

Appendix

APPENDIX 1.1: WASHINGTON OFFICE AND STATE DIRECTOR'S LAND TENURE ADJUSTMENT GUIDANCE

Acquisition Criteria

These are used to evaluate proposals which would result in the acquisition of lands, easements, or minerals by the Bureau of Land Management through exchange or other transactions.

These criteria help to assure that any BLM decision to acquire a tract of land provides significant public benefits. The criteria range from "general" standards to evaluate all proposals, to "specific" guidelines covering the selected or prioritized program areas.

These standards are designed to provide consistent direction, while allowing management flexibility to meet local, state and national needs.

General Criteria for Acquisition (and Retention Decisions)

All proposals will be evaluated to determine if the acquired lands will:

1. Facilitate access to areas retained for long term public use.
2. Enhance Congressionally designated areas, rivers, or trails.
3. Be primarily focused in the "retention" areas. Acquisition outside the retention areas will only be considered if the action leads to and/or facilitates long term needs or program objectives.
4. Facilitate national, state and local BLM priorities or mission statement needs.
5. Place emphasis where BLM land use or activity plans are completed. Proposals must facilitate implementation and/or be consistent with these plans.
6. Stabilize or enhance local economies or values.
7. Meet long term public lands management goals as opposed to short term.
8. Be of sufficient size to improve use of adjoining public lands or, if isolated, large enough to allow the identified potential public land use.
9. Allow more diverse use, more intensive use, or a change in uses to better fulfill the Bureau's mission.
10. Enhance the opportunity for new or emerging public land uses or values.
11. Contribute to a wide spectrum of uses or large number of public land users.
12. Facilitate management practices, uses, scale of operations or degrees of management intensity that are viable under economic program efficiency standards.
13. Secure for the public significant water related land interests. These interests will include lake shore, river front, stream, pond or spring sites.

Program Specific Acquisition Criteria

Any of these program criteria may provide the rationale for acquiring a particular tract of land in land adjustment transaction; however, priority will be determined on the basis of multiple use analysis. That is, the greater the number of programs and public values served, the higher the priority for acquisition.

Minerals

1. Consolidation of mineral estates -- from the minerals program viewpoint this is probably the most important reason for acquisition. The primary purpose for consolidation of estates is improvement of potential for development while improving resource management and economic values.

This concept can be applied to some deposits of coal, phosphate, potash, oil shale and tar sands. It is difficult to envision that this approach would be useful for oil and gas or locatable minerals.

2. Acquisition in response to a federal project need, as in the case of a dam project. Criteria for this type of acquisition would generally include:
 - a. Where development of the federal project would preclude the mineral estate owner from exercising development rights; or
 - b. Where the exercise of the mineral estate owners right of development would materially interfere with the federal project.
3. Acquisition mandated by law. The best example of this would be where an alluvial valley floor has precluded coal mining, triggering an exchange.

Livestock Management

Acquire non-federal holdings in key allotments which will enhance manageability and investment opportunity in improvement and maintenance category allotments.

Timber Management

Focus acquisition priority on areas:

1. Which exceed 30 cu. ft./acre in growth of commercial timber unless the areas will enhance the harvest of adjacent lands. In this case, the standard may be lowered to 20 cu. ft./acre in annual growth.
2. Contiguous to, or which facilitate access to public forest land.
3. Containing 80 acres or more of commercial timber. If less than 80 acres, the tract(s) must be logical logging unit(s) or facilitate commercial management of adjacent public forest land.
4. Containing enough harvestable volume for a feasible commercial logging unit after physical, biological or other land use constraints are considered.

Recreation

Acquire lands with the following significant public values:

1. National Values
 - a. Congressionally designated areas/rivers/trails
 - b. Congressionally designated study areas/rivers/trails
2. State Values
 - a. Select lands that enhance state recreation trails and waterways (see State Comprehensive Outdoor Recreation Plan; SCORP Vol. 2, 1978, p. 149) or those with interstate, state, and multi-county use significance.
 - b. Other statewide and multi-county values.
3. Local values for extensive use, such as hunting, fishing, ORV and snowmobile use. Higher priority will be given to acquisition of these values where such extensive use will compliment and enhance these uses on public lands.
4. Acquire access through easement to the above significant values as needed to facilitate public use if surface acquisition is undesirable or not possible.

Wilderness

Acquire in-holdings within the boundaries of Congressionally designated wilderness areas under BLM administration. Priorities are:

1. State in-holdings to be acquired through exchange only.
2. Private in-holdings to be acquired by mutual agreement involving exchange, purchase, or gift.

In the acquisition of access to designated wilderness areas highest priority will be:

1. Where no access exists.
2. Where it is needed for proper management as identified in wilderness management plans.

Cultural Resources

Any cultural site to be acquired should meet the following evaluation standards of MSO Manual Supplement 8111.24:

1. High Research Value
2. Moderate Scarcity
3. Possess some other unique values such as association with an important historic person or high aesthetic values, or
4. Contribute significantly to interpretive potential of cultural resources already in public ownership.

Strong consideration should be given to manageability. There are only a limited number of potential uses to which a cultural resource can be put (see IM 78-339). The principal use is probably research. Any site acquired for this purpose should be protectable and accessible. The second most important use may be some form of visitor or recreation use. Acquired sites in this case should be in areas also important to the Recreation Program unless they can stand on their own.

The major deciding factor for site acquisition after applying the basic criteria should be the potential for actively managing the site. Sites should not be acquired on scattered or isolated parcels unless they are of overwhelming cultural importance.

Wildlife Habitat Management

In general, areas with important wildlife which are large enough and suitable for public hunting, fishing and trapping and areas suitable for cooperative management under the Sikes Act.

High priority areas for retention and acquisition will be lands with significant wildlife values as defined below. These areas may be of any size.

1. Threatened and Endangered Species (approved recovery plans will also govern actions on these areas)
 - a. Black-footed Ferret. Occupied habitat or areas identified through planning for future ferret populations.
 - b. Grizzly Bear. Lands containing grizzly population centers (Management Situation 1 and 2 Lands*).
 - c. Whooping Crane. Suitable or potential habitat.
 - d. Bald Eagle. Historical nest sites with remaining potential, present nest sites, or documented roosting or wintering areas.
 - e. Grey Wolf. Occupied habitat.
 - f. Peregrine Falcon. Verified nest areas and suitable sites for reestablishment.
2. Fisheries.** Access to or larger areas adjacent to Class 1, 2 or 3 streams** and lake and pond fisheries. Stream areas with restoration potential to become Class 1, 2 or 3 streams. Sites to develop additional fisheries especially near population centers. Sites supporting spawning or nursery areas which may be temporal in nature but important to downstream fisheries. Land that would enable us to acquire needed instream flow reservations.
3. Big Game. Important habitat areas such as crucial winter and associated spring/fall transition areas, kidding/fawning/calving/lambing areas, crucial wallow complexes, mineral licks, and security areas.
4. Upland Game Birds, Migratory Birds and Waterfowl. Crucial breeding, nesting, resting, roosting, feeding and wintering habitat areas or complexes. These will vary in size, for example, a highly productive one acre wetland or 100 acres of nesting cover for pheasants.
5. Raptors. Existing and potential nesting areas for sensitive species or significant nesting complexes for nonsensitive species.

6. Nongame. Crucial habitat complexes.

* From Guidelines for Management Involving Grizzly Bears in Yellowstone Area, USFS, NPS 1979.

** Class of Streams defined by Montana Department of Fish, Wildlife and Parks, 1980. Stream Evaluation Map State of Montana.

LAND TENURE ADJUSTMENT CRITERIA FOR THE GREAT FALLS RESOURCE AREA

The following criteria were refined from the State Director's guidance which were used to categorize the lands in the Great Falls Resource area. Other criteria may be added as needed throughout life of the plan.

Retention Areas: These land will remain in public ownership and be managed by BLM. Minor adjustments may occur in the future. These adjustments will be primarily limited to surface management agency changes.

1. Areas of national environmental significance: These include but are not limited to:

a. Wild and Scenic Rivers

b. National Scenic and Historic Trails and Study Trails

c. National Register of Historic Places

d. Wetlands and Riparian Areas under EO 11988 and 11990, defined as:

those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. (EO 11990 sec. 5c)

e. Special Management Areas

f. Threatened and endangered plant and animal habitat.

2. Areas of national economic significance: include but not limited to:

lands containing strategic minerals needed for national defense.

lands containing nominated areas of critical mineral potential.

3. Public lands used in support of national defense.

4. Areas where management is cost-effective or lands containing other important characteristics and public values which can best be managed in public ownership by BLM will be retained.

Including but not limited to:

a. strategic tracts along rivers, streams, lakes, ponds, springs and trails

b. wildlife priority areas as defined under acquisition criteria particularly sage grouse leks, sharp-tailed grouse leks, crucial antelope range and major concentration areas of sensitive species (raptors, in particular).

c. important fishing areas

d. intensive recreation sites and areas

5. Public lands withdrawn by BLM or another Federal agency for which the purposes remains valid.

6. Retain surface and subsurface estate in areas with known solid or fluid mineral production.

7. Stabilize or enhance local economies or values.

DISPOSAL: Lands in this category appear to meet the FLPMA criteria for disposal through Sale (section 203), Exchanges (section 206) and Recreation and Public Purposes Act (section 212).

1. Widely scattered parcels which are difficult to manage with anything beyond minimal custodial administration and have no significant public values.

2. Lands with low resource values i.e., isolated, no access, custodial allotments, etc. There is no acreage limit in this category.

3. Lands with long term unauthorized use problems, if the lands are not required for public purposes.

4. Lands in which the highest public value will be attained through long term agricultural, commercial or industrial development; Class III and better lands for agricultural use.

ACQUISITION: The following criteria will be used to guide the BLMs acquisition of lands, easements and/or minerals through exchange or other means.

1. Facilitate access to retention areas.

2. Lands which will enhance retention areas.

3. Secure for the public significant water related land interests. These interests will include river front, stream, pond, potholes, riparian or spring sites.

WATERSHED:

1. Acquire watershed areas for fish reservoirs and range projects.

GRAZING MANAGEMENT:

1. Acquire non-federal holdings in key allotments which will enhance manageability and investment opportunity in grazing allotments;
2. and C allotments contiguous to I and M allotments.

WILDLIFE HABITAT MANAGEMENT:

Acquire habitat for:

1. Threatened and endangered plant and animal species including but not limited to:
 - bald eagle: historic nesting areas with continuing potential, present sites, documented roosting and wintering areas;
 - peregrine falcon: verified nest areas and suitable sites for reestablishment.
2. Fisheries: access to Class 1, 2, and 3 streams, lake and pond fisheries.
3. Important big game habitat.
4. Crucial breeding, nesting areas for upland game birds.
5. Raptors: existing and potential nesting areas for threatened and endangered and sensitive species or significant nesting complexes for non-sensitive species.

RECREATION:

1. Acquire lands with the following significant values:
 - Designated rivers and trails;
 - Congressionally designated rivers, trails and WSAs.
2. Acquire access for significant use areas, especially to major rivers, streams and the Sweetgrass Hills.

CULTURAL: Acquire important archeological and historic sites along designated rivers and trails and acquire potential national register sites adjacent to BLM lands.

MINERALS:

1. Acquire surface lands in areas of extensive mineral estate, or known production areas thereby reuniting surface and subsurface estate.
2. Acquire lands to enhance minerals management.

LAND ADJUSTMENT CRITERIA HAVRE RESOURCE AREA

The following criteria were refined from the State Director's guidance and will be using to categorize the lands in the Havre Resource Area. They may be of help in further categorizing the lands in the Havre area.

RETENTION AREAS: Lands in this area should be retained in long term public ownership. Lands in this category either require retention by law or the tract had more than one important resource value. Disposal through exchange for the latter tracts are allowed only if the exchange significantly increases public values.

1. Areas of national environmental significance: These include but are not limited to:
 - a. WSAs
 - b. Wild and Scenic Rivers
 - c. National Scenic & Historic Trails and Study Trails
 - d. National Register Historic Places
 - e. Wetlands and Riparian Areas under EO 11990 and 11988, defined as:

Those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. (EO 11990 sec. 5c).
 - f. Special Management Areas.
 - g. Threatened and Endangered habitat.
2. Areas where management is cost-effective or lands containing other important characteristics and public values which can best be managed in public ownership by BLM will be retained. Including but not limited to:
 - a. strategic tracts along rivers, streams, lakes, ponds, springs, and trails;
 - b. wildlife priority areas as defined under acquisition criteria particularly sage grouse leks, sharp-tailed grouse leks and crucial antelope range;
 - c. important fishing areas;
 - d. recreation sites and areas.
3. Public lands withdrawn by BLM or another Federal agency for which the purpose remains valid.
4. Retain surface and subsurface estate in known solid or fluid mineral production.

DISPOSAL: Lands which meet the following criteria to appear to meet FLPMA criteria for disposal through any means, including sale.

1. Lands with low resource values i.e., isolated, no access, custodial allotments, etc. There is no acreage limit in this category.
2. Widely scattered parcels which are difficult to manage with anything beyond minimal custodial administration and have no significant public values.
3. Lands with long term unauthorized use problems, if the lands are not required for public purposes.
4. Lands in which the highest public value will be attained through long term agricultural, commercial or industrial development; Class III and better lands for agriculture.

ADJUSTMENT: Lands in the adjustment category do not meet FLPMA criteria for disposal through sale (Sec. 203) or have only one important resource. Lands in this category will be exchanged for lands with higher values.

1. Areas of national economic significance: lands containing nominated areas of critical mineral potential.
2. Areas where future plans will lead to further consolidation and improvement of land patterns and management efficiency i.e., Marías.
3. Consolidation of mineral estates to improve development potential while improving resource management and economic values.
4. Timber resources on scattered tracts or on other blocks not identified for retention will be in the adjustment areas.
5. High value big game habitat.
6. Range improvements.
7. Scattered low value potholes.

ACQUISITION: Lands in this category are the types of tracts the BLM will acquire through the various acquisition programs.

1. Facilitate access to retention areas.
2. Enhance Congressionally designated rivers, trails and study trails.
3. Lands which will enhance retention areas.
4. Secure for the public significant water related land interests. These interests will include river front, stream, potholes, riparian areas, pond or spring sites.

WATERSHED:

1. Acquire watershed areas for fish reservoirs and range projects.

GRAZING MANAGEMENT: Acquire non-Federal holdings in key allotments which will enhance manageability and investment opportunity in grazing allotments.

RECREATION:

1. Acquire lands with the following significant values:
Designated rivers and trails;
Congressionally designated study rivers, trails and WSAs.
2. Acquire access for significant use areas, especially to major rivers and streams.

CULTURAL: Acquire important archeological and historic sites along designated rivers and trails and acquire potential national register sites adjacent to BLM lands.

WILDLIFE

Acquire habitat for:

1. Threatened and endangered species;
bald eagle: historic nesting areas with continuing potential, present sites, documented roosting and wintering areas;
peregrine falcon: verified nest areas and suitable sites for reestablishment.
2. Fisheries: access to Class 1, 2, and 3 streams, lake and pond fisheries.
3. Important big game habitat.
4. Crucial breeding, nesting areas for grouse and pheasants.
5. Raptors: existing and potential nesting areas for sensitive species or significant nesting complexes for nonsensitive species.

MINERALS:

1. Acquire surface lands in areas of extensive mineral estate, or known production areas thereby reuniting surface and subsurface estate.
2. Acquire lands to enhance minerals management.

These tracts appear to meet FLPMA disposal criteria (PL94-579 Sec. 203, Sec. 206) for the Havre Resource Area.

