CENTRAL UTAH INTERAGENCY FIRE MANAGEMENT PLAN

Fishlake National Forest Richfield BLM Field Office Fillmore BLM Field Office 2010









CENTRAL UTAH FIRE MANAGEMENT PLAN FISHLAKE NATIONAL FOREST 2010



Prepared by: Central Utah Fire Management Group Date

Reviewed by: _____ Date _____

Interagency Federal fire policy requires that every area with burnable vegetation must have a Fire Management Plan (FMP). This FMP provides information concerning the fire process for the Fishlake National Forest, Richfield & Fillmore Field Office and compiles guidance from existing sources such as but not limited to, the Fishlake National Forest Land and Resource Management Plan (LMP), Richfield Field Office Resource Management Plan (RMP), Warm Springs RMP, House Range RMP, national policy, and national and regional directives.

The potential consequences to firefighter, public safety, natural and cultural resources, and values to be protected help determine the management response to wildfire. Firefighter and public safety are the first consideration and are always the priority during every response to wildfire.

While the Fire Management Plan is required for the Forest Service and the Bureau of Land Management, specific requirements and policy is different for each agency. Specific agency direction will be noted throughout this document with the following icons:

- Denotes direction specific to the USFS
- **V** Denotes direction specific to the BLM
 - No agency icon signifies direction applicable to both agencies.

The following chapters discuss broad Forest and BLM specific Fire Management Unit (FMU) characteristics and guidance.

Chapter 1 introduces the area covered by the FMP, includes a map of the Central Utah Fire Management area, addresses the agencies involved, and states why the agencies are developing the FMP.

Chapter 2 establishes the link between higher-level planning documents, legislation, and policies and the actions described in FMP.

Chapter 3 articulates specific goals, objectives, standards, guidelines, and/or desired future condition(s), as established in the agencies LMP and RMP's, which apply to all the Central Utah Fire FMUs and those that are unique to individual FMUs.

- Chapter 4 (BLM) establishes the intent to document the procedures used in the area covered by the FMP to implement the wildland fire management program. The following sections and subsections should be addressed in this chapter, or a reference should be cited where this information can be found (e.g. in an appendix).
- Chapter 5 (BLM) establishes the intent to document processes for determining whether the FMP is being implemented as planned and fire-related goals and objectives are being achieved.

TABLE of CONTENTS

CHAPTER	1. INTRODUCTION	1
CHAPTER	2. POLICY, LAND MANAGEMENT PLANNING, AND PARTNERSHIPS	3
2.1.	NATIONAL AND REGIONAL FIRE MANAGEMENT POLICY	3
	Land and Resource Management Plans	
2.3.	PARTNERSHIP	3
CHAPTER	3. FIRE MANAGEMENT UNIT DESCRIPTIONS	4
3.1. I	FIRE MANAGEMENT CONSIDERATIONS APPLICABLE TO ALL FIRE MANAGEMENT UNITS	4
3.1.1.	Land and Resource Management Plan Guidance	4
3.1.2.	Physical Characteristics that Apply to All Fire Management Units	
3.2.	FIRE MANAGEMENT CONSIDERATIONS FOR SPECIFIC FIRE MANAGEMENT UNITS	26
3.2.1.	Beaver Canyon	
3.2.2.	Boulder	26
3.2.3.	Canyon Range	
3.2.4.	Confusions	26
3.2.5.	Crickets	
3.2.6.	Crystal Peak	26
3.2.7.	Deep Creeks	26
3.2.8.	Drums	26
3.2.9.	Eureka	26
3.2.10	. Fishlake Basin	26
3.2.11	. Fremont	26
3.2.12	. Goosebery	26
3.2.13.	. Hanksville Desert	26
3.2.14	. Henry Mountains	26
3.2.15.	0	
3.2.16	. Little Sahara Recreation Area	26
3.2.17.	. Loa	26
3.2.18	. Monroe Mountain	26
3.2.19	. Pahvant	26
3.2.20	. Parker	26
3.2.21	. Salina Creek	26
3.2.22	. Sanpete Valley	26
3.2.23	. Swasey/Fish Springs	26
3.2.24	. Teasdale	26
3.2.25	. Tushar Mountains	26
3.2.26	. Twin Peaks	26
3.2.27	. Valley Mountains	26
3.2.28	. West Desert Lowlands	26
CHAPTER	4. WILDLAND FIRE OPERATIONAL GUIDANCE	27
4.1.	GENERAL IMPLEMENTATION PROCEDURES	27
4.1.1.	Specific Implementation Procedures for Wildland Fire Management	29
4.1.2.	Implementation Procedures for Fire Suppression	
4.1.3.	Wildland Fire Management	
4.1.	3.1. Factors affecting decision criteria for Wildland Fire Management	
4.1.4.	Range of Potential Fire Behavior	
4.2.	PREPAREDNESS ACTIONS	
4.2.1.	Annual Prevention Program	33

4.3. Spec	CIAL ORDERS AND CLOSURES	33
4.4. INDU	JSTRIAL OPERATIONS AND FIRE PRECAUTIONS	34
4.5. ANN	UAL FIRE TRAINING ACTIVITIES	34
4.6. QUA	LIFICATIONS AND NEEDS ASSESSMENT	34
4.7. Fire	READINESS	34
	nnual Preparedness Reviews	
4.7.2. S	eason Start and Stop Criteria with Typical Dates	35
4.7.3. C	entral Utah Interagency Fire Management Cache Level Considerations	35
4.8. Det	ECTION	35
4.8.1. A	erial Patrols	35
4.8.2. L	Viscovery	35
4.8.3. N	lotifications	35
	CY, AVIATION MANAGEMENT	
4.10. INIT	IAL ATTACK	35
4.10.1.	Information Used to Set Initial Attack Priorities	35
4.10.2.	Criteria for the Appropriate Initial Attack Response	
4.10.3.	Confinement as an Initial Action Strategy	36
4.10.4.	Response Times	36
4.10.5.	Restrictions and Special Concerns	36
4.10.6.	Tractor/Dozer Use	36
4.10.7.	Social and Political Concerns	37
4.11. EXT	ENDED ATTACK AND LARGE FIRE SUPPRESSION	37
4.11.1.	A wildland fire is considered to be in extended attack status:	37
4.11.2.	WFDSS Process Implementation-Key Decision Log Development	37
4.11.3.	Exceeding Existing WFDSS Strategy-Selection of New Strategy	38
4.11.4.	Aquatic Invasive Species	39
4.11.5.	Wildland Fire Management	39
4.11.6.	Public Involvement	39
4.11.7.	Records	
4.11.7.1		
4.11.7.2		
4.11.7.3		
4.11.7.4	8	
4.11.7.5 4.11.7.6	1	
4.11.7.0		
	SCRIBED FIRE	
	NFMA Analysis	
4.12.2.	NEPA Analysis	
4.12.3.	Project Implementation	
4.12.4.	Prescribed Burn Preparation	
4.12.5.	Prescribed Burn Implementation	
4.12.6.	Post-Burn Monitoring	
4.12.7.	Annual Activities	
4.12.8.	FMU Specific Prescribed Fire Strategy	
4.12.9.	Weather, Fire Effects and Monitoring	
4.12.10.	Prescribed Fire Project Critique	
4.12.11.	Formal Prescribed Fire Reviews	
4.12.12.	Historical Fuels Treatment Map	
4.12.13.	Local Prescribed Fire Burn Plan Requirements	
4.12.14.	Exceeding Existing Prescribed Fire Burn Plan	
4.12.15.	Air Quality and Smoke Management	
4.12.16.	Non-Fire Fuel Applications	

	2.17. Cost Accounting EMERGENCY STABILIZATION AND RESTORATION	
CHAPTI	ER 5. MONITORING AND EVALUATION	44
5.1.	MONITORING AND COMPLIANCE	44
5.2.	FIRE AND FUELS MANAGEMENT MONITORING	44
5 2	PLAN MONITORING AND EVALUATION	11

Chapter 1. INTRODUCTION

This Fire Management Plan (FMP) provides a framework for the fire management programs of the Fishlake National Forest (USFS), Dixie National Forest*, Richfield Field Office of the Color Country District and the Fillmore Field Office of the West Desert District (BLM). This joint management includes as all aspects of managing wildland fire for safe accomplishment of both resource protection and resource management objectives on U.S. Forest Service (USFS) and Bureau of Land Management (BLM) lands. The lands included here are those administered by Richfield Field Office of the Color Country District and the Fillmore Field Office of the Color Country District and the Fillmore Field Office of the Service (USFS) in Central Utah (see Figure 1). This plan applies to 8,679,286 acres of federally managed lands.

*The Boulder (02) and Teasdale (24) Fire Management Units are located within the Dixie National Forest, but are administered by the Fishlake National Forest. Fire Management activities on these FMU's is the responsibility of the Central Utah Interagency Fire Program.

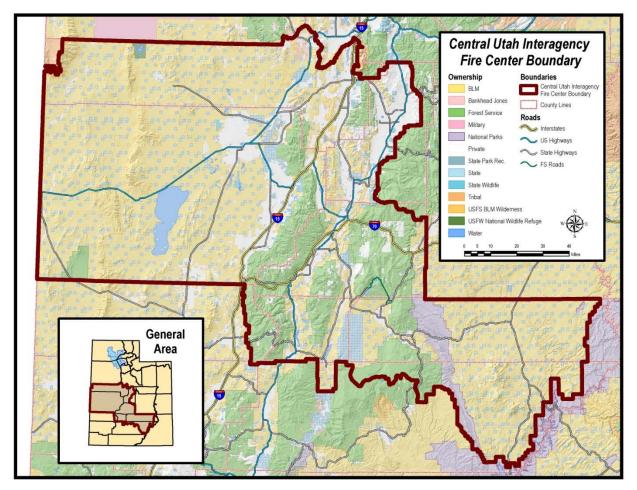


Figure 1

The purpose of this Central Utah Interagency Fire Management Plan (FMP) is to identify and integrate all Federal wildland fire management guidance, direction, and information required to implement national fire policy and fire management direction in a single document. The FMP allows management direction to be easily accessible by fire and resource personnel. It highlights management direction to facilitate development and implementation of fire management strategies.

Wildland fires have grown in size, intensity, and frequency over the last 20 to 30 years. This has caused many undesirable changes in the composition and structure (age and size) of forest and rangeland vegetation. One of the primary factors responsible for the increased size, intensity, and severity of wildfires is fire exclusion in all fire-adapted ecosystems, which has led to uncharacteristically high fuel loadings in many of those ecosystems.

The increasing size, intensity, and severity of wildfires pose greater threats to human life and property. More people are recreating on federal lands and building homes in wildland areas, increasing their exposure to naturally ignited wildland fires and increasing the risk of human-caused wildfire ignitions. Also, the threat to cultural resources is increased by uncharacteristically high fire intensities and severities resulting from uncharacteristic changes in vegetation, fuel loadings, and fire behavior. Fire suppression costs have also increased.

This FMP allows management direction to be easily accessible by fire and resource personnel. It highlights management direction to facilitate development and implementation of appropriate fire management strategies. FMPs are not static documents. This one will evolve and be revised as conditions change on the ground and as modifications are made to the Federal agencies' Land and Resource Management Plans or as new NEPA decisions are produced for the Bureau of Land Management's Fire Management Plan.

This document provides information, organized by **Fire Management Units (FMUs)**, which provides a finer scale summarization of information than is possible at the forest-wide or BLM district-wide level. These descriptions bring specific detail about the identifiable areas on the ground.

Chapter 2. POLICY, LAND MANAGEMENT PLANNING, AND PARTNERSHIPS

In 2001 the Utah Fire Amendment updated the Land Management Plan for the Fishlake National Forest. The regulations and policy in the following documents guide the fire management as outlined in this FMP.

2.1. National and Regional Fire Management Policy

Forest Service & BLM policy and direction that are relevant to this plan include:

1995 Federal Wildland Fire Management Policy and Program Review (January 2001) National Fire Plan

- Forest Service Manual 5100
- Forest Service Handbook 5109
- Aerial Application of Fire Retardant, Decision Notice 2008
 Guidance for Implementation of Federal Wildland Fire Management Policy. (February 13, 2009)
- **V** Richfield Fire Management Plan Environmental Assessment (UT-050-04-045, 2005)
- **Weight Stand Management Manual 9200**

2.2. Land and Resource Management Plans

- Fishlake National Forest Land and Resource Management Plan and Record of Decision (1986, as amended).
 - Utah Fire Amendment, 2001
 - Goshawk Amendment, 2000
- Dixie National Forest Land and Resource Management Plan and Record of Decision (1986, as amended).
 - Utah Fire Amendment, 2001
 - Goshawk Amendment, 2000
- **V** Richfield Field Resource Management Plan (2008)
- Warm Springs Resource Management Plan (1986)
- ▼ House Range Resource Management Plan (1987)

2.3. Partnership

The Central Utah Interagency Fire (CUIF) organization coordinates fire management planning. CUIF leads a cooperative effort to assist with all phases of fire management of Central Utah public lands. The group's mission is to promote safe, effective fire management through interagency cooperation. Because many wildland fires are of a multi-jurisdictional nature, interagency cooperation provides an ideal background for cohesive ecological, social, political, and economical considerations for land management. CUIF is comprised of six local land agencies: the U.S. Forest Service (USFS); Bureau of Land Management (BLM); National Park Service (NPS); Bureau of Indian Affairs (BIA); National Fish and Wildlife Service; and Utah Division of Forestry, Fire, and State Lands (FF&SL). CUIF continually assesses new opportunities for collaboration on fire management planning. Close collaboration between Fishlake National Forest, Fillmore Field Office and Richfield Field Office occurred during the development of this plan. Capitol Reef National Park has completed its own Fire Management Plan.

