

Natural Resources and Environmental Issues

Volume 5 *Ecosystem Management of Natural Resources in the Intermountain West*

Article 7

1-1-1995

Community-based approach to forest management in the Pacific Northwest: A profile of the Applegate Partnership

Brett KenCairn

Rogue Institute for Ecology and Economy, Ashland, OR

Follow this and additional works at: <http://digitalcommons.usu.edu/nrei>

Recommended Citation

KenCairn, Brett (1995) "Community-based approach to forest management in the Pacific Northwest: A profile of the Applegate Partnership," *Natural Resources and Environmental Issues*: Vol. 5, Article 7.
Available at: <http://digitalcommons.usu.edu/nrei/vol5/iss1/7>

This Article is brought to you for free and open access by the Quinney Natural Resources Research Library, S.J. and Jessie E. at DigitalCommons@USU. It has been accepted for inclusion in Natural Resources and Environmental Issues by an authorized administrator of DigitalCommons@USU. For more information, please contact becky.thoms@usu.edu.



A Community-based Approach to Forest Management in the Pacific Northwest:

A Profile of the Applegate Partnership

Brett KenCairn

Executive Director

Rogue Institute for Ecology and Economy

P.O. Box 3213

Ashland, OR 97520

Abstract

Varied interest groups joined together as the Applegate Partnership to attempt a collaborative process of forming an ecologically-based forest management plan for the Applegate Watershed, an ecologically unique area. A history of this area shows how the land was used for mining, then subsistence ranching, federally-owned and managed areas, and most recently people settling in the area during the back-to-the-land movement of 20 to 30 years ago. Out of these constituencies has come the Partnership. The three major task areas for such a community-based plan to develop are ecosystem assessment; community assessment, inventory, involvement, and monitoring; and, locally-based implementation. Comprehensive ecosystem-management planning requires the consideration of both ecological and social/economic issues and consequently, assessments of both are essential.

Based on the Partnership experience, five elements emerge as important considerations: (1) mixed interests necessitate building partnerships among stakeholder groups; (2) there is a substantial commitment needed to build and maintain broad-based community support; (3) comprehensive ecological and community inventories, involving scientists and community-development practitioners, are essential to develop a full view of the dynamics of forests and communities under consideration; (4) mechanisms for implementation of activities need to direct work to local workers, to maintain quality and consistency of work, and to ensure that economic and social benefits are retained in the community; and, (5) long-term success depends on a broad base of support, otherwise political entropy will favor external, centralized control of local resources.

INTRODUCTION

Using standard measures of health specific to each, both forests and forest-based communities in the Pacific Northwest are suffering serious declines in their overall well-being. In forests, decades of industrially-oriented forest management and harvest have resulted in multiple impacts on forest vitality including reductions in species diversity, site productivity, water quality, increase in insect and disease mortality, threat of wildfire, loss of species, and a range of other destructive forest influences.

Correspondingly, economic vitality in many forest-dependent communities has declined dramatically over the past decade, despite record levels of production in the timber industry. As the multiple influences of automation, log-supply disruption, and global trade in forest products forced a restructuring of the timber industry, unemployment rates have climbed well into the two-digit range. Poverty rates have dramatically increased. Expressions of social deviance such

as substance abuse, crime, and domestic violence have escalated, and many of the most educated or entrepreneurial individuals in these communities, especially youth, have left.

The increasing polarization and conflict in the Pacific Northwest over federal forest management, culminating in the present injunctions on timber harvests in the 2.2 million acres of BLM and Forest Service (USFS) lands in Oregon and California, have compelled the federal government to address both the issues of forests and communities as it reformulates its forest-management policies.

Perhaps more important, however, are the responses of the communities themselves. In many areas, community residents have become exasperated with the political deadlock of warring interest groups and have begun to formulate their own solutions to the problems. In some cases this has led to calls for local control or the ouster of federal land-management agencies. In others, like the Applegate Valley of southern Oregon, residents joined together across their various interest allegiances to attempt a bold collaborative pro-

cess of formulating an ecologically-based management plan for this 500,000 acre watershed. This paper profiles the efforts of these Applegate advocates and the strategy they have developed to balance both ecological and social/economic concerns.

THE APPLGATE PARTNERSHIP

GEOGRAPHIC SETTING

The Applegate River watershed encompasses approximately 496,500 acres in southern Oregon (Figure 1). This extremely diverse landscape is situated in the world-renowned "Klamath Knot," a meeting of several mountain ranges forming a unique east-west/north-south confluence of botanical and climatic influences. Throughout geologic history, this area has served as a haven for plant species during alternating cycles of placcation and inland flooding which inundated much of the available habitats throughout the region. As a result, the Applegate watershed hosts species whose native ranges extend from Alaska to central California. The area has been recognized by the International Union of Concerned Scientists as one of the critical bio-reserves on the planet.



Figure 1. Location of the Applegate Partnership Project Area

Ethnobotanical studies of the area indicate that the landscape which white settlers first encountered was already subject to consistent and intentional management by humans. Native Americans of the area regularly burned many portions of the landscape, often yearly, to foster and sustain both certain species valued for use, and for maintenance of open spaces conducive to hunting game.

Naturally occurring fires also had a major influence on the characteristics of the watershed. Studies suggest that low-intensity fires swept through much of the area as often as every 10-15 years. The frequency of these fires kept fuel loads at a minimum, and encouraged more open, park-like stands of large trees.

