S. Hrg. 115-514

THE PRESIDENT'S BUDGET REQUEST FOR THE U.S. FOREST SERVICE FOR FISCAL YEAR 2019

HEARING

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

ONE HUNDRED FIFTEENTH CONGRESS

SECOND SESSION

APRIL 24, 2018



Printed for the use of the Committee on Energy and Natural Resources

Available via the World Wide Web: http://www.govinfo.gov

U.S. GOVERNMENT PUBLISHING OFFICE ${\bf WASHINGTON} \ : 2019$

30 – 281

COMMITTEE ON ENERGY AND NATURAL RESOURCES

LISA MURKOWSKI, Alaska, Chairman

JOHN BARRASSO, Wyoming
JAMES E. RISCH, Idaho
MIKE LEE, Utah
JEFF FLAKE, Arizona
STEVE DAINES, Montana
CORY GARDNER, Colorado
LAMAR ALEXANDER, Tennessee
JOHN HOEVEN, North Dakota
BILL CASSIDY, Louisiana
ROB PORTMAN, Ohio
SHELLEY MOORE CAPITO, West Virginia

MARIA CANTWELL, Washington RON WYDEN, Oregon BERNARD SANDERS, Vermont DEBBIE STABENOW, Michigan JOE MANCHIN III, West Virginia MARTIN HEINRICH, New Mexico MAZIE K. HIRONO, Hawaii ANGUS S. KING, JR., Maine TAMMY DUCKWORTH, Illinois CATHERINE CORTEZ MASTO, Nevada

ORE CAPITO, West Virginia TINA SMITH, Minnesota

BRIAN HUGHES, Staff Director
PATRICK J. MCCORMICK III, Chief Counsel
LUCY MURFITT, Senior Counsel and Public Lands & Natural Resources Policy Director
Annie Hoefler, Professional Staff Member
Mary Louise Wagner, Democratic Staff Director
SAM E. FOWLER, Democratic Chief Counsel
BRYAN PETIT, Democratic Senior Professional Staff Member

CONTENTS

OPENING STATEMENTS

	Page			
Murkowski, Hon. Lisa, Chairman and a U.S. Senator from Alaska				
Cantwell, Hon. Maria, Ranking Member and a U.S. Senator from Wash-				
ington				
WITNESS				
	~-			
Christiansen, Victoria, Interim Chief, USDA Forest Service	25			
ALDIIADEMICAL LICHING AND ADDENDIN MARREDIAL CUDMINNED				
ALPHABETICAL LISTING AND APPENDIX MATERIAL SUBMITTED				
Cantwell, Hon. Maria:				
Opening Statement	3			
Letter to the Senate Committee on Appropriations, Subcommittee on				
Interior, Environment, and Related Agencies dated March 29, 2018				
Christiansen, Victoria:				
Opening Statement	25			
Written Testimony				
Responses to Questions for the Record				
Murkowski, Hon. Lisa:	57			
•	1			
Opening Statement	1			

THE PRESIDENT'S BUDGET REQUEST FOR THE U.S. FOREST SERVICE FOR FISCAL YEAR 2019

TUESDAY, APRIL 24, 2018

U.S. Senate, Committee on Energy and Natural Resources, Washington, DC.

The Committee met, pursuant to notice, at 10:05 a.m. in Room SD-366, Dirksen Senate Office Building, Hon. Lisa Murkowski, Chairman of the Committee, presiding.

OPENING STATEMENT OF HON. LISA MURKOWSKI, U.S. SENATOR FROM ALASKA

The CHAIRMAN. Good morning, everyone. The Committee will come to order.

We are here this morning to consider the President's budget request for the U.S. Forest Service for FY'19.

Before we begin, I would like to welcome the Interim Chief of the Forest Service, Vicki Christiansen, back to our Committee. You were here last fall when we were talking about the use of new technologies to mitigate wildfire risk, so it is good to have you back before us again.

We are here to discuss the upcoming fiscal year, but I think that the best place to start is with a discussion of what we just did in the FY 2018 Omnibus. That bill included a deal on wildfire budgeting and forest management. It is no secret that I was not particularly thrilled with it.

Along with many members of the House and Senate, I had supported both a budget fix for wildfire suppression and meaningful management reforms that would allow for more active forest management. I think that we fell far short of the management reforms I had hoped for and that I think are needed to reduce the threat of wildfires.

There were some glimmers of progress, for example, on vegetation management, but until we do more on this front, we will fail to fully protect our forests and continue to burn through a lot of taxpayer dollars each fire season.

On a more positive note, the new wildfire suppression budgeting framework should end the destructive practice of fire borrowing and stabilize the operations budget by treating wildfires more like natural disasters. We have heard this throughout this Committee for a long time, so I think it is important that we end that practice.

This is important, because for years the Forest Service has argued that fire borrowing and the rising cost of wildfire operations have inhibited its ability to carry out its multiple-use mission. Whether increasing the timber harvest or processing permits for recreation access, everything has been linked to fire costs. Now that we have a fix, I expect the Forest Service to step up and address management priorities that have long been neglected.

Throughout this year's budget request, the Forest Service acknowledges its multiple-use mission and primary responsibility for

maintaining existing lands.
So this morning I would like to lay out my budget priorities for Alaska. Ms. Christiansen, I travelled to Southeast Alaska with your predecessor earlier this year, we had a conversation about that, and we held a roundtable in Ketchikan. We heard from over 20 leaders who represented local governments, Alaska Natives, tourism, energy, timber and environmental groups, and the resounding theme that we heard over and over again is that more access is needed in the Tongass. Now in my mind that starts with restoring the roadless exemption on the Tongass. You have a state petition that asks you to do just that, and as I have said many times before, the Roadless Rule just does not make sense in the Tongass which is a forest made up of 32 island communities.

On this same trip, we also heard about the problems with our recently amended land plan. Even those who support a rapid transition from harvesting old growth to young growth acknowledge that the plan, as written, is not going to result in a successful tran-

sition unless we make some changes.

I think, and we have had this conversation, that there are some real errors in that plan. It was completed without a comprehensive inventory of young growth. I hope that you will implement the direction provided in the explanatory statement that accompanies the omnibus and seriously look at a plan amendment or revision.

Now we have other issues in Alaska. Our nation's second largest national forest, the Chugach, the agency has effectively placed a moratorium on new permits for outfitters and guides for years now. One guide, he simply wanted to take his clients ice fishing but was told that permits were not being issued and to check back in seven years. That is just absolutely unacceptable. While the moratorium has now been lifted, which we appreciate, much of the Chugach is still closed off to outfitters and guides. We hear a lot of talk about keeping public lands accessible to the public, but sometimes in Alaska it is a very different experience from the public's perspective. We have to make sure that whether it is our heli-skiers, our cross-country skiers, our fishermen and women, that they have the access to the forest that is billed as a recreation forest.

I will note that Secretary Zinke signed two secretarial orders just this last week on recreation, designed to push agencies to increase and expand access to recreation. Hopefully this will cause a sharper focus on what we need to be doing within our national forests. Of course, Alaska is not alone, and many who sit on this Com-

mittee face similar issues in their states.

I think the Forest Service has an opportunity here. The agency has been given more funding, new tools and expanded authorities. We will be looking to build on those in 2019. But in the meantime,

don't squander the goodwill. Get going to correct the management failures that have plagued the agency for years. End fire borrowing and revamp your budget process; ensure that our forests are productive again; move at the pace and a scale needed on our overstocked forests to reduce the risks of catastrophic fires; streamline the permitting so that the United States can produce minerals that are critical to our national security; provide access to our rural communities, so that they can build and sustain thriving economies; and then, of course, the one issue that I have not mentioned this morning, we discussed yesterday, but it is a significant one, you have another major job and that is the internal reforms to put an end to the sexual harassment and the assault that have plagued the Forest Service.

I have been horrified, really horrified, to learn about what has been happening over the course of years and decades. It is categorically unacceptable, and I know that you share that view. Improving the culture and guaranteeing a safe workplace must be one of your

highest priorities.

Ms. Christiansen, I know that you are new to this position and that we are still waiting on an Under Secretary at the Department, but I do appreciate your commitment to work with me, work with us, to put the Forest Service back on the right path.

Thank you for being here this morning. We will look forward to

our exchange.

Senator Cantwell.

STATEMENT OF HON. MARIA CANTWELL. U.S. SENATOR FROM WASHINGTON

Senator Cantwell. Thank you, Madam Chair, and thank you for

holding this important hearing.

As you mentioned, the Omnibus, I think, represents a significant step forward but much more needs to be done, and I welcome Ms. Christiansen's input into many of these issues, including the one you just mentioned about sexual harassment. As a previous State Forester for the State of Washington, I know you know how seriously we take this issue at home, and hopefully you will help the agency make improvements here over the long run.

As discussed, the Omnibus was a step forward, but today's discussion is about the President's budget proposal. I think the Chair

did a good job of running through where we go from here.

Getting the Wildfire Funding Fix enacted into law is something that I, Senator Wyden and several members on this side of the aisle, have fought diligently for, for many, many years. A tremendous amount of work (both inside and outside of our agencies) went into this, so our thanks to everybody that was involved. The Forest Service will no longer have to borrow funding from programs to get firefighters to the fire line.

The Forest Service will no longer need to transfer money from land management accounts to pay for funding, and the Omnibus provided an additional \$160 million through 2029 to back pay the

programs that had been cut.

It also reauthorized Secure Rural Schools for two more years, which I can't tell you how important that is to the rural communities of the Pacific Northwest. This will ensure communities are not left without the funding they need while we create permanent solutions.

The package included language to make it easier for state agencies, like Washington DNR, to be a good partner with the Forest Service. It included an expansion of the Good Neighbor program and authority for utilities managing vegetation near power lines.

Now, for the first time, the Forest Service can issue contracts for 20 years to do thinning in fire-prone areas, and there is a preference for cross-laminated timber in awarding those contracts. So rural communities in Washington stand to gain plenty from that new paradigm, hopefully treating fuels in our most challenging areas of central Washington and the Northeast corners of our state.

All of this we did while still protecting good public lands and existing environmental laws. My message to the Forest Service and to many of you is that we need to continue to provide the resources that are requested because wildfire is going to continue to plague us. We have to get this right.

In particular, we want to see wise spending given the large amounts of money that have just been given; we want to see significantly more restoration and fire preparedness; and, we enacted this law because we want to see fewer of our homes lost to wildfire. We want to make sure that our national forests become healthier.

We know the weather is drier. We are seeing more fire starts, we are seeing more homes destroyed, and we want to make sure that you understand that now is not the time to cut research.

To get ahead of the wildfire problem we need robust science. The Forest Service Fire lab in Seattle performs that kind of research. One of their highest profiled projects, the Fire and Smoke Model Evaluation experiment, would essentially combine all existing scientific models for fire behavior, weather, fuels, air quality, to make it easier and safer to do controlled burns.

I think at one of our last hearings we had the drought map that showed where the nation is going to be most affected by drought. I am pretty sure in the next 30 days the Forest Service will produce the Fire Risk map for us which will also show us the most at-risk communities.

Given the devastation of these fires, I think it is so important that we continue to have that science, if nothing more than for preparing for the season, but my guess is that it will also lead us to better strategies on how to fight fires. Hence, we need to make sure that we have better tools.

The Fire Lab and this particular project was funded by the Joint Fire Science Program which is considered to be one of the best research programs in the Federal Government.

I would like to submit for the record, Madam Chair, a letter that we received last week. I think people who signed this letter advocating for the program are county commissioners, fire chiefs, local sheriffs, prescribed fire councils, and I think every member of the Committee has a constituent who signed this letter.

The CHAIRMAN. It will be included as part of the record. [The letter advocating for the Fire Lab follows:]

The Honorable Lisa Murkowski Chair Subcommittee on Interior, Environment, and Related Agencies Senate Committee on Appropriations 131 Dirksen Senate Office Building Washington, D.C. 20510

The Honorable Tom Udall Ranking Member Subcommittee on Interior, Environment, and Related Agencies Senate Committee on Appropriations 190 Dirksen Senate Office Building Washington, D.C. 20510

Dear Chair Murkowski and Ranking Member Udall:

As researchers, extension unit leaders, and practitioners who work with the federal land management agencies on wildland fire, we urge you to maintain and fully fund the Joint Fire Science Program at historical levels of \$6.914 million annually through the USDA Forest Service's Wildland Fire Management and \$5.9 million annually through the US Department of Interior Wildland Fire Management. Wildland fire is occurring over more acres at greater severity than in the past. Fire seasons are lengthening, exposing communities to greater risk from fire, post-fire floods, and smoke. The need for science is greater than ever to support strategic allocation of resources to meet the goals of the National Cohesive Strategy—restoring and maintaining fire-adapted landscapes, promoting fire-adapted communities, and fostering safe and effective response to fire.

The Joint Fire Science Program model for funding critical research, based on management priorities and with requirements for active science delivery, makes the program uniquely valuable and the only one of its kind. No other program offers researchers the opportunity to address fire management challenges in direct response to manager priorities. Based on direction from Congress, the program is a partnership of six federal land management agencies that work together to identify and address problems associated with managing wildland fuels, fires, and fire-impacted ecosystems. Fire and land managers from the USDA Forest Service and US Department of Interior together identify issues of critical interest, competitively allocate funding to researchers to tackle those issues via applied research, and require active delivery of science to managers and policymakers, linking science to management.

With a relatively limited budget, the Joint Fire Science Program has improved efficacy and accountability of agency activities by funding research to address important topics. Past research has focused on such salient issues as understanding smoke impacts to communities, overcoming barriers to prescribed fire, identifying how drivers of fire costs affect decision making, analyzing fire behavior, and understanding fire effects on resources and communities. The program supports regional Fire Science Consortia that support science delivery to the management and practitioner communities. Research and science delivery under this program have proven valuable for both federal land managers and partner organizations working to restore fire-adapted landscapes and promote fire-adapted communities.

We ask Congress to reject the Administration's proposal to cancel the Joint Fire Science Program and request you maintain the Joint Fire Science Program at its past funding levels. Further, it is important that the program remain funded from within the Forest Service's Wildland Fire budget, rather than from Forest Service Research. Embedding the program in an already constrained research budget undercuts this successful model of a management-driven research program that responds directly to the challenges of wildland fire. We thank Congress for its past support of the Joint Fire Science Program and ask you to continue to make a priority of this important science-management partnership.

If you have any questions or need additional information, please feel free to contact Cassandra Moseley (cmoseley@uoregon.edu) or Courtney Schultz (Courtney.Schultz@colostate.edu).

Membership organization and coalition signatories

Coalition of Prescribed Fire Councils Forest Stewards Guild National Association of State Foresters Rural Voices for Conservation Coalition Society of American Foresters

University academic leadership signatories

John P. Hayes, Dean, Warner College of Natural Resources, Colorado State University
Mark Paschke, Research Associate Dean, Warner College of Natural Resources, Colorado State University
Anthony S. Davis, Acting Dean, College of Forestry, Oregon State University
Ken Smith, Assistant Dean of the Environment, Integrated Program in the Environment, The University of the South
J. Keith Gilless, Dean, College of Natural Resources, University of California, Berkeley
Janet E. Nelson, Vice President for Research and Economic Development, University of Idaho
Martin Main, Associate Dean for Extension, Institute of Food and Agricultural Sciences, University of Florida
Thomas H. DeLuca, Dean, W.A. Franke College of Forestry & Conservation, University of Montana
Cassandra Moseley, Senior Associate Vice President for Research and Innovation, University of Oregon
Lisa Graumlich, Dean, College of the Environment, University of Washington
Daniel J. Robison, Dean, Davis College of Agriculture, Natural Resources and Design, West Virginia University

Signatories by state

<u>Alaska</u>

Dawson Foster, Student and Wildland Firefighter, State of Alaska Division of Forestry, Anchorage Alison D. York, Researcher, University of Alaska Fairbanks, Fairbanks
Casey Brown, Post-doctoral Researcher, University of Alaska Fairbanks, Fairbanks
Bob Christensen, Chief Executive, SEAWEAD, Gustavus
Aaron Ferguson, Sustainability Catalyst, Spruce Root Community Development, Juneau
Brian Buma, Assistant Professor, University of Alaska, Juneau

<u>Alabama</u>

Nathan Hatch, Consultant Forester, Alabama Prescribed Fire Council, Auburn David Curry, Retired, Huntsville

Ted DeVos, Forester/Wildlife Biologist, Bach and DeVos Forestry/Alabama Prescribed Fire Council-chair 2018, Montgomery

- J. Kevin England, Science Instructor/Botanist, Ardmore High School, Moulton
- J. Ryan Mitchell, Outreach and Technical Assistance Coordinator, The Longleaf Alliance, Stockton

Raien Emery, Undergraduate Research Assistant, University of Alabama, Tuscaloosa

Justin Hart, Associate Professor, University of Alabama, Tuscaloosa

Kevin Willson, Graduate Student, University of Alabama, Tuscaloosa

<u>Arkansas</u>

Kyle Lapham, Fire Manager, The Nature Conservancy, Little Rock

Kenneth Wallen, Assistant Professor, University of Arkansas System, Monticello Tiffany Hackler, Human Resources Manager, Rogers

<u>Arizona</u>

Melanie Colavito, Human Dimensions Specialist, Ecological Restoration Institute, Flagstaff Andrea Thode, Professor, Northern Arizona University, Flagstaff Clare Aslan, Assistant Professor, Northern Arizona University, Flagstaff Scott Goetz, Professor, Northern Arizona University, Flagstaff Stephanie Mueller, Graduate Student, Northern Arizona University, Flagstaff Thomas D. Sisk, Olajos-Goslow Chair of Environmental Science and Policy, Northern Arizona University, Flagstaff Thomas Kolb, Professor, Northern Arizona University, Flagstaff James Allen, Professor and Executive Director, Northern Arizona University School of Forestry, Flagstaff Barbara Satink Wolfson, Program Coordinator, Southwest Fire Science Consortium, Flagstaff Shere A. Fischer, Phoenix Julia Rowe, Invasive Species Research Specialist, Arizona-Sonora Desert Museum, Tucson Kathy Voth, Publisher, On Pasture, Tucson Jeffrey Gicklhorn, Program Coordinator, Pima County, Office of Sustainability and Conservation, Tucson Christopher Guiterman, Research Associate, University of Arizona, Tucson Erica A. Newman, Postdoctoral Researcher, University of Arizona, Tucson Erica Bigio, Research Associate, University of Arizona, Tucson Thomas W. Swetnam, Regents Professor Emeritus, University of Arizona, Tucson Jeffrey Rapp, Tucson

California

Gary Lauben, Project Manager, Western Shasta Resource Conservation District, Anderson Connie Stewart, Executive Director, California Center for Rural Policy, Arcata Leonard H. Rios, Fire Ecology Graduate Student, Humboldt State University, Arcata David Greene, Chair, Forestry Department, Humboldt State University, Arcata Harold Zald, Assistant Professor, Humboldt State University, Arcata Jeffrey Kane, Associate Professor, Humboldt State University, Arcata Yvonne Everett, Professor, Humboldt State University, Arcata Sasha Berleman, Fire Ecologist, FirePoppy Consulting, Berkeley Allison Shiozaki, Land Steward and Director, Hooves, Hands, & Hearts Camp, Berkeley Jacob Farris, Owner, Soil Life Consultant, Berkeley J. Keith Gilless, Dean, College of Natural Resources, University of California, Berkeley Carmen Tubbesing, PhD Candidate, University of California, Berkeley Daniel Foster, Master of Forestry Student, University of California, Berkeley Dr. Scott Stephens, Professor of Fire Science, University of California, Berkeley Gabrielle Boisrame, Visiting Researcher, University of California, Berkeley Jens Stevens, Postdoctoral Scholar, University of California, Berkeley Jodi N Axelson, Cooperative Extension Specialist, University of California, Berkeley Rich Dean, Deputy Fire Marshal, University of California, Berkeley Stacey Frederick, California Fire Science Consortium Coordinator, University of California, Berkeley Jean-Louis Carmona, Director, Van Duzen Watershed Fire Safe Council, Bridgeville Jennifer E. Fawcett, Extension Associate, North Carolina State University, Campbell Joe Rawitzer, Project Coordinator, Central Coast RX Fire Council, Carmel Valley Jose Luis Duce Aragues, Fire Training Specialist, Spatial Informatics Group California, Cogolludo Spain Andrew Latimer, Associate Professor, Department of Plant Sciences, University of California, Davis Chhaya Werner, PhD Candidate, University of California, Davis Alexandra Weill, Graduate Student Researcher, University of California, Davis

Allison Simler, PhD Candidate, University of California, Davis

Brian V. Smithers, Postdoctoral Researcher, University of California, Davis

Carrie Levine, Postdoctoral Fellow, University of California, Davis

Clark Richter, PhD Candidate, University of California, Davis

Emily Brodie, Graduate Student, University of California, Davis

Jan Ng, PhD Candidate in Ecology, University of California, Davis

Jesse Miller, Postdoctoral Researcher, University of California, Davis

Jonah Weeks, Graduate Student, University of California, Davis

Kevin Welch, Research Scientist, University of California, Davis Martha Wohlfeil, PhD Student, University of California, Davis

Rebecca Wayman, Associate Specialist, University of California, Davis Sara Winsemius, Graduate Student, University of California, Davis

Zack Steel, Student, University of California, Davis

Tracy Katelman, Registered Professional Forester, ForEverGreen Forestry, Eureka

Cybelle Immitt, Senior Planner - FSC Coordinator, Humboldt County Fire Safe Council, Eureka

Julia Cavalli, Administrative Analyst, Humboldt County Fire Safe Council, Eureka

Debra Harris, Burn Program Coordinator, North Coast Unified AQMD, Eureka

Andrew Slack, Forest Fellow, Save the Redwoods League, Eureka

Yana Valachovic, Forest Advisor, University of California, Eureka

Jeffery Stackhouse, Livestock & Natural Resources Advisor, University of California Cooperative Extension, Eureka

Lenya Quinn-Davidson, Area Fire Advisor, University of California Cooperative Extension, Eureka

Steve Williams, American citizen, Folsom

Peter Brucker, Retired Program Coordinator, Salmon River Restoration Council, Forks of Salmon

Lon Winburn, Fire Chief, Fortuna Fire Protection District, Fortuna

Susan Britting, Executive Director, Sierra Forest Legacy, Garden Valley

Karen Schambach, President, Center for Sierra Nevada Conservation, Georgetown

Danny Manning, Assistant Fire Chief GIR, Greenville Rancheria, Greenville

Katherine Van Pelt, Grants & Agreements Specialist, Watershed Research & Training Center, Hayfork

Nick Goulette, Executive Director, Watershed Research & Training Center, Hayfork

lan Sigman, Chairman, Humboldt County Fire Safe Council, Honeydew

Stephen Underwood, Hydesville

Danny Fry, Wildland Fire Management Coordinator, Natural Communities Coalition, Irvine

Jake Schweitzer, Senior Ecologist, Vollmar Natural Lands Consulting, Kensington

Will Emerson, Assistant Chief, Bell Springs Fire Department, Laytonville

Gary B. Fildes, Retired, US Forest Service, Loma Rica

Christopher Giesige, Fire Researcher, Westcats, Los Angeles

Joe Snipes, Business owner, Forestscapes LLC, Humbots Data & Analysis, McKinleyville

Liisa Schmoele, Citizen, McKinleyville

Stephen C. Hart, Professor of Ecology, University of California, Merced

Nicholas C. Dove, PhD candidate, University of California, Merced

Jeanne H. Tomascheski, Registered Professional Forester, Independent Contractor, Millville

Vince Cicero, Senior Environmental Scientist, California State Parks, Morro Bay

Michael Lake, Fire Chief, Fruitland Ridge Fire, Myers Flat

Judson Fisher, Student, Sierra College, Nevada City

Chris Friedel, Executive Director, Yuba Watershed Institute, Nevada City

Dee McDonough, DFSC Board Member, Diablo FireSafe Council, Oakland

Dinah Fischbach-Benson, Secretary, Oakland Firesafe Council, Oakland

Robert Sieben, Board member Oakland Firesafe Council, OFSC, International Association of Fire Chiefs, Oakland

