

United States Department of Agriculture



Forest Service Flathead, Lolo, Helena, Lewis & Clark National Forests

# Bob Marshall Great Bear Scapegoat



## Wildernesses

## Recreation Management Direction



#### THE BOB MARSHALL, GREAT BEAR AND SCAPEGOAT WILDERNESSES

### **RECREATION MANAGEMENT DIRECTION**

Amendment To:

Flathead Forest Plan – Management Area 21 (Replaces Appendix R)

Helena Forest Plan – Management Area P-1 (Replaces Appendix S)

Lewis & Clark Forest Plan – Management Area P (Replaces Appendix U)

Lolo Forest Plan – Management Area 12 (Replaces Appendix O-2)

## PREFACE

The Bob Marshall Country stands today as a monument to the wisdom of people, from both past and present, who so cherished its wildness that they spent much of their lives achieving protection of the land in its natural state. Their first formal efforts took shape in 1931 with designation of the South Fork Primitive Area. The Pentagon Primitive area was established in 1933, the Sun River in 1934. In 1940, these three areas were combined and administratively classified by the Forest Service as the Bob Marshall Wilderness. In 1964 with passage of the Wilderness Act, Congress classified the Bob Marshall as Wilderness. Widespread citizen support resulted in creation of the Scapegoat Wilderness in 1972 and the Great Bear in 1978. It is a great tribute to the people involved both in and out of government, and to the processes of American democracy that the Bob Marshall Complex remains undeveloped as one of the most priceless natural areas left on earth.

This plan provides a uniform system for protecting or restoring the resource and social conditions needed to comply with the Wilderness Act of 1964 and to assure a high-quality experience for each user. It is to be used by personnel of the four National Forests involved and by interested citizens in caring for the Bob Marshall Complex. From a management viewpoint, the plan is written for and will be most useful to field-going rangers who work and live on the land.

Since some of the highest qualities of wilderness cannot be described or reduced to measurable factors, this plan does not deal with these broader values but instead provides a means to protect or restore the conditions necessary to create the values each visitor seeks. It focuses on limiting change to resources that, if over used, would degrade the wilderness experience and defines opportunities for various levels of contact with the natural scene. This plan is not a whole plan for managing the wilderness nor does it in any way replace the need for informed caretakers who understand the land and are stationed in the wilderness.

To the contrary, something of the wonder of its creation has to become part of every ranger before he or she is qualified to participate in management of the Bob Marshall, or contact its users, or implement the recreation program. It would be counterproductive for the plan to become a substitute for knowledge of country or familiarity with the history of the Bob's creation, the legends of its discovery, how the Indians used and viewed the land, the philosophies created by protection and use of the land and its life in the past. Taken together with the geology of the earth, knowledge and appreciation of these foregoing form the foundation of wilderness ethics that must radiate from wilderness rangers as they go about their work, including the application of this management program.

In accordance with the Wilderness Act, then, the central management thrust in the Bob Marshall Complex will be to permit natural processes to operate uninhibited by human influence. Man, however, will be viewed as a natural part of the ecosystem so long as his stay is temporary and he lives by primitive means. In that way, only man's disruptive technology and the effects of his use, not man himself, may be in conflict with wilderness. Man is a welcome visitor who rekindles his spirit by returning for a brief time to the natural systems available in wilderness. Consequently, this management program is to be applied by rangers capable of communicating the land's mystery, geology, history, and culture to others, and its purpose is to perpetuate the opportunity for each visitor to enrich his or her experience to the fullest without unduly limiting the freedom to interact alone with nature.

> Bud Moore Swan Valley Citizens Group Condon, Montana

## TABLE OF CONTENTS

PREFACE	i
TABLE OF CONTENTS	<i>iii</i>
LIST OF TABLES AND MAP	<i>v</i>
LIST OF APPENDICES	vi
INTRODUCTION	1
SECTION 1	3
MANAGEMENT DIRECTION, PLANNING FRAMEWORK, ISSUES AND CONCERNS AND AREA-WIDE GOALS AND GUIDELINES Management Direction Planning Framework Issues and Concerns Area-Wide Goals and Guidelines	<b> 3</b> 6 8 10
SECTION 2	. 15
OPPORTUNITY CLASS DESCRIPTIONS, GUIDELINES AND POLICY Opportunity Class I Opportunity Class II Opportunity Class III Opportunity Class IV	. 15 16 17 18 19
SECTION 3	. 23
INDICATORS OF RESOURCE AND SOCIAL CONDITIONS Indicators for the Bob Marshal Wilderness Complex How Each Indicator will be Measured	<b>. 23</b> 24 25
SECTION 4	. 27
INVENTORY PROCESS: RESOURCE AND SOCIAL CONDITIONS	27
SECTION 5	. 29
STANDARDS FOR RESOURCE AND SOCIAL INDICATORS FOR EACH	29
Prevention of Significant Deterioration of Wilderness Conditions Background	29 29 29 30
Standards for Resource and Social Indicators for Each Opportunity Class in the BMWC.	e 31
SECTION 6	. 33
OPPORTUNITY CLASS ALLOCATIONS	33
SECTION 7	. 35
MANAGEMENT ACTIONS	35

Management actions for places where the current opportunity class will conti under the established management direction and where conditions violate the standards for the specified opportunity class	nue 35
Management actions for places where the desired opportunity class is different	nt than
the management, which is presently occurring on the ground	40
Management direction and actions for special areas.	40
Schafer Meadows Wilderness Airstrip	40
Outfitter Camps in Argosy and Silvertip Creeks	45
Bowl Creek	45
SECTION 8	47
MONITORING PLAN	47
Long Term Monitoring Process	47
Annual Monitoring Process	47

## LIST OF TABLES AND MAP

TABLE		PAGE
1	Summary of Resource and Social Setting Component For Each Opportunity Class	20
2	Summary of Managerial Setting Components For each Opportunity Class	21
3	Standards for Resource and Social Indicators for Each Opportunity Class in the BMWC	31
4	Standards for Range Indicators for Each Opportunity Class in the BM	32
5	Potential Management Actions Directed Toward Reducing Human Impacted Site Density	36
6	Potential Management Actions Directed Toward Reducing Unacceptable Site Conditions or Impacts	37
7	Potential Management Actions Directed Toward Reducing Campsite and Trail Encounters	38
8	Potential Management Actions Direct Toward Improving Range Conditions	39
9	Management Actions Necessary to Bring Opportunity Classes in Line with Management Direction on Flathead and Helena National Forests	41-42
Map	Opportunity Class Allocation Map	????

## LIST OF APPENDICES

### APPENDIX

A	FIRE MANAGEMENT IN THE BOB MARSHALL WILDERNESS COMPLEX	49
В	FLATHEAD WILD & SCENIC RIVER MANAGEMENT (INTEGRATION WITH WILDERNESS MANAGEMENT)	55
C	TRAIL SYSTEM MANAGEMENT AND MAINTENANCE	61
D	LAC TASK FORCE ROLE BOB MARSHALL WILDERNESS COMPLEX	67
E	ONGOING MANAGEMENT CONSULTATION PROCESS	73
F	BASIC FRAMEWORK FOR DETERMING THE LIMITS OF ACCEPTABLE CHANGE AND FOR PLANNING THE RANGE (FORAGE) RESOURCE	75
G	SUPPORTING RESEARCH AND REFERENCES	79

## **INTRODUCTION**

This document constitutes amended management area direction for Flathead, Helena, Lewis & Clark, and Lolo Forest Plans specific to the Bob Marshall, Great Bear, and Scapegoat Wildernesses. These three areas are commonly referred to as the Bob Marshall Wilderness Complex (BMWC).

This recreation management direction for the Bob Marshall, Great Bear, and Scapegoat Wildernesses, was prepared as required by National Forest Management Act regulations (36 CFR 219.18(a). Those regulations require the USDA Forest Service to prepare plans for managing visitor use in the wilderness.

In order to accomplish this objective, the Forest Service followed the planning system suggested by Stankey, et al., in *The Limits of Acceptable Change (LAC) System for Wilderness Planning*, Intermountain Forest and Range Experiment Station, USDA Forest Service, General Technical Report INT – 176, January 1985.

This management direction evolved through continuous in-depth involvement of a Task Force. That Task Force included a diverse group representing a range of viewpoints regarding management of the BMWC. The Task Force involvement was followed by a formal public review process. This review process provided members of the public who have not participated in the Task Force an opportunity to make their views known. Appendix E describes the Task Force public involvement process, the role of the Task Force, its composition and underlying assumptions.

This management direction is based on the premise that the publics affected by wilderness management decisions must be a part of the decision making process. That public must also feel that they have ownership in decisions, if they are to support them. Success of wilderness management efforts depends on the consent and support of the users. Toward that end, members of wilderness interest groups played an integral part of the development of this management direction.

This amendment represents a social contact between the public and Forest Service managers regarding how recreation use of the BMWC is to be managed. It also represents the kind of wilderness experience the public can expect. This objective reflects a long-standing tradition of Forest Service management of public lands. Gifford Pinchot, father and first Chief of the Forest Service, stated, "National Forests exist today because the people want them. To make them accomplish the most good, the people themselves must make clear how they want them run." This statement is as true of Forest Service wilderness management today as it was in 1907 when Pinchot established this tenet for management of the National Forest System as a whole.

Another underlying management premise described in this direction is that public involvement; consent and support regarding implementation will be an ongoing process. It is, therefore, the intent of this amended management direction that ongoing consultation be held among managers, researchers, and citizen representatives that

comprise the Task Force. Meetings will occur annually during winter or spring of the first three years of implementation. After that time, managers and other Task Force members will decide if continued regular meetings are warranted. The objective of these meetings will be to involve members of the public in the ongoing monitoring and evaluation of this management regime and the decisions generated by that ongoing process.

The consultation process envisioned in Appendix E describes the relationship between BMWC managers and this ongoing group involvement.

## **SECTION 1**

#### MANAGEMENT DIRECTION, PLANNING FRAMEWORK, ISSUES AND CONCERNS AND AREA-WIDE GOALS AND GUIDELINES

The purpose of this section are as follows:

- To describe the background for the development of this document.
- To identify the unique characteristics of the Bob Marshall Wilderness Complex.
- To identify management concerns and public issues related to the Bob Marshall Wilderness complex.
- To identify area-wide goals and guidelines.
- To provide a basis for the establishment of management objectives.
- To guide the allocation of land to different opportunity classes.

#### **Management Direction**

The management direction for the Bob Marshall Wilderness Complex (BMWC) focuses on delivery and preservation of those wilderness-related benefits specified in the Wilderness Act of 1964, the National Forest Management Act of 1976, and in the Department of Agriculture and Forest Service policy guidelines. Selected excerpts from these laws and management guidelines follow:

A.	"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 enjoy- ment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character" (Section 2a)	Wilderness Act of 1964 (P.L. 88-577)
	"wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educa- tional, conservation, and historical use." (Section 4b)	
B.	"In carrying out such purposes, National Forest Wilderness resources shall be managed to promote, perpetuate, and, where necessary, restore the wil- derness character of the land and its specific values of solitude, physical and mental challenges, scien- tific study, inspiration, and primitive recreation. To that end: a) Natural ecological succession will be allowed to operate freely to the extent feasible. b) Wilderness will be made available for human use to the optimum extent consistent with the maintenance of primitive conditions. c) In resolving conflicts in resource use, wilderness values will be dominant to	Department of Agriculture Regulations (36 CFR 293)

the extent not limited by the Wilderness Act, subsequent establishing legislation, or the regulations in this part." (36 CFR 293.2)

- C. "In developing, maintaining, and revising plans for units of the National Forest System pursuant to this section, the Secretary shall assure that such plans (1) provide for multiple use and sustained yield of the products and services obtained therefrom... and, in particular, include coordination of outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness;..."(Section 6e)
- D. "...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 fully and that do not impair the values for which wilderness area were created..."(219.18(a))
- E. The manager, then must face the paradox of wilderness as described by Congress, as seen or felt by those whose values vary, and the uses and activities permitted and prohibited in those areas by the Wilderness Act. They must solve the problem of use of the area while still keeping these parts of the natural world intact. They must:

"...Manage the wilderness resource to ensure its character and values are dominant and enduring. Its management must be consistent over time and between areas to ensure its present and future availability and enjoyment as wilderness. Manage wilderness to ensure that human influence does not impede the free play of natural forces or interfere with natural successions in the ecosystems and to ensure that each wilderness offers outstanding opportunities for solitude or a primitive and unconfined type of recreation. Manage wilderness as one resource rather than a series of separate resources."

#### 2320.2 – Objectives

"1. Maintain and perpetuate the enduring resource of wilderness as one of the multiple uses of National Forest System land. National Forest Mangement Act of 1976 (P.L. 94-588)

Department of Agriculture Regulations (36 CFR 219)

Forest Service Manual Chapter 2320.2 2. Maintain wilderness in such a manner that ecosystems are unaffected by human manipulation and influences so that plants and animals develop and respond to natural forces.

3. Minimize the impact of those kinds of uses and activities generally prohibited by the Wilderness Act, but specifically excepted by the Act or subsequent legislation.

4. Protect and perpetuate wilderness character and public values including, but not limited to, opportunities for scientific study, education solitude, physical and mental challenge and stimulation, inspiration, and primitive recreation experiences.

5. Gather information and carry out research in a manner compatible with preserving the wilderness environment to increase understanding of wilderness ecology, wilderness uses, management opportunities, and visitor behavior."

#### 2320.3 – Policy

"1. Where there are alternatives among management decisions, wilderness values shall dominate over all other considerations except where limited by the Wilderness Act, subsequent legislation, or regulations.

2. Manage the use of other resources in wilderness in manner compatible with wilderness resource management objectives.

3. In wildernesses where the establishing legislation permits resource uses and activities that are nonconforming exceptions to the definition of wilderness as described in the Wilderness Act, manage these nonconforming uses and activities in such a manner as to minimize their effect on the wilderness resource.

4. Cease uses and activities and remove existing structures not essential to the administration, protection, or management of wilderness for wilderness

Forest Service Manual Chapter 2320.3 purposes or not provided for in the establishing legislation.

5. Because wilderness does not exist as a vacuum, consider activities on both sides of wilderness boundaries during planning and articulate management goals and the blending of diverse resources in forest plans...Use the Recreation Opportunity Spectrum (FSM 2310) as a tool to plan adjacent land management.

6. Manage each wilderness as a total unit and coordinate management direction when they cross other administrative boundaries.

7. Use interdisciplinary skills in planning for wilderness use and administration.

8. Gather necessary information and carry out research programs in a manner that is compatible with the preservation of the wilderness environment.

