

D

Fire Management Zones

Areas where wildland fire is desired, and there are few or no constraints for its use.

General Description:

Areas where unplanned and planned wildland fire may be used to achieve desired objectives such as to improve vegetation, wildlife habitat or watershed conditions.

Fire Mitigation Considerations:

Implement programs that reduce unwanted human-caused ignitions, as needed.

Fire suppression/use considerations:

These areas offer the greatest opportunity to take advantage of the full range of options available for managing wildland fire under the appropriate management response. Health and safety constraints will apply. Resource use considerations similar to those described for Category C may be identified if needed to achieve resource objectives. Areas in this category would be the lowest suppression priority in a multiple fire situation.

Fuel treatment considerations:

There is generally less need for hazard fuel treatment in this category. Prescribed fire for fuel hazard reduction is not a priority except where there is an immediate threat to public health and safety. If treatment is necessary, both fire and non-fire treatments may be utilized, as allowed by the land use plan. Prescribed fire to obtain desired resource/ecological condition is appropriate.

Black Ridge

D-130-01

Location: This FMU is located directly west of Colorado National Monument and extends to the Utah state line. (See Map Black Ridge D-130-01) This unit totals 79,934 acres encompassing 79,914 acres of BLM administered lands and only 20 acres of private land.

Characteristics: This FMU consists of an overall north aspect with mesas and benches separated by deep sandstone canyons. Soils are generally sandy, shallow to moderately deep over sandstone or shale bedrock, and often are very stony on the surface. Mesa tops, benches, and canyon bottoms have deeper soils, particularly in the more open sagebrush/rabbitbrush parks. Elevation ranges from 7,063ft at the top of Black Ridge down to 4,400 ft where the Colorado River leaves the unit. This unit contains the Black Ridge Canyons Wilderness Area, which is part of the Colorado Canyons National Conservation Area.

The unit lies primarily within the Devils, Flume, Pollock, Rattlesnake, Bull, Mee, Moore, Knowles, and Jones Canyons watersheds. These are a series of northwesterly trending ephemeral and intermittent flowing systems which are tributary to the Colorado River. Upper portion of Mee and Knowles Canyons has seasonal flow, while the lower reaches and other canyons within the unit are generally dry. The exception is snowmelt periods and when runoff is generated from summer convective rainstorms. The extreme southern border lies within the Little Dolores River watershed. Tributaries to the Little Dolores River include Twenty-eight Hole Wash and Sieber Canyon. These are ephemeral systems that flow only during snowmelt and summer storms periods. No water quality data have been collected on these streams because of the limited access and limited flow. Quality is projected to be excellent given the geology and land use within the area. The State of Colorado has classified these streams aquatic life warm 2, recreation 1b, and agriculture. The 303(d) monitoring and evaluation list, a listing of waters with perceived problems, includes these streams for sediment.

Riparian: Riparian systems are found in limited area of Bull, Rattlesnake, Jones, Knowles and Mee Canyons. All are within an area that can utilize fire as a tool in the ecosystem. Most areas do not contain enough riparian to use as a fire break, however most of the vegetation would re-sprout if fire were to consume the system.

The vegetation character is sagebrush parks and varying densities of pinyon – juniper stands on the mesas and benches. Smaller amounts of bunchgrass areas and riparian pockets are found across the FMU.

Access is very limited due to the rough topography and the fact that the area has been designated the Black Ridge Canyons Wilderness area. The primary use of the area is livestock grazing and dispersed wilderness recreation.

This FMU is covered by the Ruby Canyon/Black Ridge Guidebook for Natural Ignition Fire Planning implemented in February of 1998. Much of the background information in that book is still valid. The objectives for this FMU were for fire to 1) Assist in achieving DPC Desired Plant Community goals and objectives (See ruby Canyon/Black ridge Integrated Resource Management Plan 1998), 2) Permit lightning caused fires to play

as nearly as possible their natural ecological role; and 3) Reduce, to acceptable levels, the risks and consequences of wildland fire within the area or escaping from the area. In 1999, approximately 7000 acres (9%) burned in this FMU. Past burns in sagebrush parks have become dominated by cheatgrass.

The extent of sagebrush loss in this unit is of concern especially in the critical deer winter range at the west end of the FMU. Rehab efforts in the past have had varied results. In sagebrush parks cheatgrass becomes dominant regardless if the area was seeded or not following fire. In the piñon-juniper sites seeding has increased the perennial herbaceous cover although there is an increase in cheatgrass. In other piñon-juniper sites that were not seeded the invasion of cheatgrass varies and in most cases a satisfactory perennial herbaceous cover establishes.

Intensive dispersed recreation in the Wilderness Front Country, limited dispersed recreation throughout the rest of the unit

The following cultural resource class is found within this FMU: **CR-1** High Value/ High Risk

Fuels and Fire Behavior: The primary fuels are piñon-juniper with sagebrush in the bottoms. The area is broken up by significant amounts of barren rim rock. Fire scars are primarily cheat or perennial grasses. The fire behavior potential in this area is significant in the pockets of continuous fuels. Wind is required to cause spotting from one pocket to the next.

Fire History: This area has a history of numerous fires. Due to the difficulty in accessing the area, fires escape detection, and have the opportunity to grow. This area also is a location where fires in Utah have a tendency to cross the border into Colorado.

Fire Regime/Condition Class:

The vegetative composition of the Black Ridge area is generally in a late seral stage, with the composition and structure of the sage/grass community being moderately departed from its natural range of variability (NRV). This community is considered to be in a condition class (CC) 2 moving towards a condition class 3, especially with the potential conversion to cheatgrass. The piñon-juniper communities are considered to be within their respective NRV, and are generally considered to be in CC 1, although again the threat of cheatgrass tilts the entire community towards a CC 2.

Values at Risk:

Aquatic Habitat – All springs, seeps, and ponds within this unit provide aquatic habitat for various species. If fire suppression takes place the protection of all riparian areas, regardless of size, along with any seeps, springs, small ponds, etc. will help insure the continued presence of this habitat type.

