

University of Montana

ScholarWorks at University of Montana

Graduate Student Theses, Dissertations, &
Professional Papers

Graduate School

1985

Recreation management in the Bob Marshall Wilderness Complex: An application of the limits of acceptable change concept and transactive planning theory

Joseph L. Ashor
The University of Montana

Follow this and additional works at: <https://scholarworks.umt.edu/etd>

Let us know how access to this document benefits you.

Recommended Citation

Ashor, Joseph L., "Recreation management in the Bob Marshall Wilderness Complex: An application of the limits of acceptable change concept and transactive planning theory" (1985). *Graduate Student Theses, Dissertations, & Professional Papers*. 8414.
<https://scholarworks.umt.edu/etd/8414>

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

RECREATION MANAGEMENT IN THE BOB MARSHALL WILDERNESS COMPLEX:
AN APPLICATION OF THE LIMITS OF ACCEPTABLE CHANGE CONCEPT
AND
TRANSACTIVE PLANNING THEORY

By

Joseph L. Ashor

B.S., Whitworth College, 1978

Presented in Partial Fulfillment of the Requirements
for the degree of
MASTER OF SCIENCE

in

Recreation Management

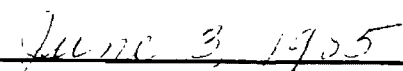
UNIVERSITY OF MONTANA

1985

Approved by:


Chairman, Board of examiners


Dean, Graduate School


Date

UMI Number: EP39215

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP39215

Published by ProQuest LLC (2013). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

Recreation Management in the Bob Marshall Wilderness Complex:
An Application of the Limits of Acceptable Change Concept and
Transactive Planning Theory (224 pp.)

Director: Stephen F. McCool



The relatively low frequency in substantive implementation of first generation wilderness management plans has forced managers to reexamine their past planning efforts and begin to devise ways in which the implementation, effectiveness, user involvement and acceptance of plans can be improved. In the Bob Marshall Wilderness Complex (BMWC), a combination limits of acceptable change (LAC) and Transactive Planning framework was tried in order to achieve improvements in these areas.

The study's primary objective was to test for the occurrence of key elements associated with Transactive Planning theory and to determine their overall effectiveness in producing a new management plan for the BMWC. This was accomplished by employing three different methodologies for collecting data - participant observation, theory evaluation surveys, and theory evaluation interviews. For analysis purposes, the three and a half year process was divided into five intervals. An indicator analysis approach was used in each interval to test for the level of occurrence of key elements of Transactive Planning (dialogue, mutual learning, and societal guidance or action). The surveying entailed sampling task force members on various dimensions of the Transactive Planning process. Their responses were compared to a sample of public involvement participants in a wilderness planning effort which had just been completed in the Rattlesnake National Recreation Area and Wilderness. This process utilized a more traditional rational-comprehensive planning approach.

The results showed the primary elements of Transactive Planning did occur in the BMWC planning effort and that Transactive Planning is a more effective approach than traditional comprehensive planning in such settings. Criteria and guidelines for applying the LAC management system and Transactive Planning approach are also provided in order to aid managers wishing to use the dual process in other wilderness planning efforts.

ACKNOWLEDGEMENTS

I would like to extend my personal gratitude and thanks to all those individuals who made possible the completion of this study.

To my committee members Dr. Steve McCool, Dr. Sid Frissell, and Dr. George Stankey for their greatly appreciated insights and guidance that could only have come from experienced wildland recreation researchers.

To all members of the Bob Marshall LAC task force; citizen, managers, and researchers alike, who had the patience, perseverance, and commitment to make a transactive style of planning work. I learned a great deal from you all.

To Arne Bolle, Jim Curtis, Smoke Elser, Jim McCreedy, Mike Dailey, Dick Kuhl, and Mike Chandler for graciously allowing me to probe their inner thoughts about what occurred in the Bob Marshall Wilderness planning effort.

To all those who participated in the Rattlesnake National Recreation Area and Wilderness planning survey.

To Dr. Jerry Stokes, a true pioneer of the transactive style of planning, whose guidance, input and support were invaluable to this study. Without Jerry's willingness to take risks and initiate an innovative planning effort, this study would not have been possible.

To Steve McCool, advisor, fellow planner and good friend for the financial support I received throughout my graduate work, for challenging me to try methodologies that strengthened this study immensely, and for the concern shown and indepth involvement given to my work.

And lastly, to my parents whose love, support and prayers sustained me throughout my graduate work. To them I am forever grateful.

TABLE OF CONTENTS

	Page
ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
LIST OF APPENDIXES	viii
LIST OF TABLES	ix
LIST OF FIGURES	xii
Chapter	
I. INTRODUCTION	1
Study purpose	5
Problem Statement.	6
Study Objectives	7
II. LITERATURE REVIEW	9
Review of Contemporary Planning Theories	9
Transactive Planning Theory	13
Citizen Participation in Planning	17
Improving Planning and Participation	21
III. CONCEPTUAL FRAMEWORK	27
The Transactive Process	27
Dialogue	27
Mutual Learning	30
Societal Guidance	31
Hypothesis Formulation	35
Research hypotheses	36

Chapter	Page
VI. METHODOLOGY	37
Overview	37
Testing Transactive Planning Theory: The BMW Case Study	38
Participant observer methodology	38
Theory evaluation surveys	41
Theory evaluation interviews	42
Indicator Analysis Approach	44
Sets of Indicators	45
V. THE BOB MARSHALL WILDERNESS COMPLEX CASE STUDY	48
Biophysical and Social Setting	48
Impetus for Planning	52
The Limits of Acceptable Change Concept . .	54
The LAC Framework	55
The Nine Step LAC Process	57
VI. CASE STUDY RESULTS	61
Overview	61
Critical Interval One (Feb. 16, 1982 - May 9, 1983)	62
Analysis of Dialogue Indicators	68
Analysis of Mutual Learning Indicators . .	72
Critical Interval two (May 10, 1983 - April 5, 1984)	76
Analysis of Dialogue Indicators	82
Analysis of Mutual Learning Indicators . .	86

Chapter	Page
Critical Interval Three (April 6, 1984 - June 7, 1984)	92
Analysis of Dialogue Indicators	96
Analysis of Mutual Learning Indicators	101
Critical Interval Four (June 8, 1984 - Jan. 25, 1985)	113
Analysis of Dialogue Indicators	116
Analysis of Mutual Learning Indicators	120
Critical Interval Five (Jan. 26, 1985 - April 1, 1985).	127
Analysis of Dialogue Indicators	130
Analysis of Mutual Learning Indicators	134
 VII. TESTING OF RESEARCH HYPOTHESES	 143
Overview	143
Hypothesis 1	143
Hypothesis 2	145
Hypothesis 3	152
Hypothesis 4	155
Hypothesis 5	163
 VIII. SUMMARY, CONCLUSIONS, MANAGEMENT IMPLICATIONS AND SUGGESTIONS	 176
Summary	176
Conclusions	177
Study Objective 1	177
Study objective 2	179
Study Objective 3	182
Planning Criteria	183
Planning Guidelines	185
Management Implications	191
Suggestions for Further Research	193
 LITERATURE CITED	 196

LIST OF APPENDIXES

Appendix	Page
A Bob Marshall Wilderness Complex theory evaluation survey, cover letter and follow up letter	200
B Rattlesnake National Recreation Area and Wilderness planning survey, cover letter and follow up letter	209
C Theory Evaluation Interview Questions	218
D Theory Evaluation Survey Key Element and Indicator Key	222

LIST OF TABLES

Table	Page
1. Dialogue indicator evaluation form, interval one	71
2. Mutual learning indicator evaluation form, interval one	77
3. Dialogue indicator evaluation form, interval two	87
4. Mutual learning indicator evaluation form, interval two	93
5. Bob Marshall Wilderness Complex theory evaluation survey results from statements testing for dialogue	102
6. Dialogue indicator evaluation form, interval three	104
7. Bob Marshall Wilderness Complex theory evaluation survey results from statements testing for mutual learning	111
8. Mutual learning indicator evaluation form, interval three	112

Table	Page
9. Dialogue indicator evaluation form, interval four	121
10. Mutual learning indicator evaluation form, interval four	126
11. Dialogue indicator evaluation form, interval five	135
12. Mutual learning indicator evaluation form, interval five	142
13. Summary of confirmation/occurrences of dialogue by critical incident interval	144
14. Summary of confirmation/occurrences of mutual learning by critical incident interval . . .	146
15. Percentage of respondents mentioning the critical nature of each step in the LAC process	149
16. Societal guidance indicator evaluation form . .	164
17. Bob Marshall Wilderness Complex theory evalua- tion survey results from statements testing for societal guidance	165

18. Transactive Planning dialogue statements, indicators and mean ranks for a Wilcoxon rank Sum Test of significance between the BMWC and RNRAW planning processes 169

19. Transactive Planning dialogue statements for the indicator "communication". Mean ranks for a Wilcoxon Rank Sum Test of significance between the BMWC and RNRAW planning processes 171

20. Transactive Planning mutual learning and societal guidance statements, indicators and mean ranks for a Wilcoxon Rank Sum Test of significance between the BMWC and RNRAW planning processes 172

21. Mean ranks and probability scores on Transactive Planning dimensions by planning situation 175

LIST OF FIGURES

Figure	Page
1. The objectives, techniques, and purposes of citizen participation	24
2. Schematic of study methodology	47
3. The Bob Marshall Wilderness Complex Study Area	49
4. The nine step LAC process	59
5. Citizen participation techniques used in the Bob Marshall Wilderness Complex planning effort and associated objectives	186

CHAPTER 1

INTRODUCTION

Citizen participation and planning; two facets of American society, that in their simultaneous reawakening and reworking are beginning to redefine how a democracy can function in today's climate of rapid change. Various types of planning are used throughout our society, but few make successful use of citizen expertise and knowledge in formulating meaningful plans. Planning represents a legitimate way to deal with rapidly changing problems, but only in so much as it is responsive to the needs of citizens, who are now demanding a more participatory role in planning.

Etzioni (1968) states: "Man is willing and able to construct and guide his own future, but the opportunity for him to participate in this social change process called planning is a first order requirement." McLaughlin (1977), emphasizes that "the primary challenge of planning today is not the development of more sophisticated technological techniques. It rests rather with our capability to develop planning approaches that insure man's "free spirit" does not become a part of a social engineering process administered and manipulated by a few knowledgeable elites." It is the

opinion of this author that direct citizen participation in the planning processes that will guide this society's future can be the primary means to insure mans "free spirit" is not manipulated, but instead used to enhance the desirability of all aspects of his environment.

In the past, planning filled a rather narrowly defined niche in American society. Its primary function was that of preparing long range comprehensive plans or sets of diagrams and maps to show what the future might look like. The concept of planning has come a long way since this initial definition. These traditional approaches are still important, but only encompass a small part of what is now a much larger process of societal action and change. Planning for the purposes of this study and as defined by Friedmann and Hudson (1974), "is an activity centrally concerned with the linkage between knowledge and organized action." This definition views planning as a thinking, learning and continually evolving process.

Within this planning movement, several new theories of the planning process have evolved in the last decade. One of the theories coming into the popular forefront of the "New Humanism Movement" is Friedmann's theory of Transactive Planning. It is defined by Friedmann (1973:2) as " a style of planning in which processes of mutual learning are

closely integrated with an organized capacity and willingness to act." The Transactive Planning approach strongly emphasizes the planner relying on face-to-face contact with the people affected by the decisions being made (Hudson, 1979). The capacity of citizens to act on those decisions is what enables them to control their future. Friedmann's theory has been popularized at the academic level, but is just now being experimented with and evaluated in applied settings.

McLaughlin (1977), was the first to analyze the application of Friedmann's theory. Using the community of Indian Hills, Colorado, he tested for its success or failure in promoting societal guidance. His study concluded that Transactive Planning is a viable theory, based upon the demonstrated occurrence of its key elements. However, McLaughlin recommends that Friedmann's theory needs to be expanded in order to deal more effectively with the concepts of "organized capacity" and "willingness to act." Stressed is the need to more precisely define the general concepts and key elements of Transactive Planning theory. McLaughlin states "this perhaps, can be accomplished by further testing of Transactive Planning theory in applied settings to discover the scope and exact dimensions involved with each of these elements."

Stokes (1982), also described and analyzed Transactive Planning while addressing a land conservation problem along the Blackfoot river in Western Montana. He also found Friedmann's theory to be a viable one, but suggested more detail is needed in conducting Transactive Planning. In particular, planners need more specific procedural guidelines. Stokes sees Transactive Planning theory as having much potential for solving problems at the community level, but feels that the limited research to date does not adequately assess this potential. Such research, he strongly emphasizes, should be actively pursued.

By examining the feasibility of Transactive Planning in a variety of settings, planners can begin to isolate and identify a framework or set of guidelines that will give themselves a better understanding of their role in the planning process. McLaughlin (1977) states: "It is upon such examination that planners can begin to isolate and identify organizational structures, communication linkages, attitudes and environmental constraints that may or may not be conducive to a particular theory." Referring to the need for testing Transactive Planning and other planning theories, Galloway (1979), states "one cannot expect larger advances in planning theory research to guide and improve practice without initiatives in the profession to sustain a vigorous planning research program." Galloway speaks of a

"critical mass" of studies on Transactive Planning that must be acquired to adequately inform and enlighten planners working in diverse situations. Further application and testing of the Transactive Planning approach is needed to reach this critical mass.

Study purpose

I have chosen to test Friedmann's theory of Transactive Planning in this study. The over-riding reason is not only to add to this currently small body of research, but more importantly to expand upon and more precisely define the key elements of the Transactive Planning approach. The context of its use in this case is in planning for a new recreation management system for the Bob Marshall Wilderness Complex in Western Montana. The plan is based on an equally new concept in managing visitor use in wilderness settings - The Limits of Acceptable Change (LAC) concept (Stankey et al. 1984, 1985). Researchers have shown that the prerequisite facets of the Transactive Planning process can be applied in rural land conservation and management situations where new and innovative concepts are being tested for the first time (Stokes, 1982). Describing, documenting and analyzing the effectiveness of Transactive Planning theory when utilized in conjunction with the LAC wilderness management system represents the major purpose of this study.

Problem Statement

As the size of this country's National Wilderness Preservation System has grown, so too have the problems with managing these areas grown as well. Since the passage of the Wilderness Act in 1964, managers and planners have recognized the necessity to develop management plans that effectively guide future as well as current activities in these areas. Early planning efforts included the public in a very peripheral manner or sometimes not at all. Even after passage of the National Environmental Policy Act of 1969 (42 U.S.C. Sec. 102(B)(4332), planners and managers of wilderness areas were reluctant to directly include citizen participants in their planning efforts. Their participation was relegated to that of "receiver" of information about the planning effort and input was usually in the form of comments on which "alternative" they favored as a final plan.

This superficial involvement of the interested public, plus the general lack of agency knowledge, expertise, and willingness to implement these early plans has left us with a generation of wilderness management plans that have largely been ignored. As managers and planners head into the second generation of planning for this country's wilderness areas, new approaches are being sought that will

markedly reduce the chances of a plan that is not implemented. Friedmann (1969), quotes one of the conclusions reached at a 1967 conference on urban planning: "Society has been planning too much and experiencing far too little application of plans - there is yet to be a climate for the acceptance of plans. The problem of implementation is a crucial one." A combination approach of Transactive Planning and LAC is being tried and tested in the Bob Marshall Wilderness Complex, in an effort to develop increased public acceptance and improve upon the chances for successful implementation.

Study Objectives

The primary objective of this study is to test for the occurrence of key elements associated with Transactive Planning theory and to determine their overall effectiveness in producing a new management plan for the Bob Marshall Wilderness Complex. Secondary objectives to shed further light on the dynamics of other important aspects of the planning process are as follows:

1. Identify what planning situations or conditions are most effective in promoting the key elements of Transactive Planning (dialogue and mutual learning).
2. Determine which characteristics of the planning process promoted initial and continued involvement by citizen participants.

3. Develop a set of criteria and guidelines crucial for successful wilderness recreation planning that integrates the LAC system and the Transactive Planning approach.

These guidelines will contain specific planning criteria whose primary purpose will be to give managers some procedural reference points if they choose to apply this package of Transactive Planning and LAC in other appropriate wilderness settings.

CHAPTER II

LITERATURE REVIEW

This literature review is composed of two main topics: (1) A comparison of the mainstream planning theories with Transactive Planning, and (2) citizen participation in planning, its costs and benefits.

Review of Contemporary Planning Theories

The most prevalent form of planning used in this country today is called "synoptic" or "rational comprehensive" planning. Almost every bureaucracy and large corporation in the country formulates long range comprehensive plans using this approach. Critics charge that its heavy dependence on comprehensive calculations and models that rely on quantifiable variables has left communities, government agencies and large corporations with an abundance of plans unresponsive to the public's needs and concerns. In our rapidly changing society, in which values are often in a state of flux, goals and objectives cannot be adequately defined or determined (Braybrooke and Lindblom, 1963; Freeman, 1974). Synoptic planning's tendency toward elitism, centralization and resistance to change has made the comprehensive ideal largely unattainable (Grabow and

Heskin, 1973).

Many theories have been proposed as possible solutions to the problems inherent in the synoptic approach. One of the first to arise was incremental planning, which evolved from decision making theory advanced by Charles Lindblom (1959). It is referred to by him as the "science of muddling through." This planning approach is reactive. Rather than moving toward some predefined goal, it moves away from known problems in small incremental steps. Analyses directed toward reaching an objective are not included. Solutions are chosen by agreement of the concerned parties, and directed at correcting the problem at hand.

The problem with the incremental approach lies in its inability to anticipate rapidly changing environments soon enough to make adequate adjustments (Dror, 1964 and Stokes, 1982). Its assumption of rough "equality in social power and influence among diverse social interests" (Freeman, 1974), tendency to neglect the potential effects of externalities (Bolan, 1967), and emphasis on seeking only "limited variations from past policies" (Etzioni, 1968), are all problems that have caused planners to continue their search for a more workable, realistic planning model.

Between the extremes of incrementalism and comprehensiveness, Etzioni (1968) has offered the mixed scanning approach. He theorized that by employing "two camera" angles which includes aspects of both incremental and synoptic planning, the deficiencies in these two approaches could hopefully be overcome. Although seemingly a worthwhile approach, there is little or no empirical research dealing with its merits or deficiencies in applied settings.

Another approach, popularized in the sixties, was advocacy planning (Davidoff, 1965). In this approach, the planner serves as a technical advisor to, or advocate for, groups or interests whose views of planning goals and objectives differ from the those of the traditional planning institutions. In a highly bureaucratic society such as ours, Davidoff states, "great care must be taken that choices remain in the area of public view and participation." Further he adds:

"If the planning process is to encourage democratic urban government then it must operate so as to include rather than exclude citizens from participating in the process. "Inclusion" means not only permitting the citizens to be heard. It also means that he be able to become well informed about the underlying reasons for planning proposals, and be able to respond to them in the technical language of professional planners" (Davidoff, 1965).

While the participatory aspects of advocacy planning can be viewed as a plus, the inability of groups most in need of representation, e.g. the poor and the elderly, to hire an advocate planner to champion their cause, make it an unlikely approach that would see widespread institutionalization.

With the rise of environmental awareness in the early seventies came a "radical" planning approach. Grabow and Heskin (1973) define radical planning as "a synthesis of rational action and spontaneity: evolutionary social experimentation within the context of an ecological ethic." This planning approach is based on taking incremental risks to see if something works; changing the margin to a better state of affairs. As Stokes (1982) observes: "Radical planning appears to be a rather cavalier approach to change in which the planner is a non-professional professional operating as both an educator and a student of the ecological ethic. Striving for self actualization, the planner is one of the people, not set apart as a professional."

Transactive Planning, like the advocacy and radical approaches has been designed to challenge the synoptic planning model, by bringing about change within the social sphere. It is viewed by Friedmann as a means to transform

our society into a decentralized, debureaucratized, non-elitist world. Transactive Planning is defined as "the process by which scientific and technical knowledge is joined to action" (Friedmann, 1969).

These six planning theories each have their strengths and weaknesses. Some may be more appropriate in particular settings than others. No one planning theory can claim ultimate superiority. However, this author feels Transactive Planning contains a mixture of elements in its approach that are most likely to effect the kinds of positive changes that are needed in our rapidly changing society. At the same time, its "pure" application in a wide variety of settings is unlikely. A mix of planning styles and strategies that uses Transactive Planning as its foundation is most likely to be the most realistic and effective approach.

Transactive Planning Theory

The theory of Transactive Planning has several fundamental underlying concepts. Of central importance is the concept of societal guidance which is brought about by the joint exploration of problems and solutions by planners and their clients.

Societal Guidance

The concept of societal guidance, first articulated by Etzioni (1968), is based on the premise that action within society is linked to all levels and many different groups. Each of these groups has a limited opportunity to influence the direction of society through action and active participation. Societal action is not the exclusive responsibility of a centralized agency, but "typically involves many actors - individual or organized - performing many roles, some of which are related in complex ways to each other, while others are performed in relative isolation" (Friedmann, 1969). This distinct pattern of linkages between organizations and individuals is what Friedmann called the guidance system of a society. Out of this interconnected web comes societal guidance that enables the culture to adapt in a rapidly changing world (Friedmann, 1969). Friedmann (1973:2), defines societal guidance as "the processes by which the incidence, rate and direction of change in society are controlled."

This societal guidance system is closely linked to what Friedmann believes is the growing necessity to relate social policy to the specific conditions of community environments where he believes citizen participation must take place. In considering the place of citizen participation in a public

philosophy, Friedmann states:

"In its most general meaning, participation refers to a partaking in the enterprise of others, and community participation, a partaking of subcommunities in the enterprise of the larger moral community whose premises are shared. I have chosen my words carefully because to partake means "to take a part, portion, or share in common with others". And thus to participate means not only gaining voice in and having a measure of influence over the allocation and uses of power, that is to say, in the processes of governance, but also a sharing in the patrimony or wealth of the community and thus in the outcomes of the established system" (Friedmann, 1973:1).

Thus citizen participation in governmental affairs, either individually or in small groups, according to Friedmann, is a vital element of Transactive Planning, which he advocates as a fundamental tool for the reordering of our society's social guidance system.

Societal Learning

Another important element of Transactive Planning can be viewed as a corollary to societal guidance and that is societal learning. Friedmann argues: "American society needs a heightened capacity for learning about itself and, to make what it learns effective in guiding its own development, a way to transform learning into appropriate action. This implies that we must find a way to join scientific and technical intelligence with personal

knowledge at the critical points of social intervention" (Friedmann, 1973:2). Two types of knowledge of major importance to the theory of Transactive Planning have been described by Friedmann.

- 1) Personal knowledge - is possessed by the client or citizen participant.
- 2) Processed knowledge - is another term for scientific - technical knowledge, and is possessed by the professional.

These two distinct forms of knowledge give rise to what Friedmann calls the "crisis of knowing"; the knowledge and communication gap between the client and the professional planner. Each form of knowledge is limited in its ability to form an exclusive basis for societal guidance. Thus Friedmann advocates, by fusing the valid aspects of personal and processed knowledge, the communication gap between the planner and client can be narrowed, or ideally closed altogether. This communication gap between planner and client can be closed by a series of personal transactions and engagements between them to combine the knowledge each possesses with action. Successful planning, Friedmann argues, would therefore:

". . . depend in large measure on the planners skill in managing interpersonal relations. The qualities he or she would have to develop include a heightened knowledge of the self; an increased capacity for learning special skills in the use of symbolic materials particularly in relating symbols to reality; a heightened

capacity for empathy; an ability to live with conflict; and an understanding of the dynamics of power and the art of getting things done" (Friedmann, 1973:1).

The communication gap between planner and client is often not bridged in many of today's planning efforts due mostly to the lack of skill many planners have in managing interpersonal relations. Having a group of citizens participate with the planner on equal terms and in a continuing series of face-to-face discussions goes against the operating format with which most of today's planners are accustomed to.

Citizen Participation in Planning

This portion of the literature review has been presented in order to project a more comprehensive view of the role of citizen participation in planning, as it is an important part of the Transactive Planning process. Two topics have been reviewed. These include (1) the costs and benefits of citizen participation in planning, and (2) improving planning and participation.

Numerous publications can be found outlining specific strategies and techniques for citizen participation and involvement in planning, Burke (1968), Arnstein (1969), Aleshire (1970), McLaughlin (1977), and Dale (1978). A

tremendous number of them are being used in a wide variety of institutions and settings today, hence specific involvement techniques will not be included in this review. For the purpose of our discussion here, attention will instead be paid to why citizen participation in the form advocated by Friedmann is not a norm in today's communities and organizations. One very important reason is that truly meaningful citizen participation where citizens actually share power with the elites and professionals has some costs involved. Aleshire (1970), outlines the costs of participation.

- "Meaningful citizen participation requires time and effort and will increase the consumption of salaries, extend the time period involved, and may heighten the negative connotation of the planning process."
- "Participation is in a way the antithesis of administrative efficiency." An efficient decision-making process often involves as few people as possible.
- Participation in the planning process arouses expectations of those involved. Expectations if not met will create frustration of all those involved.
- "Participation in planning raises the question of whether decision-making should be the result of rational reasoning and factual research, or the end product of intergroup pressure."
- Participation also raises the dilemma of defining who is the "citizen", thus who in fact will participate. See Burch (1976), Dale (1978) and Wengert (1976) for a further discussion of this aspect of citizen participation.
- Another cost of participation is representation of the unrepresented. The unrepresented in a community often comprise the majority of individuals. Adequately including the diverse range of interests of unrepresented individuals further taxes even the most innovative planners level of

initiative and creativity.

- Another "dilemma of citizen participation is that planning must and should precede action," although ironically it is usually action itself that is necessary to secure interest of citizens and thus support for their participation.
- Meaningful participation requires training, information, and technical assistance which the participants will accept and believe in.
- "Citizen participation may result in the development of decisions or demands which may be in conflict with current conditions."

In short, meaningful citizen participation in planning does make the process more complex, more difficult, more costly and time consuming, and involves some conflicts and dilemmas which are not easily solved and which few planners have sufficient insight or background to deal effectively (Aleshire, 1970).

Due to these costs, dilemmas and shortcomings, many of which may never be solved or eliminated, there is a strong case against citizen participation already built into our social infrastructure. However, when citizen participation is utilized effectively, the benefits are equally significant. Aleshire (1970) identifies eight such benefits.

1. It "provides a most appropriate and necessary check against the well reasoned power of technicians or professionals which may produce irrelevant and unresponsive action."
2. It "provides a forum for the exchange of priorities."

3. It helps preserve the democratic process.
4. As the process of planning and community development grow more technical, citizen participation provides the opportunity as well as the necessity to develop a cadre of leaders who evolve and become more technically proficient in participatory efforts.

This benefit is in fact one of the most realistic and meaningful aspects of the Transactive Planning process. The participants not only formulate solutions to the existing problems, but evolve and grow individually through mutual learning. The participant's capacity for problem solving and working with others should increase, as well as their willingness and ability to address new problems in new working groups and participatory engagements. As more and more individuals gain the knowledge and expertise for effective participation, the benefits to society as a whole will be felt, hence an important step in achieving Friedmann's ideal.

