

*Four Corners Sustainable
Forests Partnership*

2001-02

Demonstration Grants Program
Evaluation Report

Submitted by
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October 2002



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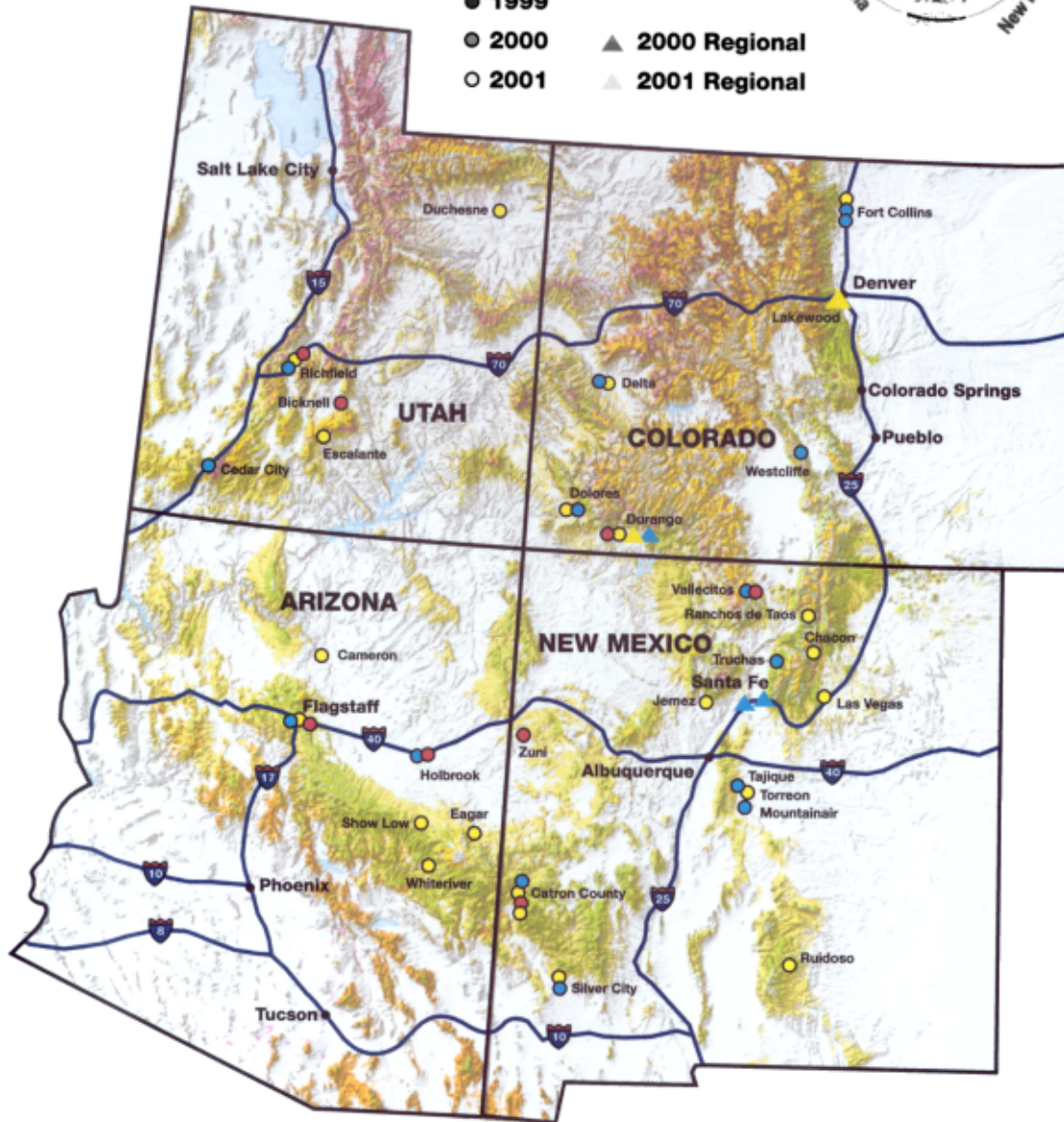
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Four Corners Sustainable Forests Partnership Demonstration Grants Map



Demonstration Sites

- 1999
- 2000
- 2001
- ▲ 2000 Regional
- ▲ 2001 Regional



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Four Corners Sustainable Forests Partnership Demonstration Projects Evaluation Summary Report, 2001-02

October 2002

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Acknowledgements

During this second year of monitoring and evaluating the Four Corners Sustainable Forests Partnership (FCSFP), we have had an opportunity to work with a greater number of the demonstration grant partners in communities across the Southwest. As we have talked and visited with citizens, business owners, public land agency managers, staff and leaders within the Partnership, *we have witnessed a growing capacity to address the challenges of forest restoration and stewardship.*

In response to decades of social, economic, and ecological neglect in the West, the FCSFP is offering an array of visible solutions to the challenges of improving forest health. While everyone is aware that the road back to naturally functioning forest ecosystems will require many years, perhaps decades, of consistent stewardship, the initial steps have been taken. Continued progress will take the sort of focused vision and commitment currently being displayed throughout the FCSFP.

Above all, it will require a sense of regional teamwork and collaboration that is beginning to emerge through increased sharing and problem solving among a wide array of human, community, and economic resources. We appreciate the assistance provided by everyone over the past year, which has enabled us to gather and tell the stories of success and challenge in this large-scale community-based forestry program.

Thank you for your continued hard work and contributions to *strengthening the linkages between communities and forests* throughout the Four Corners Region. We have enjoyed very much our past two years of learning collaboratively with you.

Sam Burns PhD
Project Coordinator

Tim Richard MA
Sr. Research Associate

Preface

By mid-summer of 2002 the wildfire season had broken records in the Four Corners region. The need for a new vision of health improvement in the national forests of the Southwest has never been more apparent. *Decades of minimal thinning and increased fire suppression have created thousands of acres of overstocked stands of ponderosa pine. More recently, declining wood production, marketing, and utilization capacity, the gap between forest stewardship needs and community and economic readiness has grown to crisis proportions.*

By the mid 1990s in isolated places, in small communities here and there throughout the Western United States, initial steps were being taken to restore natural conditions in the woods. By 1998 among several of these community-based efforts there was a belief that a more cooperative, regional, and multi-party improvement process was needed. Such a joint effort was envisioned as bringing together the level of financial resources and cross-jurisdictional support needed to make a difference. This was undertaken through the efforts of the four state foresters in Arizona, Colorado, New Mexico, and Utah, and has become the Four Corners Sustainable Forest Partnership (FCSFP). After four years of concerted efforts, the community capacity building work of the Partnership is increasingly apparent.

The FCSFP presents a unique opportunity to understand and evaluate the characteristics of community-based forest management. It encompasses a combination of forest restoration, fuels reduction and rural revitalization, bringing under one umbrella an array of demonstration projects grounded in various community and ecological contexts. *Taken together, this diversity allows us to see the importance of the specific community situations, as well as the complexity of forest restoration challenges throughout a large geographic region.*

The primary mission of the Four Corners Sustainable Forests Partnership (FCSFP) focuses on the interplay between three factors: 1) unhealthy forests that fall far outside the range of natural variability; 2) historic forest-dependent communities with significantly reduced capacity to participate in sustainable natural resource management, and; 3) dense fuels that are prone to catastrophic wildfires. The connection among these three factors, while obvious in some respects, continues to present formidable challenges to forest resource policy makers, land managers, and wood product workers. After examining the many community, economic, and research initiatives of the FCSFP, it is increasingly evident that no single project or activity can resolve the many issues connected with forest health improvement. Rather, it will require combined and focused actions of a regional effort to construct a sustainable process of community and ecosystem health.

Our understanding of community-based forestry must mirror this diverse and interconnected picture on the ground. *By looking at the contributions and roles of the many components of a regional collaborative effort, we can more completely and meaningfully portray the realistic opportunities and challenges being faced.*

In this report, you will find a variety of stories that reflect the many ways people are attempting to get their arms around the problem. The problem does not belong to one community or one state or one business. *It is a national problem, and requires a collaborative effort on a scale not witnessed before in modern ecological management. To approach understanding its complexity, engage yourself with all of the stories as a*

Project Description & Accomplishments

Since autumn 2001, at least 23 FCSFP Demonstration Grants Program grantees have been contacted through site visits, phone calls, face-to-face talks, and a questionnaire. These include the original seven projects selected for the 1999 funding cycle and which we examined during 2000-01. The projects evaluated this year, 2001-02, represent a mix of first-, second-, and third-year recipients of funding. During the two funding cycles that the Office of Community Services has studied the projects, the following number of projects were awarded grants dollars:

1999:	7
2000:	17
2001:	23

Of the 47 separate grants awarded 1999-2001, 12 were one-year grants. Of these, in 2001, at least nine were first year grants. Three were awarded grants in 2000 and we were evaluating them at least a year after they received funding. Seven 2001 projects received two years of funding, and one had received three years of funding. This included a mix of grants funded in 1999 and 2000 and others funded in 2000 and 2001. In one case, second-year funding went to a different partner involved in the same efforts; i.e., Gila WoodNet/CODC.

Sixteen field trips were conducted, dozens of individuals were interviewed in person and by telephone, 19 project profiles have been drafted, and eight past projects have been updated at least once and in some cases two or three times through phone or in-person conversation with one or more key project participants.

For the 2001-02 cycle, eight surveys were returned out of 23 sent. We determined that the reason for such low return rates was that project managers were reluctant to report results so soon after funding was received or that they thought the survey was too complicated and would take too much of their time to complete. Follow-up contacts were made to encourage filling out the questionnaire, with little result.

Fourteen *Success Criteria Matrices* were updated, which quantify some project accomplishments.

Also during 2001-02, more than two dozen project stories have been written and shared with steering committee members and others.

During the last year, an estimated 4,063 acres of forest were thinned for fuel reduction or treated with restoration prescriptions by FCSFP Grant Program participants, or by organizations in which they were involved. According to information provided by evaluated project managers, this was out of a target of an estimated 28,000 acres in wildland urban interface, tribal, national forest, or state land. Eleven out of 23 evaluated projects were directly or indirectly involved in either forest restoration or fuel-reduction/thinning projects.

After three years, the Four Corner Sustainable Forests Partnership is seeing a modest increase in capacity to harvest and process low-value or traditionally non-merchantable material.



Gary Harris in Reserve, NM nearly went out of business last year, but a modest supply of salvage timber from the Corner Mountain sale allowed him to hang on. However, he has sold off much of his mill equipment. He has become increasingly involved in the Catron County Citizens Group to build greater capacity for a lifestyle that he wants to see preserved.

Tribes involved in restoration, fuel reduction, or to some degree in partnership relationships include the Zuni Pueblo, Jemez Pueblo, Mescalero Apache, and White Mountain Apache.

We found when we began the evaluation funded projects were diverse in characteristics and were involved in a variety of project-level activities. The “Evaluated Projects” table in Appendix C lists projects studied and attributes reported as part of their goals.

After three years, the Four Corner Sustainable Forests Partnership is seeing a modest increase in capacity to harvest and process low-value or traditionally non-merchantable material. Something on the order of 2.5 million dollars in grants have been made to assist community and business development capacity. These are coupled, in some cases, with equal amounts of “regular” Economic Action Program funding distributed through the US Forest Service’s regional offices. Among other products, small furniture, animal bedding, stove pellets, and fire log manufacturers are emerging. There is a renewed effort in biomass power generation—mixing wood waste with other fuels to make electricity. Still the market will not support all the forest restoration work. The National Fire Plan is helping some with funds for thinning.

Summary Perspectives

Overview and Insights into this Year's Study

The Four Corners Sustainable Forest Partnership has been in full operation a little over three years, having just several months ago announced and contracted the fourth-year community demonstration project grants. The current year's grants bring the total to 62 awards. While the efficient distribution of these community forestry funds from the Economic Assistance Programs (EAP) of the US Forest Service, along with the associated coordination, communication and monitoring activities, have been the primary and visible functions of the FCSFP, the mere granting of funds does not reflect the full reality of what has occurred in less than four years.

When the regional Partnership was initiated shortly before the Taos Roundtable in August of 1999, there were a variety of individual community-based forestry projects scattered around the southwestern US. Their roots and history varied enough that you might wonder whether they had much in common, other than they were uniformly struggling to stay alive and trying to get started with "work in the woods." When representatives from some of these groups started communicating in 1997-1998, they did however find that they shared common problems and hopes for the future. Continually declining forest conditions, forest products industry weaknesses, resource management "gridlock," and a lack of a strategic forest-restoration vision were issues and concerns affecting everyone's ability to make progress.

Being able to obtain a substantial infusion of Economic Action Program (EAP) funds of about a million dollars a year, plus some additional National Fire Plan resources, has brought many local community partnerships, businesses, and natural resource managers together. In that process, some important pieces or elements of a regional network have been developed. *Collectively, these program elements add up to a capacity to undertake forest restoration and other ecosystem stewardship activities that simply did not exist three to four years ago.*

Therefore, one of the major themes described in this year's monitoring and evaluation report is the *capability and readiness that has been constructed* through the distribution of 3-4 million dollars, and the related follow-up technical and coordination support. This readiness consists of many specific attributes, both at local community, state and regional levels. Among the important ones, as you will notice throughout this report, the following are good examples which we highlight here:

- More stable community-based partnerships;
- New and expanded wood products harvesting and manufacturing businesses;
- Increased utilization of low-value, small-diameter raw materials;

Collectively, these program elements add up to a capacity to undertake forest restoration and other ecosystem stewardship activities that simply did not exist three to four years ago.

- Expanded research into harvesting methods and costs, and innovative wood products;
- A system for delivering technical assistance on wood product marketing and utilization regionally;
- A regional revolving loan fund to increase capital for wood industry expansion;
- A process to present public education and awareness messages about the need for forest restoration and fuel reduction;
- A regional network to facilitate communication and knowledge sharing among the community-based partnerships and businesses;
- An aggregation of significant stewardship resources, thus far over five million dollars, into a coordinated community forestry program;
- Increasing involvement of the four state forestry organizations in rebuilding the economic capacity of communities to play a key forest restoration role; and
- An emerging sense of cohesion and teamwork among a wide range of community, state forestry, US Forest Service, education, and research resources on a regional scale.

