

4.5. FIRE MANAGEMENT

Management common to the Proposed RMP and all alternatives would include the restoration of natural fire regimes using prescribed fire, mechanical treatment, chemical treatments, and wildland fire. Fire Condition Classes and Fire Management Categories have been designated throughout the VPA to indicate fire treatment priorities and are described in Chapter 3.

Prescribed fire, mechanical treatments, and chemical treatments would be used in the Fire Management Category Areas every decade, as described below in Table 4.5.1. Mechanical and chemical treatments would primarily be applied on additional acres; however, some overlap could occur with the acres designated for prescribed burning.

Table 4.5.1. Acreages in the VPA Receiving Various Treatments per Decade, by Fire Management Category

Fire Management Category	Prescribed Fire	Mechanical	Chemical
A	1,000	5,000	5,000
B	19,570	10,000	10,000
C	82,738	20,000	20,000
D	53,117	0	0

Four Wildland Urban Interface (WUI) areas were identified within the VPA and assigned a Fire Management Category: Dry Fork, Category B; Diamond Mountain, Category C; Deep Creek, Category B; and Browns Park, Category B. Special attention would be directed to each of these areas because they present a high risk associated with human safety.

In addition to the acres listed above, naturally occurring wildland fires would be used for fire management, when feasible, in the category areas as described below, in Table 4.5.2. This treatment would be applied under the Proposed RMP and all of the alternatives, as determined by site-specific conditions. Naturally occurring wildland fires would be allowed to burn as many acres per category area as described below:

Table 4.5.2. Acreages in the VPA to Receive Treatment via Natural Wildland Fires, by Fire Management Category

Fire Management Category	Acres Targeted	Acres Allowed to Burn
A	0	2,100
B	0	21,000
C	75,000	151,500
D	30,000	30,000

4.5.1. IMPACTS COMMON TO THE PROPOSED RMP AND ALL ALTERNATIVES

In order to analyze the impacts of various management decisions on fire management, two key elements have been considered: 1) the risks of fire ignition from vehicles, humans, or other sources and 2) fuel loading.

Ignition risk would occur primarily from oil and gas development activities. Management Common to All would include mineral leasing on approximately 188,500 acres of the Hill Creek Extension (see Chapter 2). In the short term, this action would create a potential fire-ignition risk from vehicles and construction activities. In the long term, fire risk would be present during mineral development activities, site maintenance, and machinery and vehicle operations. The presence of large mainline and feeder natural gas lines, primarily those greater than eight inches in diameter, would potentially impede the movement of fire suppression vehicles and equipment across these lines.

Recreation management decisions under the Proposed RMP and all alternatives would draw visitors onto public lands within the VPA. Under all of the Proposed RMP and all alternatives, motorized camping vehicles would be allowed to travel off designated routes on a single path up to 300 feet to access an existing disturbed dispersed camp site, except in non-WSA lands with wilderness characteristics and WSA lands. Additionally, areas (generally areas where disturbances to vegetation and soils would be deemed acceptable) would be designated to accommodate intensive cross-country travel. These activities would increase fire risk associated with vehicle- and human-caused ignitions. Recreation management decisions would include maintenance and possible expansion of all recreational sites. These activities would increase fire risk due to increased visitation, construction, and maintenance activities. The limitations on fire treatments within developed recreation areas and intense-use recreational areas would maintain hazardous fuel loads in these areas.

Visual resource decisions, under the Proposed RMP and all of the alternatives, would affect fire management. Restrictions on management activities that would degrade scenic quality, as described in the VRM I and VRM II Class objectives, could limit the use of fire management in some areas. Those areas most likely to be affected within the VPA would include areas designated as eligible for consideration under the Wild and Scenic River System, special designation areas, riparian corridors, and cultural sites that possess scenic quality (e.g., rock art and prehistoric structures) and could be damaged by fire.

Fire management would be affected by wildlife and special status species management actions for the Proposed RMP and all alternatives. Spatial and timing restrictions for raptors and sage grouse, and surface-disturbing restrictions for wildlife would determine when, where, and to what degree fire management treatments would be applied.

