APPENDIX I

ANACONDA-PINTLER WILDERNESS FOREST PLAN AMENDMENT

The Anaconda-Pintler Wilderness Management Plan of 1977 is an appendix to the Beaverhead, Bitterroot, and Deerlodge Forest Plans. This decision replaces and supplements some of the direction in the 1977 A-P Plan. It also thereby amends the Forest Plans themselves. This document creates Forest Plan Amendments as follows:

Beaverhead National Forest Land and Resource Management Plan Amendment 7
Bitterroot National Forest Land and Resource Management Plan Amendment 18
Deerlodge National Forest Land and Resource Management Plan Amendment 2

The interdisciplinary team reviewed the existing direction for the A-P as contained in the A-P Wilderness Management Plan of 1977, and identified those portions that needed to be changed or refined. Some parts of the 1977 Wilderness Plan remain pertinent and there is no need to update them. They will continue to provide direction for the A-P. The goals, objectives, guidelines, and standards listed below, and discussed in the Decision Notice, are only those where a change from 1977 direction is proposed. The goals, objectives, guidelines, and standards listed here have been somewhat adjusted from what appeared in the Environmental Assessment in order to eliminate redundancy, consolidate direction that was scattered in various parts of the EA, more clearly express the intended management direction, and reflect the final decision. The minor wording changes and re-organization do not change the meaning of the direction analyzed in Alternative C (except as modified by the Decision Notice).

WILDERNESS-WIDE DIRECTION

The following desired future conditions, goals, objectives, guidelines, and standards (these terms are defined in the glossary for the EA) constitute direction that will apply throughout the whole Anaconda-Pintler Wilderness.

General

Relationship to 1977 A-P Plan

In cases where direction in the 1977 A-P Wilderness Plan conflicts with the new direction described in this document, the new direction will prevail. In cases where previous direction is silent, this new direction will supplement the 1977 direction. If no new direction was developed, the 1977 direction remains in effect.

Desired Future Condition

The intent of the management direction is to help move toward the desired future condition for the Wilderness, which is described as follows:
The A-P is characterized by a predominantly unmodified natural environment where ecological processes operate without interference. Wilderness characteristics as they relate to process (function), appearance (structure), and composition (elements) of the ecosystem(s) within the Wilderness are maintained. Noxious weeds are not present. There is opportunity for a high quality “wilderness experience” which includes solitude, adventure, risk, self-reliance, and primitive forms of recreation. The area feels and looks wild to those who visit. Human activity and associated stock use do not unduly displace wildlife, substantially alter natural vegetative communities, or substantially disturb or compact soil. Air and water quality retain a high level of purity. Heritage resources are protected.

**Recreation**

**Relationship to 1977 A-P Plan**

Much of the proposed change in direction applies to recreation. The 1977 direction will be supplemented by the goals, objectives, guidelines, and standards below, as well as the attached Zone Map A, Table I, Table II, and Table III. Direction related to management zones is covered later in this amendment. Under Management Actions in the 1977 Plan, page 14, item #3: delete “the 15 person party and 20 head of stock size limits” and replace with “**Group limit will be 12 people and 12 head of stock.**”

Throughout the new direction implemented by this decision, “stock” is defined as horses, mules, burros, llamas, or goats.

**Goals**

1. Maintain opportunity for high quality, primitive recreation.

2. Maintain opportunity for solitude.

3. Evidence of management will be the minimum necessary to achieve the desired future condition.

**Objectives**

1. Minimize number of campsites and degree of impact on soil and vegetation in existing campsites.

2. Restore degraded areas to an acceptable level, as defined for each zone (see Management Zone Direction).

3. Have an active education program that emphasizes the importance of wild places and "Leave No Trace" ethics and practices.
Guidelines

1. Provide a range of opportunities for primitive and unconfined recreation.

2. Maintain opportunity for solitude by eliminating most user-built trails, naturalizing new campsites, and applying other measures as necessary to concentrate or disperse use.

3. Provide recreation options that include large trailless areas as well as maintained trails for stock users and hikers.