Chapter 3. FIRE MANAGEMENT UNIT DESCRIPTIONS

The primary purpose of developing FMUs in fire management planning is to assist in organizing information in complex landscapes. FMUs divide the landscape into smaller geographic areas to easily describe safety considerations, physical, biological, social characteristics and to frame associated planning guidance based on these characteristics.

The following information, including the summaries of fuels conditions, weather and burning patterns, and other conditions in specific FMUs, helps determine the management response to an unplanned ignition and provides a quick reference to the strategic goals in the forest's LMP.

3.1. Fire Management Considerations Applicable to All Fire Management Units



3.1.1. Land and Resource Management Plan Guidance

Forest Service Specific Direction

Fishlake National Forest Land & Resource Management Plan

Goals

Ecosystems are restored and maintained, consistent with land uses and historic fire regimes (Utah Fire Amendment, page 2-8).

Objectives

- Maintain structural diversity of vegetation on management areas that are dominated by forested ecosystems (*Fishlake NF* LRMP. 1986. P IV-11).
- General DirectionGeneral direction and Standards and Guidelines are summarized from Section C (*Fishlake NF* LRMP. 1986., starting on page IV-11) for forest-wide implementation (unless superseded by specific management area direction). This table represents the general direction and Standards and Guidelines that management of unplanned ignitions may need to considered.

MANAGEMENT PRESCRIPTION MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS AND GUIDELINES
Diversity on National Forests and National Grasslands (A00)	1. Maintain structural diversity of vegetation on management areas that are dominated by forested ecosystems.	 a. Maintain or establish a minimum of 20 percent of the forested area within a management area to provide vertical density. b. Maintain or establish a minimum of 30 percent of the forested area within a management area to provide horizontal diversity. c. In forested areas of a unit, 5 percent or more should be in old-growth and 5 percent or more should be in grass/forb stages.
		d. In forested areas, create or modify

		created openings so they have a Patton edge shape index of at least 1.4 and have at least a medium—edge contrast.
	2. Mange medium –contrast edges created in management areas dominated by grassland or shrubland.	
	3. In forested ecosystems, maintain snags well distributed over the ecosystem.	
	4. Manage Aspen for retention where needed for wildlife watershed or esthetic purposes.	
	5. Manage seral aspen stands for a diversity of age classes.	
	6. Assist in the establishment and management of Research Natural Areas.	
Cultural Resource Management (A02)	1. Protect, find an adaptive use for , or enhance all cultural resources on a National Forest System (NFS) Lands which are listed on or are eligible for the National Register of Historic places.	a. Follow direction in FSM 2360.
	 2. Protect all National Forest cultural resources: a. Complete cultural resource surveys prior to any federal undertaking which could affect significant cultural resources. b. Avoid disturbance of cultural resources until evaluated and until evaluated and until appropriate adverse effect mitigation procedures are affected for significant properties. 	a. Follow direction in FSM 2360.
Visual Resource Management (A04)	4. Plan, design and locate vegetation manipulation in a scale which retains the color and texture of characteristic landscape, borrowing directional emphasis of form and line from natural features.	 a. Meet the visual quality objectives of retention and partial retention of one full growing season after completion of a project. Meet modification and maximum modification objectives three full growing seasons after completion of a project. b. Determine sensitivity levels in accordance with FSH 2309.16, Agriculture Handbook No. 462, vol. 2, Chapter 1; Sensitivity Levels.

Wildlife and Fish Resource Management (CO1)	2. Maintain habitat for viable populations of existing vertebrate wildlife species.	will be mainta least 40 percer existing specie	ch species on the forest ined by protecting at nt of the ecosystems for es. Proper juxtaposition must be considered.
	3. Allow for the establishment of Elk and other desirable species on sites that supply the habitat needs of the species.		
	4. Manage waters capable of supporting self-sustaining trout populations to provide for those populations.	 overhanging g shrubs along b b. Maintain 50 p stream bank le where natural PFANKUCH, rating.) c. No more than substrate shou inorganic sedi size where natural 	ercent or more of grasses, forbs sedges and banks of streams. ercent or more of total ength in stable condition conditions allow. (See 1978, for stability 25 percent of stream Id be covered by ment less than 3.2mm in tural conditions allow. WS Aquatic Habitat book).
	5. Manage and provide habitat for recovery of endangered and threatened species.		
	6. Do not allow activities or practices that would negatively impact endangered, threatened, or sensitive plant or animal species.		
Wildlife Habitat Improvement and Maintenance (C02, 04, 05, and 06)	1. Use both commercial and noncommercial silvicultural practices to accomplish wildlife habitat objectives.	 a. In forested areas, maintain deer or elk hiding cover on 60 percent or more of the perimeter of all natural openings, all created openings and along at least 75 percent of the edge of arterial and collector roads and 40 percent along streams and rivers. b. In management areas dominated by forested ecosystems, maintain a minimum of 40 percent of the vegetation in deer or elk hiding cover. This hiding cover should be well distributed over the unit. One half of the hiding cover where biologically feasible. c. In management areas dominated by non-forested eco-systems, maintain deer and elk hiding cover as follows: 	
		% of Unit Forested 35-50	% of Forested Area in Cover At least 50%
		20-34 Less than 20	At least 60% At least 75%

		These levels may be exceeded temporarily during periods when stands are being regenerated to meet the cover standard, or to correct tree disease, problems, in aspen stands, or where windthrow or wildfire occurred. In critical big game habitat maintain hiding cover along at least 75 percent of the edge of arterial and collector roads, and at least 60% along streams and rivers, where trees occur. d. Alter age classes of browse stands in a management area, no more than 25 percent within a ten—year period.
	 Improve habitat capability through direct treatments of vegetation, soil, and waters. Provide maximum wildlife habitat diversity. 	
Range Resource Management (D02)	 5. Follow Fishlake snag policy as stated in forest supplement to FSM 2630. 1. Provide forage for livestock and wildlife within range capacity to sustain local dependent livestock industry, an wildlife numbers. 	
	 Achieve or maintain fair or better range conditions on all rangelands used by livestock. Treat noxious weeds in the following priority: 	
	 a. Invasion of new plant species classified as noxious weeds; b. Infestation of new areas c. Expansion of existing infestations 	
Range Improvements and Maintenance (D03, 04, 05, and 06)	2. Structural range improvement should be designed to benefit wildlife and livestock.	a. Structural improvements and maintenance will be in accordance with FSH 2209.22-R4
Silvicultural Prescriptions (E03, 06 and 07)	 Apply a variety of silvicultural systems and harvest methods which best meet resource management objectives. Clearcuts may be applied to Dwarf 	a. The appropriate harvest methods by forest cover type are <i>described on page IV-24-27 of the LMP</i> .
	Mistletoe infected stands of any forest cover type. 4. Assure that all even-aged stands	
	4. Assure that an even-aged stands scheduled to be harvested during the planning period will generally have reached the culmination of mean annual increment of growth.	
	 5. The maximum size of openings created by the application of even-aged silviculture will be 40 acres. Exceptions are: a. Proposals for larger openings 	a. SIZE OF OPENINGS Patch Clearcuts: 1-10 acres Clearcuts: 10-40 acres
	 are subject to a 60-day public review and are approved by the regional forester. b. Larger openings are the result 	

	of natural catastrophic	
	conditions of fire, insect or	
	disease attack, windstorm, or	
	c. The area does not meet the	
	definition of created openings.	
	d. Aspen cover type where	
	desirable to assure regeneration	
	or manage individual clones.	
	8. Acceptable management intensity activities to determine harvest levels are:	
	described on page IV30 of the LMP.	
	10 0	
Riparian Area Management (F03)	1. Special protection and management	
	will be given to floodplains, wetlands,	
	and all land and vegetation for a	
	minimum of 100 feet from the edges of all perennial streams, lakes and other	
	bodies of water or to the outer margin of	
	the riparian ecosystem if wider than 100	
	feet.	
	4. Prescribe silvicultural systems to	a. Maintain shade, bank stability and
	achieve riparian area objectives.	sediment standards as specified under
	a. Prohibit the operation of	wildlife and fish resource management
	motorized equipment within the	standards and guidelines.
	riparian area except at	
	constructed stream crossings.	
Water Resource Improvement and	1. Maintain needed instream flows and	
Maintenance (F05 and 06)	protect public property and resources.	
	2. Improve or maintain water quality to	
	meet State water quality standards.	
	However, where the natural background	
	water pollutants cause degradation, it is	
	not necessary to implement	
	improvement actions. Short—term or	
	temporary failure to meet some	
	parameters of the State standard, such as increased sediment from road crossing	
	construction or water resource	
	development nay be permitted in special	
	cases.	
	4. Rehabilitate disturbed areas that are	a. Reduce to natural rate any erosion due
	contributing sediment directly to	to management activity through
	perennial streams as a result of	necessary mitigation measures such as
	management activities to maintain water	water barring and revegetation.
	quality and reestablish vegetation cover.	Rehabilitation measures will be
		implemented within one year of the
Mining Long Cong Lings og 1	2 Minimize on an entre state of the	activity.
Mining Law Compliance and Administration (Local tables) (G01)	3. Minimize or as appropriate, prevent	
Γ A G G G G G G G G G G G G G G G G G G	adverse impacts on surface resources.	

Soil Resource Management (KA1)	 Maintain soil productivity, minimize man—caused soil erosion, and maintain the integrity of associated ecosystem. a. Use site preparation methods which are designed to keep fertile, friable topsoil essentially intact. b. Give roads and trails design considerations to prevent resource damage on capability areas containing soils with high shrink— swell capacity. c. Provide adequate road and trail cross drainage to reduce sediment transport energy. d. Revegetate all areas capable of supporting vegetation, disturbed during road construction and/or reconstruction to stabilize the area and reduce soil erosion. Where practicable use less palatable plant species on cuts, fills , and other areas subject to trampling damage by domestic. e. Prevent livestock and wildlife grazing which reduces the percent of plant cover to less than the amount needed for watershed protection and plant health. f. Place tractor—built fire lines on the contour where possible, and avoid use of tractors on highly erodible sites. g. Provide permanent drainage and establish protective vegetative cover on all new temporary roads or acuinment wave, and all aviiting 	 a. Use the following standards and guidelines unless more site specific requirements are developed during project design. 1. Limit intensive ground disturbing activities on unstable slopes and highly erodible sites. 2. Apply Packer's Guides in designing for cross drain spacing and buffers. 3. Chisel or rip compacted soils. Soils are considered compacted where there is a 15 percent increase in bulk density or 50 percent decrease in macro pore space.
	establish protective vegetative cover	
	2. Identify at the project level, upland areas that are immediately adjacent to riparian (prescription 9A) management areas. Adjacent upland areas are those portions of a management area which, when subjected to management activities, have a potential for directly affecting the condition of the adjacent riparian management area. The magnitude of effects is dependent upon	a. The following is a guide to identify the approximate extent of adject upland areas:

	slope steepness, and the kin amount, and location of surface and vegetation disturbance within the adjacent upland unit.	Slope gradient of upland areas adjacent to riparian management area. % Slope Range 0-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90 90-100 100-150	Upslope distance from boundary of riparian management area. Feet 100 180 280 400 520 640 760 880 1000 1000-1300
	3. Reduce project caused, on site, erosion rates through designed management practices and appropriate erosion mitigation, vegetation or restoration measures.	within five years	turbance. Reduce -site erosion by 95% after initial ulate erosion with rsal soil loss
Transportation system Management (L01 and 20)	 3. Closed or restricted roads maybe used for and to accomplish administrative purposes when: a. Prescribed in management area direction statements; b. Authorized by the forest supervision; and c. In case of emergency. 		
Wildland Fire Suppression		Standard - Human life public safety) is the hi a fire. Once firefighte assigned to a fire, thei highest value to be pro and natural and cultur lower priorities. Guideline - When assi priorities to property a cultural resources, dec	ghest priority during ers have been r safety becomes the otected. Property al resources are gning protection and natural and cisions will be based
		on the relative values commensurate with fit Standard - Human-cau accidental or arson), a wildland fires, and wi Natural ignitions will areas not covered by a management plan. Guideline - The full ra tactics is appropriate t forestwide, consistent management area emp	to be protected, re management costs. used fires (either re unwanted Il be suppressed. be suppressed in an approved fire unge of suppression o consider with forest and

Prescribed Fire		Guideline - Prescribed fire is authorized
		forestwide. (Use prescribed fire in
		wilderness only to meet wilderness
		management objectives.)
Wildland Fire Use		Guideline - Wildland fire use is authorized forestwide except in: administrative sites developed recreation sites summer home sites designated communication sites oil and gas facilities mining facilities above-ground utility corridors high-use travel corridors. The management response for these
		In areas authorized for wildland fire use, the full range of management responses from full suppression to monitoringmay be used.
Fuels		Guideline - Reduce hazardous fuels. The full range of fuel reduction methods is authorized, consistent with forest and management area emphasis and direction.
Air Resource Management (P16)	1. Comply with State and Federal Air Quality Standards. (FSM 2120 and 5180)	a. Meet applicable state air quality standards.
Insect and Disease	1. Prevent or suppress epidemic insect	
Management/Suppression (P35)	and disease populations with an	
	integrated pest management (IPM)	
	approach consistent with resource	
	management objectives.	