Vegetation treatments would occur under all rangeland improvement management decisions, and would use prescribed fire, mechanical, and/or chemical treatments. For analysis purposes, it is assumed that the greater the number of acres treated, the greater the direct long term, beneficial impacts to fire management because more of the fire management goals and objectives would be achieved.

4.5.2. PROPOSED RMP AND ALTERNATIVES IMPACTS

The impacts of various management decisions on fire management are quantitatively and/or qualitatively determined, depending on the management action. Impacts are discussed in terms of the risk of fire from ignition, fuel loading, and limitations on the use of prescribed fire due to implementation of other resource management decisions. In analyzing the impacts of the proposed RMP management actions on fire management, an assumption was made that there would be a relationship between the increased presence of humans and human activities within the VPA and an increase in the risks of wildland fire.

Management actions associated with paleontology, lands and realty, forage, livestock grazing, soils and watershed, and wild horse's resources would have negligible impacts on fire management and, therefore, are not discussed further in this section.

4.5.2.1. IMPACTS OF FIRE DECISIONS ON FIRE MANAGEMENT

Implementation of fire management strategies and treatments would be based on Fire Management Categories, Fire Regimes, and Fire Condition Classes, which are depicted in Figures 2, 3, and 4.

Fire Regimes are the patterns of wildland fires that include factors such as fire frequency, extent, and severity, and vegetation type. Regimes vary by ecosystem because each ecosystem has a different composition and structure determined by climatic conditions, vegetation types, and ignition sources.

As described in Chapter 3, Fire Condition Classes represent the degree to which an area has departed from historic fire conditions. Fire Condition Classes 1, 2, or 3 are assigned to areas depending on wildland fire risk, potential fire intensity and severity, and ecological integrity, compared to the historic fire regime, which is based on the stand density, the density of forest understory and fuel loads, and ecological conditions prior to the implementation of a policy of fire suppression (USDA and USDI 2001). Class 1 represents a relatively low risk for a catastrophic wildland fire event, and Class 3 represents a relatively high risk.

Fire Management Categories designate the type and extent of fire treatments in an area. The categories range from Category A, where full suppression of fire would be applied and the protection of areas where fire is not desired, to Category D in which planned wildland fires and prescribed fires would be used for resource benefit and where there are few constraints on fire use.

4.5.2.1.1. PROPOSED RMP, ALTERNATIVES A, B, C, AND E

In the long term, the proposed use of prescribed fire on 156,425 acres within the VPA per decade would directly benefit fire management by reducing fuel loads and stand densities and, subsequently, the risks of large-scale, catastrophic wildland fires. Management actions under these alternatives would reduce the risk of catastrophic wildland fire within the VPA, when compared to Alternative D (No Action).

4.5.2.1.2. ALTERNATIVE D (NO ACTION)

This alternative would designate prescribed fire on 50,900 acres of the VPA (27,950 within the Book Cliffs area and 22,950 in pinyon-juniper and sagebrush communities within the Diamond Mountain area). This alternative would not provide the fuel load reductions that would occur under the action alternatives. Therefore, the fire risks associated with Alternative D (No Action) would be higher than for the Proposed RMP and Alternatives A, B, and C, and E .

4.5.2.2. IMPACTS OF MINERAL DEVELOPMENT DECISIONS ON FIRE MANAGEMENT

Wildland fire risks would be limited to Standard Stipulations and Timing and Controlled Surface Use areas. No Surface Occupancy and Closed category areas would not be available for surface development and, therefore, would not be sources of wildland fire risk from minerals development activities.

4.5.2.2.1. PROPOSED RMP

Approximately 18,860 acres of surface disturbance would pose a greater risk for wildland fire due to minerals development (and surface disturbances) within the BLM-administered areas of the VPA, in the short term and long term. Surface disturbances would include seismic exploration, access road and well pad construction, pipeline construction, and the construction of support facilities. Short-term surface disturbances within this area would increase the risk of wildland fire, particularly during clearing and blading of well pads and access roads, with long-term adverse impacts on fire management because of limitations on prescribed fire treatments in these areas. The potential risks would be created by spark or heat ignition from vehicles, construction equipment, and construction personnel. However, there may be beneficial impacts to fire management from construction of roads for minerals development. These roads would serve as possible fire breaks and would provide equipment access for fire control.