9. Whenever and wherever possible, acquire non-Federal lands located within wildernesses, as well as non-Federal lands within those areas recommended for inclusion in the system.

10. Inform wilderness visitors that they face inherent risks of adverse weather conditions, isolation, physical hazards, and lack of rapid communications, and that search and rescue may not be as rapid as expected in an urban setting, in all publications and personal contacts.

11. Manage primitive areas as wilderness areas consistent with 36 CFR 293.17 until their designation as wilderness or to other use is determined by Congress."

#### **Planning Framework**

The National Forest Management Act required that Forest Plans provide for integrated management direction for each resource on the Forest. Overall management direction for the Bob Marshall, Great Bear and Scapegoat Wildernesses is established in the Forest Plans of the Flathead, Helena, Lewis & Clark and Lolo National Forests. Common wilderness management direction contained in these plans was developed in the

management area sections for the three Wildernesses. This direction provides general common guidance for managing the wilderness resource contained in these three classified wildernesses. This management direction includes general guidance for management of the individual components and attributes of the wilderness resource. These components and attributes include visitor use, wildfire, insect and disease control, range and wildlife/fisheries resources. Within the framework of the general management direction provided by Forest Plans, this amendment provides specific direction on implementation of general forest plan direction with respect to managing recreation. This general direction states:

"Management action for limiting and/or distributing visitor use in this area will be based on application of the Limits of Acceptable Change (LAC) process described by Stankey, et al, in the The Limits of acceptable change (LAC) System for Wilderness Planning, Intermountain Forest and Range Experiment Station, USDA Forest Service, General Technical Report INT-176, January 1985. The LAC system provides framework for determining the range of social and resource conditions acceptable in wilderness settings in order to ensure a diversity of high quality wilderness recreation opportunities is provided. It focuses on limiting change to resources that, if overused, would degrade the wilderness experience, and defines opportunities for various levels of contact with the natural scene. The concept recognizes that an area's ability to accommodate use depends on several variables, including the intensity of management, visitor behavior, timing or season of use, and elevation and habitat of the specific sites involved. The lands within these wildernesses will be assigned to one of the four wilderness recreation opportunity classes... The emphasis will be on Opportunity Classes I and II except around heavily used trail corridors. Upon completion of public review and Regional Forester approval, additional direction for limitation and distribution of use will be incorporated into the Forest Plan, in accordance with the amendment provisions of 36 CFR 219.10 (a)." (Flathead Forest Plan, pages III - 102 and 103)

Along with recreation, wilderness management involves many other important attributes of the wilderness resource. It is also related to ecological change and man's activities regarding fire and wildlife and fish species that require specific management direction. An action plan was developed for managing fire in the Bob Marshall Wilderness Complex. That action plan consists of the Scapegoat-Danaher Fire Management and Bob Marshall-Great Bear Wilderness Fire Plans. The direction established in this amendment constitutes an action plan for managing recreation use of the BMWC. The public expressed concern regarding the need for more specific management direction for the wildlife and fisheries attributes of the wilderness resource. This amendment recognizes that wilderness recreation use is interrelated with wildlife and fisheries management activities. It also recognizes the associated consumptive and non-consumptive uses of the wildlife resource as being an extremely important part of the experience of many wilderness users. As part of the ongoing planning and management processes related to the BMWC, direction specific to wildlife and fisheries management in the BMWC will be developed. As that component of the management process is developed, wildlife/fisheries, fire, and recreation management direction will be integrated. This will insure that recreation, fire, wildlife and fisheries management actions are complimentary in insuring an enduring wilderness resource.

#### **Issues and Concerns**

The BMWC forms a contiguous area of 1,535,352 acres of relatively remote, wild, and basically undeveloped lands. Due to the size, the resource values, the opportunities present, and the general repute of the area; it is considered a highly important resource of national and even international significance.

The resource values and opportunities of the complex area are the basis for its significance. This large area covers complete and multiple ecosystems from river bottom to ridge top on both sides of the Continental Divide. Significant elevational differences and a variety of topographic and major geologic features are present. Significant biological diversity exists in terms of wildlife and habitat, which includes threatened and endangered species values. Outstanding opportunities are available for extended travel using horses and pack animals, as well as backpacking and river running, in an environment where risk and danger exist. The wilderness complex also contains over one-third of the entire Flathead Wild and Scenic River System. This system provides unique opportunities for river rafting in the wilderness setting. Traditional and new recreational uses, outfitted trip opportunities, saddle and pack stock use, fall big-game hunting, river rafting and an active backcountry airstrip all combine to provide a mix of wilderness Complex.

The complex is one of the largest intact ecosystems remaining in the 48 contiguous states. Apparently, all wildlife species existing in the area immediately prior to the arrival of European man still remain in the area. This includes grizzly bear and the wolf. In combination with Glacier National Park, adjacent roadless areas, and nearby game preserves and ranges, the Complex serves as a major wildlife sanctuary and travel route, particularly for threatened and endangered species.

Managers and the public have identified many issues and concerns relating to all aspects of wilderness management in the BMWC. The following are management concerns and public issues that were identified through the Forest Plan scoping process and inter-Forest coordination efforts related to development of management direction for the wilderness complex. The overall issue and concern identified was: "At what level should the Forest Service manage the wilderness resource, including trail maintenance and fire management." Facets of this issue are as follows:

- A. *Outfitter service level* What level of outfitted service should be provided for the public in the BMWC?
- B. *Lake Management* What level of recreational use can occur around lake shores that does not unacceptably alter the wilderness resource and fish population?

- C. *Range* What level of forage production can be used by domestic, pack and saddle stock, while protecting the wilderness resources including wildlife winter range?
- D. *Trail Conditions* How can trails be improved to more fully protect the resource and provide a more esthetic experience for all users?
- E. *Airfield Management (Schafer Meadows)* What is the proper function of Schafer Meadows Airstrip? How can the noise from aircraft be managed within acceptable limits? What is the proper level of facility development at Schafer?
- F. *Communication Facilities*—What communication system is needed and acceptable to manage the wilderness resource?
- G. *Visitor Encounters*—What is an acceptable level of encounters between parties both on the trail and in camp (perceptions of crowding)?
- H. *Level of Regulation* What level of regulation should be used by the Forest Service to distribute and/or limit use?
- I. *Wild and Scenic River Management*—How will the management of the rivers within the BMWC integrate with wilderness management?
- J. *Wilderness Fire Management*—How will the Wilderness Fire Management Plan relate to management of the recreational user?
- K. *Human Impacted Site Numbers and Condition*—What will be an acceptable density of human impacted sites in different areas of the BMWC? What will be an acceptable level of change in human impacted sites?
- L. *Wildlife Management*—How should wildlife and fish be managed as a part of the Wilderness Resource?
  - How can quality fishing and big game hunting be maintained?
  - How can threatened and endangered species be protected?
  - How can the frequency and variety of wildlife sightings be increased?
  - What is the acceptable level of impacts by hunting and fishing use on the Wilderness Resource?
- M. *Water Quality*—How should the Forest Service ensure the water quality of lakes, rivers and streams is protected?
- N. *Cave Management*—How should the Forest Service direct their management efforts toward protecting caves within the BMWC?

O. *Administrative Facilities*—What is the acceptable level of administrative facilities and structures necessary to manage the wilderness resource including due consideration for the cultural resource?

The issues and concerns listed above that have not been addressed in this plan are outfitter service levels, wildlife and fisheries management, water quality and communications. Water quality is addressed in the respective land and resource management plan for each forest. The Limits of Acceptable Change wilderness planning system will continue to provide the overall framework for addressing the remaining unresolved issues. The goals and guidelines for each of these remaining issues are briefly discussed in the following section. Since the planning system used here is viewed as a continuing process, it is recognized that constraints and accepted direction identified for each of these may lead to changes in the management direction proposed here.

#### Area-Wide Goals and Guidelines

The primary direction regarding these area-wide goals and guidelines is contained in the respective land and resource management plans for each forest. The wilderness management area description for each forest ie (Management Area 21, Flathead National Forest) contains the overall policy for addressing these issues. In most instances, the goals and guidelines listed below supplement those found in the forest plans. In others such as cave and lake management, no new management direction is presented here.

- A. *Cave Management:* Caves will be managed as an element of the wilderness resource with the objective of allowing them to remain untrammeled without significant development or advertisement.
- B. *Lake Management*: Minimize the evidence of man's activities around the lakes and return those showing signs of overuse to a more pristine condition.
- C. *Grazing (Domestic Stock):* Manage existing range permits according to established guidelines and policy as outlined in the Conference Report to S. 2009 (H.R.96-1126) in the section under "Grazing in the National Forest Wilderness Areas" and as outlined in the Forest Service manual (see also FSM 2323.2). In general, livestock grazing will be limited to areas capable and suitable for such use. Decisions to close any grazing areas will be made by the District Ranger. Formal legal closure will not take place until the Forest Supervisor signs a closure order.
- D. *Grazing (Pack and Saddle Stock):* All major grazing areas within the wilderness (i.e., areas receiving recurrent use by pack and saddle stock) will be designated as "livestock grazing" allotments. Areas within the wilderness not included in a livestock grazing allotment will be managed to insure that forage utilization in areas suitable for grazing does not exceed a moderately grazed appearance (FSM 2323—1). All horse and pack stock users (administrative, outfitted and non-

outfitted) will be encouraged to plan for the fewest number of animals required for each trip.

- E. *Transportation System/Signing*: An analysis of the trail system will be conducted to identify problem areas and to properly located routes. (See Appendix C for policy statement and timetable.) All trails must be constructed, reconstructed, rehabilitated and maintained so they appear to be part of the land rather than an intrusion upon it. Signs will be used only when maps and route descriptions cannot adequately serve the wilderness users. Signs permitted will include wilderness boundary signs; directional signs at trail junctions, and administrative signs. Trail signs within the wilderness, unless needed to disperse use.
- F. *Outfitter Services Level*: The Outfitter Operation Management Plan is the basis for determining conduct of individual outfitter and guide activities within the wilderness. Operations such as overnight use, day use and drop camps will be included. Efforts will be intensified to eliminate or reduce unlicensed or unauthorized outfitter and guide use. When an emergency does not exist, outfitters will be given one year's advance notice of changes which significantly affect their operations (one year in advance of the operating season in which a decision will be implemented). Notices will clearly convey the intent and purpose of changes from the current limits.

Prior to completing a decision on outfitter service levels through an environmental assessment, no additional outfitter and guide permits will be issued nor will approval be granted to expand operations beyond use levels authorized in 1978-1980 special use permits.

- G. *Limiting and Distributing Use:* The primary objective of wilderness managers will be to minimize the amount of regulation and control present in wilderness. In conjunction with this objective, managers and wilderness rangers must work toward the preservation and restoration of natural ecological processes and conditions.
- H. Wild and Scenic River (Integration with Wilderness Management): Recreation management on the Flathead Wild and Scenic River is directed by the Amendment to Management Area 18 Direction of the Flathead Forest Plan. The Forest Supervisor approved the amendment on March 11, 1986.
- I. *Communication:* Abandoned phone lines will be removed during the 5-year period following implementation of the Forest Plan. An environmental analysis will be prepared to determine the communication system to be used in the wilderness. The analysis will consider the use of temporary and permanent radio repeater facilities within the wilderness boundary, a wilderness network available to all four Forests, and the continued use of existing phone lines as components of

the communication system. If deemed necessary in the analysis, repeater units may be located in Opportunity Class I areas.

- J. Wilderness Fire Management (Relationship with Wilderness Management): Management of wildfire in the BMWC is directed by the Great Bear-Bob Marshall, and Scapegoat Danaher Wilderness Fire Management Plans. See Appendix A for a description of the situation and the direction these plans give regarding recreational use and resource protection in the BMWC.
- K. Administrative Facilities: All administrative structures and facilities will be retained for wilderness administrative purposes. When major rehabilitation or maintenance is required, an assessment will be completed prior to expenditures of funds. This assessment will evaluate: (1) the need for administrative purposes, and (2) historical significance of the structure. No new facilities or major expansion of existing facilities (administrative sites, lookouts, fences) will be considered; communications facilities necessary for administrative purposes and supported by the communications analysis are the exception.
- L. *Airfield Management:* The House Committee Report (95-1616) on the Great Bear Wilderness Act states:

"The proposed Great Bear Wilderness contains a grass airstrip in Schafer Meadows which is used primarily for recreation access by commercial outfitters and the general public. This area was included in the wilderness with the specific understanding that the Forest Service will not act to phase out public use of the airstrip.. The committee notes that section 4(d)(1) of the Wilderness Act allows for such use to continue, and instructs the Forest Service to manage the area so as to provide for continued access to the airstrip for public aviation. However, the committee agreed that the Forest Service should not permit the installation of new navigational equipment, paving or hard surfacing of the airstrip, or otherwise significantly upgrading the current facility. The question of the level of use was also discussed by the committee, recognizing that the area may become increasingly popular for aviation use in the future. In general, the committee directs that the existing level of aviation use by the public (including commercial outfitters) be allowed to continue, but that greatly expanded use may be reasonable regulated by the Forest Service to protect wilderness values. At some future date this may entail restricting the number of flights per day, and the prohibition of 'touch and go' landings for training purposes."

Direction proposed to comply with Congressional intent is found in Section 7, III, Management Direction and Actions for Special Areas.

M. *Wildlife Management:* This amendment's primary objective is to manage recreational use of wilderness as mandated by the Wilderness Act (Section 4b)

and NFMA Regulations (36CFR 219.18(a)). However, fish and wildlife resources are recognized as essential components of wilderness and wilderness experiences. Major reasons for visiting wilderness are both consumptive and nonconsumptive wildlife values. In addition, the BMWC contains important remaining habitat for indigenous threatened and endangered species. Because of the ecological significance of the BMWC for these important wildlife values, managing recreational use must recognize the biological sensitivity of these species.

A work plan for developing more specific direction for management of wildlife populations within the context of the Limits of Acceptable Change planning system has been developed by Montana Department of Fish, Wildlife and Parks. The Forest Service is also inventorying biological and ecological variables in the wilderness based, in part, on LANDSAT imagery. These variables are incorporated into a Geographic Information System, which allows the manipulation and display of combinations of variables. The system can be used to identify habitat components for various wildlife species. This information will be overlaid upon the Opportunity Class allocation to determine where conflict situations exist. This will allow project level activities to incorporate necessary biological evaluations. Following completion and acceptance of the output of the Geographic Information System and the work plan, the data and information generated may be integrated into the LAC process for development of indicators and standards.