4. Limit and distribute use as necessary to protect wilderness.

5. Non-system trails (social trails and other user-built trails) will be discouraged and eliminated where possible.

6. Continue to naturalize new campsites and downsize large campsites.

7. Install facilities such as hitch racks, toilets, etc. only if there are serious resource protection needs. Possible sites are Johnson Lake, Carpp Lakes, Ripple Lake, Hidden Lake, and Mystic Lake.

8. Intensify education efforts to insure that the public does not expect to find forage in the A-P. Advise stock users to pack feed, preferably pellets. Emphasize appropriate containment of stock.

9. Where signs are needed for resource protection, they are allowed in all zones.

Standards

1. Group limit will be 12 people and 12 head of stock.

2. Require a free self-issuing registration of all users. This is a year-round requirement. The registration form will be available at trailheads. The registration will not limit the number of people and will not assign campsites. For security reasons, user names and street addresses will be optional on the registration and completed forms will be placed in a locked receptacle.

3. No new system trails will be built. Reconstruction, including relocation of short stretches for resource protection or safety purposes, will be allowed on existing trails only after further NEPA analysis. Abandoned portions of trail will be naturalized.

4. Campfire closures are required within ¼ mile of the following lakes: Oreamnos, Sawed Cabin, Upper Phyllis, Upper Carpp, Surprise, Bear, Buck, Emerald, Lost Lakes, Lower Phyllis, Park Lakes, Sauer, Continental, the unnamed lake below Queener Mountain, and the unnamed lake west of Warren Lake.
5. Stock feed requirements: Weed seed free feed is required throughout the Wilderness. Grazing is prohibited within 200 feet of all lakes in the Wilderness.

6. Camping with stock is prohibited within ¼ mile of Sawed Cabin, Oreamnos, and Ripple Lakes.

7. Hope Lake Trail #424 will remain closed to travel with stock. Hitch rails will be provided at the start of the trail.

8. No permanent structures or caches will be allowed, except permanent structures for resource protection. (Also see Zone Management Direction.)

Land Occupancy - Mystic Lake Cabin

Relationship to 1977 A-P Plan

In the 1977 Plan, page 25, Management Actions: delete item #2 relating to management of Mystic Lake Cabin and replace it with the goals, objectives, guidelines, and standards below.

Goals

1. Preserve Mystic Lake Cabin for its cultural significance as part of the historic component of the wilderness resource.

Objectives

1. Maintain and protect Mystic Lake Cabin from deterioration in a manner that allows for its continued occasional administrative use.

Guidelines

1. Efforts to save the cabin will be taken if fires threaten. These measures could include a variety of suppression tactics but would not include extensive cutting of vegetation.

Standards

1. In the event of wild or prescribed fire in the vicinity of the cabin, measures will be taken to protect the cabin from fire. Advance measures to “fire-proof” the cabin through major vegetation manipulation will not be undertaken.

2. Maintenance and stabilization of the cabin will not use mechanized tools and will be done in a fashion that meets the standards of management for a historic structure eligible for listing on the National Register of Historic Places.
Commercial Outfitters

Relationship to 1977 A-P Plan

In the 1977 Plan, page 27, delete all except the first paragraph. The remaining 1977 direction on commercial outfitters (page 26-27) will be supplemented by the goals, objectives, guidelines, and standards below.

Goals

1. Provide opportunities for outfitted service for recreation activities.

2. Outfitters and guides provide quality service in a manner compatible with use by other visitors.

3. Outfitter and guide services are conducted in a manner that maintains the wilderness resource.

4. Outfitters and guides educate their clients on "Leave No Trace" skills and ethics, provide good examples of these practices, and interpret the natural and human history of the area.

Objectives

1. Outfitted use helps achieve proposed objectives, standards, and guidelines associated with each zone (see Zone Management Direction).

2. The use allocation process and evaluation criteria for similar operations are consistently applied by all Ranger Districts in the A-P as described in the guidelines and standards below.

Guidelines

1. Operating plans will determine appropriate location and use levels of base, spike, progressive, and drop camps within direction set for each zone. Such decisions will focus on improving conditions where needed and maintaining conditions where they are fully acceptable, based on zone criteria (see Zone Management Direction).