Compared to Alternative D (No Action), the Proposed RMP would potentially disturb approximately 648 more acres through minerals surface disturbances (with an associated increase in fire risks) in the short term and long term.

4.5.2.2.2. ALTERNATIVE A

Approximately 18,971 acres of surface disturbance would pose a greater risk for wildland fire due to minerals development (and surface disturbances) within the BLM-administered areas of the VPA, in the short term and long term. The impacts would be similar to those described under the Proposed RMP.

Compared to Alternative D (No Action), Alternative A would potentially disturb approximately 759 more acres through minerals surface disturbances (with an associated increase in fire risks) in the short term and long term.

4.5.2.2.3. ALTERNATIVE B

Minerals development under this alternative would disturb approximately 19,033 acres throughout the BLM-administered areas of the VPA from minerals-related surface disturbances, in the short term and long term. The impacts would be similar to those described under the Proposed RMP. Compared to Alternative D (No Action), Alternative B would potentially disturb approximately 821 more acres in the short term and long term.

4.5.2.2.4. ALTERNATIVE C

Minerals development under Alternative C would disturb approximately 18,757 acres throughout the BLM-administered areas of the VPA in the short term and long term from minerals-related surface disturbances. The impacts would be similar to those described under the Proposed RMP. Compared to Alternative D (No Action), Alternative C would potentially disturb approximately 545 more acres in the short term and long term.

4.5.2.2.5. ALTERNATIVE D (NO ACTION)

Under this alternative, minerals development would disturb approximately 18,212 acres throughout the BLM-administered areas of the VPA from minerals-related surface disturbances in the short term and long term. The impacts would be similar to those described under the Proposed RMP. Alternative D (No Action) would potentially disturb approximately fewer acres in the short term and long term than the Proposed RMP and Alternatives A, B and C, but more than Alternative E.

4.5.2.2.6. ALTERNATIVE E

Minerals development under Alternative E would disturb approximately 17,469 acres throughout the BLM-administered areas of the VPA in the short term and long term from minerals-related surface disturbances. The impacts would be similar to those described under the Proposed RMP. Compared to Alternative D (No Action), Alternative E would potentially disturb approximately 744 fewer acres in the short term and long term.

4.5.2.2.7. SUMMARY

The relative risks of fire from surface disturbance associated with minerals development would be highest under Alternative B, followed by Alternative A, then the Proposed RMP, then C, then D, then E. Alternative E would pose the lowest relative risk of fire from minerals surface disturbances.

4.5.2.3. IMPACTS OF NON-WSA AREAS WITH WILDERNESS CHARACTERISTICS DECISIONS ON FIRE MANAGEMENT**4.5.2.3.1. PROPOSED RMP**

Under the Proposed RMP, approximately 106,178 acres would be managed as non-WSA lands with wilderness characteristics. Salvage of forest woodland species would not be allowed and

these areas would also be closed to woodland product harvest and salvage, resulting in long-term, adverse impacts as compared to Alternative D (No Action), by not allowing fuel load reductions through woodland thinning or removal of dead wood.

Prescribed burning within these areas would still be permitted when compatible with the goals and objectives for management of the non-WSA lands with wilderness characteristics. This would have long-term, beneficial impacts by reducing fire risks by reducing understory vegetation.

This alternative would have more long-term adverse impacts on fire management than Alternative D (No Action), but fewer than Alternative E.

4.5.2.3.2. ALTERNATIVES A, B, C AND D

The impacts of managing non-WSA areas with wilderness characteristics on fire management under Alternatives B, C, and D would be the same, as no acres would be managed as non-WSA areas with wilderness characteristics under any of these alternatives. This would have more beneficial impacts on fire management as compared to Alternatives A or E.

4.5.2.3.3. ALTERNATIVE E

Under Alternative E, the impacts to fire management from the closure of 277,596 acres of non-WSA areas with wilderness characteristics to woodland harvest would be similar to A, but greater due to the additional 176, 891 acres of non-WSA lands and because these areas would also be closed to commercial and personal wood cutting. This alternative would have the most long-term adverse impacts on fire management as compared to the other action alternatives and Alternative D (No Action) because a greater acreage would be restricted from fuel load reductions through woodland thinning or removal of dead wood.

