Chapter 2.0:
Alternatives Including the Proposed Action

2.1 Introduction

"Alternatives Including the Proposed Action" is the heart of this EA. This chapter describes the alternatives. Consideration of the Proposed Action is then based on comparison to the No Action alternative and on the analysis presented in Chapter 3.0 (Affected Environment and Environmental Consequences).

The comparison of the alternatives highlights differences between current fire management policies/strategies and the direction provided by the *2001 Review and Update of the Federal Wildland Fire Management Policy* (*2001 Federal Fire Policy*).

This chapter identifies how existing land use plan decisions could be amended to reduce accumulations of wildland fuels and help achieve resource objectives.

2.2 History of the Planning and Alternative Development Process

The alternative development process began in January 1998. The following narrative summarizes the alternative development process; a full accounting, including dates, is found in Chapter 4.0

- BLM staff initiated public participation by asking representatives from other groups, agencies, and organizations to identify issues and concerns. The State Director, State Fire Management Officer, and Project Leader also mailed letters to potentially interested/ affected agencies, groups, and individuals asking for issues and concerns. See Sections 1.4.1 and 4.2.

- Alternative development was initiated with a series of Interdisciplinary (ID) Team meetings. Resource and resource use staff from the Billings, Butte, Dillon, Lewistown, Great Falls, Malta, Miles City, Missoula, North Dakota, and South Dakota BLM Field Offices participated in these meetings.

- The ID Teams fully developed two alternatives (including the No Action) to consider in response to the goals identified in Section 1.3, within the constraints imposed by existing policy and guidance.

After the EA was released for public comment in August 2001, several changes to the alternatives were made, including:

- Preferred Alternative: One Fire Management Zone category was changed in response to public comment.

- Preferred Alternative: Specific RMP amendments to improve BLM's ability to implement the National Fire Plan and Federal Fire Policy were identified.

- Both Alternatives: Broad levels of treatment and guidelines for fire management to protect other resources were identified.

2.3 Alternative Design, Evaluation, and Selection Criteria

The following goals and objectives guided development of the alternatives. Key elements of the Federal Fire Policy are also summarized. Alternatives were developed to satisfy these goals, objectives and policy statements.

In some cases, the wildland fire itself may create conditions that would compromise these goals and objectives. Also, human life and safety would be prioritized above the achievement of any of these goals/objectives.

Goals related to fire and fuels management

- *Fire*: protect human life and property, reduce the risk and cost of severe wildland fire, sustain ecological health and function of fire-adapted ecosystems, minimize adverse effects of wildland fire suppression, and use fuels management methods to reduce hazardous fuels while meeting other resource objectives

- *Fish and Wildlife, including Special Status Species (Federally Threatened, Endangered, Proposed, and Candidate Species, BLM Sensitive Species and State Species of Concern)*: protect, maintain, preserve, and/ or restore habitats necessary for the conservation of species, and the ecosystems upon which they depend, to maintain viable and diverse populations of native plant, animal, and aquatic species including special status species

- *Vegetation:* improve ecosystem health and maintain or restore the range of ecological conditions in which native aquatic, vegetative, terrestrial and special status species evolved

- *Cultural, Paleontological*: protect high value cultural and paleontological resources

- *Designated Special Areas*: protect the characteristics that warranted designation of Areas of Critical Environmental Concern (ACECs), Wild and Scenic River corridors, Outstanding Natural Areas (ONAs), Special Recreation Management Areas (SRMAs), historic sites, Wilderness Areas, and Wilderness Study Areas (WSAs)

- *Recreation*: protect developed recreation facilities

Natural and biological resource objectives:

Fire and fuels management related actions will:

- *Air:* meet federal and state air quality standards and comply with the Montana/Idaho Airshed Group Operating Guide.

- *Fish and Wildlife:*
  - Threatened and Endangered Species: Ensure that BLM actions will not reduce the likelihood of survival or recovery of any listed species or destroy or adversely modify designated critical habitat.

- *Water*: meet federal and state water quality standards and prevent degradation.

- *Visual*: meet established Visual Resource Management (VRM) class objectives.

- *Uplands, Riparian Areas, Wetlands, Water, Air, Native Plant and Animal Species, Threatened, Endangered, and Candidate Species*: meet Standards for Rangeland Health.

Resource use objectives:

Fire and fuels management related actions will:

- *Vegetation*: reduce the amount of forest, shrub, and grass lands that are characterized as condition class 2 and 3 (where fire regimes have been moderately to significantly altered from their historical ranges, where there is a moderate to high risk of losing key ecosystem components, where fire return frequencies have departed from historical frequencies by more than one return interval, and where vegetation attributes have been significantly altered from their historical range.)

- *Special designations objectives:* Fire and fuels management actions will:
  - Wilderness/Wilderness Study Areas: meet the wilderness non-impairment mandate and avoid unnecessary impairment of suitability for preservation as wilderness (Wilderness Study Areas (WSAs)).

2.4 Alternatives Considered but Eliminated from Detailed Study

2.4.1 Prescribed Fire Alternative

The BLM considered its ability to achieve fuels reduction solely through the use of prescribed fire on public lands throughout Montana and the Dakotas. Field Office and fire management personnel indicated that prescribed fire would pose a very real danger in some areas where vegetation is far beyond its natural fire cycle, without some form of pre-treatment. In conjunction with the amount of private property in and around these areas, this fuels accumulation creates an unacceptable risk to human life and resources. This would also be inconsistent with agency guidance regarding the Federal Wildland Fire Management Policy (IM-2002-034).