2. If new permits are considered, the following five-step process will be followed.

   a. Determination of demonstrated public need is completed and documented by the Forest Service. A determination of need examines: 1) agency mission, 2) opportunities, 3) land capability, 4) social capacity, 5) demand/supply as further defined in the Guidebook on Outfitter and Guide Administration (February 1997).

   b. The issuance proposal is fully evaluated and the appropriate NEPA analysis/documentation is completed.
c. The analysis and decision are documented and linked to the Forest Plan.

d. The prospectus process is followed for solicitation of applicants, evaluating competition, and providing required documentation/information on applicants. This process is described in Forest Service Manual (FSM 2712.2).

   i. The applicant has proven financial capability and possesses adequate experience/expertise to operate a successful sustainable business.

   ii. The most highly qualified applicant(s) will be selected via a formal documented applicant selection and use allocation process.

e. A new permit will consist of:

   i. Basic permit

   ii. Operating plan for the tenure of the permit

   iii. Annual itinerary (annual operating plan).

3. Each outfitter is assigned an area in the operating plan.

Standards

1. New outfitters may be considered if: 1) the use will not create unacceptable social or biophysical impacts; 2) the use cannot be filled by current outfitters; and 3) the new use is non-traditional, not one of the current permitted uses. This includes, but is not limited to, such uses as dog sledding or winter ski tours. If these conditions are all met, a prospectus may be issued by the Forest Service and used to select a new outfitter.

2. Up to 200 incidental commercial/institutional use days will be allowed annually for the entire Wilderness. These days are not intended for repeated use by the same group nor are these days available to existing A-P outfitters. They are allotted on a one-time basis.

3. For currently permitted uses, existing outfitters will be capped at the 10-year actual use high, if demand exists and monitoring shows that impacts are acceptable. No additional use days will be permitted except for those days available from a pool of unused days that will exist if current permitted outfitters do not use their allotted days. Transfer of days from the pool will be allowed only amongst days of like kind and same season.

4. All regulations that apply to the public also apply to outfitters with the exception of the 14-day limit on the Bitterroot NF and the 16-day limit on the Beaverhead-Deerlodge NF. In the case of assigned sites, the 14 or 16 day limit can be exceeded as specified under the special use permit in the operating plan.
Fish

Relationship to 1977 A-P Plan

In the 1977 Plan, page 29, delete items #5, 6, and 7. On page 30, delete the second paragraph under item #1. The remaining direction on fish and wildlife management (pages 28-30) will be supplemented by the goals, objectives, guidelines, and standards below.

The intent of the following direction regarding fish is to promote wilderness values as well as acknowledge and preserve existing recreational angling opportunities within the A-P. No comprehensive management plan for fisheries in the A-P exists. It is the goal of this direction to seek consensus with Montana Department of Fish, Wildlife, and Parks (MFWP) regarding management of fisheries in the A-P through the formation of a work group representing fisheries and wilderness managers of both agencies charged with the production of a mutually satisfactory plan for adoption by both parties.

Goals (To be sought by the above work group.)

1. Where feasible, maintain and enhance indigenous fish species.

2. Seek native biological communities where possible.

3. Contribute to the conservation or restoration of native strains of fish.

4. Provide recreational angling where opportunities currently exist or where establishment of new populations of native species might contribute to the perpetuation of those species and provide recreation as well.

Objectives

1. Fishless lakes represent special esthetic, scientific, biological, and social values. Because of this the Forest Service prefers that these waters remain unstocked. Table IV, Fish Occurrence in Anaconda-Pintler Lakes (part of Appendix IV), provides a current list of fishless lakes.

2. Stock only indigenous species in lakes that have been evaluated and determined appropriate by the MFWP.

3. Maintain fishing tradition and opportunity.

4. Request of MFWP that stocking methods be as non-intrusive as possible, recognizing that airplants of fish are allowed within the A-P only if used prior to establishment of the Wilderness. Work cooperatively with MFWP to utilize resources of both agencies necessary to make fish plants successful and harmonious with wilderness values.
Guidelines

Forest Service guidelines as listed in the EA for comment, Chapter II, pages 32-33, have been removed from the document. This change was made to reflect that the statutory authority to stock and manage fisheries rests with the State and not the Forest Service. In its place, we have agreed with the State to establish an interagency working group to develop strategies to improve our native fish stocks, manage recreational impacts in the Wilderness, and deal with specific issues as they arise.

