1.0 INTRODUCTION

1.1 Overview of the CFRP

With over a century of fire suppression, logging and livestock grazing within many forests of New Mexico, the ecological structure and function of these lands have been considerably altered from self-sustaining ecosystems. These altered conditions are most evident in certain forest types, such as ponderosa pine, warm-dry mixed confer, and pinyon-juniper. At present, many forests in the state contain an unnaturally high number of small diameter trees that are subject to large, high intensity wildfires that can endanger human lives, livelihoods, and jeopardize ecological integrity and biological services.

In partial response to these conditions and a desire to create and maintain healthy, productive watersheds, Congress passed the Community Forest Restoration Act of 2000 (Title VI, Public Law 106-393). The law authorized the establishment of the Collaborative Forest Restoration Program (CFRP) in New Mexico to provide cost-share grants to stakeholders for forest restoration projects on public land designed through a collaborative process.

Specifically stated purposes of this legislation include:

- To promote healthy watersheds and reduce the threat of large, high-intensity wildfires, insect infestation, and disease in the forests of New Mexico;
- To improve forest ecosystem functions and enhance plant and wildlife biodiversity;
- To improve communication and joint problem-solving among individuals and groups who are interested in restoring the diversity and productivity of forested watersheds in New Mexico;
- To improve the use of, or added value of, small diameter trees;
- To encourage sustainable communities and forests through collaborative partnerships;
- To provide a venue to develop, demonstrate, and evaluate ecologically sound forest restoration techniques.

To read the Act in full, please visit: www.fs.fed.us/r3/spf/cfrp/pdf/publaw106.pdf

1.2 Structure of the Program

Within its legislative authority, the Act provides Federal appropriations of up to \$5 million annually towards cost share grants to stakeholders for experimental forest restoration projects designed through a collaborative process. These projects may be entirely on, or any combination of, Federal, Tribal, State, County or municipal forest lands and must include a diverse and balanced group of stakeholders in their design and implementation. Each project must also address specific restoration objectives, including: wildfire threat reduction; reestablishment of historic fire regimes; reforestation; preservation of old and large trees; and increased utilization of small diameter trees. Projects must also include a multiparty assessment, and creating local forest-related employment or training opportunities.

To assist with the evaluation of proposals and provide recommendations, the Act also establishes a Technical Advisory Panel (TAP). This panel is comprised of 12-15 members and includes a State Natural Resources official from New Mexico, two federal land management agencies, a tribal or pueblo representative, at least two independent scientists, and equal representation from conservation, local community, and commodity interests.

After the fifth round of grant awards, a total of 75 projects were authorized within the CFRP for total of more than \$22 million in federal cost-share grants (Appendix A).

1.3 Purpose of this Report

This report sets out to assess efforts by the USDA Forest Service to develop and implement the CFRP and pursue the purposes and objectives outlined within the Act. Specifically, this report responds directly to provisions of the authorizing Act that require a "multiparty monitoring and evaluation process in order to assess the cumulative accomplishments or adverse impacts of the CFRP" (Sec. 607) and a report to Congress within 5-years on "whether, and to what extent, the projects funded pursuant to this title are meeting the purposes of the CFRP" (Sec. 608). This report also aims to identify lessons and challenges associated with the CFRP and offers recommendations for improved implementation of the program in New Mexico and perhaps in other states.

2.0 METHODS

2.1 Development of a National Assessment Team

In 2005, the USDA Forest Service awarded a grant to American Forests, in partnership with the National Network of Forest Practitioners and the U.S. Institute for Environmental Conflict Resolution, to prepare a multiparty assessment and 5-year report on the Collaborative Forest Restoration Program. American Forests assembled a National Collaborative Assessment Team comprised of members with diverse interest and expertise in issues related to collaborative forest restoration projects (Appendix B).

These members convened in Santa Fe (in conjunction with the CFRP annual meeting in January 2005) to determine processes for the review, the necessary information or materials for assessment, and specific roles for each team member. Further interaction of the National Assessment Team took place via facilitated conference calls and/or email exchanges.

2.2 Structure of the Review

During its initial meeting in January 2005, the National Assessment Team decided to take an innovative approach and base its review process on a structure presented in the CFRP multiparty monitoring guidelines for projects. These project guidelines were revised to focus on monitoring, or assessing, the CFRP with respect to implementation, effectiveness, and validation. From a program perspective, these three different monitoring approaches can be described as follows:

- *Implementation monitoring:* This kind of assessment asks, "Did we do what we said we would do?" Monitoring the CFRP through such an approach might involve questions such as: Did the Forest Service establish and implement a grants program as required by the Act? Did the agency establish program components and structures to facilitate success? Did the resulting projects meet the requirements and objectives outlined in the Act?
- Effectiveness monitoring: This kind of assessment asks, "Did the program work?" and examines the degree to which the program achieved the purposes identified within the Act. Monitoring through this approach might ask questions such as: To what degree did the program—or the projects through which it is being implemented—reduce the number of small-diameter trees and help improve ecosystem functions or reduce the threat of catastrophic wildfire? Did the program improve the use of, or add value to, small-diameter trees?
- Validation monitoring: This kind of assessment explores those assumptions that form the program's foundation. Monitoring through this approach aims to evaluate the merit or overall potential of the program with questions such as: How well did the principles and strategies of the CFRP work as a model for pursuing the Act's broad purposes? How does this CFRP model for encouraging collaboration and forest restoration projects compare with others?

2.3 Information Sources

Information for this assessment includes a variety of compiled data, including: reports from the annual CFRP workshops and TAP meetings, information collected directly through the CFRP multiparty assessment process, interviews with various CFRP participants (including members of the TAP, the Forest Service program manager, Forest level CFRP coordinators¹, and CFRP grantees), and quantitative information furnished by the Forest Service and/or related partners.

3.0 IMPLEMENTATION: A Review and Evaluation

The purpose of this first review section is to examine how well the CFRP put into place key program components and mechanisms outlined in the Act. The review focuses on legislative requirements and other functions necessary for the implementation of a grants program and meeting the objectives of the Act. Key program requirements include: establishing a grants program for collaborative forest restoration projects and a Technical Advisory Panel to help evaluate the grant proposals. Key project requirements include: addressing program objectives, engaging a diverse group of stakeholders, incorporating scientific forest restoration information, and developing/implementing a multiparty assessment. The National Assessment Team identified additional items for this review section, including: program administration and support within the Forest Service, technical assistance being provided through the program, mechanisms for communication and learning, and linkages between CFRP and other major forest policy initiatives.

A Multiparty Assessment of NM CFRP

¹ During preparation of this report, these positions were referred to as Rural Community Assistance (RCA) Coordinators or CFRP Coordinators. For simplicity, they will be referred to as CFRP Coordinators.

3.1 Grants Program

At the heart of the CFRP lies a robust grants program that seeks to encourage and support critical forest restoration work in innovative and collaborative ways. The program responds to specific language authorizing the Forest Service to establish a program "to provide cost-share grants to stakeholders for experimental forest restoration projects that are designed through a collaborative process." As part of its framework, the CFRP has developed specific structures and mechanisms to encourage diverse participation, facilitate proposal development, provide for a fair proposal review and selection process, and facilitate grant implementation and reporting. The Technical Advisory Panel, which plays a critical role in reviewing proposals and providing recommendations for the program, will be discussed in the next section.

A number of CFRP participants have concluded that the grants process requires a lot of initial work, but most describe it as a worthwhile investment of their time and energy. Even those whose proposals were rejected felt the process was fair, and as such, often opted to revise and resubmit their proposals for future consideration. Some, however, were frustrated by not receiving a grant and questioned whether the grant process was becoming biased toward large, high capacity organizations.

A grant-writing consultant with considerable experience described CFRP as one of the most challenging, but fun, grants programs he had ever worked on. It has an incredibly diverse set of criteria to respond to (e.g., pre- and post- treatment conditions) and the requirement to involve a diverse and balanced group of stakeholders. It also requires a youth component, technical descriptions of proposed treatments, protecting old and large trees, multiparty monitoring—an extensive list to respond to, but making for balanced, integrated projects.

A Forest Service grants administrator with considerable experience both in and outside the agency noted that the CFRP is one of the best grants programs in which she has participated:

"Overall, for the Forest Service, the CFRP is a more exciting and positive program than other grant programs in which I've been involved. The program is accomplishing good work on the ground and within the communities. And the Forest Service role in providing the grants and being a facilitator of the process is a positive one rather than one that involves a lot of conflict."

3.1.1 The Request For Proposals (RFP) process

An RFP is the basic process by which the CFRP solicits grant applications. As noted above, the grants program can be challenging, but the Forest Service has attempted to develop an RFP that is broadly accessible.² Interview comments from various participants suggest that the RFP process has helped to make the grants program open to a wide range of applicants and that efforts have been made to respond to issues and questions as they arise.

Each year at its meetings, the Technical Advisory Panel (TAP) (described fully in Section 3.2) reviews incoming RFP materials and makes recommendations on ways in which the grants application process can be made more accessible, encourage proposals that meet the program's

² The guidelines and requirements for responding to current RFPs are found on the program's website (www.fs.fed.us/r3/spf/cfrp/2005program/index.shmtl#rfp).

objectives, and attract the desired types of applicants. The following recommendations from the TAP reflect those efforts to simplify the process, clarify requirements, and encourage attention to key considerations for proposals:

- Projects intended to build local capacity must demonstrate that the local community has been involved in the design of the project and will be involved in its implementation and monitoring. (2002)
- Proposals should clearly identify area to be treated, if the area is NEPA ready, and the amount
 of acres to be treated. A letter from the land management agency should specifically identify
 how or if the NEPA documentation will be completed. (2002)
- The RFP should emphasize non-federal match and total budget requirements. The total amount of project must include a 20% non-federal match. (2002)
- The RFP should indicate to the applicants that the collaboration requirements are significant. Collaboration should precede the application process. (2003)
- The RFP should make clear to potential proponents that the Forest Service will review their performance and final multiparty assessment results. (2003)
- Add to the RFP appendices 'In addition the proponents must include along with their proposal responses from tribes or documentation of conversations with potentially affected tribes.' (2003)
- The RFP should emphasize the desired use of low impact restoration technology and techniques (i.e. such as minimizing soil disturbance). (2003)
- For those applicants with current or past grants awarded, a letter from the appropriate land management agency needs to be included with a statement on progress toward attaining objectives of the previous award. (2004)

3.1.2 Project Awards

Table 3.1 shows that CFRP has received 188 requests during the program's first five years (2001-2005) and 75 grants have been awarded. The number of proposals submitted each year has remained relatively stable, but the quality of the proposals has improved through time, making the review and selection process increasingly challenging for the TAP. The 2005 TAP commented on the increased complexity and diversity of proposals. Earlier concerns had been expressed about certain types of proposals (e.g., small-scale thinning in WUIs) gaining too much prominence in the program. However, TAP members did not express concern about a limited applicant pool or "inner circle" of grantees. One TAP member indicated that the review process will become more and more challenging as "the number of proposals continues to increase due to repeat applicants and the diversity of proposals."

Table 3.1 Collaborative Forest Restoration Program (2001 - 2005)

Year	Proposals Submitted	Total Amount Requested	Grants Awarded	Total Funding
2001	46	\$13 million	19	\$4,704,323
2002	27	\$15 million	15	\$4,575,000

Table 3.1 Collaborative Forest Restoration Program (2001 - 2005)

Year	Proposals Submitted	Total Amount Requested	Grants Awarded	Total Funding
2003	40	\$12.5 million	14	\$4,572,167
2004	36	\$10.9 million	14	\$4,100,772
2005	39	\$11.1 million	13	\$4,131,390
	188	Over \$62.5 million	75	\$22,083,652

3.1.2 Flexibility of grants

Designed to encourage experimental forest restoration projects, the CFRP began with an approach that promoted learning and adaptation. Annual reports from TAP meetings and CFRP workshops highlight the open discussions of concerns and recommendations for improving the process for administrators and grantees. Similarly, the grants administration process by the Forest Service has adopted a great deal of flexibility to deal with these types of multiyear grants. One Forest Service staff person working on CFRP grants administration commented:

"The proposal review process is flexible and accommodating to unique approaches. With the diverse make-up of the TAP, unique approaches are fairly evaluated. Other grant review processes are often more rigid with their screening and criteria. Again, the transparency and consensus-based approach[within the CFRP] allows for this flexibility."

The CFRP has provided opportunity for project grantees to modify their proposals as projects are implemented. CFRP participants recognize the importance of this flexibility, especially as early grant recipients try to accomplish program objectives without a clear understanding of how to achieve them. Some first and second-round grant recipients did not have a clear understanding of key requirements, such as collaboration and multi-party monitoring. The adaptable approach of the CFRP has allowed projects to propose innovative activities and learn how much they can or cannot accomplish given local capacities, conditions, and time constraints.

Whereas this degree of flexibility with the grants and reporting requirements has raised some question among TAP members and others, there has not been much concern expressed about the accountability of the CFRP. Members of the TAP and others interviewed perceived the program as accountable and as a good investment of federal funds.

3.2 The Technical Advisory Panel (TAP)

The TAP is central to the program; it both implements and guides the CFRP grant review process. Because it is such a unique and important component of the CFRP, we are discussing it in a section separate but related to the Grants Program section.

Many participants see the grant review process, as implemented by the TAP, as a critical function of CFRP. The Program Manager recognizes this process as "the competitive process" for the

CFRP, comparing it to the competitive process that takes place in the Forest Service's contracting process.

"The grant review process is the competitive process, implying that it will result in the best projects to meet the program's objectives, ensuring collaboration, experimenting with restoration treatments, and stimulating local capacity to utilize the small materials."

After two years on the TAP, a state forestry representative commented that "if a project proposal can withstand the type of review it gets through the TAP, it has to be a good project!"

3.2.1 TAP Structure and Purpose

The structure and purpose of the TAP are fully described within the authorizing Act for the CFRP. Pursuant to the Act, the Secretary of Agriculture chartered the TAP as a Federal Advisory Committee on July 12, 2001 (CFR 1042-138). The purpose of the TAP described in the Charter is to evaluate grant proposals submitted to the CFRP and provide recommendations to the Forest Service Southwestern Regional Forester on which proposals best meet the program objectives. The Charter authorizes 2-year TAP appointments by the Regional Forester, with possibility of reappointments. A public outreach process is used to solicit TAP applicants, including posting on the CFRP website. In addition to the categories identified within the law, specific criteria for TAP selection "will include but not be limited to: long-time familiarity with forest management issues in New Mexico; past experience working with the government planning process; knowledge and understanding of the various cultures and communities in New Mexico; ability to actively participate in diverse team settings; demonstrated skill in working toward mutually beneficial solutions to complex issues; respect and credibility in local communities; and commitment to attending panel meetings."

The TAP has maintained 14 members over the five years of the CFRP, with some members serving multiple two-year terms. The diverse representation of expertise and experience called for in the Act has been maintained on the panel, and is frequently mentioned by its members as a unique strength of the CFRP. Panel members noted that such diversity improves the quality of discussions and results in better decisions:

"The diversity of the group brings different points of view that help us all understand the project proposals better. When you have this type of diversity and expertise, people learn to recognize and respect each others' perspectives, and we operate as equals around the table."

"The 'make-up' of the TAP also represents a well-qualified group to review proposals. The mix of expertise and experience on the TAP is better for reviewing real-world proposals [when compared to] the types of experts/academics who often sit on review panels for other grant processes."

The diverse membership of the TAP and the ground-rules for their meetings lead to a frank discussion of issues related to the proposals. The open, consensus-based process tends to focus on areas of agreement about restoration collaboration and funding decisions, rather than on differences. As one panel member stated: "This is a safe space to talk about strengths and weaknesses of proposals, even with proposal proponents in the room. Having prospective grantees in the room, in fact, has been helpful to deepen procedural and technical understanding

of the proposals and of the CFRP, although it has at times been frustrating to these parties if ultimately their proposals go un-funded."

An experienced grant-writing consultant noted the uniqueness of the TAP, as related to its structure and process. While most grant review panels, to his experience, have 4-6 members, the TAP has 14 members with diverse and balanced representation.

"Selection processes are often seen as objective, but they are dependent on the backgrounds and perspectives of panel members. The balance and diversity of the members is very important. The CFRP's selection process is one of the best I've ever seen . . . if not the best."

Panel members generally choose to participate in the TAP because they are highly interested in the CFRP and its approach to forest restoration through collaboration. Despite the significant commitment of time, panel members see their participation on the TAP as worthwhile, particularly as a means through which they can also learn:

"Now that I've been part of the TAP and [have] attended the CFRP annual meetings, I see CFRP as the pinnacle of adaptive management, and the TAP as the central discussion where the process is honed."

Concerns have been raised about the appropriateness of allowing organizations to apply for CFRP grants when a Panel member is a member of that organization. Several TAP members noted the importance of having individuals on the Panel who were actually involved in projects in order to fully understand and help strengthen the program. To deal directly with concerns about potential "conflicts of interest," the TAP adopted bylaws requiring any TAP member to leave the meeting room if that member "or any member of their immediate family, or organization employing them, will benefit directly or financially, from a CFRP grant proposal being evaluated, or if a Panel Member was directly involved in the development of the proposal, that Panel member shall leave the meeting room during the discussion of that proposal and recuse themselves from the Panel's decision to avoid a conflict of interest."

3.2.2 TAP Process

The TAP operates through an open, public process for proposal evaulation, conducting annual reviews of nearly 30-40 proposals each year. The TAP is also subject to the Federal Advisory Committee Act (FACA), the Freedom of Information Act (FOIA), and the Government in the Sunshine Act (GISA). Meeting procedures state that:

"All documents, reports, or other materials prepared by, or for, the Panel constitute official government records and must be maintained according the General Services Administration (GSA) policies and procedures. Minutes of open meetings will be available to the public upon request."

"All meetings of the Panel will be open to the public. All materials brought before or presented to the Panel will be available to the public for review or copying at the time of the scheduled meeting. Members of the public may attend any meeting or portion of a meeting and, at the determination of the Chairman, offer oral comment at such meeting."

