regarding the potential for the development of a catastrophic event.

It has happened again, we now have several very large fires with the loss of life, homes, businesses, and resources. Some of the fires grew faster in size than any fires in history, burning over 100 acres a minute. The Wilderness fire (Red Fire) that was a few hundred acres to start with and had several helicopters available to fight is now over 90,000 acres. The August complex is now over 800,000 acres doubling the largest fire in California history from 2 years ago, reaching from the middle of the Mendocino National Forest into the Shasta-Trinity National Forest on over to the Six Rivers National Forest. The North Fire is w[e]ll over 200,000 acres and destroyed the community of Berry Creek with the loss of life and homes. The community of Happy Camp was destroyed by the Slater fire.

Here is a quote from a rancher with grazing permits on the Plumas National Forest, after the destruction of the Bear Fire (Part of the North Fire).

> "I cry for the mountains and the legacy lost.
>
> It is almost midnight. We have been pushing hard for 18–20 hours every day since the Bear Fire tore through our mountain cattle range on September 8th, and there is so much swirling in my head I can't sleep anyway. The fire destroyed our cattle range, our cattle, and even worse our family legacy. Someone asked my daughter if I had lost our family home. She told them, ['']No, that would be replaceable. This is not![''] I would gladly sleep in my truck for the rest of my life to have our mountains back.
>
> I am enveloped by overwhelming sadness and grief, [then] and anger. [I'm] angry at everyone, and no one. Grieving for things lost that will never be the same. I wake myself weeping almost soundlessly and it is hard to stop.
>
> I cry for the forest[,] the trees and streams and the horrible deaths suffered by the wildlife and our cattle. The suffering was unimaginable. When you find groups of cows and their baby calves tumbled in a ravine trying to escape, burned almost beyond recognition, your try not to [retch]. You only pray death was swift. A fawn and small calf side by side as if hoping to protect one another. Worse, in searing memory, cows with their hooves, udder and even legs burned off who had to be euthanized. A doe laying in the ashes with three fawns, not all hers I bet. And you are glad they can stand and move, even with a limp, because you really cannot imagine any more death today. Euthanasia is not pleasant, but sometimes it's the only option. But you don't want more suffering. How many horrible choices have faced us in the past 3 days?"

The company I work for has lost all or portions of seven timber sales, that we have under contract on the Plumas, Mendocino, and Six Rivers National Forest, in

the current fire siege. Operations were ongoing in three of those sales. Now the questions becomes, how fast can we get the Forest Service to move and make a decision on how we can go forward with operations on the timber sales destroyed?

Will we be able to harvest and get the forest on the road to recovery or will we see hundreds of thousand acres left with no rehab and nothing replanted.

Why isn't the Chief of the Forest Service in Congress everyday pounding on your desk, asking for help in giving the Forest Service some room to deal with the devastation.

[Or] will we sit on our hands, writing environmental documents, while the timber goes to waste and nothing gets replanted.

Our National Forest's future is in your hands, please help.

SUBMITTED ARTICLE BY HON. DUSTY JOHNSON, A REPRESENTATIVE IN CONGRESS FROM SOUTH DAKOTA

Rapid City Journal

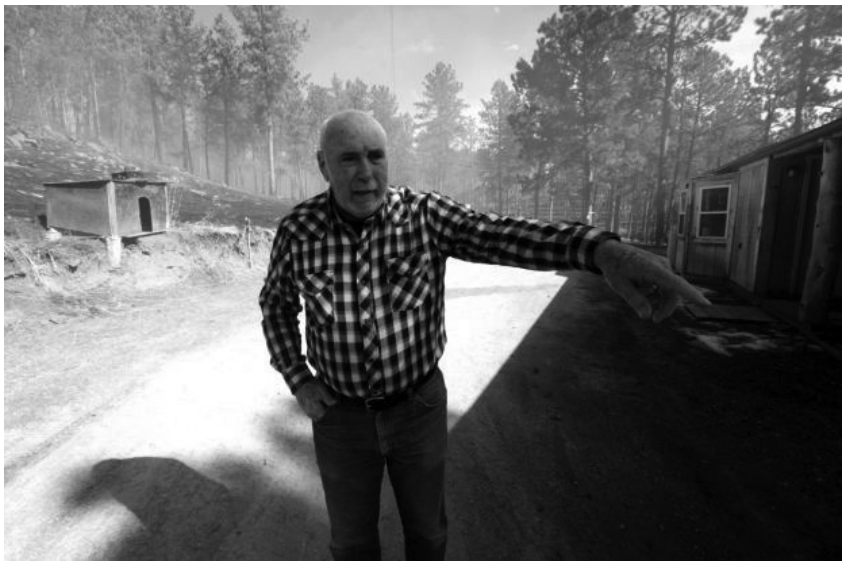
[*https://rapidcityjournal.com/news/local/blaze-burns-60-acres-more-fires-feared-without-timely-precipitation/article_b495e733-07b1-5cd6-8d09-a5e2265610bb.html*]

Blaze burns 60 acres; more fires feared without timely precipitation

Seth Tupper (*https://rapidcityjournal.com/users/profile/Seth Tupper*)
Mar. 12, 2015, Updated Feb. 1, 2016

Winston Cadotte, of the South Dakota Department of Agriculture Black Hat Crew, works on the North Pole Fire Wednesday morning west of Custer. The fire started on Tuesday and burned about 60 acres.

Chris Huber, *Journal* staff



The North Pole Fire west of Custer burned just feet from Barney Fleming's home but caused no damage thanks to firefighters using a backburn technique.

Chris Huber, *Journal* staff

The North Pole Fire burned roughly 60 acres of ground Tuesday west of Custer. Strong winds from the south drove the fire. but most of the burning was contained to the grass and didn't get into the tree canopy.

Chris Huber, *Journal* staff

Eric Johnson cleans up a hot spot Wednesday morning west of Custer while working at the North Pole Fire.
Chris Huber, *Journal* staff

John Stahl sprays out hot spots Wednesday morning at the [] North Pole Fire west of Custer. The fire mostly burned grass along the ground and spared many of the pine trees.
Chris Huber, *Journal* staff

Firefighter Ben Maisel works on the North Pole Fire Wednesday morning west of Custer.
Chris Huber, *Journal* staff

Chris Bennett left, and Eric Johnson work on hot spots Wednesday morning at the North Pole Fire west of Custer.
Chris Huber, *Journal* staff

Custer | It was a scene that already seems familiar in this warm, dry late winter:

Eight soot-covered, hard-hatted, gear-laden firefighters rested on the ground alongside Linda Fleming's driveway at noon Wednesday, munching on sub sandwiches after taming a nearly 60 acre wildfire.

"They've done a wonderful job," Fleming said through smoke from the still-smoldering fire, "and I don't think they get thanked enough."

Around 2 p.m. Tuesday, Fleming spotted smoke in the forested hills above the house she shares with her husband, Barney, about 7 miles west of Custer along S.D. Highway 16. She thought someone might be carelessly burning trash, so she called the local sheriff's office. Then she got a better vantage point and saw flames about 500′ from her home and the couple's nearby rental cabins.

Firefighters arrived and worked to contain the fire, which grew to 59.3 acres on mostly Forest Service land. No structures were known to have sustained significant damage, but the fire got within a few yards of some dwellings.

The blaze was named the North Pole Fire, because North Pole Road leads into the affected area. The cause was still under investigation.

The mood at the scene was calm by Wednesday afternoon, but there was widespread anticipation of a busy and early fire season if the Black Hills area doesn't receive significant precipitation soon.

Jared Hohn, fire management officer for the Forest Service's Hell Canyon Ranger District, said the lack of snowpack has exposed a lot of dormant grass and other dry vegetation, which can be fuel for fires.

"Next week, if we get a heavy rain, we could have an early green-up, which would then alleviate a lot of the threat for large fire growth," Hohn said.

Without that precipitation, the green-up will be delayed and the fire risk will remain heightened. On Wednesday, the official fire danger ratings throughout the Black Hills were "very high" to "extreme," the two highest ratings on the five-point scale.

Last weekend, the Rapid City Fire Department battled two grass fires and went to a third that was out by the time firefighters arrived. On Friday night, Feb. 6, near Rockerville, a fire ignited by carelessly discarded ashes from a stove or fireplace wasn't fully controlled until the afternoon of Monday, Feb. 9.

Even as crews were at the North Pole fire Wednesday afternoon, firefighters with the South Dakota Division of Wildland Fire Suppression and the Hayward, Hermosa, and Keystone volunteer fire departments jumped quickly on a fire threatening a home in the area of Turkey Ridge and Ghost Canyon roads.

The fire, burning in grass and timber, grew to about 7¼ acres before its forward advance was stopped around 5:15 p.m., about 90 minutes after it was reported.

As of Wednesday evening, the North Pole Fire was 60 percent contained. Officials planned to lift all road closures by 8 p.m. Wednesday, according to Jeni Lawver of the South Dakota Division of Wildland Fire Suppression.

Mop-up operations will continue on Thursday. Smoke plumes will be visible for the next several days while crews continue to work in the area extinguishing burning stumps and ground litter in the fire's interior, Lawver said.

The area scorched by the North Pole Fire previously was thinned by loggers who removed some of the fire's potential fuel. Most of the fuel was close to the ground, in the form of dry, dormant vegetation that grew thick during last summer's plentiful rain. The fire fed on that material, leaving behind a carpet of charred pine needles and grass that looked like thick, black tufts of horsehair.

Forest Service firefighters and others from several area fire departments, along with state workers and Department of Corrections inmates, used hand tools and bulldozers to dig flame-stopping lines around the fire and also used hoses at the fire's edge. An estimated 80 to 90 firefighters were on scene during the fire's peak.

Because the fire stayed low to the ground where the fuel was, tree damage was minimal. The bottom 2′ to 3′ of some trees were charred, but many firefighters at the scene said they expect most of the trees to survive.

Moderate winds fanned the fire only minimally, pushing it to the north-northeast. The cool night and morning conditions also were favorable to the firefighting effort.

Scott Wheeler, the division supervisor for the fire and an assistant fire management officer with the Hell Canyon Ranger District, said fighting the blaze felt similar to controlling a prescribed burn.

"It just happened to not be planned," he said.

Wednesday morning, Forest Service firefighters were on "mop up" duty, which included pulling hot embers away from potential fuel sources, spraying foamy water that soaked into hot spots, and using picks and shovels to expose hot areas to the cool morning air.

Wheeler said some firefighters would remain on the scene for at least another day, and then would patrol the area regularly for several more days.

There were no forced evacuations, and the Flemings stayed in their home Tuesday night as firefighters stood guard next to firetrucks in the driveway.

Barney Fleming, a retired veterinarian formerly of New Orleans, said the fire was concerning but not nearly as alarming as a Louisiana hurricane.

"We stayed in our house last night and I slept like a baby," he said.

Contact Seth Tupper at *seth.tupper@rapidcityjournal.com*.

SUBMITTED LETTER BY JAMES D. OGSBURY, EXECUTIVE DIRECTOR, WESTERN GOVERNORS' ASSOCIATION

September 23, 2020

Hon. ABIGAIL DAVIS SPANBERGER,
Chair,
Subcommittee on Conservation and Forestry,
House Committee on Agriculture,
Washington, D.C.;

Hon. DOUG LAMALFA,
Ranking Minority Member,
Subcommittee on Conservation and Forestry,
House Committee on Agriculture,
Washington, D.C.

Dear Chair Spanberger and Ranking Member LaMalfa:

In advance of the Subcommittee's September 24, 2020 hearing, *The 2020 Wildfire Year: Response and Recovery Efforts,* attached please find two Western Governors' items related to wildfire, forest, and rangeland management in the West:

- Western Governors' Association (WGA) Policy Resolution 2017–10, *National Forest and Rangeland Management,* and;
- The June 2017 Special Report for the Western Governors' *National Forest and Rangeland Management Initiative.*

I request that you include these documents in the permanent record of the hearing, as they articulate Western Governors' policy positions and recommendations on these important issues.

Thank you for your consideration of this request. Please contact me if you have any questions or require further information. In the meantime, with warm regards and best wishes, I am

Respectfully,

JAMES D. OGSBURY,
Executive Director.

ATTACHMENT 1

Western Governors' Association

Policy Resolution 2017–10 National Forest and Rangeland Management

A. Background

1. The American West encompasses a huge landmass representing 2.4 million square miles or over ⅔ of the entire country. Over 112 million people live in these states and they reside in large, densely populated cities, smaller cities and towns and in rural areas.
2. Perhaps more than any other region, terrain, forces of nature, and land ownership patterns in the West underscore the purpose and vital need for a more active Federal role in forest management. Western states include more than 75 percent of our National Forest and Grassland system. These public lands serve as critical economic drivers, and they provide numerous conservation benefits, water supply, and recreational opportunities for Western communities and the nation.
3. States have a particular interest in improving the active management of Federal forest lands. State governments have trust authority over water, wildlife and forest resources, along with primary authority and expertise to protect community health and safety. Poorly managed forests can have significant and broad impacts on the landscapes and communities of the West, including negative impacts to air quality and public health, degradation of rivers and streams and associated water quality (including drinking water), reduced forage for domestic livestock, impaired habitats for wildlife and fish, and the loss of forest products and associated jobs.
4. Relative to decades past and other forest landowners, forest managers today operate under a constrained decision space as they work to address contem-

porary issues such as climate change, invasive pests and diseases, habitat diversity, fuel build-ups and fire risk, and legacy impacts. Adding to this challenge are concerns about the economic and social vitality of rural communities that experience impacts from reduced timber supply and compromised forest health. Displaced workers, declines in school enrollment, aging demographics, property loss, business closures and revenue impacts due to wildfire, and high unemployment are not uncommon to these communities.

5. States are managers as well, and many western states own extensive public land holdings that require forest products infrastructure to achieve community vitality and land management goals, including ecological restoration objectives and healthy and resilient forests.
6. The U.S. Forest Service business model has historically been based on a combination of Federal appropriations that were supplemented with revenue from resource sales and fees. Until the early 1990s, the Forest Service was a net contributor to the Federal Treasury. Over the past 20 years, timber sales have dramatically declined.
7. In addition, the last decade has seen several large, very expensive wildfires, which have increased the U.S. Forest Service wildfire suppression costs from 13 percent of the agency's FY 1991 budget to nearly 50 percent over the last several fiscal years. Consequently, under the current agency budgeting framework, forest management, hazardous fuels reduction, habitat improvement, and outdoor recreation programs have been negatively impacted across National Forests and Department of [the] Interior lands.
8. An April 2015 study by the U.S. Forest Service, the *Collaborative Forest Landscape Restoration Program 5 Year Report, FY 2010–2014,* found that the past century of wildfire suppression and legacy management practices have contributed to forests being overstocked and primed for larger and more intense blazes, and that changes in land use and increasing social pressures make it difficult for the agency to let fire play its natural role of clearing the forest understory in certain forest types. Active forest management has historically played a pivotal role in the growth and mortality cycle of forests to manage fuel loading, which in turn can reduce fire-fighting costs and improve habitat resilience. Today, the U.S. Forest Service estimates that roughly 90,625[2] miles—an area larger than Utah—is at high or very high risk of severe wildfire and in need of treatment.
9. Insect infestation and disease have damaged many of the forests throughout the West. Severe drought conditions that are impacting western states, particularly California, have only exacerbated insect infestations and tree mortality. The impacts go well beyond fire risk, and timber and fiber production are negatively impacted, threatening the viability of the surviving forest product infrastructure. The significant decline in forest health has also created serious threats and challenges to watershed integrity, wildlife and fisheries habitats, recreational uses, businesses and tourism. All of these impacts present substantial challenges for forest-dependent communities across the West.
10. The dire forest conditions, unmet management needs, and the failure to provide lasting protections for some landscapes have brought diverse stakeholders together to find solutions. Community collaboration on forest health projects is robust in numerous places across the West forging broad agreements among diverse stakeholders on projects that encompass fuels reduction, fiber production, habitat restoration, long-term protection for critical areas, and other community objectives. It is not uncommon to find mill owners, hunters and anglers, loggers, small business owners, conservationists, and local elected leaders working together around the table.
11. Collaborative planning and project implementation across National Forests and state and private forest lands on a larger scale allows for more diverse interests to address their particular needs for a landscape or a watershed. Taking a broad look at a landscape for planning purposes minimizes the challenges associated with managing lands for the benefit of a particular species or to address a specific need. Well-planned projects that are strategically placed across a landscape can result in a higher level of benefits than those that are more randomly or opportunistically placed. Processes associated with planning and implementing a project have become so time consuming and expensive for National Forests in particular that a disincentive often exists for their managers to proceed with management actions that are needed to attain desired ecological, social, and economic objectives.