4.5.2.4. IMPACTS OF RANGELAND IMPROVEMENT DECISIONS ON FIRE MANAGEMENT

4.5.2.4.1. PROPOSED RMP

Vegetation treatments for rangeland improvements under the Proposed RMP would occur on an estimated 34,640 acres. This is an estimate, not a limit. Therefore, this alternative would be less beneficial to fire management than Alternative D (No Action) because under the Proposed RMP 5,750 fewer acres would be treated than under Alternative D (No Action).

4.5.2.4.2. ALTERNATIVE A

Impacts for vegetation treatments for rangeland improvements under Alternative A would be the same as the Proposed RMP because the acreages are the same.

4.5.2.4.3. ALTERNATIVE B

Vegetation treatments for rangeland improvements under Alternative B would occur on an estimated 50,900 acres. This is an estimate, not a limit. This alternative would result in long-term benefits to fire management, when compared with Alternative D (No Action) because 10,510 more acres would have vegetation treatments under this alternative than under Alternative D (No Action).

4.5.2.4.4. ALTERNATIVE C AND E

Vegetation treatments for rangeland improvements under Alternative C and E would occur on an estimated 45,860 acres. This is an estimate, not a limit. These alternatives would have beneficial impacts on fire management, compared to Alternative D (No Action), because 5,470 more acres would have vegetation treatments than under Alternative D (No Action).

4.5.2.4.5. ALTERNATIVE D (NO ACTION)

Rangeland-improvement vegetation treatments under Alternative D (No Action) would occur on an estimated 40,390 acres. This is an estimate, not a limit. Alternative D (No Action) would benefit fire management more than Alternative A, but less than Alternatives B and C.

4.5.2.5. IMPACTS OF RECREATION DECISIONS ON FIRE MANAGEMENT

Recreation opportunities included under the Proposed RMP and all of the proposed alternatives would draw visitors onto public lands within the VPA. It is assumed that increased visitation would produce an increased risk and potential for human- and/or vehicle-caused fire. In addition, visitation would potentially impede the BLM's ability to control fuel loading using prescribed fire treatments in areas with high recreational use.

4.5.2.5.1. PROPOSED RMP

The Proposed RMP would manage the following seven SRMAs:

- 42,729 acres on Blue Mountain (13,328 acres of non-WSA lands with wilderness characteristics)
- 18,490 acres in Browns Park (8,050 acres of non-WSA lands with wilderness characteristics)
- 44,168 acres in Nine Mile Canyon
- 2,831 acres along the White River
- 69 acres in Fantasy Canyon
- 24,259 acres on Red Mountain-Dry Fork
- 1,014 acres around Pelican Lake

Under the Proposed RMP, 45,436 acres within the SRMAs identified as having wilderness characteristics would be managed as VRM II. Restrictions on management activities, as described in the VRM II Class objectives, could limit the use of fire management in some areas. The Proposed RMP would also create up to 400 miles of non-motorized trails, and up to 800 miles of motorized trails would be developed and/or improved. These management actions would increase recreation-related visitation. Increased visitation would cause indirect long-term, adverse impacts in the form of increased wildland fire risks from human- and vehicle-caused ignitions. Remote and dispersed camping fires within the existing and proposed SRMAs would pose a particularly high risk of wildland fire. Based on the analytical assumption that increased visitation would increase the human-caused risks of wildland fire, the Proposed RMP would result in higher human-caused fire risks than Alternative D (No Action).

4.5.2.5.2. ALTERNATIVE A

Alternative A would manage the following seven SRMAs, with no specific actions specifically prescribed to protect the wilderness characteristics of non-WSA lands with wilderness characteristics.

- 42,758 acres on Blue Mountain
- 273,486 acres in the Book Cliffs
- 52,720 acres in Browns Park
- 24,183 acres along the White River
- 81,168 acres in Nine Mile Canyon
- 24,259 acres on Red Mountain-Dry Fork
- 1,014 acres around Pelican Lake

Based on the analytical assumption that increased visitation would increase the human-caused risks of wildland fire, Alternative A would result in higher human-caused fire risks than Alternative D (No Action), but with slightly lower risks than Alternative C.