The TAP meeting is a major commitment of time for panel members and the process of reviewing proposals is intense, even grueling at times. One TAP member noted that the open process is tough on panel members, but it is good for proposal proponents who can hear and respond to the TAP critiques. Several panel members recognized that as the number and quality of proposals become greater, the time needed for review by the TAP will become challenging. What alternative processes might be used is unclear, but the TAP has functioned by adapting to the challenges it faces.

TAP members are generally enthusiastic about the process through which they review proposals. Their comments often reflect on the openness of the process, the transparency of the information, consensus-based decision-making, and the facilitation of the meetings. The TAP also conducts a review of its own processes and criteria for evaluating proposals at each meeting—reflecting upon the purpose of the CFRP, and the TAP charter and ground-rules as it moves forward.

A number of panel members commented on how the TAP process differs from other grant processes:

- o For other grant review panels, the work is often done before the panel meeting, through proposal review by individual panel members. The TAP process involves intense proposal review by the whole panel during its meeting, as well as transparent, consensus-based processes, often resulting in better decisions.
- o Many other grant-making processes (e.g., Small Business Administration, EPA) are closed—as an applicant you can't understand how decisions are made and comments on the proposal aren't necessarily helpful. In fact, the comments sometimes raise questions about the qualifications of the reviewers to understand the project in a real setting.
- The economic development aspect of the CFRP—compared to traditional scientific or research grants—requires that the review process be more personal and emotional, especially when grant proponents are at the meeting.
- The TAP process provides "incentives for collaboration" even among its members as they
 make decisions to move projects forward, similar to the way CFRP "incentivizes"
 collaboration at the project level.
- Everything and anything can be put on the table for discussion during at TAP review, and, because the process is open, members face issues with a sense of ethical questioning keeping each other honest—but also pragmatism.

3.2.3 Annual TAP Meetings—opportunity for learning

While one of the primary functions of the TAP is to review proposals for funding, the facilitated discussions that occur during deliberations have become an excellent occasion for mutual learning about forest restoration. One participant characterized the annual TAP meetings as a "graduate course in forest restoration and ecology," and commented:

"The information being discussed by leading academics, practitioners, and interests was very educational, and the open, collaborative discussion involving diverse perspectives was unique."

This opportunity for discussion and learning is often mentioned by CFRP participants and TAP members as a benefit of the program.

"The CFRP, and the discussions at TAP [meetings], are helpful in identifying issues that get in the way of project implementation and finding ways to deal with them. Issues like the merchantability question related to small diameter materials should be dealt with through collaboration . . . getting people who want to overcome the barriers together to find options."

"The TAP is the incubator . . . it has taken on a lead role for ideas on collaboration and restoration."

"An important role of [the] TAP is to help the CFRP program evolve through the agreements reached during the panel's discussions. The panel, for example, had to invent a process to implement its own consensus-based decision process, and it has had to reach agreement on issues like the meaning of restoration and collaboration in different project contexts. In another sense, the TAP sets the direction for learning based on which projects get selected and what gets tested in the projects."

Sample issues discussed by TAP during evolution of CFRP:

<u>Size of projects:</u> Many of the initially funded projects involved treatment of small areas (e.g., 10-15 acres). The TAP was concerned that the program would have such a small impact that it would be seen as interesting, but irrelevant or ineffective in terms of significant achievements in restoration. Over the years, however, the treatment areas have increased in size. By 2005, some projects involve potentially treating more than 1,000 acres.

<u>Scale:</u> Early on, the TAP had concerns about the distribution of projects across the landscape, particularly the disconnected nature of these projects. As the program evolved, capacity is being built in certain areas, by projects expanding through resubmissions as well as leveraging other resources and by projects beginning to partner or coordinate with other project sponsors. The TAP is now considering criteria to encourage proposals to become part of larger-scale initiatives, by connecting to landscape-scale planning processes such as a Community Wildfire Protection Plan (CWPP) or other ecological-scale plans.

Partners: The TAP had an early concern about partners becoming saturated or over-tasked in the state. The program encourages collaboration among diverse and balanced stakeholders in the planning, development, implementation, and monitoring of forest restoration projects by making it an eligibility requirement for the grant review process. The proposal and letters of commitment should demonstrate the commitment to an active role for partners in the design, implementation, and monitoring. Unfortunately, many proposals early in the process did not solicit involvement from key stakeholders such as environmental groups, tribes and pueblos, communal land grants and communities. Due to guidance from the TAP, the number of involved partners has continued to grow and become more diverse over time. Early emphasis on ensuring outreach to/collaboration with tribes has led to success, and there has been increasing emphasis on outreach to environmental groups, with success, such as a recent proposal from Forest Guardians.

<u>Diversity of uses:</u> The TAP also had early concern about projects becoming too narrowly focused on one type of activity. Forest restoration should address a variety of ecosystem functions, structures, and species composition including the reduction of non-native species populations and reestablishing natural fire regimes. Thinning alone does not meet these objectives. As a result, the TAP issued guidance that future CFRP proposals focus on presenting forest restoration projects that more closely reflect these broader objectives. Over time and with this guidance, the TAP has begun to see a greater number of proposals that are broad in their range of activities.

TAP meetings, as well as CFRP Annual Workshops, are currently facilitated by outside organizations specializing in meeting facilitation (e.g., Institute for Environmental Conflict Resolution, Meridian Institute). This consistent, external facilitation of the meetings and workshops contributes significantly to the learning process, as these professionals help to manage discussions and write summarizing reports for future dissemination.

"The TAP became an educational forum on process—a messy, innovative, slow, grueling process through which the members develop a bond and respect for each other, and they produce an incredible amount of good work... [it] represents what [should be seen] in community forestry, or a collaborative restoration program."

In general, the participation of these external facilitators since 2002 has resulted in:

- Consistent planning and documentation of the annual workshops and TAP meetings, with an emphasis on learning and adaptation.
- Strengthened perception of openness and fairness in the program, which is perhaps enhanced by having multiple organizations involved with facilitation.

3.3 Program Coordination and Administration

3.3.1 Program Management

The CFRP has received strong management support from the Southwestern Regional Forester. This has provided CFRP the opportunity to develop and evolve as a demonstration program.

Management challenges within the agency, such as gaining broad support from NFS line officers and integrating with other agency programs, are noted in other sections of this report.

Many CFRP participants commented on the open, facilitative, and adaptive management style of the program. The Program Manager has encouraged this style of leadership and these principles have been exhibited and demonstrated through annual TAP meetings.

A Regional Forest Service leader commented on the important skills of the CFRP Program Manager "for keeping the process open, maintaining the integrity of the program, and letting the program evolve." In particular, these skills become apparent during the annual TAP meeting. TAP members refer to the "fair but deliberate" facilitation of the meeting, with the Program Manager stepping into the process when necessary, but then stepping out of the way to show respect for the panel's comments and direction. TAP members have willingly adopted these principles, finding the open and consensus-based process gratifying, though acknowledging that it can be difficult at times, such as when grant applicants become disgruntled at meetings. The Program Manager and the TAP members have come to believe in the open process, however, and they help each other protect the process during difficult moments.

Other comments noted that the Program Manager strives to be accessible to CFRP participants, available to respond to questions from everyone. One TAP member noted that the Program Manager frequently reminds panel members to help make the grants process more understandable to people in communities, particularly when they consider revisions. In seeking broader and more diverse participation, the Program Manager and the TAP have also adopted approaches that provide encouragement for groups considering proposals and constructive responses to proposals.

A number of participants reflected that the management skills and approaches being used in the CFRP—open process, facilitation, and adaptive learning—were not common to the Forest Service management culture. Important features of the CFRP management approach are a desire to learn and willingness to adapt. Through the TAP and other discussions, the program often identifies issues and challenges, sometimes related to policies or laws. When the TAP encounters issues that might require a change in policy or law, the panel doesn't shy away from the challenges. The members first look for other solutions, but if needed, they are willing to pursue policy changes—"to push the envelope," as one member commented. The current policy issue related to merchantable material and the Code of Federal Regulations is an example.

3.3.2 Forest Level CFRP Coordinators

In response to a need identified by participants after the first year of the CFRP, Coordinators were named for each National Forest to help with project development and implementation, as well as communication between CFRP and other Forest Service programs. The reasons these key coordinator positions were created are described by a technical assistance contractor in this way:

"CFRP developed the Coordinator positions to help grantees develop proposals, follow through with reporting requirements, and for discussions/negotiations with Forest Service line officers. A lack of communication between State and Private Forestry (S&PF) and the National Forest System (NFS) (internal Forest Service communication) and between project grantees and the Forest Service has been a key challenge. It is not entirely clear how project proposals are communicated between S&PF and NFS, but the lack of communication has been a problem on a number of projects. Project proposals need

Forest Service sponsors, but it has been difficult to develop communication with district rangers and line officers."

"A stark example of the lack of communication between project grantees and the Forest Service is the La Jicarita project, in which a grant was awarded to do thinning in a National Forest area where thinning was not permitted by the national forest plan."

"NEPA issues also caused great frustration both for grantees waiting for projects to move forward and for agency line officers feeling pressured to move projects forward. The grant guidelines are now encouraging NEPA ready projects to avoid delays."

The CFRP Program Manager took a unique approach to finding and hiring individuals for these five Coordinator position. Some were hired external to the Forest Service, while others had long agency experience. The Coordinators come from various professional backgrounds, face different situations on their national forests, and have taken different approaches to their work. Some of their approaches are highlighted in the following comments:

"My key role is to break down barriers to CFRP projects in the Forest Service. Examples are when agency silvicultural staff wanted to stop a CFRP projects because of silvicultural prescriptions that didn't fit with internal policy, and when the Regional Office said the agency couldn't give small-diameter materials away.... I talked with the District Ranger, saying it didn't make sense for the federal government to provide a CFRP grant and then require grantees to pay for federal resources with that federal money. The Ranger agreed and didn't charge the grantee for the material."

"I see my role as a facilitator. I try to help make collaborative projects work, either with the help of Rangers or other CFRP recipients."

"... trying to integrate CFRP projects into the Forest Service's work plans by attending meetings of different resource managers (e.g., fire, fuels)."

"A key role is outreach to encourage proposals. I do the outreach strategically, based on opportunities that can be identified for the National Forest relative to adjacent landowners, such as counties or tribes. Often, consideration is given to Wildland Urban Interface projects related to the National Forest Plan."

"I have played a role in communicating with line officers and hazardous fuels officers about potential projects. For example, I recently saw an opportunity to encourage a CFRP grant for the Jemez Mountain Schools to build on an existing EAP grant focused on using biomass fuels from thinning treatments on 10,000 NEPA-ready acres to replace propane burners."

In creating the CFRP Coordinator positions, the Program Manager also offered the National Forest supervisors in New Mexico a 70/30 cost-share to fund these key positions at a GS-11 level.

3.3.3 Grants Administration

The Regional Grants Administrator overseeing the CFRP has experience in other organizations as a grants administrator (University of Colorado and National Science Foundation), in addition to many years with the Forest Service. She recognizes the uniqueness of the CFRP as a Forest

Service grants program and is enthusiastic about the program. She also recognizes the agency's limited capacity to deal with CFRP grants administration. She has been trying to help build the agency's capacity by suggesting the need for more grants and agreements specialists on the National Forests.

"The CFRP is unique to the Forest Service because of the large amount of funding that is provided through grants. It's also unique because Research and S&PF are the only branches with granting authority and experience. NFS doesn't have granting authority except for limited provisions in several specific laws, such as the National Fire Plan and the Healthy Forests Restoration Act. NFS doesn't have much experience or expertise with grants programs."

"The lack of internal capacity to implement a grants program as large as CFRP has required a steep learning curve in the Region. Grants and agreements specialists on each National Forest are supposed to administer the CFRP grants, but some National Forests lack a grants and agreements specialist, and some specialists lack capacity. The CFRP has created a template to help local grants and agreements specialists and encouraged them to work closely with CFRP Coordinators on each National Forest."

In addition, a Regional CFRP staff person noted a specific challenge with respect to reporting requirements associated with CFRP grants extending over three or four years.

"The Forest Service has not done a significant, multi-year grants program before, so getting the reporting right has been difficult."

It should be noted that the CFRP also provides direct financial support to each National Forest to help cover the costs of grants administration.

3.3.4 Grant Reporting

Program-level accomplishment reports do not currently exist outside of the general CFRP overview presentations developed by program managers (found at www.fs.fed.us/r3/spf/cfrp/2005program/index.shtml#workshop). Data and lessons associated with the CFRP are collected by the CFRP Coordinators and communicated through project-level reports. These data is then compiled within a standardized template to develop program-level information.

Because CFRP is funded through the Hazardous Fuel Reduction line item of the Forest Service budget, project-level data on "acres treated" is reported as a program accomplishment under the National Fire Plan using the National Fire Plan Operations and Reporting System (NFPORS) data base.

The TAP has identified the need for more detailed information on the accomplishments of existing CRP projects (e.g., types of treatment and durability of jobs created) so that they can better comment on the long-term effects of proposed projects. They have recommended, and the Forest Service has agreed to organize, a subcommittee of the TAP to conduct site visits of selected projects, evaluate the multi-party assessments now being completed by some of the first projects to receive CFRP grants, and suggest refinements of the format for multi-party assessments.

3.3.5 Budget Management

Program leaders are trying to keep costs for program administration or overhead at a reasonable level, while building support for emerging needs (Table 3.2). These program administration costs have generally totaled \$800,000-\$900,000 per year out of \$5 million in annual CFRP funding (16% of total funding). Therefore, about \$4.1-\$4.2 million out million has been directed toward grants each year (84% of total funding).

Table 3.2 CFRP Budget Estimate for 2005

Amount	Justification		
	Regional CFRP staff, CFRP Coordinators, and NF Grants		
\$560,000	Specialists		
\$25,000	CFRP staff travel		
\$35,000	TAP meeting and CFRP annual workshop		
\$90,000	Meeting facilitation		
\$90,000	5-year report and TAP monitoring subcommittee		

\$800,000

These administrative costs generally include salaries for regional and forest-level CFRP staff, as well as support for grants administration on each National Forest, staff travel, meeting facilitation and documentation, TAP meeting and annual CFRP workshops, and additional amounts for specific annual needs, such as the required 5-year report to Congress and a TAP monitoring and evaluation subcommittee in 2005 (see table above). Emerging program needs are often addressed initially through the CFRP grant process, rather than by establishing a staff position. The three-year grant to the Ecological Restoration Institute for technical assistance on multiparty monitoring is an example.

3.3.6 General Agency Coordination and Support

From a broad perspective, it has been fairly challenging to develop understanding and support of the CFRP within the Forest Service, as well as a working relationship between the CFRP projects and the resource management structure, or line officers, of the National Forest System (NFS). NFS line officers have been encouraged to attend the CFRP annual workshops and the TAP meeting, and to engage or coordinate with the CFRP. The Regional Forester, who recently attended the 2005 workshop, has provided leadership and support for the CFRP, but it has been difficult to get many agency line officers to participate in or coordinate with CFRP activities. Although the CFRP Program Manager has provided briefings and reports to regional, as well as national leaders, the general understanding of the CFRP is limited.

Participation in CFRP by National Forest Supervisors and Districts Rangers has varied by Forest. Some Supervisors have encouraged the participation of District Rangers, as well as attend CFRP meetings and workshops. For example, some District Rangers, with support from their Supervisors, recognized the potential benefits of collaboration and increased funding from the CFRP projects and have generally felt gratified by their participation. As another example, several rangers from the Gila National Forest attended the 2005 TAP meeting to support CFRP

projects, at least partially because the Forest Supervisor has included a simple statement in the performance expectations for these districts:

"(These) Ranger Districts need to actively support the Collaborative Forest Restoration Program."

Some Forest Supervisors have, however, been too busy with other duties and some District Rangers have been reluctant to engage because they perceive CFRP as threatening to their current work or manner of working. Experience with the program, however, has generally helped to develop favorable impressions among district rangers. Several CFRP coordinators have adopted strategies to locate CFRP projects on certain districts as a way of getting those District Rangers involved. The Regional Forester now includes a question on CFRP performance in his annual performance review of Forest Supervisors, which calls attention to the Region's emphasis on collaborative approaches.

A variety of comments from CFRP participants describe some of the inherent barriers facing or perceived by Forest Service line officers:

"The NFS line officers don't understand the use of grants. They tend to think that they might lose control of decisions in the process, or that the availability and use of grant funds might somehow result in their funding allocations being reduced. They don't look at it as if there will be additional funds available for work on the National Forest, work for which they will get credit without having to expend their own budget allocations."

"There has been resistance to CFRP among line officers, especially district rangers, because it takes some control away from them. Typically, District Rangers put projects up for bid and select contractors. Now grantees hold funds and make decisions about subcontractors who will do the work"

"There is... reluctance among some line officers to put energy into CFRP proposals with a small chance of success. This grants process is a new way of doing business for most Forest Service rangers, a way that is not comfortable. The grant-review process is the competitive process for collaborative restoration projects, rather than the contracting process that Forest Service line officers are accustomed to."

To facilitate CFRP project integration into a regular program of work on a particular National Forest requires careful timing, good communication, and an appropriate fit between the project being proposed and previous NEPA analysis, often undertaken at a much larger scale. These, and other connecting or linking points, can be challenging to develop, requiring good communication, awareness of the big management picture on a given national forest, some fairly experienced staff and community partners, and a significant level of trust and working relationships. It takes time to develop all of these attributes of success, perhaps longer than a four-year grant cycle can fully accommodate.

From the District Ranger's perspective, there is also a basic need to meet acreage targets. Treating the most acres possible under the National Fire Plan or the Healthy Forest Restoration Act (HFRA), often requires thinking in terms of the lowest cost thinning or mechanical treatment methods, rather than more balanced social and economic solutions that may take more time for planning, ecological analysis, and collaborative processes.