The work plan developed by the Montana Department of Fish, Wildlife and Parks consists of the following:

- Phase I Develop a historical overview of the fish and wildlife issues that influenced classification of the three areas as wilderness; and complete an inventory of fish and wildlife resources in the BMWC. The overview and inventory will be completed in FY 87-88.
- Phase II Review the inventory of fish and wildlife resources and identify management implications associated with the inventory. Present this information to the Task Force. Incorporate information from the review into the inventory. Begin preliminary scoping of fish and wildlife goals and objectives.
- Phase III Finalize wildlife goals and objectives. Develop indicators and standards for these goals and objectives, if applicable.
- Phase IV Develop final wildlife management direction for the BMWC that is consistent with recreation management direction in this document and with the Wilderness Act.

Each phase of the work plan will be reviewed with the Task Force as it is completed. A full public review will precede implementation of fish and wildlife management direction developed in this process.

N. *Party Size Limits:* The current maximum party size limits of fifteen (15) individuals and thirty five (35) head of livestock per party will remain in effect. Exceptions must be approved in writing by the local District Ranger.

## **SECTION 2**

#### **OPPORTUNITY CLASS DESCRIPTIONS, GUIDELINES AND POLICY**

The diversity of the BMWC is as varied as the experience, descriptions, and memories of its users. Because of this variety, it is essential that managers use common terms now and in the future to communicate and describe the wilderness. This consistency is also necessary for public understanding of the intent and consequences of management actions proposed within the complex. Opportunity Classes represent a spectrum of wilderness experience opportunities within the complex. These classes describe existing areas within the complex where different resource and social conditions are found. They also identify management actions that are acceptable within each class. Inherent in the definitions are different levels of resource and social conditions acceptable for each class in the spectrum.

Three components are used to describe opportunity classes: resource, social, and managerial settings. Each component has several elements that are used to describe differences between opportunity classes. These descriptions provide managers, researchers, and users with common definitions for terms used to describe areas within the complex.

Opportunity class definitions for the BMWC were developed through analyses of Task Force member comments, examples from other areas, inventory data for sample areas within the complex, and input from wilderness researchers. The following pages list definitions of each class including descriptions of the resource, social, and managerial settings. Also included is a table to allow the reader to compare differences among classes.

Opportunity Class descriptions and allocations will remain as written in this section and as shown on the enclosed map until this management direction is amended. Minor nonsignificant revisions may be made based on a project level environmental analysis or the results of monitoring and evaluation of established management direction. Such revisions may include minor modification of Opportunity Class boundaries to more accurately represent management intent and alteration of management actions to better achieve goals set forth in this document. If a need is identified to make major significant changes, this document will be amended. Development of an amendment will follow the same procedures used to create this document.

#### **Opportunity Class I**

#### A. Resource Setting:

Opportunity Class I is characterized by an unmodified natural environment. Ecological and natural processes are not measurably affected by the actions of users. Environmental impacts are minimal, restricted to temporary loss of vegetation where camping occurs and along some stock travel routes. These areas typically recover on an annual basis, are subtle in nature and generally not apparent to most visitors.

#### B. Social Setting

This area provides an outstanding opportunity for isolation and solitude free from evidence of human activities, and very infrequent encounters with users. The user has outstanding opportunities to travel across country utilizing a maximum degree of outdoor skills. This environment often offers opportunities for a very high degree of challenge, self-reliance and risk. Interparty contacts will be very few while traveling and rare to non-existent at the campsite.

#### C. Managerial Setting

Management strongly emphasizes sustaining and enhancing the natural ecosystem. Direct on-site management of visitors will be seldom. Necessary rules and regulations will be communicated to visitors outside the area, such as at trailheads or boundary portals. Contact of visitors within this class by Forest personnel will be mostly reactive and by invitation. Discussion items will be limited to what visitors want to know. Formal and informal user education programs will be initiated to inform users about what to expect and how to use the area for optimum benefits to all. Formal regulations, orders and/or permits will be considered only when less restrictive regulations or programs consistently fail to achieve desired goals and objectives. Infrequent patrols and monitoring of conditions by appropriate State and Federal agency personnel will be conducted only as necessary to achieve management objectives. All scientific and ecological monitoring actions will be scheduled to meet social setting criteria. Signs may be present for resource protection only. New trails will not be constructed. The primary objectives of trail maintenance are described in Appendix C, Trails Maintenance Policy. Maintenance level will retain a primitive condition requiring a high degree of skill and challenge to travel. No administrative structures will be provided or permitted, except for existing lookouts and radio repeater sites deemed necessary by a communications analysis when no other feasible sites exist. Other structures, such as permanent corrals, hitch racks, and toilets will not be used as a resource protection method.

#### **Opportunity Class II**

#### A. Resource Setting

Opportunity Class II is characterized by an essentially unmodified natural environment. User actions minimally affect the ecological and natural processes and conditions. Environmental impacts are low and restricted to minor losses of vegetation where camping occurs and along most travel routes. Most impacts recover on an annual basis and will be apparent to only a low number of visitors.

B. Social Setting

A high opportunity exists for exploring and experiencing isolation from the sights and sounds of man with the probability of encountering other users being low. The user has good opportunity for experiencing independence, closeness to nature, tranquility, and self-reliance through the application of primitive recreation skills. These opportunities occur in an environment that offers a high degree of challenge and risk. Interparty contacts will be low on the trail and fairly low at the campsite, with parties often camped in isolation.

C. Managerial Setting

Management will emphasize sustaining and enhancing the natural ecosystem. Direct on-site management will involve minimum visitor contact during the normal use season. Necessary rules and regulations will be communicated to visitors outside the area, such as at trailhead and boundary portals. Visitor contact by Forest personnel will be mostly reactive and by invitation. In addition to what the visitor wants to know, the opportunity will be seized to present other pertinent site-specific messages. Formal and informal user education programs will be initiated to inform users about what to expect and how to use the area for optimum benefit to all. Formal rules and regulations may be necessary to achieve management objectives. Permits may be considered only when light-handed, less restrictive measures have failed to achieve desired goals and objectives. Trail signs will be permitted within the area and other signs will provide only the minimum information necessary to protect the wilderness resource. Trails will normally by constructed and maintained to accommodate light and infrequent travel. The primary objectives of trail maintenance described in Appendix C, Trails Maintenance Policy. Administrative structures will be allowed as described in the Area-wide Goals and Guidelines (Item K). Other structures, such as permanent corrals, hitch racks and toilets, may be provided only in a few extreme cases. Those that are permitted will only be for resource protection and will use only native materials.

#### **Opportunity Class III**

#### A. Resource Setting

Opportunity Class III is characterized by an essentially unmodified natural environment. In a few areas ecological and natural processes are moderately affected by the action of users. Environmental impacts are moderate, with most areas along travel routes and near human impacted sties showing moderate losses of vegetation. Impacts in some areas often persist from year to year and are apparent to a moderate number of visitors.

B. Social Setting

Moderate opportunities for exploring and experiencing isolation from the sights and sounds of man, with the probability of encountering other users is low to moderate. The user has moderate opportunities for experiencing independence, closeness to nature, tranquility and self-reliance through the application of primitive recreation skills. These opportunities occur in a natural environment that normally offers a moderate degree of challenge and risk. Contact with other visitors both on the trail and while camped will be moderately frequent.

C. Managerial Setting

Management will emphasize sustaining and enhancing the natural ecosystem. Onsite management will involve routine visitor contact. Necessary rules and regulations will be communicated to visitors outside the area, such as at trailheads and boundary portals. Contact is initiated by Forest personnel during routine duties. Information concerning protection of site-specific wilderness resources will be presented. Formal and informal user education programs will be initiated to inform users about what to expect and how to use the area for optimum benefit to all. Formal rules and regulations may be necessary to achieve management objectives. Permits may be considered only when light-handed, less restrictive measures fail to achieve desired goals and objectives. Signs will be permitted within the area and will include the minimum number necessary to protect the wilderness resource, and for administration. Natural materials will dominate. Trails will normally be constructed and maintained to accommodate a moderate level of use for the majority of the use season. The primary objectives of trail maintenance are described in Appendix C, Trails Maintenance Policy. Administrative structures will be allowed as described in the Area-wide Goals and Guidelines (Item K). Other structures, such as permanent corrals, hitch racks and toilets, may be provided only a few cases. Those that are permitted will only be for resource protection and will use only native materials.

#### **Opportunity Class IV**

#### A. Resource Setting

Opportunity Class IV is characterized by a predominantly unmodified natural environment. Natural conditions in many locations may be substantially affected by the action of users. Environmental impacts are relatively high in areas along major travel routes, along popular river corridors and lakeshores, and near major entry points. Impacts often persist from year to year and there maybe moderate loss of vegetation and soil at some sites. Impacts are readily apparent to most visitors.

#### B. Social Setting

Opportunities for exploring and experiencing isolation from the sights and sounds of man are moderate to low. The probability of encountering other area users is moderate to high. The user has the opportunity for a high degree of interaction with the natural environment, often with low or moderate challenge and risk. Much of the time contacts with other users will be relatively high, both on the trail and at campsites. It may be common during the main use season for some parties to come within sight and sound of each other.

#### C. Managerial Setting

Management will be oriented to sustaining and enhancing the natural ecosystem. There will be frequent opportunity for visitor contact with management personnel. Necessary rules and regulations will be communicated to visitors outside the area, such as at trailheads and boundary portals. Special efforts will be taken to contact visitors. Information concerning wilderness management, user conflicts, fire prevention, and other pertinent subjects will be presented. Formal and informal user education programs will be initiated to inform users about what to expect and how to use the area for optimum benefit to all. Formal rules and regulations may be necessary to achieve desired goals and objectives. Closure orders and enforcement actions will be initiated when necessary. Signs within the wilderness will be placed to aid in distributing and dispersing use, and for resource protection purposes. Trails will normally be constructed and maintained, and managed to accommodate heavy traffic for the majority of the use season. The primary objectives of trail maintenance are described in Appendix C, Trails Maintenance Policy. Administrative structures will be allowed as described in the Area-wide Goals and Guidelines (Item K). Other structures, such as permanent corrals, hitch racks, and toilets, may be provided only in a few cases. Those that are permitted will only be for resource protection and will use only native materials.

## TABLE I Summary of Resource and Social Setting Components For Each Opportunity Class

	Opportunity Class I	Opportunity Class II	Opportunity Class III	Opportunity Class IV
Resource Setting: (General Description)	Unmodified natural environment	Unmodified natural environment	Unmodified natural environment	Predominantly unmodified natural environment
1. Ecological conditions	Not measurably affected by the action of users	Minimally affected by the action of users	Moderately affected by the action of users	Many sites substantially affected by the action of users
2. Prevalence and duration of impact	Temporary loss of vegetation where camping occurs and along some travel routes. Typically recovers on an annual basis.	Minor loss of vegetation where camping occurs and along some travel routes. Typically recovers on an annual basis.	Moderate loss of vegetation where camping occurs and along some travel routes. Impacts in some areas persist from year to year.	Moderate loss of vegetation and soil on major travel routes, human impacted sites, & popular lakeshores. Impacts persist from year to year.
3. Visibility of impacts	Not apparent to most visitors	Apparent to only a low number of visitors	Apparent to a moderate number of visitors	Impacts are readily apparent to most visitors
Social setting: (General Description)	Outstanding opportunity for isolation and solitude.	High opportunity for isolation and solitude.	Moderate opportunity for isolation and solitude.	Moderate to low opportunity for isolation and solitude.
1. General level of encounters	Very infrequent	Low	Moderate	Moderate-High
2. Degree of challenge and risk	Very High	High	Moderate	Moderate-Low
3. Inter-party contacts while traveling	Very few	Low	Moderately frequent	Relatively high
4. Inter-party contacts while camping	Non-existent	Fairly Low	Moderately frequent	Common

## TABLE 2Summary of Managerial Setting ComponentsFor each Opportunity Class

	Opportunity Class I	Opportunity Class II	Opportunity Class III	Opportunity Class IV
Managerial Setting: (General Description)	Strongly emphasize sustaining and enhancing the natural ecosystem	Emphasize sustaining and enhancing the natural ecosystem	Emphasize sustaining and enhancing the natural ecosystem	Emphasize sustaining and enhancing the natural ecosystem
1. Contact with management personnel during normal use season	Infrequent	Minimum	Routine	Frequent
2. Rules and regulations and visitor behavior	1 Will be communicated to visitors 2 primarily outside of the wilderness in areas such as at trailheads and boundary portals.		Where necessary, and communication regulations will be compared	on-site enforcement on of rules and onducted.
3. Formal and informal user education programs	Will be initiated to inform users about what to expect and how to use the area for optimum benefit to all.			
4. Formal rules and regulations	May be necessary to achieve management objectives and permits may be considered only when light-handed, less restricted measures have consistently failed to achieve desired goals and objectives.			
5. Presence and extent of signing	Signs may be present for resource protection only.	Trailsignspermitted,Othersignswillprovideonlyminimuminformationnecessarytoprotecttheresource.	Signs will be permitted. Will include minimum number necessary to protect the resources and for administration.	Signs will be placed to aid in distributing and dispersing use, and for resource protection.
6. General level of trail construction and maintenance (See Appendix C, Trail Maintenance Policy)	New trails will not be constructed. Management level will retain primitive condition.	Managed to accommodate light and infrequent travel.	Managed to accommodate moderate use.	Managed to accommodate heavy traffic.
7. Presence of administrative structures	No new structures permitted, excepting radio repeater stations if necessary	Allowed as described in Area Wide Guidelines	Allowed as described in Area Wide Guidelines	Allowed as described in Area Wide Guidelines
8. Presence of other permanent structures (corrals, hitch racks, etc.)	None allowed	Very few permitted. For resource protection. Native materials only.	A few permitted. For resource protection. Native materials only.	A few permitted. For resource protection. Native materials only.

## **SECTION 3**

#### INDICATORS OF RESOURCE AND SOCIAL CONDITIONS

Within the BMWC indicators of resource and social conditions were identified. These indicators were important to wilderness users and subject to on the ground measurement and verification. Across the spectrum represented by the four opportunity classes, the acceptability of specific resource and social conditions varies. These differences provide the diversity of experiences, use levels, and management goals.

Indicators establish a basis for identifying a need for management action for both areas and specific sites where conditions are in conflict with those selected as management objectives. Indicators were selected based on their relevancy to the identified issues, the presence of a valid and reliable method of measurement, their sensitivity to change in resource and social conditions, and their ability to monitor conditions.

