

Agencies Within Communities, Communities Within Ecosystems

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Abstract—Can scientific information and intensive, extensive public involvement through facilitated meetings be expected to lead to agreement on natural resource issues? Communications and research in the Bitterroot Ecosystem Management Research Project indicate that, where people's values differ greatly, consensus is not a realistic goal for short term planning processes. Public involvement is successful when agreement is reached, but it is also successful when relationships among participants are enhanced, when all stakeholders are identified and included, and when public input is used to improve products such as management plans. While using public processes to accomplish planning goals, agencies must also continually work toward the long-term goals of increased participation, understanding, and acceptance. This process is enhanced by (1) accepting tensions within communities as forces that contribute to balanced decisions; (2) using the infrastructure and polity of the local community to involve the public and considering land management issues as extending across time, not resolved by single projects; (3) maintaining a commitment to obtaining, using, and sharing scientific knowledge; and (4) developing long-term relationships with community groups and members of the public, including newcomers. The long-term process of establishing and improving relationships with partners enhances short-term public involvement efforts to help agencies develop sound management plans and implement them on the ground.

If people have plenty of information that is scientifically based and plenty of opportunities to learn about one another and the environment, then they will eventually reach consensus on goals and practices for wildland management. This hypothesis captures the main focus of human dimensions activities in the Bitterroot Ecosystem Management Research Project (BEMRP) over the past five years. While this hypothesis was not explicitly stated at the outset, Gebhardt (1995) points out in his study of the history of public land management that a common expectation from Congress and public agencies is that managers will produce harmony among people who advocate competing resource uses. To investigate the premise that a well informed, well facilitated public involve-

ment process leads to agreement among participants, BEMRP participated in planning for the 40,000-acre Stevensville West Central (SWC) area in the Bitterroot National Forest (described in Guthrie and Freimund 1996a). Scientists were deeply involved in this process; they gave presentations, hosted field trips, attended public meetings, and worked intensively with the interdisciplinary team. Planning for SWC began in January 1994; the final public meeting for review of alternatives occurred on January 31, 1996.

The intensive, science-based public involvement process used in SWC was just one of the human dimension goals articulated in BEMRP's master study plan (Carlson and others 1994). The others were to expand the Bitterroot National Forest's public awareness program, assess data describing the Bitterroot community, and study alternative approaches to public involvement.

In this paper, we summarize the ways in which BEMRP's human dimensions goals were addressed and use the results to test the "inform-and-agree" hypothesis stated above. "Hypothesis" is used here not as a tool for analysis of quantitative data but as a framework for synthesizing information already collected, "a tentative assumption made in order to draw out and test its logical or empirical consequences" (Webster's New Collegiate Dictionary 1975). First, we examine BEMRP's communications efforts and research regarding the first part of the hypothesis, providing up to date, high quality scientific information and opportunities for mutual learning. Second, we examine the project's work regarding the second part of the hypothesis, the consensus expected from greater understanding. Finally, we discuss alternatives to the "inform-and-agree" model. In each section, we identify key questions, summarize relevant BEMRP research, and then synthesize what we have learned.

Hypothesis, Part 1: Sharing Scientific Information and Opportunities to Learn

Key Questions

This section synthesizes what we have learned about two key questions: What is effective communication? and how do managers, scientists, and the public learn? Information provided for the public debate about the Stevensville West Central process was both "expert" (scientific and technical, usually provided by resource professionals and scientists) and "experiential" (personal experiences and values of all participants) (Guthrie 1997). (Table 1 lists BEMRP research projects relating to human dimensions.)

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Table 1—BEMRP Research on the social system, communications, and public involvement, including the Stevensville West Central (SWC) process.

