TO THE SENATE COMMITTEE ON AGRICULTURE

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Farmers and Foresters: Opportunities to Lead in Tackling Climate Change

Presented By:
Stefanie Smallhouse
President
Arizona Farm Bureau Federation

Madam Chair and members of the Committee, my name is Stefanie Smallhouse. I am the President of the Arizona Farm Bureau Federation, and my husband and I are raising the sixth generation to live and work on our cow/calf ranch in Southern Arizona. I am pleased to offer this testimony as a Farm Bureau leader and American farmer and rancher.

Agriculture's Climate Positive Impact

Agriculture is no stranger to the conversation about climate sustainability. America's farmers and ranchers play a critical role in promoting soil health, conserving water, enhancing wildlife, efficiently using nutrients, and caring for their animals. For decades, they have embraced innovative technology thanks to investments in agricultural research and adopted climate-smart practices to improve productivity, enhance sustainability, and provide clean and renewable energy. As a result of agriculture's intentional efforts to protect soil and water, U.S. farmers and ranchers contribute significantly fewer greenhouse gas (GHG) emissions than their counterparts around the world. In the U.S., agriculture accounts for approximately 10 percent of GHG emissions. By contrast, EPA data shows that – on a global scale – agriculture contributes more than double that percentage: 24 percent of GHG emissions in 2010. This demonstrates the tremendous advances made by U.S. farmers and ranchers. All the while, we continue to feed more people with fewer resources. In fact, U.S. agriculture would have needed nearly 100 million more acres in 1990 to match 2018 production levels.

Building upon the solid foundation of voluntary stewardship investments and practices, such as those in the Farm Bill, we look forward to working with policymakers to further advance successful sustainable practices in U.S. agriculture. As we continue this conversation and draft new proposals, lawmakers must ensure that any governmental analysis characterizing U.S. crop and livestock systems reflects U.S. agriculture's leadership globally in sustainable farming practices.

Climate Change in the Arid Southwest

As a member of the American Farm Bureau Board of Directors, I have the privilege of interacting with farm and ranch leaders from across the nation. Those interactions have reinforced what my neighbors and I have long known: the needs of the West are unique from the rest of our nation.

It is almost impossible to discuss climate and environment in the West without mentioning drought. For a rancher like myself, every inch of water is vital to promoting the growth of grasses that my cattle need to eat and filling the stock tanks that they rely on to drink. Months without rain have required myself and my neighbors to spend countless hours and scarce resources hauling water and feed and reducing our herd numbers in hopes of keeping our farms and ranches viable. For Arizona's farmers, the Colorado River, Arizona's most important surface water source, provides irrigation water for crops across Arizona. In Yuma, Arizona, the source of 95 percent of the nation's winter lettuce production, the Colorado River is used to irrigate these high-value seasonal crops. The Central Arizona Project Aqueduct delivers Colorado River water to Central Arizona to irrigate cotton, grain, and forage crops that help Arizona's dairies produce affordable, wholesome milk for Arizona's families. Prolonged drought threatens the health of the river and the health of these key industries.

Drought also contributes to what is perhaps the most visible natural resource catastrophe in the West: the dramatic increase in frequency and intensity of wildfires. Arizona is home to millions of acres of flammable rangeland and forest that serve as key watersheds for Arizona communities. The last three years have been three of the worst fire seasons in Arizona history, providing a dire reminder of the need for effective forest management. Arizona's response to the state of our forests is another example of the role that voluntary conservation programs must play in resource recovery solutions. The Four Forest Restoration Initiative (4FRI) is a public-private partnership that plans and carries out landscape-level restoration projects aimed at wildfire recovery and prevention through prescribed burning, overgrowth removal, and soil erosion prevention.

But just as the Southwest has unique challenges to overcome when it comes to climate sustainability, it also has unique opportunities to contribute in the way of solutions. Grazing, the major use of public land in Arizona, contributes to plant and animal biodiversity, creates healthy wildlife habitat, is a forest management tool and protects watersheds. For example, my family's ranch, the Carlink Ranch, straddles the Lower San Pedro River in Southeastern Arizona and operates in the same location it did over 130 years ago. We have been recognized locally and nationally for our conservation ethic, but the true evidence of our sustainability is our longevity. We have implemented numerous practices to protect both our soil and water resources. Our generational presence in this valley has provided an uninterrupted corridor for wildlife between

two major sky island ecosystems in Southern Arizona. The management of our desert timber operation provides a mosaic of habitat for wildlife and contributes to better soil health.

