United States Department of the Interior



Bureau of Land Management Eastern Wyoming Zone Fire Management Plan



Gardner Mountain Prescribed Fire Spring 2004

United States Department of the Interior Bureau of Land Management Eastern Wyoming Zone Fire Management Plan - 2004

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I. INTRODUCTION

A. Purpose

The purpose of this document is to guide the fire management program for the Bureau of Land Management (BLM), Eastern Wyoming Zone (EWZ), in order to achieve the goals and objectives outlined in the appropriate Land Use Plans (LUP). The Eastern Wyoming Zone has prepared this Fire Management Plan (FMP) as directed by the 1995 and 2001 Federal Wildland Fire Management Policies, the Interagency Fire Management Plan Template, and A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy Implementation Plan.

National policy direction states that all federal agencies managing burnable vegetation are required to develop and implement an FMP.

This FMP is a strategic plan that defines an integrated approach to managing and protecting resources based on three LUPs. This FMP provides guidance for implementing fire suppression actions, Wildland Fire Use (WFU), prescribed fire, non-fire fuels treatments, Emergency Stabilization and Rehabilitation (ESR), and community assistance actions. This FMP provides for firefighter and public safety; includes fire management strategies, tactics, and alternatives; addresses values to be protected and public health issues; and is consistent with resource management objectives, activities of the area, and environmental laws and regulations of the United States Department of the Interior (USDI).

The Eastern Wyoming Zone consists of three field office management areas, the Casper Field Office, the Buffalo Field Office, and the Newcastle Field Office and encompasses 26 million acres in the northeastern corner of Wyoming. The Eastern Zone is responsible for managing approximately 2.6 million acres of BLM lands which lie in the northeast corner of the state, just south of the Montana border, and west of the South Dakota border. The zone is also responsible for 6,548 acres of BLM land in Nebraska.

This FMP provides key inputs for the new interagency Fire Program Analysis (FPA) software program, which will be used to determine budget and personnel needs. The interagency FPA evaluates the effectiveness of alternative fire management strategies through time, in order to meet land management goals and objectives. FPA will be driven by quantified fire objectives and performance measures for the full scope of fire management activities. The specific resource protection, suppression, fuels treatment and community assistance objectives and priorities outlined in this FMP will be used in the FPA system.

B. Relationship to Environmental Compliance

This Fire Management Plan (FMP) implements fire and resource management decisions from the Casper (Platte River), Buffalo, and Newcastle Field Offices, together known as the Eastern Wyoming Zone. For the purposes of this FMP the term LUP refers to a

Resource Management Plan (RMP). The RMPs associated with the Eastern Wyoming Zone area and utilized in the development of this FMP are:

- Platte River Resource Management Plan, 1985
- Buffalo Resource Management Plan, 1985
- Newcastle Resource Management Plan, 2000

These Resource Management Plans are consistent with the Federal Land Policy and Management Act of 1976, the National Environmental Policy Act (NEPA), the National Fire Plan, and other Federal and/or State laws or regulations.

C. Collaboration

The Eastern Wyoming Zone is considered part of the Central Wyoming Fire Planning Unit (FPU) for the purposes of this FMP. This FPU includes multiple planning areas crossing jurisdictional boundaries including the Southern Wyoming Zone BLM office lands, and other partner lands. Partners in the EWZ include the Black Hills National Forest, the Medicine Bow/Routt National Forest, Wyoming State Forestry, and the following counties:

- 1. Campbell
- 2. Converse
- 3. Crook
- 4. Goshen
- 5. Johnson
- 6. Natrona
- 7. Niobrara
- 8. Platte
- 9. Sheridan
- 10. Weston

This FPU consists of ten Fire Management Units (FMUs). An FMU is a management area definable by objectives, management constraints, topographic features, access, values to be protected, political boundaries, fuel types, and fire regime groups that set it apart from the management characteristics of an adjacent FMU. Each FMU is comprised of land managed by BLM, USFS, state, other federal agencies, and private land. FMU boundaries were determined by the EWZ Fire Management Officer and Fuels Specialist. See FMU Map in Appendix A.

Drafts of this plan were made available via the internet; comments were received from the Wyoming Game and Fish and the United States Fish and Wildlife Service. Every effort was made to incorporate their comments into this plan. No comments were received by any other cooperators. Interagency and public collaboration were included in the development of the associated RMPs. Resources staff from the Casper and Buffalo Field Offices provided input to meet RMP direction for this plan. Future revisions of this plan will include additional input from cooperators and BLM interdisciplinary staff.

D. Authorities

Authorities for the development of the Eastern Wyoming Zone FMP are listed below:

- Protection Act of September 20, 1922 (42 Stat. 857; U.S.C. 594).
- Economy Act of June 30, 1932 (47 Stat. 417; 31 U.S.C. 686).
- Taylor Grazing Act of June 28, 1934 (48 Stat. 1269; U.S.C. 315).
- O. and C. Act of August 28, 1937 (50 Stat. 874; U.S.C. 1181e).
- Reciprocal Fire Protection Act of May 27, 1955 (69 Stat. 66; 42 U.S.C. 1856, 1856a).
- The Federal Land Management and Policy Act of 1976 (FLMPA) (Public Law 94-579; 43 U.S.C. 1701).
- Disaster Relief Act, Section 417 (Public Law 93-288).
- Annual Appropriations Acts for the Department of the Interior.
- United States Department of the Interior Manual (910 DM 1.3)
- Bureau of Land Management Manual 9200.
- 1995 Federal Wildland Fire Management Policy and Program Review.
- 1998 Departmental Manual 620 Chapter 1, Wildland Fire Management General Policy and Procedures.
- 2001 Updated Federal Wildland Fire Management Policy (1995 Federal Wildland Fire Management Policy Update).

II. RELATIONSHIP TO LAND MANAGEMENT PLANNING/FIRE POLICY

This FMP was developed in conformance with RMP direction, including the goals and objectives that provide guidance across all disciplines. The Platte River, Buffalo, and Newcastle RMPs provide broad programmatic fire management direction.

Fire management direction was provided in all of the RMPs, with full or limited suppression areas identified. Broad programmatic direction from these plans include:

• Provide for firefighter and public safety.

- Conduct full suppression in certain areas.
- Conduct limited suppression in certain areas.
- Conduct prescribed burns as a resource management tool.
- Use minimum impact suppression tactics, as well as rehabilitation and restoration measures where appropriate.

The intent of fire and fuels management actions in the Eastern Zone FMP is to improve plant community health and habitat value, while at the same time reducing hazardous fuels and protecting human life, important resources, and private properties.

III. WILDLAND FIRE MANAGEMENT STRATEGIES

A. General Management Considerations

In order to comply with direction provided in current National Fire Plan guidance, the RMPs, the ACEC Plans and the Wilderness Study Plans, the EWZ will implement the following fire management guidance across the zone:

- Cost effectively protect life, property, and resource values from wildfire and to use prescribed fire to achieve multiple use management goals.
- Work collaboratively with all partners in fire and resource management across agency boundaries.
- Identify Appropriate Management Response (AMR) goals, objectives, and constraints by specific Fire Management Units (FMU) within the EWZ. All wildland fire management activities will be managed as described in the FMU guidance outlined in Chapter III, section D.
- Work collaboratively with communities at risk within the WUI to develop plans for risk reduction. The Federal Register Notice list is located at: http://www.fireplan.gov/ and http://www.fireplan.gov/communities_at_risk.cfm and is not totally inclusive of all communities.
- Allow wildland fire to protect, maintain, and enhance resources. Allow fire to function in its ecological role when appropriate for the site and situation.
- Use fire as a management tool to improve or maintain the ecological condition of vegetation communities within the zone.

B. Wildland Fire Management Goals

The goals of the EWZ Fire Management Program, as identified in the associated RMPs, 10 Year Comprehensive Strategy and National Fire Plan are:

- Firefighter and public safety are the highest priority in every fire management activity.
- Fires in limited suppression areas will be monitored to ensure they do not threaten human life, structures and facilities, state or private lands, oil and gas fields, important riparian habitat, or other sensitive resources.

- Prescribed burning will be implemented to manipulate vegetation on areas identified for treatment in the range, forestry, and wildlife programs.
- To provide a program that fosters interagency interaction, cooperation, and effectiveness for all fire management activities.

C. Wildland Fire Management Options

Wildland fire management follows principles derived from the RMPs and current NFP guidance. The EWZ has developed a Wildland Fire Management Program consisting of four components: Appropriate Management Response (AMR) Suppression, Prescribed Fire, Non-fire Fuels Treatments and Emergency Stabilization and Rehabilitation. Implementation procedures for all fire management activities will follow BLM resource management objectives and interagency guidelines developed to standardize fire management planning.

1. AMR Suppression Priorities

• Priorities will be firefighter safety, the protection of life and property, and protection or enhancement of resource values. Suppression priority will be given to any ignition that threatens WUI areas, and developed recreation sites and structures on public lands will be protected. Identified areas will have limitations on suppression actions, especially heavy equipment use. The use of natural firebreaks and existing roads to contain a wildland fire is encouraged. A resource specialist will be used to help determine the AMR.

Prescribed Fire

Prescribed fires are a management option when a burn can be accomplished under specific prescriptions and fire risks to resources can be mitigated. EWZ resource issues addressed with prescribed fire include: slash burning after mechanical treatments, burning for forage improvement, burning to change successional stages, creation of mosaic patterns on the landscape, watershed improvement, forest health, disease, unwanted vegetation, insect control, and habitat improvement.

NEPA compliance is required in order to implement a prescribed fire project. An interdisciplinary team will conduct site-specific analysis, including ESA and SHPO consultation, and incorporate the information into an appropriate NEPA document. Following current BLM Prescribed Fire Management Guidelines, the EWZ will then produce a Prescribed Fire Plan. The Prescribed Fire Plan is a site-specific implementation document containing specific resource objectives, prescription criteria and monitoring protocols.

2. Non-Fire Fuels Treatment

Non-fire fuels treatment is an essential component of the EWZ Fuels Management Program. It will be used in appropriate areas prior to, in conjunction with, or as an alternative to prescribed fire. Treatment will be tailored to specific resource management objectives such as hazardous fuels reduction, restoration of desired vegetation types, and noxious weed management. Treatment options include commercial timber harvest, pre-commercial thinning, commercial thinning, constructing fuel breaks, mechanical treatment of natural and activity fuels, and chemical or biological treatments to reduce or eliminate the spread of noxious weeds. Whenever possible, the treatment method will be designed to provide local economic benefit. NEPA analysis will occur before implementation of site-specific projects.