Several needs have been identified and a number of initiatives have been instituted through the CFRP to encourage greater understanding of the program within the Forest Service and to encourage integration of CFRP with other agency initiatives. The creation of the CFRP Coordinator positions on the five National Forests in New Mexico has been the most notable initiative. As discussed earlier, these Coordinators play critical roles in helping with communication about the CFRP, negotiating between project grantees and other Forest Service personnel, particularly in the National Forest System, and in overcoming barriers.

Other initiatives that are being used to encourage collaboration at the Forest and District levels include performance elements on CFRP for Forest Supervisors and District Rangers, more resources focused on partnerships and collaboration, and the development of training on collaborative approaches for agency employees.

At the 2005 CFRP Annual Workshop on "Internal Forest Service Issues," a participant expressed some of these same issues and ideas in general language:

"At the Regional level, the Forest Service needs to find ways to provide incentives to help people see CFRP as a priority. At the current time there are a set of targets that are articulated for different sectors (recreation, thinning, etc.), so there is a disconnect. If the leadership can figure out what we want to have happen in the woods, and there is a system that helps give them credit for working with you all, that would go a long way in getting attention to CFRP projects. Then, Forest Service staff will be held accountable. But it needs to start with the leadership and go all the way to the districts. Right now you

3.4 Communication and Peer Learning

Communication techniques developed through the CFRP are critical towards facilitating program implementation, information sharing, and peer learning. This section will explore communication within the program, or among grantees, agencies, and other involved stakeholders, as well as with external audiences, such as the broad public. It will also explore specific mechanisms for peer learning, which many CFRP participants see as a strength of the program

3.4.1 Communication within the Program

The CFRP has developed a comprehensive website to provide notice and information on current events and activities, as well as past reports from program activities. The program also disseminates information to CFRP participants by email and through ground mail. CFRP staff work closely with those organizations providing facilitation and technical assistance in planning and implementing outreach strategies related to program implementation to ensure that information is current, accurate and applicable.

During the 2005 CFRP Annual Workshop, a discussion among program participants resulted in the identification of several recommendations for improving communication among agency and grantee participants. Participants discussed the need to provide grantees with information on the types of communication and collaboration skills necessary for project success. They identified a specific need for information on how to budget for communication and project management activities, including working with sub-contracts and facilitating meetings. An overarching recommendation was that new grantees should budget 20% for communication and project

administration. Another recommendation was to develop a list-serve among CFRP grantees so they can communicate with each other and deal with problems collectively and in real time.

For communication within the Forest Service, the program manager has made several presentations at both regional and national levels to communicate successes and obstacles to interested agency-leaders and decision makers. Through such presentations, CFRP has also been introduced to line officers, including Forest Supervisors and District Rangers, and various opportunities for integration with other agency programs have been explored. As discussed in Section 3.3.5, it unfortunately appears that these presentations have had limited success in developing broad understanding of CFRP within the agency. A number of CFRP participants have suggested that line officers need firsthand experience with CFRP projects in order to fully understand the potential of the program.

As discussed in Section 3.3.2, CFRP Coordinator positions were also established with a key communication functions—to both help communicate program information to agency line officers and prospective grantees, as well as to help communicate to external audiences, such as the media.

3.4.2 Communication with External Audiences

Leadership and participants within the CFRP are interested in sharing information from the program with public audiences in the region and beyond. For example, the 2003 TAP report included several recommendations for improving the CFRP related to communications with external audiences, such as:

- Preparing and distributing positive press releases on program accomplishment through collaboration between grantees and Forest Service staff;
- Organizing a press conference in conjunction with annual CFRP workshop, including a panel of grantees; and
- Developing a public guide for CFRP projects, such as a driving guide with locations of projects statewide including contact information.

TAP members and others in the CFRP also suggested that they become ambassadors of the program when they participate in regional or national policy discussions related to collaboration and restoration issues. A Regional Forest Service leader recognized the importance of this communication:

"There is a great deal of spillover from CFRP as a result of TAP members, and other grantees, participating in other meetings and activities around the state and bringing their learning and perspective to those tables."

CFRP coordinators and others are also encouraged to share stories and lessons from the program with the public. A number of the forest program coordinators have been effective in their outreach to the media to encourage stories on CFRP projects, which has resulted in a series of positive stories on CFRP projects in the Santa Fe New Mexican and other newspapers around the state.

Many CFRP participants expressed enthusiasm about the projects and the amount of learning taking place through the program. A number of them commented on the importance of sharing information and lessons with the general public. A consultant who has worked on several CFRP

proposals suggested that this type of public outreach is a critical next step for the program and that it should include coordinated educational and outreach efforts to landowners in the region, to help them understand collaborative approaches to restoration projects and to help change current behavior.

3.4.2 Peer Learning--Annual workshops and TAP meetings

One can easily conclude that peer learning is one of the stronger components of the CFRP. Sharing knowledge, dialogue about issues, and mutual problem-solving are occurring in numerous settings, most of which are well documented. Many CFRP participants express that the on-going conversations about restoration, community partnerships, and implementations strategies are primary motivators for their involvement, and are keys to success. The comment of one grantee epitomizes a widespread value in the learning being generated:

"The CFRP has given [me] direction, concepts, and new ideas, and [I]apply them across the board at every level—with local government, interest groups, businesses, the state, and federal governments. [I am] able to bring this learning from CFRP to everyone, and have found that everyone has a strong interest in the concepts...."

Several program structures have been established, which have created specific occasions for sharing challenges, successes, and lessons learned among the CFRP grantees and staff, and between the host communities and public land managers. One such venue is the annual TAP meeting, which is discussed in Section 3.2. The other major structure for sharing information and learning occurs during the annual CFRP workshop, the reports of which are available on the program's website (www.fs.fed.us/r3/spf/cfrp/index.shtml).

The statute that established the CFRP requires the Forest Service to hold annual workshops for grantees to share lessons learned. CFRP grantees are required to attend as a condition of their grant award, and they can use grant funding to cover their travel expenses. A technical assistance provider commented on the values of these gatherings for peer learning:

"The annual workshops are a key peer-learning event. The grantees don't care as much for the talking heads as they do hearing from and networking with their peers. The peer-learning leads to all sorts of synergies, with grantees using approaches and technologies from others or building off each other's projects. This type of peer learning takes place during group trainings also; it's one thing that gets lost in the one-on-one technical assistance."

"The grantees like to work with each other, and the networking seems to be generating more cooperation among the tribes. For example, the San Juan and Santa Clara Pueblo are trying to coordinate their activities. Setting up CFRP has created a great amount of sharing and learning in the state."

Planning and facilitation of the annual meetings evolves each year. The 2004 and 2005 workshops created significant opportunities for mutual learning, based on both the substantive presentations and related interviews with program grantees. One specific example of an opportunity for sharing and discussion occurred during a presentation of current CFRP challenges by the Regional Forester at the 2005 workshop. Not only did it appear that these challenges had

already been identified through previous information gathered CFRP projects participants, but the project participants also presented a problem-solving agenda for the future.

As noted in Section 3.2, CFRP annual workshops and TAP meetings are facilitated by outside organizations specializing in meeting design and facilitation (e.g., U.S. Institute for Conflict Resolution and the Meridian Institute). This consistent, external facilitation of the workshops and meetings may contribute significantly to the learning process, as professionals manage discussions and write summarizing reports for future dissemination, and are privy to those lessons emerging with each subsequent year.

3.4.3 Peer Learning-Development/Dissemination of Reports

The Annual Workshop reports summarize workshop presentations, discussions, and working sessions, as well as the results of an annual questionnaire sent to project grantees. These reports help identify areas needing improvement in the program as well as training and informational needs of project partners. The 2003 Annual Workshop Report identified the need for a workshop on riparian restoration, which the Forest Service jointly sponsored with San Juan Pueblo in 2004. CFRP Annual Workshop Reports, TAP Recommendations, the CFRP Request for Proposals, and summaries of CFRP funded projects are posted on the program website at www.fs.fed.us/r3/spf/cfrp.

Also posted to the websites are reports from the annual meetings of the Technical Advisory Panel (TAP), which discuss the grants review process, provide descriptions of proposed projects, and summarize comments and recommendations of the TAP about each one. These reports provide considerable opportunities for all interested parties to observe how the grant making process works, and the pros and cons of each project. These TAP discussions have the effect of reinforcing a set of performance principles and standards, which in turn establish expectations for program implementation.

The discussions of the TAP, which occur during the review process, present a range of issues, challenges, and goals for the work of forest restoration in New Mexico, and could be generalized for applications in other regions. Summary recommendations are made about criteria and activities that could improve current and future projects, such as the need for consultation with key tribal, state, and federal partners, the importance of youth employment, and the desirability of utilizing small diameter trees, among many others.

One feature in the annual workshop reports that would appear to be most helpful is a presentation of the issues raised specifically through the grantee surveys, and supplemented at times through small group discussion during the workshop. In the 2005 report, for example, a list of specific challenges being faced by grantees, in concert with the timeliness of their documentation and reporting, gives strong evidence of the engagement of CFRP participants and staff with critical concerns and future adaptations. This current list of challenges includes "developing proposals, NEPA approvals, multi-party monitoring, implementation costs, finding markets or sources for small diameter wood, funding and retaining personnel, community involvement/building partnerships, and working with the Forests Service."

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³ The Meridian Institute completed a synthesis of the annual workshops in September of 2005. The report, entitled the "Collaborative Forest Restoration Program Annual Workshop Synthesis Report" is intended to further contribute to learning and can be found in Appendix C.

The timely availability of these summary reports should have the continuing effect of stimulating peer-learning, leading to further engagement of all CFRP partners in a problem solving dialogue, continually oriented to high expectations for performance.

3.5 Partnership Development and Collaboration

Partnership building or collaboration lies at the heart of the CFRP. It is built into the grant application and review process as an essential principle, without which a proposal or project cannot move forward. Discussion of this principle occurs at every turn—in the evaluations by the TAP of each proposal, in educational presentations at the annual workshops, in project reports, and in small group discussions on many occasions. Collaboration and partnerships, as emphasized within the CFRP, are essential at every stage of development and implementation. The goals and desires for this ingredient are high; nevertheless most everyone expresses the challenges of creating collaborative synergy and keeping people involved.

Clearly the CFRP has been instrumental in expanding the level of collaboration in forest restoration in New Mexico. A key leader in community forestry has said:

"CFRP has brought together a more varied group of people than were previously involved. It has shown that we all share many of the same goals. CFRP has been especially effective in bringing socio-cultural and environmental interests into the discussion."

An environmental scientist associated with the program believes that one of CFRP's overall strengths is its "collaborative model—it provides grants as incentives for collaboration in developing projects."

3.5.1 Partner Diversity

The challenge of achieving diverse participation in CFRP has been recognized and emphasized from the outset of the program. Comments from the 2002 TAP meeting speak to the panel's concern with the degree of collaboration and diverse participation within project proposals:

"Many proposals did not solicit involvement from key stakeholders including: environmental groups, tribes and pueblos, communal land grants and communities. The proposal and letters of commitment should demonstrate the commitment to an active role in design, implementation, and monitoring."

TAP members have given particular attention to encouraging greater participation by tribes, the environmental community, and land grants. This attention from the TAP has generally resulted in greater outreach to and involvement of these groups. A tribal representative on the TAP, for example, commented favorably on CFRP efforts to promote tribal participation:

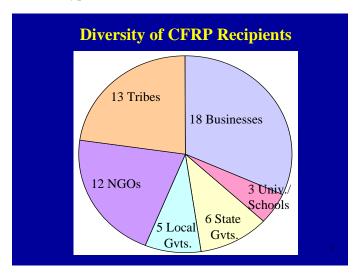
"The CFRP has brought a great benefit to the state in terms of people working together. It empowers communities to work on the National Forests—that's really significant! The collaboration promoted through CFRP has also encouraged the tribes to work with each other and with the agencies on restoration. It has helped us all move beyond the conflicting issues (e.g., water) that have characterized our relationships."

Similarly, a Regional Forest Service leader noted the expanded relationships between the agency and the tribes as a significant achievement of CFRP:

"CFRP has really helped with the Forest Service relationship with the tribes—government to government relations."

TAP members were pleased that the Forest Guardians, an environmental group known for taking legal actions against Forest Service activities, had chosen to participate by applying for a CFRP grant in 2005 and that several land grants were able to apply for the first time, as they had taken steps to obtain appropriate legal recognition as political sub-divisions of the state.

Overall, the CFRP has implemented activities to achieve strong and balanced participation by different types of stakeholders, as shown in the chart below of CFRP recipients through 2004:



3.5.2 Partnership within the Agency

Although there has been considerable discussion of the need for partnership within the Forest Service, particularly between National Forest System (NFS) and State & Private Forestry (S&PF), this goal has not been achieved nearly to the degree that is desired.

One CFRP grantee believes much of the problem with the Forest Service relative to CFRP—as well as other community assistance programs such as EAP—stems from the philosophical and operational differences between NFS and S&PF. It seems that the two have never identified their zone of agreement regarding the issues of working with communities and partners on land management projects. They see and approach such work very differently. An analogy is the Forest Service as "a ship being pulled in opposite directions by NFS and S&PF, and the result is immobility, or worse, a broken and sinking ship."

As a program that is part of S&PF but funded through Hazardous Fuel Reduction budgets, (related to wildfire and the NFS), CFRP seems to be in a position where it could help strengthen the relationship between S&PF and NFS. Since the Forest Service does not have Hazardous Fuel Reduction performance indicators or reporting requirements for activities related to partnerships and capacity building, there is little institutional incentive to focus on this work.

3.5.3 Community Partnerships

By encouraging collaboration and partnerships at the field level or in communities, CFRP has provided opportunities to build on existing projects and infrastructure and to develop new projects. Several program participants commented on how CFRP inspired entrepreneurship and provided incentives to reach out and collaborate broadly at the local level. One grantee discussed how he was able to build an integrated forest restoration program around the community of Ruidoso by obtaining an initial CFRP grant and continuing to use what he learned through the program. Other grantees saw the flexibility and partnership philosophy of CFRP as an opportunity to expand and leverage projects they had already developed.

Quite clearly CFRP has built upon and taken advantage of the social and economic infrastructure developed through the Four Corners Sustainable Forest Partnership (FCSFP), an S&PF program funded through the Economic Action Program in Arizona, Colorado, New Mexico, and Utah. The FCSFP program made approximately \$4 million available in grants, with the primary emphasis being on the development of economic capacity to harvest, process, and market small diameter material from forest restoration projects. A significant number of the CFRP projects had also been supported by the FCSFP.

A CFRP grantee that has also participated in the FCSFP describes the integration between the two programs as follows:

"CFRP has focused more on achieving forest restoration treatments from an ecological perspective [than the FSFSP], while being flexible and including some business development. Four Corners has focused more on community, forest industry, and business development. The two are not duplicative; they're complementary. CFRP may be more integrated and might involve a 'full-cost accounting' approach by looking at activities across the spectrum, from land treatment to product development and marketing."

A number of challenges for NFS line officers have been identified during CFRP project implementation. As greater communication and understanding evolve, however, CFRP has helped to forge partnerships at the field level that build on existing direction and practice within the agency. Two Gila National Forest line officers provide perspective on how CFRP has been integrated with previous or current field-level projects (some of which were NEPA ready):

"CFRP projects are often proposed in areas that are NEPA ready. The Forest Service is doing NEPA on larger areas because the cost of doing the analysis is much the same on smaller and larger areas. The NEPA analysis generally includes prescriptions for treatments in these areas. In these cases, the prescriptions for CFRP projects are written by the agency through the NEPA documents."

"CFRP integrates well with the agency's direction and other initiatives. We still need to do planning, NEPA, and decision documents. The contribution of CFRP is in funding and implementation. For example, the agency did the planning, the NEPA analysis, and put up a timber sale in Sheep Basin, but got no bids. A local logger saw an opportunity to thin some small-diameter materials on a portion of Sheep Basin and put in a CFRP grant. He got the grant, which also involves giving the materials to a local mill. It was a win-win: getting the work done on the land and providing economic benefits in the community."

3.6 Multiparty monitoring

The authorizing legislation for the CFRP specifically requires projects to include a multiparty assessment to: (a) identify both the existing ecological condition of the proposed project area and the desired future condition; and (b) report, upon project completion, on the positive or negative impact and effectiveness of the project including improvements in local management skills and on the ground results.

The program has developed multiparty monitoring guidance and technical assistance to help projects meet these requirements. Challenges remain, however, as assistance has only been available for two years and few projects have completed multiparty monitoring reports.

3.6.1 Development of the Multiparty Monitoring Approach

During the early phase of the CFRP, both grantees and Forest Service officials were uncertain of the multiparty monitoring (MPM) requirements of the CFRP legislation—how best to create MPM plans at the project level, as well as how to address Forest Service reporting requirements. A number of organizations collaboratively designed a series of working groups and a workshop to develop a set of multiparty monitoring guidelines. Sponsors and funders included the Forest Service CFRP, the Ecological Restoration Institute (ERI), the National Forest Foundation, the Ford Foundation, the Forest Trust, the Four Corners Institute, and the Pinchot Institute for Conservation.

The final synthesis of the recommendations of these working groups, which also included broad input from other experienced and knowledgeable interests, occurred in the late fall of 2002. The result of this synthesis was an extensive list of suggested "criteria and indicators," which offered a menu of sorts for forest restoration projects within the CFRP. These were non-binding suggestions for variables intended to describe and measure socio-economic and ecological outcomes of stewardship oriented forest restoration projects.

At the 2003 CFRP Annual Workshop, an orientation was given on the criteria and indicators for socio-economic and ecological monitoring contained in the working groups' MPM guidelines. A "basic introduction to multiparty monitoring" was also presented.