After close to four years of operation, the important conclusion to draw from these developments is that a *new capacity or readiness to conduct forest stewardship work has been built*. It exists in more places and in much greater strength than it did in 1998-99. There are more businesses, harvesting, milling and thinning equipment, shared knowledge, demonstration sites, products, markets, coalitions, and voices than when the FCSFP was first envisioned. These accomplishments would not have been possible without a concerted regional effort, which goes well beyond the traditional, individualized EAP grant program.

Does that mean that the work of community and economic redevelopment has been accomplished? Does it mean that, locally and regionally, there is now an adequate capability to undertake the many thousands of acres of forest restoration and hazardous fuel reduction projects that we recognize exist? No. Absolutely not! It primarily means that a good beginning has been made. It means that some small-scale restoration projects are being initiated and more are being planned. And it means that the FCSFP has an extremely important future role to play, continuing and expanding what has been started if anything like a sustainable level of integration between community development and ecological stewardship can be continued..

From a strategic or regional perspective, the FCSFP is at critical phase in its evolution. Having established “a beachhead” so to speak in three-plus years of operation, where does it put its emphasis in the remaining time of the five-year demonstration period? That’s the short-term question. If you look beyond this quite artificial “administrative” period, there is the longer-term issue of the future of community-based forestry in the Southwest, which will be addressed partly through the “transition plan” also being prepared in 2002-03.

Focusing upon the next two years of the demonstration period of the FCSFP, this year’s report generates some thoughts about raising the partnership to the “next level” of performance. Based on the progress and challenges to date, themes and suggestions are proposed in this evaluation about how to strengthen the

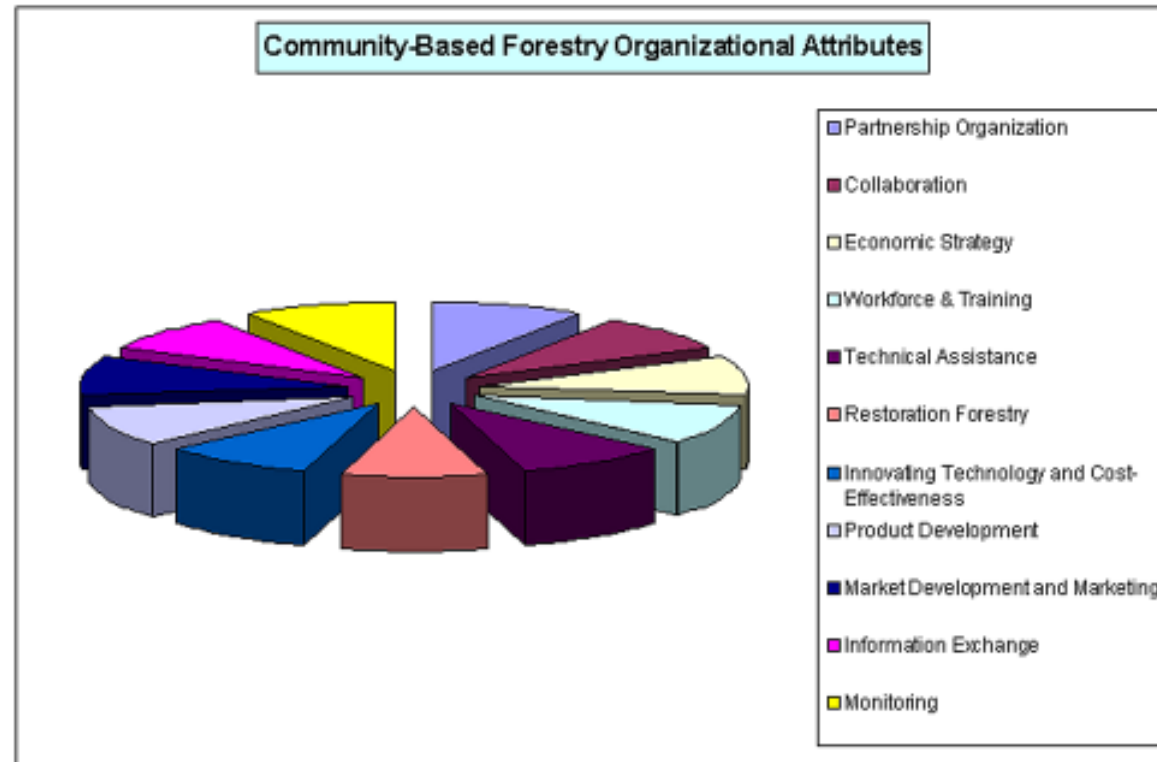
FCSFP in comprehensive and strategic ways. Throughout the report, there will be references to a series of improvements or modifications (*Reflections* and *New Directions*), which call for the partnership to advance into the next stage of development, in preparation for the longer-term advancement of community and ecological sustainability. For example, there will be suggestions expressed about the possibility of taking the following actions:

- To plan and design strategic restoration initiatives based on landscape or national forest level needs and goals;
- To base economic capacity building and diversification on these larger ecosystem goals;
- To integrate the available technical assistance and product development resources through a task force framework in order to make these services more accessible on a regional basis;
- To increase the participation and support of key leadership and units of the USFS, National Forest System in restoration and fuel-reduction planning and implementation;
- To position the FCSFP as a key partner in effectively implementing the goals and objectives of the National Fire Plan, which heavily emphasizes community collaboration and participation;
- To build state-level coalitions of community forestry organizations to strengthen integrated restoration, utilization, and marketing;
- To strongly emphasize region-wide knowledge-sharing and collaboration among the member partnerships through workshops, conferences, and effective communication;
- To improve the timely decision-making and action of the FCSFP as a regional organization through improved governance and advisory functions and mechanisms;
- And to strategically plan for the future of the FCSFP beyond the five-year demonstration period, based on a regional vision for forest restoration and stewardship, and the ongoing needs and capacities of local community partnerships and coalitions.

In summary, we call your attention to two major aspects of this report. First, to notice all of the ways in which “*capacity*” has been built and new strengths and abilities have developed through the bringing together of four states, dozens of local partnerships, businesses, and governments, into a cross-boundary coalition with a common purpose to create active stewardship linkages between communities and forests. Second, to look for the ways to move the FCSFP to the *next level of collaboration and performance*. This is a higher level, based on more strategic stages of community and economic capacity building, and a regional partnership that is more cohesive, organizationally effective, and visionary. As a whole, this report underscores the significant development work that had to be accomplished just “to get ready” to participate in the new processes of forest stewardship. Now, based on this increased readiness, how do we move to a higher level of performance and accomplishment as a regional partnership?



Ruidoso Village, New Mexico and its Upper Canyon are considered most vulnerable to costly wildfire. A single narrow, dead-end road accesses more than 300 resort and year-round homes located in a maze of one-lane drives hidden in thick forests and brush tucked at the bottom of a narrow canyon with steep slopes. Life threatening situations motivated the Village to develop a management plan for: 1) evacuation in case of wildfire; 2) fuel reduction treatment of forested areas; and, 3) hauling and processing of thinned timber and slash. The Ruidoso Wildland Urban Interface Group, a partnership of the local government, the Mescalero Apache tribe, residents, and businesses, leads the way in integrating fuel removal with commercial business development towards making Ruidoso a safer place to live.



Attribute Summary

The eleven attributes in the above diagram form a context in which projects implement actions to pursue and achieve their goals. The attributes are the parts of an integrated infrastructure that supports project development. How the projects progress can be determined by the way in which they incorporate, or are able to incorporate, any or all of the attributes in their overall vision.

While each attribute is important, and some projects are clearly stronger in one or another, the relationship between attributes is key to building long-term capacity for advancing toward goals. It is important to note that project managers understand the linkages among the attributes in their planning and implementation of actions.

During the evaluation, it was often clear that those projects that tried to integrate one or more of the attributes were in a stronger position to achieve their goals. They also seemed more resilient in ever-changing situations. This resiliency could be a simple matter of shifting focus from one attribute to another when obstacles are encountered.

None of the projects evaluated are integrating all of the attributes, but each attribute can be found operating somewhere across the region within one or more projects. The following is an abbreviated summary of trends identified during this year's evaluation and the manner in which attributes have played a role.

From an evaluation perspective, it is clear that on-the-ground restoration of forests is not occurring at rates that many had hoped for when the FCSFP process began. This should not be considered failure. Rather, the number of acres that have been treated are merely a measure of progress to date, a register of the current reality among several other measures of broader progress.

In examining progress, it is important to note that many FCSFP grants were made to businesses not directly involved in on-the-ground restoration projects. Increasingly, funding has been going to support business development and improving the *capacity* to utilize timber and to make and market products. For example, FCSFP funding supported purchases of a resaw, a chain flail chipper, parts for a fire log manufacturing plant, a portable mill, machinery for a shavings mill, a pole peeler, a loader, and a yarder-forwarder.

Of 23 evaluated grant recipients, 12 are associated in some way with restoration-related goals. Two explanations emerge explaining why the FCSFP is not more directly involved in supporting demonstration restorations. First, few actual restoration projects have gotten underway during the past few years. Networking the right people able and willing to *collaborate* and obtaining access to public lands are two of the challenges to achieving progress in this category.

Second, current challenges make efforts to conduct restoration too costly and time consuming. Disagreement over large-tree removal in restoration harvests has been enough to stop otherwise promising projects. The FCSFP and some of its grant recipients have turned their energies from on-the-ground restoration toward activities that seem more achievable and constructive and that may build capacity for the future.

Interim activities occurring include taking advantage of National Fire Plan dollars to conduct fuel reduction in wildland-urban interface lands. This kind of activity is valuable for building and documenting partnership experiences. It also is helping to expose timber cutters to restoration-oriented activities and creating training opportunities. For example, values like wildlife corridors and hiding places are part of fuel reduction. The more field workers understand this need and how to account for it in removal of biomass, the better.

Also occurring is the development of a commercial industry that provides fuel-reduction and defensible-space services on private land, thereby creating a benchmark for observing the ecological effects of thinning over time. This serves a research purpose, based primarily on private lands, that can help project realistic outcomes of potential future restoration harvesting on public lands, where there is more conflict and disagreement.

Capacity building is where the real story is. Grant recipients of FCSFP funding are part of a Four Corners-wide, multi-level effort to build a new economic and physical infrastructure that is positioned to utilize small-diameter pine and other wood products of restoration and thinning work. Infrastructure development is taking place, both physically and economically in planning for eventual access to forests to do restoration harvests. This is being led by entrepreneurial-minded business people throughout the region who are FCSFP partners.



“Why does Ruidoso work?” . . .
We have a place to bring raw
materials and a transport system
to get them there.”

—Sherry Barrow of Sherry Barrow
Strategies, Inc. speaking about the Ruidoso
Wildland Urban Interface Project that has
been successful
in treating several thousand acres to
protect the popular resort community
from wildfire.

Capacity building is where the real story is.

The evaluation identified a continual building of knowledge that in the long-term could be viewed as contributing to more actual restoration. For example, an increase has occurred over time in the number of silvicultural prescriptions being developed for specific values and localities and being tested through demonstration harvesting. Projects in Arizona and New Mexico particularly are demonstrating and monitoring prescriptions. These include the Blue Ridge Demonstration Project near Show Low, the Fort Valley project near Flagstaff, and the Millsite project near Silver City. Individuals in Colorado are hoping to develop opportunities to conduct demonstrations that utilize restoration prescriptions appropriate for the location. George Harpole and Randy Roper have proposed conducting a demonstration that tracks and analyzes the economic costs and benefits on such a project in their area near Grand Mesa National Forest.

Relationship building is also occurring among various interests. This activity is illustrated through the *Partnership Organization* and the *Collaboration Process* attributes contained in the evaluation. While more qualitative than quantitative, *Information Exchange* is a central means to partnership and collaboration while also building public awareness and understanding. The networking and information sharing among partners is an essential ingredient to getting anything done on-the-ground—or in any way at all, especially in an environment in which on-the-ground activity has been elusive.

The activity of relationship building should be considered an important measure of progress that is every bit as crucial as acres treated. Developments in infrastructure, such as exhibited by advances in relationship building and in *Innovations In Technology and Cost-Effectiveness* suggest that capacity for conducting on-the-ground restoration is stronger than it was one to two years ago when we began our evaluation.

The fires of summer 2002 will further hinder efforts to improve the ability of the USDA Forest Service to participate in collaborative efforts to increase capacity to do restoration harvests. Fighting wildfires will drain budgets for accomplishing long-term, preventive objectives for better forest health and reducing the effects of catastrophic wildfires and epidemic insect infestations.

A new *Economic Strategy* appears to be developing, as illustrated by Senate Bill 2672—Community Based Forest and Public Lands Restoration—in which some members of Congress are taking the responsibility to fund efforts like the FCSFP in response to the blows the Forest Service budget has taken this year and to the increasingly obvious lack of conducting in-woods work when many agree the challenges are urgent.

Faith is strong that entrepreneurs will ultimately gain access to currently uncertain supplies of raw materials, judging by the desire and efforts to develop new science, new products, new low-impact harvesting equipment, new manufacturing machinery, and new strategies for community understanding and support. These reflect a capacity-building momentum, based on the expectation that access to forests for raw timber materials will ultimately happen.

This trend suggests that, as the profound threat of catastrophes well outside of the range of natural variability continues to build, the work of learning how to reconceive the human and institutional relationships with landscapes will not stop, nor will the need to develop forest stewardship in conjunction with community well-being. The contexts of ecology, economy, and community will continually need to be addressed as people work to take on the challenges in each of the attribute areas.

Partnership Organization

By nature, organizational development within forest restoration partnerships is a long-term activity. It is ever-changing according to needs and opportunities within the local context. After continued observation of what contributes to success in these endeavors, it is readily apparent that strong and stable collaborative partnerships play a central and vital role. They are the primary contributor to sustainable action and public accountability, to a continuing common vision, and are the primary means of assembling the necessary level of resources to address ecosystem management issues. Separate, individual, non-collaborative action cannot sustain significant ecological improvement. This makes the on-going efforts to establish, maintain and improve community-based partnerships a vital interest to sustainable forest stewardship.

Maturing partnerships continue to adapt their visions and goals

The Four Corners Sustainable Forests Partnership (FCSFP) includes coalitions, organizations, and businesses of many types and sizes. Several of these have reached an advanced stage of development and sustainability. This appears to be a function of their longevity, diverse roles and responsibilities, access to resources, and an ability to innovate and adapt to ongoing needs and changes.

While not every member or participant of the FCSFP should, nor can, look or perform like the more highly developed partnerships, the work of these advanced projects offers many opportunities to understand and sustain community-based restoration forestry within the region. In what ways can they offer an expanded vision for how the work of the FCSFP might continue? Which of their components suggest the greatest abilities that are transferable to other, growing projects?

