#403

What Are Working Groups and Why Should Scientists Be Involved[1]

TONY J. SVEJCAR[2]

Abstract. The conflicts over management of natural resources, especially on public lands, have resulted in a high level of frustration among many of the interested parties. There are many underlying causes of the conflicts, but I think several major societal trends must be considered. During the past several decades, there has been increased emphasis on participatory democracy, with the public seeking more involvement in decision making and policy formulation. A related trend is the decline in the public image of science and lack of trust in state and federal agencies. Individual members of society desire to be included in decision making, and may not necessarily view scientists as capable of providing the answers to natural resource issues. One response to natural resource conflicts is to form a group of interested individuals from diverse backgrounds to develop solutions. These groups may also work toward policy development. Coalitions or working groups may take many forms. There are two basic types of groups I will mention: 1) those formed to address a specific issue over a set time period, and 2) those formed to foster communication, interaction, and education. Many working groups have been formed over controversies, but effective use of the groups might also keep controversies from arising. In my opinion, scientists should be active participants in natural resource working groups. Participation provides the opportunity to incorporate science in decision-making and may also guide research efforts insuring that the results are of value to a wider cross-section of society.

INTRODUCTION

There is little question that conflicts over land use and resource management have escalated dramatically in the past 10 to 15 yr. Those involved in agriculture, forestry, range management, and other resource disciplines have experienced first-hand the degree of conflict. The level of concern by the general public over biodiversity, food safety, groundwater contamination, soil erosion, and other environmental issues cannot be ignored. Some of the concerns are real and others are perceived, but even unfounded concerns can have major impacts on policy and decision-making. Wagner (9) agrees that policy setting by resource professionals is being replaced by "constituency-based, multi-resource management" in many cases. Broad-based coalitions are one means of ensuring that diverse viewpoints and pertinent information are considered in formulating policy. The composition of a coalition will depend on the particular issue to be addressed, but might include resource users, environmentalists, state and Federal land managers, community leaders, industry representatives, researchers, and extension service personnel.

There are good reasons for scientists to actively participate in working groups. In this paper, I will attempt to provide a brief overview of working groups, and suggest contributions that scientists can make to the working group process. I will also list several benefits that scientists can gain from participating in working groups.

WORKING GROUPS

Why is there more interest now than in the past in getting people from diverse backgrounds to work together? Whaley (10) lists three major trends that may have caused the shift: (a) conflicting social goals, specifically economic activity vs. maintaining environmental quality; (b) increasing democratization of decisions; and (c) excessive information. Thus, people may come together because there are conflicts, many citizens wish to become involved in decision making, and more information is available than any one person can decipher.

Many different terms have been applied to groups of individuals working together toward some common goal: partnerships, alliances, networks, coalitions, working groups, and so on. Definitions may have more importance than they are generally given. Astroth (3) has argued that not using more rigorous definitions tends to obscure the

[1]Received for publication May 3, 1995 and in revised form Dec. 15, 1995.

[2]Supervisory Range Sci., USDA-ARS, Eastern Oregon Agricultural Research Center, HC 71 4.51 Hwy 205, Burns, OR 97720.

distinct developmental phases inherent in the group process. He defines the following four levels of interaction: (a) communication, where individuals exchange information and resources; (b) cooperation, in which individuals work together to accomplish a specific goal; (c) coalition, where linkages occur at the organization level, participation is more formal and centers around a common set of issues; and (d) collaboration, where organizational relationships are formalized and involve a long-term commitment to address critical and complex social issues. My perception is that the term working group is generally applied to a diverse group of individuals that come together to solve a problem of common interest.

There are certainly many different types of groups and many different problems to solve. But an important point to consider is that each group will go through various developmental phases.

Cleary and Phillippi (6) discuss four basic steps in group development. The confusion and groping stage where members hesitate to interact and participate; toward the end of this stage the group leaders begin to emerge. The conflict and frustration stage where members do interact and leaders attempt to establish their authority. The consolidation and harmony stage where group members become more comfortable with each another and may form subgroups or cliques. The self-critical and objective stage where the group places considerable emphasis on problem-solving and control of group processes. This last stage indicates a mature group in which the emphasis is on attaining goals. However, Astroth (3) suggests that a critical analysis of group development has been ignored in the literature. I think that leaves a void for those interested in learning about group interaction. Also lacking is an analysis of why some groups are successful and some fail. Cleary (5) mentions the Cambridge Study on group interaction as providing some important clues. Basically the results of the study suggest that successful groups are characterized by a high degree of motivation and commitment which resulted from the manner in which group members interacted. Members were willing to listen to and try to understand others, objectively evaluate suggestions, and deal with conflict openly and in a problem-solving manner. However, as Barlow (4) has observed, there is a tendency to conceal problems, and getting people to share points of view honestly is not always easy.

