Appendix A—Framework Components

A number of recommended products are suggested to address assessing, evaluating, and monitoring projects related to community economic revitalization and ecosystem restoration in the Four Corners. The framework and the products which are outlined in this report establish basic steps to employ in identifying current realities, tracking progress, measuring outcomes, and adapting to changing conditions.

Assess ongoing project activities at a number of points in time to provide current information for program advancement.

Articulate outcomes at the project level that are concrete in nature, not just action steps, and that are realistically reachable within a reasonable span of time. This will help to ensure that project stakeholders experience a sense of continual achievement. This relates to another recommendation to conduct exercises to develop a vision that meets objectives of multiple stakeholders. A vision will aid in answering the question: What are the results that you want to create?

Conduct a goals assessment with the objective of determining whether or not stated project goals are realistically achievable and are really goals and not something else, such as actions.

Continue developing an evaluation framework matrix

The following list of attributes profiles essential components of demonstration projects and describes current situations in 11 select “Categories for Analysis” that give a sense of where the project has been, where it is, and the direction in which it is projecting itself. It serves as a tool to help ascertain the capacity of projects for advancement.

Criteria for measuring success

Identifies in a table broad areas for success to occur, including: participation, enterprises, products, understanding, and forest restoration. Criteria describe the conditions that would exist if the problem were solved. The matrix provides indicators for measuring attainment of, or steps towards, progress.

Success criteria matrix should be constructed so as to reflect contexts beyond the project (or aspect of project) that is being funded by the FCSFP. More research and development is
needed beyond the scope of this study and the current form and content of the success
criteria matrix.

Stories in various forms; i.e., vignettes, full features, photos

Profiles, situation narratives, photos of the people and places involved in community-based
forest restoration, community and ecosystem stewardship (conservation stewardship).

Individual project profiles and attributes

This includes a framework matrix for each project, a project profile based on the Categories of
Analysis. It will also include presentations for summer project participant workshop and training
conference.

Self-assessment scorecard/workbook

The scorecard is for projects to assess where they are in their current situation and to put
their assets to work. A questioning approach is useful to direct inquiry into current realities,
that results in sharper visions, goals, and strategies, and aids in identifying where
opportunities are possible, or where momentum is building. Potential questions for gathering
descriptive data in a monitoring process include the following:

1. What are the long-term trends?
2. What are the periodic changes that have occurred?
3. What are the fluctuations in the rates of change?
4. Who are the partners in terms of their experiences, histories, expertise,
   perspectives? This section would be extensive in details and description as
   well as interpretation.
5. Which local, regional, national institutions are involved in efforts?
6. What is the most significant feature of your project? Both preferred and
   unwelcome.
7. What technical resources do you need as a partner in order to participate in
   community sustainability and ecosystem restoration?
8. How many businesses in the community are restoration-related?
9. List indicators of success of your project and the whole idea of ecosystem
   and community restoration.
Information exchange

Continue operation of an on-line news service providing current up-to-date information to both key sources and project participants as it comes available.

Hold annual workshops for project-level participants in which networking and training occurs. Scholarships should be provided to those who otherwise would be excluded due to limited funding.

Publish a directory of stakeholders with expertise in various areas and who are involved in community revitalization and forest restoration, then distribute to communities.

Infrastructure map

To be developed in conjunction with the FCSFP Steering Committee by relating the evaluation data to a map showing how products move from restoration sites to utilization.
## Appendix B—Success Criteria

### Success Criteria Matrix Guide (08/2001)

#### Participation

<table>
<thead>
<tr>
<th># of Participants</th>
<th>Non-FCSFP Funded projects</th>
<th>Diversity of Representation</th>
<th>Dollars Leveraged</th>
<th>Collaborative Efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual number of participating entities</td>
<td>Projects with funding by sources other than FCSFP</td>
<td>• Representation&lt;br&gt;• Industry&lt;br&gt;• Environmental&lt;br&gt;• Government&lt;br&gt;• Education&lt;br&gt;• Research&lt;br&gt;• TA</td>
<td>Hard $&lt;br&gt;In-kind $</td>
<td>List two or more parties working together and describe collaborative activities.</td>
</tr>
</tbody>
</table>

#### Enterprises

<table>
<thead>
<tr>
<th># of Enterprises</th>
<th>Enterprises Receiving Technical Assistance</th>
<th>Diversity</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Manufacturing products&lt;br&gt;• New processes</td>
<td>Actual Number</td>
<td>• Raw material processing and manufacturing&lt;br&gt;• Building products&lt;br&gt;• Arts and crafts&lt;br&gt;• Production alternative&lt;br&gt;• Biomass&lt;br&gt;• Agricultural materials</td>
<td>Actual number</td>
</tr>
</tbody>
</table>