12. Collaborative efforts have shown initial successes in reaching consensus, but there is a shortage of formal mechanisms that encourage their creation in areas with conflict or reward their success within the context of public process. Further, there is little to no formal incentive for the management agencies and collaboratives to ensure collaborative work happens in a timely and efficient manner that achieves a pace and scale of management that matches the ecological, social, or economic needs of public and private forestlands and surrounding communities.
13. Despite this good work the full benefits of these collaborative efforts have not been realized on the land. Working constructively with collaborators requires resources to be productive and the Federal agencies often lack the necessary staff and funding. In addition, the Federal agencies have sometimes been reluctant to embrace collaboration, because they either have unclear legal authority to favor collaborative efforts or don't welcome the input.
14. Further, and even when collaborative forest health projects enjoy broad support from diverse stakeholders and the agencies, administrative objections and litigation remain a too frequent outcome. One result is that community collaborative efforts become fatigued, and future opportunities are lost. Another outcome is that Forest Service restoration projects often go through exhaustive, time-consuming analysis, driving up costs and preventing the agency from scaling up management to meet the scope of the problem.
15. Today the costs associated with planning and implementing a management project on National Forest lands are significantly more than those of the private sector. This cost, along with the time associated with drafting, analyzing, incorporating public involvement, and responding to appeals and/or litigation at the project level, lead many Federal managers to focus their limited staff, funds and time on projects with the least likelihood to be challenged. This approach does not adequately address the larger socioeconomic and ecological needs of our National Forests and dependent communities.
16. The 2014 Farm Bill provided the Forest Service with several new tools to accelerate forest restoration. A Governor could nominate landscapes substantially affected or threatened by insects and disease to the Secretary of Agriculture for designation as Priority Areas for expedited NEPA and administrative process and judicial review. 16 Western Governors nominated areas for this designation, the vast majority of which were approved by the Secretary of Agriculture.
17. In addition, the new farm bill authorities provided for a categorical exclusion (CE) for insect and disease projects on areas as large as 3,000 acres that are the product of a collaborative effort. The new CE has the potential to greatly magnify the role of collaboration and strengthen the results of those efforts, and to reduce the time and cost for forest health projects, resulting in on-the-ground restoration work that is accomplished more quickly and across a larger landscape. Not yet in wide use, the farm bill also added expanded "Good Neighbor" authority that enhances the ability of states to partner with the Forest Service and implement projects on Federal land.
18. The shortcomings of Federal forest management have also impacted local governments directly. In 1908, when Congress created the National Forest System, it also passed the National Forest Revenue Act in 1908 directing the Forest Service to share 25 percent of gross revenues with local governments. Then in 1976, Congress passed "Payments in Lieu of Taxes" (PILT) legislation providing Federal payments to local governments regardless of gross revenues that result from timber harvest and other forest management activities. After revenues from the sale of timber dropped substantially, Congress passed the Secure Rural Schools and Self Determination Act (SRS) in 2000, allowing counties to choose between a payment based on historical average and the 25 percent revenue share. SRS has expired several times, and PILT has been subject to funding uncertainty as well. Western Governors support efforts to ensure counties and states continue to receive payments under the Secure Rural Schools program, and that these payments should be based upon historic Federal land management receipts. These payments are vital to providing state and county public goods and services, such as roads, emergency response, and wildlife and natural resources protection in communities adjacent to Federal lands.
19. There have been several efforts in Congress to reform Federal forest management, and recent legislation reflects the continued frustration of Congress as

it attempts to find a path forward to address this issue in a productive, bipartisan manner.

B. Governors' Policy Statement

1. Western Governors support sound forest management policies that maintain and promote ecologic, economic and social balance and sustainability.
2. Today, the Forest Service's forest management program is primarily a byproduct of restoration projects intended to reduce wildfire risk and/or improve forest resilience, water quality, watershed health, key wildlife habitat, and/or intrinsic value. Western Governors recognize and support these forest values, but also believe it is reasonable to expect that some portion of the Federal landscape will be focused on long-term, ecologically-sound forest management—where jobs, forest products, and revenues are priorities and generated through sound stewardship.
3. Western Governors encourage the Forest Service to develop and help fund new technologies and wood based markets for some non-traditional products. USDA's Forest Products Laboratory is a hub for research and innovation. We should continue to encourage the application of their knowledge and experience in a practical way in the western United States so that some of the federally funded infrastructure that develops from such efforts could first be demonstrated on private lands. Also, since Federal forests are now more focused on large landscape forest health projects, there is a good opportunity to ensure we have a broader suite of outlets, in addition to traditional sawmills and existing biomass facilities.
4. We can achieve sustainable forest management across every acre of our Federal and non-Federal forestlands while including an equitable mix of uses to meet many ecological, social, and economic needs.
5. Western Governors believe that our citizens are capable of rolling up their sleeves and working together with the Federal agencies to address difficult issues such as forest management, and that not enough is done to incent and reward the current collaborative work that is occurring across the West.
6. It is important to retain citizens' rights to question governmental decisions through administrative and legal means. However, there are situations where the threat of litigation is a key factor resulting in either delay of agency activity and progress or the stifling of productive collaborative work. The lack of funding and resources for Federal agencies is also a significant factor. Western Governors believe an effort needs to be made to better understand the scope and scale of this problem. There may be an opportunity to further streamline appeals and litigation associated with National Forest decision making in association with other changes designed to incent collaboration and provide more certainty as to outcomes.
7. The 2014 Farm Bill authorities are significant expansions of Forest Service authority and are powerful new tools to boost forest management, promote collaboration, and limit the impacts of administrative objections and litigation. Western Governors encourage Federal agencies to fully implement the tools provided in the 2014 Farm Bill.
8. Western Governors are on record as strong supporters of ending the practice of fire borrowing, and Congress should pass legislation to fund Federal wildfires off-budget as many states already do, and ensure the Forest Service budget for forest restoration, recreation, road maintenance, hazardous fuels reduction, and wildlife/watershed protection is fully restored.
9. Western Governors believe clear, coordinated and consistent application of Federal vegetation management practices is integral to maintaining the health of western forests, preventing dangerous and damaging fires, and maintaining grid reliability. The Governors support effective and efficient cross-jurisdictional coordination that enables utilities to undertake necessary vegetation management actions on Federal transmission rights-of-way—and to do so without fear of strict liability imposition for necessary vegetation management actions taken adjacent to transmission rights-of-way.
10. Western Governors are well-suited to engage in a productive and bipartisan dialogue on the broader topic of Federal forest management reform, engaging westerners and examining on the ground realities across western landscapes. Western states are land owners and managers and well understand the challenges associated with forest management under changing social, economic and environmental conditions.

11. A meaningful and successful discussion of forestry reform in the West will require a transparent and inclusive process that engages those diverse interests who have a direct stake in forest management outcomes. The impacts of forest management are felt most directly by those who live, work and recreate in and adjacent to those forests, so the discussion needs to begin there. This is perhaps where Western Governors can provide the most productive bipartisan contribution to this national discussion. Our nation's forests belong to all Americans, and in the end and through their elected representation all Americans will determine the scope and success of any efforts to reform forest management.
12. There is significant dissatisfaction in the West among many stakeholders with the current level of National Forest management. There is a general sense that the current level of forest management is not meeting anyone's needs, whether it's putting logs on trucks, protecting water quality, addressing fire risk, protecting key habitats and landscapes, providing for recreation, or other important community needs. Successful forest management reform will achieve a balance among all of these important objectives, and provide the opportunity for certainty such that diverse interests will be encouraged to work together to achieve shared outcomes.
13. It is time to reconsider the business model of the U.S. Forest Service. Western Governors believe it may be possible to reform the Forest Service business model in a manner that reduces project planning costs, sources funds from non-Federal partners and recognizes that the agency no longer generates large revenues from commodity programs.
14. Any discussion of forest management reform must include consideration of the financial relationship between the Federal and local governments, the existence of PILT, and the limited tax base for counties with significant Federal ownership.
15. Western Governors support the recommendations identified over the course of the WGA National Forest and Rangeland Management Initiative, and incorporate the recommendations into this resolution by reference.

C. Governors' Management Directive

1. The Governors direct the WGA staff, where appropriate, to work with Congressional committees of jurisdiction and the Executive Branch to achieve the objectives of this resolution including funding, subject to the appropriation process, based on a prioritization of needs.
2. Furthermore, the Governors direct WGA staff to develop, as appropriate and timely, detailed annual work plans to advance the policy positions and goals contained in this resolution. Those work plans shall be presented to, and approved by, Western Governors prior to implementation. WGA staff shall keep the Governors informed, on a regular basis, of their progress in implementing approved annual work plans.

Western Governors enact new policy resolutions and amend existing resolutions on a bi-annual basis. Please consult ***http://www.westgov.org/resolutions*** *for the most current copy of a resolution and a list of all current WGA policy resolutions.*

ATTACHMENT 2

Special Report

Western Governors' National Forest and Rangeland Management Initiative

The Chairman's Initiative of Montana Governor Steve Bullock
June 2017

Dear Friends and Colleagues:

Like many of you, I had the luxury of growing up in the West. As a kid, I enjoyed a wealth of outdoor activities: hiking in the forests outside Helena, fishing in some of Montana's best rivers and streams, camping in our National Forests and public lands and visiting Yellowstone and Glacier National parks, and standing in awe of the literal "Big Sky" that surrounds us on the open range.

As an adult, I still enjoy those same activities, and retain a strong sense of wonder and appreciation for our western lands as I begin to share those experiences with my kids. Most of us living here feel the same way: we love the land, the people, the life we are able to live in these beautiful places. Although the western economy is increasingly diverse, many of us still make a living from the natural resources found on our public lands: as ranchers, loggers, mill workers, hunting and fishing

guides, and in the tourism industry. The good news is that these lands are diverse and plentiful enough to support us, regardless of how we may depend upon them.

Most of us, however, also realize that these special places are at risk. Our wildfire seasons are longer, and more expensive, and they present increasing risks to the public and firefighters. Our forests and rangelands face unprecedented threats from insects, disease and invasive species. As the health of these lands declines, we risk not only our quality of life, but fish and wildlife habitat, clean and abundant sources of water, and the diverse economic opportunities that are inextricably tied to them. One sector of our economy is at particular risk: our forest industry is struggling to secure a predictable supply of timber and compete in a global marketplace. Mill closures are eliminating markets and jobs that are critical to our rural communities and that provide the resources to help pay the costs of restoring these landscapes.

As these same conditions converged in Montana, we responded by coming together to seek solutions. Through our Forests in Focus Initiative, state and Federal agencies and stakeholders representing very divergent interests have invested in collaborative projects that restore the health and resiliency of our forests and rangelands, and support the communities that depend upon them. Our results to date have been remarkable: we've invested over $2 million to accelerate 27 Federal projects that will reduce wildfire risk, restore watersheds, support over 3,000 jobs, and eventually produce over 160 million board of timber. Equally important, we are building a foundation of greater cooperation that will help achieve even more in the future.

Montana was the first state in the nation to implement a stewardship project on U.S. Forest Service lands, and among the first to sign a Good Neighbor Agreement and implement a project using that new authority. We are focused not only on outputs, but on outcomes as well: healthier forests, more resilient watersheds, and as I learned from a young man from Seeley Lake, helping Montana's hardworking timber families feel more secure about their future.

Responsibly managing our western forests and rangelands is a vexing concern for anyone who loves the West. From private landowners to conservation advocates to the agricultural and forest industries that provide jobs, food, and homes for our people, we all want to see these landscapes sustainably managed. As Chair of the Western Governors' Association (WGA), I saw an opportunity to build upon Montana's successes and learn from our neighbors through the *National Forest and Rangeland Management Initiative.*

The Initiative is a mechanism to bring states, Federal land managers, private landowners and other stakeholders together to discuss issues and opportunities in forest and rangeland management. Although achieving balance between competing interests in the West is difficult, we believe it is possible to provide economic opportunities for our citizens, while conserving and protecting the spectacular landscapes that inspire residents and visitors who travel across the world to experience them.

Through this Initiative, we conducted four workshops, four webinars, and solicited comments to gather information on what is working, and how we need to improve. Hundreds of people have participated, and we've learned that throughout the West people are working together to build and achieve a shared vision for these landscapes and the communities that rely upon them. It has been an encouraging start to a process that I hope will continue to thrive in the years ahead.

The recommendations in this report are not exhaustive—nor do they offer quick fixes. The problems we face took decades to develop, and the solutions will take patience, dedication, and persistence from all partners to implement. I hope this report will inspire further commitment among western Governors, Federal agencies, nongovernmental organizations, Tribal and local governments, businesses and private landowners to continue working together, on a bipartisan and collaborative basis, to promote the health and resilience of our forests and rangelands.

Although we approach these challenges from various locations on the political spectrum, as citizens of the West, we are more closely tied by our similarities than differences. Our landscapes, natural resources, and our western work ethic will bind us as we seek solutions to the challenges facing us. Thank you for joining me as we continue to advance this Initiative in its second year.

Sincerely,

STEVE BULLOCK,
Governor of Montana.

Dear Friend of the West:

Public lands management. As a phrase, that sounds dry and academic and bureaucratic. But what it connotes is rich and interesting and wildly important. Because when we talk about land management, we're talking about nearly every activity undertaken on western lands. We're talking about wildfire (firefighting, prevention and mitigation). We're talking about recreation (camping, hunting, fishing, hiking, biking, climbing, skiing and motorized exploration). We're talking about economic activity (grazing, timber and mining). And we're talking about nature and water quality and species diversity and conservation.

In fact, we are talking about those very things that make the West abundant and special and truly extraordinary.

Western lands are marked by different ownership patterns and management regimes. Adjacent lands in the same biome can look, produce and react very differently from one another depending on how they are being managed and by whom and for what purposes.

Under the leadership of Montana Governor and WGA Chair Steve Bullock, WGA has been proud to launch the Western Governors' National Forest and Rangeland Management Initiative. During the course of this effort, by focusing on the steps we can be taking to increase the overall health of our forests and rangelands, we are also taking steps to increase their resilience to wildfire, and other threats like insects, disease and invasive species.

The initiative is producing recommendations on best management practices and tools that can help Western Governors, the Federal Government and local communities to strengthen their forests and rangeland habitats, revitalize forest health, and help break the current vicious cycle of catastrophic western wildfires.

Over the past year, Western Governors hosted workshops across the West. The Governors' bipartisanship and spirit of collegiality encouraged substantive and constructive conversations about forest and rangeland management. At the same time that we processed a wide range of divergent opinions, we were struck by a sincere and common desire among participants and contributors to improve the health, protect the beauty and ensure the abundance of our precious western lands for generations to come. As has been said many times, we do not inherit the [E]arth from our ancestors; we borrow it from our children.

The Western Governors' Association looks forward to continuing the work initiated by Governor Bullock in the coming year, guided by the spirit of cooperation and collegiality continually modeled by Western Governors.

Respectfully,

JAMES D. OGSBURY,
WGA *Executive Director.*

Executive Summary

Upon assuming the role of Chair of the Western Governors' Association in July 2016, **Montana Governor Steve Bullock** proposed that WGA pursue the **National Forest and Rangeland Management Initiative.** The goals of the initiative are to:

- **Examine** existing forest and rangeland management authorities and programs to determine their strengths and weaknesses;
- **Perform** a detailed investigation of the role of collaboratives in landscape restoration;
- **Create** a mechanism for states and land managers to share best practices, case studies and policy options for forest and rangeland management; and
- **Recommend** improved forest and rangeland management authorities and encourage more effective collaboration.

Montana Governor Steve Bullock launched the National Forest and Rangeland Management Initiative to bring states, Federal land managers,

private landowners and other stakeholders together to discuss issues and opportunities in forest and rangeland management.

The initiative has since assembled a wide range of experts and stakeholders from throughout the West to share insights on land management practices and identify improvements that will enable western states to develop healthy, resilient landscapes and communities.

That effort was greatly aided by the participation of Western Governors, who invested time and effort to host workshops in their respective states: **Montana Governor Steve Bullock; Idaho Governor C.L. "Butch" Otter; South Dakota Governor Dennis Daugaard;** and **Oregon Governor Kate Brown.**

The Initiative's reach was extended by live-streaming regional workshop sessions and posting those meeting sessions to WGA's YouTube page, as well as by posting live updates on Twitter. WGA also hosted webinars that addressed discrete topics in forest and rangeland management.