- Chemical/Biological: This includes the application of herbicides or the use of biological agents to control invasive species/noxious weeds and/or unwanted vegetation to meet resource objectives. Chemical treatments can be used in areas where cheatgrass or noxious weeds have invaded sagebrush steppe. In these areas, fine fuel loads are extremely high due to cheatgrass dominance of the understory. Chemical treatments to cheat grass have not been tested in the EWZ at this time, as the chemicals are still under development. Chemical treatments have been used on sagebrush in the zone.
- **Mechanical**: This includes the application of mechanical treatments such as mowing, chaining, chopping, and cutting to meet resource objectives. The majority of these mechanical treatments will occur in areas where fuel loads or invasive species need to be reduced prior to prescribed fire application or when fire risk to resources is too great for the use of prescribed fires.
- **Seeding**: This includes the application of grass, forb, or shrub seed, either applied aerially or from the ground. Seeding will largely be a follow-up treatment in areas where disturbance or the previously described treatments have removed exotic annual grasses and their residue. Seeding allows the establishment of native species or placeholder species and restoration of disturbed areas to a perennial-dominated plant community, thereby decreasing the risk of subsequent cheatgrass exotic annual grass invasion.

3. Emergency Stabilization and Rehabilitation

The objective of the ESR program is to mitigate the adverse effects of wildfire on soils and vegetation in a cost effective and expeditious manner in order to reduce accelerated wildland fire return intervals and/or invasion of noxious weeds. ESR actions may include any of the mechanical, chemical, and seeding treatments described above. These plans are separate plans with distinct treatments and activities. They describe necessary site specific ESR actions.

ESR activities are divided into short and long-term actions. Stabilization activities occur within one year of a wildfire control date in order to:

- Stabilize and prevent unacceptable degradation to natural and cultural resources
- Minimize threats to life or property resulting from the effects of a fire
- Repair/replace/construct physical improvements necessary to prevent degradation of land or resources.

Rehabilitation activities are planned actions undertaken within three years of the control of a wildland fire to repair or improve fire damaged lands unlikely to recover naturally to a management approved condition, or to repair/replace minor facilities damaged by fire. The objective of rehabilitation is either to emulate

historical or pre-fire ecosystem structure, function (including the re-establishment of the natural fire cycle), diversity, resiliency, and dynamics. If that is not feasible, then restore or establish a healthy, stable ecosystem in which native species are well represented.

D. Description of Wildland Fire Management Strategies by Fire Management Unit

The EWZ was divided into ten fire management units based on a combination of wildfire AMR and resource management concerns. Fire management objectives and strategies were developed by an interdisciplinary team for each FMU.

The following definitions and explanations apply to concepts discussed in all FMU descriptions:

• Fire Regime Condition Class

Fire Regime Condition Class (FRCC) is defined as a classification system which describes the amount of departure from the natural (historic) state of an area or landscape to present conditions. This departure from the natural state may be due to changes in one or more ecosystem components such as fuel composition, fire frequency or other disturbance. FRCC is used in this FMP to classify existing ecosystem conditions, and to determine priority areas for treatment as mandated by national direction.

- Condition Class 1 (FRCC1): Fire regimes are within historical ranges of variability. Vegetation characteristics, fuel composition and structure are intact. The risk of losing key ecosystem components from the occurrence of fire remains relatively low.
- Condition Class 2 (FRCC2): Fire regimes have a moderate departure from the historical range of variability. Fire behavior, effects and other associated disturbances are moderately departed, with composition and structure of vegetation somewhat altered. The risk of losing key ecosystem components from the occurrence of fire is moderate.
- Condition Class 3 (FRCC3): Fire regimes have a high departure from the historical range of variability. Composition and structure of vegetation and fuels are highly altered with a high risk of losing key ecosystem components. Fire regimes on these lands have been significantly altered from their historic fire-return interval. Consequently, these lands pose the greatest risk of ecological collapse as a result of catastrophic fire.

See Appendix C for condition class map of the EWZ.

Historic Fire Regimes

Fire regimes describe periodicity and pattern of naturally occurring fires in a particular area or vegetative type, described in terms of frequency, biological severity, and area of extent.

- 1. Fire regime 1 burns every 0-35 years and has low severity.
- 2. Fire regime 2 burns every 0-35 years and has replacement severity.
- 3. Fire regime 3 burns every 35-100 plus years and has mixed severities.

- 4. Fire regime 4 burns every 35-100 plus years and has replacement severity.
- 5. Fire regime 5 burns every 200 plus years and has replacement severity (there is no fire regime 5 in the EWZ, so it is not referenced).
- See Appendix C for fire regime map of the EWZ.

Fuel Models

Fuel Models (FM) are broken into four numbered groups: grasses, shrubs, timber and slash. The numbered classifications categorize fire behavior, fuel loading, and distribution of fuels among various size classes. The predominant FMs in the EWZ are:

- FM 1 = Short Grass (1 Foot)
- FM 2 = Timber (Grass and understory)
- FM 5 = 2 ft. Brush
- FM 10 = Timber (Litter and understory)

• Fire Intensity Levels (FIL)

Fire intensity is the rate of heat release per unit time per unit length of fire front. Numerically, it is the product of the heat yield, the quantity of fuel consumed in the fire front, and the rate of spread. It is measured on a scale of 1-6, with 1 being the least intense fire and 6 being the most intense. Typically, FIL is estimated by a visual measure of the flame length.

The following management objectives apply to all FMUs:

- Use AMR on all ignitions.
- Burn a maximum of 10% of BLM land over a ten year period. If this target is met, objectives will be reevaluated.
- Manipulate vegetation near Wildland Urban Interface (WUI) areas to mitigate risk
- In grasslands, stop fires at less than 500 acres 90% of the time during any FIL; prescribed fire, mechanical, and chemical treatments allowed.
- Manage for sagebrush health in accordance "Wyoming Guidelines for Managing Sagebrush Communities with Emphasis on Fire Management," and stop all fires in sagebrush communities at less than 500 acres 90% of the time during any FIL; prescribed fire, mechanical, and chemical treatments allowed.
- In salt desert shrub, stop fires at less than 25 acres 90% of the time during any FIL; prescribed fire, mechanical, and chemical treatments allowed.
- In ponderosa, stop fires at less than 200 acres 90% of the time during FIL 1-3; stop fires at less than 50 acres 75% of the time during FIL 4-6; prescribed fire, mechanical, and chemical treatments allowed.
- In woodlands, stop fires at less than 200 acres 90% of the time during FIL 1-3; stop fires at less than 50 acres 75% of the time during FIL 4-6; prescribed fire, mechanical, and chemical treatments allowed.
- Use of aerial retardant and foams on fires will provide for a 300 ft. buffer around

- streams and waterways to prevent contamination.
- Restoration of burned areas will be by natural succession unless a special ESR need is identified to prevent further resource damage.

1. EWZ Counties FMU Description

Location:

The EWZ counties FMU spans the entire zone. Each of the 10 counties is included. This

FMU has the largest percentage of private land (78%). See table 1a for ownership information.

Characteristics:

This FMU has a great variation of characteristics. Most lands consist of rolling plains, but there are some low, rocky, mountainous areas (the Haystack Range in Goshen County) and there are many deep cut drainages. Elevations range from 4,000-6,000 feet.

This unit has varied fuel types as well.

Primarily, it is comprised of perennial grasses,

Table 1a. Acres, Ownership and Communities at Risk

| Communico at Mon | | | |
|---------------------|----------------------------|---------------|--|
| FMU-1 | East Wyoming Zone Counties | | |
| Total Acres | 16,274 | ,286.00 | |
| | BLM | 1,993,997.50 | |
| Ownership by | USFS | 2985.73 | |
| acreage and percent | Private | 12,759,720.76 | |
| | State | 1,405,215.60 | |
| | Other | 112,366.39 | |
| Communities at Risk | Numerous, see below | | |

sagebrush, juniper and various shrub types (salt desert shrub, grease wood, etc.). Cheat grass has invaded many areas. Ponderosa and other pine species are present in some areas. Endangered sage grouse habitat exists within this FMU.

BLM Fire History:

Lightning caused fires account for 66% of all unplanned ignitions, the remainder are human caused or unknown. Predominant fire size classes are A-C (less than 100 acres). Class G large fires occur in groups; there may be none for 3-4 years, then several in one year. The majority are not on BLM land. From 1980 to 2003, 151 fires have occurred in the FMU, for a total of 57,417 acres. Suppression fires typically occur between June 15 and September 30. Historical weather data indicates annual precipitation averages 12-16

Table 1b. Fire History

| N | Number of Fire Starts 1980-2003 by Size Class (Acres) | | | | |
|----------|---|-----|----------|------------------|--------|
| | A (0-0.2) | 140 | | A (0-0.2) | 28 |
| | B (0.3-9.9) | 141 | | B (0.3-9.9) | 55 |
| | C (10-99.9) | 79 | | C (10-99.9) | 30 |
| | D (100-299.9) | 28 | | D (100-299.9) | 11 |
| | E (300-999.9) | 44 | | E (300-999.9) | 13 |
| Total | F (1000-4999.9) | 28 | BLM | F (1000-4999.9) | 10 |
| FMU | G (5,000+) | 17 | | G (5,000+) | 4 |
| | Total | 477 | | Total | 151 |
| | Lightning Starts | 287 | | Lightning Starts | 100 |
| | Human Starts | 5 | | Human Starts | 1 |
| | Unknown Cause | 105 | | Unknown Cause | 19 |
| | | | | | |
| Total FN | Total FMU Acres Burned 291,014 | | Total BI | LM Acres Burned | 57,417 |

inches per year. Throughout the summer months frequent lightning storms bring wetting rains.

Wind driven grass fires are the most common in this FMU, extreme fire behavior and high rates of spread are possible in August and September when grasses are cured. See fire history table 1b.

Fire Regime/Condition Class:

This FMU has Fire Regimes 1-4 and Condition Classes 1-3. See Fire Regime/Condition Class map in Appendix C.

Values at Risk:

This FMU includes endangered sage grouse habitat, National Historic Trails, cultural resources, oil and gas industrial interface areas, forest resources, recreational areas, grazing, crucial wildlife range, and air quality standards.

Communities at Risk:

Aladdin, Casper, Devils Tower, E. Upton, Glendo State Park, Hat Creek, Hulett, Jy Ranch, Midwest/Edgerton, Osage, and Rabbit Creek are among the listed communities at risk in the Federal Register and are part of the unit.

Fire Management Objectives- 1) Protect values at risk, 2) Minimize fire suppression damage to public lands.

- Maximum desired acreage burned per decade is 10 percent of BLM land or less.
- Use prescribed burns to manipulate vegetation on areas identified for treatment in range, forestry, wildlife, and ecosystem restoration.
- Rehabilitate fires in this FMU as necessary.

Fire Management Strategies- The AMR is to protect critical habitats and WUI areas while providing for firefighter and public safety.