5. "Citizen participation frequently serves the role of either taking the heat off hot issues or making cold ones hot."
6. "Citizen participation in planning should support the movement toward issue politics both in general and within political parties. Citizens learn more about the intricacies of problems and gain the information they require to deal with those problems."
7. A meaningful participatory process can identify the flaws in the assumptions that professional planners often have about peoples desires or about the root cause of a problem.
8. It can help unite the physical and social planning structures.

As stated by Etzioni (1973):

"It is vital to realize that conceptions of planning and its mechanisms do not stand isolated but are reflective of the society in which planning occurs. It is basic to see that without "authentic" participation of the members of the community, on an equal footing, no effective planning - de-alienating and genuinely responsive to human needs - can evolve."

Improving Planning and Participation

While the benefits outlined above are viewed by most planners as desirable, many are still searching for ways to improve or "authenticate" the relationship between citizen participation and planning. The question of how or why citizen participation works is fundamental in seeking ways to improve future planning efforts. Fitzpatrick (1978) conducted a systematic analysis of 52 published cases of citizen participation in planning, and applied a theory construction technique to these cases to explain why they have or have not proceeded smoothly. What emerged from the analysis was two distinct paths joining the numerous variables in the theory to explain the usual way in which citizen participation works. The first path revealed how carefully defined issues, when they arise in a responsive political atmosphere, can be developed into constructive actions through cooperative efforts between public planners and citizen groups. The second path revealed the more

traditional and familiar process by which citizen groups operating outside of planning agency structure can effectively delay or stop altogether proposals that appear to threaten them. The former path is of course the very atmosphere that is needed to avoid the plethora of planning efforts that have failed in the past.

Earlier efforts in participatory programs usually met with failure because little or no attention was given to structure or desired results. "Citizen participation was seen as an end in itself, something that needed no other justification than its congruence with the principles of democracy" (Glass, 1979). Our knowledge of citizen participation has increased in recent years. Citizen participation has become a commonplace element in many planning efforts. However, both planners and citizens are still often assessing the participatory elements as being unsatisfactory. Why the continual disillusionment?

Glass's contention is that not enough attention is being given to the design of participatory programs and that there is a particular failing in matching objectives to techniques. In the context of Transactive Planning, this means the basic objective of face-to-face dialogue between planner and client must take place if the desired results of mutual learning and societal guidance are to occur. The

techniques the planner uses to accomplish what often is a list of five or six primary objectives must be multifaceted in nature to have any chance of realizing all of the pre-planned goals. Glass (1979), identifies five objectives of citizen participation:

- 1) Information exchange
- 2) Education
- 3) Support building
- 4) Supplemental decision making
- 5) Representational input

He has also developed a typology of participatory mechanisms where he matches certain participatory techniques with their most appropriate objective (Shown in figure I). His conclusion is that if the relationship between objectives and techniques is ignored in the design of a particular program, the probability of a successful program decreases. Examples can be found where the multifaceted nature of citizen participatory avenues has spelled success for a certain planning effort. Commenting on the citizen involvement program in the Okanagan Basin Study, O'Riordan (1976) stated; "A number of factors contributed to the success of this program, but perhaps the most important was the variety of avenues provided for public response."

Objectives					
Technique categories	Information exchange	Education	Support building	Decision-making supplement	Representational input
	Unstructured	Structured		Active Process	Passive process
Techniques	<ol style="list-style-type: none"> 1. Drop-in centers 2. Neighborhood meetings 3. Agency information meetings 4. Public hearings 	<ol style="list-style-type: none"> 1. Citizen advisory committees 2. Citizen review boards 3. Citizen task force 		<ol style="list-style-type: none"> 1. Nominal group process 2. Analysis of judgment 3. Value analysis 	<ol style="list-style-type: none"> 1. Citizen survey 2. Delphi process
Administrative perspective			Citizen perspective		
Purposes					

Taken from: Glass (1979).

Figure 1. The objectives, techniques, and purposes of citizen participation.

Another important improvement can be realized in the area of strategy design. Whether it is Transactive Planning alone, or a combination of several planning approaches being used, planners must become more adept at adopting a strategy or strategies to the demands of the particular organization and the environment within which it functions (Burke, 1968). Transactive Planning and its associated strategies and techniques may not be appropriate for all organizations, (e.g. certain businesses, the military etc.). The traditional planning agencies where Transactive Planning may be more appropriate, must be more precise by what they mean by citizen participation, and how they intend to incorporate it into their planning efforts.

One significant improvement that can also be made if any planning effort is to remain relevant, is the linkage to actions. The delay between the completion of planning and the initiation of action must be narrowed (Aleshire, 1970). Indeed, Friedmann's planning ideal is such that action is never viewed as a separate entity from planning.

"If the focus of planning is shifted from decisions to actions, it is possible to assert that any action that is deliberate is also to a certain degree planned. The problem is no longer how to make decisions more rational, but how to improve the quality of the action" (Friedmann, 1969).

Probably the most formidable barrier in achieving such an idealistic end state is as Sewell and O'Riordan put it, "the harsh fact that those in a position to influence the course of human events are loathe to share their power and find it quite disconcerting to contemplate a political culture where mass participation is persuasive and effective" (Sewell and O'Riordan, 1976). Slowly and steadily though, I feel participatory planning such as that offered by the Transactive process, can provide citizens with enough power and resources to enable them to solve the problems affecting their lives, and design their own environments in a manner which encourages and takes into consideration all of the various community interests.

CHAPTER III

CONCEPTUAL FRAMEWORK

The Transactive Planning Process

Friedmann (1973), identified three components of Transactive Planning that must occur if the essential linkage between knowledge and action is to be re-established: (1) dialogue, (2) mutual learning, and (3) societal guidance.

Dialogue

Dialogue consists of the constructive exchange of information between diverse groups of citizen participants and planners addressing a problem. Friedmann distinguishes between two levels of communication in Transactive Planning; (1) person centered, and (2) subject matter related. The first and primary level - person centered communication - requires face-to-face interaction. This is where the personal knowledge of the client and the processed knowledge of the planner are exchanged. Friedmann refers to person-centered communication as dialogue. Dialogue suggests an intimacy most people associate with family and close friends. Dialogue should promote relationships that

are based on real communication of feelings and emotions as well as facts and figures. Friedmann, of course, is keenly aware that a deep, personal relationship cannot be maintained with everyone involved in the planning process, but he viewed the impersonal style currently used by professional planners a dismal failure. He sees no separation between the planning environment and the humanistic personal world, and feels dialogue must occur for the process of mutual learning to occur. Friedmann outlines the characteristics of dialogue as follows:

1. Authenticity - Dialogue presumes a relationship that is grounded in the authenticity of the person and accepts his "otherness" as a basis for meaningful communication.
2. Integration of person - Dialogue presumes a relationship in which thinking, moral judgement, feeling, and empathy are fused in authentic acts of being . . .
3. Conflict acceptance - Dialogue presumes a relation in which conflict is accepted . . .
4. Communication - Dialogue presumes a relationship of total communication in gestures and other modes of expression that are as vital to meaning as the substance of what is being said . . .
5. Reciprocity - Dialogue presumes a relationship of reciprocity and mutual obligation . . .
6. Common time and space - Dialogue presumes a relationship that unfolds in real time . . .
7. Shared interests - Dialogue presumes a relation of shared interests and commitments . . .

The second type of communication involving subject matter is accomplished through the dialogue relationship that results between the planning experts and their clients. Communicating the subject matter, various steps of the planning process, or a new management system, often include several major inhibitors to effective dialogue. They include technical and scientific language barriers, increasing sources and amounts of information, increasing complexity in the systems under study, and rapidly changing systems. All of these factors tend to lead to the problem of information saturation (McLaughlin, 1977). The result of information saturation is diminished capacity for meaningful communication between planner and client. A citizen participating in a complex planning process can quickly become overwhelmed by jargon and technical information. By isolating the most important planning indicators, the probability of information overload occurring can often be reduced. This, together with planners trained in effective communications, can increase the potential for dialogue and the second prerequisite of Transactive Planning - mutual learning.

Mutual learning

Friedmann (1973:2) defines mutual learning as "a process in which the processed knowledge of the planning expert is related to the personal knowledge of his client in the joint exploration of problems and possible solutions." Friedmann has described the characteristics of personal and processed knowledge:

1. Personal knowledge

- It is gained through on the ground experience, it provides knowledge of operational details.
- It has insights and an understanding of the real world, and can evaluate solutions and determine if they are politically and socially acceptable.
- It has the ability to assess whether the proposed action can actually be carried out, and if it will solve the problem.
- It has an understanding and familiarity with the cultural norms, and principles of right action that regulate and guide social behavior.

2. Processed knowledge

- It is theoretical in nature, and is formed of abstract ideas and concepts.
- A hypothesis is assumed and a theory adopted for investigative purposes.
- It develops systematic procedures for data collection, analysis and synthesis of solutions.
- It operates as a mediator or broker between dissimilar interests, facilitating communication and provides motivation to reach decisions and follow up with the action.

Each of these two types of knowledge have deficiencies and ways in which they can be misused, leading to distorted perceptions of reality. Mutual learning is a step in the Transactive Planning process where if these two types of knowledge are effectively combined, the most productive aspects of each can be maximized and the deficiencies hopefully minimized. If mutual learning is effective, it can produce the necessary societal guidance.

Societal guidance

For societal guidance to occur, Friedmann (1973:2) feels the planning system must be:

Autonomous - It must be able to set its own objectives and pursue them effectively.

Responsive - It must be able to take into account a variety of specialized interests, needs, and values of groups affected by its actions.

Innovative - It must be able to respond creatively to new problem situations.

Effective - Its actions must be both timely and accurate with respect to the problems addressed.

Efficient - Its work must be accomplished at a cost that is reasonably low compared to alternative plans.

Legitimate - It must inspire loyalty and be capable of mobilizing popular support for its actions.

In conclusion, Friedmann's theory of Transactive Planning has as a central theme the individual and his potential to learn from participating in the planning process. It is the individual-oriented transformation process that Friedmann sees as a key factor in increasing societies capability of attaining self guidance.

The major flaw in the Transactive Planning theory seems to be the highly idealistic notion that people will get involved in a Transactive Planning process out of some innate sense of social responsibility. This leads to the inevitable question one must ask: What motivates citizens to become involved and participate? Wengert (1976), observes that motivations are tied to perceptions and while "types of motivations can be described, it is often impossible to know which motivation or combination of motivations determined particular behavior." Stokes (1982),

in evaluating Friedmann's theory in application to a natural resource allocation issue, found that the transactive theory did work. However, he questioned Friedmann's idealism in describing the motivating factors that induce citizens to participate. Stokes felt it was primarily the desire to protect ones own interests that led to initial involvement, and not a sense of social calling or responsibility. Interestingly enough though, he did observe the initial sense of self-interest dwindle as the planning process matured, and the professional planner and citizen groups began to develop meaningful relationships based on dialogue and mutual learning.

The critical, underlying assumption of Friedmann's theory is that humans have an inherent desire to improve their own well being as well as societies. If this betterment of individual and the community in which he or she lives is to take place in a decentralized, pluralistic world, the planner must ask: How will the plurality of local communities in the newly transformed, decentralized world relate to each other? Etzioni (1973), observes one of the difficulties of the transforming movement:

"It disregards the fact that in matters of domestic policy, there is a great degree of skewed pluralism in this country, in which many of the decisions and plans are made by local elites, which are more partisan, exploitive, and change resistant than any national ones and which often are in conflict, rather than in harmony with each other."

Motivations, perceptions, value systems, and even human nature itself are all wrapped up in Transactive Planning theory. One can be unduly cynical about the idealism of the theory, but the reality of today's world suggests that the fundamental framework of a society truly able to plan for itself is being layed throughout every facet of our society. As Toffler (1980) so succinctly outlines in his book "The Third Wave", the decentralization, de-massification and de-bureaucratization of our society is occuring today and will continue to occur in unimaginable forms and proportions as we enter the twenty first-century.

I have chosen to test Transactive Planning theory in this study because I believe, even in its rough and untested way, it offers the most promising alternative approach to the impersonal style of synoptic planning. It can provide society with a means to continually evolve and find solutions to the multiplicity of problems that are facing our society today, including the problems now facing managers and users of this country's wilderness areas.

Hypothesis formulation

In this chapter, I have outlined the three key elements of Transactive Planning and the characteristics inherent in each. In chapter one, two examples were given of researchers who successfully showed that Transactive Planning is a viable theory. Their results led to several recommendations regarding some of the assumptions inherent in the Transactive Planning approach and suggestions for further research. First and foremost they stressed the further testing of Transactive Planning in a wide variety of applied settings in order to gain further insight into the exact dimensions of dialogue, mutual learning, and societal guidance. Secondly, how can the theory be expanded to deal effectively with the concepts of "organized capacity" and "willingness to act"? Many critics charge this is the most idealistic facet of Transactive Planning and yet according to Friedmann it is a fundamental part of its definition. What are the dynamics of group formation and interaction? Can the atmospheres in which groups interact be more fully distinguished, thereby defining in a more precise manner which ones do or do not promote dialogue and mutual learning? Do groups naturally organize because they feel a sense of responsibility, or do they need a catalyst to initiate their "willingness to act"? The planner is a critical element of the planning process. How does he

appear to others? Methods to analyze these important questions and dimensions of the process are critically needed in order to begin to elevate Transactive Planning out of the theoretical realm, and into a realm in which it is recognized as a viable planning methodology, able to be applied successfully in a myriad of settings.

Research Hypotheses

In sum, what is needed are more effective ways to evaluate the key elements of Transactive Planning in a more specific manner. The objectives outlined in chapter one will be pursued, plus the following research hypotheses will be tested in order to secure empirical support for some of these dimensions.

1. Dialogue among participants in the planning process has the properties of authenticity, integration of person, conflict acceptance, commitment, shared interests reciprocity and common time and space.
2. Mutual learning of planning participants will occur as a result of dialogue.
3. Societal guidance (action), (e.g. decisions made about wilderness management in the BMWC) will occur as a result of dialogue and mutual learning.
4. Societal guidance (action) if shown to occur, will have the properties of autonomy, responsiveness, innovativeness, effectiveness, efficiency and legitimacy.
5. Transactive Planning is more effective than synoptic planning when the goals of the process are dialogue, mutual learning and societal guidance.

CHAPTER IV

METHODOLOGY

Overview

This study examines Transactive Planning theory by using an indicator analysis approach for a case study of recreation planning for the Bob Marshall Wilderness Complex. This approach relies on testing for the occurrence of key elements of the planning process that indicate certain goals and objectives are taking place and or are present. Information and data were gathered using three different methodologies: participant observation, theory evaluation surveys and theory evaluation interviews. These data were evaluated against criteria for testing and evaluating the occurrence of Transactive Plannings three basic elements - dialogue, mutual learning and societal guidance. To facilitate the analysis of the research data, the critical incident interval approach, developed by Stokes (1982), was utilized. This approach divides the planning process into critical incident intervals that are determined on the basis of major decision points that occur in the planning process. "A critical incident is a juncture in the planning process when a decision is made that determines whether or not the planning process will continue, or when there is some major

occurrence indicating that the process is working" (Stokes, 1982). A critical incident interval includes the critical incident and the period of time between it and the beginning of the next critical incident.

A determination of five critical incidents was made on a judgemental basis by the researcher based on his collective knowledge of the planning environment. The actions and activities within each interval were analyzed for dialogue and mutual learning. Finally, the results of all five intervals were evaluated for the occurrence of societal guidance. In short, these critical intervals were the subject of data analysis and testing.

Testing Transactive Planning Theory: The Bob Marshall Wilderness Complex Case Study

Participant observer methodology

The participant observer methodology is one of the primary ways in which data and information were gathered in this study. This methodology, also utilized by Stokes (1982), and described by Bruyn (1966), relies on the researcher physically observing and documenting aspects of the planning process that either do or do not support the study objectives or hypotheses. It requires the participant

observer to view a social setting or culture just as the people he is studying view it. This includes "reflecting on the social process in which it is invariably engaged" (Stokes, 1982). Because Transactive Planning relies upon intimate involvement of the planner with his clients, the participant observer methodology is particularly suited for testing the occurrence of dialogue, mutual learning and societal guidance. Bruyn (1966) reflects, as the participant observer . . .

". . . becomes personally involved with and committed to the people he studies, he may get to know them better, accepting them as human beings like himself, persons who are capable of learning, growing, changing, or of being stubborn. As the social scientist becomes committed to the people he studies as persons, he no longer sees them as objects, but as subjects, thus becoming aware of certain features of their social life."

As outlined by Stokes, the role of the participant observer can be separated into both active and passive situations. Passive roles include being a (1) Listener - that is gathering much of the data needed for planning purposes by listening closely during individual small groups, or task force meetings. (2) Documentor - having the participant observer document social and physical data through notes taken during all meetings and conversations and reflections on planning events he observed and participated in.

Active roles include serving as a (1) Coordinator/facilitator - this role is a function of group needs and resources. When needed, he coordinates and facilitates communications and actions by maintaining continuous contact, (either in person, by telephone or by letter), with key individuals regarding planning problems and actions. This role involves prodding and trouble shooting to ensure that planning momentum is developed and maintained and that communication channels remain open. (2) Technical assistant - at certain appropriate key junctures of the planning process, the participant observer may be required to play a role of planner and provide technical information to clients on how to accomplish planning objectives once they are defined by the group (Stokes, 1982).

This author served as a participant observer in this study. This author also operated as a planner in the process, performing all of the roles described above. These roles were performed while employed under contract with the U.S.D.A. Forest Service. Serving in this capacity allowed the participant observer the opportunity to develop the necessary intimate relationship with the situation that is stressed by Friedmann, while at the same time adhering to the rules and axioms required to be a successful participant observer.

Theory Evaluation Surveys

Two "theory evaluation surveys" (TES) were conducted in this study. They were conducted during critical incident intervals 3 and 4. The first survey (see Appendix A), included 37 managers, researchers, citizens and users involved in the BMWC planning process. The sample for the second survey, (Appendix B), comprised 35 randomly chosen citizens and users that had just completed involvement in a planning effort creating management direction for the Rattlesnake National Recreation Area and Wilderness (RNRAW) north of Missoula, Montana.

For both groups, a six-page mail questionnaire was used for the theory evaluation survey. Nineteen fixed alternative or closed ended questions dominated the format of both questionnaires. Three open ended questions were also included, (Part III taken from McLaughlin, 1977). The questions were designed to gain descriptive information concerning the perceptions of the respondents toward the transactive style of planning. The purpose of surveying a group of participants not involved in a transactive style of planning, (the RNRAW planning effort), was to gain further insight into the comparative effectiveness of Transactive Planning versus a more traditional synoptic planning approach. Follow-up letters were sent to individuals who

did not reply to the initial survey within a three-week period. Phone calling was used after the fourth week as a final way to reach those who did not reply.

Theory evaluation interviews

"Theory evaluation interviews" (TEI) were conducted on 9 select members of the BMWC planning task force, during the last critical incident interval. These interviews served as the third way in which data were gathered to further aid in evaluating the effectiveness of a transactive style of planning. The questions (Appendix C) were directed at decision making and key aspects of the planning process that may indicate dialogue, mutual learning and societal guidance. The interviews were also used to gather information regarding the capacity of citizen participants to organize and act on their own, and to shed some light on the dynamics of group formation and interaction.

The criteria used for selecting citizen interviewees were as follows:

- They were a respected member or leader of the group they represented.
- They had maintained a high level of involvement in the three years since planning had begun.
- They had missed no more than one major task force meeting between Feb. 16, 1982 - Feb. 26, 1985.

Interviewees represented The Wilderness Society, The Bob Marshall Wilderness Alliance, The Sierra Club, The Backcountry Horseman of America, Professional Outfitters and Guides Association and the unaffiliated user groups. Refer to Appendix C for the interview questions and the area of inquiry they specifically pertain to.

In sum, participant observation and theory evaluation surveys and interviews were the three methodologies used to gather information and data in this study and along with the indicator analysis approach were used to develop support for the five hypotheses presented in the last chapter. This study's formal analysis and testing of Transactive Planning ended on April 1, 1985 despite the occurrence of ongoing efforts to finalize the details of the BMWC Recreation Management Plan.

Indicator analysis approach

This approach, also utilized by McLaughlin (1977) to test the effectiveness of Transactive Planning theory, specifically uses sets of indicators that allow the researcher to classify and measure, in a broad sense, dialogue, mutual learning, and societal guidance. Below is a summary of the indicator analysis process and its underlying assumptions as presented by McLaughlin (1977):

- The indicators represent theoretically projected occurrences that should have taken place if the hypothesized result (e.g. societal guidance, mutual learning dialogue) was accomplished.
- If a single indicator is verified by virtue of case study documentation, it is then assumed that the hypothesized end was in part achieved.
- A series of indicators is used.
- Positive verification of increasing numbers of indicators reflects a stronger measure of achievement of the hypothesized end.
- A particular indicator supported by more than one documented example or by actions of major importance reflects a stronger measure of achievement of the hypothesized end.
- Actions of major importance are determined on a judgemental basis by the researcher.
- Judgements are based upon the researchers knowledge of the study environment, contacts with participants involved in the study, and whether or not the action being considered for the "major importance" designation is in part or in total supportive of the planning goals and objectives (McLaughlin, 1977).

Sets of indicators

The analysis of dialogue, mutual learning and societal guidance was based upon the following selected performance indicators suggested by Friedmann for evaluating Transactive Planning theory. As summarized by Stokes they are as follows:

--Dialogue--

- | | |
|------------------------|--------------------------|
| 1. Authenticity | 5. Shared interests |
| 2. Integrated persons | 6. Reciprocity |
| 3. Conflict acceptance | 7. Common time and space |
| 4. Communication | |

--Mutual Learning--

- | | |
|--------------------------|---------------------------|
| 1. Planner contributions | 2. Client contributions |
| a) concept | a) operational details |
| b) theory | b) realistic alternatives |
| c) analysis | c) priorities |
| d) new perspectives | d) norms |
| e) systematic search | e) feasibility judgement |
| f) facilitator | |

--Societal Guidance--

- | | |
|-------------------|------------------|
| 1. Autonomy | 4. Effectiveness |
| 2. Responsiveness | 5. Efficiency |
| 3. Innovativeness | 6. Legitimacy |

Refer to appendix D for the portions of the theory evaluation surveys that were used to test for the occurrence of these indicators.

Using the indicators just outlined, each critical incident interval was tested for whether dialogue or mutual learning occurred or not. The entire case study was then evaluated by combining all critical incident intervals, and testing for the occurrence of societal guidance. A narrative summary will be presented for each interval outlining the most significant interactions that occurred during that interval. Documentation of the occurrence of the various indicators will again come from three sources: (1) meeting notes and summary documents compiled by the participant observers (2) theory evaluation surveys, and (3) theory evaluation interviews. From these evaluations, a determination of whether societal guidance occurred or not, will be displayed on a final evaluation form, showing the success or failure of Transactive Planning theory in this case study. A schematic in figure 2 outlines this study's methodological framework.

Indicator Analysis Approach

Methodologies used to
evaluate critical incident
intervals for dialogue,
mutual learning and
societal guidance.

Critical Incident Intervals

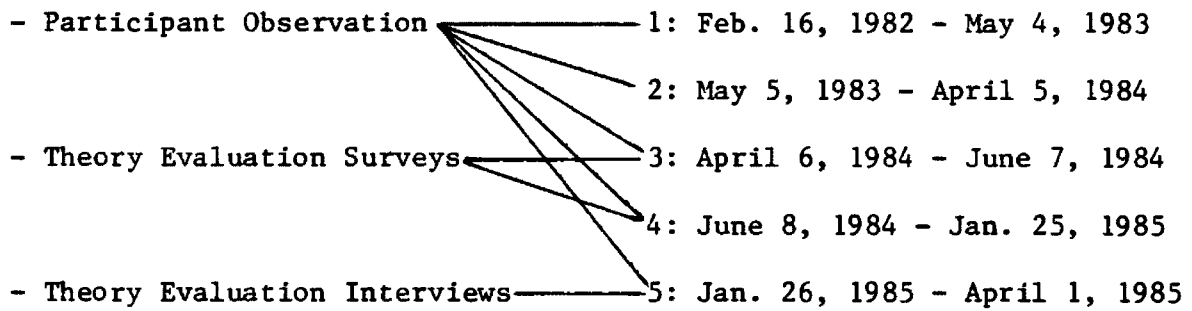


Figure 2. Methodological framework for the Bob Marshall Wilderness Complex case study.

CHAPTER V

THE BOB MARSHALL WILDERNESS COMPLEX CASE STUDY

Biophysical and Social Setting

The Bob Marshall, Great Bear and Scapegoat wildernesses form a contiguous area covering over two thousand square miles of wild, remote country. Even though each of these wilderness areas was added to the National Wilderness Preservation System at different times, they are currently being managed as one area, the Bob Marshall Wilderness Complex (BMWC) (Figure 3). The complex, comprising portions of four National Forests and managed by five ranger districts forms one of the largest wilderness ecosystems in the lower forty eight states, approximately a million and a half acres. The area is nationally well known, but receives only moderate use compared to other units of the system.