Based upon the input from state and Federal land managers, private landowners, local governments, businesses and non-governmental organizations, WGA sought to identify best practices and offer recommendations to put western states on a path toward healthier, more resilient ecosystems, while continuing to support diverse economic opportunities for western communities.

This report outlines the launch year of the Initiative and includes both administrative and legislative recommendations that touch upon the following areas:

- Reforming Federal wildfire budget practices to allow for more investment in efforts to build resilience and reduce catastrophic wildfire risk;
- Partnering to advance forest and rangeland management projects across ownership boundaries to achieve landscape-scale goals and streamline processes;

Western Governors C.L. "Butch" Otter of Idaho, left, Dennis Daugaard of South Dakota and Kate Brown of Oregon hosted Chairman's Initiative workshops in theirrespective states.

- Providing state-led investment to support collaboration, prioritize limited resources, and ensure coordinated and effective Federal, state and local government engagement;
- Augmenting capacity and streamlining environmental analysis and implementation of Federal forests and rangeland restoration projects;
- Strengthening markets for forest products and diversified rangeland goods and services that can support forest and rangeland restoration objectives; and
- Pursuing new statutory flexibility and authorities to advance landscape-scale restoration projects, and support high-impact programs.

The launch year of the National Forest and Rangeland Management Initiative is just the beginning of WGA's work on this initiative. Recognizing that good policy development and implementation takes time, WGA initiatives are designed to work across multiple years.

WGA's focus now shifts from information-gathering to implementation of the launch year recommendations. Western Governors will encourage state and Federal agencies to apply these recommendations to their management activities, and advocate for the adoption by Congress of the legislative reforms identified by the initiative.

Background

How did we get here?

The West's forests and rangelands are facing an unprecedented health crisis. The causes are manifold, including a history of past fire suppression, an increase in large-scale outbreaks of insects, a changing climate, disease, and invasive species, and an increase in the frequency, size and severity of wildfires. The symptoms are staggering. Today our fire seasons are, by some estimates, 78 days longer than they were just 2 decades ago. Six western states have had their largest or most destructive wildfire events in the last 6 years. During that time, 32 million acres of National Forests have succumbed to a devastating bark beetle epidemic, and over 100 million dead trees have littered the forests of California's Sierra Nevada mountains in the aftermath of the state's severe drought and changing climate. Amid these trends, the benefits our forests and rangelands provide (from food and fiber to recreation, water supplies and beyond) are at risk.

A tumultuous and polarizing era in Federal forest and rangeland policy—characterized by entrenched legal battles and punctuated by a great recession—has influenced the management of our forests and rangelands. This history—coupled with constrained budgets, high administrative costs, increasing fire suppression expenses, and other challenges—have left Federal forests and rangelands exposed to health problems.

The capacity of local communities, states and Federal agencies to respond to these threats has been diminished by forces beyond their control. In 1995, 16 percent of the United States Forest Service's (USFS) budget was dedicated to fire suppression. By 2015, that number had soared to more than half of the USFS's budget. Over 2 decades, non-fire staffing within the USFS has been reduced by 39 percent. Today, the rising costs of fire suppression, and the complicating need to stop work mid-season to address and pay for urgent wildfires, have reduced agency capacity to support forest and rangeland restoration—including the very measures that can reduce risks of uncharacteristic wildfire in the first place.

Meanwhile, as communities have grappled with new costs from declining forest and rangeland health and increased wildfires, a global financial crisis exacerbated impacts to a key sector for restoration: the forest products industry. New home starts plummeted from 2005–2010, resulting in the decline of worker earnings by 22 percent, and the loss of 79,000 jobs in the wood products sector in the West. During 2009 and 2010, West-wide harvest and lumber output were at their lowest levels since the late 1940s. The region has suffered the permanent loss of more than 30 large mills and scores of smaller mills, while countless others significantly curtailed operations. Today, maintaining and strengthening the capacity of the restoration economy across all sectors and addressing the capacity constraints of Federal agencies remains of paramount concern.

In the face of these increasing pressures, Federal agencies, states, counties, conservation organizations, industry and a host of other partners have rallied to achieve considerable success in cooperative restoration activity. Since 2008, USFS has increased the acres treated to restore forest and watershed health, and increased timber volume sold by over 20 percent. Through the Collaborative Forest Landscape Restoration program alone partners have treated: more than 1.45 million acres to reduce the risk of catastrophic fire; more than 84,570 acres to achieve

healthier forest and watershed conditions through timber sales; more than 1.33 million acres for improved wildlife habitat; and more than 73,600 acres to address concerns from noxious weeds and invasive plants. New and extended authorities, such as those included in the Agricultural Act of 2014 (P.L. 113–79, aka the 2014 Farm Bill), have helped Federal agencies work more efficiently and extensively with partners, including governors and states, and further advanced restoration activities.

What do we mean by healthy and resilient ecosystems?

Healthy and resilient forests and rangelands are those that can regenerate naturally after disturbance and adapt to changes in climate, invasive species and insects and disease, wildfire, and precipitation. They are characterized by:

- Dynamic growth and complexity.
- Diverse habitat, able to sustain a wide range of wildlife and fish.
- Healthy soils.
- Tolerable levels of invasive species, insects and disease.
- High quality and sustainable water supply.
- Economic and ecological sustainability: maintaining ecosystem function while meeting needs for aesthetics, recreation, health, and forest and rangeland products.

The evidence from across the West is clear: we can buck the trends and overcome an uneven history of Federal forest and rangeland policy when we work together. States, industry, local governments, and non-governmental organizations (NGOs) are playing an increasingly critical role in bolstering management capacity, reinvesting in restoration partnerships and advancing innovative approaches that not only restore degraded ecosystems, but also protect communities and provide economic engines for rural America. Equally important have been the locally and regionally-driven efforts that have emerged from Federal agency partners. These parties have redoubled their commitment and leadership to foster effective collaboration, pursue efficiencies, and drive the flow of resources to achieve mutually agreed upon objectives to improve the health and resiliency of our western forests and rangelands.

Whether through collaborative efforts to determine appropriate timber and grazing prescriptions, reintroduction of fire to control fuels and support wildlife habitat, projects to combat invasive species, or improvements to watershed functions, new and diverse partnerships are emerging across land ownerships to help improve the health and resiliency of western landscapes. Now more than ever, sustaining and building upon this progress in the face of unprecedented threats to our forests and rangelands requires our collective attention and action.

Workshops of the Chairman's Initiative gathered a wide array of stakeholders at workshops in Montana, Idaho, South Dakota and Oregon.

Why the Western Governors' Forest and Rangeland Management Initiative?

State-led innovation across the West—coupled with engagement from Federal land managers, including NGOs and industry—has created fertile ground for learning, dialogue and advancing a bipartisan reform agenda. To address the challenges we face, Western Governors recognize a need to examine these excellent but separate endeavors through a single lens: to encourage collaboration among those with different perspectives, capacities and expertise in a regional discussion of needs for the restoration and sustainable management of western rangelands and forests. The Initiative has brought together experts from a variety of sectors—from researchers to ranchers—and across a broad range of policy interests—from timber industry representatives to conservationists—to share the best available science and practical experience in examining our current forest and rangeland management policies and practices.

The Initiative also offers an opportunity to elevate successful and innovative ideas and better understand the impacts and effectiveness of a broad range of investments in collaboration and forest and rangeland restoration. As United States Supreme Court Justice Louis Brandeis said, a "state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country." This has certainly been true with land management practices. Different states have employed a wide variety of strategies to address needs ranging from wildlife and fish habitat conservation, to water quality and watershed protection, to timber management, livestock grazing, invasive species, and extractive industries. The Initiative has enabled states to share their successes and, in some cases, their failures with each other and allow them to build on the insights of collective experience.

What do we mean by restoration?

> Restoration is the process of creating and maintaining healthy, resilient forests and rangelands capable of delivering all the benefits that people get from them: clean air and water, habitat for native fish and wildlife, forest products, food sources, opportunities for outdoor recreation, and more. Restoration can foster economic opportunities to revitalize communities and benefit the environment at the same time.

During the past year, the Initiative has brought together a host of different interests and all levels of government, and the cooperative dialogue has been highly encouraging. There is a strong sense that we must work together if we are to address the challenges facing western lands and communities. Working together requires we put aside parochial interests and find ways to work across land ownership boundaries. The urgency of the threats requires all parties—states, Tribes, landowners, Federal agencies, nonprofit partners and Congress—to cooperatively implement, expand and refine the restoration management tools that currently exist, and reinvest in the many benefits our rangelands and forests provide.

What are the Initiative's management principles and philosophy?

Collaboration—Solutions born from bipartisan cooperation among diverse interests always yield the most durable returns. Collaboration is not easy: it requires participants to respect different viewpoints; consider ideas outside their normal comfort zones; and engage in the arduous work of incorporating a wide variety of views into a coherent and workable plan of action. Growing experience with collaboration offers an opportunity to assess best practices that improve the integrity and efficiency of decision-making and help achieve solutions that are both innovative and durable.

Partnership—If collaboration is talking the talk, then partnership is walking the walk. Effective partnership involves a commitment to work together for mutual benefit and to invest the time, money, and effort needed to accomplish an objective. Partnership helps us prioritize limited resources and augment capacity when and where it is most needed. It also demonstrates that our commitments to common goals are substantive and establishes joint accountability to ensure that these goals are pursued and achieved.

Urgency—The pace, scale and quality of restoration must increase amid the threats to western forests and rangelands. Since 2010, over 102 million trees on 7.7 million acres of California's forests have succumbed to drought. In Colorado, it is estimated that 1 in every 14 standing trees is dead (a total of 834 million trees whose deaths are attributed to insect infestations, disease, and the suppression of natural wildfire). Invasive cheatgrass infests over 100 million acres of rangeland in western states. Every state in the West faces challenges in conserving forests and rangelands. While Western Governors and our partners acknowledge laudable progress to address the management of our lands, it is imperative that we scale up our successes to a landscape level and increase the pace of restoration efforts. Working at landscape scales not only will help address urgent threats, it can help create predictability in the achievement of forest restoration, conservation and economic development objectives.

Resilience—Resilient forests and rangelands and communities go hand in hand. Managing for resilience ensures our lands can continue to provide for sustainable economies and that we optimize economic, social and environmental goals including the production of clean air and water, wildlife and fish habitat; and carbon sequestration in forests and wood products. It can also help us better protect communities and firefighters from increased risks, and expand and maintain diverse economic opportunities, customs and culture in rural America linked to public lands. Through provision of water supplies, recreational opportunities and the fiber needed to sustainably build and rebuild our cities of the future, resilient forests and rangelands also provide a critical linkage to our urban communities. Western Governors recognize that the long-term health of the forest and rangeland industries and enhanced markets for diverse forest and rangeland products, goods and services remains critical to meeting restoration goals. For the landowners, businesses and partners that comprise an emerging restoration economy supply-chain, a predictable and sustainable program of work helps foster a business environment conducive to investment that develops and maintains critical infrastructure and capacity.

Recommendations

The Western Governors' Forest and Rangeland Management Initiative is a multiyear effort to examine and improve Federal forest and rangeland management. WGA Chair Steve Bullock work during the launch year of the effort. Under his leadership, WGA has conducted an extensive examination of current land management practices, both at the Federal and state level, to evaluate what is working (and what is not) in the management of western rangelands and forests. A broad range of stakeholders contributed their best ideas to the discussion of how to improve land management across the West. These recommendations represent a synthesis of the ideas presented at the Initiative workshops, webinars, and other Initiative opportunities.

The recommendations are divided into two sections. First, an administrative section presents those actions that can be implemented within the framework of current Federal statutory authorities. Some of these recommendations have already been implemented on a limited basis in states or in connection with specific projects. These recommendations are included in the hope that their use will be expanded in scale. Others have been identified by various stakeholders as worthy of consideration and implementation by states and Federal agencies.

Second, a legislative section includes recommendations for consideration by Congress. These recommendations would create greater flexibility for Federal and state land managers to address pressing restoration and resilience needs. Western Governors encourage Congress to examine these bipartisan reforms as it considers legislation to improve statutory authorities.

Finally, there is a section on implementation and next steps. This includes a short examination of issues that were discussed over the past year, but which require further consideration before concrete recommendations can be offered (*e.g.,* issues surrounding litigation and the use of alternative dispute resolution) as the Initiative moves into its multiyear implementation phase.

Administrative Recommendations

States, Federal agencies and other partners have made significant progress toward optimizing the use of existing statutory land management authorities. Scaling up these early successes is perhaps the most significant opportunity to improve efficiency, incentivize action and achieve sustained progress toward forest and rangeland restoration goals.

Many of these administrative recommendations are intended to be quickly actionable by Federal and state land managers. It is possible that, in some cases, a proposed administrative reform may ultimately require state statutory authorization. None of these proposed reforms, however, should require new Federal statutory authority. They do require the commitment and resources of state and Federal managers for implementation. Western Governors encourage their state agencies and Federal partners to collaborate on how to most effectively implement these recommendations.

Montana Governor Steve Bullock hosted the opening workshop of the Initiative in Missoula. He urged attendees in a keynote to "take a hard look at collaboration. What makes it succeed? Why does it fail? It's a discussion that will set the stage and tone for more hard work to follow."

Priority 1: *Invest in all-lands/cross-boundary management opportunities (all partners):*

A1A: Identify business practice barriers to cross-boundary projects. Develop training on state and Federal contracting procedures and administration for all partners to improve implementation of cross-boundary projects. Utilize Service First authorities, which allow multiple agencies to partner to share resources, procurement procedures and other authorities, and streamline and consolidate agency processes with partners. Establish multi-agency pilot projects, which can suggest models for subsequent formal agreements.

A1B: Increase participation of Tribal governments in cross-boundary management plans and projects.

A1C: Expand opportunities to use tools developed in the 2014 Farm Bill, such as Good Neighbor Authority (GNA), Stewardship Contracting Authority (SCA) and Insect and Disease (I&D) designation authority, in forest and rangeland systems on both USFS and Bureau of Land Management (BLM) lands.

A1D: Convene partners to explore the use of new technologies and data for collaboration, monitoring and decision-making, including the use of state data as outlined in WGA Policy Resolution, *Species Conservation and the Endangered Species Act.* Integrate adaptive management approaches, using monitoring data, assessment, and other feedback to assess the efficacy of management practices and inform land management adjustments.

A1E: Provide Federal funding to develop detailed state rangeland action plans addressing invasive species, wildlife and fish habitat, and water quality and quantity as a complement to State Forest Plans. These rangeland plans should include resource analyses of soil health, water, plants, animals and productive capacities to inform management decision-making.

A1F: Identify opportunities to improve flexibility and integration of grazing management and targeted grazing as tools to achieve restoration and land management goals, including wildlife habitat improvements, drought and wildfire mitigation and resilience, water quality and watershed health, soil health management, promotion of perennial plant health, and control of invasive species such as cheatgrass.

A1G: Promote grazing allotment flexibility on Federal lands, within FWS and BLM permitting systems and across ownership boundaries, to respond to changing range conditions and environmental considerations.

A1H: Expand the use of GNA agreements and other 2014 Farm Bill tools to achieve all-lands restoration objectives across Federal, state, local government and privately-owned lands. Include the use of GNA authority and program income to support additional stewardship objectives such as invasive species management and rangeland conifer encroachment. Where programmatic agreements are already in place, use GNA agreements to address priority restoration needs.

Rangelands support a wide range of multiple uses, from livestock production and recreation to wildlife habitat and water quality values, across Federal, state and private ownerships.

A1I: Target funding from USFS, BLM, Natural Resources Conservation Service (NRCS) and state sources to address cross-boundary management goals (and support monitoring and assessment frameworks) in priority areas. Projects using this targeted funding should be consistent with State Forest Action Plans, wildlife action plans, community-wildfire protection plans and projects in other priority areas determined by Federal, state, local and Tribal partners based on the best available science.

A1J: Explore the expanded use of youth, veterans, inmate crews and conservation corps to provide cost-effective capacity to support forest and rangeland restoration work across various land ownerships.

Workshop: Missoula, Montana (Sept. 20–21, 2016)

Keynotes: Steve Bullock, Governor of Montana, and Thomas Tidwell, Chief, U.S. Forest Service

Summary

U.S. Forest Service Chief Tom Tidwell expressed optimism about the work of the Initiative in his remarks: "I have high expectations if we meet these difficult challenges together and focus on the right challenges. The more we trust in that system, the more we can get done."

