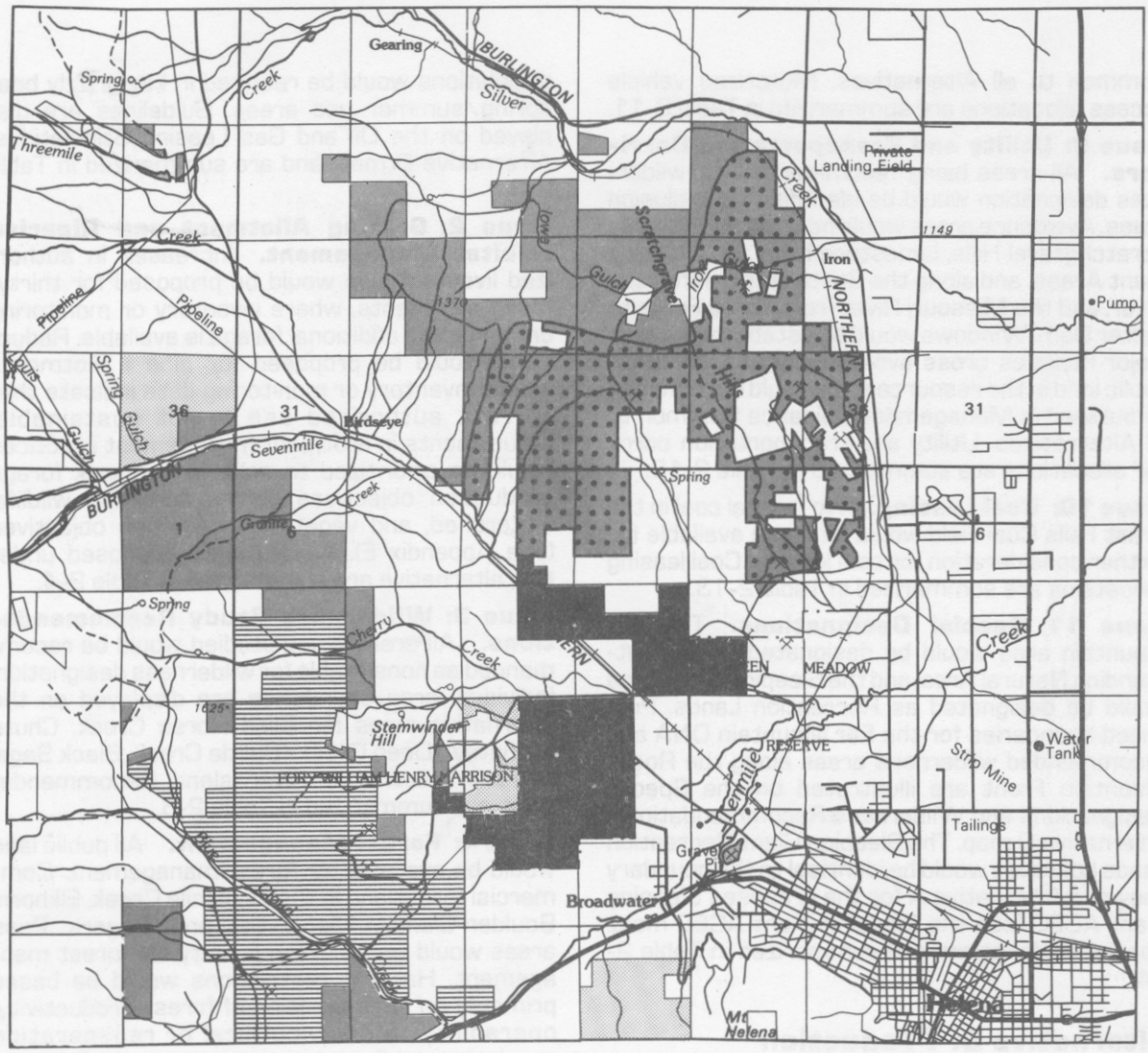


Public Surface/Subsurface

Military Reservation

Public Subsurface

State

Private

Proposed Mineral Withdrawal Area

Scratchgravel Hills Proposed Mineral Withdrawal Alternative C Only

NORTH

1:100,000

0 1 2 3 Miles

0 1 2 3 4 5 Kilometers

Common to all Alternatives. Motorized vehicle access allocations are summarized in Table 2-11.

Issue 9: Utility and Transportation Corridors. All areas being recommended for wilderness designation would be identified as exclusion areas. Avoidance areas would be established in the Scratchgravel Hills, Limestone Hills, and Sleeping Giant Areas, and along the Smith River, Jefferson River, and the Missouri River from Three Forks to Holter Dam. Windows would be established where major facilities cross avoidance areas. All other public land in the resource area would be managed as outlined in Management Guidance Common to all Alternatives. Utility and transportation corridor allocations are summarized in Table 2-12.

Issue 10: Coal Leasing. No federal coal in the Great Falls Coal Field would be made available for further consideration for coal leasing. Coal leasing allocations are summarized in Table 2-13.