Research subject	References
Description of SWC public involvement	
Stevensville West Central public involvement process	Guthrie and Freimund (1996a)
Evaluation of public involvement processes	
Literature review regarding public involvement	Gebhardt (1995)
Description and commentary on SWC process	Pukis (1997)
Success in SWC process	Guthrie (1997)
Consensus in SWC process	McCool and Guthrie (1998)
Alternative ways to involve public in planning	Richards and McLuskey (1997)
Effective communications	
Use of science and scientists in public involvement	Freimund (1998)
Effectiveness of educational trunk about wildland fire	Thomas and Walsh (2000)
Social assessment, public opinion, perceptions	
Social assessment of the Bitterroot	Canton-Thompson (1994)
Survey of public opinion	Menning (1995)
Tourism survey results relating to forest management	Freimund (1996)
Integrating information from social assessment and survey	Guthrie and Freimund (1996b)
Social science—general	
Synthesis of social science research	McCool (1998)

BEMRP Communication Activities and Research

If lack of scientific information is a barrier to agreement, then more, better information is needed. The research and modeling presented in these proceedings represent five years of ecological research; more than 50 studies about the ecosystem have been completed. They address vegetation dynamics, animal populations and habitat, and effects of potential management choices. While research has focused on the Bitterroot Valley, other areas throughout the Northern Region have also been included. This biophysical research and modeling provide the scientific basis for dialogue among scientists, managers, and the public.

Scientific information cannot contribute to management until it is shared. Fifteen public meetings, nine presentations, five field trips, and a potluck dinner provided opportunities for experiential learning and nurturing relationships among partners during the SWC public involvement process (Guthrie and Freimund 1996a). Additional field trips provided managers and the public with on-the-ground experience of research findings. Annual workshops have brought participants together to discuss research results (fig. 1). A report to partners, published annually in newsletter format, goes to scientists, managers, and hundreds of citizens in the Bitterroot Valley; it also goes to members of the public from 25 states outside Montana. The newsletter places scientific information, presented with a minimum of technical detail, in the hands of managers and citizens. The BEMRP Web site (www.fs.fed.us/rm/ecopartner) has enabled participants and others interested in ecosystem-based management to stay informed on research projects.

During the year following completion of the SWC environmental assessment, two BEMRP projects obtained information about participants' perceptions of the process.

University of Montana graduate student Kathleen Guthrie interviewed 42 participants, including managers, researchers, and members of the public. She recorded their responses to questions about the content and conduct of the public meetings, the strengths and weaknesses of the process, its outcome, and its potential influence on future public involvement. Guthrie's interviews provided the data for subsequent analyses regarding communications (Freimund 1998), success in public involvement (Guthrie 1997), and consensus (McCool and others 2000). Concurrent with the Guthrie project, journalist Rick Pukis interviewed SWC participants and produced a videotape showing participants' perceptions of the process (Pukis 1997).



Figure 1—At annual workshops, researchers present their findings and discuss projects with managers and members of the public. University of Montana Professor Carl Fiedler addresses the public at a workshop in Hamilton, MT.

What We Have Learned

What is Effective Communication?—Although many authors recognize the importance of technology transfer and increasing public understanding for effective management (for example, Brunckhorst and Rollings 1999; U.S. Department of Agriculture, Forest Service 1995), there is less agreement on how to communicate effectively. We have learned the following things about effective communications in BEMRP: Brief information summaries, clear graphics, and visualizations provide a better basis for discussion than technical lectures (Freimund 1998). When people perceive that they are being excluded or manipulated, their learning is blocked (McCool 1998; McCool and others 2000), and use of technical language can create a perception of exclusion. Use of jargon forms barriers to public learning that should be avoided “at all costs” (Guthrie 1997). Two practical measures, in particular, have helped promote clear communications: (1) Researchers and managers critique one another’s graphics and presentations prior to public workshops, and (2) a simple, jargon-free summary occurs at the beginning of every page on the Project’s Web site.