#### Products

<table>
<thead>
<tr>
<th>Number of SDT Products</th>
<th>Businesses receiving marketing and utilization assistance</th>
<th>Product Diversity</th>
<th>Amount of Material Utilized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual number</td>
<td>Actual number</td>
<td>Same as enterprises/products</td>
<td>Volumes</td>
</tr>
</tbody>
</table>
### Understanding

<table>
<thead>
<tr>
<th># of Educational Programs</th>
<th>Types of Info Dissemination</th>
<th>#/Types of Published Research Reports</th>
<th>Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Workshops</td>
<td>• Reports</td>
<td>• Economic Analysis</td>
<td>Number and kinds of strategies implemented, planned, explored.</td>
</tr>
<tr>
<td>• Public meetings</td>
<td>• Newsletters</td>
<td>• Silviculture</td>
<td></td>
</tr>
<tr>
<td>• Public schools programs</td>
<td></td>
<td>• Monitoring</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Wildlife</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Opinion Survey</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Policy decisions/actions</td>
<td></td>
</tr>
</tbody>
</table>

### Forest Restoration

<table>
<thead>
<tr>
<th># of Acres</th>
<th>Treatment Across Boundaries</th>
<th>Science and Approaches</th>
<th>Ecological Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual number</td>
<td>• BLM, FS, Tribal = acres</td>
<td>Types of scientific analysis: economic, ecological, social assessment. Field tests in operation, completed, planned.</td>
<td>• Yes or No</td>
</tr>
<tr>
<td></td>
<td>• State = acres</td>
<td></td>
<td>• Planned</td>
</tr>
<tr>
<td></td>
<td>• Private = acres</td>
<td></td>
<td>• All Party</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Contracted</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Agency traditional</td>
</tr>
</tbody>
</table>
Success Criteria Matrix

The following data is aggregated from information drawn from individual projects into a regional perspective of progress. It presents a broad, general view. Data are estimates by project contacts and should not be expected to be precise, but they do establish a fairly accurate baseline for continuing to track changes over time. The Success Criteria Matrix should be considered a work in progress that is updated as new information is gathered.

A success criteria matrix available for each project provides more specific descriptions of the general criteria. It is expected that the information contained in each will be updated during fall 2001 and periodically thereafter.

### Participation

<table>
<thead>
<tr>
<th>Participants</th>
<th>Funded projects</th>
<th>Diversity of Representation</th>
<th>Dollars Leveraged</th>
<th>Collaborative Efforts</th>
</tr>
</thead>
</table>
| 59           | • County funds (mill purchase)  
               • State community foundation (general project operation)  
               • State Health Dept. newsletter  
               • Ford Foundation (Jobs and Biodiversity Project)  
               • SARR (Utah State Univ. consulting for demo harvest)  
               • USDA Rural Coop Services (partnering on developing woodworker cooperative)  
               • Forest Trust (community mapping project)  
               • McCune Foundation (teen worker project)  
               • U. or CA, Berkeley/Ford  
               • County Governments Representatives (Coconino, Catron, Apache, Navajo)  
               • Individual community members (Website Development; volunteer partnership members)  
               • Federal Government (USFS National Forests and Ranger Districts, RCA, USF&W Service; 4-5 RC & Ds)  
               • State Government (CO Forest Service, AZ State Land Dept.; AZ Game and Fish)  
               • Foundation (Ford, Grand Canyon Trust)  
               • Regional Non-profit TA Providers (Forest Trust, Confluence, Office of Community Services)  
               • Private business (Mill owners; Flagstaff Chamber of Commerce) | $1,024,726 (This regional estimate is conservative. It will probably rise once fall 2001 updates are conducted) | • Catron County Citizens Group (multi-agency strategic partnership working on mill site development; Negrito Ecosystem Watershed and forest restoration)  
               • Zuni Natural Resources Dept. & Cibola NF, Mt. Taylor RD (Rincon Project and other restoration analysis and harvesting planning)  
               • Gila WoodNet, Gila NF, & CODC (jobs development and demo harvest planning)  
               • Flagstaff Fire Dept., Grand Canyon Forests partnership, NAU Ecological Research Institute (urban-wildland interface treatment, variety of research)  
               • Arizona Sustainable Forests Partnership & White Mountain Educational Alliance (multi-agency coop on demo harvest, education in schools, biomass research)  
               • SUFPA and Utah Rural Development Council (business training) |
<table>
<thead>
<tr>
<th>Fdn. (staffing)</th>
<th>Commerce; Flagstaff Native Plant &amp; Seed</th>
<th>::SUFP and Rural Coop Services (cooperative development)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZ. Advisory Council on Environmental Ed. (education outreach)</td>
<td>Environmental groups (regional, local watershed, and national; Nature Conservancy, SW Forest Alliance, SW Center for Biological Diversity)</td>
<td>Thousand Lake Initiative, multiple members (demo harvest)</td>
</tr>
<tr>
<td>AZ. Community Fdn. (education outreach)</td>
<td>County economic/community development assistance programs (2-3)</td>
<td>Natural Resources Working Group and Arizona Sustainable Forests Partnership (Demo harvest)</td>
</tr>
<tr>
<td>Eastern (AZ) Counties Organization (education outreach)</td>
<td>Town governmental leadership (Flagstaff, Eagar, Reserve)</td>
<td>Madera and Forest Trust with youth worker</td>
</tr>
<tr>
<td>Urban Community Interface Forestry (n/a)</td>
<td>Academic (NAU, FLC, CSU)</td>
<td>Madera and Marketing and Utilization Tim Reader dip diffusion</td>
</tr>
<tr>
<td>Urban Community Interface Forestry (n/a)</td>
<td>Research Institutes (NAU Forestry; Ecological Research Institute; NAU School of Engineering and Technology)</td>
<td>Madera and American SW Log Homes</td>
</tr>
<tr>
<td>Urban Community Interface Forestry (n/a)</td>
<td>Special Interest Groups (Society of American Foresters)</td>
<td></td>
</tr>
<tr>
<td>Urban Community Interface Forestry (n/a)</td>
<td>Tribal Leadership (Zuni)</td>
<td></td>
</tr>
</tbody>
</table>