2.4.2 Re-categorization of Wilderness Study Areas (WSAs)

In response to public comment, BLM re-evaluated WSA polygon categorizations to determine whether more natural ignitions could be allowed to burn in wildland areas. Field Office staff re-evaluated the categorizations, and changed the category of one fire management zone (Pryor Mountains) from a B to a C category area. This fire management zone contains three WSAs (Burnt Timber Canyon, Pryor Mountain, and Big Horn Tack On). Since the changes were made to only one polygon, the changes were incorporated into the preferred alternative rather than becoming a separate alternative. Other WSA category designations could not be changed at this time because the WSAs exhibit characteristics such as those listed below:

- Small size
- Moderate to heavy fuel loads that would not allow natural ignitions to burn safely
- Adjacent to land with other ownerships
- High potential for fires to cause undesired impacts to other resources and values

2.4.3 Treatment of all BLM-administered Lands in Condition Class 2 and 3 in Montana and the Dakotas

While 1.3 million BLM-administered acres are currently classified as being in Condition Class 2 or 3 (where the frequency of fire regimes have been moderately or significantly altered) in Montana and the Dakotas, it was not considered feasible to treat all these acres within the next 10 years. Current (and likely) future funding, planning, and staffing levels could not support this level of treatment. Further, treating some acres of Condition Class 2 and 3 may cause serious resource management conflicts and conflict with other RMP decisions. This approach would not allow for the efficacy of fuels treatments and the impacts on

resources to be evaluated periodically as individual projects are completed. See the glossary for a definition of Condition Class 2 and 3.

2.5 Description of the Alternatives

This section describes the similarities and differences between the alternatives. A key difference between the alternatives is whether land use plans include the decisions necessary to implement the 2001 Federal Fire Policy and the National Fire Plan. These decisions are judged "necessary" because they have appeared in recent BLM planning handbook guidance, or because they have been identified as necessary by BLM resource and fire specialists.

Section 2.5.1 includes management elements common to both alternatives; this section allows the differences of each alternative to be clearly defined in sections 2.5.2 and 2.5.3.

2.5.1 Management Common to All Alternatives

This section refers back to section 1.6, Applicable Legal Regulatory Restraints and Coordination. BLM would comply with the laws, regulations, acts, Executive Orders, policy, and formally adopted agreements described in section 1.6 under both alternatives.

This section also includes protection measures (based on current policy, guidance, direction, acts, and laws—section 2.5.1.1); and describes the nature of the fuels treatments that would be completed under both alternatives (section 2.5.1.2).

2.5.1.1 Protection measures common to both alternatives

These protection measures are based on existing policy, direction, law, and regulation. They are described here to emphasize the portions of policy that are relevant to this proposed action.

- Air Quality: Prescribed fire will conform with the provisions of state regulations and implementation plans as specified in BLM manual section 9210-Fire Planning and (in Montana) the Montana Airshed Group Operating Guide.

- Chemical Use: Label directions, BLM Manual 9011, and H9011-1 Chemical Pest Control Guidance will guide the use of chemicals on individual projects.

- Cultural: Prior to implementing fire projects, the BLM will do an appropriate level of Native American consultation according to the guidance in BLM Manual 8160 and Handbook H-8160-1 to identify potential religious or cultural concerns.

- Cultural: If Native American human remains are discovered on public lands during fire suppression, rehabilitation, or fuels reduction activities, the BLM will follow procedures identified in the Native American Graves Protection and Repatriation Act (NAGPRA) and 43 CFR part 10. If BLM fire suppression or reclamation activities extend onto private or state land, and burials are discovered, the provisions of the appropriate state burial law will be followed.

- Cultural: The protective measures that guide the placement of dozer lines and other surface disturbing fire-related activities will be followed unless the authorized officer determines that due to adverse fire behavior, implementation of a particular measure is not feasible and prudent. In those cases, the measure may be waived or modified to address crucial safety issues, i.e., imminent threats to life and/or property. The SHPO will be notified if such measures are waived or modified in accordance with existing agreements or 36 CFR 800. Also, unless critical safety issues prevent a cultural resource inventory from being conducted, the provisions regarding post-fire cultural resource inventory cannot be waived or modified. If inventory is waived or modified by the authorized officer the SHPO will be consulted consistent with existing agreements or 36 CFR 800.

- Special Status Species (SSS): Under BLM Special Status Species policy (BLM Manual 6840), BLM shall ensure that actions authorized, funded, or carried out by the BLM do not contribute to the need for listing a candidate or BLM sensitive species under the Endangered Species Act.

- Threatened and Endangered Species: Areas of occupied and/or suitable habitat, important for species expansion and recovery, would be protected from adverse effects resulting from fire/fuels management related activities.

- Wilderness and Wilderness Study Areas (WSAs): Activities in wilderness areas and WSAs, including all fuels management activities, must not impair wilderness values. Inclusion of a WSA in a polygon does not automatically enable all types of treatments and prescribed burning associated with the category to be completed within the WSA. Treatment will not impair, and will in fact enhance, wilderness values. Minimum Tool and Minimum Requirement concepts must be reviewed.

- Visual: In order to ensure that the objectives of each visual resource management class is met, contrast ratings are required for all major projects (prescribed burning, mechanical and chemical pre-treatments) on public lands that fall within VRM Classes I and II, and

Class III areas which have high sensitivity levels. Actions must not exceed the VRM objectives established for the management class.