Issue 11: Special Designations. The Ear Mountain area would be designated as an Outstanding Natural Area, and the Sleeping Giant area would be designated as Recreation Lands. Proposed boundaries for the Ear Mountain ONA and recommended wilderness areas along the Rocky Mountain Front are illustrated on the Special Designations and Wilderness Recommendations: Alternative C map. The Sleeping Giant Recreation Lands boundary would be identical to the boundary shown in Alternative A for the proposed Sleeping Giant ACEC [see the Sleeping Giant ACEC map]. Special designations are summarized in Table 2-14.

Alternative D: Production Alternative

Theme

The production alternative places primary emphasis on making public land and resources available for use and development. Environmental values would be protected to the extent required by applicable laws, regulations, and policies. The goal of this alternative is to change present management direction so that the identified issues are resolved in a manner that generally places highest priority on the production of oil and gas, coal, livestock forage, and timber.

Issue Resolution Guidelines

Issue 1: Oil and Gas Leasing and Development. No areas outside of the Sun River Game Range would be identified for no surface occupancy or no leasing. Seasonal exploration stipulations would be required in bighorn sheep, elk, and mule deer winter/spring range, and mountain goat kidding areas. Seasonal exploration and production stipulations would be required in key grizzly bear spring/summer use areas. Guidelines are displayed on the Oil and Gas Leasing Stipulations: Alternative D map, and are summarized in Table 2-3.

Issue 2: Grazing Allotment and Riparian Habitat Management. Increases in authorized livestock use would be proposed for thirty-four I allotments, where inventory or monitoring data indicate additional forage is available. Reductions would be proposed for nine I allotments where inventory or monitoring data indicate that current authorized use is not sustainable. Adjustments in allotment management practices would be prioritized to achieve livestock forage production objectives before achieving wildlife, watershed, and vegetation condition objectives (see Appendix E). Adjustments proposed under this alternative are summarized in Table 2-4.

Issue 3: Wilderness Study Recommendations. All areas being studied would be recommended as nonsuitable for wilderness designation. Individual area boundaries are displayed on the alternative maps for Blind Horse Creek, Chute Mountain, Deep Creek/Battle Creek, Black Sage, and the Yellowstone River Island. Recommendations are summarized in Table 2-6.

Issue 4: Forest Management. All public land would be available for forest management. Commercial forestland in the Eightmile Creek, Elkhorn, Boulder-Clancy, Marysville, and Rogers Pass areas would receive high priority for forest management. Harvest restrictions would be based primarily on consideration of forest productivity, operability, and silvicultural or regeneration requirements. Forest management guidelines are summarized in Table 2-7.

Issue 5: Land Ownership Adjustments. Priority areas would be established for retention and acquisition, disposal, and further study. Land ownership adjustment guidelines are summarized in Table 2-8.

Issue 6: Mineral Exploration and Development. All public land in the Scratchgravel Hills would remain open to mineral entry and development. All other public land in the resource area would remain open unless previously withdrawn from mineral entry. Mineral exploration and development guidelines are summarized in Table 2-9.

Issue 7: Motorcycle Use Areas. The Scratchgravel Hills, Limestone Hills, Hilger Hills, Spokane Hills, and Marysville areas would remain available for further consideration. All other public land in the resource area would be managed as outlined in Management Guidance Common to all Alternatives. Motorcycle use area allocations are summarized in Table 2-10.

Issue 8: Motorized Vehicle Access. The Scratchgravel Hills, Limestone Hills, and Hilger Hills would remain open to motorized vehicle access. All other public land in the resource area would be managed as outlined in Management Guidance Common to all Alternatives. Motorized vehicle access allocations are summarized in Table 2-11.

Issue 9: Utility and Transportation Corridors. The Blind Horse Creek, Chute Mountain, and Deep Creek/Battle Creek areas would continue to be managed as avoidance areas. Avoidance areas would not be established in the Scratchgravel Hills, Limestone Hills, and Sleeping Giant areas, or along the Smith River, Jefferson River, and the Missouri River from Three Forks to Holter Dam. No windows would be established. The above lands would continue to be managed as available for further consideration. All other public land in the resource area would be managed as outlined under Management Guidance Common to all Alternatives. Utility and transportation corridor allocations are summarized in Table 2-12.

Issue 10: Coal Leasing. All federal coal in the Great Falls coal field would be available for further consideration for coal leasing, pending further study. Surface occupancy generally would be prohibited within public road corridors, rights-of-way, and key wildlife use areas. For analysis purposes, it is assumed that three underground mines would be developed in the Stockett area to supply enough coal (approximately 1.2 million short-tons annually) for Montana Power Company's proposed 350 MW Salem Project near Great Falls. It is also assumed that mine development would begin in 1993 and production would begin in 1996. These assumptions are made primarily to allow for projection of social and economic impacts. The acreage to be disturbed by such operations for surface facilities cannot be estimated at this time. To date, no proposals for mining coal in the Great Falls Coal Field have been received by the BLM. Details regarding applications of the coal unsuitability criteria are included in Appendix H. Coal leasing allocations are summarized in Table 2-13.

Issue 11: Special Designations. No special designations would be established. Special designations are summarized in Table 2-14.

COMPARISON OF ALTERNATIVES

Table 2-15 summarizes the major land allocations and resource outputs that would occur under each alternative. Table 2-16 summarizes the environmental consequences expected under each alternative. For additional information regarding the environmental effects of each alternative, refer to the Environmental Consequences chapter.