Tract No.	Location	Total Tract Acres	Tract No.	Location	Total Tract Acres
1	T. 36 N., R. 22 E., Sec. 14: SE1NE1	40.00	52	T. 26 N., R. 17 E., Sec. 14: SE1NW1	40.00
2	T. 36 N., R. 22 E., Sec. 31: SE1NW1	40.00	53	T. 26 N., R. 17 E., Sec. 13: SE1SW1	40.00
3	T. 33 N., R. 20 E., Sec. 25: NE1NE1	40.00	54	T. 26 N., R. 18 E., Sec. 9: NE1SW1	40.00
4	T. 32 N., R. 19 E., Sec. 3: Lot 3	39.10	55	T. 26 N., R. 18 E., Sec. 18: SE1SW1	40.00
5	T. 32 N., R. 22 E., Sec. 6: Lot 4	34.58	56	T. 26 N., R. 18 E., Sec. 22: NW1NE1	40.00
6	T. 32 N., R. 18 E., Sec. 1: SW1SW1	40.00	57	T. 26 N., R. 18 E., Sec. 20: NW1NE1	40.00
7	T. 32 N., R. 21 E., Sec. 8: SE1NE1, NW1SE1	120.00	58	T. 26 N., R. 18 E., Sec. 19: SE1NE1	40.00
8	T. 32 N., R. 21 E., Sec. 9: NW1SW1	40.00	59	T. 27 N., R. 19 E., Sec. 1: Lot 1	23.92
9	T. 32 N., R. 21 E., Sec. 15: SE1NW1	80.00	60	T. 27 N., R. 21 E., Sec. 2: Lots 1, 2, 3, 4	186.12
10	T. 32 N., R. 21 E., Sec. 13: NE1SW1, NW1SE1	80.00	61	T. 27 N., R. 21 E., Sec. 3: Lots 1, 2, 8	80.00
11	T. 32 N., R. 20 E., Sec. 14: S1SE1	80.00	62	T. 27 N., R. 21 E., Sec. 3: S1NW1	80.00
12	T. 32 N., R. 19 E., Sec. 22: SE1NE1, NE1SE1	80.00	63	T. 27 N., R. 21 E., Sec. 1: Lots 1, 2	48.71
13	T. 32 N., R. 20 E., Sec. 19: W1NE1, NW1SE1	120.00	64	T. 27 N., R. 22 E., Sec. 4: Lots 1, 2	53.44
14	T. 32 N., R. 19 E., Sec. 26: W1SW1	80.00	65	T. 27 N., R. 22 E., Sec. 4: E1NW1	80.00
15	T. 32 N., R. 19 E., Sec. 33: SE1	160.00	66	T. 27 N., R. 21 E., Sec. 11: SW1NW1, NW1SW1	80.00
16	T. 31 N., R. 17 E., Sec. 12: E1SE1, SW1SE1	342.64	67	T. 27 N., R. 21 E., Sec. 1: SW1SW1	240.00
17	T. 31 N., R. 18 E., Sec. 7: Lots 1, 2, 3, 4	40.00	68	T. 27 N., R. 21 E., Sec. 12: W1NW1, SE1NW1, E1SW1	120.00
18	T. 31 N., R. 21 E., Sec. 28: NW1NE1	40.00	69	T. 27 N., R. 22 E., Sec. 7: W1NW1, NW1SW1	40.00
19	T. 31 N., R. 22 E., Sec. 19: SE1SE1	40.00	70	T. 27 N., R. 22 E., Sec. 7: NE1NE1	40.00
20	T. 30 N., R. 17 E., Sec. 2: SE1NE1	40.00	71	T. 27 N., R. 22 E., Sec. 8: E1NW1, NE1SW1	120.00
21	T. 29 N., R. 17 E., Sec. 8: NE1NE1	40.00	72	T. 27 N., R. 22 E., Sec. 9: SW1NW1	40.00
22	T. 35 N., R. 25 E., Sec. 14: S1SE1	80.00	73	T. 27 N., R. 22 E., Sec. 17: NE1SW1	40.00
23	T. 28 N., R. 22 E., Sec. 29: NE1SW1	40.00	74	T. 27 N., R. 22 E., Sec. 20: SE1NW1	40.00
24	T. 29 N., R. 20 E., Sec. 1: NW1SE1	40.00	75	T. 27 N., R. 22 E., Sec. 19: NW1NW1	320.00
25	T. 29 N., R. 20 E., Sec. 25: S1SE1	597.79	76	T. 27 N., R. 21 E., Sec. 24: NE1, E1NW1, NE1SE1	40.00
26	T. 29 N., R. 21 E., Sec. 30: Lots 3, 4, SE1NE1, E1SE1, SE1	40.00	77	T. 27 N., R. 21 E., Sec. 23: SE1NE1	40.00
27	T. 29 N., R. 21 E., Sec. 31: Lot 1, W1NE1, NE1NW1	40.00	78	T. 27 N., R. 21 E., Sec. 24: SW1SW1	120.00
28	T. 29 N., R. 21 E., Sec. 6: SE1SW1	80.00	79	T. 27 N., R. 21 E., Sec. 25: S1NE1, SE1NW1	40.00
29	T. 29 N., R. 21 E., Sec. 8: S1NE1	80.00	80	T. 27 N., R. 21 E., Sec. 26: NE1SE1	120.00
30	T. 29 N., R. 21 E., Sec. 18: Lots 3, 4, E1SW1, W1SE1	320.86	81	T. 27 N., R. 21 E., Sec. 2: Lots 5, 6, 7, 8, SW1NE1	114.04
31	T. 29 N., R. 21 E., Sec. 19: Lot 1, 2	80.00	82	T. 37 N., R. 11 E., Sec. 19: Lot 1 (Sold)	80.31
32	T. 29 N., R. 21 E., Sec. 19: S1NE1	40.00	83	T. 37 N., R. 10 E., Sec. 24: NE1NE1	53.73
33	T. 29 N., R. 21 E., Sec. 20: SE1SW1	40.00	84	T. 37 N., R. 15 E., Sec. 6: Lots 9, 10	80.00
34	T. 29 N., R. 21 E., Sec. 24: SE1SW1	40.00	85	T. 37 N., R. 15 E., Sec. 29: SE1NE1, NW1SE1	80.00
35	T. 29 N., R. 21 E., Sec. 34: SW1NW1	40.00	86	T. 37 N., R. 17 E., Sec. 7: SE1SE1	40.00
36	T. 28 N., R. 19 E., Sec. 13: S1NW1, NW1SE1	120.00	87	T. 35 N., R. 12 E., Sec. 18: SW1NE1	40.00
37	T. 28 N., R. 20 E., Sec. 30: SE1SW1	188.30	88	T. 34 N., R. 13 E., Sec. 31: NW1NE1	40.00
38	T. 28 N., R. 20 E., Sec. 31: Lots 1, 2, E1NW1	73.68	89	T. 32 N., R. 11 E., Sec. 5: Lot 1	36.64
39	T. 28 N., R. 21 E., Sec. 6: Lots 4, 5	77.06	90	T. 32 N., R. 14 E., Sec. 26: N1SW1	80.00
40	T. 28 N., R. 21 E., Sec. 7: Lot 1, NE1NW1	40.00	91	T. 31 N., R. 12 E., Sec. 9: W1SE1	80.00
41	T. 28 N., R. 21 E., Sec. 6: SE1SE1	40.00	92	T. 30 N., R. 11 E., Sec. 1: NE1SE1	40.00
42	T. 28 N., R. 21 E., Sec. 17: NW1SE1	80.00	93	T. 31 N., R. 16 E., Sec. 24: NW1SE1	40.00
43	T. 28 N., R. 21 E., Sec. 18: NE1SE1	80.00	94	T. 30 N., R. 17 E., Sec. 8: NE1SE1	40.00
44	T. 28 N., R. 21 E., Sec. 17: S1SE1	80.00	95	T. 30 N., R. 17 E., Sec. 4: NW1SE1	40.00
45	T. 28 N., R. 21 E., Sec. 19: NW1NE1	40.00	96	T. 30 N., R. 16 E., Sec. 25: NE1SW1	40.00
46	T. 27 N., R. 17 E., Sec. 26: SE1NW1	40.00	97	T. 28 N., R. 13 E., Sec. 34: SE1SW1	40.00
47	T. 27 N., R. 17 E., Sec. 26: NE1NW1	40.00	98	T. 24 N., R. 7 E., Sec. 4: SW1NE1, SE1NW1	80.00
48	T. 27 N., R. 17 E., Sec. 34: SE1SE1	40.00	99	T. 27 N., R. 12 E., Sec. 10: NE1SE1	40.00
49	T. 27 N., R. 18 E., Sec. 27: SE1NE1	40.00	100	T. 24 N., R. 7 E., Sec. 14: S1NW1	80.00
50	T. 27 N., R. 18 E., Sec. 32: SE1NW1	40.00	101	T. 25 N., R. 7 E., Sec. 34: NE1NW1	40.00
51	T. 27 N., R. 18 E., Sec. 35: NW1NE1	40.00	102	T. 24 N., R. 7 E., Sec. 4: SE1SE1	40.00
52	T. 27 N., R. 18 E., Sec. 31: SE1SW1, SW1SE1	80.00	103	T. 24 N., R. 7 E., Sec. 3: SE1NW1, N1SW1	120.00
53	T. 27 N., R. 18 E., Sec. 34: SW1SW1	80.00	104	T. 24 N., R. 7 E., Sec. 3: SW1SE1	40.00
54	T. 26 N., R. 18 E., Sec. 3: NW1NW1	40.00	105	T. 24 N., R. 7 E., Sec. 2: SE1SW1	40.00
55	T. 28 N., R. 19 E., Sec. 30: SW1NE1	40.00	106	T. 24 N., R. 7 E., Sec. 11: NW1SW1	40.00
56	T. 27 N., R. 21 E., Sec. 27: NW1	160.00	107	T. 24 N., R. 7 E., Sec. 11: SE1NE1, NE1SE1	553.02
57	T. 27 N., R. 22 E., Sec. 33: SE1SE1	40.00	108	T. 24 N., R. 7 E., Sec. 12: S1N1, N1SW1, SW1SW1	40.00
58	T. 26 N., R. 17 E., Sec. 12: NW1NW1	40.00	109	T. 24 N., R. 8 E., Sec. 7: Lots 1, 2, NE1NW1, SE1NW1	40.00

These lands meet FLPMA disposal criteria under Section 206, they may meet FLPMA disposal criteria under Section 203 but need further study. Under Alternative B it is assumed they will meet criteria in Section 203; Alternative C they do not meet criteria in Section 203 or 206; and Alternative D they meet criteria under Section 206 but probably not Section 203.

HAVRE RESOURCE AREA LAND ADJUSTMENT TRACTS ADJUSTMENT CATEGORY

Tract No.	Location	Total Tract Acres	Tract No.	Location	Total Tract Acres
1	T. 37 N., R. 15 E., Sec. 7: SE1SE1	40.00	9	T. 26 N., R. 16 E., Sec. 2: SE1SW1	40.00
2	T. 28 N., R. 16 E., Sec. 1: Lots 8, 13, 14	103.84	10	T. 26 N., R. 16 E., Sec. 3: Lot 1	39.96
3	T. 28 N., R. 16 E., Sec. 24: Lot 4	24.71	11	T. 26 N., R. 16 E., Sec. 3: NE1SE1	40.00
4	T. 28 N., R. 16 E., Sec. 32: NW1, N1SW1	240.00	12	T. 26 N., R. 16 E., Sec. 9: E1SE1	760.00
5	T. 28 N., R. 16 E., Sec. 33: NW1NE1, NW1NW1	200.00			
6	T. 28 N., R. 16 E., Sec. 34: NW1NE1, N1NW1	80.00			
7	T. 28 N., R. 17 E., Sec. 5: N1SW1	80.00	13	T. 26 N., R. 16 E., Sec. 10: NW1, SW1, NW1SE1	40.00
8	T. 28 N., R. 17 E., Sec. 18: SW1SE1	80.00	14	T. 26 N., R. 16 E., Sec. 15: NW1, N1SW1	40.00
			15	T. 26 N., R. 16 E., Sec. 11: NW1SW1	80.00
			16	T. 26 N., R. 16 E., Sec. 17: Lot 1	34.47
				T. 26 N., R. 16 E., Sec. 30: NE1SE1	40.00

Tract No.	Location	Total Tract Acres	Tract No.	Location	Total Tract Acres
17	T. 26 N., R. 16 E., Sec. 32: W½NE½, NW¼	240.00	72	T. 35 N., R. 18 E., Sec. 35: N½N½, S½NE½,	320.00
18	T. 26 N., R. 16 E., Sec. 33: SE½SW½	40.00			
19	T. 26 N., R. 16 E., Sec. 34: SE½NE½	40.00	73	T. 34 N., R. 18 E., Sec. 4: SW½NE½	40.00
20	T. 26 N., R. 17 E., Sec. 4: SE½SW½	40.00	74	T. 36 N., R. 19 E., Sec. 25: W½	320.00
21	T. 26 N., R. 17 E., Sec. 32: SW½NE½	40.00	75	T. 35 N., R. 19 E., Sec. 27: NE½SE½	40.00
22	T. 26 N., R. 17 E., Sec. 32: S½SE½	80.00	76	T. 35 N., R. 19 E., Sec. 34: S½SE½	720.00
23	T. 24 N., R. 16 E., Sec. 13: SW½NW½	40.00		T. 35 N., R. 19 E., Sec. 35: All	
24	T. 24 N., R. 16 E., Sec. 13: NE½SW½	40.00		T. 34 N., R. 19 E., Sec. 2: Lots 1, 2, 3, 4	
25	T. 24 N., R. 16 E., Sec. 15: NW½SW½	40.00			
26	T. 24 N., R. 16 E., Sec. 17: NE½NW½	40.00	77	T. 34 N., R. 19 E., Sec. 17: NE½NW½	40.00
27	T. 24 N., R. 16 E., Sec. 18: Lot 2	28.84	78	T. 36 N., R. 20 E., Sec. 18: NE½	160.00
28	T. 24 N., R. 16 E., Sec. 20: NE½SE½	40.00	79	T. 36 N., R. 20 E., Sec. 1: Lots 1, 2, S½NE½,	1,280.82
29	T. 24 N., R. 16 E., Sec. 21: SW½SE½	40.00			
30	T. 24 N., R. 16 E., Sec. 21: W½NE½	80.00		T. 36 N., R. 20 E., Sec. 12: All	
31	T. 24 N., R. 16 E., Sec. 33: SE½NW½	40.00		T. 36 N., R. 20 E., Sec. 13: W½	
32	T. 23 N., R. 16 E., Sec. 4: Lot 2	39.83		T. 36 N., R. 21 E., Sec. 6: Lot 5	45.84
33	T. 23 N., R. 16 E., Sec. 5: Lot 2, S½N½,	279.96	80	T. 35 N., R. 20 E., Sec. 3: W½	320.00
	NE½SW½, NW½SE½		81	T. 35 N., R. 20 E., Sec. 15: NW½	160.00
	SE½NW½, NE½SW½,		82	T. 35 N., R. 20 E., Sec. 26: S½	480.00
	W½SE½	651.45		T. 35 N., R. 20 E., Sec. 35: NW½	
			83	T. 35 N., R. 20 E., Sec. 34: S½	1,603.28
	T. 23 N., R. 15 E., Sec. 13: NE½			T. 34 N., R. 20 E., Sec. 3: Lots 1, 2, 3, 4,	
	T. 23 N., R. 16 E., Sec. 17: NW½			S½N½, S½	
	T. 23 N., R. 16 E., Sec. 18: Lots 1, 2, 3, E½NE½				
35	T. 23 N., R. 15 E., Sec. 13: NW½SW½	40.00		T. 34 N., R. 20 E., Sec. 2: S½	
36	T. 23 N., R. 15 E., Sec. 14: NE½	160.00		T. 34 N., R. 20 E., Sec. 11: E½	
37	T. 26 N., R. 13 E., Sec. 5: SW½SE½	40.00	84	T. 34 N., R. 20 E., Sec. 22: N½	320.00
38	T. 26 N., R. 13 E., Sec. 8: NE½SW½	40.00	85	T. 33 N., R. 20 E., Sec. 9: SE½	160.00
39	T. 26 N., R. 13 E., Sec. 17: NE½NW½	40.00		T. 33 N., R. 20 E., Sec. 20: E½SE½	80.00
40	T. 26 N., R. 13 E., Sec. 17: N½SW½	80.00	86	T. 37 N., R. 21 E., Sec. 10: SE½	240.00
41	T. 26 N., R. 13 E., Sec. 17: NE½SE½	40.00		T. 37 N., R. 21 E., Sec. 15: N½NE½	
42	T. 26 N., R. 13 E., Sec. 18: W½SE½	80.00	87	T. 35 N., R. 21 E., Sec. 5: S½NE½, E½SW½,	640.00
43	T. 25 N., R. 13 E., Sec. 1: SE½NW½	40.00			
44	T. 27 N., R. 12 E., Sec. 31: Lot 3	38.04		T. 35 N., R. 21 E., Sec. 8: N½	
45	T. 26 N., R. 11 E., Sec. 8: SW½NE½, S½NW½	120.00	88	T. 35 N., R. 21 E., Sec. 21: W½	640.00
46	T. 26 N., R. 11 E., Sec. 17: NE½SE½	40.00		T. 35 N., R. 21 E., Sec. 28: W½	
47	T. 26 N., R. 11 E., Sec. 18: Lot 1	37.67	89	T. 35 N., R. 21 E., Sec. 27: W½W½, E½SW½	320.00
48	T. 25 N., R. 10 E., Sec. 5: SW½NW½	40.00		T. 35 N., R. 21 E., Sec. 34: W½NW½	
49	T. 25 N., R. 10 E., Sec. 19: SE½SW½	80.00	90	T. 35 N., R. 21 E., Sec. 26: SE½SE½	160.00
	T. 25 N., R. 10 E., Sec. 30: NE½NW½			T. 35 N., R. 21 E., Sec. 35: E½NE½, NE½SE½	
50	T. 25 N., R. 9 E., Sec. 23: N½NE½	120.00	91	T. 33 N., R. 21 E., Sec. 9: W½	320.00
	T. 25 N., R. 9 E., Sec. 24: NW½NW½	120.00	92	T. 33 N., R. 21 E., Sec. 29: N½NE½, NE½NW½	160.00
51	T. 25 N., R. 9 E., Sec. 23: SE½NW½	40.00		T. 33 N., R. 21 E., Sec. 28: NW½NW½	
52	T. 25 N., R. 9 E., Sec. 24: NE½SW½	40.00	93	T. 33 N., R. 21 E., Sec. 27: NW½	320.00
53	T. 26 N., R. 9 E., Sec. 35: NE½NE½	40.00		T. 33 N., R. 21 E., Sec. 28: NW½	
54	T. 24 N., R. 8 E., Sec. 4: Lots 1, 2, NW½NE½	125.78	94	T. 35 N., R. 22 E., Sec. 30: Lots 3, 4, SW½NE½,	743.95
55*	T. 24 N., R. 8 E., Sec. 32: SW½SW½	40.00		E½SW½, W½SE½,	
56*	T. 24 N., R. 8 E., Sec. 32: Lot 2	26.34		SE½SE½	
57	T. 26 N., R. 8 E., Sec. 28: N½NW½	80.00		T. 35 N., R. 22 E., Sec. 31: Lots 1, 2, E½NW½,	
58	T. 26 N., R. 7 E., Sec. 11: NE½NE½	40.00		NE½	
59	T. 27 N., R. 8 E., Sec. 6: Lots 1, 2, 3, 4, 5, 6,	1,890.81		T. 35 N., R. 22 E., Sec. 32: W½NW½, SW½NW½	
	7, E½W½, E½		95	T. 35 N., R. 22 E., Sec. 33: E½E½	480.00
	T. 27 N., R. 8 E., Sec. 7: N½NE½, NE½NW½			T. 35 N., R. 22 E., Sec. 34: W½	
	T. 27 N., R. 8 E., Sec. 8: W½		96	T. 35 N., R. 22 E., Sec. 35: SW½SW½	40.00
	T. 28 N., R. 8 E., Sec. 29: SE½SE½			T. 35 N., R. 22 E., Sec. 35: SW½SE½	40.00
	T. 28 N., R. 8 E., Sec. 31: Lot 4, E½SW½, SE½		97	T. 34 N., R. 22 E., Sec. 13: W½W½	160.00
	T. 28 N., R. 8 E., Sec. 32: NE½, S½NW½, SW½		98	T. 34 N., R. 22 E., Sec. 23: N½	320.00
60	T. 37 N., R. 17 E., Sec. 2: SW½	1,080.00	99	T. 34 N., R. 22 E., Sec. 24: E½	669.52
	T. 37 N., R. 17 E., Sec. 10: E½, E½NW½			T. 34 N., R. 23 E., Sec. 18: Lots 3, 4, SE½NW½,	
	T. 37 N., R. 17 E., Sec. 11: N½, SW½			E½SW½	
61	T. 37 N., R. 17 E., Sec. 12: SW½SW½	40.00		T. 34 N., R. 23 E., Sec. 19: Lots 1, 2, 3, NE½NW½	
62	T. 37 N., R. 17 E., Sec. 26: S½SW½	640.00	100	T. 34 N., R. 22 E., Sec. 26: NW½, N½SW½	240.00
	T. 37 N., R. 17 E., Sec. 34: E½E½, NW½NE½,		101	T. 33 N., R. 23 E., Sec. 6: Lots 3, 4, W½SW½,	322.11
	N½NW½, SW½NW½			SE½	
	T. 37 N., R. 17 E., Sec. 35: NW½, N½SW½		102	T. 36 N., R. 24 E., Sec. 14: N½NW½, SW½NW½	120.00
63	T. 36 N., R. 17 E., Sec. 10: W½SW½	160.00	103	T. 35 N., R. 25 E., Sec. 21: E½	400.00
	T. 36 N., R. 17 E., Sec. 15: N½NW½			T. 35 N., R. 25 E., Sec. 22: W½NW½	
64	T. 36 N., R. 17 E., Sec. 11: S½NW½	80.00	104	T. 33 N., R. 26 E., Sec. 6: Lots 1, 2,	320.96
				S½NE½, SE½	
* - Lands are withdrawn for Power Site					
65	T. 35 N., R. 17 E., Sec. 1: Lots 1, 2, 3, 4,	320.48	105	T. 33 N., R. 24 E., Sec. 29: S½	320.00
	S½N½		106	T. 32 N., R. 23 E., Sec. 4: SE½NE½	40.00
66	T. 35 N., R. 17 E., Sec. 26: All	1,280.00	107	T. 32 N., R. 25 E., Sec. 34: E½	640.00
	T. 35 N., R. 17 E., Sec. 27: S½			T. 32 N., R. 25 E., Sec. 35: S½	
	T. 35 N., R. 17 E., Sec. 35: N½		108	T. 32 N., R. 25 E., Sec. 32: SW½NW½, NW½SW½	80.00
67	T. 37 N., R. 18 E., Sec. 2: Lots 4, 9, 10, 11, 12,	891.28	109	T. 31 N., R. 25 E., Sec. 5: N½SW½	80.00
	S½N½, S½		110	T. 31 N., R. 25 E., Sec. 6: SW½SE½	40.00
	T. 37 N., R. 18 E., Sec. 3: Lots 1, 2, 3, 4,		111	T. 31 N., R. 25 E., Sec. 8: NW½NW½	40.00
	S½N½		112	T. 31 N., R. 25 E., Sec. 9: E½NE½	160.00
68	T. 37 N., R. 18 E., Sec. 10: S½	320.00		T. 31 N., R. 25 E., Sec. 10: W½NW½	
	SE½		113	T. 31 N., R. 25 E., Sec. 10: NE½, NW½SE½	200.00
	T. 36 N., R. 18 E., Sec. 31: Lots 1, 2, E½NW½,		114	T. 31 N., R. 25 E., Sec. 11: SE½SW½	40.00
	NE½		115	T. 30 N., R. 21 E., Sec. 1: Lots 1, 2, 3, 4,	2,233.27
	NE½	646.44		S½NE½, SE½NW½,	
69	T. 36 N., R. 18 E., Sec. 30: Lots 3, 4, E½SW½,	160.00		SE½	
70	T. 35 N., R. 18 E., Sec. 22: NE½	160.00		T. 30 N., R. 21 E., Sec. 2: Lot 1	
71	T. 35 N., R. 18 E., Sec. 26: NE½	160.00		T. 30 N., R. 21 E., Sec. 12: N½NE½, SW½NE½,	
				NW½SE½	
				T. 30 N., R. 22 E., Sec. 4: Lots 12, 13, 14, 15	