Special Status Species – Table III.D.5 gives the status of each species, locational information, and provides the fire suppression prescriptions for the species in this unit. The plants are listed by scientific name. The species of concern to this FMU are six big river fish species, *Aletes latilobus*, *Oreocarya osterhoutii*, bald eagle, Gunnison sage-grouse, fringed myotis bat, and the northern leopard frog,. All known locations for rare

plants as well as the State Potential Conservation Areas in this unit are in the BLM GIS system to insure protection/avoidance during fire suppression efforts.

Water quality – Inclusion of these streams on the 303(d) monitoring and evaluation list indicates there is a perceived problem with sediment. Maintenance of good vegetative cover is crucial to limit sediment produced from these watersheds and health of this habitat type, especially in this otherwise dry environment.

Riparian Areas – A level of wildfire risk to these small but vital areas is accepted in the wilderness. If a wildfire event were to test this decision and threaten too much of this habitat, for example, half of a major canyon, intervention should not be foreclosed. These areas are valued for their luxuriant visual and temperature relief for visitors and for canyon wildlife from bighorn sheep to canyon tree frogs.

Sagebrush – It is the large parks along the south boundary of this unit that require the closest monitoring. These parks are Gunnison sage-grouse winter habitat. There is no evidence that fire under any circumstance is anything, but harmful to sage grouse winter habitat. The parks provide for other sagebrush obligate species and are foraging ground for elk and the occasional bighorn sheep.

Piñon-Juniper – Piñon- juniper encroachment is occurring in some parks. Fire should play its natural role as much as possible. Mechanical means are severely limited in use for thinning the P-J woodland in this unit. Since bighorn sheep are the key big game management species across the unit, reduction of PJ woodland cover is desirable here. The stands at the SE corner are used by elk as cover and should be protected from extensive burns. The rare plant, Canyonlands biscuitroot, huddles against the cliffs and slickrock of Rattlesnake Canyon and is at low risk of harm from wildfires and fire management activities, yet must be included in fire monitoring schedules.

Inside the Black Ridge Canyons Wilderness fire's natural role is welcome. The Knowles Canyon TH, Rattlesnake Arches TH, and the Jones Canyon TH should be protected.

Minimal cultural resource survey has been conducted, but where it has, a high density of Archaeological and Historic Resources that are eligible or potentially eligible for nomination to the National Register of Historic Places has been recorded. Sites at risk in all three categories, **(A)**, **(B)**, and all levels of **(C)** have been recorded (see Chapter 3.1.1). Cultural resource management is subject to the guidelines developed in a Programmatic Agreement (PA) for Wildland Fire Use between the BLM Colorado, the USFS in Colorado and the SHPO (September 1998). The Ruby Canyon/Black Ridge Guidebook for Natural Ignition Fire Planning implemented in February of 1998 for this area will need to be updated to incorporate the guidance of this PA. Identification and evaluation of combustible sites and Prescription /Constraint map development is a priority for this Unit.

Communities at Risk: There are no communities in this unit.

Bangs Canyon

D-130-02

Location: This FMU is located west of Whitewater. Rough Canyon forms the northwestern boundary and the Tabeguache Trail the southeastern boundary. The unit contains 16,250 acres and is entirely made up of BLM lands. (See Map Bangs Canyon D-130-02)

Characteristics:

This unit slopes predominately to the northeast. It contains varying densities of pinyon-juniper on rocky slopes and mesa tops, along with open areas of sagebrush/grass between canyons and on mesa tops. The elevation ranges for a high of 7,200 ft on the western boundary to the low point of 4,800 ft. on the east. Access is limited to a few rough four wheel drive roads. Use of this area is predominately livestock grazing and dispersed recreation. These latter areas contain the deeper soils having more clay in the substratum. Exposed sandstone bedrock is common, with shallow to moderately deep, fine sandy loam to sandy clay loam soils throughout this unit. Scattered stones and boulders are also common. The erosion hazard in this unit is high. Some Ponderosa Pine exists in the southwest corner of this unit. The lower half of this unit is comprised of open grass/shrub mesa tops and canyon bottoms with scattered piñon and juniper. The upper half supports a much higher density of piñon and juniper with a few small sagebrush/grass parks. Fire could play a role in increasing the size and amount of these open parks especially on the mesas with deeper soils. At this time cheatgrass is not a major component in this system.

The major drainages include Bangs Canyon and the south side of Rough Canyon which are tributary to the Gunnison River. They are generally dry with the exception of snowmelt periods and when convective storms produce runoff. No water quality data are available for the area because of the limited flow. Quality is projected to be very good considering the geology and land use. The state of Colorado has classified these tributaries aquatic life warm 2, recreation 2, water supply, and agriculture. The 303(d) list, a listing of impaired waters includes these streams for selenium.

Limited dispersed recreation activity; Tabaguache Trail runs through portions of the unit; limited bicycling and OHV traffic on the trail spring, summer and fall

The following cultural resource classes are found within this FMU: **CR-1 High Value/ High Risk**

Fuels and Fire Behavior: Bangs canyon is primarily pinyon-juniper woodland with large areas of barren ground or rock. This area is somewhat sheltered from the predominant wind by the Uncompahgre Plateau, and would require a rare wind event to have significant fire growth.

Fire History: This unit has a very low occurrence of detected fires.

Fire Regime/Condition Class:

The vegetative composition of the Bangs Canyon area is generally in a late seral stage, with the composition and structure of the sagebrush/grass and ponderosa pine communities being moderately departed from their natural range of variability (NRV). These communities are considered to be in a condition class (CC) 2 moving towards a

condition class 3, with some of the ponderosa pine stands firmly in a CC 3 due to the mature shrub layer in the understory. The pinyon-juniper communities are considered to be within their NRV, and are generally considered to be in CC 1.