Alternative A also proposes to create 400 miles of non-motorized trails and 800 miles of motorized trails would be developed and/or improved. Impacts of trail development and improvement are the same as described under the proposed RMP because the mileages are the same.

4.5.2.5.3. ALTERNATIVE B

Alternative B would not manage new SRMAs and would not establish new non-motorized trails, but would continue to manage four existing SRMAs: Browns Park (17,000 acres), Nine Mile Canyon (44,181 acres), Pelican Lake (1,014 acres), and Red Mountain (24,259 acres). No specific actions would be specifically prescribed to protect the wilderness characteristics of non-WSA lands with wilderness within SRMAs. Recreation in the Book Cliffs area would be unlimited and unconfined. However, up to 800 miles of motorized trails would be developed and/or improved. These management actions would maintain or increase recreation-related

visitation and their associated wildland fire risks, which would be less than Alternatives A, C and E, but greater than Alternative D (No Action).

4.5.2.5.4. ALTERNATIVE C

Alternative C would manage the following eight SRMAs:

- 42,758 acres on Blue Mountain
- 273,486 acres in the Book Cliffs
- 52,720 acres in Browns Park
- 69 acres in Fantasy Canyon
- 47,130 acres along the White River
- 81,168 acres in Nine Mile Canyon
- 24,259 acres on Red Mountain-Dry Fork
- 1,014 acres around Pelican Lake

Under Alternative C, up to 400 miles of non-motorized trails would be created, but no improvements or development of 800 miles of motorized trails. The impacts would be similar to those described under Alternative A. Based on the increased number of acres designated as SRMA and mileages of trail development/improvement, Alternative C would result in higher human-caused fire risks, compared to Alternative D (No Action), but less than Alternative E, as no specific actions would be specifically prescribed to protect the wilderness characteristics of non-WSA lands with wilderness within SRMAs.

4.5.2.5.5. ALTERNATIVE D (NO ACTION)

Alternative D would manage the following recreation areas (the same as Alternative B):

- Unlimited and unconfined recreation in the Book Cliffs
- 17,000 acres in Browns Park
- 44,181 acres in Nine Mile Canyon
- 24,259 acres on Red Mountain-Dry Fork
- 1,014 acres around Pelican Lake

No specific actions would be specifically prescribed to protect the wilderness characteristics of non-WSA lands with wilderness within SRMAs. In addition, Alternative D (No Action) would create 55 miles of hiking and/or horseback trails, two miles of mountain bicycling trails, and one non-motorized trail of an unspecified length along Sears Canyon. This alternative would not develop or improve 400 miles of non-motorized trails nor would it develop or improve 800 miles of motorized trails. Based on the analytical assumption that increased visitation would increase the human-caused risks of wildland fire, Alternative D (No Action) would have lower fire risks compared to the action alternatives.

4.5.2.5.6. ALTERNATIVE E

Alternative E would manage the same eight SRMAs as described in Alternative C with similar management decisions and impacts, but also manages for protection of non-WSA areas with wilderness characteristics within these proposed SRMAs. The acres of non-WSA wilderness characteristics in each SRMA are as follows:

- 13,308 acres on Blue Mountain
- 77,939 acres in the Book Cliffs
- 23,657 acres in Browns Park
- 0 acres in Fantasy Canyon
- 21,164 acres along the White River
- 20,952 acres in Nine Mile Canyon
- 0 acres on Red Mountain-Dry Fork
- 0 acres around Pelican Lake

Under Alternative E, the approximately 157,018 acres within the SRMAs identified as having wilderness characteristics would be managed as VRM I. Restrictions on management activities, as described in the VRM I Class objectives, could limit the use of fire management in some areas. Outside of the non-WSA areas, up to 400 miles of non-motorized trails would be created, with improvements or development of 800 miles of motorized trails. The impacts would be similar to those for Alternative A, but Alternative E would result in the highest human-caused fire risks, compared to the other action alternatives and to Alternative D (No Action), based on the increased number of acres designated as SRMAs, increased trail development, and restrictions on fire management activities within SRMAs lands identified as having wilderness characteristics.