Vegetation

Relationship to 1977 A-P Plan

The 1977 direction on vegetation (pages 31-34) will be supplemented by the goals, objectives, guidelines, and standards below. Under Management Direction in the 1977 Plan, page 33, delete item #5. Replace it with recreation guideline #8 and recreation standard #5 from this document.

Goals

1. Maintain native vegetation, including natural composition, structure, and function.

2. Protect rare and sensitive plants.

3. Eliminate, contain, and prevent noxious weed infestations.

4. Maintain the inherent disturbance regime for vegetation.

Objectives

1. New infestations of noxious weeds will be eradicated as soon as possible after being inventoried.

Guidelines

1. Follow the 1993 Anaconda-Pintler Wilderness Fire Management Guidelines.

2. Take actions necessary to prevent or restore recreation impacts on vegetation if they are in conflict with the desired future condition. After further analysis, these actions might include such things as campfire prohibitions, camping closures, stock closures, restoration planting, or limiting numbers of visitors.

3. A combination of education, detection, prevention, and eradication methods will be used to prevent noxious weed infestations before they occur and to eliminate infestations while they are still minimal. Methods may include the following:
a. Eradicate or contain weeds in areas adjacent to the Wilderness to prevent invasion from the perimeter. This includes treatment of trailheads and sides of approach roads, clear-cuts, and adjacent range allotments.

b. Eradicate weeds within the Wilderness with a combination of hand pulling, biological, and chemical methods as needed. Eradication will be done by hand pulling if possible. Biological or chemical control will be used only after further NEPA analysis. Herbicide applications will be site-specific and only by hand, to minimize effects on non-target species.

c. Enforce weed seed free feed regulation, CFR 261.50 (a), which requires that all feed in the Anaconda-Pintler be certified weed seed free or pelletized.

d. Encourage stock users to have animals on weed seed free feed for 48 hours prior to wilderness entry.

e. Have an active education program on weed spread prevention, weed recognition, and the negative effects of weeds on ecological processes.

4. Existing inventoried noxious weeds in Kurtz Flat (knapweed) will continue to receive follow-up treatments as needed. This was covered in the 1994 Bitterroot NF Noxious Weed EA.

Standards

The following standards are intended to limit the detrimental impacts of recreational stock grazing in the uplands, wet meadows, and riparian areas along streams in the A-P. The standards are in keeping with prescriptions in the Bitterroot, Deerlodge, and Beaverhead Forest Plans; the Beaverhead Forest Plan Riparian Amendment; the USFS Region 1 Soil and Water Conservation Practices Handbook; and accepted Forest Service pack/saddle stock practices. Land managers will apply the appropriate type of standard according to site-specific need.

1. Forage Utilization

a. Forage utilization on wet meadows and riparian sites will not exceed 50% of the total annual growth of grasses, sedges, and other herbaceous forage when measured at, or projected to, the end of the growing season. A more restrictive standard may be applied to sites that are trending downward or are identified as having a lower than desirable ecological condition. A simple visual technique can be taught and used as a guideline to encourage the frequent movement of stock. Stockhandlers should leave at least 2/3 of the plant height that was on the site when they arrived. This will help insure that a site will not be overgrazed by successive users over the remainder of the season, and serves as a minimum guarantee for maintaining plant vigor and preventing the development of bare soil patches.
b. On riparian sites associated with streams containing bull trout and westslope cutthroat trout, forage utilization will not exceed 35% to 45% of the herbaceous growth when measured at, or projected to, the end of the growing season. Identify these sites for outfitters, wilderness rangers, and general users and emphasize the need to graze these sites lightly. A rule of thumb is to leave ¾ of the forage that was present on the site when the party arrived.

c. On upland sites (those grazeable areas that are dominated by species such as elk sedge and are not influenced by groundwater) utilization will not exceed 50% of the total annual growth. More restrictive standards may be assigned to sites that are trending downward or are identified as having a less than desirable ecological condition.

d. No more than 15% of the surface area of any forage site for stock may exceed the above utilization standards. Forage sites in the A-P may vary from a fraction of an acre to 50 acres or more.