Catron County Citizens Group

The Catron County Citizens Group (CCCG) emerged out of a series of community crises in the early 1990s. With the Stone Mill closing in 1993, many local citizens thrown out of work, and deep debate over the proper role of the Gila National Forest, there has been extremely strong community motivation to create economic, social, and ecological health in the ecosystem. In the past two years, the CCCG has moved from the “processes” of community collaboration to “getting real work accomplished.” It implemented a Youth Conservation Corps, entered into an agreement with the county government to operate the old Stone timber mill as a log holding and sort yard, and purchased approximately 350,000 board feet from the Corner Mountain salvage sale for resale through the log yard.

In what ways can [the more highly developed partnerships] offer an expanded vision for how the work of the FCSFP might continue? Which of their components suggest the greatest abilities that are transferable to other, growing projects?

Businesses and Partnerships

The degree to which individual businesses are involved in partnership activities varies, but the more partnership connections the business makes, the more potential it seems to have in profiting from small-diameter timber. Sherry Barrow Strategies, Inc. shows the role business can play in utilization of materials. This shavings manufacturing company bridges the harvest-to-market gap.

However, the skills and willingness of business owners to initiate, or get involved in, partnership alliances is often limited. Helping them to build skills over time to increase their ability as partners is a factor that can positively influence community-based restoration.

Knowing the community where a business is located is key, as well. Specifically, knowing that community's interests and abilities reveal potential. For example, Madera Forest Products is a struggling organization that wants to build partnerships, but it lacks skills and opportunities.

In contrast, Ralph Barela Timber Management is a successful business not involved in any partnerships. However, Barela's demonstrated success in business is a model for his community needing incentives for initiating community-based effort.

Leadership of elected and employed government officials is a key measure of overall community capacity. So are local networks of special-interest groups forwarding their views on forest activities and hopes for the community.

Identifying issues people are willing to work on together may help lead to creating projects for them to share positive effects on the ground. Local business and government leaders are key to supporting these efforts.

The CCCG's goal is to establish a "vertically integrated" wood industry whereby 50-70 percent of the raw material is locally processed, thus adding more employment. The CCCG is looking ahead to possibly conducting forest restoration on about 6,000 acres of the Sheep Basin Unit of the Negrito Ecosystem Project, currently under appeal. Recently, through the assistance of David Nimkin with Confluence Associates in Salt Lake City, Utah, the Citizens Group has begun to reflect on how best to corporately reorganize itself to continue its community-based mission and take on more entrepreneurial roles in community forestry. The CCCG continues to adapt to new challenges, while holding true to the principles of working with small-diameter materials obtained from restoration forestry.

Greater Flagstaff Forests Partnership

The Grand Canyon Forest Foundation is now called the Greater Flagstaff Forests Partnership (GFFP). Does the change in name reflect a significant difference in role and responsibility? To some members, the answer is yes. While the GFFP still engages in forest restoration collaboratively with approximately 20 groups and organizations, including the Coconino National Forest, it now sees a greater need to address the capacity of communities in northern Arizona to process and utilize the low-value ponderosa pine products being harvested. The volume of raw material that needs to be thinned from the pine ecosystems far exceeds the capacity of the wood products industry to handle it. This has led the GFFP to refocus its energies in order to evolve a more comprehensive economic development strategy, which is in part reflected in the recently published assessment of forest products and manufacturing by Mater Engineering. The GFFP retains a strong role in thinning the forests in and around the Flagstaff area, working closely with the Ecological Restoration Institute at Northern Arizona University for research and monitoring support. At the same time, it seeks to be more proactive and innovative in developing economic sustainability in the wood products industry of the region. The partnership's leadership also believes the new organization will be more responsive to the needs of its members.



A fledgling log sortyard at the mill in Reserve, New Mexico holds hope for the future that the Catron County Citizens Group is working to rebuild with its partners.

Southern Utah Forest Products Association

Expansion, or at least the capacity to expand, is taking place in south-central Utah through the Southern Utah Forest Products Association (SUFPA). This 40-member cooperative is made up of a diversity of wood producers who provide a variety of crafts to a new retail store in Torrey. The store showcases their works for visitors to the region and to catalog buyers. Located along Highway 24 through the middle of town, it has increased SUFPA's visibility, identity, and support within the surrounding community.

Some of SUFPA's members also provide timber-cutting services and are working with other FCSFP projects in the region, such as Skyline Forest Products, to participate in fuel-reduction projects on public and private land. Other members have been, or are currently, participating in community dialogues involving national forest planning and grassroots-led demonstration harvests, particularly in the pre-revision stage of the Dixie and Fishlake National Forests Plan revisions.

Together, these three partnerships have reached a new level of maturity and stability. *They are not only growing, but are rethinking and refocusing their mission, expanding and reprioritizing their vision, becoming more innovative and entrepreneurial in order to adapt to the economic challenges of restoration forestry.* As they do so, new lessons will emerge about the ways community partnerships need to adapt to the changing demands of thinning, processing, and marketing low-value wood products.

Reflections

- The character and attributes of each partnership reflects, or grows out of, the nature and available resources of each community. One size does not fit all.
- A primary indicator of success appears to be the depth and breadth of the working relationships among the partners, both internally and externally.
- Successful partnerships are those that continue to adapt their actions to the economic and ecological opportunities in their locale, and remaining true to the values and visions of the community.
- A number of the more cohesive partnerships work effectively because a business, or group of businesses, fill crucial infrastructure needs, such as utilizing raw materials, harvesting, transport, product packaging, and marketing.

New Directions

- Prioritize the capacity of partnerships to engage public land managers in forest restoration.
- Give more continued support to demonstration projects to build stronger linkages among themselves and with external collaborative organizations through consulting assistance from the state and tribal FCSFP coordinators.

The Social, Economic and Ecological Balance

One role of a community partnership is to build a forestry program that reflects community interests and values. If the goals and actions of restoration forestry are not accountable to local interests, values, and traditions, in what sense are efforts really "community-based"?

While a community has a range of opinions about priorities, the work of finding and maintaining acceptable balance among social, economic and ecological goals will produce long-term benefits.

Since 1995, the Catron County Citizens Group has been concerned about youth. At the height of conflicts over what should happen in the Gila National Forest, concern about their well-being and employment led to forming the Catron County Youth Conservation Corps.

"It employs young people in conservation and community service projects that incorporate a strong work ethic with skills development, public lands education, and environmental awareness," writes Jim Coates, *Catron County Citizen* editor.

The CCCG is involved in other *community development* efforts, including health planning, promoting arts and cultural activities.

"The Catron County Citizens Group realizes that environment, economy, and community need to be nurtured equally in order to achieve a better life for the people of Catron County," Coates said.

Balancing these elements is a primary message of community-based restoration forestry, and is strongly exemplified in Catron County.

Las Humanas Finds New Roads to Old Roots

Las Humanas, which means “humans” in English, is the name of a cooperative of four Spanish land-grants trying to renew cultural and economic ties to forests and watersheds. The Manzano, Torreon, Tajique, and Chillili Land Grants, and the villages of the same names, are located along the eastern slopes of the Manzano Mountains where they meet the Southern Plains, almost exactly at the geographical center of New Mexico.

The 17th century Spanish immigrants who settled in the area called the native people they found living along the Manzanos “Las Xumanas.” George Ramirez, who runs the coop, says that the tribes lived “harmoniously” with each other and the land. He labors to help land grant “heirs” renew a similar connection during this era of decaying rural economies and livelihoods.

The principles of harmony and renewal guide Ramirez’s facilitation of efforts to rebuild Manzano’s dilapidated irrigation system, or “acequia.” This year, they replaced the intake and output gates of the community’s spring and reservoir, and plan to once again irrigate parts of the 17,000-acre Manzano Grant.

Ramirez is also developing a forest restoration program that provides jobs to community members and establishes them as stewards of local forests. Central to the cause is his attempt to work cooperatively with the US Forest Service, not an easy job given the distrust of the agency that reaches back generations. Historic events resulted in land being gradually wrestled from the heirs by the 1940s and placed under Forest Service jurisdiction.

“Las Humanas is a good thing for people and agencies,” Ramirez said, despite the history of local resentment between the USFS and Hispanics.

“We are developing economic opportunities in rural communities, restoring watersheds and forests, and creating innovative ways to put people to work. We don’t want to go to battle over who the land belongs to, but rather how to fix it.”

- Utilize the needs and objectives of the National Fire Plan to develop linkages between public land restoration and emerging economic capacity.
- Utilize the learning experiences of some of the maturing partnerships in a hands-on communication process with others who desire assistance in sustainability and adaptation.
- Identify specific pathways for individual businesses to integrate with other community and forest land partners in restoration forestry projects.

Partnership Development Statistics

Estimated Number of Participants (Evaluated)—69

- Diversity of Representation
- Six USDA Departments
- 10 National Forests
- Three RC&Ds
- One other federal agency
- At least five local town governments.
- At least six state agencies
- At least five counties
- At least two national foundations
- Seven financial & technical assistance providers
- Six colleges/universities and/or associated departments
- One Chamber of Commerce
- Four (Strategic) Partnership Coalitions with multi-party membership.
- One environmental activist group.

Collaborative Efforts—23 (at least)

(in which two or more organizations are working together cooperatively).

of Enterprises Involved—58 (40 are members of SUFPA)

Enterprises Receiving Technical Assistance / Marketing and Utilization Program assistance —17 / 25

Jobs (estimated existing and new)—120 (based on available data)

The Collaborative Process

The process of collaboration is one of the more difficult aspects of community-based or restoration forestry. While everyone believes collaboration is essential to ultimate success in maintaining partnerships and building a stewardship program, it is based on a number of capacities that are sometimes in short supply. Those capacities are openness, trust, relationship building, and an attitude of cooperation. Maintaining these capacities requires attitudes and skills that have often been diminished by years of conflict, continued project delays, last minute appeals, and growing impatience with the looming crisis in the woods. Collaboration is continuous. It can't be accomplished in a moment and then forgotten. Collaboration is about on-going learning, understanding different perspectives, finding enough common ground to keep the partnership moving forward. Consistent dialogue and working side by side appears to build relationships among folks that pay worthwhile dividends. But one or two bad experiences can cause people to come to the opposite conclusion.

Getting started—Not getting everything you want

Several FCSFP restoration and thinning projects (projects which often have additional related funding) are just about ready to get started. In Silver City, efforts have been focused on the Millsite Project for several years. As part of the “natural process” restoration prescription offered by the Southwest Center for Biological Diversity (SCBD), one key to initiating the Millsite Project on approximately 69 acres during the first year, is agreeing to a 12-inch cap on trees to be removed. While this might be viewed as a considerable compromise, there are good reasons to accept this in order “to get started.” Gerald Engel, district ranger on the Gila NF in Silver City, wants to get started with work in the woods. Todd Schulke, from the SCBD wants to build trust among his environmental peers and demonstrate that thinning forests is worthwhile if approached with appropriate caution. The general feeling is that getting the project started is essential to continuing the collaborative process. Some work needs to get done in order to see the results, learn from the first steps, and evaluate how best to continue. From this perspective, collaboration is also an adaptive management process.

In Catron County work continues on the Sheep Basin Unit of the Negrillo Ecosystem Project. Many hours have gone into selecting the treatment area within the study unit, establishing wildlife buffer zones, discussing prescription objectives, and making decisions. Everything looks pretty hopeful, but there is still some debate about an acceptable amount of “big trees.” It is everyone’s desire that this not hold up the project indefinitely, and that an acceptable agreement on definitions and percentages of “big trees” can be reached. If an agreement can be achieved, some employment can be generated, the forest can become healthier, and the success of collaboration can be demonstrated. If not, there will be disappointment and second guessing all around.

“ We are developing economic opportunities in rural communities, restoring watersheds and forests, and creating innovative ways to put people to work. We don't want to go to battle over who the land belongs to, but rather how to fix it.”

—George Ramirez, CEO, Las Humanas, Torreon, New Mexico



“ Prior to Flagstaff (October 2001 Workshop), I felt I was all alone out here and thought I was never the size that would even be considered for an economic assistance loan. It was a boost in my morale. There is a hope that if enough of us are working together, we can solve this problem and work this thing out.”

—Randy Roper, *Lone Eagle Timber Company, Fruita, Colorado*

Collaboration—Staying the course

A commitment to collaboration is not always easy to keep. Just about everyone has had the experience of collaboration failing. People and organizations make commitments upon which they sometimes don't or can't follow through. Trying to create common ground when there are repeated breakdowns in the process becomes tiresome. Sometimes it's the result of simple miscommunication, or the situation changes and various parties resort to traditional patterns of confrontation.

Recently, Max Cordova, a leader in the La Montana de Truchas, commented that he had noticed that many partnerships had started to give up on working with some of the environmental groups on forest restoration. Nevertheless, Max noted that he still invites one of the groups, known widely for their frequent appeals of forestry projects, to come out and take a look at what the Truchas group is proposing. He believes that following this principle will in the end be more successful. Is this just a good principle which may not always work? Is it being too idealistic to stay the course with collaboration? Will collaboration, if followed consistently, lead to a more sustainable forest and healthy community? None of us is really sure, but at least there are a few folks like Max Cordova that believe it is still worth attempting, because the alternatives of conflict and gridlock have not worked for decades.

Reflections

- Collaboration is being attempted in many ways, under many circumstances, throughout the partnership.
- Keeping people at the table during initial project start-up is often the most difficult, especially when there are prolonged procedural or regulatory delays.
- In choosing to collaborate, various parties fully realize they are not getting everything they want, but believe reaching common ground will enable them to demonstrate the benefits of restoration forestry through tangible progress in the woods.
- Planning and implementation of some restoration projects are being held up by an inability or unwillingness to collaborate, either because of long-held policy positions or limits in decision-making authorities or mandates.

New Directions

- During the last year of the FCSFP, make a close assessment of the degree to which collaboration is contributing to community-based forestry, gathering stories of success and failure.
- Make an appraisal of the capacities of various types of groups and organizations to participate in collaborative processes, and develop a strategy for enhancing these capacities where needed.