- Use full suppression if WUI areas are threatened. Coordinate this effort closely with cooperators.
- Contain fires from unplanned ignitions to 100 acres or less 90% of the time during FIL 1-3.
- Contain fires from unplanned ignitions to 1000 acres or less 75% of the time during FIL 4-6.
- If decadal burn targets are met, a review of objectives and strategies will be initiated to develop new suppression criteria on all wildland fires.
- Wildland Fire Use is not currently an identified option at this time.
- Prescribed Fire will be used to reduce fuel loading.
- Continue training assistance actions with cooperators and continue to support the Rural Assistance program.

2. Wilderness Study Areas FMU Description

Location:

The Wilderness Study Areas (WSA) FMU is split among three separate WSAs. North Fork, Gardner Mountain, and Fortification Creek WSAs are included. North Fork is approximately 17 miles northwest of Kaycee; Gardner Mountain is approximately 10 west of Kaycee; Fortification Creek is approximately 25 miles northwest of Gillette. See table 1a for ownership information.

Characteristics:

North Fork and Gardner Mountain WSAs have similar characteristics. Both have primarily ponderosa pine with juniper encroachment, perennial grasses and mountain mahogany. Elevations at North

Table 1a. Acres, Ownership and Communities at Risk

| Communities at Man | | | |
|--|------------------------|-----------|--|
| FMU 2 | Wilderness Study Areas | | |
| Total Acres | 29,75 | 56.86 | |
| | BLM | 28,530.17 | |
| Ownership by acreage and percent | USFS | 0 | |
| | Private | 464.31 | |
| | State | 762.38 | |
| | Other | 0 | |
| Communities at Risk | None | | |

Fork Range from 6,100 to 8,200 feet and elevations at Gardner Mountain range from 5,400 to 7,000 feet. Fortification Creek consists of primarily juniper and sage, with some perennial grasses. Elevations range from 4,000-4,800 feet.

BLM Fire History:

Lightning caused fires account for 100% of all unplanned ignitions among the three areas. Predominant fire size class is B. From 1980 to 2003, 9 fires have occurred in the FMU, for a total of 281 acres. Suppression fires typically occur between July 1 and September 30. Historical weather data indicates annual precipitation averages 14-20 inches per year. Fire Behavior is generally moderate with low rates of spread. Shading from vegetation seems to keep fire on the ground, even during drought years. However, the fuels could

Table 1b. Fire History

| N | Number of Fire Starts 1980-2003 by Size Class (Acres) | | | | |
|----------|---|-------|------------|------------------|-------|
| | A (0-0.2) | 1 | | A (0-0.2) | 1 |
| | B (0.3-9.9) | 5 | | B (0.3-9.9) | 5 |
| | C (10-99.9) | 2 | | C (10-99.9) | 2 |
| | D (100-299.9) | 1 | | D (100-299.9) | 1 |
| | E (300-999.9) | 0 | | E (300-999.9) | 0 |
| Total | F (1000-4999.9) | 0 | DIM | F (1000-4999.9) | 0 |
| FMU | G(5,000+) 0 BLM | DLW | G (5,000+) | 0 | |
| | Total | 9 | | Total | 9 |
| | Lightning Starts | 9 | | Lightning Starts | 9 |
| | Human Starts | 0 | | Human Starts | 0 |
| | Unknown Cause | 0 | | Unknown Cause | 0 |
| | | • | | | - |
| Total FN | MU Acres Burned | 281.1 | Total BI | LM Acres Burned | 281.1 |

support crown runs given the right conditions. See fire history table 1b.

Fire Regime/Condition Class:

North Fork and Gardner Mountain are both Fire Regime 4 and Condition Class 3. Fortification Creek is Fire Regime 3 and Condition Class 2. See Fire Regime/Condition Class map in Appendix C.

Values at Risk:

This FMU includes wilderness values at risk and dispersed recreation areas.

Communities at Risk:

None.

Fire Management Objectives- Maintain Wilderness values.

- Maximum desired acreage burned per decade is no more than 50% of each WSA.
- Maintain and enhance fire adapted ecosystem within WSAs.
- Allow natural rehabilitation of fires in this FMU.

Fire Management Strategies- The AMR is allow fire to maintain ecosystem diversity while providing for firefighter and public safety.

- Use Wildfire Use (WFU) to allow natural ignition to maintain ecosystem diversity.
- In non-WFU events, use the confine/contain AMR response.
- Contain all non-WFU wildland fires at 500 acres or less 90% of the time during any FIL.
- Use Minimum Impact Suppression Tactics on all fires in this FMU.
- Use no heavy equipment in this FMU without agency administrator approval.
- If each individual WSA decadal burn targets are met, a review of objectives and strategies will be initiated to develop new suppression criteria on all wildland fires.
- Prescribed Fire will be used as needed to reintroduce fire into the ecosystem and establish vegetative mosaics.
- No mechanical or chemical fuels treatments are allowed in this FMU.

3. Pine Mountain ACEC Description

Location:

Pine Mountain ACEC is located approximately 25 miles west/northwest of Casper, and 5 miles southeast of Powder River. See table 1a for ownership information.

Characteristics:

Pine Mountain ACEC consists of Reid Canyon, Johnson Canyon, Smith Canyon, and Blue Canyon. The topography in the area consists of steep canyons and drainages, and meadows on top. The mountain itself is a single, stand alone peak. Elevations range from 5,600-6,600 feet.

Ponderosa pine, sagebrush, and perennial grass species are prevalent on slopes. Sage and grass dominate the flat meadows on top, with scattered juniper.

Table 1a. Acres, Ownership and Communities at Risk

| Communities at Task | | | |
|--|--------------------|-----------|--|
| FMU 3 | Pine Mountain ACEC | | |
| Total Acres | 21,87 | 79.69 | |
| Ownership by acreage and percent | BLM | 7,411.51 | |
| | USFS | 0 | |
| | Private | 12,296.74 | |
| | State | 2,171.44 | |
| | Other | 0 | |
| Communities at Risk | None | | |

BLM Fire History:

Lightning caused fires account for 66% of all unplanned ignitions, the remainder are unknown. Predominant fire size class is B. From 1980 to 2003, 3 fires have occurred in the FMU, for a total of 1.3 acres. Suppression fires typically occur between June 1 and September 30. Historical weather data indicates annual precipitation averages 14 inches per year.

Fire behavior can be extreme on slopes, especially with a southwest wind. There are stands of ponderosa capable of supporting crown fires. See fire history table 1b.

Table 1b. Fire History

| N | Number of Fire Starts 1980-2003 by Size Class (Acres) | | | | |
|----------|---|-------|----------|------------------|-----|
| | A (0-0.2) | 2 | | A (0-0.2) | 1 |
| | B (0.3-9.9) | 3 | | B (0.3-9.9) | 2 |
| | C (10-99.9) | 1 | | C (10-99.9) | 0 |
| | D (100-299.9) | 2 | | D (100-299.9) | 0 |
| | E (300-999.9) | 0 | | E (300-999.9) | 0 |
| Total | F (1000-4999.9) | 0 | BLM | F (1000-4999.9) | 0 |
| FMU | G (5,000+) | 0 | DLW | G (5,000+) | 0 |
| | Total | 8 | | Total | 3 |
| | Lightning Starts | 6 | | Lightning Starts | 2 |
| | Human Starts | 0 | | Human Starts | 0 |
| | Unknown Cause | 2 | | Unknown Cause | 1 |
| | | | | | |
| Total FN | MU Acres Burned | 437.8 | Total BI | LM Acres Burned | 1.3 |

Fire Regime/Condition Class:

The majority of this FMU is in Fire Regime 3 and Condition Class 1. See Fire Regime/Condition Class map in Appendix C.

Values at Risk:

The FMU contains numerous structures and bald eagle roosting areas. There are also some oil sites on private lands. Grazing is common in meadows.

Fire Management Objectives- 1) Protect values at risk, 2) Manage for old-growth ponderosa pine (bald eagle roost trees).

- All fires will be suppressed through aggressive and sustained initial and extended attack to protect values at risk.
- Maximum desired acreage burned per decade is 250 acres or less.
- Use mechanical treatments to reduce fuel loading.
- Rehabilitate fires in this FMU as necessary.

Fire Management Strategies- The AMR is to protect cultural resources and WUI areas while providing for firefighter and public safety.

- Use full suppression if WUI areas are threatened.
- No tree falling within 200 yards of bald eagle roost trees.
- Contain fires from unplanned ignitions to 5 acres or less 90% of the time during FIL 1-3.
- Contain fires from unplanned ignitions to 250 acres or less 75% of the time during FIL 4-6.
- Once the burn target of 250 acres has been reached, a review of objectives and strategies will be initiated to develop new suppression criteria on all wildland fires.
- Once roost trees have been effectively fireproofed through mechanical methods and prescribed fire, a review of objectives and strategies will be initiated to develop new suppression criteria on all wildland fires.
- Wildland Fire Use is not currently an identified option at this time.
- Prescribed Fire will be used to reduce fuel loading, burn no more than 250 acres in ten years.
- Continue mechanical treatments around roost trees and WUI areas; treat no more than 500 acres in ten years. Reduction of fuel loads will help protect communities at risk.

Note: This unit is very similar in characteristics and management to Jackson Canyon ACEC (FMU 5); these units may be combined in future revisions of this plan.

4. West Laramie Range FMU Description

Location:

The West Laramie Range FMU is just south and east of Casper and north and west of the USFS Medicine Bow Ranger District. It includes Casper Mountain, Muddy Mountain, and lands adjacent to the USFS land. See table 1a for ownership information.

Characteristics:

This unit includes mostly forested lands. Ponderosa and lodgepole pine are common, there are aspen on southern aspects and perennial grass and sage at lower elevations. Junipers are common on the west end of Casper and Muddy Mountains. Elevations range from 5,100-8,300 feet.

BLM Fire History:

Lightning caused fires account for 81% of all unplanned ignitions among the three areas, the remainder are unknown. Predominant fire size classes are A and B. From 1980 to 2003. 21 fires have occurred in the FMU, for a total of 6,500 acres. One class G fire occurred during this period. Suppression fires typically occur between June 15 and September 30. Historical weather data indicates annual precipitation averages 14-18 inches per year. Fire Behavior is generally moderate with low rates of spread. Fires on southwest

Table 1a. Acres, Ownership and Communities at Risk

| FMU 4 | West Laramie Range | | |
|---------------------|---|------------|--|
| Total Acres | 226,2 | 28.93 | |
| | BLM | 42,577.05 | |
| Ownership by | USFS | 40.00 | |
| acreage and percent | Private | 127,879.65 | |
| | State | 55,461.06 | |
| | Other | 270.59 | |
| Communities at Risk | Casper Mountain Emigrant Ridge Muddy Mountain | | |

Table 1b. Fire History

| N | Number of Fire Starts 1980-2003 by Size Class (Acres) | | | | |
|----------|---|-------|----------|------------------|---------------|
| | A (0-0.2) | 46 | | A (0-0.2) | 9 |
| | B (0.3-9.9) | 20 | | B (0.3-9.9) | 7 |
| | C (10-99.9) | 5 | | C (10-99.9) | 3 |
| | D (100-299.9) | 0 | | D (100-299.9) | 0 |
| | E (300-999.9) | 2 | | E (300-999.9) | 1 |
| Total | F (1000-4999.9) | 0 | BLM | F (1000-4999.9) | 0 |
| FMU | G (5,000+) | 1 | | G (5,000+) | 1 |
| | Total | 74 | | Total | 21 |
| | Lightning Starts | 44 | | Lightning Starts | 17 |
| | Human Starts | 1 | | Human Starts | 0 |
| | Unknown Cause | 15 | | | Unknown Cause |
| | | | | | |
| Total FN | MU Acres Burned | 7,231 | Total BI | LM Acres Burned | 6,500 |

facing slopes can exhibit extreme fire behavior. See fire history table 1b.