2. Stubble Height Standards for Perennial Streams and Associated Vegetation

a. Average leaf length of grasses and sedges in the bankfull zone (immediately adjacent to streams) will not be shorter than 4 inches at the end of the growing season.

b. Average leaf lengths after grazing of the grasses and sedges in the floodplain zone will not be shorter than 3 inches at the end of the growing season. This standard applies to those floodplain zones that support sedge species, tufted hairgrass, alpine timothy, or other species that typically grow leaf lengths well in excess of 3 inches.

c. The above stubble height standards (a and b) may not apply to some community types, such as Kentucky bluegrass, that at high elevations may not attain leaf lengths much greater than 3 inches. Employ utilization standards on these sites.

d. More restrictive stubble heights may be prescribed for sites that are trending downward or are in a less than desirable ecological status.

3. Stream Bank Alteration

a. The amount and kind of stream bank trampling by stock hoof action will be tracked to insure that riparian function is maintained. Forage sites along streams or stream segments classified as "functioning-at-risk" or “non-functioning” (using hydrologic/ecological condition rating) may need seasonal limitations or closure to grazing in order to establish an improving trend in stream bank and vegetation condition. This need will be determined on a site-specific basis.

b. Some stream bank alteration resulting from stock crossings or watering sites is inevitable, however, the number and size of crossings and watering sites should be small for any forage site. An increase in size or number of crossings and watering sites that
may affect the function of the stream will warrant management action to control and mitigate the resource impacts.

4. Willow, Aspen, and Other Browse Species

   a. Corrective management action on problem sites, where the sustainability of browse stands is affected by stock impacts, may include seasonal grazing limitations, closures, or fencing.

Research Natural Areas

Relationship to 1977 A-P Plan

Part of this decision is to proceed with establishment of the Goat Flat (Beaverhead-Deerlodge NF) and East Fork Bitterroot (Bitterroot NF) Research Natural Areas, and to manage those areas as described here. The 1977 A-P Wilderness direction on scientific study (page 47) will be supplemented by the goals, objectives, guidelines, and standards related to Research Natural Areas (RNAs) listed below.

Goals

1. Preserve and monitor RNAs as representative ecosystem types and for their special vegetative associations and sensitive species. These special elements are noted in the RNA establishment records and the existing conditions section of the EA.

Objectives

1. No increase in number of campsites or their degree of impact within the East Fork RNA. No campsites in Goat Flat RNA.

Guidelines

1. Naturalize any new campsites that appear.

2. Pay special attention to sensitive species and plant associations if any trail relocation or reconstruction is necessary.

3. Eliminate noxious weeds in accordance with direction discussed in the vegetation section above. Other exotic vegetation will also be eliminated if it is determined that it is displacing native vegetation.

Standards

1. Do not stage crews for firefighting or use areas for repeated helicopter landings.
2. Avoid group camps for administrative purposes, including spike or base camps for fire fighting, trail construction, contract work, or other camps for fieldwork.

3. Do not allow outfitter camps or other camps under special use permit.

4. No new range allotments or new water diversions are allowed.

**MANAGEMENT ZONE DIRECTION**

Management zones have been created throughout the Wilderness as shown on Zone Map A. Table III summarizes the zones designated for lakes, trails, and adjacent areas. Zones are based on the Limits of Acceptable Change (LAC) concept. LAC sets limits of change, in different portions of the Wilderness, based on measurements of conditions. The intent of establishing zones is to maintain or re-establish acceptable resource and social conditions. These conditions represent the maximum limit of change from natural which will be allowed. Zones allow managers to apply a range of desired conditions that are specific and acceptable within wilderness. Zones are based on the premise that the Wilderness is not homogeneous. Conditions, as described in the following zone description narratives and as measured by indicators, vary from one zone to the next. Management direction described previously in this document applies to all zones; this section provides direction specific to each zone. Procedures for monitoring and evaluating the effectiveness of management actions are also established. Table I shows some selected objectives and standards by zone. Indicators listed in Table I are items that can be measured to gauge the overall condition of management zones.

**General**

**Relationship to 1977 A-P Plan**

The 1977 Plan did not include the concept of zones. The 1977 direction will be supplemented by the goals, objectives, guidelines, and standards for zones below. In addition, Zone Map A, Table I, and Table III are part of the new direction.

