

IV. Field Office Fire Management Components

A. Wildland Fire Suppression

1. Wildland Fire History – During the 23-year period from 1980 through 2002, 587 wildland fires occurred wholly or partially within the seven FMUs covered under this FMP and burned a total of 75,179.5 acres (includes acres burned outside the FMU boundaries). The average is 25.5 fires, burning 3,269 acres annually, across the seven FMUs. Fire cause for these 587 fires was determined to be 52% natural (lightning), 37% human-caused, and the remaining 11% were of unknown origin. While the majority of these 587 fires were relatively insignificant in terms of size and intensity, several large, damaging fires did occur. Typically, these large fires were wind-driven and burned at FIL 5 or 6, quickly consuming several thousand acres before suppression efforts were successful. Fire size distribution for all seven FMUs combined is summarized in Table 9, below.

Table 9.

Fire Size Class	# of Fires	Acres Burned
A (0.25 ac. or less)	421	31.9
B (0.26 - 9.9 ac.)	108	217.6
C (10.0 - 99.9 ac.)	28	1,272
D (100 - 299 ac.)	9	1,521
E (300 - 999 ac.)	10	6,157
F (1,000 - 4,999 ac.)	6	12,570
G (5,000 + ac.)	5	53,410
Total	587	75,179.5

2. Suppression/Preparedness Actions – The Appropriate Management Response (AMR) system is used to manage and suppress all wildland fires. In general, unless a fire is to be managed as a WFU fire, rapid suppression while the fire is small in size is the safest and most cost-effective strategy. The following types of fires are not candidates for Wildland Fire Use (WFU), and thus are managed for suppression:
 - a) Any fire in any location likely to be human-caused.
 - b) Any naturally ignited fire not within a designated Wildland Fire Use (WFU) area.
 - c) Any naturally ignited fire within a designated WFU area which the Field Office Manager, District Ranger, or other designated official believes cannot be managed under WFU to safely and effectively meet WFU and other resource management objectives for the given area.

When a fire is determined to not be a candidate for WFU, a wide range of suppression strategies and tactics can be employed. Fires threatening human life and private property receive the highest priority, and AMR in this situation includes water and retardant drops from aircraft, bulldozers, back-firing, hand crews, etc...

For fires not threatening human life or property, safe, rapid, cost-effective suppression is still the goal. In this situation however, AMR considers other resource management issues and generally results in a lighter-on-the-land suppression effort. The following AMR strategies and tactics are to be considered in these situations:

- Avoid retardant use within 300 feet of creeks and other waterways
- Use clear retardant when visual resources are a concern
- Bulldozers and other heavy equipment are only used in prominent viewsheds, riparian areas, aspen groves, cultural sites, ACECs, and mule deer winter ranges with authorization from the Field Office Manager, and only to protect human life, private property, structures, visitor safety, or other, sensitive or valuable resources.
- Use natural and pre-existing human-made barriers to minimize fire line construction
- Consider back firing to minimize fire line construction
- Minimize fire line construction through riparian areas, meadows, low sagebrush, and other important habitat areas
- Construct fire lines perpendicular to riparian areas, not parallel to them
- Equipment coming from outside the FPU must be clean and free of soil and other vegetative material, to prevent the spread of noxious and invasive weeds

These strategies and tactics should be employed wherever possible, but are especially appropriate in ACECs, WSAs, and other areas known to have other significant resource values.

Occasionally, ignitions occur on very steep, inaccessible terrain. Often, these fires are lightning strikes on a single tree, with little risk of substantial spread. Where this is the case, firefighter safety becomes an issue. Even though the fire may be in a non-WFU area, the AMR may consist only of monitoring, due to unsafe conditions associated with trying to put suppression personnel on the fire.

3. Fire Prevention, Community Education, Community Risk Assessment, and Other Community Protection Assistance Activities (Firewise) -

- a) Annual Prevention Program - The fire prevention program is an active component of the fire management program. The Bishop Field Office and the Inyo NF fire prevention personnel work under one document, The Interagency Wildfire Prevention Plan, which outlines the prevention objectives and guidelines.