Fire Regime/Condition Class:

This unit is Fire Regime 3 and Condition Class 2. See Fire Regime/Condition Class map in Appendix C.

Values at Risk:

Casper and Muddy Mountain areas are classified as WUI areas. Casper Mountain has numerous communications systems, recreation areas, and residences (both permanent and summer). Muddy Mountain has recreation and grazing areas, and elk winter range.

Some residences are located at the lower elevations, especially on the west end. Forestry resources are present throughout the FMU.

Communities at Risk:

Casper Mountain is a community at risk.

Fire Management Objectives- 1) Protect values at risk, 2) Improve and maintain forest and range health.

- Maximum desired acreage burned per decade is no more than 10%.
- Maintain and enhance elk winter range.
- Use mechanical treatments to reduce fuel loading.
- Rehabilitate fires in this FMU as necessary.

Fire Management Strategies- The AMR is to protect WUI areas while providing for firefighter and public safety.

- Use full suppression in WUI areas.
- In non-WFU events, use the confine/contain AMR response.
- Contain fires from unplanned ignitions to 10 acres or less 90% of the time during FIL 1-3.
- Contain fires from unplanned ignitions to 25 acres or less 75% of the time during FIL 4-6.
- Use no heavy equipment in elk winter range.
- Use natural barriers and existing roads and trails as firelines in the Muddy Mountain EEA.
- If decadal burn targets are met, a review of objectives and strategies will be initiated to develop new suppression criteria on all wildland fires.
- Prescribed Fire will be used as needed to enhance aspen stands, promote old-growth ponderosa pine, improve rangeland mosaics, and reduce hazardous fuels.
- Use mechanical treatments to reduce hazardous fuels and promote forest health.

5. Jackson Canyon ACEC Description

Location:

Jackson Canyon ACEC is located approximately 8 miles southwest of Casper, on the west end of Casper Mountain. See table 1a for ownership information.

Characteristics:

Jackson Canyon ACEC consists of Matheson Creek, Little Red Creek, Gothberg Draw, and the northeast face of Coal Mountain. The topography in the area consists of steep canyons and drainages. Elevations range from 5,400-7,500 feet.

Ponderosa pine, juniper, sagebrush, and perennial grass species dominate the unit. Juniper encroachment has thickened pine stands.

BLM Fire History:

Lightning caused fires account for 60% of all unplanned ignitions. Predominant fire size class is A. From 1980 to 2003, 10 fires have occurred in the FMU, for a total of 448 acres. Suppression fires typically occur between June 15 and September 30. Historical weather data indicates annual precipitation averages 15 inches per year.

Fire behavior can be extreme on slopes, especially with a southwest wind. See fire history table 1b.

Table 1a. Acres, Ownership and Communities at Risk

| FMU 5 | Jackson Canyon ACEC | | |
|--|---------------------|----------|--|
| Total Acres | 14,02 | 24.75 | |
| | BLM | 4,076.71 | |
| Ownership by acreage and percent | USFS | 0 | |
| | Private | 7,359.59 | |
| | State | 2,588.45 | |
| | Other | 0 | |
| Communities at Risk | Casper Mountain | | |

Table 1b. Fire History

| N | Number of Fire Starts 1980-2003 by Size Class (Acres) | | | | |
|----------|---|-----|----------|------------------|---------------|
| | A (0-0.2) | 11 | | A (0-0.2) | 4 |
| | B (0.3-9.9) | 5 | | B (0.3-9.9) | 2 |
| | C (10-99.9) | 5 | | C (10-99.9) | 2 |
| | D (100-299.9) | 2 | | D (100-299.9) | 1 |
| | E (300-999.9) | 1 | | E (300-999.9) | 1 |
| Total | F (1000-4999.9) | 0 | BLM | F (1000-4999.9) | 0 |
| FMU | G (5,000+) | 0 | | G (5,000+) | 0 |
| | Total | 24 | | Total | 10 |
| | Lightning Starts | 19 | | Lightning Starts | 6 |
| | Human Starts | 0 | | Human Starts | 0 |
| | Unknown Cause | 3 | | | Unknown Cause |
| | | | | | |
| Total FN | MU Acres Burned | 683 | Total BI | LM Acres Burned | 448 |

Fire Regime/Condition Class:

The majority of this FMU is in Fire Regime 3 and Condition Class 2. See Fire Regime/Condition Class map in Appendix C.

Values at Risk:

The entire FMU is identified as a WUI area. The FMU contains numerous structures and bald eagle roosting areas.

Communities at Risk:

This unit is on the western end of Casper Mountain, an identified community at risk.

Fire Management Objectives- 1) Protect values at risk, 2) Manage for old-growth ponderosa pine (bald eagle roost trees).

- All fires will be suppressed through aggressive and sustained initial and extended attack to protect values at risk.
- Maximum desired acreage burned per decade is 250 acres or less.
- Use mechanical treatments to reduce fuel loading.
- Rehabilitate fires in this FMU as necessary.

Fire Management Strategies- The AMR is to protect cultural resources and WUI areas while providing for firefighter and public safety.

- Use full suppression if WUI areas are threatened.
- No tree falling within 200 yards of bald eagle roost trees.
- Contain fires from unplanned ignitions to 5 acres or less 90% of the time during FIL 1-3.
- Contain fires from unplanned ignitions to 250 acres or less 75% of the time during FIL 4-6.
- If decadal burn targets are met, a review of objectives and strategies will be initiated to develop new suppression criteria on all wildland fires.
- Once roost trees have been effectively fireproofed through mechanical methods and prescribed fire, a review of objectives and strategies will be initiated to develop new suppression criteria on all wildland fires.
- Wildland Fire Use is not currently an identified option at this time.
- Prescribed Fire will be used to reduce fuel loading, burn no more than 250 acres in ten years.
- Continue mechanical treatments around roost trees and WUI areas; treat no more than 500 acres in ten years. Reduction of fuel loads will help protect communities at risk.

Note: This unit is very similar in characteristics and management to Pine Mountain ACEC (FMU 3); these units may be combined in future revisions of this plan.

6. East Laramie Range FMU Description

Location:

The East Laramie Range FMU is approximately 25 miles south of Douglas and surrounding the north and east sides of the USFS Medicine Bow Ranger District and the Laramie Peak area. It includes the southeast portion of Converse County and the western edge of Platte County. See table 1a for ownership information.

Characteristics:

This unit includes mostly mountainous forested lands. Perennial grasses, mountain mahogany, ponderosa and lodgepole pine, juniper, and aspen are the dominant native vegetation. Terrain is generally steep and rocky. Elevations range from 5,000-8,300 feet.

BLM Fire History:

Lightning caused fires account for 94% of all unplanned ignitions among the three areas, the remainder are unknown. Predominant fire size class is B. No large fire has occurred on BLM land in this FMU. From 1980 to 2003, 18 fires have occurred in the FMU, for a total of 27 acres. Suppression fires typically occur between June 15 and September 30. Historical weather data indicates annual precipitation averages 12-18 inches per year. Fire Behavior is generally

Fire Behavior is generally moderate with low rates of spread. Fires on southwest

Table 1a. Acres, Ownership and Communities at Risk

| FMU 6 | East Laramie Range | | |
|---------------------|--------------------|------------|--|
| Total Acres | 177,4 | 01.10 | |
| | BLM | 11,568.42 | |
| Ownership by | USFS | 1,398.66 | |
| acreage and percent | Private | 141,588.34 | |
| | State | 22,845.68 | |
| | Other | 0 | |
| Communities at Risk | None | | |

Table 1b. Fire History

| N | Number of Fire Starts 1980-2003 by Size Class (Acres) | | | | | | |
|----------|---|-------|----------|------------------|----|--|--|
| | A (0-0.2) | 10 | | A (0-0.2) | 6 | | |
| | B (0.3-9.9) | 17 | | B (0.3-9.9) | 11 | | |
| | C (10-99.9) | 4 | | C (10-99.9) | 1 | | |
| | D (100-299.9) | 0 | | D (100-299.9) | 0 | | |
| | E (300-999.9) | 0 | BLM | E (300-999.9) | 0 | | |
| Total | F (1000-4999.9) | 1 | | F (1000-4999.9) | 0 | | |
| FMU | G (5,000+) | 1 | | G (5,000+) | 0 | | |
| | Total | 33 | | Total | 18 | | |
| | Lightning Starts | 30 | | Lightning Starts | 17 | | |
| | Human Starts | 0 | | Human Starts | 0 | | |
| | Unknown Cause | 3 | | Unknown Cause | 1 | | |
| | | | | | | | |
| Total FN | MU Acres Burned | 9,181 | Total BI | LM Acres Burned | 27 | | |

facing slopes can exhibit extreme fire behavior. See fire history table 1b.

Fire Regime/Condition Class:

This unit is Fire Regime 3 and Condition Class 2. See Fire Regime/Condition Class map in Appendix C.

Values at Risk:

Forestry resources are present throughout the FMU. There are also critical deer, elk and bighorn sheep winter ranges. The community of Esterbrook borders this unit. There are some grazing activities on private land.

Communities at Risk:

Esterbrook is a community at risk. While it is not in the unit, a fire in the unit could threaten the town.

Fire Management Objectives- 1) Protect values at risk, 2) Improve and maintain forest and range health.

- Maximum desired acreage burned per decade is no more than 10% of BLM land.
- Maintain and enhance winter range.
- Coordinate fuels treatments with cooperators.
- Rehabilitate fires in this FMU as necessary.

Fire Management Strategies- The AMR is to prevent fire from spreading to adjacent private, state, and USFS lands while providing for firefighter and public safety.

