

INVOLVING RURAL COMMUNITIES IN FOREST MANAGEMENT: NEW MEXICO'S COLLABORATIVE FOREST RESTORATION PROGRAM



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Introduction

In the past decade, forest restoration and community wildfire protection have become increasingly important as fire suppression and other human activities have led to increased tree densities and an increased fire risk in forests throughout New Mexico and the southwestern United States. This increased fire risk comes at a time when the wildland-urban interface is steadily expanding in New Mexico, particularly in forested regions that are desired vacation destinations such as Ruidoso, Taos, Red River, and Silver City. In response, forest managers and landowners want to thin forests to reduce hazardous fuel loads and to “restore” forests to pre-European settlement conditions when tree densities were lower and fire disturbance was frequent but less severe, especially in ponderosa pine dominated forests (Covington et al. 1997).

There is widespread agreement that restoration-based fuel treatments and hazardous-fuel reduction treatments are needed throughout the southwest, although the methods and principles used to restore forests, especially in ponderosa pine dominated stands, is debated in the literature (Swetnam et al. 1999, Allen et al. 2002, Abella et al. 2006, Falk 2006). The costs of forest thinning are high in the state (\$400 – 1800/acre) and there are limited markets for the small diameter products that come off the thinned sites. Due to these high costs, the positioning of forest treatments on the landscape is seen as increasingly important (Finney 2001, Sisk et al. 2005). In addition, there is an added layer of social complexity to forest management in New Mexico, and forest managers that ignore the socio-economic factors that are important to rural communities do so at their own peril (deBuys 1985, Krahl and Henderson 1998).

Collaborative natural resource-based efforts in New Mexico

Over the past several years, there has been a growing spirit of collaboration among a diverse group of stakeholders in New Mexico concerning a wide variety of natural resource-based issues. Although litigation and divergent opinions over forest and range management issues still exist, there is a growing sense that collaborative efforts are more useful in solving the state's pressing forest, range, and watershed issues. Examples of this collaborative spirit include the development of the New Mexico Forest and Watershed Health Plan, the New Mexico Biomass Task Force, the Quivira Coalition, and the Forest Service's (FS) Collaborative Forest Restoration Program.

From 2003-2006, a number of New Mexico-based state, federal, non-governmental, tribal, and private stakeholders held meetings and Town Halls across the state to develop the state's Forest and Watershed Health Plan and to guide the formation of the Forest and Watershed Restoration Institute (NMFWRI), one of three similar Institute's in the US that are collectively called the Southwestern Ecological Restoration Institutes. In 2005 and 2006, the New Mexico Biomass Task

Force, a team of 15 individuals from various land management agencies, environmental groups, and business interests in the state convened to identify key forest restoration challenges and to develop a mutually-agreed upon set of principles to be followed by land managers as hazardous fuel reduction projects and forest restoration projects proceed across the state. The Quivira Coalition, founded in 1997, is a group of ranchers, environmentalists, and range advocates that promote “common sense solutions” to grazing issues. The Quivira Coalition addresses these range management issues through a well attended annual conference, outreach and education programs, the management of a grassbank, and by maintaining a pool of consultants for ranchers interested in sustainable ranch management.

The Forest Service’s Collaborative Forest Restoration Program

With the passage of the Community Forest Restoration Act of 2000 (Title VI, Public Law 106-393; the “Act”), the Secretary of Agriculture was directed to establish a Collaborative Forest Restoration Program (CFRP) in New Mexico to provide cost-share grants to stakeholders for forest restoration projects on public land. The CFRP issues an annual Request for Proposals (RFP), inviting grant applicants to bring together diverse and balanced groups of stakeholders to design, implement, and monitor projects that: 1) reduce the threat of wildfire, 2) restore ecosystem health, 3) re-establish historic fire regimes, 4) replant trees in deforested areas, 5) preserve old and large trees, 6) increase the utilization of small diameter trees, and 7) create forest-related local employment. The Act limits projects to four years, and authorizes appropriations of up to \$5 million annually. The legislation also directed the Secretary of Agriculture to convene a technical advisory panel to evaluate proposals submitted each year to the CFRP and make funding recommendations to the Forest Service.

The Initial Years

The first set of CFRP grant proposals were received in the spring of 2001; in that first year, 19 of 46 applications were funded. Grant recipients included tribal and state government entities, private businesses, and non-governmental organizations. Over \$4 million in grants were distributed and almost 4000 acres of forest were scheduled to be thinned.