### Enterprises

<table>
<thead>
<tr>
<th>Enterprises</th>
<th>Enterprises Receiving Technical Assistance</th>
<th>Diversity</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 estimated</td>
<td>5</td>
<td>Wood Products (3)</td>
<td>35-plus, 180 projected</td>
</tr>
<tr>
<td>Milling</td>
<td></td>
<td>Agricultural Products (2)</td>
<td></td>
</tr>
<tr>
<td>Crafts Retail</td>
<td></td>
<td>Home &amp; Building Construction Products (3)</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td>Manufacturing Firewood (2)</td>
<td></td>
</tr>
<tr>
<td>Home Construction</td>
<td></td>
<td>Harvesting and Processing Sawmills (7)</td>
<td></td>
</tr>
<tr>
<td>Gardening</td>
<td></td>
<td>Woodcrafts (3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technical consulting businesses (0)</td>
<td></td>
</tr>
<tr>
<td>Number of SDT Products</td>
<td>Businesses receiving marketing and utilization assistance</td>
<td>Product Diversity</td>
<td>Amount of Material Utilized</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------------------------</td>
<td>-------------------</td>
<td>-----------------------------</td>
</tr>
</tbody>
</table>
| 32 (3-4 projected)     | 2 (This information was gathered during fall-winter 2000-2001 surveys. It will probably go up during fall 2001 success criteria updates) | • Log greenhouse  
• Solar kilns (3-4)  
• Treated round wood  
• Roofing trusses  
• Deck railing  
• Decorative home entryways  
• Wood crafts (enterprises = vigas, doors, furniture, cabinets, flutes, lamp/clock bases, etc.)  
• Firewood  
• Sawdust for fireplace pellets  
• Structural sawdust/cement blocks  
• Rough-sawn dimension lumber  
• New experimental 3” standard  
• Structural sawdust/cement blocks  
• Compressed logs  
• Posts and poles  
• 4”x4” cants to Mexico  
• Handcrafted and finished furniture, doors, vigas  
• Hand-peeled vigas  
• Latillas  
• Log and timber-frame houses  
• Other log cabin structures (barns, sheds, water towers.)  
• Mine supports  
• Flooring  
• Window frames, molding and trim  
• Cabinetry/Gun Cabinets  
• Fence posts and poles  
• Jewelry boxes  
• Native American flutes  
• Clock and lamp bases  
• Specialty products | N/a as yet. |
### Understanding

<table>
<thead>
<tr>
<th>Educational Programs</th>
<th>Information Dissemination</th>
<th>#/Types of Published Research Reports</th>
<th>Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>• Several reports</td>
<td>• Economic Analysis</td>
<td>Number and kinds of strategies implemented, planned, explored.</td>
</tr>
<tr>
<td></td>
<td>• Three conferences</td>
<td>• Silviculture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Research studies (26), such as economic utilization, business plan, economic modeling.</td>
<td>• Monitoring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• One trade show exhibit</td>
<td>• Wildlife</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Two teleconferences</td>
<td>• Opinion Survey</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• One newspaper</td>
<td>• Policy decisions/actions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• One online news service</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Two newsletters</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Two websites</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 3-plus steering committee meetings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Economic Analysis</th>
<th>Silviculture</th>
<th>Monitoring</th>
<th>Wildlife</th>
<th>Opinion Survey</th>
<th>Policy decisions/actions</th>
</tr>
</thead>
</table>