- Use full suppression in WUI areas.
- Contain fires from unplanned ignitions to 250 acres or less 90% of the time during FIL 1-3.
- Contain fires from unplanned ignitions to 50 acres or less 75% of the time during FIL 4-6.
- If decadal burn targets are met, a review of objectives and strategies will be initiated to develop new suppression criteria on all wildland fires.
- Use mechanical and prescribed fire treatments in conjunction with adjacent land owners to reduce hazardous fuels around WUI areas.

7. Rattlesnake FMU Description

Location:

The Rattlesnake FMU is just approximately miles west of Casper and miles south of Powder River. It includes Casper Mountain, Muddy Mountain, and lands adjacent to the USFS land. See table 1a for ownership information.

Characteristics:

Perennial grasses, several shrub species, and Limber pine dominate the unit. There are scattered sage and juniper as well. The Rattlesnake Range is split between the EWZ and the Southern Wyoming Zone. EWZ is responsible for the north portion, an area of mostly north and east aspects. This area has many drainages. Elevations range from 5,800-7,300 feet.

BLM Fire History:

Lightning caused fires account for 100% of all unplanned ignitions. Predominant fire size class is C. From 1980 to 2003, 2 fires have occurred in the FMU, for a total of 19 acres. Suppression fires typically occur between June 15 and September 30. Historical weather data indicates annual precipitation averages 14 inches per year.

Fire Behavior is generally moderate with low rates of spread. Dead and downed pines in some areas have contributed to high fire intensities.

Drainages have increased fuel loads. See fire history table 1b.

Table 1a. Acres, Ownership and Communities at Risk

| FMU 7 | Rattlesnake | | | | |
|---------------------|---------------|-----------|--|--|--|
| Total Acres | 36,283.64 | | | | |
| | BLM | 16,846.34 | | | |
| Ownership by | USFS | 0 | | | |
| acreage and percent | Private | 17,237.50 | | | |
| | State | 2,199.80 | | | |
| | Other | 0 | | | |
| Communities at Risk | Rattlesnake H | ills | | | |

Table 1b. Fire History

| N | Number of Fire Starts 1980-2003 by Size Class (Acres) | | | | | |
|----------|---|----------------|-----------------|------------------|----|--|
| | A (0-0.2) | 0 | | A (0-0.2) | 0 | |
| | B (0.3-9.9) | 3 | | B (0.3-9.9) | 0 | |
| | C (10-99.9) | 2 | | C (10-99.9) | 2 | |
| | D (100-299.9) | 1 | | D (100-299.9) | 0 | |
| | E (300-999.9) 0 F (1000-4999.9) 0 | | E (300-999.9) | 0 | | |
| Total | | BLM | F (1000-4999.9) | 0 | | |
| FMU | G (5,000+) | 0 | BLM | G (5,000+) | 0 | |
| | Total | 6 | | Total | 2 | |
| | Lightning Starts | 5 | | Lightning Starts | 1 | |
| | Human Starts | Human Starts 0 | | Human Starts | 0 | |
| | Unknown Cause | 0 | | Unknown Cause | 0 | |
| | | | | | | |
| Total FN | AU Acres Burned | 314 | Total BI | LM Acres Burned | 19 | |

Fire Regime/Condition Class:

This unit is Fire Regime 3 and Condition Class 2. See Fire Regime/Condition Class map in Appendix C.

Values at Risk:

The entire unit is classified as a WUI area. There numerous vacation cabins and ranches. Grazing allotments and wildlife ranges dominate the area. There are numerous oil and gas interests just north of the Rattlesnakes, but none have entered the unit.

Communities at Risk:

The Rattlesnake Hills (lower elevations of this unit) are a community at risk.

Fire Management Objectives- 1) Protect community and values at risk, 2) Manage for aspen growth.

- Maximum desired acreage burned per decade is no more than 10%.
- Maintain and enhance vegetative diversity.
- Use mechanical treatments to reduce fuel loading.
- Rehabilitate fires in this FMU as necessary.

Fire Management Strategies- The AMR is to protect WUI areas while providing for firefighter and public safety.

- Use full suppression in WUI areas.
- Contain fires from unplanned ignitions to 500 acres or less 90% of the time during FIL 1-3.
- Contain fires from unplanned ignitions to 100 acres or less 75% of the time during FIL 4-6.
- If decadal burn targets are met, a review of objectives and strategies will be initiated to develop new suppression criteria on all wildland fires.
- Prescribed Fire will be used as needed to enhance aspen stands, improve rangeland mosaics, and reduce hazardous fuels.
- Use mechanical treatments to reduce hazardous fuels within ½ mile of WUI areas.
- Use mechanical treatments to remove concentrations of Limber pine.

8. Bighorn Mountains FMU Description

Location:

The Bighorn Mountain FMU skirts the eastern edge of the Bighorn National Forest and runs south until the terrain flattens at Ralston Flats, just north of US Highway 20/26. Most of the unit is part of the southern Bighorn Mountains. This unit encompasses the North Fork and Gardner Mountain WSAs. See table 1a for ownership information.

Characteristics:

This FMU has diverse terrain and fuels. It is steep and mountainous, but turns into foothills as the Bighorns give way to the plains. There are numerous canyons and drainages, most notably Robinson and Crazy Woman canyons, Moser Gulch, and the Red Wall area. The north, middle, and south forks of the Powder River are included in this FMU, along with many other tributaries. Elevations range from 5.400.7

many other tributaries. Elevations range from 5,400-7,800 feet.

Table 1a. Acres, Ownership and Communities at Risk

| Communities at Misk | | | | | |
|--|--|------------|--|--|--|
| FMU 8 | Bighorn Mountains | | | | |
| Total Acres | 869,9 | 39.27 | | | |
| | BLM | 333,137.76 | | | |
| Ownership by acreage and percent | USFS | 1.93 | | | |
| | Private | 417,885.94 | | | |
| | State | 118,913.62 | | | |
| | Other | 0 | | | |
| Communities at Risk | Billy Creek Dull Knife Reservoir Hazelton Area 4-H Camp | | | | |

BLM Fire History:

Lightning caused fires account for 33% of all unplanned ignitions, however the data is incomplete. It is estimated that at least 95% of fires in this unit are lightning caused.

Predominant fire size classes are A and B. From 1980 to 2003, 61 fires have occurred in the FMU, for a total of 2,075 acres. There have been large fires in this unit, though only a few on BLM land. Suppression fires typically occur between July 15 and September 30. Historical weather data indicates annual precipitation averages 14-22 inches per year.

Table 1b. Fire History

| | Table 10. Fire History | | | | | | |
|----------|---|-----|-----|------------------|-------|--|--|
| N | Number of Fire Starts 1980-2003 by Size Class (Acres) | | | | | | |
| | A (0-0.2) | 37 | | A (0-0.2) | 23 | | |
| | B (0.3-9.9) | 44 | | B (0.3-9.9) | 31 | | |
| | C (10-99.9) | 13 | | C (10-99.9) | 4 | | |
| | D (100-299.9) | 5 | | D (100-299.9) | 1 | | |
| | E (300-999.9) | 4 | BLM | E (300-999.9) | 1 | | |
| Total | Total F (1000-4999.9) 2 | 2 | | F (1000-4999.9) | 1 | | |
| FMU | G (5,000+) | 0 | | G (5,000+) | 0 | | |
| | Total | 105 | | Total | 61 | | |
| | Lightning Starts | 73 | | Lightning Starts | 20 | | |
| | Human Starts | 0 | | Human Starts | 0 | | |
| | Unknown Cause | 20 | | Unknown Cause | 7 | | |
| | | | | | | | |
| Total FN | Total FMU Acres Burned 5,801 | | | LM Acres Burned | 2,075 | | |

Fire Behavior is generally moderate with low rates of spread. Shading from vegetation seems to keep fire on the ground, but drought conditions have lessened this. The fuels have supported crown runs given the right conditions. See fire history table 1b.

Fire Regime/Condition Class:

This unit has Fire Regimes 2-4 and all three Condition Classes. See Fire Regime/Condition Class map in Appendix C.

Values at Risk:

This FMU has multiple values at risk. Billy Creek has become a major WUI area, and there are multiple recreation areas (Moser Gulch, Outlaw). Wildlife habitat, including big game winter range and multiple forest resources are at risk from fire. There are even some sites of historical and archeological significance (Hole in the Wall). Some grazing is done on the unit.

Communities at Risk:

There are four in the FMU: Billy Creek, Dull Knife Reservoir, Hazelton Area, and the 4-H Camp.

Fire Management Objectives- 1) Protect values at risk, 2) Prevent catastrophic fires.

- Maximum desired acreage burned per decade is no more than 10% of BLM land.
- Manage forest health for aspen regeneration, Ponderosa pine, and Douglas fir.
- Manage for healthy sagebrush and mountain shrub communities.
- Rehabilitate fires as necessary in this FMU.

Fire Management Strategies- The AMR is to protect WUI areas and allow fire to maintain ecosystem diversity while providing for firefighter and public safety.

- Use full suppression if WUI areas are threatened. Coordinate this effort closely with cooperators.
- Contain all fires from unplanned ignitions at 500 acres or less 90% of the time during FIL 1-3.
- Contain all fires from unplanned ignitions at 200 acres or less 75% of the time during FIL 4-6.
- Contain all fires from unplanned ignitions in Curl Leaf Mahogany at 10 acres or less 90% of the time during any FIL. Fire is not desired in this species.
- If decadal burn targets are met, a review of objectives and strategies will be initiated to develop new suppression criteria on all wildland fires.
- Use no heavy equipment in big game winter range.
- Prescribed Fire will be used as needed to maintain and establish vegetative mosaics. In forested areas, the ideal age diversity for Ponderosa pine and Douglas fir is: 10-20% in 1-10 yr. age class, 20-80% in 20-50 yr. age class, and 20% in 80-200 yr. age class (old growth).
- Use mechanical treatments to reduce encroachment of invasive species.

9. Whoopup Canyon ACEC Description

Location:

The Whoopup Canyon FMU is located approximately 2 miles southeast of Newcastle. See table 1a for ownership information and Appendix A for FMU map.

Characteristics:

The Whoopup Canyon ACEC consists of the Whoopup Canyon channel. This channel transects a diverse and mosaic region of the Newcastle FO. The topography in the area varies from flat topped ridges to rim-rock slopes. Elevations range from 3,600 – 3,900 feet.

Vegetation is mosaic. Ponderosa pine, juniper, and several shrub species dominate the south-facing slopes of the canyon, and dense, overstocked

Juniper/mixed shrub stands on the north, west, and eastern-facing slopes of the canyon. Several cottonwoods and other hardwoods are located along the stream channel.

The FMU contains a riparian zone along the intermittent Whoopup Creek. Some springs flow the majority of the year. No water courses on public land are on the Wyoming Department of Environmental Quality's list of impaired streams.