Due to this large size, the complex contains many unique characteristics that collectively serve to make the area a highly important resource of national significance. These characteristics include an area large enough to contain almost half of the entire Flathead Wild and Scenic River System. Other characteristics which contribute to the significance of the complex include not only river bottoms

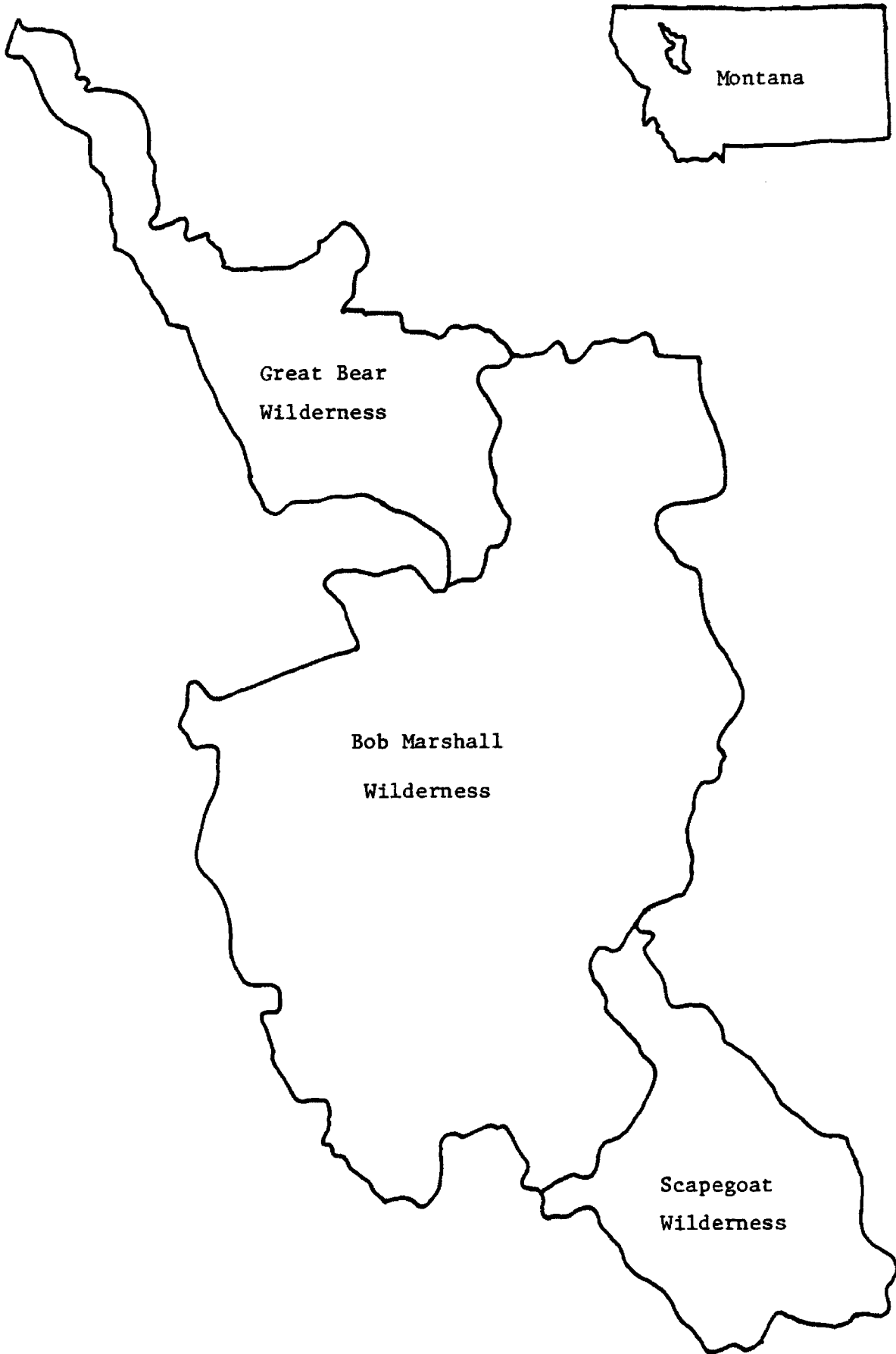


Figure 3. The Bob Marshall Wilderness Complex Study Area.

but ridge tops on both sides of the continental divide. These ecosystems contain a variety of topographic and geologic features as well as significant biologic diversity in terms of wildlife habitat. This habitat supports one of the largest remaining concentrations of grizzlies outside of Alaska as well as large herds of deer, elk and rocky mountain sheep. Fall big game hunting is a major attraction due to this abundant and varied wildlife resource. Again the sheer size of the area provides opportunities for extended horse and foot travel. Outfitters and guides, (over 50 operating in the complex), offer a wide variety of summer and fall pack trips into a wilderness area many consider to be the flagship of our National Wilderness Preservation System. This area, with its variety of unique ecologic, geologic and historic characteristics also has a variety of management problems.

Each year, thousands of wilderness enthusiasts visit the area to experience these characteristics and features that can be found in only a handful of other areas in the lower forty eight states. Since the Bob Marshall was first considered a wilderness preserve in the 1930's, use has increased dramatically. In 1983, use in the entire BMWC was estimated to be 215,000 visitor days (U.S.D.A Forest Service, Use of National Forest Units: National Wilderness Preservation System 1983 Annual Report). This increased use

began leading to serious erosion of the very values that make the BMWC a unique and special place. Managers and many users and interested citizens became concerned. Their concerns included:

- Long lasting damage to trees and ground cover has occurred at many campsite locations.
- Quality fishing is no longer a major attraction, due to declining numbers and size of fish in many lakes and streams.
- Many trails are in need of maintenance or relocation to reduce further resource damage and improve the aesthetics and enjoyment while travelling.
- Noxious weeds and non-native plants are increasing in numbers in many areas.
- Overgrazed range areas are common in many areas each year.
- Conflicts occur between horse users and backpackers.
- Overall dissatisfaction with the lack of management and enforcement of existing rules and regulations.

As a result of these concerns, a task force of managers, researchers, users and interested citizens was assembled in February of 1982 to begin to address these problems. Prior to this time, management activities in the wilderness had been guided by the Bob Marshall Wilderness Management Plan prepared in 1972. Despite two years of planning effort, this plan followed the typical path of most wilderness plans prepared during that time - neglect and lack of implementation. Fears of this early task force were

that another planning effort would result in a similar situation.

Impetus for planning

Along with concerns for the area, the impetus for a renewed planning effort basically stemmed from three other sources. The first of these sources was the 1964 Wilderness Act itself which states wilderness:

". . . shall be administered for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, and the preservation of their wilderness character. . ." (Sec 2a).

A second source, the Department of Agriculture regulations also stated:

". . . in carrying out such purposes, National Forest Wilderness resources shall be managed to promote, perpetuate, and where necessary restore the wilderness character of the land and it's specific values of solitude, physical and mental challenge, scientific study, inspiration, and primitive recreation."
(36CFR 293.2)

A third reason for the initiation of renewed planning efforts stemmed from the 1976 National Forest Management Act (NFMA) Sec 219.12(f)(1). In 1979, the Secretary of Agriculture released regulations implementing the act, which gave directives to each National Forest; that when planning for their respective wilderness areas they would:

Provide for limiting and distributing visitor use of specific portions in accord with periodic estimates of the maximum levels of use that allow natural processes to operate freely and do not impair the values for which wildernesses were created (U.S. Federal Register, 1979).

These regulations posed problems for wilderness managers in general as many of them interpreted this last statement as requiring the establishment of carrying capacities for all wilderness areas. The phrase "periodic estimates of maximum levels of use" was viewed as a directive to quantify capacity. Most managers found this very hard to do or unnecessary. A 1978 survey found that managers in only 16 percent of the National Forest and National Park wildernesses had gotten around to or were willing to set carrying capacities for their areas (Washburne, 1982).

The approach chosen by managers for satisfying the requirements of the NFMA, plus dealing with the highly politicized, controversial nature of the problems in the BMWC was a two fold approach that employed Transactive Planning theory and the limits of acceptable change process.

The Limits of Acceptable Change Concept

This concept originally arose out of the controversy and misaligned notions surrounding the "carrying capacity" issue. The carrying capacity approach was originally drawn from the fields of range and wildlife management. It is based on the determination of a specific use level that would cause the onset of unacceptable resource damage and unsatisfactory recreational experiences. A "magic number" of sorts that if reached or exceeded would signal to managers that action was needed to limit or restrict the numbers of people using the wilderness, in order to protect the resource and their experiences while visiting.

Since the concept was first advocated as a possible management tool in the late fifties and early sixties, a plethora of articles have been written exploring the bio-physical and social aspects of the carrying capacity problem. Stankey and Lime (1973), found over 200 published pieces relating to the subject between 1957 and 1972 alone. Countless others have been written since. Most of the earlier articles focused on ways to determine levels of use at which unacceptable impacts begin. The main consideration focused on the questions: How much use is too much? What are the appropriate levels of use for any given wilderness area? This traditional carrying capacity approach, by

focusing on these questions, was hampered by several conceptual and empirical problems. Some of these problems included:

- Lack of a conceptual framework for studies to be developed and conducted (Frissell and Stankey, 1972).
- Lack of Empirical research showing numerical measures of use as an independent means of predicting change (LaPage, 1967), or of determining quality recreational experiences; Wager (1964), Lucas (1964), and Stankey (1971).
- Lack of a clear and predictable relationship between use and impact (Stankey, McCool and Stokes, 1984).

These problems gave researchers good reason to begin doubting this traditional approach and led to the rethinking of the problem and the development of a revised approach to the carrying capacity concept. The LAC framework is "the latest step in a continuing effort to improve wildland recreation management through definition of more explicit measurable objectives" (Stankey et al., 1985).

The LAC Framework

The most basic, underlying premise of LAC is that change in wilderness due to recreational use is inevitable. Changes in the types and amounts of resource impact and social interactions will occur. Stankey, McCool, and Stokes (1984), outline two important implications of the LAC

approach. First, the new approach diverts managers attention away from use levels as the key management concern and directs it toward managing environmental and social conditions desired in the wilderness. The second implication of the LAC framework is that it shifts the issue of carrying capacity from the context of a technical decision about appropriate use levels, to one in which personal judgement plays more of a key role in deciding the "limits" of acceptable change. The LAC process treats the technical, scientific information used in the past more "as an aid in answering what is acceptable, not as a determinant" (Stankey, McCool, and Stokes, 1984). In the case of the BMWC, it is the personal judgements of the task force members coupled with the scientific/technical information, that was used to determine what is acceptable.

In order to make future discussions of the process and research results more meaningful, the author feels a brief review of the nine step LAC process is needed.

The Nine Step LAC Process

As summarized by Stankey et al.,(1985):

"Step 1 involves identification of area concerns and issues. In addition to legal guidelines and organizational policy, management of an area needs to reflect area-specific features and values in order that the role of the area at both regional and national levels can be assessed.

In step 2, opportunity classes are defined and described. Opportunity classes represent subunits of the area where different conditions are provided, thereby [recognizing] the diversity of the area. These [different conditions] are measured through indicators, identified in step 3, representing resource and social conditions for which management is striving. Indicators should be capable of quantitative measurement.

In step 4, the existing condition of the resource and social conditions is inventoried. These data are recorded and mapped, and serve as the basis for the definition, in step 5, of standards for each indicator in each opportunity class. Basing the standard on inventory data helps ensure realism and also clarifies the nature and extent of management activity that will be required to achieve standards.

Step 6 involves identification of alternative allocations of the area among the various opportunity classes. Because different allocations will require different types of management, step 7 requires [the identification of management actions for] each alternative, in terms of environmental impacts and impacts on visitors as well as administrative costs.

In step 8, the costs and benefits of each alternative are evaluated and a final alternative is selected. This final selection will reflect the responsiveness of the alternative to the issues and concerns identified in step 1 and the management requirements identified in step 7.

Step 9 involves implementation of the selected alternative and establishment of a monitoring program. Monitoring is particularly important as it provides feedback on the effectiveness of the management actions employed, alerting managers to the need to consider more rigorous application or the use of other measures" (Stankey et al., 1985).

An important characteristic of the LAC process is its ongoing nature. This conforms to Transactive Planning's basic premise that planning does not end upon completion of the final plan, but is ongoing. Figure 4 illustrates the concept of LAC as an evolving process that is continually being strengthened and refined.

Does the LAC process fulfill the requirements of NFMA regulations? Researchers and agency decision makers are in general agreement that it does. Washburne (1982) states:

"Capacity is thus a relative condition rather than a specific number. This way of stating capacity would seem to fulfill the spirit and purpose of the regulation and would allow use to continue at current amounts or increase as long as impacts remain acceptable. Where conditions become unacceptable - and all other management strategies except reducing use are inadequate - a number could specify the capacity, thus fulfilling the letter of the regulations."

Long term forest management plans that were being drafted during this period gave interim wilderness management direction until "carrying capacity" studies could be completed. The 0-2 appendix of the Lolo Forest Plan gave direction that:

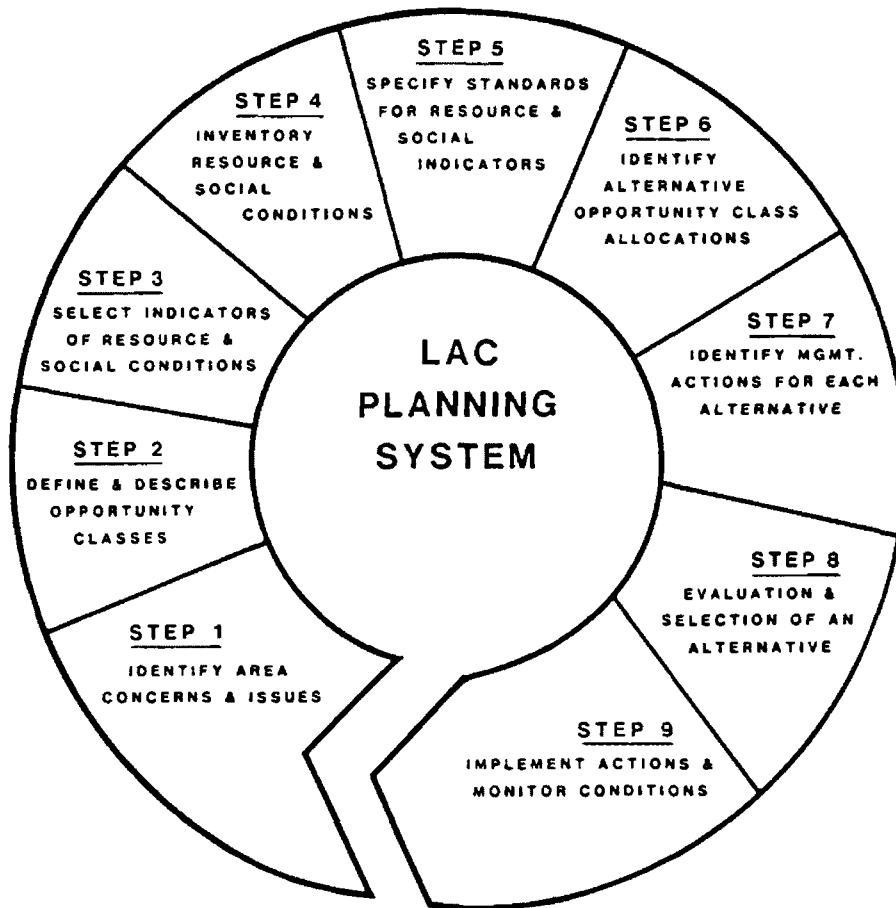


Figure 4. The nine step limits of acceptable change system.

(From Stankey, McCool and Stokes 1984)

"Specific guidelines, standards, and action plans will be developed for managing the wilderness complex based on 'carrying capacity studies'. These studies establish some limit on the kinds and amounts of recreational use that can be tolerated as well as the need for various guidelines and standards" (Appendix 0-2, Lolo National Forest Plan).

The only limits in effect prior to the initiation of the LAC process was a moratorium on the issuance of outfitter permits, and party size limits of no more than 35 head of stock or 15 persons. Maximum length of stay at any one site was two weeks. For the most part, these limitations were more strictly enforced for outfitters than they were for private parties.

In sum, armed with a new approach to wilderness management planning, managers, researchers and citizens began a lengthy process to produce a new recreation management plan for the BMWC that would not only develop solutions to the myriad of problems that faced the area, but also to create an atmosphere in which the solutions and management actions chosen would be implemented in a comprehensive and timely manner.

CHAPTER VI

CASE STUDY RESULTS

Overview

In January 1981, concerns from a few managers began to surface about the need to coordinate the development of a new management plan for the Bob Marshall Wilderness Complex (BMWC). An informal decision was then made by the planning director for the region to jointly develop a management plan for the BMWC. Very little if any progress was made in 1981 other than an increased awareness on the part of the Washington office of the Forest Service to establish a national wilderness policy direction to guide individual Forests in establishing management plans that would adequately address the carrying capacity question and be responsive to NFMA regulations (36 CFR 219.12(f)). A draft of a proposed interim directive was developed in early October and sent to all Regional Foresters.

The planning process in the BMWC was first initiated by a recreation staff officer from the Flathead National Forest. His intent from the beginning was to conduct a transactive style of planning which would include representative publics, researchers and managers early on

and in all subsequent phases of the process. An adhoc planning committee was formed in early 1982, and a meeting held on February 16 and 17. This first meeting represents the point at which this study begins testing for the key elements of Transactive Planning. It should be noted that there will be several incidents mentioned in the following narratives that were critical to the planning process, but not directly related to transactive planning. All were, for the most part, related to intra-agency hoops or procedural hurdles that informally or formally facilitated the continuation of the planning process.

Critical Incident One (FEB. 16, 1982 - MAY 9, 1983)

Critical Incident: February 16 - 17 planning workshop.

The purpose of the first meeting in the planning process was to begin addressing the LAC concept as it pertained to the BMWC. The meeting focused on presenting results of data gathering efforts that had been underway in the BMWC for the past two years. It was hoped that the research efforts would serve as a basis for dialogue among managers, researchers and wilderness users and eventually establish a mutual understanding of the problems and the tasks ahead. After presenting the general LAC concept to

the group, planners initiated a nominal group process to identify important indicators that would serve as the backbone of the plan. The nine step LAC process outlined in the last chapter was just beginning to be developed at this time, hence planners at this stage were somewhat unsure of the specific steps that would usher them through an efficient planning process. The meeting was well attended by all three categories of participants, showing a strong indication of a latent interest in solving management problems in the complex.

In a follow up outline a month later, the Forest Service solicited comments on a proposed planning process that included among its highlights, formation of a citizen task force which would provide the primary leadership role for further planning. Agency personnel would only serve as technical assistants if needed. This approach of emphasizing broad-based citizen leadership and participation in coordinating the planning process was one of the first of its kind to be proposed as a possible route to solve wilderness management problems. An important and necessary first step was to have citizen leaders emerge, and commit themselves to forming a citizen planning team. Despite adequate opportunity given by the agency, a citizen leader did not emerge to keep the planning momentum going. At an annual interforest coordination meeting on March 23 and 24,

the recreation staff officer responsible for originally initiating the process was appointed chairman of an interforest committee to follow-up on the LAC process. He was to serve in this role until September of 1983. The appointment of an intra-agency leader for the planning process represented an important critical incident, but one which had no citizen involvement.

However, citizen initiated public involvement did occur shortly after the February 16 workshop. Three self appointed citizens attempted to organize members of the public who were unaffiliated with any organized group. They held three meetings, with approximately 50 people attending each meeting. Simple surveys were handed out at each meeting to acquire written comments on what the public felt were the priority management concerns in the BMWC. Concern over the trail system, the maintenance of quality fishing and hunting and the number of commercial outfitters surfaced as the major issues the public felt strongly about. While interest was high at these meetings, no additional members of the unaffiliated public were willing to commit time and effort into a long term planning process.

The next significant involvement activity occurred during the week of August 23-29 where a joint agency/citizen field trip was conducted to view and discuss problems in the complex itself. The trip consisted of two groups of participants who traveled on a circuitous route where each group was able to retrace each others steps.

The fall months were largely taken up with presentations about LAC and small meetings and discussions with interested user groups, researchers and other managers. The Bob Marshall Alliance, Montana Wilderness Association, Flathead outfitters, Professional Wilderness Outfitters and Guides and the Missoula and Mission Valley Backcountry Horseman were among the groups contacted during this time. It was after these meetings that the LAC chairperson came to the conclusion that the planning environment was much more complex than he had previously realized. He became convinced at this point in the process that Forest Service personnel involved needed to be more politically sensitive to the variety of concerns held by interested publics. What the planning leader was finding among many groups involved in the process was a large amount of mistrust of Forest Service intentions, capabilities and resources for managing the wilderness resource. He speculated that follow-up brain storming, strategy development and political initiative were sorely needed.

The complexity of the process was not limited to outside of the agency. The remainder of this first interval also saw important things happening politically within the agency. Coordinating planning efforts between 4 different National Forests and 5 ranger districts had its share of problems. Several intra-agency critical incidents occurred between the end of February and the first of May which kept the process alive internally.

First, an adhoc interforest committee meeting was held on February 24, 1983 to draft a formal LAC action/work plan. It was sent out to all the Forests and districts involved for their review and suggested revisions. The action/work plan immediately came into conflict with long range forest plans being drafted at that time for each Forest. In particular, an appendix (0-2) to the Lolo National Forest plan which gave wilderness management direction for the BMWC was viewed by some Forest Service officials as adequately specific and transferable to all other Forest plans involved with administering the BMWC. In some officials minds, the LAC process was therefore merely an unneeded planning exercise and one which conflicted with the 0-2 appendix.

On March 23 and 24, an inter-forest coordination meeting was held where the LAC committee chair attempted to explain to the other Forests what the committee had decided regarding LAC/0-2 appendix/Forest plan interrelationships. Despite not resolving the conflict at this meeting, LAC planning still continued. On April 5 and 6, another LAC committee meeting was held to work on opportunity class definitions, representative areas for each class, preliminary mapping and a public participation plan. Major questions identified at this meeting were as follows:

- What is the relationship between the LAC process, the 0-2 appendix and Forest plans?
- Do we proceed to develop a wilderness management plan that can stand alone in light of the Forest plans possibly being held up due to public controversy.
- Can we implement a wilderness plan tiered to Forest plans that are not officially approved?
- What is the legal and managerial basis for proceeding with the LAC wilderness plan?
- How do we get the wilderness plan written?

Finally the committee chair convened a meeting with his counterparts on other Forests on April 27 in an attempt to get at most of the root causes of the misunderstandings and problems. It proved to be a highly critical, very productive meeting of the minds and resulted in an agreement by all that LAC planning should proceed. Most communication problems and differences related to LAC/Forest planning had been identified and finally resolved.

Analysis of Dialogue Indicators (Interval 1)

1. Authenticity (acceptance of others)

No documented evidence of authenticity was found during this first interval.

2. Integrated Persons (whole person displayed by speech and good faith)

Insufficient evidence was available during this interval to document the presence of this indicator.

3. Conflict Acceptance (difference of viewpoint)

No major conflicts occurred during this interval that related to transactive planning. Conflicts and differing viewpoints within the agency about the efficacy of LAC planning were largely resolved prior to the end of this interval.

4. Communication (conveyance of meaning)

Through the nominal group process initiated at the February 16 workshop, participants were able to quickly and clearly communicate their feelings regarding important indicators for the LAC process.

5. Shared Interest and Commitment (common concern)

Common concern and commitment was shown immediately in the process by the willingness of a large diverse group of citizens, managers, and researchers to meet for two days to begin the initial stages of a long and complex planning effort.

6. Reciprocity (mutual obligation)

Insufficient evidence of reciprocity existed during this first interval.

7. Common Time and Space

All participants attending the February 16 workshop gathered at the same place at the same time. There were two separate groups who participated in a field trip in the BMWC in August. Common space was shown when each group took a different route into the wilderness, but retraced each others steps on the way back out. This allowed both groups to view basically the same areas, and have a common understanding of the problems inherent in those areas. The two groups were able to rendezvous in a central location at a common time halfway through the trip to discuss what they had observed and how the LAC process might address some of the problems they han observed.

Table 1 shows that some evidence of dialogue was able to be documented thereby allowing this author to conclude that, although weak, dialogue did occur during this first interval.

TABLE 1. DIALOGUE INDICATOR EVALUATION FORM

Critical Incident Interval No. 1		Period: February 16, 1982 - May 4, 1983		
Indicator	Indicator Descriptor	Occurred		Documentation
		Yes	No	
<u>Authenticity</u>	<u>Acceptance of others</u>	_____	_____	<u>Insufficient</u>
<u>Integrated persons</u>	<u>Whole person: speech; good faith</u>	_____	_____	<u>Insufficient</u>
<u>Conflict acceptance</u>	<u>Difference in viewpoint</u>	_____	_____	<u>Insufficient</u>
<u>Communication</u>	<u>Conveyance of meaning</u>	X	_____	<u>Workshop Notes 2/16/82</u>
<u>Shared interests and commitment</u>	<u>Common concern</u>	X	_____	<u>Workshop Agenda 2/16/82</u> <u>Attendance List 2/16/82</u>
<u>Reciprocity</u>	<u>Mutual obligation</u>	_____	_____	<u>Insufficient</u>
<u>Common time and space</u>	<u>Here and now</u>	X	_____	<u>Field Trip Attendees Summer 1982</u> <u>Workshop attendees 2/16/82</u>

71

Note: Order of listing implies no hierarchial priority of value.

Analysis of Mutual Learning Indicators (Interval 1)

1. Planner contributions (Processed knowledge)

Concept - The LAC concept was the major planner contribution of the entire planning process. It was first described at several outfitter and guide meetings prior to being presented at the February 16 workshop where it was discussed in depth by managers, researchers, and interested citizen representatives.

Theory - The LAC committee chairperson contributed the transactive planning theory to the process. His intimate knowledge of the theory came from applying Transactive Planning on the Blackfoot River, a recreational setting just south of the BMWC (Stokes, 1982). The initiation of a workshop and a field trip where citizens and agency personnel could discuss their concerns and problems in a intimate face-to-face manner represented a bold new way of approaching wilderness planning.

Analysis - The LAC approach, with its reliance on the use of opportunity classes represented a way of separating the planning environment into subcomponents that could be analyzed with regards to their problems and possible solutions.

New perspectives - While use and impact of the wilderness resource was viewed by most as the main problem, no consensus existed as to how to begin solving the problem. A new perspective, in the form of LAC was brought in by Forest Service managers and researchers who had no vested interest in a particular solution.

Systematic search - Procedures for gathering data prior to this interval included a study of the range resource in the South Fork river valley, a campsite impact study, a Wild and Scenic River use study and a trail counter/camera study designed to determine use levels at several major trailheads. Analyzed data from some of the above studies were presented at the February 16 meeting helping the planning participants to choose realistic indicators for the area. In the summer and fall of 1982, a visitor use characteristic survey was conducted on the entire BMWC, further adding social and environmental information to the data base.

Facilitator/Coordinator - The LAC committee chairperson effectively played the role of facilitator/coordinator for all involved parties. His role in motivating decisions and following up on decisions made at meetings was vital in keeping the planning momentum going during this first interval. Effective and adequate communication was carried

out among citizen representatives, but remained elusive within the agency until problems were identified and largely resolved prior to the May 5 task force meeting.

2. Client Contributions (personal knowledge)

Operational details - Personal knowledge was utilized by the citizen participants throughout the nominal group process. Certain knowledge of details about the actual conditions in the wilderness enabled participants to develop a range of indicators.

Realistic alternatives - The range of indicators that resulted from going through the nominal group process represented realistic characteristics of wilderness use that would effectively serve to measure the "health" of the BMWC. Several alternative solutions to the increasing levels of impact were discussed on the field trip. The alternatives discussed were realistic, each having their inherent drawbacks and costs in terms of affecting one group or another.

Priorities - Citizen representatives identified impacts from horse use as a major planning priority. Specifically tying horses to trees and poor grazing practices were two issues participants felt needed priority attention. A few select areas where these problems were severe were identified as high priority areas. The meetings for the general unaffiliated public, held during this interval also identified two priority concerns, (1) improving conditions on the trail system, and (2) maintaining quality fishing and hunting.

Norms - A norm that was brought to the attention of the LAC coordinator many times during this interval was the prospect of limiting the number of users who entered the complex. Almost all citizens were unanimous in rejecting any plans that might deal with the initiation of a use limit policy or mandatory permit system.

Feasibility judgements - The positive comments received after the February 16 meeting represented a strong signal that most felt the Transactive Planning and LAC approach was a feasible one. However a few participants did express reservations about the capacity of the Forest Service to implement such a plan and monitor its progress.

Receptiveness - Receptivity to the initial idea of sitting down with the Forest Service managers, and all of the various interests involved was shown by the high attendance level at the first LAC workshop. Interest and receptiveness remained high during the summer as a field inspection trip was organized and successfully conducted.