Marc Meyer, Concerned Citizen, Orange

Kimberly Baker, Executive Director, Klamath Forest Alliance, Orleans

Nancy Bailey, Fire and Fuels Co-Director, Mid Klamath Watershed Council, Orleans

Ellie Cohen, President and CEO, Point Blue Conservation Science, Petaluma

Erica N. Stavros, Self, Poway

Gabe Miller, Stewardship Director, Feather River Land Trust, Quincy

Hannah Hepner, Coordinator, Fire Safe Council, Quincy

Jack Bramhall, Registered Professional Forester, Retired, Red Bluff

Ricky Satomi, Forest Advisor, University of California, Redding

William Eastwood, President, Southern Humboldt Fire Safe Council, Redway

Seguoia Kantara, Apprentice Forester, Redway

Owen Warner, Consultant, Berkeley Research Group, Richmond

Marko J. Spasojevic, Assistant Professor, University of California, Riverside

Karen Converse, Environmental Scientist, California Department of Fish and Wildlife, Sacramento

David Sapsis, Wildland Fire Scientist, California Department of Forestry and Fire Protection, Sacramento

Greg Suba, Conservation Program Director, California Native Plant Society, Sacramento

Louis Heinrich, Gen. Partner Heinrich Family Limited Partnership, Heinrich Property Mgmt., Sacramento

Jamie M Lydersen, Associate Specialist, University of California, Berkeley, Sacramento

John Fisher, Battalion Chief, San Diego Fire-Rescue, San Diego

Scott Rothberg, Environmental Planner / Geospatial Information Database Administrator, San Elijo Lagoon Conservancy. San Diego

Laura Lalemand, Forest Fellow, Save the Redwoods League, San Francisco

Paul Beisner, Burn Crew Lead, The Nature Conservancy, San Francisco

Phillip Dye, Owner, Prometheus Fire Consulting, San Jose

Gary Evan Sanchez, Board President, Santa Clara FireSafe Council, San Jose

Joe Christy, President, Fire Safe Santa Cruz County & Bonny Doon Fire Safe Council, Santa Cruz

James Gore, County Supervisor, County of Sonoma, Santa Rosa

Jeff Schreiber, Program Development Manager, Sonoma Resource Conservation District, Santa Rosa

Jennifer Potts, Resource Ecologist, Audubon Canyon Ranch, Sonoma

Patrick Koepele, Executive Director, Tuolumne River Trust, Sonora

Christina Restaino, Forest Health Program Manager, Tahoe Regional Planning Agency, South Lake Tahoe

Susie Kocher, Forestry Advisor, University of California Cooperative Extension, South Lake Tahoe

Joseph Restaino, Research Scientist, University of Washington, South Lake Tahoe

Rosemary Chang, Counsel Member, Sunol Fire Safe Coalition, Sunol Kyle Rodgers, Social Science Research Associate, Sierra Institute for Community and Environment, Taylorsville

Charles Ashley, Independent, Tollhouse

Steven Frisch, President, Sierra Business Council, Truckee

Mary Mayeda, Forest Program Manager, Mendocino County RCD, Ukiah

Cathy M. Koos Breazeal, Executive Director (retired), Amador Fire Safe Council, Volcano

David Jaramillo, Registered Professional Forester, Watershed Research & Training Center, Weaverville

Colorado

Rodrigo Moraga, Chair - Colorado Prescribed Fire Council, Anchor Point Group, Boulder

Elise Jones, County Commissioner, Boulder County, Boulder

Seth McKinney, Fire Management Officer, Boulder County Sheriff's Office, Boulder

John Wold, Natural Resource Specialist, City of Boulder, Boulder

Chris Wanner, Forest Ecologist, City of Boulder Open Space and Mountain Parks, Boulder

Lynn Riedel, Plant Ecologist, City of Boulder Open Space and Mtn Parks, Boulder

Arika Virapongse, Research Scholar, Ronin Institute & Middle Path EcoSolutions, Boulder

Jean Patton, Communications Lead, The Nature Conservancy/LANDFIRE, Boulder

Emily Troisi, Program Associate, The Watershed Research & Training Center, Boulder

David A. Sacher, Audio Engineer, University of Colorado, Boulder

Jonathan Salerno, Postdoc, University of Colorado, Boulder

Zachary Wurtzebach, Postdoctoral scholar, Colorado State University, Carbondale

Sloan Shoemaker, Executive Director, Wilderness Workshop, Carbondale

Casey Cooley, Forest Habitat Coordinator, Colorado Parks and Wildlife, Colorado Springs

Mike Bablert, Retired, The Nature Conservancy, Crested Butte

Garrett Stephens, Forester, Jefferson Conservation District, Denver

Gregory H. Aplet, Senior Science Director, The Wilderness Society, Denver

Matthew D. Spinner, Open Space Supervisor, Town of Erie, Denver

Mitch Hart, Concerned citizen, Denver

Devyn Arbogast, Youth and Education Programs Manager, Friends of the Dillon Ranger District, Dillon

Brad Pietruszka, US citizen and taxpaver, Dolores

Chris Metz, Weed management Technician/equipment operator, Larimer County, Fort Collins

Daniel Godwin, Wildland Fire Analyst, Center for Environmental Management of Military Lands, Fort Collins

John P. Hayes, Dean, Warner College of Natural Resources, Colorado State University, Fort Collins

Mark Paschke, Research Associate Dean, Warner College of Natural Resources, Colorado State University, Fort Collins

Antony Cheng, Professor, Colorado State University, Fort Collins

Camille S. Stevens-Rumann, Assistant Professor, Colorado State University, Fort Collins

Carrie Frickman, MS Student Conservation Leadership, Colorado State University, Fort Collins

Courtney Schultz, Associate Professor, Colorado State University, Fort Collins

Erica Fleishman, Department of Fish, Wildlife and Conservation Biology, Colorado State University, Fort Collins

Kat Morici, Research Associate, Colorado State University, Fort Collins

Katherine Mattor, Research Scientist, Colorado State University, Fort Collins

Katie Lyon, Research Assistant, Colorado State University, Fort Collins

Linda Nagel, Professor and Department Head, Colorado State University, Fort Collins

Megan Matonis, Colorado State University, Fort Collins

Miranda Redmond, Assistant Professor, Colorado State University, Fort Collins

Monique E. Rocca, Associate Professor, Colorado State University, Fort Collins

Philip N. Omi, Professor Emeritus, Colorado State University, Fort Collins

Sonya Le Febre, Assistant Professor, Colorado State University, Fort Collins

Tomas Pickering, PhD candidate, Colorado State University, Fort Collins

Wade Tinkham, Assistant Professor, Colorado State University, Fort Collins

Merrill R. Kaufmann, Emeritus Fire and Forest Ecology Senior Scientist, Rocky Mountain Research Station, US Forest Service, Fort Collins

Peter M. Brown, Director, Rocky Mountain Tree-Ring Research, Fort Collins

Laren A. Cyphers, Program Associate, Rural Voices for Conservation Coalition, Fort Collins

Gloria J. Edwards, Program Coordinator, Southern Rockies Fire Science Network, Fort Collins

Daniel, Squad Captain, State Agency, Fort Collins

Chad Hoffman, Associate professor of fire science, Colorado State University, Ft. Collins

Denise Wilson, Botanist, Chicago Botanic Garden, Golden

Hillary King, Research and Grants Coordinator, Jefferson County Open Space, Golden

Carissa Callison, Graduate Student, Western State Colorado University, Gunnison

 ${\bf Jonathan\ Coop,\ Assistant\ Professor,\ Western\ State\ Colorado\ University,\ Gunnison}$

Patrick Magee, Assistant Professor of Wildlife and Conservation Biology, Western State Colorado University, Gunnison

Steve Orr, Wildfire Mitigation Coordinator, West Metro Fire Rescue, Lakewood

Seth Ex, Assistant Professor, Colorado State University, Laporte

David Hirt, Natural Resource Specialist, Boulder County Parks & Open Space, Longmont

Jennifer Muha, Geospatial Sciences Department Lead, Front Range Community College, Longmont

Annie Oxarart, Administrative Director, Association for Fire Ecology, Louisville

Amy Seglund, Biologist, Colorado Parks and Wildlife, Montrose

Brad Setter, Open Space, Trails, and Rodeo Supervisor, City of Steamboat Springs, Steamboat Springs

Hilary Cooper, County Commissioner, San Miguel County, Telluride

Connecticut

Helen Poulos, Professor, Weslevan University, Middletown Emily Dolhansky, Graduate Teaching Fellow, Yale School of Forestry, New Haven

Florida

Steven Brinkley, Wildlife Biologist and Land Manager, Florida Fish & Wildlife Conservation Commission, Brooksville

Anne Blanchard, Wildlife Biologist, State of Florida, Brooksville Patricia A. Cooke, Retired Master Gardener, Brooksville

Beth Christopher, Forester, Florida Forest Service, Carrabelle

Rosi Mulholland, Land Management Specialist, Burn Boss, St. Johns River Water Management District, Clermont

Sofia Thordin, Urban Planner, Fort Lauderdale

Scott Crosby, Forester, Crosby Forestry & GIS Services, LLC, Gainesville

Johanna Freeman, Biological Scientist, Florida Fish & Wildlife Conservation Commission, Gainesville

Martin Main, Associate Dean for Extension, Institute of Food and Agricultural Sciences, University of Florida, Gainesville

Alan J. Long, Professor Emeritus, University of Florida, Gainesville

Alexis Boenker, Graduate Student, University of Florida, Gainesville Anonymous, University of Florida, Gainesville

Chris Demers, Extension Program Manager, University of Florida, Gainesville

Eden Schoepflin, Student, University of Florida, Gainesville

Krissy Olson, Environmental Consultant, University of Florida, Gainesville

Michael Andreu, Associate Professor, University of Florida, Gainesville

Raelene Crandall, Assistant Professor, University of Florida, Gainesville

Kelly McPherson, Natural Resource Consultant, Workman Forestry, Gainesville

Bryce Catarelli, Nurse Practitioner, Gainesville

Justin Littleiohn, Research Student, Gainesville

Ryan Kennelly, Ecosystem Restoration Team Lead, Gainesville

Stephen Wasp, Firefighter, Gainesville

Jeremiah Hatcher, Assistant Team Lead, Wildland Restoration International, Gulf Breeze

Joseph Bell, Wildland Firefighter, Jacksonville

Scotland Talley, Conservation Biologist, Florida Fish & Wildlife Conservation Commission, Lake City

Vincent Fioramanti, Wildlife Technician, Florida Fish & Wildlife Conservation Commission, Lake Placid

Erik Moretuzzo, Agricultural Conservation Technician, Hillsborough Soil and Water District, Lithia

Jonathan Baker, Land Management Specialist, Brevard County, Melbourne

Ronald Chicone, Land Management Technician, Brevard County Environmentally Endangered Lands, Melbourne

Samantha Anderson, Biologist, University of Florida, Melbourne

Alice Matthews, Educator, Merritt Island

Ad Platt, Vice President for Operations, The Longleaf Alliance, Milton

Danielle Deming, Ecosystem Support Team member, The Longleaf Alliance, Milton

Vernon Compton, Project Director, The Longleaf Alliance, Milton

Jean McCollom, Biologist, Natural Ecosystems LLC, Naples

Michael Duever, Ecologist, Natural Ecosystems LLC, Naples

Sabrina Philipp, University of Florida, Naples

Christina Powell, Parks Manager, Charlotte County, North Port

Deborah Blanco, Environmental Specialist, Sarasota County Government, North Port

Laurie Dolan, Environmental Specialist II, Florida Dept. of Environmental Protection, Ocala

Ken Weyrauch, Senior Planner, Ocala

Kristina Baker, Consultant, Orange Park

Christopher Kinslow, Land Management Specialist, St. Johns River Water Management District, Palatka

Lucas Furman, GIS Support Specialist, Natural Resources Professional, Pensacola

Donna Vassallo, Wildland Fire Ecologist, The Longleaf Alliance, Pensacola

Paul Langford, Private Forest Landowner, Pensacola Jack Smith, Forest Area Supervisor, Florida Forest Service, Perry John Diaz, Assistant Professor, University of Florida, Plant City Mike Olson, Firefighter, Port Orange

Catherine Ricketts, Wildlife biologist, Florida Fish & Wildlife Conservation Commission, Port Saint Joe Elysia Dytrych, Biologist II, Florida Fish and Wildlife Conservation Commission, Sebring

Matthew Goode, Biological Scientist, Florida Fish & Wildlife Conservation Commission, Sebring

Nathan Bunting, Wildlife Biologist, Florida Fish & Wildlife Conservation Commission, Sneads

Paul Strauss, Volunteer Nature Interpreter and Wildland Firefighter, Stuart Thomas Christopher, Senior Forester, Florida Forest Service, Tallahassee

Nicole Zampieri, Field Biologist, Florida Natural Areas Inventory, Tallahassee

William Butler, Associate Professor, Florida State University, Tallahassee

John Kevin Hiers, Wildland Fire Scientist, Tall Timbers Research Station, Tallahassee

Kevin Robertson, Fire Ecology Program Director, Tall Timbers Research Station, Tallahassee

Scott Pokswinski, Wildland Fire Science Lab Manager, Tall Timbers Research Station, Tallahassee

David R. Godwin, Coordinator, University of Florida, Tallahassee

Jerrie Lindsey, Citizen, Tallahassee

Margaret Kargel, Private Citizen, Tallahassee

Sarah Godwin, Voter, Tallahassee

Rvan Proly, Recruiter, Tampa

Eric S. Menges, Program Director, Plant Ecology Program, Archbold Biological Station, Venus

Bradley T Weller, Owner, Kings Birds Zoological, Webster

Kraig Krum, Environmental Program Supervisor, Palm Beach County, Environmental Resources Management, West Palm Beach

Matthew Hortman, Biological Scientist III, Florida Fish & Wildlife Conservation Commission, Wewahitchka Philip Manor, District Wildlife Biologist, Florida Fish & Wildlife Conservation Commission, Wewahitchka Brian Christ, Wildlife Technician, Florida Fish & Wildlife Conservation Commission

Georgia

Stephen Logan, Forest Consultant, F&W Forestry, Albany

Dave Coyle, Regional Forest Health Director, Southern Regional Extension Forestry, Athens

Holly Campbell, Extension Association, Southern Regional Extension Forestry, Athens

Leslie Boby, Extension Associate, Southern Regional Extension Forestry, Athens

Jesse B. Sands, ACN, Atlanta

Mehmet Talat Odman, Principal Research Engineer, Georgia Institute of Technology, Atlanta

Tiffany Woods, Program Manager, Southeast Forestry, National Wildlife Federation, Atlanta

Brandon Sanford, Research Assistant and Environmental Engineer Undergraduate, Atlanta

Frick Brown, Fire Manager, Atlanta

Megan Blizzard, LEED Certification Reviewer, Atlanta

Joe Butler, Manager/Owner, Forest Lodge Farms, LLC, Camilla

Andrew Edelman, Associate Professor, University of West Georgia, Carrollton

Matthew P. Snider, Burn Boss, The Nature Conservancy, Columbus

Mike Worley, Chair Elect, Georgia Prescribed Fire Council, Covington

Mike Worley, President & CEO, Georgia Wildlife Federation, Covington

Theron Menken, Wildlife Biologist, Georgia Department of Natural Resources, Fort Valley

Peter Whiteside, Insurance Professional, Hinesville

Emily Rushton, Wildlife Biologist, Georgia Department of Natural Resources, McDonough

Mark A. Melvin, Chair, Coalition of Prescribed Fire Councils, Inc, Newton

Seth W. Bigelow, Assistant Scientist, Jones Center at Ichauway, Newton

LuAnn Craighton, Environmental Educator, Valley View Farms, Pine Mountain Valley

Randy Tate, Fort Stewart/Altamaha Longleaf Partnership Coordinator, The Longleaf Alliance, Savannah

Wayne Bell, Retired COO, International Forest Company, Valdosta Reese J. Thompson, Longleaf Tree Farmer, Vidalia

<u>Hawaii</u>

Gantry Andrade, Assistant Fire Chief, Hawaii Fire Department, Hilo

Clay Trauernicht, Assistant Specialist in Wildland Fire Science and Management, University of Hawaii, Manoa, Honolulu

Creighton M. Litton, Professor, University of Hawaii, Manoa, Honolulu

Pablo Akira Beimler, Community Outreach Coordinator, Hawaii Wildfire Management Organization, Kamuela Lance W. Holter, Council Member, US Forestry Research Advisory Council, Paia

<u>ldaho</u>

Jonathan Oppenheimer, Government Relations Director, Idaho Conservation League, Boise

April Hulet, Rangeland Extension Specialist, University of Idaho, Boise

Chris Bowman-Prideaux, PhD Candidate, University of Idaho, Boise

Corey L. Gucker, Project Coordinator, University of Nevada, Reno, Boise

John H. Cissel, Retired Fire Scientist and Manager, Boise

Thomas Laird, Wildlife Monitoring Technician, Oregon Department of Fish and Wildlife, Caldwell

Gordon L. Sanders, Idaho Master Forest Steward, Idaho Forest Owners Association, Idaho Lands Resource Coordinating Counsel, Coeur d'Alene

Mark Masters, CEO, Chloeta Fire, Idaho Falls

Charles Goebel, Department Head and Professor, Department of Forest, Rangeland & Fire Sciences, College of Natural Resources, University of Idaho, Moscow

Dennis Becker, Director, Policy Analysis Group, University of Idaho, Moscow

Aaron Murdock, Student, University of Idaho, Moscow

Adam Young, PhD Candidate, University of Idaho, Moscow

Carrie Minerich, Graduate Research Assistant, University of Idaho, Moscow

Darcy Hammond, Research Assistant, University of Idaho, Moscow

Eva Strand, Associate Professor, University of Idaho, Moscow

Janet E. Nelson, Vice President for Research and Economic Development, University of Idaho, Moscow

Josh Hyde, Fire Research Scientist, University of Idaho, Moscow Katherine Wollstein, Doctoral Research Assistant, University of Idaho, Moscow

Leda Kobziar, Associate Professor, University of Idaho, Moscow

Luigi Boschetti, Associate Professor, University of Idaho, Moscow

Penny Morgan, Professor, University of Idaho, Moscow

Illinois

Edward Warden, Naturalist, Chicago

Nicole Cavender, Vice President of Science and Conservation, The Morton Arboretum, Lisle

Linda Premo, R.T., Saint Charles

Jacob Gawlik, Reverend, Evangelical Lutheran Church in America, Sterling

Paul Brewer, Illinois Certified Prescribed Burn Manager, Illinois Prescribed Fire Council, Toledo

Daniel A. Tortorelli, George B. Grimm Professor, Emeritus, University of Illinois at Urbana-Champaign, Urbana

Indiana

Michael R. Saunders, Associate Professor, Purdue University, West Lafayette

Kansas

Kyle Schumacher, Graduate Research Assistant, Fort Hays State University, Hays
Tyler Warner, Rancher, Holton
Jeremy Robert Cox, Fire Fighter Type 2, GH Ranch, Hutchinson
John Blair, University Distinguished Professor, Kansas State University, Manhattan
Rory O'Connor, PhD Candidate, Kansas State University, Manhattan
Vickie Cikanek, Private Lands Biologist, Kansas Department of Wildlife, Parks, & Tourism, Topeka

Kentucky

Chris Minor, President, Kentucky Prescribed Fire Council, Greenville

Louisiana

William J. Platt, Professor of Biology, Louisiana State University, Baton Rouge Nathan Yeldell, Biologist, LA Dept. of Wildlife and Fisheries, Hammond Ann W. Stuart, Citizen, Lafayette Julia E. Earl, Assistant Professor, Louisiana Tech University, Ruston

Massachusetts

Cristina Eisenberg, Chief Scientist, Earthwatch Institute, Boston
Bob Bale, President, Wildland Restoration International, Duxbury
Danelle Laflowerm, Research Assistant, Harvard University/Harvard Forest, Petersham
Jonathan R. Thompson, Senior Ecologist, Harvard University/Harvard Forest, Petersham
Matthew Duveneck, Research Associate, Harvard University/Harvard Forest, Petersham

Maryland

Robert R. Schwartz, Forester, Maryland Forest Service, Hagerstown Sylvia S. Tognetti, Adjunct Professor and Independent Consultant, University of the District of Columbia Community College, Silver Spring

Maine

Robert Hyson, Owner, Medomak Construction Inc., Bremen Susan Conard, Editor in Chief, International Journal of Wildland Fire, Northport

Michigan

Nancy H.F. French, Senior Scientist, Michigan Tech University Research Institute, Ann Arbor Matthew Hamilton, Postdoctoral Research Fellow, University of Michigan, Ann Arbor Alexandra Paige Fischer, Assistant Professor, University of Michigan, School for Environment and Sustainability, Ann Arbor

Madelyn Tucker, PhD candidate, Wayne State University, Detroit
Chase Brooke, Graduate Student, Michigan State University, East Lansing
Jessica R. Miesel, Assistant Professor, Michigan State University, East Lansing
Kathleen Quigley, Postdoctoral Research Associate, Michigan State University, East Lansing
Noah Jansen, Conservationist, Little Traverse Bay Bands of Odawa Indians, Harbor Springs
Gordon Vander Yacht, Equipment Manager, Hope College, Holland
Kathleen E. Halvorsen, Professor of Natural Resource Policy, Michigan Technological University, Houghton

Rankin Smith, Field Technician, Michigan DNR, Ishpeming
Michele Richards, Wildland Fire Manager, Michigan Army National Guard, Kalamazoo
Brenda Tiefenthal, Tax Payer, Kalamazoo
Andrew Vander Yacht, PhD, Research Specialist, Michigan State University, Lansing
Erica Pfleiderer, Wildland Firefighter, Marquette
Darwin Micheal Schultz, Consultant / Fire Ecologist / Student, Oscoda
Christina DeGrush, Rise Kalamazoo, Plainwell
Kim Steinmann, Constituent, MI06, Portage

Minnesota

Craig R. Sterle, President - MN Division Izaak Walton League of America, Barnum
Katie Zlonis, Plant Resource Director, Leech Lake Band of Ojibwe, Cass Lake
Melissa Mokry, PhD Candidate, Colorado State University, Duluth
Todd Armbruster, Firewise Coordinator, Cook and Lake County, Duluth
Lane Johnson, Research Forester, University of Minnesota, Cloquet Forestry Center, Duluth
Matthew Tyler, Forester, Grand Portage, Grand Portage
Tim Miller, Reservation Forester, Grand Portage Tribal Forestry, Grand Portage
Tony Lenoch, Area Resource Specialist, Minnesota Dept. of Natural Resources, Grand Rapids
Lori Knosalla, Graduate Student Researcher, University of Minnesota, Minneapolis
Nancy Braker, Arboretum Director, Carleton College, Northfield
Matthew Lasch, Minnesota Contracting Manager, Applied Ecological Services, Prior Lake
Eli Sagor, Associate Extension Professor, University of Minnesota, Roseville
Ferin Davis, Environmental Technician, Shakopee Mdewakanton Sioux Community Land Department, Shakopee
Annie Hawkinson, Graduate Research Assistant, University of Minnesota, St. Paul
Rebecca Montgomery, Associate Professor, University of Minnesota, St. Paul

Missouri

Elizabeth Middleton, Grassland Botanist, Missouri Department of Conservation, Clinton
Clif Baumer, Member, East Central Prescribed Burn Association, Columbia
Connor Crouch, Graduate Research Assistant, School of Natural Resources, University of Missouri, Columbia
Benjamin Knapp, Assistant Professor, University of Missouri, Columbia
Joseph Marschall, Senior Research Specialist, University of Missouri, Columbia
Mary Wachuta, Graduate Research Assistant, University of Missouri, Columbia
Michael Stambaugh, Research Associate Professor, University of Missouri, Columbia
Gary Llewellyn, Rancher Retired, SRM, Excelsior Springs
Thomas Fielden, Chairman, Missouri Prescribed Fire Council, Van Buren
Calvin Maginel, Fire Ecologist, Missouri Department of Conservation, West Plains