### Forest Restoration

<table>
<thead>
<tr>
<th>Number of Acres Treated</th>
<th>Treatment Across Boundaries</th>
<th>Science and Approaches</th>
<th>Ecological Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four projects provided answers for this.</td>
<td>100% of all projects are on federal land.</td>
<td>Three projects provided answers for this. Field application projected of thinning from below for fire reduction and wildlife values.</td>
<td>One project reports acquiring baseline data.</td>
</tr>
<tr>
<td>• 20 (1,400 acres undergone) NEPA. Will treat summer 2001</td>
<td></td>
<td>Three prescriptions being tested.</td>
<td></td>
</tr>
<tr>
<td>• 600-700</td>
<td></td>
<td>Landscape scale assessment in process.</td>
<td></td>
</tr>
<tr>
<td>• (4,700 projected in Blue Ridge Demo)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 2,000-3,000 thinned; 5,000-6,000 controlled burned</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C—Survey Questions

During late summer and fall of 2000, an initial survey conducted with coordinators of 1999 projects for the purpose of establishing contact and to gather general data about the projects. The surveys represent the initial data gathering phase of the evaluation study.

The survey was divided into four sections: General Project Information, Implementation, Available Resources, and Your Assessment. For the purposes of this report, respondents’ answers to a number of questions were aggregated in order to see how they compare to each other and to learn what they collectively suggest. The results demonstrate significant perceptions, understandings, and knowledge on the part of project leaders.

For Year 01-02 Evaluation, this survey will be revised for use with newly selected projects. It is expected that another, briefer, update survey will be prepared for learning more about projects already under evaluation.

General Project Description
1. Describe project location (on the map provided).

2. Were you able to implement you project within the time proposed? If not, please explain why.

3. Please describe needs to which your project is in response. What is your sense of whether the need is local, state, and/or national in scope.

4. Have you received more funding support with the aid of this Four Corners Sustainable Forests Partnership grant? If so, list types and amount of dollars.

1. What technical assistance has been utilized to meet project objectives?

6. How have you progressed on the goals you outlined for your project? Please identify if and how they have been altered during the implementation process.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Percent completed</th>
<th>How altered</th>
<th>Reason for Altering</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Has your group held any informational or educational events, such as workshops, conferences, seminars, teleconferences, or technical transfers? How many events and how many participants?

**Partnership/Collaboration Status and Development**

8. Who are the key, active partners? What are their contributions? What perspective does each represent? What value is the contribution (dollars, in-kind services, facilities, consulting, equipment, etc.) Please include and identify new partners that have joined your project since its startup.

<table>
<thead>
<tr>
<th>Individual Partners</th>
<th>Contributions</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name/Perspective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Rate the degree to which the following statements are occurring by circling one number in each category. (one = very low; two = low; three = medium; four = high; five = very high). Write in N/A if not applicable to your project. Explain your rating if needed.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Explanatory Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Collaboration and joint leadership occurs among key partners.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Explanatory Comments</td>
</tr>
<tr>
<td>b. Partnership component of your project is well-organized and works efficiently.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Explanatory Comments</td>
</tr>
<tr>
<td>c. Critical information is regularly shared among key partners in a clear and timely manner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Explanatory Comments</td>
</tr>
<tr>
<td>d. There is good diversity in the collaborative group through inclusion of business, land agency, environmental, community, and other groups.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Explanatory Comments</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>---</td>
<td>------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td>The federal public land agency is supportive of community-based resource management.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1  2  3  4  5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f.</td>
<td>The state public land agency is supportive of community-based resource management.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1  2  3  4  5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g.</td>
<td>Ecological/environmental groups supports project goals and implementation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1  2  3  4  5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h.</td>
<td>Community support for forest restoration is demonstrated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1  2  3  4  5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j.</td>
<td>Businesses and the industry participate actively.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1  2  3  4  5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Are there any organizations, agencies, individuals not involved in your project that you feel should be?

11. Do you believe that community involvement with national forest planning in your area could lead to more restoration forestry and community sustainability?

Implementation

12. What activities have been initiated so far in the following areas. If not applicable, write in "n/a."

           i. List the types of restoration being implemented in your project.
ii. Vegetation types involved in the treatment.

iii. Number of acres targeted by your project for restoration

iv. Number of acres treated

v. How many acres in the project's surrounding ecosystem?

vi. Who owns or manages the land involved in the project? Federal %
    State % Private % Other (specify ) %

vii. Does treatment/restoration activity occur across jurisdictional boundaries? 
    Please Explain.

viii. Describe how restoration activities specific to your project will improve the 
    ecosystem.