In the years that followed, an additional 96 projects were funded across the state (Figure 1). Project reporting indicates that approximately 61% of all acres treated have been in mixed conifer or ponderosa pine systems, 22% in piñon-juniper, and 17% in lowland riparian systems (bosque) or other systems (Derr et al. 2008). Over the first 8 years of the program, grants were distributed to a variety of entities (Table 1).

Table 1. Distribution of CFRP grants, 2001 - 2008

Businesses	NGOs	Local Gov’t	Schools/University	State Gov’t	Tribes
33	33	6	7	8	28

CFRP Projects 2001 - 2008

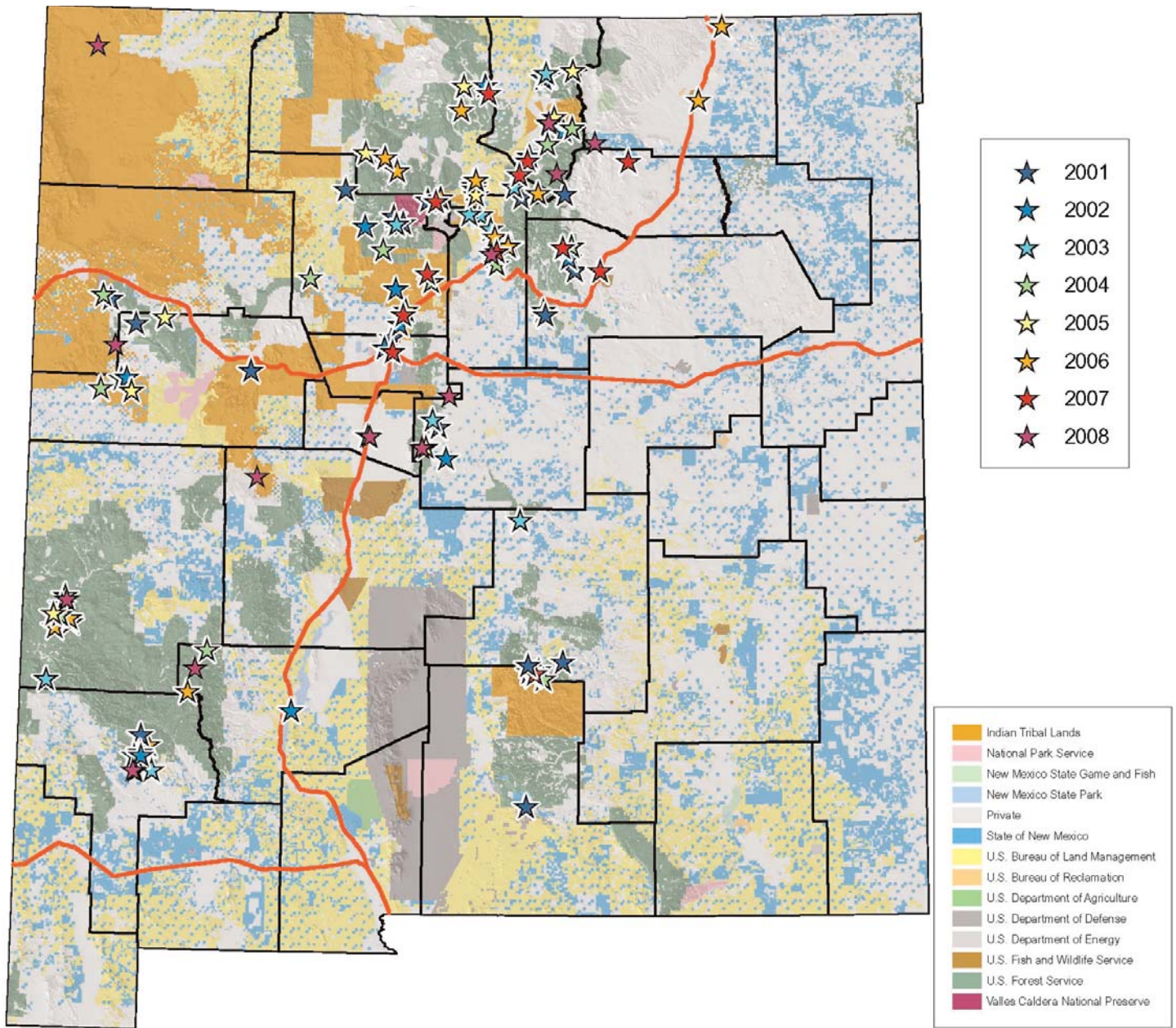


Figure 1. The spatial distribution of CFRP projects from 2001 – 2008. The major highway running north-south is I-25. The highway running east-west across the central portion of the state is I-40.