Mississippi

Marcus Lashley, Assistant Professor, Mississippi State University, Mississippi

<u>Montana</u>

David McWethy, Assistant Professor, Montana State University, Bozeman Todd Erdody, Concerned Citizen, Bozeman Jon Warwick, Kalispell Jeffrey Lombardo, Forester, Heirloom Woodlands LLC / Watershed Consulting LLC, Missoula Megan Keville, Coordinator, Northern Rockies Fire Science Network, Missoula Julie Gilbertson-Day, Senior Spatial Wildfire Analyst, Pyrologix, LLC, Missoula

Thomas H. DeLuca, Dean, W.A. Franke College of Forestry & Conservation, University of Montana, Missoula Alan Tepley, Postdoctoral Fellow, University of Montana, Missoula Andrew Larson, Associate Professor, University of Montana, Missoula Christopher R. Keyes, Research Professor of Forestry, University of Montana, Missoula Eric Rowell, Wildland Fire Scientist, University of Montana, Missoula Libby Metcalf, Associate Professor, University of Montana, Missoula Philip Higuera, Associate Professor of Fire Ecology, University of Montana, Missoula Solomon Dobrowski, Associate Professor, University of Montana, Missoula Mark Vander Meer, Forest Ecologist/ Soil Scientist, Watershed Consulting LLC, Missoula Hannah Johlman, Fire Science Communicator, GPFSE, Wyola

North Carolina

Josh Kelly, Biologist, Mountain True, Asheville Lauren Reker, Non-native Invasive Species Project Coordinator, Mountain True, Asheville Adam Warwick, Stewardship Manager, The Nature Conservancy, Asheville Mamie Colburn, Stewardship Assistant, The Nature Conservancy, Asheville Jenna Danckwrt, Concerned Citizen, Asheville Nic Danckwart, Forestry Technician, Asheville Richard L. Broadwell, President, Fork Ridge Environmental Consulting, Bakersville Alex Finkral, Chief Forester, The Forestland Group, Chapel Hill Christa Rogers, Natural Resources Manager, Mecklenburg County NC, Charlotte Aixi Zhou, Associate Professor, University of North Carolina at Charlotte, Charlotte Dan Feola, NC Forest Service Ranger, North Carolina State University, Columbia Chet Buell, Technology Support Analyst, North Carolina State University, Durham Renee Strnad, Environmental Educator, North Carolina State University, Durham Margit Bucher, Fire Manager, The Nature Conservancy, Durham Meyer Speary, Fire Environment Forester, North Carolina Forest Service, Edenton Edgar L. Peck III, Elk Park Matthew Harrell, Practitioner, NC Prescribed Fire Council, Indian Trail Colby Lambert, Area Specialized Agent -Forestry, NC Cooperative Extension, Lillington Thomas G. Crews, Jr., Retired Fire Management Officer, US Fish and Wildlife Service, Manteo Ryan Jacobs, Wildlife Forest Manager, North Carolina Wildlife Resources Commission, Marion Ryan Sparks, Conservation Associate, Foothills Conservancy of NC, Morganton Branda Nowell, Professor, North Carolina State University, Raleigh Charles Sanders, Wildlife Biologist, North Carolina State University, Raleigh Fernando García Menendez, Assistant Professor, North Carolina State University, Raleigh Jennifer Costanza, Research Assistant Professor, North Carolina State University, Raleigh Joseph P. Roise, Forester, North Carolina State University, Raleigh Mara Omega, Professor, North Carolina State University, Raleigh Myron Floyd, Professor, North Carolina State University, Raleigh Robert Scheller, Professor, North Carolina State University, Raleigh Ronald Sederoff, Professor Emeritus, North Carolina State University, Raleigh Ross Whetten, Professor of Forestry & Environmental Resources, North Carolina State University, Raleigh Stephanie Jeffries, Director, Environmental First Year Program, North Carolina State University, Raleigh Steven McKeand, Professor, North Carolina State University, Raleigh Toddi Steelman, Professor, North Carolina State University, Raleigh Laurel Kays, Project Manager, Southwestern NC RC&D Council, Waynesville Ryan Bollinger, Local Implementation Team Consul, The Longleaf Alliance, Whispering Pines Kate Williams, Prescribed Fire Technician, The Nature Conservancy, Wilmington

North Dakota

Betsey York, Research Associate, North Dakota State University, Fargo
Devan Allen McGranahan, Assistant Professor of Range Science, North Dakota State University, Fargo
Jonathan Spiess, Graduate Student, North Dakota State University, Fargo
Micayla Lakey, Graduate Research Assistant, North Dakota State University, Fargo

<u>Nebraska</u>

Jeanine Lackey, Director of Research and Stewardship, Fontenelle Forest, Bellevue
Michelle Foss, Restoration Biologist, Fontenelle Forest, Bellevue
Noah Sundberg, Fontenelle Forest, Bellevue
Tim Dickson, Faculty, University of Nebraska, Omaha, Omaha
Jennifer Hopwood, Senior Pollinator Conservation Specialist, Xerces Society for Invertebrate Conservation, Omaha

New Jersey

John Cecil, Vice President for Stewardship, New Jersey Audubon, Port Murray

New Mexico

Matthew Hurteau, Associate Professor, University of New Mexico, Albuquerque
Scott L Collins, Distinguished Professor, University of New Mexico, Albuquerque
Emily Hohman, Executive Director, Chama Peak Land Alliance, Chama
Jeremy Gingerich, Assistant General Manager, Vermejo Park LLC, Raton
John Lissoway, Member, Forest Stewards Guild, Santa Fe
Sam Berry, Project Coordinator, Forest Stewards Guild, Santa Fe
Zander Evans, Executive Director, Forest Stewards Guild, Santa Fe
Mark Meyers, Forester, New Mexico State Land Office, Santa Fe
Tim L. Kirkpatrick, President, East Mountain Interagency Fire Protection Association (EMIFPA), Tijeras

<u>Nevada</u>

Tim Brown, Research Professor, Desert Research Institute, Reno
Julie Hunter, Chair, Nevada Prescribed Fire Alliance, Reno
Alexandra Urza, Graduate Research Assistant, University of Nevada, Reno, Reno
Eugenie MontBlanc, Project Manager, University of Nevada, Reno, Reno
Peter Weisberg, Professor, University of Nevada, Reno, Reno
Thomas Dilts, Research Scientist, University of Nevada, Reno, Reno
Carol L. Rice, Senior Wildland Fire Manager, Wildland Resource Management, Inc., Reno
April Smith, Stay at Home Mother, Reno

New York

Kurt Gielow, Student, Homer
Sarah A. Moss, Accounting Staff Specialist, Saint Christopher's Inn, Inc., Poughkeepsie
David Newman, Professor, SUNY College of Environmental Science and Forestry, Syracuse
Robert W. Malmsheimer, Interim Chair and Professor of Forest Policy and Law, SUNY College of Environmental
Science and Forestry, Syracuse
Ben Zimmerman, Branch Manager, Managing Ecologist, Applied Ecological Services, Waterloo

<u>Ohio</u>

Alia Dietsch, Assistant Professor, The Ohio State University, Columbus
Claire Rapp, Graduate Researcher, The Ohio State University, Columbus
Elizabeth Myers Toman, Visiting Assistant Professor, The Ohio State University, Columbus
Eric Toman, Associate Professor, The Ohio State University, Columbus
G. Matt Davies, Assistant Professor, The Ohio State University, Columbus
Rachel Gabor, Assistant Professor, The Ohio State University, Columbus
Robyn Wilson, Associate Professor of Risk Analysis and Decision Science, The Ohio State University, Columbus
Roger A. Williams, Associate Professor, The Ohio State University, Columbus
Virginia Rich, Assistant Professor, The Ohio State University, Columbus

Oklahoma

Jack Waymire, Senior Biologist, Oklahoma Department of Wildlife Conservation, Clayton Evan Tanner, Postdoctoral Fellow, Oklahoma State University, Stillwater John Weir, Research Associate, Oklahoma State University, Stillwater

Oregon

Pat Uhtoff, Forester, Pat Uhtoff Forestry, Ashland George McKinley, Executive Director, Southern Oregon Forest Restoration Collaborative, Ashland Carolyn Hunsaker, Retired Research Ecologist, US Forest Service, Ashland Karl J. Findling, Member, Steens Mountain Advisory Council, Bend Michael O'Casey, Stewardship Coordinator, Bend Kirk R. Metzger, Retired Wildland Hazardous Fuels Manager, US Forest Service, Camp Sherman Max Bennett, Extension Forestry & Natural Resources Faculty, Oregon State University, Central Point Kevin Vogler, Spatial Wildfire Analyst, Oregon State University, Corvallis Anthony S. Davis, Acting Dean, College of Forestry, Oregon State University Al Pancoast, Graduate Student, Oregon State University, Corvallis Anna Talucci, Graduate Student, Oregon State University, Corvallis Audrey Maclennan, Graduate Student, Oregon State University, Corvallis Audrey Riddell, Graduate Research Assistant, Oregon State University, Corvallis Becky Miller, Graduate Student, Oregon State University, Corvallis Bruce Shindler, Professor Emeritus, Oregon State University, Corvallis Carrie Berger, Extension, Oregon State University, Corvallis Chad Kooistra, Researcher, Oregon State University, Corvallis Christal Johnson, PhD Student in Fire Science, Oregon State University, Corvallis Christine Olsen, Instructor, Oregon State University, Corvallis Christopher J. Dunn, Research Associate, Oregon State University, Corvallis Claire Tortorelli, Graduate Student, Oregon State University, Corvallis Clayton Sodergren, PhD Student, Oregon State University, Corvallis Danielle Jackson, Student, Oregon State University, Corvallis David Blunck, Assistant Professor, Oregon State University, Corvallis Gabe, Graduate Research Assistant, Oregon State University, Corvallis Janean Creighton, Associate Professor, Oregon State University, Corvallis Kayla Johnston, Graduate Teaching Assistant, Oregon State University, Corvallis Lisa Ellsworth, Assistant Professor, Senior Research, Oregon State University, Corvallis Lizz Schuyler, Doctoral Researcher, Oregon State University, Corvallis M. E. Braun, Acquisitions Editor, Oregon State University, Corvallis Meg Krawchuk, Assistant Professor, Oregon State University, Corvallis Patricia Muir, Professor Emeritus, Oregon State University, Corvallis Rachel Houtman, Faculty Research Assistant, Oregon State University, Corvallis Stephen Fitzgerald, Professor, Oregon State University, Corvallis

Timothy Facemire, Graduate Student, Oregon State University, Corvallis

Tom Spies, Courtesy Professor, Oregon State University, Corvallis

Will Downing, Fire Ecologist, Oregon State University, Corvallis

Lisa M. Ganio, Associate Professor, Oregon State University, College of Forestry, Corvallis

David Shaw, Associate Professor, Forest Health Specialist, Oregon State University, Corvallis

Neil Williams, Researcher, Corvallis

Lance Sargent, Citizen, Eagle Point

Allison Rossman, Botanist, The Nature Conservancy, Enterprise

Heron Brae, Botanist and Natural History Educator, Columbines School of Botanical Studies, Eugene

Timothy Ingalsbee, Executive Director, Firefighters United for Safety, Ethics, and Ecology (FUSEE), Eugene

Autumn Ellison, Research Faculty, University of Oregon, Eugene

Bart Johnson, Professor, University of Oregon, Eugene

Cassandra Moseley, Director, Ecosystem Workforce Program, University of Oregon, Eugene

Heidi Huber-Stearns, Assistant Research Professor, University of Oregon, Eugene

Jesse Abrams, Research Associate, University of Oregon, Eugene

John Koenig, South Willamette Forest Collaborative, Eugene

Mike Brinkley, Citizen, SW Fire Science Consortium, Eugene

Amanda Stamper, Fire Manager, The Nature Conservancy, Eugene

Alexis Engelbrecht, Volunteer & Outreach Coordinator, Walama Restoration Project, Eugene

Alan Stearns, Teacher, Eugene

Janelle Cossey, Forestry Technician, Eugene

Leslie Dietz, Volunteer, Eugene

Louisa Evers, US Citizen, Gresham

Jack Shipley, Board Chair, Applegate Partnership and Watershed Council, Jacksonville

Daniel Leavell, Assistant Professor of Practice/Forest Agent, OSU College of Forestry Extension, Klamath Falls

Gene Rogers, President, Wildland Fire Technologies, Inc., Klamath Falls

James K. Walls, Executive Director, Lake County Resources Initiative, Lakeview

Audrey Squires, Restoration Projects Manager, Middle Fork Willamette Watershed Council, Lowell

Derek Anderson, Oregon State University, Monmouth

Mark Webb, Executive Director, Blue Mountains Forest Partners, Mt. Vernon

Joan Lawrence, Prescribed Fire Practitioner, Interagency Wildland Fire, North Bend

Paula Hebert, Member, Southern Willamette Forest Collaboration, Oakridge

Sarah Altemus-Pope, Coordinator, Southern Willamette Forest Collaborative, Oakridge Susan Knudsen Obermeyer, Private Citizen, Southern Willamette Forest Collaborative, Oakridge

Loren E. Hogue, Retired Board Member, SW Fire Science Consortium, Oakridge

Loren E. Hogue, Retired Board Wember, SW Fire Science Consortium, Oakridge

 $Megan\ Creutzburg,\ Faculty\ Research\ Associate,\ Institute\ for\ Natural\ Resources,\ Oregon\ State\ University,\ Portland$

Andres Holz, Assistant Professor, Portland State University, Portland

Cody Evers, PhD Student, Portland State University, Portland

Max Nielsen-Pincus, Assistant Professor of Environmental Management, Portland State University, Portland

Melissa Lucash, Research Assistant Professor, Portland State University, Portland

Greg Block, President, Sustainable Northwest, Portland

Kendal Martel, Forest Program Associate, Sustainable Northwest, Portland

Susan Jane Brown, Wildlands Program Director & Staff Attorney, Western Environmental Law Center, Portland

Kerry Kemp, Forest Ecologist, The Nature Conservancy, Prairie City

Alison E. Dean, Fire Effects Monitoring Coordinator, Central Oregon Fire Management Service, Prineville

Nick Yonker, Oregon Smoke Management Program Manager, Oregon Department of Forestry, Salem

Susanne Ranseen, Ecologist, Oregon State University, Salem

Cristina Horton, Student, Oregon State University, Salem

Robbye Lanier, Environmental Technician, Lane Regional Air Protection Agency, Springfield

Emily Jane Davis, Assistant Professor, Oregon State University, The Dalles

Teresa Zena Alcock, Fire Data and Geospatial Analyst, Oregon Department of Forestry, Tualatin

<u>Pennsylvania</u>

Robert J. Fleming, President, Danamere Farms, Inc., Philadelphia Alice Puchalsky, Student, Temple University, Philadelphia Emily Booth, Postdoctoral Research Fellow, Temple University, Philadelphia Alan Taylor, Professor Department of Geography and Ecology, Pennsylvania State University, State College Warren Reed, PhD Candidate, Pennsylvania State University, State College Melissa M. Kreye, Assistant Professor of Forest Resources Management, Pennsylvania State University, State College

South Carolina

Charles Babb, Longleaf Implementation Team Coordinator, Sandhills Longleaf Pine Conservation Partnership, Chesterfield

Bridget Lorraine Blood, PhD Research Assistant, Clemson University, Clemson

Dr. Donald L. Hagan, Assistant Professor of Forest Ecology, Clemson University, Clemson

Emily Oakman, Masters Student, Clemson University, Clemson

Jenifer Bunty, Public Information Coordinator, Clemson University, Clemson

Matthew Vaughan, PhD Student, Clemson University, Clemson

Darryl Jones, Forest Protection Chief, South Carolina Forestry Commission, Columbia

Sudie Thomas, Member, South Carolina Native Plant Society, South Carolina Exotic Pest Plant Council, Conway

Dylan Scott, Prescribed Fire Practitioner, Goose Creek

Thomas A. Waldrop, President, TomGen Forestry, Seneca

Brad McKelvy, Retired Fed FireFighter 38 Years USFS, US Forest Service, Warrenvile

<u>Tennessee</u>

Steven Hromada, Adjunct Instructor, Austin Peay State University, Clarksville Trisha Johnson, Biologist, Cookeville Jef Hodges, Grassland Coordinator, National Bobwhite Conservation Initiative, Knoxville

Savannah Collins-Key, Graduate Teaching Assistant, University of Tennessee, Knoxville

Tyler Gifford, Student, University of Tennessee, Knoxville

Courtney Madson, Associate Producer, Knoxville

Mark Gudlin, Assistant. Chief, Wildlife & Forestry, TN Wildlife Resources Agency, Nashville

Ken Smith, Assistant Dean of the Environment, Integrated Program in the Environment, The University of the South, Sewanee

Shannon Allen, Natural Resources Planner, Alabama and Tennessee Chapter of the Wildlife Society, Sewanee

Texas

J. Kelly Hoffman, Environmental Scientist, Texas A&M University, Austin

Theron Tate, Property Owner, Beaumont

Aaron D. Stottlemyer, Forest Resource Analyst, Texas A&M University, College Station

Alexandra Lodge, Postdoctoral Research Associate, Texas A&M University, College Station

Charles Lafon, Professor, Texas A&M University, Dept. of Geography, College Station

Christopher Roos, Associate Professor of Anthropology, Southern Methodist University, Dallas

William Mobley, Postdoctoral Researcher, Texas A&M University, Fort Worth

Dylan Schwilk, Associate Professor of Biological Sciences, Texas Tech University, Lubbock Robin M. Verble, Associate Professor, Texas Tech University, Lubbock

Xiulin Gao, PhD Student, Texas Tech University, Biological Science, Lubbock

Rebecca Kidd, Assistant Professor, Stephen F. Austin State University, Nacogdoches

Morgan Russell, Assistant Professor and Range Extension Specialist, Texas A&M AgriLife Extension Service, San

Angelo

Rob Galbraith, Director of Underwriting Research, USAA, San Antonio Cynthia L. Dinwiddie, Principal Scientist, San Antonio

<u>Utah</u>

Sara Germain, Canine Search Specialist, FEMA, Logan
Alexander Howe, PhD Fellow, Utah State University, Logan
Erika Blomdahl, Graduate Student Researcher, Utah State University, Logan
Gwendwr Meredith, PhD Student, Utah State University, Logan
Kendall Becker, USU Science Writing Center Assistant Director, Utah State University, Logan
Lisa Green, Project Coordinator, Utah State University, Logan
Mark Brunson, Professor, Utah State University, Logan
Tucker Furniss, PhD Student, Utah State University, Logan
Jessica Kirby, Open Space Management Supervisor, Snyderville Basin Special Recreation District, Park City
Bruce A. Roundy, Professor, Brigham Young University, Provo
Erin Banwell, Fire Ecology Program Coordinator, Gravitas Peak Wildland Fire Module, Provo
Marjie Brown, Wildfire Communications Specialist, ScienceFire Solutions, Inc., Salt Lake City
Maxfield Carlin, Biologist, Tracy Aviary, Salt Lake City

Virginia

Isa Bryant, Researcher, Arlington
Adam Coates, Assistant Professor, Virginia Tech, Blacksburg
Andrew Johnson, Student, Virginia Tech, Blacksburg
Anne-Lise Velez, Collegiate Assistant Professor, Virginia Tech, Blacksburg
George Hahn III, NCRF 1826, PhD Research Assistant, Virginia Tech, Blacksburg
Marc Stern, Associate Professor, Virginia Tech, Blacksburg
Harold Burkhart, Professor, Virginia Tech, Forestry, Blacksburg
Howard Epstein, Professor, University of Virginia, Charlottesville
Nikole Simmons, Restoration Coordinator, The Nature Conservancy, Hot Springs
Anne M. Jewell, Fire Management Specialist, Forester, Center for Environmental Management of Military Lands,
Mechaniscville
Allison Jolley, Communications Manager, Fire Adapted Communities Learning Network, Richmond
Stacey S. Frederick, Science Outreach, Richmond
Laurel Schablein, Private Citizen, Vesuvius

<u>Vermont</u>

Anthony D'Amato, Associate Professor, University of Vermont, Burlington Kim Coleman, Postdoctoral Researcher, University of Vermont, Burlington Cecilia Danks, Associate Professor and Gund Fellow, University of Vermont, Burlington

Washington

Ray Guse, Principal, Smoked Goose Consulting, LLC, Cove
Rose Shriner, Natural Resources Project Manager, Kittitas County Conservation District, Ellensburg
Brooke A. Cassell, Research Assistant, Portland State University, Everett
Jon K. Culp, Secretary, Washington Prescribed Fire Council, Okanogan
Sarah Hamman, Restoration Ecologist, Center for Natural Lands Management, Olympia
Tim Shearman, Postdoctoral Research Associate, University of Washington, Olympia

David Wilderman, Natural Resource Scientist, Washington Dept of Natural Resources, Olympia

Sarah Hart, Assistant Professor, Washington State University, Pullman

 ${\it Keala\ Hagmann, Research\ Ecologist, Applegate\ Forestry,\ LLC,\ Seattle}$

Diana Olson, FRAMES Project Manager, University of Idaho, Seattle

Michael Tjoelker, Content Specialist, University of Idaho, Seattle

Lisa Graumlich, Dean, College of the Environment, University of Washington, Seattle

Charles Halpern, Research Professor, University of Washington, Seattle

Claire Wainwright, Postdoctoral Ecologist, University of Washington, Seattle

Ernesto Alvarado, Research Associate Professor, University of Washington, Seattle

James K. Agee, Professor Emeritus, University of Washington, Seattle

Jonathan Bakker, Associate Professor, University of Washington, Seattle Kara M Yedinak, Postdoctoral Research Associate, University of Washington, Seattle

Michelle Agne, PhD Student, University of Washington, Seattle

Paige C Eagle, Research Consultant, University of Washington, Seattle

Saba Saberi, Graduate Student, University of Washington, Seattle

Paul F. Hessburg, Research Ecologist, College of the Environment, University of Washington, Seattle

Brian J. Harvey, Assistant Professor, School of Environmental and Forest Sciences, University of Washington,

Rae Morris, Community Coordinator, Tonasket

Dave Werntz, Science and Conservation Director, Conservation Northwest, Twisp

Joel Dubowy, Software Engineer, University of Washington, Winthrop

Susan Prichard, Research Scientist, University of Washington, Winthrop

Reese Lolley, Director, Forest Restoration and Fire, The Nature Conservancy, Washington Prescribed Fire Council, Yakima

Hilary Lundgren, Washington Fire Adapted Communities Learning Network Coordinator, Washington Resource Conservation and Development Council, Yakima

Wisconsin

Sarah Johnson, Associate Professor, Northland College, Ashland

Carl Cotter, Stewardship Coordinator, Aldo Leopold Foundation, Baraboo

Curt Meine, Senior Fellow, Aldo Leopold Foundation, Baraboo

Steven Swenson, Director of Conservation, Aldo Leopold Foundation, Baraboo

 ${\it Josh \, LaPointe, Regional \, Manager \, Ecosystem \, Restoration, Applied \, Ecological \, Services, \, Brodhead \, Contract \, Contrac$

Josh Kraemer, Project Manager, Wisconsin Prescribed Fire Council, Brodhead

Fred Wollenburg, Landowner, The Prairie Enthusiasts, Dalton Stacey Marion, Restoration Ecologist, Adaptive Restoration, Madison

Mark Horn, Owner, Conservation Media LLC, Madison

Gary Werner, Volunteer Burn Boss, Dane County Chapter Ice Age Trail Alliance, Madison

 ${\it Jacob Griffin, Associate Professor of Biology; Director of Environmental Studies, Edgewood College, Madison}$

Joe Lacy, Concerned Citizen, Prairie Enthusiasts, Madison

Hannah Spaul, Fire Manager, The Nature Conservancy, Madison

Thomas Pierce, The Prairie Enthusiasts, Madison

Ankur Desai, Professor, University of Wisconsin, Madison

H. Anu Kramer, Research Associate, University of Wisconsin, Madison

Adena Rissman, Associate Professor, Human Dimensions of Ecosystem Management, University of Wisconsin, Madison, Madison

Laura Ladwig, Research Ecologist, University of Wisconsin, Madison, Madison

Monica G. Turner, Odum Professor of Ecology and Vilas Research Professor, University of Wisconsin, Madison, Madison

Paul H. Zedler, Professor of Environmental Studies, University of Wisconsin, Madison, Madison

Tyler J. Hoecker, Graduate Researcher, University of Wisconsin, Madison, Madison

Winslow D Hansen, PhD Candidate, University of Wisconsin, Madison, Madison Zakary Ratajczak, Postdoctoral Student, University of Wisconsin, Madison, Madison Amelia Fass, Student, University of Wisconsin, Stevens Point, Madison Keith Phelps, Conservation Worker, University System, Madison Megan Sebasky, Research Scientist, Wisconsin Department of Natural Resources, Madison Adam Gundlach, Board of Directors Chair, Wisconsin Prescribed Fire Council, Madison Jan Ketelle, Wisconsin Prescribed Fire Council, Mineral Point Yari Johnson, Assistant Professor, University of Wisconsin-Platteville, Mount Horeb Curtis Wayka, Prescribed Fire/Fuels Technician, Menominee Tribal Enterprises, Neopit Angus Mossman, Student, University of Wisconsin, Madison, North Freedom Evan Larson, Associate Professor of Geography, University of Wisconsin-Platteville, Platteville Matthew Smith, Land Manager, Riveredge Nature Center, Saukville Jeb Barzen, Founder, Private Lands Conservation LLC, Spring Green Isabel Moritz, Fire Crew, University of Wisconsin, Stevens Point Jacob Barkalow, Student of Fire, University of Wisconsin, Stevens Point Julie Dickson, College Student, University of Wisconsin, Stevens Point Korey Badeau, Student, University of Wisconsin, Stevens Point Logan Wimme, Undergraduate Forest Management, University of Wisconsin, Stevens Point Max Richards, Student, University of Wisconsin, Stevens Point Nick Bielski, Student, University of Wisconsin, Stevens Point Dylan Wenker, Student, Stevens Point Kelley Harkins, Undergraduate Wildland Fire Science Student, University of Wisconsin, Stevens Point Nathan Holoubek, Research Scientist, Wisconsin Department of Natural Resources, Sun Prairie Theran Stautz, Ecologist, Sun Prairie Richard A. Hansen, Private land owner, Wautoma

West Virginia

Daniel J. Robison, Dean, Davis College of Agriculture, Natural Resources and Design, West Virginia University Nicholas Jeros, Supervisory Fire Engine Operator, Central Apps Fire Learning Network, Davis Adele Fenwick, Fire Instructor and Practitioner, Morgantown

Wyoming

Daniel Laughlin, Associate Professor, University of Wyoming, Laramie Kristina Hufford, Associate Professor, University of Wyoming, Laramie Alex Spannuth, Fire Effects Monitor, Wyoming

Senator Cantwell. We are talking about \$7 million of the Forest Service's \$3 billion budget to operate this innovation program. So I am asking that we do everything we can to help protect it, particularly during the wildfire season we are facing. We need science

iust as we need our assets.