Economic Strategy

While obtaining ample external funding resources is necessary to "jump-start" community-based restoration, in the long term a sustainable strategy needs to address fundamental wood-market conditions. More than three years of economic capacity building through the FCSFP is providing insights into what a successful strategy might be. Is success possible by making grants available to individual businesses? Sometimes, but it depends on whether a product obtains a market. Could we have higher assurances of success by taking a larger landscape and integrated market approach? Let's look at the following stories from northeastern Arizona and southern Utah. The first one describes the *strategic ecological need* and the second portrays a more *systematic way* to look at wood production and utilization.

Sizing the economy to fit the landscape

Current community and economic capacity building within the FCSFP is focused on the financial needs and growth potential of individual businesses and community partnerships. This strategy has enabled many entities in the Four Corners region to sustain or increase their involvement in a high-risk enterprise, thinning small-diameter trees from overstocked ponderosa pine forests.

While this has produced an array of individual organizations within the wood products industry, which are better adapted to work with forest restoration, is not a landscape-level economic strategy for forest restoration needed? This would require working from the landscape-level restoration goals toward what business enterprises, products, and markets are needed to achieve them.

Jim Andersen in the Apache-Sitgreaves NF (A/SNF) Supervisor's Office in Springerville describes a broad landscape-level strategy. "Ideally, we want to be able to treat 10-20,000 acres per year mechanically, including the wildland-urban interface, and use every piece of material. That means that we need to create capacity for that amount of work." This will obviously mean developing more than one business enterprise.

Today the resources of the A/S allow subsidized treatment of 2,500 acres per year, or about nine acres per day. As Jim thinks and plans in these landscape terms, he begins to describe a larger forest-level strategy, linking forest needs to the type and depth of industry capacity required. Achieving this strategic level of planning depends on the capacity of the particular national forest to set and meet restoration goals of three-, five-, or ten-thousand acres per year. Although working through the planning and analysis of large landscape restoration processes may be challenging, getting there will require a shift in economic capacity building from individual businesses to the larger ecological stewardship question: *What sort of industry capacity does it take to treat five, ten or twenty-thousand acre landscapes each year over ten, twenty, or thirty years?*

What sort of wood industry capacity does it take to treat 5,000, 10,000 or 20,000-acre landscapes each year over 10, 20 or 30 years?

Multi-products and multi-markets—An integrated economic development strategy

“‘Plaid’ is Jim’s (Anderson, A/S NF) way of saying **multi-products and multi-markets.**”



Ten to 20 years ago, along the Mogollon Rim in east-central Arizona, a timber and wood products industry thrived. In Eagar, a Stone Corp. timber mill employed more than 100 people, and the pulp mill at Snowflake purchased significant amounts of chips. This kept many people working in the woods and in processing raw materials. Today, the sawmill at Eagar is closed, and the pulp mill uses only recycled paper.

From the public lands perspective, including the White Mountain Apache Homelands and the Apache-Sitgreaves (A/S) National Forest, what do you do with thousands of acres of overstocked stands of ponderosa pine, many of which face an unnatural stand-replacement fire? (Recall that one of the largest fires in the West, the Rodeo-Chediski, occurred there and on the White Mountain Apache Reservation in June 2002.) If you are Jim Andersen, RCA Coordinator for the A-S NF, you think “plaid.” “Plaid” is Jim’s way of saying *multi-products and multi-markets*. Plaid is one way of overcoming community and forest dependence on one product, one source of revenue and jobs, one means of utilizing resources that need to be removed from a stagnant ecosystem.

Under the general auspices of the Arizona Sustainable Forests Partnership, coordinated through the Little Colorado Resource and Conservation District based in Holbrook, Arizona, several businesses and community organizations are working in concert to address a problem that is larger than any single agency, organization, or business can solve alone. Walker Bros., a multi-generational logging company located in Eagar, has returned 18 jobs to the region after becoming equipped to mechanically thin high volumes of small diameter material. About half of the material in the form of clean chips is being transported to Forest Energy Corp. in Show Low to manufacture stove pellets. Another portion of the raw material is being used by Eric Hamlin to produce pallet stock. At the old Stone sawmill, efforts are underway to bring a biomass steam turbine on-line, which will produce electricity and be linked to the power grid.

Outside of Springerville, just north of Eagar, Imperial Laminators is producing a laminated highway guardrail that has passed U.S. Department of Transportation standards for safety and resiliency. It could utilize significant volumes of two by six lumber.

Just northwest of Show Low, Neil Brewer, another multi-generational wood worker, is producing a wide range of products from peeled poles, to a panelized log home system, to house beams and landscaping mulch. The Town of Eagar has taken over the old Precision lumber mill, and is developing an industrial park oriented especially to wood processing. In the Pinetop-Lakeside area near Show Low, three prescriptions have been implemented on the Blue Ridge Demonstration Project. Ed Collins, the District Ranger on that portion of the A/S NF, and Steve Campbell, with County Extension, are working with private landowners in the area to establish collaborative relationships with multiple interests through the Natural Resources Working Group to improve forest health and reduce fire risk

No one has struck it rich yet. It is not yet clear that all the visions and ideas are going to work out exactly as planned, *but for the first time in a while there is hope*. It is starting to look like the capacity of small wood



Steve Hall in Eagar is retooling a mill to generate electricity by burning small-diameter wood.

processing businesses can mature enough to utilize the thousands of acres of fire prone lands surrounding the rapidly urbanizing communities on the Mogollon Rim.

More and more people are thinking “plaid,” and finding new ways to share the forest stewardship problem, build a diversified market, and take better care of the lands and their communities. A healthy optimism is being created by the many partners, and being rallied by Herb Hopper through the Little Colorado RC&D. The group, working through the Arizona Sustainable Forest Partnership, seems to be achieving success through teamwork, multiple solutions, strong community leadership, innovation, and collaborative entrepreneurship by taking a strategic approach to economic sustainability and forest restoration

SUFPA shifts to a financial focus in lieu of restoration

The Southern Utah Forest Products Association, a non-profit cooperative of woodworkers who sell their crafts through the Torrey Home and Garden store, didn’t start out to establish a retail center at first, but to regain access to national forest timber and continue supplying raw materials to local mills for local and regional sales. Twenty small mills have closed down in 20 years in Wayne County, Utah, where SUFPA focuses its activities.

During fall 2001, the last large mill in the region, Utah Forest Products in Escalante (90 miles from Torrey) closed, laying off 65 workers. Its future was uncertain until it reopened this spring and rehired the laid-off workers. Also, the Thousand Lake Mountain Community Forestry Initiative, a “grassroots” group of diverse interests in which SUFPA members participated, struck another hurdle after nearly four years of struggling to design a demonstration harvest on Monroe Mountain.

Responding to such obstacles, SUFPA began to adapt activities to increase membership and grant funding, focusing on what it could achieve and letting the Forest Service address challenges in its timber program without extensive involvement on its part. Pursuing relationships with other federal and state agencies during the last year, SUFPA landed funding from the USDA-Rural Community Assistance Program, the Federal/State Marketing Improvement Program for general business development, the USDA Rural Business Development agency for an Enterprise Opportunities grant, and The Forest Trust to conduct a participatory community research project. A 1999 FCSFP-funded project was among the earliest grant aid that SUFPA received.

Within three years, SUFPA went from having barely enough money to pay a single employee to a staff of four and a \$200,000-plus budget.

SUFPA plans to take advantage of future restoration harvesting opportunities when possible, but right now they are focusing on diversifying and marketing members’ products and services, and planning a wholesale manufacturing operation. FCSFP 2002-03 funds will support coordination of an industrial design research project to brainstorm new uses of small-diameter timber.

“To be honest with you, we’re busy, but we’re hanging on by a thread. If I wasn’t so smart—or so stubborn—I’d be doing something else. For some reason, I’m optimistic about the possibilities.”

—Randy Roper, Lone Eagle Timber Company, Fruita, Colorado



A chair made of laminated lumber on sale at Torrey (Utah) Home and Garden.

Revolving Loan Fund Helps to Cover the Bases

The Four Corners Sustainable Forests Partnership created its Revolving Loan Fund to help forest-products business owners acquire much needed capital. Along with gaining access to small-diameter timber and wood-product markets, and receiving technical assistance, capital is high on the list of needs, particularly for purchasing equipment.

The Revolving Loan Fund complements capital available through the FCSFP Demonstration Grants Program, which has emphasized community-based collaboration and restoration forestry that occurs through multi-party partnership and cooperation.

Since the Revolving Loan Program began in 2001, \$500,000 have been awarded to 19 businesses in 12 counties. While \$1.3 million was requested, \$800,000 has been leveraged from other lending sources to help applicants more effectively.

The program results from a unique partnership. In November 2000, the Rocky Mountain Home-Based Business Association developed a program to lend capital to Four Corners forest-based businesses. In March 2001, Four Corners Sustainable Forests Partnership representatives proposed a program to Revolving Loan Fund Administrators from Colorado, New Mexico, Arizona, and Utah. The administrators agreed to include the FCSFP RLP in their statewide program and guidelines, policies, and eligibility criteria were developed by June 2001. Applicants were solicited and screened by that fall and loans were awarded by spring 2001. Each RLF administrator received \$125,000, who in turn awarded it in amounts between \$5,000 and \$80,000.

Reflections

- Those community-based partnerships that have received multi-year and multi-source funding are reaching an advanced stage of sustainable organizational capacity. Longer-term support appears instrumental in allowing project managers to build stronger, increasingly productive relationships with key development partners and technical assistance providers across a broad area.
- Multi-product and multi-market economic and marketing strategies appear to have a higher chance of achieving economic advancement, and possibly sustainability, as well as supporting increased forest restoration in a given landscape.
- Those FCSFP community-demonstration projects, which are not a part of working partnerships or coalitions do play a significant role within their community as an employer and could serve in a central role for initiating future partnership development.

New Directions

- Integrated regional economic development and marketing strategies deserve strong FCSFP attention on either a state or Four Corners level.
- Stronger intra-state partnerships, modeled after the Arizona Sustainable Forests Partnership, may be desirable for other states and tribes to pursue.
- Under the best circumstances, community-based restoration forestry requires some significant amounts of public “reinvestment.”



A contemporary hogan built of small diameter timber with innovative fasteners. Indigenous Community Enterprises worked closely with members of Navajo communities to preserve the traditional design and add a new dimension to meet today's needs.

Workforce & Training

A stable, skilled workforce is a highly underrated community asset. Because of the historical decline in the wood products industry, trained and experienced sawyers, tree markers, log-truck drivers, millwrights, and people to operate mechanized harvesting equipment are often in short supply. Woodworkers who know the local terrain and possess traditional or local knowledge about the forest may have left the area, or left the job market. A capable, efficient, and adaptive workforce is required to take even the first step toward rebuilding a forest stewardship program. Without the human capital to accomplish the work, restoration projects can't function, the equipment will stand idle, and the forest will continue to deteriorate.

Workforce stability—Coming home again

With sawmill and logging operations shutting down all over the Southwest during the past 10-20 years, job mobility has been quite common. Duane Walker, from a fourth generation logging family in Eagar-Springerville, Arizona, has spent the last 16 years “scrapping and clawing to make a living.” He has worked on lopping crews and operated bush cats, chipping the last load that went to the Stone Pulp Mill in Snowflake, before they switched to 100 percent recyclables. From there he went to New Mexico for a couple of years, working out of Mescalero Apache and Cimarron. When he left Arizona, he took 18 employees with him.

“I could have taken 20!” During this time, he and other members of his crews commuted back home on the weekends.

A year or so ago, John Bedell, Supervisor on the Apache-Sitgreaves National Forest asked, “What would it take to get [Walker] to come back to the area?” With support from the Economic Assistance Programs of the USFS, Duane was able to obtain a chipper through Region 3, which enabled him to move his business back home. When he moved back, he brought his dozers, cutting machines, skidders, and processors on 30 semi-trailers.

“We have a lot of iron.” Along with the equipment, he brought 18 employees home again. “We are not gypsies! We need to stay with our families!”

That’s 18 direct jobs, and there are more indirect impacts. Consider the economic one. Furthermore, think of the social impact on personal and family life of people having to leave, commuting hundreds of miles home on the weekends, and then return home, hopefully to sustainable employment.

What does it mean to a community on both sides of the job move, when they leave home and when they

“ We have an amazing support structure for people in this area, but forest workers’ learning curve is huge, . . . especially to bid on contracts with the US Forest Service.”

—Sherry Barrow, who estimates that about 30 part- and full-time contractors are located in the Ruidoso, NM area.



Catron County Youth Conservation Corps have been central in efforts to restore ecological, social and economy aspects of the community.

After moving from place to place in New Mexico to find work, Duane Walker has brought his logging business back to Eagar, resettling 18 employees in the community. The social and economic impacts of such a move are significant in terms of family well-being and community sustainability. Restoration forestry, because of its on-going, long-term nature, is a means of stabilizing a workforce in a community place.

return? Stress on the social fabric of the community and continuity of life for parents and children comes to mind. These considerations need to be described and measured as the movement towards community-based forestry proceeds, lest we forget the interplay between ecology, economy, and community.

Also, what about having a stable workforce, attached to a community and a forest, where there can be a dependable means of stewarding the land? An employer can build a more sustainable business through a stable and skilled work force. Over time, wood harvesters and millers can build up a local knowledge of the “woods,” which can pay enormous dividends about how best to work with the ecosystem on sustainable improvements.

Duane feels lucky to be able to work at home, when he sees friends and associates still facing economic disaster.

“In Eagar, two loggers filed bankruptcy last year. Sawmills are dropping like flies.” He worries out loud about a small, second-generation sawmiller who can’t get wood.

“Eight million board feet per year is all he needs, and the Forest Service won’t put up any saw timber. All they are selling is pulpwood quality.” Not being able to obtain a steady supply of timber is going in the opposite direction from stability and stewardship.

Training for restoration forestry—A developing process

To gather the story of training for restoration forestry we need to go to a lot of places in the Four Corners region. There is not one big story, but a myriad of little pieces of the narrative located here and there. In Ranchos de Taos, members of the Youth Conservation Corps are learning wood crafting and marketing. In Catron County as a part of their Youth Corps education, members are studying the ecology of fire, learning to preserve a historic trail, and how to conduct a monitoring assessment of a thinning project. At Jemez Pueblo, the new tribal harvesting crews are learning how to salvage burnt timber, working on the Los Alamos Cerro Grande wildfire of 2000. They are also learning how to operate a small sawmill and a pole peeler, and to load and drive a logging truck. In numerous other places, saw millers and loggers are learning to operate new pieces of equipment, or how to cobble together several old saws and conveyors into a more efficient way of processing small-diameter wood. At times it is a new and innovative technique, but often there is fairly basic learning of traditional techniques by a new generation of wood workers.