Sustainable Climate Solutions

At the Arizona Farm Bureau and all the way up through the American Farm Bureau, our policy is crafted by our grassroots members: hard-working farmers and ranchers who recognize the value of a voluntary, market-based system of incentives for planting crops or adopting sustainable farming practices. As we interact with our members, who are on the forefront of both the impact of and solutions for a changing climate, they have identified several themes necessary for successful policies incentivizing climate solutions.

First, policy which addresses proactive measures to influence climate conditions cannot be one-size-fits-all. Just as I have highlighted the unique needs of Arizona's farmers and ranchers in the West, all regions of the U.S. can explain ways in which any given climate policy may or may not work for the landscape, industry, and ecology present in that region. Every farm and ranch is unique according to its financial capabilities and the dynamics of its resources.

Second, any policy debate should recognize the contributions, efficiency gains, and considerable impact of American farmers and ranchers, including their sustainability and carbon sequestration efforts. Carbon sequestration, achieved through the management of soil, forests, grasslands, wetlands, cropland, and settlements, made possible GHG removals equivalent to 12 percent of total U.S. emissions – enough to more than offset agriculture's contribution to total emissions. However, many of agriculture's carbon sequestration efforts are not directly assigned to the agriculture sector. It is certain that if the carbon sequestration efforts of U.S. farmers and ranchers were assigned to agriculture, especially our forests, our contributions to GHG emissions would be lower. This is also why we welcome opportunities for farmers and ranchers to participate in emerging carbon markets.

Third, priority must be given to funding for effective voluntary conservation programs. Much of the current success of agriculture's sustainability model must be attributed to voluntary stewardship investments and practices, such as those in the Farm Bill. There are certainly farms and ranches across the U.S. implementing conservation practices without participating in government cost share, but the great majority are likely contracted with the USDA due to the

high cost of investing in such technologies as compared to the return on this investment. The 15 percent of farm acreage enrolled in conservation programs is significant; although, there are opportunities to improve upon the barriers to participation. It is crucial that proposed solutions contain additional funding for voluntary conservation programming, regionally specific practices, and outreach efforts to promote widespread adoption of these methods across farm country.

Fourth, in order to develop innovative technologies to capture more carbon in our croplands, forests, and grasslands, we need increased investment in agriculture research aimed at developing innovative solutions that can be efficiently utilized. Foreign investment in agricultural research and development has skyrocketed, with China surpassing the U.S. in 2009. The 1890 land grant institutions have served as an invaluable resource in developing new technologies for our farmers to implement. Both New Mexico State University, my alma mater, and the University of Arizona are land grant universities doing great work in agricultural research for arid lands but with limited research dollars in a highly competitive environment.

Finally, we need to expand the scope through which we view climate policy to also focus on other natural resources, especially water. Unprecedented drought in the West threatens the sustainability of thousands of farmers and ranchers growing food and fiber on millions of acres. To adapt we must plan for greater storage capacity for both surface and groundwater and dramatically increase flood control. That is why proposed investments in the agriculture industry must also include spending for our water infrastructure in the West. Managing the vegetative landscape is also crucial to conserving water resources amid climate variability. This impacts our water quality and quantity.

Arizona Farm Bureau will continue to work alongside American Farm Bureau to ensure that farm families maintain their ability to respond and adapt to climatic events and that public policies do not threaten the long-term resiliency of our rural communities. Congress must protect American agriculture and production practices from undue burden, and respect farmers' and ranchers' ability to innovate and solve problems.

Food and Agriculture Climate Alliance

The diversity of the agriculture industry is precisely why the American Farm Bureau convened a wide group of stakeholders to further explore policy options for farmers, ranchers, and rural communities to address climate change. From this effort, we now have what is known as the Food and Agriculture Climate Alliance. This alliance consists of organizations representing a cross-section of farmers, ranchers, forest owners, the food sector, state governments and environmental advocates that are working together to develop and promote shared climate policy priorities. The alliance developed three principles that guide our 40 recommendations: support voluntary, market- and incentive-based policies; advance science-based outcomes; promote resilience and help rural economies better adapt to changes in the climate. We hope the work and recommendations of the alliance ensure farmers and ranchers will be respected and supported as society calls for more climate-smart practices.

American farm families, such as my own, want to leave the land better than when it was first entrusted to our care. We want to be responsible stewards of the resources we will pass to the next generation, while feeding and clothing people, fueling a nation and promoting vibrant communities. Working with our partners, land-grant universities, lawmakers, and the farmers and ranchers we represent, Arizona Farm Bureau and American Farm Bureau intend to continue finding solutions that meet both our current and future needs.

Madam Chair, I thank you for convening this hearing and for your efforts on behalf of agriculture. I look forward to answering any questions.