How Do Managers, Scientists, and the Public Learn?—Managers and the public regard learning as more than a transfer of knowledge from “experts” to others; they see it as a two-way process (Guthrie 1997). In this process, managers and researchers share scientific information about ecosystems and management possibilities, and the public shares experiential knowledge and articulates values that are not described in scientific studies or technical models (Freimund 1998). An important aspect of this two-way learning is ability and willingness to listen actively as well as “tell.” If participants do not agree that they can accept a proposed course of action, for instance, further data and technical explanations may not be as useful as further dialogue regarding participants’ values (McCool and others 2000).

People learn best in the context of positive, trusting relationships, whether between participants in a public involvement process (Guthrie 1997) or between teachers and students (Thomas and Walsh 2000). Presentations, field trips, workshops, and public meetings provide opportunities for BEMRP partners to overcome stereotypes and develop positive relationships. Routine communications (newsletter and Web site) provide continuity for the learning process and ensure that new knowledge is readily available to all participants. Routine communications are an agency’s demonstration of good faith in sharing information. They also enable managers to show partners how public input was used in planning.

Including scientists in public involvement not only provides expert information but also provides further opportunities for building relationships; in fact, the latter may be more valued than the former (Freimund 1998). Increased understanding of complex concepts, however, often occurs over the long term rather than being a quick, efficient process (Guthrie 1997). Efforts to enhance public understanding of scientific principles are a long-term investment in content and relationships even if they do not contribute substantially to a particular project. Rapid population growth and urbanization of rural areas like the Bitterroot Valley increase the difficulty of developing positive long-term relationships and increasing public understanding (McCool 1998); outreach specifically to newcomers is essential.

Educational theory indicates that first-hand experience and hands-on activities are particularly effective ways to learn new information (Lisowski and Disinger 1991). BEMRP’s field trips provide technical information in a tangible, visible, on-the-ground context and provide an informal setting in which participants get to know each other better (fig. 2). Former Stevensville District Ranger Tom Wagner believes these field trips “have the most promise of dealing with the lack of public support for active management” in a forest (Wagner 1998). Effectiveness of hands-on learning is reported in Thomas and Walsh’s (2000) assessment of *FireWorks*, an educational trunk and curriculum for students to use in learning about fire ecology. The assessment shows that information learned experientially in the classroom can be successfully applied in field settings. In addition, this kind of learning enhances students’ perceptions of the teacher and the learning environment (fig. 3).



Figure 2—Field trips are provided for both professionals and the public. This field trip featured visits to three ponderosa pine sites where ecosystem-based management practices had been assessed in regard to aesthetic effects, fire hazard reduction, and economic feasibility.



Figure 3—Hands-on experiences increase learning and improve relationships. Middle school teachers from Thompson Falls, MT, learn about ladder fuels at a teacher workshop.

Hypothesis, Part 2: Reaching Consensus on Goals and Practices for Wildland Management

Key Questions

The “inform-and-agree” hypothesis suggests that understanding will lead to consensus regarding land management. It assumes that the success of public involvement is measured mainly by the extent to which agreement is reached. Research regarding public involvement in SWC provides information for addressing three key questions: What really is successful public involvement? How successful was the SWC public involvement process? Is consensus an appropriate goal for public involvement?

BEMRP Activities and Research

Interviews of SWC participants conducted by Kathleen Guthrie provided the basis for research about successful public involvement (Guthrie 1997) and the role of consensus in success (McCool and others 2000). Anecdotal information from videotape (Pukis 1997) supplemented these research findings.