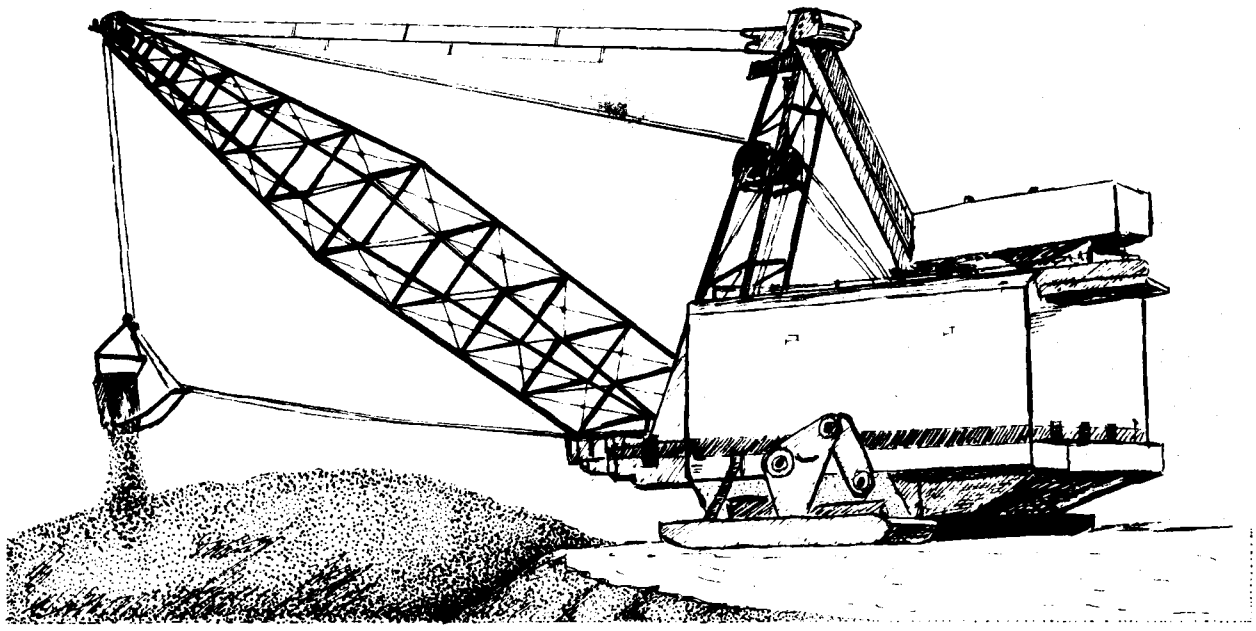


TABLE 2-15

COMPARISON OF ALTERNATIVES: SUMMARY OF ALLOCATIONS/OUTPUTS BY ISSUE

Issue	Allocation or Output[1]	Unit of Measure	Alt. A Preferred	Alt. B No Action	Alt. C Protection	Alt. D Production
Oil and Gas Leasing & Development	Standard Stipulations	acres fed. min.	272,449	272,449	271,324	272,703
	Special Stipulations	acres fed. min.	339,208	347,103	302,903	356,107
	No Surface Occupancy[2]	acres fed. min.	22,950	17,528	42,751	11,821
	No Leasing	acres fed. min.	20,898	18,425	38,527	14,874
	Standard Stipulations-RMF[3]	acres fed. O&G	36,160	36,160	34,740	36,480
	Special Stipulations-RMF	acres fed. O&G	49,500	59,460	3,700	70,820
	No Surface Occupancy-RMF	acres fed. O&G	14,040	7,200	39,020	0
	No Leasing-RMF	acres fed. O&G	18,550	15,430	40,790	10,950
Grazing Allotment & Riparian Habitat Management	Initial Livestock Forage Target	AUMs	29,297	31,501	27,036	33,954
	Livestock Forage Prod.[4]	AUMs	33,417	33,417	28,217	38,618
	Satisfactory Riparian Habitat[4]	miles of streambank	**130**	123	135.5	105
Wilderness Study	Proposed Wilderness Recommendations	acres fed. surface	0	0	17,197	0
Forest Management	Total Commercial Forest Set Aside	acres fed. surface	**9,503**	5,197	5,197	0
	Yield	mmbf/decade[6]	**24.0**	26.5	26.5	29.0
Land Ownership Adjustments	Retention Category	acres fed. surface	**283,323**	311,337	282,283	282,283
	Disposal Category	acres fed. surface	**25,317**	0	25,637	25,637
	Further study	acres fed. surface	**2,697**	0	3,417	3,417
Mineral Exploration & Development	Withdrawn from entry	acres fed. min.	42,019	42,019	44,979	42,019
	Available for entry	acres fed. min.	613,486	613,486	610,526	613,486
Motorcycle Use Areas	Available for further consideration	acres fed. surface	234,134	266,149	208,824	266,149
	Closed to organized events	acres fed. surface	77,203	45,188	102,513	45,188
Motorized Vehicle Access	Open	acres fed. surface	79,875	111,890	76,472	111,890
	Prioritized for restrictions	acres fed. surface	219,404	199,447	216,828	199,447
	Closed	acres fed. surface	12,058	0	18,037	0
Utility and Transportation Corridors	Exclusion Areas	acres fed. surface	0	0	17,197	0
	Avoidance Areas	acres fed. surface	74,489	22,171	63,271	22,171
	Windows	acres fed. surface	952	0	952	0
	Available for further consideration	acres fed. surface	235,896	289,166	229,917	289,166
Coal Leasing consideration	Available for further	acres fed. coal	25,452	0	0	25,452
	Available for surface occupancy	acres fed. coal	**23,672**	0	0	23,697
Special Designations	Area of Critical Environmental Concern	acres fed. surface	11,609	0	0	0
	Recreation Lands	acres fed. surface	0	0	11,609	0
	Outstanding Natural Areas	acres fed. surface	12,058	0	840	0
	Undesignated	acres fed. surface	287,670	311,337	298,888	311,337