4.5.2.6. IMPACTS OF TRAVEL DECISIONS ON FIRE MANAGEMENT

Motorized use in the VPA creates a limited risk of human-caused fire. This risk includes heat and sparks from motors and exhaust systems. This risk is increased substantially if travel occurs off designated routes. The cross-country motorized travel category poses the greatest risk of inadvertent wildland fire starts, followed by travel on designated routes. Cross country travel is much more likely to bring the heat and sparks from exhaust systems in direct contact with vegetation than travel on designated routes, which are typically devoid of vegetation. Closing areas to motorized travel largely eliminates the risk of inadvertent fire starts from motorized vehicles. The Proposed RMP and all of the action alternatives would lessen the impact of human-caused fires more than Alternative D (No Action), due to the reduction of motorized cross-country travel under those alternatives. Acreages vary by alternative and are discussed below.

4.5.2.6.1. PROPOSED RMP

Under the Proposed RMP, 6,202 acres would be open to unrestricted OHV travel. Another 1,643,475 acres would be open to limited or restricted OHV travel, and 75,845 acres would be

closed to OHV travel. This would have beneficial impacts on fire management as compared to Alternative D (No Action) as 781,657 fewer acres would be open to unrestricted OHV travel and 28,457 more acres would be closed to OHV travel.

4.5.2.6.2. ALTERNATIVE A

Impacts under Alternative A would be the same as under the Proposed RMP because the travel decisions are the same.

4.5.2.6.3. ALTERNATIVE B

Under Alternative B, 5,434 acres would be open to unrestricted OHV travel. Another 1,659,901 acres would be open to limited or restricted OHV travel, and 60,187 acres would be closed to OHV travel. This would have beneficial impacts on fire management as compared to Alternative D (No Action) as 782,425 fewer acres would be open to unrestricted OHV travel and 9,799 more acres would be closed to OHV travel.

4.5.2.6.4. ALTERNATIVE C

Under Alternative C, 5,434 acres would be open to unrestricted OHV travel. Another 1,353,529 acres would be open to limited or restricted OHV travel, and 366,559 acres would be closed to OHV travel. This would have beneficial impacts on fire management as compared to Alternative D (No Action) as 782,425 fewer acres would be open to unrestricted OHV travel and 316,171 more acres would be closed to OHV travel.

4.5.2.6.5. ALTERNATIVE D (NO ACTION)

Under Alternative D (No Action), 787,859 acres are open to unrestricted OHV use, largely in Condition 1 and Condition 2 areas. There are 887,275 acres subject to restrictions on OHV use, and 50,388 acres are closed to OHV use. The highest adverse impacts to fire management would be due to Alternative D (No Action) as compared to the Proposed RMP and the action alternatives because fewer acres are closed to OHV travel and more acres are open to unrestricted OHV travel.

4.5.2.6.6. ALTERNATIVE E

Under Alternative E, 5,434 acres would be open to unrestricted cross-country OHV travel. Approximately 1,326,024 acres would be managed to restrict OHV travel to designated routes, and 392,818 acres would be closed to OHV travel. This would have beneficial impacts on fire management as compared to Alternative D (No Action) as 782,425 fewer acres would be open to unrestricted OHV travel and 342,430 more acres would be closed to OHV travel.

Travel decisions would result in the same risk as Alternative A, less risk of fire than Alternative B and Alternative C, but more risk than Alternatives D and E.

4.5.2.7. IMPACTS OF WOODLAND AND FOREST DECISIONS ON FIRE MANAGEMENT

4.5.2.7.1. PROPOSED RMP

Under the Proposed RMP, forests and woodlands would be managed to promote biodiversity and multiple use/sustained yield. In addition, woodlands and forests within the VPA would be managed so that disturbances would not exceed levels normally expected within healthy woodland and forest ecosystems. Woodland and forest harvesting would reduce stand densities, and salvaging of dead or downed wood would reduce fuel loads, which would have direct, long-term, beneficial impacts on fire management.

Under the Proposed RMP, 546,152 acres of forest and woodlands would be open to treatments or harvesting. Approximately 13,606 acres within WSAs and 106,178 acres of non-WSA lands with wilderness characteristics would not have woodland product harvest or salvage, but would be open to treatments. This would have long term, beneficial impacts by reducing the risk of wildland fire through fuel loads reduction. The Proposed RMP would have more long-term direct beneficial impacts on fire management than Alternative D (No Action) because more acreage within the VPA would have treatments or be harvested.