Within a short time it became clear that the CFRP funded projects would need additional training and technical assistance with regard to planning, designing, and implementation of the MPM process. In 2003 the TAP recommended funding a three-year grant to ERI to develop a series of six multi-party monitoring guidebooks and provide technical assistance to CFRP grantees on the development and implementation of project level multi-party monitoring. Links to these resources are as follows:

The Multiparty Monitoring Handbook Series

- Handbook 1 What is multiparty monitoring? (157kb)
- Handbook 2 Developing a multiparty monitoring plan (134kb)
- Handbook 3 Budgeting for monitoring projects (174kb)
- <u>Handbook 4 Monitoring ecological effects</u> (1.2mb)
- Handbook 5 Monitoring social and economic effects of forest restoration (350kb)

• Handbook 6 - Analyzing and interpreting monitoring data (1mb)(193kb)

3.6.2 Training and Technical Assistance

As the six handbooks were being developed and finalized, many of the grantees were increasingly searching for practical solutions on how to establish their own MPM processes. Although some individual training in different parts of New Mexico continued to be offered by ERI and its partners, grantees did not request assistance consistently, even when encouraged to do so by CFRP coordinators on each National Forest. While trainings were well attended, grantees didn't seem to have the capacity to follow through in producing their MPM plans. It became increasingly clear that grantees wanted, or needed, individual attention and assistance. This led to on-site community trainings with selected projects, which sometimes included youth groups and schools.

ERI and its project partners began to reach out to grantees, checking to see if assistance was needed. What seemed to be most productive was when many or all the members of a MPM team for a project showed up for individual site visits by the trainers. For example, a planned MPM workshop in Ruidoso resulted in attendance by seven people from a single project. This made it possible for the workshop to focus on developing an MPM plan for that one project, with the project's entire MPM team working on it. The participants could then take the plan home and begin implementing it, rather than taking home more general information from the workshop and having to take additional steps to develop a plan for their project.

However, there are cases where higher capacity individuals and those projects privy to previous technical support were able to take the MPM handbooks, or perhaps information from CFRP annual workshops, and develop MPM plans for their projects without additional help. It should be noted that earlier CFRP projects (i.e., 2001, 2002) didn't have specific guidance on how to develop a multiparty monitoring plan. Although these early projects (e.g., Ruidoso, Zuni, Las Humanas, Gila Woodnet) have done some multiparty monitoring, their efforts were guided by pre-CFRP programs and materials, such as the Forest Trust's Southwest Community Forestry Research Center.

Technical assistance providers have developed a spreadsheet with information about the requests for assistance it receives from various projects. One of the frequently asked questions from grantees has been about how to budget for MPM, or how to build sufficient funding into the budget for MPM. These questions demonstrate the need for further and more refined technical assistance among many of the CFRP projects. One concern raised about the provision of this technical assistance is that provider organizations are currently supported by a 3-year grant that expires in 2006. Whereas the use of grants for such services provides both flexibility in building the program—meeting emerging needs through grants—and an adaptation mechanism, it is unclear how such support will continue after the grant, or whether TA will be provided more directly through the program structure.

The data collected by projects are highly variable and difficult to compile or aggregate in a concise manner. Data collected for ecological monitoring is particularly difficult, given the diversity of the project objectives. Given this, one technical assistance provider has commented on how multiparty monitoring differs from traditional monitoring, which has often been done by researchers. Multiparty monitoring is not about "scientific research," it is about collecting

information to improve projects from a practical perspective and to learn about the effects of restoration treatments.

Finally, it should be noted that both the MPM support team and project representatives report that it is an on-going challenge to integrate monitoring into local community and project work plans. It requires continual communication, outreach, and hands-on interaction, often in the sponsoring community setting. A series of comments from grantees, summarized in the 2005 Annual Workshop Report present the challenge that the CFRP projects are facing in implementing the MPM process:

- Implementation of MPM has been somewhat difficult, although it hasn't seemed to affect the good work being done. If a project or community doesn't have partners from different perspectives, different parts of the community, and from different backgrounds, it can't do work like this (i.e., collaborative partnership and MPM).
- For some participants, MPM was too technical for a regular community to be able to understand and implement. On a lot of projects, regular citizens are the ones collecting the data. When the process becomes too scientific, you lose the community members who are able to implement that side of things. Participants did feel that the technical experts put a lot of work into the development of the guidelines, and by no means wish to disagree with the work, but the heavy technical aspects tend to hinder implementation in a practical sense.
- A number of grantees were experiencing continued confusion in the development of the social and economic portion of their MPM plan. Project managers asked for assistance from TA providers and then tried to design a monitoring plan themselves. Because they were more skilled at dealing with forestry and ecological data, they had difficulty in developing monitoring plans to assess socio-ecological issues, such as how many people were being trained and how many jobs were created.
- One of the remaining challenges is the turnover in local people participating in MPM activities. A High School teacher with whom a project was working left in the middle of the year and his replacement didn't want to pick up the project because he had too much other work. So the project lost about half a year of involvement with the high school doing the photo point monitoring. Later, however, another replacement teacher arrived who was very interested in and supportive of forestry programs, and the project came back stronger than it was before.

3.7 Technical Assistance

This section explores technical assistance (TA) provided to CFRP participants to develop and implement projects and to meet project requirements. It also explores TA provided to agencies in implementing this innovative program. Although the authorizing statute does not require TA, program participants have requested various types of assistance and the program responded to these needs.

The CFRP generally adopted the following strategies for technical assistance among its grantees and partners, each discussed in detailed in the following sections:

• Indirect technical assistance through guidance materials on specific subjects (e.g., multiparty monitoring, grant and proposal writing, forest product utilization, and science applications);

- Direct technical assistance through providers such as the Ecological Restoration Institute (ERI);
- Direct technical assistance through CFRP Coordinators hired at the National Forest level to help prospective applicants develop proposals, implementation projects, and follow through with reporting requirements; and
- Peer-to-peer learning through organized grantee workshops and meetings.

3.7.1 Grant Writing

The CFRP provides various levels of technical assistance with the overarching goal of achieving quality proposals and projects, and a diversity of involved interests and project types. The CFRP has developed Request for Proposal (RFP) guidance on its website (http://www.fs.fed.us/r3/spf/cfrp) including examples of successful grant proposals and sample budgets

Each year, the TAP reviews the RFP and recommends ways to improve the overall grant process and make the RFP easier to understand and follow. The annual workshop is open to the public and includes training sessions on how to prepare grant proposals. Questions about grant writing and the need for grant writing support also emerged through various discussion sessions at these annual workshops. CFRP Coordinators also provide assistance to prospective grant applicants in developing projects and preparing proposals. Some coordinators convene workshops for this purpose on their forests. In 2004 the Forest Service began requesting two-page pre-proposals proposals to identify potential grant applicants and facilitate communication with agency line officers during the development of project proposals.

Among applicants, there is a belief that the TAP is encouraging higher quality grant proposals, which may make it difficult for new grantees, especially lower capacity ones, to prepare successful proposals. One Coordinator relates a story about his efforts to encourage several "mom and pop" businesses to prepare CFRP proposals. They put a lot of effort into their proposals, but ultimately the TAP did not fund the project. Although the TAP provided constructive responses and encouraged the businesses to resubmit, they decided not to go through the process again. Some prospective participants, as well as agency staff, perceive the CFRP grants process as requiring too much time and effort with too little certainty of success. The CFRP program has recognized the need to provide more support to lower capacity organizations. For example, grant-writing assistance has been made available to underserved communities through Forest Service grants to the National Network of Forest Practitioners, but many feel that further help is needed.

"The Forest Service has limited experience with grants programs, especially within the National Forest System, which only has limited authorities to use grants, such as through the hazardous fuels program. State &Private Forestry has greater experience with grants, but capacity within the R3 office to deal with a program such as CFRP has been challenged. This is due to limited numbers of grants specialists and inexperience with so many large, multi-year grants."

As noted in Section 5.3.3, the lack of internal capacity to implement a grants program as large as CFRP has resulted in a steep learning curve for the Region. Grants and agreements specialists on each National Forest administer the CFRP grants, but some National Forests lack a grants and agreements specialist, and some specialists lack capacity. The Regional CFRP Grants

Administrator developed a template for CFRP grant awards to assist the Grants and Agreements Specialists and CFRP Coordinators on the forests in the implementation of this new program.

3.7.2 Multiparty Monitoring

As discussed in Section 3.6, the CFRP has developed MPM guidebooks and provided technical assistance to help projects meet the multiparty monitoring requirements of the CFRP. The need for technical assistance in multiparty monitoring emerged from discussions among CFRP participants at the annual workshop and TAP meeting. Program leaders responded to these reports by asking proponents to develop a grant proposal for delivering technical assistance. The use of a grant to support TA, rather than using administrative overhead, may be seen as an adaptive response to meet an emerging need and watch how the TA evolved, while keeping program overhead low. A similar suggestion has surfaced in the need for additional TA on business development.

3.7.3 Marketing and Utilization of Forest Products (and by-products)

Technical support for the utilization and marketing of forest products, and other activities to help build local capacity, is a need identified by many CFRP grantees. This need also relates specifically to the legislative objective of CFRP projects to improve the use of, or add value to, small diameter trees.

Comments from the 2003 Annual CFRP Workshop report suggested that grantees may need to look to sources other than the CFRP for this type of assistance, such as other agency programs or collaborators. A number of CFRP grantees have done this, seeking assistance from organizations such as the Forest Service's Forest Products Laboratory, academic or research institutions, and industry groups.

Discussions at the annual workshops do, however, provide important fodder for innovation and opportunity for networking and peer learning. For example, in the 2004 Annual Workshop discussions took place around the key issues of "equipment and technology" and "market utilization and finding markets." These discussions revealed that although there are a lot of projects and activities involving utilization and marketing, they are not well connected or integrated at present. There is also concern about CFRP projects having difficulty creating viable commercial enterprises and therefore becoming dependent on grant money.

Within the CFRP, "marketing and product development support" has been reported as one of the major challenges facing the program. TAP members representing "industry interests" have also recognized the need for more technical assistance to help projects put together integrated business plans and to get up and running. The CFRP has encouraged those interested to develop and submit a grant proposal to provide this type of assistance. Another suggestion to help address this need is to develop an opportunity for cross-pollinating CFRP grantees through formal exchanges or site visits. One TAP member noted that annual workshops are great for information sharing and networking, but site visits might be necessary for grantees to learn from each other in more depth.

3.7.4 Applying Current Science and Technologies

The legislation authorizing CFRP requires projects to "incorporate current scientific forest restoration information," (Sec. 605 (b)(4)). The program has encouraged open discussion of this requirement through the TAP meetings and annual workshops: has relevant guidance has been developed through the multiparty monitoring guidelines and handbooks, and have certain projects have been funded to demonstrate forest restoration treatments. Questions and issues remain, however, around the terms "scientific information" and "forest restoration" and whether CFRP projects are adequately incorporating such information.

The science of "forest restoration" is an issue explored in comments by the TAP regarding proposals and in discussions and comments from Annual Workshops. General comments from the 2002 TAP meeting seek to clarify the meaning of forest restoration:

"Forest restoration should address ecosystem functions, structures, and species composition including the reduction of non-native species populations. Restoration should also include reestablishing natural fire regimes, where appropriate, and/or a modified suppression policy. Thinning alone does not meet these objectives."

Notes from discussions of technical issues at the 2003 Annual Workshop further explore this issue of "restoring fire regimes" in the Southwest, as opposed to simply changing the forest structure at the project level. The idea of a special workshop on fire restoration has been proposed.

The multiparty monitoring guidelines for community-based forest restoration in SW Ponderosa Pine forests and technical assistance framework for multiparty monitoring within CFRP may well be the key mechanisms for helping grantees incorporate current science on forest restoration. It is important, however, for an ecologist or qualified individual to be involved in the data collection or, at least, in reviewing the data.

Technical assistance providers commented that there is limited information gathering and analysis being done to address questions about how science is being used by CFRP projects and what is being learned. In most of the CFRP projects, some science is being used, but it is often the science built into the prescriptions for treatment provided by the federal agencies. Some CFRP participants expressed concern that the "science" behind Forest Service treatment prescriptions focuses on fuels reduction rather than forest restoration. Only a limited number of CFRP projects have developed their own prescriptions for restoration and included monitoring approaches for learning.

A scientist on the TAP commented on the need for greater understanding of how these CFRP projects were advancing forest restoration. There is a need for both experiential—or practical—information as well as the results of scientific research related to projects. The subcommittee currently being discussed by the TAP to visit project sites and collect information on accomplishments might help address these needs.

"We need a synthesis of experiential and science knowledge in forms accessible to project proponents. What are we learning? We need to ensure that we are developing science as a part of the projects—addressing the requirement to bring in current science. We don't have sufficient information through the current project reporting process, and the multiparty monitoring process isn't far enough developed yet."

The passage of the "Southwest Forest Health and Wildfire Prevention Act of 2004 (Pub. L. No. 108-317)" may help address this need. It established Forest Restoration Institutes in New Mexico, Colorado, and Arizona. One of the duties of these institutes is to provide technical assistance to collaborative efforts to develop, implement, and monitor adaptive forest restoration treatments that are ecologically sound, economically viable, and socially responsible.

3.8 Linkage to Other Initiatives

3.8.1 Healthy Forests Restoration Act (HFRA) and the National Fire Plan (NFP)

Restoring historic fire regimes is a critical element of the CFRP. This emphasis suggests a strong link between CFRP, HFRA and the NFP with respect to program priorities. The fact that CFRP is supported through funds from the Hazardous Fuel Reduction program reinforces this link. However, there has not much discussion among grantees or agency staff regarding efforts to specifically link CFRP and HFRA projects.

With "acres treated" as the primary performance indicator reported through NFPORS, CFRP provides an opportunity for line officers to achieve greater accomplishments toward HFRA targets. Some District Rangers saw this opportunity and enhanced their accomplishments by encouraging CFRP projects in their districts, while others saw CFRP projects as a threat to their control and a possible risk to their funding. The response of line officers to CFRP is critical to the link with HFRA. A positive response could strengthen the linkage. A negative response to CFRP could tend to isolate the program, and some CFRP participants fear that the program could be overwhelmed by momentum behind the far larger HFRA.

A recent example illustrates how linkages between CFRP and HFRA could have positive or negative consequences for CFRP. The first HFRA project established in New Mexico came under threat of appeal. If appealed, the HFRA project could have delayed and adversely affected a related CFRP project, even though the appeal was not specifically related to CFRP activities. Due to the relationships and trust developed through previous collaboration on CFRP projects, however, the group threatening to appeal and the Forest Service line officer agreed to meet at the project site and discuss ways to avoid the appeal. (The outcome was unclear at the time of this report.)

In response to issues of scale, TAP members have discussed ways in which CFRP projects might address or be integrated within landscape scale plans. Another link between CFRP and HFRA is the "spillover" that occurs as CFRP participants get involved in other policy discussions at the state, regional or national levels. A number of TAP members are involved in such discussions with the Western Governors Association, as well as other policy forums where HFRA and the NFP are discussed.

3.8.2 Stewardship Contracting

Although there may be several policy links between CFRP and stewardship contracting, not much discussion has occurred about these new contracting authorities among CFRP participants, perhaps due to limited experience with these new contracting mechanisms in the region. Where discussion did occur, it involved perspectives on the costs of treatment through the CFRP vs. the

use of stewardship contracts. Some CFRP participants perceive the costs of CFRP more favorably, recognizing that \$1,200/acre average reported by the CFRP includes all the costs covered by CFRP grants, including the collaboration, capacity building, and other activities. Others, however, see the costs of stewardship contracting more favorably, believing that the per acre treatment costs for larger-scale stewardship projects will continue to decrease as the federal agencies gain more experience with them. A stewardship project in the White Mountains of Arizona was used an as example where treatment costs have been coming down.

Stewardship contracting projects and CFRP involve similar authorities related to collaboration and multiparty monitoring. These activities seem to receive more attention through CFRP, however, because they are mandated by law, as opposed to "suggested" under the stewardship contracting legislation. Perhaps more importantly, the TAP uses these requirements as incentives for funding. The emphasis on collaboration among diverse interests, as well as up-front collaboration with the federal and state land management agencies, has been a focal point of discussions at CFRP annual workshops and TAP meetings. As discussed above, CFRP played an important role in the collaborative process to develop guidelines for multiparty monitoring in the region. The program then translated those guidelines into handbooks and supported technical assistance to projects.

3.8.3 Economic Action Programs (EAP)

There are strong links between EAP and CFRP. A number of CFRP projects have built on prior EAP funded projects, using the capacity and infrastructure already created through that program. "One reason the CFRP has done so well," noted a CFRP staff person, "is the foundation of infrastructure in the region already built on EAP grants."

Several people noted that CFRP has been picking up on the funding of capacity building and business development activities in the state as funding for EAP has been diminishing. One CFRP coordinator, for example, said his work has evolved to focus almost exclusively on CFRP.

EAP and CFRP are often seen as complementary programs that could build on each other. EAP emphasizes capacity building and infrastructure development while CFRP emphasizes accomplishing work on the ground, although it also integrates capacity building. A program participant from the state forestry agency commented that "CFRP could be doing much more if EAP funds were available for some of the capacity building needs—CFRP could then focus more on the restoration treatment objectives."

4.0 EFFECTIVENESS: A Review and Evaluation

The purpose of this second section of the review is to assess how effective CFRP has been relative to the purposes set out for the program in the authorizing legislation. The first section of the review explores how well the CFRP has developed and implemented program components to help meet the program's purposes. In this section, we explore how much progress is being made toward the purposes for which the program was established, using data and information collected through the program and perceptions about program gathered through interviews.

One basic indicator of effectiveness is the actual establishment of the CFRP and the implementation of a grants program that has resulted in 75 projects being funded in New Mexico for a total of \$22.1 million over the first five years of the program. Therefore, with the framework for program implementation discussed in the first section of this review, the CFRP has effectively created a grants program, solicited and reviewed grant applications, and allocated program funds to projects.