Some of those assets are airtankers and water scoopers. I would like to discuss the change in Forest Service policy as it relates to airtankers and water scoopers. The point of airtankers is to be able to catch wildfires before they grow into expensive incidents. I am concerned about a policy that would leave these airtankers unable to fly after they are ordered for up to 48 hours. With the number of fire starts, I understand the Forest Service trying to be economical, but how does it add up if those fire starts turn into more explosive fires?

I don't know if I have the numbers right here, but the Carlton Complex fire destroyed over 100,000 acres in one afternoon, and that fire was accompanied by many other fire starts in the area. So basically all the resources ended up going into one particular part of the Okanagan while other parts of Pend Oreille County were on fire and could have certainly used some help and support.

Under exclusive use contracts, an airtanker has to respond within 15 minutes. To me, that sounded like a good process. Under the call-when-needed contract, an airtanker would, under this change, have up to 48 hours to respond. In 48 hours a lot of damage can be done.

Over the last week almost every airtanker company has raised concerns about this. I am told the Forest Service is trying to shift cost for aircraft to be paid for with the new pot of money created in the Omnibus. The policy shift, I believe, could be adding up to the taxpayers paying more dollars. I hope you will look at this and help clarify this during the questions today and after today's hearing.

I look forward to working with you as the Committee continues to move forward on fire issues and to make sure that we have a level playing field.

Again, thank you Madam Chair for this hearing and allowing us to ask important questions.

The CHAIRMAN. Thank you, Senator Cantwell.

Ms. Christiansen, we will now turn to you for whatever comments you would care to share with the Committee.

As I mentioned, Vicki Christiansen is the Interim Chief for the U.S. Forest Service at the Department of Agriculture. She is accompanied by Mr. John Rapp who is the Budget Director at the U.S. Forest Service. Mr. Rapp, I don't know whether you plan on providing any testimony or just being here for backup to Ms. Christiansen?

With that, Ms. Christiansen, you have the floor here. We would ask that you try to keep your comments to five minutes, and we will include your full statement as part of the record, but an opportunity for the questions back and forth, I think, is what we are here for. We appreciate that, and we appreciate your leadership here.

STATEMENT OF VICTORIA CHRISTIANSEN, INTERIM CHIEF, USDA FOREST SERVICE

Ms. CHRISTIANSEN. Madam Chair, members of the Committee, thank you for inviting me here to testify on USDA Forest Service's priorities and the request in the President's 2019 budget.

I look forward to working closely with each one of you in my new

role as Interim Chief.

Before I talk about the budget, I'll share just a bit about my background. I was named to this position six weeks ago. I came to the Forest Service in 2010 as Deputy Director of Fire and Aviation and went on to serve as the Deputy Chief for State and Private Forestry. For 30 years prior to these assignments, I helped deliver the mission of the Forest Service through my work in state government. I grew up in the Pacific Northwest, and I'm a forester by training. I started as a seasonal wildland firefighter in Washington State. I had several positions that emphasized managing state trust lands, wildland fire protection and landowner assistance with Washington Department of Natural Resources. I eventually served as State Forester, as Senator Cantwell mentioned, and then the State Forester of Arizona. My passion is to connect people with their natural resources, and the most productive way to do that is through partnerships and collaboration that are based on mutual trust. I will lead this agency in that same spirit.

In regards to the budget and our priorities, I will touch on four topics: fire funding, the 2019 investments in America's forests, in-

ternal reforms, and improving our work environment.

Thank you for solving the fire-funding problem that has disrupted our work for a decade. In 2020 this solution will allow us to stabilize our operating environment by interrupting the rising fire suppression budget by treating catastrophic wildfires as disasters. We can immediately begin to use the new tools and expanded authorities in the recent Omnibus to help us do more work to improve forest conditions and deliver products. This fix is a clear affirmation for us to put more dollars in boots on the ground, and we are committed to doing just that.

The President's request for the Forest Service budget totals nearly \$5.2 billion. Sixty-three percent of it is fire-related as a result

of the rising 10-year average.

This budget does reflect hard choices and difficult tradeoffs. Our primary focus is to improve conditions on national forests. This funding will go toward preventative treatments and hazardous fuel removal on more than 3.4 million acres of national forest. This work will help boost local economies supporting over 350,000 jobs. We will be able to make greater progress using tools like the Good Neighbor Authority and the expansion of the 20-year stewardship contracts to do more work in a spirit of shared stewardship. We thank the Congress for investing in the nation's forests and grasslands. We will make good on that investment.

We also do our part by reforming our internal processes. We will be more transparent, prudent and accountable for the taxpayers'

dollars. We know we don't have a blank check.

This is especially true for our response to wildfires. We will work to better contain fire costs, ensuring we make decisions that give us the best chance at success. We are also working to reform our overly complex, outdated processes that delay our work.

Lastly, we are changing our culture to create a safe and respectful work environment so employees can effectively deliver our mission. Recently we have faced hard truths about allegations of workplace harassment and retaliation, and these are not acceptable.

The Forest Service has been combating these problems for years, but the recent news reports made it painfully clear, policies prohibiting such behavior are not enough. We will match the urgency of this situation with focused actions and sustained energy. We know it won't happen overnight, but I have committed to our employees and to the American people that we will not rest until the USDA Forest Service is a safe and resilient workplace for everyone.

Thank you for your support of America's forests. We will ensure

these investments yield positive results.

Thank you, Madam Chair.

[The prepared statement of Ms. Christiansen follows:]

Statement of Victoria Christiansen, Interim Chief of the USDA Forest Service
Before the Senate Committee on Energy and Natural Resources
Concerning President's Fiscal Year 2019 Proposed Budget
For the USDA Forest Service
April 24, 2018, 10:00 a.m.

Mr. Chairman and members of the Subcommittee, thank you for inviting me here today to testify on the President's FY 2019 Budget request for the Forest Service. I appreciate the support this Committee has shown for the Forest Service in the past. I look forward to working with you to improve conditions on National Forest System lands so they provide—today and tomorrow—for the uses, experiences and services that meet the needs of our Nation.

I am especially appreciative of the solution to our fire funding dilemma. It's a challenge we have struggled with and worked on together for well over a decade. In FY 2020, this comprehensive fire funding fix will ultimately stabilize our operating environment by addressing the rising suppression budget and treating catastrophic wildfires as disasters. You have dramatically reduced the need for transferring funds from our other mission programs so we can cover firefighting costs. You have approved the use of new tools and expanded authorities to help us do more to improve the conditions of our forests and grasslands. These actions signal a significant change for us; it will not be business as usual. We will step up to this challenge and also do our part as an agency. We are already developing more efficient and effective ways to do our work while taking steps to contain fire costs and ensuring we spend dollars in the right places to make a difference. We expect to demonstrate this commitment as we confront the 2018 fire season. Moreover, we have embarked on other internal reforms, especially in active forest management, that will result in changing overly complex, time-consuming, outdated processes that delay our work on the ground. Coupled with the expanded authorities you have approved, these reforms will translate to more results, production and work in our nation's forests.

The 2019 President's Budget for Forest Service totals nearly \$5.17 billion. Of that, \$405 million is mandatory funding. It is a good investment for the American people; we will work to make good on it. The funding and related work will support between 340,000 and 370,000 jobs and contribute more than \$30 billion in Gross Domestic Product. Through the use of tools like the Good Neighbor Authority, with more than 127 agreements in 33 states, 20-year stewardship contracts with cancellation ceiling relief, and other internal process improvements like environmental analysis decision-making (EADM), the Forest Service will move forward to sell 3.7 billion board feet of timber while improving the resiliency and health of more than 3.4 million acres of National Forest System lands through removal of hazardous fuels and stand treatments.

Meanwhile, the agency continues our work on other reforms. We continue our progress to strengthen internal controls by implementing policies and procedures that reinforce administrative control of funds, better management of prior year unobligated balances, and quarterly review of unliquidated obligations. An effort is also underway to evaluate the Forest Service's budget structure compared to other agencies. The goal is to produce a FY 2020 budget within a new, streamlined structure that will facilitate better transparency about how the agency allocates funds to direct and indirect costs and eliminate cost pools.

We recognize, however, our successful delivery of services and work starts with a highly skilled, motivated workforce. Forest Service employees remain our largest and most important investment. They are essential to confronting the arduous challenges facing America's forests and grasslands. They are integral to the services and experiences we provide to citizens and local communities. Recently, we have faced hard truths about continued allegations of harassment and retaliation that remain within our agency. Though difficult to hear and watch, these important stories reveal unacceptable behavior that must—and will—end in this agency. Looking at this agency, I see strong, courageous and forward-thinking people willing to stand up for their colleagues and themselves. Please know I stand with them. We will match the urgency of this situation with focused actions and sustained commitment; I commit to hold everyone accountable for their behavior and we will continue to take meaningful steps that will result in a permanent change to our culture. We cannot achieve the important work of our mission without the safe, rewarding, respectful, harassment free environment each of our employees deserves and the American people expect of their Government.

The President's 2019 Budget

The FY 2019 request focuses on: wildfire response; active forest management; and acquiring knowledge to better manage forests. To address these focus areas, the Budget makes key investments in the following program areas:

- \$1.34 billion is proposed for Fire Preparedness, which enables the Forest Service to maintain its existing firefighting capability and funds all base 8 salary costs for firefighters.
- Fire Preparedness aviation investments support the agency's goal of providing a safe and
 effective fire response.
 - The USDA Forest Service seeks the support of the appropriate Congressional committees to terminate the agency-owned HC-130H program in 2019.
- \$1.165 billion is proposed for Suppression which fully funds the rolling 10-year average expenditures for Suppression.
 - o The 10-year average increased \$108 million from the FY 2018 President's request.
- \$390 million is proposed for Hazardous Fuels, which supports the agency's emphasis on improving the condition of the Nation's forests and grasslands while enhancing their resilience to the negative effects of wildland fire.
- \$341 million is proposed for Forest Products which will support the sale of 3.7 billion board feet of timber. The Forest Service is working to improve the speed and agility in the planning and execution of land management actions including timber sales.
 - Timber sales are an important tool for accomplishing resource management objectives in an ecologically and economically efficient manner while generating revenue to offset implementation costs, support jobs and bolster economies.
- \$75 million is proposed for the Forest Inventory and Analysis (FIA) Program, which
 generates data on past, current, and projected tree inventories for all 50 states. The FIA
 program enables the FS and others in the natural resource community to understand the
 magnitude of changes in forest conditions and trends, and to make projections of future
 conditions information which is vital to the long-term health of forests and the sustained
 availability of multiple uses from forests.

 FIA leverages one partner dollar for every six Federal dollars spent, and provides current and historical information that informs forest management planning across the country.

Legislative Proposals

The FY 2019 President's Budget proposes several key legislative changes to improve our effectiveness in delivering programs and services:

- Federal Lands Recreation Enhancement Act Reauthorization (FLREA): The proposal is to
 reauthorize the Federal Lands Recreation Enhancement Act through September 30, 2021.
 This is an interagency proposal with the Department of the Interior. An interagency working
 group developed specific, mutually agreed upon language changes to the authority. The
 Triennial Report to Congress on Implementation of FLREA, published in May 2012,
 contained a number of "Considerations for the Future of the Program" which set the
 foundation for the interagency proposal.
- Forest Service Facility Realignment and Enhancement Act of 2005 (FSFREA): The agency
 is requesting reauthorization for one year, until September 30, 2019. This would allow the
 Secretary to continue to convey administrative sites that the Forest Service no longer needs,
 and retain the proceeds from the sales for the acquisition, improvement, maintenance,
 reconstruction, or construction of facilities.
- Small Tracts Act: The 1983 Small Tracts Act authorizes the Secretary to dispose of up to 40 acres of National Forest System (NFS) land by sale or exchange. This proposal would increase the minimum value of the land that could be conveyed from \$150,000 to \$500,000 to better align with current land values.
- Grazing Permits: The proposal would provide an amendment to the Federal Land Policy and Management Act (FLPMA) to correct the National Defense Appropriations Act (NDAA) amendment to FLPMA Section 402. For this section only, all National Forest System lands would be included so that those lands in eastern States and National Grasslands are covered by the NDAA and are treated equally in National Environmental Policy Act analysis of grazing permits.
- Direct Hire Authority: The Forest Service is seeking Direct Hire Authority for Resource Assistant Interns who have successfully completed the newly implemented Resource Assistant Program. The Program is designed to attract recent graduates of institutions of higher education with particular emphasis on ensuring full representation of women and participants from historically Black, Hispanic, and Native American schools, or other schools with diverse student populations. This authority will enable the Forest Service to directly hire, without competition, eligible resource assistants who have successfully completed a minimum of 960 hours on a Forest Service unit and have at least an Associate degree.
- Wild and Scenic Rivers: This proposal would change the Wild and Scenic Rivers Act to state that the Secretary of Agriculture shall not be considered to be in violation of Section

3(d)(1) of the Wild and Scenic Rivers Act solely because more than three years have passed since a river was designated "wild and scenic," and a comprehensive river management plan has not yet been completed. If more than three years have passed since designation without the completion of a comprehensive river management plan, the proposal would require that a plan must be completed or appropriately updated no later than during the next forest plan revision process.

Our FY 19 Budget request focuses on the stewardship of our natural resources, and the more effective and efficient delivery of forest and rangeland products and services. It requires tough choices within our existing program of work and progress to better contain costs and account for our spending. I look forward to working with this Committee to fulfill the President's goals and our key responsibilities for the long-term benefit of the Nation's forests and grasslands and for all Americans. I will be glad to answer your questions.

The CHAIRMAN. Thank you, Ms. Christiansen. I appreciate not only your commitment to see true reforms as they relate to the workplace, and know that we will hold you accountable to that.

I am going to want to know where you are with the progress following some benchmarks here. It is one thing to come before the Committee and say we are going to do this. We need to ensure that it is happening internally, that the men and women who work hard and serve our agency, that they feel safe and they feel that they are in an environment that, obviously, has respect for them and that men and women respect one another.

So know this is something that doesn't factor in there in terms of these policy initiatives, Tongass or what you are going to do with airtankers, but that is something this Committee is going to be following up with you on a somewhat regular basis to know and un-

derstand where we are.

I also appreciate your comments about accountability for the funding and the recognition that you have new authorities. You have new flexibility. You are getting what a lot of agencies would like to have which is a little more free reign here. That does not mean that it is not without accountability. It does not mean, you have used the words, it is not a blank check. I appreciate that you have raised it and you have stated it that way, but know that that too will be an area of ongoing inquiry for us here in the Committee.

In my first round let me ask just a couple more Alaska-specific, Tongass-specific questions. These are things that, of course, do not

come as a surprise to you.

Let me first address the Roadless Rule and access. As I mentioned in my opening and as we discussed yesterday amongst all those who came together for a public meeting when we were in Ketchikan, whether you are an air taxi operator, the electric utility, the school superintendent, or the guy who has the small sawmill, everybody is desperate for more access to the Tongass. And the state has submitted its petition on the Roadless Rule.

The question for you this morning is what are you doing to help facilitate and to respond to that petition that the state has submitted and, really broader, what is the Forest Service doing to fa-

cilitate increased access to the Tongass?

Ms. Christiansen. Thank you, Senator.

We're well aware of the needs to address Southeast Alaska's needs and economy and access to the Tongass. We are working very closely with the State of Alaska to look at all of the options to address the roadless issues. A response is being submitted in the matter of a day from Secretary Purdue back to the State of Alaska. We want to look for success in how we can assure Southeast Alaska citizens have the needs met, as you identified, and we will support the state in numerous ways on those various options.

The CHAIRMAN. I will repeat again what we have discussed, the entire Southeast economy is locked because of the Roadless Rule.

The Tongass comprises 95 percent of southeastern Alaska. Whether it is your ability to be able to provide for clean, renewable power through additional hydro, building transmission lines, new activity in mining, or recreational permits, it is about access.

When we think about the struggling economy, when we think about the out migration in this area, when you think about the

high unemployment in this area. The urgency focused in this specific area is very, very keen and I need to know that your commitment and that of the Secretary is to work with the State of Alaska as we seek solutions.

Let me move quickly here to the Tongass, the 2016 Tongass Land Management Plan. Again, we have been working with Forest Service staff as well as the Tongass collaborative members, and it is very clear that there have been errors that were identified in the 2016 plan. One involves a standard that restricts harvest on moderate vulnerability karst areas, and the other overestimates the timber supply that is expected to be available from both native corporation and state lands.

I know that you are aware of both of these errors. The question to you this morning is how, recognizing that we have to address this, how we will be able to ensure that in dealing with the timber sale planning ability to meet the market demand, how we will comply with the Tongass Timber Reform Act, given the errors that we

are dealing with?

Ms. Christiansen. Yes, Senator, you're absolutely right. I'm well aware of the errors and, as you said, the collaborative has acknowledged those errors. So we are working now to put together the most effective method that we can get those fixes in an amendment while we look at other options for the, potentially adjusting the transition period when we get the-

The Chairman. Given the new inventory.

Ms. Christiansen. ——the inventory is completed at the end of this summer.

We want to be the most expeditious and efficient in getting those fixes corrected. And I'd be glad to, certainly, keep you posted on that progress.

The CHAIRMAN. Good.

Well, we will be working with you as you get all that information.

Let me go to Senator Cantwell.

Senator Cantwell. Thank you, Madam Chair.

Ms. Christiansen, the science program. Do you think that we are

seeing dramatic shifts in how fire is behaving?

Ms. Christiansen. Senator Cantwell, what I can tell you is we now don't refer to a fire season, we refer to the fire year. Certainly from the national level, we need to be ready 12 months a year. So yes, we are seeing shifts and our scientists are documenting the change in our vegetation and, therefore, the associated behavior on the landscape as it results to many stressors, fire, insects and disease and others being just a couple of those stressors.

Our scientific capability is very essential for us to be able to look out ahead and know what we're facing. And then on the back end of these catastrophic events, how we can best recover the landscape

and the communities.

Senator Cantwell. Thank you.

On this issue of airtankers being ready versus the 48-hour proposal, how does that save us money because I look at this and I think it might be from an upfront look, it is valued to have a cheaper contract, but if they are not ready for 48 hours to serve us when we have an emergency, how is that saving us money?

I think the Colville had something like \$1 billion worth of timber that burned up in one of our two bad fire seasons. So we are talking about a lot of catastrophic damage that can be done and these assets seem to have been utilized in helping slow down the many, many, many more fire starts that we are seeing when an area is in that target zone which is what we saw for us for two years. This year, I don't know that we are going to be in that target zone again, but other people will be.

How do you equate savings if, in fact, more land burns up be-

cause we don't have the immediate resource?

Ms. Christiansen. Thank you for your questions and your concern.

There's just two things I'd like to clarify. Airtankers are a very, very important tool, in the right place, to help retard the immediate advancement of fires, but they do not put the fires out without effective ground resources. In regards to the 15 minutes (the exclusive-use contracting) and the 48 hours (the call-when-needed contracting), here's how our scientists are really helpful. We have great predictive services, but certainly as the different fire year evolves we have more precise information about the uptick in fire danger. So we will certainly activate those call-when-needed airtankers as we see less availability of our existing resources and more fire danger. So it's on us that we activate that surge capacity, those additional resources. And then, once they're activated, on a call-when-needed basis. They also would have an immediate response effect.

So, our scientists——

Senator Cantwell. Are you saying, for example, once that fire map is produced then you would be calling these guys every couple of days saying you are activated. Is that what would happen?

Ms. Christiansen. Well, it's not necessarily dependent just on a static fire map. It would be the weather patterns, how much in demand we have resources across the nation in other places, what our needs are

So, there's hourly updates to the national needs that are evaluated in our fire center in Boise. We'll project out 2 days, 5 days, 10 days, 2 weeks, 3 weeks and evaluate what resources are needed based on those projections.

Senator CANTWELL. But are you saying that, for example, the Okanagan was targeted again. You would say that a big storm was coming through, you would activate those assets? You would call them and say, you are on call for this region?

Ms. Christiansen. If we didn't have other available exclusiveuse aircraft, they were all being used and we saw they were going to be overused in those weeks to come, absolutely, we would.

Senator Cantwell. So, my time is expired, Madam Chair, but I will look forward to discussing this more with you.

Ms. Christiansen. Sure.

Senator Cantwell. Thank you. The Chairman. Senator Gardner.

Senator GARDNER. Thank you, Madam Chair, and thank you to the witnesses for being here today.

The last 20 years have been pretty rough on areas of Colorado forest. We have had millions of acres of national, state, and private

forests infested by bark beetles and other diseases. Some people believe we have over a billion dead trees in the State of Colorado alone.