The past 120 years have dramatically altered this landscape. Years of intensive timber harvest, fire suppression, intensive agriculture and ranching, mining activities, and a decade of drought have dramatically altered the composition and structure of this area's forest from the conditions found by the first Euroamericans in the area. A patchwork of ownerships, private and public, fragment much of the landscape into holdings ranging from a few acres to over 100,000 in the case of national forest land.

SOCIAL SETTING

The first Euroamerican settlement of the Applegate Valley took place around 1850. Fueled by the discovery of gold, Jacksonville, Oregon was the center of Oregon's population in 1850. The settlement patterns and land-use behaviors of these early arrivals are characteristic of pioneer species. They rapidly established an infrastructure based on voracious and inefficient consumption of resources. Most new arrivals intended to stay only long enough to make their riches and move on.

This strategy created major impacts on the native biological, geographic and social constituents of the area. The indigenous populations of humans, the Takilma and Dagilma peoples, were largely exterminated or relocated by 1870. Human-set fires designed to remove forest cover dramatically altered the forest conditions throughout much of the watershed. A Portland paper in 1870 reported that smoke from fires in southern Oregon was so pervasive that it disrupted shipping on the Columbia river 300 miles to the north. Hydraulic mining further altered the land forms and dramatically impacted both the soils and vegetation of the area, and the hydrologic patterns of the landscape.

Eventually the major mining activity began to play out and the area settled into a typical western pattern of subsistence farming/ranching. This land-use and social pattern characterized the area until the early 1960s when the marginal operations began closing down, creating opportunities for new immigrants to purchase land. This opportunity corresponded to the larger back-to-the-land movement which was taking place throughout the Northwest. As a consequence, this period saw a new set of immigrants arriving in the valley with many significant cultural and educational differences from the pioneering society then pervasive in the watershed.

Despite these differences, the strong common identification and appreciation of active subsistence use of the landscape formed viable cultural bridges between these two groups. Preister (1994) notes that it was common to find these two groups mixing in social settings and institutions such as volunteer fire departments or weekly evening card games held at a local cafe. However, important differences did exist, and these were about to surface as industrial management of the surrounding lands began to take shape on federal forest lands.

TWO DECADES OF GROWING CONFLICT

Logging has been a prevalent activity in the Applegate watershed since arrival of the Euroamerican settlers. During the early to mid 1900s, small sawmills could be found up

almost all of the major tributaries to the Applegate River. However, most of the logging practiced in this period was selective logging in which the largest and most valuable trees were felled and removed, leaving a substantial portion of the residual stand intact. In the 1960s, these selective cutting practices began to be replaced by more intensive forms of extraction utilizing clearcutting and slash burning. These practices had far more significant impacts on the landscape and were much more visible to area residents.

During the late 1960s and early 1970s, grassroots environmental concerns over large-scale clear cutting and herbicide applications sparked the formation of local watershed associations which began challenging the long-standing patterns of resource extraction and use. These concerns were particularly strong among the newer arrivals to the watershed. By the mid-1980s, such challenges had grown into major battles between local environmentalists and the federal agencies managing approximately 70 percent of the watershed's forests. Most of the timber sales in the area were appealed, and many were blocked.

In 1990, most planning of new logging activities in the area was halted by the federal court injunctions pertaining to the spotted owl.

GENESIS OF THE PARTNERSHIP

In the spring of 1992, a local environmentalist, Jack Shipley, began talking to agency scientists and an industry research group about the possibility of developing a landscape-scale management plan which would attempt to demonstrate the concepts being developed in what was loosely defined "ecosystem management." Shipley proposed to several leading scientists including Jerry Franklin that the Applegate watershed, an 800 square mile basin in southern Oregon, would be a perfect testing ground for this approach.

Based on the enthusiastic response from Franklin and others, Shipley began making presentations to a variety of agency groups in the Forest Service and BLM throughout the summer and early fall of 1992. Through the connections open to the industry group, the Aerial Forest Management Foundation¹, Jack and others were able to give presentations to the head of Region 6 (covering Washington and Oregon) of the USFS and eventually to the state director of the Oregon BLM. The positive feedback they received confirmed the timeliness of the idea. What remained was the development of community support.

Throughout the spring and summer of 1992, Jack began circulating a concept paper among a wide variety of local interest groups including industry and the environmental community. The paper outlined overarching goals for management of the watershed, namely forest and community health, and served as a means of determining whether common ground existed in philosophical orientation among the diverse and sometimes warring factions affecting the fate of the Applegate watershed. Comments were collected and the draft revised until it appeared that an overall consensus on basic principles actually existed.

In October of 1992, Jack hosted a gathering at his home in the Applegate. Over 30 people gathered on the back deck of Jack's house to share a potluck dinner. A wide range of

backgrounds and affiliations met that afternoon to talk about the possibility of joining together to develop a community-based solution to the timber crisis.

A unique part of this gathering was the format of the initial introductions. As everyone went around the circle introducing themselves, they were asked to tell something personal about their background, their past times, and their experiences in the forest. People were asked specifically *not* to talk about who they worked for or of what group they were a part. As a result, loggers talked about their love of hunting and fishing with their grandkids in the "woods," and environmentalists spoke of their concern for the traditions and culture of their small rural communities. A distinct sense of the common concerns emerged which led to an agreement to form a working group to move forward in developing a joint management plan for the 500,000 acre Applegate Watershed.

In an effort to create a broad-based representation of the various interests present in the valley, the group attempted to find representatives from the following groups or interests: farming/ranching, timber industry, watershed groups, environmental organizations, and agencies (BLM and USFS).