[1]All allocations or output estimates are for the entire Headwaters Resource Area unless otherwise indicated. All outputs assume adequate funding and manpower.

[2]Acres identified for no surface occupancy do not include areas which normally are not occupied under standard stipulations, e.g. slopes exceeding 30% and streamside buffer strips.

[3]RMF: Rocky Mountain Front

[4]Long-term estimate; assumes adequate funding to implement plan over 20-year period

[5]HRA: Headwaters Resource Area

[6]mmbf: million board feet

TABLE 2-16

COMPARISION OF ALTERNATIVES: SUMMARY OF ENVIRONMENTAL CONSEQUENCES

ENVIRONMENTAL COMPONENT	EXISTING SITUATION	ALTERNATIVE A: PREFERRED		ALTERNATIVE B: NO ACTION		ALTERNATIVE C: PROTECTION		ALTERNATIVE D: PRODUCTION	
		SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
AIR QUALITY		Air quality would not be significantly affected under any alternative.							
SOIL AND WATER RESOURCES									
Watershed Condition	—	minor improvement	moderate improvement	minor improvement	moderate improvement	minor improvement	moderate-high improvement	minor deterioration	minor deterioration
Water Quality	generally good to excellent	no significant change	minor improvement	no significant change	minor improvement	no significant change	moderate improvement	no significant change	minor deterioration
ENERGY AND MINERALS									
Oil and Gas—Rocky Mountain Front (in acres)									
Leased with standard stipulations	86,050	decreasing	36,160	decreasing	36,160	decreasing	34,740	decreasing	36,480
Leased with special stipulations	17,700	increasing	49,500	increasing	59,460	decreasing	3,700	increasing	70,820
Leased with no surface occupancy	3,550	increasing	14,040	increasing	7,200	increasing	39,020	decreasing	0
Unleased	10,950	increasing	18,550	increasing	15,430	increasing	40,790	no change	10,950
Oil and Gas—Headwaters Resource Area (in acres)									
Leased with standard stipulations	450,154	decreasing	272,449	decreasing	272,449	decreasing	271,324	decreasing	272,703
Leased with special stipulations	163,333	increasing	339,208	increasing	347,103	increasing	302,903	increasing	356,107
Leased with no surface occupancy	23,550	decreasing	22,950	decreasing	17,528	increasing	42,751	decreasing	11,821
Unleased	12,918	increasing	20,898	increasing	18,425	increasing	38,527	increasing	14,874
Locatable Minerals (in acres)									
Withdrawn from mineral entry	53,606	decreasing	42,019	decreasing	42,019	decreasing	44,979	decreasing	42,019
Available for entry	601,899	increasing	613,486	increasing	613,486	increasing	610,526	increasing	613,486
Coal (in millions of short tons)									
Available for further consideration for leasing	0	increasing	125.6	0	0	0	0	increasing	125.6
LANDS									
Land Ownership Pattern	highly fragmented	no significant change	minor improvement	no significant change	no significant change	no significant change	minor improvement	no significant change	minor improvement
Legal Accessibility	generally poor	no significant change	minor improvement	no significant change	no significant change	no significant change	minor improvement	no significant change	minor improvement
RECREATION									
Developed Recreaton Opportunities		Developed recreation opportunities would not be significantly affected under any alternative.							
Dispersed Recreation Opportunities									
Nonmotorized	—	no significant change	minor increase	no significant change	no significant change	no significant change	minor increase	no significant change	minor decrease
Motorized	—	minor decrease	minor decrease	minor decrease	minor decrease	minor decrease	minor decrease	minor decrease	minor decrease
VISUAL QUALITY		Visual quality would not be significantly affected under any alternative.							
CULTURAL RESOURCES		Cultural resources would not be significantly affected under any alternative.							

TABLE 2-16 (cont.)