We were lucky in 2017, one of the worst fire seasons we have seen in Colorado was not as bad as it was in other places because of the wet winter in Colorado. But 2018 is setting up to be a much different picture for Colorado's forests than 2017 was in terms of fire. In fact, we have already had an early season fire on the front range that burned 43,000 acres.

Based on the management reforms that we passed in the Omnibus as well as the fire borrowing fix, which will hopefully free up what were previously at risk of diversion resources, what is the Forest Service doing right now in states like Colorado to prepare for what could be a difficult 2018? And then I want to follow up on this call-when-needed contract issue.

Ms. Christiansen. Thank you, Senator Gardner.

We are, as a person from the Pacific Northwest says, not letting any moss grow under our feet and adding to our tool box these new additional authorities from the Omnibus.

As I think you're aware, we're making some really good progress with the Good Neighbor Authority with the added additions of being able to conduct the important work of maintaining and doing some reconstruction of needed roads. Our state partners are going to be far more effective in helping us get more work done on the ground.

We have 127 Good Neighbor agreements across the U.S. in 33 states. It's really effective. And this road addition, to be able to maintain and reconstruct roads, is essential. So we can put that to work immediately.

I'm working with our regional foresters to assess where we can really activate this 20-year stewardship agreement, especially in places with high fire risk and danger and where we don't have any real good infrastructure to process that woody biomass or that timber. The 20-year will give the private sector the opportunity to really invest because they will have a known supply. So we're targeting where we can use that new authority.

We are 50 percent ahead in our timber that we have brought to market than we were this time last year. We are really putting a laser sharp focus on doing these preventative treatments and getting more product to the ground.

Senator Gardner. If I could jump in real quick and just to follow up. Will you be seeking any additional forest health or fuel management reforms this year—

Ms. CHRISTIANSEN. We'd be glad to work—

Senator GARDNER. ——that you would like to see Congress authorize?

Ms. CHRISTIANSEN. We'd be glad to work with Congress if there is anything that will help us get more sustainable work done on the ground. We'd look forward to working with you.

Senator GARDNER. Okay, very good.

This issue of the call-when-needed contracts, I mean, it is, I think, pretty obvious when you have a call-when-needed contract, if you are calling somebody two to five days out or utilizing an ex-

clusive contract versus a call-when-needed contract, the costs vary dramatically.

Last year, I believe, you had 20 exclusive-use, large airtanker contracts in place; you had three MAFF units, the Modular Air Fire Fighter units, and you had two large airtankers from Canada. In addition to those 20, you ended up with the three MAFFs, the two large airtankers from Canada, and this year you have 13 exclusive-use contracts in place for what looks to be a very difficult year in the Colorado River Basin, Colorado, and other states.

There has been a reduction by about 65 percent in the term, in the numbers of contracts you are utilizing. It is going to add significant costs, I would think, if you are calling up people as you go

into the summer. What is the rationale for that again?

Ms. Christiansen. Senator, we really look hard and do our analysis on the right balance between these exclusive use which is for an extended period of time and then the call-when-needed. We take this very seriously, and we will evaluate each year and adjust the balance of these contracts.

These next generation aircraft are more expensive than the legacy aircraft we had operated for the last two decades, so we have to be fiscally prudent and responsible in finding that right balance.

We are confident that we have the aircraft we need when we need it through the combination of the exclusive use, the call-whenneeded, the military MAFFs and then when we can call our partners down from Alaska and Canada.

Senator GARDNER. If I could, with no time left.

Do you think you are providing industry with enough certainty, private industry, with enough certainty to replace some of the contracts in the past that were coming out of the Forest Service in terms of the airtankers that have been used since 2014, authorized by the Defense Authorization Act?

Ms. Christiansen. Senator Gardner, we are doing everything we can to be a good partner with the industry and exercise our fiscal

responsibility.

Senator GARDNER. Thank you, Madam Chair.

Thank you.

The CHAIRMAN. Senator Wyden.

Senator Wyden. Thank you, Madam Chair.

Madam Chair and Senator Cantwell, I am still trying to get my arms around the fact that this is the first time in seven years when I have not walked into this hearing room and said, we all, on this Committee, led by you two, and I see Senator Daines, Senator Gardner, Senator Heinrich, all of our colleagues, said we have got to fix this commonsense-defying practice known as fire borrowing. To be able to come in here and say we have gotten it done and our job now is to build on that accomplishment is in and of itself a remarkable event. We have folks at home who said, well Ron's just going to come and talk to us about this, sort of like, it is the longest running battle since the Trojan War. It will just go on and on. But we now have gotten it done. And colleagues, we are ready to go on and talk about how we are going to get back in the business of preventing forest fires, how we are going to promote forest health, how we are going to strengthen rural economies while we

protect our treasures. I think that is a day and a moment well worth taking note of.

I particularly want to thank your leadership, Madam Chair, and Senator Cantwell's leadership because there are a lot of folks in the

West who never thought that this day was going to come.

Now that we have liberated the Forest Service with respect to funding and you all can get back to prevention, how does the Forest Service position itself and will you be able to position yourself to have more certainty with respect to prevention so we can get more done in hazardous fuels reduction and thinning?

Ms. Christiansen, we appreciate your professionalism. Those of us who have served on this Committee for a while have seen it in action. Tell us whether this does provide you the certainty and the ability now to accomplish things in hazardous fuels reduction and

thinning that you could not do before.

Ms. Christiansen. Senator Wyden, thank you very much.

I'd like to say it's liberation with accountability, and that's what we have to show. And yes, this frees us up to get more work done in the targeted places where we can reduce the most risk, the highest risk, looking at the critical values that are at-risk. Of course, it's communities, it's watersheds, it's important timber values. We

are using our important science to identify those priorities.

With the new authorities you've immediately given us, as I've already stated, it will help us accelerate what we believe we've already laid some pretty good foundational pieces, Good Neighbor Authority, 20-year stewardship, these fire resiliencies, the categorical exclusions for fire resilience projects, working in a collaborative fashion. We are going to build on the collaboration that we have already established around this country and go further with shared stewardship.

Senator WYDEN. Let me close and build on a comment that the Chair, Senator Murkowski, made with respect to benchmarks, because when you enact a law that is just the beginning. I think a lot of the, sort of, theorizing about lawmaking is you write a law and then you move on. Well, once you pass the law that is just the beginning. Then, per your notion of accountability, you have to have a game plan from that point on.

I want to build on what the Chair just talked about with respect to benchmarks and see if we can get a game plan, at least for my state and perhaps my colleagues in the West would like it as well. I think we need a game plan from you. A specific game plan in order to get at the hazardous fuels backlog in Oregon and around

the West.

As you noted, the fire season just goes on and on. We have fires sometimes in Oregon in the winter, and people say, hey, I thought

these things came along in July and August.

Could you, for our state and certainly I think it is appealing throughout the West because it is going to be a tough fire season, could you get to us within say, the next six weeks, send it to the Chair and the Ranking Minority Member, we would all look at it, an actual game plan for attacking the hazardous fuels backlog in the West?

Ms. Christiansen. Senator, we'd be happy to work with you on that. We are setting ourselves up. We call it scenarial planning, so we can look at where we can get this hazardous fuels and sustain these rural economies and look at the critical watershed values.

We're prepared to go to the State Foresters and the governors and have a conversation so that we can have some state-based specifics about how we manage the landscapes collectively. We're very happy and look forward to working with you on getting that.

Senator Wyden. Thank you, Madam Chair.

The CHAIRMAN. Thank you, Senator Wyden. I appreciate your ask here because I do think that, again, this level of accountability is important, and I appreciate that you have volunteered its liberation with accountability.

But I do think having an opportunity to know where you are, where the agency is, in this process, working with the states in the collaborative process and sharing that with us will be important. We will work together on this, again, so that we can have more fol-

I am going to excuse myself for a few minutes and go to an Appropriations hearing. I have asked Senator Barrasso to take the gavel, but we will turn now to Senator Daines.

Senator Daines. Thank you, Madam Chair. Ms. Christiansen, welcome. Thank you for coming here today, and congratulations on your interim appointment as Chief of the Forest Service.

This is first time the Forest Service Chief, albeit Acting, has appeared before us since the recent PBS News Hour Investigation revealed a history of problems at the Forest Service related to harassment, sexual misconduct, and retaliation of the agency, including at least two incidents in Montana. Reports of these abuses are horrific, and I hope for an update today on what the Forest Service is doing to address this issue.

We have also since made some progress in the recent funding bill to enact a wildfire funding fix, as Senator Wyden just pointed out, and some, albeit limited, management reforms, but I am not sure we have quite liberated the Forest Service at this point based on what we passed.

I will argue that we have won a small battle in, I think, a longerterm war that we face before maybe we have ultimate liberation of the Forest Service to get on with the business of doing what you do best. I think a lot more needs to be done to restore health to our national forests.

I want to explore this idea of arbitration. In my state, especially, litigation from a handful of fringe groups, who are usually not part of the collaborative process, they are sitting on the sidelines waiting until the collaborative process finally gets to an end and then they come in and they litigate. They delay some great forest restoration projects, and they are really harming our local economies.

I was up in Lincoln County a little over a week ago. It is just devastating what is going on in terms of the sickness of our forests, what we have and then we have a fire we can't even get in and do commonsense salvage work. That is why I think we need to take a look at arbitration as part of the solution.

A question is does the Forest Service support an arbitration pilot, a pilot authority like the one proposed in a bill I have called the Protect Collaboration for Healthier Forests Act, to ensure swifter resolution of litigation and therefore, faster implementation of these projects?

Ms. Christiansen. Thank you, Senator Daines.

It is so that one out of every ten projects in the State of Montana are litigated, and in the spirit of learning and moving forward, we'd be happy to work with you on a pilot project evaluating arbitration.

Senator DAINES. Thank you.

Recent legislation that was passed here in Congress reversed that Ninth Circuit Court of Appeals' Cottonwood decision. For some forest plans, I have to tell you, I was disappointed in that the very bottom of the ninth inning that legislation we had was bipartisan, co-sponsorship, frankly was deluded at the very end because the requirements for the Forest Service to consult with the Fish and Wildlife Service remains when, "new information reveals that agency actions may affect species or habitat." This requirement creates more red tape and slows down management.

The question is do you support my efforts, the efforts, to remove

or modify the "new information consultation requirement?"

Ms. Christiansen. Yes, Senator, we do have similar concerns, and we'd be glad to work with you on that.

Senator DAINES. Thank you.

I want to move into this issue of the sexual harassment in the Forest Service.

Can the Forest Service provide my office with an update regarding this 30-day action plan that outlines initial steps the agency is taking to build a safe working environment?

Ms. Christiansen. Absolutely. We'll come up any time and keep you updated on how serious we are taking this and what improvements that we are absolutely committed to make.

Senator Daines. Thank you, I appreciate it. Thanks for your

leadership in this area as well.

Lastly, I applaud the agency's recent rulemaking to revise its NEPA procedures and share the goal of increasing the efficiency of environmental analysis. I am told your agency spends \$365 million every year on complying with NEPA and other federal laws. This excessive red tape is unnecessary and, frankly, crippling to a more effective forest management.

Could you discuss how creating NEPA process efficiencies whether through your rulemaking or through additional provisions in law or both could help the Forest Service get more work done on the

ground?

Ms. Christiansen. Yes, Senator Daines. We have a nationwide effort underway, as you have mentioned, to increase both the quantity and quality of our environmental assessments and our accomplishments.

We are doing it through several factors, learning and innovating how we can streamline cleanup, some old outdated processes through regulations, through training, through quite frankly, checking our culture and our practices and many others, many other opportunities.

We have benchmarked ourselves. We are, we will see a 10 percent efficiency in 2018, a 20 percent—another 10 percent efficiency in 2019. And by 2020, 20 percent. So, we will have reduced that

by at least 40 percent by the year 2020.

Senator Daines. Great.

I am out of time, but it is refreshing to see leadership that quantifies a goal and holds itself accountable——

Ms. Christiansen. Thank you.

Senator Daines. ——for the results. Thank you.

Ms. Christiansen. Thank you.

Senator Barrasso [presiding]. Thank you, Senator Daines.

Senator Cortez Masto.

Senator CORTEZ MASTO. Thank you.

Welcome, it is great to see you here. Ms. Christiansen. Thank you.

Senator Cortez Masto. I look forward to working with you.

Let me start with an issue that is of concern to many of us in Nevada, and that is the opening of oil and gas drilling in our Ruby Mountains. I know you are relatively new but I have a few questions and, if you cannot answer them, I would love some follow-up on it.

I am concerned about the prospect of opening 54,000 acres of U.S. Forest land in Nevada's Ruby Mountains for oil and gas leasing. The Ruby Mountains are located in Elko County within the Humboldt-Toiyabe National Forest and are known for their rugged terrain and mule deer, bighorn sheep, and greater sage-grouse habitat. Likewise, I am also concerned that expansive oil and gas drilling will threaten this pristine and sensitive area which welcomes thousands of annual visitors to utilize its public spaces for hunting, fishing, and outdoor recreation. The comment period closed yesterday, and I know that you have already heard from hundreds of local constituents, if not more.

So the first question I have is, does the Forest Service believe the Ruby Mountains are suitable for oil and gas leasing?

Ms. Christiansen. Thank you, Senator Cortez Masto.

We certainly take our responsibilities of multiple-use management very seriously and for public engagement and for really hear-

ing from the public about the process.

I am aware of this issue. I know that we will be working with the BLM. They will make the final decision, but we have more to review. We will be doing an environmental review, and I can assure you through that environmental review process we will be including the public.

Senator CORTEZ MASTO. And so, a couple of things. How long is the environmental review process? How long will that take?

Ms. Christiansen. Senator, I don't have that specific timeline.

Senator CORTEZ MASTO. Okay.

Ms. CHRISTIANSEN. I'd be glad to get back to you.

Senator CORTEZ MASTO. Can you ensure that numerous individuals, stakeholders, and businesses will have their voices counted during this review process?

Ms. Christiansen. Absolutely.

Senator CORTEZ MASTO. Thank you. I appreciate that.

The Forest Service's budget eliminates the Legacy Roads and Trails line item, and counties in Nevada will not have the funds to make these repairs if this is zeroed out. Why has the program been zeroed out and how can you address the needs of local communities from this funding?

Ms. Christiansen. Senator, this budget request, as I said in my opening statement, really does have some tough choices and tradeoffs. We do understand the importance of these roads and trails to local communities, and we'd be glad to work with you through the process on this budget.

Senator Cortez Masto. So, can I ask? Do you have enough resources and staff to manage the upkeep of these trails or are you going to be relying more on local resources which, quite frankly,

are not enough?

Ms. Christiansen. No, we will have to prioritize and we will not have enough resources for all 178 million miles of trails that we have on the National Forest System.

Senator Cortez Masto. I think that is all of our concern. I would like to work with you as well.

Ms. Christiansen. Certainly.

Senator Cortez Masto. And then let me jump back to Senator Wyden's comments and what I have heard.

As you well know, Nevada is just as concerned about the fire services, fire suppression, and management. We have had wildfires in Nevada that continue to cause damage. That is, unfortunately, the norm now.

And as you well know, one of the MAFF systems is in Reno with

our Air National Guard, the 152nd Airlift Wing.

You stated in your comments that 3.4 million acres of Forest Service land is subject to the removal of hazardous fuels and stand treatments. Is that correct?

Ms. Christiansen. What I stated is that is our goal for accomplishment. We will affect 3.4—we will treat 3.4 million acres in all of our activities in this 2019 Fiscal Year.

Senator Cortez Masto. Have you identified those 3.4 million

acres, where they are located geographically?

Ms. CHRISTIANSEN. We certainly have hazard maps and where we need to keep the supply for local infrastructure and mills, and our units do work planning two and three years out. So, we certainly have our prioritized list, yes.

Senator CORTEZ MASTO. And geographically are they located in the Western states, that 3.4 million acres? I guess my concern is I would like to see, like the Senator and everyone else, specifics.

If you are talking about 3.4 million acres, you have obviously identified where those acres are going to be located across the country. If 80 percent of the land that you manage is in the Western states, that is where the fire services, I am assuming that is where that 3.4 million is going to be located—in the Western states, where the fires are occurring.

Ms. Christiansen. Yes, Senator, it is spread out through all of our units, and we would be glad to get back to you. Of course, the majority of the lands are in the West, so that would be the majority of activity. But we can get back to you with more specifics.

Senator CORTEZ MASTO. Thank you. I know my time is running out. Thank you very much. I look forward to working with you.

Ms. CHRISTIANSEN. Thank you.

Senator Barrasso. Thank you, Senator Cortez Masto.

Senator Capito.

Senator Capito. Thank you.

Thank you very much for being here with us and we appreciate in West Virginia, Senator Manchin is here, we enjoy our national forest, that is for sure.

I have noticed that we are hearing a recurring theme from our constituents that there is a lack of consistency in the application of the law, the agency regulations, and policy guidance, considering different areas of the country. We hear issues, for instance, the same issues we hear about the National Park Service, Fish and Wildlife, Bureau of Land Management and EPA's regional offices, which I know none of those you are over. But the Forest Service, I think, faces similar challenges. National forests apply federal statutes and agency regulations very differently from one jurisdiction to the other.

Secretary Zinke has proposed a regional realignment for the agencies within the Department of the Interior. The Secretary has talked about staying in a common watershed would bring like decisions to like decisions. I realize that you are within USDA. Are you monitoring this effort that is going on with the other, sort of, realignments and do you have any perspectives on that in terms of the Forest Service?

Ms. CHRISTIANSEN. Thank you, Senator Capito.

I think we are within USDA.

Senator Capito. Right.

Ms. Christiansen. We are very much a part of USDA.

Senator Capito. Right.

Ms. Christiansen. And the relationship that we have, particularly with the Department of the Interior, is absolutely very important and a commitment that we have ongoing coordination.

I meet once a month with the leadership of my counterparts at the Bureau of Land Management, and I have an expectation that our regional foresters are doing the same. We have a long history of learning together and in doing community engagement together along with how we respond to wildland fire.

Now, I know and this is what I tell my team all the time, we need to work out those differences and those inconsistencies—

Senator Capito. Right.

Ms. CHRISTIANSEN. —behind the scenes and not let our public

feel that impact and the different effects on communities.

Senator Capito. I think that is what we are hearing. I bring it up because in West Virginia I have heard, we have heard, from constituents who are frustrated by the constraints on sustainable timber harvesting in the Monongahela (Mon) Forest or you can go a little bit north of us in the Appalachia, same sort of—

Ms. Christiansen. Yup.

Senator Capito. —very similar forestry makeup.

In Pennsylvania, the Allegheny National Forest has a better balance and is outperforming the Mon Forest in timber sales and harvest despite being just half the size.

So when you say you are encouraging more of that, is that the kind of thing where these two, the one in Pennsylvania and the Mon Forest, would be coordinating? How can that occur more readily in the Allegheny National Forest and not the Mon Forest? Be-

cause this is starting to accumulate. We are hearing this time and time again.

Ms. Christiansen. Yeah, I really understand, Senator.

The Monongahela is really stepping up. Now they, each of these forests, have a forest land management plan.

Senator Capito. Right.

Ms. Christiansen. That was with significant input from the local community and the local resources.

Senator Capito. Right.

Ms. Christiansen. So we both are responsive to the local needs but looking at the overall alignment of how we get our collective work done. So, in a specific case, the Monongahela is increasing their timber output significantly. They will more than double by

the year 2020.

I just met with Clyde Thompson, our Forest Supervisor, and his team and they are really trying to make sure that that increased activity as well as recreational activity has access to local, the local contractors. Some of these local contractors, as you know, don't have access to broadband internet and that we are being conscious that we are not just advertising these opportunities through the internet and other ways. I'm really proud of the way the team there is stepping up and trying to really listen and work with the local community.

Senator Capito. Well, I appreciate that. That is certainly welcome, obviously, job creator and economic benefits from where you

live.

But now that you have brought up broadband, I am remembering in the back of my mind that we have a bill, I believe, that works with the Forest Service to be able to run broadband availability more readily through Forest Service and national forests. Do you have any insight into that?

Ms. CHRISTIANSEN. Senator, I know it's a priority, but I don't have, I'm not completely briefed on those details, but I'd be glad

to get back to you.

Senator CAPITO. I can honestly tell you, if you are worried about going to a town hall meeting and you are saying you are going to run a high-speed internet line through the national forest for the objective to get it to some of the more remote homeowners, I do not think you will have much pushback.

Ms. Christiansen. Good.

Senator Capito. So I would encourage that.

Certainly, in the West it has to have a huge impact, but even in a state like ours, we have low connectivity but we really need to use every part of our land to be able to get that connectivity for economic, agriculture and, now, timbering.

Thank you.

Ms. Christiansen. Thank you.

The CHAIRMAN [presiding]. Senator Heinrich.

Senator HEINRICH. Thank you.

Ms. Christiansen, it is already an active fire season in New Mexico, and I should start by just saying a special thank you to all the men and women who are working to keep our communities safe and especially the teams that recently responded to manage the Blue Water and Diener Canyon fires, outside of Grants in my old

backyard. What is the fire season outlook for the Southwest this year?

Ms. Christiansen. I'm sorry.

Senator Heinrich. What is the fire season outlook for the South-

west as a whole this year?

Ms. Christiansen. Yes, fire season outlook is significant for the Southwest, as you know. The fire year starts in the South and the Southwest with the extended drought and the weather patterns we don't see the monsoons coming in soon. So, we have added some additional resources to be able to be fully prepared for the response in the Southwest.

Senator HEINRICH. You have heard a lot about fixing the fire borrowing problem, but that does not kick in this year. Do you expect the funding for the fire program provided in the FY'18 spending bill will cover this year's costs or do you expect to have to borrow for other programs before the year ends?

Ms. Christiansen. Yes, Senator, you're absolutely right.

Senator HEINRICH. Sort of this transition year before the '19 spending kicks in, so.

Ms. Christiansen. Absolutely.

For '18 we really appreciate the additional \$500 million that was added to the suppression account. That puts us at \$1.6 billion. Our scientists' projections are \$1.9 million, the average likelihood for this season. So there is a likelihood we will have to borrow.

Senator Heinrich. The Collaborative Forest Landscape Restoration Program provides critical funds to, really across the nation, support landscape-scale, collaboratively developed forest restoration

projects.

Now we have a couple of those active in New Mexico on the Jemez Mountains and in the Zuni Mountains where, I just mentioned, a couple of fires are occurring. Both projects are helping to reduce the risk of catastrophic wildfire. They are restoring forests that need it, they are providing good paying jobs in communities that need that economic opportunity and yet the budget eliminates all funding for these projects. Why is the Forest Service gutting a program that is not only so important for rural jobs and forest health but is actually working?

Ms. Christiansen. Yes, Senator, we are very pleased with the outcomes that the Collaborative Forest Landscape Restoration Program has afforded us. It's been great learning. It's brought the real foundation of true collaboration and shared stewardship in these communities.

This was a, quite frankly, was seen as a duplicative effort, and we will not be abandoning those projects wholeheartedly. They will be funded from all the other funds, the hazardous fuels, the vegetation funds. They will compete with all the rest of the important work that we do have.

Senator HEINRICH. As you know, if you lose one of these small operations, even if there is a 6-month delay because you are trying to move from one account to another account, you can lose the entire capacity to be able to do that work in those areas. Do you have a plan in place to make sure that that does not happen?

Ms. CHRISTIANSEN. We certainly agree and, as I said, we will make sure to not abandon the important foundational pieces we've

laid out, and we'd be glad to work with you as the appropriation

process plays forward.

Senator Heinrich. The other place that there is absolutely no funding is in the Forest Legacy Program which is incredibly important for privately-owned forest lands and placing conservation easements on those lands.

In New Mexico we have a project called the Brazos Cliff project, "cliffs," plural, which would protect six miles of the Rio Brazos, more than four miles of tributary creeks, riparian and wetland habitat which I can, probably do not need to tell you, is not common in New Mexico. The property provides abundant water to the Rio Chama which in turn waters farms downstream and cities in the Rio Grande Valley. Why on Earth would we zero out the Forest Legacy program?