BLM Fire History:

Lightning caused fires account for 100% of all unplanned ignitions. Predominant fire size class is B. From 1980 to 2003, 3 fires have occurred in the FMU, for a total of 16 acres. Suppression fires typically occur between July 1 and September 30. Historical weather data indicates annual precipitation averages 15 - 19 inches.

Fire behavior is typically moderate unless increased by thunderstorm activity. See fire history table 1b and map in Appendix B.

Table 1a. Acres, Ownership and Communities at Risk

| Communities at Kisk | | | | | |
|------------------------|----------------|-------|--|--|--|
| FMU 9 | Whoopup Canyon | | | | |
| Total Acres | 1,439 | | | | |
| | BLM | 1,439 | | | |
| Ownership by | USFS | 0 | | | |
| acreage and percent | Private | 0 | | | |
| | State | 0 | | | |
| | Other | 0 | | | |
| Communities at Risk | None | | | | |

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|------|------|----|------|------|-----|
| 1 an | le 1 | D. | rire | пія | Orv |

| N | Number of Fire Starts 1980-2003 by Size Class (Acres) | | | | | |
|----------|---|----|----------|------------------|----|--|
| | A (0-0.2) | 2 | | A (0-0.2) | 1 | |
| | B (0.3-9.9) | 3 | | B (0.3-9.9) | 2 | |
| | C (10-99.9) | 1 | | C (10-99.9) | 0 | |
| | D (100-299.9) | 0 | | D (100-299.9) | 0 | |
| | E (300-999.9) Total F (1000-4999.9) | 0 | | E (300-999.9) | 0 | |
| Total | | 0 | BLM | F (1000-4999.9) | 0 | |
| FMU | G (5,000+) | 0 | | G (5,000+) | 0 | |
| | Total | 6 | | Total | 3 | |
| | Lightning Starts | 4 | | Lightning Starts | 2 | |
| | Human Starts | 0 | | Human Starts | 0 | |
| | Unknown Cause | 0 | | Unknown Cause | 0 | |
| | | | | | | |
| Total FN | MU Acres Burned | 34 | Total BI | LM Acres Burned | 16 | |

Fire Regime/Condition Class:

The majority of this FMU is in Fire Regime 3 and Condition Class 3. See Fire Regime/Condition Class map in Appendix C.

Values at Risk:

The FMU contains prehistoric petroglyphs of world class significance in canyon topography. Management of this FMU is focused on the preservation and protection of the petroglyphs. Mule deer, Whitetail Deer, Antelope, Prairie Falcons, Red-Tailed Hawks, as well as other raptors and several songbird and non-game wildlife species utilize this highly diverse ecosystem.

All USDI BLM lands within the FMU are designated as an Area of Critical Environmental Concern (ACEC), due to the extensive cultural resources present. Access into the area is limited by the approved RMP to (1) research under a cultural resources research permit, (2) traditional religious use by Native Americans, and (3) supervised tours guided by BLM personnel.

Communities at Risk:

None.

Fire Management Objectives- 1) Protect values at risk, 2) Convert Condition Class 3 to Condition Class 2.

- All fires will be suppressed through aggressive and sustained initial and extended attack to protect values at risk.
- Maximum desired acreage burned per decade is 50 acres or less.
- Use mechanical treatments to reduce fuel loading.
- Rehabilitate fires in this FMU as necessary.

Fire Management Strategies- The AMR is to protect cultural resources and WUI areas while providing for firefighter and public safety.

- Restrict the use of heavy equipment to construct firelines; use natural barriers and fire breaks whenever possible.
- Do not use aerial retardants or foams with dies.
- Contain fires from unplanned ignitions to 5 acres or less 90% of the time during FIL 1-3.
- Contain fires from unplanned ignitions to 50 acres or less 75% of the time during FIL 4-6.
- Once the burn target of 50 acres has been reached, a review of objectives and strategies will be initiated to develop new suppression criteria on all wildland fires.
- Wildland Fire Use is not currently an identified option at this time.
- Prescribed Fire will not be used if smoke will come in contact with petroglyphs. No areas are currently identified, but prescribed fire is still an option for the FMU.
- Continue mechanical treatments around cultural resources and WUI areas; treat no more than 500 acres.

10. Stateline/Newcastle FMU Description

Location:

The Stateline/Newcastle FMU is located in the area surrounding the Newcastle Field office, north to the Black Hills National Forest boundary and east to the state line. See table 1a for ownership information and Appendix A for FMU map.

Characteristics:

The Stateline/Newcastle FMU is dominated by uplands and foothills. There are some steep canyon areas. Major streams include Salt Creek, Plum Creek, and Stockdale Beaver Creek. Elevations range from 3,600-5,100 feet.

Vegetation cover types are annual and perennial grasses and mid elevation shrub steppe intermixed with Ponderosa pine. Cottonwoods and other hardwoods are located along the stream channels.

Table 1a. Acres, Ownership and Communities at Risk

| FMU-10 | Stateline/Newcastle | | | | |
|--|--|------------|--|--|--|
| Total Acres | 140,174.62 | | | | |
| | BLM | 18,237.68 | | | |
| Ownership by acreage and percent | USFS | 4,019.02 | | | |
| | Private | 102,301.95 | | | |
| | State | 15,615.97 | | | |
| | Other | 0 | | | |
| Communities at Risk | 3 Clifton Canyon Ferguson Canyon Whoopup ACEC | | | | |

BLM Fire History:

Lightning caused fires account for 92% of all unplanned ignitions, the remainder are unknown. Predominant fire size class is B. From 1980 to 2003, 13 fires have occurred in the FMU, for a total of 2,886 acres. Suppression fires typically occur between July 1 and September 30. Historical weather data indicates annual precipitation averages 15 - 19 inches.

Fire behavior is typically moderate unless increased by thunderstorm activity.
See fire history table 1b and fire history map in Appendix B.

Table 1b. Fire History

| N | Number of Fire Starts 1980-2003 by Size Class (Acres) | | | | | | |
|----------|---|--------|------------|------------------|-------|--|--|
| | A (0-0.2) | 12 | | A (0-0.2) | 4 | | |
| | B (0.3-9.9) | 11 | | B (0.3-9.9) | 6 | | |
| | C (10-99.9) | 0 | | C (10-99.9) | 0 | | |
| | D (100-299.9) | 0 | | D (100-299.9) | 0 | | |
| | E (300-999.9) | 2 | | E (300-999.9) | 2 | | |
| Total | F (1000-4999.9) | 3 | DIM | F (1000-4999.9) | 1 | | |
| FMU | G (5,000+) 1 BLM | DLM | G (5,000+) | 0 | | | |
| | Total | 29 | | Total | 13 | | |
| | Lightning Starts | 25 | | Lightning Starts | 12 | | |
| | Human Starts | 0 | | Human Starts | 0 | | |
| | Unknown Cause | 2 | | Unknown Cause | 0 | | |
| | | | | | | | |
| Total FN | MU Acres Burned | 22,170 | Total BI | LM Acres Burned | 2,886 | | |

Fire Regime/Condition Class:

The entire FMU is in Fire Regime 3 and Condition Class 3. See Fire Regime/Condition Class map in Appendix C.

Values at Risk:

The entire FMU is identified as a WUI area and includes the town of Newcastle. There are also forestry resources, recreation areas, wildlife habitat and grazing allotments in the unit.

Communities at Risk:

Clifton Canyon, Ferguson Canyon, Newcastle

Fire Management Objectives- 1) Protect values at risk, 2) Convert Condition Class 3 to Condition Class 2.

- Maximum desired acreage burned per decade is 10 percent of BLM land or less.
- Use prescribed fire to improve wildlife habitat and grazing allotments.
- Use mechanical treatments to reduce hazardous fuel loading.
- Rehabilitate fires in this FMU as necessary.

Fire Management Strategies- The AMR is to protect WUI areas while providing for firefighter and public safety.

- Use full suppression if WUI areas are threatened. Coordinate this effort closely with cooperators.
- Contain fires from unplanned ignitions to 50 acres or less 90% of the time during FIL 1-3.
- Contain fires from unplanned ignitions to 5 acres or less 75% of the time during FIL 4-6.
- If decadal burn targets are met, a review of objectives and strategies will be initiated to develop new suppression criteria on all wildland fires.
- Wildland Fire Use is not currently an identified option at this time.
- Prescribed Fire will be used to improve wildlife habitat and grazing allotments, burn no more than 1,800 acres in ten years.
- Continue mechanical treatments in WUI areas to reduce hazardous fuels.

IV. FIRE MANAGEMENT COMPONENTS

A. Wildland Fire Suppression

1. EWZ Fire History

The primary fire season generally begins in June and runs through October during average years, with the most active period running from mid-July to mid-September. During severe seasons, fire activity often begins in March and April and runs well into November. Fires have occurred during every month of the year when conditions were right. During the period of 1980-2001, the EWZ averaged 19 fires per year, burning 2,160 BLM acres annually. Approximately 68% of these wildfires were size class A-D incidents (less than 300 acres in size). Fire in forested areas accounted for 39% of total acreage, and grass/brush type fires accounted for the remaining 61%. On average, 82% of fires are lighting caused.

Risk Assessment and Mitigation Strategies (RAMS) data for 1992-2001 may be more accurate, though not as complete as the above numbers. For the 10 year period, RAMS calculated an average of 31.7 fires per year, burning 24, 965 acres annually. 80% were lightning caused. The difference in data is most likely due to improved fire reporting and recording systems. It also suggests a trend that fires in the EWZ are becoming larger and more frequent.

Beginning in FY 2002, the fire reporting system switched to reporting fire information for each field office. For FY 2002-FY 2004, the EWZ averaged 27 fires for 8,323 BLM acres. 94% of these fires were lightning caused. Again, this trend suggests EWZ fires are becoming larger and more frequent. However, it may be attributed to more accurate reporting. Some fires on BLM lands were, and probably still are, not reported properly.

None of this data includes assist fires, or acreage burned on private, state, or Forest Service land. Some data does exist for this, but it is largely incomplete. EWZ suppression resources respond to a significant number of cooperator fires. A large amount of the workload for Casper Interagency Dispatch Center (CPC) involves cooperator fires and resources.

See fire occurrence map in Appendix B.

2. Suppression/Preparedness Actions

General guidance from the Resource Management Plans provide for fire suppression commensurate with resource values at risk and safety to firefighters and the public. Agency resource advisors are immediately consulted when fires occur in Areas of Critical Environmental Concern, Wilderness Study Areas, cultural sites, critical T&E habitat areas, etc. While suppression may be the AMR, limitations may be imposed on suppression methods.

Initial attack actions usually consist of an interagency response, with county or volunteer resources arriving first on scene. The typical strategy at first is almost always complete suppression, but once ownership is identified a new strategy may be implemented. Suppression tactics are generally direct attack whenever possible, and minimizing costs is always a high priority. Most agencies across the zone only have type IV (usually surplus military 6x6 conversions) or type VI engines available, so that is the most common resource. Heavy equipment is seldom used, while aviation resources have become more common in recent years. Due to these limitations on resources, impacts to the land are usually minimal.

