

San Juan Public Lands

The San Juan Public Lands are jointly administered by the USDA Forest Service and the Bureau of Land Management in the southwest corner of Colorado. Durango, CO is the largest community in the area that encompasses some 2.5 million acres. The terrain ranges from high-desert mesas to alpine peaks and is home to the Southern Ute Tribe and the communities of Ignacio, Cortez, Dolores, Pagosa Springs and others in the heart of the San Juan Mountains.

Extreme fire risk created by long term drought conditions and dense forests led to the Missionary Ridge Complex Fire that started on June 9, 2002 just to the north of Durango. More than 70,000 acres of Gambel oak, ponderosa pine, mixed conifer, aspen, and spruce-fir forests were burnt. The result of which was the loss of key wildlife habitat, soil erosion, and aesthetics. With the risk of wildfire still present, new partnerships were forged to affect fuels reduction including the efforts of the Ponderosa Pine Forest Partnership, Public Lands Partnership, and the San Juan RC&D. Increased attention to the role of biomass utilization also emerged among the various federal agencies, Southern Ute Tribe, and in particular the Colorado State Forest Service. These partnerships and the resulting strategies represent why the San Juan Public Lands were chosen for the Joint Fire Science Program assessment. The area also represents a growing recreation and tourism-based economy in which amenity resources, retirees and second-home owners are increasingly at risk of wildfire.

The dominant biomass utilization need in the area is to find productive uses for an abundance of low-value small diameter ponderosa pine. Dense forests of Pinyon–juniper have also experienced mortality as have large sections of over-mature aspen. The challenge is that there remains limited forest industry in the area capable of utilizing the type of material removed from fuels reduction projects. Several mills have shut down in past decades. Of those remaining, the Intermountain Resources mill in Montrose, CO is the largest but is located more than 100 miles to the north traveled by mountain roads. The Stonertop Lumber mill in Dolores and Triangle Custom Cutting in Pagosa Springs are closer but are small operators with limited supply needs. A challenge for prospective businesses is the remote nature of the San Juan Mountains and the cost of transportation. Delivery of raw logs to existing mills and transport of finish products to markets in Denver and elsewhere are largely prohibitive. Agency challenges also are evident, in particular the inability to provide a consistent volume of biomass from federal forests to stimulate investments.

In the face of these challenges, the work of the Colorado State Forest Service through the Colorado Wood Utilization and Marketing Program has been a catalyst for emerging ideas and strategies. Their focus on local and regional markets, building technical expertise, and helping with business plan development has been essential. Their efforts helped to create the Colorado Forest Products program (<http://www.coloradoforestproducts.org/>) and expand the Colorado Proud™ trademark to include forest products. While agency strategies vary, the Colorado State Forest Service has been instrumental in business recruitment and retention, building technical capacity, identifying priority projects, and creating wildfire fuels reduction plans. Particular strategies and plans in the San Juan area include:



- Development of wood marketing plans to identify uses for local products that may lead to the expansion or creation of markets appropriately suited for the type of fuels reduction material coming from local forests. An example includes plans for a wood pellet manufacturing facility on the Southern Ute Indian Reservation located outside of Cortez, CO. The necessary labor force exists locally and there is an adequate amount of biomass in proximity to the planned site.

- The potential siting of a biomass energy facility in Pagosa Springs has generated considerable attention for its use of low-value ponderosa pine and focus on local energy needs. A group of private landowners and community stakeholders are working with the USDA Forest Service to conduct an analysis determining the feasibility of a small-scale energy facility (3 megawatt). Building on relationships developed in the aftermath of the Missionary Ridge Complex Fire, partners are working together to identify and address obstacles, including a willingness to adapt to agency constraints and seeking ways to procure a consistent supply of biomass.
- The expansion of low-value markets for firewood represents one of the few areas where biomass utilization has been on-going and consistent. In one ranger district, more than one million board feet of volume is utilized annually for firewood amounting to about 20 percent of biomass use for that area. Expansion of firewood markets represent progress towards fuel reduction goals where little else has been accomplished.
- In the absence of biomass markets, National Fire Plan funds are used to pay the cost of mulching small diameter trees and brush. However, there is growing concern that excessive mulch may change soil and understory plant composition, which may have unintentional impacts on forest health. Unless biomass markets materialize, mulching will likely continue for the foreseeable future.
- The Colorado State Forest Service in partnership with local businesses have solicited and received federal funding for a variety of biomass utilization needs including grants to purchase a wood dowel mill and other specialty equipment. The failure of markets to materialize and the cost of transportation have left some investments idle, which is leading to renewed efforts to develop local market opportunities.



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The general observation in the San Juan Mountain region is that the public, including local conservation groups, are supportive of efforts to achieve wildfire risk reduction and support biomass utilization. The focus on local businesses creating products for local markets is appealing to most. Yet, a persistent challenge is in developing those markets while at the same time addressing growing hazardous fuels needs that threatens communities and forest health. Long range plans exist to create energy from woody biomass and to support market research to find productive uses for the type of material removed and that would also create living-wage jobs. But the immediate concerns facing the region are resulting in most biomass being mulched to reduce hazardous fuels and low-value markets like firewood processing. For biomass utilization to effectively offset the high cost of fuels reduction, new and reliable product markets will be needed.

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