2.5.2 Alternative A (No Action Alternative)

The No Action Alternative is for BLM to continue to implement current wildland fire suppression policy and to implement fuels management actions through project plans that are largely consistent with existing RMPs. Some fuels management actions would continue to be constrained by the Powder River and Big Dry RMPs.

The BLM would also implement the *National Fire Plan (NFP)* and *Federal Wildland Fire Management Policy (2001 Federal Fire Policy)* to the fullest extent possible.

However, implementation of the NFP and 2001 Federal Fire Policy would be restricted by existing RMP decisions where:

- RMP decisions do not allow specific actions associated with fire and fuels management (e.g., some methods for mechanically treating hazardous fuels), or

- RMP decisions allow necessary activities but do not provide sufficient direction to guide fire and fuels management (e.g., have not applied fire management categories).

See Table 1 for a summary of current RMP decisions related to fire and fuels management. Under the No Action Alternative, these decisions would continue to guide, and in some cases limit, fire suppression and fuels management on BLM-administered public lands.

2.5.3 Alternative B (Proposed Action)

Under the proposed action, BLM would amend all RMPs covering BLM-administered lands in Montana and North and South Dakota, to include the following new decisions recommended in BLM planning guidance (Handbook H-1601-1) for fire management:

1. Fire management categorization: Four consistent fire management category descriptions are included in H-1601-1. Selecting one of these designations provides broad fire and fuels management direction based on ecological, social, economic, and political considerations. The guidance provided by categorization would be applied to all BLM-administered public lands within the boundaries of designated fire management zones. This guidance would not apply to private, state, or federal lands administered by another agency that also happen to fall within the boundaries.

   See Table 2 for a description of the management associated with each category. See Table 3 for the name, categorization, and acreage of each of these fire management zones associated with this alternative. See Appendix A, Maps 3-10 for the fire management zone boundaries and categories for each Field Office.

2. Broad Levels of Treatment: Broad levels of treatment are considered as a basis for analysis. Fuels treatments would include prescribed burns and mechanical (including manual) methods. Chemical weed treatments are also anticipated. Total acres by treatment type and category are listed in Table 2, and are further qualified by vegetation type in Chapter 3 for the purpose of analysis.

3. General guidance for fire management (including both wildfire suppression and fuels management) needed to protect other resource values: This guidance provides additional protection for resources sensitive to an expanded level of treatment where existing policy does not provide sufficient protection. See section 2.5.3.1 for mandatory measures and Appendix B for available design features for wildlife.

BLM would also revise the following existing decisions in individual RMPs, based on recommendations from BLM specialists:

- The Powder River RMP would be amended to allow prescribed fire to be used on more than 20 acres per year.

- The Big Dry RMP would be amended to allow commercial timber harvest as a mechanical treatment method in the Big Dry planning area.

- Decisions in the JVP, West HiLine, and Billings RMP would be qualified so that any timber harvested for the purpose of fuel reduction would not count toward established Allowable Sale Quantities (ASQs) or annual cuts for those areas.

See Appendix C for the text of the proposed amendments.

Table 1 - Summary of Current Fire Management Guidance (No Action Alternative)

Wildland Fire Suppression Guidance	Current Prescribed Fire/Fuels Reduction Guidance
Control, during first burn period, all wildfires on or threatening public land. • North Dakota RMP (67,571 acres). • Headwaters RMP (311,337 surface acres; includes a portion of Lewistown FO): modified suppression recognized. • Powder River RMP (1,080,675 acres): modified suppression recognized. Protection priority goes to highest-value resources. **All wildfires fires receive initial attack** unless a modified suppression plan is developed and in effect: • West HiLine RMP (626,098 acres) Also establishes criteria for identifying limited suppression areas. • South Dakota RMP (280,672 acres). No fires are allowed to burn unless covered by an approved prescribed burn plan or modified suppression plan. **Intensive and Conditional Suppression, by Area:** Fires will be intensively suppressed in areas with high resource value, structures, improvements, developments, commercial forest values, sagebrush and juniper areas, fire sensitive woody riparian areas, and cultural areas. Conditional suppression will be applied to areas with resources low in value or not warranting initial action/ high costs: • Judith RMP (867,591 acres) and Phillips RMP (1,084,960 acres): Allowable burn acreages established. • Valley RMP (1,134,644 acres). • Big Dry RMP (1,703,830 acres): Intensive areas require immediate suppression. Varying response in conditional areas. Requires rehabilitation plans if more than 25 acres burn. **Respond to all fires on or threatening public lands:** • Billings RMP (431,676 surface acres). **Use a modified suppression plan** for wilderness areas, primitive areas, and selected areas. Control and confinement areas identified. • Dillon MFP (902,528 acres). **Develop a Fire Management Plan** to identify areas for the appropriate actions of control or confinement. • Garnet RMP (145,660 acres).	**Prescribed Burning** Prescribed burning is currently allowed on 8.2 million acres, with: **No limitations** • Headwaters RMP, Dillon Management Framework Plan (MFP), North Dakota RMP, and South Dakota RMP. **Annual acreage limitation** • Within the Powder River planning area, prescribed burning may be used on about 20 acres per year. **Prescribed Burning Restrictions in WSAs** Prescribed fire will not be used in WSAs in the Judith-Valley-Phillips planning area. Other RMPs do not mention whether prescribed fire is allowed in WSAs. Existing policy, however, does provide guidance on limited situations when the use of prescribed fire could be considered in WSAs. (This analysis does not consider new RMP decisions for expanded use of prescribed fires in WSAs). **Prescribed Burning Restrictions on Certain Landcover Types:** Garnet RMP: Prescribed fire is not allowed on 5,820 acres adjacent to stream channels and recreation sites. (This analysis does not consider expanded use of fire in these areas). **Other Management Limitations** Six plans do not limit prescribed burning but do limit timber management options, which affect BLM's ability to effectively implement mechanical hazardous fuels reduction projects under the National Fire Plan and 2001 Federal Fire Policy. • Big Dry RMP: No sale of sawtimber except salvage harvest ponderosa pine. Wood product sales are only allowed in Knowlton, Pine Unit, and Missouri Breaks areas. Mechanical treatments are limited to 15 percent or less slopes. • Billings RMP: Annual cut limited to 70 thousand board feet (MBF) per year over a 10-year period. • Judith-Valley-Phillips (JVP) RMP: Allowable Sale Quantity (ASQ) of forest products limited to 650 MBF per year over a 10-year period. • West HiLine RMP: ASQ of forest products limited to 300 MBF per year over a 10-year period.