This core of people eventually galvanized into a nine-member board which called itself the Applegate Partnership. The group started meeting twice weekly in November and December of 1992. During December the group hosted a meeting with the Regional Forester from USFS Region 6, John Lowe, and the state head of the BLM, Dean Bibles. As part of the tour, board member Dwain Cross, owner of a helicopter logging company, took the two agency heads on a helicopter tour of the watershed. Afterwards, the agency directors met with the Partnership board over a potluck lunch at the home of a local resident. As a result, both agency heads agreed to endorse and authorize their local offices to actively participate in the Partnership's activities.

KEY DEVELOPMENTS

Throughout the late winter and early spring, the board worked to create a mutually agreed upon approach for identifying potential projects in the project area, and to facilitate their implementation. Several mistakes were made during this period, including underestimating the potential threat which the Partnership's activities represented to the existing agency personnel responsible for managing lands in the project area. Concern soon began to emerge over whether the Partnership was trying to take over the management role from the agencies. This conflict led the board to reassess its role and strategy. Rather than attempt to design its own projects

¹ The Aerial Forest Management Foundation (AFMF) was founded in 1991 to conduct research and development on helicopter-based logging systems. From the outset, this group was a leader in promoting new approaches to selection-based logging techniques which retained forest structure and ecosystem integrity. The group was originally funded through congressional appropriations and designated as a partner in the Forest Service's Pacific Northwest Research Stations "New Perspectives Partnership," a research effort designed to examine new approaches to forest management. This association gave AFMF direct access to many of the high-ranking officials in Forest Service Region 6.

in the watershed, the Partnership invited the agency staff to bring forward projects which would meet a set of ecosystem-based criteria that the board had developed.

During early spring, prospects for the upcoming Forest Summit caused a new flurry of activity as rumors circulated that one or more of the Clinton Administration's cabinet might come to tour the project area and meet with the Partnership board. Eventually, Secretary of Interior Bruce Babbitt did spend a day touring the area and met with the Partnership board in the same private residence previously used to meet with the agency heads. Following the meeting, Babbitt made several statements to the local and national press strongly endorsing the Partnership and calling it "historic effort." Two Partnership board members, Dwain Cross from Croman Corporation, and Jack Shipley, were invited by Babbitt's staff to attend the Forest Conference as the Secretary's guests. The Partnership was subsequently mentioned during the conference as one of the examples in the region of a locally generated solution to the timber crisis.

As a consequence of this exposure, President Clinton's Forest Plan identified the Applegate Partnership as a model for community-based forest management. Of the ten sites the Plan designated as Adaptive Management Areas, only three have partnership efforts in progress, and only the Applegate Partnership has formulated a clear plan to address both ecological and economic issues.

OVERALL PARTNERSHIP STRATEGY

Early in the process of identifying its overall objectives, the Partnership board identified three primary task areas necessary for developing and implementing a community-based ecosystem management plan. These task areas are: ecosystem assessment and formulation of a monitoring plan; community skills and resources inventory and development of an information and feedback system to facilitate community participation; and development of new implementation mechanisms to enable local land managers to help generate more economic opportunities in the local community. These task areas are as follows:

1. **Ecosystem Assessment.** Developing a natural-resources inventory which addresses the entire ecosystem requires a scientific team which includes agencies, non-agency specialists, and representatives of key interest groups such as the environmental community and industry. The Applegate Partnership initiated the formation of such a committee. A core group, consisting of an ecologist, forester, hydrologist, and restoration specialist met for six months to lay the groundwork for a larger planning team consisting of a wide range of specialists including both scientists, agency planners, and representatives of both industry and the environmental community.

The initial information needs assessment for the ecological evaluation was completed nine months after the group was convened. The document, however, simply profiled the information which would need to be collected to formulate such an evaluation. Without the larger landscape assessment the Partnership had originally envisioned, its claim to be moving forward in supporting an ecologically-based management plan for the watershed carried little credibility.

Eventually, in frustration over the agencies' (BLM and USFS) apparent unwillingness to commit the necessary resources to conduct such an analysis, the Partnership board—including environmental, industry, and community members—met with the two Forest Supervisors and BLM District Managers responsible for land in the watershed. Board members strongly protested the agencies' lack of follow-through and clearly stated that if the agencies were unwilling to commit to such an assessment, the Partnership would disband and leave the agencies to deal with the return of interest-group politics.

Within three weeks the agencies had appointed a joint team of specialists to conduct an overall ecosystem-health assessment. This team met together for over two weeks and eventually published a report identifying the key issues and ecological concerns of the Applegate watershed.

2. **Community Assessment, Inventory, Involvement, and Monitoring.** Concurrently, the Institute and the Partnership initiated a process to assess, inventory and monitor the issues and resources among residents in the project area. The first step in this process was a community-impact assessment which utilized informal outreach techniques to identify the major interest groups in the area and their key issues. During this process, key gatekeepers and caretakers in the community were identified and a communication network established to provide rapid feedback about proposed or implemented projects.

During this process, the Institute also conducted an inventory of the existing size and capability of the local workforce. The Applegate watershed hosts a population of over 9,000 residents, over 10% of whom work in some sort of forest-products-related industry. Using a combination of public meetings and personal interviews, the Institute assessed the present KSA (Knowledge, Skills, Abilities) set among the existing workforce. By comparing this set of abilities to the set of skills which will be required under the projected set of ecosystem-management activities, the Institute is beginning to determine what sorts of skill-enhancement and training opportunities will be necessary to involve local workers in management of the watershed. This will in turn allow the local community college, county extension, and agencies to develop training programs tailored to the local need.