Values at Risk:

Aquatic Habitat – There are also numerous fish species in the Gunnison River, including a diverse sucker population, which make spawning runs up several of the drainages to spawn in the spring and early summer. All springs, seeps, and ponds within this unit provide aquatic habitat for various species. If fire suppression takes place, the protection of all riparian areas, regardless of size, along with any seeps, springs, small ponds, etc. will help insure the continued presence and health of this habitat type, especially in this otherwise dry environment

Special Status Species – Table III.D.5 gives the status of each species, locational information, and provides the fire suppression prescriptions for the species in this unit. The plants are listed by scientific name. The species of concern to this FMU are four big river fish species, bald eagle, northern goshawk, fringed and Yuma myotis bats, northern leopard frog, Great Basin spadefoot toad, and *Astragalus linifolius*. All known locations for rare plants as well as any State Potential Conservation Area in this unit are in the BLM GIS system to insure protection/avoidance during fire suppression efforts

Risk to riparian resources from fire is accepted here as reasonable considering the many natural fire breaks and that the natural fire return rate is great enough to never jeopardize the overall resource. This prediction should be monitored.

Riparian – While the streams are not perennial and the springs are small, riparian vegetation exists and surface water is found at several sites within the FMU. These serve wildlife and human visitors. Every drainage with a name on the USGS topographic maps has riparian vegetation in it.

Pinyon-Juniper – Fire should play as natural role as possible. Mechanical means can be used to thin the PJ woodland in this unit. Two herds of desert bighorn sheep range on opposite sides of this FMU. Thinning by any means would promote the objective of having the Bangs Canyon area serve as a linkage between the two ranges.

Ponderosa Pine – The Southwest corner of this unit, at the highest elevation, contains some Ponderosa Pine that should be protected from high intensity fires. Low intensity burns that could benefit the stands are desirable.

Minimal cultural resource survey has been conducted but where it has a high density of Archaeological and Historic Resources that are eligible or potentially eligible for nomination to the National Register of Historic Places have been recorded. Sites at risk in all three categories, **(A)**, **(B)**, and all levels of **(C)** have been recorded (see Chapter 3.1.1). Cultural resource management is subject to the guidelines developed in a Programmatic Agreement (PA) for Wildland Fire Use between the BLM Colorado, the USFS in Colorado and the SHPO (September 1998). Until a Wildland Fire Use Plan is approved guidelines and Prescription/ Constraint maps need to be developed for this

unit prior to allowing Wildland Fire Use as described in the Appendix. Identification and evaluation of combustible sites and Prescription /Constraint map development is a priority for this Unit.

General – This unit contains two high investment range improvements. The Bangs Well is not at risk due to its location and low density surrounding vegetation. The Round Knob catchment is located in much denser vegetation and is at risk of damage from fire. (JD)

Communities at Risk: There is no community in this FMU and fires in this FMU are not likely to threaten any community.

Wagon Park / Nine Mile Hill

D-130-03

Location: This FMU is located on the north east corner of the Uncompaghre Plateau between Horse Mesa and Little Dominguez Creek. The unit consists of a total of 56,341 acres of BLM administered lands.

Characteristics: This area is characterized by large northeast-sloping mesas and deep canyons. The elevation ranges from 4,800 ft at the lowest point on the eastern boundary to 8,170 ft on the highest point on the southwestern edge. As is common to this entire area, soils are developing in sandstone and shale parent materials, with a high content of stones and boulders scattered over or in the surface. Soil at the higher elevations of this unit generally have higher clay content, with sandy clay loam to clay loam textures providing fair water holding capacity. They are shallow to deep over bedrock, with exposures of sandstone bedrock common throughout the unit.

Water Quality - Most of the unit lies within the Dominguez watershed; however the northern part of the unit is drained by series of northeast trending unnamed ephemeral drainages. All are tributary to the Gunnison River. Big Dominguez Creek is a perennial stream with seasonal variation of flow. Snowmelt provides seasonal high water, but summer convective storms produce flood flows. Water quality is excellent. Total dissolved solids are generally below 250 mg/l and the waters are a calcium-bicarbonate type. The state of Colorado has classified Dominguez Creek aquatic life cold 1, recreation 1a, and agriculture. The 303(d) list, a listing of impaired waters, does not include these streams suggesting water quality standards are being met

Riparian - The upper reaches of Big Dominguez contain a fishery and have a series of occurring beaver dams. The upper reaches of all three streams would probably not burn well and would most likely work as a fuel break. The vegetation would re-sprout and recruitment would occur if wildfire were to enter these systems. The lower portions of Big and Little Dominguez lack the diversity of the upper reaches and the cottonwoods along the lower reaches would suffer from fire even though they are mostly Narrowleaf which will re-sprout following fire as long as the fire is not too severe. Protection of lower reaches of cottonwoods may be necessary if wildfire were to be used as a tool in these areas.

This unit contains varying densities of pinyon-juniper on rocky slopes and mesa tops. Some Ponderosa Pine exists in the southwest corner of this unit. The upper mesas have received a number of pinyon-juniper treatments. The northeast portion is dominated by desert shrub community which provides desert bighorn sheep habitat. In the 1960's the southern part area was chained and in the past 5 years some of the old chaining were treated using a roller chopper. This unit is within the Uncompaghre Ecosystem Restoration Project area, which is concerned with restoring native plant communities to a natural healthy condition. Currently many vegetation communities have lost much of there natural plant diversity and have become dominated by pinyon and juniper trees.

This unit provides for livestock grazing and dispersed recreation. Limited dispersed recreation during spring and summer increases with big game season in higher elevations. There is intensive recreation use along 9 Mile hill especially in the spring and fall.

This unit supports one rare plant and three specimen plant communities within its boundary; these are listed by unit number in (Appendix 1A). In addition, this unit supports three State Potential Conservation Areas, which are listed by unit, in (Appendix 1B).

The following cultural resource classes are found within this FMU: **CR-1 High Value/High Risk**

Fuels and Fire Behavior: This FMU is primarily pinyon-juniper with large areas of barren ground or rock. This area is somewhat sheltered from the predominate wind by the Uncompahgre Plateau, and would require a rare wind event to have significant fire growth.

Fire History: This unit has a very low occurrence of detected fires.

Fire Regime/Condition Class:

The vegetative composition of the Wagon Park area is generally in a late seral stage, with the composition and structure of the sagebrush/grass community being moderately departed from its natural range of variability (NRV). This community is considered to be in a condition class (CC) 2 moving towards a condition class 3, and the few ponderosa pine stands are in a CC 3 due to the mature shrub understory. The pinyon-juniper communities are considered to be within their respective NRV, and are generally considered to be in CC 1 in both Wagon Park and the Nine Mile area.