COMPARISION OF ALTERNATIVES: SUMMARY OF ENVIRONMENTAL CONSEQUENCES

ENVIRONMENTAL COMPONENT	EXISTING SITUATION	ALTERNATIVE A: PREFERRED		ALTERNATIVE B: NO ACTION		ALTERNATIVE C: PROTECTION		ALTERNATIVE D: PRODUCTION	
		SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
WILDERNESS RESOURCES	Five areas containing 17,197 acres under wilderness study	Potential loss of wilderness values, primarily because of oil and gas exploration and development on pre-FLPMA leases	Maintenance of wilderness values on 11,218 acres designated as Outstanding Natural Areas; potential loss of wilderness values on remaining 5,979 acres	Potential loss of wilderness values, primarily because of oil and gas exploration and development on pre-FLPMA leases	Potential loss of wilderness values in all areas	Potential loss of wilderness values, primarily because of oil and gas exploration and development on pre-FLPMA leases	Preservation of wilderness values in all areas through wilderness designation	Potential loss of wilderness values, primarily because of oil and gas exploration and development on pre-FLPMA leases	Potential loss of wilderness values in all areas
TIMBER RESOURCES									
Allowable Cut (million board feet per decade)	1.0 (actual cut)	increasing	**23.95**	increasing	26.45	increasing	26.45	increasing	29.0
Acres Cut per decade	333 (actual cut)	increasing	**7,983**	increasing	8,816	increasing	8,816	increasing	9,667
RANGE RESOURCES									
Ecological range condition (% of rangeland in HRA)									
Excellent	8%	no change	8%	no change	8%	increasing	15%	increasing	37%
Good	49%	increasing	67%	increasing	67%	decreasing	42%	no change	49%
Fair	40%	decreasing	24%	decreasing	24%	decreasing	39%	decreasing	13%
Poor	3%	decreasing	1%	decreasing	1%	increasing	4%	decreasing	1%
Livestock AUMs	31,501	29,297	33,417	31,501	33,417	27,036	28,217	33,954	38,618
FISH AND WILDLIFE HABITAT (unsatisfactory acres)									
Big Game—winter/spring habitat									
Elk	14,926 (23%)	minor decrease	moderate decrease	no significant change	moderate decrease	minor decrease	major decrease	minor increase	moderate increase
Mule Deer	27,763 (25%)	minor decrease	minor decrease	minor decrease	minor decrease	minor decrease	major decrease	moderate increase	moderate increase
Bighorn Sheep	1,035 (17%)	minor decrease	moderate decrease	no significant change	moderate decrease	minor decrease	moderate decrease	minor increase	moderate increase
Moose	3,888 (40%)	minor decrease	minor decrease	minor decrease	minor decrease	minor decrease	major decrease	moderate increase	moderate increase
Antelope	3,072 (22%)	minor decrease	minor decrease	minor decrease	minor decrease	minor decrease	moderate decrease	moderate increase	moderate increase
Big Game—summer/fall habitat									
Elk	5,922 (23%)	minor decrease	moderate decrease	no significant change	moderate decrease	minor decrease	major decrease	moderate increase	moderate increase
Mule Deer	1,015 (10%)	minor decrease	minor decrease	minor decrease	minor decrease	minor decrease	minor decrease	minor increase	minor increase
Bighorn Sheep	783 (8%)	minor decrease	minor decrease	no significant change	minor decrease	minor decrease	minor decrease	minor increase	minor increase

TABLE 2-16 (cont.)

COMPARISION OF ALTERNATIVES: SUMMARY OF ENVIRONMENTAL CONSEQUENCES

ENVIRONMENTAL COMPONENT	EXISTING SITUATION	ALTERNATIVE A: PREFERRED		ALTERNATIVE B: NO ACTION		ALTERNATIVE C: PROTECTION		ALTERNATIVE D: PRODUCTION	
		SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM	SHORT TERM	LONG TERM
Moose	748 (12%)	no significant change	minor decrease	no significant change	minor decrease	minor decrease	moderate decrease	minor increase	moderate increase
Antelope	3,259 (23%)	no significant change	minor decrease	minor decrease	minor decrease	minor decrease	moderate decrease	minor increase	moderate increase
Big Game—yearlong habitat									
Elk	2,142 (25%)	minor decrease	moderate decrease	no significant change	moderate decrease	minor decrease	major decrease	moderate increase	moderate increase
Mule Deer	10,521 (22%)	minor decrease	moderate decrease	no significant change	moderate decrease	minor decrease	major decrease	minor increase	minor increase
Bighorn Sheep	0 (0%)	no significant change	no significant change	no significant change	no significant change	no significant change	no significant change	no significant change	no significant change
Antelope	4,212 (21%)	no significant change	minor decrease	no significant change	minor decrease	minor decrease	moderate decrease	minor increase	major increase
Threatened and Endangered Species habitat									
Grizzly Bear (yearlong)	8,588 (40%)	minor decrease	major decrease	no significant change	major decrease	moderate decrease	major decrease	minor decrease	minor decrease
Gray Wolf	1,035 (6%)	minor decrease	moderate decrease	no significant change	moderate decrease	minor decrease	major decrease	minor increase	minor increase
Bald Eagle (miles)	2 (10%)	minor decrease	moderate decrease	no significant change	moderate decrease	moderate decrease	moderate decrease	no significant change	no significant change
Peregrine Falcon	0	no significant change	no significant change	no significant change	no significant change	no significant change	no significant change	no significant change	no significant change
Riparian Habitat (miles)									
I allotments	34 (49%)	no significant change	major decrease	no significant change	major decrease	minor decrease	major decrease	no significant change	minor decrease
M and C allotments	5 (7%)	no significant change	minor decrease	no significant change	minor decrease	minor decrease	moderate decrease	no significant change	no significant change
Waterfowl Habitat (acres)	525 (21%)	minor decrease	major decrease	minor decrease	major decrease	moderate decrease	major decrease	minor increase	minor increase
Fisheries Habitat (miles)	36 (38%)	minor decrease	major decrease	minor decrease	major decrease	moderate decrease	major decrease	no significant change	minor decrease
Upland Game Bird Habitat	—	minor decrease	moderate decrease	no significant change	moderate decrease	minor decrease	moderate decrease	minor increase	minor increase
SOCIAL AND ECONOMICS CONDITIONS									
Economic impact to livestock operators caused by decreases in AUMs		moderately significant	insignificant	none	none	moderately significant	moderately significant	moderately significant	insignificant
Economic impact to livestock operators caused by increases in AUMs		moderately significant	moderately significant	none	moderately significant	none	none	moderately significant	moderately to highly significant
Overall impact to regional economy		Insignificant under all alternatives							
Overall impact on attitudes		Insignificant under all alternatives							

