

## **NMFWRI WHITE PAPER**

### **Developing sustainable watershed restoration-based economies:**

#### **The Alamo Navajo Initiative**

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In order to both mitigate the potential for catastrophic wildfire and restore natural watershed functions, the Collaborative Forest Restoration Program (CFRP) provides funding for forest restoration and the improved use of small-diameter thinnings from restoration projects. In addition, CFRP promotes the development of restoration-based employment and businesses in the context of community involvement and collaboration. While watershed restoration projects in New Mexico are currently subsidized by the federal government through the CFRP, a *sustainable* restoration effort will depend on the development of local restoration-based economies, the success of which relies on a number of factors, including reliable and predictable availability of raw material, a trained labor force, local entrepreneurship, and production capacity and viable markets for small diameter thinnings from restoration treatments.

#### **Alamo Navajo**

Located in northwestern Socorro County, New Mexico, the Alamo Navajo Indian Reservation has a land area of over 63,000 acres and a resident population of approximately 2,000 people. While Socorro County has an overall poverty rate of approximately 32 percent, the Alamo Navajo reservation has a poverty rate of 69 percent and has been experiencing negative population growth. Per capita income in 2000 was \$4,039, and in 2005 the Alamo Band of the Navajo had an unemployment rate of 36 percent.

The Alamo Natural Resources Program (ANRP) manages the reservation's natural resources and, often in collaboration with the New Mexico Forest and Watershed Restoration Institute (NMFWRI) and other partners, provides training in natural resources-related fields, including forest restoration monitoring and safe and efficient tree harvesting. According to the Alamo Navajo Community, it is the vision of the ANRP *to train and educate an Alamo work force which will provide ecologically sound natural resource services and techniques for Alamo Reservation and other tribal, private, state, and federal lands. ANRP*

*will investigate small diameter wood products and, where economically feasible, create a small diameter woods program to increase capacity.*

As a result of these efforts, ANRP's vision, and the dedication of members of the Alamo Navajo School Board, Inc. (ANSBI), trained Alamo Navajo tree fallers have developed a reputation for skill, efficiency and hard work that is unsurpassed in the region and a core group of the Alamo Navajo Community has developed expertise in forest restoration monitoring.

### **The initiative**

In an attempt to both empower local citizens and develop a model for restoration-based economic enterprises and outreach, in the Fall, 2010, the ANSBI partnered with the NMFWRRI to accomplish the following objectives:

*Develop expertise and capacity in sustainable restoration-based forest enterprises at the Alamo Navajo Community.* This is being accomplished by expanding capacity and knowledge in wood processing at the Alamo Navajo Community, including the production of squared lumber and firewood. In addition, the partnership is facilitating the primary (in-woods) transport of felled wood at the Alamo Navajo Community and developing the capacity to realize the value-added benefits of wood processing beyond those associated with harvesting.

*Develop a model for training and outreach in watershed restoration and restoration-based economic development by the Alamo Navajo Community to other communities by developing a partnership between ANSBI and the NMFWRRI.* This includes training members of the Alamo Navajo Community by the NMFWRRI in the use of the equipment provided by the NMFWRRI and working with members of the Alamo Navajo Community to outreach to other individuals and communities

As part of this agreement, the NMFWRRI has agreed to site small-wood processing equipment, owned and managed by the NMFWRRI, with the Alamo Navajo Community, including a firewood processor, a self-loading trailer for yarding felled restoration thinnings, and a portable sawmill. Under the terms of the agreement, the Alamo Navajo Community is responsible for all operating and fixed costs associated with the equipment, including maintenance and repair, insurance, and replacement of tires. Importantly, in partnership with the NMFWRRI, beginning in 2011, the Alamo Navajo Community will plan and conduct at least two workshops per year focusing on some aspect(s) of the development of watershed restoration-based enterprises. This may include, for example:

- Primary processing of harvested material from in-woods watershed restoration activity, including industrial safety related to harvesting and processing thinnings during watershed restoration activity;
- Efficient felling and in-woods transport of thinnings from watershed restoration activity; and

- Development of entrepreneurship and business plans related to successful watershed restoration-based enterprises.

While the wood processing equipment mentioned above will remain sited with the Alamo Navajo Community, lessons learned from this initiative will be extended to other communities and individuals – ultimately contributing to the development of other watershed restoration-based economies and the feasibility and sustainability of watershed restoration efforts throughout New Mexico and the southwest US.