Montana Governor Steve Bullock led off the workshop series for the launch year of the Western Governors' Association's (WGA) National Forest and Rangeland Management Initiative in Missoula, Montana. The meeting started off with a look at the challenges Montana faces in forest management, and focused on the role of collaboratives in facilitating management on U.S. Forest Service (USFS) lands.

The Governor, in his keynote address, urged attendees: "Take a hard look at collaboration. What makes it succeed? Why does it fail? How do the Federal land managers embrace it? It's a discussion that will set the stage and tone for more hard work to follow."

USFS Chief Tom Tidwell expressed optimism about the collaborative work of the Initiative. "I have high expectations if we meet these difficult challenges together and focus on the right challenges. The more we trust in that system, the more we can get done."

WGA Executive Director Jim Ogsbury summed up the wide-ranging impact of the initiative in his opening remarks: "Public lands management . . . sounds kind of dry and academic and bureaucratic. But what it connotes is rich and interesting and wildly important. Because when we talk land management, we're talking about nearly every activity taken on western lands."

"The work we do on these issues and the successes we've had are because people with very different ideologies have come together, project by project, and dollar by dollar," said Governor Bullock, emphasizing the importance of collaboration. "Our natural resources are a foundation of our quality of life, and how we manage them must transcend party politics."

Priority 2: *Provide state leadership to bolster collaboration on U.S. Department of Agriculture (USDA) and U.S. Department of the Interior (DOI) planning and projects (Western Governors):*

A2A: Working with their state legislatures, Governors could encourage funding to support effective collaboratives, collaboration on Federal projects, and all-lands initiatives. Financial assistance from a variety of sources could be targeted to address key priorities and capacity constraints, and contingent on the use of metrics that measure performance and project deliverables. Possible opportunities include:

- Provide small grants to support collaboration through hiring facilitators, conducting needed planning, data collection and analysis, and incentivizing collaborative efforts to retain effective leadership and participation.
- Deliver state funds to targeted Federal projects to augment capacity, expedite project approvals and implementation, and add key state project priorities (including socioeconomic elements) to the Federal program of work.
- Support cost-share grants to local governments and local and non-governmental organizations (NGOs) to enable their participation in Federal project planning and implementation through collaborative processes.

A2B: Support regular meetings convened by collaboratives and encourage the development of local principles and best management practices for collaboration.

A2C: Invest in key state and Federal liaison positions with decision-making authority to provide better engagement and understanding between state forest, wildlife, and rangeland agencies and their Federal counterparts (as well as with partners in industry, NGOs and academia).

A2D: Facilitate the participation of local governments in Federal decision-making by dedicating staff to develop and provide technical assistance and enhance communications across local, Tribal, state and Federal partners.

A2E: Champion and encourage the efforts of state and local governments, municipalities, water utilities and corporate partners to collaborate on, and co-invest in, forest and rangeland restoration—including the support of collaborative groups—across ownership boundaries in key water supply source watersheds.

Webinar: *Managing Electricity Reliability Risks on Forests and Rangeland*

Vegetation management experts discussed best-practices for maintaining electrical utility rights-of-way for the benefit of multiple resources, including transmission, conservation, grazing, timber, and wildfire mitigation. Moderated by Anne Beard, Manager of Vegetation Management and T&D Asset Management for Public Service Company of New Mexico, the webinar included a robust discussion of vegetation management challenges. Panelists recommended that transmission corridors be viewed as areas of opportunity, and that planning decisions include early engagement with relevant stakeholders. A sample of panelists' comments:

- "We need to stop looking at utility rights-of-way as sacrifice areas, and begin to look at them as areas of opportunity that can be managed for other plant communities to supply habitat for pollinators, small mammals, small lizards, and songbirds, *etc.* This is because meadow and prairie plant communities are lacking and, in some cases, almost extinct in some states." **Randy Miller, Director, Vegetation Management, PacifiCorp.**
- "There is a need for more early engagement with utilities and Federal land managers. Engaging early in the process helps to better develop a cooperative plan to evaluate the current conditions, identify high risk areas, address those risks, and develop a plan for maintenance of the remainder of the line. Integrated Vegetation Management and greater education about early and frequent communications with land managers is needed." **Reggie Woodruff, Energy Program Manager, U.S. Forest Service.**

- "The Right-of-Way Stewardship Council is really all about trying to promote environmental stewardship, and taking advantage of this area of opportunity, in terms of how these millions of acres across the country can be better managed to meet a broad array of societal benefits, including environmental benefits." **Tom Sullivan, Audit Committee Chair, Right-of-Way Stewardship Council.**

Priority 3: *Promote efforts to support fire-adapted communities, reduce fuels and manage wildfire risks, and ensure a coordinated and effective wildfire response, coordinating where appropriate with parallel efforts such as the National Wildland Fire Cohesive Strategy (all partners):*

A3A: Prioritize restoration activities across all ownerships to create resilient landscapes in areas facing high wildfire risk, significant watershed health issues, wildlife and fish habitat degradation, or wildfire-damaged landscapes, including insect and disease priority areas designated through the 2014 Farm Bill and areas identified in state wildfire risk assessments, state forest action plans, and community wildfire protection plans.

A3B: Improve interagency communication, fire response capability, and coordination, including the sharing of firefighting resources. Ensure these activities support fire prevention, full suppression strategies and management of wildfire for resource benefits. Continue to seek opportunities, including revisions to forest plans, to enhance safety and reduce costs in suppression decisions while protecting communities.

Workshop: Boise, Idaho (Oct. 20–21, 2016)

Keynotes: C.L. "Butch" Otter, Governor of Idaho, and Jim Lyons, U.S. Department of the Interior

Summary

Idaho Gov. C.L. "Butch" Otter emphasized finding projects of value during his address at the Boise workshop: "I want you all to discuss all of your ideas for improving land management and let's find those with the greatest value."

The second initiative workshop was hosted by Governor C.L. "Butch" Otter in Boise, Idaho. The meeting opened with an examination of the many forest and rangeland management issues throughout the state. Idaho has been especially active in the implementation of projects using Good Neighbor Authority, and roundtable discussions examined the state's success in taking advantage of this authority, which allows Federal agencies and the state to enter into cooperative agreements to advance management priorities.

The Idaho workshop also examined the success of Rangeland Fire Protection Associations (RFPAs), which engage private landowners with Bureau of Land

Management wildland fire monitoring and suppression efforts. These collaborative efforts were a centerpiece of Governor Otter's message to attendees. Before 2012, ranchers were not allowed to assist Federal land managers on wildfire suppression activities. The Governor, legislature, and Federal and state fire agencies subsequently created the RFPAs, which have now grown to eight districts with nearly 300 volunteers overseeing more than 7 million acres.

Governor Otter also emphasized finding projects of value. "People talk to me all the time about the cost of doing things and I understand cost. But when someone comes to me and explains the value of something, that really gets my interest. I want you all to discuss all of your ideas for improving land management and let's find those with the greatest value."

Jim Lyons, then-Deputy Assistant Secretary of Interior for Land and Minerals Management at the Department of the Interior, discussed collaboration's role in blunting the impact of wildfires and invasive species, noting "these are not public land issues or private land issues; they are resource issues that know no political or administrative boundaries."

A3C: Facilitate the expanded use prescribed fire:

- Convene state and Federal air quality specialists to identify reforms that reduce barriers to prescribed fire and reduce overall health impacts from smoke.
- Encourage interagency use of smoke management best practices and explore ways to build capacity of licensed burn managers.
- Examine liability protection for licensed burn managers who execute approved prescribed burns, and address compensation for private property owners negatively affected by escaped prescribed burns.
- Identify new tools for evaluating and managing prescribed fire risk in cooperation with Federal, Tribal and local governments.
- Engage with state and local prescribed burn associations, established for the responsible use and application of prescribed fire for rangeland management.

A3D: Incentivize local governments to take voluntary actions to support the creation and expansion of fire-adapted communities and resilience, including the promotion of education, fuels management projects and improved integration of community wildfire protection plans with land use decisions when compatible with local goals. Provide additional analyses to help communities evaluate the full costs of suppression associated with development in the wildland urban interface (WUI).

The benefits of healthy forests and rangelands include the protection of environmental values and the promotion of sustainable economic opportunities.

Priority 4: *Pursue opportunities to further enhance Federal agency staff capacity and efficiency in the environmental analysis, review and implementation of projects (Federal partners):*

A4A: Further explore the use of strike teams, interagency Endangered Species Act (ESA) consultation support, and other modular capacity to accelerate restoration in priority areas, including the expanded use of existing statutory authorities.

A4B: Modify employee relocation practices to optimize leadership development and longevity. Assure retention of critical capacity for restoration after leaders depart through transition planning, including promotion of local employees where appropriate.

A4C: Leverage the use of state, Tribal, and local expertise and science in Federal environmental review, consultation and permitting requirements. Collaborate with environmental regulators to reduce legislative and regulatory barriers to restoration activities.

A4D: Continue to implement National Environmental Policy Act (NEPA) streamlining efforts that promote best practices or procedural innovations, including the use of landscape-scale, programmatic, adaptive and iterative analyses.

A4E: Support independent research and analysis from NGO, academic, and other partners to inform NEPA and ESA compliance review process improvements, including estimates of the time and cost involved for different project types. Develop metrics for successful outcomes, including cost and time performance indicators.

A4F: Consider standardized approaches to environmental analysis to increase efficiency and reduce time to decision. Ensure agency NEPA implementation policy includes comprehensive training and accountability for field practitioners.

A4G: Use information technology to improve the efficiency of NEPA and to provide greater transparency and reduce redundant data, analysis and business practices. Provide analytical tools for improved analysis of potential implications of no-action alternatives.

Webinar: *The Future of Wild Horse and Burro Management: Challenges and Opportunities*

The conversation focused on the economic and environmental impacts of wild horse and burro overpopulation on western rangelands. During the webinar, moderated by U.S. Representative Chris Stewart, panelists encouraged Federal land managers to take quick, proactive actions to bring herds within Appropriate Management Levels (AML), including the use of new technologies and management practices. A sample of panelists' comments:

- "In Nevada, and across the West, wild horse management is no longer an emergency, it is a disaster. The program is at a breaking point . . . We must gather 100 percent of horses in an HMA (Herd Management Area). Those horses that are to be returned to the range, but be treated with permanent or near permanent fertility control. We cannot continue to round up horses and not curb reproduction. We will be removing 1,000 to 1,100 horses from this HMA again in a few years if we don't slow reproduction." **J.J. Goicoechea, Eureka County Commission Chair, Eureka County, Nevada.**

- "If we had proper management and the horse populations were within AML, you would have good range, healthy horses, healthy wildlife, healthy livestock, and healthy local economies for these rural communities. This is, and will be, the worst case of inhumane treatment of animals and man-made ecological disasters in the history of the West." **Tammy Pearson, Commissioner, Beaver County, Utah.**
- "By 2030, we will have spent over $1 billion on the wild horse problem. We are reaching the point where something has to give: it is becoming more cost prohibitive. One of the problems is that the economic impacts from wild horses is not felt evenly across the country. Your average citizen in an urban setting, and even some other rural counties, doesn't feel the impacts of wild horses." **Dr. Eric Thacker, Professor of Wildland Resources, Utah State University.**
- "The need for proactive management on these western rangelands cannot be stated strongly enough. The fact that we typically have five to, at best, 15″ of annual precipitation makes it critical that we do proactive management and not let rangelands get degraded, because once they pass a threshold, they cannot be reclaimed." **Callie Hendrickson, Executive Director, White River & Douglas Creek Conservation Districts in Rio Blanco County, Colorado**
- "This is a call to action. Let's get the Congress educated, and let's overcome our fear of the politics of this and have a clear mandate to the BLM (Bureau of Land Management) to follow the law. They've got the tools they need right now to do what needs to be done, but they are intimidated by the politics of the national activists." **Kathleen Clarke, Director of Utah Public Lands Coordinating Office.**

Priority 5: *Take coordinated state and Federal action to expand markets for forest products and diversified rangeland goods and services that can support forest and rangeland restoration objectives (all partners):*

A5A: Expand opportunities for existing USDA Rural Development, U.S. Economic Development Administration (EDA) and Small Business Administration (SBA) programs and financing to support wood product business development and infrastructure.

A5B: Encourage collaboration between USFS Research and Development, State and Private Forestry, and National Forest System capacities that support existing and emerging wood products technologies, including the work of the National Forest Products Laboratory, with the goal of expanding markets to maximize restoration activity. Encourage appropriate research, development and deployment focused on commercially-ready technologies with high potential to contribute to current and emerging restoration objectives. Better align these capacities with the contributions of states and industry partners, and actively pursue public-private partnerships to advance market growth, with the goal of providing sustainable economic development opportunities for rural communities.

A5C: Western Governors should identify initiatives to support markets that can achieve restoration goals and foster near-term opportunities for economic development in rural communities. Opportunities include:

- Advancing the use of mass timber (such as cross-laminated timber) in construction of taller buildings and community facilities through research, demonstration projects, and revisions to national, state and local building codes.
- Expanding utilization of low-value woody biomass for thermal, electric and liquid-fuel energy. Engage rural electric cooperatives, public utilities, community facility managers and other partners in the research, testing and deployment of new and modified heat and electric generation projects and liquid-fuel facilities from hazardous fuels reduction, conifer removal and other forest and rangeland restoration efforts.
- Exploring opportunities to support new and diversified rangeland products, markets and processing infrastructure, such as mobile meat processing, renewable energy production (wind and solar), local and regional food hubs, and recreation.

A5D: The Federal Government should negotiate a fair and equitable U.S.-Canada Softwood Lumber Agreement as an element of maintaining and strengthening domestic markets for wood products.

Legislative Recommendations

Legislative action must address chronic capacity constraints and develop and expand additional authorities that build on past progress. One of the most significant steps Congress can take to increase the scale and pace of restoration activities is to comprehensively address Federal agency budgeting. The decline of Federal staff and resources for land management, in large part due to the shifting of funds to pay for the increasing cost of wildfire suppression, must be resolved in order to meet the challenges facing Federal agencies. The 2014 Farm Bill made real progress in elevating an implementation role for states in Federal land management by providing new statutory tools, and permanently authorizing and expanding other authorities with the goal of accelerating forest and rangeland restoration. Further action and improvements are needed in the 2018 Farm Bill or other Federal legislation, with particular focus on actions to achieve landscape-scale restoration objectives.

Priority 1: *Reform Federal fire funding management procedures:*

L1A: Provide a comprehensive fix for the two challenges posed by the present wildland fire budget approach: (1) the cost of fire suppression (10 year average) as a share of the agencies' budgets continues to increase, as budgets remain relatively flat; and (2) the need to transfer funds from non-fire to fire accounts mid-season when budgeted funds are insufficient.

L1B: Address the associated impacts of wildfire funding on Federal natural resource management capacity, planning and project implementation. Ensure budget actions continue to support state wildfire and forestry capacity, including the USFS State and Private Forestry programs.

The cost of fire suppression continues to increase, as budgets remain relatively flat, which results in the need to transfer funds from non-fire to fire accounts when budgeted funds are insufficient.

Priority 2: *2014 Farm Bill modifications:*

L2A: Permanently authorize the Insect and Disease designation provisions of section 602 of the 2014 Farm Bill and eliminate project constraints from section 603 for condition class or fire regimes outside of the WUI.

L2B: Increase flexibility in the GNA program on road construction/reconstruction and create flexibility in allocations of program income to support better prioritization of GNA projects across larger geographies.

L2C: Authorize the use of stewardship and GNA funds for recreation improvements and forest and rangeland restoration planning and implementation activities.

L2D: Consider extending the length of stewardship or timber contracts up to 20 years, or allowing for periodic review and extension of contacts to provide economic certainty to restoration industry partners and address related cancellation ceiling constraints. Allow for a portion (up to five percent) of retained receipts from stewardship contracting to be used for subsequent project planning and analysis.

Workshop: Deadwood, South Dakota (Dec. 1–2, 2016)

Keynote: Dennis Daugaard, Governor of South Dakota

Summary

"We don't want to use this workshop to just clap each other on the back," Gov. Dennis Daugaard said at the Deadwood workshop. "We want to use this to think about how to do things better."