Participating in one or more of the workshops offered by Tim Reader, the marketing and utilization specialist located in Durango, Colorado, wood producers are learning more about air-drying wood and how to utilize the new “dip-diffusion” techniques for treating post and poles. Business representatives are receiving hands-on training from Carolyn Dunmire about marketing by developing the specific tools and knowledge they need for their particular products.

People are learning from trial and error. Bill Whatley, working with the Jemez Pueblo crew, explains that they lost money on the Cerro Grande salvage work, underestimating the labor costs. Various businesses are learning the lessons of a good business plan, of realistic cash flow, estimating product costs and standards, and

expanding markets at an appropriate pace so as to not outstrip your capability to deliver on time.

Overall, the FCSFP is a large learning laboratory, where everyone is both a teacher and a learner. This brings out the ongoing need for sharing, communicating, and working together in the total partnership, across state boundaries, to build up each other's capacity and momentum. While perhaps in time the general themes of training will become more apparent, for now it is an emerging story of "trying on a skill to see if it fits."

Reflections

- Ongoing delays in restoration projects, some of which last two or three years, make it difficult to recruit and train workers for harvesting and processing wood products.
- Workforce development and training is a unique problem to each community forestry project, but which may have state and regional themes.
- Some communities needing to employ thinning crews on a seasonal basis are facing a shortage of workers, partly because they cannot provide a continuous, livable wage.

New Directions

- A broader scale assessment of training needs and opportunities might be pursued, with an eye toward a collaborative or multi-partnership approach to development of ecosystem stewardship skills.
- Those projects with the greatest expertise and advancement in a given attribute should be encouraged to serve as mentors to other projects that can benefit from the knowledge holders in order to expedite their own development.
- Special, unique, or one of a kind skills, like building a light-weight harvester or appropriately marking a complex restoration prescription, need to be documented and shared as an urgent priority.



During 1998, Las Humanas Land Grant Cooperative initiated a thinning project on Cibola National Forest land near Manzano, New Mexico in which community members were trained in restoration timber cutting. The project was followed up a couple of years later with a similar one. Both were learning experiences that helped to establish training needs. Las Humanas now has a crew of 10-20 trainee/workers available for thinning and fuel-reduction contracts.

Can creating greater capacity to conduct fuel reduction . . .

eventually lead to a stronger restoration workforce? Currently, in southwest Colorado, where considerable progress is occurring in fuel-reduction-business development (motivated by massive wildfires and wildfire threats), thinning-service contractors are asking as much as \$1,000 per acre of private land to cut and chip beetle-killed piñon and juniper stands. Other service providers elsewhere in the Four Corners are charging as much as \$300 to \$500 an acre to conduct thinning on public land.

Contractors attend classes to do business with SBS

Sherry Barrow requires contractors working with the shavings manufacturing plant she and her husband, Glen, built to attend quarterly trainings aimed at increasing the ecological and environmental sensitivity of loggers, haulers, and others involved in the business. Barrow sponsors the trainings, which are conducted by different invited experts on harvesting and processing.

Sherry Barrow reports some resistance to the requirement, but she expresses confidence that in the long run contractors will appreciate the benefit their new knowledge will bring to their own businesses. They are learning about the "big picture," Barrow said.

If you are in Las Vegas, NM and have a thousand tons of sawdust and shavings from a viga operation, you have a technical problem.

Providing Technical Assistance to Businesses

Technical assistance in the FCSFP has taken many forms. It has included help from a small business development center in mapping out a business plan for a wood business that wishes to expand a product line (Show Low, Arizona). Assistance has been provided to assess and improve productivity and reduce costs in sawmill operations (Delta Timber, Delta, Colorado). Wood producers have participated in workshops to improve air-drying and to study the potential of dip-diffusion techniques for post and pole operations (regionwide). And compression tests have been completed on a sawdust adobe building product, utilizing 13 samples with a 4:1 ratio of sawdust to adobe (Rio Arriba County, New Mexico).

Technical Assistance

The wood industry that is responding to the needs of forest restoration is filled with new ideas, processing equipment, and products. Old tools and production methods typically cannot be used in the same old ways with huge volumes of small trees, brush and limbs, bark and sawdust. The sheer economics of working with low value wood requires a high level of technical problem solving, a level not available consistently throughout the Four Corners region.

If you are in Las Vegas, NM and have a thousand tons of sawdust and shavings from a viga operation, you have a technical problem. What sort of product can be made from this material? How can I test my product ideas? What will it cost to go into production?

If you are in Eagar, Arizona you may have found some reasonably priced, used, small diameter milling equipment in the Midwest. You have a good idea for a product, but you may run into difficulties in “cobbling together” an efficient sawmill operation. Labor costs are too high to not have a smooth operation. The multiple saw operation needs to be configured to operate efficiently.

You have operated a small logging company for over 20 years. It looks like you need to mechanize your harvesting operation in order to move the tonnage coming off the restoration sites. What equipment do you purchase? Is there are market for chips? With whom can I work to create a series of market outlets that work coherently with my rate of production?



Brian Cottam, John Hinz, Ray Wrobley, and Tim Reader listen during a steering committee meeting in Moab in June 2002. Reader staffs the Marketing and Utilization Program.

Tracking and linking the technical assistance resources

Communities and projects need help with “technical” issues and questions. And, if you look around a little bit, there are a lot of answers available. So what’s the big deal? Let’s get to work!

In Catron County, a house log company has a pile of sawdust that might

be utilized. At Jemez Pueblo, there is a question about whether to buy a medium- or large-sized sawmill. In Escalante, Utah, the partnership wants to find out what volumes of raw materials will be needed to make an existing, technically advanced, portable sawmill economically sustainable. In Catron County there are concerns about how to implement a proposed silvicultural prescription, while at the same time maintaining a broad agreement established among community interests.

The typical way to get plugged into the technical assistance (TA) network is to call your state or tribal coordinator, or get in touch with Tim Reader, the marketing and utilization specialist with Colorado State Forest Service located in Durango, Colorado. Behind and around Tim is a significant list of other resources. Jerry Payne with the USFS Region 3 office in Albuquerque has a wealth of information about biomass energy. Kurt Mackes and Dennis Lynch, with the forestry program at Colorado State University have inventoried all the potential wood products in Colorado, their volumes, uses, and sources of supply.

Kurt has also studied using wood fiber in producing concrete and for animal bedding. Dennis has completed over a half a dozen comparative cases of harvesting costs and techniques in different forest situations in Colorado. In Denver, McNeil Technologies is identifying and evaluating as many ways as possible to utilize biomass for power generation.

Carolyn Dunmire, working out of the Cortez, Colorado area, provides an assortment of wood product marketing tools and techniques on a quick turnaround basis.

Since the community projects and businesses have an array of TA questions, and a significant investment has been made in resources, *the main question is how best to link them up*. For the most part the current arrangement works pretty well. People make TA requests. Tim or Carol get around to seeing them as quickly as possible. Tim puts on a workshop or two a year. There have been well-attended training events on air-drying or using dip-diffusion techniques to chemically treat a post and pole product. What could be better?

What seems to be needed is a better way for the variety of technical assistance resources to work together more closely. What would this look like? It would simply be a way for Tim, Jerry, Denny, Kurt, Carolyn, and any relevant others to meet regularly, compare notes, review requests for assistance, and propose an integrated training and workshop schedule for the coming year. This would probably make good sense for the region as a whole.

Reflections

- Some of the best learning can occur on site, out in the woods, or in someone's mill. FCSFP members prefer the hands-on approach to learning.
- Extensive knowledge of new wood harvesting and processing techniques exists among the FCSFP partners themselves, which can serve a strong technical assistance role.
- The needs for technical assistance run the gamut from collaborative skills, to purchasing equipment, to determining harvesting costs, to establishing an appropriate cost for products in the marketplace.

The link between restoration harvesting and private businesses

The FCSFP has helped to build a link between restoration forestry and private business by making urban/wildland interface fuel-reduction activities possible. However, in some areas, no strong enterprise infrastructure exists to accomplish needed work and take advantage of opportunities to do either fuel reduction or forest restoration.

Vallecitos, New Mexico is one area lacking capacity to take advantage of opportunities, even with the large sums of money available through the Community Forest Restoration Act that Senators Jeff Bingaman and Tom Udall sponsored.

Technical assistance providers should take into consideration the limitations of rural areas in capitalizing on available funding, especially in the interest of building greater capacity to conduct restoration forestry. To balance community economic development needs with restoration needs, they must recognize that availability of funds may not automatically create capacity for communities in vicinity of forests with great ecological needs for restorative management, especially when they lack the skills and resources to take advantage of opportunities. Technical assistance providers may be in a position to teach the skills and capacity-building expertise needed by the community organizations.

“The small diameter thinning business is the steepest entrepreneurial hill you can climb.”

—Gordon West, Gila WoodNet,
Silver City, NM

New Directions

- Organize one or more field tours each year through community demonstration sites that have an opportunity to display expertise and present challenges.
- Create a directory of knowledge and skills that are available among the FCSFP partnership members, more or less along the lines of a speaker's bureau.
- Encourage increased sharing and interaction among the community partnership and business projects.
- Build communication and coordination linkages among all technical assistance resources so that they can share ideas and reinforce each other in an organized fashion.



Building Learning Partnerships—Wood-drying “Short Course” Workshop participants, March 2, 2002, Mancos, Colorado organized by FCSFP’s Marketing and Utilization Program. The Marketing and Utilization Program hosted five workshops during 2001-2002: the wood drying short course in March, 2002 and four workshops on the FCSFP’s Revolving Loan Fund program during the fall 2001. As many as 40 attended the drying course and about 50 attended the RLF workshops.

Restoration Forestry

Research on fire regimes, stand structures, silvicultural prescription development, ecological monitoring, and documentation are important components of the science and practice of restoration forestry. To be effective, scientific observation and learning must rely on sharing of information and new knowledge, from the researcher to the forest-thinning operator, to stakeholders and general public in a timely manner. Restoration forestry is characterized by *two major activities*: developing, applying, testing prescriptions and harvesting methods; and scientific monitoring that ultimately guides restoration and building of an infrastructure for economic revitalization, allowing both to adapt to new information.

The number of acres being treated continues to grow but proceeds slowly and remains concentrated in a relatively few FCSFP projects. However, the range of projects now underway offers an opportunity for ecological comparisons and monitoring to assess silvicultural prescription diversity and outcomes. In many areas, progress is a direct result of additional funding through the National Fire Plan.

It takes a long time to get a project started

Outside of Silver City, New Mexico members of Gila Woodnet have been working for five or six years to put a forest restoration project together. It will involve treating approximately one thousand acres of the 1,400-acre Millsite, which according to Bob Yost with the Gila National Forest was offered as a regular timber sale in the late 1980s. At that time, local wood operators expressed no interest in the sale. Thinking among the USFS staff changed in the early 1990s on what prescriptions should be utilized, but this work was held up by the 16-month injunction on timber harvesting in all Region 3 national forests in 1994-95.

In 1996, Todd Schulke of the Southwest Center for Biodiversity (SCBD), which had been a party to the injunction, started talking about using a “natural process” prescription on the Millsite project. This prescription, while not seeking a “pre-settlement” goal, reduces stand density and retains mature tree groupings of 3-10 trees. All trees over 12 inches are also retained. According to Todd, this is an important opportunity for him and other conservationists associated with the SCBD to demonstrate their willingness to work on an active management approach to ecosystem restoration in the Gila Watershed, where they historically have expressed critical concerns about landscape conditions and appealed previous management actions.

Gordon West, a logger and master woodworker, arrived in Silver City from Idaho about five years ago. “All I wanted was a few logs,” he said. To obtain the few logs he needed for his furniture business, Santa

NM Coalition Covers New Ground in Demo

Last year, a unique coalition formed in southwest New Mexico to conduct a NEPA assessment and a restoration harvest at the Millsite area near Silver City on the Gila National Forest. The project is unusual because it is a harvesting project on national forest lands being planned by a coalition in which the Forest Service is a partner. Partners include: Gila WoodNet; Southwest Forest Alliance; Southwest Center for Biological Diversity; Cooperative Ownership Development Corp.; Silver City Ranger District; Nature Conservancy; Upper Gila Watershed Alliance; Silver City-Grant County Regional Economic Development.

A “participatory agreement” authorizes the arrangement. The Gila NF has final say, but is not providing funding or staffing to conduct environmental assessment work. Funding comes from the Collaborative Forest Restoration Program established by Sen. Jeff Bingaman.

Reportedly, a USFS forester will not be on the assessment team, which will be made up of biologists, hydrologists, and other specialists designing a small-diameter thinning on about 1,000 acres of a 1,400-acre analysis area. The Forest Service does have final decision-making authority, however.

During January 2002, partners visited the project and set parameters for Phase 1, about 69 acres. Tree marking and cruising was completed in August 2002, and a contract to initiate restoration activities was expected, using a “natural process” prescription recommended by the Southwest Center for Biological Diversity.

Controlling Costs

Jemez Pueblo's Walatowa Woodlands Initiative completed salvage work on the Cerro Grande Fire Burn at Los Alamos, NM, but lost at least \$60,000 in under-estimated labor costs. Duane Walker in Arizona is utilizing a whole tree debarker and flail chipper to produce up to 12 truckloads of wood chips per day, thinning small diameter on Apache Tribal Lands and the Apache-Sitgreaves National Forest. The log sortyard in Catron County has purchased approximately 350,000 board feet of salvaged fir trees to resell to local mills.

Most markets, such as Show Low's Forest Energies pellet mill, can't pay the cost of harvesting raw materials, which often are subsidized through USFS stewardship contracts or National Fire Plan funds. With these economic constraints, restoration depends upon available subsidies. Meanwhile forests continue to deteriorate.

Costs vary, depending on the selected thinning technique, ecological prescriptions, transportation distances, and other factors that we have recognized for years, but do not fully understand.

Per-acre costs also vary considerably—from \$200, \$500, even \$1,000 an acre. Because the cost of utilization is such a significant factor in forest restoration, it is timely to collect as much data as possible on the costs and revenues associated with restoration harvesting.

Several possibilities exist for doing this, such as continuing demonstration projects that include cost/benefits analyses, field trips that support collaborative learning and participatory research.