🚨 Dixie Land and Resource Management Plan Guidance

Boulder(02) & Teasdale(24) FMU Specific Direction

Goals

Ecosystems are restored and maintained, consistent with land uses and historic fire regimes.

Objectives

Maintain structural diversity of vegetation on management areas that are dominated by forested ecosystems (*Dixie NF* LRMP. 1986. P IV-25).

General Direction

General direction and Standards and Guidelines are summarized from Section E (*Dixie NF* LRMP. 1986., starting on page IV-24) for forest-wide implementation (unless superseded by specific management area direction). This table represents the general direction and Standards and Guidelines that management of unplanned ignitions may need to consider.

MANAGEMENT PRESCRIPTION MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS AND GUIDELINES
Diversity on National Forests and National Grasslands (A00)	1. Maintain structural diversity of vegetation on management areas that are dominated by forested ecosystems.	 e. Maintain or establish a minimum of 20 percent of the forested area within a management area to provide vertical density. f. Maintain or establish a minimum of 30 percent of the forested area within a management area to provide horizontal diversity. g. In forested areas, create or modify created openings so they have a Patton edge shape index of at least 1.4 and have at least a medium—edge contrast.
	2. Maintain existing medium— or high—contrast edges within forested management areas.	
	3. If medium—contrast edges are created in units dominated by grassland or shrubland, create openings with Patton edge— shape index of at least 1.4.	a. Maximum size of individual treated areas is 500 acres.
	4. In forested management areas, maintain a minimum on each treated area, an average of 20—30 snags (in all stages of development) per 10 acres, well distributed over the management areas.	 a. Provide at a minimum, an average of 2-12 hard snags per 10 acres of the following minimum diameters (where biologioally feasible): Ponderosa pine, Douglas-fir and spruce-fir: 10 inches dbh. Aspen: 8 inches dbh Betain an average length per acre of down-dead logs (where feasible) of the following minimum diameters: Ponderosa pine, Douglas-fir and spruce-fir -12 inch diameter, 50 linear feet per acre Aspen - 10 inch diameter, 33 linear feet per acre
	 5. Manage aspen for retention wherever it occurs, unless justified by one of the following: a. Conversion of determinate aspen to conifers, or shrub—or grass/forb seral stages for wildlife, esthetic, recreation, transportation, or watershed purposes. b. Conversion of determinate aspen to conifers on sites with a high demand for softwood, or c. Areas of aspen which are larger than are needed for wildlife or esthetic purposes. 	 a. Silvicultural standards: (These standards may be exceeded in areas managed for old growth.) 1. Clearcut (Stand or Clone) Rotation Age: 80—120 years Thinning Cycle: N/A 2. Limit individual regeneration acres to a maximum of 40, or the size of a clone, whichever is smaller.

	6. If determinant aspen stands are	
	managed for regeneration, treat	
	contiguous areas no larger than 40 acres,	
	unless larger areas are needed to protect	
	aspen regeneration or prevent	
	decadence. Treat entire clones in	
	determinate (climax) aspen stands can be	
	converted to other cover types if needed	
	to meet other objectives.	
	3	
Cultural Resource Management	1. Protect, find an adaptive use for, or	A. Follow direction in FSM 2360.
(A02)	interpret all cultural resources on	
	National Forest System lands (NFS)	
	lands which are listed on or eligible for	
	inclusion in the National Register of	
	Historic Places, as detailed in the forest	
	protection/ maintenance and interpretive	
	plans.	
	2. Protect and foster public use and	
	enjoyment of cultural resources:	
	a. Complete cultural resource surveys	
	prior to any ground— disturbing	
	project,	
	b. Avoid disturbance of known	
	cultural resources until evaluated	
	and determined not significant,	
	c. Mitigate sites where there is no	
	other way to protect the properties,	
	3. Achieve enhancement of landscapes	
	through addition, subtraction or	
	alteration of elements of the landscape	
	such as vegetation, rockform, water	
	features or structures, examples of these	
	include:	
	a. Addition of vegetation species to	
	introduce unique form, color or	
	texture to existing vegetation.	
	b. Vegetation manipulation to open up	
	vistas or screen out undesirable	
	views.	
	4. Plan, design and locate vegetation	
	manipulation in a scale which retains the	
	color and texture of the characteristic,	
	borrowing directional emphasis of form	
	and line from natural features.	
Wilderness Area Management	9. Restore soil disturbances caused by	
(B02)	human use (past mining, grazing, trail	
	construction and use, camping, etc.) to	
	soil loss tolerance levels commensurate	
	with the natural ecological processes for	
	the treatment area.	
	the treatment area.	

	 13. Implement revegetation only for rehabilitation of areas in less than fair range condition based upon their natural potential. Use only native species for revegetation. Implement only where natural vegetation possibilities are poor, and only where degradation was due to human activities. 16. Suppress man-caused wildfires. 17. Maintain fire dependent ecosystems using prescribed fires ignited naturally. Reclaims areas disturbed as part of fire control activities to meet the visual quality objective of retention. 	A. Base range condition on the standards in the Range Analysis Handbook (FSH 2209.21)
Wildlife and Fish Resource Management (CO1)	 18. Protect air quality related values from adverse effects from air pollution. 3. Manage habitat for viable populations of all existing vertebrate wildlife 	A. See criteria and standards in FSM 2120.
	 species. 4. Allow for re-establishment of deer herds to the population levels outlined in the Utah Deer Herd Unit Management Plans 6. Manage waters capable of supporting self—sustaining trout populations to provide for those populations, 	 Where natural geologic and biologic conditions will allow, maintain the following stream habitat conditions: a. Maintain 40 percent or more of overhanging grasses, forbs sedges and shrubs along banks of streams. b. Maintain 50 percent or more of total streambank length in stable condition c. No more than 25 percent of stream substrate should be covered by inorganic sediment less than 3.2mm in size(use R—4 GAWS Aquatic Habitat Surveys Handbook). d. Maintain overall stream habitat condition at or above 40 percent of optimum (use R—4 GAWS Aquatic Habitat Surveys Handbook).
Wildlife Habitat Improvement and	7. Manage and provide habitat for recovery of endangered and threatened species,1. Use appropriate silvicultural practices	A. In forested areas, where biologic-hiding
Maintenance (C02, 04, 05, and 06)	to accomplish wildlife habitat objectives forestwide.	cover ^{1/} on 50 percent or more of the perimeter of all natural and created openings along at least 75 percent of the edge of arterial and connector roads ^{2/} . and along at least 50 percent along streams and rivers, In areas of winter and transition ranges at least 20 percent of the cover should quality as thermal cover.

			g cover is defined as that
			percent of a standing
			tance of at least 200 feet.
			ed and vehicle and
		-	to be considered on a
		case—by—case ba	
			areas dominated by
			systems, maintain deer
		and elk hiding cov	
		% of Unit	% of Forested Area in
		Forested	Cover
		35-50	At least 50%
		20-34	At least 60%
		Less than 20	At least 75%
		These levels may l	be exceeded temporarily
		during periods who	en stands are being
		regenerated to mee	et the cover standard, or
		to correct tree dise	ase, problems, in aspen
			vindthrow or wildfire
			al big game habitat
			over along at least 75
			e of arterial and collector
			60% along streams and
		rivers, where trees	
			es of browse stands in a
			no more than 25 percent
		within a ten—year	
	2. Improve habitat capability through		*
	direct treatments of vegetation, soil, and		
	waters.		
	4. Provide maximum wildlife habitat	a. Where silvicu	lturally practical,
	diversity.		contrast# of at least
	5		gh between tree stands
			en aged management.
			BY AGE CLASS IS
			page IV-35 of the LMP
			h even and uneven aged
			ement systems and a
		variety of har	
Range Resource Management (D07)	1. Provide forage to sustain local	. unety of hur	
<u> </u>	dependent livestock industry.		
	4. Achieve or maintain satisfactory	A All suitable ran	gelands currently in
	range conditions on all rangelands.		as determined according
			R—4) will be improved
		to "fair" or better of	
	6. Control noxious farm weeds in the		
	following priority:		
	a. Musk thistle; Scotch thistle; Canada		
	thistle		
	b. Invasion of new plant species		
	classified as noxious farm weeds;		
	c. Infestation in new areas;		
	d. Expansion or existing infestations of		
	Scotch, Musk and Canada thistle,		
	and other noxious farm weeds; and		
	e. Reduce acreage of current		

	infestation.	
Silvicultural Prescriptions (E03, 06 and 07)	2. Apply a variety of silviculture systems and harvest methods which best meet resource management objectives.	 b. The appropriate harvest methods by forest cover type are <i>described on page IV-38-39 of the LMP</i>. c. D. To facilitate the control of soil erosion within acceptable tolerance soil surveys or site specific soil data will be used to develop project level harvest systems.
	3. Clearcuts may be applied to dwarf mistletoe infected stands of any forest	
	cover type.	
	4. Assure that all even-aged stands scheduled to be harvested during the planning period will generally have reached the culmination of mean annual increment of growth.	
	6. The maximum size of openings created by the application of even-aged silviculture will be 40 acres regardless of forest cover type. Exceptions are:	A. SIZE OF OPENINGS Patch Clearcuts: 1-10 acres Clearcuts: 10-40 acres
	a. Proposals for larger openings are subject to a 60-day public review and are approved by the Regional Forester.b. Larger openings are the result of	
	 natural catastrophic conditions of fire, insect or disease attack, windstorm, or c. The area does not meet the definition of created openings. 	
	7. Acceptable management intensity activities to determine harvest levels are <i>described on page IV-40 of the LMP</i> .	
	9. Examine modifications to silvicultural techniques and harvest practices in the spruce-fir and mixed conifer timber types to increase water yield. Implement changes when not inconsistent with other multiple use management goals.	
	4. Where appropriate, use K—V funds for soil and watershed rehabilitation and/or wildlife habitat improvement.	
Riparian Area Management (F03)	1. Special protection and management will be given to land and vegetation for a minimum of 100 feet from the edges of all perennial streams, lakes and other bodies of water or to the outermargin of the riparian ecosystem if wider than 100 feet.	
	2. Design and implement activities in management areas to protect and manage the riparian ecosystem.	
	4. Prescribe silvicultural systems to achieve riparian area objectives.	a. Maintain shade, bank stability and sediment standards as specified under Wildlife and Fish Resource

		 Management, Standards and Guidelines. b. B. Maintain at least 70 percent of the linear distance of all riparian ecosystems in at least an upper mid- seral successional stage.
Water Resource Improvement and Maintenance (F05 and 06)	1. Maintain needed instrean flows and protect public property and resources.	
	2. Improve or maintain water quality to meet State water quality standards. However, where the natural background water pollutants cause degradation, it is not necessary to implement improvement actions. Short—term or temporary failure to meet some parameters of the State standard, such as increased sediment from road crossing construction or water resource development nay be permitted in special cases.	
	3. Evaluate all management activities within 100 feet of any spring for impacts on springflow, riparian habitat and soil disturbance.	
	4. Rehabilitate disturbed areas that are contributing sediment directly to perennial streams as a result of management acitivities to maintain water quality and reestablish vegetation cover.	A. Reduce to natural rate any erosion due to management activities in the season of disturbance and sediment yields within one year of the activity through necessary mitigation measures such as water barring and revegetation.
Mining Law Compliance and Administration (Locatables)	1. Minimize or, as appropriate, prevent adverse impacts on surface resources.	
Soil Resource Management (KA1)	 Maintain soil productivity, minimize man—caused soil erosion, and maintain the integrity of associated ecosystem. Use site preparation methods which are designed to keep fertile, triable topsoil essentially intact. Give roads and trails special design considerations to prevent resource damage on capability areas containing soils with high shrink— swell capacity. Provide adquate road and trail cross drainage to reduce sediment transport energy. Revegetate all areas capable of supporting vegetation, disturbed during road construction and/or reconstruction to stabilize the area and reduce soil erosion. Prevent livestock and wildlife grazing which reduces the percent of plant cover to less than the amount needed for watershed protection and plant health. 	 A. Use the following standards and guidelines unless more site specific requirements are developed during project design. 1. Limit intensive ground disturbing activities on unstable slopes and highly erodible sites. 2. Apply Packer's Guides in designing for cross drain spacing and buffers. 3. Chisel or rip compacted soils. Soils are considered compacted where there is a 15 percent increase in bulk density or 50 percent decrease in macro pore space.