As the CFRP enters its fifth year of implementation, only a small number of projects have been completed. Final reports from the initial round of projects (2001) are being completed, some have been submitted, and a total of 13 are expected by the fall of 2005. Therefore, little information for this review is available from final project reports and multi-party monitoring reports. Rather, most of the information being reviewed has come from annual project data gathered and reported by CFRP Coordinators, CFRP annual workshop and TAP reports, and interviews with CFRP participants.

It should also be noted that the CFRP has been on a steep learning curve since initial implementation. Many of the first and second round projects (2001, 2002) had less guidance and support than these projects that received grants in the later rounds. Therefore, the reports generated by earlier projects are not likely to reflect the same experiences as those of more recent projects. For example, reporting requirements for first-round projects were less developed and clear, and multi-party monitoring guidelines and technical assistance were not available until 2003.

The CFRP legislation identifies six major purposes for the program, as well as a list of objectives and eligibility requirements for projects implemented through the program. For this review of effectiveness, we have organized the purposes and objectives into the structure shown in the chart below. We note, however, that the purposes and objectives within the CFRP are often integrated, or inter-related, so our discussions may overlap in various parts.

Structure for the Effectiveness Review

- Restore forest ecosystem health and diversity (Incorporates first two legislative purposes)
 - o Reduce the threat of large, high-intensity wildfires and negative effects of excessive competition between trees by restoring ecosystem functions, structures, and species composition, including the reduction of non-native species populations.
 - Re-establish fire regimes approximating those that shaped forest ecosystems prior to fire suppression.
 - o Preserve old and large trees.
 - o Replant trees in deforested areas if they exist in the proposed project area.
- Improve communication and joint problem solving among individuals and groups who are interested in restoring the diversity and productivity of forested watershed in NM.
 - o Comply with all Federal and State environmental laws
 - o Include a diverse and balanced group of stakeholders
 - o Include stakeholder agreement to attend annual workshop
- Improve the use of, or add value to, small diameter trees.
- Encourage sustainable communities and sustainable forests through collaborative partnerships, whose objectives are forest restoration.

- Create employment or training opportunities within the context of accomplishing restoration objectives
- Develop, demonstrate and evaluate ecologically sound forest restoration techniques
 - o Incorporate current scientific forest restoration information.
 - Include a multiparty assessment.

4.1 Restoring Forest Ecosystem Health and Diversity

The first two purposes for the CFRP—(1) Promote healthy watersheds and reduce the threat of large, high-intensity wildfires, insect infestation, and disease in the forests of NM; and (2) Improve functioning of forest ecosystems and enhance plant and wildlife biodiversity by reducing the unnaturally high number and density of small diameter trees on Federal, State, Tribal, County, and municipal forest lands—focus on various aspects related to forest ecosystem restoration, such as watershed and forest health, biodiversity, and wildfire risk reduction. Because these two purpose statements are so difficult to differentiate, we will discuss them simultaneously. We will first discuss the data (desired and available) to assess effectiveness, and then comment on progress made toward meeting four specific objectives under these purposes.

4.1.1 Desired Ecological Data

Ecological monitoring is the main tool being used to assess whether CFRP projects are achieving the stated purposes behind the CFRP. While the CFRP requires multiparty monitoring, no methods are specifically required of the program largely due to the variety and scope of projects funded by the CFRP (not all CFRP projects have an ecological component) and different requirements and assistance needed for monitoring by individual CFRP projects.

A critical assessment of whether restoration goals have been achieved for CFRP projects is difficult because project-specific multi-party assessments for the four-year CFRP projects are only now being completed for the first round of projects, and the guidelines for ecological monitoring under the multi-party assessments were not complete until the second year of the program. "Any sample of projects will be skewed" and, "information will be highly variable among CFRP projects," according to a Technical Assistance provider. The CFRP has endeavored to standardize ecological monitoring and accountability needs by developing a guidebook on ecological monitoring and by providing training and technical assistance so that future program assessment can be attained. Some projects currently meet all of the program objectives and incorporate current scientific information [e.g., Zuni (CFRP 21-01), Gila Woodnet (CFRP 46-01), San Juan (CFRP 06-02, Monument Canyon (CFRP 10-02)], while other projects have sparse/no monitoring data. "Data is highly variable," commented an assistance provider. "Some projects are going beyond guidelines for MPM, while others are collecting minimal data."

As stated in Section 3.6.1, the CFRP has developed a set of handbooks with multiparty monitoring guidelines for project grantees. These handbooks are extremely useful documents that have been divided into user-friendly sections for grantees. Handbook Four (Monitoring Ecological Effects) specifically outlines how CFRP grantees can incorporate a self-designed monitoring protocol for their projects. Three levels are identified in this process: 1) identifying monitoring goals; 2) establishing indicators to assess goals; and 3) establish target values for indicators to assess goals. The CFRP Coordinators encourage prospective grantees to attend

monitoring workshops provided by ERI at the CFRP Annual Workshops and at other times during the year. The TAP reviews proposed multi-party monitoring plans and budgets for each project proposal, which is one of the evaluation criteria for selecting projects to recommend for funding.

Projects that focus on training or small diameter utilization do not focus on ecological monitoring, but projects that emphasize forest restoration treatments need to include these three levels in the project and the budget to insure accountability for ecological monitoring of future projects. In addition, the handbook recommends six specific indicators that could help to ensure a more complete understanding of ecological changes across ecosystems and feed into an adaptive management scenario.

Currently, a lack of continuity in ecological data among individual CFRP projects makes any generalized assessment of multiple projects difficult—although the treatment prescriptions are designed based on management and research in similar ecotypes and must comply with the National Environmental Policy Act (NEPA). Preferably, a minimum number of common indicators should be recorded for all projects using CFRP funding for forest restoration treatments. For example, the use of repeat photo points might be implemented in all ecologically based CFRP projects. MPM guidelines outlined in the handbook should be used for continuity among projects. While MPM for CFRP projects is not intended to be "scientific research", as one TA provider commented, viable data are required to determine if the CFRP program objectives are being met, to improve projects from a practical perspective, and to learn about the effects of restoration treatments.

Technical assistance for MPM is available for those CFRP projects that request it. While numerous CFRP grantees have taken advantage of technical assistance services through workshops or training, some grantees may not understand the necessity for ecological monitoring, may not have the time or funding, or may believe they have sufficient expertise. The technical assistance activities have provided training for youth and school groups to assist in MPM. This training promotes quality data collection, meets the goals of multiparty collaboration in the monitoring process, and helps meet the CFRP objective of involving youth groups.

Pursuant to the Act, CFRP project grantees are not required to submit their multi-party assessments until project completion. Since the first CFRP projects, funded in 2001, are only now completing those assessments, there is very little ecological data at this time for this programmatic assessment. For future projects, the individuals identified in grant proposals as responsible for MPM could provide information in the project's annual report regarding ecological MPM. Ideally, one-on-one MPM training should be provided for these responsible individuals, as well as members of each project's MPM team. This would build a relationship between technical assistance providers and all project grantees. It would also help ensure ecologically sound MPM in all projects, as well as accountability for ecological monitoring. Technical assistance providers and project grantees have expressed an interest in site visits and one-on-one training. Such training may be expensive, however, and challenging to implement in a cost-effective manner.

4.1.2 Available Data

At this point in the program, the primary indicator for the effectiveness of CFRP projects in achieving ecological objectives (such as wildfire threat reduction, ecosystem restoration, nonnative species reduction, and reforestation) is the number of acres treated. From project

accomplishment reports, information has been compiled showing that 6,160 acres have been treated during the first four years of the CFRP. Based on proposed grant activities, the CFRP coordinators estimate that 19,394 acres will have been treated when the currently funded projects are completed. The data indicates the forest types and ownership types on which these treatments have occurred, but it does not indicate relative types of treatments or resulting conditions (Appendix A). The treatments represent a variety of on-the-ground activities, including: thinning or fuels reduction, riparian and forest restoration, non-native species eradication, and reforestation. These different treatments are accomplished using a variety of prescriptions that reflect multiple program objectives described in the enabling Act.

The current reporting of "acres treated" by the CFRP is consistent with the accomplishment reporting done by the National Forest System for the Hazardous Fuel Reduction program, since this is the program through which CFRP is funded and held accountable. This is the best ecological data currently available through the program, but additional information will likely become available as the grantees submit their multi-party assessments upon project completion. TAP discussions about how to obtain more ecological data have led to the creation of a TAP subcommittee that will be developed in the coming year to visit selected project sites and evaluate the first set of multi-party assessments, exploring what they indicate about program effectiveness and recommending possible improvements for future assessment reports. The reporting of a significant and increasing number of acres being treated through CFRP projects is a positive outcome of the program. Work is being completed on the ground, and the program is adapting and accomplishing more as time passes. The basic assumption that more treatment on the ground equates to more positive benefits may not necessarily be justified, but it is a common assumption in current performance-based reporting systems on forest restoration treatments. A strength of the CFRP is that participants are able to express open concern about the limitations of the data and are looking for ways to obtain better information.

As more of the CFRP projects complete their multiparty monitoring activities and reports, much more information will become available regarding he ecological effects. It is important to remember, however, that even when such data is available, it will continue to be difficult to make broad statements about the program, as the projects are highly variable and data are not easily aggregated. Questions about how to assess the ecological effects of individual projects and to aggregate data to explore cumulative or larger-scale effects are challenging and common to all federal programs focusing on forest restoration. The CFRP provides an open forum for discussing these questions and for exploring tools and methods to address them.

4.1.3 Reducing the Threat of Wildfire

In annual questionnaires, respondents indicate that most CFRP projects are pursuing this objective, but it is too early to tell whether the broader objective is actually being met through on-the-ground treatments (2004 CFRP Annual Workshop Summary).

4.1.4 Re-establishing Fire Regimes

Restoring fire regimes is challenging because many projects focus on structural changes in the forest at the local level, rather than on the landscapes. The TAP observed that thinning alone does not accomplish all the objectives related to the re-establishment of fire regimes. Mechanical treatments need to be explicitly integrated with restoration work. As such, participants have raised

questions such as: how to restore the natural fire regime in different areas; what kinds of technology are available and when is their use appropriate; who should perform the work (especially where controlled burning is involved); and where to acquire information about different fire regimes and new management techniques.

As with reducing the threat of wildfire, it is still too early (and data are too limited) to determine if the broad objective of re-establishing historic fire regimes is being met through CFRP activities.

4.1.5 Preserving Old and Large Trees

The CFRP program was created to focus on the challenges of forest restoration, particularly the challenges of removing and utilizing small-diameter trees. With this emphasis and strict requirements to preserve old and large trees, there seems to be consistent attention to the challenges of managing those forests dense with small-diameter trees. Project respondents in 2003 and 2004 questionnaires said they were committed to preserving old and large trees. Others have said that the thinning of small-diameter trees helps improve the health and vigor of large and old trees, while some conclude that the production of wood products from small-diameter trees can help reduce the economic pressure to harvest large and old trees. TAP discussions have evolved from diameter caps in the early years to lengthy discussions of desired future conditions. Without having completed monitoring of project activities or effects, however, a number of respondents noted that it was too early tell how effective these preservation measures were.

4.1.6 Replanting Trees in Deforested Areas

The replanting of trees in deforested project areas is not a significant focus for most CFRP projects. Projects tend to focus on efforts to reduce excessive numbers of trees rather than to replant trees. A relatively small number of project respondents said they were planning to replant trees in project areas, while most said that replanting was not applicable or necessary to their projects. It should be noted that most riparian restoration projects involve the eradication of nonnative species (Russian olive and Salt Cedar) and the planting of native tree and shrub species (cottonwood, willow, and native grasses).

4.2 Improving Communication and Joint Problem-solving

The third purpose behind the CFRP focuses on improving communication and joint problem solving among individuals and groups who are interested in forest restoration. This purpose responds to the theory in the Act (SEC. 2(5), Title VI, Pub. L. No. 106-393), that restoration efforts are more successful when there is broad and diverse involvement. To achieve this, efforts must be made to involve diverse individuals and groups, encourage better communication, and encourage joint efforts to solve common problems.

The CFRP has established an excellent framework to encourage broad and diverse involvement in the program through the grant application requirements and the structure and process of the TAP. By including strong requirements for project applicants to include clear indications of early collaboration in their project proposals, the CFRP has provided an incentive-based approach to collaboration, stimulating discussion about collaboration and encouraging local stakeholders to break through barriers. Individuals or groups who were uncomfortable with such a requirement

and open process may not have participate, but those who were open to the prospect of collaboration often were engaged.

The TAP can be seen as the primary model and mechanism for improved communication and problem solving for the CFRP. During interviews, many of the TAP members recognized its diversity as a key strength. Individuals and groups who rarely spoke with each other, or saw each other as adversaries, came together to discuss collaborative forest restoration projects and a wide range of related issues through the TAP process. The open and facilitated process allowed TAP members to speak their minds and acknowledge their differences, in a respectful manner. Through these discussions, members of the TAP developed relationships with each other and increased levels of trust. The trust developed by individuals on the TAP also carried beyond the CFRP program, as these individuals interacted with each other in various state, regional, and national initiatives. A clear example recently emerged as members of the TAP agreed to come together to explore opportunities to prevent a legal challenge that was going to be filed on a forest management project on the Cibola National Forest. This type of communication and problem solving would probably not have occurred prior to the CFRP.

A related indicator of improved communication and joint problem solving is the fact that none of the 62 CFRP projects to date have involved an appeal or lawsuit—a fact frequently and proudly reiterated by program administrators. The theory is that if collaboration among diverse individuals and groups is achieved early, during project development, and maintained through project implementation and monitoring, trust is developed among project participants and problems or issues that arise may be solved without legal challenges. So far for the CFRP, the collaboration theory appears to be working, despite a number of issues and barriers to implementing projects.

The TAP has placed a strong emphasis on ensuring diverse and balanced participation in CFRP projects. TAP discussions and recommendations during early rounds of CFRP often dealt with the need to ensure sufficient participation of various groups in project proposal, such as Tribes or environmental groups. The seriousness and continued attention that the TAP gives to the requirement for diverse participation are key factors contributing to the success of the program. TAP members represent certain interests described in the Act and they advocate for those interests during panel discussions. At times, therefore, it appears that panel members are simply arguing for the interests they represent rather than pursuing the broader objectives of the program. This, however, is how the process works. Members advocate for the interests they represent while keeping in mind the larger program objectives and respecting both the panel process and voices of other panel members. TAP recommendations are developed using a consensus-based process as directed in the Act.

The adaptive approaches taken by the TAP, and the program overall, have also helped to improve communication and joint problem solving. As challenges are identified through the open process, strategies are developed to address them. Efforts to involve more Tribal interests in the program has led to what many perceive as a major strength of the CFRP. The challenge of allowing Hispanic land grants to apply for CFRP grants was overcome through the pursuit of state legislation providing legal recognition of land grants as political sub-divisions of the state. And several TAP members saw a 2005 CFRP grant application from an environmental group that generally functions through appeals and lawsuits as an important success. One TAP member said there had been early concerns among panel members that the number of partners and project participants in the state might become quickly saturated. That concern, however, has not come to

pass, as early emphasis on outreach has led to an increasing number of partners and an increasing diversity of projects.

The emphasis placed on communication and problem solving, as modeled and emphasized by the open process of the TAP as well as the facilitated discussions in the annual CFRP meetings, results in issues and challenges to the program being discussed and documented. This allows for many issues to be identified and for strategies to be developed. Participants on the TAP observed that the nature of the program, as well as the TAP Chairman (who also serves as the CFRP Program Manager) is to identify issues, raise discussion, and develop ways to overcome barriers. The CFRP Program Manager is also known to "push the envelope" in order to address difficult issues, such as those involving existing policies that conflict with the objectives of CFRP. A key example involves conflict between policies regarding the pricing and merchantability of small diameter trees from the National Forests and the CFRP objective to improve the use of, or add value to, small diameter trees.

Some of the key issues and barriers that have emerged through the program relate to communication and problem solving involving the Forest Service. The CFRP is a grants program that involves a very different way for individuals in the Forest Service, particularly the National Forest System, to interact with individuals and groups outside of the agency. There are questions about the lack of capacity to implement such a significant and multi-year grants program, the lack of internal support and understanding of the CFRP in the regional office, the lack of understanding at the field level, and District Ranger concerns about losing control of their budgets, projects, and prescriptions. As District Rangers and other line officers become involved in CFRP, their support and enthusiasm for the program seems to grow. However, institutional challenges in the Forest Service seem to be some of the most significant challenges to CFRP. To address this challenge the Southwestern Regional Forester includes a discussion on CFRP accomplishments in his annual performance review with Forest Supervisors, and the Supervisory of the Gila National Forest has developed performance measures to emphasize and hold District Rangers accountable for communicating and collaborating with communities through the CFRP.

4.2.1 Complying with all Federal and State Environmental Laws.

While public agencies maintain legal responsibilities for overseeing environmental laws, a frequently mentioned benefit of the CFRP is the access it has provided for communities to develop projects on national forests. This increased access has resulted in some anxiety and frustration among various participants, due to delays related to NEPA, funding, and small diameter markets. This access has also resulted in a greater understanding between the various federal and state agencies, Tribal, local government, and private-sector participants. Greater access to federal lands by other participants has increased awareness of the laws and policies governing federal forest management. This awareness has helped call attention to issues and barriers, both federal and state policies. It has also led to the development of guidelines on how non-federal entities, such as Tribes, can develop and implement projects on the national forests. According to a regional Forest Service official, the Zuni Tribe has developed a set of guidelines for how they develop projects and what they are doing on the National Forests. These guidelines are expected to be included as part of the next CFRP grant to understand how the collaborative process and the land treatments work together.

4.2.2 Stakeholder Agreement to Attend Annual Workshop

The legislative provisions to "require" stakeholders in CFRP projects to attend the annual CFRP workshop appear to have worked well. Attendance at the workshop among project participants has increased as the program has grown. The legislative authorities allowing project grantees to use grant funds to pay for travel and per diem to the workshop has led to strong attendance. Although Forest Service line officers have been encouraged to attend the annual workshops, participation among this sector has been limited. Line officer participation has been increasing, however, as more Ranger Districts have gotten involved in CFRP projects. More District Rangers have recognized the importance of attending the annual TAP meetings, if they are to play a key role in developing new CFRP project proposals.