SELECTION OF THE PREFERRED ALTERNATIVE

Each alternative considered in detail represents a comprehensive plan for managing all land and resources in the Headwaters Resource Area. However, what differentiates one alternative from another is the way each of the eleven issues would be resolved if that alternative were selected for implementation. Thus, selection of the preferred alternative was based largely on the effects of the alternative in resolving issues. Alternative A was selected as the preferred alternative, and the management direction for resolving each of the eleven issues under Alternative A is summarized below.

Oil and Gas Leasing and Development

Management Direction

Oil and gas leasing and development on slightly more than 80% of the federal minerals within the Headwaters Resource Area will continue to be administered in accordance with the general guidance provided by the Butte District Oil and Gas Leasing Environmental Assessment. This represents no change from current management direction, and is a reflection of the low level of oil and gas activity anticipated in the future throughout most of the area.

Federal minerals located along the Rocky Mountain Front will be administered in accordance with more specific lease stipulation guidance provided by this plan. The preferred alternative represents a change from current management direction because of the need to establish additional no surface occupancy restrictions within the boundaries of proposed Outstanding Natural Areas. This alternative will result in approximately 72% of the federal minerals along the Rocky Mountain Front remaining available for occupancy leasing (a decrease of 9%, or 9,960 acres, from current direction).

Rationale

The Rocky Mountain Front is a nationally significant area because of its high wildlife, recreation, and scenic values. It is also an area of high potential for oil and gas production, although to date, exploration of the area has yielded inconclusive results. The preferred alternative will provide needed protection for grizzly bear and other important wildlife habitat, and will preserve future management options for the proposed Blind Horse Creek, Ear Mountain, Chute Mountain, and Deep Creek/Battle Creek Outstanding Natural Areas, while still allowing oil and gas exploration and development to occur on most of the federal mineral estate within the Rocky Mountain Front area.

Grazing Allotment and Riparian Habitat Management

Management Direction

The preferred alternative will result in minor changes from current management direction. Short-term adjustments in livestock forage allocations will be proposed for twenty-six allotments containing 88,596 acres of public land, resulting in a 2,204 AUM (7%) net decrease in licensed livestock use within the resource area. Livestock grazing on 301 allotments will remain at current levels. Future upward or downward adjustments in livestock use will be based on monitoring studies.

Range improvements, treatments, and grazing systems will be implemented in accordance with current BLM policy, and will be designed to achieve specific multiple use objectives identified in the RMP for each allotment. Riparian habitat condition will be improved from unsatisfactory to satisfactory on approximately twenty-six miles of stream bank.

Rationale

The preferred alternative provides for significant improvement of vegetation, wildlife habitat, and riparian habitat conditions, while causing minimal disruptions in livestock use. The proposed 2,204 AUM reduction in licensed livestock use includes 1,999 AUMs of nonuse licensed during 1980-1982; thus, the reduction in actual livestock use will be approximately 205 AUMs. Allotments where resource conditions are unsatisfactory have been targeted for corrective action. Other allotments with high potential for livestock forage production will be managed with the goal of increasing future livestock use. This alternative strikes a balance between the protection or enhancement of environmental values and the production of additional livestock forage.

Wilderness Study Recommendations

Management Direction

None of the five areas under consideration will be recommended for wilderness designation. Three areas along the Rocky Mountain Front (Blind Horse Creek, Chute Mountain, and Deep Creek/Battle Creek) will be administratively protected as Outstanding Natural Areas, while the Black Sage

and Yellowstone River Island Wilderness Study Areas will be managed without any special designation.

Rationale

The Black Sage and Yellowstone River Island WSAs possess moderate to low wilderness values and would be difficult to manage as wilderness. The three areas along the Rocky Mountain Front generally are characterized by moderate to high wilderness values, but pose significant manageability problems and may be underlain by oil and gas. The use of Outstanding Natural Area designations is preferred in this case because of the management flexibility such designations would allow if significant oil and gas reserves are proven to exist beneath these areas in the future. During the interim, special designation will permit essentially the same level of protection for scenic, recreational, and other values that wilderness designation would provide.