South Dakota was the scene of the third National Forest and Rangeland Management Initiative workshop, hosted by Governor Dennis Daugaard in Deadwood. The Governor encouraged practical solutions to land management challenges. "I'm so glad to see so much expertise here. But we don't want to use this workshop to just clap each other on the back. We want to use this to think about how to do things better."

The Governor pointed out that the City of Deadwood earned its name from a pine beetle infestation back in the 1800s, and insect depredation is still a significant challenge. The worst beetle outbreak in the state's history has taken place in recent years, but collaborative efforts with the USFS have had a successful effect in blunting the current invasion.

The Black Hills has been one of the most actively managed areas in the U.S., and provides excellent examples of how timber operations, the use of prescribed fire, and livestock grazing can contribute to the health and resilience of forest and rangeland systems.

"Proper land management is critical," said Governor Daugaard. "It helps control fire danger and supports economic growth and tourism. The Black Hills have been a great success story for active management. Despite vibrant timbering, it is still a beautiful forest, attractive to recreationalists. And this has worked because of the great relationships developed over time between the state and USFS."

L2E: Fully fund conservation title programs such as Environmental Quality Incentives Program (EQIP), Conservation Technical Assistance (CTA), Conservation Stewardship Program (CSP), Conservation Reserve Program (CRP), Agricultural Conservation Easement Program (ACEP), and the Regional Conservation Partnership Program (RCPP), that provide technical and financial assistance for forest and

rangeland management in partnership with private landowners. Take steps to provide greater flexibility in the deployment of these programs to achieve restoration objectives.

Priority 3: *Update the Federal legislative framework to bolster and clarify the appropriate use of NEPA tools, support collaborative efforts and provide additional flexibility in the development and execution of restoration projects:*

L3A: Create a new pilot program to prioritize landscape-scale, streamlined environmental analysis for restoration projects envisioned over geographies greater than 100,000 acres (using either environmental assessments or environmental impact statements, depending on context and size of the project) in landscapes with demonstrated ecological and economic need and effective existing collaboration among diverse stakeholders. The analysis should be sufficient to allow for project-scale implementation and adaptive management, and should include the following elements:

- Site descriptions or land allocations that identify locations within the landscape in which specific restoration or maintenance treatments can be used appropriately;
- Standards and guidelines consistent with the appropriate forest plan and project-level design criteria for projects;
- Identification of the cumulative impacts of the project; and
- Provisions allowing for the implementation of project-level actions barring the introduction of new information or unforeseen circumstances.

Congress should consider creating a limited and short-term categorical exclusion (CE) under NEPA available to expedite work in these pilot landscapes while environmental analyses are being developed, available for use at the agency's discretion provided the analyses achieve defined progress milestones.

Webinar: *Rangeland Management Strategies and Tools: Promoting Resiliency and Addressing Invasive Species*

A panel of rangeland ecologists and researchers discussed emerging technologies that increase the resilience of western rangeland plant communities to invasive weeds. Panelists emphasized that, as new species appear and range use patterns change, land managers must remain adaptable, experimental, and innovative. The panel was moderated by Jeremy Maestas, Sagebrush Ecosystem Specialist with the U.S. Department of Agriculture's Natural Resources Conservation Service. A sample of panelists' comments:

- "I think it's really important that we take to heart, not just in words but in actions, that it's not the year 1850 anymore. We have a fundamentally different disturbance ecology that's present within the annual grass zone. We are going to have to think outside the traditional box and embrace that new ecology if we are going to be able to maintain resilient landscapes." **Chad Boyd, Rangeland Ecologist, Research Leader, Burns, Ore., Agricultural Research Service**
- "Our strategic approach to weed and rangeland management in Wyoming is to try to do the right thing, at the right place, at the right time. It's not as easy as going out and killing some weeds; it's about understanding what

the situation is, and knowing about how the species that you're dealing with fits into that situation. It's important to find leverage points that are driven by ecological understanding, and to find where we can put a small amount of effort and have a large amount of result." **Brian Mealor, Director, University of Wyoming's Sheridan Research and Extension Center**

- "If our choice is to spend a lot of money and fail repeatedly with native seeds or be successful with exotic seeds and establish an exotic monoculture, that's a tough choice in terms of conservation values in the long run. I don't think we're going to get all the societal outcomes [we're] looking for if we don't find some other solutions and new routes to establish native plant communities." **Jay Kerby, Southeast Oregon Project Manager, The Nature Conservancy**

L3B: Congress should direct Federal agencies to build consistency in environmental analysis and bring agency practice in conducting EAs more in line with the administrative policy intent of streamlined, summary documents. Agency guidance should clarify significance thresholds and Extraordinary Circumstances language for NEPA based on best practices and provide, where possible, consistent approaches to interpreting these NEPA requirements when agencies and the courts have had conflicting interpretations.

L3C: Develop a new NEPA restoration CE that is based on decisions documented in a Decision Notice and Finding of No Significant Impact over the past 5 years where no significant impacts to the environment occurred. Project activities could include commercial and noncommercial timber harvest, hazardous fuels removal projects, prescribed burning, post-fire restoration and herbicide use. The CE should use the best available science, rely on collaboration, and have environmental safeguards for consistency with appropriate management plans and existing law and policy. In designing the CE, Congress should rely on agency analysis of past decisions.

L3D: Allow Federal agencies to analyze only the action and no-action alternatives when a project is collaboratively developed, unless a third alternative is proposed during the scoping and meets the purpose and need of the project.

L3E: Reward successful implementation of collaborative projects through increased funding, retained-receipt authority, or other capacity to pursue subsequent projects.

L3F: Resolve outstanding issues with potential requirements to reinitiate endangered species consultations following the adoption, amendment or revision of an appropriate management plan.

Nearly 400 attendees from across a wide spectrum took part in the regional workshops held in Montana, Idaho, South Dakota and Oregon.

Priority 4: *Strengthen and expand high impact programs:*

L4A: Codify and fund the USFS State and Private Landscape Scale Restoration Competitive Grant program to prioritize work consistent with state forestry goals and action plans.

L4B: Allow for investment of a portion of hazardous fuels funding on state and private lands commensurate with program funding increases for National Forest System lands.

L4C: Pass legislation to promote forest and rangeland product markets and technologies, and expand funding for the Community Wood Energy Program. Use program funds to create and incentivize state, Federal and Tribal partnerships in support of these objectives.

L4D: Pass legislation, such as the 21st Century Conservation Service Corps Act, to make it easier for young people and veterans to complete quality, cost-effective maintenance and improvement projects on public and Tribal lands and waters across the country. These programs could address the backlogged maintenance needs of land and water management agencies; enhance outdoor recreation opportunities; improve the accessibility of public lands; and respond to wildfires and other natural disasters.

L4E: Codify and direct funding for the Joint Chiefs Landscape Restoration Program to facilitate continued partnership and investment between USFS and NRCS to support restoration projects where Federal and private land ownership and management goals intersect.

Implementation and Next Steps

As the Initiative enters its second year, Western Governors will be primarily focused on the implementation of these recommendations, within their own states, collaboratively through WGA and in legislation being considered by the U.S. Congress. Several matters were raised over the past year that deserve additional attention, but time constraints or subject complexity prevented a thorough consideration of these issues. WGA intends to continue the conversation on these matters and other emerging items with the goal of providing concrete recommendations in these areas as well.

Litigation/Alternative Dispute Resolution (ADR)

Although litigation over Federal forest management decisions has declined considerably over the past 2 decades, lawsuits can still frustrate forest collaborative efforts and have a ripple effect on broader Federal practices and policy. The topic of litigation and its potential alternatives is both complex and controversial. There are no easy or simple answers, but it is necessary to explore whether better procedures and outcomes can be achieved.

During the past year, Western Governors heard from workshop participants about issues associated with litigation. This feedback led to a WGA-sponsored webinar that explored the present and future role of forest litigation, potential alternatives to traditional adjudication in Federal courts, and other alternatives that might expedite review or allow for a certain set of projects to proceed while claims are considered. A broad spectrum of conservation and timber industry representatives, public officials, and other interested parties participated in the webinar.

The webinar panel explored Alternative Dispute Resolution (ADR) as a means of resolving forest management disagreements. The most frequently cited alternative to litigation was arbitration. Engaging an arbitrator—instead of a Federal judge—to adjudicate claims is appealing to industry and conservation interests. As there are different systems of arbitration (and widespread dissatisfaction with the current system), a more thorough examination of arbitration as an alternative to litigation is warranted.

Workshop: Bend, Oregon (Jan. 23–24, 2017)

Keynotes: Kate Brown, Governor of Oregon, and Leslie Weldon, Deputy Chief, U.S. Forest Service

Summary

Governor Kate Brown noted during her opening remarks at the Bend workshop that "In Oregon, we continue to pursue strategies to accelerate the pace, scale, and quality of restoration of our Federal forests."

Governor Kate Brown hosted the fourth workshop of the National Forest and Rangeland Management Initiative in Bend, Oregon. The meeting highlighted collaboration's role in creating economic opportunities, fostering robust rural economies, and preserving natural resources.

"We know we accomplish more working together. We have benefited tremendously from this collaboration in Oregon," Governor Brown observed in her opening remarks.

"I am focused on creating jobs in our timber and rural communities," she continued. "In Oregon, we continue to pursue strategies to accelerate the pace, scale, and quality of restoration of our Federal forests."

Governor Brown noted, as an example, that in 2006, the timber sale program on the Malheur National Forest was effectively zero. Disagreements over forest management were grinding restoration activities to a halt. The formation of the Blue Mountain Forest Partners collaborative has resulted in the reinstatement of active management. That has led to a 200 percent increase in home sales in the area, as well as school enrollment increases and a decrease in unemployment.

USFS Deputy Chief Leslie Weldon commended the work of the initiative, noting that the workshops "are really helping us chart a strong path for shared stewardship with the states, with Federal land managers, and Tribes, and communities."

Deputy Chief Weldon encouraged initiative participants to "not be limited by conventional thinking" in looking for innovative solutions to the threats facing forests and rangelands in the West. "Our challenges are great," Governor Brown observed, "but I am confident our resolve is greater."

Most current litigation on behalf of environmental organizations is concentrated in the Northern Rockies region. Some participants expressed concern that Congress could change the current system for everyone to address the actions of a few. Others emphasized the importance of retaining the ability to challenge government actions due to substantive or procedural violations of law, and expressed reservations that ADR could be implemented in a way that safeguards these principles. It was also suggested that a limited-scale ADR pilot program could provide valuable insights on the feasibility of different ADR approaches.

Despite a variety of views on the merits and efficacy of ADR, many agree that plaintiffs should have an appropriate venue in which to air opposition to, or grievances over, forest and rangeland projects. At the same time, litigation intended to

stall or halt collaboratively developed projects—without consideration of a project's merits, quality, or the collaborative process used in project design and decision-making—undermines the objectives of all parties and fosters disincentives for achieving restoration and management objectives.

Western Governors see a need for further dialogue to determine recommendations that can help resolve chronic litigation challenges, while allowing for the appropriate adjudication of claims. Strategies should explore the full range of ADR tools, potential variations in the timing and scope of these tools in project development and decisions, and other strategies that can be deployed administratively or legislatively to significantly reduce litigation delays and risks beyond the use of ADR. Western Governors look forward to pursuing options and recommendations further in year 2 of the initiative in consultation with Federal agencies and interested stakeholders.

Pacific Islands Management Challenges

The flora and fauna of the State of Hawaii and U.S. territories in the Pacific Ocean differ markedly from in the continental U.S. Many of the land management challenges faced by the Pacific Islands are instantly familiar to any continental state forester or Federal land manager. These include:

- water quantity and quality;
- invasive species;
- insect and disease control;
- changing climate;
- wildfire and public safety; and
- watershed function.

WGA will examine the challenges faced by the Pacific Islands and develop a strategy for these areas that can be integrated into the broader WGA National Forest and Rangeland Management Initiative. WGA plans to convene a Pacific Islands workshop or webinar (or combination) to explore the land management challenges in the State of Hawaii and the Pacific territories, including island challenges identified in their forest action plans. WGA will also examine how individual islands collaborate with Federal agencies to accomplish restoration and seek information on the level of engagement of non-Federal entities in the execution of restoration activities.

Finally, WGA will explore additional opportunities for partnerships to advance collective priorities and needed restoration actions in Hawaii and the U.S. territories.

Tribal Practices and Additional Collaboration Opportunities

Tribal lands and Tribal traditional ecological knowledge (TEK) are an important component of forest and rangeland management in the West. In the U.S., more than 55 million acres of land are held in trust by the Federal Government for various Native American Tribes and individuals. The vast majority of these lands are located in western states and are owned and managed by the 567 federally recognized American Indian Tribes and Alaska Natives. The Federal Bureau of Indian Affairs (BIA) is responsible for the administration and management of the surface land and 57 million acres of subsurface minerals estates held in trust for Native American and Alaska Natives.

Tribes possess nationhood status and retain inherent powers of self-government, and states have no authority over Tribal governments unless expressly authorized by Congress. The relationship between Tribes and states is that of one sovereign government to another. States and Tribes frequently collaborate and cooperate through compacts or other agreements on matters of mutual concern (such as environmental protection and law enforcement).

The Tribal Forest Protection Act (P.L. 108–278) does allow the Secretaries of Agriculture and Interior to give special consideration to tribally-proposed SCA or other projects on Federal lands to protect the Indian trust resources from fire, disease, or other threats. It is clear, however, that there are additional opportunities for collaboration with Tribes. For example, the integration of Tribal lands into cross-boundary land management discussions has proven to be of great benefit in many instances. While some aspects of Tribal involvement were discussed at the initiative workshops, opportunities to include Tribes in the planning and execution of restoration activities should be examined further. In the coming year, WGA plans to convene a western Tribal forest and rangeland restoration workshop or webinar to explore increased collaboration opportunities to achieve mutual Tribal and state land management objectives.

U.S. Forest Service Deputy Chief Leslie Weldon commended the work of the Initiative at the Bend workshop, noting that participants "are really helping us chart a strong path for shared stewardship with the states, with Federal land managers, and Tribes, and communities."

Webinar: *Land Management Conflict: Current Litigation and the Future of Alternative Dispute Resolution*

Citizen-suits, collaboration, and alternative dispute resolution (ADR) was the focus of the conversation. Moderated by David Dreier, President of Foresight LLC, a diverse panel discussed how collaboratives can be structured to avoid lawsuits, when ADR is appropriate, and how an equitable outcome can be reached when litigation does occur. A sample of panelists' comments:

- "If you were to ask anybody, 'Has litigation been a benefit to the whole process?' I think an objective answer would be, 'No.' Today, we are re-litigating the same issues under fundamental laws that we have litigated for several decades. The courts are not a good place to resolve what are the fundamental questions here, and we have to seek alternative venues." **Jim Riley, Principal, Riley and Associates.**
- "20 years ago, or 30 years ago, litigation over forest planning and sales was really hammering out big questions about what was the Forest Service's duty to implement forest plans that manage for multiple purposes. Many of those big overarching questions have been worked out through that environmental litigation. Trout Unlimited believes that a sort of sale-by-sale litigation strategy looks in the rearview mirror, as opposed to a strategy that really moves forward National Forest management in a way that's helpful for both wildlife species and rural communities." **Laura Ziemer, Senior Counsel and Water Policy Advisor, Trout Unlimited.**
- "The Forest Service is very open to any idea that fosters a mechanism that allows us to collaborate and engage with people more effectively than the set of tools we have right now. Any process that we can use to help us focus more on working closer with people, getting the project right, getting wider

support for the actions we are going to do, as opposed to the more process-oriented pieces that focus on preparing for what may occur during litigation, is very helpful to the agency." **Chris French, Director, Ecosystem Management Coordination, U.S. Forest Service.**

- "People want to be part of success. They want to be part of solving problems locally, of having their own local flair be part of how local lands are managed. You want to incentivize working together and coming up with projects that are durable and can get implemented. That is really where the future of land management lies, but I don't think that it is a silver bullet. You can't force people to collaborate, so there has to be a way for them to continue to engage. These are public lands. If they feel that laws have been violated, substantive and procedural, they should have their day in court." **Susan Jane Brown, Wildlands Program Director and Staff Attorney, Western Environmental Law Center.**

Enhanced Tracking and Performance Metrics

WGA plans to pursue emerging ideas to better track and measure impacts of forest and rangeland restoration in collaboration with Federal agencies, academic partners and Congress. Improved tracking and metrics are needed to chart progress, better understand the ramifications of inaction, and assist in prioritizing future work. Preliminary recommendations include:

- Examine the creation of a Federal Forest and Rangeland Planning and Project Dashboard to enable periodic and real-time monitoring of Federal project planning and implementation, including improved measures of restoration outcomes. As a part of this, explore the opportunity for a pilot project to develop a collaborative online geographic information system (GIS).
- Research and establish common interagency metrics to better assess the economic, social and ecological value of forest and rangeland restoration activities, including avoided costs of catastrophic wildfire, and economic impacts to other linked sectors (such as the livestock, timber, water supply and outdoor recreation industries). Develop recommendations on how these metrics of the economic value of restoration can be better incorporated into decision-making. Research and establish common interagency metrics of large-scale community wildfire resilience to track progress across multiple projects and resilience strategies.
- Integrate rangeland assessment metrics (soil, water, plants, animals, productive capacity) to create a rangeland sustainability report that addresses ecological, economic and social impacts of restoration activities. Use these metrics to identify and prioritize restoration activities on rangelands.