The Bishop Field Office fire prevention program strives to develop and apply maximum prevention efforts to minimize the ignition of human caused wildland fires. The human cause fire risk for the Bishop Field Office is debris burning and escaped campfires. The prevention program focuses on mitigation through education, engineering, and enforcement. Education is aimed at changing people's behavior by awareness and knowledge. This is accomplished through printed materials, mass media, personal contacts or group presentations, signs, displays, fair booths, and parade entries. Engineering is an activity designed to reduce or eliminate fire risks. Spark arrestors and clearing are an example of an engineering activity. Enforcement is used to gain compliance with fire regulation and ordinances.

The fire prevention program also focuses on fire risk in the WUI through hazard mitigation. The primary effort is toward increased awareness through education, to make communities and individual property owners understand and appreciate the importance of hazard reduction on private land. Development of Fire Safe Councils in local communities is a key to hazard reduction on private land. Additionally, there is collaboration with local fire departments and other cooperators working to reduce fire risk on and around private land.

b) Special Orders and Closures – All Special Orders and Closures will be coordinated with local cooperators, recommended by the Interagency Fire Management Officer and approved by the Field Office Manager and Forest Supervisor. See the Interagency Fire Restriction and Emergency Closure Plan for more details.

c) Industrial Operations and Fire Precautions – See the Interagency Wildfire Prevention Plan for details.

4. Annual Fire Training Activities –

a) Qualifications and Fireline refresher – Training and fitness requirements for all Bishop Field Office personnel involved in fire suppression and support can be found in the Interagency Standards for Fire and Fire Aviation Operations 2004 handbook. Attendance at the refresher training, along with passage of the appropriate level of work capacity testing is a prerequisite for issuance of a red card. All training and testing should be completed by June 15th annually.

b) Fire Season Readiness – Requirements for preparedness and operational plans can be found in the Interagency Standards for Fire and Fire Aviation Management 2004 handbook, and are maintained at each station. Each suppression and prevention module is reviewed for readiness on an annual basis. For the BLM, these reviews are conducted by a State Office team. Every four years, the annual review is conducted by a national team.

5. Detection – The interagency fire management staff may request aerial detection services on an as-needed basis from the dispatch center. The Inyo NF maintains one lookout (Bald Mountain in Mono County), which is sometimes useful in detecting wildland fires in two or three FMUs covered under this plan, depending on visibility.
6. Fire Weather and Fire Danger – There are six Remote Automated Weather Stations (RAWS) located within the FPU. The Interagency Dispatch Center staff is responsible for the daily and seasonal activities associated with RAWS data management. Table 10, below, provides summary characteristics for each of the 6 RAWS located within the FPU.

Table 10.

<u>Name</u>	<u>Owner</u>	<u>Sta. ID</u>	<u>NFDRS Fuel Model(s)</u>	<u>Elev.</u>	<u>Latitude</u>	<u>Longitude</u>
Benton	BLM	43708	C	5,377 ft.	37.83500	118.48300
Crestview	USFS	43709	C, T, and G	7,518 ft.	37.73500	119.00000
Devils Postpile	USFS	44208	C and T	7,560 ft.	37.61800	119.08500
Rock Creek	USFS	43710	C and T	7,040 ft.	37.55100	118.66700
Owens Valley	CDF	44803	C	4,635 ft.	37.38500	118.55100
Oak Creek	BLM	44804	C	4,280 ft.	36.83300	118.25200

Data collected from these RAWS are used to compute fire danger ratings on a daily basis. Portable RAWS stations are available and can be set up to provide site-specific weather information necessary for project implementation.

7. Aviation Management – The Interagency fire organization maintains a Type III helicopter at Independence, California, and an air tanker re-load base at the Bishop Airport. Local vendors are available to provide point-to-point transportation and reconnaissance missions.
8. Initial Attack – All fires on BLM lands covered under this FMP will be managed with suppression actions consistent with pre-planned dispatch protocols and in accordance with the resource management objectives identified in this plan. Fires potentially threatening human life and property always receive response priority over those not threatening human life and property.