APPENDIX 2.1: SOLICITOR'S OPINION



United States Department of the Interior

OFFICE OF THE SOLICITOR

177 JAN -7 1977 1538

BILLINGS, MONTANA 59103

RECEIVED
MONTANA STATE OFFICE
BILLINGS, MONTANA

January 6, 1977

Memorandum

To: State Director, BLM, Billings

From: Field Solicitor, Billings

Subject: Status of Federal Lands Within the Missouri
Component of the National Wild and Scenic Rivers
System

The original Wild and Scenic Rivers Act of October 2, 1968, 82 Stat. 906, et seq; 16 U.S.C.A. §§ 1271 - 1287, and the Act of September 2, 1976, _____ Stat. _____, create the following withdrawals from entry under the mining laws and the land laws of the United States.

1. October 2, 1968 -- All public lands within bed and banks and 1/4 mile of banks on either side from Fort Benton to Ryan Island.

2. October 12, 1976 -- All public lands within boundaries on map dated October 1975, entitled "Missouri Breaks Free-Flowing River Proposal."

3. Unknown -- Upon publication in Federal Register of final boundaries, all public lands within those boundaries will be withdrawn.

All entries after October 2, 1968, mineral or other, falling within No. 1 above are void ab initio. All entries after September 2, 1976, falling within No. 2 above are void ab initio. And all entries after publication in the Federal Register of the final boundaries, falling within these boundaries, will be void ab initio.

Leasing under the mineral leasing laws, however, can continue under the 1968 and 1976 Acts and can under such regulations as the Secretary of Interior may specify to effectuate the purposes of both Acts. It is noted that lands within wild segments will not be available for leasing.

We note that the withdrawal under No. 1 above as to any lands not within Nos. 2 and 3 above, will terminate pursuant to 16 U.S.C.A. § 1280(b) under the time periods of 1278(b)(i) and (b)(ii), or October 2, 1978, plus up to 3 years if they are still being considered for inclusion into the system. The withdrawal of lands under No. 2 above not within No. 3 above should also terminate as of the date of No. 3 above.

If you have any questions with respect to this matter, please feel free to call upon this office.


Richard K. Aldrich
For the Field Solicitor

APPENDIX 2.2: STANDARD STIPULATIONS FOR APPROVAL

1. Site Specific Stipulations

Location: Topsoil is to be removed and stockpiled.

Rehabilitation: Non-Producer: After the pit contents have been hauled to a reservoir, the location is to be recontoured to the original shape of the terrain. The location is to be drill seeded with pure live seed mixture of 5 pounds per acre western wheatgrass and 3 pounds per acre green needlegress, a total of 8 pounds per acre. Broadcast seeding requires doubling the above rates. Recommended seeding time is September 15 until soil freeze-up.

Rehabilitation: Producer: The unused portion of the pad area will be recontoured to the original shape and seeded as described above. Production facilities on the well pad are to be painted a non-reflective earth tone color.

2. Notification Requirements (to be used in combination as field office determines).

- a. Notify this office verbally at least 8 hours before the well is spudded.
- b. Notify this office verbally not more than 48 hours after the well is spudded, or on the next regular work day.
- c. Notify this office at least 8 hours prior to running/cementing surface casing.
- d. For verbal plugging orders on drilling locations, notify this office at least 24 hours prior to plugging.

BLM Representatives - Office Telephone No. (406) 538-7461

	<u>Name</u>	<u>Home Telephone</u>
Asst. District Mgr., Minerals Petroleum Engineer Environmental Scientist		

3. A complete copy of the approved Application for Permit to Drill (APD), including conditions, stipulations, and the H₂S contingency plan (if required) must be on the well site and available for reference during the construction and drilling phase.
4. This drilling permit is valid for either 1 year from the approval date or until lease expiration, whichever occurs first.
5. Dikes must be constructed to API standards around storage treatment facilities for liquids. The dike must be of sufficient size to contain the contents of the largest tank plus 1 day's production.
6. Dry Hole Marker
Upon abandonment, the following marker is required. It must contain the same information as the well sign.
 A 4" diameter, 4' high pipe, welded to casing or set in cement.
 A steel plate welded to surface casing at ground level.
 A steel plate welded to surface casing 4' below ground level.
7. Additional requirements may be imposed if changes in operational and/or environmental conditions dictate.

These special stipulations are subject to the Technical and Procedural Review (TPR) and appeals provisions of 43 CFR 3165.3.4.

Informational Notice

The following items are from the Federal Oil and gas regulations (43 CFR Part 3160) and from other public notices (Onshore Order No. 1, Notices to lessees). This is not a complete list, but is an abstract of some major requirements.

1. General Requirements (43 CFR 3162.2(a))

The lessee shall comply with applicable laws and regulations; with the lease terms, Onshore Oil and Gas Orders; NTL's; and with other orders and instructions of the authorized officer.

2. Any substantial deviation from the terms of this APD require prior approval.

3. Well abandonment (3162.3-4, Onshore Order No. 1 - Sec. V)

Prior approval for abandonment must be obtained. Initial approval for drilling operations may be verbal; subsequent notifications are to be on Form 3160-5 in triplicate.

4. Reports and Notifications (43 CFR 3162.4-1, 43 CFR 3162.4-3, Operating Form chart beginning of 43 CFR Part 3160).

- a. Form 3160-4, Well Completion or Recompletion Report (in duplicate) and two copies of logs, due 30 days after well completion.
- b. Form 3160-6, Monthly Report of Operations (one copy) due 10th day of second month following production month, beginning with month in which drilling operations are initiated.
- c. Production Startup Notification

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such Production has begun or resumed."

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

5. Environmental Obligations (3162.5-1, Notices to Lessees 2B, 3A, 4A)

- a. With BLM approval, water produced from newly completed wells may be temporarily disposed of into unlined pits for up to 90 days. During this initial period, application for the permanent disposal method must be made in accordance with NTL-2B.
- b. Spills, accidents, fires, injuries, blowout and other undesirable events, as described in Notice to Lessee 3A, must be reported to this office within the time frames in NTL-3A.
- c. Gas may be vented or flared during emergencies, well evaluation, or initial production tests for a time period of up to 30 days or the production of 50 MMCF of gas, whichever occurs first. After this period, you must obtain approval from the authorized officer to flare or vent in accordance with NTL-4A.

6. Well Identification (43 CFR 3162.6)

Each drilling, producing or abandoned well shall be identified with the operator's name, the lease serial number, the well number, and the surveyed description of the well (either footages or the quarter section, the section, township and range). The Indian allottee lessor's name may also be required. All markings must be legible, and in a conspicuous place.

7. Site Security on Federal and Indian oil and gas leases (43 CFR 3162-7-4)

- a. Oil storage facilities must be clearly identified with a sign, and tanks must be individually identified (43 CFR 3162.7-4(b)(6)).
- b. Site security plans must be completed within 30 days of production startup (43 CFR 3162.7-4(c)).
- c. Site facility diagrams must be filed within 30 days after facilities are installed or modified (43 CFR 3162.7-4(d)).

8. Confidentiality (3162.8)

All submitted information not marked "CONFIDENTIAL INFORMATION" will be available for public inspection upon request. The exception is Indian lease information which is always considered confidential.

Thank you for your cooperation with the Lewistown District Office.

APPENDIX 2.3: ALLOTMENT LISTING

HAVRE RESOURCE AREA ALLOTMENTS

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmnt Name	Mgt Cat	Pblc Land	Acres Pblc Land	AUMs No of Lvstk	Lvstk Class	Vegt Cond	AMP Status	Crrnt Crzng System
5049	Phillips Co	C	160	27	110	C	Good	Non	S
5097	Liese/VanVoast	M	3215	750	152	C	Good	Prpsd	S
6001	Northwest	M	2617	528	105	C	Good	Non	S
6002	Pebble Crk	C	160	30	3	C	Good	Non	S
6004	Driftwood	C	440	79	30	C	Good	Non	S
6005	Davies Ranch	M	6048	1140	93	Y	Good	Prpsd	S
					340	C			
6006	West Unit	I	11023	2187	725	C	Fair	Exstg	RR
6007	Lyons Creek	I	1743	319	100	C	Gd/Fr	Prpsd	S
6008	Canada Line	M	1921	367	200	C	Good	Prpsd	S
6009	Meridian	M	781	163	90	C	Good	Prpsd	S
6010	1 Ind 2 E Frk	I	2050	633	3	C	Fr/Gd	Exstg	D/RR
6011	Bennett Coulee	M	3820	1034	150	Y	Good	Exstg	D/RR
					234	C			
					4	H			
6012	Border Unit	M	10116	2219	455	C	Gd/Fr	Exstg	RR
6013	Reservr Altmnt	M	1046	223	72	C	Good	Prpsd	S
6014	Silvrwb Unit C	M	1520	322	100	C	Fr/Gd	Prpsd	S
6015	Upper 30 Mile	M	1181	197	125	C	Good	Exstg	DR
6016	Woody Coulee	C	200	40	27	C	Fair	Non	S
6017	Simons	M	798	153	37	C	Fr/Gd	Prpsd	S
6018	Cherry Ridge	M	8284	1668	340	C	Good	Exstg	DR
6020	Petrie Rnch	I	12959	2665	450	C	Fr/Gd	Exstg	DR
					100	Y			
					6	H			
6021	Customs	M	880	157	100	C	Good	Prpsd	S
6022	Uppr Woody Isl	I	2340	541	100	C	Good	Non	S
6023	Rifle Ranch	C	120	25	20	C	Good	Non	S
6025	Kiedrowski	C	40	6	6	C	Good	Non	S
6026	Borderline	C	595	185	50	C	Gd/Fr	Non	S
6027	Anderson Rnch	M	880	142	52	C	Good	Exstng	DR
6028	Elloam	C	1120	205	13	C	Fr/Gd	Non	S
6029	North Field	I	1600	316	68	C	Fair	Prpsd	S
6030	McClaren	M	1126	200	60	C	Good	Prpsd	S
6031	Bahr X 3	M	1191	229	40	C	Good	Prpsd	S
6032	Ola Creek	C	80	17	1	C	Good	Non	S
6033	Corral Creek	C	2380	463	150	C	Gd/Fr	Exstng	DR
					150	Y			
6034	Stevens	C	480	89	16	C	Good	Non	S
6035	U	M	1760	321	296	C	Good	Prpsd	S
6036	Only Forty	C	40	9	45	C	Good	Non	S
6037	Little Cherry	M	672	91	33	C	Good	Prpsd	S
6038	Magda North	C	441	95	50	C	Gd/Fr	Non	S
6039	Haugo	M	1436	301	189	C	Good	Prpsd	DR
6040	Diagonal	M	1242	314	1	C	Good	Prpsd	S
6041	Cherry Ridge	M	941	181	211	C	Good	Prpsd	S
6042	Red Top	C	120	22	2	C	Good	Non	S
6043	Mosquito	M	840	239	56	C	Gd/Fr	Prpsd	S
6044	Buckley Coulee	C	80	13	7	C	Fair	Non	S
6045	Turner	C	107	32	3	C	Good	Non	S
6046	Schellin Bros	I	1600	282	225	C	Fr/Gd	Prpsd	S
6047	Mud Lake	I	2360	672	240	C	Good	Exstg	DR
6048	Lodge Creek	M	1201	242	133	C	Fair	Prpsd	S
6049	Chinook Rsrvr	C	640	86	100	C	Good	Non	S
6050	South Field	I	919	168	58	C	Fair	Prpsd	S
6051	Tee Trail	M	900	154	46	C	Good	Prpsd	S
6052	No Chinook Cmn	M	1600	339	81	C	Fair	Exstng	DR
6053	Marker	M	480	102	43	C	Fair	Prpsd	S
6054	Skoyen	C	320	77	59	C	Fair	Non	S
6055	Lwr Chouteau Cl	I	1053	267	100	C	Fr/Gd	Exstng	DR
6056	Dry Fork	M	1640	333	80	C	Fair	Prpsd	S
6057	Holman	M	3910	997	300	C	Good	Prpsd	S
6058	Chouteau Cl	I	7280	1650	31	C	Good	Exstng	DR
6059	Boot Reservoir	C	480	103	35	C	Good	Non	S
6060	North	M	640	120	132	C	Good	Prpsd	S
6061	15 Mile Coulee	C	640	130	75	C	Gd/Fr	Non	S
6062	Tilleman Unit	I	1851	458	220	C	Gd/Fr	Prpsd	S
6063	Windbreak	M	1280	300	83	C	Good	Exstng	RR
6064	Miller	C	415	68	48	C	Good	Exstng	S
6065	Little Woody	C	400	77	100	C	Good	Non	S
6066	Hammer	I	1787	376	200	C	Fair	Prpsd	S
6067	FH	C	40	7	1	C	Good	Non	S
6068	Killam	C	480	118	30	C	Good	Non	S
6069	Second Bend	M	880	176	124	C	Fair	Prpsd	S
6070	Blaine County	C	859	192	100	C	Good	Non	S
6071	Hanson Flat	I	3360	751	184	C	Good	Exstng	RR
6072	Redrock Coulee	M	1120	252	102	C	Good	Prpsd	S
6074	Williams Bench	M	640	236	67	C	Good	Exstng	DR
6075	Lohman Common	I	3905	1083	256	C	Good	Exstng	DR