4.5.2.7.2. ALTERNATIVES A AND C

Under Alternatives A and C, 552,152 acres of forest and woodland are proposed for treatments or harvesting. Approximately 13,606 acres of WSAs would not have woodland product harvest or salvage, but would be open to treatments. Alternatives A and C would have more long-term direct beneficial impacts on fire management than Alternative D (No Action) because more acreage within the VPA would have treatments or be harvested.

4.5.2.7.3. ALTERNATIVE B

Under this alternative 554,108 acres of forest and woodlands would be open to treatments or harvesting. The long term, beneficial impacts of this management action on fire management would be similar to those described above for the Proposed RMP, but on a larger scale. This alternative would have more long-term direct beneficial impacts on fire management than Alternative D (No Action) because more acreage within the VPA would have treatments or be harvested.

4.5.2.7.4. ALTERNATIVE D (NO ACTION)

Under Alternative D (No Action), up to 288,200 acres (88,200 acres of forest and 200,100 acres of woodland) would be designated for treatments or be harvested, but public use of the resource and woodland salvaging is unspecified. Alternative D (No Action) would have some long-term direct beneficial impacts on fire management from harvesting and treatments, but less than those resulting from the Proposed RMP or the action alternatives.

4.5.2.7.5. ALTERNATIVE E

Under Alternative E, up to 421,133 acres of forest and woodland would be treated or harvested. Approximately 330,573 acres within WSAs and non-WSA lands wilderness characteristics would not have vegetation removal. Impacts to fire management would be similar to those described under the Proposed RMP, but would be less as fewer acres would be treated and the salvage of forest and woodland species, woodland product harvest and personal and commercial woodcutting would not be allowed in 277,596 acres non-WSA lands with wilderness characteristics. This would increase the risks of large-scale, catastrophic wildland fires that would have direct, long-term, adverse impacts on fire management. This alternative would have more long term adverse impacts than any of the alternatives.

4.5.2.8. SUMMARY**4.5.2.8.1. PROPOSED RMP**

Under the Proposed RMP, fire risk would be third highest due to minerals development. Rangeland improvements would result in fewer beneficial impacts than under Alternative D (No Action). Recreation decisions would result in the second highest level of risk when compared to Alternative D (No Action). Travel decisions would result in the same risk as Alternative A, less risk of fire than Alternative B and Alternative D (No Action)., but more risk than Alternatives D (No Action) and E. Alternative A would have more long-term direct beneficial impacts on fire management from woodland decisions that would reduce stand densities, and reduce fuel loads through dead or downed wood would reduce fuel loads than Alternative D (No Action). Management of non-WSA land with wilderness characteristics would result in fewer beneficial impacts to fire management as compared to Alternative D (No Action).

4.5.2.8.2. ALTERNATIVE A

Under Alternative A, fire risk would be second highest due to minerals development. Rangeland improvements would result in fewer beneficial impacts than under Alternative D (No Action). Recreation decisions would result in the second highest level of risk when compared to Alternative D (No Action). Travel decisions would result in less risk of fire than Alternative Band Alternative D (No Action)., but more risk than Alternatives D (No Action) and E. Alternative A would have more long-term direct beneficial impacts on fire management from woodland decisions that would reduce stand densities, and reduce fuel loads through dead or downed wood would reduce fuel loads than Alternative D (No Action). Management of non-WSA land with wilderness characteristics would result in fewer beneficial impacts to fire management as compared to Alternative D (No Action).

4.5.2.8.3. ALTERNATIVE B

Under Alternative B, risk of wildland fire due to minerals development would be the highest. Rangeland improvements would be the most beneficial under Alternative B, when compared to Alternative D (No Action). Recreation decisions would result in a higher risk of fire than Alternative D (No Action), but lower than the other action alternatives. Travel decisions would

result in less risk of fire than Alternative D (No Action), but more fire risk than the other action alternatives. Woodland decisions would have impacts on reducing the risks of wildland fire similar to Alternatives A and C, but on a slightly larger (and more beneficial) scale, with impacts to fire management more beneficial than Alternative D (No Action). Management of non-WSA land with wilderness characteristics would result in the same impacts as Alternative D (No Action).