What We Have Learned

What is Successful Public Involvement?—Forest Service mandates and public expectations focus largely on tangible ecological outcomes as indicators of success (U.S. Department of Agriculture, Forest Service 1995). In addition to this product-oriented definition of success, Congress and public agencies regard agreement among participants as a strong indicator of success (Gebhardt 1995). But success is not limited to agreement or actions taken (or not taken) “on the ground.” Participants in the SWC process described success in many ways. In interviews with SWC participants, Guthrie (1997) identified eight aspects of success. They relate to:

- Products (the completion of a plan or task).
- Politics (the extent to which the process and plan are representative and accepted).
- Interests (the extent to which diverse interests are protected by the plan).
- Responsibility (the extent to which participants develop a sense of ownership).
- Relationship (occurring when relationships among stakeholders are established and enhanced).
- Learning (in which all participants learn about each other’s experiences, needs and values).
- Education (in which managers and researchers share their expertise with the public).
- Implementation (indicated by resource protection on the ground).

Guthrie’s first two aspects of success reflect the two common agency expectations of success: product completion and participant agreement. The remaining aspects are more difficult to measure, but they are vitally important for effective public involvement.

How Successful Was the Extensive SWC Public Involvement Process?—The complexity of “success,” as described by Guthrie (1997), is reflected by the multi-faceted way in which SWC participants related to the public involvement process. In videotaped interviews (Pukis 1997), participants spoke about success in terms of the aspects that were important to them. Several focused on relationships in the group, with emphasis on the need for strong facilitation. A few were not satisfied with the process because they felt that the outcome did not support their interests. Former Stevensville District Ranger Leslie Weldon focused on learning: “We learned a lot about the values and concerns that the public has, in a different way than we have in the past” (Pukis 1997). The SWC process produced a plan, and the two appeals filed were overturned on the basis of the scientific background for the decision. Thus, the process was successful in regard to products. Most participants felt that all interests were included and that mutual learning about one another’s values occurred (McCool and others 2000), so the interest and relationship aspects of success were met. Members of the public differed greatly in the value they placed on research data, scientific presentations, and expert knowledge. Comments ranged from “I didn’t learn anything” to “I learned a lot”. Thus, the SWC process was partially successful in relationship to education and learning. With regard to the politics and responsibility aspects of success (discussed in the next section), the process was also partially successful. Since participants were interviewed before the SWC plan was approved, the implementation aspect of success has not yet been addressed by BEMRP research.

Is Consensus an Appropriate Goal for Public Involvement?—Consensus can be viewed as a process (“consensus building”) or as an outcome (“consensus was reached”) (McKinney 1998). Interviews of SWC participants revealed six elements of consensus (McCool and others 2000):

- Agreement that the issue can be resolved through public participation.
- Inclusiveness of all affected interests.
- Common understanding of the problem.
- Equal knowledge among participants.
- General agreement on the proposed action.
- Permission for the agency to act.

Participants agreed that two aspects of consensus were present in the SWC process: Public involvement was definitely appropriate for planning, and the process was inclusive of all interests (McCool and others 2000). However, participants did not all view SWC as successful in reaching agreement on the nature of the problem or the extent to which knowledge, particularly experiential knowledge, was shared among participants. Most participants, but not all, felt they could “live with” the results of the process, even if they were not enthusiastic supporters of the outcome. Thus general (though not unanimous) agreement was present. As evidenced by the appeal on the District Ranger’s decision, not all participants gave the agency their permission to act.

Although consensus was not complete in SWC despite “nearly heroic” efforts of the agency to achieve it (McCool and others 2000), the process contributed to consensus building in the Bitterroot community. Several SWC participants commented that the understanding and knowledge of

procedures gained in SWC were helpful in subsequent county level comprehensive planning (Guthrie 1997; Pukis 1997). Managers and scientists involved in SWC understand public involvement and mutual learning processes better and have learned the importance of frequent, clear communications about the role and limits of public involvement (McCool and others 2000). Where members of the public have widely differing values in regard to natural resources, a long-term goal of mutual learning about each other, values, and the ecosystem is more appropriate than a short-term goal of consensus (McCool and others 2000).

Alternatives to the “Inform-and-Agree” Model

Key Questions

This section addresses ways to broaden our focus from the agency-centered view, enabling us to consider public involvement in the context of the entire social system and its place within the ecosystem. We synthesize results from research to address the following questions: What is a useful conceptual framework for understanding the social system? How do Bitterroot communities and social systems work? What are the implications of these understandings for public involvement?