Table 2 shows that all indicators associated with personal and processed knowledge were present during interval 1. A strong indication of the presence of mutual learning.

Critical Interval Two (May 10, 1983 - April 4 1984)

Critical incident: May 10, 1983 Task force meeting.

On May 10, the LAC coordinator convened a second meeting of what was now being formally called the LAC task force. Prior to this meeting, task force members were sent a package of information they were asked to review and bring to the meeting. The information contained in the package had been developed by a core committee of representatives from each National Forest and was based on the material generated at the February 16-17 workshop. One of the primary objectives of the meeting was to validate or where

TABLE 2. MUTUAL LEARNING INDICATOR EVALUATION FORM

Critical Incident Interval No. 1			
Period: February 16, 1982 - May 9, 1983			
Occurrence of Planners Contribution (Processed Knowledge)			
<u>Indicator</u>	<u>Yes</u>	<u>No</u>	<u>Documentation</u>
<u>Concept</u>	<u>X</u>	<u> </u>	<u>McCreedy Field Notes 9/20/82</u> <u>Agenda 2/16/82</u>
<u>Theory</u>	<u>X</u>	<u> </u>	<u>Stokes Write-up 4/11/83</u> <u>Stokes Letter 3/31/82</u>
<u>Analysis</u>	<u>X</u>	<u> </u>	<u>Agenda 2/16/82</u>
<u>New Perspective</u>	<u>X</u>	<u> </u>	<u>Agenda 2/16/82</u>
<u>Systematic Search Procedure</u>	<u>X</u>	<u> </u>	<u>Agenda 2/16/82</u>
<u>Facilitator</u>	<u>X</u>	<u> </u>	<u>Stokes Letter 3/31/82</u> <u>Field Trip Follow-up 9/20/82</u>
Occurrence of Citizen Participants Contributions (Personal Knowledge)			
<u>Indicator</u>	<u>Yes</u>	<u>No</u>	<u>Documentation</u>
<u>Operational Details</u>	<u>X</u>	<u> </u>	<u>Nominal group process notes 2/16/82</u>
<u>Realistic Alternatives</u>	<u>X</u>	<u> </u>	<u>Nominal group process notes 2/16/82</u> <u>McCreedy Field Notes 9/20/82</u>
<u>Priorities</u>	<u>X</u>	<u> </u>	<u>McCreedy Field Notes 9/20/82</u>
<u>Norms</u>	<u>X</u>	<u> </u>	<u>Stokes Letter 1/19/83</u> <u>McCreedy Field Notes 9/20/82</u>
<u>Feasibility Judgments</u>	<u>X</u>	<u> </u>	<u>Stokes Letter 3/31/82</u> <u>Ron Cox Letter 2/21/82</u>
<u>Receptiveness</u>	<u>X</u>	<u> </u>	<u>Attendees 2/16/82-8/23-29/82</u>

Note: Order of listing implies no hierarchial priority of value.

necessary, modify the material that had been developed thus far.

In keeping with a transactive style of planning, managers, researchers and citizens were divided into three discussion groups of approximately 10-12 people each to facilitate a free and open exchange of input and ideas. This author served as a moderator for one of the discussion groups, recording comments and changes participants felt strongly about.

During the spring, summer, and fall months, public involvement activities were composed mainly of presentations to various interest groups such as the Missoula chapter of the Backcountry Horseman.

An internal agency problem that still threatened to hamper the momentum of the planning process at this point was the required signed approval of the LAC action plan by all four Forest supervisors. This critical task was finally accomplished on September 1, 1983 when the fourth supervisor gave written consent to proceed with the planning process outlined in the action plan. From the point where the planning process was first initiated in January of 1982 to the point where this important approval was received, constituted a 19 month span of time.

As early as February of 1983, the LAC chairperson/coordinator envisioned the need, in the near future, for a new facilitator/coordinator to replace what he viewed as too much of a Forest Service dominated operation. Also, as the complexity and time consuming nature of the process continued to increase, it became evident that outside assistance would be needed to complete the process.

In September, the Forest Service contracted with this author and Dr. Stephen McCool, a professor of wildland recreation management from the University of Montana to take over the role of facilitating and coordinating the process. This arrangement represented this author's formal involvement as a participant observer and assistant coordinator. Because a natural leader never emerged among the citizen participants, the leadership role was largely retained by the agency coordinator. The securing of an adequate amount of funds to hire this outside assistance represented another agency related critical incident that was needed to keep the process on track.

A problem immediately identified by the new coordinator's as needing attention was the overly long length of time between task force meetings. At a December 1 and 2 interforest core team meeting, it was decided that small sub groups that could meet on a more frequent basis

needed to be formed. In addition, the core team discussed the "Inform and Involve" plan to go along with the LAC action plan, plus the creation of a slide tape presentation and informational brochure on the 9 step LAC process.

On December 12, a small subgroup of citizen representatives from Missoula was convened (9 individuals, including this author and the LAC coordinator). Another small subgroup meeting was held in Kalispell on January 5 that contained an equal number of people. The major objectives of both meetings were to inform participants of the progress being made, to identify their concerns and to discuss with them the near future agenda of the planning process. Good support was shown for the LAC process itself, however many citizens expressed the desire to develop more of a partnership with the Forest Service. They wanted to see concrete steps toward this type of citizen participation and visible Forest Service responsiveness to their concerns. A January 4 meeting with the Professional Wilderness Outfitters Association was also the first time the newly completed slide-tape program was presented to any members of the public.

The slide-tape program proved to be a valuable educational tool that was immediately put to use. The Missoula chapter of the Sierra Club and local and national chapters of the Backcountry Horseman were among a few of the groups who viewed the program during this interval. As a result of the task force meetings, small sub-group meetings and many other informal discussions, a first round draft plan was drawn up. It incorporated information completing a draft of the first 5 steps of the LAC process.

Between January 26 and February 9, meetings were held with the Missoula and Kalispell citizen sub-groups. It was during these meetings that draft plan I was first presented to the citizen participants for review and comment. Substantial discussion was held on the heart of the LAC process, primarily the indicators proposed to measure the health of the wilderness. They still generated misunderstanding in some peoples minds as to what they were, the purpose they served, and their general validity. Trail conditions were brought up by both groups as well as other issues such as integration of LAC with other wilderness management concerns such as fire and wildlife.

In order to address concerns relating to more of a Forest Service citizen transactive partnership in actually creating the plan, a move was made within the agency to foster such an atmosphere. Up to this point in the planning process, no interforest core team meeting had ever included citizen representatives. It was decided that such a meeting should be organized and conducted. It was to include 6 key citizen members representing a broad diversity of interests plus all members of the agency core team.

To organize material for such a meeting, a core team meeting was held on February 22-23. Comments received from citizens on the draft plan were discussed and preliminary standards for each indicator were then developed. Also developed at this meeting was an opportunity class map that reflected what managers could live with under current budget and manpower constraints. The map was presented to the citizens who attended the core team meeting on April 6.

Analysis of Dialogue Indicators (Interval 2)

1. Authenticity (acceptance of others)

The May 10 task force meeting, which represented the beginning of this interval, showed almost a doubling of citizen participation. Despite the increase in size and

diversity, only one incident occurred that could be construed as lack of authenticity. One individual within the group used the meeting to stump for user fees and a use limit policy for the non-outfitted wilderness users. He was rebuked by a citizen member of the task force for raising an issue totally unrelated to the meeting agenda. He was therefore not accepted as authentic by most task force members. The participant observer (this author) noted in most other participants at the May 10 task force meeting, and in subsequent sub-group meetings, an acceptance of the diverse range of interests. Due to this observed acceptance among a now expanded and more diverse group, authenticity was a strong part of the dialogue that took place during this interval.

2. Integrated Persons (whole person displayed by speech and good faith)

The views expressed during all meetings where citizen participants were present were generally conveyed sincerely and in good faith. Many had dealt with each other in similar circumstances so were better able to discern what exactly was being voiced. The willingness to continue

working together throughout this interval showed in part that dialogue occurring during meetings was accepted in good faith.

3. Conflict Acceptance (difference in viewpoint)

The idea to control and regulate private users and to charge them a fee for entering the wilderness, voiced by one individual at the May 10 task force meeting was not accepted by most members of the task force. Most participants agreed with focusing on devising a plan where non-regulatory measures would be used to begin solving the problems in the BMWC. However, most of the outfitters and guides present agreed partially with the notion that the non-outfitted public should be regulated in some way, similar to the way they were. Many felt it was unfair they were so heavily regulated and the public was not. This difference in viewpoint between two major factions of the task force largely remained throughout this interval.

4. Communication (conveyance of meaning)

In the May 10 task force meeting and the 5 sub-group meetings that were held during this interval, participants clearly and sincerely communicated their concerns both to planners and other members of the planning team. As a

result of the vast amount of meaningful dialogue that took place during this interval, great progress was made in advancing toward the latter steps of the LAC process.

5. Shared Interests and Commitment (common concern)

A commitment to the planning process was shown by the very strong attendance at the May 10 task force meeting. That individuals with diverse interests continued to meet throughout this interval was indication of a common commitment to continue BMWC planning.

6. Reciprocity (mutual obligation)

While the Forest Service indicated its obligation to the process by signing the action plan and allocating funds for outside assistance, citizen participants also showed their obligation by continuing to meet with the LAC coordinator. This level of commitment from both sides indicated a mutual obligation to continue pursuing planning efforts and to develop a sense of shared ownership in the BMWC management challenge.

7. Common Time and Space

Participants met at the same time and at the same place for the May 10 task force meeting. Smaller subgroup meetings, while lacking the total group, did include representatives from most of the major interest groups represented on the larger task force.

Table 3 shows that conflict acceptance was the only indicator that was not sufficiently documented during interval 2. Strong documentation of other indicators shows that dialogue was present during this interval.

Analysis of Mutual Learning Indicators

1. Planner Contributions

Concept - Planners and managers continued to provide new concepts during this interval. Wilderness land type association related to soils capability was a concept put forth at the May 10 task force meeting.

Theory - Techniques associated with the application of Transactive planning theory were applied more rigorously during this interval. Subgroup, core team meetings and numerous one-on-one discussions all initiated by the LAC

TABLE 3. DIALOGUE INDICATOR EVALUATION FORM

Critical Incident Interval No. 2		Period: May 10, 1983 - April 5, 1984		
Indicator	Indicator Descriptor	Occurred		Documentation
		Yes	No	
<u>Authenticity</u>	<u>Acceptance of others</u>	<u>X</u>	<u> </u>	<u>Small group notes 5/10/83</u> <u>Notes--Subgroups-12/15/83-1/5/84</u>
<u>Integrated persons</u>	<u>Whole person: speech; good faith</u>	<u>X</u>	<u> </u>	<u>Notes 1/12/84</u> <u>Small group notes 5/10/83</u>
<u>Conflict acceptance</u>	<u>Difference in viewpoint</u>	<u> </u>	<u>X</u>	<u>Task Force Notes 5/10/83</u>
<u>Communication</u>	<u>Conveyance of meaning</u>	<u>X</u>	<u> </u>	<u>Subgroups 12/15/83-1/26/84</u> <u>Notes 5/10/83-2/9/84</u>
<u>Shared interests and commitment</u>	<u>Common concern</u>	<u>X</u>	<u> </u>	<u>Subgroups 12/15/83-2/9/84</u> <u>Notes 5/10/83</u>
<u>Reciprocity</u>	<u>Mutual obligation</u>	<u>X</u>	<u> </u>	<u>Subgroups 12/15/83-1/26/84</u> <u>Action Plan 8/4/83-9/1/83</u>
<u>Common time and space</u>	<u>Here and now</u>	<u>X</u>	<u> </u>	<u>Agenda 5/10/83</u>

Note: Order of listing implies no hierarchial priority of value.

coordinator exemplified a transactive style of planning.

Analysis - The problems identified at the May 10 task force meeting and subsequent smaller meetings were analyzed and incorporated into the first draft plan. The LAC coordinator also collected and analyzed inventory data with which he compiled a set of existing condition maps of each resource and social indicator. Managers then analyzed this set of maps and compiled an opportunity class map that reflected current conditions considering present funding and manpower levels.

New perspective - The new LAC coordinator brought in to continue facilitating the planning process, was able to objectively evaluate the planning environment and bring a new perspective to the effort. Examples include presenting different perspectives and examples of possible standards and how they might appear mapped in a portion of the BMWC. Not having a vested interest in any particular outcome, the LAC coordinator was able to bring to the planning effort a new perspective.

Systematic search procedures - During this interval, inventory data were gathered from all five ranger districts, plus from Forest Service researchers. The data was formulated into existing condition inventory maps and a set

of proposed standards was submitted to task force members. These efforts constituted systematic search procedures.

Facilitator - The LAC coordinator and this author, aided by the agency leader, effectively facilitated the efforts of the LAC planning team. Operating in somewhat of a neutral role, the LAC coordinator acted as a go-between among Forest Service managers and citizen representatives, organizing meetings, collecting information and following through on recommendations and decisions.

2. Client contributions

Operational details - Most of the citizen representatives on the planning team visit the BMWC annually or conduct commercial operations in the complex itself. Many had personal knowledge to offer that reached back 30 years or more. Numerous times during this interval these individuals contributed this knowledge to the planning effort. Concerns voiced at the various meetings were site specific, reflecting an indepth knowledge and personal understanding of the planning environment. Examples included recommended changes on the preliminary opportunity class map.

Realistic alternatives - For the May 10 task force meeting, an interforest committee compiled a packet of information to be reviewed and discussed. Alternatives were presented for various unacceptable aspects of this packet. These alternatives were later incorporated into the first draft plan. Trail management still presented a dilemma as to whether or not to create an indicator to manage this part of the resource. A realistic alternative was presented at a February 9 sub-group meeting that involved the outlining of what the trail system ought to look like, and then writing prescriptions to achieve such a system over time. This alternative was eventually accepted by planning team members.

Priorities - One priority consistently voiced throughout this interval concerned the need to develop more of an agency/citizen partnership role in planning. Another priority concerned an issue that everyone agreed was a serious problem, poor trail conditions. This issue was initially addressed by a "trail statement" of conditions and alternatives compiled by the LAC coordinator. Moves were also made within the agency to improve communication and find ways to more effectively incorporate citizen expertise into the planning process.

Norms - From the personal experience and familiarity with past management in the BMWC, most citizens by this time perceived current manpower and funding levels to be inadequate to properly implement LAC. A norm voiced many times during this interval was that professionally qualified people were needed to conduct further inventory and monitoring work. Adequate funds to employ these people and carry out a workable program was viewed as a vital key to successful implementation of the management plan.

Feasibility judgements - Numerous concerns and questions were raised during this interval that dealt with many aspects of the LAC planning process. Despite many questions, those that understood the process continued to strongly support the feasibility of at least trying a system they viewed as better than anything that had been tried in the past.

Receptiveness - Continued receptivity to the process was shown on the part of citizen participants in their willingness to meet frequently in small sub-groups to discuss LAC and ongoing planning efforts. They were also receptive to the addition of a new LAC coordinator and this author to the planning process, both of whom were from outside the agency.

Table 4 shows that all indicators associated with personal and processed knowledge were present during interval 2. This strongly indicates that mutual learning during this interval has taken place.

Critical Interval Three (APRIL 6, 1984 - JUNE 7, 1984)

Critical incident: April 6, 1984 Citizen/agency core team meeting

On April 6, one of the most important meetings of the entire planning effort was held. It was important because it was an interforest core team meeting that included 7 citizen representatives. The meeting's primary objective was to jointly develop two opportunity class map alternatives; one that reflected a maximization of pristine opportunities and a second that reflected a maximization of recreational opportunities. The meeting was important from a transactive planning perspective because it was organized as a task-oriented working group situation in which small groups of both managers and citizens were involved in developing part of step 6 of the LAC process. Small task-oriented working groups where intimate dialogue is exchanged and a mutual learning process occurs is a fundamental aspect of a transactive style of planning. Its success in achieving a higher level of mutual learning with

TABLE 4. MUTUAL LEARNING INDICATOR EVALUATION FORM

Critical Incident Interval No. 2			
Period: May 10, 1983 - April 5, 1984			
Occurrence of Planners Contribution (Processed Knowledge)			
<u>Indicator</u>	<u>Yes</u>	<u>No</u>	<u>Documentation</u>
<u>Concept</u>	<u>X</u>	<u> </u>	<u>Agenda 5/10/83</u>
<u>Theory</u>	<u>X</u>	<u> </u>	<u>Meeting Notes 1/4/84</u> <u>Subgroups 12/15/84-1/26/84</u>
<u>Analysis</u>	<u>X</u>	<u> </u>	<u>Draft Plan I 12/15/83</u> <u>Memo 1/5/84</u>
<u>New Perspective</u>	<u>X</u>	<u> </u>	<u>Core Team 12/1/83-2/22/84</u> <u>Notes 10/20/83</u>
<u>Systematic Search Procedure</u>	<u>X</u>	<u> </u>	<u>Core Team 2/22/84</u> <u>Memo 1/5/84</u>
<u>Facilitator</u>	<u>X</u>	<u> </u>	<u>Core Team 2/22/84</u> <u>Subgroups 12/15/83-3/29/84</u>
Occurrence of Citizen Participants Contributions (Personal Knowledge)			
<u>Indicator</u>	<u>Yes</u>	<u>No</u>	<u>Documentation</u>
<u>Operational Details</u>	<u>X</u>	<u> </u>	<u>Notes 2/9/84</u> <u>Notes 5/10/83</u>
<u>Realistic Alternatives</u>	<u>X</u>	<u> </u>	<u>Notes 2/9/84</u> <u>Notes 5/10/83</u>
<u>Priorities</u>	<u>X</u>	<u> </u>	<u>Notes 1/4/84, Letter 1/31/84</u> <u>Subgroup 12/15/83</u>
<u>Norms</u>	<u>X</u>	<u> </u>	<u>Subgroup 1/12/84</u>
<u>Feasibility Judgments</u>	<u>X</u>	<u> </u>	<u>Subgroup 1/12/84</u>
<u>Receptiveness</u>	<u>X</u>	<u> </u>	<u>Subgroup Notes 12/15/82-3/29/84</u>

Note: Order of listing implies no hierarchial priority of value.

regards to opportunity class mapping was summed up that day by a citizen representing the outfitting industry.

"This exercise today was a pretty serious learning experience that was very important. I feel the task force should go through this mapping exercise as well."

More importantly, the experience and knowledge gained from this meeting enabled citizens who attended, to return to their constituents and guide them through creating their own preferred opportunity class map alternatives. During this interval, maps were drawn up by four groups: The Missoula and Kalispell chapters of the Backcountry Horseman, the Montana Wilderness Association and the Swan Valley Citizens Group.

Prior to this time, no sub-groups had been formed in Lincoln, a small community flanking the Southern portion of the complex. The installation, in the district office in Lincoln, of a new Forest Service ranger interested in citizen involvement, initiated a flurry of new activity in this area. A Lincoln sub-group was formed, and met six times during this two month interval.

This interval also saw the retirement of the Forest supervisor from the Flathead National Forest, the Forest responsible for managing most of the BMWC. This caused a ripple of uncertainty among citizen members, leary of a replacement who may thwart their efforts at completing the LAC process. The value of an active group of influential citizens, supportive of the process was shown when several citizen members voiced their concern to the Regional Forester. They were assured that the incoming supervisor would be thoroughly briefed of their planning efforts and the importance of a successful program in the BMWC. The new supervisor, in fact, proved to be highly supportive of agency/citizen cooperative planning efforts.

On April 24, another LAC task force meeting was held with approximately 37 people attending. The primary focus of the meeting was to examine the proposed standards, develop areas of agreement and identify places of disagreement. There was substantial agreement and acceptance concerning the range of proposed standards except one: "the amount of barren soil core (ft. square) in any five acre area in any section". This indicator was of particular concern to the commercial outfitters, most of whom operated in large, permanent camps with horse corrals. In hopes of resolving the disagreement, a team of citizens volunteered to meet and try to come up with an acceptable

proposed standard for this controversial indicator. All in all, more enthusiasm was shown at this task force meeting than at any other; so much so that members agreed to have another task force meeting to resolve any unfinished business before the 1984 summer field season began.

During the meeting, this author also dispensed theory evaluation surveys to participants who had been involved in the process for at least six months (See appendix A). Most of the documentation of dialogue and mutual learning in this interval will come from the results of the theory evaluation survey. Although the questions asked and statements posed on the survey pertained to "all incidents" and meetings that had occurred in the planning process "thus far", this author will be applying some survey results to this interval only.

Analysis of Dialogue Indicators (Interval three)

1. Authenticity (acceptance of others)

Results from the theory evaluation survey (TES) revealed that approximately 62% of task force members agreed or strongly agreed with the following statement: I feel my views have been readily accepted by the diverse make up of individuals on the task force. Thirty three percent felt

neutral about the statement and only three respondents disagreed out of a total of 36 participants. These results show that most participants accept each others views about planning for the BMWC.

2. Integrated Persons (whole person displayed by speech and good faith)

Comments in all meetings by most participants were in most cases conveyed sincerely and in good faith. This statement, posed to participants on the TES revealed almost 80% agreeing or strongly agreeing with it. A similar statement "Comments in all meetings by all participants were in most cases conveyed in an open manner", showed an even higher percentage (83%) of participants agreeing or strongly agreeing this was the case. An excellent example of sincere dialogue occurred at the April 24 task force meeting, where a citizen participant rose to the podium to give a speech. He related to those present that he had had two occupations in his life and that he was now involved in his third occupation; a full time citizen participant. The value of citizen participation, he related, is all important in what we are trying to accomplish here.

3. Conflict Acceptance (difference of viewpoint)

Two statements were posed on the TES to gain insight into this particular indicator. (1) All parties involved in the planning process have for the most part accepted the differing viewpoints of others. (2) All participants in the planning process have for the most part accepted the right of other to express opposing views. The former statement was agreed to by only 53% of the respondents, while the later showed that 92% of the respondents either agreed or strongly agreed. In short, the TES revealed that while not all task force members agreed with each others viewpoints, they do strongly accept the right of others members to express those views. These results show that relationships in which conflicting viewpoints were accepted was shown to be present among many of the planning participants.

4. Communication (conveyance of meaning)

The concerns of citizen representatives, contained in dialogue communicated to managers and the LAC coordinator were acknowledged and acted upon numerous times during this interval. At the April 6 citizen core team meeting, it was communicated that as many opinions and concerns should be reflected in the opportunity class maps as possible. Managers then agreed to let 5 different citizen groups draw

up their own opportunity class maps.

The TES revealed that 19% of the task force members felt citizens had "always" clearly conveyed their concerns about LAC management in the BMW. Seventy two percent felt concerns had been conveyed clearly "most of the time." When asked the frequency at which participants had been kept informed about progress being made; 53% responded "always". Forty four percent felt participants had been kept abreast of ongoing progress "most of the time." The TES also revealed almost 75% of respondents agreed or strongly agreed that citizen concerns had been incorporated into the draft plan thus far.

Finally, when asked what they felt had been the overall successes of the planning process thus far, numerous responses related to communication were given. They are listed as follows:

1. Sincere effort by the Forest Service to listen to citizen concerns.
2. The repeated conveying of available information.
3. Development of communication lines to Forest Service officials.
4. Citizen concerns being effectively expressed to the land manager.

5. Shared Interests and Commitment (common concern)

To determine the presence of this dialogue indicator, the following statement was posed on the TES: There is a shared interest and commitment among all parties involved in the planning process to produce a plan that will adequately begin to address recreation management problems in the BMWC. Almost 30% of the task force members strongly agreed with the statement with another 58% agreeing. In short, almost 90% of TES respondents reacted positively toward this statement. Common concern was also shown in the almost unanimous decision to meet as a task force one more time before the summer field season. A sincere show of commitment and common concern considering many task force citizen members sacrificed a days work to participate in BMWC planning.

6. Reciprocity (mutual obligation)

As of April 6, 1984 (the beginning of this interval) almost two and one half years of joint citizen/agency planning had occurred. Had there developed after this period of time a relationship of mutual obligation and reciprocal give and take among task force members? Almost 75% of the TES respondents seemed to agree that it had. This was manifested at the April 24 task force meeting where

a considerable amount of give and take was shown in accepting most of the proposed range of standards. The high level of commitment shown by members who voted to meet as a group during the busy summer month of June also indicated a mutual obligation to proceed with BMWC planning as expeditiously as possible.

7. Common Time and Space (here and now)

Although numerous sub-group meetings were held in Lincoln to bring a community of interested people into the process, the larger task force meeting on April 24 represented all of the various interests involved, including representatives from this new group. Most TES respondents also indicated they felt there had been an adequate representation of all interests at all major meetings where comments were gathered and ideas shared.

Table 5 shows the results of the questions asked on the TES that pertain to the indicators associated with dialogue. Table 6 shows that dialogue did occur during this interval.

Analysis of Mutual Learning Indicators

1. Planner Contributions

Concept - Planners introduced the concept of nondegradation or the "prevention of significant deterioration" during this

Table 5. BMWC theory evaluation survey results from statements testing for Dialogue. (Percentages)

N = 36	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I feel my views have been readily accepted by the diverse makeup of individuals on the task force.	2.8	58.3	30.6	5.6	2.8
Comments in all meetings by all participants were in most cases conveyed sincerely and in good faith.	16.7	61.1	16.7	5.6	--
All parties involved in the planning process have for the most part accepted the differing viewpoints of others.	--	52.8	13.9	33.3	--
The concerns of the citizen representatives have been effectively incorporated into the plan <u>thus far</u> .	14.3	60.0	11.4	14.3	--
There is a shared interest and commitment among all parties involved in the planning process to produce a plan that will adequately begin to address recreation management problems in the Bob Marshall wilderness complex.	27.8	58.3	11.1	2.8	--
A relationship of mutual obligation and reciprocal "give and take" exists between the task force members.	5.6	66.7	25.0	2.8	--
There has been an adequate representation of all interests at all interests at all major meetings where comments were gathered and ideas shared.	11.1	50.0	11.1	22.2	5.6
Comments in all meetings by all participants were in most cases conveyed in an open manner.	13.9	69.4	13.9	2.8	--

Table 5. (cont.)

N = 36	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
All participants involved in the planning process have for the most part accepted the right of others to express opposing views.	16.7	75.0	5.6	2.8	-
	Always	Most the time	Sometimes	Never	
The citizen representatives have clearly conveyed their concerns about LAC management in the Bob Marshall Wilderness Complex.	19.4	72.2	8.3	--	
All participants in the planning process have been kept informed about the progress being made.	52.8	44.4	2.8	--	

TABLE 6. DIALOGUE INDICATOR EVALUATION FORM

Critical Incident Interval No. 3		Period: April 6, 1984 - June 7, 1984		
Indicator	Indicator Descriptor	Occurred		Documentation
		Yes	No	
<u>Authenticity</u>	<u>Acceptance of others</u>	<u>X</u>	<u> </u>	<u>Survey May 1984</u>
<u>Integrated persons</u>	<u>Whole person: speech; good faith</u>	<u>X</u>	<u> </u>	<u>Task Force meeting notes 4/24/84</u> <u>Survey May 1984</u>
<u>Conflict acceptance</u>	<u>Difference in viewpoint</u>	<u>X</u>	<u> </u>	<u>Survey May 1984</u>
<u>Communication</u>	<u>Conveyance of meaning</u>	<u>X</u>	<u> </u>	<u>Survey May 1984</u> <u>Citizen Core Team notes 4/6/84</u>
<u>Shared interests and commitment</u>	<u>Common concern</u>	<u>X</u>	<u> </u>	<u>Task Force notes 4/24/84</u> <u>Survey May 1984</u>
<u>Reciprocity</u>	<u>Mutual obligation</u>	<u>X</u>	<u> </u>	<u>Task Force notes 4/24/84</u> <u>Survey May 1984</u>
<u>Common time and space</u>	<u>Here and now</u>	<u>X</u>	<u> </u>	<u>Survey May 1984</u>

Note: Order of listing implies no hierarchial priority of value.

interval. Although the concept is an inherent part of the LAC process, it had not been fully articulated to the citizen participants until this time.