Case Studies

Montana

The Custer Gallatin National Forest, Montana.

Montana has initiated a multi-faceted strategy called Forests in Focus to accelerate forest and rangeland restoration across all land ownerships and reinforce the positive benefits of state engagement in Federal land management. Through the strategy, the state has built capacity and advanced priority projects through a variety of strategies, such as:

- **Chessman Reservoir Stewardship Project:** Designed to help protect the Helena water supply, this 490 acre project on the Helena-Lewis and Clark National Forest was administered by the Montana Department of Natural Resources (DNRC). Completed in late 2016, this project reduced hazardous fuels on approximately 500 acres of dead and dying forests adjacent to the reservoir. The project involved difficult hand thinning and fuel removal along the length of the water conveyance flume. About 4 million board feet of wood products were also generated by the project, helping to underwrite the cost of the fuel reduction treatments.
- **Investing in Coordination and Implementation of Federal Forest Restoration:** Montana created a Federal Forest Liaison position in 2014. Doing so has proven instrumental in providing clear communication and coordination to support state investments in priority Federal projects, advance new tools under the 2014 Farm Bill, and ensure state equities are reflected in forest plan revisions.

Montana has also invested over $2 million of state funds in 27 USFS forest restoration projects, which will help bring them online more quickly. All told, the investments are expected to treat approximately 285,000 acres and produce 165 million board feet of timber. The efficacy of DNRC investment is being analyzed to form the basis for future investments of state funds in Federal forest projects.

- **Direct Investment in State, Tribal and Private Forest Projects:** Since 2014, Montana has invested $5.5 million in more than 34 projects on state, Tribal, and private forest lands. The majority of these projects have been implemented, completing forest restoration and fuel reduction on approximately 10,000 acres, and producing 22 million board feet and 71,000 tons of pulp logs.
- **Assistance to Local Governments:** Through the DNRC Local Government Forest Advisor, Montana has helped bring county commissioners and USFS leadership together to improve dialogue and coordination on Federal forest planning and management. Montana has provided financial assistance to counties to help pay for travel, analysis, and facilitate their efforts to engage with their Federal counterparts. In the fall of 2016, DNRC helped plan and host the first annual "County Forest Summit," which facilitated dialogue between Federal and state officials around forest management issues. DNRC is also planning to provide financial and technical assistance to four Montana counties as they intervene in court on priority USFS projects that are under litigation.

Good Neighbor Authority (GNA): GNA allows states to enter into cooperative agreements with certain Federal agencies and permits them to perform various land management activities on Federal lands. Montana signed a Master Good Neighbor Agreement in July 2016, and completed the pilot Jumping Creek Campground GNA project soon after. Analysis has started for the Pintlar-Prison GNA Project on the Beaverhead-Deerlodge National Forest and adjacent lands owned by the Montana Department of Corrections and private landowners. Two other GNA projects on the Lolo and Kootenai National Forests are in the planning stages as well. A master GNA Agreement with the Bureau of Land Management (BLM) has been finalized and is awaiting signature; several GNA projects are anticipated to be initiated between DNRC and the BLM in 2017.

Collaboration: The DNRC Federal Forest Liaison and Local Government Forest Advisor have been active in several forest collaborative groups around the state, and helped form the Montana Forest Collaboration Network in late 2016.

Idaho

Sawtooth Valley, Idaho.

Idaho has been recognized as a state leader in the use of GNA and is using the authority to achieve a number of different restoration objectives.

GNA Statewide Master Agreement: The state has already established a GNA Statewide Master Agreement between the Idaho Department of Lands (IDL) and Regions 1 and 4 of the USFS. It has also entered into a 5 year agreement with three forest products industry cooperators, who have committed to providing up to $1 million over 5 years to cover partial startup costs for GNA projects. Additionally, IDL has entered into a 3 year contract with five environmental firms to support NEPA through the state's GNA agreements. This contract allows the environmental firms to supplement the individual forests' NEPA teams as needed, or complete the full analysis from start to finish on any National Forest that the state has a GNA agreement with.

Supplemental Project Agreements: Supplemental Project Agreements (SPAs) have been developed and signed on the Nez Perce-Clearwater, Payette, and Idaho Panhandle National Forests. The SPAs authorize and describe how IDL will implement GNA forest restoration projects on those National Forests. Successes include:

- The first GNA timber sale (Wapiti timber sale) on the Nez Perce-Clearwater National Forests, which is expected to generate approximately 4.5 million board feet and $1.2 million in net program income for Idaho GNA.
- Field work for the Lost Creek Boulder Creek and Brundage Vegetation Management Projects. On Lost Creek Boulder Creek, approximately 150 acres have been designated for harvest, and on Brundage, 180 acres with 14 treatment units have been identified for treatment.
- Reconnaissance work on the 3,000 acre Hanna Flats project, a thinning and fuel reduction project, has started near Priest Lake on the Idaho Panhandle National Forest. The field reconnaissance work provided the basis to begin the collaborative conversation with the public for a proposed action within the NEPA process.

South Dakota

Black Hills Forest, South Dakota.

South Dakota's effort to address Mountain Pine Beetle (MPB) infestation is an excellent example of successful cross-boundary management:

Black Hills Forest Initiative: Governor Dennis Daugaard led a Black Hills Forest Initiative focused on state and private lands as a part of the overall MPB effort, and later expanded to Federal lands. The state legislature supplied almost $11 million over several years to complete work on priority landscapes across private, state and Federal lands. In addition, two Landscape Scale Restoration grants provided by USFS State and Private Forestry over 3 years added another $600,000 to the MPB suppression effort.

Since 2011, this initiative has resulted in the survey of 278,149 acres of state and private land and the completion of 4,807 acres in Black Hills National Forest timber sales, identifying 672,000 infested trees and the treatment of 557,000 trees.

County Mountain Pine Beetle Initiative: Supported by state and county funds, the County Mountain Pine Beetle Initiative identified over 121,000 infested and dead trees in four key counties, and by the end of 2015 had treated more than 84,000 of those trees. The result of these concentrated efforts, coupled with 1.4 million infested trees harvested by the local forest products industry, has achieved a dramatic reduction in the amount of MPB-caused pine mortality in the Black Hills.

Oregon

The Federal Forest Restoration Program has been instrumental in accelerating the pace, scale and quality of restoration projects in Oregon. About ten percent of program funds have been awarded as grants to local collaborative groups to procure facilitation services and technical assistance to reach agreements for landscape scale projects.

- One example of success is the Blue Mountain Forest Partners, which switched from a project-by-project approach to an issues-based approach to collaboration. This has allowed the group to expand their agreements to keep up with the accelerated pace of restoration. Since 2013, the Malheur National Forest has tripled its timber output and expanded the boundary of the Southern Blues CFLR project area by 300,000 acres. The state has used its own funds to assist the USFS with data collection to reduce NEPA timeframes. The state has also used firefighting staff on the shoulder seasons to assist with pre-sale layout on 54 timber sales statewide to increase the pace of treatment implementation. On the Willamette National Forest, the state is estimated to have completed 55 percent of all pre-sale layout in the fiscal year and helped the forest exceed its timber target.

- Another notable success is the Blue Mountains Cohesive Strategy Pilot Project, which is located on 7.5 million acres of mixed land ownership in northeastern Oregon, southeastern Washington and western Idaho. Federal Records of Decision were signed on 137,487 acres of collaborative projects within the Blue Mountains region from 2012–2014, with planning work proceeding on an additional 465,356 acres. In addition to treatments on both Federal and private lands, the Oregon Department of Forestry and Department of Fish and Wildlife (ODFW) partnered to implement a timber sale on a property owned and managed by ODFW.

Wyoming

Wyoming Governor Matt Mead established a Task Force on Forests in 2013. The group was charged with examining all forests in the state, regardless of jurisdiction, and providing recommendations to assess and address the challenges affecting forest conditions and management. The final report includes 12 major recommendations and 53 subrecommendations for the Governor's consideration. The task force's efforts have served as a blueprint for improving forest management practices throughout the state.

New Mexico

The Watershed Restoration Initiative, started by New Mexico Governor Susana Martinez in 2014, has enabled implementation of forest restoration projects designed to improve and protect water quality. Approximately $12.2 million in state funds and an additional $9.475 million of matching Federal funds have been committed to carry out initiative work. The state and its partners have undertaken 50 separate projects covering 27,263 acres in 14 watersheds identified as high priority in the New Mexico Forest Action Plan.

One notable success has been the Mescalero Apache Tribe Watershed Restoration Project. The project targeted three watersheds listed as high priority by New Mexico State Forestry, as part of a statewide assessment that looked at watershed areas that are considered at-risk. The project was completed ahead of schedule due, in large part, to the collaboration of the state and the Tribe. The restoration work reduced tree density throughout the watersheds, promoting forest resiliency, benefiting overall forest health and lowering the threat of uncharacteristic wildfire. This will not only improve the watersheds on Mescalero Tribal land, but extend protection to water resources and communities downstream within the Tularosa Basin.

Colorado

Firefighters on the 2002 Hayman Fire, whose long-term impacts dramatically affected water quality and supply for the Front Range of Colorado.

Soil health impacts from uncharacteristic catastrophic wildfires along Colorado's Front Range, including the 1996 Buffalo Creek and 2002 Hayman wildfires, have led to severe erosion and sediment accumulation in reservoirs supplying drinking water for the greater Denver area.

From Forests to Faucets is a partnership between the Colorado State Forest Service, USFS, the Natural Resources Conservation Service, and the Denver Water Department. The partnership began in 2010 with the goal of restoring forests affected by wildfire and mitigating wildfire risk in critical watersheds to reduce future water quality impacts. To date, more than 40,000 acres of National Forest System (NFS) lands have been treated for fire mitigation and restoration.

In February 2017, the partnership was renewed until 2021 and $33 million pledged to complete projects across NFS and private lands in support of watershed protection for Denver's water supply.

California

Governor Jerry Brown established the Tree Mortality Task Force (TMTF) to address the effects of bark beetle infestation and prolonged drought. The TMTF includes state and Federal agencies, local governments, utilities and various stakeholders working cooperatively to coordinate emergency protective actions and monitor on-the-ground conditions.

The state estimates that since 2010, more than 100 million trees have succumbed to the stress of beetle infestation or drought. Of California's 32 million acres of forestland, over 6 million acres have been classified as either Tier I or Tier II High Hazard Zones. The TMTF coordinates Federal, state and local governments to ensure that restoration activities are organized effectively, ensuring that these high-hazard areas receive priority treatment. It also serves as an important focal point of communication between different layers of government, nongovernmental organizations, Tribes, and private landowners, providing regular updates on tree mortality and the status of restoration activities.

On the Web

A central objective of this initiative is to enable participants to engage in discussions designed to deliver insights on current land management practices and identify improvements that will put western states on a path to developing healthy, resilient landscapes and communities. To ensure the conversation reaches the widest possible audience, WGA launched an online resource that includes videos of all Workshops, our Webinar series, and a variety of other resources. We've also created the Initiative Appendix, a document that delivers expanded detail on the conversations at each workshop, as well as responses to participant questionnaires.

Workshops

Nearly 400 attendees took part in the four regional Initiative Workshops. The workshops were "live-streamed" on the web and subsequently posted to YouTube. Workshops were hosted by Gov. Steve Bullock in Montana, Gov. C.L. "Butch" Otter in Idaho, Gov. Dennis Daugaard in South Dakota and Gov. Kate Brown in Oregon.

Webinars

The Initiative webinar series featured the leading thinkers on topics such as "The Future of Wild Horse and Burro Management," "Rangeland Management Strategies and Tools," and "Land Management Conflict," which explored litigation and Alternative Dispute Resolution.

Find the Initiative online resource and join the conversation at: *westgov.org*

Acknowledgments

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Bob Harrington, Montana State Forester
Tim Baker, Member, Northwest Power and Conservation Council
Christine Dawe, Director of Renewable Resources Management, U.S. Forest Service
Kelsey Delaney, Policy Director, Council of Western State Foresters
Patrick Holmes, Natural Resources Advisor, Montana Governor's Office

Panelists and Speakers
Missoula, Montana Workshop
September 20–21, 2016

Honorable Steve Bullock, Governor of Montana
Tom Tidwell, Chief, U.S. Forest Service
James D. Ogsbury, WGA Executive Director
Matt Arno, Local Government Forest Advisor, Montana DNRC
Tim Baker, Montana Governor's Office
Rebecca Barnard, National Forestry Programs Manager, National Wild Turkey Federation
Mo Bookwalter, DNRC–USFS Liaison
Caroline Byrd, Executive Director, Greater Yellowstone Coalition
Cecilia Clavet, Senior Policy Advisor, The Nature Conservancy
Tony Colter, Plant Manager, Sun Mountain Lumber Company
Christine Dawe, Acting Director of Forest Management, USFS
Kelsey Delaney, Council of Western State Foresters
Ryan Domsalla, West Fork District Ranger, Bitterroot National Forest, USFS
Carol Ekarius, Executive Director, Coalition for the Upper South Platte
Jonas Feinstein, State Conservation Forester, Natural Resources Conservation Service
Tom France, Senior Director, Western Wildlife Conservation, National Wildlife Federation
Tom Fry, Western Conservation Director, American Forest Foundation
Ron Gray, Wood Fuel Manager, Avista Utilities
Buddy Green, Wyoming Deputy State Director, U.S. Bureau of Land Management
Joseph Hansen, Conservation Forester, Jefferson Conservation District
Bob Harrington, Montana State Forester
Wayne Hedman, Bitterroot Restoration Committee
Jennifer Hensiek, Missoula District Ranger, Lolo National Forest, USFS
Bill Imbergamo, Executive Director, Federal Forest Resource Coalition
Denny Iverson, Blackfoot Challenge
Keith Lannom, USFS Payette Forest Supervisor
Charles Lyons, RFPA Member, Percy Ranch
Jeremy Maestas, Natural Resources Conservation Service
Joe Merrick, Owyhee County Commissioner
Mikal Moore, National Wild Turkey Federation
Peg Polichio, IDL GNA Contractor
Cheryl Probert, USFS Nez Perce-Clearwater Forest Supervisor
Brenda Richards, Owyhee County Rancher
John Robison, Idaho Forest Restoration Partnership
Allen Rowley, USFS Rangeland Management Director
Tom Schultz, Director, Idaho Department of Lands
Julia Sullens, IDL
Rick Tholen, Payette Forest Coalition
Troy Timmons, WGA
Will Whelan, The Nature Conservancy

Deadwood, South Dakota Workshop
December 1–2, 2016

Honorable Dennis Daugaard, Governor of South Dakota
Troy Timmons, WGA
Craig Bobzien, USFS, Black Hills National Forest Supervisor—Retired
Ryan Brunner, Commissioner of South Dakota School and Public Lands
Chance Davis, Heart Tail Ranch, LLP
Christine Dawe, USFS
Kelsey Delaney, Council of Western State Foresters
Jay Esperance, SDDA Wildland Fire Director
Mike Jaspers, Secretary, South Dakota Department of Agriculture (SDDA)
Eric Jennings, Hollow Valley Ranch
Karl Jensen, South Dakota Association of Conservation Districts
Greg Josten, State Forester, South Dakota Department of Agriculture (SDDA)
Lori "Chip" Kimball, BLM
Steve Kozel, USFS, District Ranger, Black Hills National Forest
Jim Neiman, Neiman Enterprises Inc.
Dave Ollila, Sheep Field Specialist, South Dakota State University Extension
Jeff Parrett, Wheeler Lumber, LLC
Bob Paulson, The Nature Conservancy
Hunter Roberts, South Dakota Governor's Office
Allen Rowley, USFS
Bill Smith, South Dakota Department of Agriculture
David Steffen, Mid Missouri River Prescribed Burn Association
Dan Svingen, USFS
Dave Thom, Custer Conservation District & Coordinator of the MPB Working Group
Nancy Trautman, Pennington County Commissioner