BEMRP Activities and Research

Canton-Thompson (1994) described the Bitterroot social system by interviewing opinion leaders in the Bitterroot Valley. She described the community, culture, polity, and perceptions of change that affect the social system. She focused particularly on questions about forest management. A random survey conducted a year later (Menning 1995) supplemented Canton-Thompson’s report with quantitative information about a smaller number of natural resource issues.

Subsequent to the SWC planning process, Richards and McLuskey (1997) studied community and civic groups in the Bitterroot and other areas of the Northern Region to explore how these groups address their missions and might help address land management issues.

What We Have Learned

Five years of experience and research on the human dimension indicate that “plenty of information and plenty of opportunities to learn” do not necessarily produce consensus on goals and practices for wildland management, and that consensus is not necessarily an appropriate goal for public involvement. The main shortcoming of the “inform-and-agree” model is that it is agency-centered: Public involvement efforts originate from goals or products mandated by the agency, so the problems addressed are defined by the agency. BEMRP’s work in the human dimension indicates that a broader view of learning and collaboration is needed. This view depicts the agency functioning *as part of* the social system and the social system functioning *as part of* the ecosystem. Understanding human communities and working with them in the context of their interactions

with the environment will more likely result in realistic expectations and successful collaboration over the long term than the “inform-and-agree” model.

What Is a Useful Conceptual Framework for Understanding the Social System?—Agencies operate as part of social systems, which operate as part of ecosystems. A conceptual framework for viewing the social system in this way was not agreed upon when BEMRP began in 1994, but was provided by the Interior Columbia River Basin (ICRB) Assessment in 1996 (Haynes and others 1996) (fig. 4). The ICRB framework describes the basic principles of biophysical systems, which apply to social systems as well. Like biophysical systems, social systems are dynamic, can be viewed as hierarchies with temporal and spatial dimensions (for example, ancestries and future generations, scale from neighborhoods to communities to counties to states, etc.), have limits (where the integrity and survival of the human system is challenged), and are relatively unpredictable (many players and social dynamics across time and space).

Human systems also have order, as the ICRB framework suggests. They can be described by their culture (heritage and identity), community (how people work together to sustain the community or enhance their quality of life), economy (how people sustain themselves financially), and polity (how people govern themselves). A similar view of the social system within the ecosystem is presented in Brunckhorst and Rollings (1999).

How Do Bitterroot Communities and Social Systems Work?—In the Bitterroot Valley, the model of the social system functioning within the ecosystem applies not only figuratively but also literally: Public wildlands, mostly the Bitterroot National Forest, surround the private lands in the valley bottom and comprise approximately 80 percent of the Bitterroot watershed (fig. 5). Residents share a love of the outdoors, but their visions of how they fit within the ecosystem differ (Canton-Thompson 1994). They value public lands for commodities as well as amenities; the balance

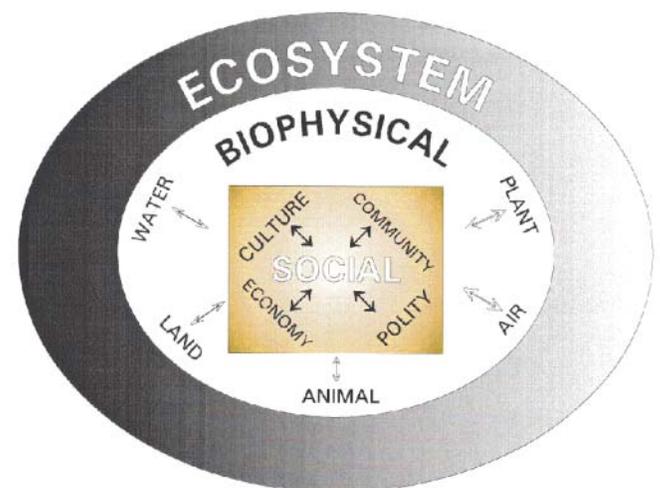


Figure 4—Ecosystems are places where biophysical and social components interact. Energy and resources flow from one component to another. All components vary in space and change over time. Diagram adapted from Haynes and others (1996).