There are several suggestions I would like to make to those interested in forming or participating in a working group. Recognize that groups (just like children) go through developmental stages. There will be stages where you get to know each other, discuss goals, undergo conflict, gain commonality, wonder what possessed you to join the group, feel excitement over progress, and if things go well, eventually trust each other. Don't think yours is the first group to enter these stages, or that you are the only member to feel the ups and downs. I suspect each group will be a little different in its development; however, the four stages outlined earlier in this paper are probably common to many groups. Recognize the importance of group objectives, rules of operation, and membership. The group must have a clear picture of why it is meeting, what is to be accomplished, and by when. Will the meeting be held at regularly scheduled times or called as needed, who will handle correspondence, lead the discussion, take notes, and so on? If possible, try to involve someone with formal training in meeting facilitation. Membership is a critical element if group decisions are to be accepted by individuals outside the group. Participants must believe in the group process and must have good standing with the organization they represent. Individuals representing science or research must keep in mind that working groups are not science committees and plain English is the only effective means of communication. Don't use jargon or acronyms, and don't assume all group members are well-versed in science. Use existing literature, guidelines, and knowledge to help understand the process. There is written material available, and we should do a better job of soliciting help from our colleagues in the social sciences. A publication titled *Coordinated Resource Management Guidelines* (6) was recently published by the Society for Range Management. Although Coordinated Resource Management Planning was initially applied mostly to interactions between public agencies and private landowners, the process has broadened considerably (e.g., 2). There are probably many relevant studies published in the social sciences literature, but like most biologists, I am not well versed in that literature. Social science research addressing coalition-building in the natural resource arena would certainly be warranted. Stress the need for patience to yourself and other group members. Difficult problems will not be solved in a meeting or two. Adams and Hairston (1) suggest that developing contacts and organizing involvement will initially slow progress, but will also result in fewer misunderstandings and greater information exchange. Ensure that all members of the group feel ownership in decisions. If group members feel that they have been left out of the decision-making process, they may not only fail to support

the decisions, they may also question the value and fairness of the group.

There are techniques and skills necessary to ensure successful working group meetings. In recent years it has become more common to find natural resource managers with training in meeting facilitation. A facilitator will be knowledgeable in the points I have raised in the preceding paragraph. Doyle and Strauss (7) list several functions of a facilitator: (a) keep the group focused on a common problem and a common process; (b) protect group members and ensure that everyone participates; and (c) maintain neutrality and build trust among group members. These authors suggest that a facilitator must remain flexible and adjust to the specific needs of each group. Must the facilitator be familiar with the subject area upon which the working group is focused? I would say that subject area knowledge is desirable but not essential. More important is knowledge of group dynamics and the ability to remain impartial.

WHY SHOULD SCIENTISTS PARTICIPATE?

There are examples of coalitions that have been formed to deal with a wide range of issues. But it seems these groups tend to be more heavily influenced and dominated by individuals with policy interests rather than scientific interests. There is also no shortage of examples where policy appears to be generated in a scientific vacuum. Scientists and researchers complain at length about the limited use of science in setting agricultural and natural resource polices, yet often are unwilling to interact with managers, policy-makers, and the general public. Thus the "Ivory Tower" image. There is also institutional inertia to overcome. The reward system in science has generally not favored participation in group projects, especially if the end result was not a publication.

There is a great deal that scientists can contribute to natural resource coalitions or working groups. As mentioned earlier, we are indeed overwhelmed with information, much of which is published in scientific journals, and scientists are best suited to gathering and interpreting this information. However, scientists may have difficulty meshing the information with management practices. A group that includes scientists and managers should be able to develop practical, science-based management plans. Scientists should also be well-suited to developing sampling protocols if a group wishes to objectively evaluate a management practice. For example, will a weed management practice increase biodiversity in a particular forest or rangeland setting? A group could argue such a point for days, or set up a trial to find out. Scientists that participate in working groups must strive to remain objective. A distinction must be made between what is scientifically known and what is personal opinion. Unfortunately, the line between fact and opinion is not always distinct in the arena of natural resources. We are often faced with a high degree of environmental variability and relatively limited site-specific research.