Table 2 Comparison of Fire Management Categories (H-1601-1 Land Use Planning Handbook and IM no. 2002-034)			
Category A: Fire is not desired at all (8,000 acres)	**Category B: Unplanned fire is likely to cause negative effects (81 million acres)**	**Category C: Fire is desired to manage ecosystems, but current vegetative condition creates constraints on use (2.52 million acres)**	**Category D: Fire is desired; no constraints on its use (200 acres)**
Fire Management Activities • Mitigation and suppression required • Fire should not be used to manage fuels	*Fire Management Activities* • Suppression required • Fire and non-fire fuels treatments may be used	*Fire Management Activities*: • Suppression may be required • Fire and non-fire fuels treatments may be used	*Fire Management Activities:* • Suppression may not be necessary • Both fire and non-fire treatments could be used
Rationale for Categorization: • Direct threats to life or property • Ecosystems not fire dependant • Long fire return intervals	*Rationale for Categorization:* • Unplanned ignitions would have negative effects on ecosystems unless mitigated	*Rationale for Categorization:* • Significant ecological, social, or political constraints	*Rationale for Categorization:* • Few ecological, social, or political constraints • Less need for fuels treatment
Fire Suppression Considerations: • Emphasis on prevention, detection, and rapid suppression response and techniques	*Fire Suppression Considerations:* • Emphasis on prevention/education and suppression	*Fire Suppression/Use Considerations:* • Emphasis on reducing unwanted ignitions, resource threats, and fuels accumulations	*Fire Suppression/Use Considerations:* • Emphasis on using planned and unplanned wildfire to achieve resource objectives
Multiple Fire Priority: [1] Highest	*Multiple Fire Priority:*[1] High	*Multiple Fire Priority:* [1] Medium	*Multiple Fire Priority:* [1] Lowest
Anticipated type and level of fire/fuels treatments: • <1,000 acres mechanical	*Anticipated type and level of fire/fuels treatments, including treating areas that were previously treated*: • 105,000 acres prescribed fire • 74,000 acres mechanical • 37,000 acres chemical weed treatment	*Anticipated type and level of fire/fuels treatments, including treating areas that were previously treated*: • 192,000 acres prescribed fire • 84,000 acres mechanical • 149,000 acres chemical weed treatment	*Anticipated type and level of fire/fuels treatments*: • 2,000 acres fire use or prescribed fire

[1] If multiple fires were burning, Categories A and B would generally receive priority for fire management resources.

Table 3 Montana/Dakotas Fire Management Zones[1]