The CFRP National Assessment

In 2005, the CFRP program underwent an extensive multi-party review, led by American Forests, Fort Lewis College, and the Pinchot Institute. The objective of this assessment was to examine the efforts by the CFRP program staff and coordinators to develop and implement the program and to determine if they were successful in achieving the objectives outlined within the authorizing legislation. In this report, completed after four years of funding projects, the assessment team concluded that the CFRP is an effective program and, in particular, gave positive reviews to the grant review process and the Technical Advisory Panel (TAP).

As previously mentioned, the grant program is initiated each year with a RFP that the FS advertises widely through the CFRP website, email and mail notifications, and CFRP regional coordinators located in each of New Mexico's national forests. The Act directs grant recipients to attend an annual CFRP workshop with other stakeholders, "for the purpose of discussing the cooperative forest restoration program and projects". The workshop is an effective networking opportunity that facilitates the creation of new partnerships, new project ideas, and innovative joint problem solving solutions to existing challenges. It is also an excellent venue for groups interested in writing a new proposal because past grant recipients attend the conference in large numbers and give progress reports and summaries of their projects throughout the three day meeting. In addition, the CFRP coordinators organize several workshops at this meeting that cover the essentials of grant writing, field site monitoring protocols, and other items important to the proposal development and review process.

As a Federal Advisory Committee, the TAP is central to the CFRP and guides the annual review of competitive grant proposals. The TAP is comprised of 12-15 members and criteria for membership in the group include a commitment to review proposals and attend the required meetings, familiarity with New Mexico forest management issues, an understanding of the diverse mix of cultures and communities in the state, and a demonstrated skill in working in a team setting. The TAP meets once a year to discuss and review 30-40 proposals, and these sessions are open Federal Advisory Committee meetings that grant applicants are invited to attend. At the end of their week-long meeting, the TAP develops a consensus-based set of proposals that they recommend for funding. Based on comments from grant recipients and former members of the TAP, the national assessment team deemed the TAP not just as an effective grant review team, but an effective model for building consensus, maintaining accountability, and sustaining a statewide collaborative effort.

The assessment team outlined a series of other lessons and recommendations, and these can be found in detail on the FS's Region 3 CFRP website (www.fs.fed.us/r3/spf/cfrp/). Of particular note, the team suggested that CFRP projects be linked to larger-scale watershed management efforts or collaborative planning projects including Community Wildfire Protection Plans. Finally, the assessment team encouraged continued outreach to New Mexico's Hispanic Land-Grant and Native American communities to promote capacity building and economic development through the implementation of forest thinning and restoration-based hazardous fuel treatments.

CFRP Successes

In the first seven years since its implementation, the CFRP has enjoyed several successes. For example, a diverse set of communities across New Mexico have received support from the program (many times after resubmissions of proposals), and many projects have created seasonal and full-time jobs in rural areas. Several projects have provided needy communities with an accessible supply of firewood, which is increasingly important in regions where home heating with gas is expensive. In addition, in some areas, the CFRP has stimulated the growth of a forest products industry that utilizes small diameter wood (Figures 2, 3).



Figure 2. CFRP grantee Gordon West and former Gila National Forest CFRP coordinator Kim Hunter discuss the use of a log peeler in Silver City, New Mexico. These ponderosa pine logs are peeled and sold as vigas (ceiling poles) that are popular in southwestern construction.

It is widely recognized that the CFRP has been a very inclusive and unifying process. For example, former adversaries in the environmental and land management communities have served together on the TAP. In two cases, litigious environmental groups have received grants for forest thinning and road reclamation projects. In addition, many CFRP grantees have included junior high and high school students in their monitoring programs, and these efforts have helped community members outside of the core project group to understand the utility of the project in their region (Figure 4).

All CFRP grant recipients are required to develop a multi-party monitoring plan, and a recommended 5 – 20% of each proposed budget is allocated for monitoring project activities. In 2003, the CFRP funded a technical assistance program that was designed to help grantees evaluate the effectiveness of the treatments they applied on the landscape (e.g., thinnings). This technical assistance was requested by the grantees because, in many cases, there was confusion over how to develop and implement a multi-party forest monitoring program. From 2003 – 2006, a monitoring technical assistance team developed a series of monitoring protocols and workbooks. These guidelines were shortened into a single document in 2007 (Ecological Restoration Institute 2007). The CFRP monitoring assistance team continues to provide guidance to grantees and grant applicants on the design and implementation of multi-party monitoring programs and the resulting assessment reports that are required upon project completion.

Challenges

Capturing the true short- and long-term socio-economic effects of CFRP grants has been a key challenge of the program. Socio-economic monitoring techniques can be more complicated and difficult to implement than biological monitoring, and measuring the true socio-economic “multiplier effects” of CFRP projects would exceed the capacity and resources of most CFRP grantees.