#### Indicators for the Bob Marshal Wilderness Complex

FACTOR	INDICATOR
Social	1. Number of trail encounters per day *
A. Solitude while traveling	
B. Campsite solitude	2. Number of other parties camped within
	sight or continuous sound per day
Environmental	3. Area of barren soil core (sq ft) at each
C. Human impacted site conditions**	human impacted site (excluding authorized
	horse handling facilities)
	4. Number of humans impacted sites per
	640-acre area
	5. Number of human impacted sites above
	a particular condition class index per 640-
	acre area.
D. Range Conditions	6. Degree of forage utilization (%)
	7. General trend
	8. Overall condition
	9. Visual appearance (Maximum impact)
	10. Forest succession, vegetation changes

- \* Inventory data is being collected on encounters with large parties and different types of user groups. Standards for these two types of encounters may be considered pending collection of adequate inventory data.
- \*\* Human Impacted site refers generally to any site showing effects of human use; including warming fires, lunch stops, and sites actually used for camping.

#### How Each Indicator will be Measured

- 1. *Number of trail encounters per day* This indicator will be measured by counting the number of parties encountered while traveling along a given trail or trail segment. Additional information may be gathered by informal conversation with visitors to ascertain number of parties they encountered during the day. Information will be later recorded on visitor monitoring forms.
- Number of other parties camped within sight or sound per day This indicator will be measured by direct observation and/or contact of visitors in camp by the wilderness ranger. Additional information may be obtained by informal conversation with visitors on the trail to ascertain the number of other parties they observed near their campsites. Information will later be recorded on visitor monitoring forms.
- 3. *Area of barren core in the area impacted* This indicator will be measured by the wilderness ranger using the campsite inventory form.
- 4. *Number of human impacted sites per 640-acre area* This information will be tabulated by the wilderness ranger based on field observations.
- 5. Number of human impacted sites above a particular condition class index per 640-acre area Using the campsite inventory form, wilderness rangers will determine an impact index for the human impacted site being inventoried. Instructions on how to fill out the impact ratings on the campsite inventory form, as well as the form itself, will be included in a monitoring guidebook to be developed at a later date. The nine parameters used to calculate the impact index have been given weights according to this importance. They are as follows:

Parameter	Weight
vegetation loss	2
bare soil increase	3
tree damage	2
root exposure	3
development	1
cleanliness	1
camp area	4
barren core camp area	2
social trails	2

The justification for this weighting is:

(1) Development and cleanliness are least important because they are superficial changes that can easily be remedied.
- (2) Camp area is most important because it provides a measure of how large an area has been impacted.
- (3) Bare soil increase and root exposure are particularly important indicators of intensity of impact because they become pronounced only on the most heavily used and highly altered human impacted sites.

To derive the impact index, the ratings from these nine parameters are multiplied by their weights and then summed. In short, the impact index is the sum of the products of the rating (1 to 3) and weight for each of the nine parameters. In this system, the index could range from 20 (least impact) to 60 (most impact). The range of the impact index has been divided into three "condition classes." They are as follows:

- (1) *Minimally Impacted* sites with an index between 20 and 30. Consists of sites that could probably be rapidly restored.
- (2) *Moderately Impacted* sites with an index between 31 and 49. Contains the vast majority of sites.
- (3) *Highly Impacted* sites with an index between 50 and 60.
- 6. *Degree of Forage Utilization General Range Trend Overall Condition –* See Appendix F for measurement and management of forage in wilderness.

A guidebook will be developed to provide specific direction for monitoring each indicator. This will provide consistency across all administrative units in the BMWC.

### **SECTION 4**

#### **INVENTORY PROCESS: RESOURCE AND SOCIAL CONDITIONS**

The inventory information available through 1984 on the existing resource and social indicators selected in Section 3 helped the Task Force develop the standards in Section 5. Information from the inventory was directly recorded onto base maps providing analysis of its spatial patterns. This was helpful when task force members considered different allocations of opportunity classes across the area. It also permitted comparison between existing conditions and those conditions defined as acceptable for an opportunity class. Information served as critical input in knowing where and what management actions will be needed to achieve desired conditions. Because of the large amount of data involved, inventory information is available for examination at each District Ranger Station and each Forest Supervisor's Office.

# **SECTION 5**

#### STANDARDS FOR RESOURCE AND SOCIAL INDICATORS FOR EACH OPPORTUNITY CLASS

Using the data identified in Section 4 and descriptions of each opportunity class, a range of standards were specified that describe the acceptable and appropriate conditions for each indicator in each opportunity class. Standards provide a means to evaluate where and what management actions are needed. Standards permit comparison of existing conditions with those defined as acceptable for each indicator in each opportunity class. The Task Force initially developed and considered two or more alternative sets of standards for each opportunity class. Based on Task Force input and public review the standards shown in Tables 3 and 4 were adopted.

To ensure the standards adopted would work towards no further deterioration in overall wilderness conditions, the following policy was also developed. It will apply in all areas of the BMWC.

#### Prevention of Significant Deterioration of Wilderness Conditions

#### Background

The Wilderness Act (PL 88-577) requires agencies administering components of the National Wilderness Preservation System to manage these areas so as to provide for "the preservation of their wilderness character." The overriding objective of this management direction is to ensure that this Congressional mandate is achieved in the Bob Marshall Wilderness Complex.

There were several important areas where the issue of deterioration arose. First, the standards, which were developed, had to be written so as not to justify existing conditions, which would otherwise be unacceptable in wilderness settings. They had to be realistic in the sense of being achievable within a reasonable time frame and they also had to meet the test required by section 2a of the Wilderness Act. Through the checks and balances of managerial expertise, diverse public involvement, and research assistance, standards consistent with the Wilderness Act were developed.

Second, the LAC process identified a range of conditions acceptable in wilderness settings. The objective was to ensure a diversity of wilderness recreation experiences by providing explicit guidelines as to how different parts of the wilderness should be managed. In allocating the wilderness to various opportunity classes, there was the potential of applying a less pristine class to an area with pristine conditions. The intent of the planning process was to restore or enhance wilderness conditions. Allocations, which offered the potential of deteriorating existing conditions, had to be carefully examined.

Third, there will always be areas within any given opportunity class that are significantly above standard or the defined Limit of Acceptable Change for that class. In these areas, there is potential for deterioration of wilderness quality unless appropriate management action is taken.

#### Policy

- 1. *Identification of Standards:* Standards are written to maintain the highest level of pristine conditions practicable.
- 2. *Opportunity Class Allocations:* Existing conditions served as the baseline. Allocations of opportunity classes meets or exceed existing conditions unless significant improvement in overall wilderness resulted from applying a less pristine class in a particular situation.
- 3. *Management Within Opportunity Classes:* Within any given opportunity class, no significant deterioration of wilderness conditions will occur unless, following documentation, a management action leading to deterioration in particular areas is accompanied by significant improvement of conditions elsewhere in that class. Any human impacted sites in 640-acre areas not now impacted, or any increase in human impacted sites in 640-acre area now being impacted, must comply with this statement.

#### TABLE 3

# Standards for Resource and Social Indicators for Each Opportunity Class in the BMWC

Indicators	Opportunity Class I	Opportunity Class II	Opportunity Class III	Opportunity Class IV
Social: 1. Number of trail encounters with other parties	80% probability of 0 encounters per day	80% probability of 1 or fewer encounters per day	80% probability of 3 or fewer encounters per day	80% probability of 5 or fewer encounters per day
2. Number of other parties camped within sight or continuous sound	80% probability of 0 parties per day	80% probability of 0 parties per day	80% probability of 1 or 0 parties per day	80% probability of 3 or fewer parties per day
<b>Resource:</b> 3. Area of barren core (sq ft)*	100	500	1000	2000
4. Number of human impacted sites per 640 acre area**	1 permitted	2 permitted	3 permitted	6 permitted
5. Number of human impacted sites above a particular condition class index per 640 acres	No moderately or highly impacted sites per 640 acre area	No more than (1) moderately impacted site and (0) highly impacted sites per 640 acre area	No more than (2) moderately impacted site and (0) highly impacted sites per 640 acre area	No more than (3) moderately impacted site and (0) highly impacted sites per 640 acre area

- \* Excludes authorized horse handling facilities. A variance will be given to outfitter base camps not currently in compliance and a time table for compliance will be developed and administered through the outfitter operation plans.
- \*\* Human impacted sites defined as any site with evidence of human impact, normally centered around a fire ring, regardless of its prior use for camping.

#### TABLE 4 Standards for Range Indicators for Each Opportunity Class in the BMWC

Indicators	Opportunity Class I	Opportunity Class II	Opportunity Class III	Opportunity Class IV
Range:				
1. Degree of forage utilization *	No more than 20% forage utilized	No more than 20% forage utilized	No more than 40% forage utilized ***	No more than 40% forage utilized ***
2. General range trend *	Static or improving	Static or improving	Static or improving	Improving
3. Overall range condition *	Excellent	Excellent	Generally good or better	Generally good
4. Visual Appearance ** (Maximum Impact)	Lightly grazed	Lightly grazed	Moderately grazed	Moderately grazed
5. Forest succession, Vegetation changes	Maintain natural ecological processes and conditions as they existed prior to fire suppression	Maintain natural ecological processes and conditions as they existed prior to fire suppression	Maintain natural ecological processes and conditions as they existed prior to fire suppression	Maintain natural ecological processes and conditions as they existed prior to fire suppression

\*Standards for determining range condition, trend, and utilization are found in the Range Analysis Handbook (FSH 2209.21 - 1)

\*\*Standards for defining the visual appearance of grazing impact are found in the Appendices of the Forest Plans of the Flathead, Lewis and Clark, Helena and Lolo National Forests.

\*\*\*On big game winter range, critical grizzly habitat or other important wildlife ranges, forage utilization standards may be below these levels.

## **SECTION 6**

#### **OPPORTUNITY CLASS ALLOCATIONS**

This section defines what resource and social conditions will be provided in different parts of the wilderness. By analyzing the data collected during the inventory process, and along with the area issues and concerns identified in Section 1, numerous alternatives for opportunity class allocation were developed. One alternative reflected current conditions on the ground. Another alternative emphasized management of the BMWC to maintain or rehabilitate pristine conditions. A third alternative oriented management toward providing additional wilderness recreation opportunities. Four user and concerned citizen groups developed their own alternatives. All alternatives were overlaid and a "difference" map was created. This map displayed the areas in the wilderness that differed in terms of opportunity class allocation among the seven alternatives. Managers examined this map and the current conditions map and developed a composite alternative. This alternative was presented to the Task Force. The Task Force reviewed the composite alternative and through consensus developed a preferred alternative, which was then subjected to formal public review. Public comment was reviewed, discussed with the Task Force and a final Opportunity Class allocation was developed. An Environmental Assessment was prepared to evaluate potential effects of this allocation as well as those of other alternatives considered by the Task Force.

The final Opportunity Class allocation is shown on the enclosed map. Generally, this alternative leans toward emphasizing pristine conditions, except around some heavily used trail corridors.

## **SECTION 7**

#### MANAGEMENT ACTIONS

This section of the management direction identifies areas in the BMWC where current opportunity class conditions are being shifted to a different opportunity class designation. For example, the current levels of human impact below Palisade Lake reflect conditions that are acceptable in an opportunity class III, but unacceptable in an opportunity class II. To upgrade levels of human impact in this area, a decision has been made to designate the area as more pristine than what currently exists, i.e. (shifting from class III to class II).

This section also identifies areas where standards are being violated and potential management actions to maintain or enhance wilderness conditions. The section deals with three areas where management actions will be considered:

#### Management actions for places where the current opportunity class will continue under the established management direction and where conditions violate the standards for the specified opportunity class.

The BMWC encompasses approximately 1.5 million acres of wild, unroaded and undeveloped land. Inventory data gathered to date indicate that there are many areas where the established standards are violated, and management actions will be needed to restore wilderness conditions. Because of the large number of these potential problem areas, specific management actions for each have not been established at this time for most of the area. Many situations in the wilderness require more field checking before specific proposals can be made for problem solution. However, it is the intent of this management direction to provide as sitespecific management direction as possible in the ongoing planning process.

Where site-specific management direction is not currently available, the following process will be used to determine when management actions should occur and what actions should be adopted. This approach will also be used to deal with new problems that are identified in the future. Areas will be field checked where inventory data or monitoring show that standards are being violated, or that wilderness conditions are deteriorating. Managers will determine if the indicator accurately measures conditions on the ground. If the indicator has been accurately measured, then managers will compare the measured conditions with the management direction for the particular opportunity class where the measurement was taken. If the measured conditions are inconsistent with the opportunity class or trending in that direction, managers will determine the priority of the problem as well as its cause. Violations of standards will automatically trigger an analysis of the cause of the violation. Following such an analysis, managers will determine the most appropriate management actions using tables 5-8 as guidelines. Because wilderness is a place for "outstanding opportunities for solitude and primitive and

unconfined type of recreation," the emphasis on selecting management actions will be on those, which are least intrusive to the wilderness visitor.

Managers will examine the array of techniques, which will correct the problem. They will select those techniques, which are least intrusive into the wilderness users' experience. In some cases, because of the extent of the problem, its complexity, intensity or visibility, the least intrusive technique may not be selected. The monitoring plan will be used to assess the effectiveness of the implemented management actions. Should the management actions implemented not prove effective in reducing the extent or intensity of the problem, managers will move toward more intrusive actions. This progression will continue until the problem is resolved. Tables 5-8 show an array of potential management actions the task force identified as most appropriate or least appropriate for handling various problems in each opportunity class. Based on outcomes of monitoring activities appropriate management actions will be identified for each geographic unit in the wilderness.

The Task Force will continue playing an important role in implementing and monitoring this plan. The reader is encouraged to review Appendix E, which discusses the proposed role of managers, and the Task Force in the wilderness management effort.