Clara Wood Works, Gordon has joined forces with Todd on the 1,000-acre Millsite restoration endeavor. In the second grant cycle of the FCSFP, Gordon obtained partial funding for a custom built, lightweight harvesting machine that functions as a cable yarder and a forwarder. He will soon have a processing head mounted on the front-end. The machine weighs about eight thousand pounds, and will pull a "steering" trailer, thereby serving as a small logging truck in the forest. He believes he has about \$75,000 invested in the machine, when a "processor" and a "forwarder" could each cost up to \$150,000.

In 2002, Gila Woodnet obtained a grant from the Community Forest Restoration Program (Sen. Jeff Bingaman) to support the NEPA work and the Gila NF's sale preparation costs on the Millsite project. It will also pay the costs of thinning at the average rate of \$300.00 per acre, which Gordon will implement with the new machine.

The first unit of 69 acres has been marked and cruised, and the thinning contract is being prepared. District Ranger Gerry Engel "wants to get something done, and to build some trust." Everyone is ready to get in the woods in order to build confidence and knowledge through working together.

After many years of planning and preparation, it looks like the Millsite restoration project is ready to begin. The last three or four years that it has taken to formulate an agreement for the restoration project have required a lot of patience by everyone. According to Gordon West, when the wood flow gets started "so that a guy can make a business, then we will get some jobs being created."

"It has been hard to bring people along over four years without having wood." Even then, "the small diameter thinning business is the steepest entrepreneurial hill you can climb."

Initial progress in restoration forestry

In a number of places in the Four Corners region initial steps to restore forests have been undertaken. After numerous administrative delays, the Greater Flagstaff Forest Partnership is making headway on the Fort Valley site. La Montana de Truchas has completed an initial thinning project in the Santa Fe watershed. Duane Walker, working on the Apache-Sitgreaves NF and the White Mountain Apache Reservation out of Eagar, Arizona, is making significant headway with a highly mechanized approach to thinning, producing up to 12 truckloads of chips a day when in full operation. Gordon West and others are ready to begin a 69-acre demonstration project near Silver City on the Gila NF that will set the stage for eventually harvesting close to 1,000 more acres. In a number of locations, forest stewardship work is closely linked with hazardous fuel reduction, and being supported financially by National Fire Plan funding.

There is also evidence of progress and success among other forest restoration projects in the region, which are not directly linked to the FCSFP through the demonstration grants program. For example, the Ponderosa Pine Forest Partnership in Colorado on the San Juan NF has prepared to some degree more than 8,000 acres of restoration sales during the past 6-7 years. And the Blue Ridge Demo in the Pinetop-Lakeside area of Arizona has completed work on more than 1,000 acres of an estimated 10,000 projected for thinning, pre-commercial harvest, or prescribed fire.

Looking ahead, there appears to be a number of restoration projects that are about ready to start. Within the Negrito Ecosystem Project on the Gila NF, the Sheep Basin Unit EIS has just been completed, with approximately 3,000 acres proposed for thinning. Las Humanas is ready to begin work on the Thunderbird Project on the Cibola National Forest. Jemez Pueblo is looking at continued work on Pueblo forestlands.

Reflections

- Access to supply remains a key obstacle to sustaining, or starting new, timber businesses in communities. When access is available it often is due to dedicated leadership of Forest Service management, who have prioritized fuel reduction or restoration harvesting and participate in multi-organization alliances that provided the resources to get the job done.
- Economic feasibility of restoration forestry remains precarious. A break-even outcome depends on stand structure, the balance in diameter classes harvested, the harvesting methods, market proximity, etc. Often, even with the best of circumstances, community-based restoration forestry is a break-even economic enterprise.
- The number of acres being treated continues to grow but proceeds slowly and remains concentrated in only a few FCSFP projects.

New Directions

- Perhaps this is a time to step back, look at the progress in forest restoration, inventory the barriers and challenges creating delays, and look more closely at the ecological prescriptions being used. On either a state or regional basis, those who have been engaged in the work are in an excellent position to examine the lessons learned and strategies for the future regarding forest restoration.
- Support for community-based restoration may grow as an outcome of this year's wildfires that have forced the Forest Service to drain restoration activities. Bills introduced in Congress suggest this direction will be taken, possibly creating new opportunities for community-based forest restoration.
- The range of projects now offers an opportunity for ecological comparisons and monitoring to assess silvicultural prescription diversity and outcomes.
- In many areas, progress is a direct result of additional funding through the National Fire Plan. An in-depth analysis of this linkage in terms of costs and revenues would be helpful to determine levels of industrial sustainability, raw material availability, and market needs.

Zuni Sawmill at a Glance

For a couple of years, the Zuni Sawmill has received new funding, hired additional workers, received new market opportunities, bought new processing equipment, and is negotiating thinning contracts with the Cibola National Forest. Here is a quick update of their activities.

Restoration—Last spring, the sawmill was using the loader truck bought with a FCSFP grant in a tribal thinning project. The truck will be used for a Cibola NF thinning contract being negotiated. Work is expected this fall.

Collaboration—Manager Clifford Waikaniwa said that Zuni Natural Resources Dept. is working closely with Chuck Hagerdon, Mt. Taylor District Ranger

Workforce and Training—Zuni Sawmill has a three-man crew whose consistency has improved and more viga design personnel may be hired. Four new thinning workers were hired, making a total of 8 full-time men to cut, skid, monitor, operate the loader, and coordinate safety.

Funding—An Economic Action Program grant has funded the purchase of an edger to produce lumber for Zuni members and pay wages to two new workers to produce designed vigas. The Collaborative Forest Restoration Program funding (\$300,000+) will help thinning activities in the McAfee/Rincon area. Funding will be used to hire area youth to do monitoring.

Market Development—Grant funding is a significant development, but the sawmill was recently contacted by individuals interested in purchasing logs for a log-home business. One person in Colorado is prepared to purchase 600 nine-inch logs.

Innovating Technology—The Zuni Sawmill has been shopping for a debarker to prepare vigas. They have funding to purchase one.

Information Exchange—Many tribes are developing forestry programs that offer opportunities to care for traditional landscapes. The Indian Timber Symposium last April is viewed as a good information exchange. But, new information to apply in daily operations is needed. Zuni managers want to share what they are doing, how they are doing it, and what are the effects and benefits with other Pueblo programs more regularly.



George Harpole, retired employee with the USDA Forest Service Forest Products Lab in Madison, Wisconsin, has been hoping to help Randy Roper improve his logyard operation in Fruita, Colorado (see related story, page 37). He describes Roper's operation as an example of "integrated utilization," a comprehensive involvement of each stage of wood utilization from source to consumer.

Technology and Cost Effectiveness

This attribute centers on developing low-impact restoration harvest machinery, efficient processing equipment, new uses for small-diameter timber raw materials, all of which are cheaper to purchase and operate. In turn, this reduced cost of logging and milling will offer opportunities to small entrepreneurs looking for inroads into restoration-related businesses. Progress on the development of standards and guidelines to improve the cost-effectiveness of utilization is also a major focus.

Barrow Strategies will produce energy with SDT in a Department of Energy prototype unit

During spring 2002, Sherry Barrow Strategies, Glencoe, NM, was one of six locations chosen nationwide to participate in a Small-Scale Modular Biomass Power System demonstration project, co-sponsored by the U.S. Department of Energy (DOE) and the National Renewable Energy Laboratory (NREL) in Littleton, CO, and the USDA Forest Service, Forest Products Laboratory (FPL) in Madison, WI.

Sherry Barrow and her husband Glen have played a key role in establishing the Ruidoso Wildland Urban Interface Project, a project which received FCSFP funding, that depends largely on the wood shavings manufacturing operation that the Barrows are developing to move biomass from fuel reduction projects.

The small, modular biomass unit holds tremendous opportunities for both offsetting some local energy needs and using forest residues.

Before being selected, the SBS wood shavings plant was visited by a team of agency representative including the USDA, DOE, National Renewable Energy Laboratory. They selected SBS based on factors such as the Barrows' strong research, their resourcefulness, and innovation in:

- Building a sustainable small-diameter business that will provide local employment,
- Producing an ecologically sound byproduct,
- Helping to reduce the burn time on pile/burn projects, thereby improving regional air quality,
- Helping support existing area businesses while identifying new and emerging markets for sustainable rural economic growth; and,
- Designing a successful model for small-diameter restoration wood utilization.

The Ruidoso Wildland Urban Interface Project is an interagency and community effort to mitigate extreme wildfire hazard in the Ruidoso area, which was listed as most vulnerable community to wildfire in New Mexico. A working group was formed in January 2000 as a result of the NM Forestry Division prioritizing the top 20 communities at risk of the potential for catastrophic wildfire. Federal, state, county, and local governments, and community members of the working group developed a focus area map, and each selected an area for leading mitigation actions.

The shavings from the Barrows' operation will be a "product," not a "by-product." Raw materials will be milled straight from small-diameter timber harvested from fuel reduction projects in the wildland/urban interface.

The Barrows built the plant, hurdled New Mexico air quality standards, and began production in August. "My husband and I have had many successes, but until we begin putting shavings in bags, we can't brag too much," Sherry said.

Barrow exuberantly endorses the notion that private enterprise can find the way to solve forest restoration problems if people can agree about what is the best thing to do.

Reflections

- Technology advancements in harvesting machinery, while an interest of some entrepreneurs and members of the research community, have developed at a slow pace, in part due to the lack of access to harvest sites on public land and a supply of raw materials.
- Cost-effective utilization remains a challenge in many areas. Contractors risk losing money if they can't accurately gauge the cost of labor and overhead for bidding on thinning contracts.

New Directions

- Focus on an increased understanding of harvesting costs, techniques, and equipment through several site/field tours over the next year.
- Collect data on labor utilization, equipment options, and related expenditures. Analyze them through case comparisons, linking with existing research conducted by Dr. Dennis Lynch, Emeritus, Colorado State University on approximately a half-dozen sites in Colorado.



Glen and Sherry Barrow at the shavings manufacturing plant in Glencoe, NM



Steven Steed (L) owner of Skyline Forest Products, and Quinn Griffin, director of The Escalante Center, take a look at the portable micro-mill purchased with the help of Four Corners Sustainable Forests Partnership funds. The mill will demonstrate the effective small diameter timber utilization in the woods.

Estimated Number of SDT Products — 33

- “Ceramacrete”
- 4”x4”x4’ cants for pallets
- Animal bed shavings
- Arts and crafts
- Biomass fuel
- Cabinets
- Compost
- Decks
- Dimension lumber
- Doors
- Experimental 3” standard
- Fireplace pellets
- Foot bridges
- Fuelwood
- Furniture
- Hogans
- Latillas
- Log home logs
- Manufactured fireplace logs
- Molding
- Mulch
- Native American flutes
- Paneling
- Poles
- Posts
- Roof beams
- Rough-sawn dimension lumber
- Sawdust for pellets
- Specialty signs
- Structural sawdust/cement blocks
- Tongue & Groove
- Shiplap
- Vigas

Product Development

Product development includes research to create products made from small-diameter timber and various other kinds of raw materials. Those experimenting with new products range from the USDA Forest Products Laboratory (Madison, WI) to small, local business owners and wood workers. The number, kind, effectiveness, and economic impact of these products is of major interest.

Several FCSFP initiatives demonstrate exceptional innovation in product development, successes that argue strongly for increased investment in “product innovation” and related entrepreneurship. Is this a regional issue that deserves increased attention on the part of the FCSFP? When looking around the region as a whole there are people undertaking very unique and creative work and who are already succeeding. The efforts are underway. A working strategy is needed which gathers together current knowledge, existing opportunities, and specific options for short- and long-term investment in biomass utilization.

Innovative wood-product contribution to sustainability of restoration forestry

For decades the wood products industry has created value from small logs and waste wood by making particleboard, pallets, posts and poles, and mulch. While this sort of production will continue, the sustainability of restoration forestry will in part depend on new products that are innovative in concept, design, or processing. Innovation is just starting to take off throughout the FCSFP. Phil Archuleta at P&M Signs is increasing production levels for his signs, which use a plastic-wood composite that he developed jointly with the USFS Products Lab at Madison, Wisconsin. In Cameron, Arizona, the Indigenous Community Enterprise (ICE) is revitalizing an old idea, the traditional home of the Navajo, the Hogan. By adding a kitchen and bathroom to the traditional octagonal design of the Hogan at the request of community members, ICE is preparing to produce a home that fits the community and the availability of small diameter logs.

Rob Davis, in Show Low Arizona, has for some time worked with clean chips to make residential stove pellets, and has begun to partner with Walker Brothers to take higher volumes of chips from thinning projects in that region. However, seeing the need to work with “dirty chips” (made from whole trees, bark and all), Rob is intensifying his work on commercial pellet applications, including large-scale community projects such as schools, jails, and neighborhood housing and municipal complexes. Similarly, biomass energy generation is being applied to heating schools and possibly producing electricity.

Innovation is bringing a new dimension to the wood products industry in the region, the result of creative

thinking, cutting-edge materials testing, and applied technology. Are there breakthroughs just around the corner? On the drawing board, is a building product that can be produced from mixing wet, dirty chips with a bonding agent and molded in the forest, which will dry quickly because of the nature of the composite, and used in a building project the same day (Gordon West, Gila WoodNet). Stay tuned for the latest developments!

Diversification has helped Lone Eagle for the time being

Randy Roper owns Lone Eagle Timber Company in Fruita, Colorado where he is “hanging on by a thread.” Supply of raw materials from local sources has fallen short and it has been difficult to develop a product that sells in large volumes. Lately, Roper began diversifying his merchandise and making custom products to meet these challenges. He was more optimistic a few months ago than he is this summer, which is slow in sales.

Roper harvests small timber sales, when he can get one, and mills logs at his logyard, which doubles as a retail outlet. He uses a variety of saws, turning logs into various products, such as decorative slabs, paneling, dimension lumber, and custom-cut lumber.

Filling custom orders has helped him to hang on, even though they are “time consuming.” Unable to rely on his inexperienced staff of four, he does the skilled tasks of selecting and milling lumber for custom-order clients from markets like Aspen and Telluride.

“I usually have three guys standing around watching me, because I’m the only one who knows what the customer wants and how to do it,” Roper said.

It is the unreliable supply of raw timber that really is forcing Roper out of the custom woodwork business right now, even while demand is “way up.”

To improve his chances, Roper has been shifting to what he describes as a new “standard mode of operation” in which he develops marketable products out of available materials—whatever he can get his hands on that someone will buy. Diversification is the key.