Theory - Transactive planning theory continued to be applied by the LAC coordinator during this interval. The process was strengthened by the inclusion of a new sub-group who represented the Southern portion of the BMWC. Six small (8-10 individuals) meetings were held with this group in less than two months in hopes of bringing this group up to the knowledge level of the rest of the task force and to incorporate their specific concerns into the process. The citizen/agency core team meeting held on April 6 represented the most important meeting to date with regards to the most desirable format for promoting mutual learning.

Analysis - Very important analysis work occurred during this interval with regards to opportunity class mapping. After receiving the opportunity class map alternatives created by the four citizen groups, managers set about the task of analyzing the four maps and comparing them for differences. A "difference map" was drawn up and decisions made regarding areas of conflicting opportunity class allocation. Using This difference map and their previously created "current conditions" map, managers were able to create an alternative

map that held a composite of preferences from both managers and a variety of citizen groups. The map was termed the "composite alternative."

New perspective - The core team of managers plus the LAC coordinator provided two possible new perspectives on how alternative opportunity class allocation maps could be created (step 6 in the LAC process): (1) map an alternative that maximized pristine conditions, and (2) one that maximized recreational use levels. These two alternatives were created at the citizen core-team meeting. Managers had no vested interest in a particular outcome of the mapping exercise other than the allocation for both alternatives be realistic.

Systematic procedures - Systematic search procedures were shown in two areas during this interval. First, once the LAC coordinator was informed that a new group of interested citizens wanted to become involved, a series of meetings was organized whereby their concerns could be voiced and views heard. Second, managers and coordinator's set up a series of systematic procedures to gather opportunity class allocation preferences and information in order to initiate step 6 of the LAC process.

Facilitator - The LAC coordinator's facilitating activities were numerous during this interval. They included a very important citizens core team meeting, an issue resolution meeting, six small subgroup meetings in Lincoln, and presentations to the Professional Wilderness Outfitters and the Department of Fish, Wildlife and Parks. A core team meeting and task force meeting were also organized and held during this interval.

2. Client contributions

Operational details - Personal knowledge of details of the planning environment was shown many times during this interval. The provision of personal knowledge occurred in a very important way when a group of citizens participated with managers in mapping opportunity class alternatives. At this meeting, groups were also asked to list areas where standards were being violated for both alternatives they were creating. An indepth knowledge of many of the problem areas enabled citizens to aid managers in choosing management actions for these areas.

A question on the TES was posed as follows: My personal knowledge of the Bob Marshall Wilderness Complex

has been utilized in the planning process. When selecting for citizen task force members only, over 80% either agreed or strongly agreed their personal knowledge had been utilized.

Realistic alternatives - After gaining the knowledge required to do their own mapping, citizen members of the core team led their groups in mapping out four different alternatives. All four alternatives proved to be realistic in nature, and were used by managers to compile the composite alternative. Being unable to decide on a realistic alternative for a barren core area standard, citizens on their own initiative formed a small task oriented working group. The proposed alternatives they presented to the task force were all considered as realistic possibilities for inclusion into the final plan.

Priorities - Much insight was gained from the TES regarding priorities of citizen participants. Far and above the most frequently mentioned priority problem that citizens felt LAC must be directed toward solving dealt with overuse and abuse of the wilderness resource by users. Education of the visitors in proper use of the wilderness resource was also a very high priority citizens felt should be strongly stressed. The planning priority related specifically to this interval was the development of a reasonable range of

proposed standards for the barren core area indicator that would satisfy outfitters as well as private horse and hiker interests.

Norms - When the April 24 task force was unable to come to agreement on an acceptable standard for barren core area, a committee was formed to resolve the conflict and recommend a range of acceptable alternatives. This norm was deemed acceptable by the task force. Had it not been deemed an acceptable way of guiding this issue to a resolution, it more than likely would have gone unresolved until late fall.

Feasibility judgements - Respondents were asked on the TES how likely they felt the chances were of implementing and carrying out a management system such as LAC. Twenty one percent felt it was "highly likely", 47% felt it was "likely", 21% were neutral and 11% felt it was "unlikely." In short, most felt the plan being drawn up had a good chance of being carried out. When asked why they responded the way they did, most of the optimists mentioned the practicality of the LAC concept and the deep level of commitment that had been generated due to citizens and managers working together. The skeptics mentioned lack of proper funding levels and trained professionals in the field as their major reasons for doubting the feasibility of implementing the final plan.

Receptiveness - Citizens were very receptive when asked if they would like to join the core team in mapping out opportunity class alternatives. Although the exercise was a tough learning experience about the difficulties of mapping, receptivity to the task remained high as evidenced by the production of citizen initiated and constructed alternatives. Task force members were also receptive to the idea of a small citizens task force to tackle the barren core area problem. Also, 95% of the TES's distributed to citizens were returned, another indication that receptiveness was present during this interval.

Several statements were included on the TES that did not directly relate to any particular indicator but served to gauge the occurrence of mutual learning in a more broad sense. For example, 81% of the respondents strongly agreed or agreed that the knowledge gained about the LAC process from others on the task force, better enabled them to be more effective participants. When asked simply whether mutual learning about most aspects of the planning process had occurred among task force members, all respondents agreed that it had (30% strongly agreed). The results from the statement posed on the TES that pertain to mutual learning are shown in table 7. Table 8 shows there is strong evidence mutual learning occurred during this interval.

Table 7. BMWC Theory Evaluation Survey Results from statements testing for Mutual Learning (Percentages).

N = 36	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Knowledge gained about the LAC process from others on the task force has better enabled me to be a more effective participant.	27.8	52.8	16.7	2.8	-
Mutual learning about most aspects of the planning process has occurred among task force members.	30.6	69.4	--	--	--
My personal knowledge of the Bob Marshall Wilderness Complex has been utilized in the planning process.	22.2	52.8	19.4	5.6	--

TABLE 8. MUTUAL LEARNING INDICATOR EVALUATION FORM

Critical Incident Interval No. 3			
Period: April 6, 1984 - June 7, 1984			
Occurrence of Planners Contribution (Processed Knowledge)			
<u>Indicator</u>	<u>Yes</u>	<u>No</u>	<u>Documentation</u>
<u>Concept</u>	<u>X</u>	<u> </u>	<u>Memo 4/21/84</u>
<u>Theory</u>	<u>X</u>	<u> </u>	<u>Lincoln subgroup 4/11/84-6/4/84</u> <u>Citizen Core Team 4/6/84</u>
<u>Analysis</u>	<u>X</u>	<u> </u>	<u>Activity Report</u> <u>4/1/84 - 4/30/84</u>
<u>New Perspective</u>	<u>X</u>	<u> </u>	<u>Citizen Core Team 4/6/84</u> <u>Core Team 4/5/84</u>
<u>Systematic Search Procedure</u>	<u>X</u>	<u> </u>	<u>White Paper, Sept. 1984</u>
<u>Facilitator</u>	<u>X</u>	<u> </u>	<u>White Paper, Sept. 1984</u>
Occurrence of Citizen Participants Contributions (Personal Knowledge)			
<u>Indicator</u>	<u>Yes</u>	<u>No</u>	<u>Documentation</u>
<u>Operational Details</u>	<u>X</u>	<u> </u>	<u>Survey, May 1984</u> <u>Citizen Core Team 4/6/84</u>
<u>Realistic Alternatives</u>	<u>X</u>	<u> </u>	<u>Opportunity Class Maps 4/20/84</u>
<u>Priorities</u>	<u>X</u>	<u> </u>	<u>Survey, May 1984</u>
<u>Norms</u>	<u>X</u>	<u> </u>	<u>Task Force 4/24/84</u>
<u>Feasibility Judgments</u>	<u>X</u>	<u> </u>	<u>Survey, May 1984</u>
<u>Receptiveness</u>	<u>X</u>	<u> </u>	<u>Task Force 4/24/84</u> <u>Citizen Core Team 4/6/84</u>

Note: Order of listing implies no hierarchial priority of value.

Critical Interval Four (June 8, 1984 - January 25, 1985)

Critical incident: June 8 task force meeting.

As recommended by citizen representatives and agreed to at the April 24 task force meeting, another general task force meeting was held on June 8th. The objective of the meeting was to discuss the tentative composite opportunity class map, indicators and standards, and management actions that were to be reviewed on-the-ground for the summer field season. The new forest supervisor for the Flathead National Forest gave opening remarks in support of the approach of using a task force of managers, researchers and interested citizens in planning for the wilderness.

A barren core area indicator committee representative gave the recommendations on this issue to the task force. An extensive discussion was held on the rest of the standards in regards to how they were to be measured and what management actions would be taken when. A high level representative from the Fish, Wildlife and Parks was also present to address the concerns of several task force

members who felt fish and wildlife populations needed explicit consideration in the plan. Using the composite opportunity class map as a guide, the group divided into 5 small working groups to develop tentative management actions for problem areas they were familiar with. Citizen participants were encouraged to add to a list of management actions that were displayed before the group.

As a result of increased awareness by the outfitters and guides, nine of them showed up at this June 8 meeting where only 2 or 3 had shown up previously. The reaction from other interest group representatives was less than positive as many had assumed the task force membership was limited to only 2 or 3 representatives from each interest group. This somewhat informal agreement hadn't been stressed in past meetings. The overstacking by this one interest group alerted planners to make mention of the informal rule to task force members for the next general meeting.

A few members who were going to be spending time in the BMWC during the summer months decided a seminar on how to measure campsite impacts would be beneficial in order to be able to conduct some campsite inventorying on their own. The seminar was held mid June and was poorly attended.

At the end of July, the LAC coordinator and several task force members and Forest Service personnel took an inspection trip into the complex to objectively examine areas of concern and discuss appropriate methods of alleviating problems. The LAC coordinator conducted a session on LAC planning one day. The talk centered mostly on outfitter camp management and big game hunting and management.

By fall, the LAC coordinator and this author had analyzed and responded to most of the concerns that had arisen that year. A second draft plan, incorporating these concerns was completed in late September along with a "white paper" describing where the plan had been revised as a result of input from citizen task force members. The agency core team met on November 16 to develop the LAC work schedule for 1985. It was then agreed that the core team would consult with citizen members of the task force on how business would be conducted in the next series of general meetings. On November 30, discussions were held with three citizen members of the task force on the format for arriving at a consensus on indicators and standards and the mapped composite opportunity class alternative. The objective of the next task force meeting was to arrive at a consensus on these important portions of the plan.

On December 7, the latest draft plan was sent to the task force members, accompanied by a letter informing them of the time schedule for completing the final draft. Prior to the January task force meeting, a workshop on LAC was held for the wilderness rangers and backcountry workers. During the mid winter months, sub group meetings were held in Missoula and Lincoln.

Analysis of Dialogue Indicators (Interval 4)

1. Authenticity (acceptance of others)

The task force increased in size at the June 8 meeting, disproportionately favoring the outfitters and guides. These new participants, who had little or no previous knowledge of LAC, were regarded by a few regular task force members as inappropriate at this stage in the process. Acceptance of regular members of the task force continued throughout this interval. This was not extended to the uninvited participants who showed up at the June 8 meeting.

2. Integrated person(s) (whole person displayed by speech and good faith)

The issue of establishing a framework within LAC to deal with fish and wildlife populations was finally

discussed in length on June 8. A representative from Fish, Wildlife and Parks (F.W.Ps) agreed there should be limits of acceptable change established for fish and game populations. He outlined the issues that would needed to be looked at carefully to deal with the problem. His assurances that a group within his agency would be assembled to deal with the problem, were at that time accepted in good faith by the task force members. Later in the interval however, the same F.W.Ps representative presented a paper to the Montana Wilderness Association Convention where he seriously questioned many aspects of the LAC process and how the process was being handled. The firestorm of controversy that ensued after this paper was given did more than any one act to damage the credibility of the LAC process, and the planners involved. At the end of this interval, no group or committee within F.W.Ps had been assembled to deal with fish and wildlife problems in the wilderness. Hence, the sincerity and good faith of his earlier statements continued to be held suspect during the later part of this interval.

3. Conflict acceptance (difference in viewpoint)

Despite the differing viewpoints held by the representative from F.W.Ps, the conflict was resolved prior to the end of this interval. The conflict was largely overcome by agreeing to continue the dialogue on fish and wildlife management in wilderness. The presence of the F.W.Ps representative would also continue in the next series of task force meetings. Other spinoff conflicts, generated by this representative were also resolved sufficiently so that they did not hamper future progress of BMWC planning efforts.

4. Communication (conveyance of meaning)

The strongest example of conveyance of meaning was exemplified in the third draft plan completed during this interval. Incorporated into the draft plan were numerous concerns that had been communicated to planners and managers during the past year. A white paper was prepared by this author that documented areas of the plan that had been altered as a result of citizen input.

5. Shared interest and commitment (common concern)

The group's shared interests and commitment continued throughout this interval despite the lack of any substantive

commitment from F.W.Ps. Common concern was shown at the June 8 task force meeting where problem areas were looked at and a few management actions suggested. Commitment was also shown at the Lincoln subgroup meeting, where dialogue among participants enabled them to reach a consensus of their own on the indicators and standards, prior to attending the larger meeting on January 26.

6. Reciprocity (mutual obligation)

Mutual action occurred at the January 22 subgroup meeting in Lincoln where participants, through a considerable amount of give and take, reached a consensus on the indicators and standards. They chose two members of their group to attend the general meeting on January 26 where the entire task force would attempt to reach a consensus of their own.

7. Common time and space (here and now)

Most of the group met in the same place and at the same time for the June 8 task force meeting. The field trip which included six members of the task force, also covered a common time and space that all participants shared.

While indicators "authenticity" and "integrated persons" were observed to be lacking in this interval, a sufficient amount of other indicators were observed, to show that dialogue was present (shown in table 9).

Analysis of Mutual Learning Indicators

1. Planner Contributions

Concept - Introduced during this interval was the concept of using remote sensed satellite imagery and a Geographical Information System (GIS) for mapping characteristics such as trail and campsite locations and for storing inventory data. The feasibility of the concept had been explored earlier during interval two. It was determined during this interval that utilizing the latest in satellite technology could be applied for wilderness management purposes.

Theory - A transactive style of planning continued to be the norm during interval four. The small group format, where dialogue was easily shared, was again applied at the June 8 task force meeting where management actions were discussed. Communication and mutual learning was facilitated in numerous other informal gatherings where two or three task force members were present.

TABLE 9. DIALOGUE INDICATOR EVALUATION FORM

Critical Incident Interval No. 4		Period: June 8, 1985 - January 25, 1985		
Indicator	Indicator Descriptor	Occurred		Documentation
		Yes	No	
<u>Authenticity</u>	<u>Acceptance of others</u>	_____	<u>X</u>	<u>Notes 6/16/84</u>
<u>Integrated persons</u>	<u>Whole person: speech; good faith</u>	_____	<u>X</u>	<u>Posewitz paper, Oct. 1984</u> <u>Notes 6/8/84</u>
<u>Conflict acceptance</u>	<u>Difference in viewpoint</u>	<u>X</u>	_____	<u>Barker Meeting notes 1/23/85</u>
<u>Communication</u>	<u>Conveyance of meaning</u>	<u>X</u>	_____	<u>White Paper, Sept. 1984</u> <u>Draft Plan, Sept. 30, 1984</u>
<u>Shared interests and commitment</u>	<u>Common concern</u>	<u>X</u>	_____	<u>Task Force notes 1/26/85</u> <u>Lincoln subgroup notes 1/22/85</u>
<u>Reciprocity</u>	<u>Mutual obligation</u>	<u>X</u>	_____	<u>Lincoln subgroup notes 1/22/85</u>
<u>Common time and space</u>	<u>Here and now</u>	<u>X</u>	_____	<u>Field trip write up 8/28/84</u> <u>Task Force attendees 6/8/84</u>

Note: Order of listing implies no hierarchial priority of value.

Analysis - Many task force members expressed the desire to examine problem areas in the wilderness during the field season and have a convenient way to suggest management actions to solve those problems. As a result, a summer field packet was compiled that divided the wilderness into eight maps. Each map was analyzed as to its problem areas, and the indicators which were in violation of the limit of acceptable change. These were listed and an area provided for suggested management actions. The packet was sent to each member of the task force.

New perspective - The task of gathering information on trails was begun during this interval. To accomplish this task, the Forest Service contracted with an individual that hadn't been involved in the process and therefore had no vested interest in any of the possible solutions. He was able to analyze the problem of trail management and bring a new perspective into this portion of the process.

Systematic search procedures - Several systematic procedures for gathering data and information were contributed by managers during this interval. A trail encounter monitoring form was designed and utilized by managers during the summer field season. More data was collected on campsite impacts. A systematic ground truthing of vegetation was also conducted to verify the accuracy of remotely sensed data

obtained through NASA's Landsat program. All of the data collected during this interval greatly aided the ability of managers and planners to further analyze the existing management situation.

Facilitator - This author and the LAC coordinator continued their role as facilitators of the planning process during this interval. The facilitator role was demonstrated by leading the June 8 task force meeting, conducting an LAC training workshop for wilderness rangers, organizing a core team meeting and initiating numerous small group meetings.

2. Client contributions

Operational details- At the June 8 task force meeting, participants were divided into five small working groups for the specific purpose of looking at each problem area and recommending management actions that might solve the problems in those areas. Numerous times during this exercise, citizen members contributed specific details about areas they were intimately familiar with. Citizen members were also consulted on November 30 regarding the strategy for the next series of task force meetings. Many details of how those meetings should be conducted were shared with planners.

Realistic alternatives - Step six of the LAC process is to identify alternative opportunity class allocations reflecting area issues and concerns and existing resource and social conditions. The third draft of the plan, presented during this interval, included descriptions of all alternative opportunity class allocations that had been developed as part of the sixth step. Four of the alternatives, formally written into the draft plan were the direct result of citizens autonomously compiling their own maps and drafting position statements reflecting the general emphasis of their particular alternative.

Priorities - The task force determined that its main priority for the summer field season was to obtain campsite impact ratings for all outfitter base camps. Most agreed this needed to be done before a decision could be made on the preferred standards for the barren core soil area indicator. Carefully looking at how this indicator would affect users and the land was also a priority voiced by the committee that had formed to address the problems associated with this indicator.

Norms - No one particular norm or principle of right action was able to be documented during this interval.

Feasibility judgements - A judgement was made by the committee on the barren core soil area standard that making a decision on this standard was not feasible until more data on the outfitter camps were collected. This judgement was largely arrived at by citizen members and presented at the June 8 task force meeting.

Receptiveness - Perhaps the greatest example of continued receptivity and the occurrence of citizen knowledge about the LAC process took place at the Montana Wilderness Association (MWA) meeting on November 30. With no agency assistance or aid, a citizen task force member put together a display on the LAC process which included the task force's preferred opportunity class allocation map. This undoubtedly would not have taken place if this individual had not participated in LAC planning and gained a sense of shared ownership in the process.

A strong indication that mutual learning was present in interval four is shown in table 10 where most indicators were observed and able to be documented.

TABLE 10. MUTUAL LEARNING INDICATOR EVALUATION FORM

Critical Incident Interval No. 4			
Period: June 8, 1984 - January 25, 1985			
Occurrence of Planners Contribution (Processed Knowledge)			
<u>Indicator</u>	<u>Yes</u>	<u>No</u>	<u>Documentation</u>
<u>Concept</u>	<u>X</u>	<u> </u>	<u>Notes 6/13/84</u>
<u>Theory</u>	<u>X</u>	<u> </u>	<u>Task Force Notes 6/8/84</u>
<u>Analysis</u>	<u>X</u>	<u> </u>	<u>Summer Field packet, June 1984</u>
<u>New Perspective</u>	<u>X</u>	<u> </u>	<u>Trail information form Summer 1984</u>
<u>Systematic Search Procedure</u>	<u>X</u>	<u> </u>	<u>Trail encounter form Encounter summaries 11/30/84</u>
<u>Facilitator</u>	<u>X</u>	<u> </u>	<u>Core Team Notes 11/16/84 Task Force agenda 6/8/84</u>
Occurrence of Citizen Participants Contributions (Personal Knowledge)			
<u>Indicator</u>	<u>Yes</u>	<u>No</u>	<u>Documentation</u>
<u>Operational Details</u>	<u>X</u>	<u> </u>	<u>Management action suggestions 6/8/84</u>
<u>Realistic Alternatives</u>	<u>X</u>	<u> </u>	<u>White Paper, Sept. 1984 Draft Plan III, Sept. 30, 1984</u>
<u>Priorities</u>	<u>X</u>	<u> </u>	<u>Task Force Notes 6/8/84</u>
<u>Norms</u>	<u> </u>	<u> </u>	<u>Insufficient</u>
<u>Feasibility Judgments</u>	<u>X</u>	<u> </u>	<u>Task Force Notes 6/8/84</u>
<u>Receptiveness</u>	<u>X</u>	<u> </u>	<u>Letter 1/15/85</u>

Note: Order of listing implies no hierarchial priority of value.

Critical Interval Five (January 26, 1985 - April 1, 1985)

Critical incident: January 26 task force meeting.

On January 26, a task force meeting was convened. Its objectives were to come to a consensus on the indicators, standards and opportunity class allocation for the management plan. The decisions arrived at during this meeting were to be used as recommendations to the Forest Service managers and planners. In general, the meeting was a success that saw 35 task force members reaching a consensus on indicators, standards and all but a few areas on the opportunity class allocation map.

Numerous times during the meeting, issues cropped up that could have potentially side tracked the group, preventing them from reaching their desired objectives. These were handled by planners through the use of an "issues board" where the concern was listed and acknowledged on a flip chart. The facilitation of the meeting was handled jointly by the LAC coordinator and a Forest Service manager.

On February 8, an inter-forest core team meeting was held primarily to develop a plan for finishing the nine step LAC process by spring. Step seven of the LAC process is to identify management actions for each alternative opportunity

class allocation. Due to the sheer size of the BMWC, managers felt identifying hundreds of management actions for each alternative would not be a productive nor a feasible exercise. This was shown at the June 8 task force meeting which focused on devising a list of management actions for each problem area. This exercise was helpful from a mutual learning standpoint but frustrated task force members as only a small fraction of the areas were able to be dealt with for only one alternative.

The solution arrived at during the core team meeting was to go to the next task force meeting and ask members to simply provide the planners with a range of management actions they felt would be appropriate in each opportunity class. The objective would be to come to some kind of consensus on a "menu" of management actions that would be acceptable to managers and citizens alike. Other issues discussed included the development of an implementation and monitoring plan (step 9), integrating the LAC plan with the Wild and Scenic River and Fire management plans, and compiling a more specific statement on trail standards and the meaning of resource protection.

Planning activities between February 9 and February 22 included mostly preparatory exercises for another task force meeting on February 23. During these few weeks, this author conducted nine theory evaluation interviews; one with the LAC coordinator, one with the principle agency planner and seven with select citizen members of the task force.

The LAC coordinator met on February 20 with several pilots who frequently used the Schafer airstrip. This airstrip, located in the Northern portion of the wilderness, was the only one of its kind in the complex. The LAC slide-tape program was shown at this meeting and ways to conform the current aircraft use with the LAC plan were discussed. In general, the pilots were receptive and willing to work with the LAC coordinator and BMWC managers.

On February 23, another task force meeting was held to discuss how the issues raised at the last meeting were being handled. The Dept. of F.W.Ps handed out a first draft of a proposed work plan designed to lead to a fish and wildlife management plan for the BMWC. Key aspects of the work plan were presented to the task force by a representative from F.W.Ps. The main objective of the meeting however was to identify a range of possible management actions that could be taken for specific types of problems. Task force members divided into three working groups. One dealt with social

indicators and standards, one dealt with the resource and a final group discussed range management. All groups still found it quite difficult to suggest appropriate and acceptable management actions. However, because individual areas were not being examined, all three groups were able to more easily accomplish their task in a way that was much more helpful to managers.

March 12 saw the interforest core team meet to work out the specifics of the last step of the LAC process - implementation and monitoring. Developing an effective education program was also discussed. The last planning activity of this interval was a small committee meeting held on March 25 to address the problem of outfitter base camps in opportunity classes I and II. Those outfitters affected, plus several interested citizen task force members and the LAC coordinator met for three hours to develop a list of recommendations to be presented to the larger task force.

Analysis of Dialogue Indicators (Interval 5)

1. Authenticity (acceptance of others)

The January 26 task force meeting was cooperatively led by the LAC coordinator and a Forest service ranger from one

of the districts involved in managing a portion of the BMWC. This same cooperative arrangement was also used at the February 23 meeting using a ranger from a different district and National Forest. This arrangement was well accepted by the task force members as evidenced by the amount of work accomplished at both meetings. One individual interviewed during this interval showed acceptance by mentioning the benefits of spreading the leadership around the various National Forest's. Authenticity was also shown at the March 25 committee meeting where participants in numerous situations accepted recommendations made by others.

2. Integrated Person(s) (whole persons displayed by speech and good faith)

Numerous times during this last interval, sincere dialogue expressed in good faith was shown by many task force members. The managers who helped lead the task force meetings during this interval mentioned the desirability of continuing task force involvement after formal approval of the management plan had taken place. One citizen member agreed that the most important thing the process had going was the continuing nature of the citizen involvement. Also stressed by managers was the flexibility of the process and

the importance of including the district rangers in the process. This author also found the dialogue that occurred during the theory evaluation interviews was conducted in a very open and sincere manner. The sincere and open communication that occurred on March 25 was also an indication that dialogue was present during this interval.

3. Conflict Acceptance (difference of viewpoint)

No new major conflicts arose during this interval, hence there was no opportunity for this author to assess whether differing viewpoints were accepted by planning team members.

4. Communication (conveyance of meaning)

Because it was the first task force meeting in over seven months, many things were communicated to planners and task force members on January 26. A representative from the outfitting industry communicated his thoughts on the process to the group by reading a pre-prepared statement. The unaffiliated members of the task force also read a statement reiterating their concern over the lack of provision for fish and wildlife management in the LAC plan. They recognized the problem with intra-agency communication, however, and urged continued efforts at resolving any differences. At both task force meetings during this

interval, preferences for certain standards, opportunity class allocations and management actions were communicated to planners. Conveying the meaning of many aspects of the planning process, also occurred during interviews with citizen members and at the March 25 committee meeting.