12b. Economic sustainability of local forest restoration.

   • Number of new products developed using small diameter or underutilized 
     materials
     Species type ________________________________

   • Volume of local material utilized
     Species type ________________________________

   • If products were sold, estimate of income from sales

12c. Businesses, jobs, enterprises created or assisted in some way through your 
    project.

   • Number of enterprises developed/assisted

   • Number of jobs created

   • Kind of enterprises (new businesses) developed/assisted.
12d. Have you received assistance from the FCSFP Marketing and Utilization Program? Please describe how the assistance was useful. How can it benefit your project better?

12e. What studies have you done related to implementation of your project, if any? What were they about? Are they completed? (e.g., monitoring, silvicultural, ecological assessment, market feasibility, product development)

12f. If training needs are being met, how? If not, describe your needs.

### Available Resources
13. Rate the availability of resources to meet the needs of your project. If the resource is lacking or of poor quality, describe the gap or need. (1 = not available; 3 = adequate; 5 = easily available).

<table>
<thead>
<tr>
<th>Description of Gaps</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Administrative or Organizational Support</td>
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<td>b. Ecological Science</td>
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<td>c. Neutral Facilitation</td>
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<td>d. Technical Expertise in Product Development</td>
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<td>e. Technical Assistance in Market Development</td>
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<td>f. Technical Assistance in Marketing</td>
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Your Assessment

14. List short- and long-term benefits that your community receives from your project.

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<tr>
<th>Describe Short Term Benefits</th>
<th>Describe Long term Benefits</th>
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15. What factors would make your project more self-sustaining?

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<tr>
<th>Factors/Resources</th>
<th>Description</th>
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16. What are the major internal and external institutional challenges faced by the project? (Administration, legal authorities, inherent social barriers, lack of institutional innovation, etc.)

17. What critical lessons have you learned in your project? (scientific, collaborative, economic, resources, etc)?

18. In what ways would regional or multi-project cooperation assist your efforts?

19. Looking ahead, what turning point does your project have to meet in order to make significant progress?

20. What five items/actions/outcomes do you consider to be critical indicators of success?

21. Overall Summary Comments (Additional comments on any previous section: implementation, partnership, assessment, resources, etc.).
Appendix D—Summary of Survey Outcomes

Description Section
(Questions #4, #5, #8)

Have you received more funding support with the aid of this Four Corners funding?

- Not at this point. Forest Service and the public steering committee association with Upper Sevier program are seeing its effects as triggering further work in the future.
- NM Health Department: $5,000; NM Community foundations: $15,000; USDA Rural Community Assistance, Community Spirit Award: $5,000
- For a supply of materials and for the kind of work Gordon West does. To use small-diameter timber. Partner Cooperative Owner Development Corporation/Pellet Plant: need help developing SMT as a resource base, to create job opportunities for disadvantaged worker-owned enterprise.
- SW Forest Alliance: Seeking approaches to do forestry restoration that was not traditional logging focus.
- Focusing locally, but could be a national model for local effort, replicated in some way in other places.
- Yes, generally in a sense of our overall efforts. We created a foundation from the FCSFP funding and other funding about working knowledge about utilization, one of several elements in cracking the restoration nut.
- Applied for other grants at same time. Got other funding this time because of what we have accomplished. 1999—Arizona Community Foundation and Forest Service Rural Community Assistance program. $25,000; Arizona Advisory Council on Environmental Education, $30,000 with $30,000 match; 2000—same as ’99, plus acquired help from Cooperative Extension Service; Eastern Counties Organization to do natural resource education (Marty Moore), $50,000; Urban Community Interface Forestry, $10,000.
- No. Other than this. (Researcher note: This may be misleading, since it was later discovered that this project was receiving general funding support form other source, although it was intermittent.)
- None received, but have tried. To International Forest Products Society in order to try and increase scale and economic feasibility of project.
- Have not leverage that grant particularly. Consultants have received 10s of thousands of dollars previous to FCSFP’s grant. Money lost and can’t. Have gotten small pots of money from state and federal sources; i.e., Rural Community Assistance, SARR through Utah State University, USDA Rural Cooperative Services RBG grant from administrative dollars.

**Rate the availability of resources to meet the needs of your project. If the resource is lacking or of poor quality, describe the gap or need. (1 = not available; 3 = adequate; 5 = easily available).**

![A Rating of the Degree to Which Selected Activities are Occurring](chart.png)

It is important to note that the data are skewed slightly by extreme answers by one or two respondents. This created a more positive response that might have been recorded without the inclusion of the highly positive responses. Due to this, federal and state
assistance may be artificially highly rated. What is significant is that overall the data reflect optimism towards the potential of community and ecosystem restoration.
Assessment Section

**What critical lessons have you learned in your project?**
Respondents’ answers to this question identify objectives which are important to them and that mark progress in their views. Often-mentioned objectives include: obtaining effective funding, steady jobs for workers, and cash flow. Funding is deficient for partnership development, product development, equipment purchases, ….