#### TABLE 5 Potential Management Actions Directed Toward Reducing Human Impacted Site Density (Listed in Order of Decreasing Acceptability)

Opportunity Class I	Opportunity Class II	
Campsite Obliteration	Campsite Obliteration	
Contact Repeat Users	Contact Repeat Users	
Seasonal Campsite Closures	Seasonal Campsite Closures	
Closure of Large Area to Camping	Closure of Large Area to Camping	
<b>Opportunity Class III</b>	<b>Opportunity Class IV</b>	
Contact Repeat Users	Contact Repeat Users	
Campsite Obliteration	Campsite Obliteration	
Seasonal Campsite Closures	Seasonal Campsite Closures	
Closure of Large Area to Camping	Closure of Large Area to Camping	

#### TABLE 6 Potential Management Actions Directed Toward Reducing Unacceptable Site Conditions or Impacts (Listed in Decreasing Order of Acceptability)

<b>Opportunity Class I</b>	Opportunity Class II		
Information and Education	Information and Education		
Contact Repeat Users	Contact Repeat Users		
Limit Group Size	Limit Group Size		
Limit Number of Stock per Group	Enforcement		
Campsite Closure	Limit Number of Stock per Group		
Enforcement	Campsite Closure		
Prohibit Stock in Campsite	Campsite Restoration		
Seasonal Campsite Closure	Seasonal Campsite Closure		
Remove Existing Facilities	Prohibit Stock in Campsite		
Campsite Restoration	Equipment Requirements		
Equipment Requirements	Remove Existing Facilities		
Close Campsite to Certain Users Only	Ranger Contact		
Ranger Contact	Close Campsite to Certain Users Only		
Temporary Corrals	Temporary Corrals		
Campsite Permit	Campsite Permit		
Opportunity Class III	Opportunity Class IV		
Opportunity Class III Information and Education	Opportunity Class IV Information and Education		
Opportunity Class III Information and Education Contact Repeat Users	Opportunity Class IV Information and Education Ranger Contact		
Opportunity Class III Information and Education Contact Repeat Users Enforcement	Opportunity Class IV Information and Education Ranger Contact Campsite Restoration		
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# TABLE 7Potential Management Actions Directed TowardReducing Campsite and Trail Encounters(Listed in Order of Decreasing Acceptability)

Opportunity Classes I and II	Opportunity Class III	
Limit Group Size	Limit Group Size	
Length of Stay Limits	Length of Stay Limits	
Seasonal Campsite Closures	Seasonal Campsite Closures	
Self-issued Entry Permits	Self-issued Entry Permits	
Close Campsite to Certain Users	Campsite Permits	
Office-issued Permits	Screen Trails from Each Other	
Campsite Permits	Office-issued Permits	
	Close Campsite to Certain Users	
	Signing with Direction & Distance	
	Change Access Conditions	
	Build More Bridges	
	Allow 1-Way Travel Only on Some	
	Trails	
<b>Opportunity Class IV</b>		
Limit Group Size		
Length of Stay Limits		
Seasonal Campsite Closures		
Self-issued Entry Permits		
Screen Trails from Each Other		
Signing with Direction & Distance		
Campsite Permits		
Change Access Conditions		
Build More Bridges		
Allow 1-Way Travel Only on Some		
Trails		
Office-issued Permits		
Close Campsite to Certain Users		
Trail Head Entry Quotas		

# TABLE 8Potential Management Actions Direct Toward<br/>Improving Range Conditions(Listed in Order of Decreasing Acceptability)

Opportunity Class I and II	Opportunity Class III
Information and Education	Information and Education
Limit Total Number of Stock per Party	Temporary Corrals
Require Users to Provide Supplement Feed	Length of Stay Limits
Length of Stay Limits	Limit Total Number of Stock per Party
Seasonal Campsite Closures	Require Users to Provide Supplement Feed
Prohibit Stock in Campsite	Seasonal Campsite Closures
Closure of Large Areas	Prohibit Stock in Campsite
Limit Stock/People Ratio	Closure of Large Areas
Close Drainages on Rotating Basis	Permanent Corrals
Prohibit Stock Overnight in Campsite	Limit Stock/People Ratio
Temporary Corrals	Close Drainages on Rotating Basis
	Drift Fences
<b>Opportunity Class IV</b>	Additional Direction from Forest Plans
Information and Education	Grazing by Permit
Temporary Corrals	Limit on Grazing Time
Length of Stay Limits	
Limit Total Number of Stock per Party	
Require Users to Provide Supplement Feed	
Seasonal Campsite Closures	
Permanent Corrals	
Prohibit Stock in Campsite	
Closure of Large Areas	
Drift Fences	
Limit Stock/People Ratio	
Close Drainages on Rotating Basis	

#### Management actions for places where the desired opportunity class is different than the management, which is presently occurring on the ground.

A map showing opportunity class allocations is enclosed. Where differences exist between current conditions and those desired in this amendment, the management direction will be different than currently practiced; it may require more substantial attention in terms of management techniques and monitoring than other areas. Nine of these areas were specifically identified where conditions will be upgraded to a more pristine opportunity class. Management actions were developed for each area. They are shown in Table 9 along with the problems that currently exist. All management actions are tentative depending upon field review. Education efforts will continue for all areas.

Conditions in some areas are already to the point that more restrictive action is necessary to achieve the standards set for the opportunity class.

#### Management direction and actions for special areas.

There area several places in the BMWC that require special attention because of the intensity of the management problem, situational characteristics, or conflict with wilderness values. These areas include the Schafer Airstrip, outfitter camps in Argosy and Silvertip Creeks, and the Bowl Creek trail corridor. The management direction proposed for these areas was developed by a series of small groups comprising citizens, affected publics, and managers.

#### Schafer Meadows Wilderness Airstrip

The Forest Service recognized the Congressional Direction established in the House Committee Report accompanying the act establishing the Great Bear Wilderness. This report directs that the airstrip remain open to aircraft use, but that such use may be regulated in the Future if it is greatly expanded.

In developing this management direction, managers and users chose not to define the term of "greatly expanded use" since early use figures for the Schafer airstrip are incomplete or unavailable. In place of this concept, members of the task force (including pilots) agreed to a general management philosophy for the airstrip. They set the acceptable level of aircraft use in terms of impacts on the wilderness resource and experience. This philosophy and the accepted indicators and standards are shown below. Members of the task force agreed that management actions (some of which are shown in paragraph d) are appropriate when the level of use exceeds that shown in the standard. The primary function of the airstrip will be that of a trailhead for wilderness users. Its main use will be for general wilderness dependent activities, river access, and Forest Service administrative activities. In order to insure continued use of the airstrip by the flying public with a minimum impact on other wilderness visitors and a minimum of restriction on aircraft users, the following steps will be taken:

#### TABLE 9

#### Management Actions Necessary to Bring Opportunity Classes in Line with Management Direction on Flathead and Helena National Forests\*

Area	Previous OC was	Final OC is	Site	Problem	Management Actions
Palisade Cr. (FNF)	Ш	Ш	Lake at Lion Creek Pass	2 Moderately impacted sites	Rehabilitate sites. Post with restoration site sign (voluntary). Close to stock use within 300' of lake. Enforce formal closures.
			Palisade Lake	1 highly impact site	Rehabilitate site. Formal closure of site. Close to stock within 300' of lake. Enforce formal closures. Examine potential trail relocation.
			Below Palisade Lake	2 moderately impacted sites	Rehabilitate sites. Post with restoration site sign (voluntary).
Doctor Lake (FNF)	Ш	П	George Lake	14 too many sites/640 acre area. 3 moderately impacted sites	Post highly & moderately impacted sites with restoration signs (voluntary).
			Lick Lake	5 too many sites/640 acre area. 1 moderately impacted site	Close to stock use within 300' of lakes. Enforce formal closures.
			Doctor Lake	1 too many campsites/640 acres. 1 moderately impacted site. Damaged trees.	
			Koessler Lake	1 highly impacted site	
Kid Mountain (FNF)	II	Ι	NA	None	NA

\*No changes in opportunity class allocation were made on the Lolo and Lewis and Clark National Forests. Current conditions equal desired condition with regard to opportunity class allocation.

(FNF) - Flathead National Forest

#### TABLE 9 (continued) Management Actions Necessary to Bring Opportunity Classes in Line with Management Direction on Flathead and Helena National Forests\*

Area	Previous OC was	Final OC is	Site	Problem	Management Actions
Divine Spruce Creek (FNF)	П	Ι	Ross Creek	2 moderately impacted sites. 3 too many sites/640 acre area. Damaged trees	Rehabilitate sites. Post moderately impacted sites with restoration signs (voluntary).
Limestone Creek (FNF)	II	Ι	NA	None	NA
Calf Alloy Creek (FNF)	II	Ι	NA	None	NA
Rapid Creek (FNF)	III	П	Ayres Creek	1 moderately impacted site (outfitter camp)	Work with outfitters through Camp Management Plan.
			Fiction Creek	1 moderately impacted site. Damaged trees.	Rehabilitate site. Post site with restoration sign (voluntary).
Minor Creek (FNF)	III	II	NA	None	NA
Lower Twin Creek (FNF)	П	I	NA	1 moderately impacted site	Rehabilitate site. Post site with restoration sign (voluntary).
Upper Meadow Creek (HNF)	III	Π	Section 31	Too many human impacted sites/640 acre area. Excessive barren core (outfitter camp).	Rehabilitate & naturalize two sites. Work with outfitter through management plan. Consider possible camp relocation.

(HNF) – Helena National Forest

a. The following indicators and standards will be adopted:

Indicator:	1) The number of aircraft landings per day. A landing includes touch-and-go approaches for training or practice as well as landings where the plane remains on the ground for any length of time.
	2) The total number of landings per year.
Standard:	1) A ninety-percent probability of having no more than a total of 5 aircraft landings per day.
	2) No more than a total of 550 landings per year of which no more than 6% will be administrative landings.
	Exceeding standards because of bona fide emergency landings (search and rescue, fire, etc.) will not lead to restrictions on private flights.

#### b. Education:

The Montana Aeronautics Division, Montana Pilots Association, Forest Service and other aviation groups will pursue a user education program concerning aeronautical activity at Schafer Meadows. The groups will endeavor to educate the flying community to:

- Avoid flights into Schafer Airstrip not in keeping with the primary function of the airstrip.
- Maintain a minimum of 2,000' above ground level over the Bob Marshall Wilderness Complex, except when approaching or leaving the Schafer Meadow Wilderness Airstrip. (Montana Aeronautics Division will work with FAA to get this on Federal charts.)
- Avoid low-level flights over the wilderness, such as scenic flights, game spotting, etc.
- Discourage "touch-and-go" and other training flights that can be conducted elsewhere.
- Avoid unnecessary low approaches and departures to and from the airstrip
- Encourage fewer landings by combining parties and/or using larger aircraft.
- The Forest Service will inform the non-flying wilderness user that the aviation community is working with the Forest Service to limit unnecessary noise impact on the BMWC. Users will be informed (1) that they should expect

occasional impact from noise as well as concentrated aviation activity in the Schafer Meadows area, and (2) that aircraft use at Schafer has been recognized by Congressional direction. This will be accomplished through trailhead signing, personal contact, and a wilderness primer.

- c. Specific authorization by the District Ranger will be required for all planned administrative flights into the Schafer Airstrip.
- d. If the standard in (a) above is breached and if education efforts cannot bring the number of planes landing at Schafer within acceptable levels, more restrictive management actions will be taken. In general, management actions will be the least restrictive necessary to accomplish this goal. Management actions may include limits on type of landings (touch-and-go, training), timing of landings (time of day), limits on specific days and, as a last resort, requiring a permit to use the Schafer Airstrip.
- e. *Group Fly-ins* Any party with over 15 individuals planning to fly into Schafer Meadows must follow the permit process as with any large groups utilizing the wilderness.
- f. *Airfield Maintenance* Maintenance of the Schafer Airstrip is the responsibility of the Forest Service. Historically, organized groups accomplished a part of this work. These volunteers were sponsored by the Montana Aeronautics Division and several Montana aviation groups. This volunteer maintenance/work session is recognized as a use that existed prior to wilderness classification. In the future it will be allowed to continue, with authorization from the District Ranger. All maintenance activities will be planned with Forest Service concurrence and will be approved in advance.
- g. *Developments* There are two campgrounds near the airstrip. One near the upper end of the airstrip was constructed by a cooperative effort among the Montana Pilots Association, Montana Aeronautics Division, and the Forest Service. The lower campground was constructed by the Forest Service. Maintenance of these facilities is the responsibility of the Forest Service. Maintenance work may be accomplished through volunteer efforts so long as all work ahs the advance approval of the Forest Service.

No new campgrounds will be constructed at Schafer Meadows nor will existing campgrounds be expanded. The campground at the upper end of the airstrip will remain. Facilities at this campground will remain at a level consistent with those in 1978, which allows the following:

2 outhouses

6 campsites each with a picnic table and fire grate

- 2 barbecue grates
- 1 group campfire ring with three split log benches

1 water faucet 1 sign

Changes in either the level or type of facilities will only be made after the Forest Service consults with the Montana Pilots Association and Montana Aeronautics Division.

The lower campground will be phased out over time. When facilities become a hazard or unserviceable, they will be removed.

#### **Outfitter Camps in Argosy and Silvertip Creeks**

The two outfitter camps are located in Opportunity Class I, most pristine, which does not allow facilities such as permanent corrals. Management actions for outfitter base camps in these two areas will be developed jointly by managers and the affected outfitter. These actions will follow annual field examinations of the camps. The outfitter in Argosy Creek has made substantial progress toward meeting standards for opportunity Class I.

#### **Bowl Creek**

The desired opportunity class for the Bowl Creek corridor is Opportunity Class III. The trail is currently located in a valley bottom characterized by clay soils and high water tables. It is currently in a condition that is not acceptable in wilderness. An analysis is being conducted to determine if and where the trail should be relocated. If the trail is relocated, the new corridor will be classified as Opportunity Class III. The old trail will be closed and rehabilitated and the old trail corridor will be classed as Opportunity Class I. If relocation is not possible, opportunity class allocation will remain as shown on the enclosed Opportunity Class Allocation map.

# **SECTION 8**

#### **MONITORING PLAN**

The monitoring plan for the BMWC serves three functions: (1) measurement of the effectiveness of management actions implemented to restore or maintain acceptable wilderness conditions; (2) identification of adverse changes in wilderness conditions; and (3) completion of the inventory process for the entire area. The three objectives will be met through two complementary monitoring processes. One is a long term monitoring process. The second is directed at indicators to be monitored annually, and areas of special concern such as locations where standards are already being violated.

#### Long Term Monitoring Process

The specific objectives of this component of the monitoring plan are to detect changes in wilderness conditions, which may require management actions. In addition, there are a number of areas in the BMWC that have not been inventoried for human impacted site conditions, encounters, or range conditions. This monitoring process will, over time, include all areas of the complex. Specific monitoring plans include:

- 1. Complete human impact site re-inventory every 5 years, or 20 percent of the area to be monitored to determine human impacted site conditions each year.
- 2. Extensive social data (e.g., Lucas and McCool survey of 1982) to be completed every 10 years
- 3. Analysis of range conditions to be completed by 1995.
- 4. Range trend and condition to be monitored on 20 percent of the range allotments each year.

#### **Annual Monitoring Process**

All management personnel will monitor trail and human impacted site conditions during the course of their travels.