5. Shared Interests and Commitment (common concern)

A continued commitment to the planning process was shown by the strong attendance at both the January 26 and February 23 task force meetings. Most all of the individuals who attended the January 16, 1982 meeting were present for both meetings. Common concern was shown at the January 26 task force meeting where a consensus was finally reached on indicators and standards. A commitment by the Dept. of F.W.Ps was finally made at the February 23 meeting as evidenced by a four page work plan they made available to task force participants.

6. Reciprocity (mutual obligation)

A relationship of mutual obligation and reciprocal give and take was shown by most task force members at the January 26 meeting, where a long sought after consensus was reached on standards for each resource and social indicator. A consensus was also reached on almost all of the opportunity class allocations.

7. Common Time and Space (here and now)

Both task force meetings held during this final interval convened at the same time and in the same place and included most all of the planning team members. This was also true of the two interagency core team meetings that were held before each task force meeting.

As table 11 shows, a sufficient amount of dialogue indicators were able to be documented during this interval, allowing this author to conclude that dialogue was present.

Analysis of Mutual Learning Indicators

1. Planner contributions

Concept - Two new concepts were provided by planners during this last interval. The first, termed "the politically prudent manager concept" was drafted by the primary agency planner. Its premise is based on a continuing involvement of the task force in LAC implementation through periodic meetings to discuss progress and problems. A politically prudent manager would legitimize the implementation of

TABLE 11. DIALOGUE INDICATOR EVALUATION FORM

Critical Incident Interval No. 5		Period: January 26, 1985 - April 1, 1985		
Indicator	Indicator Descriptor	Occurred		Documentation
		Yes	No	
<u>Authenticity</u>	<u>Acceptance of others</u>	X		Task Force notes, Kuhl interview Agenda 1/26/85, 2/23/85
<u>Integrated persons</u>	<u>Whole person: speech; good faith</u>	X		Committee notes 3/25/85 Interview Summaries Task Force notes 1/26-2/23/85
135 <u>Conflict acceptance</u>	<u>Difference in viewpoint</u>			<u>Insufficient</u> Task Force notes 1/26/85 Interview Summaries
<u>Communication</u>	<u>Conveyance of meaning</u>	X		Statements - C.B. Rich 1/26/85 Committee attendance 3/25/85
<u>Shared interests and commitment</u>	<u>Common concern</u>	X		Dept. of F.W.&Ps Work Plan 2/14/85 List of attendees 1/26-2/23/85
<u>Reciprocity</u>	<u>Mutual obligation</u>	X		Task Force notes 1/26/85
<u>Common time and space</u>	<u>Here and now</u>	X		Agenda 1/26-2/23/85

Note: Order of listing implies no hierarchial priority of value.

controversial management actions with task force members before initiating that action. Managers also presented a conceptual outline of the LAC monitoring and implementation program on February 23. The monitoring framework, its objectives and an example of what the plan would look like were included in this presentation.

Theory - The planning process continued to utilize citizen participation techniques representative of transactive planning theory. The mutual learning that had occurred among task force members allowed them to make substantive progress in completing the nine step LAC process. Consensus by the full task force on January 26 and by the three smaller working groups on February 23 was evidence mutual understanding was present among a diverse group of people.

Analysis - During this interval, this author completed an analysis of what the principal problems by opportunity class were in the complex. The proposed opportunity class allocation was also analyzed and compared with the current conditions allocation previously compiled by managers. A map was then developed depicting the differences between these two maps. The author also analyzed the indicators and standards developed for the South and Middle Fork of the Flathead river plan and compared them with the proposed indicators and standards for the BMWC plan. A table was

prepared comparing the two sets of indicators and standards to help address the problem of integrating the two plans.

New Perspective - New and different perspectives of the planning process were brought to both task force meetings by managers who had previously never addressed or led the group formally before. Citizen members were reassured that the perspectives of different managers were in line with their thinking and what that they had been told by the LAC coordinator. New perspectives were also provided by individuals who had previously never participated; principally on fire management in the BMWC and on the F.W.Ps work plan. Finally, a renewed perspective was given by managers on the definition of resource protection and how that pertained to trail maintenance. All of these examples represented new perspectives of the planning environment and its problems.

Systematic search procedures - In order to ascertain which outfitter base camps would be affected by the proposed opportunity class allocation, a systematic search was conducted by managers to identify the number and location of such camps. This information was then organized into a form helpful to task force members, enabling them to see which areas might present a problem and warrant further examination. A survey of task force members was also

conducted during this interval that enabled them to specify which management actions they considered acceptable in the four opportunity classes. This data was analyzed for similarities between managers and citizens, aiding planners in formulating a range of management actions most would find acceptable in all four classes.

Facilitator - The LAC coordinator continued facilitating the planning process during this final and crucial interval. Two important task force meetings, two core team meetings, a problem issue committee and several meetings with pilots who used the Schafer air strip made up the majority of activities. Many decisions made during this last interval were the direct result of the motivating actions of the LAC coordinator, this author and agency planners.

2. Client Contributions

Operational details - Details of particular situations in the BMWC were provided by many citizen members at both task force meetings. Examples include providing first hand knowledge of trail and campsite conditions when discussing indicators and standards, and knowledge of management actions that had worked or not worked in the past. The April 26 task force meeting also saw many participants

relating detailed specifics of outfitter base camps and characteristics of specific drainages being discussed.

Realistic alternatives - At the January 26 task force meeting, considerable discussion was held on the standard "maximum number of damaged trees found in any five acre area surrounding the campsite in any given section." Nobody seemed to be satisfied with accepting any of the proposed alternatives that were already provided. A citizen member of the task force recommended an entirely new alternative. It was realistic in nature as the full task force agreed to accept it as the preferred alternative for that particular standard. Realistic alternatives to the problem of outfitter base camps in class I and II were also provided by citizen participants on March 25.

Priorities - Several issues that citizen task force members felt needed high priority attention were brought up and listed at the January 26 meeting. They included somehow handling the issue of outfitter base camps in opportunity classes I and II, integration of the LAC plan with fire management, Wild and Scenic River management and grizzly bear management plans. Interpreting the meaning of resource protection as a rationale for trail maintenance was also listed as a priority issue. All priority issues were brought to the attention of planners by citizen task force members.

Norms - After examining the composite opportunity class allocation map at the January 26 meeting it was discovered that there were currently five outfitters with base camps in class I (most pristine), and seven in class II. Definitions and standards that the group had just reached a consensus on would have made outfitter operations as currently conducted, somewhat difficult to continue in these more restrictive areas of the wilderness. Planners became quickly aware that this politically touchy issue could not be resolved at the meeting and asked for volunteers to serve on a committee that would draw up recommendations for the task force. Seven citizens and two managers were chosen. This norm was deemed by task force members as an acceptable way to go about resolving this issue.

Feasibility judgements - After close examination and much debate, the task force determined that none of the proposed alternatives for the standard "maximum number of damaged trees . . ." were feasible. An alternative, provided by a citizen task force member was judged to be feasible by most other citizen participants. The feasibility of having a citizen member(s) of the task force lead and coordinate the planning process was investigated by this author during theory evaluation interviews. All seven interviewees felt

it was not feasible for a citizen to coordinate and lead the process due to the size and complexity of the planning environment. Also the feasibility of many of the recommendations brought up on March 25 were vigorously debated by citizen participants present at the meeting.

Receptiveness - Receptivity was shown at the Feb 23 meeting where a representative from the Dept. of F.W.Ps presented a work plan to the group that addressed fish and wildlife management in the wilderness. Receptiveness towards a more diffused leadership within the agency was also shown by citizen members. The district rangers were receptive to the role of cooperatively leading the task force meetings with the LAC coordinator and the citizens were receptive to the agency show of combined leadership. Finally, receptiveness towards continuing the planning process was shown as evidenced by the high turn out of citizen members at both task force meetings. Finally, the outfitters who had base camps in opportunity class I were receptive to most of the recommendations made by other citizens and outfitters on March 25.

Table 12 shows that all indicators of mutual learning for both planners and the citizens were documented during this final phase of the process.

TABLE 12. MUTUAL LEARNING INDICATOR EVALUATION FORM

Critical Incident Interval No. 5			
Period: January 26, 1985 - April 1, 1985			
Occurrence of Planners Contribution (Processed Knowledge)			
<u>Indicator</u>	<u>Yes</u>	<u>No</u>	<u>Documentation</u>
<u>Concept</u>	<u>X</u>	<u> </u>	<u>Stokes Write-up 2/22/85</u> <u>Solum Notes 2/23/85</u>
<u>Theory</u>	<u>X</u>	<u> </u>	<u>Task Force Notes 1/26-2/23/85</u>
<u>Analysis</u>	<u>X</u>	<u> </u>	<u>Action Items 2/8/85</u>
<u>New Perspective</u>	<u>X</u>	<u> </u>	<u>Task Force Notes 1/26-2/23/85</u>
<u>Systematic Search Procedure</u>	<u>X</u>	<u> </u>	<u>Outfitter Base Camp Data 2/85</u> <u>Mgmt. Action Survey 2/23/85</u>
<u>Facilitator</u>	<u>X</u>	<u> </u>	<u>Action Items 2/8/85</u>
Occurrence of Citizen Participants Contributions (Personal Knowledge)			
<u>Indicator</u>	<u>Yes</u>	<u>No</u>	<u>Documentation</u>
<u>Operational Details</u>	<u>X</u>	<u> </u>	<u>Committee Notes 3/25/85</u> <u>Task Force Notes 1/26-2/23/85</u>
<u>Realistic Alternatives</u>	<u>X</u>	<u> </u>	<u>Committee Notes 3/25/85</u> <u>Task Force Notes 1/26/85</u>
<u>Priorities</u>	<u>X</u>	<u> </u>	<u>Task Force Notes 1/26/85</u>
<u>Norms</u>	<u>X</u>	<u> </u>	<u>Task Force Notes 1/26/85</u> <u>Committee Notes 3/25/85</u>
<u>Feasibility Judgments</u>	<u>X</u>	<u> </u>	<u>Task Force Notes 1/26/85</u> <u>Interview Summaries 2/85</u> <u>Attendance Sheet 1/26-2/23/85</u> <u>Dept. F.W.&P s Work Plan 2/23/85</u>
<u>Receptiveness</u>	<u>X</u>	<u> </u>	<u>Committee Notes 3/25/85</u>

Note: Order of listing implies no hierarchial priority of value.

CHAPTER VII

TESTING OF RESEARCH HYPOTHESES

Overview

The findings from the five research hypotheses will be presented in this chapter. The basic format for discussing each hypothesis is as follows: (1) Stating the hypothesis in its entirety, (2) a review of the methodologies that tested the hypothesis, (3) a review, in some cases, of the statistical procedures used to test the hypothesis, (4) a brief discussion of the findings where appropriate, and (5) whether the hypothesis was rejected or accepted is stated.

HYPOTHESIS 1: Dialogue among participants in the planning process has the properties of authenticity, integration of person, conflict acceptance, commitment, shared interests, reciprocity and common time and space.

Essential to Transactive Planning is successful dialogue which carries with it the characteristics listed in the above hypothesis. In all five intervals that testing took place during this study, these elements were examined for their presence. Table 13 summarizes the results of tables 1, 3, 5, 7 and 9 which documented these elements of

Table 13. Summary of Confirmation/Occurrences of Dialogue by Critical Incident Intervals

Dialogue Indicator	Critical Incident Interval									
	2/16/82-5/9/83		5/10/83-4/5/84		4/6/84-6/7/84		6/8/84-1/25/85		1/26/85-4/1/85	
	No. 1		No. 2		No. 3		No. 4		No. 5	
	Occurrence		Occurrence		Occurrence		Occurrence		Occurrence	
	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
Authenticity	—	<u>IS</u>	<u>X</u>	—	<u>X</u>	—	—	<u>X</u>	<u>X</u>	—
Integrated Persons	—	<u>IS</u>	<u>X</u>	—	<u>X</u>	—	—	<u>X</u>	<u>X</u>	—
Conflict Acceptance	—	<u>IS</u>	—	<u>X</u>	<u>X</u>	—	<u>X</u>	—	—	<u>IS</u>
Communication	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—
Commitment	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—
Reciprocity	—	<u>IS</u>	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—
Common Time & Space	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—
Dialogue Occurrence	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—	<u>X</u>	—

IS = Insufficient.

dialogue in the last chapter. An ample amount of evidence of dialogue was found in all five critical incident intervals to allow this author to accept hypothesis 1.

HYPOTHESIS 2: Mutual learning of planning participants will occur as a result of dialogue.

Strong evidence of mutual learning was found in this planning process. Table 14 displays the cumulative evaluation from tables 2, 4, 6, 8 and 10. As this table shows, documentation was found for virtually all mutual learning indicators in all five planning intervals. Further evidence that mutual learning occurred during this planning process can be found when the results from the open ended questions on the TES are examined.

Question 1: What do you feel have been the overall successes or failures of the planning process thus far?

Both managers and citizens listed nearly identical successes of the planning process even though their ordering was a bit different. The top five successes for the task force in general, listed in order are as follows:

Table 14. Summary of Confirmation/Occurrences of Mutual Learning by Critical Incident Intervals

Mutual Learning Indicator	Critical Incident Interval									
	2/16/82-5/9/83		5/10/83-4/5/84		4/6/84-6/7/84		6/8/84-1/25/85		1/26/85-4/1/85	
	No. 1		No. 2		No. 3		No. 4		No. 5	
	Occurrence		Occurrence		Occurrence		Occurrence		Occurrence	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
<u>Planner Contribution</u>										
Concept	X		X		X		X		X	
Theory	X		X		X		X		X	
Analysis	X		X		X		X		X	
New Perspective	X		X		X		X		X	
Systematic Search										
Procedures	X		X		X		X		X	
Facilitator	X		X		X		X		X	
<u>Client Contribution</u>										
Operational Details	X		X		X		X		X	
Realistic Alternatives	X		X		X		X		X	
Priorities	X		X		X		X		X	
Norms	X		X		X			IS	X	
Feasibility Judgments	X		X		X		X		X	
Receptiveness	X		X		X		X		X	
Mutual Learning Occurrence	X		X		X		X		X	

IS = Insufficient.

1. Brought together diverse citizen interests to discuss wilderness management.
2. Involvement of the users and the public in beginning stages of the process.
3. Created a heightened awareness of various problems.
4. Involving a representative range of publics and user groups as active participants.
5. Developing a working relationship between users, managers, and researchers.

The failures most often mentioned by managers and citizens were also similar, emphasizing two main points:

1. The slow pace of the planning process; and
2. Lack of participation from the Lewis and Clark National Forest personnel and users from the east side of the complex.

Of the remaining responses, citizens generally emphasized a failure to include specialized user groups such as non-affiliated backpackers and not addressing several resource related problems such as wildlife or trails. Managers most often mentioned failures related to the agency and organizational aspects of the process such as meetings being too far apart, or too much wheel spinning.

In order to test whether there was a mutual understanding regarding the importance of the nine steps in the LAC process, the TES contained the following question.

Question 2: Of the 9 steps in the LAC process, which three do you feel are most critical?

Researchers who developed the LAC process feel steps 3, 5, 7, and 9 are most critical; that is, selecting indicators, specifying standards, identifying management actions and monitoring and implementation. Citizens most often mentioned step 1, "Identify area issues and concerns" as most critical. Step 7 was rated second most critical and step 9 third most critical. What the results in table 15 show is that citizens, at the point in the process when the TES was conducted, still hadn't fully grasped the importance of selecting indicators and standards for the wilderness complex. Both managers and citizens agreed on the importance of identifying management actions, implementing those actions and monitoring conditions, steps 7 and 9. When one merely looks at the number of times each step was actually mentioned, "regardless of rank", steps 3, 5, 7 and 9 are the most frequently mentioned critical steps. These results suggest a certain level of mutual learning about LAC had taken place up to that point in the planning process.

Finally, the theory evaluation interviews conducted towards the end of the process included several questions dealing with mutual learning.

Table 15. Percentage of Respondents Mentioning the Critical Nature of Each Step in the Lac Process

Citizens N = 21 Researchers N = 12
 Managers N = 14 Total N = 37

	Most Critical	Second Most Critical	Third Most Critical	Not Critical	Citizens	Managers	Researchers	N ^{a/}
STEP 1: Identify area issues and concerns	29.7	8.1	--	62.2	11	3	--	14
STEP 2: Define and describe opportunity classes	13.5	5.4	2.7	78.4	3	5	--	8
STEP 3: Select indicators of resource and social conditions	13.5	16.2	13.5	56.8	8	7	1	16
STEP 4: Inventory resource and social conditions	24.3	2.7	5.4	67.6	7	4	1	12
STEP 5: Specify standards for resource and social conditions	21.6	10.8	10.8	56.8	7	8	1	16
STEP 6: Identify alternative opportunity class allocations	5.4	2.7	5.4	86.5	4	1	--	5
STEP 7: Identify management actions for each alternative	10.8	21.6	18.9	48.7	14	3	2	19

^{a/} Total number of respondents who mentioned a particular step as critical irregardless of rank.

Table 15 (Cont.)

Citizens N = 21 Researchers N = 12
 Managers N = 14 Total N = 37

	Most Critical	Second Most Critical	Third Most Critical	Not Critical	Citizens	Managers	Researchers	N ^{a/}
STEP 8: Evaluation and selection of a preferred alternative	8.1	8.1	--	83.8	3	3	--	6
STEP 9: Implement actions and monitor conditions	13.5	16.2	35.1	35.2	15	8	1	24

150

Question 1: What do you feel you have learned about wilderness planning having participated in this process?

A summary of their responses is as follows:

- Planning participants have become far more aware of and sensitive to the real problems in planning for good wilderness management.
- The process is what public involvement in wilderness planning ought to be like in terms of really getting things done.
- Wilderness planning takes a lot of different interests and groups to contribute their ideas. Groups that must be willing to comprise.
- Wilderness planning involves a lot of politics.

Question 2: Do you feel a mutual understanding and learning about the LAC concept and most of the problems the BMWC faces has been reached by most individuals in the process?

All of those interviewed agreed that it had, with most stating that everyone had a much greater understanding of each others views, problems and concerns. One individual felt mutual learning was the most important thing that had come out of the process. When asked what they felt had been the key aspects or parts of the process that promoted this understanding, the dominant response was the use of small groups that allowed for more dialogue among user groups.

In summary, the strong positive results obtained from the following sources has enabled this author to accept hypothesis 2; that is, mutual learning of planning participants has occurred as a result of dialogue between them.

1. Documented confirmation of virtually all mutual learning indicators in all five critical incident intervals.
2. All respondents on the TES and those included in the theory evaluation interviews felt mutual learning had occurred in this process.
3. Those interviewed largely felt the small group format where dialogue was most prevalent, was most responsible for the occurrence of mutual learning.
4. TES open ended questions showed similar responses for most planning participants.

HYPOTHESIS 3: Societal guidance (action, e.g. decisions made about wilderness management in the BMWC) will occur as a result of dialogue and mutual learning.

This hypothesis specifically deals with a critical aspect of transactive planning and that is whether identifiable linkages of knowledge to action have occurred in this process. In short, are there incidents where processed knowledge, gained through dialogue and mutual learning, has become a primary part of individual or group actions (Friedmann, 1973:2). Many identifiable linkages of

processed knowledge to action were found in the BMWC planning process. Selected examples are summarized below:

1. Once receiving processed knowledge about the LAC concept, three citizen task force members initiated a series of open house workshops for the general public in order to solicit comments on priority issues and concerns.
2. The processed data, presented in the form of inventory maps and data summary sheets greatly aided participants in making decisions about resource and social standards for the BMWC.
3. The processed knowledge acquired by seven key citizen participants at a joint citizen/core team workshop enabled them to return to their own constituents and construct realistic opportunity class allocation maps. All of these maps were used as part of the range of alternatives in the draft plan.
4. The processed knowledge gained, and mutual learning that had taken place, enabled a group of citizen participants to apply pressure on the Regional Forester to replace an outgoing Forest Supervisor with one that would be sympathetic and receptive to the LAC concept and a transactive style of planning for the BMWC.

5. Processed knowledge acquired by managers enabled them to develop a method of monitoring encounter levels on the trails within the BMWC. This monitoring action was initiated in the 1984 field season.
6. The learning that occurred throughout the planning effort enabled a citizen participant to use his personal and processed knowledge to discuss a display on the LAC process that he had created for an annual meeting of the Montana Wilderness Association.
7. The processed knowledge held by many managers, wilderness rangers, guards and trail crew members was used to conduct a trail characteristics inventory for the entire BMWC trail system.
8. Processed data gathered on barren soil area in outfitter base camps enabled the task force to reach a consensus on this controversial standard.

These examples indicate that numerous identifiable linkages of processed knowledge to action occurred throughout the BMWC planning effort. This has enabled this author to accept hypothesis 3. Decisions made about wilderness management did occur as a result of dialogue and mutual learning. Unfortunately, this study was unable to proceed

through the first season of implementation of the actual plan, hence substantive site specific actions that will undoubtedly take place were unable to be included as support for hypothesis 3.

HYPOTHESIS 4: Societal guidance (action) if shown to occur will have the properties of autonomy, responsiveness, innovativeness, effectiveness, efficiency and legitimacy.

Each of the indicators above will be discussed to assess the extent of societal guidance in the BMWC planning process.

Autonomy

Autonomy means the planning system must be able to set its own objectives and pursue them effectively (Friedmann, 1973:2). This was evident in the BMWC in several ways. While the Forest Service did provide the leadership role throughout the process, it did not operate within any formal agency planning guidelines or policy constraints. A transactive style of planning was conceived of from the very beginning and, along with the LAC process, provided the basic framework throughout the entire planning effort. The primary facilitator/coordinator role was played by neutral

planners not employed by the agency. They had a great deal of autonomy to conduct the process in a way that gave the citizen participants a good deal of freedom to plan for themselves. The interdependent, cooperative relationship that existed between managers, planners and citizens often allowed citizens to freely develop solutions and realistic alternatives to problem situations.

Task force members were asked on the TES if they felt citizens had been able to set their own objectives for the plan and pursue them effectively. Almost 70% of the respondents either "agreed" or "strongly agreed" this had been the case up to that point.

In late 1984, the idea of continual involvement of the task force for periodic review of progress was put forth. Citizens interviewed in early 1985 were asked how important they felt this continuing involvement was in properly implementing LAC. All agreed it was extremely important and fundamental in effectively pursuing their own objectives and successfully implementing plan objectives. Their perception was that if the plan is really a continually evolving process, you have to have continuing involvement from the task force as well. If such an involvement did not take place, many agreed the process would fall apart. Bi-annual meetings, one pre-season and

one post-season, was the preferred frequency of involvement to maintain dialogue crucial to successful plan development.

When asked on the TES if citizens were able to plan for themselves, most were unsure or disagreed this was possible. In reference to whether the process could have been successfully led by task force citizens, all those interviewed felt it could not have occurred due to the size and complexity of the planning environment. However, most of those interviewed felt that the final decisions made by the Forest managers would remain localized and be made with the citizen interests in mind.

In sum, total autonomy was not possible nor was it even desirable. Citizens were able to pursue their own objectives with planners and managers in an informal and productive atmosphere. For the above reasons, the planning process was autonomous.

Responsiveness

The BMWC planning process was responsive because it was able to take into account a variety of specialized interests, needs and values of groups affected by its actions. This was confirmed by the TES respondents who overwhelmingly responded favorably to this statement. More

than 80% agreed or strongly agreed the planning process was responsive. No respondents disagreed. An open ended question on the TES relating to successes of the process revealed numerous statements confirming the responsiveness of the planning effort. They are listed as follows:

- It is grounded more in reality than past plans.
- The Forest Service made a sincere effort to listen to citizen concerns.
- Citizen concerns and ideas were incorporated into the plan.

Question five on the theory evaluation interviews inquired into the responsiveness of the process. Most felt the process did as good a job as it could have done to include all interests even though some felt the hiker or backpacker, unaffiliated with any organized group was under-represented. All in all, a large percentage of the interest groups who may have been affected by new management direction were adequately represented throughout the planning process.

Innovativeness

Simply stated, the entire planning process was a case study in innovative wilderness planning. Not only was the transactive style of planning a new and innovative way of

approaching Forest Service planning, but the nine step LAC system had never been tried before. Because of this first time application of both LAC and Transactive Planning in a highly politicized environment, innovative techniques for solving many of the problem situations that surfaced were frequently used. Many concepts, new to wilderness planning and management were developed as a result of the BMWC planning effort. An example is the idea of using remote sensed satellite imagery to map characteristics of the wilderness such as trails and campsites.

The coordination and facilitating of the process by planners not employed by the agency represented another major innovative characteristic of the process. Friedmann feels the process must be able to respond creatively to new problem situations for societal guidance to occur. The TES asked if the planning process was able to develop viable alternatives to new problem situations. Over half the respondents were neutral regarding this statement, with 34% agreeing and 11% disagreeing. This somewhat weak response may have been due to the process being only two thirds completed when the TES was conducted. Nearer toward completion, interviewees responded more favorably agreeing for the most part that when new issues or problems arose, they were responded to in a creative manner. All strongly

agreed that even though untried, LAC/Transactive Planning was an innovative approach and a great improvement over traditional Forest Service planning approaches.

Effectiveness

The BMWC planning process was effective because it created a heightened awareness of the various problems among all groups involved. The process also tempered the passions of those involved which ultimately led to a working relationship between managers, researchers, planners and citizens. Information gleaned from theory evaluation interviews showed that all agreed that the actions initiated by the planning process were both timely and accurate with respect to the problems facing the BMWC. Open-ended responses from the TES revealed that participants felt the process was also effective in . . .

- Providing a vehicle for a dynamic, ongoing process rather than a static management plan.
- Showing Forest Service management and political problems to citizen participants.
- Improving coordination between Forest Service administrative units.
- Involving a representative range of publics and user groups as active participants.
- Breaking new ground for future wilderness planning that involves LAC and Transactive Planning.

Efficiency

The efficiency of the process was shown in many ways. First and foremost was the tremendous amount of time and energy devoted to the process by citizen participants. For many, the sacrifice of time and money was considerable. The personal and even technical knowledge provided by users and citizens greatly aided managers and planners and strengthened the overall plan. The feasibility of many planned actions could also be checked continually, thereby avoiding inefficient and politically costly decisions. Public support and ownership reduced the probability of costly appeals over controversial portions of the management plan.

Finally, the hiring of outside assistants to coordinate and facilitate the process was without a doubt fiscally efficient. If an equal amount of time were spent by agency planners, the costs incurred directly attributable to BMWC planning would have been considerably more (Flathead National Forest Plan coefficient documentation, appendix E-1AB 1981). For these reasons, the BMWC planning process was efficient.

Legitimacy

A legitimate planning system must inspire loyalty and be capable of mobilizing popular support for its actions (Friedmann, 1973:2). At the time the TES was conducted, 54% of the task force felt the planning process had inspired loyalty among planning members, and 40% felt it had been able to mobilize popular support for its actions. A good proportion of respondents, (approx. 35%) were neutral regarding legitimacy of the process at that time.