The interagency dispatch center is designed to provide direction and standards for initial attack on emergency incidents, and uses a state-of-the-art Computer Aided Dispatching (CAD) system. The CAD system determines the appropriate resource response, the number of resources necessary based on fire location, weather conditions, and resource availability. All responses are based on closest resource concept. Once the Incident Commander is on-scene, they will adjust resource orders as necessary.

9. Extended Attack and Large Fire Suppression – BLM direction for extended attack and large fire suppression follows the direction in the Interagency Standards for Fire and Fire Aviation Operations 2004 handbook.
10. Other Fire Suppression Considerations – none

B. Wildland Fire Use

1. Description of Wildland Fire Use Opportunities – This FMP covers only those lands within the FPU which are managed by the BLM – Bishop Field Office. Through an inter-disciplinary effort, one FMU (Inyo Mountains Wilderness, CA170-007) was identified for WFU. The objectives for this area were addressed in Chapter III of this document.
2. Pre-Planned Implementation Procedures – This FMP establishes the Inyo Mountains Wilderness as the one FMU where WFU is allowable. Since this FMP is a decisional document and the NEPA process is being followed, there has been an open process for local and tribal governments, other agencies, and the public to comment on the WFU designation and the management objectives and constraints for this FMU. Specific WFU management objectives and constraints for the FMU can be found in Chapter III of this document.
3. Initial Action Procedures – All wildland fires will be subject to an initial attack response. This response will include size up of current fire situation, determination of probable cause, and estimate of potential for fire spread. A suppression action will be initiated unless the fire is determined to be a candidate ignition for management as a WFU fire. All candidate ignitions will be managed in accordance with the procedures and requirements outlined in the Wildland and Prescribed Fire Management Policy Implementation Procedures Reference Guide. All ignitions determined to be human caused will be suppressed using AMR.

4. Required Personnel – The interagency fire organization is capable of managing WFU incidents up to and including those at the Stage III complexity level. A Fire Use Management Team can be ordered for incidents which require additional support personnel. Current qualified staff members may act as interim fire use managers, pending the arrival of a Fire Use Manager (FUMA) or Fire Use Management Team. A current list of all personnel qualified to manage and/or assist in wildland fire use incidents is available through the Interagency Dispatch Center.
5. Public Information – Timely public information is crucial for public support for WFU. Information should be targeted to all segments of the public, from those directly impacted by the fire, to those whose interest is merely curiosity. Phone call, letters, newspaper articles, and radio and TV news should all be utilized to spread information to the public. The information distributed should not only include specifics about the WFU fire, but also include other resource objectives and fuels reduction benefits.

C. Prescribed Fire

1. Planning and Documentation – Until recently, the Bishop Field Office use of prescribed fire had been fairly limited. Most prescribed fire treatments were conducted to meet other resource goals and objectives. For FY2004, the Bishop Field Office intends to implement three prescribed fire fuels reduction projects to treat approximately 102 acres. All projects are in the WUI. For FY2005, prescribed fire treatments total one project, treating approximately 350 acres, all within the WUI. In all cases, these treatments are being designed to move from a higher risk Condition Class (2 or 3), to a lower risk Condition Class (1 or 2).

Initial emphasis areas for prescribed fire treatments are the WUI, habitat enhancement and protection for threatened, endangered, or otherwise sensitive species, and Condition Class 3 areas. Over time, as these areas are treated, it is anticipated that prescribed fire and WFU will become the preferred and dominant treatment methods to restore and maintain these fire-adapted ecosystems, especially outside the WUI.

2. Air Quality and Smoke Management – Air quality across the FPU is generally good. There are two moderate PM 10 non-attainment areas within the FPU (Mammoth Lakes and Mono Basin) and one serious PM 10 non-attainment area (Owens Valley).