HAVRE RESOURCE AREA ALLOTMENTS

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmnt Name	Mgt Cat	Acres		No of Lvstk	Lvstk Class	Vegt Cond	AMP Status	Crrnt Grzng System
			Pblc Land	AUMs Pblc Land					
6076	Pidgeon Lease	C	320	64	32	C	Good	Non	S
6077	North	C	480	111	80	C	Good	Non	S
6078	Lodge Creek	C	160	35	3	C	Good	Non	S
6079	East	C	197	39	80	C	Good	Non	S
6081	Siemens	C	40	5	80	C	Good	Non	S
6082	Rabbit Hills	C	240	39	7	C	Good	Non	S
6083	Battle Creek	M	1413	193	270	Y	Good	Prpsd	S
6084	Andy Reservoir	C	438	58	13	C	Fair	Non	S
6085	Coal Coulee	C	643	147	27	C	Fair	Non	S
6086	Salmo	M	1914	308	270	Y	Good	Prpsd	S
6087	No Coal Coulee	M	1611	343	100	C	Gd/Fr	Prpsd	S
6088	W Coal Coulee	M	690	151	80	C	Fair	Prpsd	S
6089	Pond Coulee	M	480	97	70	C	Good	Exstng	D
6090	Zurich Park	M	465	81	25	C	Gd/Fr	Prpsd	S
6091	Two Step Altmnt	M	661	136	243	C	Good	Prpsd	S
6092	Road Bend	M	1160	249	87	C	Good	Prpsd	S
6093	Half Loaf	C	320	80	45	C	Good	Non	S
6094	Triangle	M	1450	309	70	C	Fair	Prpsd	S
6095	Pauly Pasture	M	2069	341	295	C	Good	Prpsd	S
6096	West Fork	C	880	177	155	C	Good	Non	S
6097	Wayne Creek	C	2298	486	55	C	Good	Non	S
6098	Buckshot	C	1560	332	236	C	Good	Non	S
6099	Riggin Common	M	5636	1413	293	C	Good	Exstng	DR/S
6101	Modic	I	956	220	119	C	Fair	Prpsd	S
6102	East Nelson	C	440	91	85	C	Gd/Fr	Non	S
6103	North Refugee	M	600	127	154	C	Gd/Fr	Prpsd	S
6104	Stoplight	C	40	9	1	C	Fair	Non	S
6105	Little Jewel	M	320	64	14	C	Good	Prpsd	S
6106	Second	C	160	34	11	C	Good	Non	S
6107	Liese/VanVoast	M	2625	597	205	C	Good	Prpsd	S
6108	County Line	C	20	4	8	C	Good	Non	S
6109	Miles Butte	C	601	115	10	C	Gd/Fr	Non	S
6110	Nonombre	C	640	143	28	C	Fair	Non	S
6111	Zurich Bench	M	3239	674	241	C	Good	Exstng	RR
6113	Zurich Park	C	130	15	4	C	Good	Non	S
6115	Greenland	M	1330	179	130	C	Gd/Fr	Prpsd	S
6116	Rodeo	C	737	108	49	C	Good	Non	S
6117	Siphon	C	145	28	2	C	Fair	Non	S
6118	Colony	C	200	46	13	C	Good	Non	S
6119	Lwr Wayne Crk	M	4695	1144	190	C	Good	Prpsd	DR
6120	Willie	M	1276	250	220	C	Good	Prpsd	S
6121	Exclosure	I	400	81	---	C	Good	Prpsd	S
6122	Black Crk	M	1120	266	200	C	Good	Prpsd	S
6123	Finger Lakes	M	1683	375	30	C	Gd/Fr	Prpsd	S
6124	Harlem	C	512	71	12	C	Good	Non	S
6125	Matador	M	1400	279	81	C	Good	Prpsd	S
6127	Railroad	C	200	95	124	C	Good	Non	S
6129	Llano	M	6082	1126	269	C	Good	Prpsd	S
6130	Savoy Crk	C	440	79	350	C	Good	Non	S
6131	Drake Creek	M	1840	378	90	C	Good	Prpsd	S
6132	Milk Creek	M	2185	462	358	C	Good	Prpsd	S
6133	Kubitz Trnsfr	M	880	199	153	C	Good	Prpsd	S
6134	Coburg	M	1652	276	97	C	Good	Prpsd	S
6136	Junction	M	2587	658	222	C	Good	Prpsd	S
6137	Eureka	M	1441	317	215	C	Gd/Fr	Prpsd	S
6138	Hereford	C	40	12	2	C	Fr/Gd	Non	S
6139	Bowes Field	C	160	28	2	C	Gd/Fr	Non	S
6140	Pipeline	C	160	26	3	C	Fair	Non	S
6141	Miles Creek	C	120	48	8	C	Good	Non	S
6142	South Magda	C	40	10	2	C	Fair	Non	S
6143	Farm Road	C	80	14	140	C	Fr/Gd	Non	S
6144	County Road	C	342	82	82	C	Gd/Fr	Non	S
6146	North Fork	C	40	10	2	C	Good	Non	S
6147	Big Coulee	C	40	8	2	C	Fair	Non	S
6148	Mule Talk	C	50	9	2	C	Fair	Non	S
6150	Alkali Lake	M	1609	245	20	C	Gd/Fr	Prpsd	S
6152	Gap Creek	C	80	21	4	C	Good	Non	S
6153	Gap Creek	C	1345	162	14	C	Good	Non	S
6154	Birdtail Butte	C	561	134	17	C	Fair	Non	S
6155	McCann Butte	C	40	7	2	C	Good	Non	S
6157	Yrlng Pasture	C	381	46	185	C	Gd/Fr	Non	S
6159	Myrtle Butte	C	1257	267	60	C	Gd/Fr	Non	S
6160	North&McGuire	C	944	213	18	C	Fair	Non	S
6161	Halseth Field	C	480	92	88	C	Gd/Fr	Non	S
6163	Sawtooth Mtn	C	200	52	10	C	Fair	Non	S
6164	3-Mile Ridge	M	10321	1461	2	C	Good	Exstng	D
6165	TU Bench	M	2193	371	200	C	Good	Exstng	D
6166	Pioneer	M	600	60	60	C	Good	Non	S
6167	Tin Cup	I	560	64	167	C	Fr/Gd	Prpsd	S
6168	Al's Creek	I	3385	366	129	C	Fr/Gd	Prpsd	S
6169	Chimney Butte	I	7072	716	182	C	Fair	Prpsd	S

HAVRE RESOURCE AREA ALLOTMENTS

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmnt Name	Mgt Cat	Acres Pblc Land	AUMs Pblc Land	No of Lvstck	Lvstck Class	Vegt Cond	AMP Status	Crrnt Grngz System
666171	Little Suction	I	1383	169	167	C	Fair	Prpsd	S
6172	Timber Ridge	I	2845	1807	263	C	Good	Prpsd	S
6173	Sand Creek	M	4497	701	269	C	Good	Prpsd	S
6173	Sand Crk Secl5	M	1011	201	214	C	Good	Prpsd	S
6174	Benchmark	C	240	39	20	C	Fair	Non	S
6175	Warrick Jnct	C	610	97	42	C	Good	Non	S
6176	Sherard Field	I	2232	412	6	C	Good	Exstng	DR
6177	Black Fork	C	190	39	10	C	Fair	Non	S
6178	Lightning	C	360	32	4	C	Gd/Fr	Non	S
6179	No Sherard Fld	C	160	35	3	C	Good	Non	S
6180	Bullseye	C	40	5	1	C	Fr/Gd	Non	S
6181	Bullwhacker	M	40774	4563	13	C	Good	Exstng	RR
6182	Hay Coulee	I	12959	1414	350	C	Gd/F	Exstng	RR
6183	Birch Creek	C	3023	284	33	C	Fair	Non	S
6184	Greens Bench	M	11224	1099	255	C	Good	Exstng	RR
6185	Scattered Trct	C	611	92	8	C	Good	Non	S
6187	Frk/Black Coulee	C	1013	135	90Y	C	Fair	Non	S
6189	North Ranch	C	420	69	420	C	Fair	Non	S
6190	Oliver	C	241	36	6	C	Fr/Gd	Non	S
6191	North Altmnt	C	40	9	1	C	----	Non	S
6192	N FrkLionCoulee	I	3924	592	590	C	Good	Exstng	HILF
6193	Lion Coulee	I	3050	410	----	C	Good	Exstng	D
6194	Spencer Ridge	I	7250	587	98	C	Gd/Fr	Exstng	D
6195	Corner	C	120	21	2	C	Good	Non	S
6196	Hooper Spring	C	40	6	1	C	Good	Non	S
6197	Laporte Place	I	2115	465	160	C	Gd/Fr	Exstng	DR
6198	Chase Hill Cmmn	I	923	113	100	C	Good	Exstng	DRR
6199	Greens Coulee	I	1487	109	100	C	Good	Exstng	DRR
6200	Chip Creed	C	1600	387	97	C	Good	Non	S
6201	Halley	M	7250	537	45	C	Gd/Fr	Prpsd	S
6202	Cummings Bench	I	2089	198	160	C	Gd/Fr	Prpsd	S
6203	Golf Bench	M	3364	396	200	C	Gd/Fr	Exstng	DR
6204	Blk Coulee Cmmn	M	4642	372	465	C	Fr/Gd	Exstng	D
6205	Moravec Indvl	C	440	14	51	C	Good	Non	S
6206	UpprBlkCoulee	M	1036	104	49	C	Good	Prpsd	S
6207	Ragland Ridge	C	1085	25	2	C	Fr/Gd	Non	S
6208	Lost Ridge	I	6254	382	171	C	Good	Exstng	-
6209	Barnard Ridge	I	4807	432	102	C	Fair	Prpsd	S
					3	H			
6210	Maxwell	C	100	10	1	C	Good	Non	S
6211	Black Butte	I	8345	742	200	C	Fr/Gd	Prpsd	S
6212	Ervin Ridge	I	13918	915	383	C	Fr/Gd	Prpsd	S
6213	Rankin Land	M	97	16	60	C	Gd/Fr	Non	S
6214	Lil Blwhckr	I	21642	1652	350	C	Gd/Fr	Exstng	RR
6215	Dark Butte	I	4537	362	33	C	Good	Prpsd	S
6216	Pablo Rapids	I	1653	115	29	C	Fair	Prpsd	S
6217	Sneath Common	C	5686	283	240	C	Fair	Prpsd	S
6218	Sneath Common	I	3095	344	78	C	Fair	Prpsd	S
6219	Hoge	C	560	187	47	C	Good	Non	S
6220	8 Mile Bench	C	1466	367	52	C	Good	Non	S
6221	Deadman Rapids	I	1605	110	37	C	Good	Prpsd	S
6222	Gallatin Rapids	I	6959	287	6	C	Fair	Prpsd	S
6223	Hsr Hm Place	C	55	7	2	C	Fair	Non	S
6224	Upr Dphn Rapid	I	2400	84	54	C	Good	Prpsd	S
6225	Dauphine Rapids	M	210	12	28	C	Good	Prpsd	S
6226	Sharples Place	C	320	60	69	C	Good	Non	S
6227	Chouteau Coulee	I	5120	1013	375	C	Fair	Exstng	DR
6228	Fort	C	120	25	25	C	Good	Prpsd	S
6229	Guide	C	480	130	52	C	Good	Prpsd	S
6230	Hrs Crnl Coulee	M	1915	369	180	C	Good	Exstng	RR
6231	15 Mile	M	1640	325	190	C	Good	Exstng	RR
6232	30 Mile	M	920	176	190	C	Good	Exstng	RR
6233	Airstrip	M	2629	495	185	C	Gd/Fr	Prpsd	S
6234	Quarter	C	199	48	33	C	Good	Non	S
6235	MBEast Pasture	I	1709	321	137	C	Gd/Fr	Prpsd	S
6236	South	M	1584	322	70	C	Good	Prpsd	S
6237	Hldng Pstr CSGD	C	160	35	5	C	Good	Non	S
6238	Highway	C	310	65	45	C	Good	Non	S
6239	Forgey Creek	I	3840	555	9	C	Good	Exstng	DR
6240	Moses Indvl	C	100	24	53	C	Good	Non	S
6241	Pueblo	C	80	9	2	C	Good	Non	S
6242	Waylee	C	80	9	5	S	Fr/Gd	Non	S
6243	Big Bend	M	590	180	180	C	Fair	Exstng	S
6244	Murray Crk	C	320	93	14	C	Fr/Gd	Non	S
6245	Stirrup	C	200	40	80	C	Good	Non	S
6246	Wadish Base	C	40	8	4	C	Good	Non	S
6247	West Wildhorse	C	114	32	8	C	Good	Non	S
6248	Grave	C	43	6	1	C	Good	Non	S
6249	Pwll Nrth Unit	I	1923	295	106	C	Gd/Fr	/Prpsd	S
6250	Milk Rvr	C	167	35	5	C	Fair	Non	S
6251	East Unit	I	5256	1121	415	C	Good	Exstng	RR
					2	H			
6253	Fifty-Fifty	C	80	16	5	C	Good	Non	S
6254	Lost Bird	C	40	6	1	C	Good	Non	S
6255	Graber Unit	M	624	113		C	Gd/Fr	Prpsd	S

HAVRE RESOURCE AREA ALLOTMENTS

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmt Name	Mgt Cat	Acres Pblc Land	AUMs Pblc Land	No of Lvstck	Lvstck Class	Vegt Cond	AMP Status	Crrnt Grzng System
6256	Silver Lake	C	80	15	1	C	Good	Non	S
6257	North Zurich	M	1576	340	130	C	Gd/Fr	Prpsd	S
6258	Lateral	C	160	16	2	C	Good	Non	S
6260	Rankin Range	M	776	177	135	C	Gd/Fr	Prpsd	S
6261	Nvevo	C	320	62	131	C	Good	Non	S
6265	Bench	C	40	7	1	C	Good	Non	S
6292	3-Mile	C	62	17	1	C	Good	Non	S
6301	North Snake	C	255	45	11	C	Good	Non	S
6302	Snake Butte	I	862	145	29	C	Good	Prpsd	S
6303	River Run	C	39	9	3	C	Good	Non	S
6304	Snake Btte Est	M	1117	194	39	C	Good	Prpsd	S
6341	Lil Bxeldr Cr	C	8	2	1	C	Fair	Non	S
6350	South Vimy	I	920	95	19	C	Fair	Prpsd	S
6406	Kaun	C	40	14	2	C	Good	Non	S
6407	Bootlegger	C	120	35	5	C	Good	Non	S
6408	Pinto	C	120	37	3	C	Good	Non	S
6410	Warrick	C	40	11	2	C	Good	Non	S
6411	PreferenceLnds	C	320	60	4	C	Good	Non	S
6412	Buckin	M	960	137	85	C	Good	Prpsd	S
6413	Little Birch	C	114	13	1	C	Gd/Fr	Non	S
6414	Triangle PU	M	280	51	220	C	Good	Prpsd	S
6415	Dogtown	I	1171	91	100	C	Fr/Gd	Exstng	RR
6416	Pigtail Coulee	I	1248	132	100	C	Good	Exstng	RR
6417	Trafalger	C	160	23	8	C	Fair	Non	S
6418	Blanchard	C	435	81	20	C	Fair	Non	S
6419	Kelly	C	200	55	10	C	Fair	Non	S
6420	Clinard Coulee	C	280	70	10	C	Fr/Gd	Non	S
6421	Henry	C	120	34	5	C	Good	Non	S
6422	N Hanging 5	C	329	100	7	C	Fair	Non	S
6424	Blazek	C	336	90	15	C	Gd/Fr	Non	S
6425	Piedras	C	1002	54	12	C	Good	Non	S
6426	Grouse	C	186	41	3	C	Fair	Non	S
6428	Osterman Henry	C	200	42	5	C	Good	Non	S
6429	Puma	C	156	53	7	C	Good	Non	S
6430	Braun	C	254	29	4	C	Good	Non	S
6431	Cougar	C	290	107	14	C	Good	Non	S
6432	Arroyo	C	553	139	23	C	Fair	Non	S
6433	Valkyrie	C	80	5	1	H	Fair	Non	S
6434	Cabin	I	1874	429	50	C	Fair	Prpsd	S
6435	Kng Cle St Tr	C	629	66	6	C	Good	Non	S
6436	Lasso	C	40	8	1	C	Good	Non	S
6437	Loma Rance	C	101	20	4	C	Fair	Non	S
6438	Hackamore	C	319	54	7	C	Fair	Non	S
6439	Homestead Coule	I	1527	408	90	C	Fair	Prpsd	S
6440	Latigo	C	400	66	11	C	Fair	Non	S
6441	Stevens	C	347	58	17	C	Good	Non	S
6442	Marias Rvr 1	C	682	182	25	C	Fair	Prpsd	S
6443	Klondike	M	1200	200	40	C	Good	Prpsd	S
6444	Sheep Coulee	M	1771	591	118	C	Good	Prpsd	S
6445	Marias Breaks	C	178	40	6	C	Fair	Non	S
6446	Nome	I	1223	185	40	C	Fair	Prpsd	S
6447	Est Lnsme Lake	C	360	90	22	C	Fair	Prpsd	S
6448	Christofferson*	M	5096	1635	225	C	Good	Prpsd	S
6450	Ihmsen Well*	M	1669	668	100	C	Fair	Prpsd	S
6451	Lnsme Pair Farm	M	1982	368	76	C	Fair	Prpsd	S
6452	Grass Seed**	M	1080	300	100	C	Fair	Prpsd	S
6453	Hardware	M	438	176	43	C	Fair	Prpsd	S
6454	Two Bit	C	40	10	1	C	Good	Non	S
6455	Haystack	I	2643	1057	151	C	Good	Prosd	S
6456	Reservation	C	244	34	3	C	Good	Non	S
6457	Edwards Lease	C	300	43	3	C	Good	Non	S
6458	Bear Paw	C	25	4	1	C	Good	Non	S
6459	Bullhook	C	40	8	1	C	Fair	Non	S
6460	Kremlin	C	80	27	7	C	Fair	Non	S
6461	Fresno	C	120	16	2	C	Good	Non	S
6462	Long Beach	C	78	25	6	C	Fair	Non	S
6464	Creedman Coulee	C	80	16	3	C	Fair	Non	S
6465	Signal	C	174	35	6	C	Fair	Non	S
6466	Haugen	C	40	12	1	C	Fair	Non	S
6467	Hot Iron	C	40	7	2	C	Fair	Non	S
6468	Lobo	C	720	180	45	C	Fair	Non	S
6469	Lost River	C	80	27	18	C	Fair	Non	S
6470	Nagelhus Lease	M	1600	163	23	C	Fair	Prpsd	S
6471	Wildhorse Lake	M	8794	691	173	C	Fair	Prpsd	S
6472	Wildhorse	M	960	108	27	C	Fair	Prpsd	S
6475	Vimy Point	C	160	22	3	C	Fair	Non	S
6476	Chauvet	C	120	22	7	C	Fr/Gd	Non	S
6477	Dietz	c	286	30	3	C	Good	Non	S
6478	Teton	C	560	77	15	C	Fair	Non	S
6479	Shamrock	C	40	14	3	C	Fair	Non	S
6480	Jacobsen	C	40	14	25	C	Good	Non	S
6481	Jurenka	C	130	7	1	C	Good	Non	S

HAVRE RESOURCE AREA ALLOTMENTS

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmnt Name	Mgt Cat	Acres		No of Lvstk	Lvstk Class	Vegt Cond	AMP Status	Crrnt Grzng System
			Pblc Land	AUMs Pblc Land					
6482	Badger	C	400	46	15	C	Good	Non	S
6483	Tunis	C	40	12	2	C	Good	Non	S
6484	Sunset	C	600	16	13	C	Fair	Non	S
6485	Marias River 2	C	240	38	6	C	Gd/Fr	Non	S
6486	Lazy K6	C	181	40	8	C	Good	Non	S
6487	Melby	C	120	32	8	C	Unsu	Non	S
6488	W Lonesome Lk	C	120	48	32	C	Fair	Non	S
6490	Fork Coulee	I	1096	193	27	C	Fair	Non	S
6491	Pine Tree	C	80	18	3	C	Good	Non	S
6494	Red Wing	C	18	3	1	C	Good	Non	S
6524	Anchor's Isl	C	40	9	1	C	Good	Non	S
6541	Roadside	C	40	6	1	C	Good	Non	S
TOTALS									