When interviewing key citizen members of the planning process, a much more favorable response was given. All those interviewed perceived there was support from most knowledgeable task force members, about the way the process was being handled. This one aspect of legitimacy was confirmed numerous times throughout the process and that was the simple fact that once people understood the LAC process and were knowledgeable about how it was to be applied, their support and loyalty to the process in most cases quickly followed. Nurturing and slowly developing support for the process took time due to its being new and untried. Many citizens had developed a sense of shared ownership, as evidenced by the many times they themselves defended the

plan as "theirs" and voiced support for the LAC process and the public involvement approach being used.

The level of societal guidance indicated in this study is displayed in table 16. TES results from questions pertaining to societal guidance are shown in table 17. Note the achievement of these six indicators of societal guidance cannot be entirely linked to the transactive style of planning used in this process. None the less, the documented occurrence of all six societal guidance indicators has allowed hypothesis 4 to be accepted. In summary, citizen participants do possess a certain amount of ability to guide management direction in the BMWC.

HYPOTHESIS 5: Transactive Planning is more effective than synoptic planning when the goals of the process are dialogue, mutual learning and societal guidance.

In order to explore the effectiveness of transactive planning as applied in the BMWC, two theory evaluation surveys were conducted. The first, already mentioned, was administered to all BMWC task force members in May 1984. It was intended to measure the success of the planning effort up to that point. The second survey was administered a few months later to a random sample of citizens who had recently

Table 16. SOCIETAL GUIDANCE INDICATOR EVALUATION FORM

Societal Guidance Indicator	Occurrence of Societal Guidance Indicator		
	Yes	No	Documentation
<u>Autonomy</u>	<u>X</u>	<u> </u>	<u>Survey results, May 1984 White Paper, Sept. 1984 Interview Notes, Feb. 1985</u>
<u>Responsiveness</u>	<u>X</u>	<u> </u>	<u>Interview Notes, Feb. 1985 Survey Results, May 1984</u>
<u>Innovativeness</u>	<u>X</u>	<u> </u>	<u>Interview Notes, Feb. 1985</u>
<u>Effectiveness</u>	<u>X</u>	<u> </u>	<u>Interview Notes, Feb. 1985 Survey Results, May 1984</u>
<u>Efficiency</u>	<u>X</u>	<u> </u>	<u>Interview Notes, Feb. 1985</u>
<u>Legitimacy</u>	<u>X</u>	<u> </u>	<u>Interview Notes, Feb. 1985 Survey Results, May 1984</u>

Note: Order of listing implies no hierarchical priority of values.

Table 17. BMWC Theory Evaluation Survey Results from statements testing for Societal Guidance. (Percentages)

N = 36	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Citizen representatives, other concerned publics and users of the Bob Marshall Wilderness Complex are able to plan for themselves.	5.6	61.1	22.2	11.1	--
The planning process <u>thus far</u> has been responsive and able to take into account a variety of specialized interests, needs and values of groups affected by its actions.	2.9	28.6	45.7	22.9	--
The planning process <u>thus far</u> has been able to develop viable alternatives to new problem situations.	5.6	75.0	19.4	--	--
The planning process <u>thus far</u> has inspired loyalty among the members of the task force.	--	34.3	54.3	11.4	--
The planning process <u>thus far</u> has been capable of mobilizing popular support for its actions.	--	40.0	37.1	20.0	2.9

completed participating in the planning process for the Rattlesnake National Recreation Area and Wilderness (RNRAW).

The public participation program for the RNRAW was similar to many traditional approaches being used throughout the Forest Service at that time. Issues and problems were identified and workshops held with interested public groups. A proposed range of management alternatives was presented, and the public was invited to comment on which alternative they favored. Although many meetings were held, and new and innovative ways of collecting the public's major concerns were tried, no task force was ever formed to initiate dialogue in a form recommended by Friedmann.

The statements posed on the surveys were for the most part identical and were intended to evaluate how respondents perceived their involvement and the involvement of others in their respective planning situations. More specifically, respondents were asked to evaluate 19 statements about the planning process that tested for the indicators of the three elements of transactive planning. Fifty surveys were sent to RNRAW participants; 35 were returned for a response rate of 70%. Thirty six members, or about 90% of the task force, participated in the BMWC planning survey.

Each respondent was asked to indicate the extent to which they agreed or disagreed on a 5 point Likert scale (1 indicating "strongly agree", 5 "strongly disagree"). A non-parametric Man Whitney or Wilcoxon Rank Sum Test was used to test for significant differences between the responses from the two planning situations. This test ranks all responses for both groups in order of increasing size and computes a test statistic U, which is the number of times a score from the BMWC group precedes a score from the RNRAW group of respondents. Mean ranks and 1-tailed probability scores for the statements associated with dialogue indicators are shown in tables 18 and 19. The 3 indicators testing for mutual learning and four of the six indicators associated with societal guidance are shown in table 20. Note the other two indicators of societal guidance, efficiency and effectiveness were measured in other ways, and not tested for on these surveys. Lower mean ranks better signify the positive verification of that indicator; that is, more respondents agreeing with a particular statement. Stated differently, lower scores suggest the operation and presence of indicators that collectively lead to a successful transactive planning process.

Two things are important to note in tables 18 and 19. First, the mean ranks for each indicator for the BMWC planning process are less than or equal to most ranks for the RNRAW planning process. Second, the differences are statistically significant for most of the indicators. Shared interest and commitment and a relationship of mutual obligation were much stronger in the BMWC process. The participants in the BMWC planning effort were kept much better informed about the progress being made than participants in the RNRAW process. These results show that dialogue was present in the BMWC planning process in a much stronger way than in the RNRAW process.

When examining the mean ranks for mutual learning in table 20, one can see that all are lower in the BMWC planning situation. Statistically significant differences are found in the two statements relating to the occurrence of mutual learning in general and the use of personal knowledge in the planning process. Therefore, the BMWC transactive planning process was much more effective in promoting mutual learning than the approach used in the RNRAW.

Table 18. Transactive Planning dialogue statements, indicators and mean ranks for a Wilcoxon Rank Sum Test of significance between the BMWC and RNRAW planning process.

<u>Statement</u>	<u>Indicator</u>	<u>BMW^{a/}</u>	<u>RNRAW^{b/}</u>	<u>p^{c/}</u>
1. I feel my views were readily accepted by the diverse makeup of individuals involved in the planning process.	Authenticity	29.0	38.9	0.0128
2. Comments in all meetings by most participants were in most cases conveyed sincerely and in good faith.	Integration of person	28.8	37.3	0.0238
3. Comments in all meetings by most participants were in most cases conveyed in an open manner.	Integration of person	28.7	37.4	0.0170
4. All parties involved in the planning process have for the most part accepted the differing viewpoints of others.	Conflict Acceptance	29.0	38.8	0.0152
5. All participants that were involved in the planning process for the most part accepted the right of others to express opposing views.	Conflict Acceptance	29.8	36.0	0.0515
6. The concerns of the majority of citizens were incorporated into the management plan.	Communication	29.3	35.4	0.0767

^{a/} Bob Marshall Wilderness Complex

^{b/} Rattlesnake National Recreation Area and Wilderness

^{c/} 1 tailed probability corrected for ties

Table 18. (Cont.)

<u>Statement</u>	<u>Indicator</u>	<u>BMWC^{a/}</u>	<u>RNRW^{b/}</u>	<u>P^{c/}</u>
7. There was a shared interest and commitment among all parties involved in the planning process to produce a plan that would adequately begin to address recreation management in the area.	Commitment	26.8	41.6	0.0004
8. A relationship of mutual obligation and reciprocal "give and take" existed between those involved in the planning process.	Reciprocity	26.6	41.0	0.0003
9. Adequate consideration was given in the alternatives presented to represent the views of all interested citizens.	Common time and space	35.0	35.0	0.4948

Table 19. Transactive Planning Dialogue Statements for the indicator "Communication". Mean ranks for a Wilcoxon Rank Sum Test of significance between the BMWC and RNRAW planning processes.

<u>Statement</u>	<u>BMWC^{a/}</u>	<u>RNRAW^{b/}</u>	<u>p^{c/}</u>
1. Citizens have clearly conveyed their concerns about management in the BMWC/RNRAW.	26.38	33.50	.2485
2. All those participants interested in the planning process were kept adequately informed about progress being made.	29.03	41.52	.0025

^{a/} Bob Marshall Wilderness Complex

^{b/} Rattlesnake National Recreation Area and Wilderness

^{c/} 1 tailed probability corrected for ties

Table 20. Transactive Planning mutual learning and societal guidance statements, indicators and mean ranks for a Wilcoxon Rank Sum Test of significance between the BMWC and RNRAW planning processes.

MUTUAL LEARNING:

<u>Statement</u>	<u>Indicator</u>	<u>BMWC^{a/}</u>	<u>RNRAW^{b/}</u>	<u>p^{c/}</u>
1. Knowledge gained about the planning process from other citizens or managers has better enabled me to be a more effective participant.	Transfer of Knowledge	31.2	38.2	0.0541
2. Mutual learning about most aspects of the planning process occurred among most of those involved.	Mutual Learning	20.9	48.0	0.0000
3. My personal knowledge of the area has been utilized in the planning process.	Personal Knowledge	26.9	40.6	0.0010

SOCIETAL GUIDANCE:

1. Citizens were able to set their own objectives for the plan and pursue them effectively.	Autonomy	31.8	36.6	0.1363
2. Citizens, users of the area and other concerned publics are able to plan for themselves.	Autonomy	30.9	33.4	0.2818

^{a/} Bob Marshall Wilderness Complex

^{b/} Rattlesnake National Recreation Area and Wilderness

^{c/} 1 tailed probability corrected for ties

Table 20. (Cont.)

<u>Statement</u>	<u>Indicator</u>	<u>BMWC^{a/}</u>	<u>RNRAW^{b/}</u>	<u>p^{c/}</u>
3. The planning process was responsive and able to take into account a variety of specialized interests, needs and values of groups affected by its actions.	Responsive- ness	30.9	37.5	0.0566
4. The planning process was able to develop viable alternatives to new problem situations.	Innovation	34.1	31.7	0.2841
5. The planning process was capable of mobilizing popular support for its actions.	Legitimacy	35.6	28.7	0.0553

The mean ranks for the indicators associated with societal guidance show very little difference between the two planning situations. This may be due in part to the incomplete nature of the Transactive Planning process at the time the survey was conducted. Results do show the BMWC process was more responsive and better able to take into account a variety of interests, needs and values of various groups. In order to summarize the results, grand mean ranks for each dimension of transactive planning were calculated (table 21). The overall results show that the Transactive Planning process used in the BMWC was able to bring about dialogue and mutual learning much more effectively than the rational comprehensive approach used in the RNRAW.

In sum, the much more positive scores received on the BMWC planning survey for both dialogue and mutual learning enabled this author to accept hypothesis five, despite similar scores on the two planning processes for societal guidance. If the BMWC planning survey had been conducted after the formal planning process had ended, as it was in the RNRAW, this author feels the transactive approach would have revealed much stronger indications that societal guidance had occurred.

Table 21. Mean ranks and probability scores on transactive planning dimensions by planning situation.

<u>Dimension</u>	<u>BMWC^{a/}</u>	<u>RNRAW^{b/}</u>	<u>p^{c/}</u>
Dialogue	28.4	42.2	0.0021
Mutual Learning	23.7	46.6	0.0000
Societal Guidance	33.6	34.4	0.4372

a/ Bob Marshall Wilderness Complex

b/ Rattlesnake National Recreation Area and Wilderness

c/ 1 tailed probability corrected for ties

CHAPTER VIII

SUMMARY, CONCLUSIONS, MANAGEMENT IMPLICATIONS AND SUGGESTIONS

Summary

The purpose of this study was to describe, document and analyze the application of Transactive Planning and the limits of acceptable change system for wilderness planning in the Bob Marshall Wilderness Complex in Western Montana. Participant observation, theory evaluation surveys and theory evaluation interviews were the three methodologies used in this case study to document the events and actions that occurred during the planning process. For analysis purposes, the planning process was divided into five critical intervals. For each interval, an indicator analysis approach was used to test for the level of occurrence of key elements of Transactive Planning (e.g. dialogue and mutual learning). Using another set of indicators, the entire case study was finally evaluated for the level of occurrence of societal guidance. This approach allowed the research to successfully combine both subjective evaluations and objective, quantitative survey research to test the five research hypotheses and to achieve study objectives.

Conclusions

Based on the acceptance of the five research hypotheses, this author has concluded that Transactive Planning has occurred in the BMWC planning environment and that it is a feasible and more effective approach than traditional comprehensive planning in such settings. Along with this major conclusion, the researcher also reached numerous conclusions based upon the investigation and analysis of information related to the study objectives. The study objectives and the conclusions, based largely on information obtained from participant observation and theory evaluation interviews, are summarized below.

Study Objective 1: Identify what planning situations or conditions are most effective in promoting the key elements of Transactive Planning (e.g. dialogue and mutual learning).

The findings and conclusions reached in this study reaffirm the notion that dialogue and mutual learning are most likely to occur in small group situations where participants are acquainted or are familiar with each others views. The small groups facilitated interchange among user

groups, allowing them to understand each others value systems and view points about various problem situations. The length of the process was also a key factor in promoting dialogue and mutual learning. As the process progressed towards its later stages, all meetings showed a more free flowing dialogue and exchange of views. After three years of planning together, participants had developed a trusting relationship with each other; they knew where each interest group stood, and were more likely to express their own views in a free, uninhibited manner.

Specifically, meetings that were organized around small task-oriented working groups were the most effective in promoting mutual learning. Examples include the citizens/core team meeting where participants conducted intensive mapping exercises, and task force meetings where participants were asked to compile management actions for problem areas. The field trips were also particularly good at fostering authentic dialogue and learning. In the field, participants were no longer dealing on a conceptual level and thus could better picture realistic solutions and alternatives to management problems.

In sum, the general structure of the entire process, with the emphasis on openness and informality was very important in securing mutual learning. In this process, where we had polarized interest groups and citizens with very different value systems and stereotypes of other citizens, the dialogue and learning that occurred required a maturation of sorts. It eventually evolved into a very powerful social unit that will hold the agency accountable to many of their proposed actions.

Study Objective 2: Determine which characteristics of the planning process promoted initial and continued involvement by citizen participants.

The dynamics of group formation and Friedmann's concept of "organized capacity" are the main concepts this study objective attempted to address. Most participants initially got involved in the BMWC planning process for three main reasons.

1. Concern with protecting their own interests was the main reason most individuals became involved initially. Politically powerful interest groups such as the outfitter and guides and backcountry horse groups became involved to protect their operations and continued opportunities for horse travel in the wilderness.

2. Each participant had some kind of tie to the wilderness. Many had been working and or recreating in the area for 20-30 years or longer. The emotional tie to the area for many participants was very strong.

3. They were invited to participate by the agency chairperson who felt a transactive style of planning was needed in this particularly complex planning environment. Those invited were perceived by the agency chairperson to have primary veto power. That is, if not included in the process, most of these individuals could at some time have seriously thwarted the efforts of the entire group, either by using their power in the political arena, with the press, or among other influential users of the BMWC.

The typical citizen participant had been involved in wilderness or natural resource planning in the past. The three citizen participants representing the unaffiliated users had not been involved or involved very little in other planning efforts. Most would not have gotten involved if they did not perceive the problems being addressed as seriously in need of attention. A few of those interviewed realized the importance of looking to the future and felt they would have gotten involved, even if the wilderness had not contained any serious problems. However, this sense of responsibility held by a few participants might not have

sustained them over a three and a half year period.

Making sure the opportunities currently available for their particular activity (e.g. horse trips) would not be limited in any way was the key factor that kept most participants involved. However the reasons they stayed involved were by no means limited to protecting their own interests. Other reasons participants stayed involved are as follows:

- The importance of addressing many sorely neglected problems.
- The understanding that they, the citizen participants, were actually going to help write the plan rather than simply comment on it.
- The overall importance of the entire process. That is, what occurred in the BMWC planning effort would seriously affect future management direction of the entire National Wilderness Preservation System. The use of a major new planning system (LAC) and an innovative planning approach, (Transactive Planning) was being watched by wilderness managers, planners and administrators from many regions of the country (TEI results).

In sum, the profile of the typical citizen participant in this process was an individual who had participated in similar planning processes before. They were natural leaders in their particular organizations. They felt comfortable in speaking up in all types of meetings and planning situations. They became involved because of their

own self interests and emotional ties to the area and because they wanted to see serious problems in the area effectively addressed. They would not have gotten involved if these problems did not exist. They stayed involved because they were authentically being used to help write the plan and because of the national importance of the new and innovative wilderness planning concepts and management systems that were being used.

Study Objective 3: Develop a set of criteria and guidelines for successful wilderness recreation planning that integrates the LAC framework and the Transactive Planning approach.

Planning criteria:

This research and past research into Transactive Planning (Stokes, 1982) has uncovered a set of criteria crucial to successful wilderness planning using the LAC system and a transactive style of planning. A potential planning atmosphere should be evaluated by planners according to the reality of conforming in a rough way to these physical and social criteria before planning begins.

1. The plan will address important and serious problems that exist within the wilderness. As the conclusions in study objective two pointed out, people are unlikely to get involved unless they perceive there are problems worth addressing.

2. The planning environment should be manageable from both a physical and social standpoint. The actual size of the wilderness should not be so large as to overwhelm the technical capability of planners and their ability to organize meetings in convenient, central locations. If more than one National Forest or Ranger district is involved, as is often the case, all must be willing to commit the necessary resources to accomplish the task. The number of issues to be addressed should also be manageable and not overly comprehensive and complex. Also important is that the number of interest groups is not so large so as to make general task force meetings unresponsive and ineffective. The BMWC planning effort was performing at the upper limit of physical and social manageability.

3. There must exist a potential for planners to organize citizen participants into a viable political coalition. Enough groups or individuals must be interested in participating to comprise a political marketplace. Those citizens with veto power must be willing to participate, or at least acquiesce to using an LAC planning framework (Stokes, 1982).

4. The planner must have a wide range of personal characteristics and have at their disposal the appropriate tools to adequately and effectively progress through the nine step LAC process. This means the planner using a transactive style of planning . . .

- a) must have thorough knowledge of the LAC system, the rationale behind it and how it is to be applied in their area.
- b) must have the manpower and experienced field personnel to conduct an inventory of the indicators selected.
- c) must have a willingness to serve people beyond what would be minimally acceptable and have the ability to bring the necessary people and tools together to foster dialogue and mutual learning (Stokes, 1982).
- d) must be skilled in managing interpersonal relations, have a heightened capacity for empathy, be willing to live with conflict and have an understanding of the dynamics of power and the art of using that power to accomplish planning goals (Friedmann, 1973:1).
- e) must be a good leader; someone who is credible in the eyes of citizen participants both in terms of technical proficiency and trustworthiness. They must have the confidence and trust of the people.
- f) should be committed to a transactive style of planning in which the scientific/technical knowledge is joined with the personal knowledge of the citizen through the life of dialogue which leads to mutual learning (Stokes, 1982).

This researcher has also developed a set of guidelines based on participant observation experiences and the writings of Aleshire (1970) and Glass (1979). The following guidelines are provided for managers and planners who might wish to use the LAC system and the Transactive Planning approach.

Planning guidelines:

1. The design of the planning process should receive close attention and scrutiny. The most important factor here is the provision of many avenues for participation and involvement. Several different kinds of citizen participation techniques were used in the BMWC planning effort. Techniques are merely potential tools or means for achieving planning objectives. Certain techniques are more appropriate than others in achieving a particular objective. Therefore, along with using many techniques, attention should be paid to matching those techniques with certain citizen participation objectives.

Attention should also be paid to matching techniques with certain Transactive Planning objectives such as dialogue and mutual learning, and indicators such as autonomy and legitimacy. By utilizing a wide variety of participatory techniques, the weaknesses of one can be overcome by the strengths of another. Transactive Planning goals and overall planning objectives can be more easily achieved. The major planning techniques used in the BMWC and the associated citizen participation objectives are shown in Figure 5.

Citizen Participation Objectives

	Exchange Informa- tion	Education of Citizens	Building Support	Supple- mental Decision Making	Representational Input
<u>Planning techniques</u>					
*1. Task Force meetings	X	X	X		X
2. Agency information meetings	X	X	X		
*3. Small subgroups	X	X	X		X
*4. Citizen/agency workshop	X	X	X		X
5. Nominal group process				X	X
6. Surveys					X
7. Public mass meetings	X				
*8. Problem analysis committees	X			X	
9. Citizen interviews	X				X
*10. Field trips	X	X	X		

*Planning techniques most likely to promote dialogue and mutual learning.

Figure 5. Citizen participation techniques used in the Bob Marshall Wilderness Complex Planning Effort and Associated Objectives.

2. Ensure that interest group representation is comprehensive, or at least diverse enough to include all major groups who might be affected by the proposed management plan. Orchestrating the formation of the task force and making sure it has all of the key player's is one of the most important tasks of the planner. While comprehensive interest group representation is desirable, it is often hard to achieve. The BMWC planning process lacked adequate representation for unaffiliated backpackers.

Planners need not include all possible interest groups at the first meeting. Attempts to be overly comprehensive in the beginning, increase the chances of not being able to get the process launched. However, the flexibility and openness of the process should eventually allow for diverse and equitable representation. But, those with first level veto power should be included as soon as possible; that is, those groups who have the most political clout to nullify planning efforts. Outfitter and guide organizations and national conservation and environmental clubs were some of the groups in the BMWC that held first level veto power. A rescanning of the task force make up should also take place periodically to ensure that those with veto power are eventually included. If individuals are brought into the process fairly late, they need to be educated about LAC and the purpose of the task force before they can effectively

contribute to it. Following is a list of the interest group representation in the BMWC planning process:

The Wilderness Society

Sierra Club (state chapter)

Bob Marshall Wilderness Alliance

Montana Wilderness Association (2 area specific chapters)

Backcountry Horsemen of America (3 area specific chapters)

Professional Wilderness Outfitters Association

Montana Outfitters and Guides Association

National Forest Recreation Association

Unaffiliated BMWC users

State Dept. of Fish, Wildlife and Parks

3. The size of the planning team should be small enough to facilitate an easy exchange of personal and technical/scientific knowledge. Main task force meetings should contain no more than 25 to 30 participants. Smaller, task oriented working groups or sub-group meetings operate most effectively with seven to nine people. These meetings should be frequent enough to keep the process fresh in peoples minds. Face-to-face dialogue should occur throughout the entire planning process.

4. Inform all participants of their role in the planning process. Citizen members of the planning team should be encouraged to develop their own solutions and management actions to solve problems. In short, to play the role of planning for themselves. If managers plan to use citizen generated alternatives as part of the actual plan, citizens should be informed beforehand so as to increase the chances of them generating realistic alternatives. "Realistic" in the sense of being accepted as viable alternatives by task force members. It should also be made clear to citizens that although their input and knowledge will be heavily relied upon, the final decisions rest with the managers. Planners must not make the mistake of using the citizens as decision makers. The role of the agency is still that of final decision maker. Informing citizen participants of their role is especially important in avoiding unrealistic expectations of the outcomes of the process.

5. Respond to problem situations immediately. Problem situations usually arise due to inadequate or faulty communication and misunderstandings. Citizens or other government agency officials who do not understand the LAC process or the nature of the public involvement can often do substantial harm. Keeping the process on track means responding to these individuals as quickly as possible so as to avoid a situation that could possibly balloon out of

proportion and beyond the control of planners and supportive planning team members.

6. Continue citizen participation after the formal planning process has been completed. Continued involvement of citizen task force members is vital to successful implementation of a management plan that utilizes LAC or any other management system. At a minimum, the task force should meet annually to evaluate the past seasons management activities. This will help ensure that agreed upon management actions and monitoring schedules are being adhered to by managers. It will also give managers and citizens a chance to reevaluate the effectiveness of key parts of the plan such as resource or social indicators. The flexibility of the LAC system is such that if an indicator or other aspects of the system are obviously not serving a useful purpose, they can be dropped and new indicators added and tried. This flexibility warrants continued input from users and citizens to ensure they accept any proposed changes or controversial management actions. It will also help maintain the high level of support and cooperative spirit needed for effective implementation.

While these guidelines will help to provide a basic strategic framework for managers and planners who might wish to use the LAC/Transactive Planning approach, they will by no means guarantee its success. Fundamental to understanding the total process is realizing that there exist many bits and pieces that cannot be easily conveyed as simple rules or guidelines. Much of this is an art, a subtle process rather than something that can be taught and learned. The lead planner must rely heavily on intuitive path finding. A sense of what to do next to orchestrate a myriad of underlying agendas and when to initiate subtle actions can be just as much responsible for a successful process as other more easily defined procedures. Again, the traditional planning activities are important, but only if effectively combined with less tangible, more humanistic characteristics of the process.

Management Implications

The implications for managers who choose to use this style of planning and the LAC system are significant and far reaching. The LAC system avoids the lack of specificity plaguing many past wilderness management plans (Stankey, McCool and Stokes, 1984). The LAC system also comes at a time when the public is demanding a level of specificity

that will adequately confront problems past plans have failed to properly address. The LAC system can be used as just another in-house approach to planning. However, it will likely suffer the same fate as past planning schemes unless the public plays a much more integral role in both developing the plan and overseeing its implementation.

The use of citizens to help write the plan and continue serving as "watchdogs" to the agency represents a major shift in the way planning and management is conducted. If this type of planning is to be conducted more in the future, fundamental changes will need to occur within the federal bureaucracies that manage this country's wilderness areas. Changes such as hiring innovative, creative wilderness planners and managers who have a new level of sensitivity and commitment to operate in a transactive style. Allowing "bottom up" planning to become the norm within the agency rather than continue with the traditional "top down" approaches. Are the federal land managing agencies ready for such far reaching changes in the way wilderness planning is conducted? If they are, the implication for wilderness planning will mean the improved acceptance of plans by users and interested citizens. This is especially critical when sophisticated management systems such as LAC are employed in areas where controversial and politically volatile issues exist.

Not all areas are as controversial as the BMWC. In those that are, Transactive Planning will not necessarily decrease the controversial nature of the many issues that face today's managers. However, the effective use of Transactive Planning principles suggests that by bringing citizens into the process, a cooperative relationship with agency managers can be built, thereby reducing the controversial nature of many issues and increasing the chances for successful implementation.

Suggestions for Further Research

One of the characteristics of this planning process that emerged as essential was the presence of a leader versed in the principles of Transactive Planning theory. He held the intuitive capability and necessary skills in interpersonal relations that made the task force work. More research needs to be done into the kinds of personalities that would make successful transactive planners. Can people be trained to be good transactive planners, or is the intuitive sense more of a unique personality trait? This vital element of the process needs to be investigated further.

Along these same lines, researchers also need to more precisely determine the types of people who are likely to actively serve on a task force or planning team. A profile of the typical citizen participant was constructed in this study. This profile needs to be tested in other planning situations, and ways developed to further expand upon Friedmann's concept of "organized capacity." Is it related to past planning participation as much as this study suggests or are there additional elements to this concept of people's capacity to organize and plan for themselves? A better understanding of the power set ups and relationships in a community might shed some light on this question.