Dyrk Krueger, Enhanced Forest Management, Inc.
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Tera Little, Farm Bill ID Team Leader, USFS
Tim Love, Montana Forest Collaboratives' Network
Sarah Lundstrum, National Parks Conservation Association
Leanne Marten, Regional Forester, USFS Northern Region
Mary Mitsos, National Forest Foundation
Cassandra Moseley, Director, Institute for a Sustainable Environment, University of Oregon
Mark Peck, Lincoln County Commissioner, MT
Mike Petersen, Lands Council
Ralph Rau, Regional Fire and Aviation Director, USFS—Region 1
Chuck Roady, General Manager, F.H. Stoltze Land and Lumber
Gordy Sanders, Resource Manager, Pyramid Mountain Lumber
Dave Schulz, Madison County Commissioner, MT
John Tubbs, Director, Montana DNRC
Russ Vaagen, Vice President, Vaagen Bros Lumber Co.
Chas Vincent, Kootenai Forest Stakeholders Coalition

Boise, Idaho Workshop
October 20–21, 2016

Honorable C.L. "Butch" Otter, Governor of Idaho
Jim Lyons, U.S. Department of the Interior
James D. Ogsbury, WGA Executive Director
Steve Acarregui, BLM Fire and Aviation Directorate
David Anderson, Natural Resource Results
Zoanne Anderson, Maggie Creek Area Manager, IDL
Dennis Becker, University of Idaho
Bob Boeh, Idaho Forest Group
Mike Courtney, Twin Falls District Manager, U.S. Bureau of Land Management
Gordon Cruickshank, Valley County Commissioner
Christine Dawe, USFS Acting Director of Forest Management
Kelsey Delaney, Council of Western State Foresters
Don Ebert, Clearwater County Commissioner
Mary Farnsworth, USFS Acting Deputy Regional Forester
Craig Foss, IDL
David Groeschl, Idaho Department of Lands (IDL)
Toni Hardesty, The Nature Conservancy
Darcy Helmick, RFPA Member
Alex Irby, Clearwater Basin Collaborative
Liz Johnson-Gebhardt, Priest Community Forest Connection
Don Kemner, Idaho Department of Fish and Game
Shawn Keough, Associated Logging Contractors—Idaho
Gina Knudson, USFS Salmon-Challis National Forest
Terry Kramer, Twin Falls County Commissioner
Mark Van Every, USFS, Black Hills National Forest Supervisor
Mike Wood, High Ridge Leadership
Ben Wudtke, Black Hills Forest Resource Association
Mary Zimmerman, Black Hills National Forest Advisory Board

Bend, Oregon Workshop
January 23–24, 2017

Honorable Kate Brown, Governor of Oregon
Leslie Weldon, Deputy Chief, U.S. Forest Service
James D. Ogsbury, WGA Executive Director
Ron Alvarado, State Conservationist, NRCS
Bill Aney, Former Eastside Restoration Coordinator, USFS
Steve Beverlin, Malheur National Forest Supervisor, U.S. Forest Service
Pete Caligiuri, The Nature Conservancy
Nils Christofferson, Wallowa Resources
Peter Daugherty, Oregon State Forester
Chad Davis, Partnership and Planning Program Director, Oregon Department of Forestry
Steve Grasty, Judge (Retired), Harney County, Oregon
Karen Hardigg, Rural Voices for Conservation Coalition
Paul Henson, Oregon State Director, U.S. Fish and Wildlife Service
Paul Hessburg, U.S. Forest Service
Tom Insko, Eastern Oregon University
Travis Joseph, American Forest Resource Council
Jason Miner, Governor Kate Brown's Natural Resource Policy Manager
Cassandra Moseley, University of Oregon
John O'Keeffe, Oregon Cattlemen's Association
Jim Pena, Regional Forester, U.S. Forest Service
Sally Russell, Mayor *Pro Tem* of Bend, Oregon
Mark Stern, The Nature Conservancy
Sean Stevens, Oregon Wild
John Stromberg, Mayor of Ashland, Oregon
Troy Timmons, WGA
Mark Webb, Blue Mountains Forest Partners

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SUBMITTED QUESTIONS

Response from John Phipps, Deputy Chief for State and Private Forestry, U.S. Department of Agriculture

Questions Submitted by Hon. Abigail Davis Spanberger, a Representative in Congress from Virginia

Question 1. Deputy Chief Phipps, 2020 has been an unprecedented fire year. Over 7 million acres have burned nationwide, a figure that exceeds the 10 year-to-date average by a million acres. In addition to this, the COVID-19 health crisis presents new challenges to the wildland fire system. Can you take a moment to discuss the unique factors at play this wildfire year? Does the Forest Service have the necessary resources—including agency personnel, physical assets, and personal protective equipment to meet current challenges?

Answer. This fire year was challenging due to many factors, not the least of which was modifying our response efforts to incorporate employee and community protections against COVID-19. In addition to challenges in preparing for a fire year during a global pandemic, toward the end of the fire season, we had extreme fire activity occurring simultaneously across multiple geographic areas in the Rocky Mountains and the West Coast.

In a typical fire year, fire activity transitions from the southwestern part of the country, to the western states and then into southern California, allowing for resources to move around the country, surging to the areas of greatest need. In latter part of the 2020 fire year, we saw a simultaneous and persistent need for resources throughout the western United States, stretching resources to their limit for several weeks. The wildland fire system was able to respond effectively despite these significant challenges. The agency anticipates similar challenges in the future and will be evaluating and implementing many lessons learned to better position ourselves for future fire years. The supplemental funding received from the Coronavirus Aid, Relief, and Economic Security Act provided the agency with much needed resources to ensure that adequate personal protective equipment was available to all agency wildland fire responders.

This year, despite these challenging circumstances, the agency was able to deliver an effective interagency wildland fire response, at certain times deploying over

32,000 firefighters, the largest mobilization since record keeping began. The agency is focused on providing a strategy to modernize our preparedness and response efforts and adopting best practices learned from this year's deployments. We are moving to a virtual posture whenever possible to provide support across many areas simultaneously rather than utilizing large fire camps for firefighter support. These changes were a vast improvement over historical practices and will continue.

Question 2. Deputy Chief Phipps, in a budget hearing earlier this year, Chief Christiansen testified to the need of shifting the wildland firefighting workforce towards full-time to account for the changes we are experiencing across landscapes, including longer and more intense fire seasons as a result of climate change. Please take some time to discuss the need for a full-time firefighting workforce—both in terms of reducing fire risk and improving forest health overall?

Answer. A full-time firefighting workforce would allow the agency to more effectively address the entirety of the wildland fire cycle, and the agency continues to work towards a more effective balance of full-time and seasonal firefighters. Year-round wildland fire resources could increase—the agency's capacity to treat hazardous fuels and large landscapes prior to the most active months of the fire year and still provide a robust response capability during months of peak activity. Additionally, a year-round work force reduces the administrative burden of on-boarding thousands of temporary and seasonal firefighters each year.

Question 3. Across much of the United States, fire seasons have lengthened by as many as 20 days per decade over the last forty years. As climate change continues to intensify fire seasons, what steps is the Forest Service taking to proactively manage fire risk?

Answer. It is true that annual fire seasons are weeks longer than they were a few decades ago as forest management activities have seen a decrease since the 1990's. Agencies often now refer to the "fire year" instead of the "fire season." The Forest Service is an active partner in the National Cohesive Wildfire Management Strategy (Cohesive Strategy). The Cohesive Strategy has three goals, and the Forest Service is making meaningful progress on all three.

1. Resilient Landscapes—The agency is involved in many initiatives to foster resilient landscapes across all land ownerships (*e.g.,* Collaborative Forest Landscape Restoration, Shared Stewardship, and Quantitative Wildfire Risk Assessments). Agency researchers are leading the world on diverse topics such as small-diameter wood utilization needed to cost-effectively thin forests for improved health; developing models to better predict fire behavior under future weather conditions; and pioneering physics-based approaches to modeling wildfire and smoke to forecast airhazards to communities.
2. Fire Adapted Communities—the most tragic wildfire consequences often occur in communities and in the wildland-urban interface. The agency is a supportive partner in many projects to help communities become more fire resilient and learn to live with fire. These projects include: Community Mitigation Assistance Teams, *https://www.fs.usda.gov/managing-land/fire/cmat;* Community Planning Assistance for Wildfire, *https://cpaw.headwaterseconomics.org/;* Federal Excess Personal Property program, *https://www.fs.usda.gov/managing-land/fire/fepp;* Fire Adapted Communities Learning Network, *https://fireadaptednetwork.org/;* Firewise USA, *https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Wildfire/Firewise-USA;* Ready, Set, Go!, *https://www.readyforwildfire.org/prepare-for-wildfire/ready-set-go/;* EPA's Smoke-Ready Toolbox, *https://www.epa.gov/smoke-ready-toolbox-wildfires;* and the Wildland Fire Assessment Program, *https://www.nvfc.org/programs/wildland-fire-assessment-program/*. The agency also provides tools and data for communities such as the Wildfire Risk to Communities website, *https://wildfirerisk.org/*. The dividends paid by these programs will be even more important to meet the climate demands of the future.
3. Safe and Effective Wildfire Response—The Forest Service is taking steps and working with partners to ensure that our response to wildfires will be safe and effective. For example:
   - The Forest Service is adjusting staffing levels to have additional year-round personnel available for response throughout the year.
   - All fire response agencies are fine-tuning guidance about when and where to deploy human resources to reduce risks to firefighters and invest in actions with the greatest likelihood of success.
   - Communication equipment and protocols are being updated.

Question 4. Can you speak to the role of technology in wildland fire management? Are you aware of any innovative uses of technology in the field or currently being tested today? Where do you see technology being most useful in the future?

Answer. Technology is a critical component in all aspects of wildland fire management. Technology and associated data are critical in decision support processes, risk management evaluations, and the monitoring and evaluation of both aircraft use and ground crews. Technology is the backbone of fire modeling and associated weather inputs that allow fire managers to understand current and predicted fire behaviors. These outputs, fused with resource availability and use, allow fire managers to view a landscape at a tactical and strategic level to ensure effective and efficient use of fire resources is occurring. The use of technology during this most recent fire year allowed incident management organizations to operate more safely despite the COVID-19 pandemic by providing a cloud-based collaboration suite of tools that could be managed in remote locations, significantly reducing the need for continuous face-to-face interactions.

Innovation is occurring at all levels and business areas of fire management. Unmanned aerial systems and High Altitude Long Endurance resources are currently being tested to enhance unmanned aerial systems use and improve situational awareness. The installation and use of ground-based camera systems has mostly phased out the need for staffing lookout towers, as well as providing better coverage of the landscape for wildland fire detection and monitoring. The testing and integration of fire resource tracking systems is currently being evaluated across the fire community with several different tracking devices and back-end systems to view and analyze the data.

Technology will continue to enhance situational awareness in wildland fire and landscape impacts caused by fire. Technology will allow firefighters to analyze situations using current and historical data processed with artificial intelligence giving probabilities of success based on a given tactic.

Question 5. How has the COVID-19 crisis impacted the number of firefighters and other support personnel? How does the number of personnel deployed to respond to wildfire this year compare to past seasons? Do you have an adequate number of firefighters?

Answer. COVID-19 did decrease personnel on incident management teams due to individuals at high risk choosing not to participate this year. However, the interagency firefighting community was able to deploy over 32,000 firefighters at certain times during the 2020 fire year despite this challenge. This was the largest deployment of resources since record keeping began.

Question 6. What measures and training protocols is the Forest Service implementing to mitigate COVID-19 virus exposure to wildland firefighters and the communities they serve? How is the Forest Service working to ensure COVID-19 related precautions are being implemented across all the geographic regions?

Answer. The National Wildfire Coordination Group Fire Management Board has developed a hazard assessment toolkit to provide information and templates for the wildland fire community to assess current infection control, testing, and workplace procedures relating to COVID-19 in the wildland fire environment. *https://www.nwcg.gov/partners/fmb/hazard-assessment-prevention-toolkit*.

Firefighters have received information on appropriate mask use, what to do when they are symptomatic and how to follow CDC guidelines and work with their local health officials. Agencies are emphasizing greater use of traditional and social media, as well as internet-based technologies to provide consistent communication with the public on wildfire issues where social distancing and "Stay at Home" orders limit in-person communication. When large fires require firefighters to travel from outside the local area, crews are being mobilized and supported in a manner that ensures social distancing and protection for local communities from the spread of COVID-19. Agencies are working with community leaders and local law enforcement, ensuring that community needs are being met and wildfire threats and capacity are clearly understood when planning firefighting strategy and evacuations. Large fire camps are not the norm. Most firefighting efforts are being accomplished in small groups and dispersed into isolated camps to provide firefighters and the public better social distancing and safety from the spread of COVID-19. Wildland fire agencies have adapted support functions to be accomplished virtually to maintain social distancing. We continue to work with interagency partners to determine when and how to bring in resources from outside the local area when a fire escapes initial attack.

Mitigation measures also include crews maintaining a module-of-one philosophy at fire camps to keep crews isolated from one another; masks are required while on a fire or at the home unit when around anyone not on their module; physical

distancing of at least 6′ is required unless physically not possible, *i.e.,* vehicles; vehicles are to maximize air flow/exchange with windows partially open and no use of recirculation of interior air; non-fire personnel are to wear masks and maximize physical distance from fire personnel when interaction is needed; and crews are expected to be self-sufficient, including a three-day supply of food and water for every crew member when they arrive on their fire assignment. Many crews procured coolers as well as another vehicle to carry food and water to limit their interaction with community members while traveling and ensure minimal support would be required on their assignments. Crews also designated individuals that dispensed fuel and went into convenience stores to get supplies to limit both exposure to community members and the crew. The Forest Service has a representative on the Medical Public Health Advisory Team that developed and disseminated guidance to fire personnel across the nation to follow.

Question 7. The Forest Service recently unveiled a new website designed to help community leaders assess the wildfire risk in their community, region, and state. Have you received any feedback from community leaders on the website? Have you found it to be helpful during this fire season?

Answer. Yes. Since the Wildfire Risk to Communities website was launched in April 2020, 22,000 people have visited with 73,000 page-views. The bulk of these visits have been from western states, but we have had visits from every state. The website offers geospatial data downloads to create custom analysis. The geospatial data has been downloaded over 1,000 times. The California data alone has been downloaded 150 times.

The project development team conducted a series of live webinars (*e.g.,* National Association of State Foresters and American Planning Association), gave interviews for articles, and received comments from the website. The feedback has been extremely positive. Most are thankful for the new data and resources. There have been compliments about the organization and design of the website.

Some comments have suggested improvements for future versions. Many commenters would like the data periodically updated and maintained. The Forest Service is collaborating with the University of Colorado to conduct a social survey of users to gain additional insight this winter and spring.

Much of the wildland fire emphasis during the summer of 2020 was on suppression of active wildfires. The Wildfire Risk to Communities website focuses on identification and reduction of future risks. Also, due to fire activity in 2020, awareness of the website and its resources has grown slowly.

In mid-September, the project team reached out to and provided geospatial data about housing unit density (from our website) to the WiFire Project (University of California San Diego). WiFire incorporated the data that same day to help round out their provision of real-time data for monitoring, modeling, research, and operational uses. The data helped advise operations for the rest of the 2020 wildfire season.

Additionally, the team has presented webinars this fall that included a retrospective look at some of the 2020 wildfires. We demonstrated to the webinar viewers that some areas of severe wildfires were only ranked in the mid-range for wildfire risk. This underscores the somewhat random nature of wildfire. We emphasized that wildfire risk awareness and mitigation actions to reduce wildfire risk should not be limited to the top-tier communities. Catastrophes can and do occur in communities with moderate risk. There is no way to predict which specific communities will be next.

Question 8. The National Multiagency Coordinating Group released geographic-specific plans to help guide wildland fire response during the COVID pandemic. As I understand it, the plans are working documents. They will be updated as new information becomes available. Drawing on these working plans, can you discuss how COVID-19 has impacted particular aspects of the wildland fire system. What lesson have been learned so far?