	 o. Place tractor—built firelines on the contour where practical, and avoid use of tractors on highly erodible sites. p. Provide natural channel drainage and establish protective vegetative cover on all new roads or equipment ways, and all existing roads which are being removed from the transportation system. q. Minimize soil compaction by limiting vehicle travel; skidding on snow, frozen or dry soil; or using off-ground logging systems. r. Restore disturbed soil areas caused by human use to soil loss tolerance levels commensurate with the natural ecological processes for the treatment areas. 2. Repair and improve degraded watershed areas through initiation of watershed restoration projects. 	 a. Eliminate watershed restoration backlog by year 2000. b. Base priority of watershed restoration
Transportation system Management	 Closed or restricted roads may be 	projects on watershed improvement needs inventory & cost—benefit analysis emphasizing improvement opportunities in wet meadows and riparian areas.
(L01 and 20)	 a. Prescribed in management area direction statements; b. Authorized by the Forest Supervisor; and c. In case of emergency. 	
Fire Planning and Suppression (P01)	 Plan and provide a level of protection from wildfire that will meet management objectives for the area, considering the following: The values of the resources that are threatened by fire, The probability of fire occurrence, The fuelbed that fires will probably occur in, The weather conditions that will probably influence fires that occur, The costs of fire protection programs (FFP and FFF), The social, economic, political, cultural, environmental, life and property concerns, and Management objectives for the area. Use the National Fire Management Analysis Process (NFMAS). 	

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Escaped Fire Suppression (P09)	1. Take suppression action on all	
	escaped fires considering the following:	
	a. The values of the resources	
	threatened by the fire (both positive	
	and negative),	
	b. Management objectives for the	
	threatened area(s),	
	c. The fuelbeds the fire may burn in,	
	d. The current and projected weather	
	conditions that will influence fire	
	behavior,	
	e. Natural barriers and fuel breaks,	
	f. Social, economic, political,	
	cultural, and environmental	
	concerns,	
	g. Public safety,	
	h. Firefighter safety, and	
	i. Costs of alternative suppression	
	strategies. Use the Escaped Fire	
	Situation Analysis (EFSA) to make	
	this determination.	
Air Resource Management (P16)	1. Comply with State and Federal Air	
All Resource Management (110)	Quality Standards. (FSM 2120 and	
Insect and Disease	5180)	
	1. Prevent or suppress epidemic insect	
Management/Suppression (P35)	and disease populations that threaten	
	forest stands with an integrated pest	
	management (IPM) approach consistent	
	with resource management objectives.	

Guidelines

- Guideline When assigning protection priorities to property and natural and cultural resources, decisions will be based on relative values to be protected, commensurate with fire management costs (Utah Fire Amendment, page 2-8).
- Guideline The full range of suppression tactics is authorized forest wide, consistent with fore and management area emphasis and direction (Utah Fire Amendment, page 2-8).
- Guideline Wildland fire use is authorized forest wide except in:
 - Administrative sites
 - Developed recreation sites
 - Summer home sites
 - Designated communication sites
 - Oil and gas facilities
 - Mining facilities
 - Above-ground utility corridors
 - High-use corridors.

The management response for these locations will be suppression if they are threatened. (*Utah Fire Amendment* EA. 2000. P 2-9).

NOTE: Wildland fire use is an out-dated term. The LRMP direction will be applied consistent with new terminology.

- Guideline -- Avoid Aerial application of retardant or foam within 300 feet of waterways (Aerial Application of Fire Retardant Decision, page 9). A waterway is defined as "Any body of water including lakes, rivers, streams and ponds whether or not they contain aquatic life." Exceptions may be made under the following conditions:
 - When alternative line construction tactics are not available due to terrain constraints, congested area, life and property concerns or lack of ground personnel, it is acceptable to anchor the foam or retardant application to the waterway. When anchoring a retardant or foam line to a waterway, use the most accurate method of delivery in order to minimize placement of retardant or foam in the waterway (e.g., a helicopter rather than a heavy airtanker).
 - Deviations from these guidelines are acceptable when life or property is threatened and the use of retardant or foam can be reasonably expected to alleviate the threat.
 - When potential damage to natural resources outweighs possible loss of aquatic life, the unit administrator may approve a deviation from these guidelines.

Standards

- Human life (firefighter and public safety) is the highest priority during a fire. Once firefighters have been assigned to a fire, their safety becomes the highest value to be protected. Property and natural and cultural resources are lower priorities (*Utah Fire Amendment* EA. 2000. P 2-8).
- Standard Human-caused fires (either accidental or arson) are unwanted wildland fires, and will be suppressed. Natural ignitions will be suppressed in areas not covered by an approved fire management plan (*Utah Fire Amendment* EA. 2000. P 2-8).



Bureau of Land Management Specific Direction

Richfield & Fillmore Resource Management Plans & Richfield FMP Environmental Assessment

🔻 Goals

- Allow fire to function in its ecological role when appropriate for the site and situation, while still protecting resource values at risk.
- Reduce human and ecological losses; complete resource management objectives and sustain the productivity of biological systems through fire management.
- Restore wildland fire to ecosystems when feasible and to minimize undesirable fire systems.

VObjectives

- Manage fire and fuels, where appropriate, to restore natural systems to their desired future condition, considering the interrelated social and economic components.
- Manage wildland fires to minimize cost considering firefighter and public safety, benefits, and values to be protected, consistent with resource objectives.
- Manage fire and fuels to protect life, firefighter safety, property, and critical resource values.
- Reduce the threat of wildfire in the Wildland Urban Interface (WUI).

💗 BLM General Direction

- Protection of human life is the most important goal for all resource protection measures (RPMs).
- Abbreviations for fire management actions: SUP: Wildfire suppression; NF: Non-fire fuels treatment; WFU: Wildland fire which will be beneficial to the landscape; ESR: Emergency Stabilization and Rehabilitation; RX: Prescribed Fire

Code	Protection Measures (and applicable fire management practices)	FMUs
Air Quality		
AQ-1	Evaluate weather conditions, including wind speed and atmospheric stability, to predict impacts from smoke from prescribed fires and wildland fire use. Coordinate with Utah Department of Environmental Quality for prescribed fires and wildland fire use. (RX, WFU)	All
AQ-2	When using chemical fuels reduction methods, follow all label requirements for herbicide application. (NF)	All
Cultural R	esources	
CR-1	Cultural resource advisors should be contacted when fires occur in areas containing sensitive cultural resources. (SUP)	All
CR-2	Wildland fire use is discouraged in areas containing sensitive cultural resources. A Programmatic Agreement is being prepared between the Utah State Historic Preservation Office, BLM, and the Advisory Council to cover the finding of adverse effect on cultural resources associated with wildland fire use. (WFU)	All
CR-3	Potential impacts of proposed treatment should be evaluated for compliance with the National Historic Preservation Act (NHPA) and the Utah Statewide Protocol. This should be conducted prior to the proposed treatment. (RX, NF, ESR)	All
CR-4	The resource advisor would consult with the agency archaeologist prior to construction of dozer/major hand lines and use of fire retardant. (SUP, WFU, RX)	All
Invasive, N	Ion-native Species	
INV-1	Wash any equipment used in areas where noxious weeds occur to minimize spread of noxious weeds. (SUP, WFU, RX, NF, ESR)	All
INV-2	In areas known to have weed infestations, aggressive action should be taken in rehabilitating firelines, seeding and follow-up monitoring, and treatment to reduce the spread of noxious weeds. Monitor burned areas and treat as necessary. All seed used would be tested for purity and for noxious weeds. Seed with noxious weeds would be rejected (ROD 13 Western States Vegetation Treatment EIS 1991). (SUP, WFU, RX, NF, ESR)	All
INV-3	Use certified weed-free seed on suppression rehabilitation. (SUP)	All
Native Am	erican Religious Concerns	
NAT-1	Consultation would be completed on an individual site-specific basis. (SUP, WFU, RX, NF, ESR)	All
Threateneo	l, Endangered or Candidate Species- Plants and Animals	-
END-1	Initiate Emergency Section 7 consultation with United States Fish and Wildlife Service (USFWS) upon the determination that wildfire suppression may pose a potential threat to any listed threatened or endangered species or adverse modification of designated critical habitat. (SUP)	All
END-2	Prior to planned fire management actions, survey for listed threatened and endangered (T&E) and non-listed sensitive species. Initiate Section 7 consultation with USFWS as necessary if proposed project may affect any listed species. Review appropriate management, conservation, and recovery plans and include recovery plan direction into project proposals. For non-listed special status plant and animal species, follow the direction contained in the BLM 6840 Manual. Ensure that any proposed project conserves non-listed sensitive species and their habitats and ensure that any action authorized, funded, or carried out by BLM does not contribute to the need for any species to become listed. (RX, NF, ESR)	All

Code	Protection Measures (and applicable fire management practices)	FMUs
END-3	See site-specific conservation measures identified in the Biological Assessment.	All
	(SUP, WFU, RX, NF, ESR)	
Wastes (H	azardous or Solid)	
HW-1	Recognize hazardous wastes and move fire personnel to a safe distance from dumped chemicals, unexploded ordnance, drug labs, wire burn sites, or any other hazardous wastes. Immediately notify BLM Field Office hazmat coordinator or state hazmat coordinator upon discovery of any hazardous materials, following the BLM hazardous materials contingency plan. (SUP, WFU, RX, NF, ESR)	All
Wetlands/	Riparian Zones	
WET-1	Plan and implement projects taking into account the potential impacts on water quality, including increased water yields that can threaten: fisheries and aquatic habitat; improvements at channel crossings; channel stability; and downstream values. Of special concern are: small headwaters of moderate to steep watersheds; erosive soils; multiple channel crossings; at-risk fisheries; and downstream residents. (RX, NF, ESR)	All
WET-2	When using chemical fuel reduction treatments follow all label directions, additional mitigations identified in project NEPA evaluation and the Approved Pesticide Use Proposal. At a minimum, provide a 100-foot-wide riparian buffer strip for aerial application, 25 feet for vehicle application and 10 feet for hand application. Any deviations must be in accordance with the label. Herbicides would be applied to individual plants within 10 feet of water where application is critical (BLM ROD 13 Western States Vegetation Treatment EIS 1991). (NF)	All
WET-5	Plan and implement projects consistent with compliance strategies for restoring or maintaining the restoration of water quality impaired [303(d) listed] waterbodies. Planned activities should take into account the potential impacts on water quality, including increased water yields that can threaten fisheries and aquatic habitat; improvements at channel crossings; channel stability; and downstream values. Of special concern are small headwaters of moderate to steep watersheds; erosive or saline soils; multiple channel crossings; at-risk fisheries; and downstream residents. (RX, NF, ESR)	All
WET-6	Suppress wildfires consistent with compliance strategies for restoring or maintaining the restoration of water quality impaired [303(d) listed] waterbodies. Do not use retardant within 300 feet of water bodies. (SUP, WFU)	All
WET-7	Avoid heavy equipment in riparian or wetland areas. During wildfire suppression or wildland fire use, consult a resource advisor before using heavy equipment in riparian or wetland areas. (SUP, WFU, RX, NF, ESR)	All
WET-8	Limit ignition within native riparian or wetland. Allow low-intensity fire to burn into riparian areas. (RX)	All
	Scenic Rivers—Not Indicated	
	s, Wilderness Study Areas , H-1742-1, Manual Section 1742)	
	The use of earth-moving equipment must be authorized by the field office manager.	
Wild-1	(SUP, WFU, RX, ESR)	All
Wild-2	Fire management actions would rely on the most effective methods of suppression that are least damaging to wilderness values, other resources and the environment, while requiring the least expenditure of public funds. (SUP, WFU)	All
Wild-3	A resource advisor should be consulted when fire occurs in Wilderness and WSA. (SUP, WFU)	All
Wild-4	All methods and tools used for suppression within the Wilderness Study Areas would be consistent with Interim Management Policy and Guidelines (BLM Manual H-8550-1). (SUP)	All