Values at Risk:

Aquatic Habitat – Big Dominguez Creek supports a trout fishery. This Creek, along with Little Dominguez, and any other drainages having water, wet areas, springs, seeps, and ponds within this unit provide aquatic habitat for various species. If fire suppression takes place, the protection of all riparian areas, regardless of size, along with any seeps, springs, small ponds, etc. will help insure the continued presence and health of this habitat type, especially in this otherwise dry environment.

Special Status Species – Table III.D.5 gives the status of each species, locational information, and provides the fire suppression prescriptions for the species in this unit. The plants are listed by scientific name. The species of concern to this FMU are four big river fish species, bluehead sucker, bald eagle, northern goshawk, fringed and Yuma myotis bats, northern leopard frog, *Sclerocactus glaucus*, and *Astragalus linifolius*. All known locations for rare plants as well as any State Potential Conservation Area in this unit are in the BLM GIS system to insure protection/avoidance during fire suppression efforts.

Riparian Areas –Big and Little Dominguez Creeks are perennial streams with well developed riparian vegetation along them. The size and importance of this resource is too great to not protect from wildfire. In doing this, the presence of *Sclerocactus glaucus*, a threatened species of plant at the lower ends of those streams and immediately outside the riparian zone must be taken into account.

Pinyon-Juniper – Fire should play as natural role as possible. Mechanical means can be used to thin the P-J woodland in this unit. Thinning of PJ woodlands here improves bighorn sheep habitat. Recently the Ips beetle has been thinning these woodlands with none of the ground disturbance attendant with fire and mechanical methods. A common and desirable understory of open PJ woodlands in this FMU is black sagebrush and blue grama.

Ponderosa Pine – The Southwest corner of this unit, at the highest elevation, contains some Ponderosa Pine that should be protected from high intensity fires. Low intensity burns that could benefit the stands are desirable.

General – The best stands of the BLM sensitive plant, Grand Junction milkvetch, *Astragalus linifolius*, are in this FMU. The stands of it above the cliffs of Dominguez Canyon may themselves be sufficient to carry a ground fire.

Dominguez WSA is in this unit. Fire's natural role is welcome. Dominguez CG, and cottonwood stands along Big Dominguez Creek should be protected. The water saver overlooking upper Dominguez Canyon and Rocky Pitch Canyon should be protected from wildfire. It is mapped in this FMU, but is close enough for confusion to be thought of as in FMU C-130-01.

Minimal cultural resource survey has been conducted, but where it has, a high density of Archaeological and Historic Resources that are eligible or potentially eligible for nomination to the National Register of Historic Places has been recorded. Sites at risk in all three categories, **(A)**, **(B)**, and all levels of **(C)** have been recorded (see Chapter 3.1.1). Canyon sites are most at risk from direct thermal impacts and flash flood or debris events following large fires in the uplands. The Wagon Park areas most at risk from fire would be any woodlands that have not had disturbance in the last 200-400 years. In the Nine Mile Hill area cultural sites may be best prioritized for fuels assessment. Cultural resource management is subject to the guidelines developed in a Programmatic Agreement (PA) for Wildland Fire Use between the BLM Colorado, the USFS in Colorado and the SHPO (September 1998). Until a Wildland Fire Use Plan is approved guidelines and Prescription/ Constraint maps need to be developed for this unit prior to allowing Wildland Fire Use as described in the Appendix.

Communities at Risk: There are no communities or private structures in this unit.

The Palisade

D-130-04

Location: This FMU is located directly north of Gateway. It is entirely BLM administered land and consists of 7,747 acres. (See Map Palisade D-130-04)

Characteristics: This FMU consists of a series of rocky ridges and draws with the Palisade Ridge forming the western boundary. The high point on the Palisade is 7,045ft and the low point near Gateway is 4,700 ft.

Below the sandstone cliffs and bedrock exposures, soils are developing in parent materials containing a large amount of gravel and cobble. Soils are generally very sandy and droughty, with a high erosion potential.

Bull Draw, Wright Draw, and Mailbox Draw, tributaries to West Creek are the drainages in this unit. These are all ephemeral systems, consequently are dry and not classified as riparian. They contain water during snowmelt periods and when runoff is generated from convective storms. No water quality data are available for these drainages because they are virtually dry. Visual observations indicate that high sediment loads occur during flooding events. The State of Colorado has classified these streams aquatic life warm 2, recreation 1a, and agriculture.

The major aspect is south. Pinyon-juniper woodland is the major vegetation type with some of the lower ridges supporting blackbrush and the drainage bottoms having rubber rabbitbrush. The dominant uses of the area are livestock grazing and big game hunting. The area is an important deer winter range.

Limited dispersed recreation. Intensive dispersed use during late big game seasons. This FMU contains the Palisade WSA.

Cultural: The following cultural resource classes are found within this FMU: **CR-0** Low Value/Low Risk.

Fuels and Fire Behavior: The fuels are primarily pinyon, juniper and mountain shrub. There is significant potential for large fire growth due to the fuels, steep slopes, and difficulty in accessing the upper portions of the unit.

Fire History: This unit has a very low occurrence of detected fires.

Fire Regime/Condition Class:

The vegetative composition of the Palisade area is generally in a late seral stage, with the composition and structure of the blackbrush and pinyon-juniper communities being within its natural range of variability (NRV). This community is considered to be in a condition class (CC) 1, and the few ponderosa pine stands are in a CC 3 due to the mature shrub understory.

Values at Risk:

Aquatic Habitat – All aquatic areas such as seeps, springs, small ponds, regardless of size, found in this unit are extremely important for both aquatic and terrestrial species and must be protected especially in this otherwise dry environment.

Special Status Species – Table III.D.5 gives the status of each species and provides the fire suppression prescriptions for the species in this unit. The species of concern to this FMU are fringed myotis bat and northern leopard frog.

Piñon- Juniper – Fire should play as natural role as possible. Mechanical means can be used to thin the PJ woodland in this unit, although this is considerably limited by the WSA status of the area and the topography does not lend itself to sizeable projects here. This is a deer winter range and the PJ woodland serves as daytime cover for the animals that move downslope to feed at evening. Land treatments that increase the forage in the FMU may reduce the incursion of deer onto private land gardens along West Creek. There is no information as to the public desire for this.