1. As a minimum, trail and campsite encounters in Opportunity Classes 3 and 4 will be monitored annually. An intermediate level of monitoring will require that each trail segment in these opportunity classes be monitored at least once per month in September, October, and November and twice per month during the months of July and August. Opportunity Classes 1 and 2 will be monitored whenever workloads permit.

- 2. Forage utilizations will be monitored annually on specific sites (to be determined).
- 3. Monitoring of overall use patterns, activities, and levels will take place annually.
- 4. Heavily used sites will be inventoried annually and changes plotted. Areas containing human impacted sites that violate standards will be rehabilitated and posted. They will be monitored at 2 and 5-year intervals to determine the effect of management actions. Human impacted sites closed due to violation of barren core area or damaged tree standards will be monitored annually. Closure will be effective until conditions are in the lower third of the range for each indicator.
- 5. Lakes formally closed to livestock within 300 feet of the shore and human impacted sites with formal closures will be visited by Wilderness Rangers once every 2 weeks. The purpose of the visit will be education and enforcement. Visits will include both weekdays and weekends.
- 6. Those trails exceeding trail encounter standards will be monitored for 10 days throughout the season. This monitoring will verify that the standard is in fact exceeded before any management actions are initiated.
- 7. A guidebook will be prepared to provide specific direction for monitoring each indicator, in order to promote consistent monitoring across all administrative units.

#### APPENDIX A

#### FIRE MANAGEMENT IN THE BOB MARSHALL WILDERNESS COMPLEX

#### 1. *Situation*

*a.* The Scapegoat Wilderness proposal, prepared in 1971, and the Great Bear Wilderness proposal, prepared in 1978, stated that the role of fire in the ecological processes of the area would be studied. The previous Bob Marshall Wilderness Management Plan, approved in 1972, stated that long-range planning will determine areas in which fire will be allowed to play a more natural role for the purpose of wilderness.

National direction governing fire management in wilderness is contained in Chapter 2320 of the Forest Service Manual (FSM). Section 2324.02 and 2324.03 of the FSM states the following objectives and policy:

#### **Objectives**

The objectives of fire management in wilderness area:

- 1. Permit lighting caused fires to play, as nearly as possible, their natural ecological role within wilderness.
- 2. Reduce unnatural buildups of fuels that present a fire danger in excess of that which might have existed had fire been allowed to occur naturally.
- 3. Reduce, to an acceptable level, the risks and consequences of wildfire within wilderness or escaping from wilderness.

#### Policy

Only two types of prescribed fires may be approved for use within wilderness: those ignited by lightning and allowed to burn under prescribed conditions and those ignited by qualified Forest Service officers. The use of prescribed fire in wilderness is subject to preplanned, specified conditions.

Specific guidelines for the control of wildfire and the use of prescribed fire within each wilderness (FSM 5100, 5150, and 5190) must be set forth in either a forest plan or a wilderness implementation plan prepared pursuant to a forest plan. Where the forest planning process is not complete, Forest Officers shall document decisions and provide

appropriate guidelines for control of wildfire and use of prescribed fire. These guidelines are as follows:

- 1. Suppress all wildfires within wilderness in accordance with the direction in FSM 5130.
- 2. Fire ignited by lightning may be permitted to burn if prescribed in an approved plan. (FSM 2324 and 5150).
- 3. Forest Service Managers may ignite a prescribed fire within wilderness if the decision to do so meets at least one of the wilderness fire management objectives set forth in FSM 2324.02 and if all of the following conditions are met:
  - (a) The use of prescribed fire or other fuel treatment measures outside of wilderness is not sufficient to achieve fire management objectives within wilderness.
  - (b) An interdisciplinary team of resource specialists has evaluated and recommended the proposed use of prescribed fire.
  - (c) The interested public has been involved appropriately in the decision.
  - (d) Lightning caused fires must be suppressed to avoid serious threats to life and/or property within wilderness or to life, property, or natural resources outside of wilderness.
- 4. A decision to use prescribed fire in wilderness shall not be based on benefits to wildlife, maintenance of vegetative types, improvement in forage production, or enhancement of other resource values. These can be additional benefits, which may result from a decision to use prescribed fire, but are not objectives for managing fire in wilderness.
- 5. Management ignited fire will not be used to achieve wilderness fire management objectives where lightning caused fires can achieve them.
- 2. *Direction.* The following gives direction for the Bob Marshall-Scapegoat Wilderness Fire Management Plans regarding recreational use and resource protection in the Bob Marshall Wilderness Complex:

- *a.* Continue fire prevention efforts to reduce man-caused fires in the area using public service media messages, trailhead notices, and personal contact. It is essential that a natural fire program not be construed as a license to be careless with fire. (Scapegoat, Danaher Fire Plan, p.4).
- *b.* Inform users of potential risks during the fire season; maintain and dispense current information about ongoing fires. (Scapegoat, Danaher Fire Plan, p.4).
- *c*. Fires that endanger life or private property will be suppressed. Safety practices to be implemented to protect users when a prescribed fire or wilderness fire is burning may include the following:
  - 1) Trails passing through or close to an ongoing fire will be signed (warning signs as to fire hazards, etc.).
  - 2) Trails passing through or adjacent to a hazardous fire (i.e., snags, rolling debris, extreme fire behavior, etc.) will be closed.
  - 3) Personnel may be posted at trailheads or on trails leading the fire area to inform or turn away recreationists.
  - 4) Where necessary, the area around any fire will be thoroughly searched (aircraft and/or ground personnel) to locate any recreationists and assist them out of the area.
  - 5) Inform the public (through literature, radio, newspaper articles, and personal contacts) of the hazards associated with an ongoing fire. Educate the public in practices to follow when traveling through a burned area. (Great Bear, Bob Marshall Wilderness Fire Plan. P.6)
- *d.* When implementing fire suppression activities, protect the integrity of the wilderness resource. Use control methods and equipment that least alter the landscape or disturb the land surface. Bulldozers or other heavy equipment that disturb soil will not be used to control fires.
- *e*. The responsible line officer will appoint a resource advisor for all project wildfires within the Wilderness. This individual, cognizant of the Region's and Forests' wilderness resource management objectives, will be responsible for seeing that all suppression activities are compatible with wilderness management objectives.
- *f.* Establish project fire camps outside the Wilderness whenever possible. If camps must be within the Wilderness, keep them small. Consider

50-person spike camps the acceptable limit. Expend all efforts to minimize camp impact: in site selection, facility placement, and camp procedures. Communicate, do not assume, an understanding of "minimum impact camping" that applies to fire camps as well as recreational use of the wilderness resource.

- *g.* Begin restoration activities to correct erosive conditions resulting from fire suppression activities (e.g., fire lines) as soon as the fire danger permits the safe execution of these procedures. Acceptable methods include water bars and seeding of native plant species. Allow erosion resulting from natural processes to continue.
- *h*. Use primitive means to demobilize fire camps unless determined that removal by primitive means will have an unacceptable impact to the Wilderness, or that personnel and equipment are needed immediately for another fire emergency.
- *i*. Remove all unburnable solid wastes resulting from suppression action. Restore fire campsites to their prefire condition. Consider the use of before and after photo prints to document restoration practices and their results.
- *j*. Managers will establish and maintain at least annual contact with outfitters that have operations in the Fire Management Area and develop a plan of action in the event of a prescribed fire affecting their operations.
  - (d-j taken from Scapegoat-Danaher Fire Plan, PP4 and 5)
- *k*. Appropriate fire suppression action may be taken to protect Forest Service facilities in wilderness and outfitter camp improvements, which are authorized in the outfitter operation management plan.

There is always the possibility of human error in planning and carrying out fire prescriptions. Therefore, there is a risk of some fires not meeting fire management direction or wilderness management objectives.

To minimize the impact of this possibility, daily contact is made with the Regional Fire Coordinator to ascertain the status of suppression resources available, for a suppression effort if necessary.

Some wilderness users may be inconvenienced as a result of certain fires, and it is possible that some financial loss to the user could result. Any known tangible damage or loss to private property would be investigated by the Forest Service, and restitution would be made according to current Federal regulations. (Great Bear, Bob Marshall Wilderness Plan, p.10).

The Fielding area near Marias Pass, North Fork Birch Creek near Swift Dam, and an area above Gibson Reservoir will not have wilderness-type fire management prescriptions because of heavy recreational use, proximity to improvement, or resources outside the wilderness. (Great Bear, Bob Marshall Wilderness Plan, p.16)

#### **APPENDIX B**

#### FLATHEAD WILD & SCENIC RIVER MANAGEMENT (INTEGRATION WITH WILDERNESS MANAGEMENT)

#### a. Situation

The recently completed Flathead Wild and Scenic River recreation management direction (Amendment to Forest Plan Management Area 18 direction ) gives specific direction for managing portions of the Flathead River system that lie within the BMWC. The river corridors that lie within the wilderness include the Upper South Fork and the Upper Middle Fork. Management emphasis in the river plan is primarily directed at floaters. However, land based users constitute a significant part of the overall use in both corridors, hence the direction given in both the wilderness plan and the river plan has been integrated in order to present a more complete and consistent management direction.

#### b. Management Goals

Outlined below are the management goals the river action plan identified for maintaining recreation opportunities in these two river corridors

- a. Maintain a diversity of river and land based recreation activity opportunities in both corridors.
- b. Prevent any increase in the amount of permanent human influence in the river corridors.
- c. Preserve the Wilderness/Wild River environment by maintaining the natural resource condition in the South Fork and Middle Fork corridors required by the Wilderness Act.
- d. Maintain the existing high water quality for fisheries, esthetics and other ecological considerations in both corridors.
- e. Maintain existing trails and trail facilities within both river corridors.
- f. Provide maximum isolation from the sites and sounds of other users in the Middle Fork corridor (except at Schafer Meadows). Congestion will be minimized at Schafer Meadows. Provide maximum isolation between float parties and at least a moderate level of isolation between float parties and shore parties on the South Fork corridor.
- g. Treat all river users equally whether it is in terms of implementing new management practices, following regulations and procedures, having a

chance to float the river or having a chance to use the public land in the corridor for other recreation purposes.

- h. Provide information, education, and access to management personnel at Schafer Meadows. Users will be provided increased access to management personnel within the South Fork corridor. Management personnel will maintain a periodic presence in the corridor and on the river.
- i. Initiate regulations in both river segments that protect the natural resources and creation opportunity mandated by wilderness legislation.
- j. Provide the opportunity for combination pack/float and or wilderness fly in/float (Schafer) experiences as a means to develop river running skills and Wilderness/Wild River ethics.
- k. Provide freedom of choice for floaters in selecting their own level of involvement in trip planning and execution.
- 1. Provide the opportunity for users to interact with and learn about the natural environment and provide for an extremely challenging whitewater float associated with the risk of the unexpected (Middle Fork).

#### c. Indicators and Standards

Several indicators were selected in the river action plan to reflect the recreation opportunities described above.

- 1. *Encounters per day with other float parties on the river:* Probability of sighting no more than 2 other float parties or individual boats on the river.
- 2. *Encounters per day with other shore parties or camps.* Probability of sighting no more than 4 shore parties or camps per day.
- 3. *Human Impacted Site (Campsite) Condition:* 
  - a. *Middle Fork:* Human impacted site standards are those specified for opportunity class III, except in the Schafer vicinity, where opportunity class IV standards apply (see opportunity class allocation map and Table 3 Standards for Resource and Social Indicators for each opportunity class in the BMWC).
  - b. *South Fork:* Human Impacted site standards are those specified for opportunity class IV. (see Opportunity Class Map and Table 3,

Standards for Resource and Social Indicators for each opportunity class in the BMWC).

- 4. *Occurrences of litter on riverbank*: No more than an average of 1 occurrence per 5 miles of river.
- 5. *Recreation user experience quality index*: No more than 20 percent of surveyed users at lowest quality level; no less than 20 percent at highest quality level.
- 6. *Encounters per day with other float parties at Schafer Meadows Access Site*: Probability of sighting no other float parties at Schafer.

The Wild and Scenic River Act states, "Any portion of a component of the National Wild and Scenic River System that is within the National Wilderness Preservation System, as established by or pursuant to the Act of September 3, 1964 (78 Stat. 890; 16 U.S.C., Ch 23), shall be subject to the provisions of both the Wilderness Act and this Act with respect to preservation of such river and its immediate environment, and in case of conflict between the provisions of these Acts the more restrictive provisions shall apply.

The standard in both corridors for floaters encountering other shore parties or camps per day will be no more than four. No indicator has been established in the river plan for shore parties encountering other float parties. To assure the quality of the shore users experience is being maintained, the recreation user experience quality index described on page 58 will be applied in the BMWC. This will entail surveying shore parties, who utilize the river corridors for camping, fishing, etc., making sure no more than 20 percent of them are dissatisfied due to their encounters with float parties.

#### **Recreation User Experience Quality Index**

A primary goal of managers is to provide high quality recreation experiences. To determine if this goal is being reached, managers need a method for measuring the quality of a recreation experience. Managers and researchers have developed a scale for the Flathead River system. This scale provides a meaningful measure of the quality level floaters and non-floaters associate with their recreational experiences.

How experience will be measured:

1. Floaters will be approached at take out points, shore users in camp or along the shoreline. Individuals will be presented with three statements (below). Users will then be asked to rate their agreement with each of these statements on a 7-point scale.

	My experience was so good I would like to do	My experience was better than any other I	My experience was better than any other outdoor recreational experience I
Vary Changely	it again.	Temeniber.	Temember
very Strongly			
Disagree			
Strongly Disagree			XXX
Disagree		XXX	
Neither Agree Nor			
Disagree			
Agree			
Strongly Agree	XXX		
Very Strongly			
Agree			

2. By using a statistical technique known as Guttman Scaling Analysis, each user would then be assigned to a "quality level" based on how they responded to each statement. The four quality levels are shown below:

#### Quality Level

- 1. Would not take trip again
- 2. Would take trip again
- 3. Would take trip again Better than any other river trip
- Would take trip again
   Better than any other river trip
   Better than any other outdoor recreation experience

An example of a users response is given above. Such a response would categorize this user under quality level 2, "would take trip again". If they disagreed with all three statements, they would naturally be categorized under quality level 1. If they agreed with all three statements they would be categorized under quality level 4. The number of floaters rating their trip in each of these four quality levels is shown in the inventory of the existing situation found in the Recreation Management Direction, Flathead Wild and Scenic River (Amendment to the Flathead Forest Plan, Management Area 18). The Upper South Fork and Upper Middle Fork are the two management units of the Flathead River System that lie within the Boundaries of the BMWC.