Field Office	Fire Management Zone	Category	Size (acres) (approximate)	BLM acres (approximate)
Billings (see Map 3)	1. Billings Grasslands	B	9,025,800	263,500
	2. Roundup	B	853,000	86,700
	3. Pryor Mountains	C	138,600	50,100
	4. Big Timber/Absaroka	B	768,200	11,500
	5. Twin Coulee WSA	B	12,700	7,100
	6. Pompey's Pillar	B	500	500
Butte (see Map 4)	1. Absaroka Foothills	C	67,700	3,900
	2. Big Belt Mountains	C	360,300	7,200
	3. Big Hole River Corridor	C	68,800	11,100
	4. Blackfoot (See Missoula FO)	C	340,800	0
	5. Boulder River	B	264,400	14,300
	6. Clancy/Marysville	C	299,600	28,200
	7. Elkhorn Mountains	C	482,900	68,900
	8. Fleecer Mountains	C	284,300	18,100
	9. McCartney/Rochester	C	273,600	28,100
	10. North Hills	B	33,900	6,300
	11. Pipestone	C	369,300	41,000
	12. Scratchgravel Hills	B	126,900	7,900
	13. Sleeping Giant/Sheep Creek	C	82,600	20,500
	14. Spokane Hills and North	B	156,500	6,800
	15. Three Forks	C	485,000	31,200
	16. Wise River Townsite	B	10,100	1,400
	17. Bozeman/Livingston Scattered Tracts	A	1,714,300	7,300
Dillon (see Map 5)	1. Beaverhead Mountains	B[2]	743,300	27,100
	2. Beaverhead/Jefferson	A[2]	556,400	14,900
	3. Big Hole River Corridor	C[2]	68,800	6,900
	4. Big Sheep/Medicine Lodge Backcountry Byway	B[2]	96,100	46,500
	5. Blacktail Mountains	C[2]	34,600	21,400
	6. Blacktail/Horse Prairie	C[2]	593,300	236,100
	7. Centennial	C[2]	505,800	131,800
	8. East Madison	C[2]	320,600	9,800
	9. Gravelly Mountains	C[2]	556,600	34,300
	10. Madison Valley	A[2]	410,200	23,300
	11. McCartney/Rochester	C[2]	273,600	89,600
	12. North Rubys	D[2]	26,800	13,700
	13. SE Foothills/Pioneers	C[2]	969,100	91,500
	14. Sweetwater/Ruby	C[2]	295,300	81,500
	15. Tendoy Mountains	C[2]	131,700	52,500
	16. Tobacco Root Mountains	C[2]	289,900	29,300
Lewistown (see Map 6)	1. Timber/Mountain Range	B	262,200	37,900
	2. Range/Grasslands	B	19,401,800	707,800
	3. Breaks	C	1,463,700	670,400
	4. Front Range	C	82,800	14,600
Malta (see Map 7)	1. Timber/Mountain Range	B	65,200	30,100
	2. Range/Grasslands	B	4,913,700	1,853,800
	3. Breaks	C	376,300	247,700
Miles City (see Map 8)	1. Cedar Breaks	B	122,000	60,400
	2. Vicinity of Custer National Forest	C	1,804,500	136,100
	3. Knowlton-Locate	C	36,200	11,700
	4. Missouri-Musselshell River Breaks	C	483,000	178,900
	5. Mixed Grass Prairie Sagebrush	B	23,020,300	2,240,300
	6. Rural Interface	B	232,700	30,400
	7. Special Management Areas	C	95,000	94,200
Missoula (see Map 9)	1. Blackfoot	C	357,000	71,100
	2. Clark Fork Front	B	223,600	15,900
	3. Flintrock	B	529,300	21,500
	4. Hoodoo	C	389,400	31,600
North Dakota	1. North Dakota Resource Area	B	–	59,600
South Dakota (see Map 10)	2. Exemption Area	B	22,400	5,400
	3. Fort Meade Recreation Area ACEC	B	6,700	6,500
	4. Remainder of South Dakota Field Office	B	–	263,900

[1] Category and associated treatments only apply to BLM land within each zone

[2] Likely categories within the Dillon Field Office. Final category decisions will be made in the Dillon RMP/EIS

2.5.3.1 Direction for fire management (including both fire suppression and fuels management) to protect other resource values

The following direction would be used when developing and updating field office fire management plans, when responding to wildland fires, and when developing site-specific fuels projects. This direction would not be mandatory during wildland fire suppression if using it would compromise protection of life or property.

Aquatic Species (including Special Status Species) and Habitat
Fuels Management

- To provide additional protection of aquatic species beyond Streamside Management Zone (SMZ) boundaries, **Riparian Protection Zones** (RPZs) would be identified to protect the following specific key ecological functions:
  - **water quality**, to a degree that provides for stable and productive riparian and aquatic ecosystems;
  - **stream channel integrity**, channel processes, and the sediment regime (including the elements of timing, volume, and character of sediment input and transport) under which the riparian and aquatic ecosystems developed;
  - **instream flows** to support healthy riparian and aquatic habitats, the stability and effective function of stream channels, and the ability to route flood discharges;
  - **natural timing and variability** of the water table elevation in meadows and wetlands.
  - **diversity and productivity** of native and desired non-native plant communities in riparian zones.

- The width necessary to protect stream and riparian area structure and function should be determined from watershed and site-specific analysis. Interim RPZ boundaries described below should be considered default boundaries until final boundaries are determined by watershed or site-specific analysis. Final RPZ boundaries may be narrower or wider, depending on local conditions and results of the project specific analysis.

- Interim RPZ boundaries within forested zones would be:
  - Streams, ponds, lakes containing Special Status Fish Species: two site-potential tree heights
  - Other fish-bearing streams: one site-potential tree height
  - Ponds, lakes, and wetlands greater than 1 acre: the RPZ consists of the body of water or wetland and the area to the outer edges of the riparian vegetation, or to the extent of the seasonally saturated soil, or to the extent of moderately and highly unstable areas, or to a distance equal to one site-potential tree height (whichever is greatest)
- Interim RPZ boundaries for non-forested rangeland ecosystems would consist of the body of water or wetland and the area to the outer edges of the riparian vegetation, or to the extent of the seasonally saturated soil, or to the extent of moderately and highly unstable areas, or (in segments where trees are present) to a distance equal to one site-potential tree height (whichever is greatest).

- Fuels treatments could occur within these RPZs; however, riparian values would receive primary management emphasis during fuels treatments.

- All proposed fuels treatments within RPZs should analyze particular risk from wildfire and fuels management projects to isolated, depressed populations in degraded habitats without access to local or regional refugia. Proposed treatments should incorporate specific design features to avoid any further degradation of habitat.

- If RPZ boundaries are narrower than SMZ boundaries, fuels treatments would still comply with applicable state laws and Water Quality/Forestry Best Management Practices that BLM has adopted.

- See Appendix D for more complete development of the RPZ strategy.

- The following **conservation measures** would be applied to protect Threatened and Endangered fishes:

  Pallid Sturgeon (Endangered)
  - No aerial retardant should be applied within 300 feet of the Yellowstone River below the mouth of the Powder River or within 300 feet of the Upper Missouri River (above Fort Peck Dam).
  - Restrict livestock grazing of riparian vegetation, especially cottonwood stands along the Upper Missouri River (above Fort Peck Dam), and Yellowstone River below the mouth of the Powder River, where that vegetation has been recently affected by fire or other catastrophic events (blowdown, ice shear, flood etc.) until successful regeneration of vegetative components occurs.