The Institute has already initiated a training program in forest inventory and assessment skills targeted toward displaced workers in the Applegate and two other forest-dependent watersheds in the Rogue Valley. Two other training programs, one in restoration techniques and the other in forest-stand improvement activities, are slated for implementation in early 1995.

Through ongoing collaboration with resource planners, community-development practitioners like the Institute and the Partnership will be able to make projections about the longer-term workforce size and skill levels necessary for ongoing ecosystem maintenance and enhancement. *This proactive forecasting of ongoing labor requirements in ecosystem management will allow, for the first time, a capacity for adaptive and orderly change within the workforce.*

Finally, based on the indigenous information-transmission patterns and predominant methods of interaction in the

community, the Partnership is developing a series of communication tools such as video updates, newsletters, and public gatherings to maintain and enhance direct community involvement in the activities facilitated by the Partnership. Using the network of contacts developed during the community impact assessment, the Partnership can also monitor the communities' response to proposed or implemented actions. This facilitates early and timely response to emerging issues and minimizes the potential for disruption of activities caused by distortions of information or unrecognized concerns.

Preister and Kent (1981) place issues on a continuum ranging from "emerging issues," to "existing issues," and finally "disruptive" issues. In an issue-management system, the goal is to identify and address issues in the emerging stage before they become entrenched and intractable. By the time issues have gone unaddressed long enough to become disruptive, they are extremely difficult to resolve without substantial investment of time and resources.

3. Locally-based Implementation. Perhaps the most economically important influence available to the federal government for benefiting rural communities is the mechanism by which it implements forest management. During the contracting process, the resource inventories and opportunities meet the availability and capability of the workforce. This process is also one of the most effective ways to create substantive opportunities for local people to participate directly in the implementation of management activities, either in traditional resource-related activities, or in monitoring and research. These opportunities for direct involvement build participant awareness and expertise in local resource management and foster the emergence of a local stewardship culture.

The key missing element is the development of new implementation mechanisms which directly join the resource tasks and opportunities and the existing local workforce. In an effort to find mechanisms to direct more work to local resource workers, Partnership board members are meeting with contracting specialists from the agencies to discuss new approaches to contracting that would enhance local resource workers' access to employment opportunities in their area, and create longer-term contracts which offer more security and consistency. The development of training programs targeted at local-community resource workers also maximizes the likelihood that those living in the area will have a strong competitive position in bidding on agency contracts. The agencies will need to value these skill-enhancement initiatives by providing contract processes that favor those with demonstrated proficiency in ecosystem management.

These three elements, ecological assessment, community assessment, and local implementation form the basis of the Partnership's strategy and the core of its efforts in the coming year. Figure 2 illustrates these elements of the Partnership's community-forestry approach.

KEY ELEMENTS IN COMMUNITY-FORESTRY STRATEGIES

Based on the experiences described above, and communication and observations of other community-based forest

management efforts in the region, I have identified the following five elements as important areas for consideration in the development of community-forestry initiatives. These elements include: forming multi-interest partnerships; conducting comprehensive ecological and community assessments; creating and sustaining vehicles for substantive community participation in all phases of forest-management decision making; developing mechanisms for community-based implementation of forest-management practices; and building coalitions with other community-based efforts in other areas.

BUILDING LOCAL PARTNERSHIPS

A key consideration in attempting to implement a community-based forest management which successfully addresses both ecological and socio/economic/cultural concerns is the size of the land base under consideration. The land area chosen for management must be large enough to address driving ecological considerations (e.g., watershed condition, wildlife patterns, forest health), as well as provide significant economic opportunities for local residents.

As project area size increases, the number of potential stakeholders in that area also increases. In the current setting of environmental litigation over the spotted owl and other endangered species in the Northwest, these stakeholder groups are often clearly visible, and openly antagonistic to one another.