#### **APPENDIX C**

#### TRAIL SYSTEM MANAGEMENT AND MAINTENANCE

Trails and trail conditions in the Bob Marshall Wilderness Complex (BMWC) are a major concern of users and managers alike. Most of the existing trail system in the complex preceded designation of the area as wilderness. Trails were located and designed to meet managerial needs such as basic access and fire suppression. Hence, they are primarily destination rather than experience oriented. Little consideration was given to needs for public access. Most routes were constructed to handle relatively light traffic. They were not located or designed to accommodate the relatively high traffic that exists today. Over the years, funding for trail maintenance did not keep pace with needs on the ground. Over time trail conditions deteriorated. In some cases, they are impassible, and, in a few extreme cases, are lost from the system for all practical purposes.

#### TRAIL MANAGEMENT GOALS

The long-term goals of trail management in the BMWC are:

- 1) Retain all existing system trails (those currently on the trail system inventory) at least until a complete trail system analysis is done.
- 2) Maintain these trails to a standard consistent with the established opportunity classes.
- 3) Consistent with established opportunity classes, reconstruct and/or rehabilitate established system trails to eliminate resource damage and to enhance visitors' wilderness experience.
- 4) Where necessary and consistent with established opportunity classes construct new trails for the purpose of eliminating resource damage and/or enhancing the visitors' wilderness experience.

#### Trail System Analysis

As a first step in correcting the problems now inherent in the trail system, an analysis will conducted to determine:

- a. Trail sections, which need to be relocated to protect the resource and enhance recreational experiences (i.e., esthetics).
- b. All inadequate sections (based on design class).
- c. Mileage of trails in each opportunity class.
- d. Trails suitable for "foot traffic only"

The time frame for such an analysis will be as follows:

Analyze all trails in Opportunity Class IV the first field season of implementation of this management direction. Each succeeding field season analyze trails in other opportunity classes until the entire trail system has been analyzed according to the above criteria.

The primary purpose of such an analysis is to identify a trail system that would provide long-term protection of the resource and user opportunities for a quality wilderness experience. As funds and manpower become available, managers will direct reconstruction or relocation efforts as closely as possible to the previously identified system of trails. Eventually, a trail system will develop that is less destination but more experience oriented. The percentage of trails properly located will markedly increase, further delaying the day when restrictive use limit policies will be required to halt resource damage on the trails.

A new system for storing and managing natural resource information will assist in this analysis. The system, called Geographical Information System (GIS), is based on remotely sensed data obtained through NASA's Landsat program. The Forest Service will be applying this new technology to the Bob Marshall Wilderness Complex in several ways. In addition to basic vegetation and geophysical data, this system has the capacity to store large quantities of information on human impacted sites, trails, recreational use, and many other parameters important to wilderness management. The Forest Service is currently working on incorporating data pertinent to the LAC planning process into the GIS system.

Trail information has been collected from each of the five Ranger Districts. Once the system is in operation, it will be capable of generating maps and lists of trails by District, Forest, or the entire complex. It will also be able to map and list trails by opportunity class, design standards (mainline, secondary, etc.), maintenance history, types and kinds of facilities, encounters per day, and major use type (horse, foot). In addition, it can map each opportunity class and identify the trails and components that are not consistent with the guidelines for that opportunity class.

The system will be useful in pinpointing problem trails, and developing maintenance schedules and reconstruction/relocation projects. It will enable managers to see at a glance when trails were last maintained, at what level, and what the current problems are. Over the next several years the location of trails can be examined for their impact on the environment and problems with resource damage, the recreational opportunities they provide and the potential for esthetic enjoyment they offer. This will help establish trail priorities on a Complex-wide basis, and lead to better trail planning and design of a more impact resistant trail system.

### Trail Maintenance Policy

### **Existing Situation**

The trail system in the wilderness complex receives heavy use. This use generally occurs during the summer and fall. Early fall use particularly critical since the heaviest use occurs when trails are often wet and not frozen. Most of the trails are used whether they are in good condition or not. Funding has not kept pace with trail management needs. Segments of new trails are being created to gain access to desired locations. These new routes result when segments of the existing trail system become unusable through lack of maintenance or poor location. Resource damage has occurred and the quality of the visitor's wilderness experience has diminished. Management options to distribute use and enhance the various components of the wilderness resource through trail management have been limited.

### Maintenance and Resource Protection Direction

The degree of development of a trail must be compatible with the resource, social, and managerial settings described for the opportunity class in which it lies. To achieve this objective, the level of maintenance (amount and type of work) and frequency of maintenance will vary by opportunity class and trail classification (easiest, more difficult, most difficult).

Lower levels of maintenance can be expected on those trails classified as most difficult than would be expected on trails classified as easiest. Any maintenance tasks performed, however, will be accomplished to accepted standards. Resource (soil, water, wilderness) protection is paramount in all opportunity classes, and various techniques will be used to prevent gullying, runoff entering live streams, excessive surface damage from going around obstacles, etc.

Opportunity classes, topography, vegetation, and soil type will generally determine frequency of trail maintenance. Frequency will vary from annually in opportunity class IV to approximately every 5 years in opportunity class I. The greatest effort will be directed toward high priority problem areas.

# Generalized Description of Trail Maintenance by Opportunity Class

The following descriptions provide a general idea of what may be expected of a given classification of trail in different opportunity classes. These conditions can be achieved by varying levels of maintenance and frequency of maintenance, and will require some judgment calls by managers and trail crew foreman.

### OPPORTUNITY CLASS I

- A. Way Trails (most difficult)
  - 1) Primary objective of maintenance is for resource protection (soil, water and wilderness).
  - 2) Generally visible cut logs, old blazes, clearing.
  - 3) Passable to a person on foot or horseback. Difficult for pack stock.
  - 4) Trail structures are not provided.
- B. Secondary Trails (more difficult)
  - 1) Primary objective or maintenance is for resource protection (soil, water, wilderness).
  - 2) Visible on the ground.
  - 3) Passable by foot and horse traffic with a degree of difficulty for pack stock
  - 4) Trail structures generally not provided. When used they will be constructed of native materials. Serious consideration will be given to limiting use before trail structures are installed.

# OPPORTUNITY CLASS II

#### A. Way Trails (most difficult)

- 1) Primary Objective of maintenance is for resource protection (soil, water, and wilderness)
- 2) Generally visible cut logs, old blazes, clearing.
- 3) Passable to a person on foot or horseback. Difficult for pack stock
- 4) Trail structures generally not provided. When used they will be constructed of native materials.

#### B. Secondary Trails (more difficult)

- 1) Primary objective of maintenance is for resource protection (soil, water, wilderness).
- 2) Readily visible on the ground.
- 3) Passable to people on foot or horseback and to pack stock.
- 4) Trail structures are generally of native materials and are provided for resource protection. Non-native materials may be used if it results in less impact to the wilderness resource and if the materials are not apparent to the user.

#### OPPORTUNITY CLASS III

- A. Way Trails (most difficult)
  - 1) If any, would remain the same as Opportunity Class I and II.

### A. Secondary Trails (more difficult)

- 1) Primary objective of maintenance is for resource protection (soil, water, and wilderness.
- 2) Readily visible on the ground old blazes, cleared to standards.
- 3) Receives light to moderate use.
- 4) Passable to all modes of wilderness travel.
- 5) Trail structures are generally of native materials and are provided for resource protection. Non-native materials may be used if it results in less impact to the wilderness resource and if the materials are not apparent to the user.

# C. Mainline Trails (easiest)

- 1) Primary objective of maintenance is for resource protection (soil, water, wilderness).
- 2) Readily visible on the ground old blazes, cleared to standards, brushed out.
- 3) May receive moderate to heavy use.
- 4) Easily passable to all modes of wilderness travel.
- 5) Trail structures of native and non-native materials may be provided for resource protection and user safety. Non-native materials are generally not apparent to the user.

# OPPORTUNITY CLASS IV

- A. *Mainline trails* (easiest)
  - 1) Primary objective of maintenance is for resource protection (soil, water, wilderness).
  - 2) Readily visible on the ground old blazes, cleared to standards, brushed (maintained to withstand heavy traffic)
  - 3) Receives heavy use throughout the summer and fall seasons.
  - 4) Easily passable to all modes of wilderness travel.
  - 5) Trail structures of native and non-native materials may be provided for resource protection, user safety, and limited user convenience.
- B. Way and Secondary Trails (most and more difficult)
  - 1) For those trails originating in opportunity class IV, but serving other opportunity classes, the trail will be maintained consistent with the maintenance description of the opportunity class it is serving.

### APPENDIX D

#### LAC TASK FORCE ROLE BOB MARSHALL WILDERNESS COMPLEX

The LAC Task Force was assembled in February of 1982 and has gradually expanded to its present size. The task force functioned as an ad hoc umbrella group composed of managerial, research and citizens components. All full task force meetings included all three components. Thus the LAC Task Force can be seen as a three-legged stool with a managerial leg, a research leg and a citizen's leg. This composition of representatives allowed the opportunity for sharing technical/scientific knowledge and personal knowledge (that gained through on-the-ground experience) among participants. Most citizens' representatives had personal knowledge of the Bob Marshall Complex based on their experience as users. Many of them also had technical knowledge to share with others.

The managers had both personal knowledge of the area and scientific/technical backgrounds and knowledge and the researchers provided concepts such as LAC and the best scientific data and analysis that were available. Through discussions and dialogue at general task force meetings and smaller subgroup meetings, the personal knowledge of all representatives became integrated with the collective scientific/technical knowledge of the group. This provided:

1. Validation or tempering of scientific/theoretical/technical information with the personal knowledge of users and managers.

2. Validation or tempering of the collective personal knowledge of the group with scientific/technical data, analysis and methodology.

The result was the most accurate description of the real world management situation in the BMWC. This also resulted in the most accurate assessment possible of what should and can be achieved to maintain or enhance that management situation, what the future real world state of affairs of the BMWC should be and how to achieve that future state, i.e. what management actions should be taken.

This process may be summarized as follows:

Dialogue and discussion within and among the three components of the task force resulted in mutual learning about the BMWC through sharing or personal and scientific/technical knowledge for the area. This mutual learning provided an opportunity to develop a consensus on what the state of affairs in the BMWC was and what, if anything, should be done to improve it. The final result was a course of action (direction for managing recreation use) that is scientifically, politically, and administratively justified, supportable and defensible.

This process was based on several assumptions:

- 1. The scientific/technical data now on hand, though not all-inclusive, was adequate for this first generation LAC planning effort. It can be refined over time to adjust conclusions and management direction based on new or improved data.
- 2. The collective personal knowledge of users, managers and researchers was sufficient to compliment, validate, and/or refine conclusions based on the data.
- 3. Managers, citizens, representatives, and researchers were willing to participate openly within the Task Force framework to develop a sense of shared ownership in the BMWC management challenges and development of solutions to those challenges.
- 4. The citizens component included a sufficiently broad spectrum of BMWC interest groups to constitute a microcosm of local, regional and national interest in the BMWC. The Task Force was not, however, necessarily representative of all wilderness interest groups. The formal public review process provided the opportunity for any groups or individuals not included in the Task Force to make their views known.
- 5. The citizens component provided an adequate "political market place" wherein the bargaining and tradeoffs necessary to develop a consensus could be conducted.
- 6. The composition of the citizen component constituted a potentially viable political coalition that could ensure the recreation management direction and the managerial actions necessary to implement that direction were carried out. This coalition can continue to function after recreation direction is developed. It can ensure adequate extra-agency political support and internal agency managerial support will be provided for implementation and ongoing monitoring.
- 7. Managers responsible for legislative mandates and administrative policies emanating from the Wilderness Act would ensure that all solutions/directions were consistent with existing mandates and policies. All direction for managing recreation use in the BMWC must provide "for the American people of present and future generations the benefits of an enduring resource of wilderness."
- 8. Solutions developed under the umbrella of the LAC Task Force would fall within the sideboards established by the Wilderness Act and the citizens component would ensure wilderness resource values were adequately addressed within the context of wilderness act intent. If this did not occur, managerial prerogatives based on agency policies and regulations would have been exercised.

- 9. What is acceptable and supportable by the citizens component would be acceptable and supportable by the population at large.
- 10. The formal public review of the draft recreation management direction developed by the Task Force would either validate or invalidate Items 8 and 9.

In August 1983 an inter-forest core team was formalized under the auspices of the LAC Action Plan signed by all four Forest Supervisors. The core team's charge was to develop a draft plan. Both managerial and research components were intensively involved in the core team effort. The core team along with its research support operated as the technical arm of the LAC Task Force as a whole.

The Task Force operated as a whole and in subgroups that were formed to develop recommendations for particularly difficult problems or provide for a local forum to discuss this plan. The LAC Coordinator met with these subgroups to discuss the core team's efforts and progress and to get their further input regarding those efforts. As sufficient progress was made to warrant a general meeting, the full LAC Task Force was convened.

As managers deemed appropriate, they involved other area-specific constituents not already included.

The following is a list of the representation that has been or is now included in the LAC Task Force.

# LAC TASK FORCE

# Research

University of Idaho – Department of Wildland Recreation University of Montana – School of Forestry University of Montana – Wilderness Institute Montana State University – Department of Animal and Range Sciences Forest Service Wilderness Research Unit, Intermountain Experiment Station

# Unit Managers

Lolo National Forest – Seeley Lake Ranger District Helena National Forest – Lincoln Ranger District Lewis & Clark National Forest – Rocky Mountain Ranger District Flathead National Forest – Hungry Horse Ranger District Flathead National Forest – Spotted Bear Ranger District

#### **Other Agencies**

Montana Department of Fish, Wildlife and Parks Montana Aeronautics Division

#### Public Representation

The Wilderness Society Montana Wilderness Association Sierra Club, Montana Chapter Montana Pilots Association Montana Outfitters and Guides Association Professional Wilderness Outfitters Association National Forest Recreation Association North American Outfitters Association Back Country Horsemen of American – 3 BCH Chapters Unaffiliated Users Lincoln Subgroup Swan Valley Citizens Group

The following flow diagram displays the LAC Task Force participation process.



### **APPENDIX E**

#### ONGOING MANAGEMENT CONSULTATION PROCESS

The underlying fact related to implementation of wilderness management direction in general, and associated management actions specifically, is that management decisions will be made by the wilderness manager (District Ranger). The following describes the wilderness manager's consultation options regarding the LAC Task Force. It assumes ongoing involvement of the Task Force during implementation through periodic meetings to discuss progress and problems. During development of the wilderness management direction, managers worked closely with the Task Force which represented a diversity of wilderness interest groups. Mangers recognize that the Task Force represents a political coalition from whom they will need support in order to implement wilderness management direction.