  Bull Trout (Threatened)
  - Projects shall be designed using the guidance set forth in the "Interim Bull Trout Habitat Conservation Strategy."
  - BLM would comply with the Terms and Conditions in the Biological Opinion from FWS.

Cultural and Paleontological Guidance
Fire Suppression

- The following guidance is recommended for the protection of cultural and paleontological resources during fire suppression, stabilization, and restoration activities. These guidelines should be incorporated into Montana's existing Protocol in consultation with the MT SHPO. The ND Field Office and the SD Field Office should consult with their respective SHPOs on implementation of these recommended guilelines. A Programmatic Agreement may be the appropriate instrument for their implementation:

  · Fire suppression tactics would limit surface disturbance to protect cultural resource values in designated cultural Areas of Critical Environmental Concern (ACEC), archeological districts, and other areas known or suspected to contain cultural resources, including historic structures and features. Use of earth moving/tillage equipment should be avoided for wildland fire suppression in areas with special designations to protect cultural resources and values, archeological districts, and other areas known to possess cultural resources. The use of heavy equipment and off-road vehicles should be limited to existing roads and trails within these areas during rehabilitation.

  · The aerial application of fire retardant would be restricted over areas that contain petroglyphs and pictographs.

  · Fire camps and fire staging areas should be placed outside and sufficiently distant from known or identified cultural resources. Use of off-road motorized vehicles outside of fire camp and staging areas should be avoided to prevent inadvertent impacts to cultural resources.

  · An intensive cultural resource inventory (Class III) as described in BLM Manual 8110 should be completed on areas disturbed by suppression activities, e.g., fire lines, fire camp areas, and staging areas before starting rehabilitation. Cultural resources discovered in or near disturbed areas should be protected from further damage during rehabilitation. Where cultural resources have been disturbed by suppression activities stabilization work may be implemented. This may entail a careful return of the berm over the site, seeding, or covering the site with protective mesh and culturally sterile material. These emergency actions should be considered on a case-by-case basis at the discretion of the archaeologist assigned to the fire. Consultation with the SHPO would be done in accordance with existing agreements or 36 CFR 800.

  · A BLM resource advisor would be on site during suppression and rehabilitation activities. A qualified archeologist (BLM, federal, or consulting archeologist will be requested to give guidance and ensure compliance with the guidelines and decisions established to protect cultural resource values. Cultural resource input and involvement by the archeologist should be at the initiation of the fire emergency and throughout the process of suppression, stabilization, and restoration activities.

  · The archaeologist assigned to the fire would work with the rehabilitation team to ensure that cultural resources, including historic structures and features, are considered during fire suppression restoration actions. Site treatment plans would be prepared for historic properties that have been damaged by fire suppression and require more detailed stabilization efforts. These treatment plans would protect the site from secondary effects of the fire and fire suppression activities.

  · Monitoring of sensitive site areas would be conducted when fire suppression rehabilitation plans are within close proximity to historic properties, or could have an indirect effect on an existing resource.

  · If stabilization/protective measures were employed for cultural resources a report summarizing those actions should be submitted to an appropriate SHPO. The report should include a description of the fire impacts, fire suppression and rehabilitation, and salvage activities. It should also include the number and types of sites affected and stabilized. In Montana, BLM would provide a summary of activities performed as part of the annual report instead of immediate notification of fire emergency related activities.

  · In accordance with the existing agreements or 36 CFR 800, the SHPO would be notified of a fire emergency and the suppression efforts associated with the emergency. Adjustments to these procedures may be made in response to comments from consulting parties; e.g. the SHPO, either programmatically through existing agreements or on a case-by-case basis where no agreement exists.

  · Surface disturbance should be limited within designated ACECs and formations known to contain significant fossil resources to protect paleontological values. In these areas with designated paleontological resources, the use of heavy equipment and off-road vehicles would be limited to existing roads and trails during rehabilitation.

- Fire camps and fire staging areas should be placed outside and sufficiently distant from known or identified fossil localities. Use of motorized vehicles outside of fire camp and staging areas in known fossil producing formations should be avoided to prevent inadvertent impacts to fossil resources.

- Significant fossils that are exposed by suppression activities or would be damaged by rehabilitation work should be recovered by a qualified Paleontologist.

Cultural and Paleontological Guidance
Fuels Management

- Develop protocol with ND and SD SHPOs similar to that described in IM MT No. 99-032 for Montana. This would allow for a sample inventory instead of a Class III intensive survey of an entire target area. Until that protocol is developed, prescribed fire projects in ND or SD would require consultation with the appropriate SHPOs to develop a prescribed fire survey and protection strategy. The inventory strategies developed for these two states should be similar to guidance provided in IM no. MT-99-032.

- If a class III inventory is used instead of the sample inventory described in IM No. MT 99-032, no additional consultation with SHPO would be required.

- Where known cultural resources are present or are suspected and the area cannot be avoided, hand tools should be used instead of motorized vehicles or heavy equipment to remove brush and tree cover. Also, where cultural resources are combustible, prescribed fire treatments should not be used. In these cases, hand tools and mechanical removal is the appropriate methods to ensure site protection and reduction of fuel load objectives.