Internal and external funding are two major areas of emphasis to which sources referred. There is a sense of a moving away from the hypothesis that originated some eight or ten years ago that ecosystem restoration could be achieved by using existing timber industry business to do the on-the-ground work for profit.

The perception is increasingly expressed that combining forest and ecosystem restoration with community economic revitalization is not producing the results that people set out originally to achieve. Some people are saying that the idea of achieving ecosystem restoration as a product of economic revitalization is only one alternative. Paying the cost for getting the critical work of restoration done should be shared by society as a whole through outright appropriations, they say. Forest restoration cannot and should not have to “pay for itself.” This is not to say that commercially viable approaches that support local timber-related businesses is no longer feasible, only that the time to consider other options has arrived.

One source said that in the long run subsidizing the wood products industry might be cheaper than paying for thinning. Clarification is needed on this, however.

Restoration science is increasingly a critical area of concern for many. An examination of the debate surrounding the role of science shows that the gap between the need to achieve ecosystem restoration and community economic revitalization is closing. It is a subject that once had served to bring people together into common vision and cooperative interaction.

Debates focused on prescriptions serve to signify where advocates stand in opposition to each other. Support for one prescription or another stems from an individual’s social or political values. Disagreement over the purpose and expected outcomes of silvicultural prescriptions is occupying center stage in a politicized environment sometimes characterized by legal disputes. Some sources point out that even among leading environmental organizations, disagreement over what is the appropriate application of science knowledge hampers their ability to participate in solving the forest health problems or in uniting in common cause.

While concerns are increasingly expressed that getting actual thinning work done is being stalled at the risk of losing the forests, some are saying that the forests can take care of themselves in the long run. Indeed, the effects of whatever happens today will take two
centuries to evolve, it is said. There are ecological questions that still need to be asked and answered through research.

A few years ago only a few silvicultural prescriptions were available for application and examination of their effectiveness. Now there are several promoted by various interests for distinct motivations. They lie at the center of debates now and collectively appear to be little more than an amalgam of approaches that have not served to coalesce people into common cause.

“Pre-settlement reference conditions” versus “natural functions” versus “restoration treatment” versus “fuels reduction” are labels that reflect the pains people are taking to articulate their positions or preferred approaches. The extent of overall interaction is limited while attempts take place to find common goals. The overall debate may be one of efforts to give one method an advantage over others, rather than to identified where different methods have the best chance of being appropriately applied and result in successful outcomes.

Despite this conflictive context, cooperation or collaboration are extremely important to many. This is confirmed by the amount of energy going into organizing cooperative partnerships and networks throughout the Four Corners. Sources exhibit a general sense that opportunities still exist for making cooperative efforts worthwhile and promising. But some sources are questioning the efficacy of collaboration in the manner that it is evolving to address the more urgent issues in a timely manner. Some sources have expressed that individuals participating in some partnerships act more in self-interest, or in favor of a particular value, rather than in a cooperative, compromising way. Some say that in order for cooperative efforts to work, individuals must be willing to change out-dated methods of interacting with others and the landscape.

At least one person said that collaboratives should be as much for learning as anything else, such as organizing to achieve economic revitalization or forest restoration. The criticism is that some collaboratives are being viewed and used as mechanisms to perpetuate outdated social and economic relationships with local landscapes. The thought was expressed that rural traditional people feel threatened by the realities of the Changing West without really understanding what the threats are. This ultimately renders them defenseless in the face of inevitable change. The question should be how do those who are accustomed to traditional relationships with the land adapt. What should they let go of and what should they modify in order to share the land with people possessing different knowledge, experiences, values, and desires. The same question must be asked by everyone.
What are the major internal and external institutional challenges faced by the project?

Generally, obstacles exist in business organization and access to technical assistance, industry access to public timber, agency bureaucracy and regulatory processes, social acceptance, understanding and support of restoration, and legal actions based on philosophical differences.

In summary, while some express the need to supply existing industry with access to timber, others say that because access to public land for timber is scarce, those involved in timber-based businesses will go out of business. The apparent decline in the timber industry seems to confirm this projection and their concern. However, some survey respondents are expressing that, in this time of transition in the relationship between communities, businesses, and ecosystems, a new kind of worker will be needed that is oriented to restoration activities. As local and regional efforts at community economic recovery and ecosystem restoration gain momentum workers will be needed for restoration-oriented jobs. They add, however, that the pay scale for available positions will not be sufficient to fill those positions with qualified workers. It is important to note that a significant number of respondents, not just survey respondents, but field trip interviewees, lack a general grasp of the overarching structure.