525,733-Acres Public Land

85,942-AUMs Public Land

28,225-Cows

853-Yearlings

15-Horses

5-Sheep

*All BR Acres

**40 Acres BLM and 1040 Acres BR

HAVRE RESOURCE AREA - UNALLOCATED ALLOTMENTS

Nmbr	Altmnt Name	Mgt Cat	Acres Pblc Land	AUMs Pblc Land	No. of Lvstk	Lvstk Class	Vegt Cond	AMP Status	Crrnt Grzng System
6331	Unallocated	C	118	-0-	-0-	---	--	Non	S
6332	"	C	37	-0-	-0-	---	--	"	"
6333	"	C	26	-0-	-0-	---	--	"	"
6334	"	C	40	-0-	-0-	---	--	"	"
6335	"	C	40	-0-	-0-	---	--	"	"
6336	"	C	40	-0-	-0-	---	--	"	"
6337	"	C	25	-0-	-0-	---	--	"	"
6338	"	C	35	-0-	-0-	---	--	"	"
6339	"	C	11	-0-	-0-	---	--	"	"
6340	"	C	1	-0-	-0-	---	--	"	"
6341	"	C	4	-0-	-0-	---	--	"	"
6342	"	C	40	-0-	-0-	---	--	"	"
6343	"	C	40	-0-	-0-	---	--	"	"
6344	"	C	40	-0-	-0-	---	--	"	"
6345	"	C	40	-0-	-0-	---	--	"	"
6501	"	C	80	22	-0-	---	-G	"	"
6503	"	C	40	12	-0-	---	-G	"	"
6505	"	C	33	10	-0-	---	-G	"	"
6507	"	C	40	4	-0-	---	-G	"	"
6509	"	C	80	12	-0-	---	-F	"	"
6512	"	C	40	5	-0-	---	-F	"	"
6513	"	C	40	9	-0-	---	-F	"	"
6514	"	C	40	6	-0-	---	-F	"	"
6515	Unallocated	C	29	1	-0-	---	-F	Non	S
6516	"	C	40	7	-0-	---	-G	"	"
6518	"	C	40	12	-0-	---	-G	"	"
6519	"	C	15	9	-0-	---	-G	"	"
6520	"	C	80	7	-0-	---	-F	"	"
6521	"	C	40	7	-0-	---	-F	"	"
6522	"	C	45	19	-0-	---	-G	"	"
6524	"	C	40	9	-0-	---	-F	"	"
6527	"	C	80	18	-0-	---	-G	"	"
6528	"	C	40	6	-0-	---	-F	"	"
6529	"	C	40	8	-0-	---	-F	"	"
6530	"	C	40	7	-0-	---	-G	"	"
6531	"	C	40	8	-0-	---	-F	"	"
6532	"	C	42	11	-0-	---	-G	"	"
6533	"	C	40	6	-0-	---	-F	"	"
6534	"	C	71	6	-0-	---	-F	"	"
6535	"	C	80	7	-0-	---	-F	"	"
6536	"	C	40	10	-0-	---	-G	"	"
6540	"	C	59	15	-0-	---	-G	"	"
6542	"	C	40	11	-0-	---	-F	"	"
6548	"	C	40	6	-0-	---	-F	"	"
6554	"	C	80	19	-0-	---	-F	"	"
6555	"	C	40	12	-0-	---	-F	"	"
6557	Unallocated	C	40	9	-0-	---	-F	Non	S
6558	"	C	40	10	-0-	---	-F	"	"
6559	"	C	40	10	-0-	---	-F	"	"
6564	"	C	40	7	-0-	---	-F	"	"
6567	"	C	40	4	-0-	---	-G	"	"
6568	"	C	40	8	-0-	---	-G	"	"
6577	"	C	10	3	-0-	---	-F	"	"
6581	"	C	80	10	-0-	---	-F	"	"
6568	"	C	40	5	-0-	---	-F	"	"
TOTAL			2401	357 AUMs					

GREAT FALLS RESOURCE AREA ALLOTMENTS

(S)Seasonal (RR)Rest Rotation (D/RR)Deferred/RR (DR)Deferred Rotation

Nmbr	Altmnt Name	Mgt Cat	Acres		No. of Lvstk	Lvstk Class	Vegt Cond	AMP Status
			Pblc Land	AUMs Pblc Land				
6340	India	C	607	203	-	-	Fair	
6351	Haivorson	C	40	14	2	C	Good	
6352	Dahlen	C	160	36	4	C	Fair	
6353	Bench	C	309	62	5	C	Fair	
6354	India	C	640	171	14	C	Fair	
6355	Kevin Rim	I	5681	909	75	C		
6356	India	C	400	116	10	C		
6357		C	80	15	3	C	Pr/F	
6358	Wilma	M	2874	358	30	C		
6359	Rimrock	C	404	125	10	C	Good	
6360	India	C	720	150	12	C		
6361	Saltbush	C	320	53	4	C	Fair	
6362	Virden Lake	C	1409	89	30	C		
6363	Open Flat	C	560	187	31	C	Fair	
6364	Shelby	C	905	36	7	C		
6367	Big Damp	C	833	137	19	C	Fair	
6368	India	C	156	28	4	C	Fair	
6369	Roun	C	181	37	11	C	Fair	
6370	Red Deer	C	458	107	6	C	Good	
6371	India	C	247	75	6	C	Good	
6372	Hutley	C	40	13	18	S	Fair	
6373	Oilmont	C	435	145	1	C	Fr/Gd	
6374	Sandon	M	480	120	20	C	Gd/Fr Propsd	
6375	Psalmist	C	80	8	1	C	Fair	
6376	Jimmy	C	120	40	10	C	Good	
6377	Henry	C	40	5	10	S	Fair	
6378	Upper Marias	C	2689	245	30	C		
6379	India	C	320	80	6	H	Fair	
6380	Keil	C	186	62	21	C	Fair	
6381	M and M	C	197	44	6	C	Fair	
6383	Dry Fork	C	32	7	1	C	Fair	
6384	Myron	C	62	10	2	C	Fair	
6385	India	C	240	37	3	C	Fair	
6386	Mack	C	360	25	8	C	Fair	
6387	India	C	203	68	6	C	Fair	
6388	India	M	120	37	6	C	Exclt	
6389	West Butte	M	1870	312	26	C		
6390	Mickey	C	200	37	12	C	Exclt	
6391	Fey Lease	C	40	7	1	C	Exclt	
6392	Antelope	C	322	100	8	C	Fair	
6393	Arrowhead	C	80	15	5	C		
6394	Blackfoot	M	327	32	8	C	Exclt	
6395	Mt. Royal	M	2177	192	42	C		
6396	Marias Bridge	C	1619	324	165	C		
6397	Oswood	M	657	36	5	C	Exclt	
6398	Bald Eagle	M	1131	82	15	C		
6399	Buffalo	M	3763	1255	153	C		
6402	Link	C	237	34	4	C	Fair	
6403	Denson Ranch	C	680	66	17	C	Fair	
6404	India	C	40	10	3	C	Fair	
6405	North Star	C	443	70	30	C	Fair	
6406	West Virden		40	12	1	C	Good	
6463	Liberty		4	1	13	C		
6473	Sunburst	C	440	10	3	C	Fair	
6474	Good	C	80	27	5	C	Fair	
6489	Gold Eagle	M	210	14	3	C	Fair	
6492	India	C	80	18	3	C	Fr/Gd	
6493	Hill		595	120	32	C		
6495	Fowler	C	77	12	2	C		
6496	Cut Bank	C	1069	1	1	C		
6569	Outlook School	C	200	15	3	C		
6570	McPhillips	C	40	8	1	C		

APPENDIX 2.4: RIPARIAN AREAS

1. Evans Bend	T. 24 N., R. 8 E., Sec. 3, 4, 9, 10, 16 River Mile 6-7	450 acres
2. Hole in the Wall	T. 24 N., R. 13 E., Sec. 22 River Mile 64	20 acres
3. Pablo	T. 23 N., R. 14 E., Sec. 12 River Mile 73	20 acres
4. Sturgeon Island Complex (Gist)	T. 23 N., R. 21 E., Sec. 4-5 River Mile 121.4-123.1	65 acres
5. Woodhawk Bottom	T. 23 N., R. 22 E., Sec. 17, 18, 19 River Mile 128.7-134.5	200 acres
6. Hideaway	T. 23 N., R. 22 E., Sec. 25, 26, 36 River Mile 136.5-137.5	60 acres
7. Black Bluff	T. 25 N., R. 10 E., Sec. 20 River Mile 19.2-19.9	75 acres
8. Sturgeon Island Complex (1)	T. 23 N., R. 21 E., Sec. 5, 6 River Mile 119-120	b, c, d, total 425 acres
9. Sturgeon Island Complex (2)	T. 23 N., R. 21 E., Sec. 4, 5 River Mile 120-121.5	
10. Sturgeon Island Complex (4)	T. 24 N., R. 21 E., Sec. 34 River Mile 122-123	
11. Cow Island	T. 23 N., R. 22 E., Sec. 7 River Mile 127.2-128.3	105 acres

APPENDIX 2.5: TARGET SOIL VEGETATION COVER BY SOIL SUBGROUP

Soil Subgroup and Soil Names *	Target Soil Vegetation Cover (%)	Range in Existing Cover (%) **
1. Loamy glacial till upland plains; series are Bearpaw, Dooley, Hillon, Joplin, Kevin, Phillips, Scobey, Sunburst, Telstad, Vida, Williams, Zahl, Zahill.	80	24-100
2. Claypan and dense clay glacial till uplands; series are Elloam, Tealette, Theony.	85	30-98
3. Clayey acid shale uplands; series are Dilts, Julin, Teigen.	55	36-72
4. Calcareous or bentonitic shale uplands; series are Abor, Bascovy, Dimyaw, Lisam, Norbert, Neldore, Thebo, Weingart, Yawdim.	55	32-95
5. Loamy sedimentary uplands; series are Cabba, Cabbart, Cambert, Dast Delpoint, Doney, Ernem, Lonna, Marmarth, Reeder, Rentsac, Riedel, Twilight.	80	71-99
6. Loamy and clayey floodplains; series are Bowdoin, Gesa, Glendive, Hanly, Harlem, Havre, Havrelon, Kiwanis, Korchea, Korent, Lallie, Lardell, Lohler, Nesda, Rivra, Trembles, Typic Fluvequents, Typic Ustifluvents, Aquic Ustifluvents, Fluvaquentic Haploboralls, Ustic Torrifluvents.	90	58-99
7. Potholes and level basins subject to ponding; series are Dimmick, McKenzie, Nishon.	90	81-100
8. Moderately coarse and coarse textured soils on terraces, footslopes and fans; series are Assinniboine, Blanchard, Busby, Chinook, Cozberg, Hawksell, Lihen, Parshall, Tally, Yetull.	75	74-99
9. Medium textured soils on terraces, footslopes and fans; series are Attewan, Benz, Bitton, Brockway, Evanston, Farland, Farnuf, Floweree, Judith, Kremlin, Lambeth, Macar, Martinsdale, Redvale, Shawmut, Straw, Turner, Vanstel, Work, Yamac.	80	63-99
10. Fine textured soils on terraces, footslopes and fans; series are Acel, Cherry, Ethridge, Grail, Kobar, Lawther, Linnet, Lothair, Marias, Marvan, Pendroy, Richey, Savage, Shaak.	70	61-99
11. Claypan and dense clay soils on terraces, footslopes and fans; series are Creed, Gerdrum, Tealette.	85	49-93
12. Subirrigated and saline claypans on terraces and fans; series are Absher, Adger, Nobe.	85	63-88
13. Very slowly permeable soils of terraces and fans, series are Vanda, Vaeda.	50	48-73
14. Very gravelly, extremely gravelly and cobbly soils on terraces and fans; series are Beaverell, Beaverton, Tinsley, Wabek, Windham.	85	39-97
15. Loamy and clayey soils in mountains with forest canopy; series are Arcette, Belain, Cowood, Elve, Gambler, Lolo, Macmeal, Repp, Sicklestears, Silverchief, Trapper, Warneke, Whitecow, Whitore.	85	75-100
16. Clay shale uplands with forest canopy cover; series are Bascovy, Dilts, Julin, Neldore.	55	32-72
17. Loamy and clayey floodplains with more than 10% canopy cover of deciduous trees; soils are the same as subgroup 6.	90	58-99
18. Loamy and clayey soils on fans and footslopes of mountains and foothills; series are Belain, Hedges, Lolo.	80	41-97
19. Loamy and loamy-skeletal soils on bedrock ridges and on footslopes of mountains; series are Castner, Cheadle, Libeg, Perma, Warneke.	85	33-100

* Lists are not all inclusive. Those listed are representatives of soils series in this subgroup.

**These figures were obtained from transects made in a 1978-1979 inventory.

APPENDIX 2.6: MITIGATION MEASURES FOR VEGETATION (A), WILDLIFE (B), AND CULTURAL RESOURCES (C)

APPENDIX 2.6A: VEGETATION MITIGATION MEASURES

All rights-of-way, leases, permits or surface disturbing activities will have stipulations for riparian protection and a rehabilitation plan.

Topsoil will be stockpiled when a surface disturbing action begins and will be replaced at the completion of the project.

Tractor logging will be limited to slopes with average gradient of less than 40%.

Clearcuts will be limited to slopes with an average of gradient of less than 30%.

Clearcut blocks will be less than 10 acres.

If available, a minimum of 3 snags/acre, plus replacement snags will be left for wildlife use on all sale and thinning areas.

All road construction will be laid out by BLM personnel in accordance with MSO 5424-4 specifications.

Streamside "green" strips would be left along all perennial streams. Minimum strip width would be the average height of the overstory. The strip width will be determined by an on site evaluation during the activity development phase.

All wildfires of 100 acres or more will be reviewed by the district rehabilitation team to determine rehabilitation needs.

Within the UMNWSR Corridor the following restrictions will apply:

Fire fighting equipment is restricted to existing roads: no red fire retardant will be used in the White Rocks section of the UMNWSR Corridor.

APPENDIX 2.6B: WILDLIFE MITIGATION MEASURES

The following standard stipulations to mitigate impacts to wildlife will be applied to surface disturbing activities in the Kevin Rim, Sweet Grass Hills and in important wildlife winter range areas. These stipulations will be appended to other areas if monitoring and inventories indicates a need. These stipulations will be applied at the activity level phase after an on site evaluation indicates the presence of the specific resource.

No surface occupancy for leasable mineral exploration and other surface disturbing activities will be allowed on mule deer and antelope winter and fawning ranges from December 1 - May 15 and May 1 - June 30.

No surface occupancy for leasable mineral exploration and other surface disturbing activities allowed on important elk habitats (Sweet Grass Hills) during the following seasonal use periods (locatable mineral activity will be mitigated to the extent possible to prevent unnecessary and undue degradation to these resource values:

Winter ranges December 1 - May 15
Calving areas May 1 - June 30

Time restrictions on surface disturbing activities may be applied on nesting areas and strutting grounds of sage and sharp-tailed grouse from March 1 to June 30.

Surface use may be controlled or excluded with a $\frac{1}{4}$ mile zone of identified essential habitat of federal and state listed threatened, endangered and sensitive species; at the present time this stipulation will primarily be applied to raptor species.

Currently there are no known occupied peregrine falcon aeries in the area; however, historical and potential nest sites are known for the Kevin Rim, Marias and Missouri River Corridors and the West Butte of the Sweet Grass Hills. In the event a peregrine falcon is found or introduced the BLM will adhere to the approved recovery plan and guidance from the Montana Peregrine Falcon Working Group.

APPENDIX 2.6C: CULTURAL MITIGATION MEASURES

All surface disturbing actions will require a cultural inventory prior to approval of the action. The guidelines from the Northern Glaciated Plains Statistical Survey will apply.

Impacts to significant cultural resources will be avoided where possible and feasible. Where impacts cannot be avoided, impacts to cultural resources will be mitigated by employing various standard salvage procedures.

National Register of Historic Sites and other significant sites within the UMNWSR Corridor in immediate danger of loss due to natural and/or human disturbance will be monitored, avoided and/or excavated.

Impacts to Native American religious sites will be avoided or mitigated where possible or necessary.

If cultural resources are encountered during surface disturbing activities construction operations will cease until BLM can evaluate the find and salvage if necessary.

All cultural surveys and excavations will be performed by holders of valid archaeological permits.

APPENDIX 2.7: CULTURAL RESOURCE EVALUATION

Decisions about the future of cultural resources in the Lewistown District are made after:

1. analysis of available information on the resources in question;
2. application of professional judgement to identify characteristics which contribute to possible use of recorded cultural resources;
3. recommendation of appropriate use or uses for each resource or group of resources.

After the above steps have been completed the appropriate manager assigns cultural resources to one of the following seven categories:

1. Current scientific use: a category that applies to any cultural property that is the subject of an ongoing scientific or historical study or project, under permit, at the time of evaluation. Sites that might be assigned here include Lost Terrace or the Eagle Creek sites along the Missouri River. Upon completion of that study or project, the cultural property shall be assigned to another use category.
2. Potential scientific use: a category that applies to any cultural property determined to be presently eligible for consideration as the subject of scientific or historical study utilizing research techniques currently available, including study which would result in its physical alteration, and signifies that it need not be conserved in the face of an appropriate research or data recovery (mitigation) proposal. Sites that fit this category includes tipi ring sites that have the potential to yield important information, but do not have to be preserved.
3. Conservation for future use: a category reserved for any unusual cultural resource which, because of scarcity, a research potential that surpasses the current state of the art, singular historic importance or architectural interest, or comparable reasons, is not currently eligible for consideration as the subject of scientific or historical study which would result in its physical alteration. It is considered worthy of segregation from other land or resource uses which would threaten the maintenance of its present condition, and it will remain in this use category until specified provisions are met in the future. Very few sites in study area fit this category. Ones that do might contain very old data or would be associated with early, unrecorded European entry into the study area.
4. Management use: a category that may be applied to any cultural property considered eligible for controlled experimental study which would result in its physical alteration, to be conducted by the BLM or other entities concerned with the management of cultural properties. Expenditure of cultural properties or cultural resource data may be justified for purposes of obtaining specific information leading for a better understanding of kinds and rates of natural or human-caused deterioration, effectiveness of protection measures, and similar lines of inquiry, the results of which would ultimately aid in the management of other cultural properties. Examples of these kinds of resources are tipi ring sites that can be exploited for their information potential, using approaches that are new and innovative.
5. Socio-cultural use: a category that may be applied to any cultural resource that is perceived by a specified social and/or cultural group as having attributes which contribute to maintaining the heritage or existence of that group, and signifies that the cultural resource is to be managed in a way that takes those attributes into account, as applicable. Sites in the Sweet Grass Hills that have cultural significance for the Blackfeet fit this use category.
6. Public use: category that may be applied to any cultural property found to be eligible for consideration as an interpretive exhibit-in-place, a subject of supervised participation in scientific or historical study, or related educational and recreational uses by members of the general public. Resources fitting this category include tipi ring and camp sites along the upper Missouri that have been considered for interpretation for the public.
7. Discharged use: means that a cultural property, previously qualified for assignment to any of the categories defined above, no longer possesses the qualifying characteristics for that use or for assignment to an alternative use, that records pertaining to it represent its only remaining importance, and that its location no longer presents a management constraint for competing land uses. This category is also used for cultural resources that do not qualify for the National Register of Historic Places.

APPENDIX 2.8: WILDERNESS

1. STAFFORD WSA (MT-066-250)

Land Description

The 4,800-acre Stafford WSA is just north of the Missouri River between the PN and Stafford Ferries in Chouteau and Blaine Counties. Of this unit, 4,346 acres are in the Upper Missouri Wild and Scenic River Management Corridor: 425 acres in the "Scenic" Section, 113 acres in the "Recreational" and 3,808 acres in the "Wild".

Naturalness

Stafford's rugged terrain has limited human imprints which helps retain the WSA's natural appearance. Developments are few and scattered, lying primarily on the unit's periphery. These are mostly associated with livestock grazing.

Solitude

The Stafford WSA is long and narrow, stretching eight miles in length and $\frac{1}{2}$ to $1\frac{1}{2}$ miles in width. It is found in a rugged portion of the Missouri Breaks with steep and highly dissected coulees that are often sparsely vegetated. Since the unit has very few tall plants, there is very little screening from vegetation but topographic screening is abundant.