Code	Protection Measures (and applicable fire management practices)	FMUs
Livestock		
(43 CFR 4	160.1, and 43 CFR 4190, Utah Standards and Guidelines for Healthy Rangelands 19	97)
L-1	Notify permittees of requirements for non-use or rest of treated areas. Coordinate with permittees regarding the requirements for non-use or rest of treated areas. (SUP, WFU, RX, NF, ESR)	All
L-2	Rangelands that have been burned, by wildfire, prescribed fire, or wildland fire use, would be ungrazed for a minimum of one complete growing season following the burn. (SUP, WFU, RX)	All
L-3	Rangelands that have been re-seeded or otherwise treated to alter vegetative composition, chemically or mechanically, would be ungrazed for a minimum of two complete growing seasons. (RX, NF, ESR)	All
L-4	Consider impacts on allotment management during wildland fire operations. (SUP, WFU, RX, NF, ESR)	All
Woodland	/Forestry	
WF-1	Planned projects should be consistent with HFRA Section 102(e) (2) to maintain or contribute to the restoration of old-growth stands to a pre-fire suppression condition and to retain large trees contributing to old-growth structure. (SUP, WFU, RX, NF)	All
WF-2	During planning, evaluate opportunities to utilize forest and woodland products prior to implementing prescribed fire activities. Include opportunities to use forest and woodland product sales to accomplish non-fire fuel treatments. In forest and woodland stands, consider developing silvicultural prescriptions concurrently with fuel treatments prescriptions. (RX, NF)	All
Vegetation	including Special Status Plants	
V-1	When restoring or rehabilitating disturbed rangelands, non-intrusive, nonnative plant species are appropriate for use when native species: (1) are not available; (2) are not economically feasible; (3) cannot achieve ecological objectives as well as nonnative species; and/or (4) cannot compete with already established native species (Noxious Weeds Executive Order 13112 2/3/1999; BLM Manual 9015; BLM ROD 13 Western States Vegetation Treatment EIS 1991). (RX, NF, ESR)	All
Fish and V	Vildlife including Special Status species	
FWSS-1	Avoid treatments during nesting, fawning, spawning, or other critical periods for wildlife or fish. (RX, NF, ESR)	All
FWSS-2	Avoid if possible or limit the size of, wildland fires in important wildlife habitats such as, mule deer winter range, riparian and occupied sage grouse habitat. Use resource advisors to help prioritize resources and develop Wildland Fire Situation Analyses (WFSAs) and Wildland Fire Implementation Plans (WFIPs) when important habitats may be impacted. (SUP, WFU)	All
FWSS-3	Minimize wildfire size and frequency in sagebrush communities where sage grouse habitat objectives would not be met if a fire occurs. Prioritize wildfire suppression in sagebrush habitat with an understory of invasive, annual species. Retain unburned islands and patches of sagebrush unless there are compelling safety, private property, and resource protection or control objectives at risk. Minimize burn-out operations (to minimize burned acres) in occupied sage-grouse habitats when there are no threats to human life and/or important resources. (SUP)	All
FWSS-4	Establish fuels treatment projects at strategic locations to minimize size of wildfires and limit further loss of sagebrush. Fuel treatments may include greenstripping to help reduce the spread of wildfires into sagebrush communities. (RX, NF)	All
FWSS-5	Use wildland fire to meet wildlife objectives. Evaluate impacts on sage grouse habitat in areas where wildland fire use for resource benefit may be implemented. (WFU, RX)	All
FWSS-6	Create small openings in continuous or dense sagebrush (>30% canopy cover) to create a mosaic of multiple-age classes and associated understory diversity across the landscape to benefit sagebrush-dependent species. (WFU, RX, NF)	All

Code	Protection Measures (and applicable fire management practices)	FMUs
	On sites that are currently occupied by forests or woodlands, but historically	
FWSS-7	supported sagebrush communities, implement treatments (fire, cutting, chaining,	All
	seeding, etc.) to reestablish sagebrush communities. (RX, NF)	
	Evaluate and monitor burned areas and continue management restrictions until the	
FWSS-8	recovering and/or seeded plant community reflect the desired condition. (SUP,	All
	WFU, RX, ESR)	
	Utilize the Emergency Stabilization and Rehabilitation program to apply appropriate	
	post-fire treatments within crucial wildlife habitats, including sage grouse habitats.	
	Minimize seeding with non-native species that may create a continuous perennial	
	grass cover and restrict establishment of native vegetation. Seed mixtures should be	
FWSS-9	designed to re-establish important seasonal habitat components for sage grouse.	All
	Leks should not be re-seeded with plants that change the vegetation height	
	previously found on the lek. Forbs should be stressed in early and late brood-rearing	
	habitats. In situations of limited funds for ESR actions, prioritize rehabilitation of	
	sage grouse habitats. (ESR)	
Soil		
	Avoid heavy equipment use on highly erosive soils (soils with low soil loss	
	tolerance), wet or boggy soils, and slopes greater than 30%, unless otherwise	
S-1	analyzed and allowed under appropriate NEPA evaluation with implementation of	All
	additional erosion control and other soil protection mitigation measures. (SUP,	
	WFU, RX, NF, ESR)	
	There may be situations where high intensity fire would occur on sensitive and	
	erosive soil types during wildland fire, wildland fire use or prescribed fire. If	
S-2	significant areas of soil show evidence of high severity fire, then evaluate area for	All
52	soil erosion potential and downstream values at risk and implement appropriate or	7 111
	necessary soil stabilization actions such as mulching or seeding to avoid excessive	
	wind and water erosion. (SUP, WFU, RX)	
	Complete necessary rehabilitation on firelines or other areas of direct soil	
~ -	disturbance, including but not limited to waterbarring firelines, covering and	
S-3	mulching firelines with slash, tilling and/or subsoiling compacted areas,	All
	scarification of vehicle tracks, OHV closures, seeding and/or mulching for erosion	
	protection. (SUP, WFU, RX)	
	When using mechanical fuels reduction treatments, limit tractor and heavy	
S-4	equipment use to periods of low soil moisture to reduce the risk of soil compaction.	All
	If this is not practical, evaluate sites, post treatment, and if necessary, implement	
	appropriate remediation, such as subsoiling, as part of the operation. (NF)	
a -	Treatments such as chaining, plowing, and roller chopping shall be conducted as	4.11
S-5	much as practical on the contour to reduce soil erosion (BLM ROD 13 Western	All
D	States Vegetation Treatment EIS 1991). (NF, ESR)	
Recreation	Wildfire suppression efforts would preferentially protect Special Recreation	
REC-1	Management Areas and recreation site infrastructure in line with fire management	All
KEC-I	goals and objectives. (SUP)	All
	Vehicle tracks created off of established routes would be obliterated after fire	
REC-2	management actions in order to reduce unauthorized OHV travel. (SUP, WFU, RX,	All
KEC-2	NF, ESR)	All
Mineral Ro		
	A safety buffer should be maintained between fire management activities and at-risk	
M-1	facilities. (SUP, WFU, RX)	All
Paleontolo		
	Plan and implement projects consistent with BLM Manual and Handbook H-8270-	
	1, Chapter III (A) and III (B) in order to avoid areas where significant fossils are	
D 1		
P-1	known or predicted to occur, or to provide for other mitigation of possible adverse	All

Code	Protection Measures (and applicable fire management practices)	FMUs
P-2	In the event that paleontological resources are discovered in the course of surface fire management activities, including fires suppression, efforts should be made to protect these resources. (SUP, WFU, RX, NF, ESR)	All
Lands/Ac	cess	
L-1	Fire management practices would be designed to avoid or otherwise ensure the protection of authorized rights-of-way and other facilities located on the public lands, including coordination with holders of major rights-of-way systems within rights-of-way corridors and communication sites. (WFU, RX, NF, ESR)	All
L-2	Individual project plans will, as appropriate, identify and analyze access requirements for the timely implementation of fire management activities. Where legal access needs are not required, appropriate coordination with non-federal land owners would occur. (RX, NF, ESR)	All
L-3	The actions of any fire management practice shall not destroy, deface, change, or remove to another place any monument or witness tree of the Public Land Survey System. Cadastral Surveys (see 18 USC Sec. 1858, Title 18, Part I, Chapter 91, Section 1858) (SUP, WFU, RX, NF, ESR)	All
Wild Horse and Burros		
WHB-1	Avoid fencing that would restrict access to water. (ESR)	All

Threatened and Endangered Species (*Richfield* FMP EA. 2005. P I-2&3)

- Before the beginning of each fire season, a threatened and endangered species education program will be presented to all personnel anticipated to be within federally listed species habitats during suppression activities. Following training, each individual will sign a completion sheet to be placed on file at the local BLM office.
- A qualified Resource Advisor will be assigned to each wildfire that occurs in or threatens listed species habitat.
- If available, maps shall be provided to dispatch centers showing general locations of listed species. Local BLM or UDWR biologists shall be consulted for specific locations if fires occur within or near the general locations delineated on the map.
- Emergency Stabilization and Rehabilitation efforts must focus on areas in the spread of non-native species particularly within suitable habitat for federally listed species.

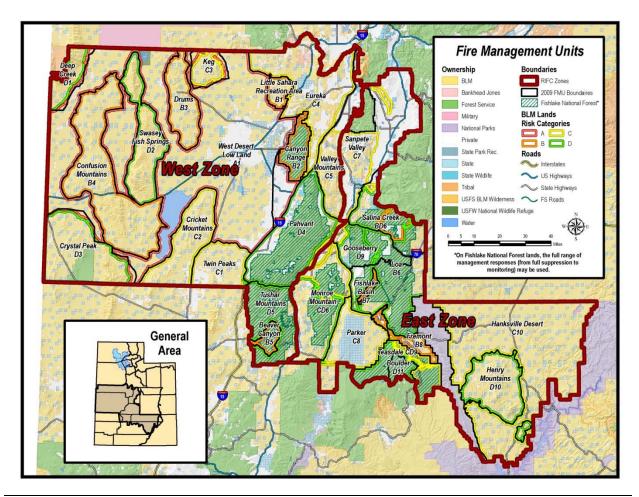
3.1.2. Physical Characteristics that Apply to All Fire Management Units

The Fire Management Plan establishes specific geographic areas as Fire Management Units (FMUs). Each FMU establishes prescriptive criteria and other guidance, which provide area specific direction for managers to implement the objectives of the LRMP, RMPs and other activity-level plans. There are 28 separate fire management units in the Central Utah Interagency Fire Management Area.

3.2. Fire Management Considerations for Specific Fire Management Units

- 3.2.1. Beaver Canyon
- 3.2.2. Boulder
- 3.2.3. Canyon Range
- 3.2.4. Confusion
- 3.2.5. Crickets
- 3.2.6. Crystal Peak
- 3.2.7. Deep Creeks
- 3.2.8. Drums
- 3.2.9. Eureka
- 3.2.10. Fishlake Basin
- 3.2.11. Fremont
- 3.2.12. Gooseberry
- 3.2.13. Hanksville Desert
- 3.2.14. Henry Mountains

- 3.2.15. Keg
- 3.2.16. Little Sahara Recreation Area
- 3.2.17. Loa
- 3.2.18. Monroe Mountain
- 3.2.19. Pahvant
- 3.2.20. Parker
- 3.2.21. Salina Creek
- 3.2.22. Sanpete Valley
- 3.2.23. Swasey/Fish Springs
- 3.2.24. Teasdale
- 3.2.25. Tushar Mountains
- 3.2.26. Twin Peaks
- 3.2.27. Valley Mountains
- 3.2.28. West Desert Lowlands



Chapter 4. WILDLAND FIRE OPERATIONAL GUIDANCE

BLM Specific Guidance Only

4.1. General Implementation Procedures

The Fire Management on the Central Utah Interagency Management area consists of responses to wildland fire and fuels management implementation programs. The fire management programs will be implemented through Response to Wildland Fire. The implementation procedures for these specific components are addressed in this section.

The implementation of the fire management program will be guided through the analysis of historic fire behavior indices *NFDRS*. This analysis provides a series of threshold values used to determine when and where specific portions of the fire program will be implemented. This helps fire managers and line officers to quickly narrow the range of management options for specific fires, select the most appropriate response for the given time, and place.

A. CATEGORY A: Where wildland fire is not desired.

Wildland fires in these areas have adverse environmental impacts on the ecosystem. These impacts include such factors as the destruction of crucial wildlife habitat, conversion of native vegetation to exotic plant species, establishment of weed species, increased soil loss, reduced water quality, and damage to cultural and historical resources.