An outdated Initial Attack Plan exists, but is in the process of being revised. The current plan does have guidelines for staffing during certain planning levels, and the National Mobilization Guide has guidelines for staffing during different levels of fire danger. Planning level and Fire Danger will be key inputs for the revised EWZ Initial Attack Plan.

Extended attack fires will reflect the strategy of the managing agency. Indirect tactics are more common, as is the use of heavy equipment.

The preparedness program consists primarily of patrols of areas and periods of concentrated recreation use, such as Muddy Mountain EEA (i.e. campgrounds and trails), South Bighorn Mountains (campgrounds), and Goldeneye Reservoir, Alcova and Pathfinder reservoirs, North Platte River access areas, especially on weekends and July 4 and Labor Day holidays. During times of severity, resources are bolstered and patrols are increased.

Structural fire suppression is the responsibility of tribal, State, or local governments, as described in the Interagency Standards for Fire and Fire Aviation Operations. Agency Administrators will ensure employees are trained, certified and available to participate in the wildland fire program locally, regionally, and nationally as the situation demands, as described in the Interagency Standards for Fire and Fire Aviation Operations.

Requirements for fire operations/suppression plans can be found in the Interagency Standards for Fire and Fire Aviation Operations, and the Office of Fire and Aviation website at: http://www.fire.blm.gov/. A list of all fire and resource personnel is available at CPC.

See Appendix E of this document for a complete summary of the preparedness organization, including staffing, budget, equipment, etc.

3. Fire Prevention, Community Education, Community Risk Assessment, and other Community Assistance Activities (Firewise).

a. Prevention Program

Although the majority of lands on the Casper Mountain are privately owned, the BLM is seen as a major player in terms of prevention and education. Community risk assessments of Casper Mountain (completed primarily by Natrona County Firewise) and other identified WUI areas are completed in conjunction cooperating agencies.

There is an active Smokey Bear program in the Casper area, as well as use of information booths (county fair, Fire Protection Week, national finals rodeo, safe kids' day), engines in parades, and participation in "career days."

The EWZ provided training to rural fire departments across the zone during the winter of 2002-2003. Sixteen different NWCG courses were offered to sixteen different agencies, for a total of 168 students reached. The program received excellent feedback, but no further funding. The EWZ continues to offer training to cooperators on a reduced level.

b. Special Orders and Closures

All special orders and closures will be coordinated with local cooperators, recommended by the FMO, and approved by the appropriate manager(s).

4. Fire Training Activities

a. Qualifications and Fireline Refresher

Training and fitness requirements for all personnel involved in fire/suppression support can be found in the Interagency Standards for Fire and Fire Aviation Management, and records of the EWZ personnel are kept at Casper Interagency Dispatch Center. Attendance of the refresher training and successful completion of the appropriate work capacity test are prerequisites for issuance of a red card prior to June 15th annually. The EWZ offers refresher training to cooperators as funding and scheduling permit.

b. Fire Season Readiness

Requirements for all preparedness and operational plans can be found in the Interagency Standards for Fire and Fire Aviation Management. Typical fire season readiness includes roughly three weeks of training (S-130, S-190, S-211, S-212 or varying courses depending on crew experience, Defensive Driving, First Aid/CPR, EEO, etc.), followed by a readiness review (local, state, or national).

5. Detection

Detection actions generally consist of three efforts in most cases; 1) lightning maps are obtained and studied to determine areas where fires are likely to have started and aerial and/or ground patrols are made of those areas; 2) engines are pre-positioned to areas of known high lightning occurrence and hazard fuels; and 3) engines make regular patrols to areas of concentrated recreation use, such as Muddy Mountain EEA. In many cases, fires are reported by the general public via the 911 dispatch centers. There are several individuals qualified as Aerial Observers who make detection flights. In

addition to locating fires, these flights are made in order to provide size-up and ownership information, and assist ground resources in finding the route into the fire.

6. Fire Weather and Fire Danger

Four BLM Remote Automated Weather Stations (RAWS) are operated across the EWZ (plus two FS RAWS, not shown):

| Name | NWS ID | NESS ID | Elevation | Latitude | Longitude |
|-----------------|--------|----------|-----------|----------|-----------|
| Casper Mountain | 481502 | 3264B19C | 7,740 | 42 43 12 | 106 21 0 |
| Echeta | 480501 | 3278318A | 4,320 | 44 28 12 | 105 49 48 |
| Fales Rock | 481504 | 3265139E | 6,274 | 42 1 23 | 107 16 20 |
| Poker Creek | 481003 | 3264E1E0 | 6,440 | 43 34 12 | 106 58 12 |

Casper Interagency Dispatch Center is responsible for daily RAWS management and data collection. All RAWS units use NFDRS fuel model C or T, along with the Energy Release Component to develop fire danger ratings on a daily basis.

A portable RAWS station is available along with two Davis Weather Stations that can be installed to provide site specific weather information where permanent RAWS information is not sufficient to collect needed data for a specific site.

7. Aviation Management

Use of aircraft in the Zone is light; most flights are fire related on an annual basis. Other uses have been for wildlife surveys or counts, law enforcement and oil & gas compliance (contract helicopter in some cases). The FMO is the Zone Aviation Manager (DAM) and is also a designated aviation safety trainer (AST).

The EWZ rates 1, using the aviation program determination matrix (collateral DAM), averaging 49.08 flight hours annually. The need for air tactical support to fires is determined by the severity of the fire season and what is threatened by particular fires. The EWZ averages 2-3 air tactical missions per year, some in support of cooperator agencies. The zone needs to maintain air tactical qualifications for its own needs as well as supporting cooperators, especially within the wildland/urban interface, and the fact that cooperators have virtually no capability at all. This function is often critical in early stages of initial attack to meeting national direction of safety commitments.

See Appendix F for the EWZ Aviation Plan.

8. Initial Attack

All fires within the FPU will be managed with suppression actions consistent with resource management objectives identified within the respective FMU. Tactics and strategies will be based on the current and predicted weather and fire behavior. Firefighter and public safety is always the first priority. Use the following information for determining initial attack priorities:

The highest priority FMUs within the fire planning unit for initial attack are ranked as follows:

- 1. West Laramie Range (including Jackson Canyon).
- 2. Big Horn (specifically Billy Creek WUI)
- 3. Rattlesnake
- 4. Stateline/Newcastle
- 5. East Laramie Range
- 6. EWZ Counties (specifically industrial WUIs)

FMUs are ranked in this order based on the amount of WUI values at risk and their proximity to BLM land. As fire complexity increases, additional staffing will be requested as appropriate and consistent with incident complexity. Casper Mountain (part of the West Laramie Range WUI) is viewed by Wyoming State Forestry Division as the number one priority for wildland/urban interface suppression in the State.

• Extended Attack and Large Fire Suppression

The BLM requires no narrative in this section. This section is here to maintain consistency with other agencies format. BLM direction is outlined in the Interagency Standards for Fire and Fire Aviation Management.

• Other Fire Suppression Considerations

Due to the land ownership pattern in the EWZ, suppression of fires is most often an effort between resources of county/district and BLM. Using the Incident Command System, the first arriving unit is assumed to be in command until jurisdictions are determined, or command is handed off to a more qualified person. Selection of an Incident Commander may also be related to land ownership, though not always. It is important to determine land ownership as soon as possible.

B. Wildland Fire Use

Description of wildland fire use opportunities
 Within the Fire Planning Unit, there are currently no areas identified in the
 existing Resource Management Plans where wildland fire may be used for

resource benefit. As these plans are revised, some fire use areas may be identified and an appropriate plan will be written.

C. Prescribed Fire

1. Planning and Documentation

All FMUs within the EWZ include or have the potential for using prescribed fire as a resource management tool for various objectives, primarily in the range, wildlife and forestry programs. As the result of 1999 -2003 fire seasons, recent legislation and policy have made Wildland Urban Interface and hazard fuels reduction projects a high priority. Prescribed burning is authorized in all three RMPs. Projects are brought forward by the Natural Resource Specialists in conjunction with Resource staff through the preparation of an Environmental Analysis (EA). Funding is requested and a site specific burn plan is prepared for implementation; the burn plan includes cooperative agreements with private landowners or lessees and specifications for smoke management, allowable areas and post-burn management and monitoring.

The Zone began burning in 1981 with projects in the area of the Bates Creek Reservoir. These burns were the first to be conducted, other than logging slash disposal, and were done for range and wildlife objectives. Prescribed burns have been conducted annually in the Platte River and Buffalo Resource Areas since 1981. Prior to 2002 no prescribed fires other than logging slash disposal had been planned in the Newcastle Resource Area. Burning "windows" for broadcast burns are quite often limited, especially in the spring; therefore the Zone averages 3-5 projects per year for an average of 1500-5000 acres. With the increase in hazard fuels reduction projects, a significant number of slash piles are being created. Slash pile are typically burned during the winter months when snow cover is present. This has created a workload that continues through the winter months.

Almost all prescribed burns in the Zone involve BLM, State and/or private lands. Cooperative support and/ or funding is secured through cooperative agreements during the planning process when available. Burn projects most often involve fairly small acreages and require extensive preparation to keep fire off adjacent lands due to different grazing management and/or different ownerships. It is difficult to plan burns on a landscape basis due to the land ownership pattern.

To execute prescribe fire projects the Zone requires personnel qualified in prescribed fire, suppression and planning. The planning staff, consisting of people in Resources, Fuels and Fire needs to have sufficient depth and numbers to keep the project planning process moving without bottlenecks. Contracting provides an avenue to overcome short term bottlenecks. The National Fire Plan provides avenues for hiring term positions to address short term shortfalls in needed staffing. In planning, sufficient specialists need to be on hand to design projects, complete NEPA, produce and finish EAs, produce

burn plans and monitor treatment effects. The Zone should have at a minimum: 1- RXB1, 3- RXB2, 2- RXI1, 2- RXI2, 1- helitorch manager, 1-complete helitorch module with mixmaster and parking tender, and 2 PSD operators to work directly with prescribed fire operations. To support prescribed fire operations the suppression staff should be able to provide holding bosses; 2 at the DIVS level and 2 at the TFLD level. A Fuels Program Manager is needed to oversee the Zone Fuels program and coordinate the projects generated by the three Field Offices in the Zone. A Fuels Module Leader with an Assistant is necessary to oversee a seasonal fuels crew of up to 10. The fuels module would be used to gather data, prepare project sites, implement projects, provide monitoring and assist in planning projects as qualified.

To date, monitoring has been the responsibility of resources staff associated with individual projects. It is proposed that resources staff work closely with Fuels staff to design and implement a more integrated monitoring program.