The opportunity for solitude is also affected by adjacent homes, vehicle use along surrounding roads, boat travel on the river and by four farm-ranch operations next to the WSA. The Stafford WSA is also part of a National Guard tactical jet fighter training zone with eight aircraft every day scheduled to fly over at 4,000 feet. Periodic disruptions of solitude should be expected throughout the study area.

These offsite impacts are well within both the sight and sound zone of 25% of the Stafford WSA.

Primitive Recreational Value

Typical recreational opportunities in the unit include horseback riding, hunting, hiking, sightseeing, photography and shoreline fishing. Hunting is the major use, usually involving vehicles traveling along the ridge tops of the north boundary.

Although there are some opportunities for primitive recreation, use is limited in various ways. The steep terrain channels use along the river or the finger ridges, while the lack of screening vegetation limits campsites to the few scattered groves of trees along the river. Rattlesnakes, the lack of water and the difficulty of travel during wet weather present hazards to the wilderness user.

Supplemental Values

This WSA, like most of the Missouri River Breaks, contains features of scenic and historical value. Steep coulees and clay cliffs offer stark contrast to the Missouri River. Evidence of the area's use by Indians and homesteaders can be found in the study area and an old wagon road forms its eastern border.

2. ERVIN RIDGE WSA (MT-066-253)

Land Description

This 10,200 acre unit is just north of the Missouri River and ten miles east of the Stafford (McClellan) Ferry crossing. Nearly 50% of the WSA lies within the Upper Missouri River Wild and Scenic Corridor. All the land within its border have Federal surface and subsurface ownership.

Solitude

About ten miles long and $\frac{1}{2}$ - $2\frac{1}{2}$ miles wide, this unit is irregularly shaped. The rugged topography of steep and highly eroded ridge lines tapers to narrow edges before dropping to the river. The terrain provides solitude but the steep slopes also channel visitors along the Missouri and to the ridge tops. Vegetation growing along drainages and on some ridge tops provides some screening, primarily in the eastern half of the unit.

Solitude in certain parts of this unit is affected by the configuration of the Ervin Ridge Wilderness Study area, outside impacts and by two cherry-stemmed roads. Inside the unit, the wilderness user is never more than a mile from the boundary.

Farming, vehicle traffic on the boundary and cherry-stemmed roads and activities around three homesites near the west side are distracting. This unit is part of a National Guard tactical jet fighter training zone, where up to eight aircraft daily are scheduled to fly at 4,000 feet. Periodic disruptions of solitude throughout the unit should be expected.

Primitive Recreational Values

Hunting and boating on the Upper Missouri Wild and Scenic River are presently the two most common forms of recreational use in the study area. Other forms of primitive recreation that could occur in the unit include horseback riding, hiking, sightseeing, photography and shoreline fishing.

Access to the area is limited. The main access points are through the Ervin Ridge and Barnard Ridge Roads and by boat from the Missouri River. Wet weather and snow often make these dirt roads impassable and can quickly seal off the area, limiting access to May-October during dry weather. The WSAs steep terrain channels use along the river, along coulee bottoms or on finger ridges.

Supplemental Values

The WSA is very scenic and rugged, combining steep slopes of exposed clay with narrow finger ridges. Trees are few. The area is historically significant with prehistoric artifacts being found and a few remnants of the homestead era still exist.

3. COW CREEK (MT-066-265)

Land Description

This 34,050 acre unit lies along the east side of Cow Creek between the borders of Blaine and Phillips Counties. Approximately 17,000 acres of this unit lie within the West HiLine RMP area. Of this unit, 2,018 acres are in the "Wild" Section of the Upper Missouri Wild and Scenic River Management Corridor. The border of the WSA is formed by roads, private land, Montana state land, the Missouri River and topographic contours.

Naturalness

Within the RMP Area, the WSA has one cherry-stemmed road and one developed area along the northwest boundary. Most of the development-reservoirs, vehicle ways and fences are associated with livestock grazing. Five petroleum drilling pads and access ways are also scattered throughout this portion of the WSA. The majority of these developments are found along ridge tops and are screened from view by the rugged topography and vegetation. This allows the WSA to maintain its predominately natural appearance.

Solitude

Most of the terrain is rugged and steep because of the many drainages that feed into Cow Creek and the Missouri. Ponderosa pine, lodgepole pine, Douglas fir and juniper are prevalent throughout the WSA, with the densest stands growing along the northern end. Topography and vegetative screening provide excellent opportunities for solitude.

Solitude is affected by the unit's configuration and a cherrystem road. A farming operation which borders the study area near John Coulee and a ranch (T. 25 N., R. 22 E., Section 8) reduces solitude on about 1,800 acres in the northern end.

In the northwestern end of the unit near Hay Coulee, a user would never be more than a mile from the perimeter of the unit. The cherry-stemmed road along the ridgetop and an adjacent ranch operation would force a visitor to follow the narrow drainages to seek solitude.

Old buildings and vehicle ways near the Cow Island Recreation Area are visible from about 500 acres of the southwest end of the WSA. Occasional motorized boat traffic can be seen from the ridges in this part of the unit.

Another offsite distraction comes from the Landusky Mine in the Little Rocky Mountains, 15 miles away. Bright lights at night from the mine can be seen from a few locations in Cow Creek.

The WSA is in a National Guard jet fighter training zone; flights average eight daily at an altitude of 4,000 feet. Periodic disruptions of solitude should be expected.

Primitive Recreational Values

Primitive forms of recreation in the WSA include hunting, horseback riding, hiking, photography and rock climbing; hunting is the most popular at the present time. Hunting is normally limited to areas around access roads because of the difficulty of retrieving game. The Upper Missouri Wild and Scenic River, adjacent to the unit, has increased public awareness of the WSAs recreational opportunities. People floating the river often stop to hike and explore within the unit.

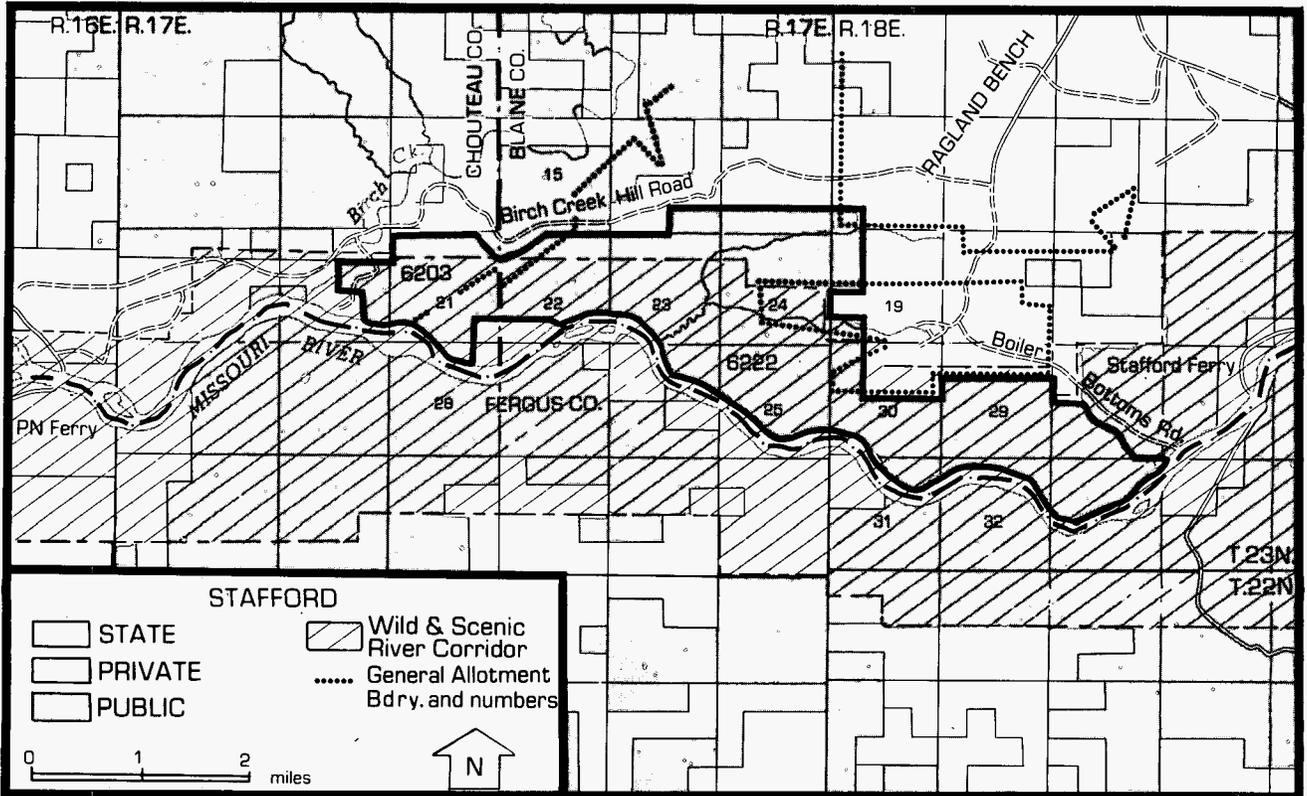
Access into Cow Creek is available along the northwest and southern boundaries and marginal access is also available from the Missouri River through public lands.

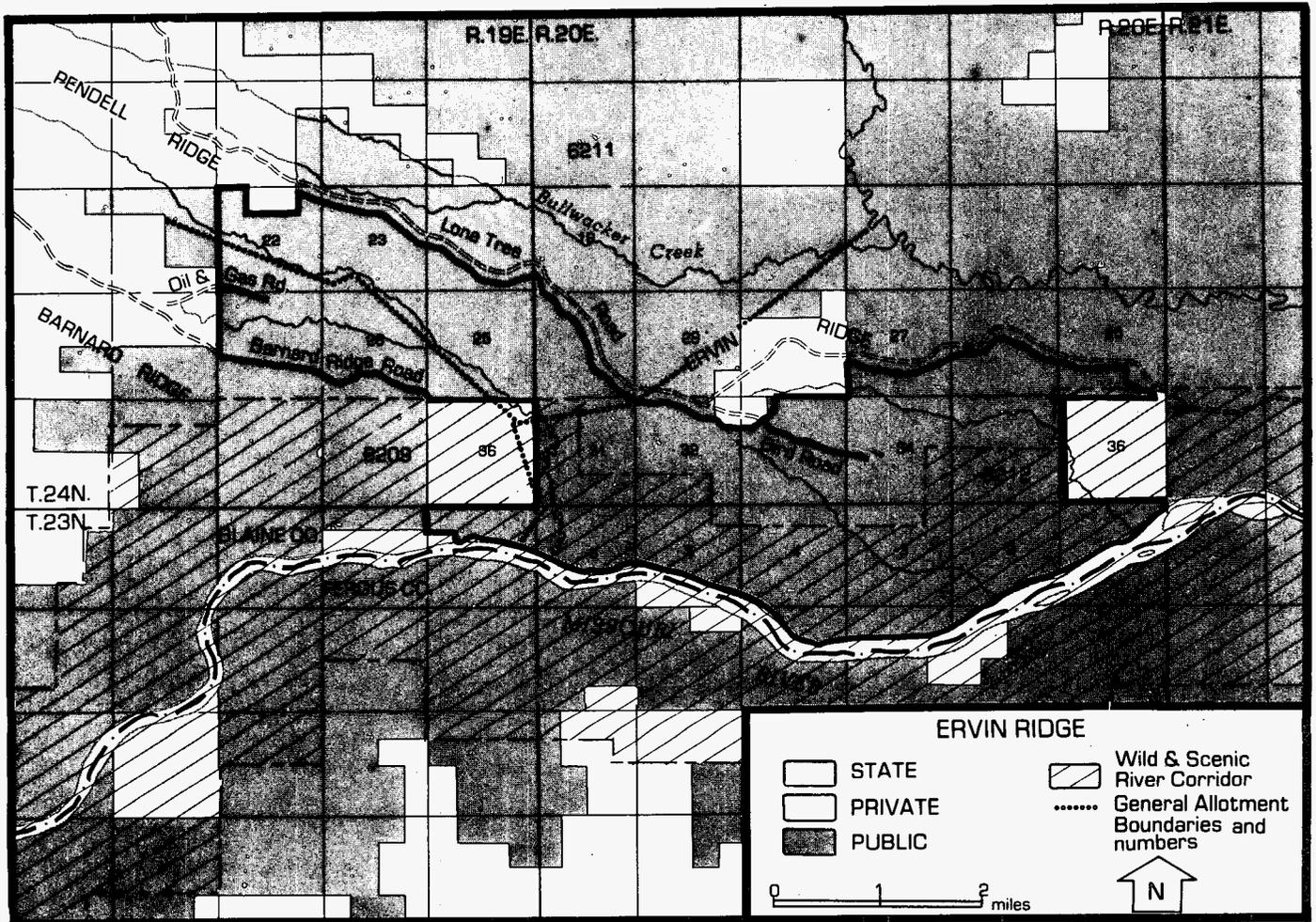
Other accesses are controlled by private landowners. Wet weather and snow normally limit access to May-October or during dry weather.

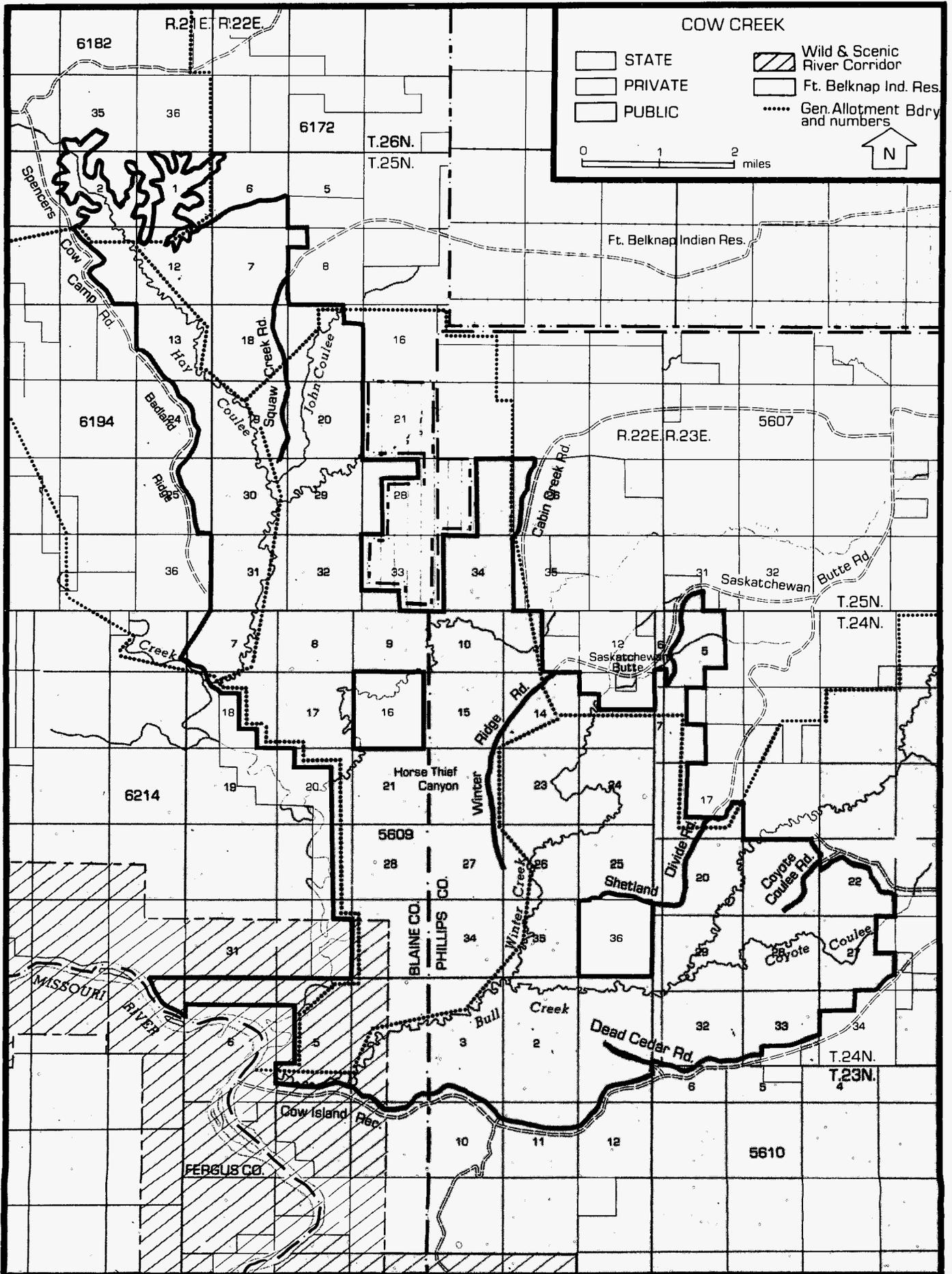
Supplemental Values

Although the area is rough and dry, scenic features are a notable supplementary attribute of the Cow Creek WSA. Wind and water have carved many castle-like formations suitable for climbing along some of the major drainages.

The WSA is also historically rich. Tipi rings, rock cairns and a buffalo jump indicate that the area was used extensively by early people. Along the west boundary, the Nez Perce Indians traveled the well known Cow Island Trail during their escape attempt to Canada in 1877.







APPENDIX 2.9: RAPTOR GUIDELINES

The failure of adult raptors to return to nest, eggs or young after human interference of an unfamiliar nature, is both serious and unpredictable. Because of this unpredictability, precaution should always be taken around any occupied nest or potential nesting territory.

Following are general recommended nest buffer zones related to various human activities. These recommended zones are not inclusive; details in terrain, vegetation, type and duration and familiarity of disturbance, specific temperament of individual birds, phase of nesting cycle, etc., all enter into determining the actual needed buffer zone at a given nest site. Preclusion of human activity at a given nest territory should be tempered with as many variables as possible and on a site specific basis.

<u>Activity</u>	<u>Recommended buffer zones</u>
Off-road vehicle use	1/4 mi - 1/2 mi
Camping	1/4 mi - 1/2 mi
Hiking	1/4 mi - 1/2 mi
Rock climbing	1/2 mi - 3/4 mi
Road construction	1/2 mi - 1 mi
Controlled burning	1 mi - 2 mi
Trail clearing	1/4 mi - 1/2 mi
Building/construction	1/2 mi - 3 mi
Mining/heavy equip or blasting	1 mi - 3 mi
Logging	1/2 mi - 1 mi
Aircraft flights (low altitude)	1/4 mi - 1 mi
Seismic	

Nesting chronology for most raptors can be divided into five phases. The following summarizes each phase, general sensitivity to disturbance and comments. This table should be used with table 1 to temper activity and zone buffers.

