

**Testimony before the Public Lands, Forests and Mining Subcommittee of the  
Senate Committee on Energy and Natural Resource  
S. 4603 – Forest Health and Biomass Act (McSally)**

Subcommittee Chairman Lee, Ranking Member Wyden and distinguished members of the subcommittee, thank you for holding today's hearing to discuss S. 4603, Forest Health and Biomass Energy Act, and for inviting me to testify on behalf of the critical need for biomass energy to support forest health across the Western United States. On behalf of Coconino County, I want to express my thanks to Senator McSally for working with the County to introduce S. 4603 and the subcommittee for highlighting this critical issue.

My name is Art Babbott, County Supervisor from Coconino County. During my time on the Board of Supervisors, forest restoration has been one of the top policy priorities for the County as catastrophic wildfire and flood represent the number one public health and safety risk for the County. As part of that priority, I have been honored to serve as Chair of the Four Forest Restoration Initiative (4FRI), which I will discuss later.

Coconino County, the second largest county in the contiguous United States, consisting of 18,661 square miles of land, 27 percent, or over three million acres, of which are owned and managed by the U.S. Forest Service. We are home to the largest Ponderosa Pine forest in the world, making healthy forests one of our top interests and priorities as we work to protect lives and communities from the impacts of catastrophic wildfires and post-wildfire flooding.

In the past ten years, Coconino County has experienced four major wildfires on federal land that has negatively impacted us through the tragic loss of life, homes and businesses, decreased property values as well as social and economic burdens on our communities. Just one year ago in my district, the Museum Fire, which burned less than 2,000 acres, cost the U.S. Forest Service over \$11 million to suppress and rehabilitate and cost Coconino County nearly \$2 million in response to the post-wildfire flooding threat to the City of Flagstaff.

While forest restoration has been on the hearts and minds of our citizens for years, we are currently in the eighth year of a ten-year landscape scale restoration project called the Four Forest Restoration Initiative or 4FRI, an effort to restore 300,000 acres of forest over 10 years. In those eight years, the contractor has only been successful at treating 14,000 acres. While there are many factors that have played into the small amount of acres being treated, the lack of a market for the biomass (non-merchantable trees, limbs and tops) that is created from forest restoration treatments continues to be the bottleneck.. This is quite evident by the fact that a mere 125 miles away, where a bioenergy plant is located in Snowflake, Arizona, industry has been able to treat over SIX TIMES as many acres in the same timeframe precisely because there is a market for biomass. Support for biomass energy facilities as well as the "High Hazard Area Wood Biomass Fund" in S. 4603 to fund the processing, removal and hauling of biomass to end markets that can be hundreds of miles away from the source, is critical for increasing the pace and scale of forest restoration on federal lands.

In the early 1990's, much of Arizona's forest industry "left town" due to increasing litigation on federal timber sales. Add to that the Forest Service policy to put every forest fire out, we have created conditions where the forest is overstocked with trees and is a virtual tinderbox waiting to combust. Northern Arizona University's Ecological Restoration Institute cites that pre-1900, tree densities in Arizona's forests averaged around 24 trees per acre due to the frequent lightning caused fires naturally thinning the forest. However, that average today has skyrocketed to well over 1,200 trees per acre. The goal of forest restoration is to reduce the tree density to a healthy average of 80 trees per acre, allowing for the re-introduction of wildfire back into our fire adapted ecosystem. Attempting to do that work primarily through prescribed fire is too risky and not feasible based on the current density of trees. However, mechanical thinning treatments brings a multitude of benefits, although success depends on markets being made available for the forest products and biomass. One of the greatest benefits of mechanized thinning operations, aside from creating a healthy, fire-resistant forest, is the creation of well-paying jobs in some of the most rural areas of the country where they are desperately needed.

Biomass energy plays a significant role in the success rate of forest restoration in Arizona and yet has struggled to get support from state and federal lawmakers. Biomass energy is the only viable option, at this time, in our efforts to thin 30,000 to 50,000 acres per year for the next twenty years as we work diligently to improve forest health and reduce the threat of catastrophic wildfires across the West. We often look only at the cost of bioenergy when determining its viability and knowing that it has a higher cost than green energy systems like solar and wind. Therefore, it often gets overlooked. However, we must not forget that the ecosystem benefits resulting from forest restoration treatments that supply the biomass for energy, is creating healthy forests and watersheds, improved wildlife habitat, protecting communities and lives from catastrophic wildfires and the negative air quality impacts, as well as recreational and economic opportunities within our national forest lands. S. 4603 is critical for support of biomass removal from federal lands and biomass energy to reduce the amount of carbon emissions from wildfire, open-burning fire and prescribed fire. In addition, the financial impact from forest restoration, made possible by having biomass energy as an end market for forest by-products, is the reduction of catastrophic wildfires that have cost the federal government nearly \$3.4 billion in suppression costs alone in 2020, according to the National Interagency Fire Center. Furthermore, it is estimated that the total economic impact from wildfires in 2020 will reach between \$130 to \$150 billion in losses.

The facts on the ground in our region prove out the need for biomass as a tool to dispose of the forest products in our area. Senator McSally's legislation, S. 4603, is a critical step towards creating this policy goal and funding that will plant the seeds for biomass utilization in forest restoration efforts in Arizona and elsewhere across the West.

In Arizona, where we have only one 30 MW bioenergy plant, there is a need for an additional 90 MW of biomass energy to consume the biomass residue that will be produced from the Four Forest Restoration Initiative. Over the last several years, the bioenergy facility captured over 98 percent of the particulate matter (PM) 2.5 created by burning biomass for energy. The EPA has published that "Wildland fires now account for 40 percent of the total PM emitted in the country, making it a major source of the pollutant, which causes lung and health problems." Consider that



against all particulate matter emitted from vehicles, power generation, industrial facilities, etc. forest fire represents 40 percent of the PM emitted.

In conclusion, it is critical that the federal government upholds its responsibility to the American people in supporting the most viable and economic way to dispose of the millions of tons of small diameter trees, limbs and tops (biomass) that result from forest restoration projects across the West and more specifically in Arizona, where there are no other industry markets available, allowing for more acres to be treated each year. Without your support, we will continue to see catastrophic wildfires ravage the landscape and watersheds, turning once beautiful forests into a desolate wasteland of ash and dust. I applaud the subcommittee for holding this important hearing today and urge you to pass S. 4603 to protect our fragile forest ecosystem in the West.