Forest Management

Management Direction

The preferred alternative will result in a minor change from current management direction, primarily in the Elkhorn area, where commercial forest land will be set aside from commercial harvest activities. Forest products will continue to be harvested on a sustained yield basis on other appropriate sites throughout the resource area. Intensive management, including investment of federal funds for forest management activities, will be focused in a few key areas with the highest potential for timber production and the lowest potential for conflicts with other resource values. Standard operating procedures developed for the protection of soils, water quality, scenic values, and wildlife habitat will continue to be applied. **Minor amounts of forested land will be set aside from harvest in the Scratchgravel Hills, Sleeping Giant, Rocky Mountain Front, and Elkhorn areas and within key wildlife habitats.**

Rationale

Current management direction is resulting in no significant conflicts between forest management activities and other resource uses and values. **However, in order to be consistent with Forest Service management guidelines for the Elkhorn Wildlife Management Area, timber harvest activity in this area will be allowed only for the improvement of wildlife habitat.** With adequate funding, the full **23.95** mmbf/decade of allowable harvest could be realized and would contribute to the economies of local communities.

Land Ownership Adjustments

Management Direction

Assuming that willing buyers and/or exchange proponents can be located, the preferred alternative will result in a significant change from the current management direction of retaining essentially all BLM-administered land in public ownership. In the future, tracts that are generally small, isolated, inaccessible, and low in public resource values will be disposed of through sale or exchange**, with exchange being the preferred method of disposal.** Some nonfederal land with high public values will be acquired through exchange in order to consolidate public ownership within retention areas. Approximately **2,700** acres will require additional study prior to making retention/disposal decisions.

Rationale

The current land ownership pattern within the Headwaters Resource Area is characterized by numerous isolated parcels of BLM-administered land that are inaccessible to the public and relatively difficult to manage. The preferred alternative will allow land ownership adjustments to occur, and this will result in improved management efficiency, fewer conflicts between the public and private landowners, and greater public benefits through improved access opportunities and consolidation of public land in retention areas. It will also allow for some public land to be put to more productive use in private or local government ownership.

Mineral Exploration and Development

Management Direction

The preferred alternative will result in no change from current management direction. All public land within the resource area will remain available for mineral entry and development, unless previously withdrawn. Some existing withdrawals may be revoked in the future, based on application of current withdrawal review procedures.

Rationale

The Scratchgravel Hills were considered for a possible new withdrawal in order to protect the groundwater recharge area for nearby homeowners from possible cyanide contamination or other types of pollution. The preferred alternative will not establish any new withdrawal in the Scratchgravel Hills because there are numerous patented and unpatented mining claims within the groundwater recharge area that would be unaffected by the withdrawal. Current federal and state regulations affecting mining and water qual-

ity are considered adequate to protect groundwater in the area, if the enforcing agencies are funded adequately.

Motorcycle Use Areas

Management Direction

The preferred alternative will result in no change from current management direction on approximately 90% of the resource area. The Montana City motorcycle use area will remain available for organized events. Public land along the Rocky Mountain Front, in the Jefferson, Smith, and Missouri river corridors, in the Holter Lake/Sleeping Giant area, and near Toston Dam will remain closed to organized motorcycle events. New closures will be established in the Scratchgravel Hills and Limestone Hills. Approximately 234,134 acres, or 75% of the resource area, will remain available for future consideration. Applications for staging events will be reviewed on a case-by-case basis and future decisions will be based on criteria provided in the RMP.

Rationale

The primary demand for organized events in the resource area appears to be in the Helena Valley and Limestone Hills areas. The preferred alternative will allow such use to continue on public land near Montana City, and will make other public land in the Hilger Hills, Spokane Hills, and Marysville areas available for future consideration. Public land in the Scratchgravel Hills will be closed to motorcycle races in order to protect open space, scenic, and other environmental values, while the Limestone Hills will be closed in order to avoid conflicts with National Guard activities, range users, and wildlife habitat.

Motorized Vehicle Access

Management Direction

Under the preferred alternative, motorized vehicle access will continue without restrictions on approximately 79,875 acres of public land. An additional 219,404 acres of public land will remain available for motorized access, but use may be restricted seasonally and/or to specific roads and trails. The proposed Blind Horse Creek, Ear Mountain, Chute Mountain, and Deep Creek/Battle Creek outstanding natural areas, comprising 12,058 acres, will be closed to motorized vehicle use. Future site-specific decisions regarding restrictions and closures will be based on criteria provided in the RMP (see Management Guidance Common to All Alternatives, Recreation Program).

Rationale

The preferred alternative generally will allow motorized vehicle use to continue where it has already been established, but will permit appropriate restrictions to be applied where necessary to protect important seasonal wildlife habitat, or to reduce conflicts with watershed values, nonmotorized recreation users, and adjoining landowners. This alternative balances the need for public access to public land and resources with the protection of important amenity values, and will allow for flexibility to adjust future access decisions based on changing public demands and resource conditions.