**Zone I (Most Natural)**

Zone I exists in essentially trailless areas where use and impacts are not focused by destinations. This area has the lowest level of human disturbance and is characterized by a virtually unmodified natural environment. The A-P is primarily Zone I.

**Goals**

1. This zone has the highest degree of apparent naturalness.

2. Ecological processes operate naturally, with essentially no perceptible or measurable evidence of human impact or use.
3. The area has outstanding opportunities for solitude and a primitive and unconfined type of recreation that requires self-reliance.

4. The area functions as a wild place. It looks and feels wild to those who visit.

Objectives

1. Campsite density is less than 1 per roving radial mile.
2. Barren core areas associated with campsites revegetate annually.
3. Non-system trails (social trails and other user-built trails) are generally absent.
4. Encounters with other groups and rangers generally do not occur.

Guidelines

1. Through education and administrative actions, which may sometimes include physical removal, the following will be discouraged or eliminated:
   a. Frequent managerial presence
   b. Base camps for fire suppression or other administrative purposes
   c. Constructed heli-spots; allow old sites to recover
   d. Repeated use of large group camps (includes outfitters)
   e. Barren core areas associated with campsites
   f. Rock campfire rings

Standards

1. Eliminate or prevent the following in this zone:
   a. Permanent structures (other than heritage resources)
   b. System trails
   c. Directional trail signs

2. Use of administrative and permitted camps (base or spike camps) may not exceed 15 service or use days per season per site.
Zone II

Zone II is composed primarily of some access routes and the high elevation lake areas found on the Philipsburg and NW Wise River Districts. It is close to the crest of the range and contains more destinations than any other portion of the Wilderness. The destinations include lakes, peaks, and high passes. Access in this zone is via secondary trails. Destination areas have moderate use and are relatively vulnerable to impacts from use.

Goals

1. This zone has a high degree of wilderness integrity and a low level of human disturbance.
2. A predominantly unmodified natural environment characterizes the zone.
3. Ecological processes operate naturally with limited evidence of human impact.
4. Excellent opportunities exist for solitude and the area offers a primitive and unconfined type of recreation, requiring self-reliance.

Objectives

1. Campsite density is less than 3 per roving radial mile.
2. Barren core areas associated with campsites are less than 100 square feet.
3. Non-system trails (social trails and other user-built trails) are generally less than 2 per campsite and less than 2 per concentrated use area.
4. Encounters with other groups and rangers are generally less than 2 per day on the trail and less than 2 per day in camp.
5. Campsite impacts are minimal.

Guidelines

1. Through education and administrative actions, which may sometimes include physical removal, the following will be discouraged or eliminated:
   a. Signing, except at trail junctions and wilderness boundaries
   b. Frequent managerial presence
   c. Base camps for fire suppression or other administrative purposes
   d. Outfitter base camps
e. Rock campfire rings

Standards

1. Administrative and permitted camps (base or spike camps) are occasionally allowed, except in RNAs.

2. Eliminate or prevent permanent structures (except heritage resources and trail structures for resource protection, e.g. water bars, turnpikes, and puncheons).

3. The highest system trail standard in this zone is a secondary trail.

4. Directional trail signs are allowed.

Zone III

Zone III includes some popular destinations and more heavily used areas that are along popular routes used for overnight trips. A predominantly unmodified natural environment characterizes this zone, however, some sites are substantially affected by human activity. Such impacts include loss of vegetation and soil along travel routes, at campsites, and at scenic attractions such as lakeshores and viewpoints. The zone has both mainline and secondary system trails. Encounters with other groups and rangers on the trail or in campsites are expected. Campfire rings will exist only in heavily used sites where determination has been made that less damage occurs by concentrating use than by dispersing it. Impacts could persist from year to year but do not exceed the limits defined in the objectives, guidelines, and standards.

Goals

1. The zone has a high degree of wilderness integrity.

2. A minimal level of human disturbance characterizes the zone.

3. Ecological processes operate naturally with limited evidence of human impact.

4. Opportunities for solitude are available.

5. A primitive and unconfined type of recreation, requiring self-reliance, is characteristic of the area.

Objectives

1. Campsite density is less than 6 per roving radial mile.

2. Barren core areas associated with campsites are less than 200 square feet.
3. Non-system trails (social trails and other user-built trails) are generally less than 3 per camp and less than 3 per concentrated use area.