Cultural Resources- The area has no recorded Archaeological and Historic Resources that are eligible or potentially eligible for nomination to the National Register of Historic Places, but there has also been no cultural survey. If current wildlife use and vegetation community distribution represent historic and prehistoric conditions it is likely that open camps and open architectural sites exist. Reconnaissance survey to test this possibility should be planned. Until a Wildland Fire Use Plan is approved guidelines and Prescription/ Constraint maps need to be developed for this unit prior to allowing Wildland Fire Use as described in the Appendix.

General – This FMU is within the Palisade WSA affecting fire management methodology. It is also in The Palisade Outstanding Natural Area, making this FMU's designation appropriate.

Communities at Risk: There are not communities or private structures within this FMU, but the community of Gateway is directly adjacent to this unit.

Location – The 16,410 acres of this FMU are located entirely within the boundary of Colorado National Monument, primarily “backcountry areas” on mesa tops and canyon bottoms (See Map D-130-05). Much of the historic Rim Rock Drive, associated overlooks, and several trailheads are in this FMU.

Characteristics – This FMU consists of terrain that varies from rolling pinyon-juniper and sagebrush mesa tops to rugged canyons and 400’ verticle rock walls and spectacular sandstone monoliths. Canyons are generally oriented in southwest to northeast direction. The area has a significant amount of bare rock and Rim Rock Drive serves as a narrow but possibly effective manmade fire break. Elevations range from 5,300 ft. to a high point of 7,107 ft. at the monument boundary on Black Ridge.

Air Quality: Under the Clean Air Act of 1977 (as amended), the monument is designated a Federal Class II airshed. This affords the monument modest protection of its air quality-related values. The State of Colorado has designated the monument Category I, that provides a level of protection from in-state sources of sulfur dioxide equal to the protection afforded under Federal Class I standards.

Water Quantity and Quality: Colorado River tributaries include Monument Canyon, Wedding Canyon, Ute Canyon, Red Canyon, Columbus Canyon and No Thoroughfare Canyon which have ephemeral flow patterns. These are intermittent systems and are dry much of the year but during the summer convective storms can produce significant flash flood events. There are also various seeps and springs where water quality is a concern. Water quality from the few seeps, springs and intermittent streams in this unit meets standards. The state of Colorado has classified these streams aquatic life warm 2, recreation 1b, and agriculture. The 303(d) monitoring and evaluation list, a listing of streams with perceived problems, includes these streams for sediment.

Soils: There are a wide variety of soils present in this unit. Sandstone and shale, with aeolian contributions, are the predominate parent materials. Biological soil crusts can be found in all areas. Soils on the Kayenta Formation mesa tops are shallow to deep, sandy loam to sandy clay loam textured, and often have a high percentage of rock outcrop. Many are very stony. Soils in the valley bottoms or open areas between the mesas are generally deep, sandy loam to silty clay loam soils. Clay will be found associated with the Morrison Formation. Numerous intermittent stream courses cut across the unit. Water erosion potential for the FMU is usually high, particularly when surface cover is removed.

Riparian: All canyons have riparian species that if a wildfire was to enter the area, re-sprouting and recovery of the area would likely occur. Control measures have contained tamarisk and Russian olive mostly to the canyon bottom water courses. Monitoring and control of nonnative species is on-going and would continue post-fire.

Vegetation: Pinion-juniper woodland dominates the mesa tops although there is a limited mosaic of small sagebrush-grass meadows. The invasion of *Ips* beetles that has attacked piñon trees is evident where as of the summer of 2004, about 10-20% of the trees died or are dying from the affects. Small meadows of big sagebrush are scattered throughout the woodland covered mesa tops. Singleleaf ash, mountain mahogany and other small trees and shrubs can be found in the more shaded and moist areas. Pockets

of Gambel's oak are found particularly in Ute and No Thoroughfare Canyons.

In the canyons, native grasses, sagebrush and shrubs are more common and mature piñon and juniper trees are plentiful. Stands of willows and cottonwoods survive along intermittent water courses. There are numerous small pockets of exotic vegetation in this FMU, with cheatgrass being the most extensive.

Cultural resources: The following cultural classes are found within this FMU: **CR-1** High Value/High Risk.

Wildlife: Varieties of wildlife use this area or migrate across it to access water, food and shelter. Rodents, skunks, raccoons, deer, lizards and snakes are common. Elk, bobcats, mountain lions, coyotes, bear and ringtails are spotted on occasion. Several species of birds are associated with the habitats in this FMU. Peregrine falcons nest on steep rock ledges.

Recreation and permitted uses: The social and recreational characteristics of this FMU sometimes conflict. The Glade Park community depends on Rim Rock Drive (especially the 6 miles from the DS Road intersection to the East Entrance for commuting and commercial access. Recreational motorists and bicyclists share the road as well. Hiking, climbing, some backpacking and horseback riding are popular visitor activities. Approximately 11,000 acres of this FMU are recommended wilderness. The sights and sounds of human activity vary in this unit, with typical highway noise along Rim Rock Drive, to intense solitude in some of the remote sections of the canyons.

In the canyons a managed, introduced bison herd was grazed from the 1920's until 1983. Very little grazing by bison, sheep, cattle or horses took place on the mesa tops.

Qwest Communications has a permitted right-of-way (ROW) for an aerial telecommunications line that services the Glade Park Community. This ROW extends thorough three FMUs (A-02, B-05 and D-05) Under the terms of the ROW permit, Qwest is responsible for fuel reduction to protect the line and poles to help reduce fire effects on this utility service.

Public infrastructure: Public infrastructure includes about 18 miles of Rim Rock Drive, several associated overlooks, traffic signs and interpretive displays. There are 7 trailheads in this unit and about 32 miles of designated trails, the most popular being the upper portions of Monument Canyon, Liberty Cap and Serpents Trails. Serpents Trail and Rim Rock Drive are listed on the National Register of Historic Places.

Also refer to the Qwest Communications ROW referred to under permitted uses.