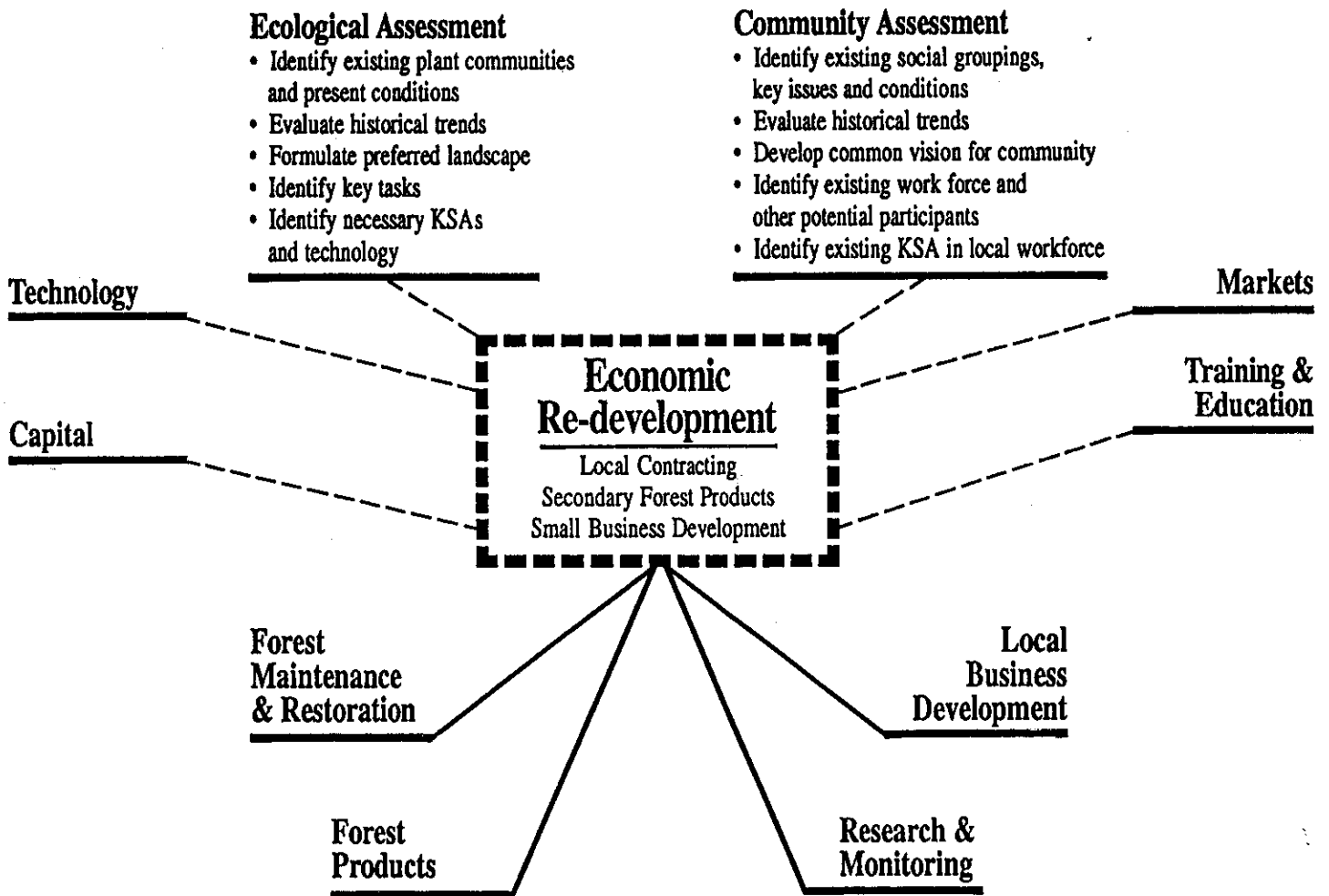
The first step in developing a community-based, forest-management approach is to identify the key stakeholder groups which have the capacity to substantially support or impede such an approach. In most instances, any significant plans for forest management will require the support of these key stakeholders, or be subject to lengthy delay or obstruction.

The second step in building cross-interest cooperation is to launch a series of informal contacts with each sector or interest group. This allows organizers to both identify the key issues of concern, and determine who the potential spokespersons are among the group. These spokespeople must be recognized as legitimate within their respective groups.

Generally, informal dialogue begins among the various spokespeople from each interest before any formal gatherings take place. In many instances, some agent who is broadly perceived as neutral begins this dialogue by having separate conversations among the various interests and conveying the issues in a sort of folk-diplomacy.

Eventually, a gathering of interest groups takes place. These initial gatherings are often relatively unstructured and informal, and are highlighted by story telling and accounts of personal history. In the initial gathering of the Applegate Partnership, a group of 60 people gathered outside on a wooden deck—consisting of environmentalists, agency personnel, community residents, and industry representatives—were asked to introduce themselves and tell about their family and personal histories without telling who they worked for.

If the initial group agrees to form a partnership, the next step is selecting the representatives for each interest group. This is a critical step and may be one of the most important determinants of success or failure. Whaley (1993) describes



* KSA: Knowledge, Skills and Abilities

Figure 2. Elements of the Applegate Partnership's community-forestry approach.

three critical elements for successful partnerships. The first is recognizing that successful partnerships are based largely on the strengths of the individuals who participate rather than the organizations represented. For partnerships to succeed, participants must be able to both disagree and yet still work together.

Whaley's second principal is that participants must see that they are unable to accomplish alone what they can achieve as part of a partnership. This is the glue that binds a group through the difficult, initial phases of building trust and identifying common goals and objectives. Collectively identifying both desired future outcomes and worst-case scenarios is an important part of the initial partnership-building process.

Finally, according to Whaley, partners must be clear about what they and every other person in the Partnership "bring to the table." By understanding what resources, skills, interests, and limitations each partner carries with him/her, the Partnership can more realistically assess its capabilities and the factors it can or cannot influence.

It is very important for the Partnership group to clarify its role in relation to the community-based initiative being conceived. For example, a partnership group will not likely

be given broad decision-making prerogative over either public or private lands. Similarly, the Partnership group cannot feasibly take an overly active role in reviewing and monitoring all of the land-management or community-development activities in the project area. Consequently, the Partnership group needs to define its function clearly. In most cases, a partnership's major role is to lobby its interest group to support a community-based approach, and to secure the resources necessary for implementation. In essence, *the partnership acts to create an open space in which community-based planning can take place unobstructed by forces outside the project area.*

CONDUCTING COMPREHENSIVE ECOSYSTEM ASSESSMENTS AND COMMUNITY-RESOURCES INVENTORIES

Comprehensive ecosystem-management planning requires the consideration of both ecological and social/economic issues. Consequently assessments of both are essential.