4. Encounters with other groups and rangers are generally less than 3 per day on the trail, and less than 4 per day in camp.

5. Conditions that precipitate user conflicts are minimal.

Guidelines

1. The following will be discouraged through education and may be physically modified or removed if they occur:
   a. Signing, except at trail junctions and wilderness boundaries
   b. Rock campfire rings

Standards

1. Administrative and permitted camps (base or spike camps) are occasionally allowed, except in RNAs.

2. Eliminate or prevent permanent structures (except heritage resources and trail structures for resource protection, e.g. water bars, turnpikes, and puncheons).

3. Directional trail signs are allowed.

Zone IV (Transition/Portal)

Zone IV has the most human disturbance of any zone within the Wilderness and has the highest percentage of day use. Despite this disturbance it is still characterized by a high degree of wilderness integrity and by a predominantly unmodified natural environment, however, some sites are substantially affected by human activity. Impacts include loss of vegetation and soil along travel routes, campsites, and scenic attractions. Ecological processes still operate naturally with little evidence of human impact. Activity levels are such that some wildlife is displaced. Opportunities for solitude are available but less characteristic of this area. A primitive and unconfined type of recreation, requiring self-reliance, is characteristic of the area. Risk and challenge are somewhat less than in more remote areas of the Wilderness. The area has both mainline and secondary system trails. User-built trails and social trails are minimized. Encounters with other groups and rangers on the trail or in campsites are expected. Rock campfire rings will exist only in heavily used sites where a determination has been made that less damage occurs by concentrating use than by dispersing it. Impacts could persist from year to year but do not exceed defined objectives shown in Table I.
Goals

1. Maintain, as much as possible, a high degree of wilderness integrity.

2. Minimize the level of human disturbance.

3. Ecological processes operate naturally with little evidence of human impact.

4. Opportunities for solitude are available but mostly during off-season.

5. A primitive and unconfined type of recreation requiring self-reliance is characteristic of the area.

Objectives

1. Campsite density is less than 8 per roving radial mile.

2. Barren core areas associated with campsites are less than 500 square feet.

3. Non-system trails (social trails and other user-built trails) are generally less than 5 per camp and less than 3 per concentrated use area.

4. Encounters with other groups and rangers are generally less than 5 per day on the trail, and less than 4 per day in camp.

5. Conditions that precipitate user conflicts are minimal.

Guidelines

1. The following will be discouraged through education and may be physically modified or removed if they occur:
   a. Rock campfire rings

Standards

1. Administrative and permitted camps (base or spike camps) are occasionally allowed, except in RNAs.

2. Eliminate or prevent permanent structures (except heritage resources and structures for resource protection, e.g. water bars or other resource protection structures, such as hitching rails or toilets).

3. Directional trail signs are allowed.
MONITORING DIRECTION

This section contains direction for monitoring. Accomplishment of monitoring is contingent on funding in any given year. If necessary, monitoring in the A-P will be prioritized based on which information is most critical to maintaining wilderness values. Monitoring by wilderness rangers, trail crews, and wilderness managers will gauge the health of the resource. An Air Quality Related Values plan exists to monitor air quality. Other areas of concern are considered below.

Relationship to 1977 A-P Plan

The 1977 direction on collection of resource and use information (pages 45-46) will be supplemented by the monitoring described below.

Conditions By Zone

Monitoring which gauges whether the goals, objectives, guidelines, and standards are being attained will be necessary. Site conditions will be assessed by campsite monitoring, wilderness ranger and trail crew observations, and field checks by wilderness managers. Recreation impacts and administrative actions, which have specific indicators as shown in Table I, will be monitored. Indicators to be monitored include campsite density, barren core area, social trails, encounters, administrative and permitted camps, permanent structures, system trails, trail signs, and impacts to vegetation that result from recreation use. Recreation impacts include firewood utilization, forage utilization, and vegetation disturbance or elimination around campsites.