There are three Class 1 airsheds within the FPU (Hoover Wilderness, Ansel Adams Wilderness, and John Muir Wilderness). Prevailing winds usually favor smoke dispersal away from these airsheds. These airsheds are more commonly impacted by prescribed fire conducted by agencies on the west side of the Sierra Nevada. Favorable burn days within this FPU usually include adequate lifting of smoke into the transport layer for good smoke dispersal. Smoke impacts from prescribed fire are short term in nature.

Each prescribed fire project requires a Burn Plan. An approved Smoke Management Plan is contained within the Burn Plan. This Smoke Management Plan must be approved at least 30 days prior to ignition, by the local air pollution control district. Additionally, prior day ignition approval is required from the local air pollution control district.

D. Non-Fire Treatments

Until recently, the Bishop Field Office use of non-fire treatments has been fairly limited. Most vegetation manipulation was conducted to meet other resource goals and objectives. For FY2004, the Bishop Field Office intends to implement five mechanical treatment projects, covering approximately 280 acres. All projects are in the WUI. For FY2005, mechanical treatment increases to six projects, treating 540 acres, with nearly all acres in the WUI. In all cases, these treatments are being designed to move from a higher risk Condition Class (2 or 3), to a lower risk Condition Class (1 or 2). As the fuels program becomes more established, it is anticipated that annual non-fire treatments could reach several thousand acres.

Initial emphasis areas for non-fire treatments are the WUI, habitat enhancement and protection for threatened, endangered, or otherwise sensitive species, and Condition Class 3 areas where prescribed fire or WFU cannot safely be introduced without pre-treatment to modify the fuels condition. Over time, as these areas are treated, it is anticipated that prescribed fire and WFU will become the preferred and dominant treatment methods to restore and maintain these fire-adapted ecosystems, especially outside the WUI.

For FY2004, the Bishop Field Office will advertise one 350-acre mechanical fuels reduction contract with by-product (fuelwood) utilization, via stewardship contracting authorities. Additional by-product utilization will be pursued, if markets exist or develop. It is unknown if a local contractor will be used to accomplish this project.

E. Emergency Stabilization and Rehabilitation

Historically, Emergency Stabilization and Rehabilitation (ESR) workload has been approximately 500 acres per year. Most ESR needs have been in the desert scrub and shrub steppe vegetative communities. Once these native plant communities burn, cheat grass frequently invades the site.

The short term ESR actions are aimed primarily at damage caused by the suppression effort itself, and include fire line rehabilitation and erosion control measures. Short and long term goals are to help mitigate fire-related degradation to natural and cultural resources, minimize threats to life and property resulting from the effects of the fire, and repair/replace/construct physical improvements necessary to prevent degradation of the land or resources. The long term objective is the re-establishment of the appropriate native plant community.

F. Community Protection/Community Assistance

1. Number of WUI communities at risk with completed and current fire management plans or risk assessments - There are 22 communities within the FPU that are listed in the Federal Register as Communities At-Risk. Numerous other communities exist which appear to have been missed and should have been included in the Federal Register listing. Lone Pine Paiute-Shoshone Reservation has a current fire management plan. Fort Independence Indian Reservation has a current plan, but they are not listed as a Community At-Risk. Numerous communities have held public meetings to address the WUI situation and organize fuel reduction projects. These communities are in the early stages of forming local Fire Safe Council chapters under the Eastern Sierra Regional Fire Safe Council.
2. Total number of WUI communities at risk with fire prevention programs in place and being implemented - Of the 22 Communities At-Risk, 15 have active interagency fire prevention programs. The programs range from press releases, school programs, defensible space education, billboards, fairs, events, and Fire Safe Councils, to actual on-the-ground fuels reduction projects. Several Fire Safe Councils and local volunteer fire departments are very involved in educating the homeowners in the risk reduction in the WUI.
3. Total number of WUI Communities At-Risk that initiated volunteer and community funded efforts to reduce hazardous fuels resulting in the removal of the community from the at-risk list - none.

4. Overview of the rural fire assistance program within the FPU - The rural fire departments are a crucial element to our fire agency response area. Commonly these volunteer fire departments are first on-scene at wildland fires, vehicle accidents, and medical emergencies. Numerous departments border BLM response areas. The rural fire assistance program is an invaluable program for our local volunteer fire departments, which provide the opportunity to purchase or update much needed equipment.