Fire History: COLM has a history over the past several decades of low numbers of mostly single-tree fires with the largest fire (grassland) on record being 97.9 acres (1942).

On the average, four fires occur within the monument annually. All of these fires have been suppressed or went out on their own. The fires typically occur between April and September. Maximum temperatures for the FMU exceed 100 degrees in the fire season. Lightning storms are often, but not always associated with rain showers.

Fire Regime/ Condition Class: Generally, the area in a CC 2, with some of the sage parks moving to a CC 3 due to Piñon-Juniper (P-J) encroachment.

Values at risk:

All seeps, springs, and any other aquatic habitat are unique and important to aquatic and terrestrial wildlife and plant species and must be protected, should fire be used in the unit. The only species listed under the federal Endangered Species Act is the threatened bald eagle. Table III.D.5 gives the status of special status species and provides the fire suppression prescriptions for bald eagles. It also lists rare plants including *Aletes latilobus*, a plant in this FMU that is believed to be the rarest in Mesa County, and *Oreocarya osterhoutii*.

The primary value at risk is the public infrastructure consisting of the Rim Rock Drive, signs and miscellaneous improvements. Cultural resources at risk include National Register structures and sites, historic artifacts, rock art panels and scattered lithics. Native vegetation is at risk of being replaced by cheatgrass dependent upon the frequency and intensity of fires and that ability to mitigate impacts with rehabilitation efforts.

Cultural Resources – This FMU has had minimal survey but the areas that have been surveyed indicate a high density of archeological and historic resources that are eligible or potentially eligible for nomination to the National Register of Historic Places. Sites at risk in all three categories (A, B and C) have been recorded (see Chapter 3.1.1). COLM has identified several archeological sites in this FMU. Historic resources in COLM relate to the Civilian Conservation Corps era and many locally significant structures. Rim Rock Drive and Serpents Trail are on the National Register of Historic Places. The greatest potential threat to cultural resources is from surface disturbing suppression activities that may best be mitigated by avoidance of known properties. Fuel reduction around cultural resources may help mitigate fire affects. Significant sites are associated with both the piñon-juniper woodland, the margins of historic sage parks, and woodlands of any species that have not burned in the last 400 years which may have structures associated that would be vulnerable to burning. Open camps are most susceptible to suppression impacts and if fires burn in this unit, extensive post-fire monitoring (and probably treatment) will need to be planned.

Communities at Risk – There are no human communities at risk in this FMU.

Blue Mesa

D-130-06

Location: This FMU is near the Northwest corner of the Uncompahgre Plateau south of Gateway. This unit contains on private lands and is 16,291 acres of BLM administered lands (See Map Blue Mesa D-130-06).

Characteristics: This unit consists of a large mesa (Blue Mesa) bounded on the west by the Dolores River canyon rim, on the north by Blue Creek and on the southeast by Mesa Creek. The high point in the unit is 6,301 ft and is found on the northeast corner of the unit and low point is found near the Dolores River and is 4,700 ft. Soils are developing in sandstone and shale parent materials, and are moderately deep to very deep on slopes of 3 to 12 percent. Soils are easily eroded, with fine sandy loam surface textures overlying sandy clay loam to clay loam. There is a high content of stone scattered on and within the surface of the Progresso-Rock outcrop-Bowdish soil map unit, which also contains up to 30 percent flat-lying rock outcrop.

The vegetation is mostly composed of piñon-juniper woodlands and sagebrush parks. The condition of the sagebrush community is a concern for this unit especially areas receiving extensive deer use. Sagebrush in many areas is stagnant with limited amounts of recruitment. Treatments and/or seeding efforts should focus on sustaining a mixture of age classes within the sagebrush community. The area also has old chainings that were designed to reduce piñon –juniper.

Most of this FMU lies within the Mesa Creek watershed although the northern portion is within the Blue Creek watershed. Most of the tributaries to Mesa Creek trend to the east, while the Blue Creek tributaries are oriented either to the north or west. These drainages are ephemeral consequently are dry nearly all year. No water quality data are available for these systems because of the lack of water and remoteness of the area. Water quality is projected to be excellent with the geology and land use within the area. The state of Colorado has classified these streams aquatic life warm 2, recreation 1a, and agriculture.

No issues with water quality within this area have been identified. Riparian resources are very limited in this FMU.

Terrain of the area is a plateau setting dissected by shallow and deep sandstone canyons. There are several vegetation types located within this unit. The mesa tops are generally sagebrush parks and pinyon-juniper woodland, north-facing slopes have mountain shrub cover and steep rocky hillsides are pinyon-juniper dominated. Blue Mesa has the largest sagebrush parks in the Gateway area. There are very small riparian sites at springs and drainage bottoms.

The unit is relative isolated and access is mainly on rough four wheel drive roads there is an old air strip in the unit. There have been some old vegetation treatments in this area concentrating on reducing pinyon-juniper cover. The primary uses of the area are livestock grazing and big game hunting (late rifle season).

Cultural: The following cultural resource classes are found within this FMU CR-2 Moderate Value/ Moderate Risk

Fuels and Fire Behavior: The dominate fuel type of the area is pinyon-juniper with scattered areas of ponderosa pine and mountain shrub. This area tends to receive less

lightning than the areas on the west side of the Dolores River. It does have significant potential for large fire growth.

Fire History: This unit has a very low occurrence of detected fires.

Fire Regime/Condition Class:

The vegetative composition of the Blue Mesa area is generally in a late seral stage, with the composition and structure of the sagebrush/grass community being moderately departed from its natural range of variability (NRV). This community is considered to be in a condition class (CC) 2 moving towards a condition class 3. The pinyon-juniper communities are considered to be within their respective NRV, and are generally considered to be in CC 1, although the threat of conversion to cheatgrass has moved the community towards a CC 2.

Values at Risk:

Aquatic Habitat – Blue Creek (out side the FMU) supports a rainbow trout fishery, along with several other fish species. This unit drains into, toward, or into tributaries to the Dolores River which has supported endangered, as well as native fish species, all wet areas, springs, seeps, and ponds within this unit provide aquatic habitat for various species. If fire suppression takes place the protection of all wet areas, regardless of size, along with seeps, springs, small ponds, etc. will help insure the continued presence and health of this habitat type, especially in this otherwise dry environment.