Ms. Christiansen. Senator Heinrich, when I was State Forester of Arizona we had the first Forest Legacy project on a very valuable desert riparian area. I know how unique and important those are. So I really do hear you. These are important landscapes. We like to be able to help leverage these important values. This budget request is a request of very tough choices and tradeoffs and focus-

ing on the national forest.

The CHAIRMAN. Thank you, Senator Heinrich.

Senator Barrasso.

Senator Barrasso. Thank you very much, Madam Chairman.

Ms. Christiansen, I am glad to hear today of a couple questions. You really have a wealth of knowledge to bring to this position, not only about how the Forest Service has historically approached forest management but also about what Western states need in order to effectively manage forest resources. So I am grateful that you are here.

Wyoming's forests present a wide variety of management challenges, as you know. The Shoshone National Forest is in Region Two. It abuts the Bridger-Teton National Forest in Region Four. The Shoshone has experienced massive die offs following mountain pine beetles, spruce beetle, white bark pine activity while the Bighorn remains relatively untouched. The Thunder Basin National Grasslands has a complex system of multiple uses and experiences its own challenges when trying to address resource damage from prairie dogs. For these reasons and more I am really glad to hear you say that you understand the need to focus the budget on stewardship of natural resources, including delivery of forest products and services.

I would like to echo what the Chairman said earlier about the forestry provisions in the Omnibus. They fell far short of my expectations, but there is reason for hope. The agency must use these funds effectively to make a real difference to prevent future fire borrowing and must be accountable for these actions to the Committee and to our forest communities, and I believe you will be.

With your background I know you understand the need to work cohesively across jurisdictional boundaries. Boundaries that are, that really have no respect, are not respected by fire, by invasive species, by wildlife. They are just, kind of, lines drawn.

In your testimony, the written testimony, you appropriately recognize the need to work more efficiently within the parameters of

the smaller budget request. This means the agency must have good working relationships with states, counties, and tribes when determining the best course of action at the onset of fire.

I want to echo what Senator Capito said about coordinated ef-

forts. She mentioned that earlier.

And then this whole concept also applies, in my opinion, to interagency activities. So Wyoming is nearly unique. I know my friend, Senator Risch from Idaho, he knows exactly what I am talking about because Idaho, just like Wyoming, split into two Forest Service regions. Although they share a boundary, the Shoshone in Region Two, the Bridger-Teton in Region Four, there have been many cases where the regions have applied agency policy or guidelines inconsistently on two adjacent properties.

Understanding the need to be flexible to address the local resource needs, I would just ask how you are working to promote consistently, in addition to what you said to Senator Capito, across re-

gions, to prevent future problems?

Ms. Christiansen. Thank you, Senator Barrasso.

I really agree with you and I have to say I was a partner with the Forest Service for 30 years, so I have literally been on both sides and I do understand.

You know, one immediate way that and these reforms we're undertaking some of our major bodies of work, I call it spring cleaning. We are really looking at the processes that we need to get us the results we need and the outcomes we need for both quality and quantity, whether it's our efforts on modernizing forest practices or it's the environmental assessment in decision-making or it's improving our special uses. This provides us a way to get a standardization. And so, we're spring cleaning. We clean out different things in our different closets, if you will.

So I think we're going to uncover more of these inconsistencies across our boundary, and it's my expectation to work with our leaders and hold them accountable that we have more alignment.

Senator Barrasso. Great. Well, I appreciate that answer.

In Wyoming, like in Arizona, grazing is an important tool for our national forests. Not only does the grazing program provide for important hazardous fuels reduction and invasive species control, permittees, I believe, make significant investments in improvements to their allotments which benefit the agency and the land resource overall.

One of the challenges, especially in Western Wyoming, is finding alternative allotments when fire or other situations arise. Unoccupied allotments, but if the NEPA is not completed, the allotments remain unavailable.

In the proposed budget both the grazing program and the land management planning program would see decreases for the 2018 level.

Can you talk a little bit about how you anticipate the grazing program could remain basically operable and how the agency can ensure important NEPA analysis is up to date?

Ms. CHRISTIANSEN. Senator, I'll be quite frank. We do have concerns about being able to keep up with all of the needs of grazing. But we will, I will assure you we will prioritize and with our efficiencies gained in our NEPA environmental analysis and decision-

making, that we can anticipate the needs, particularly if fire runs through an area and that we have some alternative allotments available. It will not be easy, but we're going to stay focused and we're going to stay prioritized.

Senator Barrasso. Thank you. Thank you, Madam Chairman.

The CHAIRMAN. Thank you, Senator Barrasso.

Senator Manchin.

Senator Manchin. Thank you, Madam Chairman.

Hello, Ms. Christiansen. Ms. Christiansen. Hi.

Senator Manchin. How are you? Congratulations.

Ms. Christiansen. Thank you.

Senator Manchin. The increasing market share of the natural gas in our electricity mix has translated into great need for expanding energy infrastructure in the United States, particularly our pipelines, and they are under, as you can see, under concern.

Natural gas pipelines are the safest and most efficient way to transport natural gas to the market. I know there are a lot of concerns—where we hear from a lot of folks on both sides of the pipeline issues, and I understand the people that have concerns about pipelines coming through their property. But the fact of the matter is we are sitting on a wealth of natural gas resources in West Virginia, Ohio, and Pennsylvania with all the fracking that has brought us so much energy, and we can't get it to the customers in the Northeast. In fact, just a few months ago, in January, a tanker carrying liquified natural gas from Russia's Arctic arrived in Boston. It seems to me that it is not too responsible nor in concert with landowners and the conservation of public lands. These pipelines are helping secure our nation's energy security. I would much rather be selling gas to Boston than have Russia bring it in.

As we continue to see the onsite demonstrations against pipelines, I want to be sure that when it comes to pipelines across land that you all manage there is a good balance to ensure the safety and the environment and the progress that is needed.

Have you all developed or considered developing guidelines or guidances for local land managers facing pipeline protest?

Ms. Christiansen. Senator Manchin, yes, we will——Senator Manchin. Maybe I can help you a little bit on this.

I have been told that basically if the pipelines are done and done properly, and a lot are in very forested areas. We live in the third most forested state here in the nation. You can do that and create habitat for the wildlife by clearing, but what's more if you plant foods to sustain the wildlife, it is much better. And right now, we don't have cleared spaces for that, so pipeline installation has to be done under some type of management plan. And you all would be best to do that.

Ms. Christiansen. Yes, there's been thorough planning and environmental reviews for pipelines crossing, you know, crossing multiple ownerships.

Senator Manchin. Sure.

Ms. CHRISTIANSEN. But certainly, on the national forests. We tried to be very thorough and balanced in our decision-making on authorizing the crossing of those pipelines.

Senator Manchin. Are you sharing that with the private sector so they are using best practices that you all have adopted?

Ms. Christiansen. Absolutely.

Senator Manchin. If it is good for the United States forest management, then it should be something that, basically, the private sector should be able to benefit from.

Ms. Christiansen. Absolutely, Senator.

Senator Manchin. Okay.

The other thing I have is the Forest Service previously worked with West Virginia's Division of Forestry to help achieve the state goals for enhanced forest health and habitat conservation under the Good Neighbor Authority authorized in a 2014 Farm bill. Specifically, the Gypsy Moth Working Group, the Hemlock Conservation Group and the Invasive Species Working Group are working with the Monongahela National Forest as well as other programs addressing weed and pest management, the Fire Learning Network and High-Elevation Restoration. West Virginia has benefited from these successful federal/state efforts such as the Forest Stewardship program and the Forest Health Management programs which aim to protect forest health in states especially on our private forest areas. We have a lot of that in West Virginia, as you know.

I am concerned that the budget may reverse some of the progress our forests have made. You all have a pretty substantial budget cut. Do you believe that under the Fiscal Year 2019 proposed budget, the Forest Service will have the bandwidth to be able to continue these Good Neighbor practices? How much of a debt is this going to take you into?

Ms. Christiansen. Yeah. Senator Manchin. I think your cut, I was looking at your cuts, were pretty substantial here, seven percent, \$341 million.

Ms. Christiansen. Yes, they are substantial, Senator.

I do want to acknowledge the benefit and the high value of leveraging working across boundaries with our state forestry agencies and in achieving successful outcomes for the whole landscape because even on private lands there are public benefits that flow from private lands.

Senator Manchin. Have you been able to push back on the Administration and say, you can't cut me this deep? I can't do my job. Ms. Christiansen. Senator, we have prioritized what we can do

within these constrained-

Senator Manchin. There are a lot of us that will have gotten— Ms. Christiansen. Yes.

So our priority is on the national forest, but I look forward to working with you about-

Senator Manchin. Sure.

Ms. Christiansen. ——additional priorities this Committee has. Senator Manchin. Thank you so much, I appreciate you.

The CHAIRMAN. Thank you, Senator Manchin.

Senator Hoeven.

Senator HOEVEN. Thank you, Madam Chairman.

Thanks to our witnesses for being here. We appreciate it, and I look forward to working with you.

My first question relates to grazing. Have you been out to our grasslands in North Dakota? National grasslands?

Ms. Christiansen. Yes, sir, I have.

Senator HOEVEN. Good.

Ms. Christiansen. Once.

Senator HOEVEN. Well, then you are invited to come back again.

Ms. Christiansen. Thank you.

Senator HOEVEN. You will love meeting with our ranchers.

Ms. Christiansen. Yes.

Senator HOEVEN. And we have great meetings. They like to see you and talk to you and give you great input. There is nothing like being there with them, not only seeing the grasslands, but hearing from them. And believe me, they show up and they are great. They are very courteous, and they give you great input.

Ms. CHRISTIANSEN. Great.

Senator HOEVEN. But they really tell you what is going on, on the ground, so it is valuable. But we have a number of grazing associations out there, and we have had a longstanding partnership with the Forest Service.

We are concerned the budget that was submitted proposes to cut the grazing management fee for 2019. Will you continue to uphold the partnership that we have between our grazing associations and the Forest Service and our ranchers?

Ms. Christiansen. Yes, Senator, absolutely. Our relationship with the grazing association is essential for the success of the Forest Service and for the grazers.

I know we're working on a standard permit that will hopefully have a couple really good outcomes, be more efficient on how we can get more done and provide more certainty and assurance for the grazing associations.

Senator HOEVEN. Yes, and I would really encourage you to come out and meet with the grazing associations and ranchers that want to come in. We will set up a nice roundtable, give you real good input as part of that process.

Ms. CHRISTIANSEN. I'd really appreciate that. Senator HOEVEN. People find it very valuable.

We have section lines, of course, in our state and a section line law that keeps those open to public access. Longstanding because we are an agrarian state, you know, and it has just been something that is always there. It goes back to our constitution. We need some help on that because there is concern out there now with some of those section lines being closed down and restricting access. So I would ask, are you willing to work with us on that on our section line law and make sure that we continue to have public access?

Ms. Christiansen. Absolutely, Senator.

I am aware that no grazing permittees or ranchers have not been allowed motorized access to all of their allotments.

Senator Hoeven. Well, we truly have multiple use.

Ms. CHRISTIANSEN. Yeah.

Senator HOEVEN. I mean, we have not only farming and ranching, obviously ranching, on the grasslands, but we also have oil and gas and energy development, but we have both traditional and renewable energy. We are now the second largest oil-producing state behind only Texas. There is a lot of activity out there. There is a

lot of energy development, renewable energy as well, and hunting and fishing and sportsmen and all those kinds of things.

Ms. Christiansen. Sure.

Senator Hoeven. So it really is multiple use, but we need to have that access.

Again, that is another thing that you coming out to see would be helpful and we do have an active effort now on the section lines that we need your help.

Ms. Christiansen. Good, I'd be glad to.

Senator HOEVEN. That is wonderful. Thank you very much.

Wildfires are another area that require coordination. Of course, in our case it is grasslands rather than forests, but we really need coordination any time there is a controlled burn or anything like that. Again, can you, kind of, tell me how you approach the issue of working with the landowners on that issue of wildfires and controlled burns and so forth?

Ms. Christiansen. Senator, it's really important to me. Again, I was previously 30 years on the state side of the boundary that whatever the jurisdiction that we work well before a fire, whether it's a prescribed fire or a wildfire, to know what our strategies, tactics and priorities and that we keep each agency well informed, inclusive of the committees—of the communities. And then, during the fire we have far more expectations of each other and coordination. And then, certainly, after fire, we can't forget the restoration and the needs of the communities, the watersheds that we need to work collectively across boundaries on.

Senator HOEVEN. Yes, that consultation on the front end is really important, again, for those producers who are on the ground. They know what is going on in terms of management and not having an unintended consequence or outcome.

Ms. Christiansen. You bet. Senator Hoeven. That front end coordination is really important. Thank you so much.

Ms. CHRISTIANSEN. Thank you.

The CHAIRMAN. Thank you, Senator Hoeven.

Senator Hirono.

Senator HIRONO. Thank you, Madam Chair.

As we go through the testimony of so many of our programs and departments, it is very clear that the President's Fiscal Year '18 budget as well as Fiscal Year '19 budget really reflects a lower priority, much, much lower priorities for all domestic programs as opposed to the Department of Defense (DoD), which I have no problem in understanding that DoD requires funding. But to sit here, hearing after hearing, to be told that you all have to make very tough choices on the domestic side, it just reflects, in my view, the misplaced priorities of this Administration because the domestic spending is just as much a part of national security as the DoD

Having said that, Ms. Christiansen, as you may know the Governor of Hawaii has recently made disaster declarations for both the County of Kauai and the City and County of Honolulu following rain events that have resulted in severe flooding and landslides to the point where people were without food and water.

If Secretary Purdue were to make a disaster declaration for our impacted counties, what resources would the Forest Service be able to provide? Hawaii does not have national forest land, so does the Forest Service have the authority to provide resources to our state and local forests? And if not, what authorities would be required to do so?

Ms. Christiansen. Thank you, Senator Hirono.

We certainly understand the needs and the resiliency of an island community such as Hawaii. We have numerous resources at the Forest Service to assist and support communities.

Our scientific knowledge on watershed resiliency, community resiliency under threat of wildfire, insects and disease is significant. As you know, we have the Institute for Pacific Island Forestry in Hawaii and the Hawaii experimental forest that is working on several of these issues proactively.

And then, on the recovery side, for the actual support during an event it would need to be a Presidential declaration.

Senator HIRONO. That I understand.

Ms. Christiansen. And then, our expertise around incident management should/could certainly be evoked.

Senator HIRONO. I like the fact that there is an Institute of Pacific Island Forestry so that you can engage in some proactive kinds of research. Is that program going to be cut in the Fiscal Year '19 budget, Presidential budget?

Ms. Christiansen. The '19 proposed budget does have some cuts to our greater research and development. So we will prioritize where those cuts are, but I can assure you we will not pull out of Hawaii.

Senator HIRONO. Well, it is a matter of degree. So thank you.

You have been asked by some of my other colleagues about your response to the Inspector General's interim draft report regarding Forest Service initiatives to address workplace misconduct issued this past February. And you have said today, that you would be happy to get back to us as to how you are doing, but are there any specific steps that have already been taken to address the misconduct issue at the Forest Service?

Ms. Christiansen. Yes, Senator, there's many steps. I'll give you the high level.

First of all, we have been putting many things in place for the last, in earnest, over the last two and a half years. We've put a harassment call center so to take away any perception of retaliation. We want folks to report, and we put on additional resources to follow up on those investigations.

We've put—we've issued a very comprehensive update of the anti-harassment policy. In addition, what we've done of late is to add to that in what we are calling an action plan, "Stand Up for Each Other." This—one of the things out of the OIG report is there's a perception between agency investigators that follow up on harassment and contract investigators, that there's a perception potentially of bias.

Senator HIRONO. My time is running out.

You have put in place certain things in hopes that will result in more people coming forward because the IG report indicates that a very large percentage of your people have experienced harassment.

I would be interested to know what kind of metrics you will put in place to decide or to determine whether these steps are working? With the last second, regarding the state and private forestry budget which is being cut by almost 50 percent, states like Hawaii, for example, get about \$5 million from this program and the money for this program comes from other funds like the Forest Legacy Program which is being zeroed out. And you said that you have to make some tough decisions and that you will, through that Forest Legacy Program, concentrate on national forests, of which Hawaii has none.

I just want to point out to you that if you are going to be focusing on national forests, it leaves Hawaii, as well as ten other states that have no national forests, kind of, out in the cold. I would want to work with you as to how to ameliorate those kinds of dramatic cuts to these programs.

Ms. CHRISTIANSEN. I understand your concern, and I'd be happy to work with you through the process.

Senator HIRONO. Thank you.

The CHAIRMAN. Thank you, Senator Hirono.

Let me ask a few more questions here, if I may.

Speaking to recreation and some of the concerns that I raised earlier about the permitting issues in both the Tongass and the Chugach.

As you recognized, we were able to include \$2 million in additional funding for the recreation, the heritage and wilderness line item. There is also an additional \$1.5 million in land ownership and access management to address the permitting, specifically.

So we have worked on the funding side. It is good, but now we need to, kind of, break this loose. The effective moratorium that I referenced earlier in the Chugach has been lifted, but we still have a real issue with regards to access for recreational activities in the Chugach.

Seward and Cordova, both of them would like to expand their tourism season to include some winter activities because right now they are very limited, but the opportunity to do heli-skiing would be a great opportunity for, again, some of these smaller operators. The current leadership does not want to consider any new heli-ski permits until the land management revision plan is completed which is still a few years away. That is kind of tough for these small operators to be told, well, you know, wait until we get this plan complete.

I guess the question to you is why is the Forest Service seemingly dragging its feet when it comes to permitting for our outfitters and guides in the Chugach given that, again, we have put in place some resources to provide for additional permitting? What I need, Ms. Christiansen, is your commitment to initiate a fair permitting process there in the Chugach and in the Tongass for our recreational permits.

Ms. Christiansen. Yes, I really do understand, Senator, and you have my commitment.

It is true that our process for permitting was cumbersome and outdated, and we have put some real focused efforts on improving

our special use permits.

We have 77,000 special use permits across the system with a demand for many more. That doesn't excuse us from not being responsive to the public and to the needs of the local economy. I can assure you we have caught up on the backlog and thank you for your help on the Chugach, in particular, and they have really been an early adopter of trying out these new processes.

It is also true that we need to have our zoning, if you will, of the forest land, the forest management plan. And the Chugach is soon

to release their draft, a forest management plan.

So, we see those two coming together very soon, but I will work with my leaders in the field to ensure that we are as responsive as we can be and we keep pressing on these improvements to be responsive.

The Chairman. Well, I appreciate your commitment.

You know, the heli-skiing operations that we are talking about in the Chugach, again, but also the two small operators down in

Southeast, down in the Tongass area.

As you know, we have significant tourist visitorship. We saw over a million tourists last summer. We expect to see more this summer. At the same time that we are seeing a rise in tourism, we are seeing a reduction in the number of permits that are being issued to our air taxi operators—the number of permitted landings that they can do in the Misty Fjords and for bear viewing at Trader Cove. What is happening is we are seeing a reduction in the number of permits that are issued and more of the tourism operators are being pushed into the same areas. So what happens is you have congestion.

Just think about this scenario. The cruise ship comes in at eight o'clock, nine o'clock, in the morning. They have six hours, eight hours in port, let's say. So you have these air taxi operators, these small float planes that have a very, very, very narrow window of time within which to take their passengers, these tourists, for this extraordinary opportunity and do it safely because we have to have it done safely. What we are seeing is more and more are pushed to the same area which, again, when you are a small float plane flying around and not every day is a perfect sunshine day, we do not want to see congestion that could result in an accident.

I need your folks to take a very, very critical look at both the Tongass and the Chugach to evaluate additional areas that can be made available for our tourism operators and see if more landings,

more user days, can be permitted.

My first round of questioning to you was directed on how we are going to be able to revitalize, and I even hesitate to use that word, but to breathe some life into a struggling timber economy in Southeast.

I have those that will oppose me at every turn if I even suggest harvesting one tree on the Tongass and they always say, go to the tourism. That is your industry. That is your industry.

Well, the industry is still within the Tongass National Forest and you all, as an agency, still control what everybody does there. So whether it is cutting a tree or allowing us to have a flight-seeing opportunity in some extraordinary areas, we are still coming to you, hat in hand, saying allow us to have this economy, allow us to have some kind of an economy.

I need you to work with us on the timber management side in a way that, again, allows for a small timber harvest. And when I say small, I recognize that we are the largest national forest in the country and we cannot even get what some would describe as an infinitesimal amount of harvest out of the Tongass right now. And then when we go on the other side to look at recreation, again, we have limitations that most would say just does not make sense. So I am asking for your help with that.

Ms. Christiansen. Senator, as you know, I'm getting up to speed and I'm learning a lot, thanks to your help, about the issues in Alaska.

I do know and feel the needs of Southeast Alaska, in particular, and you have my commitment that we will look at the balance of all multiple uses and that there's many sectors, both the economy and the culture and the way of life in Alaska, particularly Southeast and that the national forests there do have a great impact and opportunity. And I want to make it an opportunity where we can.

The CHAIRMAN. Well, thank you.

And you mention the culture. Many, many in Southeast are native people—Tlingit, Tsimshian, Haida, other Alaska natives who may have served in Vietnam at the same time that other Alaska natives around the state were able to make selections under the Alaska Native Claims Settlement Act (ANCSA). They were unable to submit applications since they were serving our country when ANCSA was enacted and we have been trying for years, for decades now, to finally see an equitable distribution to those Vietnam veterans. Obviously, a critically important issue for them.

Another measure that we have been working, as it relates to our native people, directs the Forest Service to work with Department of the Interior to study a potential land exchange there in the Chugach to allow Chugach Alaska Corporation to exchange their lands that were contaminated from the Exxon Valdez oil spill.

These are just two of the issues that are very, very important to Alaska natives, whether down in the Tongass area or up in the Chugach. I would like your commitment to work with me on these issues and others that are part of our ANCSA Improvement Act.

Ms. Christiansen. Senator, you have my commitment, absolutely.

The CHAIRMAN. Good, good, thank you for that.

My last question for you, and this is very parochial here, but this also relates to some land in, down in Southeast. Forest Service has been working on acquiring lands at Cube Cove on Admiralty Island from Shee Atika Corporation there near Sitka and then we have some split estate ownership issues.

Funding was included in the budget deal to acquire the next few tracts so the land acquisition is almost complete. This has been one of these torturous, it just seems like it's taking forever to resolve this, but Forest Service is only acquiring the surface rights knowing that the surface estate could be impacted if minerals are discovered because the regional corps have the rights to development under both ANCSA and ANILCA.

I know that your staff has been working to find a solution to gain the subsurface to these lands. I do not know if you are up to speed on this, whether you have any status update as to where we are in finally resolving this?

Ms. Christiansen. Yes, I am aware.

I know that we are working with Sealaska on the subsurface issue and opportunity. There are some differences about the potential evaluation of those subsurfaces. And Sealaska, after a meeting our folks had in February, they informed us that they were going to hire an outside consultant to evaluate the, what might be entailed in those subsurface minerals.

The CHAIRMAN. So, not necessarily an appraisal?

Ms. Christiansen. No.

The Chairman. But an assessment of the resource?

Ms. Christiansen. That's how I understand it, Senator.

And this was something that they wanted to do. So we are, of course, anxiously awaiting to get back with them after that consultation.

The CHAIRMAN. Okay, okay.

I thought that was going to be my last question, but let me throw one more out at you and this relates to improving the agency's NEPA processing.

Ms. Christiansen. Yes.

The Chairman. The Forest Service has launched this advanced notice of proposed rulemaking on NEPA, working on ways to make it more efficient and comply with environmental laws.