1. **Ecosystem Assessment.** Using a process similar to the one described for the Applegate Partnership, a group of

scientists and interest-group representatives develop a comprehensive assessment of the primary ecological dynamics shaping the area under consideration. This assessment is then used to identify the ecological priority areas in need of attention, and the opportunity areas in which forest products can be produced as a part of the activities designed to enhance ecosystem health. A part of the team needs to collate these opportunities for both short- and long-term timeframes, and begin building projections for the amount of labor necessary to complete the tasks identified, the types of skills necessary, and the potential flow of forest products which will result.

2. Community Resources and Skills Inventory. Concurrent with an ecosystem assessment of the community's surrounding resource base, organizers should conduct an inventory of the existing size and capabilities of the local workforce. As part of this inventory, the team should also conduct an accounting of the technology and resource-management-related information available to this workforce. Special attention should be given to assessing whether these resources are truly accessible to the workforce: e.g., can they afford it, are they trained in its operation, is the information they need packaged in a form that is accessible to them, etc.? Most forest-dependent areas continue to have a high percentage of their workforce with some sort of forest-products-related industry experience. *In order for these assessments, both ecological and community, to be relevant and vested in the community, it is essential that community residents are given the opportunity to participate and jointly direct these studies.* A project advisory committee with broad-scale community representation would be an excellent mechanism to insure this participation.

FOSTERING SUBSTANTIVE COMMUNITY PARTICIPATION

Even if a partnership board has carefully constituted itself to include community representatives, this does not insure that the community will be, or will consider itself, adequately represented in the various phases of planning and implementation. While it is essential for key interest groups to be represented in order to minimize outside disruption of a community-based, forest-management approach, ample opportunities still remain for local dissent and challenge. Communities must be given the opportunity to identify what their goals are as part of the community forestry process. This means communities must be given a direct role in defining what constitutes community well-being and how it is measured.

1. Community Well-being Assessment. As noted earlier, an essential question which must be answered in defining community well-being is the extent to which the community has been involved in the assessment. In the majority of the studies cited (Fortmann and Kusel 1991; Lee 1990; Gramling and Freudenburg 1992), researchers established the criteria for assessment. Fortmann and Kusel (1990) actively recognize the importance and value of community-based measures of well-being. Their method of incorporating these considerations into their study was to conduct rapid rural assessments on a series of targeted communities. The utility of this approach is obvious. Researchers are able to

avoid the fuzziness of community-generated criteria, many of which are highly subjective, and results are replicable and comparable between geographically disparate locations.

However, the academic research value in replicable community assessments may ultimately be less important than the pedagogical value a community gains from identifying and monitoring measures of its own well-being. As Willms and Gilbert (1991) point out:

The definition of health as a resource for control over one's life suggests that the definition of a healthy community must mean that there is some control over the assignment of what it means to be a healthy community. Community control means that the selection of indicators and the interpretation of the data gathered must be directed by the communities themselves.

A community impact-assessment process (Preister and Kent 1981, Gramling and Freudenburg 1992) is a useful starting point for developing a well-being assessment. This model of community evaluation uses informal contacts and interviews to build a comprehensive map of interest groups within a community, the range of issues of concern to them, and the gatekeepers, opinion leaders and caretakers who anchor this informal social network. With this kind of broad-based assessment as a foundation, organizers can then develop a process by which the community itself identifies the criteria and measures for evaluating its own well-being.

As a starting point for providing a framework for a community-based, well-being assessment, I have collated a variety of well-being indicators using the studies cited above and other attempts to develop quantitative/qualitative measures of community well-being (Preister and Kent 1981, Mathur 1989, Willms and Gilbert 1991, Gramling and Freudenburg 1992). As a demonstration of the common challenges facing the understanding of both ecosystems and community systems, these criteria have been arranged using the same three categories derived for ecosystem assessment: composition, structure, and function (Figure 3).

In order for the establishment of community well-being measures to be meaningful, they must be monitored over time and the results given back to the community.

2. Community Monitoring and Involvement. Communities have had decades of experience with "public involvement" exercises which offered no real substantive opportunity for influencing agency or corporate decision making. Added to this legacy of bad experiences in public participation, many segments of the community are frequently excluded by traditional involvement exercises due to the class, gender, or economic barriers which are imbedded in the choice of involvement techniques.

In recognition of these challenges, effective community-based forest management requires a proactive community outreach program which can identify the primary value/interest affiliations which are present in the project community. As with major interest groups, organizers need to identify key opinion leaders or "gatekeepers" for these affinity groups and develop appropriate means of contact and communication. Much of this process is by nature conducted

in the informal sector; meetings in local restaurants, barber shops, grocery stores, or people's homes. As John McKnight (1987) noted in a discussion of community dynamics "In Universities, people know through studies. In business and bureaucracies, people know by reports. In communities, people know by stories."

This approach to community assessment has been well documented in the Social Impact Assessment literature (Preister and Kent 1981, Gramling and Freudenburg 1992). The important augmentation to the methodology recommended here is the establishment of an ongoing community-monitoring network. After the primary affiliation group representatives have been identified in the community, regular contact should be maintained with these people to provide for timely feedback on the communities' responses to projects being proposed or implemented. As one expert in community assessment pointed out, it is much easier to respond successfully to an issue when it is first emerging than wait for it to become established, embittered, and entrenched.

This commitment to community "monitoring" provides yet another parallel to the emerging principals in ecosystem management. Successful implementation of either forest-management or community-development strategies will require a much higher level of commitment and consistency to ongoing monitoring and evaluation than has ever been practiced to this point.