Figure 5—In the Bitterroot Valley, the human community is surrounded by the natural processes and wildlands literally as well as figuratively. Agriculture, timber, recreation, and a growing urban culture shape the social context for ecosystem-based management.

between the two differs among residents and is constantly shifting.

Change due to rapid growth and urbanization is currently very dramatic in the Bitterroot Valley, but change—accompanied by continual tension regarding people’s relationship with each other and values about land use—has characterized the human community of the Bitterroot for centuries. Two hundred years ago, the Salish people occupied the Bitterroot, following the cycle of life, harvesting foods when seasonally available. By the late 1800’s, the Salish were largely displaced by European American settlers. Salish use and value of the Bitterroot National Forest continues. During the past 100 years, European American residents in the Bitterroot acquired a livelihood from the land through agriculture, timber, and mining. Population growth accelerated in the 1970’s and has increased about 40 percent in the last eight years. The people moving in bring a culture that is less tied to natural resource products than that of the early 1900’s. In 1992, only 13 percent of the county’s basic labor income was related to the timber and agriculture industries. More than half of the county’s income was “unearned” (from dividends, interest, and rent) (Canton-Thompson 1994).

Opinion leaders in the Bitterroot Valley described several ways in which their communities address critical issues to maintain or enhance their quality of life (Canton-Thompson 1994): practicing the “golden rule,” maintaining economic diversity, being proactive in response to change, and embracing good communications, community spirit, and public involvement. Barriers that confront communities trying to sustain themselves were also mentioned: powerlessness to influence government, lack of infrastructure or institutions within a community, lack of funds, and constant change due to newcomers with new ways of doing things.

What Are the Implications of These Understandings for Public Involvement?—While the Forest Service has required public participation in management since 1960 (Gebhardt 1995), the agency does not mandate a single way to achieve it. The booklet “Strengthening Public Involvement” (U.S. Department of Agriculture, Forest Service 1993)

identifies 23 different methods of involving the public and lists 10 potential objectives of public involvement. A public involvement course offered in the Forest Service’s Northern Region lists more than 75 ways of working with the public and emphasizes building relationships as a major part of successful communications (Enright 1999). These resources reinforce the findings of Guthrie (1997) that success in public involvement is not limited to achievement of consensus but has many dimensions. While agreement is obviously a positive outcome, other results—new or enhanced understanding of the ecosystems and of participants’ values, identification and inclusion of stakeholders, and completion of a high quality plan for sustaining the ecosystem—are equally valid accomplishments. Based on BEMRP research and experience, we suggest four ways in which success in public involvement can be enhanced:

1. Accept tensions within a community as forces that contribute to balanced decisions. If managers understand the dynamic nature of the social system, the infusion of new values that is taking place, and the fact that some facets of the culture and economy can be lost in this time of rapid change, they may form more realistic expectations about public agreement and make more effective choices of public involvement methods. Managers and scientists cannot make tensions among citizens about natural resource issues go away, nor can they freeze the community and ecosystem in time to bring people into agreement. Divergent viewpoints and tensions among community members regarding natural resources form the context for land management. They have been, and can continue to be, a positive force for change (Gebhardt 1995).

Respect among participants is an important aspect of public participation. Some participants in SWC perceived the process as requiring too many meetings and lasting too long; others mentioned lack of civil discourse in public meetings (Pukis 1997). We have learned that consistent, assertive facilitation is essential to provide an environment of respect for all participants and to ensure effective use of their time.