Answer. The geographic area plans served their purpose by gathering and compiling key information nationally early in the pandemic. Each geographic area took a tailored approach to utilizing these plans and modifying as information became available. Measures developed to reduce concentrations of personnel and exposure to COVID-19 were successfully implemented.

The wildland fire system embraced the concept of remote response, particularly in large fire management. We successfully used a remote Situation Unit and expanded into other incident management team functions such as the planning section, public information, and finance. Collaborative calls were held from the beginning of the western fire season with Incident Commanders, as well as other functional area representatives, in order to compare notes and best practices in dealing

with mitigations for the pandemic. We learned that many functions can effectively work remotely and have plans to continue to fine tune these practices this winter in order to implement some into the future.

Questions Submitted by Hon. Chellie Pingree, a Representative in Congress from Maine

Question 1. The situation out West is highlighting the effects that a changing climate bring to bear on wildfire. Your testimony noted that this is an "unprecedented year." California just had its warmest August on record. Even in Maine, we are experiencing an extended drought and the worst fire season in over a decade. As we face even higher temperatures, warmer winters, and decreased snowpack further worsening wildfires, what proactive steps is the Forest Service taking to respond to the challenge of climate change?

Answer. The Forest Service has undertaken work in several areas to respond to the climate demands of the future and developed the Sustainability Scorecard to track the agency's progress toward sustainable management outcomes and to improve its ability to respond quickly to new challenges. The Scorecard provides evidence of the agency's progress toward addressing future risks, and helps us integrate change into our programs, plans, and projects.

The Forest Service supports decision making grounded in best available science by developing datasets, tools, and methods to forecast the impacts of a changing climate on national forests and grasslands. For example, Forest Service Research and Development provides baseline data and research on climate driven interactions with wildfire, insect and disease outbreaks, and invasive species. This research is used to develop and enhance practices to improve climate resilience, including implementing fuel reduction treatments in forests throughout the West and South.

The Forest Service is also addressing changing climate through our operations, decreasing emissions of greenhouse gases by 23% through FY19 compared to FY08, including emissions directly generated and from purchased electricity. Several Forest Service regions offer a microgrant program to encourage innovative methods of reducing the agency's environmental footprint.

Consideration of climate is required under the 2012 Planning Rule, and the agency incorporates this into Land Management Plans as they are revised. To support this work, the Forest Service conducts regional and forest-level climate vulnerability assessments using the best available science on a variety of managed resources (*e.g.,* trees, wildlife, recreation). The agency is updating its complete assessment of carbon stocks for every Region and Unit in the National Forest System, as well as developing a national comprehensive approach for including these assessments in land management planning and NEPA disclosures.

The Forest Service is also addressing a changing climate by providing support and data for the World Economic Forum's One Trillion Trees initiative that President Trump announced the United Stated would join in January. The President followed this announcement by signing an Executive Order to establish the One Trillion Trees Interagency Council, which will be co-chaired by USDA. The initiative aims to increase carbon sequestration by managing, conserving, and regenerating our Nation's forests.

The Forest Service is also supporting carbon uptake on private lands; for example, developing a silvics guide and economic models to support farmer uptake of agroforestry. In addition, the agency supports development of economical biofuels as well as wood innovations that can store carbon outside of forests; for example, furthering the use of wood in tall building construction.

Question 2. The Forest Service's contribution to USDA's Climate Hubs has been essentially cut in half from 2016 levels. In response to a previous question for the record on this matter, the Forest Service wrote: "The funding drop is reflective of prioritization of urgent forest restoration program and project work. However, the agency continues to support many important initiatives through our multiple Research and Development programs."

Can you provide more information about how these USFS Research and Development programs are working to address climate change?

Answer. Forest Service Research and Development programs are working to address the climate demands of the future in several ways. First, the agency produces protocols, data, and map products of baseline carbon and greenhouse gas inventory estimates recognized and used by many as authoritative for all forests and ownerships in the United States. This research includes producing the official U.S. National Greenhouse Gas Inventory estimates for land use change and forestry, including carbon in harvested wood products. This research supports carbon accounting and markets which finance activities to reduce atmospheric CO_2.

Second, Forest Service Research and Development has recently developed a Library of Silvicultural Prescriptions and a Scenario Investment Planning Tool to identify climate resilient practices that support rural economies. We are developing science-based menus of adaptation approaches for forest managers and have played a key role in developing climate vulnerability assessments and adaptation plans. Our scientists are working with National Forests and partners to ensure restoration and afforestation projects use climate-resilient species that will succeed over time.

Third, working directly with states, Research and Development is identifying potential land-based carbon sequestration strategies and opportunities for implementation to enhance climate mitigation. We are providing states and the National Forest System with information on carbon storage and flux to better understand carbon implications of policy, management, and planning activities. Our Forest Products Lab is developing and testing products to enhance long-term carbon sequestration in wood products and replace energy-intensive materials.

In addition, Research and Development continues to work with stakeholders and the National Forest System to understand actual and potential social and economic impacts of a changing climate. Our scientists also study mechanisms to enhance and incentivize uptake of climate-smart practices.

Finally, Research and Development monitors baseline impacts of a changing climate on forests and rangelands and studies interactions with wildfire, insect and disease outbreaks, and invasive species. This research is used to develop and enhance practices to improve climate resilience, including implementing fuel reduction treatments in forests throughout the West and South in order to reduce fuel loads which are largely responsible for increased fire severity.

Question 2a. While I understand the Forest Service working with limited resources, it seems problematic to shortchange the Climate Hubs given the impact of climate change on every aspect of the Forest Service's work. How can we work with you to make sure longer-term climate solutions and resilience efforts aren't left behind?

Answer. Critical work to improve climate resilience is ongoing in the Forest Service, and the Climate Hubs are an important part of this body of work. Long-term climate solutions and resilience efforts in forests and rangelands are bolstered by cross-agency efforts. The Five-Year Review of the Climate Hubs indicated the demand for Climate Hub programs and products and services exceeds current capacity. We are evaluating the needs and our resources to ensure we are efficiently delivering our programs to maximize impact. We would be happy to work with you to address our capabilities in carrying out climate resilience efforts.

Question 3. One obstacle to wildfire risk reduction is the lack of markets for small diameter wood, which means it is generally not cost-effective to remove it. Mass timber like cross-laminated timber has the potential to drive demand for this material, reduce wildfire hazards, and even reduce the carbon footprint of new construction. The 2018 Farm Bill included some support for these types of innovative materials, but there is more that could be done.

Would you agree that there is a need for a government-wide effort to develop markets for small diameter wood? How can we create a viable, at-scale market for this material?

Answer. There is a need for increased market opportunities for small diameter wood across the United States to support healthy forests and reduced wildfire risk. Small dimension timber of both widely used species and underutilized species lacks markets. In the West, millions of acres of forests need intense management to thin our forests, improve forest health and reduce wildland fire risk. Northern states and areas along the Appalachian Range with hardwood forests have seen reduced markets due to off-shoring of the furniture manufacturing industry and the significant decline of printing and publishing paper.

The Forest Service Wood Innovations Program expands and creates markets for wood products and renewable wood energy that support long-term, sustainable management of the National Forest System and other forest lands. Markets for small diameter wood with substantial growth potential include, but are not limited to, mass timber, cellulosic nanomaterials in concrete and renewable wood energy. Continuing to invest in the Wood Innovations Program supports growing markets such as these through grant programs and infrastructure investment.

Question 4. Along those lines, are there other areas where Congress can support Forest Service efforts that both reduce the immediate risk of wildfire *and* contribute to emissions reduction or carbon sequestration to reduce climate risks in the long run?

Answer. As part of its FY 2021 budget request, the USDA submitted to Congress a package of legislative reforms to improve forest management and reduce wildfire

risk. The proposals are intended to support healthy forests and rangelands and aid in efforts to protect homes, watersheds and critical infrastructure from catastrophic wildfires. The USDA would like to work with the committee to identify solutions that match the threat of the wildfire problem and scale of forest management needed.

Questions Submitted by Hon. Collin C. Peterson, a Representative in Congress from Minnesota

Question 1. Director Phipps, the Forest Service employs multiple types of aircraft to suppress fire on Federal lands. Can you tell us how single engine aircraft tankers and scoopers are utilized in the field as part of the agency's fire suppression efforts? Can you describe the mission profile of single engine aircraft tankers and scoopers? What drop objectives are met by these aircraft?

Answer. Single engine airtankers are contracted by the Department of the Interior but are often ordered by incident commanders for use on Forest Service-protected lands. Single engine airtankers are utilized very similarly to large airtankers but only hold 800 gallons of retardant compared to 3,000 gallons or more for a large airtanker. There are many more single engine airtankers than large airtankers so they can be dispersed widely in the field. They often operate in flights of two aircraft to increase their retardant drop capability.

The Forest Service contracts multi-engine water scoopers and uses them throughout the United States. Water scoopers can scoop and carry 1,600 gallons of water from lakes and larger rivers and operate much like large helicopters. They complete rapid turnarounds to and from a water source to the fire, dropping tens of thousands of gallons of water in a few hours.

Both single engine airtankers and water scoopers fly at lower altitudes throughout most of their flights. Single engine airtankers can operate from mobile retardant plants and are often based much closer to the fire than large airtankers which require support from larger airfields.

Single engine airtanker retardant drops are used as part of an indirect attack to slow fire growth, allowing ground resources to contain the fire. Water scooper water drops are used in direct attack of the flaming front of a wildfire, slowing or stopping fire growth. This also allows ground resources to contain the fire.

Question 2. Successful restoration of the sagebrush ecosystem after fire is critical for ranching communities and wildlife that depend on vegetative structure. In order to maximize an ecosystem's forage and wildlife value, it is also critical that restoration efforts take place in the same year as the fire. Without restoration efforts, the long-term economic impacts of reduced forage, loss of infrastructure (fencing), and cost of future weed control are immense, and communities and some wildlife may not be able to recover. Deputy Chief Phipps, how is the Forest Service currently coordinating with NRCS to treat public and private lands after wildfire?

Answer. Post-fire response and restoration is a shared challenge for public and private lands. The Forest Service Burned Area Emergency Response program works closely with the National Resource Conservation Service and local landowners and agencies to determine post-fire response actions necessary for the protection of human life and safety, infrastructure, and critical cultural and natural resources, including native plant communities. While Burned Area Emergency Response funding can only be used to accomplish mitigation actions on National Forest Systems lands, working with other local, state and Federal agencies like the National Resource Conservation Service provides additional mechanisms to work with an all-lands approach to post-fire actions. In order to coordinate across land ownerships, post-fire datasets are shared between the agencies to develop and implement actions. Key programs for private lands actions include the National Resource Conservation Service Emergency Watershed Protection program and the Environmental Quality Incentives Programs.

Questions Submitted by Hon. Kim Schrier, a Representative in Congress from Washington

Question 1. This has been an exceptionally difficult wildfire year, with the public health emergency adding another layer of complication to historic levels of fire. How is the Forest Service working with state and local health workers to coordinate and gain access to COVID-19 testing, and how does the Forest Service make that information available internally? What is the process when a crew is moved to a different region or state?

Answer. The availability of state/local health department workers and COVID-19 testing varied from town/state to town/state. Many health departments had no capacity to do contact tracing and had no capacity to deal with fire personnel on a fire, including testing. Other areas had more robust capacity and were able to work

with fire personnel on testing and assist as needed and available. Standard procedure was that the local health department was contacted by the Incident Management Team Medical Unit Leader once a team arrived on a fire to better understand local resource capacity. Some Regions began to create COVID-19 Coordinators to assist with this communication as well.

Some states required COVID-19 testing when the crews returned to their home unit from a fire out of area/state. Alaska was the only state requiring a test before coming into the state.

Question 2. How does the Forest Service leverage other USDA resources to help communities recover after wildfires? Does the Under Secretary coordinate with other Under Secretaries across USDA to organize wildfire recovery response?

Answer. The Forest Service has leveraged other USDA resources to help communities recover after wildfires. We are helping our field units and personnel access resources available from USDA Rural Development financial assistance programs and connecting communities with the USDA Natural Resources Conservation Service in order to carry out post-fire treatments to protect natural resources and water infrastructure.

Question 3. How does the agency ensure that its wildland firefighters and everyone they work with in fire camps—including their state and local partners—have adequate PPE for COVID-19? I understand that there is both a national and a regional component to this.

Answer. The National Interagency Support Cache system, comprised primarily of the Forest Service and the Department of the Interior's Bureau of Land Management warehouses, provides equipment and supplies to Federal, state and local agencies in support of wildfire suppression activities. Pandemic support items (to include PPE) are supplied to fire camps from these warehouses.

We have robust supply chains in place that support our national cache system, including our partnerships with the Defense Logistics Agency and other distributors of wildland firefighting equipment, PPE and other pandemic-specific items. We leveraged these existing supply chains early in 2020 so supplies continue to be available when needed to support our fire response from these warehouses.

Questions Submitted by Hon. Salud O. Carbajal, a Representative in Congress from California

Question 1. What additional resources does the USDA need in order to utilize their existing authorities to actively manage our forests, rangelands, and other Federal lands to improve conditions and reduce wildfire risk?

Answer. As part of its FY 2021 budget request, the USDA submitted to Congress a package of legislative reforms to improve forest management and reduce wildfire risk. The proposals are intended to support healthy forests and rangelands and aid in efforts to protect homes, watersheds and critical infrastructure from catastrophic wildfires. The USDA would like to work with the committee to identify solutions that match the threat of the wildfire problem and the scope and scale of forest management needed.

Question 2. How does the national wildfire potential outlook appear as we head into the fall months? When do you expect we will start to see a decrease in wildfire activity?

Answer. La Niña and current fuel conditions remain the principle drivers of significant fire potential into spring. Drought conditions are expected to continue for much of California, the Great Basin, and the Southwest into the winter with drying expected to increase across portions of the Southern Plains and Southeast. Offshore wind events will continue to be a concern across southern California in December given the dry fuels and lack of forecast precipitation through early December.

Over the winter, the expected warming and drying trend across the southern tier of the United States due to La Niña and other large-scale climate forces will likely result in above normal significant fire potential for portions of the Southern Plains. Drought intensification and expansion from the Southern Plains into southern California is likely. Strong wind and low relative humidity events could occasionally increase fire activity in portions of the Great Basin and Southwest this fall into winter as well. Outside of the Southern Plains, significant fire potential will likely remain near normal for the rest of the United States.

Question 3. What measures and training protocols is the Forest Service implementing to mitigate COVID-19 virus exposure to wildland firefighters and the communities they serve? How is the Forest Service working to ensure COVID-19 related precautions are being implemented across all the geographic regions? Can you please explain how the Forest Service has worked with other Federal Agencies and the White House Coronavirus Task Force to develop and implement strategies to

prevent the spread of COVID-19 and ensure the safety of both firefighters and civilians effected during fire season?

Answer. Mitigations for COVID-19 exposure include: the module-of-one crew concept used at fire camps to keep crews isolated from one another; masks are required when around anyone not in your module on the fire or when at the home unit; physical distancing of at least 6′ required unless physically not possible, *i.e.,* vehicles; vehicles are to maximize air flow/exchange with windows partially open, no use of recirculation of interior air; non-fire personnel are to wear masks and maximize physical distance from fire personnel when interaction is needed. A crew, when mobilized to a fire, is expected to be self-sufficient including food and water for three days once on the fire. This limited their interaction with community members while traveling. The crews also had designated individuals that dispensed fuel and went into convenience stores to get snacks/drinks to limit both exposure to community members and the crew.

The Forest Service has a representative on the National Wildfire Coordinating Group, Medical and Public Health Advisory Team, an interagency group compiled of physicians and public health officers from the Department of [the] Interior, Forest Service, and the National Institute for Occupational Safety and Health/Centers for Disease Control. This group has created guidance for fire personnel across the nation to follow, which includes the above.

Question 4. The CARES Act provided $7 million to the Forest Service to prevent, prepare, and respond to coronavirus—including to purchase Personal Protect Equipment (PPE) and baseline health testing. How much of these funds have already been spent, and what were they used for? Do you anticipate there will be a need for more funding?

Answer. At the end of Fiscal Year 2020, $5 million of the CARES Act funds were spent. National purchases of PPE like masks, hand sanitizer, and digital thermometers were distributed throughout the wildland fire organization and made available at every fire camp. The need for additional funding will be dependent on the COVID-19 situation nationally in the early spring months when significant fire activity usually begins each year.