What five items/actions/outcomes do you consider to be critical indicators of success?

**Synopsis**
Respondents’ answers aggregate into seven general areas of critical indicators of success: 1) A cooperative process among diverse members of communities, industry, and agency in enhancing progress of community economic recovery and ecosystem restoration; 2) Better organization of the components of community-based forest and ecosystem restoration at project level, such as project administration; 3) Funding is self-generated; 4) A self-sustaining, ecologically aware industry, which in turn serves as a tool to help build ecosystem and community stability; 5) A flow of raw timber supplies to harvesting and processing operations; 6) Water quality and habitat protection as forest restoration occurs. This suggests an understanding of a more overarching concept of “ecosystem” restoration, beyond that of “forest” restoration; 7) Development of products and markets that are locally based.
What factors would make your project more self-sustaining?

Much of the information that emerged from survey respondents’ answers to survey questions is probably commonly held knowledge about where they were in the evolution of community economic revitalization and ecosystem restoration at the time the survey was conducted during fall 2000. The ideas listed below do suggest where project participants view their efforts need to be.

- Implementation of forest restoration projects following NEPA processes and the installment of core industry infrastructure, including mills. Self-sustainability of forest-to-product-to-market and community-ecosystem stewardship is goal on a commercially sustainable basis.
- Get project goals to pay as much as they can for the work being done. However, we are looking at 20 plus years before we know if any restoration will work on a commercial basis.
- Private support in dollars of project. To not use taxpayer dollars.
- Increased education of public to increase private support verbally and in dollars.
- A more cross-discipline educated workforce. Operators with business management skills. Operators have good ideas, but no incentive to do business planning with when that would be helpful.
- Generate cost-effective product development. “A dollar saved is a dollar earned.”
- A bigger project that goes beyond research and development and with double or triple the space. A bigger solar drying kiln, once we see prototypes working.
- Internal funding mechanism, free of continuous need for grants.
- Go beyond research and begin fine tuning project organization and writing a business plan.
- Generate more membership for (cooperatives, such as) the Southern Utah Forest Products Association.
- Appropriately scaled local small-diameter products industry.
- Increased participation from the environmental community (ideas to increase participation include: setting standards for restoration in Southwest; broad-based agreement on general guidelines; e.g., diameter cap, where restoration should, shouldn’t occur, a forest service planning framework that addresses restoration).
- Standardized monitoring and project planning framework. Ties in with a systematic landscape assessment currently being pursued.
- Implementation of the Marketing and Utilization Program of the FCSFP.
- Participation of universities: CSU, NMSU, NAU, who don’t get enough recognition for what they can potentially do to enhance things; i.e., testing, marketing and product development.
Have you received more funding support with the aid of this Four Corners Sustainable Forests Partnership grant? If so, list types and amount of dollars.

**Synopsis**
In most cases, projects have utilized FCSFP funding to leverage other dollars only generally, not directly. For the most part, project coordinators have not explicitly sought to leverage funding. However, key sources expressed that FCSFP funding has aided their ability to continue pursuing goals, as well as influenced their ability to receive funding from other sources. Survey question #4 asks for information dollars leveraged and question #8 addressed the issue of partner contributions in terms of dollars. Responses to question #4 were largely negative. Dollar amounts in the third column of #8 were difficult to obtain because almost no one had been keeping close account of dollar-contribution amounts of partners.

Looking ahead, what turning point does your project have to meet in order to make significant progress?

**Individual Statements**
- A small-diameter industry will be in place to provide core industry production.
- Value-added production of additional products will be nurtured through business incubation.
- Money.
- Forest Service putting up a timber or some harvesting project.
- Businesses willing to take risks, entrepreneurship.
- Land managers to put up more products and supply.
- Arizona needs to vamp up support in restoration.
- A market. Turn products over quickly in a market.
- Get rural business enterprise grant from the USDA to ensure one more year of administrative funding (internal funding).
- Getting internal funding to marketing, Website, SUFPA retail store, trade show exhibit so that Brian can focus on forest policy development.
- Getting ecosystem prescription accomplished. Other stuff is secondary. “As soon as we can get in the woods and the contract acceptable and signed, we’ll more forward very rapidly.”
- Fort Valley Project on the ground results.
- Approving chemical use through the EPA.
- Test demonstration samples in a laboratory setting.
- The project must increase revenues from marketing of small-diameter timber products to match sawmill operational costs, especially in the long-term and independent of external and community/tribal financial support.
• For small-diameter harvesting to pay for itself through value-added processing and marketing, or else be supported for the other benefits (forest restoration, Tribal sovereignty, access to cultural resources) that it provides.
• Forest restoration activities, both contractually and on-the-ground, must become efficient and cost-effective for the tribe to be able to continue collaboration with Cibola (or other partners). They are likely to do so as ZDNR builds experience in both areas. If this happens, if Zuni and Cibola can enter into a long-term cooperative agreement, and if Zuni Sawmill generates sufficient revenue from small-diameter timber products, there is a virtually limitless acreage of small-diameter stands to be thinned.