Any monitoring program established must also be accountable and accessible to the community, and consistently feed its results back to the community itself. Establishing a covert monitoring program with proprietary access is a recipe for disaster.

LOCAL IMPLEMENTATION OF ECOSYSTEM MANAGEMENT

As noted earlier, ecological assessment should be designed and implemented in a manner that identifies types and amounts of labor necessary to maintain and improve ecosystem health. By finding ways to direct these economic benefits locally, land managers can conduct forest management and rural development simultaneously.

Successful implementation of ecosystem management also requires a level of monitoring and evaluation never before attempted in natural-resources management. This

demand for information and analysis far exceeds the capacities of the federal agencies as they are now constituted. The most logical mechanism for meeting these information needs is to directly involve the communities in collecting and interpreting of ecosystem data. At the 1993 Forest Conference in Portland, a number of the nation's leading researchers in ecosystem management, including Jack Ward Thomas, Jerry Franklin, John Gordon, and Chad Oliver, all noted both the need for more monitoring data, and the logical role for local communities in its collection and assessment. Several groups in the region have already begun developing third-party systems to monitor agency and industry activities. These programs use a mix of both contracted and volunteer labor drawn from communities adjacent to the lands being monitored.

This use of local labor has benefits stretching beyond simple economic returns. By involving local people in the actual resource management, whether by direct forest-management activities or monitoring, the level of experience and understanding of ecosystem processes expands in the community. This in turn builds the capacity among local people to participate actively and directly in more complex resource-planning and implementation tasks. In this manner, a rich stewardship culture grows which provides many benefits for both the local ecosystem and the local community.

In total, *implementation of forest-management tasks is the most powerful community-development tool available to the federal government.* However, to be successful, a number of standard agency practices will have to be modified. An excellent example is the present approach to contracting forest-management activities.

The traditional view of open bidding fails to recognize or account for all the hidden costs of letting work flow outside the community (e.g., unemployment payments, lost wages, community breakdown (domestic violence, etc.), loss of self-esteem, and depopulation of rural communities with resulting loss of a land-based lifestyle). Promising approaches with some track record include performance-based contracts, multi-task contract packages, and long-term stewardship contracts. A variety of groups are also developing contracting provisions which give preference to resource workers who live within a certain distance of the contract activity. This approach is reminiscent of the cutting circles originally proposed under the Sustained Yield Unit Act of 1944.

COMPOSITION

Cultural/ethnic diversity
Age class distribution
Income distribution
Immigration/emigration

STRUCTURE

Public infrastructure
Private infrastructure
Land Ownership Patterns
Environmental quality

FUNCTIONS

Community institutions
Public participation
Communication
Capital retention
Education
Health Care

Figure 3. Community Well-being Criteria

BUILDING REGIONAL COALITIONS

The political reality facing most forest-dependent communities that are considering a community-based, forest-management approach is the overwhelming momentum behind centralized, top-down approaches to resource management. This theme of outside ownership or control of local forest resources can be found throughout the region regardless of whether the predominant landholders are private companies or public agencies. Several initiatives like the Applegate Partnership in southern Oregon, the Matolius Partnership in central Oregon, the Quincy Library Group's efforts in northeastern California, or the Hayfork consortium in northwestern California have been able to gain some measure of freedom in pursuing community-based solutions due to the novelty of their initiatives, or the political influence of their participants.

However, for a broad-based movement toward community-based forest management to occur, communities will have to form alliances with one another to secure and consolidate the administrative and legislative support necessary to sustain such efforts. To influence policy on a national level, these alliances will have to stretch beyond one region to encompass community-based efforts in other resource-dependent areas. Various members of the Applegate Partnership have already begun developing this regional organizing strategy. The Rogue Institute for Ecology and Economy conducted a successful conference in late 1993 to bring together over 140 representatives from 14 communities around the region to discuss community-based forest-management strategies. Participants included members of most key stakeholder groups including environmentalists, timber-industry representatives, agency staff, resource workers and their spouses, and community-development practitioners.

In a related effort, members of the Partnership board began meeting regularly with a group of similar community-based partnerships, primarily in northern California, in an effort to identify common issues and barriers limiting community-based problem solving around resource-management issues. This group, calling itself the Lead Partnership Group, is currently planning a major national conference to foster a dialogue with the regional and national interest groups who have up to now openly criticized or worked to obstruct these community initiatives.

The Institute has also spawned a separate but related association of groups working on resource-based sustainable development options for rural communities in the region. Represented are 18 different organizations in southern Oregon and northern California ranging from environmental organizations to more traditional community-development institutions. The purpose of this group is to develop a mechanism and strategy for rapidly disseminating the information and expertise being developed by these various groups. The group has developed a unique set of agreements among the groups which has created a collaborative association within which groups are working to secure funding and coordinate project activity. This group calls itself the Klamath Province Collaborative Learning Circle.

SUMMARY: FIVE ELEMENTS IMPORTANT FOR COMMUNITY FORESTRY ENDEAVORS

Drawing on the experience of the Applegate Partnership and other community forestry efforts in the Pacific Northwest, five elements emerge as important considerations for locally-based, forest-management initiatives:

1. The mix of interests affected by changes in forest-management policy necessitates a strategy of building partnerships among the various stakeholder groups.
2. Building and maintaining broad-based community support necessitates a substantial commitment to the development of effective community assessment, monitoring, and feedback mechanisms. These mechanisms should be directed and controlled by the community as much as possible.
3. Comprehensive ecological and community inventories are essential to develop a "big picture" view of the dynamics of the forests and communities under consideration. These inventories should also involve the range of stakeholders and include the best scientists and community-development practitioners available to insure that the information gathered is suitable for developing industrial restructuring strategies based on project volumes of material and labor needs.
4. New mechanisms for implementing forest-management activities need to be developed which can direct work to local resource workers. In this way, the quality and consistency of work necessary for effective ecosystem management can be maintained, and the economic and social benefits of the forest resource employment can be retained in the local community.
5. Long-term success of community-based forest management will depend on the development of a broad base of communities advocating for this approach to resource management. Without this base, political entropy will continue to favor centralized, top-down approaches to control of local resources.