- Where known fossil resources are suspected but unknown and where the area cannot be avoided the following measures would be employed: 1. Conduct an inventory to identify the presence or absence of fossil resources employing a qualified paleontologist, 2. in areas where fossil resources are suspected or have been identified avoid using surface disturbing motorized vehicles, heavy equipment, or hand tools, and 3. advise fire personnel and others to refrain from collecting fossils on public lands.

- An archeologist, and to the extent possible, a paleontologist will be used during fuels treatment planning, to assess the risk of damages and to recommend ways to minimize damage to fossil resources resulting from implementation of fuels treatments.

Terrestrial Wildlife Species (including Special Status Species) and Habitat Direction common to both Wildland Fire Management and Fuels Management

- The following **conservation measures** would be applied to protect Threatened and Endangered terrestrial wildlife species:

  Interior Least Tern (Endangered)
  - No human disturbance within 1/4 mile of least tern nest site from May 15 to August 15;
  - No prescribed burning activities within 1 mile upwind of least tern nest sites.
  - No helicopter/aircraft activity or aerial retardant application within 1/2 mile of least tern nest sites between May 15 and August 15;
  - No prescribed burning activities within 1 mile upwind of nest sites between May 15 and August 15.

  Whooping Crane (Endangered)
  - No human disturbance within 1/2 mile of occupied whooping crane habitat or potential habitat where whooping cranes have been identified within the past three years from April 1 to August 31
  - No helicopter/aircraft activity or aerial retardant application within _ mile of occupied whooping crane habitat or potential habitat where whooping cranes have been identified within the past three years from April 1 to August 31.

  Black-footed Ferret (Endangered)
  - No heavy equipment operation off of existing roads within 1/4 mile of prairie dog towns with documented occurrence of black-footed ferret
  - No aerial retardant application within 1/4 mile of prairie dog towns with documented occurrence of black-footed ferret
  - No surface disturbance (fire line construction) should occur in prairie dog towns with documented occurrence of black-footed ferret.

  Gray Wolf (Endangered)
  - No human disturbance or associated activities within 1 mile of a den or rendezvous site from April 15 to June 30.

  Bald Eagle (Threatened)
  - No human disturbance within 1/2 mile of bald eagle nests from February 1 through August 15;
  - No human disturbance within 1/4 mile of a winter roost from November 1 through March 1 or, if within 1/4 mile, activity should be restricted to a period of 9 am to 3 pm;
  - No helicopter/aircraft activity or aerial retardant application within 1/2 mile of known bald eagle nest sites from January 1 through August 15; or within 1/4 mile of a winter roost from November 1 through March 1;

- No prescribed burning activities within 1 mile upwind of nest sites from January 1 through August 15; or within 1 mile upwind of a winter roost between November 1 and March 1.

Piping Plover (Threatened)
- No human disturbance within 1/4 mile of any occupied nest sites from April 1 to July 31
- No prescribed burning within one mile upwind of any occupied nest sites from April 1 to July 31 ;
- No helicopter/aircraft activity or aerial retardant application within 1/2 mile of piping plover nest sites between April 15 and July 31.

Canada Lynx (Threatened)
- Activities shall not cause a greater than 30 percent temporary loss or 15 percent permanent loss of suitable habitat in a decade. In addition, 10 percent of the Lynx Assessment Unit (LAU) shall remain in denning habitat in patches larger than five acres;
- Processes used to reduce fuel levels, prepare sites for planting or for reintroduction of fire shall preserve the majority of large standing dead trees and large woody debris (denning habitat);
- Precommercial thinning or introduction of fire into lynx habitat shall only occur when the forest stand no longer provides snowshoe hare habitat. This occurs when self-pruning processes have eliminated snowshoe hare cover and forage availability.
- Following disturbance such as blowdown, fire, insects, and disease that could contribute to lynx habitat, do not salvage harvest when the affected area is smaller than 5 acres (exceptions would include areas such as developed campgrounds). Where larger areas are affected, retain a minimum of 10 percent of the affected area per LAU in patches of at least 5 acres;
- Design burn prescriptions to create snowshoe hare habitat (e.g. regeneration of aspen and lodgepole pine);
- Minimize construction of temporary roads, firebreaks, machine lines, etc. on ridges, saddles, or areas that would create permanent travel ways that could facilitate increased access by competitors (e.g. coyote, bobcat);
- Restrict livestock grazing of fire created openings, aspen stands, willow carrs, and other potential lynx habitat until successful regeneration of shrub and tree components occurs.

Grizzly Bear (Threatened)
- Within the Recovery Zone, as defined in the Grizzly Bear Recovery Plan (USFWS 1993), any off-road vehicular travel or vehicular travel on restricted roads shall adhere to access standards/direction as provided in local or regional interagency agreements, Biological Opinions, or local Land Use Plans;
- All activities requiring overnight stays or establishment of a base camp shall be limited to fewer than 20 individuals and less than 5 days duration within the Recovery Zone (defined in Grizzly Bear Recover Plan (USFWS 1993));
- Firewood collection within the Recovery Zone (defined in Grizzly Bear Recovery Plan (USFWS 1993)) shall be limited to roadside hazard tree removal, road maintenance, or campground maintenance activities;
- Activities within the Recovery Zone (defined in Grizzly Bear Recover Plan (USFWS 1993)) in Riparian, Meadows, and Stream Corridors including restoration and improvement projects must not occur between April 1 and July 1 or must be completed in one day;
- Within the Recovery Zone (defined in Grizzly Bear Recover Plan (USFWS 1993)) projects that would significantly change the vegetative community should not be implemented in huckleberry producing sites;
- In order to minimize the potential for habituation or human conflict, activities within the Recovery Zone (defined in Grizzly Bear Recover Plan (USFWS 1993)) will adhere to Interagency Grizzly Bear Guidelines or local interagency grizzly bear standards for sanitation measures or storage of potential attractants;
- Within the Recovery Zone (defined in Grizzly Bear Recover Plan (USFWS 1993)) activities will not involve planting or seeding of highly palatable forage species near roads or facilities used by humans.