Category A areas are where fire is not a regular, natural part of the ecosystem, or where fire has more harmful impacts than benefits to the ecosystem. Fire has generally played a negative role in these areas by altering the native vegetation and allowing introduction of exotic species such as cheatgrass. Introduction of these exotic species has changed the size and interval of fires and has altered the natural species composition of the sites disrupting the natural secession of the native plant communities. As a result, increased size and frequency of fires allows continued and increased disturbance to native plant communities, damages wildlife habitat, and produces other adverse impacts on the ecosystem. Because the native species generally lack an ability to out-compete introduced and exotic species following a fire, rehabilitation projects are required to establish desirable vegetation and prevent soil loss and other undesirable natural consequences. Key examples include the salt desert shrub, black sagebrush, and big sagebrush shrub communities. Prescribed fire for resource management is not recommended nor desired in these units due to fire's adverse environmental impacts. However, prescribed fire may be used to establish fuelbreaks and perform hazardous fuel reduction when the benefits of mitigating the potential for a large spreading fire outweigh the impacts of the fuels management project. In addition, other forms of fuels management designed to protect these fire-sensitive areas are recommended and may include mechanical manipulation, grazing management, seeding to less flammable and more desirable species, vegetative fuelbreaks, and other management actions.

B. **CATEGORY B:** Where unplanned wildland fire would likely cause negative effects, but these effects may be mitigated through fuels management, prescribed fire, or other strategies.

Unplanned wildland fires in category B produce similar adverse and harmful impacts as in category A. This adverse response to wildland fires is due to a combination of fire sensitivity and abnormal wildland fuels accumulations that produce larger, more severe fires than would normally occur in a healthy ecosystem. Due to this, the primary objective is to limit and suppress wildland fires within these areas. However, category B areas may respond positively to properly managed and planned prescribed fires. Unlike category A areas, prescribed fire may be used to reintroduce fire into the ecosystem and meet resource management objectives. Small, limited fires can improve vegetation diversity and/or revitalize old decadent plant communities. In addition, prescribed fire is used to reduce hazardous fuel loadings, thus mitigating and reducing the impacts should a wildland fire occur. The key examples are those areas where the absence of fires has resulted in replacement of diverse vegetation communities with monotypic stands of less desirable structure and/or species. These areas include dense stands of juniper or decadent stands of big sagebrush. These plant communities may have little vegetation and age class diversity, resulting in accumulations of hazardous and volatile fuels.

Fuels management is a key to mitigating the negative impacts of unplanned wildland fire in these areas. Fuels management options may include prescribed fire, mechanical manipulation, seeding of less flammable and more desirable species, vegetation greenstripping, and other management strategies.

C. **CATEGORY C:** Where wildland fire is desired to manage ecosystems, but there are constraints because of the existing vegetation due to past fire exclusion.

These are areas where wildland fire is a natural part of the ecosystem. The health and diversity of the vegetation, soils, and wildlife have evolved and are enhanced or dependent upon the natural consequences of fire. In normal circumstances, the existing native vegetation would naturally re-vegetate after fire. Key ecosystem examples include juniper with perennial grasslands, aspen groves and big sagebrush with perennial grasses, and other upper elevation plant communities. Although these ecosystems benefit from both unplanned wildland fires and planned prescribed fires, use of either as a management tool may be limited by constraints. These constraints include threats to adjacent developments and residential communities, smoke impacts, lack of manageable fire boundaries, political concerns, and economics of management. Because unplanned wildland fires can be beneficial in these areas, the appropriate fire management response may utilize less aggressive suppression strategies and tactics that result in more acreage burned than under a more aggressive wildfire suppression response.

Prescribed fire in these areas is recommended both to meet resource management objectives and as fuels management to mitigate the constraints that may limit using less aggressive suppression in wildland fire situations. Fuels management may be necessary to define more manageable wildland fire boundaries, to protect and minimize the severity and impact of wildland fires on existing plant communities, and to protect values in adjacent units (i.e.: resource values, developments, etc.). Fuels management activities may involve prescribe fire, mechanical manipulation, fuelbreak development, and other management strategies. D. **CATEGORY D:** Areas where wildland fires may burn without constraints associated with resource conditions, social, economic, or political considerations.

The ecosystem response of these areas is similar to category C, except there are few constraints in letting the fire play out its natural role; once the decision to use wildland fire for benefits has been made, a wildland fire implementation plan is developed by an interdisciplinary group to continue to manage the fire appropriately. Most often, the appropriate fire management response in these areas is to monitor the fire and let the fire play out its natural role in the ecosystem. The key ecosystem example for this category would be mixed conifer/aspen, some spruce/fir, and ecosystems in condition class one. Vegetation in these areas is sparse and there is little to no threat to resource values, improvements, or adjacent ownerships. In addition, because of their isolation, social, economic, or political considerations are unlikely to occur.

4.1.1. **Specific Implementation Procedures for Wildland Fire Management** A Wildland Fire Decision Support System (WFDSS) Response Level 1 analysis will be completed for each new wildland fire detected.

The WFDSS **Response Level 1** is the Initial Fire Assessment step. It is necessary to establish the foundation information critical to manage the fire. It documents the current and predicted situation and all appropriate administrative information. It aids managers by providing them with decision criteria to make the initial decision whether to continue fire management actions. It also provides the manager with a recommended response action.

If the response to wildland fire is determined to be initial attack, because the fire is out of prescription, then there is no need to continue to the WFDSS Response Level 2 or 3 unless the fire situation changes and dictates further analysis. However, if a confine/contain strategy is being considered then it is necessary to complete the WFDSS analysis to determine if the selected strategy is appropriate.

4.1.2. Implementation Procedures for Fire Suppression

The Richfield BLM Field Officer and Fillmore BLM Field Office *RMPs* allow a full range of Wildland Fire Management but under different circumstances and in different locations. BLM Plan direction forms the basis for all fire management actions.

Agency Administrators who are designated as qualified will be responsible for the management of fires at the Type 3, 4 and 5 levels, including developing and reviewing the WFDSS analysis if needed. The District Managers or delegated Agency Administrators are responsible for all Type I and II fires, and all wildland fire events that require, the completion of a Response Level 3 analysis, and/or the assignment of a Fire Management Team.

Central Utah Interagency Agency Administrators, or their designated acting, retains the authority to sign all WFDSS documents and Delegation of Authority to type I, II, III, IV, and V Incident Commanders.

A suppression response will be initiated in following situations:

- All person-caused wildland fires
- Whenever prescriptive criteria are outside of the range to allow wildland fire management which may be beneficial to the ecosystem for the individual Fire Management Units.

The level of suppression response intensity may range from monitoring to aggressive initial attack. The chart shown in Figures 3 & 4 may be used to help determine the suppression response intensity.

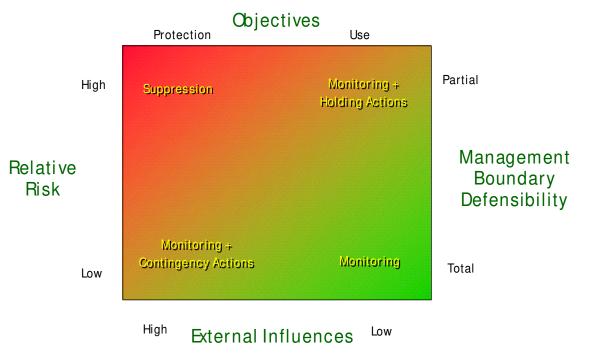
4.1.3. Wildland Fire Management

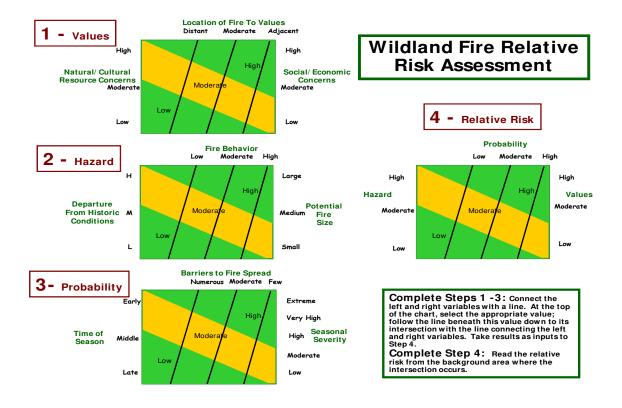
The Response to Wildland Fire will be based on:

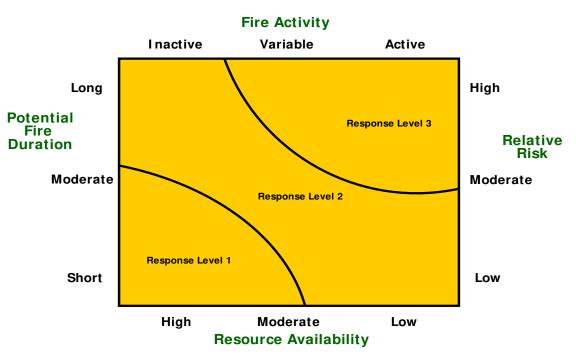
- The range of available management responses for the specific *FMU*.
- The current Staffing Level for the specific *FMU*.

Not all available resources can be used without prior authorization of the appropriate Line Officer. When such authorization is required, the Zone Duty Officer will consult with the appropriate Line Officer and convey specific equipment use authorization to RIFC before actions are initiated.

Appropriate Management Response







Response Level Progression Chart

4.1.4. Range of Potential Fire Behavior

Fire behavior within the Central Utah Interagency Fire area varies greatly both temporally and spatially. Fire season can start as early as March and extend as late as November if dry and warm weather prevails. Fires that occur prior to spring green-up (that usually occurs by April 15th) generally burn through fine dead surface fuels with spread halted by aspect change and canopy cover. Larger surface fuels and ground fuels are usually too wet to burn. These fires are usually person caused since lightning is rare during this time period.

The period from the beginning of green-up until early June is generally one of lower fire risk. Green fuels serve as a heat-sink so tend to retard fire spread. Fires are often started by lightning that accompanies weather systems but are mostly confined to snags and hollow live trees. Surface spread is generally limited to litter beneath trees.

The weather after early to mid June tends to increasingly dry with fewer thunderstorms. As this pattern develops, dry lightning storms can ignite numerous fires in increasingly dry forested areas. Seasonal curing of grasses occurs during mid to late July providing an abundance of fuels to carry surface fires. Forests are also becoming dry enough to support surface fire spread. Fires are generally fast moving on open southerly and westerly aspects and tend to be slow spreading understanding timber. During this time the West Desert tend to be dry enough for large fires to occur there.

Early July to Mid August tends to be a hot and dry period with occasional dry lightning-storms. Persistent high pressure often develops and keeps skies sunny, winds light and conditions hot and dry. Fires burning under these conditions can result in smoky skies and persistent fire spread. Weather systems begin to appear as the summer weather pattern begins to transition to an autumnal pattern. These systems may be either wet or dry depending on the system and the storm track. Weather in advance of the cold front usually produce hot and very dry south or southwest winds which can greatly increase the spread of ongoing fires. After the front passes, winds shift to northwesterly and can be very dry and vigorous. Under these conditions rapid fire growth is very possible especially at higher elevations that are more exposed. Fuel moistures are at the lowest level for the year.

Storms can also be wet with a cooling trend that may signal the end of critical fire season or just an interlude. These storms have been called the "Monsoonal Flow".

As days become shorter in late September through mid-October fire spread potential is limited to south and west aspects for only a few hours per day. North aspects do not receive enough sun to support persistent fire spread. Rare events, such as vigorous cold front passages, can result in broad scale burning but these episodes generally last for 1-3 days.

Review of representative weather stations on the Central Utah Interagency Fire area indicates that Energy Release Component (ERC) and Burning Index (BI) are reliable fire danger indicators and can be used to estimate potential fire behavior. Energy Release Component (ERC) charts and Burning Index charts are included in the RIFC NFDRS plan. Pocket cards are provided to firefighters for Fuel Model T (Sagebrush – Grass), Fuel Model G (Short needle conifer with heavy dead), and Fuel Model C (ponderosa pine and short grass).

4.2. **Preparedness Actions**

4.2.1. Annual Prevention Program

The fire prevention activities within the Central Utah Interagency Fire area are accomplished by Fire Prevention Staff. A typical range of program efforts is undertaken including signing, press releases and public service announcements, educational programs targeting school children and BLM visitors and coordination with local cooperators during periods of high fire danger.

The Central Utah Interagency Fire area receives moderate visitor use in dispersed backcountry settings as well as at developed recreation facilities. Recreational use resulting in the potential for human caused fire begins typically after Memorial Day and continues through the big game hunting seasons in October and November.

The BLM participates in the Smokey Bear Program to maintain public awareness of the need to prevent wildfires. Smokey Bear related fire prevention materials are distributed at agency offices as well as through educational programs that focus on local school children. Employees dressed as Smokey Bear participate in local festivals and parades throughout the Central Utah area.

Contacts with BLM visitors at the office locations across the Central Utah Interagency Fire Management area provide information regarding current fire danger and tips for camping and other use. Recreation staff and personnel staffing developed recreation sites make frequent one on one contact with recreational users.

Indirect contacts are made through radio, television, newspapers, and signing. Press releases, informal contacts, and feature articles are also used to get the message to the public.

4.3. Special Orders and Closures

Authority –BLM District Managers have authority to issue restrictions and closures of BLM Lands. The Field Managers who are responsible for implementation and enforcement of the restrictions, will be contacted to ensure that proposed restrictions are coordinated across the Unit as appropriate. Closures will be consistent with those developed by the Utah Restrictions Group and following the Operating Plan for Implementing Fire Restrictions Closures in Central Utah.