Special Status Species – Table III.D.5 gives the status of each species and provides the fire suppression prescriptions for the species in this unit. The species of concern to this FMU are four big river fish species, bluehead sucker, bald eagle, fringed and Yuma myotis bats, and northern leopard frog.

Sagebrush – Loss of any sagebrush by wildfire would be detrimental to deer, but the area naturally is a stage for the dynamic tension between PJ woodland and sagebrush parks, with fire being the disturbance factor. On sites suited to sagebrush, especially on the more level deeper soils, sagebrush should return to the burned area more rapidly than PJ.

Pinyon-Juniper – Fire should play as natural a role as possible.

Minimal cultural resource survey has been conducted, but where it has, a high density of Archaeological and Historic Resources that are eligible or potentially eligible for nomination to the National Register of Historic Places, has been recorded. Sites at risk in category **(A) and (C)** have been recorded (see Chapter 3.1.1). If current wildlife use and vegetation community distribution represent historic and prehistoric conditions it is likely that open camps and open architectural sites may exist. Reconnaissance survey to test this possibility should be planned. Until a Wildland Fire Use Plan is approved guidelines and Prescription/ Constraint maps need to be developed for this unit prior to allowing Wildland Fire Use as described in the Appendix

Communities at Risk: There are no communities in this FMU.

Demaree

D-130-07

Location: This FMU is located north of Loma in the Book Cliffs. (See Map Demaree D-07) This unit is composed of 11,858 acres of BLM administered lands and no private lands.

Characteristics: The FMU is essentially a plateau dissected by deep north to south oriented sandstone canyons. Dry Canyon Wash, Camp Gulch, and Demaree Canyon and are all ephemeral tributaries to East Salt Creek. They consequently are dry with the exceptions of a few days each year. No water quality data are available for this area because of the lack of water. The state of Colorado has classified these drainages aquatic life warm 2, recreation 1b, and agriculture. The 303(d) monitoring and evaluation list, a listing of perceived impaired waters, includes these tributaries do to sediment. The elevation ranges from 5,200 ft at the base of the Book Cliffs up to the high point of 7,285 ft. Soils are moderately deep to shallow on steep mountain sideslopes, developing primarily in sandstone and shale materials of the Mesa Verde Formation. Rock outcrop is common, as are very stony and cobbly sandy loam to sandy clay loam soils. Erosion hazard is high. This unit is within the Demaree Wilderness Study area and there is no vehicle access in the unit except for two short roads that are cherry stemmed into the unit to service natural gas wells.

Vegetation is sparse pinyon-juniper on south-facing slopes, varying cover from moderate to heavy P-J on the mesa tops, and intermixed mountain shrub species on the north facing slopes. The primary use of the area is for big and small game hunting, and natural gas extraction.

Water Quality -Dry Canyon Wash, Camp Gulch, Demaree Canyon, and Howard Canyon are all ephemeral tributaries to East Salt Creek. They consequently are dry with the exceptions of a few days each year. No water quality data are available for this area because of the lack of water. The state of Colorado has classified these drainages aquatic life warm 2, recreation 1b, and agriculture. The 303(d) monitoring and evaluation list, a listing of perceived impaired waters, includes these tributaries do to sediment.

Riparian- All the drainages in this FMU are ephemeral and do not qualify as riparian.

Limited, dispersed recreation use during big game hunting season

Cultural: The following cultural resource classes are found within this FMU: **CR-0** Low Value/Low Risk.

Fuels and Fire Behavior: The dominate fuel type of the area is pinon-juniper with scattered areas of sagebrush and mountain brush. The area has a moderate potential for large fire growth.

Fire History: This area has a moderate history of lightning caused fires. Fires do have the opportunity for growth due to the remote and rugged nature of the unit. Fires tend to

be detected early due to visibility from the Grand Valley and the abundance of aviation traffic over the area.

Fire Regime/Condition Class:

The vegetation communities of the Demaree area is generally in a late seral stage, with the composition and structure of the pinyon/juniper community being within its natural range of variability (NRV). This community is considered to be in a condition class (CC) 1, although at the lower elevations the threat of cheatgrass has moved these areas to a CC 2. The mountain shrub community is considered to be within its NRV, and is generally considered to be in CC 1.

Values at Risk:

Aquatic Habitat – All wet areas, springs and seeps within this unit provide aquatic habitat for various species. If fire suppression takes place, the protection of these areas, regardless of size will help insure the continued presence and health of this habitat type, especially in this otherwise dry environment.

Special Status Species – Table III.D.5 gives the status of each species and provides the fire suppression prescriptions for the species in this unit. The species of concern to this FMU are fringed myotis bat and northern leopard frog.

Water quality -- Inclusion of these streams on the 303(d) monitoring and evaluation list indicates there is a perceived problem with sediment concentrations. Maintenance of good vegetative cover is crucial to limit sediment produced from these watersheds.

Piñon-Juniper – Fire should play as natural a role as possible. The southern (lower) half of Camp and Demaree Canyons are big game critical winter range. The positive and negative effects of wildfire on this part of the winter range are acceptable for the overall management of the range.

The area has no recorded Archaeological and Historic Resources that are eligible or potentially eligible for nomination to the National Register of Historic Places. There has been limited cultural survey and all sites recorded to date have been associated with the benches overlooking the creeks and their tributaries. Until a Wildland Fire Use Plan is approved guidelines and Prescription/ Constraint maps need to be developed for this unit prior to allowing Wildland Fire Use as described in the Appendix.

Communities at Risk: There are no communities in this unit.

South Shale Ridge and Little Book Cliffs

D-130-08

Location: This FMU west of De Beque and north of Palisade. It is totally administered by the BLM and consists of 43,849 acres (See Map South Shale Ridge and Little Book Cliffs D-130-08).