4.5.2.8.4. ALTERNATIVE C

Under Alternative C, the risk of wildland fire due to minerals development would be lower than Alternatives A and B. Rangeland improvements would be beneficial when compared to Alternative D (No Action), though not as beneficial as those under Alternative B. Recreation decisions would result in a higher risk of wildland fire, when compared to Alternative D. Travel decisions would result in less risk of fire than Alternatives A, B and D (No Action), but more risk than Alternative E. Alternative C would have more long-term direct beneficial impacts on fire management from woodland decisions than Alternatives A, D (No Action), and E. Management of non-WSA land with wilderness characteristics would result in the same impacts as Alternative D (No Action).

4.5.2.8.5. ALTERNATIVE D (NO ACTION)

Minerals development proposed under Alternative D (No Action) would cause the risk of wildland fire to be lower than the risks under Alternatives A and B, and C, but higher than under Alternative E. Rangeland vegetation improvements under Alternative D (No Action) would be more beneficial than those of Alternative A, but less than those of Alternatives B, C, and E. Recreation decisions would pose less of a wildland fire risk than Alternatives A, B, C, and E. Travel decisions under Alternative D (No Action) would have substantially more risk than the action alternatives. Woodland decisions would have some beneficial impacts on fire management, but less than Alternatives A, B, and C. There would be no impacts from non-WSA land management decisions under Alternative D (No Action).

4.5.2.8.6. ALTERNATIVE E

Under Alternative E, the risk of wildland fire due to minerals development would be lower than all other alternatives. Rangeland improvements would be beneficial when compared to Alternative D (No Action), though not as beneficial as those under Alternative B. The risk of wildland fire due to travel decisions would be lowest under Alternative E. Recreation and woodland decisions would result in the highest risk of wildland fire. Management of non-WSA land with wilderness characteristics would result in fewer beneficial impacts as Alternative D (No Action).

4.5.3. MITIGATION MEASURES

- To ensure timely access to and escape from wildland fire or prescribed burns for fire suppression equipment and personnel, berm or bury pipelines at road crossings to ensure

that fire equipment and personnel would not be impeded or obstructed by cross-country natural gas or liquid petroleum pipelines.

- To reduce fire risk, vehicles used to transport personnel and equipment to treatment areas would be restricted to authorized routes or equipped with spark arresters.
- Prescriptive treatments would be managed in high-use recreation areas and during special seasons (e.g., big-game rifle hunting in the fall) to reduce or eliminate resource use conflicts.
- To reduce wildland fire risk, after prescribed burning, chemicals and seed with shrub/grass/forbs would be used to reduce cheatgrass, tamarisk, and other noxious weeds and non-native species.

4.5.4. UNAVOIDABLE ADVERSE IMPACTS

Wildland fire ignition risks associated with minerals development would be an unavoidable adverse impact.

Recreation decisions would have unavoidable adverse impacts on fire management by increasing visitation, but reducing the ability of the BLM to control fuel loading through the use of prescribed fire or other treatments.

4.5.5. SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY

Short-term development of mineral exploration and extraction sites would have long-term impacts on fire management, including increasing the wildland fire ignition risk and increasing the difficulty of restoring desired natural Fire Regimes and Fire Condition Classes.

Recreation decisions would potentially result in long-term impacts to fire management by increasing wildland fire ignition risks that result from increased visitor use in recreation areas and, due to an increased human presence in VPA recreation areas, decreasing the ability to control fuel loading through prescribed fire.

4.5.6. IRREVERSIBLE AND IRRETRIEVABLE IMPACTS

Proposed management decisions regarding woodlands, recreation and travel management, minerals development; and management of non-WSA lands with wilderness characteristics would impose long-term limitations and restrictions on the use of prescribed fire for vegetation and fuels management. This, in turn, would result in a potential irretrievable departure in vegetative natural functioning condition, with a resultant increase in the risk of catastrophic fire in those areas where these restrictions are imposed. However, these impacts would not be irreversible as areas where proposed surface disturbance would occur could be rehabilitated or restored. Additionally, chemical and mechanical vegetation treatments could be used in these areas in lieu of prescribed fire.