Consultation with the Task Force resulted in the development of a set of actions that will be available for the manager to use in achieving or maintaining the standards set in this document. This set of management actions may be viewed as a spectrum ranging from minor to major actions. The minor actions are non-regulatory and affect few, if any, of the public in terms of convenience or freedom. This array of management actions represents the options available to the manager for dealing with problems across the entire wilderness complex, by opportunity class, or on a specific site. Guidelines for the configuration and the composition of the management actions have been determined through Task Force deliberations and the subsequent formal public review process. The final outcome is a legitimized set of management actions available to the manager failing in a non-regulatory to regulatory continuum.

Since these management actions have been legitimized by support or consent of the Task Force, formal public review, and formal decision by the responsible line officers, the District Ranger is technically free to choose and apply the management actions as he sees fit. In most situations, this exercise of managerial prerogative with no further consultation will be appropriate and acceptable to the public. This assumes that most situations will not entail use of major actions. Where the use of a major or controversial action becomes necessary, there are three choices:

- 1. The manager can assume the adoption of this management direction provides sufficient legitimism of all management of all management actions and that use of a particular action requires no further consultation.
- 2. The manager can acknowledge that the action is legitimate but elect to consult further with the Task Force regarding a specific situation, area or problem before implementing the action.
- 3. The manager can present the problem and ask the Task Force for a recommended solution.

The first option will not provide the manager with a current sense of the political support available from the public or segments of the public or segments of the public, as indicated Task Force representation. The manager will unilaterally exercise his managerial prerogatives.

The second option will give the manager a sense of the political ramifications of potential management actions in that the Task Force response will serve as a bellwether of general public opinion or opinions of segments of the public. In essence, the manager can sound out whether there is general Task Force support or support of some groups for the action. The breadth and depth of opposition as well as support can be estimated through this approach. If the action is supported, the Task Force may be helpful in communicating the need for the action to the general public and achieving their support without major opposition.

The third option will do essentially the same as the second except it places the Task Force members more in a position of responsibility for the solution and, therefore, potentially develops more ownership in and support of the manager's subsequent action.

Managers will consult on an annual basis with the Task Force for the first three years to update them on wilderness management activities and to discuss problems that warrant consideration of major or controversial actions. After this time the Task Force will decide whether it is appropriate to continue the meetings. The second and third options described above will be the preferred methods to deal with implementation of major or controversial management actions. In using both options however, the manager will be free to exercise his authority to take actions that are contrary to recommendations of the Task Force manager will do so with an understanding of the risks, costs, and probability of success of the proposed action.

If a problem arises that warrants immediate action to deal with protecting the resource, the manager has the responsibility to act without delay. Subsequent consultation with the Task Force to explain emergency actions is appropriate. If the problem is severe but does not require urgent action, consultation with the Task Force will be considered.

If a situation arises for which no appropriate management action is described and no emergency exists, the manager will consult with the Task Force at the next periodic meeting. Options described above will be used to develop an appropriate management action to deal with an unforeseen situation or problem.

# **APPENDIX F**

# **BASIC FRAMEWORK FOR DETERMING THE LIMITS OF ACCEPTABLE CHANGE AND FOR PLANNING THE RANGE (FORAGE) RESOURCE**

The following is an outline of the process to be used by the Forest Service for range management planning in the wilderness and in limiting and distributing grazing use by saddle and pack stock (horses and mules) among the various users: Public recreationists, commercial outfitters and guides, and administrative personnel. The process will insure that saddle and pack stock grazing does not exceed the maximum levels us use (limits of acceptable change) that will allow natural ecological processes to operate, and will not impair the values for which the wilderness complex was designated.

Forage resources in the Wilderness will be allocated and managed in units referred to as allotments. The details of the process that follows will be accomplished during allotment management planning, within the basic framework of the Forest Plans for the Flathead, Helena, Lewis & Clark, Lolo and the Wilderness management Plan for the Wilderness complex. The result of this process will be an allotment management plan (AMP) for each grazing allotment. The AMP will define the specific allocation of forage resources, the grazing management system, and the monitoring necessary to ensure that the objectives are met. The Following is an outline of the Allotment Management Plan (AMP) process:

#### A. Objectives

Basic objectives for managing the forage resource within the overall purposes of wilderness will be defined initially. One source of objectives for all allotments will be the range indicators developed for the limits of acceptable change (see Table 3 and 4). Other objectives will be defined for each allotment, as the AMP process is initiated, based on site conditions.

#### B. Range Analysis

Each allotment will be analyzed using standards defined in the Northern Region Range Analysis Handbook (FSH 2209.21). This process will include field mapping of the range, compilation of data, evaluation, and the development of alternatives. Some of the details of this process are outlined below:

- 1. Field Inventory of Range (Forage) Resources
  - a) Determine suitability for livestock grazing.
  - b) Map range vegetation type, soils, condition/trend, and production/utilization, etc.

- 2. *Compilation of Data* 
  - a) Acres by condition/trend.
  - b) Grazing capacity calculations.
  - *c)* Actual grazing use records for all livestock, including commercial outfitter /guide, public recreation stock, and administrative stock. Assemble grazing history.
- 3. Evaluation
  - a) Develop alternatives for meeting the objectives and for resolving discrepancies between grazing capacity and the traditional actual grazing use pattern, etc. Compare the consequences of the various alternatives.

This evaluation stage will include consultation with the LAC Task Force, affected commercial outfitter/guides, and the public.

### C. Allotment Management Plan

The final result of the range analysis process above will be the approval of an allotment management plan that will guide future grazing management activities. The elements of this plan are outlined in the Ranger Analysis Handbook (FSH 2209.21, R-1, Chap. 830) and summarized below:

- 1. *Action Plan* including specific actions scheduled to accomplish the objectives.
  - a. Grazing system and livestock management.
  - b. Adjustments needed to balance permitted grazing use with the grazing capacity.
  - c. Use of prescribed fire to allow forest succession to play its natural role in Wilderness.
- 2. *Monitoring Plan* including a schedule of inspections to gather data to assure that the plan is accomplishing the objectives.
  - a. Condition/trend benchmarks and photo points to monitor vegetation changes.

- b. Production/utilization studies. Forage utilization will be measured suing the "grazed plant method" which is based on a percent of plants grazed and was determined by weight studies.
- c. Visual inspections.
- d. Comparative photos from photo points designed to monitor longterm succession changes and success of range improvement activities.
- D. Definitions and Guidelines for Determining Range Condition, Trend, Utilization and Visual Appearance.
  - 1. CONDITION is the character of the vegetal cover and soil under man's use in relation to site potential (defined ecologically). It has also been defined as the health of the range based on what the range is naturally capable of producing. The purpose in classifying range condition is to measure any deterioration that has taken place, and/or provide a basis for predicting the degree of improvement that is possible. Depending upon the degree of departure from site potential, range condition is divided into five classes: excellent, good, fair, poor and very poor. Thus, excellent condition designates little or no departure from potential, whereas very poor designates extreme deterioration of vegetation and/or soils.
  - 2. TREND is change in condition. If the change is toward site potential, the range is improving and the trend is up. If the change is away from site potential, the range is deteriorating and the trend is down. Ranges are rarely static. Change is the rule rather than the exception, so there is usually an upward or downward trend.

Range condition and trend can be estimated by observation of various soil and vegetation indicators. However, a definitive measurement of range condition and trend requires sampling and long-term monitoring of benchmarks and photo points. Instructions for these studies are found in the Northern Region Ranger Analysis Handbook (FSH 2209.21, RA, Chap. 300).

### **APPENDIX G**

#### SUPPORTING RESEARCH AND REFERENCES

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Location/Drainage		
Year		
Status: (circle one) <b>CURRENT</b>	NON-DISCERNABLE	HISTORIC LOCATION (no cultural significance)

O.C.\_\_\_\_\_ Rating\_\_\_\_\_ Excess Barren Core: YES NO

# BOB MARSHALL WILDERNESS COMPLEX CAMPSITE INVENTORY

GENERAL SITE DESCRIPTION 1) SITE NUMBER *Site number = geounit & campsite number	<ul><li>13) VEGETATION: (Circle One)</li><li>1) Closed Forest</li><li>3) Non-forested, Densely Vegetated</li></ul>					
2) SURVEYED BY	2) Open Forest 4) Non-forested, Sparsely Vegetated Dominant Species:					
3) SORVET DATE(Monut)(Day)(Year)	Habitat Type, il known					
4) LOCATION: LAT/LONG UTM COORDINATE: NEEE	<ul><li>14) LANDFORM: (Circle One)</li><li>1) Floodplain</li><li>2) Other Valley Bottom</li><li>3) Cirque Basin</li></ul>					
	4) Slide Slope 5) Ridge Top 6) Other					
6) ELEVATION (to nearest 100 ft.)	<ul><li>15) Predominate TYPE OF USE: (Circle as many as apply)</li><li>1) Foot</li><li>3) River</li></ul>					
7) DISTANCE TO CLOSEST TRAILHEAD:(miles)	2) Stock 4) Outfitter					
8) DISTANCE TO CONSTRUCTED TRAIL:(feet) Screening: (Circle one)	16) FACILITIES: (note # of each upon arrival and after cleaning) - # of features <b>BEFORE</b> / # of features <b>AFTER</b>					
1) Complete 2) Partial 3) None	1) Fire Ring       /					
9) DISTANCE TO WATER:(feet)	4) Table/Shelf/Counter/					
Type of water source (circle one)	5) Meat Rack/					
1) River/Creek 3) Spring	7) Corral////					
2) Lake 4) Other	9) Other//					
10) DISTANCE TO CLOSEST CAMPSITE:(feet) Screening: (Circle one)	17) CLOSEST FIREWOOD SOURCE: (Circle one) 1) On site 3) 100-300 feet 5) >1/4 mile					
1) Complete         2) Partial         3) None           11) NUMBER OF OTHER CAMPSITES WITHIN ¼ MILE:	2) <100 feet					

IMPACT EVALUATION						
19) VEGETATION COVER:	On Campsite		On Unused Comparative Are	a		
(Be sure to compare similar areas, same species, 1) 0-5	) 0-5% 3) 26-50% 5) 76-10	00% 1	) 0-5% 3) 26-50%	5) 76-100%		
and canopy cover.)	2) 6-25% 4) 51-75%	2	) 6-25% 4) 51-75%	-,		
		-	, 0 20,0 1, 01, 10,0			
20) WIINERAL SUIL EXPOSURE.		100%/	) 0 5%	E) 76 100%		
(Percent of area that is bare mineral soli.)	1) 0-5% 3) 26-50% 5) 76-1	100%	) 0-5% 3) 20-50%	5) 76-100%		
	2) 6-25% 4) 51-75%	2	2) 6-25% 4) 51-75%			
Rating (Circle one category)						
				Impact index		
	1	2	3	(weight) (total)		
21) VEGETATION LOSS:	No difference in coverage	Difference of one coverage	Difference of two or	(		
	class	class	more coverage classes	X 2 =		
22) MINERAL SOIL INCREASE:	No difference in coverage	Difference of one coverage	Difference of two or			
	class	class	more coverage classes	X 3 -		
	No more then broken	1.9 searred trees or		X 5 =		
23) THEE DAMAGE.		1 O bodhy occurred or	>o scarred trees,			
No. of trees scarred or felled ALLNEVV	lower branches	1-3 badly scarred or	badly scarred or	X O		
% of trees scarred or felled		telled.	telled	X 2 =		
24) ROOT EXPOSURE:						
No. of trees with roots exposed ALLNEW	None	1-6 trees with roots	>6 trees with roots			
% of trees with roots exposed		exposed	exposed	X 3 =		
25) DEVELOPMENT:	No more than 1 scattered	1 fire ring with or without	>1 fire ring or major			
	fire ring	primitive log seat	development	X 1 =		
26) CLEANLINESS:	No more than scattered	Remnants of >1 firering,	Human waste, much			
No. of fire scars ALL NEW	charcoal from 1 fire ring	some litter or manure	litter or manure	X 1 =		
27) SOCIAL TBAILS:	No more than 1 discernible	2-3 discernible trails	>3 discernible or more			
No of trails All	trail	Max of 1 well-worn trail	than 1 well-worn trail	X 2 =		
28) CAMP ABEA:						
Estimated area (sq. ft.)	<500 sq. ft	500-2000 sq. ft	>2000 sq. ft	× 4 –		
	<500 Sq. II.	500-2000 Sq. II.	>2000 Sq. It.	× + =		
29) DARREN CORE CAMP AREA.	FO og ft	E0 E00 og ft	. E00 og ft	X O		
Estimated area(sq. it.)	<50 Sq. II.	50-500 sq. ii.	>500 sq. ii.	X 2 =		
	30) IMPACT INDEX	:				
Evenes Barren Cara, OC L. agual to an greater than 100 ag ft	, -	Impost	Boting			
Excess barren core. OCT – equal to or greater than 100 sq ft $OCH$ – equal to or greater than 500 sq ft			MIMPACT: 20.20			
OCIII = equal to or greater than 500 sq ft		MODEB				
OCIV –equal to or greater than 2000 sq ft		HIGH IM	1PACT: 50+			
31) NOXIOUS WEED SPECIES	On Campsite	On Campsite On Unused Comparative Ar				
(% Noxious weeds within vegetative cover)	1) 0-5% 3) 26-50%	5) 76-100%	1) 0-5% 3) 26-50% 5) 76-100%			
	2) 6-25% 4) 51-75%		2) 6-25% 4) 51-75%			
32) IN I HODUCED PLANT SPECIES	1) 0 5% 2) 26 50% 5) 70	100%	1) 0 E9/ 2) 26 E09/ E) 76 1009/			
	2) 6-25% 4) 51-75%	0) /0-100%         1) 0-5%         3) 20-50%         5) /0-100%           2) 6-25%         4) 51-75%				
33) COMMENTS: (Details about location of site, impacts, management suggestions, etc.)	2,020,0 4,01-10,0		2,52070 4,017070			
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* *			c.			* Dotor		PG	of	
*	*		0	C:		+	vale:		10	01
TR #:	T	R Name:					Name:			
			Г	Frail En	counters					
Type Party	TypeParty#PartySizeStockSS		ck Stock P		Length of Trip		Notes: (Feed Start and Finish Points, Info from Secondary Source FS Cress, Name of Outfitter, Etc.)			
		Occupied C	ampsite	s				Othe	er Ptys Ob	served
Campsite Location		Other Si	Other OCC Days Sites Si		s this Ty ite Pa		'ype arty	/pe Type rty		0.
Use back o	of sheet for ad	ditional comn	ients					1		