He just began milling fencing out of small-diameter ponderosa for sale to local homeowners. With a “resaw” bought by Painted Sky RC&D in Delta with FCSFP funds, Roper produces slats ¾” x 4” or 6” x 6”. He adds value by “dog-earing” and treating the wood with preservatives. It’s more durable than cedar, he said.

“Small diameter is not always poor quality, or unusable, or for chipping only,” he said.

Roper’s is not a large operation. He managed about 10 truck loads this year, although he could handle more if he could get it. But he is demonstrating principles of diversification as an important contribution to cycling biomass, which is key to restoration forestry.

Diversification “works to some degree and got us this far,” Roper said, but you need a ready supply of almost any material. “The secret is also in merchandising of raw materials; knowing the highest value of each piece and being in position to reserve it for that use.”

Diversifying products is still good to pursue, he said, but it needs to be matched to local demand and a local raw-material supply.



“Small diameter is not always poor quality, or unusable, or for chipping only,” said Randy Roper, pointing out a stack of freshly sawn lumber, to be used for fencing or some other non-structural building project. Note the rings depicting the center of the small log from which the 2x4s were sawn.



Freshly bagged shavings made from fuel reduction materials at SBS, Inc. in Glencoe, NM.



Ralph Barela stands next to a waste pile created from his viga making business. He built a firelog processing plant to dispose of the waste, but it will take years to clear out.



Randy Roper, Lone Eagle Timber, with fence components made from small-diameter timber.

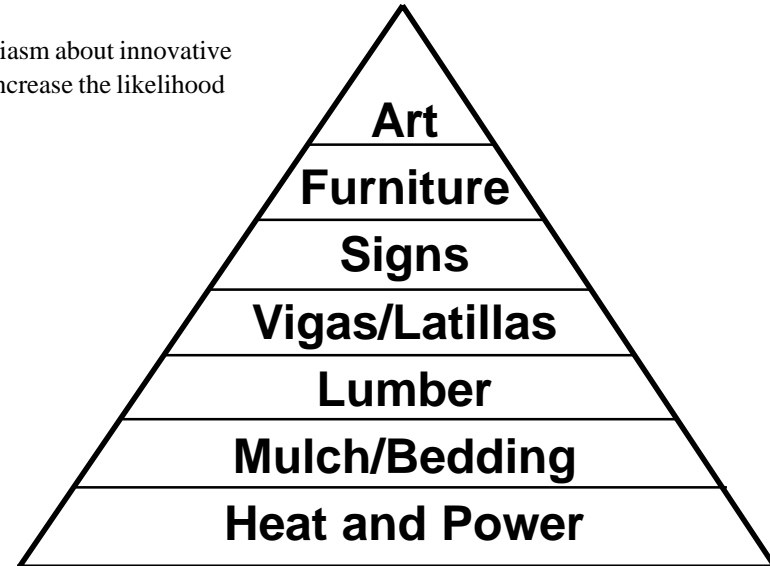
“That’s where the key is. There’s a lot of equipment on the market and some of it’s fascinating. But not being in an area with a lot of demand, we’re limited in being able to make those products, because it’s so far to market. The biggest thing we have going in our area is homebuilding and construction. So anything that ties in to that will be worth pursuing. That’s why we went with fencing.”

Reflections

- Four years of FCSFP operation is beginning to provide an array of wood products and utilization that could be compared and analyzed collectively in order to clarify sustainable relationships between high volume uses, such as pellets and fuel generation, and lower volume, value-added ones, such as furniture and crafts.
- In addition to traditional product utilization, considerable creativity is occurring among a number of the FCSFP projects to bring new products to market.

New Directions

- Conduct an assessment of volume utilization opportunities, utilizing the product diversification model suggested by Rob Davis at the 2002 Small Woods Conference.
- Sharing the energy and enthusiasm about innovative product development would increase the likelihood of economic sustainability.



Product diversification model suggested by Rob Davis, Forest Energy, Inc., at the 2002 Small Woods Conference in Albuquerque.

Market Development & Marketing

In contrast to the larger, multi-partner, multi-year funded projects are the small individual businesses struggling to get a foothold in a local community economy. Evaluation and assessment has found that marketing was a major need, but many rural community people lacked the resources, skills, and funding to address the need. Marketing assistance is aiding projects and businesses in their overall efforts to become sustainable.

Southern Utah Forest Products markets history to sell crafts

The Southern Utah Forest Products Association represents a unique niche in projects associated with the Four Corners Sustainable Forests Partnership Demonstration Grant Program. It is a cooperative of woodworkers, of which many members were part of the commercial timber industry once prevalent in south-central Utah.

Arts and crafts created by members of the cooperative often showcase the unique culture of the area. This is the story behind products sold at SUFPA's new Torrey Home and Garden store, which markets local historic and cultural arts and crafts handmade by the area's mostly Mormon residents.

"The store is going to help us tell our story," said Susan Snow, Executive Director of SUFPA. Buyers will learn about the history and culture of the region associated with them each time they purchase a locally crafted wood product.

Since their arrival a little more than a century ago, settlers descended from European ancestors have had a close relationship with area forests, which are predominantly spruce-fir, with some piñon and juniper and ponderosa pine. Raw timber was used for a variety of building products for home building, agriculture and mining. Non-timber products were probably highly valued and utilized through the years, as well. The unique thing about the timber industry in the region is that it was very localized. Local timber and products were harvested and consumed locally.

This traditional relationship with the forests has changed drastically during the last 20 years. There is almost no traditional relationship at all. One of many causes attributed to this development is increasing dependence upon lumber from outside sources, driven in part by growing suburban phenomenon of multi-product homebuilding centers. This has influenced the self-sufficient rural lifestyle once common in Utah; a relationship not forgotten and one that many people want to re-establish. And importantly, many SUFPA members recognize and accept the help of others in preserving what they can of their traditions.

SUFPA is helping people to reinstate an interaction between people, their local forests, and the products



By simply renovating a closed-down gas station into an attractive storefront, visible from the main highway through the area, community interest in the recently opened Torrey Home and Garden store is a good sign. In a quiet little town like Torrey, optimism displayed by local residents, many of whom are members of the coop, is a true gauge of local support for pursuing other goals in the future.

“ They start with a small-diameter timber product, but they really have a lot of options (for marketing), . . . They can call the same piece of wood different things and carry out a whole new aspect of marketing.”

— Carolyn Dunmire, a local marketing consultant hired to assist small forest-based businesses.

they produce and sell. Its recently opened store in Torrey is the latest step in linking producers and their arts and crafts with consumers.

Marketing small diameter products as more than “widgets” calls for new skills and concepts

Last year, Carolyn Dunmire, a marketing consultant living in rural southwest Colorado, received \$50,000 from the Four Corners Sustainable Forests Partnership to help 25 wood product and services businesses across the region learn about marketing. She helped each business identify its needs for marketing materials, such as promotional flyers, signs, websites, and brochures. Then she helped to find designers, printers, and photographers. She also helped business owners set short- and long-term priorities, develop budgets, and research markets.

Next year, with more FCSFP funding, Ms. Dunmire plans to document marketing successes and failures more comprehensively, while she continues to market and helps clients sell products.

Results are “qualitative” at this point, but a number of common elements have emerged that outline the context in which she and her clients are operating.

Most forest-related businesses lack a structure for monitoring progress and marketing results.

“They track their dollars, but not ‘units,’ ” Dunmire said. “They could respond to markets better if they kept better track of things like dimension lumber, posts, mulch, compost and the like.”

“I ask people, ‘Are people asking for stuff you don’t have?’ ” If they knew they could try to sell it.

None of Dunmire’s clients have a business plan and few intend to write one. However, they do like getting a chance to learn marketing. Many have trouble finding the time, though.

Dunmire said that business owners do have “ideas.” Knowing this, she talks to her clients about prioritizing them. Implementation, or “selling” the product, is the tough thing for many people, she said.

“A lot of these folks would rather just work in the woods than sell their products.” The key to training is to help them “get over their fears of marketing.” One approach is to think of their products in fresh ways.

“They start with a small-diameter timber product, but they really have a lot of options (for marketing),” Ms. Dunmire said. “They can call the same piece of wood different things and carry out a whole new aspect of marketing.”

For example, Stoner Top Lumber in Dolores, Colorado produces a single wood chip, but calls it “mulch” for one consumer group and “playground surface” for another.

Dunmire said that it’s people who make the difference in a business’s advancement.

“It’s not the brochure, but who’s running the business,” she said, referring to Zuni Furniture Enterprise’s new director, who during his first four weeks developed and paid for the enterprise’s first brochure.

People are learning to think of the restoration industry as much more than just making “widgets,” Ms. Dunmire said. Diverse partners, including community leaders, public-land managers, business owners, and

residents, are waking up to a concept of a community economy based on more than just products. A “marketing message” is emerging from coming together to solve the problem of SDT and rural economy.

“This (SDT restoration) industry is a good example for other industries, like the recycling industry. They both make products out of “renewable resources that once were thought of as garbage.”

Reflections

- Many rural community people lack the resources, skills, and funding to address marketing, which was identified as a major need. Marketing assistance can aid businesses in their overall efforts to become sustainable.
- An array of business types are increasingly emerging through the FCSFP demonstration program, suggesting new ways in which private business fits with overall efforts of revitalization and restoration; industrial and small business scales work at different levels of development and could complement each other.
- Developing an entrepreneurial business approach provides an avenue for trying out new product and service ideas. Learning basic marketing skills and techniques stimulates optimism. Broader community economic development is more possible.
- Increased product sales, a main outcome of improved marketing, can mean increased ability of businesses to cycle larger volumes of biomass out of forests to consumers.

New Directions

- Develop processing tools for products that meet existing market demand for which few, or no, products are available.
- Address marketing needs with action ideas, such as: cataloging value-added products available from small businesses in the region in a Four Corners “shopper”; inventorying exportable products that identify the region as a source of specialty products unique to the region.
- Identify how the FCSFP can help market small businesses as part of “strategic partnership perspective.”

Monitoring

Ecological monitoring in community-based forest restoration is widely accepted as a critical part of assessing stewardship outcomes, and impacts on community and economic sustainability. Acceptance of its importance has, however, not made the task easier. Monitoring of social, economic, and ecological successes and barriers is a complex, sometimes expensive endeavor, particularly in human time. Partnerships and community projects must make the determination as to what resources and priorities they can apply to making monitoring an appropriate component of their efforts. The investment in monitoring promises to pay dividends in collaborative learning, increased stewardship skills, and higher levels of community accountability and trust.

Monitoring: The current status

By and large, within the FCSFP monitoring has not yet become a major objective. However, where ample resources and interest exist, ecological monitoring has become a primary focus. The notable example is the work being completed by faculty and staff of Northern Arizona University, particularly through the new Ecological Restoration Institute (ERI), in conjunction with the Greater Flagstaff Forest Partnership. However, the availability of such institutional and professional resources is not easily accessible to most of the other FCSFP community projects.

In other cases, such as in Catron County and La Montaña de Truchas, youth are involved in learning about forestry problems and solutions through monitoring projects. This has created a win-win situation for youth learning and ecological monitoring.

The benefits of monitoring include increased local knowledge of successful outcomes, improved collaboration among multi-party interests, and maintenance of an appropriate community-based vision and action strategy. The primary focus of local monitoring is to enable the key partners to determine if they are meeting their own goals, thereby leading to local empowerment. This process can then be tiered up to describing and documenting critical successes and challenges for the funding agency, and governmental and policy representatives in order to maintain support for community-based forestry.

The difficulties of monitoring are primarily having the resources to plan, design and undertake long-term assessment of the outcomes of community-based forestry. This lack of resources often boils down to not having an external scientist to assist the local partnership in designing a multi-part monitoring framework. But what if there were a general framework, which included economic, social, community, and ecological monitoring, could be produced? This general framework might then be adapted by local partnerships to the specific



The Manzano Mountains, near the geographical center of New Mexico, have been as much a cultural landscape, as a geological land form for the many centuries people have lived on its eastern slopes. The people whose history is rooted in the future of the mountains struggle to renew their relationship with the landscape as stewards and as a real avenue for sustaining their cultural identity.

goals and context of the local forest and community.

A recent initiative, supported by the Community Forest Restoration Program in New Mexico (sometimes know as the Bingaman grants program), is building a socio-economic and ecological, multi-party monitoring framework. It is anticipated that individual restoration projects and community-based partnerships can adapt and implement it in a customized manner, tailoring it to their needs. The final results of this effort will not be completed until late fall 2002. Consideration could be then given to ways in which the FCSFP might wish to incorporate its application into the FCSFP as a guiding standard.

George Ramirez from Las Humanas, Quinn Griffin from the Escalante Center, Max Córdova from La Montaña de Truchas, Sam Burns from Fort Lewis College, and Ann Moote from ERI/NAU are participating in developing this monitoring framework, focusing on socio-economic criteria. Others are working on ecological and process criteria.

Monitoring: Maintaining communities' social and cultural roots

While renewing the economic capacity of businesses and communities to engage in the challenging work of forest restoration is critical, the social and human dimensions cannot be overlooked either. Recently, Bob Moore, executive director of the Catron County Citizens Group, asked a member of the evaluation team whether the FCSFP was paying enough attention to “connections to community values.” The discussion that followed brought out a number of projects where considerable attention is being given to how the community-based restoration is integrated with the history and contemporary social needs of local communities. These include La Montaña de Truchas, Las Humanas, Jemez Pueblo, Zuni Pueblo, and the Navajo Hogan Project, or Indigenous Community Enterprises.

In a related discussion about how to monitor the social impacts of restoration in northern New Mexico Max Cordova noted that thinning overstocked forests leads to increases in elk herds, which in turn results in

In other cases, such as in Catron County and La Montaña de Truchas, youth are involved in learning about forestry problems and solutions through monitoring projects.



“ We just want something for our kids to come back to, and we want to sustain our culture and our roots. ”

—George Ramirez, *Las Humanas* CEO, emphasizing the important connection of culture and forests.

more meat available to families during the winter. This is an interesting connection.

At Jemez Pueblo, Bill Whatley points out that when an initial timber program assessment and planning was completed there, special attention was given to the sacred springs and gathering places known by the elders and spiritual leaders of the community. These areas will be avoided for any sort of harvesting activity, certainly a worthwhile principle to follow.