There are also benefits that scientists can gain from participating in the group process. Input from divergent points of view can aid in setting research priorities. As individuals or institutions we should be soliciting input as to what our clientele considers important research. In many cases, the input has come from a limited number of sources, and often comes from a single viewpoint. Participation in working groups can help expand the focus of research programs, often with relatively little additional effort. In many cases, the traditional agricultural clientele is very supportive of such efforts, especially if the level of conflict has risen to the point where a working group has been formed to address the issue. The broadening of a research program should help improve the problem-solving image of science, and make the research relevant to a wider cross-section of society.

Given the current funding climate, the image of science is no small issue. In fact, the current public image of science may be the most compelling reason for scientists to become more active in working groups and related public participation efforts. A National Science Foundation (NSF) survey reported that only 44% of U.S. adults felt that science has yielded more benefit than harm to society (8). Only 21% of the public are attentive to science, and 53% of adults know little about science and are not interested in learning. Trankina (8) used opinion surveys to demonstrate that scientists consistently reported the desire for meaningful work (more than most other professionals), yet half are dissatisfied with their jobs. She suggested that difficulty in obtaining funding and the deterioration of the public image of science are two major factors contributing to the degree of job dissatisfaction. Much of the focus of this work is on the biomedical field, although I think there are some parallels in the agricultural and environmental sciences. There are plenty of examples where clearly established scientific facts have been ignored in public opinion, and the objectivity of science questioned. If the public

image is to be improved, I think that more public involvement and a commitment to seeing that research is relevant and accessible to the public will be essential.

CONCLUSIONS

Working groups are increasingly being used to bring diverse, often conflicting, interests together in a problem-solving setting. A working group might address a subject as specific as insect control in a township (management), or as broad as guidelines for insect control in the rural/urban interface (policy). Scientists can provide information to working groups and where necessary help with interpretation. Scientists are also well-suited to designing sampling schemes in cases where monitoring is important. During group meetings, scientists must take care to remain as objective as possible, and clearly distinguish between scientific fact and personal opinion. Scientists can realize benefits from participating in working groups that include the satisfaction of providing information for management and policy formulation, and the opportunity to receive input on research needs and priorities from a broad array of interests. Ownership in setting management and research priorities will ensure that a larger segment of society is supportive of the resulting efforts.

ACKNOWLEDGMENTS

The author thanks Drs. P. Doescher, B. Masters, M. Vavra, and several anonymous reviewers for constructive input on the manuscript.

LITERATURE CITED

1. Adams, P. W. and A. B. Hairston. 1994. Using scientific input in policy and decision making. Oregon State Univ. Ext. Serv. Pub. EC1441. 19 p.
2. Anderson, E. W. 1991. Innovations in coordinated resource management planning. J. Soil Water Conserv. 46:441–414.
3. Astroth, K. A. 1991. Getting serious about strategic alliances: conceptionalizing the collaboration process. J. Ext. 29:8–10.
4. Barlow, C. P. 1992. Managing disagreements. J. Soil Water Conserv. 47:78–79.
5. Cleary, C. R. 1988. Coordinated resource management: a planning process that works. J. Soil Water Conserv. 43:138–139.
6. Cleary, C. R. and D. Phillippi. 1993. Coordinated Resource Management Guidelines. Society for Range Management. Denver, CO. 265 p.
7. Doyle, M. And D. Strauss. 1976. How to Make Meetings Work. Berkeley Publishing Group. New York, NY. 298 p.
8. Trankina, M. L. 1991. Psychology of the scientists: LXIV. Work-related attitudes of U.S. scientists. Psychol. Rep. 69:443–450.
9. Wagner, F. H. 1994. Changing institutional arrangements for setting natural-resources policy. p. 281–288 *in* M. Vavra, W. A. Laycock, and R. D. Pieper, eds. Ecological Implications of Livestock Herbivory in the West. Society for Range Management. Denver, CO.
10. Whaley, R. S. 1993. Working partnerships: elements for success. J. For. 91:10–11.