Characteristics: This FMU covers the south-facing side of South Shale Ridge between the Winter Flats road and the crest of the ridge. It also includes the most of the Little Book Cliffs Wilderness Study Area and part of the Little Book Cliffs Wild Horse Management Area. Soils are shallow to moderately deep over sandstone under the pinyon-juniper overstory. They are often stony, and bedrock exposures are common. The sagebrush parks have deep soils with sandy loam surface textures grading into sandy clay loam to silty clay loam. These are generally the more productive areas. The rough terrain limits vehicle access to a few four wheel drive roads and roads constructed to access natural gas well locations and associated facilities. The area supports livestock grazing, wild horses, natural gas development and dispersed recreation, especially big game hunting. Round Mountain is the center of a critical winter range for deer. A newly re-introduced herd of bighorn sheep uses Main, Cottonwood, Spring and Coal Canyons as their primary range.

Vegetation is primarily pinyon-juniper with varying degrees of density. Mountain shrub and sagebrush parks dot the area. Much of the terrain is barren with sparse vegetation.

The unit lies within Coon Hollow, Sulfur Gulch, and Jerry Creek watersheds which are tributary to the Colorado River. All of these drainages have ephemeral to intermittent flows. Cottonwood Canyon, a tributary to Jerry Creek has discontinuous flow. The streams within this area are dry much of the year. No water quality data have been collected on these streams because of their dry nature. While no water quality data are available for these streams, visual observations indicate high sediment concentrations are common during runoff events. Limited data have been collected on springs within the area. Those data indicated relatively good water quality with total dissolved solids generally below 500 mg/l. The state of Colorado has classified these tributaries aquatic life warm 2, recreation 1b, and agriculture. The 303(d) monitoring and evaluation list, a listing of waters with perceived problems, includes the Colorado River and tributaries within this unit for sediment.

Riparian- There is limited riparian resource in this FMU with mostly ephemeral systems. Small riparian sites exist in Main, Cosgrave, Cottonwood, and Spring Canyons. Having limited data and no pictures to go by for the type and structure of the riparian, it would be hard to determine how wildfire would be accepted by this landscape.

Limited, dispersed recreation during late spring, summer (wild horses) and during big game season occurs here.

The following cultural resource class is found within this FMU: **CR-2** Moderate Value / Moderate Risk

Fuels and Fire Behavior: Fuels are primarily pinyon-juniper and sagebrush. Fine fuels within the wild horse area have been significantly reduced due to grazing. Some fuels

modifications have occurred since 2000. Fires have the opportunity for growth due to the remote and rugged nature of the unit.

Fire History: This area has a moderate history of lightning-caused fires.

Fire Regime/Condition Class:

The vegetation communities of the South Shale Ridge and Little Bookcliffs areas are generally in a late seral stage, with the composition and structure of the pinyon-juniper community being within its natural range of variability (NRV). This community is considered to be in a condition class (CC) 1, although at the lower elevations the threat of cheatgrass has moved these areas to a CC 2. The mountain shrub community is considered to be within its NRV, and is generally considered to be in CC 1.

Values at Risk:

Aquatic Habitat – If fire suppression takes place in this unit, the protection of all wet areas, regardless of size, along with seeps, springs, small ponds, etc. will help insure the continued presence and health of this habitat type, especially in this otherwise dry environment.

Water quality – Inclusion of these streams on the 303(d) monitoring and evaluation list indicates there is a perceived problem with sediment concentrations. Maintenance of good vegetative cover is crucial to limit sediment produced from these watersheds.

Special Status Species – Table III.D.5 gives the status of each species, locational information, and provides the fire suppression prescriptions for the species in this unit. The plants are listed by scientific name. The species of concern to this FMU are bald eagle, fringed and Yuma myotis bats, northern leopard frog, *Astragalus debquaeus*, *Cirsium perplexans*, ~~*Phacelia submutica*~~, and *Sclerocactus glaucus*. All known locations for rare plants as well as the two State Potential Conservation Areas in this unit are in the BLM GIS system to insure protection/avoidance during fire suppression efforts.

Riparian Areas – Small riparian sites exist in Main, Cosgrave, Cottonwood, and Spring Canyons. These should be monitored and protected from more than modest fire intrusions.

Sagebrush – This FMU shares the large sagebrush park of Winter Flats with FMU C-04 (eastern division). Historically this park supported greater sage-grouse and could yet. This park should be protected from wildfire. This is also at the edge of occurrences of the threatened plant, *Sclerocactus glaucus*, with a few plants being inside this FMU on the north side of Wagon Track Road. The other DeBeque rare plant species are in this lobe of the FMU too, but are not considered vulnerable to fire or fire management activities.

Pinyon-Juniper – Fire should play as natural role as possible. Mechanical means can be used to thin the P-J woodland in this unit. Treatments in the Round Mountain area would need to observe the big game winter restriction (Dec. 1 to May 1). Thinning PJ in the southern third of this FMU would improve bighorn sheep range. There is a small wild turkey population in the area that are expected to roost in the ponderosa pines to the west of this FMU, yet are consistently found in this FMU enough to allow suspicion that

they roost in some of the taller pinyon and juniper trees here or in Lane Gulch (LG Fire might have destroyed this roost).

Douglas-fir – There are dougfir stands on the north side of this unit which are of concern should a fire leave this unit and go over the ridge into these stands.

Minimal cultural resource survey has been conducted, but where it has, a moderate density of Archaeological and Historic Resources that are eligible or potentially eligible for nomination to the National Register of Historic Places, has been recorded. Sites at risk in all three categories, **(A)**, **(B)**, and all levels of **(C)** have been recorded (see Chapter 3.1.1). The area south of Winter Flats Road is the portion of the unit with the highest risk value. There are eligible resources in the north unit but most are not associated with heavy fuels. Cultural resource management is subject to the guidelines developed in a Programmatic Agreement (PA) for Wildland Fire Use between the BLM Colorado, the USFS in Colorado and the SHPO (September 1998). Until a Wildland Fire Use Plan is approved guidelines and Prescription/ Constraint maps need to be developed for this unit prior to allowing Wildland Fire Use as described in the Appendix.

General – The Low Gap Camp Ground is in the unit and will need to be protected from wildfire. Natural gas facilities are built to withstand most wildfire conditions, but need to be considered during suppression activities.

Low Gap and North Soda Rec Sites should be protected

Communities at Risk: There are no communities within this FMU.