4.4. Industrial Operations and Fire Precautions

Zone Fire Management staff, Facility Managers, or their appointed representatives, and Safety Officers typically make inspections of all Fire facilities periodically. Measures to reduce the risks of and hazards from wildfire are to be taken immediately whenever problems are noted.

Rights-of-way in the form of roads and power lines are periodically reviewed to minimize the potential for fire starts through the special use inspection process.

Inspection of and requirements placed on Special Use operations will include fire prevention considerations. Compliance inspections are completed in accordance with contract requirements or per manual direction in the case of special use permits. Inspections are for the protection of the BLM and the operators.

4.5. Annual Fire Training Activities

All agency personnel holding a REDCARD in a position that requires duty on or near active fires are required to attend an annual fire refresher. This refresher includes fire shelter deployment and recurrent safety topics such as Standards for Survival; Look Up, Look Down, Look Around; or similar safety oriented training. Attendance at the refresher training and successful completion of the appropriate level of work capacity testing is a pre-requisite for receipt of a red card.

The use of the Six Minutes for Safety program is encouraged on a daily basis for all fire management and fire production resources.

Basic Firefighter training (S-130, S-190, I-100, L-180) is offered annually to new employees and interested members of local cooperating agencies and fire departments.

Zone Fire Management Officers are the primary point of contact for agency employees from other resource disciplines or support functions to coordinate training needs.

Fire training is available locally, within the Regional area and Nationally. The Central Utah Interagency Fire Training Coordinator is responsible for disseminating fire training information and making nominations for off-unit classes and coordinating and teaching on-unit classes.

Required fire training for AD employees as well as agency employees will meet the standards set forth in the **Interagency Standards for Fire and Aviation Operations (REDBOOK)**.

4.6. Qualifications and Needs Assessment

The Central Utah Interagency Fire Management Qualification committee reviews the list of personnel qualified by position to undertake assignments in support of wildfire or prescribed fire. The Qualification and Training Committee also identifies positions where insufficient personnel are qualified to meet short-term and mid-term wildland fire management needs.

The needs assessment is forwarded to the Utah Training Oversight Committee for discussion at the Area level.

4.7. Fire Readiness

4.7.1. Annual Preparedness Reviews

The Central Utah Interagency Fire Management Officer, in conjunction with the Agency Administrators and Zone Fire Management Officer, annually conducts readiness inspections for all suppression modules. This will be completed no later than June 10th. The goal of fire managers is to have all suppression resources trained and available for assignment by June **15th of each year.** Areas that may be covered include safety drills, knowledge of standard fire orders and watch out situations, hose-lay and line construction skills, station maintenance, training records, and equipment knowledge and maintenance. Format for annual review is included in the appendices.

4.7.2. Season Start and Stop Criteria with Typical Dates

Established on-dates for fire modules are based on *NFMAS* and IIAA funding levels. This also authorizes employment of seasonal personnel that will continue through the end of fire season. The *NFMAS* and IIAA fire season as determined by historical analysis of fires is May 1 through September 30. This corresponds to the period of time when approximately 95% of all fire starts occurred.

4.7.3. **Central Utah Interagency Fire Management Cache Level Considerations** The purpose of the Central Utah Interagency fire cache in Richfield is to support initial attack and

two (2) type 3 fire organizations for up to 48 hours without support from geographic area caches. The purpose of local unit fire caches is to support re-supply for initial attack and the equipping of local militia. Caches are not a source of supply for *IMTs* to use to meet fire loss tolerance standards.

4.8. Detection

4.8.1. Aerial Patrols

An aerial patrol will typically occur after each lightning storm or as determined necessary by the Zone or Central Utah Duty officers. Aerial patrols may be requested at anytime by duty officers through the Dispatch Duty Officer or Forest Duty officer. RIFC will utilize the BLMs Automated Lightning Detection System to help determine where detection flights are needed. All aerial observers must meet the BLM Manual 310-1 qualifications for this position.

4.8.2. **Discovery**

Upon discovery of any wildland fire or unreported controlled burn, information will be collected using the Great Basin Initial Attack Fire Size Up Card, and communicated to the Dispatch Office where this information entered into WFDSS where a new incident will be created and further analysis can be completed if necessary.

4.8.3. Notifications

Central Utah Duty Officer and Zone Duty Officers will be notified of new fire starts in a timely manner, generally within 5-10 minutes of discovery for Zone and 10-20 minutes for Central Utah Duty Officer.

4.9. Policy, Aviation Management

Central Utah Interagency Fire Management area has an Aviation Plan for all aviation activities which occur.

4.10. Initial Attack

4.10.1. Information Used to Set Initial Attack Priorities

In instances where multiple wildland fire starts require prioritization, the Central Utah Duty officer and Zone Fire Managers will consult with Agency Administrators as needed, to set priorities for initial attack. The following criteria will be considered when assigning incident priorities (adopted from the National Mobilization Guide):

- 1. The potential to destroy or harm human life.
- 2. The potential to destroy:
 - a) Communities

- **b)** Community infrastructure (including long term effects to economic sustainability and viability)
- c) Historically significant cultural resources
- d) Commercial business
- e) Principle residence (year round homes)
- f) Non-principle residence (seasonal homes, cabins, etc.)
- g) Out-buildings (barns, unattached garages, utility buildings, etc.)
- h) Potential to adversely impact cultural and natural resource values
- i) Probability of meeting incident objectives

4.10.2. Criteria for the Appropriate Initial Attack Response

All initial attack actions will be those identified on the WILDCAD RUNCARDS, provided to RIFC by Zone Fire Managers, for the appropriate National Fire Danger Rating System index threshold for ERC and BI. These thresholds are described as Low, Moderate, High, or Extreme and have a progressively greater level of response. These initial actions were designed with the following considerations in mind.

- Available fire management options prescribed by the RMP for the specific area
- Current and expected fuel and weather conditions
- The probability the fire will continue to spread
- Availability of resources
- Ability to maintain firefighter safety
- Risk the fire poses to the public
- Management discretion and flexibility

4.10.3. Confinement as an Initial Action Strategy

Fires may be managed under either plan using a confinement strategy if it is determined to be the selected management strategy. The initial decision to manage a fire under this strategy should be based on direction in the LRMP and RMP and followed by an entry into the Key Decision Log that documents the rationale. This would include safety, potential resource loss, threat to private property and cost.

Confinement can also be a strategic selection through the *WFDSS* process when the fire is expected to exceed initial attack capability.

4.10.4. **Response Times**

Response times (the time from dispatch of a resource until they are in motion) for all suppression resources will be predicated on the current *NFDRS* Indices as they relate to historic fire growth. As weather and fuel conditions become drier and fire spread potential greater, response times would decrease.

4.10.5. Restrictions and Special Concerns

Fire management tools, such as dozers, retardant, aircraft are available for use although some restrictions do apply. Resource Management Plans are mute on everything but dozers, which require Agency Administrator approval before using.

4.10.6. Tractor/Dozer Use

As identified in the Central Utah Interagency Fire Management Plan: "The incident commander is responsible for consulting with the, Duty Officer, Agency Administrator or Resource Advisor whenever tractor or dozer use is being considered and/or planned. Tractor line width must be commensurate with the situation at hand. Lines in excess of one blade wide are rarely needed and will not be permitted without prior approval of the Agency Administrator, except in emergency situations.

4.10.7. Social and Political Concerns

Residents of the communities within the proclaimed boundaries of the Central Utah Interagency Management area, as well as those who are proximal to it, are generally supportive of the fire management program. Wildland fire management is generally supported because of the positive effects on big-game habitat, although some outfitters and guides may be individually impacted by specific fires. Wildland fire suppression is a source of seasonal employment within the local communities. Purchasing in support for fire management is often done within local communities when possible.

The impact of smoke is perhaps the greatest concern within local communities. Both suppression and wildland fire use fires contribute to the load of smoke that affects the area. Smoke from suppression fires is less of an issue than is smoke from fire use events because the public sees the latter as discretionary. During the past few years local residents have experienced periods of heavy smoke concentrations that have affected their physical and mental health.

4.11. Extended Attack and Large Fire Suppression

4.11.1. A wildland fire is considered to be in extended attack status:

- When a wildfire that has not been contained or controlled by initial attack or contingency forces; and
- For which more firefighting resources are arriving, en route or being ordered by the initial attack incident commander.

Extended attack needs will be determined by the following factors as well as specific FMU objectives.

- Current and predicted fire behavior
- Current and predicted weather
- Suppression resource availability

The WFDSS process must be initiated for all fires. Strategies and tactics should be developed with the use of WFDSS process. All strategic decisions should be documented in the Key Decision Log by the appropriate Line Officer to document the rationale for the selected strategy.

4.11.2. **WFDSS Process Implementation-Key Decision Log Development** A WFDSS Analysis must be completed on all wildland fires.

The responsible Agency Administrator (or their qualified acting) will complete the WFDSS for all fires which escape initial attack; select the preferred management strategy, and act as Agency Administrator for Type 1, 2, 3, 4 and 5 incidents as delegated.

Alternatives developed through the WFDSS process must be consistent with the goals of the Central Utah Fire Management Plan, Richfield Fire Management Plan/Environmental Assessment and BLM Resource Management Plans and must address the following:

- **a.** Firefighter and public safety
- **b.** Expectation that the alternative can be implemented
- c. Each alternative must be accompanied by a strategic plan of action
- d. The probability of success and consequences of failure must be assessed and displayed
- e. Each alternative will display the estimated numbers of acres burned, times for containment and control, suppression costs and resource damage
- f. Every WFDSS analysis will consider the least cost strategies.

Complexity Decision Process for Incident Management Transition

An Incident "Complexity Analysis for Type 1, 2, 3, 4 or 5 will be used as a guide for ICs, fire managers and Agency Administrators to evaluate emerging fires in order to determine the level of management organization required to meet agency objectives. This will assist in identifying resource, safety, and strategic issues that will require mitigation.

The need to transition from initial attack to extended attack and from extended attack to Type I or II Incident Management Teams will be predicated on the following:

- **a.** An Incident Complexity Analysis
- **b.** Current fire management workload
- c. Expected fire management workload based on historic records
- d. Local, Regional and National management considerations
- e. Firefighter and public safety considerations
- f. Local political concerns

During the transition period to a more complex level of management, local resources assigned to the fire will be managed within the capability of the assigned IC. All resources will remain engaged in the accomplishment of incident objectives although they may be disengaged to a safer location. Resources will be deployed to accomplish the following priorities:

- **a.** Protection of public safety
- **b.** Protection of firefighter safety
- c. Protection of the wildland urban interface
- d. Fire suppression actions such as establishing an anchor point or constructing control line
- e. Protection of high resource values
- f. Logistics support activities for the incoming team

Local suppression resources assigned to the incident at the time of transition to a Type I or II IMT may be either assigned to the fire for the remainder of their 14 day tour, or released to their home unit. This issue will be agreed to at the time of transfer of command, between the Incident Commander and the Agency Administrator. Central Utah Interagency Fire will make resources available to the extent possible. Factors to be considered in making this decision include:

- a. Initial attack responsibility areas, team and district
- **b.** Current and expected initial attack load and resource need
- c. Mental and physical condition of assigned Forest resources

The Central Utah Interagency FMO or Zone FMO is responsible for overseeing the completion of the following prior to the arrival of a Type 1 or Type 2 Incident Management Team on the Unit. The local unit is responsible for the actual WFDSS development. The Agency Administrator will be responsible for the IMT in-briefing and the delegation of authority:

- **a.** WFDSS process complete with applicable incident objectives and a selected alternative to guide tactical suppression actions. The District Manager (or acting) will select the preferred alternative.
- **b.** Agency Administrator Briefing Guide completed
- c. Delegation of Authority completed and signed by the District Manager.

4.11.3. Exceeding Existing WFDSS Strategy-Selection of New Strategy

A new *strategy* is required when the objectives of the existing *strategy* have been compromised (or are expected to be compromised). The revised *strategy* will be documented in the Key Decision Log and include a new set of objectives and a range of alternatives and associated fallback strategies and worst-case outcomes.

4.11.4. Aquatic Invasive Species

The Central Utah Interagency Fire Management Program recognizes the potential for fire operations to contribute to the spread of aquatic invasive species across the Central Utah fire area. In an effort to minimize the spread of such species all fire operations follow the guidelines.

4.11.5. Wildland Fire Management

Responding to a fire may include using multiple strategies. The response could range from monitoring a fire that is beneficial to the landscape to aggressively putting out a fire that threatens people, homes, or important natural or cultural resources.

Decisions are based on safety for the public and firefighters, what is threatened by the fire, forecasted weather, fire behavior, and what the fire and land-use plans or objectives are for the area.