I have heard some concerns about how the effort is being conducted. I am just wondering what the status of this review is, where next steps are taking you as you are dealing with this NEPA review effort. We have also heard that there is possibly non-federal entities that have been holding sessions related to the NEPA review effort. If you can just give me the status on where we are with this.

Ms. Christiansen. Yeah, Senator. We're trying to be well-informed about the issues and the opportunities around the whole process. So we did hold ten roundtables across the U.S. and one technical session. We partnered with the National Forest Foundation to help us with those roundtables. They did bring in a couple partners to help with the facilitation. We were very balanced in who were at and attended and had input into those roundtables. I'd be glad to talk to you anymore about concerns that you've heard.

The CHAIRMAN. That might be worth a conversation with our staffs just so that we have a little bit of the background——

Ms. CHRISTIANSEN. Sure.

The CHAIRMAN. ——to respond to some of the concerns that have been raised with us.

Ms. Christiansen. I'd be glad to.

The CHAIRMAN. Okay, good, good, good.

We are approaching the noon hour. I appreciate you being here this morning, being as responsive as you have been to the wide variety of questions that have been posed by members.

Obviously, this is an important agency, not only for the Committee, but really, it is an important agency for the management

of so much of our land across the country.

As we deal with some of these challenges, whether it be fire, whether it be timber harvest, whether it be recreation, grazing, know that we, as a Committee, stand ready to work with you and

You have taken on a lot in just six weeks and I think your background, actually being on the ground, in the forests, working it, gives you a good perspective on the needs of the agency, but I also recognize that you are dealing with a big bureaucracy here.

We wish you well in that, and I appreciate your leadership.

Thank you.

We stand adjourned.

[Whereupon, at 11:49 a.m. the hearing was adjourned.]

APPENDIX MATERIAL SUBMITTED

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Ouestions for the Record Submitted to Ms. Victoria Christiansen

Questions from Ranking Member Cantwell

Question 1: Unmanned Aircraft Systems

This Administration has dubbed the Department of the Interior as the leader in the Federal government (of the non-military agencies) when it comes to Unmanned Aircraft Systems. Last year, they published the *Inter-Agency Fire Operations Guide for Unmanned Aerial Vehicles* (UAVs), and it looks they use a lot of UAVs [see figure below].



It seems that the Forest Service would benefit from an M.O.U. with the Department of the Interior, so that you could quickly make use of UAVs in your firefighting efforts.

Rather than inventing a separate system, you could use their contract specifications, their pilot training program, their airworthiness procedures... I know that Senator Murkowski and I do not want to see any more different procedures for different agencies; we have already been down that *fun* road with the helicopters and dozers.

Would you be willing to enter into some sort of MOU with the Office of Aviation Services at the Department of the Interior to take advantage of their successes?

Would you commit to getting that signed before the fire season in the Pacific Northwest gets underway?

Answer: The Forest Service has been working closely with DOI's Unmanned Aircraft Systems (UAS) offices and personnel for several years. In 2017, DOI personnel flew five non-fire missions under agreements with the Forest Service on Forest Service lands for Forest Service benefit. The Forest Service is currently negotiating an agreement to expand the scope and simplify the process of accessing this support.

Cooperation for UAS support of wildland fire management is facilitated through existing agreements and partnerships. The National Wildfire Coordinating Group, an interagency body representing DOI Bureaus with wildland fire responsibility, the Forest Service, and States,

1

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

published the Interagency Fire UAS Operations Guide, developed by the National Interagency Aviation Committee's Interagency Fire UAS Subcommittee. DOI, Forest Service, and State Subcommittee members all contributed to this Guide. Service First agreements and the interagency Resource Ordering and Status System facilitate immediate UAS support for wildland fire management.

The Forest Service and DOI Office of Aviation Services (OAS) began discussing an MOU early this year. Simultaneously, the Forest Service has been working to update our own policy and establish procedures for UAS. A specific goal of the effort has been to ensure standardization and interoperability with DOI. OAS provided valuable input during the process. We intend to build on this experience with a mutually beneficial MOU that is moving through the finalization process, recognizing that statutory authority will require us to use separate agreements with individual Bureaus to access flight crews and services for operational, non-fire missions. We have a signed MOU in place with BLM that allows use of personnel and UAS's.

Question 2: Roadless Rule

The State of Alaska's rulemaking petition to exempt the Tongass National Forest from the 2001 Roadless Area Conservation Rule makes several legal arguments in support of its request. The State has made some of those same legal claims in its lawsuit challenging the Roadless Rule before the U.S. District Court for the District of Columbia.

How has the Forest Service, through the Justice Department, responded to the State's claims in that lawsuit, and how did the DC District Court rule on the State's claims? If you accept the State of Alaska's petition and initiate a State-specific rulemaking, under what authority would or will you promulgate the rulemaking?

Answer: Filing this case in 2011 (State of Alaska et al. v. USDA (11-1122, AK.)), the State of Alaska argued the Forest Service issued the Roadless Rule in an unrealistic time frame and didn't weigh the needs of individual states and its consequences. Twenty parties (various companies and industries) intervened on behalf of the State. Conservation groups supported the Forest Service. Plaintiffs claimed violations of the National Environmental Policy Act (NEPA) Regulatory Flexibility Act, Tongass Timber Reform Act (TTRA), and the Alaska National Interest Lands Conservation Act (ANILCA). Plaintiffs also claimed that mitigation was arbitrary because it did not address the negative impacts outside of the timber context, including impacts on mining, tourism, hydropower, geothermal energy, and community access. Lastly, allegations were made that the Forest Service failed to consider the social and economic impacts of the Roadless Rule.

On September 20, 2017, the Court for the District of Columbia ruled favorably for the government on all counts. In its defense, the government specifically pointed to parts of the Administrative Record that addressed the plaintiffs' allegations. The Court found the Forest Service complied with its obligations under NEPA - the Rule's Final Environmental Impact

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

Statement contained an extensive review of the Rule's cumulative effects; while done quickly, the agency complied with NEPA in conducting its public comment and decision-making process; the Forest Service "considered the unique circumstances of the Tongass"; and the agency adequately considered the economic impacts the Roadless Rule would have on Alaska. The Court also found the agency did not violate the TTRA as the Forest Service complied with its duty to meet market demand while balancing other competing land uses. Further, the Court found the agency did not violate ANILCA, as the Rule does not result in the withdrawal of public lands. Lastly, the Court noted that the primary adverse consequence of the Rule on the Tongass was the potential that timber harvest would be reduced. As such, it was not unreasonable to focus mitigation efforts on easing the transition from an old growth timber market.

The Petition request, dated January 19, 2018, argues that the rationale for doing a new Rule for the State of Alaska has not changed over the agency's arguments made in the 2010 Tongass Exemption Rule or its defense of a related 2009 case in the Court for the District of Alaska – namely, "The extensive damage resulting from the application of the Roadless Rule to the economic and social fabric of Southeast Alaska" (Organized Village of Kake et al. v. USDA et al. (9-23, D. Ak.)). The Court for the District of Columbia, in its 2017 decision (State of Alaska et al. v. USDA (11-1122, AK.)), supported these agency arguments. Plaintiffs, including the State of Alaska, appealed the September 20, 2017 Decision. Briefing is not likely to conclude until August 2018. A decision by the Court of Appeals in the District of Columbia will follow.

The authority to implement a site-specific roadless rule is found in 36 CFR 294, Subpart B, "State Petitions for Inventoried Roadless Area Management." Basically, this falls under the Organic Act and the Multiple Use Sustained Yield Act. More specifically, 16 U.S.C. 472 (Laws affecting National Forest Lands), 529 (Development and Administration of Renewable Surface Resources for Multiple Use and Sustained Yield of Products and Services, Congressional Declaration of Policy and Purpose), 551 (Protection of National Forests; Rules and Regulations), 1608 (National Forest Transportation System), 1613 (Promulgation of Regulations) and 23 U.S.C. 201 (Federal Lands and Tribal Transportation Programs), and 205 (Highways).

The Secretary of Agriculture responded to the Petition and committed to working with the State to discuss options to address application of the Roadless Rule.

Question 3: Roads Funding Justification

Recreation is fundamental to the heart-beat of our economy. I do not appreciate your proposed cuts to the Roads program funding, Trails program, nor the Legacy Roads and Trails program—this is a program that has been tremendously successful in helping us deal with our problematic roads in the Northwest.

Your budget proposal this year did not list out what portion of the Roads dollars will go to maintenance, building new roads, decommissioning roads, etc. That is unacceptable.

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

I am confused as to whether:

- -you don't know what you would use the money for, OR
- -you don't want us to know.

Can you provide for the record the breakout by budget activity how you would use funding proposed for the Roads and Trails budget line items?

Answer: Sub-activity level information within the Roads and Trails budget line items were removed beginning with the FY 2018 budget submission. Our financial system does not track how funding is used at the sub-activity level (e.g. maintenance v. new construction v. decommissioning). Sub-activity figures in previous budgets were not based on actual financial data detailing how funds were spent at the sub-activity level, but on estimates which lacked acceptable precision. For these reasons we decided to delete spending on sub-activities from the budget justification.

Questions from Senator Ron Wyden

Question 1: As we discussed at the hearing, now that Congress has passed the Wildfire Disaster Funding Act, liberating the U.S. Forest Service's wildfire prevention funds from "fire borrowing," will you commit to providing me, within six weeks, with a detailed plan about what hazardous fuels reduction treatments, thinning, and forest health projects the U.S. Forest Service intends to do in Oregon to prepare for this summer's fire season?

Answer: The Forest Service's Pacific Northwest Region will commit to providing a plan within six weeks that addresses hazardous fuels reduction treatments, thinning, and forest health projects planned in Oregon in preparation for the 2018 fire season. The Region is finalizing the plan and will have it completed in the coming weeks.

Question 2: Congress just passed the most comprehensive suite of forest management reforms in over a decade: expansion of the Good Neighbor Forestry program; a new categorical exclusion for projects that increase resiliency to wildfire; expansion of the Healthy Forest Restoration Act to include fuel break and fire breaks as eligible practices; expansion of the Forest Service Stewardship Contracting authority to allow for 20 year contracts; addressing the implications of the so-called "Cottonwood" lawsuit.

How many projects have been completed so far under these expanded authorities and how many acres of national forest land have been treated under these expanded authorities? If none, or very few, as of the time of this hearing, could you let me and the Committee know when you expect to implement projects using this new authorities, where, and how many acres you expect the projects to cover? If there are administrative processes or barriers to implementation could you please also let us know what those are?

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

Answer: The agency is appreciative of the new and expanded authorities provided in the Omnibus. We are actively working to implement the authorities now and have recently directed each Regional Forester to develop specific implementation plans. While it is too soon to show specific acres implemented under these new authorities, the Omnibus expanded or complemented the authorities granted in the 2014 Farm Bill. Both have allowed us work with states on a broad suite of restoration projects. For example, we have established 136 Good Neighbor agreements in 33 states and in at least 62 national forests. The expanded Good Neighbor Authority (GNA) will allow us to conduct road construction and repair activities, allowing us to work more efficiently with states on restoration projects. We have asked the Regions to update their agreements to include this new authority. Using the authorities established in the Healthy Forests Restoration Act (HFRA) and the 2014 Farm Bill insect and disease categorical exclusions (CEs), we have accomplished 115 projects with an additional 42 projects ongoing. We have directed Regions to incorporate the new Omnibus HFRA CE into their post-fire responses and 2019 project development work plans. At this time we do not have a total of the acres completed, but, with respect to GNA in particular, we are taking steps to modify our data systems to be able to track acres linked to work conducted using the authority.

As was seen with the authorities granted within the 2014 Farm Bill, it will take some time to begin implementing the expanded authorities. We are identifying priority landscapes in Regions where we have the capacity to begin applying these authorities quickly, increasing our ability to work with states on restoration projects in order to improve the condition of the Nation's forest and grasslands. We would be pleased to update the Committee as specifications for these projects materialize, and we don't foresee material concerns related to administrative processes or barriers to implementation.

Question 3: Your written testimony included proposals for six more legislative changes, which you characterized as straightforward proposals to "improve effectiveness in delivering programs and services." However, given recent attempts to include significant environmental waivers in the Farm Bill Forestry Title, I am concerned about attempts to pass new, controversial forest management reforms. I would consider this to be a distraction from the Forest Service's mission of accomplishing much-needed work in the woods.

In your written testimony there are six proposed legislative changes: does the Forest Service propose any exemptions or waivers of National Environmental Policy Act and the Endangered Species Act?

Answer: No. None of the six proposed legislative changes would require exemptions or waivers of the National Environmental Policy Act or the Endangered Species Act.

<u>Question 4</u>: One of the recent forest management reforms builds off the success of the popular stewardship contracting program to allow for 20-year contracts in areas most at risk of wildfires, while ensuring a stable supply of logs for rural mills. In Oregon, we have been a model of

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

success with a 10-year stewardship agreement that has resulted in the expansion of a mill and a complete lack of lawsuits.

What is the Forest Service's plan for getting the new 20-year stewardship authority up and running? How will you implement this new authority to make it seamless with our current successes? How can you implement this new authority in new places while replicating our successes?

Answer: While we will continue to build on the current success of stewardship contracts and agreements of up to 10 years, we now have additional opportunities. The legislation not only extends the maximum duration of stewardship contracts in areas at great risk of catastrophic wildfire from 10 to 20 years, it also gives the agency greater flexibility to manage appropriated funds needed to cover contract cancellation costs, which has been a disincentive to expanding stewardship contracting as a forest management tool.

We are currently identifying forests where this new authority can be applied (in Fire Regime groups I, II, and III). In addition, we are developing policies and guidance to implement the requirements of the legislation and we will update our Stewardship Handbook to include the 20-year authority. We are developing guidance to apply preference for innovative use of forest products under the expanded authority. Longer contract or agreement periods may expand the industry's capacity to create additional markets for wood products in areas where mills are scarce. The absence of such markets limits options for active forest management and puts privately-owned forests at greater risk of conversion to non-forest uses.

<u>Question 5</u>: The five-year Chetco River mineral withdrawal ends this summer. The Forest Service has long supported permanent protection of the Chetco River, including recommending much of the river and its tributaries for designation by Congress as Wild, Scenic, or Recreational Rivers.

Has the position of the Forest Service to support protection for the Chetco River under the Wild and Scenic Rivers Act changed?

Answer: No, the Forest Service position has not changed. We have proposed extending the withdrawal for five years (see answer to Question 6, below). The proposed withdrawal extension of the 5,610-acre Chetco River (Public Land Order 7819) would provide time for Congress to act on your bill, S. 192, the Southwestern Oregon Watershed and Salmon Protection Act of 2017, which would permanently withdraw these lands. This is consistent with USDA and DOI initiatives to protect our natural resources, promote agriculture and rural prosperity, and to be a good neighbor. This action is in direct support of the Forest Service's commitment to build robust, sustainable communities for generations to come.

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

<u>Question 6</u>: What is the status of the Forest Service's efforts to extend the 2013 mineral withdrawal of the Chetco River? If the withdrawal has not been extended, what other steps must occur to finalize the extension?

Answer: The Forest Service Pacific Northwest Regional Office submitted all extension application materials for the case file to the BLM Oregon/Washington State Office on November 7, 2017. The 5-year term of the withdrawal extension is in compliance with regulations that require the extension term shall not exceed the duration of the existing withdrawal period. The BLM returned the application to the Forest Service on March 27, 2018 with recommended edits. The Forest Service submitted revisions on April 2, 2018. DOI will publish the requisite Notice of Application for Extension of a Public Land Order and Opportunity for Public Meeting, per 43 CFR 2310.3-1, in the Federal Register. Following the public meeting, DOI will issue the Public Land Order.

<u>Question 7</u>: What are the outstandingly remarkable values (ORVs) associated with the Chetco River that prompted USFS, USDA, and Interior to withdraw the river in 2013? Have any of those values changed in the intervening 5 years?

Answer: Fisheries, water quality, and recreation were identified in the Chetco Wild and Scenic River Comprehensive River Management Plan (1993) as the outstandingly remarkable values for the Chetco River, and those values remain.

<u>Question 8</u>: How will the Forest Service continue to protect the ORVs of the Chetco River if the mineral withdrawal is allowed to expire?

Answer: The Forest Service will protect and enhance the ORVs of the Chetco River by implementing management direction in the Siskiyou Land and Resource Management Plan and the Chetco Wild and Scenic River Comprehensive River Management Plan.

<u>Question 9</u>: I am concerned that, if the mineral withdrawal expires, suction dredge mining would be allowed to take place on the Chetco River, which would degrade water quality. How would suction dredge mining on the Chetco River affect downstream fisheries and drinking water?

Answer: Oregon Senate Bill 3, enacted on January 1, 2018, prohibits motorized placer mining on the Chetco River in Oregon. Senate Bill 3 prohibits dredge mining on streams containing essential Salmon and Steelhead habitat, including the Chetco River, as defined by the State of Oregon.

In the absence of Oregon's dredging prohibition, any significant mining operation identified as such by the Forest Service District Ranger would require the operator to submit a Plan of Operations subject to Forest Service regulations. Operations are not approved unless the

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

unavoidable impacts proposed in a Plan are mitigated to reasonably reduce the effects of mining operations and/or to avoid adversely impacting sensitive resources.

Question 10: In the summer of 2017, the Chetco Bar fire burned thousands of acres in the Chetco River watershed. The Rogue River-Siskiyou National Forest is now proposing moderate post-fire logging in the wake of the fire that avoids logging in Riparian Reserves, Late-Successional Reserves, and the Chetco River corridor. I applaud you for putting forward this common-sense proposal, which will result in more than 70 million board feet of timber for the local economy, more than double the Forest's probable sale quantity.

What else can the Forest Service do to further protect the Chetco River watershed?

Answer: In October 2017, the Rogue River-Siskiyou National Forest began Burned Area Emergency Response (BAER) work to manage the post-fire risks caused by the Chetco Bar Fire. This BAER work was expected to cost about \$2.4 million and included road and trail drainage improvements and storm proofing, invasive plant treatments, cultural site stabilization, and safety protection measures such as hazard tree removal and warning signs. Some of the work was completed before winter and the rest will be completed this spring and early summer.

In addition, about \$3.3 million of disaster supplemental funding provided in PL 115-123 has been directed to the Rogue-River Siskiyou National Forest for repair of fire-damaged recreation sites, roads and trails, as well as additional public safety protection measures in the watershed.

Ouestions from Senator Bernard Sanders

<u>Question 1</u>: USFS's Fiscal Year 2019 budget request would cut State and Private Forestry programs by 43%, including completely eliminating important conservation programs like the Forest Legacy Program, the Urban and Community Forestry Program, and the Community Forest and Open Space Conservation. In addition, USFS's budget request includes a 74% cut to Capital Improvement and Maintenance programs.

As you know, the Forest Service currently has trail maintenance backlog of more than \$300 million, and many of our nation's forests face unprecedented threats from factors like deforestation and invasive species. Given that your previous budget was clearly insufficient to adequately address these problems and fulfil the USFS's stated mission to "sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations," please describe your plan, including a timeline, for reversing the U.S. Forest Service's proposed cuts to conservation programs included in the President's FY19 budget request, including a plan for formulating a proposal that would provide adequate funding to meet the mission and goals of the agency.

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

Answer: The FY 2019 President's Budget represents difficult tradeoffs in a constrained budget environment and the primary focus is to improve conditions on national forests. The Budget request emphasizes wildfire response, active forest management, and acquiring knowledge to better manage the Nation's forests. The Budget request is adequate to support our mission objectives. Moreover, in the spirit of shared stewardship, we will make greater use of tools like the Good Neighbor Authority, expansion of the 20-year stewardship contract, the new categorical exclusion for wildfire resiliency projects, and other new and expanded tools to do more work.

Question 2: In 2002, the U.S. Forest Service's policy on National Forest System trails that cross private lands was:

In situations where an existing NFS trail crosses private lands, and no deeded easements exist, the Forest Service position is as follows:

The United States has acquired a right-of-way for the trail through development, maintenance, and continuous use of the trail. As a matter of law, the Forest Service believes that there is a public access easement for the trail. The Forest Service is a beneficiary of this public right of access, will continue its efforts to defend the public's right of access.

In situations where an existing NFS trail crosses private lands, and no deeded easements exist, it is very important for the Forest and District to:

- (1) Protect and maintain historic evidence, including trail blazes, signs, maps, photos, and maintenance records,
- (2) Maintain and sign the trail on a regular basis, and keep records and photos of this maintenance, and
- (3) Take prompt action in the event that landowners threaten or take action to close or obliterate the trail

Does the 2002 position accurately reflect the USFS's current position in regards to USFS trails that cross private lands? If it does not, please list all the areas in which current USFS policy differs from the above excerpt. For each area, please describe the decision-making process, including a timeline, for the policy change.

Answer: Yes, the 2002 Forest Service policy on National Forest System trails is current as listed above.

Question 3: According to the USFS's Environmental Analysis and Decision Making (EADM), its object is:

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

...to increase the health, diversity, resilience, and productivity of our national forests and grasslands by getting more work done on-the-ground by increasing our efficiency and reducing the cost of environmental analysis and decision-making processes.

How will you ensure that the EADM effort does not result in a shortened and/or less effective environmental analysis? Please describe the specific steps USFS is taking to ensure that the EADM effort does not result in a shortened and/or less effective environmental analysis.

Answer: The Forest Service is committed to responsible environmental stewardship and we will continue to follow the law and deliver scientific-based, high-quality environmental analyses that lead to sound land management decisions and honor stewardship responsibilities. A number of internal initiatives are being undertaken as part of the agency's EADM change effort. These include agency-wide training, modernization of our NEPA infrastructure, reforming our NEPA policies, and increasing engagement. We appreciate and acknowledge the value of the diverse perspectives of our partners in environmental analysis. We have held 10 national roundtables and one technical workshop to hear from external stakeholders and gather innovative and creative ideas for implementing EADM. All of these and additional planned actions will help us increase the efficiency and reduce the cost of our environmental analysis and decision making processes while still ensuring effective environmental analysis.

Question from Senator James E. Risch

Question: Last year was the costliest wildfire season on record with massive wildfires consuming millions of acres across the West. While a funding fix, which I was a strong proponent of, was finally achieved, there is still work to be done in reducing these disasters that are plaguing Western communities. An important method to reduce wildfires is through presuppression and remediation activities. In Idaho and other Western states, Conservation Corps help to accomplish this through invasive species and dead tree removal. How does this budget address remediation needed to prevent fires?

Answer: The Forest Service has a robust hazardous fuels program. Hazardous fuels treatments include any vegetation manipulation, or removal or modification of wildland fuels that reduce the likelihood of ignition, reduce potential fire intensity and spread rates, and lessen potential damage and resistance to control. Fuels treatments achieve site-specific fire and resource management objectives primarily through prescribed fire and mechanical treatment. Last year the Forest Service accomplished fuel treatments on nearly 3 million acres. In each of fiscal years 2018 and 2019, our performance target is to exceed 3 million acres.

The Forest Service also has a very active wildfire prevention program, which uses a number of techniques to reduce human-caused wildfires. These techniques include environmental education, patrols and public contacts, working with industry to engineer better outdoor equipment, public awareness signage, and enforcement of fire use and safety regulations. It has

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

been estimated that 80-90% of all wildfires are human-caused and therefore potentially preventable.

Questions from Senator Stabenow

<u>Question 1</u>: The recent omnibus spending bill expanded the 2014 Farm Bill's Good Neighbor Forestry program. How many projects have been completed so far under this expanded authority and how many acres of national forest land have been treated under this expanded authority?

Answer: The authorities granted in the 2014 Farm Bill allow us to work with states on a broad suite of restoration projects. We have 136 Good Neighbor agreements in 33 states and in at least 62 national forests. The expanded Good Neighbor Authority will allow us to conduct road construction and repair activities, allowing us to work more efficiently with states on restoration projects.

As was seen with the authorities granted within the 2014 Farm Bill, it will take some time to begin implementing the expanded authorities. We are reviewing existing Good Neighbor agreements nationally and working with partners to identify priority landscapes in Regions where we have the capacity to begin applying the expanded Good Neighbor authority quickly.