In what ways would regional or multi-project cooperation assist your efforts?

Individual Statements
• A scientifically designed solar drying kiln project that involves data collecting overtime in order to learn about the drying characteristics of small-diameter timber, which in turn would help do a better job of it in the future
• Raw material utilization: Such as regional centers to process low value wood efficiently through economy of scale production.
• Cooperative marketing agreements to meet production capacity of large orders and guarantee of product quality.
• Dry kiln person in Colorado that was not funded by FCSFP could have contributed data that we could use here. Gordon West is building a solar drying kiln for his woodworking business, but it is not a scientifically designed project that involves data collecting overtime in order to learn about the drying characteristics of small-diameter timber, which in turn would help do a better job of it in the future. West has learned a lot over the years and knows what he needs to build for the results he needs. “I just need to make it work,” he explains. If there were money to do a more systematic study, Gila Wood Net could be “a test bed for other people’s projects,” he believes.
• Bring more attention and resources to the need of situation of forest health and community health.
• Attention and resources and aid in community development and forest restoration.
• Technical assistance helps, but moves at too slow a pace and involvement is not continual and focused enough; including funding sources and technical assistance. Would be better to give us money and let us do what we believe will be best for us.
• Get us into the forest. Regional officer is “gun shy.” If he could see the successes his forest supervisors have accomplished, he would feel more confident.
• Communication through all levels of state, US Forest Service, etc.
• This is a new approach to both old and new problems and problem-solving. Funding is attached to new issues; i.e., how do you do restoration and sustain forest-based communities. Put money on ground trying new things.
• To make more commercial. Need approval from major trade organizations.
• A cooperative that would be ground up rather than top down.
• Document on-going research and protocols.
• Regional guidelines for restoration. Standardized planning, monitoring, and documentation.
• Regional and multi-project cooperation in small-diameter timber utilization and forest stewardship would help to create replicable models for cost-effectiveness and effective interagency collaboration. Such projects would also strengthen the case for necessary policy reform and administrative flexibility to bring federal and state authorities more into line with the existing situation of the forests, forest products industry, and forest-dependent communities.
Appendix E—Evaluation Project Goals

The expected outcomes and benefits listed below were included in the original 2000-01 proposal for developing the Demonstration Projects Assessment and Evaluation Study. Products and recommendations developed during the evaluation correspond to these goals.

- An evaluative framework to serve current and future demonstration projects supported by the Four Corners Sustainable Forestry Partnership. This report and accompanying recommended products form the core of the framework.

- Identification of evaluation criteria and performance indicators for assessing critical restoration components of community economic revitalization and forest restoration in the Four Corners. The identification of these has begun with the development of the success criteria matrix which contains indicators for measuring progress towards goals and the effectiveness of the FCSFP in overall community and ecosystem restoration efforts.

- Assessment of restoration benefits, including: reduced wildfire risk, increased diversity of vegetation and wildlife habitat, and forest conditions that more closely resemble the “range of natural variability.” This goal has not been addressed directly.

- Concrete project description which enables state and federal land managers, local, state, and federal leaders and policymakers, the timber industry, private landowners, environmental organizations, and the general public to become better informed about restoration and to make informed decisions. This information is provided through the assessment portion of the study and outlined in the Categories of Analysis section in which attributes are listed and described.

- Documentation of lessons learned, formatted into narrative and visual products for on-going use in educational and policy-making activities of the FCSFP. Along with survey findings, profiles and stories of stakeholders and projects have been and continue to be developed for gaining a greater understanding of the people, places and events occurring in relation to economic revitalization and forest restoration.

- A framework for the exchange of information among interested leaders and participants in local, state and national arenas about critical elements for success in
social, economic, and ecological areas of forest restoration projects. Recently, a
periodic on-line news service about FCSFP-related information to steering committee
members was begun as a tool to funnel newly acquired information in a timely
manner.

- An inventory of lessons learned from these restoration efforts that could improve
future project formulation and funding. Aggregated survey responses address this
goal. See Appendix XXX for summary of answers.

- A comprehensive list of barriers and challenges to be addressed that can facilitate
longer-term success in community-based forest restoration through public policy and
education initiatives. An annotated themes list was developed to identify barriers and
challenges which forms the basis for the principal findings.