<u>Phase</u>	<u>Activity</u>	<u>Sensitivity To Disturbance</u>	<u>Comments</u>
I	Nest building includes courtship behavior	Extremely sensitive, period most likely to desert.	1. Most critical time period from the standpoint of desertion.
II	Egg laying	" "	2. Human disturbance of even limited duration may cause desertion, not only of nest sites, but also of long established territories.
III	Incubation	" "	3. Nest site tenacity is weakest on new territories or when birds first establish their territories. 4. Flushed birds may puncture, crush or eject eggs from nest 5. Flushed birds leave eggs unattended. Eggs susceptible to cooling, loss of moisture, overheating and predation.
IV	Hatching and nesting rearing	Moderately Sensitive	1. As hatching approaches most birds become tenacious with clutches of eggs. 2. Generally uncommon to desert a nest after young have hatched.
V	Post Fledging	Moderately Sensitive	3. 1st half of nestling period, young most susceptible to elements. 4. Flushed birds may trample young or eject them from nest. 5. Unattended nestlings may chill or overheat, susceptible to predation.

(Table 2 Continued)

<u>Phase</u>	<u>Activity</u>	<u>Sensitivity To Disturbance</u>	<u>Comments</u>
			6. Nestlings may miss feedings. May affect overall health of young birds.
			7. Premature Fledging-Threat to young prematurely leaving nest due to disturbance.

Approximate nesting dates for some raptors that occur in the West-Hi-Line Area

<u>Species</u>	<u>Approximate Dates of Nesting Season</u>
*Golden Eagle	Feb 1 - July 30
*Northern Goshawk	April 15 - August 15
*Ferruginous Hawk	April 1 - July 30
*Mevlin	April 15 - August 15
*Prairie Falcon	Feb 15 - July 30
*Northern Saw-whet Owl	March 1 - August 30
*Coopers Hawk	April 15 - August 15
*Burrowing Owl	March 15 - July 15
Sharp-Shinned Hawk	May 1 - August 1
Swainson's Hawk	April 15 - August 1
Northern Harrier	April 1 - July 1
Screech Owl	March 1 - June 1
Great-horned Owl	Jan 1 - August 1
Short-eared Owl	March 1 - August 1

*Species of special interest or concern

PEREGRINE FALCON
CURRENTLY OCCUPIED NESTING HABITAT

No currently occupied peregrine falcon nesting eyries have been located in the West HiLine area, however, a historical nest site is known for the Kevin Rim.

- Should nesting peregrines be discovered, site specific nest management plans should be developed for each nesting territory. References used to develop these plans should be: the approved Recovery Plan and Guidance from the Montana Peregrine Falcon Working Group.

APPENDIX 2.10: LIMITS OF ACCEPTABLE CHANGE

The Limits of Acceptable Change concept has been developed during the last decade or so as a supplement to carrying capacity determinations. It is based on the premise that recreational use of an area can diminish the quality of both the natural environment and the recreation experience. Concern about overuse causing negative impacts on the ecological and social environments of an area has led managers to try to establish carrying capacities. This approach has focused attention on the amount of use and the search for a specific number of people that can be allowed to use an area without causing unacceptable changes to the natural environment or the recreation experience.

This approach has several problems. First of all, the carrying capacity of an area can vary depending on the objectives for which an area is managed. An acre of city park can accommodate more people than an acre of wilderness. Secondly, much of the adverse impact of recreational use is not the result of too much use, but rather the kind of use, the behavior of visitors, and the timing and distribution of use. The amount of impact caused by a specific number of users can be affected by the activities of the user, the user's level of skill, the pattern of use and other factors. Furthermore, the amount of use is not always directly related to the amount of impact. A little use in a new area may cause a lot of impact, while a lot more use may cause only a little more impact. Because of these problems, it can be very difficult to come up with a specific number that is a river's "carrying capacity." Stankey et al contains a more detailed discussion of some of the problems associated with using carrying capacity as a planning framework.

The traditional carrying capacity approach to managing rivers often leads managers to institute a system of use rationing, which is a fairly heavy-handed management tool. The search for a single carrying capacity number also misdirects the managers' attention to numbers instead of trying to correct specific problems.

The Limits of Acceptable Change (LAC) concept can be used as an alternative to establishing carrying capacities for a river. In applying the LAC concept, managers assume that change to the ecological and social conditions of the area they are managing is going to occur, due to both natural and human factors. The goal of management then is to keep the character and rate of change due to human factors within acceptable levels.

Stankey et al. has outlined a procedure for implementing the LAC concept. According to their scheme managers first develop management objectives for the area they are managing and describe the recreation opportunities that will be provided. They then identify the ecological and social factors that are likely to change and select indicators which can be easily observed and used as a gauge to determine the amount of change that is occurring. For each indicator, managers then set a standard, which is a threshold value which defines the amount of change that is acceptable and unacceptable. The purpose of selecting indicators and standards is to provide managers with reference points so that they can judge whether the recreation opportunity they are trying to manage for is actually being provided over time. The standards serve as trigger devices rather than as management policy. If conditions deteriorate and a standard is approached, mitigating action can be taken to avoid unacceptable change. Managers retain the flexibility to implement any of a wide variety of mitigating actions. In the past, limits on the amount of use were frequently instituted when adverse impacts occurred, but the LAC concept allows the flexibility to implement many other kinds of management actions to control specific problems.

It is important to remember that an LAC standard is a maximum permissible level of impact or a critical threshold limit. It is not an objective that one is attempting to achieve. Managers should try to provide the best conditions possible rather than allowing conditions to deteriorate until the standard is reached. On the other hand, managers should not focus solely on the selected indicators, but should consider the whole river management situation. As management experience is gained and other issues develop in the future, there may be a need to select additional indicators or delete some indicators.

TABLE 1
NINE STEPS OF THE LIMITS OF ACCEPTABLE CHANGE
PLANNING PROCESS

-
1. Identify area issues and concerns.
 2. Define and describe opportunity classes.
 3. Select indicators of resource and social conditions.
 4. Inventory existing resource and social conditions.
 5. Specify standards for resource and social indicators for each opportunity class.
 6. Identify alternative opportunity class allocations reflecting area issues and concerns and existing resource and social conditions.
 7. Identify management actions for each alternative.
 8. Evaluate and select a preferred alternative.
 9. Implement actions and monitor conditions.
-

- (1) USDA - Forest Service. 1986. Flathead Wild and Scenic River: Recreation Management Direction. Amendment to Flathead National Forest Plan Management Area 18 Direction, March.
- (2) Stankey, G. H., D. N. Cole, R. C. Lucas, M. E. Petersen and S. S. Frissell. 1985. The Limits of Acceptable Change (LAC) System for Wilderness Planning. USDA - For. Serv., Intermountain Forest and Range Exp. Sta., Gen Tech. Report, INT - 176, pp. 37.
- (3) Hendee, J. C., G. H. Stankey, and R. C. Lucas. 1978. Wilderness Management. USDA - Forest Service Misc. Publ. 1365, 381 p.
- (4) Washburn, Randel F. 1982. Wilderness Recreational Carrying Capacity: Are Numbers Necessary? J. For. 80(11): 726-728.
- (5) Cole, David N. 1981. Managing Ecological Impacts at Wilderness Campsites: An Evaluation of Techniques. J. For. 79(2): 86-89.
- (6) Stankey, G. H., S. F. McCool. 1984. Carrying Capacity in Recreational Settings: Evolution, Appraisal, and Application. Leisure Sciences 6(4): 453-473.

APPENDIX 3.1: LEGAL DESCRIPTION OF THE KEVIN RIM AREA

T. 35 N., R. 3 W., PMM

Section 3: Lots 3, 4, SW $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$, SW $\frac{1}{4}$
Section 4: Lots 1-4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$
5: 1, 2, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$
6: SE $\frac{1}{4}$
7: Lots 3, 4, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$
8: NW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$, NE $\frac{1}{4}$, W $\frac{1}{2}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$
17: All
18: Lots 3, 4, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$
19: Lots 1, 2 NW $\frac{1}{4}$, NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, E/2NW $\frac{1}{4}$
20: NE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$

T. 36 N., R. 3 W., PMM.

Section 4: Lots 3, 4
17: S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$, SE $\frac{1}{4}$
20: E $\frac{1}{2}$ NW $\frac{1}{4}$
22: SW $\frac{1}{4}$ SE $\frac{1}{4}$
27: N $\frac{1}{2}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$
28: N $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$, NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$

APPENDIX 3.2: LEGAL DESCRIPTION OF THE SWEET GRASS HILLS

West Butte of the Sweet Grass Hills.

T. 37 N., R 1 E., PMM.

- Section 13: Lots 4, 5 $SE\frac{1}{2}SW\frac{1}{2}$, $SW\frac{1}{2}SE\frac{1}{2}$
14: Lots 1-3, $W\frac{1}{2}NE\frac{1}{2}$, $E\frac{1}{2}SW\frac{1}{2}$, $SW\frac{1}{2}SW\frac{1}{2}$
15: $SE\frac{1}{2}SE\frac{1}{2}$
24: Lots 1-4, $W\frac{1}{2}E\frac{1}{2}$, $NE\frac{1}{2}NW\frac{1}{2}$, $E\frac{1}{2}SW\frac{1}{2}$, $SW\frac{1}{2}SW\frac{1}{2}$
25: Lots 1-3, 5, 6, 8-10, $SW\frac{1}{2}NE\frac{1}{2}$, $S\frac{1}{2}NW\frac{1}{2}$, $NE\frac{1}{2}SW\frac{1}{2}$,
 $NW\frac{1}{2}SE\frac{1}{2}$
26: $SE\frac{1}{2}NE\frac{1}{2}$

T. 37 N., R 2 E., PMM.

- Section 19: Lot 4
20: $NW\frac{1}{2}NE\frac{1}{2}$, $NE\frac{1}{2}NW\frac{1}{2}$
30: Lot 1-4, $S\frac{1}{2}NE\frac{1}{2}$, $SE\frac{1}{2}NW\frac{1}{2}$, $E\frac{1}{2}SW\frac{1}{2}$, $SE\frac{1}{2}$
31: Lots 1-3, $NE\frac{1}{2}$, $E\frac{1}{2}NW\frac{1}{2}$, $NE\frac{1}{2}SW\frac{1}{2}$, $N\frac{1}{2}SE\frac{1}{2}$

East Butte of the Sweet Grass Hills.

T. 36 N., R. 4 E., PMM.

- Section 13: $NW\frac{1}{2}NE\frac{1}{2}$, $W\frac{1}{2}$
24: Lots 1-4, $N\frac{1}{2}NE\frac{1}{2}$, $SW\frac{1}{2}NE\frac{1}{2}$, $NE\frac{1}{2}NW\frac{1}{2}$
25: Lots 1, 2, 4, 6, $E\frac{1}{2}NE\frac{1}{2}$
36: Lots 1-3, 5

T. 36 N., R. 5 E., PMM.

- Section 6: $SE\frac{1}{2}NE\frac{1}{2}$, $E\frac{1}{2}SE\frac{1}{2}$
7: $E\frac{1}{2}$
8: $W\frac{1}{2}SW\frac{1}{2}$
17: $W\frac{1}{2}W\frac{1}{2}$
18: $N\frac{1}{2}NE\frac{1}{2}$
19: Lots 2-9, PATENT 20510, PATENT 20511, $SE\frac{1}{2}SW\frac{1}{2}$
20: Lots 1-5, PATENT 20511, $W\frac{1}{2}NE\frac{1}{2}$, $SE\frac{1}{2}NE\frac{1}{2}$, $NW\frac{1}{2}$,
 $NW\frac{1}{2}SE\frac{1}{2}$
29: Lots 1-5, 8-10, $SW\frac{1}{2}NW\frac{1}{2}$, $N\frac{1}{2}SW\frac{1}{2}$, $SW\frac{1}{2}SW\frac{1}{2}$
30: Lots 1-4, $S\frac{1}{2}NE\frac{1}{2}$, $E\frac{1}{2}W\frac{1}{2}$, $SE\frac{1}{2}$
31: Lot 1, $E\frac{1}{2}NE\frac{1}{2}$, $NW\frac{1}{2}NE\frac{1}{2}$, $NE\frac{1}{2}NW\frac{1}{2}$
32: Lots 1-3, $E\frac{1}{2}NE\frac{1}{2}$, $SW\frac{1}{2}NE\frac{1}{2}$

APPENDIX 3.3: LEGAL DESCRIPTIONS OF THE COW CREEK AREA

T. 23 N., R. 21 E.	Acres		
Section 1: Lot 1	39.99	Section 32: All	640.00
2	32.20	Section 33: W $\frac{1}{2}$	320.00
7	39.68	W $\frac{1}{2}$ E $\frac{1}{2}$	160.00
T. 23 N., R. 22 E.		T. 25 N., R. 21 E.	
Section 4: Lot 3	23.44	Section 3: S $\frac{1}{2}$ S $\frac{1}{2}$	160.00
4	23.41	Section 4: S $\frac{1}{2}$ N $\frac{1}{2}$	160.00
5	40.00	S $\frac{1}{2}$	320.00
6	40.00	Section 5: S $\frac{1}{2}$ S $\frac{1}{2}$	160.00
12	40.00	S $\frac{1}{2}$	320.00
Section 5: Lot 1	23.31	Section 8: E $\frac{1}{2}$ E $\frac{1}{2}$	160.00
2	23.13	NW $\frac{1}{2}$ N $\frac{1}{2}$	40.00
3	22.95	Section 9: All	640.00
4	22.77	Section 10: All	640.00
5	40.00	Section 11: SW $\frac{1}{2}$ SW $\frac{1}{2}$	40.00
6	40.00	Section 14: W $\frac{1}{2}$	320.00
7	40.00	Section 15: All	640.00
8	40.00	Section 16: E $\frac{1}{2}$	320.00
9	40.00	N $\frac{1}{2}$ NW $\frac{1}{2}$	80.00
10	40.00	Section 21: E $\frac{1}{2}$ E $\frac{1}{2}$	160.00
11	40.00	W $\frac{1}{2}$ SE $\frac{1}{2}$	80.00
12	40.00	Section 22: All	640.00
13	40.00	Section 23: W $\frac{1}{2}$	320.00
14	40.00	Section 25: SW $\frac{1}{2}$ SW $\frac{1}{2}$	40.00
15	40.00	Section 26: W $\frac{1}{2}$	320.00
16	40.00	S $\frac{1}{2}$ SE $\frac{1}{2}$	80.00
18	40.00	Section 27: All	640.00
19	40.00	Section 28: E $\frac{1}{2}$ NE $\frac{1}{2}$	80.00
20	40.00	Section 34: All	640.00
Section 6: Lot 1	22.65	Section 35: All	640.00
2	21.61	Section 36: W $\frac{1}{2}$	320.00
3	22.56	W $\frac{1}{2}$ E $\frac{1}{2}$	80.00
4	22.51	T. 24 N., R. 22 E.	
5	19.69	Section 7: Lot 1	50.68
6	34.99	2	50.75
7	40.00	3	50.84
8	40.00	4	50.91
9	40.00	5	43.48
10	40.00	6	34.09
11	39.08	7	40.00
12	25.41	8	40.00
13	15.24	9	40.00
14	18.98	10	40.00
15	21.30	11	40.00
20	18.03	12	40.00
21	15.60	13	40.00
29	46.26	14	40.00
30	40.00	15	34.07
31	38.02	Section 8: Lot 4	50.68
Section 7: Lot 1	42.06	W $\frac{1}{2}$ SW $\frac{1}{2}$	80.00
T. 24 N., R. 21 E.		Section 16: W $\frac{1}{2}$ SW $\frac{1}{2}$	80.00
Section 12: Lot 1	51.08	Section 17: W $\frac{1}{2}$ NW $\frac{1}{2}$	80.00
2	51.19	S $\frac{1}{2}$	320.00
3	51.31		
4	51.42		
S $\frac{1}{2}$	320.00		
Section 11: Lot 1	51.53		
2	51.64		
3	51.74		
4	51.85		
N $\frac{1}{2}$ S $\frac{1}{2}$	160.00		
S $\frac{1}{2}$ SE $\frac{1}{2}$	80.00		
Section 13: All	640.00		
Section 14: E $\frac{1}{2}$	320.00		
Section 24: All	640.00		

Section 18: Lot	1	40.00
	2	40.00
	3	34.09
	4	34.13
	5	40.00
	6	40.00
	7	40.00
	8	40.00
	9	34.19
	10	34.23
	11	40.00
	12	40.00
	E $\frac{1}{2}$	320.00
Section 19: Lot	1	40.00
	2	40.00
	3	34.34
	4	34.48
	5	40.00
	6	40.00
	7	40.00
	8	40.00
	9	34.64
	10	34.78
	11	40.00
	12	40.00
	E $\frac{1}{2}$	320.00
Section 20: All		640.00
Section 21: W $\frac{1}{2}$		320.00
	W $\frac{1}{2}$ NE $\frac{1}{4}$	80.00
Section 28: W $\frac{1}{2}$		320.00
	W $\frac{1}{2}$ E $\frac{1}{2}$	160.00
Section 29: All		640.00
Section 30: Lot	1	40.00
	2	40.00
	3	34.88
	4	34.90
	5	40.00
	6	40.00
	7	40.00
	8	40.00
	9	34.94
	10	34.96
	11	40.00
	12	40.00
	E $\frac{1}{2}$	320.00
Section 31: Lot	7	40.00
	8	40.00
	11	40.00
	12	40.00
	E $\frac{1}{2}$	320.00

APPENDIX 4.1: CUMULATIVE IMPACTS OF PREVIOUS PLANNING EFFORTS

This appendix contains a summary discussion of the cumulative impacts identified in the Prairie Potnoles EIS (PPEIS) 1982, the Missouri Breaks Grazing EIS (MBGEIS) 1979, the Missouri Breaks Wilderness Suitability Study EIS (MBWEIS) 1982, the Lewistown Oil and Gas Environmental Assessment of BLM Leasing Program (O & G EA) 1981, and the Forest Product Programmatic EA (FPPEA) 1983. These documents are regional EISs and EAs which analyze proposed actions for grazing, wilderness, oil and gas and forest product management on all or portions of the West HiLine RMP area. The guidance from these documents has been carried forward in the management common to all alternatives portion of this document. The cumulative impacts identified in the above documents will be the same under the implementation of any alternative in the West HiLine RMP/EIS. Further information on impacts from grazing, wilderness, oil and gas and forest product management can be found in the respective document. These documents may be found at the Lewistown District Office and at the Resource Area Offices in Havre, Great Falls, Malta and Lewistown.

Air Quality

No residual adverse impacts to air quality are expected from grazing, recreation and wilderness. (PPEIS, MBGEIS, MBWEIS)

No residual adverse impacts from oil and gas activities on the macroclimate would be expected. Some effects on the microclimate would remain after abandonment and/or restoration of disturbed areas because of soil compaction and changes in water infiltration rates.