With the help of external workshop facilitators, the workshop design has also evolved in response to comments and recommendations of workshop attendees. A number of CFRP program participants commented that project grantees sought less formal or structured time at the workshops to allow them to discuss their projects and learn from each other. The workshop design has evolved to accommodate this participant interest while continuing to provide basic information and technical assistance.

4.3 Improving the Use of, or Added Value of, Small Diameter Trees

The purpose to "improve the use of, or add value to, small diameter trees" reflects an economic and social interest in finding uses for the anticipated large volumes of small-diameter, generally low-value, trees that would result from collaborative forest restoration projects in the Southwest. In exploring whether the CFRP has achieved this purpose, we will discuss information about projects that involve the use of small-diameter trees. We will also explore the degree to which the CFRP has built on or enhanced previous initiatives and the technical assistance that CFRP has provided to projects for this purpose.

The CFRP has provided considerable attention to this purpose by including members on the TAP with an interest in developing technologies, products, and businesses focused on the use of small-diameter trees. As a result, a variety of projects involving the utilization of small-diameter trees have also received CFRP funding, including:

- Bosque restoration firewood
- **P&M Plastics, Inc.** (wood fiber and recycled plastic fiber for signs)
- The Corona Group's utilization project
- Santa Clara Woodworks (log cabin kits)
- Indigenous Community Enterprises (Navajo hogans)
- **Zuni Forest Products** (vigas, latillas, and corbels)
- Sharri Barrow Strategies (animal bedding)
- Larry's Sales and Building Supply (pallets)
- Santa Clara Woodworks (furniture)
- **Zuni Furniture Enterprise** (furniture)
- Ten projects producing firewood

While the CFRP has given substantial attention to the marketing and utilization of small-diameter trees, a number of related challenges remain. In many regards, the program faces a variety of "institutional" challenges in providing resources toward this purpose, largely because of overarching federal funding and budget structures. As a program administratively located in the State and Private Forestry branch of the Forest Service, the CFRP has an integrated set of objectives, combining forest restoration with community capacity building and rural economic development. Projects that do not include restoration treatments are at a disadvantage in the competitive grant process, however, because TAP members and land management agencies generally prefer to fund projects that will produce visible results on the ground. Because the program is funded through the Hazardous Fuel Reduction Program, which measures and reports results in terms of acres treated, the CFRP faces a key challenge in gaining recognition for the activities it supports related to capacity building and economic development.

The program faces additional challenges associated with developing new products and markets for restoration by-products. Grantees who have developed projects with a strong emphasis on developing new products and markets for small-diameter wood products talk about the entrepreneurial spirit, business knowledge and experience, and long-term commitment required to achieve success in this area. These challenges range from acquiring a sufficient and timely supply of raw material—a major challenge for several CFRP grantees seeking small-diameter trees—to using new technologies for product improvement and refinement, to raising sufficient capital for equipment and processing facilities. Training and maintaining a crew of workers—while dealing with issues such as workers compensation—is also an on-going challenge, as is developing and maintaining markets for the innovative products. Grantees have generally used CFRP funds to leverage other grants and revenues they developed to start their business enterprises and try to keep them going. Some grantees have also used CFRP grant funds to purchase necessary equipment for processing small-diameter trees or test processing facilities and/or workforce training programs. The flexibility of CFRP grants has therefore been an attractive feature to project applicants working in this area, allowing them to apply for and use funds where they most needed them.

Several CFRP participants mentioned the specific need for more technical assistance in the marketing and development area. Some emphasized the need for assistance regarding new products technologies while others sought assistance on basic business skills, such as understanding cost and pricing structures, developing markets, or dealing with workers. One TAP member who represents "industry interests" has proposed developing a project to provide technical assistance to CFRP grantees. This TAP member was encouraged to apply for a CFRP grant as the means to develop the technical assistance capacity for project grantees. The TAP member emphasized the importance of long-term experience and broad knowledge of the forest products industry as important to this purpose, as well as a commitment to the ideals of creating a business in this area. In addition, several participants mentioned that one or more technical assistance positions may soon be filled in Region 3 to help address the broad needs for dealing with small-diameter trees and biomass utilization under the Healthy Forests Restoration Act and National Fire Plan, as well as other initiatives such as the CFRP in New Mexico and the Southwest Sustainable Forestry Initiative in New Mexico and Arizona.

As one of several Forest Service programs that have provided assistance for economic development in the forest products sector in Region 3 over recent years, the CFRP has built on the capacity developed by these other program, as well as sought to develop its own specific niche. It is, therefore, difficult to distinguish the degree to which improvements or new

innovations for using small-diameter trees is attributable to CFRP or to other programs. However, it is evident that the CFRP has effectively sought to learn from and strategically build upon the other programs as the program sought to identify its niche.

For example, the primary program on which CFRP was built, with respect to the purpose of improving the use of small-diameter trees, was the Economic Action Program (EAP) within the agency's State and Private Forestry branch. EAP has provided for a range of technical and financial assistance initiatives for economic development related to forest resources in rural communities in the region. Various CFRP participants discussed the importance of EAP in helping to rebuild the infrastructure for a forest products development in the region. The State Forester in New Mexico was a strong proponent of using EAP to encourage forest products development and helped initiate the Four Corners Sustainable Forests Partnership (FCSFP) in the late 1990s. The FCSFP focused primarily on building capacity for forest products enterprises in the states of New Mexico, Arizona, Colorado, and Utah. The 5-year initiative achieved considerable success and has evolved into a similar initiative, the Southwest Sustainable Forest Partnership, involving two of the four states, New Mexico and Arizona. Many of the projects that received technical and financial assistance through EAP and the FCSFP have become CFRP applicants and grant recipients. In some respects, CFRP has become a primary source of funding for these types economic development projects, as funding for EAP has greatly diminished in recent years and as the FCSFP has come to a close.

A number of CFRP participants commented that much more could be accomplished if more funding and support were available for community capacity building and economic development purposes, including innovative uses of small-diameter trees and the development of small-scale wood products enterprises. Several participants noted that although CFRP provides grants for these purposes, it is only a small part of what the program does. Therefore, CFRP cannot currently provide the level of support for these purposes that many participants feel is needed. Furthermore, because of the current emphasis on "acres treated" as a primary performance indicator for the CFRP, it is difficult to build support for providing greater attention and resources to these purposes. A number of program participants—including federal and state agency as well as local and private participants—recognized the need for performance indicators to help document the positive and negative effects of activities in this area.

4.4 Encouraging Sustainable Communities and Forests through Collaboration

This purpose statement implies that collaborative partnerships are a mechanism or means to encourage both sustainable communities and sustainable forests. Many participants in the program believe that collaboration among diverse stakeholders may be the most promising way to make progress toward the goals of sustainability, and, more importantly, it may be the most promising way of integrating the inherent challenges. All participants recognized important benefits being achieved through the collaborative partnerships developed through CFRP, but many also recognized the likely challenges that could be faced over the long term.

Building collaborative partnerships is a process that takes time and persistence. Often the process faces barriers such as technological and economic issues, antagonistic relationships between individuals or organizations, and current policies or traditional ways of doing business. CFRP

participants generally talk about collaboration as a promising means to overcome these barriers and see the program as achieving many short-term successes.

One TAP member commented on the importance of maintaining appropriate expectations of what CFRP can accomplish through collaborative partnership. He suggested that it is good to have high hopes for the program in helping to achieve broad goals, but that one should also be pragmatic about what a small grants program can achieve and how it needs to build over time.

"It is a big expectation to think that the small grants provided through CFRP are going to be able to kick start sustainable collaboration and infrastructure. These things don't happen quickly—it could take a decade or more to build the capacity."

A number of participants recognized that CFRP is only one federal initiative through which collaboration is being pursued. Some suggested that others, such as stewardship contracting and the Healthy Forests Restoration Act, might hold more promise for the future. These participants anticipated a future with primarily larger-scale projects and market-driven projects. Others were concerned, however, that collaboration was not being seriously pursued through some of these other federal initiatives. They suggested that CFRP had a strong and credible emphasis on collaboration, and they expressed concern that the program might get overshadowed—or even subsumed—by the other national initiatives. One TAP member acknowledged the effectiveness of encouraging collaboration through CFRP, but noted that it is hard to separate the influence of CFRP from other federal initiatives.

"No[one] question that the CFRP has had influence in the region and that the emphasis on collaboration is stronger in New Mexico than anywhere in the country. The CFRP is also demonstrating how a collaboration program can function and is one of the best—if not the only—model program being recognized and discussed in the country. It's difficult to talk about the effects of CFRP on collaboration right now because of all the other federal initiatives that are talking about collaboration, such as HFRA, NFP, and stewardship contracting. It is the best collaborative structure for project level information. Many of the other programs are anomalies at the project level and involve little collaboration."

Another TAP member discussed an underlying ideology necessary to understand collaboration as a means toward achieving sustainable communities and sustainable forests. The basic belief is that capitalism and markets alone are not the answer to achieving sustainability. There is a need to explore new economic approaches through collaboration:

"Head-to-head competition and simple botto-line economics don't work for long-term community sustainability or ecosystem sustainability. Pure capitalism can be destructive. We need to find ways for people in communities to work together for community wellbeing, to use collaborative approaches and to make them work economically."

A TAP member representing environmental interests discussed the importance of providing continued support to projects that were building capacity and making progress integrating sustainable communities and forests. He suggested that the notion that emerging projects could somehow make a great leap to becoming economically self-sustaining after one grant or a few years was not realistic. Successful projects that are moving forward—building capacity and doing forest restoration work—may still need continued grant support as they evolve.

"We have to keep funding projects in areas with promising initiatives multiple times. We should be funding projects with the vision of helping to create long-term, integrated infrastructure... and it won't happen simply through private-sector investment. It will need continuing grant support."

To connect the day-to-day work on the projects with the long-term goal of sustainable communities, it is essential to create and maintain a vision. One grantee and TAP member commented on the "people" part of the sustainability equation:

"After 30 years of experience with this small wood stuff while also keeping a strong interest in the health of the forest, I've learned that you can't teach this experience and perspective to everyone in a short time. In managing projects and tasks, much of the work is keeping people on task. It is a social, people management, issue and involves keeping people in touch with the larger vision."

The ability of CFRP to support projects that emphasize an integrated approach to forest restoration was important to many program participants. These participants recognized the need to integrate community capacity-building and forest restoration activities in order to pursue a vision of sustainability. One CFRP coordinator suggested that CFRP was uniquely designed to pursue this vision and is making progress, but the vision is challenged by single emphases, such as fire suppression, and by diminishing support for community development.

"The CFRP is a great vehicle for integrating forest restoration and rural development—to move forestry into the 21st Century. CFRP provides opportunity for innovation, blending new technologies and entrepreneurial spirit with the needs of the forests (natural resources) and rural communities."

"The fire mitigation situation is the overarching issue, and state and federal agencies are still driven by fire suppression and fuel reduction rather than by forest restoration or forest ecology. The CFRP is helping to make progress—ecology and restoration are getting more recognition. To achieve its vision, however, the CFRP will need to be durable. If it can stay with us for the long-term, it may continue to make headway, but there is a risk as other programs like RCA and EAP are being cut and diminishing in importance. The Western Governors Association and the National Fire Plan are providing great forums for discussion, but without the funding for rural development (such as RCA, EAP) there isn't much opportunity for the integration that is needed."

Another TAP member recognized the lack of wood products infrastructure in New Mexico and the importance of rebuilding it before creating any opportunities to make progress toward sustainable communities and forests:

"Because we have lost so much infrastructure in the state, it is hard to achieve projects that are sustainable in the long term."

"There is also a bit of a disconnect between the small projects in CFRP and language to achieve landscape scale objectives. It seems that many of the CFRP grants are targeted to help develop small businesses. Perhaps there could be a partnership between CFRP (for small-scale projects) and the National Fire Plan funding that could focus on larger-scale approaches to treatment and utilization."

4.4.1 Creating Local Employment or Training Opportunities

One requirement of CFRP projects is that they create local employment or training opportunities within the context of accomplishing restoration objectives. This requirement aims to build local social capacity by helping to develop a workforce and to provide economic benefits to communities through jobs. It connects to the broader purpose of encouraging sustainable communities.

A key indicator of program effectiveness is the number of jobs created through CFRP projects. This data is reported to Forest CFRP Coordinators on each national forest from each of the projects. To date (through 2004), 464 jobs have been created (Appendix A). These data are collected to reflect "full time equivalents," but it is difficult to consistently characterize these jobs. Some jobs, such as those involving field crews working on forest restoration projects, might be seasonal and some might last only as long as there is CFRP grant funding for project activities. Other jobs might be year around, involving multiple activities, and they might be more durable where projects have leveraged CFRP projects with other grant or contract funding for other activities. A related concern mentioned by several grantees is the high rate of turnover among workers on these types of projects.

4.5 Developing, Demonstrating and Evaluating Ecologically Sound Forest Restoration Techniques

Many participants in CFRP speak to the value of the program as a demonstration program, allowing for a great deal of experimentation with technologies and practices that would not be tried through traditional industry or management practices. The guidance for this experimentation is provided by the vision and discussion of the TAP members as they interpret the legislative purposes and authorities of the program. It is important to recognize that a key purpose of CFRP is demonstration. It helps to clarify and explain the diversity of projects funded through the program and, in turn, the difficulty of developing data at a programmatic level for such a diversity of projects.

One CFRP grantee recognized the demonstration value by saying, "We need models or examples of restoration projects and productive technologies and businesses, and we may need to start small. With CFRP as a demonstration program, we can show how different project grantees can 'produce' in diverse contexts through different approaches. All of the models don't need to look alike." Another CFRP participant and TAP member recognized potential benefits of experimental and small-scale projects that are difficult to measure:

"CFRP has also brought an ability to try something experimental—things that wouldn't have been tried by traditional industry, because they weren't right for pure bottom-line economics. These small-scale projects bring a lot more in benefits to communities than simple dollars and jobs suggest. It is about people working together within communities, (building off each others' activities and supporting their community through collaboration.) For example, an effort to develop products that are currently being imported into the community could provide significant benefits to the community in terms of saved energy and transportation costs. These types of benefits of small-scale community projects are difficult to communicate with national policy audiences who are looking for simple measures."

The CFRP has created a unique and effective framework for implementing a demonstration program to explore forest restoration techniques. The program is noted for its flexibility and a culture of open and adaptive learning through mechanisms, such as the TAP review process and the annual workshop. It is still early in the CFRP and multiparty monitoring reports are available only from initial-round projects.

4.5.1 Incorporating Current Scientific Forest Restoration Information

Many of the "forest restoration" treatments accomplished through CFRP projects have been based on prescriptions developed by the Forest Service through project planning and the NEPA process. These prescriptions are generally based on recent scientific information, but CFRP participants have raised a number of concerns, including: perceptions that many CFRP project treatments are based on prescriptions for thinning or fuel reduction rather than for forest restoration; limited scientific information regarding treatments in forest types other than Ponderosa Pine; and prescriptions being applied at a project level without sufficient consideration of ecological effects at a larger scale.

4.5.2 Including a multiparty assessment

The guidelines and handbooks prepared through the CFRP for multiparty monitoring are effective materials for incorporating current scientific forest restoration information and providing sound methods for evaluating the ecological effects of these projects. Handbook 4 is particularly good at translating information to help guide multiparty monitoring teams in developing ecological monitoring activities. Although it is early in the program and substantial effort has been put into developing these guidance materials and project support, questions remain as to whether the level of technical assistance is sufficient and how it will be sustained in the future.

5.0 VALIDATION: A Review and Evaluation

The purpose of this third review section is to examine the overall validity of the CFRP as a model framework for making progress toward the broad purposes of the program. To do this, we will consider the "validity" or merits of the CFRP as an integrated set of principles and strategies designed to address the multiple and integrated goals of improved forest restoration, watershed health and diversity, reducing catastrophic wildfire risks, strengthening partnerships for joint action, improving economic capacities for forest stewardship and wood utilization, and increasing ecosystem and community sustainability.

In other words, as a model that is built on *specific assumptions* (e.g., the importance of diverse stakeholder collaboration, the potential to "incentivize" sound and accepted forest restoration projects and up-front collaboration through a grants program, and the potential for integrating forest restoration and capacity building through multi-year cost-share grants) and *specific program elements* (e.g., grants program, TAP, diverse stakeholder participation, multiparty monitoring, open process, transparent information, consensus-based decision-making, peer learning, and adaptive management), has the CFRP proven to be a valid experiment and a program worthy of further investment and expansion? Or, stated yet another way, in what ways does the CFRP possess the critical principles and strategies for success in the face of the

ecological and economic concerns related to restoring forest ecosystems—concerns that are not only exemplified in the State of New Mexico, but are widespread in other regions of the United States?

We will explore the validity of the CFRP from a community-based forestry perspective, examining a number of themes and topics that have consistently emerged through projects and discussions involving community-based forestry groups. We have selected and developed these themes based on conversations and interviews with a number of the participants in the CFRP. Most of the comments included in the following sections were made while we discussed with participants the overall design of the CFRP and the benefits, outcomes, and future applications of the program. The following discussions also include perspectives from the National Assessment Team, reflecting a more policy-oriented appraisal of the foundational components of the CFRP, as the program might be viewed within a broader national context

5.1 Emphasizing or Mandating Collaboration

Collaboration and partnership among a diversity of groups and interests has been a hallmark of the CFRP. Not only is this orientation explicitly stated in the enabling Act, it is also embedded explicitly and implicitly in the processes of the TAP and other program strategies that bring together partners. Comments from participants and partners note that the CFRP has "emphasized" collaboration, "has built partnerships," and has "incentivized collaboration" at the project level. At a broader scale, participants have expressed that CFRP has "built a state-level collaboration process within the Western Governors Association's 10-year Implementation Plan," "has brought a great benefit to the state in terms of people working together," and "has also encouraged the tribes to work with each other."