Rural fire assistance grants have been awarded to numerous local volunteer fire departments, including: Paradise, Long Valley, Keeler, Bridgeport, Big Pine, Antelope Valley, and Aspendell. These volunteer fire departments used these grants to purchase Personal Protective Equipment (gloves, hard hats, Nomex pants and shirts), I.A. packs and web gear, and radios. Grant money has also been used to train personnel in wildland fire suppression strategies and tactics.

V. Organization, Budget and Agreements DO NOT COMPLETE UNTIL FY05 BUDGET ALLOCATIONS ARE IDENTIFIED

A. Organization and Budget

Table 11, below, summarizes the current (as of May, 2004) and desired staffing for the Bishop Field Office fire and fuels management program.

Table 11.

Resource	Current Staffing	Desired Staffing	Normal Activation	Sub-Activity	Yearly Cost
Deputy Inter-agency FMO	1	1	Year-round	2810/2824	
Fire Operations Specialist	1	1	Year-round	2810/2824	
Type 4 Eng. (2)	8	14	May 1 - Oct. 31	2810/2824	
Type 6 Eng. (2)	3	10	May 1 - Oct. 31	2810/2824	
Fuels Specialist	1	1	Year-round	2823/2824	
Mitigation Specialist	1	1	Year-round	2810/2824	
Dispatch	2	2.5	Year-round	2810/2824	
Admin. Support	0.5	1	Year-round	2810/2824	

Mechanical fuels treatments rely heavily on contracting services from the private sector, while prescribed fire treatments utilize the joint Bishop Field Office/Inyo NF interagency fire specialists and personnel.

B. Assistance Agreements and Intra/Interagency Agreements

The Bishop Field Office and the Inyo National Forest operate a fully integrated interagency fire management organization. Additionally, the Bishop Field Office has a Cooperative Fire Protection Agreement with California Department of Forestry (CDF), whereby CDF provides fire protection services for all BLM land in Inyo County and the BLM provides fire protection services for all State land in Mono County. Agreements also exist between the Bishop Field Office and Bodie State Park, as well as numerous local volunteer fire departments. A complete listing of all such agreements is available in the dispatch center.

C. Equipment Rental Agreements - none

D. Contract Suppression and Prescribed Fire Resources - none

VI. Monitoring and Evaluation DO NOT COMPLETE - STATEWIDE STRATEGY WILL BE DEVELOPED FOR THIS SECTION

The National Fire Plan Operations and Reporting System (NFPORS) tracks fuels treatments and accomplishments at the project level. State Office and National Reviews of fuels programs occur periodically. Specific monitoring and evaluation of treatments for invasive plants and other resource objectives are developed by the appropriate specialists within the Bishop Field Office staff.

Glossary of Terms DO NOT COMPLETE - STATEWIDE GLOSSARY STANDARD WILL BE DEVELOPED

Appropriate Management Response (AMR) - the response to a wildland fire, based on an evaluation of risks to firefighter and public safety, the circumstances under which the fire occurs, including weather and fuel conditions, natural and cultural resource management objectives, protection priorities, and values to be protected. The evaluation must also include an analysis of the context of the specific fire within the overall local, geographic area, or the national wildland fire situation.

Fire Management Plan (FMP) - a strategic plan that defines a program to manage wildland fires based on the area's approved Resource Management Plan (RMP). Fire Management Plans must address a full range of fire management activities that support ecosystem sustainability, values to be protected, protection of firefighter and public safety, public health and environmental issues, and must be consistent with resource management objectives and activities of the area.

Fire Regime and Condition Class (FR/CC) - a natural Fire Regime is a general classification of the role fire would play across a landscape in the absence of modern human mechanical intervention, but including the influence of aboriginal burning. It includes the combination of fire frequency, predictability, intensity, seasonality, and extent. Condition Class is a classification of the amount of departure from the natural Fire Regime.

Appendix A

A. Map of Fire Management Units