The mitigation of impacts on air quality would reduce, but not entirely eliminate, the adverse impacts from oil and gas operations. Some pollution from internal combustion engines, waste gas release and accidental fires or explosions might still occur. (O&G EA)

Soils

Erosion on public lands will decrease in the long term as sediment yields and water yields decrease. Soil losses from range developments will be insignificant. Consumptive water use by livestock due to increased numbers will increase slightly. More vegetation production will result, with 50% of the increase available for non-consumptive uses, improving watershed protection. (PPEIS)

Because grazing management provisions in the proposed action would reduce livestock grazing impacts on soils and watershed in the long term, no residual adverse impacts would be anticipated from these measures.

Erosion losses from land disturbance due to construction of range improvements and water developments total 38,086 tons. Mechanical treatments would reduce existing erosion losses, resulting in a decrease in the net residual adverse watershed impacts.

Lands disturbed for water developments would be permanently removed from forage production. Additional lands surrounding these developments, but not presently quantified, would experience accelerated erosion due to increased livestock grazing and trampling. These latter adverse impacts should be outweighed by the reduction in such watershed damage along present drainage bottoms and adjacent to other present water sources. (MBGEIS)

Overall residual erosion impacts would be moderate during drilling, road construction, pipeline construction and other surface disturbing activities. With the prescribed mitigating measures, the impacts might be reduced to slight within one year after rehabilitation.

Oil spills generally have little effect on soil erosion due to the biodegradability of crude petroleum, but the effects on vegetation is more significant. Spills of salt solutions, on the other hand, might cause longer periods of soil sterility with the potential of causing severe erosion on steep slopes.

There would be a possibility of localized, severe erosion due to oil or saltwater spills, improper construction or abandonment measures and unsupervised development. Such isolated incidences are expected to be rare.

If the lands associated with oil and gas activity are reclaimed they will become reestablished with native vegetation over time. The length of time required for the lands to develop the production capability they had before oil and gas operations is often so great (many decades to centuries), however, that this effect is considered a long-term residual impact.

Depending upon the number of developed wells in a given area, unreclaimed lands could cause a substantial loss in land productivity. For example, present regulations allow the development of one oil well for every 40 acres of land and one gas well for every 160 acres of land. Assuming that an average drilling site, including wells, pads, storage tanks, service roads, etc., would disturb an estimated 3 acres of land surface, then, at maximum development, the amount of productive land lost to oil development would likely approximate 48 acres per square mile (7 1/2% of 640 acres), or about 22 acres per square mile (3 1/2% of 640 acres) for lands developed for natural gas production. (O&G EA)

Soil compaction could occur along roads, landings, and skid trails which could result in minor soil erosion. (FPPEA)

Water

Impacts to water from actions analyzed in the PPEIS are described in the first paragraph under soils.

Withdrawal of water from new wells and development of springs would remove an insignificant amount of water from the aquifers. Wells that would tap artesian aquifers, if controlled, would not lower the artesian pressure surface noticeably, and recharge to water-table aquifers would normally exceed potential withdrawals. Interception of precipitation by rainfall catchment basins would have no measurable effect on ground water. Surface manipulation, by increasing potential infiltration, would increase potential recharge for a short time. After new vegetation became established, however, recharge to the aquifers would be almost the same as it is at present.

Peak discharge could be reduced if the flood events that produce them would occur when receiving reservoirs were empty or only partly full. A possible unavoidable impact of peak discharge would be the washing out of the dam or spillway when reservoirs are full. Localized flooding, whose magnitude would depend on the shape and vegetal cover of the stream valley below the dam, would be a possible consequence. The valley would be subjected to rapid short-lived erosion, and the acquired sediment would be deposited over an indeterminate distance downstream.

Saline seeps are wet, saline soils in drainages below reservoirs and on some other slopes and drainages. Water impoundment structures often produce areas of seepage below them. Water percolates through reservoirs, dams and abutments, dissolving salts from local soils. These salts accumulate at the soil surface by the upward capillary movement of water and its subsequent evaporation. Some saline seep water from the seeps moves down drainages causing changes in vegetation composition and reducing soil productivity, particularly on riparian soils.

The proposed reservoirs would each accumulate sediment eventually, they become filled to the extent that they no longer are effective water retention facilities. Reservoirs below easily eroded barren shale beds could become useless in 0 to 5 years, reservoirs below thickly grassed stable slopes may contain water for scores of years. (MBGEIS)

Through enforcement of the recommended mitigating measures, sedimentation impacts would be reduced significantly. There is the possibility that revegetation might result in sediment yield rates that are less than before land disturbance in some instances.

Operations requiring stream crossings and activities on floodplains and near water could cause significant impacts during and immediately after surface disturbances. These impacts would be slight after one year of rehabilitation.

Measures to reduce the impacts on groundwater quality of oil and gas well construction and the drilling of seismic shot holes are included in both GS and Montana regulations. Because subsurface drilling, reinjection and plugging are regulated by GS, these impacts cannot be mitigated by BLM.

The Montana State Water Quality Bureau regulates the discharge of pollutants through a permit system (The Montana Pollutant Discharge Elimination System). The system controls significant point-source discharges by inspections to ensure compliance. Discharge of formation or treater waters from oil fields is regulated by this system. Consequently, residual adverse impacts on surface water quality from discharge waters should generally be slight.

The impact presenting the greatest hazard to surface water would be from accidents during oil and natural gas development and production stages. These could include oil spills, leaks, brine pit overflows and blowouts. Safety measures like protective dikes and standby cleanup equipment are required by Montana law and GS regulations. These measures reduce the impact both in terms of the volume and the length of the exposure to pollutants.

Unusual acts of nature might result in the failure of earthworks, mudpit and brine overflows and surface water runoff capable of transporting brine and oil to streams, lakes and wetlands. (O&GEA)

Mineral Resources

Opportunities for exploration or development of oil and/or natural gas reserves could be restricted or foregone in areas recommended for wilderness. Natural gas potential is rated high for entire area recommended for wilderness designation. Approximately 5,593 acres with high potential would be available for exploration and/or development in areas not recommended as suitable. (MBWEIS)

Vegetation

Rangelands in poor and fair ecological range condition will be improved to good and excellent ecological condition in allotments with existing and proposed AMPs. Some poor and fair condition rangelands will not be improved because of low potential soils within these allotments. Other poor and fair condition rangelands will not be improved because of scattered land patterns and/or are a small part of an allotment in overall good or better condition. (PPEIS)

Short-term unavoidable impacts from the loss of forage production on sprayed, contour furrowed, and plowed and seeded lands would occur. Within two to three years, these lands would be producing more forage than before treatment, and in several additional years would have more than compensated for the lost productivity.

Long-term unavoidable impacts would occur. On land that would be permanently removed for the life of range improvement projects such as wells, reservoirs, stock tanks, and other water developments are proposed. (MBGEIS)

The permanent loss of native vegetation caused by the construction of roads and development facilities would occur. Recovery on other disturbed areas such as pipelines, seismograph trails, drill pads and drainage crossings might occur several years after abandonment.

Soil and habitat sterilization caused by acids or salts would partially or entirely remove vegetation in affected areas. Blowouts, fires and spills of caustic solutions could cause the significant loss of vegetation if large areas were affected.

Invader species and noxious forms of vegetation might replace native species on some disturbed sites if exposed to a seed source. The spread of invaders to off-site areas would have a negative effect on the composition of vegetation. The rehabilitation of the area and the seeding of native species suitable to the soils and climate would reduce the time required to replace the present plant composition if overrun by invader annuals and perennials. Despite weed control and rehabilitative seeding, noxious weeds would crop up in most areas in the Lewistown District.

The length of time required for restoration of native species would depend upon the composition of the vegetation disturbed. Grassland vegetation types could be restored rather quickly, so the negative impact would be short-term. Destruction of sagebrush and streamside brush and trees would create a long-term impact. Forest cover species could also be adversely affected by road and pad construction and pipelines. The length of time needed for rehabilitation, in this case, would be dependent upon the condition of the site. (O&GEA)

Wildlife and Fisheries

On present and new AMP allotments, deer and antelope numbers are projected to double from 1979 levels in the long term. Moderate increases in residual vegetation from rest and deferment will improve habitat conditions for upland game birds and nongame wildlife on these allotments. Duck and goose populations will have slight increases, principally due to the construction of reservoirs and nesting islands. High value riparian habitat, reservoir shoreline and saline seep vegetation which receives periodic rest and deferment periods of 4-10 year will improve significantly. Riparian areas not receiving these treatments will either decline or remain static.

Despite improved grazing management, continued siltation will result in the loss of one fisheries reservoir.

The more uniform grazing pressure that would be made possible by the water developments and fencing that are part of the proposed action would cause reductions in sharp-tailed grouse and mule deer populations by removing residual cover and browse species that otherwise would not be grazed by livestock. These reductions cannot be quantified, but would be significant locally.

Successional advancement (i.e., from fair to good range condition class) would cause declines in some species of small mammals and nongame birds which prefer early successional stages. For example, changes that involve increased vegetation cover would reduce deer mouse populations.

The proposed sagebrush spraying and plowing and seeding would have significant local negative impacts on sage grouse, antelope and mule deer. Some negative impacts to antelope from these treatments and contour furrowing are also possible.

Unavoidable adverse impacts to riparian habitats would continue for at least two years until inventory and protection can be initiated.

No negative impacts on endangered species are anticipated. If any endangered species such as peregrine falcons or black-footed ferrets are observed in the ES area, all necessary steps to protect them including consultation with the U.S. Fish and Wildlife Service would be taken. (MBGEIS)

Wilderness could provide some benefits to wildlife by providing a secure area and protecting habitat. On the other hand large blocks of land with limited hunting access could reduce the effectiveness of hunting as a game management tool. (MBWEIS)

Most of the direct mortality to individual animals might still occur. The death of small animals from heavy equipment could be unavoidable. Vehicle-animal collisions and the illegal shooting of game and raptors, as well as indiscriminate shooting of other animals, would remain a possibility. Accidental spills of oil or other toxic substances might still happen, causing significant animal losses from polluted water sources.

The destruction of habitat that included important food and cover areas would affect various wildlife populations until adequate restoration occurred. If a game species were reduced, this would be reflected in a lower harvest to sportsmen. Big game and some other animals dependent on shrubs and trees for food or cover could suffer long-term losses, as these vegetation types do not recover quickly.

Habitat loss from permanent structures such as buildings and roads, would reduce available living space, either permanently or for a long period of time. No surface occupancy stipulations could significantly lower this loss. Allowing the industry to operate in any given area would often result in an adverse impact on one species while protecting another. Thus, some wild-life loss would undoubtedly occur, requiring a ranking of the importance of each species.

Oil and natural gas development and human activities would significantly affect species that are intolerant to such things. Ensuring that these activities are allowed only in the less important habitats or during non-critical periods of time would lessen this impact. (O&GEA)

Grazing

In the long term, forage production will increase by about 15% overall. Within AMP allotments the expected increase is about 27%. Riparian vegetation along streams and below reservoirs will significantly increase. Annual red meat production will increase by 3,344,670 pounds. (PPEIS)

No change in current grazing practices is projected on allotments with no AMPs, they will continue to be grazed as they are now. This in most cases involves season-long or continuous spring use which would adversely affect plant vigor, reproduction, seedling establishment, litter accumulation, and soil stability.

Vegetation would be destroyed by construction equipment working on the range improvements. This short-term loss would be on equipment storage sites, temporary access roads, and the immediate area around the construction sites.

There would be no change in stocking levels on lands recommended for wilderness. There could be minor additional costs to operators due to restrictions of motorized vehicle use. (MBWEIS)

Cultural

The application of mitigating measures in the form of thorough inventory and avoidance of sites which would be affected by range improvement projects would eliminate many impacts to prehistoric or historic sites.

Where avoidance of sites is not possible, some residual adverse impacts would occur. The advance planning and careful excavation of sites that would otherwise be destroyed would contribute information to the archaeological or historical record. However, archaeological methods are constantly being improved, and those excavated sites would represent an irretrievable resource commitment in that the opportunity would be lost to study the sites with any newly developed archaeological techniques.

All allotments are not likely to be inventoried for prehistoric and historic sites within the next five or ten years. The impacts from livestock trampling therefore could not be mitigated until those sites were actually located. This could cause loss of valuable cultural information.

Any buried cultural material found in the course of construction work would probably be adversely impacted. The nature of archaeological excavation is such that slow, painstaking work is required to recover all possible information. Emergency excavation in a short timeframe, necessary to minimize construction delays, would probably mean that all information would not be recovered. Also, these sites could not be restudied with improved methods. It is not known, however, if any prehistoric or historic sites would be affected in this way. (MBGEIS)

Oil and gas operations may also cause residual adverse impacts to sites eligible for the National Register which cannot be avoided. The impacts might consist of unwanted visual intrusions and destruction of sites not mitigated or identified before the operations occurred. However, such instances would be quite rare. (O&GEA)

Recreation

On allotments with improved rangeland conditions, hunting opportunities will improve significantly. A moderate increase in fishing quality will occur from the elimination of livestock grazing on some of the fisheries reservoirs. Access and ORV travel will decrease slightly because of fences and surface disturbances caused by mechanical treatments. Opportunities for prairie dog shooting may be reduced. Effects on wilderness and visual resources will be insignificant. (PPEIS)

In riparian areas and along shoreline areas where livestock grazing is allowed, impacts to hunting and fishing opportunities associated with adverse impacts to fish and wildlife habitat would continue.

Conflicts between sport shooting enthusiasts and livestock would continue on the public lands within grazing allotments, presenting shooting hazards to livestock.

Any fencing done along the Upper Missouri Wild and Scenic River to reduce recreationist/livestock conflicts would present visual intrusions adversely impacting the visual resource, reducing scenic values.

Vegetation manipulation practices would have residual adverse impacts on scenic values by creating unnatural contrasts on the landscape.

Any range improvements placed on the public lands where they can be viewed by recreationists would produce visual intrusions adversely impacting the visual resource, reducing scenic values.

In areas along the Upper Missouri Wild and Scenic River where livestock grazing is allowed, potential livestock/recreationist conflicts would exist or continue.

Fence construction would create residual adverse impacts to cross-country travel by off-road vehicles and snowmobiles by producing hazards and barriers to movement. (MBGEIS)

Primitive non-motorized recreational opportunities would be preserved or enhanced on areas which would be closed to motorized vehicles. Recreational use is not expected to increase in designated wilderness areas over present low levels. (MBWEIS)

Impacts that diminish or eliminate hunting, fishing or the general enjoyment of the outdoors on public lands would be considered adverse to recreational values. These impacts are listed under the "Water," "Animals," "Aesthetics," and "Wilderness" sections of this document. (O&GEIS)

Visual

Regardless of how successful the mitigating measures for range developments are, there would still be some modifications to the basic elements resulting in unavoidable visual impacts to the ES area as a result of implementing the proposed action. These adverse impacts are a direct result of constructing additional range improvements and implementing multiple pasture grazing systems. (MBGEIS)

With proper reclamation, the long-term residual impacts could be minimal. The short-term impacts could also be minimized through the proper enforcement of stipulations, e.g. requiring painting or camouflaging structures. As mentioned above, this is most effectively done at the time of the prestack or predrill application since requiring such stipulations after a field is in production would involve additional coordination. It is more efficient for the operator to make all changes during the initial construction. (O&GEA)

Any cutting of timber is aesthetically unacceptable to some people, even when all reasonable mitigating measures are applied. Road cuts could have a long-lasting, adverse, aesthetic effect. (FPPEA)

Wilderness

Residual adverse impacts to wilderness values would result from the implementation of any proposed range improvement project found acceptable for placement in a wilderness study area. The magnitude and significance of these impacts is unknown. If a project is removed after a wilderness study area is designated "wilderness," the residual adverse impact becomes zero. Projects acceptable within a designated "wilderness" would continue to display those residual impacts. Range improvement projects not allowed in a wilderness study area would also have a residual adverse impact of zero.

Intensities of the residual impacts in a specific wilderness study area would depend on the characteristics of the site. Determinations must be done on a case-by-case basis to avoid problems with over-generalizations. (MBGEIS)

One area containing 21,590 acres would become part of the NWPS. These areas all include outstanding opportunities for solitude, diverse recreational opportunities and excellent scenery. This area is in the grama/needlegrass/wheatgrass ecotype subgroup and its inclusion would add to the quality and diversity of the system.

In the areas not recommended suitable, there is some potential for long-term loss of wilderness quality, primarily from oil and natural gas development. In almost all cases, change should come slowly. Four WSAs not recommended for wilderness contain portions of the Upper Missouri National Wild and Scenic River Corridor. Lands in this corridor will be managed to preserve their wild character. (MBWEIS)

On pre-1976 leases, with the wilderness stipulations, BLM has no control over oil and gas operations beyond dictating access and preventing undue or unnecessary degradation of the area. Therefore, any of a host of possible impacts could occur.

Temporary impacts would mar the area visually until rehabilitation hid the scars of two-track trails, blast holes, litter and possibly even some drill pads. Traces would not be significant and would be easily removable.

Continued use of abandoned vehicle trails made during oil and gas operations pose the greatest hazard to wilderness as far as residual impacts are concerned. Use, especially in wet conditions, could result in roads being developed from barely discernable vehicle compaction tracks.

If the procedures outlined in Section 2.3 "Wilderness" are followed, no long-term impacts from oil and gas operations would affect wilderness values on leases carrying the wilderness stipulation. The process allows for the separation and protection of wilderness study areas from other public lands as a whole without disqualifying impairments. (O&G EIS)

Economic and Social

In the short term some ranch operations would experience a disruption of grazing as mechanical treatments are applied and/or grazing systems implemented. Licensed livestock grazing levels would be reduced slightly following implementation of the proposed action. While these changes could represent a significant impact to a few individual operators in the short term, when land was out of production, they would be insignificant to the regional economy. The full implementation of AMPs would increase licensed use to above present levels. In the long term some operations would show an increase in livestock sales but most would experience no change. An economic gain will be realized by ranch operations with an increase in grazing permit values and ranch employment. These changes will improve the social well-being of ranch families (PPEIS & MBGEIS). If some areas became wilderness the value of ranches with BLM grazing permits for long term loan purposes would be reduced in the affected area (MBWEIS). Recreation opportunities would be enhanced with improved wildlife habitat, and maintaining and establishing new recreation visitor services. In the short term there would be little or no impact on recreation related earnings and employment. In the long term recreation expenditures would increase but this change would be insignificant to the regional economy. Attitudes show that imposition of federal government regulations is met with some resentment. Although government interference would be somewhat mitigated by the proposed action's effects not being outside the prevailing area, some resentment of the government's imposed management regulation would probably be present. However, general attitudes of residents toward BLM would be positive because this management offers a low level of development with improved range condition for livestock, wildlife and watershed (PPEIS). The potential loss of benefits from mineral reserves foregone cannot be calculated from information presently available (O&G EIS).