There is strong evidence that CFRP's emphasis on collaboration has helped to build trust, enhance innovation, and encourage an entrepreneurial spirit among those groups and interests involved in the program. Support for collaboration as a principle of the program is both broad and strong. However, there is also an awareness that collaboration is challenging as an objective. Experience through CFRP has shown that "not all communities have the capacity and/or interest to develop, implement, and monitor collaborative projects," and that efforts to pursue the objective have required "field level outreach and program management to accomplish collaborative planning and proposal development." These comments fit with fairly consistent findings from broader community-based forestry experiences—while collaboration significantly benefits forest restoration efforts, it requires an investment of both time and resources on the part of various interests and partners. In other words, the CFRP demonstrates and reaffirms widespread thinking that collaboration is a major contributing factor to success in community-based forest stewardship processes, and that it necessitates a capacity building investment to be sustainable.

⁴ Examples of community-based reference include: "Understanding Community-Based Forest Ecosystem Management, An Editorial Synthesis," Gerald Gray, Maia Enzer, Jonathan Kusel. 2001. Journal of Sustainable Forestry, Vol 12, Nos. 3-4.; "Community-based Forest Restoration," Ann Moote, 2003, in Ecological Restoration of Southwestern Ponderosa Pine Forests; Hart Prairie report on collaboration, Ann Moote and Dennis Becker, Ecological Restoration Institute; and "The Four Corners Sustainable Forests"

Partnership: Lessons and Strategy for Community Forestry Capacity Building," Office of Community Services, Fort Lewis College, November 2004.

The emphasis on collaboration and partnerships, including the eligibility requirement and the grant incentive, has strengthened the performance of the overall CFRP program and the accomplishments of individual projects. Collaboration, therefore, appears to be an essential component of the CFRP and brings considerable validity to the overall model. Some participants have noted, however, that collaboration cannot override important and legitimate public land use values merely to seek agreement. Furthermore, collaboration as a principle requires that once a zone of agreement is achieved, some attention be paid to maintaining its essential terms, while also adapting to emerging, practical realities.

5.2 Capacity Building

"Capacity building" is an often-used term in the field of community forestry and forest restoration, and is applicable to the work of the CFRP. An important validity question with regard to capacity building is to ask how program energies and resources within CFRP are being devoted to building various types of organizational resources, personal skills, and project orientations.

In many places where the need exists, the current capacities do not exist to attain the goals of collaborative forest restoration, as represented by those stated in the Act. Foremost among the currently unavailable capacities in New Mexico is an economic infrastructure, made up of small and medium scale enterprises to harvest, process, and market low-value wood materials and biomass. If there happens to be an available supply of sawtimber in some of the restoration projects, most of the mills that could have used it closed 10 or 15 years ago.

Other capacities requiring development are social, or community oriented. They revolve around forming new relationships among diverse interests in a community. These interests range from local governments who wish to reduce catastrophic wildfire risk to life and property, to traditional wood-users who wish to maintain cultural ties to the land, to conservation groups who seek to sustain forest ecosystems. Although common ground often exists among these and other interests, it is only in a community context that an agreement can be reached, even after considerable dialogue, because we are in a new era in which diverse interests are willing to explore the interdependence of forests and communities.

The need for this dialogue must be set in the context of the new realities of forest restoration, forest stewardship, and community sustainability. Restoration of unhealthy, overstocked, fire and disease prone forest stands is an emerging process, supported only partially by an evolving science. It is therefore to be expected that substantial amounts of public dialogue and civic engagement of citizens, business owners, woods workers, ecologists and many others is necessary to discover areas of common ground as a new and sustainable stewardship-based economy is built. This is a social or community capacity that typically needs to be developed or at least strengthened.

Based on the experiences of CFRP participants, as well as broader experiences of the community forestry movement, building capacities in communities, among economic enterprises, and within public land agencies is a necessary component of a valid forest health and restoration model. It is the view of the National Assessment Team that all the components of the CFRP dedicated to building capacities—from assisting with grant writing skills, to investing in multi-party monitoring activities, to enhancing collaborative partnerships through the grant making requirements of the TAP—are important public investments in a new infrastructure. Without such

components, the likelihood of achieving the goals of the Act would be significantly lessened. We believe the dedication of resources to continued capacity building though peer-learning, increased partnering, and engaging in various forms of technical assistance, is an important contribution to the "validity of the CFRP model."

5.3 Addressing Institutional Change

Another important factor that often emerges from community forestry efforts has to do with the adaptations necessary within the Forest Service or other land management agency in order to interface with a particular initiative. A community forestry group seeking to address forest health, economic development, and monitoring of restored ecosystems, may develop plans or practices that do not align well with traditional forest management operations and practices of the land management agency. This is true because community forestry groups, made up of local governments, businesses, conservations organizations, and other interests, have needs, perspectives, skills, and resources that are distinct from the agency, even though they may be working in partnership with it. In some instances, the agency might take a rigid position and maintain that the standard or traditional ways of doing business are not subject to change. In other instances, with some reorientation and flexibility, leadership within the agency might recognize the need for institutional change inside of the partnering agency in order to accommodate the perspectives of the community forestry group.

In this regard, comments from participants in the CFRP included the following:

"In this agency culture, long-term collaboration with communities simply doesn't fit very well."

"The changes that are needed in the Forest Service (and other agencies) are not about forestry, they are about people skills."

"The grants process is a new way of doing business for the Forest Service."

"The traditional [USFS] approach was to do the work based on plans, allocations, and laws/policies."

"The CFRP partnership approach requires a lot of energy to be put into collaboration and an open, competitive grants process...[is] a foreign way of doing business."

The "validity" question is whether "institutional change" can be accommodated by agencies in order to achieve significant public benefits. There is evidence from over a decade of experience with community-based forestry projects that the efforts made by land management agencies to collaborate with community-based organizations and businesses brings about results, benefits, and accomplishments that would otherwise not occur. Within the CFRP experience, there is also evidence that as District Rangers opened up to working with local collaborative groups and their proposed projects, rather than avoiding them for a variety of reasons, they began to see the benefits, both to accomplishing their work on the National Forest and to providing work for local businesses. Based on this evidence, efforts by land management agencies to pursue institutional change appear to be very worthwhile. The changes are intended to enable the agencies to partner better with community-based groups and to leverage resources towards collaborative stewardship. Without this collaboration, much, if not most, of the restoration and economic development work

could not get done. The fact that community-based forestry initiatives prompt behavior shifts and adaptation within public land management agencies can therefore be seen as another positive outcome.

As one CFRP partner put it:

"If the agency is going to accomplish the work it needs to do... it is going to have to do it hand-in-hand with partners."

And, as another observer pointed out:

"Again, this is not just about land treatments; it is about collaboration and partnerships as well as treatment."

The fact that the CFRP is causing or leading various units of the Forest Service, the prime sponsor of the endeavor, to adapt, to learn new strategies, and to invest in building new relationships provides us with another indicator of validity. In other words, the CFRP, through its programmatic arrangements for discussion, communication, partnership development, and sharing knowledge is seeking ways for land management agencies to adapt and change in order to form workable and productive partnerships with the grant-funded community groups.

Such internal, institutional changes do not occur painlessly or without commitment, time, and discussion. Simultaneously, this process of institutional change requires the community groups have to learn about internal operations and regulations of governmental agencies. What makes this a key validity monitoring factor is that there is real, day-to-day dialogue about the needs for change and adaptation in order to create new or more creative and entrepreneurial solutions to forest health problems that have no simple marketplace answers. This dialogue is beneficial on many levels, producing community learning and capacity, and enabling the land agency to gradually but consistently work through changes that enhance its performance with key partners.

5.4 Integrating with the Land Management Agency's Program of Work

Just as we have acknowledged that a successful model of community forestry needs to work through processes of institutional change within the land management agency, conversely the work of community partnerships needs to integrate with agency mission, operations, and regular programs of work. It would be counterproductive to establish a model of community forest restoration with the false expectation that the community partnerships or funded groups could work independently of the agencies on a piece of public land. This is true of any public land management agency, whether it relates to native trust lands, municipal watersheds, or BLM or Forest Service jurisdictions, although reference is most often made to "integration" with the Forest Service.

The notion of integration has a lot to do with the "program of work" for which each National Forest receives an annual budget. In a general sense, the CFRP is designed to address fuel treatments, wildfire mitigation, and other forest health improvement objectives that fit within the work programs of each National Forest and the land management units, generally Ranger Districts, on that forest. For all practical purposes, CFRP should facilitate efforts of a given National Forest to achieve its goals, or "hit its targets." The CFRP model is based on an

assumption that the program, through its grant-funded projects, can bring additional or new resources to the table, which National Forests and units might incorporate into their larger work programs. The "validity" question is, has this been working through the CFRP?

Where the challenges of integration often arise are around the appropriate fit on the ground in a given time period. A CFRP project, generally developed over a 1-2 year period and set up to work over about four years on 500-1,000 acres of land, may not integrate as easily as one might expect into a multi-thousand acre planning strategy on a National Forest Ranger District, which may have been evolving over many years of planning and analysis. Ranger Districts generally develop their work plans and budgets at least a couple years before projects are implemented, consistent with direction in the overall national forest plan. Reconciling CFRP projects with a Ranger District's plan of work requires early involvement of a Ranger in the collaborative CFRP process. Even then, the process of integration may face challenges.

Many CFRP projects have faced challenges related to the required NEPA study work for their project area. Delays in getting the NEPA work completed can cause CFRP projects to be thrown off course, just as such delays can affect projects within a Ranger District's regular program of work. "Flexibility" has become a common attribute among CFRP grantees in meeting their project objectives, and seeking to "add value" to the ecological work of their agency partners. In addition to adjusting project timelines, some CFRP projects have adapted by building the costs and time requirements of NEPA studies into their budgets and plans, while other others have sought to develop their collaborative projects in areas where NEPA studies have already been done. Questions about the appropriate scale of NEPA analysis and how projects are reconciled with, or perhaps tiered to, such analysis relate to CFRP projects as well as to regular projects in a ranger district's plan of work.

Time and timeliness mean everything to grant-funded CFRP projects and their efforts to integrate with a national forest's regular program of work. This relates back to the factor of collaboration, without which there is almost no likelihood of achieving a successful integration. In the absence of integration with the program of work, whether related to NEPA studies or agreed-upon restoration prescriptions, the CFRP grantees are often forced to wait, lose momentum, and to waste capacity and resources. Within the CFRP there have been a number of instances of these types of difficulties, or barriers to full integration. Some of the most challenging have involved small businesses that have used CFRP grants to leverage other resources, developed the capacity to employ crews of workers, and acquired specialized equipment for restoration work—all consistent with the CFRP vision—but have run into difficulty obtaining the anticipated project work to keep their crews employed and to provide access to a supply of small-diameter trees for the processing equipment they have purchased.

The challenges of integrating grant-funded CFRP projects with the land management agency's program of work have led some to question the validity of this approach. As a demonstration program, a reasonable question about the grant-funded CFRP model might be to focus on the likelihood of success of "integration." Despite the challenges, in fact by calling attention to the challenges, the CFRP has stimulated the current learning and adaptation going on within the agency. An alternative question might be, without CFRP would the Forest Service be as able to create a collaborative, community partnership approach to forest restoration? To the National Assessment Team, it appears that there is a greater likelihood of success from a grant-funded approach, due to the creativity and synergy that tends to come from placing a focused set of resources in the hands of a qualified external entity, while maintaining the land management

agency as a key and vital partner. Merely flowing the "new resources" through the normal agency budgetary structure, at least within traditional institutional capacities, could very likely curtail the stimuli for change that are driving the entrepreneurial and risk taking behaviors that are building the badly needed new capacities. That is, the very stewardship-based economies and infrastructure, as well as community governance and accountability required to restore and maintain forest health, likely would not occur if the program was rooted in internal funding mechanisms.

The National Assessment Team concludes that the more "valid" model for addressing the long-term objectives of healthy and sustainable forests and communities, as envisioned in the Act, is to place the resources in the hands of a strongly collaborative enterprise, which is willing to work diligently to integrate its efforts with the partnering public land management agency. In addition, the land management agency will need to work just as diligently to increase its internal capacity to work with collaborative groups and processes, to provide guidance and participate in efforts to integrate projects with their regular programs of work, and to assist with coordination and communication in a variety of ways. This will require some organizational and procedural adaptations, greater openness, more transparent communication, and collaborative project level development.

5.5 Developing Infrastructure for a Forest Restoration Economy

As has been mentioned in Section 5.3, to develop a forest restoration infrastructure will require an initial public investment. It is necessary, in most geographic locales, particularly in the Southwest, to facilitate the development of a renewed, stewardship-oriented, wood products economy. A long-term objective of such investment is to stimulate sustainable economic activities based on the forest restoration work and the use of by-products from that work. An underlying assumption of the CFRP is that efforts to restore healthy forest ecosystems will be clearly connected to efforts to revitalize and sustain local economies. The important "validity" issue, therefore, is to ensure that the ecological, or forest restoration, functions of the CFRP are well integrated with its economic, or rural development, functions.

The CFRP model, as exhibited in the principles and strategies with which it solicits and makes forest restoration grants, seeks an integration of forest economics and long term ecological sustainability. A number of CFRP participants have noted the importance and uniqueness of this program orientation, as well as the need to provide sufficient funding for both program emphases:

"[I see] CFRP as one option, and as an important option, that goes far beyond treating acres by helping to build capacity and infrastructure."

"A grants program can help build the local capacity and get the work done."

"We need to bring the funding and the broad authorities—capacity and treatment—together so the program can grow."

"The funding needs to be allowed to go across the board, not just to treatments, if this integrated vision is to work."

Recognition of and support for this integration does not mean that it will be easy. Efforts to rebuild a stewardship-oriented forest economy, for example, have encountered challenges, such as high workmen's compensation insurance costs that undermine the financial viability of emerging businesses. In addition, it has been recognized that the development of new enterprises, products and markets requires more support than CFRP has been able to give. Indeed, CFRP is looking for ways to provide more hands-on technical assistance to promote knowledge and skills in a variety of business management, product development, and marketing identification fields. It is also recognized by CFRP participants that the development of such economic infrastructure will take time, as one noted: "It could take a decade or more to build the capacity."

In the short term, many participants praise CFRP for its effectiveness in getting resources to the grantees so that they can implement project activities. Several noted the efficiency of this grants program in avoiding administrative costs and getting resources to the ground:

"[CFRP] gets money to the ground, rather than to a national initiative that comes through the agency bureaucracy. The top-down approach is less efficient and effective."

"Money is not being sucked up by the overhead of some large company or bureaucracy."

Participants also made comments about the economics of the integrated infrastructure and forest restoration activities called for through the CFRP. The following remarks, for example, recognize the importance of providing access to capital for new business enterprises attempting to engage in a restoration-based wood products economy. They also recognize that the costs for restoration treatment through CFRP should be considered investments, or expenditures that offset the costs of service work necessary to restore ecosystem health. Based on available economic data for CFRP, a good case can be made that the program is accomplishing restoration work in a cost-efficient manner while also making investments in community and economic infrastructure. It is the program's attention to and investment in both of these objectives that makes it unique:

"Banks could not provide capital for businesses based on the current economics and supply issues surrounding small-diameter trees."

"It costs us to remove small-diameter material."

"The current need for stewardship and restoration work on the landscape is going to cost money. This is service work."

In looking to the future, a number of questions about CFRP can be raised. How will this grants program ultimately connect with a market-based economy, if and when it develops? That is, what happens over the coming decades if and when a wood-products economy, in traditional market terms, is revitalized enough to be part of the community based restoration movement? Some participants suggested that there will be a need for a grants program like CFRP in the Southwest for several decades, at least, since the magnitude of the needed forest restoration work will take that long and will not be achievable through traditional market economics. Others were more optimistic that markets might develop through the use of innovative technologies and products and that the need for a grants program may diminish at some point in the future.

CFRP participants also raised similar questions about the potential effects of future market development on some of the current projects and community-based enterprises. As market-based economics become more viable, for example, and perhaps a greater number of larger wood-

products companies enter the restoration-based forest economy, what might happen to the smaller, local wood-products businesses that took the first steps towards the sustainable integration of forest health and sustainable communities? While this question is beyond the scope of the current assessment, it nevertheless illustrates the current need for a vision of how to integrate the economic and ecological components of this program, and to develop better measures of success, addressing both components and their interrelationships, rather than the limited measures of "acres treated" and "jobs created."

5.6 Larger Landscape Scale Connections

As the CFRP begins its fifth year of implementation, there is discussion about how small demonstration-scale projects fit within the health and restoration needs of the larger landscape. While this might be a longer-term validity question, it is important that it be considered early on as CFRP is viewed as a model with potential for broader applicability.

CFRP participants expressed interest in this topic, both in seeking to coordinate the planning of CFRP projects with other initiatives to address larger-scale concerns and to assess the impacts of CFRP projects in conjunction with other projects from a larger scale perspective. Several comments included:

"Can we put together a process through collaboration to meet broader objectives of scale?"

"How are CFRP projects connected to landscape scale initiatives?"

"There is also a bit of a disconnect between the small projects in the CFRP and [the goal-oriented] language related to achieving landscape scale objectives. It seems that many of the CFRP grants are targeted to help develop small businesses. Perhaps there could be a partnership between CFRP (for small-scale projects) and the National Fire Plan funding that could focus on larger-scale approaches to treatment and utilization."

"Small-grants to local operators alone will not solve the problem; there needs to be some integrated, longer-term initiative . . . restoration work must continue over time."

Discussions of how to address issues related to landscape-scale connections often reflected on the upfront planning and development of CFRP projects. How could this planning better integrate with larger-scale planning efforts already being conducted by federal and state agencies, through collaboration with local communities, such as those under the National Fire Plan. One idea that has merit is to ensure efforts to connect the planning of CFRP projects to Community Wildfire Protection Plans (CWPPs) currently being prepared through the Healthy Forests Restoration Act. Like CFRP projects, CWPPs are intended to be developed through open collaborative, or community-based, processes. And communities preparing CWPPs are struggling with similar questions about how to plan projects and set priorities from a landscape-scale perspective.