Mountain Plover (Proposed)
- No human disturbance within 1/4 mile of occupied mountain plover nest sites from April 1 to July 31;
- No helicopter/aircraft activity or aerial retardant application within 1/2 mile of occupied mountain plover nest sites;
- No prescribed burning within 1 mile upwind of any occupied mountain plover nest sites from April 1 to July 31.

- BLM would adhere to Terms and Conditions as provided in Biological Opinions from the FWS.
- BLM would consider applying conservation and protection measures contained in Conservation Strategies, Recovery Plans, and Biological Opinions, where similar habitats or habitat needs exist elsewhere on BLM- administered lands in Montana/Dakotas.

Vegetation Direction
Wildland Fire Suppression
- The following **conservation measures** would be applied to protect Threatened plant species:

Western Prairie Fringed Orchid, Water Howellia, Ute Ladies'-tresses (Threatened)

- All proposed action areas within potential habitat shall be surveyed by a botanically qualified biologist, botanist, or ecologist to determine the presence/absence of the species;
- No action that would potentially affect the species will be taken within suitable habitat if surveys are not completed to determine the presence or absence of the species;
- Areas of occupied habitat within a proposed project area will have a "site specific" no activity buffer established by a qualified botanist, biologist, or ecologist, to protect occupied habitat;
- Best Management Practices should be applied to protect the area from invasive plant species;
- Non-native species should not be used in revegetation of suitable habitat.
- BLM would comply with the Terms and Conditions in the Biological Opinion from FWS.

Visual Direction
Wildland Fire Suppression

- The use of heavy equipment and retardant for wildland fire suppression should be avoided in designated VRM Class I and Class II areas unless the impact of the fire would more severely impact the VRM values than the impact of equipment and retardant.
- Fire rehabilitation of VRM Class I and II areas should be coordinated with a VRM specialist.

Fuels Management

- Fuels management projects should be coordinated with a VRM specialist.

2.5.3.2 Additional Guidance to protect resource values

- Additional guidance included in Appendix B would be recommended when planning and implementing fire and fuels treatment projects.

2.6 Summary Comparison of Alternatives

Table 4 summarizes the guidance for fire and fuels management that is available under both alternatives, and the new guidance that would become available under the proposed alternative.

2.7 Identification of the Preferred Alternative

Alternative B is BLM's Preferred Alternative.

Table 4 Summary Comparison of Fire/Fuels Management Alternatives

Alternative A (No Action-Current Land Use Plan Direction)	Alternative B (Proposed fire/fuels management/ Plan Amendments)
Current Sources for fire and fuels Management direction and guidance: • National Policy (e.g., National Fire Plan, 2001 Federal Fire Policy) • Departmental, Bureau, and program guidance • BLM land use plans (RMP decisions) **Protection measures** based on current laws, regulation, and policy **(see section 2.5.1**) **Priorities for treatment:** 1. Protect human life and property (e.g. interface), 2. Reduce the risk and cost of severe wildland fires (e.g. hazardous fuels reduction), 3. Sustain the ecological health and function of the ecosystem (e.g. restore degraded fish/wildlife habitat)	
Categorization of BLM lands would not guide fire management. Additional fire management direction would not be provided.	**Categorization of BLM lands would guide fire management:** • Category A: Fire is not desired (38,000 acres) • Category B: Unplanned fire would cause negative effects (5.81 million acres) • Category C: Fire is desired to manage ecosystems, but current vegetative condition creates constraints on use (2.52 million acres) • Category D: Fire is desired; few or no constraints on its use (27,000 acres)
Anticipated level of treatment per decade: • 158,000 acres prescribed fire • 35,000 acres of mechanical treatments • 3,500 acres of chemical weed treatments	**Anticipated level of treatment** per decade: • 299,000 acres of prescribed fire (Category B: 105,000 acres. Category C: 192,000 acres. Category D: 2,000 acres) • 158,000 acres of mechanical treatments (Category A: <1,000 acres. Category B: 74,000 acres. Category C: 84,000 acres) • 185,000 acres of chemical treatment (Category B: >37,000 acres. Category C: >149,000 acres)
Additional guidance to protect other resource values would not be provided.	**Additional guidance to protect other resource values (see sections 2.5.3.1 and 2.5.3.2)** would be provided for: • Aquatic species and habitat (including special status species), cultural and paleontological resources, visual resources, and terrestrial wildlife species and habitat
Fire and fuels management would be subject to existing RMP decisions ü Commercial timber harvest would not occur in the Big Dry RMP area. ü Prescribed fire in the Powder River RMP area would proceed at 20 acres/year. ü Fuels treatments would count toward ASQs and annual cuts in Billings, JVP, and West Hi Line RMPs.	**Specific RMP decisions** would be amended: ü Commercial timber harvest could be used as a fuels management tool in the Big Dry planning area. ü Use of prescribed fire would not be limited to a level of 20 acres per year in the Powder River planning area. ü Fuels treatments would not count toward established ASQ levels or annual cuts in the Billings, Judith-Valley-Phillips (JVP), and West HiLine RMPs.