2. Air Quality and Smoke Management

The Wyoming Department of Environmental Quality (Wyoming DEQ) is the agency responsible for air quality in Wyoming. To date, an air quality permit is required for prescribed fires. This permit is obtained from DEQ by application. Applications require information on the location, size, fuel type, and date(s), along with smoke modeling information. Currently, changes in this process are under way, expected in the spring of 2005.

D. Non-Fire Fuel Treatments

Non-fire fuels treatment is an essential component of the EWZ Fuels Management Program. It will be used in appropriate areas prior to, in conjunction with, or as an alternative to prescribed fire. Treatment will be tailored to specific resource management objectives such as hazardous fuels reduction, restoration of priority vegetation types, and noxious weed management. Treatment options include commercial timber harvest, pre-commercial thinning, commercial thinning, constructing fuel breaks, mechanical treatment of natural and activity fuels, and chemical or biological treatments to reduce or eliminate the spread of noxious weeds. Whenever possible, the treatment method will be designed to provide local economic benefit. NEPA analysis will occur before implementation of site-specific projects.

At this time, projects treated mechanically have been limited to small tracts of firewood sales. Stewardship contracts, sale of traditional and non-traditional wood products and as yet undeveloped uses for by-products are options to reduce or reutilize biomass produced from fuels treatments.

Contractors have been utilized for thinning and piling projects to date. The use of contractors for chipping and mastication is planned. The national IDIQ contract is utilized, but currently contains a limited number of local contractors.

Acres to be treated with non-fire treatments can be referenced in the output of the Eastern Wyoming Risk Assessment and Mitigation Strategies (RAMS) contract (February 2003, Contract No. KAP024002) and through NFPORS.

E. Emergency Stabilization and Rehabilitation

Historically, Emergency Stabilization and Rehabilitation (ESR) workload has been varied. ESR is done on a case by case basis after consulting the resources staff of the hosting field office. The resources staff then implements ESR, assisted by the fire staff when available. Most of the ESR needs have been rehabilitation of dozer lines, fence repair, and seeding.

The long term objective is the reestablishment of native grass and sagebrush community. Short and long term goals are to help mitigate fire-related degradation to natural and cultural resources, to minimize threats to life or property resulting from the effects of a fire, or to repair/replace/construct physical improvements necessary to prevent degradation of land or resources. Long-term restoration actions include the establishment of native shrub species on site to reestablish pre fire sagebrush/perennial grass cover.

Short-term ESR actions are aimed primarily at damage caused by the suppression effort itself and include rehabilitation of hand and dozer line, construction of water erosion abatement structures and seeding a mixture of grass and forb species to re-establish ground cover to hold soil in critical areas.

Short-term monitoring requirements include evaluation of treatment implementation and its initial effectiveness. Post-treatment monitoring may include vegetative transects or the establishment of permanent photo points depending on specific project objectives.

Resource specialists and fire management staff with GIS specialist support conduct long term monitoring at the FPU level.

F. Community Protection/Community Assistance

There are over 15 communities within the FPU that are listed in the Federal Register as communities at risk, although several are not on or near BLM land. A complete list of communities at risk can be viewed at:

http://www.fireplan.gov/reports/351-358-en.pdf. Communities at risk within the scope of EWZ management have been ranked by the Risk Assessment Mitigation Strategy (RAMS). Following is a list of these communities prioritized for accomplishment of Community Risk and Action Plans:

- 1.) Casper Mountain WUI
- 2.) Billy Creek WUI
- 3.) Stateline WUI
- 4.) Newcastle WUI

An assessment of fuels conditions and the associated risks have been completed for all areas within the Casper Field Office by North Wind Environmental, Inc. This includes community priority 1, Casper Mountain (West Laramie Range FMU), including Jackson Canyon ACEC, and mitigation measures are underway and ongoing. Priority 2, Billy Creek WUI (Bighorn Mountains FMU) will be completed in FY 2006. Priority 3 and 4 will be completed in FY 2008. As these plans are completed specific actions will be included in this Fire Management Plan. Actions are underway and some are already completed, including fuels breaks on the northeastern edge of Newcastle to provide a fuel break between BLM land and the community.

Rural fire assistance grants have been awarded to several County, Rural, and Volunteer Fire Departments over the years, including Goshen and Johnson counties. Specific items purchased have included PPE (primarily nomex and gloves), training materials, tools and equipment. Surplus fire engines from EWZ are usually purchased by Johnson County.

V: ORGANIZATION AND BUDGET

A. Budget and Organization

The EWZ's typical annual budget consists of roughly \$1.5 Million. This includes 2810, 2823, and 2824 Sub-Activities in the Casper, Buffalo, and Newcastle Field Offices. It does not include funding for specific projects, reimbursable or assistance accounts. The EWZ is currently staffed to meet 7-day effective levels identified in the National Fire Plan for June-September. Only the FMO, Dispatch Center Manager, and Fuels Specialist are permanent full time (PFT) employees. A need has been identified through reviews for an AFMO to cover the duties of the FMO in his absence. Currently the FOS is not qualified to assume the duties of the FMO.

All suppression forces are career seasonal or seasonal, and are managed by a career seasonal Fire Operations Supervisor (funded 10 workmonths). Four Type 6 engines are staffed with a career seasonal Engine Module Leader (funded 8-9 workmonths), a career seasonal Assistant Engine Module Leader (funded 6-7 workmonths), and three seasonal firefighters (funded 3-4 workmonths). One engine is stationed at the Buffalo Field Office, the other three at the Casper Field Office. Also in Casper are a Type 2 3500 gallon water tender and a 1500 gallon CAFS surplus military 6x6 5 ton. Neither is staffed full-time and is normally staffed only during severity or by ADs for specific incidents. The need for a seasonal water tender operator has been identified. The 6x6 is technically a type 4, but not reliable enough to use for full time suppression; it is primarily for prescribed fire and was purchased with 2823 money.

The fuels program is still in the developmental stage, and has grown every year. The Fuels Specialist and each (3) Natural Resource Specialist (NRS Fire) are PFT positions and are fully funded. The Fuels Specialist supervises a career seasonal Fuels Module Leader and a 5-7 person seasonal fuels crew. He also coordinates with the three Natural Resource Specialists at the Casper, Buffalo and Newcastle Field Offices, as well as the Forester in Casper. The fuels crew normally works

May-October. There are currently no base funds (2823/2824) for the Fuels Module Leader or fuels crew; their employment is dependent on project work for funds. In the future, a minimum of six work months of base funding for the Fuels Module Leader and one work month per seasonal fuels crew person is requested. These base work months would cover training, conferences and meetings. They receive fire training with the suppression forces, are red carded, and are frequently used as an Initial Attack squad during fire season. In turn, suppression forces frequently participate in fuels projects.

The Casper Interagency Dispatch Center (CPC) combines three BLM employees and two Forest Service employees (funded by the Medicine Bow National Forest). BLM funded positions include: PFT Dispatch Center Manager (10 workmonths), career seasonal Intelligence Dispatcher (8-9 workmonths), and a seasonal dispatcher (4-5 workmonths). The Forest Service funds a career seasonal Assistant Dispatch Center Manager and another seasonal dispatcher. The Casper Field Office Manager and a Purchasing Agent are partially funded with preparedness funds.

The EWZ maintains a fire cache at the Casper Field Office for initial attack and extended attack support and replacement. This cache is maintained at the 50-person level, with a higher level of hand-tools, recognizing that it is often the initial support for fires in the area being managed by volunteer fire departments which employ engine attack in most cases. A small cache is maintained at the Buffalo Field Office, to provide replacement for the engine stationed there; major replacement is provided by the Casper cache. Caches of hand tools are maintained at several ranch headquarters in the zone, in Johnson and Natrona counties; these tool caches are provided and maintained by BLM for initial attack by volunteer cooperators. Also based in Casper is a small, extended attack cache "trailer," equipped with tools, base camp, helicopter, and command items to be used primarily on Type 3 incidents.

The two positions identified above (AFMO and water tender operator) would fully meet Normal Year Readiness requirements for staffing. A fire Mitigation/ Education Specialist would benefit the program, as would a fire planner. FPA may identify additional/different equipment as the most efficient for initial attack, such as a type 4 engine.

See Appendix E for a table of the Implemented Year Fire Organization.

B. Assistance Agreements and Intra/Interagency Agreements

EWZ has Annual Operating Plans with the following counties:

- 1. Campbell
- 2. Converse
- 3. Crook
- 4. Goshen
- 5. Johnson
- 6. Natrona
- 7. Niobrara

- 8. Platte
- 9. Sheridan
- 10. Weston

Included in these Operating Plans are agreements with the Wyoming State Forestry Division, Medicine Bow National Forest, Black Hills National Forest, Big Horn National Forest, Devils Tower National Monument, National Park Service, Crow Indian Agency, neighboring BLM offices, and numerous fire districts.

Two counties take total initial attack of BLM fires on a reimbursable basis (Campbell and Goshen); BLM only sends resources if requested for assistance or, if the number of fires exceeds the counties' capabilities, BLM provides initial attack. Several counties provide reimbursable initial attack on a cooperative basis (Crook, Weston, and Niobrara). Sheridan, Johnson, Natrona, Converse and Platte counties provide initial attack with various mutual aid periods (3-24 hours). These mutual aid agreements are for all or portions of each county. Initial attack in Converse, Natrona and Platte counties is further complicated by an agreement between BLM and the Medicine Bow/Routt NF. The USFS provides initial attack on BLM fires in areas bordering the Forest, east of the Fort Fetterman road; BLM provides initial attack for fires on the Forest west of the Fort Fetterman road in Converse and Natrona counties. Frequently, when fires have been controlled, the initial attack resources will remain on the fire rather than "swap" resources between agencies.

An agreement with the State of Nebraska and cooperators there is in the process of being executed. 6,548 BLM acres are scattered over 30 counties. Cooperators, specifically county departments there will most likely provide initial attack on a reimbursable basis. It is assumed they do this now without knowing ownerships. BLM land in Nebraska will be included in the Nebraska FPU.

Copies of existing agreements are available in CPC.

C. Equipment Rental Agreements

Copies of these agreements are available in dispatch as part of the service and supply plan.

D. Contract Suppression and Prescribed Fire Resources

Copies of these agreements/contracts are available in dispatch as part of the service and supply plan.

VI. MONITORING AND EVALUATION

This FMP will be reviewed and/or revised on an annual basis and in conjunction to revisions in RMPs from each of the field offices, FPA, and national, departmental, or bureau direction. If this FMP is not performing adequately or

meeting fire/resource management objectives as outlined in the RMPs, it will be revised. This FMP will be revised once FPA is completed.

Project level plans will be evaluated to ensure that the treatment/action meets the purpose and need for the project.

Accomplishments for performance measures are reported in the MIS.