<u>Question 2</u>: The recent omnibus spending bill created a new categorical exclusion for projects that increase resiliency to wildfire. How many projects have been completed so far under this new authority and how many acres of national forest land have been treated under this new authority?

Answer: The Forest Service appreciates the new categorical exclusion, which will allow us to start and complete wildfire resilience projects on federal land more quickly. As we have learned from implementing 2014 Farm Bill authorities, we are taking steps to more quickly implement the expanded authorities. We are identifying priority landscapes in Regions where we have the capacity to begin applying the new categorical exclusion. We are also preparing national tools that target where the new Categorical Exclusion can be used to reduce wildland fuels. While it is too soon to show specific projects and associated acres completed under this new authority, utilization of this categorical exclusion falls under the 20 million acres limit set up in the Healthy Forests Restoration Act.

<u>Question 3</u>: The recent omnibus spending bill expanded the Healthy Forest Restoration Act to include fuel breaks and fire breaks as eligible practices. How many projects have been completed so far under this new authority and how many fuel breaks and fire breaks have been installed?

Answer: The omnibus provides important clarification on the scope of hazardous fuels projects included in the Healthy Forest Restoration Act and will allow these types of projects to move forward more efficiently. As was seen with the authorities granted within the 2014 Farm Bill, it

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

will take some time to begin implementing the expanded authorities. We are identifying priority landscapes in Regions where we have the capacity to begin applying this new authority quickly.

Question 4: The recent omnibus spending bill expanded the Forest Service's Stewardship Contracting authority to allow for 20-year contracts. Since the passage of the omnibus, how many 20-year stewardship contracts have been completed?

Answer: Increasing the maximum duration of stewardship contracts to 20 years will allow the Forest Service to invest in more areas that lack the infrastructure to address forest health concerns and will give industry more flexibility, allowing it to create additional markets for wood products in areas where mills are scarce. As was seen with the authorities granted within the 2014 Farm Bill, it will take some time to begin implementing the expanded authorities. We are identifying areas where the use of a 20-year stewardship authority could bring stability and investment opportunities for local forest products infrastructure.

<u>Question 5</u>: The recent omnibus spending bill addressed the implications of the so-called "Cottonwood" lawsuit. How many forest management projects are now able to move forward in light of Congress' action on the matter in the omnibus? Where are these projects located and how many acres are covered by the projects?

Answer: The legislative language in the Omnibus related to the "Cottonwood" lawsuit did not directly influence the projects originally affected by the suit in lynx habitat. The Forest Service complied with the May 2013 U.S. District Court of Montana ruling by consulting on the Northern Rockies Lynx Forest Plan Amendment for 18 National Forests on designated critical habitat in the fall of 2017.

The 2018 Omnibus bill language alleviates the potential impact to other projects going forward by providing a 5-year "safe harbor" from having to reinitiate consultation until March 23, 2023. The agency had received four other notices of intent to sue under the Endangered Species Act raising issues similar to those in Cottonwood. Without Congressional action, others may have filed notices of intent to sue on other species/projects as well.

Questions from Senator Steve Daines

<u>Question 1</u>: Relating to the question I asked during the hearing, could you please provide me with the status of your work on fighting sexual harassment at the agency, specifically regarding the 30 Day Action plan that outlined initial steps the agency is taking to build a safe working environment?

Answer: The Stand Up For Each Other Action Plan is an immediate effort to interrupt the pattern of harassment and retaliation in the agency. It puts us on the path to creating a permanent shift in the agency's culture.

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

The Forest Service is implementing the Stand Up for Each Other Action Plan in the following ways:

- Listen and Learn sessions held across the Nation to enable employees to express their views, thoughts, and concerns regarding the work environment. A report of findings and recommendations will be developed.
- An agency-wide Stand Up for Each Other engagement session will take place in June.
 Feedback received from the Listen and Learn sessions and anti-harassment awareness training are being incorporated.
- Improved protocols to ensure support of employees who file a complaint of sexual
 harassment through the Forest Service's anti-harassment hotline. The protocols will
 ensure employees are cared for throughout the process and make leaders aware of
 issues and take appropriate actions. Peace Corps has offered to train the Forest
 Service in the new protocols.
- Victim advocacy support is being established with assistance from renowned organizations such as Rape, Assault, Incest National Network (RAINN) and Green Dot
- An Employee Advisory Group was created to advise the Chief and senior leaders on proactive steps the agency can take to support and empower employees, eliminate harassment, and promote safe, respectful work environments.
- Employee Code of Conduct, "This Is Who We Are", which is aligned to agency
 values and will create a clear standard of behavior for all Forest Service employees,
 to be introduced in June.
- Implementation of OIG's recommendation to contract with third party, independent investigators for all sexual misconduct investigations.
- Agency-wide work environment assessment/survey on harassment and retaliation in the Forest Service in order to gain a better understanding of experiences and perceptions about harassment in the workplace. The assessment will be conducted mid-summer 2018.
- For all supervisory position vacancy announcements above the GS-12 level, incorporation of experience or attributes candidates have in creating harassment-free environments.

We know we cannot achieve the important work of our mission without the safe, respectful, harassment-free environment that each of our employees deserves and we will not be satisfied until that is achieved. We will match the urgency of this situation with focused actions and sustained commitment to hold everyone accountable for their actions and to take meaningful steps that will result in a permanent change to our culture.

<u>Question 2</u>: The Forest Service has been working on a Final SEIS and ROD for the Rock Creek Exploration project on the Kootenai National Forest in Montana for eight years. It is my understanding that the completed documents are currently in your Washington Office. Can you

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

tell me where in the review process the documents are, and can you assure me that the review process is moving through expeditiously?

Answer: Recently, we received a copy of a letter from the Montana Department of Environmental Quality to Mines Management Inc. (Montanore Minerals Corp.) in which it was stated their Exploration License had been renewed for one year. In light of this new information, the Forest Service is evaluating options for proceeding with the Final Record of Decision on the Rock Creek project for publication in the Federal Register.

Question 3: In its January 10, 2018 response to the GAO protest, the Forest Service indicated the agency is reviewing and drafting a more thorough documentation of its airtanker needs. In the same letter, the Forest Service indicated a revised solicitation for Call When Needed (CWN) Airtankers will be issued in early 2018. To date, the agency has not released a solicitation for CWN airtankers. Further, there have been significant delays in issuing the Next Generation 3.0 large airtanker contracts. Please provide an update regarding when the solicitations for the CWN and Next Generation 3.0 contracts will be issued.

Answer: In May 2018, the Forest Service will issue a synopsis inviting CWN offers for Very Large Airtanker Services. We will also invite existing CWN Large Airtanker vendors to add aircraft to their existing agreements and invite new vendors to offer their CWN Large Airtanker services. The Next Generation 3.0 solicitation is projected to be released in late June 2018. On May 4, the Forest Service posted a Special Notice on the Federal Business Opportunities website describing the agency's intent to release the synopsis listed above. The notice also provided information about an industry day meeting that will be held in Boise, Idaho in June to discuss future airtanker requirements and contracting strategies.

https://www.fbo.gov/?s=opportunity&mode=form&id=1268f5c3cf0efbc502947c7a2b2776e8&tab=core&cview=0

Question from Senator Tammy Duckworth

Question: In its Fiscal Year 2019 budget request, the U.S. Department of Labor (DOL) proposes to end the role of the U.S. Forest Service in running 26 Civilian Conservation Corps centers as part of the Job Corps program and to have contractors operate the centers instead. Please confirm whether DOL consulted with the U.S. Forest Service in crafting its budget proposal to eliminate the U.S. Forest Service from the Job Corps program. If the U.S. Forest Service was not consulted by DOL, please describe the potential impacts that could result from eliminating the U.S. Forest Service's role in the program and replacing it with contractors.

Answer: The President's Budget is coordinated across all federal agencies by the Office of Management and Budget. Program and Budget leadership at DOL consulted with Secretary Perdue and the Forest Service in developing their Budget Proposal for the Job Corps.

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

Questions from Senator Catherine Cortez Masto

Question 1: As with last year's Budget Request, the Forest Service's proposal would also eliminate funding the line item for Deferred Maintenance. Just last week, this Committee had a hearing specifically on National Park Deferred Maintenance, and the witness from Interior talked about their support to address deferred maintenance within NPS, the Fish & Wildlife Service, and the Bureau of Indian Education. Obviously, USFS falls under a different department's jurisdiction, but with direct proposals to tackle this issue on a multi-agency basis, why does USFS eliminate this line item?

Answer: Some deferred maintenance needs can be addressed within the overall Capital Improvement and Maintenance portfolio. The FY 2019 President's Budget proposal for \$94.7 million for Capital Improvement and Maintenance represents difficult tradeoffs made within the context of budget constraints. With limited funds this work will have to be prioritized and focused on managing existing infrastructure and maintaining public safety.

Question 2: For the first year ever, the Forest Service has only provided proposed top-line Capital Improvement and Maintenance funding requests. In the past, Forest Service has made requests down to the Activity level. For example, the amount requested for the "Roads" budget (\$71 million) does not disclose what particular activities would be pursued. Why was this change made, and why should Congress just provide large pots of money for these necessary expenses without a sense of specificity from the agency?

Answer: The FY 2017 President's Budget was the last to provide the breakout of Capital Improvement and Maintenance funding down to the sub-category level. We understand the sub-category breakout was seen as useful to track agency accomplishments. However, our financial system does not track how funding is used at the sub-activity level. Therefore, the sub-activity figures used in previous budgets were not based on actual financial data detailing how funds were spent, but rather on estimates which lacked precision. For these reasons we decided to delete spending on sub-activities from the budget justification.

<u>Question 3</u>: Currently, 80 percent of trail maintenance in Nevada is accomplished by volunteers through organizations such as Friends of Nevada Wilderness and Great Basin Institute. While these partnerships are crucial for maintenance and we appreciate their incredible work, there is widespread concerns that with even proposed cuts by this Administration, the responsibility of all maintenance will fall on the shoulders on these organizations. Can you address some of those concerns?

Answer: The contributions of volunteers are vital to the Forest Service delivering its mission. The agency relies on volunteers to maintain trails, serve as hosts at campgrounds, and perform many other valuable services. For example, the new National Strategy for a Sustainable Trail System builds on and expands work with partners and volunteers to move the agency toward a sustainable trail system and ensure access to National Forest System lands.

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

The President's Budget represents difficult tradeoffs made within the context of budget constraints. Under our FY 2019 funding request, the Forest Service will prioritize trail work to manage existing infrastructure, maintain public safety and needed access, and defer lower priority projects as needed. We will continue to work in a system of collaborative stewardship with partners and volunteers to address our needs.

Question 4: 52 percent of the Forest Service's budget is spent on wildfire management. With the new tools and authorities that were provided to you by the recent Omnibus, what will the Forest Service do to develop a responsible approach that addresses risk management, cost containment, and state and local government partners to ensure adequate funds are available for wildfire suppression?

Answer: The fire funding solution provided in the FY 2018 omnibus spending bill will create greater stability and predictability in the Forest Service budget and greatly reduce the likelihood of fire transfers. In order to be a good steward of taxpayer dollars, the agency will continue to pursue these significant cost saving initiatives to reduce the rising cost of wildfire suppression. These initiatives are 1) pursuing cost reimbursement from cooperating agencies, 2) improving our risk assessment and decision making processes, and 3) implementing cost controls.

The tools and authorities provided in the omnibus, including the expanded Good Neighbor authority, the extended maximum duration of stewardship contracts to 20 years, and the new categorical exclusion for wildfire resiliency projects will improve our ability to work with states on restoration projects, increase our ability to address the areas at highest risk to catastrophic fire, and improve the condition of the Nation's forests and grasslands.

Question 5: We have now entered an era where we do not refer to wildfire season as "fire seasons" anymore – we live in a time when wildfire is now "year-round." The National Significant Wildland Fire Potential Outlook issued by the National Interagency Fire Center on April 1, estimates that above normal significant wildland fire potential is possible over parts of western/northwestern Nevada beginning in May. As wildfires become more constant and the threat of potential wildfire increases, are there concerns about resources and staffing? If so, why decrease the number of full-time employees by six percent?

Answer: In FY 2019, the Forest Service plans on staffing the same number of firefighters, 10,000, as it has in previous years. Maintaining core firefighting capacity is a primary objective of the agency and significant effort is placed on ensuring that permanent, seasonal, and contracted firefighting assets are available throughout the fire year to support operations. The agency continues to look to increase programmatic efficiencies, including decreasing overhead, to maximize our ability to deliver firefighting capability.

<u>Question 6</u>: Under President Trump's budget, cuts to the Forest Service would impact state and private forestry budgets. In fact, the Nevada Division of Forestry (NDF) could experience a

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

substantial funding loss, which would have a huge impact on wildland fire suppression and fire prevention. Can you elaborate on those potential impacts and concerns?

Answer: Decreased funding to State & Private Forestry programs does not diminish our commitment to longstanding partnerships with Federal, State, Tribal, local, and non-profit groups to sustain the health, diversity, and productivity of the Nation's forests. The FY2019 Budget requires greater emphasis on shared stewardship with States, communities, and private landowners to accomplish forest management goals.

<u>Question 7</u>: The Forest Service and Department of the Interior are projecting a very strong probability for Northern Nevada to see wildfires early this summer. In what ways is the Forest Service coordinating with state firefighters, and what are ways in which the Forest Service can improve coordination between other agencies and state partners?

Answer: Through the National Fire Capacity and Rural Fire Capacity programs, the Forest Service provides financial assistance to State and local response agencies for the prevention, mitigation, control, and suppression of wildfires on non-Federal lands. The programs emphasize pre-fire planning and hazardous fuels mitigation near communities at risk. In addition, training funded by these programs provide effective and safer initial response to wildfire.

The National Wildland Fire Cohesive Management Strategy emphasizes collaboration and coordination across jurisdictional boundaries. There are dozens of examples around the country where the Forest Service is working closely with our State and local partners to reduce wildfire risk.

In Nevada, Northeast Nevada Interagency Fire Management is an early Cohesive Strategy Success Story. The Humboldt-Toiyabe National Forest partners with the BLM under a Service First Agreement to provide dispatching, fire preparedness, and fire suppression support in the state. The Service First interagency partners, the Nevada Division of Forestry, the US Fish and Wildlife Service, and Duck Valley Tribe constitute the Northeast Nevada cooperators. Other agreements are in place to share resources with the Nevada Division of Forestry and other local entities throughout the state.

The Great Basin Coordination Center as well as the National Interagency Coordination Center work to assure there are appropriate resources available to meet the anticipated needs for wildland fire management. We also use the provisions in the Good Neighbor authority on a regular basis to work with state partners.

Question 8: In your testimony, you state that USFS is "already developing more efficient and effective ways to do your work while taking steps to contain fire costs and ensuring dollars are spent in the right places to make a difference," and that you have already embarked on other internal reforms. What have you done thus far and how do you intend to measure the improved results?

U.S. Senate Committee on Energy and Natural Resources April 24, 2018 Hearing The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

Answer: Ensuring we are making high quality decisions will help drive appropriate cost outcomes. It is imperative that we work proactively before, during, and after any incident to identify and manage actions that pose risk to the mission and financial capability of the agency.

The Forest Service continues to pursue cost saving solutions to streamline operations and become a more efficient and agile organization. Efforts undertaken include reviewing procurement procedures jointly with DOI to reduce duplication of effort, exploring partnership opportunities with NASA to leverage existing capability and reduce agency reliance on surveillance planes, and creating key performance indicators to evaluate operational and cost effectiveness of asset use and decision making.

On May 10, 2018 Secretary Perdue and Secretary Zinke signed a memorandum to wildland fire leadership highlighting the importance of interdepartmental collaboration to increase firefighter, public, and community safety. The agreement commits the Departments to collaborate in order to ensure all firefighting assets are being used in an efficient manner, integrating technology into operations to support planning and protect communities.

We are examining operational requirements and available budget to determine the appropriate mix of Exclusive Use and Call When Needed aviation assets, and we continue to modernize our aviation fleet according to the Aviation Strategy Implementation Plan, which was released on May 14, 2018. On wildfire incidents, we have deployed and will continue to utilize Risk Management Assistance Teams (RMATs) to help decision makers examine alternative strategies that better consider inherent tradeoffs of exposure, fiscal accountability, risk to highly valued assets, and opportunities for fire benefits.

Due to the increasingly complex wildfire environment, other Federal, State, and local entities continue to rely on specialized Forest Service-contracted firefighting capabilities. The agency will seek to establish appropriate cost-share agreements and pursue 100 percent cost recovery from partners to equitably balance these costs among users.

We believe the efficiency and cost reform measures we are undertaking can be measured by a reduction in the overall cost of fire management in the future – from the cost of pre-suppression work such as fuels reduction, to being more mindful of decisions made on the ground, to looking at the mix of aviation assets necessary to be successful, and finally, in pursuing cost recovery.

Question 9: I am glad that you have addressed this topic in your testimony. It is important that every corner of the government face this head-on and root out any form of harassment, wherever it is and in whatever form it manifests. You mention that USFS will "match the urgency of the situation with focused actions and sustained commitment."

A. What actions have been taken thus far?

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

Answer: The Stand Up For Each Other Action Plan is an immediate effort to interrupt the pattern of harassment and retaliation in the agency. It puts us on the path to creating a permanent shift in the agency's culture. Significant steps have been taken and are underway to improve policies, accountability, reporting systems, and training. These include:

- Re-aligned the Employee Relations and Equal Employment Opportunity programs, increasing capacity and expertise.
- Established a national oversight and assessment team and engaged top-level leadership in high profile cases.
- Launched the Harassment Reporting Center Help Line, a new service for employees that
 provides a single, dedicated resource for reporting all forms of harassment. Employees
 can reach a Harassment Reporting Center Representative seven days a week. The center
 is operated by skilled and extensively trained contracted individuals.
- Designated a Forest Service Senior Advisor for Work Environment to focus on work environment and creating an employee advisory group.
- Launched the Anti-Harassment Program Intranet web page.

Most recently, the Forest Service developed and has begun implementation of components of the "Stand Up For Each Other" Action Plan. The plan includes:

- · Listen and Learn Sessions conducted nationwide
- Improved victim advocacy support
- Improved protocols throughout the complaint process
- Independent investigators for all sexual misconduct investigations
- · Updated employee code of conduct
- Agency-wide assessment/survey on harassment and retaliation
- Inclusion of experience in creating harassment free environments in supervisory vacancy announcements

We know we cannot achieve the important work of our mission without the safe, respectful, harassment-free environment that each of our employees deserves and we will not be satisfied until that is achieved. We will match the urgency of this situation with focused actions and sustained commitment to hold everyone accountable for their actions and to take meaningful steps that will result in a permanent change to our culture.

B. Other agencies, such as the National Park Service, have had their share of sexual harassment allegations stemming from within their workforce. Have you worked with other agencies to combat this problem?

Answer: The Forest Service has reached out to several agencies, including Department of Homeland Security's Coast Guard, the Department of the Interior's National Park Service, and the Peace Corps to begin working collaboratively and share best practices on ways to address and mitigate sexual harassment allegations. Preliminary discussions have proved very productive as we have started exchanging ideas, best practices, materials, and training tools regarding sexual

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

harassment and other work environment issues. We plan to continue working collaboratively with these other agencies on these issues.

C. What guidance have you received from the White House on this matter? Do you think the White House should be involved in rooting out this problem across the entire federal government?

Answer: This issue is of importance to the Secretary of Agriculture. The White House relies on Cabinet members to effectively manage their Departments and Secretary Perdue is engaged in the Forest Service activities around this issue.

Questions from Senator Rob Portman

Questions: It is my understanding that the U.S. Forest Service works with the Bureau of Land Management on the development of resources on federal land. In my home state of Ohio, over 2,700 acres in the Wayne National Forest have been leased for oil and gas development. Lease sales began in December 2016 after a Finding of No Significant Impact from the environmental assessment, but no permits have been issued to develop. What steps must be taken by the BLM and the Forest Service prior to issuing permits to develop? What is the timeline for completing these additional steps?

Answer: If a company would like to develop an existing federal lease, it submits a Notice of Staking (NOS) or an Application for Permit to Drill (APD) to the BLM. The BLM notifies the Forest Service that either an NOS or an APD has been submitted and outlines the information necessary for the Forest Service to complete the analysis. For wells to be located on private surface estate, the Forest Service simply verifies that the lands are private, visits the site, and communicates to the BLM that no permit stipulations will be provided since the well does not impact National Forest System surface lands. This work is generally accomplished within one week of NOS or APD notification.

For wells to be located on National Forest System surface estate, the applicant must submit a Surface Use Plan of Operations (SUPO) containing the information outlined in 36 CFR 228.106. If there is a deficiency in the SUPO, the BLM must notify the applicant. Once the SUPO is complete, the Forest Service analyzes the impacts associated with the planned operations in accordance with 36 CFR 228.107. The completion of this work usually occurs within 30 days in accordance with 36 CFR 228.107. The Forest Service provides the BLM with updates regarding the amount of time needed to perform the analysis. Permit stipulations may be provided to mitigate impacts documented as a result of the analysis.

The wells drilled in the past several years on the Wayne National Forest have been located on private surface. Two of these wells have needed National Forest System lands for state-mandated minimum acreage requirements. The Forest Service activities with respect to these wells have been completed within approximately one week of notification.

The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019

Questions for the Record Submitted to Ms. Victoria Christiansen

Questions from Senator Shelley Moore Capito

Questions: Ms. Christiansen, as I briefly touched upon at the end of my questioning during the hearing, one of my biggest priorities in Congress is encouraging additional deployment of broadband to unserved and underserved rural areas. West Virginia ranks 48th in terms of broadband connectedness according to the Federal Communications Commission. One of the many challenges facing rural broadband deployment is the prevalence of federal lands around these communities and the associated permitting constraints for laying conduit or fiber across them. I am a cosponsor of S. 604, the Highway Rights-of-Way Permitting Efficiency Act, which would require the USDA through the Forest Service, as well as the Department of Interior through the Bureau of Land Management, to establish memoranda of understanding in conjunction with state regulators to allow for the permitting of broadband conduit installation within an operational right-of-way on federal lands. The bill would also exempt deployments in existing rights-of-way from environmental assessment or impact statement requirements.

 Does the Forest Service have an official policy regarding S. 604 or similar legislative proposals to promote and remove obstacles to broadband deployment in our national forests?

Answer: USDA's overarching strategic goals include "Facilitate rural prosperity and economic development", "Strengthen the stewardship of private lands through technology and research", and "Foster productive and sustainable use of our National Forest System Lands". Consistent with these goals, the Forest Service supports improving broadband access across rural America in concert with responsible multiple-use management of our natural resources. We are working with our colleagues at DOI regarding the provisions in the House version of S. 604 and stand ready to work with Congress on opportunities to improve access to this critical technology.

 What administrative policies is the Forest Service considering to promote broadband deployment?

Answer: The Forest Service has several administrative policies in place to promote broadband deployment, including a standard application and authorization form, national rental fee schedule, incentives for co-locating on existing wireless infrastructure and long term authorizations. The agency supports Dig Once policies and sharing existing infrastructure to encourage efficient broadband deployment to underserved or unserved communities. In addition, we are currently participating in two separate efforts being led by the Broadband Interagency Working Group to streamline federal permitting and leverage federal assets to deploy broadband in response to Executive Order 13821. Furthermore, we are working to implement Title VI, Sec. 606 of the Consolidated Appropriations Act, 2018, that directs federal agencies to respond to applications for communications facilities with 270 days.

U.S. Senate Committee on Energy and Natural Resources April 24, 2018 Hearing The President's Budget Request for the U.S. Forest Service for Fiscal Year 2019 Questions for the Record Submitted to Ms. Victoria Christiansen

We recognize the important role National Forest System lands have in ensuring the American public has reliable and affordable broadband access. We are committed to pursuing opportunities to modernize our program and policies.

0