POSTSCRIPT

Since the original composition of this work, the Applegate Partnership has experienced a number of difficult struggles in its efforts to promote community-based problem solving in resource-management communities. Though these challenges have come in different forms, I believe they can be summarized in one word: power.

As the public profile of the Partnership grew in 1993 and early 1994, it began to encounter growing opposition from the regional environmental groups. These groups believed that the Clinton administration's fascination with the Partnership and the subsequent inclusion of Partnership-like "Adaptive Management Areas" in the President's Forest Plan would lead to industry-captured, local-control groups in many areas around the Northwest. In part due to these pressures, the major local environmental group participating in the Part-

nership withdrew. Despite the ongoing participation of a number of influential Applegate valley environmentalists and their watershed groups, the local media and others portrayed this as a departure of the environmental voice from the Partnership table.

Similarly, the industry, though more outspoken local proponents of the Partnership, filed a lawsuit against the Forest Plan using the Federal Advisory Committee Act as the basis of its challenge. In brief, the industry asserted that by utilizing non-federal employees in the formulation of its Forest Plan, the Administration had violated this relatively obscure law which had rarely been invoked since its passage in 1972. According to Judge Jackson's eventual ruling on the issue, FACA states that the government may not meet regularly with any group of non-federal people in any manner which could lead to influence over the government's course of action. Jackson went on to warn the Administration that any further violations of FACA could jeopardize both the Forest Plan and the Health Care Plan.

The Administration's response was to order the formal withdrawal of agency personnel from the Applegate Partnership and other high-profile partnerships. A long period of negotiation then took place to search for a legal means by which the agencies could continue to participate. With Judge Dwyer's final affirmative ruling on the Administration's Forest Plan, the agencies have now signaled a growing willingness to maintain a more visible participation. The memory of their withdrawal, however, continues to qualify the Partnership's overall optimism for their unqualified support.

Taken together, these events signal important lessons for community-based collaborative efforts. They generally reveal the likelihood that when communities of place assert the right to sit at the decision-making table, they will encounter the resistance of communities of interest (e.g., environmental, industry, etc.) who have largely enjoyed the most influential role on policy and decision making over the past 20 to 30 years. It also underscores how current laws, both FACA and NEPA, tend to favor these interest groups over local communities who generally do not have the resources necessary to maintain the legal and political tools which can use such laws or administrative procedures.

For the Applegate, this will probably be a useful incentive to withdraw from the high-profile arena of influence trading and political maneuvering, and to return to build the base of power which will have enduring influence in the struggle the community itself. The Partnership is currently broadening its efforts to include work with the agricultural and ranching communities to look at ways to address water and development issues, work with private landowners to address fire and restoration issues, and in the schools to build the next generation of participatory local problem solvers.

The stakes are high. Already in the Northwest, a variety of other more reactionary groups have formed and are growing rapidly. Many of these groups call for the complete dissolution of federal land management in favor of local control. Others have chosen to identify other races or ethnic groups as their targets for criticism or attack. Overall, the population both here and elsewhere is weighing which set of strategies it can use to address the growing sense of powerlessness and chaos which are so palpable in our public and private lives. We hope that all who are aware of these disturbing trends will work with us in trying to build positive and constructive alternatives that point us toward a more just and sustainable future.

REFERENCES

- Fortmann, L., and J. Kusel. 1990. New voices, old beliefs: Forest environmentalism among new and long-standing rural residents. *Rural Sociology* 55(3):214-232.
- Fortmann, L., and J. Kusel. 1991. Well-being in forest dependent communities. A report by forest and rangeland resources assessment program, California Department of Forestry and Fire Protection.
- Gramling, R., and W. R. Freudenburg. 1992. Opportunity-threat, development, and adaptation: Toward a comprehensive framework for social impact assessment. *Rural Sociology* 57(2):216-234.
- Lee, R. G. 1990. Sustained yield and social order. In R. G. Lee, and D. R. Field, eds. *Community and forestry: Continuities in the sociology of natural resources*. Westview Press, Boulder, CO.
- Mathur, B. 1989. Community planning and the new public health. *Plan Canada*. 29(4):35-44.
- McKnight, J. L. 1987. Regenerating community. *Social Policy*, Winter 1987.
- Preister, K., and J. Kent. 1981. The issue-centered approach to social impacts: From assessment to management. *Social Impact Assessment*, November/December 1981.
- Preister, K. 1994. Words into action: A community assessment of the Applegate Valley. *Rogue Institute for Ecology and Economy*, Ashland, OR.
- Whaley, R. S. 1993. Working partnerships: Elements for success. *Journal of Forestry*, March 1993:10-11.
- Willms, S. M., and L. Gilbert. 1991. Healthy community indicators: Lessons from the social indicator movement." *CHS Research Bulletin*. UBC Centre for Human Settlements, Vancouver, BC.