Collaboration requires significant commitment and investment from all stakeholders, including land management agencies. Approximately half of all CFRP projects are conducted on National Forest System (NFS) lands. The planning and implementation of CFRP projects on NFS lands requires considerable resource commitment (in terms of both time and money) from the local planning unit (Ranger District). Given current funding limitations and the increasing emphasis on performance measures, these resource demands can be a disincentive for District staffs to collaborate on CFRP projects. As the CFRP has matured, the program has increased administrative support for Districts involved in project planning and implementation and has asked that grantees take several measures to



Figure 4. Students from Ruidoso High School learn about field data collection and monitoring for a CFRP project in the Lincoln National Forest.



Figure 3. CFRP grantee David Old at his flooring plant that utilizes small diameter Douglas-fir from thinnings in the Las Vegas, New Mexico region.

reduce the impacts of CFRP projects on NFS staffs (e.g., initiate proposal planning efforts earlier and include NEPA planning costs in the grant budget and work plan, etc.). This direction complements other efforts by the Forest Service to offset the “hidden costs” of collaboration, including the adoption of policy changes that allow agency personnel to report accomplishments that result from partnerships.

Another issue that was identified in the 2005 review of the CFRP was the need to integrate the forest treatments that are integral to the program into larger-scale watershed planning. This applica-

tion of treatments on a larger landscape-scale is not just an issue for the CFRP, but for all land management entities in the state. Furthermore, because of its unique authority to fund restoration treatments that are on any combination of federal, tribal, state, county or municipal land, the CFRP

can potentially play a lead role in efforts to overcome institutional barriers to future cross-jurisdictional projects.

Although substantial forest acreage is located on private lands in New Mexico, the CFRP does not have a mandate for project implementation outside of public (federal, state, municipal and tribal) lands. This limitation emphasizes the need for future CFRP projects to be creatively aligned with Community Wildfire Protection Plans or restoration projects on private or other public lands supervised by New Mexico State Forestry or the Natural Resource Conservation Service. As previously mentioned, future project areas should be chosen with consideration to plans for the entire watershed.

Future Direction of the Program

The CFRP is popular with a wide variety of stakeholders across New Mexico. There have been attempts to expand the program to Arizona (e.g., H.R. 3590), a state which has similar issues with regard to community development, forest restoration, and hazardous fuel reductions. In addition, the FS is exploring ways to incorporate CFRP projects into landscape-scale and cross-jurisdictional restoration work across New Mexico.

During their 2007 session, the Colorado General Assembly approved HB07-1130 creating the Colorado Community Forest Restoration (CFR) grant program. This five-year cost-share grant program to promote community-based forest restoration projects mirrors the CFRP in both its objectives and the structure of its review Panel. The Colorado General Assembly allocated \$1 million in state funds to implement the first year of this program.

The CFRP has its own website that is used by grantees for information related to the program, but there is a stated need by stakeholders for a place that will serve as a repository for information related to past CFRP projects, forest prescriptions, and monitoring protocols across New Mexico. This call for a clearinghouse for up-to-date information related to land management is another potential linkage between the CFRP and other state and federal programs such as the NMFWRI and the State Office for Forest and Watershed Health.

Finally, the CFRP staff is developing a more consistent multiparty monitoring process, in an effort to capture the programmatic effects of CFRP across all its projects. The coordinating role for the multiparty monitoring technical assistance will be transferred to the NMFWRI, which is playing a larger role in the monitoring community across the state. In addition, the program has a mandate to develop a long-term monitoring plan for its projects, and the selection of projects to be monitored over the long-term (15 years) as well as the protocols to be followed will be addressed in the near future. The ability of the CFRP to evaluate the success of the program's forest treatments and socio-economic effects will be critical to the continuation or possible expansion of the program in the coming years.

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New Mexico Forest and Watershed Restoration Institute

The New Mexico Forest and Watershed Restoration Institute at New Mexico Highlands University is dedicated to providing state-of-the-art information about forest and watershed restoration to the public, federal and state agencies, tribes, and private landowners in New Mexico. To accomplish this, the Institute collaborates with citizen stakeholders, academic institutions, NGOs, and professional natural resources managers to establish a consensus concerning prescriptions and monitoring protocols for use in the restoration of forests and watersheds in an ecologically, socially, and economically sound manner. Through research and collaboration, the Institute promotes ecological restoration and forest management efforts in ways that 1) will keep New Mexican homes and property safe from wildfire, 2) will lead to a more efficient recharge of New Mexican watersheds, and 3) will provide local communities with employment and educational opportunities.