Utility and Transportation Corridors

Management Direction

Under the preferred alternative, approximately 236,838 acres, or 77%, of the public land in the resource area generally will remain available for development of utility and transportation corridors. The remaining public land, located primarily in the Rocky Mountain Front, Holter Lake/Sleeping Giant area, Scratchgravel Hills, Limestone Hills, and along the Jefferson, Smith, and upper Missouri rivers, will be identified for avoidance, and thus will generally be unavailable for corridor development. Future site-specific corridor development decisions will be based on criteria provided in the RMP.

Rationale

The preferred alternative reflects the need to make public land available for major utility and transportation corridor development, while avoiding, to the extent possible, the location of major facilities in areas of high public recreation use, high scenic and wildlife values, and residential areas. This alternative establishes general direction for corridor decisions, yet preserves flexibility for adapting future decisions to changing public demands and resource conditions.

Coal Leasing

Management Direction

The preferred alternative will make all federal coal within the Great Falls Coal Field available for further consideration for coal leasing, pending further study. Approximately 25,452 acres, containing about 125 million short-tons of federal coal, will be available for lease application. Individual lease applications and mining plans will be reviewed to assure protection of important social and environmental values.

Rationale

The preferred alternative maximizes the availability of federal coal for further consideration, pending the results of further study. Since the Great Falls Coal Field is considered suitable for mining only by underground methods, surface impacts generally will be relatively minor and/or mitigatable. Important seasonal wildlife habitat, **floodplains,** and utility and transportation rights-of-way have been identified that will be unavailable for surface occupancy, and use. Additional no occupancy areas may be identified in the future prior to leasing and at the time of mine plan review.

Special Designations

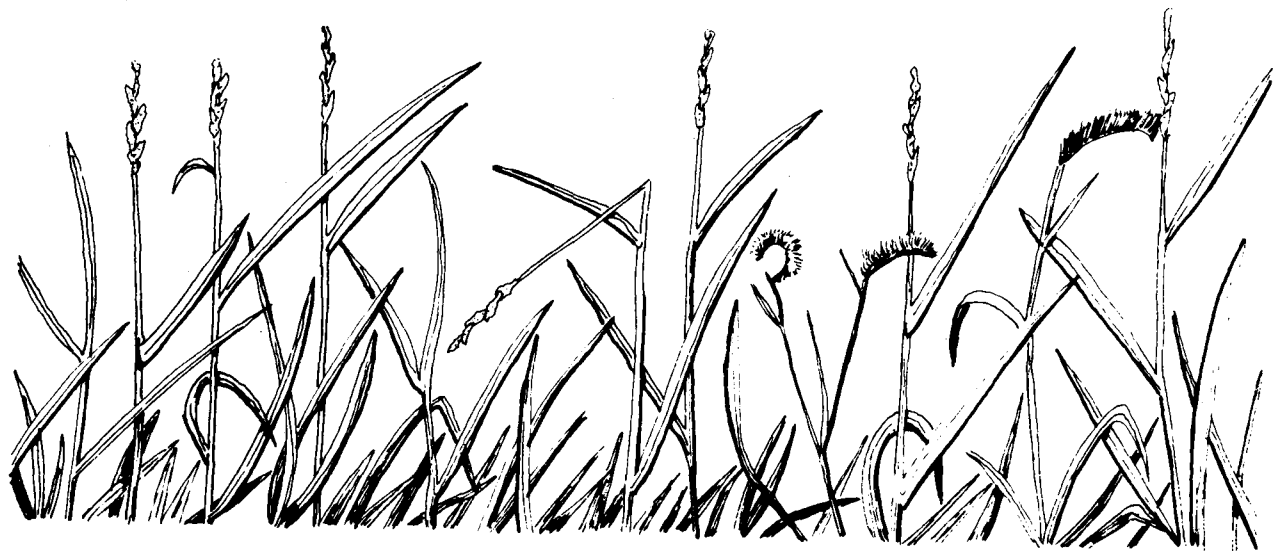
Management Direction

The preferred alternative will result in the designation of four Outstanding Natural Areas comprising 12,058 acres along the Rocky Mountain Front. These areas are Blind Horse Creek, Ear Mountain, Chute Mountain, and Deep Creek/Battle Creek. In addition, approximately 11,609 acres of public land will be designated as the Sleeping Giant Area of Critical Environmental Concern.

Rationale

The four proposed outstanding natural areas are considered nationally significant because of their high wildlife, recreation, and scenic values, and because of their association with the Bob Marshall ecosystem. They also are considered to have high potential for oil and gas production, although exploration in the area to date has yielded inconclusive results. The proposed designation of the areas, accompanied by a prohibition on surface occupancy, is intended to preserve future management options while providing full protection for surface values.

The proposed Area of Critical Environmental Concern designation for the Sleeping Giant area will provide added recognition of the high recreation and wildlife values in this area. The proximity of this area to the population centers of Great Falls and Helena, and its association with Holter Lake and the Gates of the Mountains Wilderness, suggests that future management emphasis should be directed primarily toward maintaining and enhancing the recreation, scenic, and wildlife values of the area.

MONITORING AND EVALUATION

The effects of implementing the Headwaters RMP will be monitored and evaluated on a periodic basis to assure that the desired results are being achieved. The general purposes, priorities, and methods to be used in monitoring and evaluation are identified in Appendix I.