Some kind of empirical approach also needs to be developed to test the legitimacy and effectiveness of the various indicators this study has used. An instrument to test the validity of these indicators is needed. Future research efforts should be directed more and more toward objective, quantifiable evaluations such as the theory evaluation surveys used in this study. Also important would be further research aimed at testing what kinds of situations promote and enhance the occurrence of these indicators.

Finally, researchers should continue to investigate the occurrence and effectiveness of Transactive Planning theory, particularly in wilderness and natural resource planning situations where it seems particularly suited. More comparative studies need to be conducted in order to determine just how much more effective Transactive Planning is when compared with traditional synoptic planning approaches. Attention should be paid to filling in the gaps in the Transactive Planning methodology so planners will feel more comfortable with applying its principles in a wide variety of settings. It has been shown in three different studies that Transactive Planning has much potential for overcoming the deficiencies inherent in rational comprehensive planning. Its elevation from theory to practical application has begun. Its application, and the testing of its key elements must continue, to fully ascertain its real potential.

LITERATURE CITED

- Aleshire, Robert A. 1970. Planning and Citizen Participation Costs, Benefits and Approaches. *Urban Affairs Quarterly*, 5(4):369-393.
- Appendix E-1AB. 1981. Flathead National Forest Plan coefficient documentation.
- Appendix 0-2. 1983. Bob Marshall, Great Bear, Scapegoat Wilderness. Lolo National Forest Plan.
- Arnstein, Sherry R. 1969. A Ladder of Citizen Participation. *Journal of the American Institute of Planners*, 35(4): 216-224.
- Bolan, Richard S. 1967. Emerging Views of Planning. *Journal of the American Institute of Planners*, 33(4):233-245.
- Braybrooke, David, and Charles E. Lindblom. 1963. *A strategy of Decision*. New York: The Free Press.
- Bruyn, Severyn T. 1966. *The Human Perspective in Sociology - The Methodology of the Participant Observer*, Englewood Hills, N.J. Prentice - Hall.
- Burke, Edmund M. 1968. Citizen Participation Strategies. *Journal of the American Institute of Planners*, 35(5): 287-294.
- Burch Jr., William R. 1976. Who Participates - A Sociological Interpretation of Natural Resource Decisions. *Natural Resources Journal*, 16(1):41-54.
- Dale, Duane. 1978. *How to Make Citizen Involvement Work: Strategies for Developing Clout*. Citizen Involvement Training Project, University of Mass., 92p.
- Davidoff, Paul. 1965. Advocacy and Pluralism in Planning. *Journal of the American Institute of Planners*, 31(4): 331.
- Dror, Yehezkel. 1964. Muddling Through - Science Of Inertia. *Public Administration Review*, 24(3):153-157.
- Etzioni, Amitai. 1968. *The Active Society*. New York: The Free Press, p.1-16.

- Etzioni, Amitai. 1973. A Commentary on Grabow and Heskin: Foundations for a Radical Concept of Planning. *Journal of the American Institute of Planners*, 39(2):107.
- Federal Register. 1979. Rules and Regulations: National Forest System and Resource Management Planning. *Fed. Reg.* 44(181):53995.
- Fitzpatrick, Linda C.L. 1978. Two Paths to Effectiveness: A Theory of Citizen Participation in Planning. Ph.D. dissertation, University of Washington, 343p.
- Freeman, David M. 1974. *Technology and Society: Issues in Assessment Conflict and Choice.* (Chicago: Rand McNally College Publishing Co.), p.112.
- Friedmann, John. 1969. Notes on Societal Action. *Journal of the American Institute of Planners*, 35(5):311-318.
- Friedmann, John. 1973:1. The Public Interest and Community Participation: Toward a Reconstruction of Public Philosophy. *Journal of the American Institute of Planners*, 39(1):1-12.
- Friedmann, John. 1973:2. *Retracking America.* Garden City, New York:Anchor Press/Doubleday.
- Friedmann, John. and Hudson Barclay. 1974. Knowledge and Action: A Guide to Planning Theory. *Journal of the American Institute of Planners*, 40(1):2-16.
- Frissell, Sidney S. and George H. Stankey. 1972. Wilderness Environmental Quality: Search for Social and Ecological Harmony, In: *Proceedings, Society of American Foresters' Annual Meeting, Hot Springs, Arkansas,* p.170-183.
- Glass, James J. 1979. Citizen Participation in Planning: The Relationship Between Objectives and Techniques. *Journal of the American Planning Association*, 45(2): 180-189.
- Galloway, Thomas D. 1979. Comment on Comparison of Current Planning Theories: Counterparts and Contradictions. *Journal of the American Planning Association*, Oct:399-402.
- Grabow, Stephen, and Allen Heskin. 1973. Foundations for a Radical Concept of Planning. *Journal of the American Institute of Planners*, 39(2):106.

- La Page, Wilbur F. 1967. Some Observations on Campground Trampling and Ground Cover Responce. U.S.D.A. Forest Service, Northeast Forest Experiment Station, 11p.
- Lucas, Robert C. Wilderness Percepton and Use: The Example of the Boundary Waters Canoe Area. Natural Resources Journal, 3(3):394-411.
- Lindblom, Charles. 1959. The Science of Muddling Through. Public Administration Review, 19:79-99.
- McLaughlin, William J. 1977. The Indian Hills Experiment - A Case Study in Transactive Planning Theory. Ph.D. dissertation, Colorado State University, 306p.
- National Environmental Policy Act of 1969. 42 U.S.C.A. 4332 (Sec. 102).
- National Forest Management Act of 1976. 16 U.S.C.A. 1601-13.
- O'Riordan, Jon. 1976. The Public Involvement Program in the Okanagan Basin Study. Natural Resources Journal, 16(1):177-196.
- Sewell, Derrich W.R. and Timothy O'Riordan. 1976. The Culture of Participation in Environmental Decision Making. Natural Resource Journal, 16(1):23-40.
- Stankey, George H. 1971. The Perception of Wilderness Recreation Carrying Capacity: A Geographic Study in Natural Resources Management. Ph.D. dissertation, Department of Geography, Michigan State University, 351p.
- Stankey, George H. and Dave W. Lime. 1973. Recreational Carrying Capacity: An Annotated Bibliography. U.S.D.A. Forest Service Gen. Tech. Report INT-3, Intermountain Forest and Range Experiment Station, Ogden, UT., 45p.
- Stankey, George H., Stephen F. McCool and Gerald L. Stokes. 1984. Limits of Acceptable Change: A New Framework for Managing the Bob Marshall Wilderness Complex. Western Wildlands, 10(3):33-37.
- Stankey, George H., David N. Cole, Robert C. Lucas, Margaret E. Petersen and Sidney S. Frissel. 1985. U.S.D.A. Forest Service Gen. Tech. Report INT-176, Intermountain Forest and Range Experiment Station, Ogden, UT., 37p.

- Stokes, Gerald L. 1982. Conservation of the Blackfoot river Corridor - An Application of Transactive Planning Theory. Ph.D. dissertation, Colorado State University, 229p.
- Toffler, Alvin. 1980. The Third Wave. Bantom Books, New York, N.Y.
- U.S. Department of Agriculture regulations. (36CFR 293.2)
- Wagar, Alan J. 1964. The Carrying Capacity of Wildlands for Recreation. Forest Science Monograph, 7:23.
- Washburne, Randel F. 1981. Carrying Capacity Assessment and Recreational Use in the National Wilderness Preservation System. Journal of Soil and Water Conservation, 36(3):162-166.
- Washburne, Randell F. 1982. Wilderness Recreational Carrying Capacity: Are Numbers Necessary? Journal of Forestry, 80(11):726-728.
- Wengert, Norman. 1976. Citizen Participation: Practice in Search of a Theory. Natural Resources Journal, 16(1): 23-40.
- Wilderness Act of 1964. Public Law 88-577. (Sec. 2a).

APPENDIX A

Bob Marshall Wilderness Complex theory evaluation survey,
cover letter and follow-up letter

May 2, 1984

Dear

As some of you are aware, I am completing my masters program at the University of Montana. My thesis work is directed towards developing an analysis of the Limits of Acceptable Change (LAC) planning process. In order to produce an objective analysis, I need you to provide me with some information about the planning process thus far.

Enclosed you will find a questionnaire. It will help to provide me with some very valuable information necessary to begin evaluating what has occurred thus far. This questionnaire was given out at the last Task Force meeting on April 24th, and is now being sent to those of you who have been involved in the past but were unable to attend this last meeting. This information will be treated as confidential and used for analysis purposes only.

The enclosed questionnaire should take about 15 to 20 minutes of your time. Your opinions and views are extremely important, for only by asking you, those involved in and impacted by the program, can its value be determined. This will allow a decision to be made about LAC's applicability to other wilderness areas in the future.

You are one of only 40 people selected to answer these questions, so you can understand how important your response is to me. Please fill out the questionnaire and return it in the stamped envelope at your earliest convenience. Thanks very much.

Sincerely yours,

Joe L. Ashor
Graduate Student Coordinator
LAC Planning Program

JLA:dg

Enc.

May 9, 1984

Dear,

Several weeks ago at the last LAC Task Force meeting, I gave you, or provided for a friend to deliver to you, a questionnaire. One of the things I neglected to stress at the meeting was that I needed to receive the questionnaire back fairly soon. As of this time I have received no response from you.

Since there are only 40 select individuals chosen for this study, each response is extremely important. It will help myself and others learn how we can improve the planning process the next time LAC is applied in another wilderness area.

Please complete the questionnaire you have received and return it in the stamped envelope provided. Thanks again for your help.

Sincerely,

Joe L. Ashor
Graduate Student Coordinator
LAC Planning Program

JLA:ja

LIMITS OF ACCEPTABLE CHANGE PLANNING SURVEY

The planning process currently being used to apply the "Limits of acceptable change" management system in the Bob Marshall Wilderness Complex has been tried in very few other areas. In order to evaluate the planning process in an objective manner, I need to know how you feel about how the process is being carried out thus far. The information you provide will be treated as confidential and used for analysis purposes only. As you will recall, there are three primary component groups participating in the process -- Managers, researchers and specialists, and citizen representatives. Please indicate below which group best represents your affiliation.

MANAGERS RESEARCHERS AND SPECIALISTS CITIZEN REPRESENTATIVE

In order to determine, in a rough way, your involvement in the LAC process, I would like you to please indicate which of the following you have attended.

Planning workshop (Feb. 16th and 17th, 1982)	<input type="checkbox"/>
LAC field trip (Aug. 23rd - 29th, 1982)	<input type="checkbox"/>
Task force meeting (May 10th, 1983)	<input type="checkbox"/>
Small citizen subgroups (winter 1984)	<input type="checkbox"/>
Task force meeting (April 24th, 1984)	<input type="checkbox"/>

(I) How well do each of the following statements describe your feelings about the planning process so far.

IMPORTANT NOTE: The phrase "task force" and "all participants" in the following statements refers to planner/coordinators, managers, researchers and citizen representatives.

Please circle one answer for each statement.	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
	SA	A	N	D	SD
Knowledge gained about the LAC process from others on the task force has better enabled me to be a more effective participant.	SA	A	N	D	SD
Mutual learning about most aspects of the planning process has occurred among task force members.	SA	A	N	D	SD

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I feel my views have been readily accepted by the diverse makeup of individuals on the task force.	SA	A	N	D	SD
Comments in all meetings by all participants were in most cases conveyed sincerely and in good faith.	SA	A	N	D	SD
All parties involved in the planning process have for the most part accepted the differing viewpoints of others.	SA	A	N	D	SD
The concerns of the citizen representatives have been effectively incorporated into the plan <u>thus far</u> .	SA	A	N	D	SD
There is a shared interest and commitment among all parties involved in the planning process to produce a plan that will adequately begin to address recreation management problems in the Bob Marshall wilderness complex.	SA	A	N	D	SD
A relationship of mutual obligation and reciprocal "give and take" exists between the task force members.	SA	A	N	D	SD
There has been an adequate representation of all interests at all major meetings where comments were gathered and ideas shared.	SA	A	N	D	SD
Comments in all meetings by all participants were in most cases conveyed in an open manner.	SA	A	N	D	SD
All participants involved in the planning process have for the most part accepted the right of others to express opposing views.	SA	A	N	D	SD
The citizen representatives have been able to set their own objectives for the plan <u>thus far</u> , and pursue them effectively.	SA	A	N	D	SD

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Citizen representatives, other concerned publics and users of the Bob Marshall Wilderness Complex are able to plan for themselves.	SA	A	N	D	SD
The planning process <u>thus far</u> has been responsive and able to take into account a variety of specialized interests, needs and values of groups affected by it's actions.	SA	A	N	D	SD
The planning process <u>thus far</u> has been able to develop viable alternatives to new problem situations.	SA	A	N	D	SD
The planning process <u>thus far</u> has inspired loyalty among the members of the task force.	SA	A	N	D	SD
The planning process <u>thus far</u> has been capable of mobilizing popular support for it's actions.	SA	A	N	D	SD
My personal knowledge of the Bob Marshall Wilderness Complex has been utilized in the planning process.	SA	A	N	D	SD
(II) The citizen representatives have clearly conveyed their concerns about LAC management in the Bob Marshall Wilderness Complex.	Always	Most of the time	Sometimes	Never	
All participants in the planning process have been kept informed about the progress being made.	Always	Most of the time	Sometimes	Never	

(III) What do you feel have been the overall successes or failures of the planning process thus far?

Successes:

1. _____

2. _____

3. _____

Failures:

1. _____

2. _____

3. _____

(IV) What do you feel are the most important problems in the Bob Marshall Wilderness Complex that the LAC management system must be directed toward.....

solving:

not solving:

(V) Of the 9 steps in the LAC process, which three do you feel are the most critical. Put "1" in the box for most critical, "2" for second most critical, and "3" third most critical.

STEP 1: Identify area issues and concerns.

STEP 2: Define and describe opportunity classes.

STEP 3: Select indicators of resource and social conditions.

STEP 4: Inventory existing resource and social conditions.

STEP 5: Specify standards for resource and social indicators for each opportunity class.

STEP 6: Identify alternative opportunity class allocations reflecting area issues and concerns and existing resource and social conditions.

STEP 7: Identify management actions for each alternative.

STEP 8: Evaluation and selection of a preferred alternative.

STEP 9: Implement actions and monitor conditions.

Why do you feel the steps you have chosen are the most critical?

(VI) The chances of implementing and carrying out a management system such as LAC are.... -Circle one-

Highly
likely

Likely

Neutral

Unlikely

Highly
unlikely

Please indicate why you feel the way you do on the above question.

(VII) What do you feel are the most important elements of the LAC management system that would increase it's chances of being successful?

Additional comments:

Thank you very much. Your participation in this survey is greatly appreciated!

APPENDIX B

Rattlesnake National Recreation Area and Wilderness
planning survey, cover letter and follow-up letter

July 25, 1984

Dear Interested Citizen:

I am a student at the University of Montana working on a Master's degree in Recreation Management. Part of my thesis work is directed towards developing an analysis of the public involvement and planning process that occurred in the Rattlesnake National Recreation and Wilderness Area (RNRAW). In order to produce an objective analysis, I need you to provide me with some information about the planning process.

Enclosed you will find a questionnaire. It will help to provide me with some very valuable information necessary to begin evaluating what occurred in the RNRAW planning process. Be assured that the information you provide will be treated as confidential and used for analysis purposes only.

The enclosed questionnaire should take about 15 to 20 minutes of your time. Your opinions and views are extremely important, for only by asking you, those involved in planning for the RNRAW can its value be determined. You are one of only 50 people selected to answer these questions, so you can understand how important your response is to me. Please fill out the questionnaire at your earliest convenience and return it in the stamped envelope. Thanks very much.

Sincerely,

Joe L. Ashor

Enclosures

August 7, 1984

Dear Interested Citizen:

Several weeks ago I sent you a questionnaire in the mail. As of this time I have received no response from you. My study of the public involvement and planning process that occurred in the Rattlesnake National Recreation and Wilderness Area is dependent upon your response.

Since there are only 50 select individuals chosen for this study, each response is extremely important. It will help myself and others learn how public involvement and wildlands planning can be improved for application in other areas of the country.

Please complete the questionnaire you have received and return it in the stamped envelope provided. Thanks again for your help.

Sincerely,

Joe L. Ashor

JLA:ja

RATTLESNAKE NATIONAL RECREATION AND WILDERNESS AREA PLANNING SURVEY

The planning process used to formulate a management plan for the Rattlesnake National Recreation and Wilderness Area (RNRAW), has now been completed. In order to evaluate the planning process in an objective manner, I need to know how you feel about how the process was carried out. Again, the information you provide will be treated as confidential and used for analysis purposes only. First, please indicate below your organizational affiliation (if any).

Org. affil.: _____

In order to determine in a rough way your involvement in the planning process, I would like you to please indicate which of the following you have attended, or been involved with.

Any club or group meeting where Forest Service officials gave a presentation on their planning process.

Personally talked one or more times with Forest Service officials regarding any aspect of the process.

Open house, library (Jan. 17th, 1984)

Open house, district office (Jan. 19th, 1984)

Friends of the Rattlesnake public meeting (Feb. 2nd, 1984)

Approximate time span involved in planning for the RNRAW. _____

(I) How well do each of the following statements describe your feelings about the planning process that took place in the RNRAW?

IMPORTANT NOTE: The phrase "all participants" in the following statements refers to planners, managers, users of the RNRAW and interested citizens who attended meetings and commented on the plan. The phrase "planning process" refers to the entire planning effort conducted by the Forest Service planners and managers including all methods used to collect public comments and any and all meetings, presentations, open houses or contacts with individual citizens.

Please circle one answer for each statement.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Knowledge gained about the planning process from other citizens or managers has better enabled me to be a more effective participant.	SA	A	N	D	SD
Mutual learning about most aspects of the planning process occurred among most of those involved.	SA	A	N	D	SD
I feel my views were readily accepted by the diverse make-up of individuals involved in the planning process.	SA	A	N	D	SD
Comments in all meetings by most participants were in most cases conveyed sincerely and in good faith.	SA	A	N	D	SD
All parties involved in the planning process have for the most part accepted the differing viewpoints of others.	SA	A	N	D	SD
The concerns of the majority of citizens were incorporated into the final document.	SA	A	N	D	SD
There was a shared interest and commitment among all parties involved in the planning process to produce a plan that would adequately begin to address recreation management in the RNRW.	SA	A	N	D	SD
A relationship of mutual obligation and reciprocal "give and take" existed between those involved in the planning process.	SA	A	N	D	SD

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Adequate consideration was given in the alternatives presented to represent the views of all interested citizens.	SA	A	N	D	SD
Comments in all meetings by all participants were in most cases conveyed in an open manner.	SA	A	N	D	SD
All participants that were involved in the planning process for the most part accepted the right of others to express opposing views.	SA	A	N	D	SD
Citizens were able to set their own objectives for the plan and pursue them effectively.	SA	A	N	D	SD
Citizens, users of the RNRW and other concerned publics are able to plan for themselves.	SA	A	N	D	SD
The planning process was responsive and able to take into account a variety of specialized interests, needs and values of groups affected by its actions.	SA	A	N	D	SD
The planning process was able to develop viable alternatives to new problem situations.	SA	A	N	D	SD
The planning process was capable of mobilizing popular support for its actions.	SA	A	N	D	SD
My personal knowledge of the RNRW has been utilized in the planning process.	SA	A	N	D	SD

(II) The citizens clearly conveyed their concerns about management in the RNRAW.

Always Most of the time Sometimes Never

All those interested in the planning process were kept adequately informed about the progress being made.

Always Most of the time Sometimes Never

(III) What do you feel were the overall successes or failures of the entire planning process?

Successes:

Failures:

1. _____

1. _____

2. _____

3. _____

(IV) Comments on the plan were collected from a number of groups listed below. Please check the box which most closely matches your opinion concerning the relative level of involvement each group may have had in the public participation stage of the planning process.

	High level	About right	Low level	Don't know
Long time users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occasional users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
University students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interested citizens (non-users)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Formalized groups or organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Out of state residents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(V) A major document to collect citizen comments concerning management options for the RNRAW - The Missoulian supplement - was published on Feb. 7th, 1983. As a means of collecting public comment on management issues and options, the supplement was. . . .

-circle one-

Highly satisfactory Satisfactory Neither sat. nor unsat. Unsatisfactory Highly unsatisfactory

Please indicate why you feel the way you do on the above question.

As many of you are already aware, the present document merely specifies broad management objectives, goals and guidelines for the RNRAW. A specific final management plan has yet to be written. These final questions will help me determine your feelings about further planning and implementation of a final management plan.

(VI) What do you feel are the most important problems in the RNRAW that the final management plan must be directed toward

solving:

not solving:

(VII) The chances of implementing and carrying out a final management plan are...
- circle one -

Highly
likely

Likely

Neutral

Unlikely

Highly
unlikely

Please indicate why you feel the way you do on the above question.

(VIII) What do you feel are the most important elements of a further planning effort that would increase the chances of successful implementation of the final management plan.

Additional comments:

Thank you very much. Your participation in this survey is greatly appreciated!

APPENDIX C

Theory Evaluation Interview Questions

QUESTIONS FOR THEORY EVALUATION INTERVIEWS

QUESTION

AREA OF INQUIRY

- 1) What do you feel you have learned about wilderness planning having participated in this process? Occurrence of Mutual Learning
- 2) Do you feel a mutual understanding and learning about the LAC concept and most of the problems the BMWC faces have been reached by most individuals involved in the process? If yes . . . Occurrence of Mutual Learning
- 3) What do you feel were the key aspects or parts of the process that promoted this understanding? i.e., (what types of meetings or discussions) Which techniques best promoted mutual learning?

SOCIETAL GUIDANCE

- 4) The idea of continuing involvement of the task force citizen members for periodic review of progress has been put forth. How important of a role do you see these citizens playing in the proper implementation of LAC? (setting own objectives and pursuing them effectively) (4a) What form should this role take? i.e. (formal or informal). Autonomy
- 5) Do you feel the planning process has been able to take into account a variety of interests, needs and values of groups who may be affected by its actions? Responsiveness
- 6) With all of the involvement and participation that individuals like yourself have contributed, do you feel comfortable that the final decisions made by the forest managers will be adequately specific to the BMWC? Autonomy
- 7) Do you feel the planning process could have been successfully led by the task force citizen representatives rather than the Forest Service? Autonomy

QUESTION

AREA OF INQUIRY

SOCIETAL GUIDANCE Cont.

- | | |
|---|---|
| 8a) When new issues or problems arose, do you feel they were responded to in a creative manner; that is, not through the usual channels or ordinary way of handling things? | Innovativeness |
| 8b) LAC/citizen participation is a new concept being tested for the first time. Do you feel it is an innovative approach and an improvement, even through untried. That is, an improvement over the way forest planning has taken place. Optional: Have you been involved in forest planning? | Innovativeness |
| 9) Do you feel the actions initiated by LAC planning are both timely and accurate with respect to the problems facing the BMWC. | Effectiveness |
| 10a) What is your impression of the level of support for the way the planning process is being handled? i.e. (early citizen involvement - broad based support?) | Legitimacy |
| 10b) What is your impression of the level of support from task force member to implement the plan (funding aside). | |
| 10c) Do you feel there is enough support in the political arena to get adequate funds? | |
| 11) What was the impetus that initiated your involvement? Why did you become involved? What kept you involved? | <u>Dynamics of Group Formation</u> (study object #2) |
| 12) Would you have gotten involved if you did not perceive the problems being addressed as seriously in need of attention? | Concept of "organized capacity" and "willingness to act." |
| 13) What other similar planning processes have you been involved with in the past? | Same as above. |

QUESTION

AREA OF INQUIRY

SOCIETAL GUIDANCE Cont.

- | | |
|--|---|
| 14) Of the various meetings you attended, which ones did you feel most comfortable expressing your views at and why? | <u>Dynamics of Group Interaction</u> |
| 15) Which ones (or types) did you feel the least comfortable? | Which techniques best promoted dialogue. |
| 16) Do you feel the planners in this process utilized in a meaningful way, the personal knowledge and expertise held by yourself or other citizen representatives? | <u>How does the planner appear to others?</u> |
| 17) The process generated a great deal of data and information. Do you feel it was presented in a way that aided or hindered your ability to make decisions? | Information overload |
| 18) What do you feel was the primary role of the planners in this process? | Planners' role |
| 19) What do you feel was your role? | Citizen's role |
| 20) What things did the planners do that you liked? . . . disliked? | |
| 21) How well do you feel the group has been led? i.e. What has gone well and what hasn't? Who's the leader?" | |

FINAL QUESTION

If this planning framework were to be used in another wilderness area, i.e., (LAC/citizen participation on task force, etc.), what do you feel could be done differently to improve upon the overall process?

Do you have any additional comments?

APPENDIX D

Theory Evaluation Survey Key Element
and Indicator Key

THEORY EVALUATION SURVEY KEY ELEMENT AND INDICATOR KEY

STATEMENTS	--KEY ELEMENT-- (Indicator)
1) I feel my views were readily accepted by the diverse make-up of individuals involved in the planning process	--DIALOGUE-- (Authenticity)
2) Comments in all meetings by most participants were in most cases conveyed sincerely and in good faith.	(Integration of Person)
3) All parties involved in the planning process have for the most part accepted the differing viewpoints of others.	(Conflict Acceptance)
4) The concerns of the majority of citizens were incorporated into the management plan.	(Communication)
5) There was a shared interest and commitment among all parties involved in the planning process to produce a plan that would adequately begin to address recreation management in the area.	(Shared Interest and Commitment)
6) A relationship of mutual obligation and reciprocal "give and take" existed between those involved in the planning process.	(Reciprocity)
7) Adequate consideration was given in the alternatives presented to represent the views of all interested citizens.	(Common Time and Space)
8) Comments in all meetings by all participants were in most cases conveyed in an open manner.	(Integration of Person)
9) All participants that were involved in the planning process for the most part accepted the right of others to express opposing views.	(Conflict Acceptance)

STATEMENTS	--KEY ELEMENT-- (Indicator)
10) Citizens have clearly conveyed concerns about management in the BMWC/RNRAW.	--DIALOGUE-- (Communication)
11) All those interested in the planning process were kept adequately informed about progress being made.	(Communication)
12) Knowledge gained about the planning process from other citizens or managers has better enabled me to be a more effective participant.	--MUTUAL LEARNING-- (Knowledge Transfer)
13) Mutual learning about most aspects of the planning process occurred among most of those involved.	(Mutual Learning)
14) My personal knowledge of the area has been utilized in the planning process.	(Personal Knowledge)
15) Citizens were able to set their own objectives for the plan and pursue them effectively.	--SOCIETAL GUIDANCE-- (Autonomy)
16) Citizens, users of the area and other concerned publics are able to plan for themselves.	(Autonomy)
17) The planning process was responsive and able to take into account a variety of specialized interests, needs and values of groups affected by its actions.	(Responsiveness)
18) The planning process was able to develop viable alternatives to new problem situations.	(Innovation)
19) The planning process was capable of mobilizing popular support for its actions.	(Legitimacy)