The Zuni Sawmill was initially created to assist community members in obtaining lumber needed for homebuilding and maintenance. Directly related to this activity is the Pueblo’s strong interest in reconnecting with traditional, historical Zuni lands by becoming involved in restoration forestry efforts and associated partnerships.

The Navajo Hogan Project, in working with small diameter materials, is connecting to the need for housing among the Navajo/Diné people. Using the cultural patterns of the traditional Hogan, a more meaningful home can be constructed, along with adaptations for modern and safer functions, such as a kitchen, a bathroom, and storage. Here another direct connection is being made between forest restoration and people’s lives.

When restoration projects are delayed there are social impacts as well, which can be seen from the “appeal” of the Thunderbird Project, a restoration project located on a 10,000-acre analysis area near Manzano, New Mexico. Las Humanas, a cooperative of four Spanish land grants in the Manzano Mountains, is the contractor negotiating with the Cibola National Forest to provide a local workforce to conduct restoration thinning. In a discussion with Ann Moote, George Ramirez with Las Humanas expressed deep concerns about the last minute appeal by the Forest Conservation Council, based in Boca Raton, Florida.

“The appellants ‘don’t realize what this means to the community,’ Ramirez says. ‘Local people live woodpile to woodpile. They’re so poor that being caught with one illegal load can break them. The result is alcoholism, domestic abuse, and other social ills. We just want something for our kids to come back to, and we want to sustain our culture, and our roots.’ (Moote, Ann. 2001. “Community, Culture and Forest Restoration,” in *Communities and Forests*, Ecological Restoration Institute/N. Ariz. Univ.)

Bob Moore was correct in asking if we are paying enough attention to community values. The answer to his question will not be fully known until the work of the FCSFP demonstration projects is further studied by the local community partnerships through their own monitoring and evaluation. For now, it is critical that we not forget the mission of the FCSFP, *to link communities and forests*, and the deeper, longer term social and cultural implications of this statement.

Reflections

- Monitoring, while a somewhat neglected aspect of the FCSFP efforts to date, is being given increased attention.
- Monitoring is often limited to ecological measurements and outcomes, when social and economic results are equally as important.

New Directions

- Increase sharing among the FCSFP community demonstration projects about the monitoring goals and techniques of community-based forestry.
- Encourage each project to undertake some form of documented, reportable monitoring in the coming year.
- Establish a clear form of communication between the FCSFP Steering Committee and the current teams that are developing socio-economic and ecological monitoring criteria, in conjunction with the Collaborative Forest Restoration Program in New Mexico.
- Emphasize documenting stories about the cultural connections to landscapes, in order to cultivate greater awareness and understanding about how they are integral to the challenges and outcomes of restoration and stewardship.



Photo points are useful tools for social and ecological monitoring

Monitoring is an objective that Las Humanas in Manzano, New Mexico is integrating into planning community-based restoration. To this end, “photo points,” such as the one shown above of Manzano fields slated for future irrigation, have been selected around the communities and lands involved in the community-based forestry projects. Through the years, photos will be taken periodically to document progress and trends in land rehabilitation. High school students will be recruited to do some of the monitoring as part of the hope to interest them in staying in the community as economic leaders. The monitoring project is as much a historical documentation project for future generations to remember their community's past as it is a measure of progress in community-based restoration.

The work of these folks illustrates a three-fold approach to sharing information about efforts to do restoration forestry: approach the community straight on, teach the children, and create staff to carry out a communication strategy.

Information Exchange/Communication

Some have said that the most essential role of the FCSFP is to enable and facilitate an open and productive dialogue about linking communities and forests. Along with the regional sharing, individual projects are communicating with each other and with their surrounding communities about the work they are doing, thus facilitating increased knowledge and community support. These two outcomes—knowledge and community support—are most important to the ultimate success of restoration, stewardship, and community development work that is being undertaken. In the accounts that follow, you will see descriptions of the communication efforts being occurring at both the regional and project level.

Two NM business owners cooperate for bigger benefits

During October's FCSFP Annual Workshop, Gordon West and Sherry Barrow began talking about collaborating on restoration forestry opportunities and put out better products more efficiently and more cheaply. Each is refining his or her own efforts with help from the other, sharing information and looking for opportunities to do more as time and opportunity allow. Already, West has sent a prospective client to Barrow.

"I often find that the strengths of others can be used to fill in weak areas of my own business," said West, owner and operator of Gila WoodNet in Silver City, NM. "Most of us think we have some trade secrets that we can't afford to let the guy down the road know about. But in fact, if we allow ourselves to openly meet and talk with other woodworkers or loggers, each of us wearing fifty hats of the small businessman will see that three of them are overlapping. That means that in collaboration, several hats can be worn well."

Collaboration can relieve some of the burden of trying to cover all of the bases of a vertically integrated business, West said. Businesses can broaden the possibilities and add to a network of "useful acquaintances."

Barrow is building a "strong relationship" with the Forest Service for contracts and raw materials. While transportation remains a challenge, she said her partners in the agency want to create a successful utilization model similar to what West is trying to do in his neck of the woods.

"Let's talk about what's missing and how we can work together to make it work," Barrow said, adding that the venue that exists in the region is weak for pursuing a collaborative approach that solves problems as they pop up. It makes sense to go where she can make contacts for potential future benefits.

Similar contacts have been made by Susan Snow, of SUFPA, and David Solomon, with Taos Youth Corps. Snow is interested in potentially stocking products crafted by Youth Corps members in the Torrey Home and Garden store.

Other demonstration grant recipients regularly express interest in the activities and needs of fellow recipients. Steven Steed, who owns Skyline Forest Products mill in Escalante, Utah is interested in what Steve Hall, Rob Davis, and Tim Rooney can share with him about biomass co-generation. Randy Roper and George Harpole in Fruita, Colorado want to know more precisely the costs and benefits of small-diameter harvesting and processing. They want to conduct an analysis that other small businesses across the region can use to improve their operations.

In some cases, individuals contact each other, such as West and Barrow, who had the luxury of meeting in Flagstaff. Snow contacted Solomon by phone. Others, like Roper, are more isolated and at somewhat of a loss to know how to contact others. But that doesn't diffuse his interest in getting a chance to meet and talk with other mill owners.

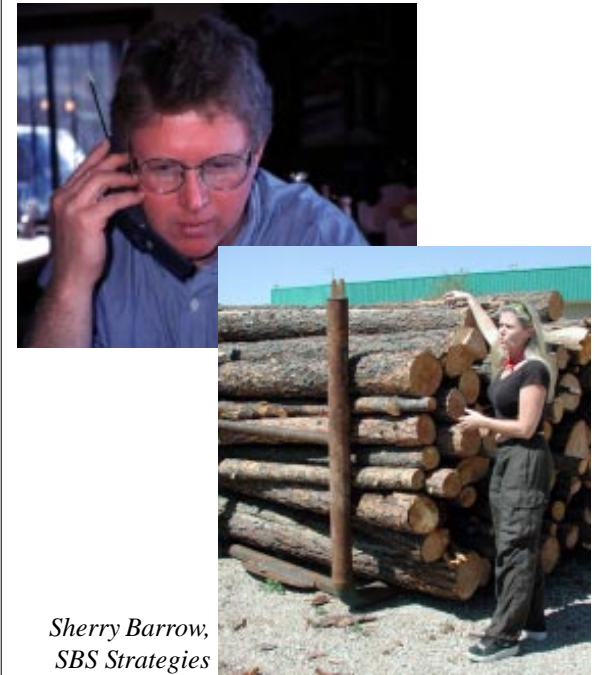
"Prior to Flagstaff, I felt I was all alone out here and thought I was never the size that would even be considered for an economic assistance loan. It was a boost in my morale. There is a hope that if enough of us are working together, we can solve this problem and work this thing out."

Regional exchange produces a sense of togetherness

On an autumn day in 2001, a group of about 100 people gathered in Flagstaff at the Little America Hotel and Convention Center. Around a dozen or so circular tables, the conversations are energetic and inspired. Up in front of the room, Herb Hopper alternately briefs the participants about the workshop agenda, calls on the panel moderators to begin their sessions, and gives away the celebratory gifts and prizes donated by members of the Four Corners Sustainable Forests Partnership. Interspersed throughout the two days is the heart of the FCSFP, community and land agency partners, business representatives, and forestry program leaders telling stories about their endeavors, sharing new ideas and solutions.

Quinn Griffin tells the group how and why the Escalante Center was formed, George Ramirez explains the impact on the Las Humanas communities of the continued procedural delays in getting started on their thinning project, and Brian Cottam and Bob Moore lay out conceptual frameworks and implementation processes for community-based forestry in Flagstaff and Catron County, respectively. Kurt Mackes reviews the research, which he and Denny Lynch have been doing in Colorado to track the utilization of wood products, and in the evening there is a humorous presentation about how "not" to work with the media. And along the way there are statements of support and congratulations from Kurt Rowdabaugh, Arizona State Forester, and John Bedell, Supervisor of the Apache-Sitgreaves National Forest.

As the formal program unfolds, the chatter and feedback circulate around each table, throughout the meal times, and during breaks. By the time the two days conclude new friendships have been made, lots and lots of information has been shared, and there is a growing sense of commonality and collegiality within the FCSFP. Members of the partnership depart for home with many new ideas and facts, and a strong desire to stay in touch and continue the process of sharing and working together. Good job, Herb! Good job everyone!



*Sherry Barrow,
SBS Strategies*

Four needs of an entrepreneur, according to Sherry Barrow, co-owner of Sherry Barrow Strategies, Inc. and contract sponsor for the Ruidoso Wildland Urban Interface Project:

1. Ability to network with other entrepreneurs.
2. Access to mentors.
3. Access to capital: not just "debt capital," but also to "equity" capital.
4. Access to good business services.



Sam Burns, Office of Community Services, Durango, CO, and Rob Davis, Forest Energies, Inc, Show Low, AZ. share ideas at Moab, UT meeting.

Public awareness as part of doing business

Ed Collins, Lakeside District Ranger on the Apache-Sitgreaves National Forest, reported last spring that the Natural Resources Working Group hosts or sponsors field tours for the media and any interested groups to the Blue Ridge Demonstration Sale that the group has been working on for a few years. They are developing a self-guided tour, in fact.

Stories about the project have even appeared on local public television station twice since 1999. Collins and his partners also sponsored two town halls, one in Pinetop-Lakeside and another in Tempe to describe the project and get feedback from residents.

Education has been a big part of the working group's efforts, particularly of members Steve Campbell and Jan Mathis. Mathis is particularly involved in working with local schools to educate young people and give them opportunities to get involved.

Steve Campbell is currently chair of the working group. Jan works for him indirectly as "town forester" with southern Navajo County, assisting area towns to create planning and zoning regulations and help private landowners plan and conduct conservation treatments on their properties.

Much of the money to do information exchange is coming from national fire plan grant dollars. The work of these folks illustrates a three-fold approach to sharing information about efforts to do restoration forestry: approach the community straight on, teach the children, and create staff to carry out a communication strategy.

Reflections

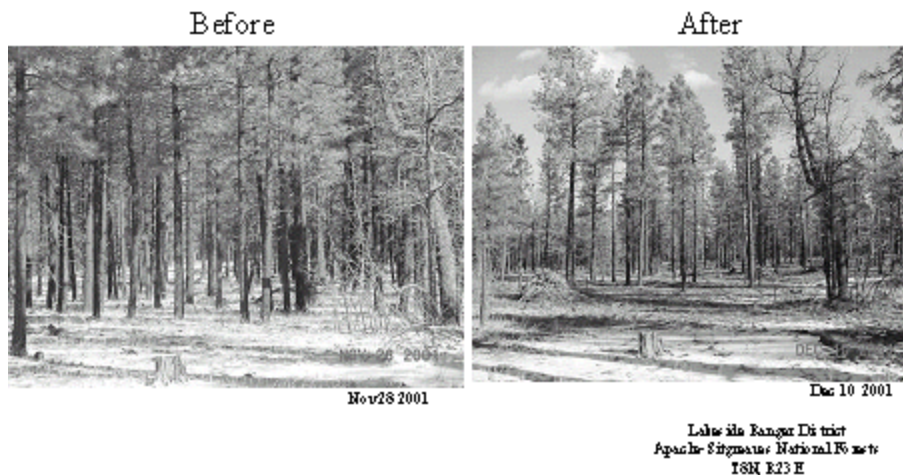
- Collaboration and information exchange are complementary components supporting partnership advancement; however, distances between potential partners hinder continued interaction. A consistent means of regular, long-term communication is scarce.
- While the FCSFP has dedicated significant resources to a public awareness and communication strategy, the best messages come from the experiences of local communities and projects, which in turn could benefit from wider dissemination.

New Directions

- The opportunity for increased beneficial collaboration hinges on the ability of projects and businesses to share information amongst themselves. Being familiar with each other's activities would be a key outcome of any planned communication effort.
- The need to communicate consistently with the public about forest restoration needs, which was identified at the FCSFP-Taos Roundtable in 1999, remains a critical concern.

- The 2002 wildfire season has created a special “teaching moment” to explain forest conditions, and the need to undertake fuel treatments and broad based restoration activities.
- Field trips held at projects and hosted by project leaders are potentially the most beneficial means of projects and businesses learning about each other through the telling of their stories and sharing of their methods.
- Partnerships and businesses need local support to get their story into the appropriate markets and reach critical audiences.
- A set of messages for key regional and national interest groups and policy makers, designed to increase resources and opportunities for community-based forestry needs to be formulated.
- A FCSFP quarterly, or more frequent, newsletter should be considered.

Blue Ridge Demo-Forest Plan Treatment Thin & Chip on Unit 7



Demonstration Projects Initiate Communication and Dialogue

Collaboration and communication are interchangeable, complementary concepts. Although Demonstration Grant recipients often lack resources and capacity to exchange information with each other and interested people, most strongly express the value they have for communicating about their activities. What they have to say, how they say it, and who hears it are crucial to the prosperity of their projects. It may be as simple as talking to neighbors, or as involved as testifying to Congress, which George Ramirez, Director of Las Humanas, has done. Sherry Barrow in New Mexico talks to her Congressmen regularly, and in Utah, Susan Snow talks to hers. The Greater Flagstaff Forests Partnership has a strategy to increase public understanding of its activities and goals. The Catron County Citizen's Group has been publishing *The Citizen* for more than a year, reporting on forest- and health-related developments.

Perhaps the FCSFP itself is in the best position to lead information dissemination relevant to restoration forestry and community development. Information exchange is already a key activity in which it has participated and received positive criticism.

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