Natural Fire Occurrence

The goal of wilderness fire management is that fire plays as natural a role as possible within the Wilderness, displaying a frequency and severity similar to the historic range of variability. Frequency and severity are both monitored as part of the Anaconda-Pintler Wilderness Fire Management Guidelines (April 1993). The number of natural starts is compared with the number of fires that are allowed to follow their natural course without suppression. Fire frequency, intensity, and acres burned relative to lightning starts will be monitored and compared with historic fire activity. The monitoring plan in the FMG is adequate and is not changed by this direction.

Grazing Impacts from Recreational Use

Guidance on monitoring the grazing impacts of recreational stock use is identified here. Land managers will apply the appropriate monitoring frequency according to site-specific need. The Wilderness Operating Plan may provide more site-specific direction on this monitoring. Standards that the EA discussed in this Monitoring section have been moved to the Vegetation portion of Wilderness-Wide Direction.

Forage Utilization Monitoring: Estimates of forage utilization can be arrived at by using clipping and weighing inside and outside small exclosure cages, grazed plant transects,
comparison with ungrazed sites, etc. Sampling methodologies are explained in FSH 2209.21 and "Sampling Vegetation Attributes" (1996), an Interagency Technical Reference.

**Stubble Height Monitoring:** Stubble height measurements are taken along representative stream segments within the forage site.

**Streambank Alteration Monitoring:** Monitor the amount and kind of streambank trampling by stock hoof action.

**Willow, Aspen, and Other Browse Species Monitoring:** Managers should monitor browse intensity of deciduous woody species such as willow and aspen by recreational stock to insure the plant stands or communities within forage sites are maintaining height growth. The accepted method for determining the health of woody browse stands is contained in “Browse Evaluation by Analysis of Growth Form” (Keigley and Frisina, 1998).

The following areas have been identified as those with fairly regular recreational stock grazing, therefore ongoing observation is important for these areas.

<table>
<thead>
<tr>
<th>Location</th>
<th>District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meadows behind Warren Lake</td>
<td>Wise River</td>
</tr>
<tr>
<td>Elk Park</td>
<td>Wisdom</td>
</tr>
<tr>
<td>Seymour Horse Camp</td>
<td>Wise River</td>
</tr>
<tr>
<td>McGlaughlin Meadows at Rainbow Lake</td>
<td>Wise River</td>
</tr>
<tr>
<td>Meadow below Kelly Lake</td>
<td>Sula</td>
</tr>
<tr>
<td>Meadow below Hidden Lake</td>
<td>Sula</td>
</tr>
<tr>
<td>Buck Ridge Meadows</td>
<td>Sula</td>
</tr>
<tr>
<td>Kurtz Flat, both sides of river</td>
<td>Sula</td>
</tr>
<tr>
<td>Meadow above Mystic Lake along CDT</td>
<td>Wisdom</td>
</tr>
<tr>
<td>Meadow on NW end of Mystic</td>
<td>Wisdom</td>
</tr>
<tr>
<td>Horse camp at Johnson Lake</td>
<td>Philipsburg</td>
</tr>
</tbody>
</table>

**White Pine Blister Rust**

Most of the high elevation areas in the Anaconda-Pintler support whitebark pine. Whitebark is both a critical component of the ecosystem and a special element of the wilderness experience for those who visit. Many areas in the northwest have growing occurrence of a fungus, white pine blister rust, *Cronartium ribicola*. This fungus causes branch and stem cankers that eventually cause top kill and death of the infected whitebark pine trees. The Anaconda-Pintler has been relatively free of this disease compared to adjacent areas, however recently more and more areas have been showing infection. It is important to know how much this pathogen, which was introduced from Europe and Asia in the early 1930's, is influencing the natural conditions of the Anaconda-Pintler. It is also important to know how this area might differ from adjacent ones as far as resistance. Monitoring will involve mapping infestations of white pine blister rust in whitebark and limber pine communities.
Research Natural Areas

Monitor the trail corridor and any existing campsites to make certain the vegetative associations and sensitive plants are not disturbed by human activity or displaced by exotic plants, particularly noxious weeds.

Monitor the existing campsites within the East Fork RNA to make certain they are not increasing in degree of impact. Monitor to insure that no campsites become established within Goat Flat RNA.

Monitor noxious weeds and other exotic plants.

Noxious Weeds

Monitor known infestations and inventory any new infestations of noxious weeds by placing them on maps and identifying species. If any treatment is administered the effects of that process will also be monitored.