Objectives

The objectives for the fire management program are included in the Richfield BLM RMP, Central Utah Fire Management Plan, and the Richfield Field Office Fire Management Plan/Environmental Assessment. Implementing this direction is the objective of the fire management program.

Preplanned Implementation Procedures

Wildland fire that may provide resource benefit may be implemented in approved areas. Fire managers consider the effects of natural fire to be desirable when appropriate at the right time and place. The following factors may affect the use of ignitions.

- 1. Potential for the fire to escape the planned area.
- 2. The potential for the fire to impact private property
- 3. The airshed is smoke laden to the degree new use fires are not politically acceptable
- **4.** National, State and Local preparedness levels indicate a lack of resources to adequately manage a new use fire
- 5. Other socio-political considerations

Since there is no way to set threshold values for these factors it is important to review them periodically.

Impacts of Plan Implementation

Potential impacts resulting from the implementation of wildland fire management include the following, including potential mitigation actions.

- 1. Smoke production may impact local and regional air quality. This potential will be mitigated by following the recommendations of the Utah Airshed Group and public information.
- 2. There is a potential for a fire to escape the planned area and impact inholdings, adjacent private lands, general forest lands and improvements. Mitigation to avoid this would include careful design of the planned area and associated Management Action Points and Contingency Actions to protect identified values. Contingency actions would be incorporated into the WFDSS.

4.11.6. Public Involvement

Initial news queries on wildland fires will be directed to a Fire Information Officer assigned as needed. Prompt reply to such queries is essential and should include interpretation of the wildland fire program. The Central Utah Interagency Fire Duty Officer, IC or SOPL will provide periodic fire information update to the Fire Information Officer.

Requests for media visits will be directed to the Fire Information Officer and coordinated with the SOPL or Incident Commander.

A Fire Information Officer will either be assigned from the pool of qualified personnel on the Forest or ordered through the dispatch office.

4.11.7. Records

Permanent records of all fires will be gathered by the responsible Zone Fire Management Officer. At the end of the season, or when the fire is declared out, these records will be transferred to RIFC. These records will be retained in record storage as per the National direction regarding legacy fire records. The following components will be included in these records.

4.11.7.1. Approved Planning Documents

All original, signed, WFDSS components, including amendments and revisions will be included in the record package.

4.11.7.2. Monitoring Reports

All monitoring records, reports and findings will be included.

4.11.7.3. Periodic Fire Assessments

Original Periodic Fire Assessments will be included.

4.11.7.4. Funding Codes and Cost Accounting

All financial records including funding codes and cost accounting documents will be retained.

4.11.7.5. Permanent Maps

One copy of all map products developed for the WFDSS analysis will be retained.

4.11.7.6. Photos and other records

Photographs and other records that substantially contribute to the understanding of the fire event will also be included.

4.11.7.7. Cost Tracking

Cost tracking records will be maintained in a condition to facilitate efficient financial reviews.

4.12. Prescribed Fire

The BLM Fire Management and Fuels programs are combined within the Central Utah Interagency Fire Organization. Fuels budgets and targets are dispersed via the fire management and vegetation programs. Smoke management, an important aspect of prescribed burning, is also coordinated through fire management.

4.12.1. NFMA Analysis

The NFMA Analysis identifies all pertinent Land and Resource Management Standards, Goals and Objectives for the area under consideration as well as existing condition inventories needed to support Project Development. Data collected during this phase of planning will form the basis of project specific analyses in the NEPA phase. Specific opportunities to meet project objectives are identified. Potential issues should be identified along with potential design criteria to mitigate them. The end product should be a well defined and implementable proposed action ready for public scoping.

4.12.2. NEPA Analysis

Scoping of the proposed action starts the NEPA process. Specific and measurable project objectives should be developed that tie directly in with LRMP and other programmatic direction.

An IDT comprised of specialist assigned to address specific issues should be assigned based on internal and external scoping and issue identification. Common issues may include the following:

- 1. Soil impacts from past, present and reasonably foreseeable actions.
- 2. TES habitat impacts.

4.12.3. Project Implementation

The responsibility for project implementation will depend on the method of fuels treatment selected.

If the project includes implementation through contracts, the Fuels organization would be responsible for contract preparation and administration.

4.12.4. Prescribed Burn Preparation

Fuels specialist will have the responsibility for the development of site specific burn plans. Burn plans may be developed by any of the Burn Bosses qualified at the burn complexity level so would include those in Fuels that have the qualification.

4.12.5. Prescribed Burn Implementation

Smoke signage will be the responsibility of the Fuels Specialists.

Arrangements for contingency forces on the day of burn and thereafter will be the responsibility of Fuels Management.

4.12.6. **Post-Burn Monitoring**

Post burn monitoring will be the responsibility of the Fuels organization. Fuel and Fire Management specialists involved with the planning and implementation of specific burns need to be involved with post-burn monitoring. Evaluation should include; how well objectives were met such as mortality percentage due to burning, fuel reduction, mortality percentage due to mechanical or insect damage, effectiveness of the burn prescription, effectiveness of mechanical treatment etc.

4.12.7. Annual Activities

The primary annual activity that supports the fuels program is the planning process from project inception to NEPA decision. This is now and will continue to be the most demanding work of the fuels program. The Central Utah Interagency Fire Management area has several planning projects underway with at least one completed for the out year.

4.12.8. FMU Specific Prescribed Fire Strategy

The most aggressive fuels treatment projects are situated in the "Suppression, Wildland Urban Interface" FMU. The current emphasis is along areas where high fuel continuity and private dwellings complicate protection. Projects in these areas are focused on removal of ladder fuels and reduction of surface fuels to improve firefighting efficiency.

Within the "Suppression, Non-Wildland Urban Interface" FMU the focus of the fuels program is to reduce the threat wildland fire poses to ecosystem health by emulating fire effects through vegetative manipulation. While this does include prescribed fire it also includes the removal of trees that would not have grown under a historic fire regime. The outcome of this treatment would be reduced surface fuel loading, a reduced rate of recruitment of large woody fuels, reduced moisture and competitive stress on remaining trees, reduced threat of extensive crown fire and a broad based improvement of general ecosystem health.

Fuel management activities within the Central Utah Interagency Fire Management area may occur where high value infrastructure, such as heritage sites, and private inholding are routinely threatened by fires and the cost of protection during wildland fires is very high compared to the cost of fuel treatment.

4.12.9. Weather, Fire Effects and Monitoring

Weather, fire behavior and prescribed fire effects monitoring are described in the project specific NEPA decision, the vegetation prescription and the individual burn plan.

Weather is monitored before and during the prescribed burn to determine if prescribed weather parameters are being met. For more complex burns a spot weather forecast if generally requested to get more accurate and site-specific weather. Weather records are important for the analysis of fire effects.

Fire behavior is continually monitored during prescribed burns and provides an immediate feedback to the burn boss about how current ignition patterns are meeting objectives. Ignition patterns are dynamic over the course of the day and must be adjusted several time based on observed fire behavior.

Fire effects monitoring must be done to determine if the measurable objectives in the NEPA decision were met through the implementation of the prescribed burn. The monitoring plan elements depend on the objectives of the burn treatment that are detailed in the vegetation management prescription.

4.12.10. Prescribed Fire Project Critique

Informal reviews and after action reviews:

• Burn plan documentation requires a post burn evaluation including assessment of objective achievement, an informal unit log and after action review.

4.12.11. Formal Prescribed Fire Reviews

Formal prescribed fire reviews will be conducted when a prescribed fire escapes and/or an injury occurs that requires medical treatment. These reviews would be lead by the Center Interagency Fire Management Officer with team members determined by the charter provided by the local line officer. Elements of these reviews may consist of the following:

Effectiveness	Safety
Organization	Qualifications
Policy implementation	Smoke monitoring
Job hazard analysis effectiveness	Information dissemination

4.12.12. Historical Fuels Treatment Map

The most current fuels treatment history maps and information kept and maintained by each zone Fuels Specialists.

4.12.13.Local Prescribed Fire Burn Plan Requirements

All burn plans will be written under the agreed standard burn plan format. Elements required in the prescribed fire burn plan can be found in the implementation guide. These elements are reflected in the BLM Standard burn plan.

4.12.14. Exceeding Existing Prescribed Fire Burn Plan

Any prescribed fire that exceeds the designated *planning area*, contingency area or exceeds prescription constraints will be considered an escaped fire if not able to be returned to

prescription. Following designation of an escape, the WFDSS process will be completed and approved by the appropriate Line Officer.

Considerations used when completing the WFDSS process for an escaped prescribed fire are similar to a fire that escapes initial action from an unplanned wildland fire. They include:

- 1. Fire fighter and public safety
- 2. Risk to improvements
- **3.** Risk to resource values
- 4. Cost of Suppression
- 5. NEPA decision objectives and project analysis
- 6. Effects analysis from the NEPA decision

4.12.15. Air Quality and Smoke Management

- a. Location of Class I Airsheds near (<50 miles) to parts of the Central Utah Interagency Fire Management area.
 - a. Capitol Reef National Park
 - b. Bryce Canyon National Park
 - c. Arches National Park
 - d. Canyonlands National Park
 - e. Great Basin National Park
- b. Smoke sensitive areas are defined as schools, hospitals, nursing homes, major roads such as interstates and major state highways and communities. Individual Fire Management Units descriptions define smoke sensitive areas.

4.12.16.Non-Fire Fuel Applications

Mechanical Treatment and Other Applications Annual Planning Projects

Approximately 70% percent of the annual total treated acres within the Central Utah Interagency Fire area are completed with non-fire or mechanical treatment. In 2005, mechanical treatments increased over the historical average based on the emphasis on treatment in the wildland urban interface. These treatments occur using both Federal employees and contractors. Techniques used include chain saw felling, lop and scatter whole tree removal, tractor piling, hand-piling, Equipment and Seasonal Restriction

Equipment use to treat fuels may be restricted by a variety of factors. Sensitive species, erosive soils are examples of mechanical treatment restrictions. These restrictions are described in project specific NEPA analysis.

4.12.17. Cost Accounting

Required Reporting and Documentation

- Perimeters will be mapped to the standard described in the monitoring guide.
- Report through the appropriate accounting system (i.e. MAR)

Each zone Fuels Specialist will maintain a list of projects to be implemented each fiscal year

4.13. Emergency Stabilization and Restoration

Site-specific burned area rehabilitation plans will be completed as needed.

Chapter 5. MONITORING AND EVALUATIONVBLM Specific Guidance Only

5.1. Monitoring and Compliance

To ensure an adaptive management response to fire planning needs within the state, monitoring measures and compliance with the goals and objectives of this plan would be maintained. This would be achieved through future planning associated with fire management implementation actions. These fire management actions would be evaluated for adherence to the goals and objectives established by this Proposed Action, as well as specific resource requirements contained within the appropriate LUPs. Wildland fire impacts would be compared to FMP goals and, if necessary, revisions to the FMP would be incorporated to reflect the impact of wildland fire events on the planning area resources. Implementation-level fire management actions would be developed to meet resource requirements and could include additional monitoring to evaluate and ensure conformance to plan-level decisions. The frequency and duration of monitoring would be determined on a case by case basis. (*Richfield* FMP EA. 2000.)

5.2. Fire and Fuels Management Monitoring

Monitoring will determine whether fire management strategies, practices, and activities are meeting resource management objectives and concerns. Fire management plans and policies will be updated as needed to keep current with national and state fire management direction. Scheduled program reviews (post-season fire review) will be conducted to evaluate fire management effectiveness in meeting goals and to re-assess program direction.

Pre-fire condition and post-fire effects will be determined by monitoring vegetative response to treatments and progress towards meeting objectives. Monitoring methods may include fuels and vegetation transects, photo points, density, cover and frequency plots, and ocular estimates. As available, applicable remote sensing data will also be incorporated into ecological condition monitoring. The number of acres in Condition Class 1, 2, and 3 will be re-evaluated during the watershed assessment process, and tracked and reported in the Annual Program Summary and Planning Update.

Wildfire rehabilitation effectiveness monitoring studies will be encouraged to determine whether emergency rehabilitation objectives are met. Monitoring requirements and methods will be project specific. Treatments completed under Emergency Fire Stabilization Rehabilitation and Restoration Program will be monitored for treatment effectiveness using the Line-Point Intercept Method. A Nested Plot Frequency Study would be added if the study plot is to be used as a long term trend study. Use GIS for plot location and support with photos. The study plot is read yearly for at least three years after treatment. A Soil Condition Rating Assessment would be done each time the plot is read. (*Richfield* RMP. 2008. P 101)

5.3. Plan Monitoring and Evaluation

The Fire Management Activity Plan and fire management practices will be reviewed at five-year intervals to identify need for revision or modification. (*House Range* RMP. 1987. P 94)

Annual reporting of hazardous fuels accomplishments are as follows:

- Management Information Systems (MIS)
- National Fire Plan Operations Reporting Systems (NFPORS)