2. Use the infrastructure and polity of the local community to involve the public. Consider land management issues to extend across time, with dialogue and adaptation occurring across many projects or “events.” Brunckhorst and Rollings (1999) recommend that agencies craft their governance methods to fit the social and ecological systems they are working with. One size surely does not fit all. Richards and McLuskey (1997) found that community organizations and civic groups work effectively on many community/county issues in Montana and northern Idaho. Groups that have been successful:

- Foster diverse membership and encourage expression and recognition of all opinions.
- Involve all stakeholders early in planning processes.
- Focus on common issues and tangible goals, emphasizing small successes.
- Use a regular facilitator.
- Encourage development of understanding and relationships among participants.
- Encourage individuals to represent themselves rather than interest groups, but recognize political interests.
- Avoid extreme positions and focusing on personalities.
- Use local media and informal networks to communicate.

Community groups, which already have some cohesiveness and experience in collaboration, have the potential to be effective partners in agency planning efforts. "If the goal of public involvement is to incorporate informed citizens into the natural resource decision-making process, then more than one public involvement mechanism needs to be used to provide a more complete opportunity for participation and better representation of the human dimension" (Freimund 1996).

3. Maintain a commitment to obtaining, using, and sharing scientific knowledge. Agency staffs are dynamic by nature, so documentation and archival of knowledge—expert, experiential, and organizational—are essential for effective, long-term management. Monitoring is essential to keep information current and identify trends (U.S. Department of Agriculture, Forest Service 1995). Synthesis of this array of knowledge, archived and new, expert and experiential, must also be transferred to new staff; without archiving and synthesis, the legacy of agency learning will have little significance to a new manager.

A consistent, routine communications program that includes scientists, managers, and the public not only provides knowledge to all participants but also indicates the agency's commitment to partnership. Newsletters and a Web site may seem impersonal, but they contribute to maintaining relationships between participants. They also provide a way for agency staff to let members of the public know how their comments are being used. People want to know that their participation matters.

4. Develop positive long-term relationships with community groups and members of the public, including newcomers. "It is only through social interactions that any policy such as ecosystem management can become socially acceptable" (Lewis 1993). Positive relationships are essential for learning and collaboration. The public needs opportunities to get to know managers and scientists as people, not just as "experts." Field trips, catered meals, and potlucks all helped develop relationships among BEMRP partners. When agency staff participate in community events, do volunteer work, and participate in solving community problems not directly related to the agency, they also contribute to developing positive, working relationships with other members of the community (Richards and McLuskey 1997).

Conclusions

Plenty of time and plenty of opportunities to work together, as described in the Introduction, do not necessarily lead to agreement in public involvement processes. Where people's values differ greatly, information is not likely to produce agreement, especially in short term planning processes, and consensus is not a realistic or appropriate goal. However, lack of complete agreement does not mean lack of success. Increased understanding among partners—understanding of each other, of common and differing values, and of ecosystems—is a strong indicator of success. New and enhanced relationships between managers, scientists, and the public are also evidence of success. For members of the public, agency concerns are only a part of the social system in which they live and work, and agency practices are only

one facet of their relationship with wildland ecosystems. No wonder agreement is often out of reach! To develop specific plans and meet short-term goals, managers need to dialogue with a wide variety of community and civic groups using a variety of communications methods, and then address all concerns and values in a synthesis completed by the agency. At the same time, a long-term view is essential, including monitoring and frequent evaluation of public participation efforts. BEMRP research demonstrates the importance of evaluating the effectiveness of public participation so the agency can improve upon processes. Debate over natural resource issues benefits from continuous learning about natural systems and about one another's experience and values. Mutual learning contributes to growing relationships, and working together may gradually enhance agreement in the community.

Public participation is vital to successful, long-term ecosystem-based management. BEMRP's experience demonstrates that improving public involvement requires understanding of past and current conditions in the human community, ways in which community members work together to govern themselves, and how people relate to wildland ecosystems.

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