Recently, the TAP has discussed the need to send a review team out to representative grantee demonstration sites. During such visits, landscape-scale questions could be asked. The effectiveness of the small demonstration projects in contributing to landscape-scale restoration needs could also become a part of the multi-party monitoring process. In addition, it may be reasonable to suggest a coordinated statewide appraisal, connected to each of the five National

Forests in New Mexico, to tribal lands, and municipal watersheds. There may be a consistent and strategic way to map the interrelationships of all the CFRP projects, linking them with on-going National Fire Plan projects, stewardship contracting projects, and other projects under the Healthy Forests Restoration Act. Such a mapping effort could examine the overall cumulative contributions to landscape or ecosystem level restoration goals, as envisioned by land management agencies from a "cross boundary" perspective.

5.7 Sustainability of Community Forestry Infrastructure and Projects

An important validity question to ask of grant-funded community forest restoration initiatives, like the CFRP, addresses their emphasis on long-term sustainability. To fund a local group or partnership, however collaborative or committed to forest improvement, and then have that effort only be able to operate until the grant funds ran out, would be a less than a wise investment. It is in this sense that most observers see "long-term sustainability" as a key indicator of validity. Either explicitly or implicitly, the general belief is that resources provided to these sorts of collaborative stewardship enterprises will help get them started or enhance their existing capacity. It is generally expected that they will obtain other sources of revenue to leverage grant-funded activities, or that with the grant funds as an initial seed source, capital market conditions and related activities generated will over time enable them to become sustainable.

CFRP, like most grant programs, requires a non-federal match of the grant funds provided (20 percent minimum). This serves as a basic level of leverage expected of all projects, while some provide much more. Given the diversity of CFRP projects, they present a wide range of experience with respect to leverage. Some meet the minimum requirements while others bring together a variety of funding sources, such as other grants, contracts, and project revenues, to support different aspects of an integrated restoration project.

Achieving long-term sustainability may seem like a lofty goal or high expectation, based on a mixture of some strong and some untested assumptions. Nevertheless, it is reasonable to strive for sustainability, or to do everything possible to achieve it. This is why the CFRP "validly" establishes a set of requirements that are considered to be key important elements for projects to make progress toward sustainability, such as to seek partnerships, to have good communications with the relevant public land agency, and to design and implement a monitoring plan.

As a broad concept integrating social, economic, and environmental considerations, sustainability is linked to many of the other "validity" factors discussed in Chapter 5, including: being collaborative, building social and economic capacities, integrating restoration with economic infrastructure development, integrating the project level actions with agency work plans, and institutional adaptations to increase opportunities for community-based forestry. Because of these many interrelated factors, the degree of sustainability of a project can be affected by numerous circumstances, some beyond the control of the participants. At a programmatic level, the best one can do may be to stress sustainability as a principle by putting in place parameters that will make it as achievable as possible. Some of the parameters that CFRP has set for projects include: make sure there is a "spark plug" (i.e., a leader and motivator), be entrepreneurial, have a feasible business plan, include diverse interests in the project planning, seek the support of local and tribal governments, meet often with the land managers, improve the linkages with other forest health and conservation programs, and keep the larger landscape in view. In other words, CFRP projects

are encouraged to identify and seek to implement all the means that can possibly contribute to sustainability.

An important aspect of sustainability, which should be considered in exploring the validity of the CFRP model, is that it reflects the need for a long-term vision of community forest restoration—long-term both in the sense of the health and management of the ecosystem and the time it will take to rebuild a stewardship oriented forest products economy. The former sense has been more thoroughly examined and is pretty well captured in fundamental knowledge about dynamic ecosystems and the need for adaptive management approaches. CFRP has demonstrated a strong emphasis on learning and adaptive management, particularly through its requirements and commitments concerning multiparty monitoring. The latter sense of a long-term vision of sustainability is less well developed. We are only beginning, through on-going experiences with community forestry models such as the CFRP, to understand the investment and commitment that is necessary to build a sustainable, public-private economy based on forest health improvement.

Participants in the CFRP have said that, although it is "hard to achieve projects that are sustainable in the long term," they believe that:

"The impacts of the program on the resources will go on long beyond the grant program."

"The treatments through individual projects will have effects on the land beyond the life of the grant."

"The infrastructure or capacity stimulated by the grants will also have longer lasting effects."

These types of statements, and the challenging work that stimulated them, lends credence to the importance of "sustainability" as a critical factor in the CFRP in New Mexico, and as a critical component of any model that might be applicable in other contexts.

5.8 Peer and Collaborative Learning

The CFRP seems to have created a social fabric that networks throughout the program and intersects many of the program components. The fabric is composed through a process of ongoing peer or collaborative learning. Whether one is a grantee, a member of the TAP, a technical assistance consultant, or a staff member of one of the many land management or governmental agencies, there is strong evidence of learning from and through the CFRP processes. For instance, the TAP has been characterized as a graduate level course in restoration forestry. The program has encouraged a culture in which problems are raised and barriers are addressed.

At CFRP annual workshops, small groups share experiences. Projects present their successes, challenges, and lessons learned. Participants have commented that:

"Lessons are being learned for future [project] proposals."

"[CFRP] it is accomplishing a lot in bringing people together, in treating acres in need of restoration, and in learning how to do restoration.

"It's clear that there is a lot of learning through CFRP.

"The TAP process also results in better decisions.

"[CFRP] is pushing the envelope and helping the conversation on forest restoration.

"The CFRP, and the discussions at TAP, are helpful in identifying issues that get in the way of project implementation and finding ways to deal with them.

Peer or collaborative learning is an essential part of any community-based forest restoration model. A major reason for this is the emerging, evolving, and adaptive nature of forest restoration work, which in a very real sense requires such learning. There are no easy formulas for ecological restoration.

The environmental, social, and economic needs and challenges cannot be adequately addressed by individuals, single businesses, or by academics or technical consultants. Mutual learning, continually shared among systems of learners and practitioners, offers one of the best possibilities for developing, applying, and testing the new knowledge of forest restoration that is required.

The learning systems and networks need to cross traditional lines drawn between academic researchers and scientists and the knowledge users in the field. Knowledge available in universities and forest research centers needs to be integrated with applied experiences and methods of the forest workers, wood processors, product manufacturers, and marketing and utilization professionals. And vice versa; the experimentation and hands-on learning that is occurring as forest restoration evolves needs to feed into formal education and research programs.

No model of community-based forest restoration would be "valid" without a strong collaborative learning component. Given the culture of learning and the amount of peer learning occurring within the CFRP, it appears that this is a strong feature of the program. Furthermore, the program's mandate for multi-party monitoring is a focal point for collaborative learning, not only as a means of accountability, but as a vital opportunity to build a learning foundation under the community forest restoration process.

5.9 Broader Policy Framework Questions

From a policy perspective, the CFRP is a relatively tightly integrated approach to community-based forest restoration. It embodies the traditional triad of ecological, social, and economic processes that are considered essential contributors to success in this arena. By incorporating these three processes, with and through various program components, such as the grants selection process and the multi-party monitoring mandate among others, the CFRP model may be said to possess the critical policy direction to be successful. When this policy direction is implemented to an appropriate degree, CFRP can be seen as a model that is serving as "an incubator for new approaches and solutions to the problems of forest management both inside and outside of the region." That being the case, the CFRP can be perceived as a catalyst for tackling a range of regional and national forest restoration challenges. It suggests that CFRP provides a good opportunity to apply resources in a manner that focuses on addressing recently identified policy issues, such as of forest health, stewardship-based forest restoration, collaboration, and community sustainability, or that CFRP is a worthy public investment.

While some might say that there is an unevenness in the way the CFRP in New Mexico has emphasized various parts of the ecological-social-economic framework, the very fact that it does

address actual fuel treatments and scientific approaches to forest restoration, forms collaborative partnerships to facilitate community support and getting work accomplished, and supports utilization of woody and biomass materials and development of new products, indicates a fundamentally well-balanced orientation to community-based forest restoration. It speaks well for the program that its approach to integration neither states nor emphasizes only a single objective, such as "to get acres treated," or "to create jobs," or "to protect communities from wildfire," or "that forest dependent communities must be sustainable." The CFRP does not envision these as independent from each other, but as interdependent functions of a balanced model. This is a welcome policy perspective. It underscores that healthy forests are not separate from vital communities that care about good stewardship and ecology, nor are they independent from a variety of forest workers and businesses that are trying to earn a living or survive by undertaking needed wood harvesting and production work.

Looking more broadly at the CFRP, as one program among others, such as the National Fire Plan (NFP), stewardship contracting, the Healthy Forest Restoration Act (HFRA), or a variety of USDA funded rural development activities, what can be said about it as a contributing component or strategy? While it might be suggested that CFRP has not strongly stressed specific forms of integration with these other program initiatives, it has called attention its own compatibility with them and encouraged efforts to integrate. It is also evident that CFRP could contribute more to collaboration and forest restoration efforts through these programs, as well as benefit from them over time, if more comprehensive integration were sought and achieved.

For instance, CFRP funded partnerships could contribute to the NFP and HFRA by building capacity at the community and wood-products business levels, wherein local government and citizen support is increased for improving forest health and reducing fire risk in forested areas that affect health, safety, property, and other social and economic values. They could also contribute by helping create a sustainable wood-products industry, one that is scaled to fit the ecological goals on the landscape and the needs of the community. In other words these same partnerships, having built the capacity to design, implement, and monitor restoration projects through CFRP, can also tackle additional projects that could be supported and facilitated through NFP, HFRA, or stewardship contracting.

In turn, these other program initiatives can and should support the CFRP, especially as a program that operates through a "grant-making" strategy. By encouraging the coordination of their resources with those that flow through CFRP and other grants programs, these other initiatives can build on, leverage, and help sustain the grant-funded projects, as well as enhance their efforts and accomplishments. Better integration of all these forest restoration initiatives at the community or forest level can strengthen a wide range of capacities, including more comprehensive ecosystem management, partnership-based project planning and design, efficient project implementation, and monitoring and adaptive management. Working in concert among all of the relevant authorities and programs enhances the sustainability of many restoration skills and collaborative relationships within both the community and the land management agencies because together they increase confidence, on the ground experience, knowledge of working together, and mutual trust among the parties.

Considering the CFRP in regional and national policy contexts, questions have been raised about possibility of "growing the funding" or "exploring the expansion of the CFRP." People familiar with the CFRP are asking questions about the potential for the model to be replicated in other regions or states. A number of program participants were enthusiastic about the CFRP model and

thought it could be applied widely among states in the West with a strong federal forestland context. The program might evolve differently in various local and regional contexts, but the basic model provided for open and adaptive responses to these contexts. Some participants noted that the CFRP model seemed to fit particularly well in the Southwest where there was a widely accepted wildfire threat and need for forest restoration, a recognized need to rebuild social and economic infrastructure related to forests and natural resources, and a substantial, if fairly recent, history of exploring collaborative partnerships to address these issues. A prudent approach for expanding the CFRP, they suggested, might be to start with those states in the Southwest with similar contexts.

6.0 LESSONS AND RECOMMENDATIONS

6.1 Lessons

After approximately four years of implementation of the CFRP in New Mexico, numerous lessons can be gleaned from the experience. The following lessons highlight emerging trends, successes, and challenges that are worthy of consideration for those involved in the CFRP as well as a variety of groups interested in community-based forest restoration more broadly.

- The basic model for the CFRP, a grants program providing incentives for collaboration and integrated forest restoration projects, has been effective in stimulating many and varied proposals, encouraging collaboration among diverse stakeholders, and accomplishing significant work in treating forests as well as building infrastructure for local wood-products enterprises.
- With its diverse membership, open process, and consensus-based decision making, the
 Technical Advisory Panel (TAP) has been an effective mechanism to guide the grant-making
 process, develop and share community forestry principles and guidelines, and build and
 sustain a set of vital collaborative relationships.
- The program's efforts to foster peer and collaborative learning among diverse stakeholders, through mechanisms such as TAP meetings and CFRP annual workshops, have proven to be an effective catalyst to learn about and identify possible solutions to the challenges of community-based forest restoration.
- Through the CFRP, a statewide network of locally based partnerships has been created that is
 vitally needed to establish and sustain the working relationships and momentum required for
 forest restoration processes. In addition, CFRP participants have shared their experiences and
 lessons more broadly through regional and national initiatives.
- A significant challenge remains in seeking to integrate community-based partnership efforts, such as CFRP projects, into the regular program of work of the Forest Service, even when the goals are similar, due to issues related to institutional culture, program budgets and targets, performance measures, timing and timeliness of project planning, including NEPA studies, and specific procedures such as contracting and prescriptions for restoration treatments.
- CFRP is praised for its vision and ability to integrate restoration treatments and community capacity building. Its grants have funded both the on-the-ground treatments and the community infrastructure necessary for economic development (e.g., worker training, equipment and facilities, technology assistance, and business development and marketing).

The program's ability to pursue this integrated vision is constrained, however, by a source of funding with narrower objectives (i.e., the hazardous fuels reduction program) and a primary performance measure for reporting purposes (i.e., acres treated).

- Attention and communication on the part of Forest Service leadership teams at the national
 forest level are essential to the success of CFRP, particularly to address issues related to
 internal coordination and institutional change. Performance measures for collaboration, as
 developed by the Regional Forester and the Forest Supervisor on the Gila National Forest,
 have been important leadership commitments.
- The hiring of CFRP Coordinators on the five National Forests in New Mexico has been a key
 adaptation responding to multiple needs and challenges, such as outreach about the program,
 solicitation of and assistance on grant proposals, internal Forest Service communication, and
 grant administration and reporting. The Coordinators have been essential to the program's
 success.
- CFRP has done commendable work in developing program capacity for delivering technical assistance through the five Coordinators and through a grant-funded project providing technical assistance on multiparty monitoring. Through the program's peer learning processes, additional requests for technical assistance have emerged in a number of areas, including a particular need in the area of marketing and business development. In addition, important questions have been raised about sustaining the program's capacity for providing technical assistance over the longer term.
- Although collaborative efforts have been shown to be increasingly effective in stimulating
 creative solutions to the many challenges of community-based forest restoration, adequate
 resources are often lacking to support and sustain these collaborative processes, including the
 participation of diverse stakeholders;
- Linkages between CFRP project-level outcomes and larger-scale watersheds or landscapes require special observation and review in a cumulative impact sense, otherwise CFRP may be perceived as having isolated accomplishments when viewed at the ecosystem scale.
- The issue of long-term sustainability of particular restoration and economic development projects is an increasingly appropriate question, as it remains to be assessed how the capacities built through CFRP projects can become institutionalized among various partners and on-going sources of public and private funding can be developed.

6.2 Recommendations

The primary intent of this section is to reaffirm a number of actions and proposed responses that have been discussed within the CFRP, at TAP meetings and annual workshops. The goal of the following recommendations is to reinforce CFRP dialogue and deliberations, to highlight actions or proposed responses that we believe would be constructive, and to provide some additional perspectives of the National Collaborative Assessment Team.

Continue the strong role of the TAP not only in developing grant recommendations, but also
as a means of exploring community forestry concepts and issues, building consensus,
maintaining accountability, and sustaining a statewide, community forestry, collaborative
network. The TAP subcommittee that will be convened in 2006 is an important adaptation to
learn more about project accomplishments through site visits of selected and review
multiparty assessments.

- Continue to stress communication and peer learning among all the participants, partners, and
 interests involved in the CFRP. Widely communicate information from TAP meetings, CFRP
 workshops, and dialogue among various partners about the principles and practices of
 community forest restoration as a means of increasing understanding and capacities at all
 levels.
- Continue to address the goal of integrating CFRP funded projects into the regular program of work of the Forest Service, as well as into the programs and procedures of the other governmental partners. One suggestion is to convene a working group in Region 3 of the Forest Service made up of agency line officers, State and Private Forestry staff, and external CFRP partners, including project grantees and assistance providers, to examine the challenges to integration and potential solutions. Another suggestion is to set appropriate and achievable goals in Region 3 for integrating CFRP projects with projects under other forest restoration initiatives, such as the National Fire Plan, Healthy Forest Restoration Act, and stewardship contracting.
- Explore opportunities to enhance the ability of CFRP to pursue its vision of integrating forest restoration and community capacity-building. Suggestions for consideration by Forest Service leadership include:
 - Develop performance measures and a national reporting system reflecting the community capacity-building and economic development goals of CFRP, as well as other national initiatives that support an integrated vision.
 - O Develop a budget line item that would support this integrated vision, providing resources for both forest restoration and community capacity-building.
 - Request legislative authority for the National Forest System to use grants and agreements for accomplishing collaborative forest restoration work, particularly for community capacity-building and economic development.
- Strengthen efforts by National Forest Supervisors in New Mexico to support and encourage
 integration of the current program of work with CFRP projects. Suggestions include an
 expanded use of performance measures related to collaboration at the National Forest level
 and enhanced recognition of the CFRP Coordinators in working internally with their
 respective forests' leadership teams and ecosystem management teams.
- Given the strong and vital ethnic and cultural heritage of New Mexico, continue to emphasize
 interaction and work with the Hispanic Land-Grant and Native American communities in
 ways that strengthen their visions of land use and conservation, needs for economic
 development, and community sustainability.
- Continue and strengthen the program's capacity to provide technical assistance on multi-party monitoring, recognizing its importance for both collaborative learning and public accountability.
- Strengthen efforts to bring the "best available science" to CFRP projects in order to enhance their capacity to develop their own collaborative approaches to restoration treatment, rather than simply adopting prescriptions from the land management agency.
- Develop methods for understanding the effects and potential contributions of CFRP projects by including them in larger-scale landscape or watershed assessments and by linking the planning and development of new CFRP projects with larger-scale collaborative planning efforts, such as "community wildfire protection plans."