

Umatilla National Forest Fire Management Plan 2008

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Recommended by

Approved by

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Section 1 - Introduction

The 1995 Federal Wildland Fire Management Policy and Program Review (Update 2001); the Wildland and Prescribed Fire Management Policy and Implementation Procedures Reference Guide (FSM 5101, 5103, and 5108); and other Forest Service direction require development of a Fire Management Plan (FMP) for all federal lands with burnable vegetation.

The Fire Management Plan (FMP) describes how the Fire Management Program will be implemented. The goal of the Fire Management Program is to 1) achieve the resource objectives outlined in the forest's Land Management and Resource Management Plan; 2) comply with the direction of the Federal Wildland Fire Policy and Program Review and other applicable agency policies and requirements; and 3) be responsive to the various recovery plans prepared in response to the Threatened and Endangered Species Act.

The FMP is not an Environmental Analysis, but is tiered to an approved Land Management and Resource Management Plan or other environmental documents where applicable. Land and Resource Management Plan terminology has been updated to current Federal Fire Policy language.

The Fire Management Plan is meant to be a working reference for fire program information. It is supplemented by cooperative agreements, preparedness plans, mobilization guides, prescribed fire plans, prevention plans and other operational procedural documents that are updated periodically and approved annually.

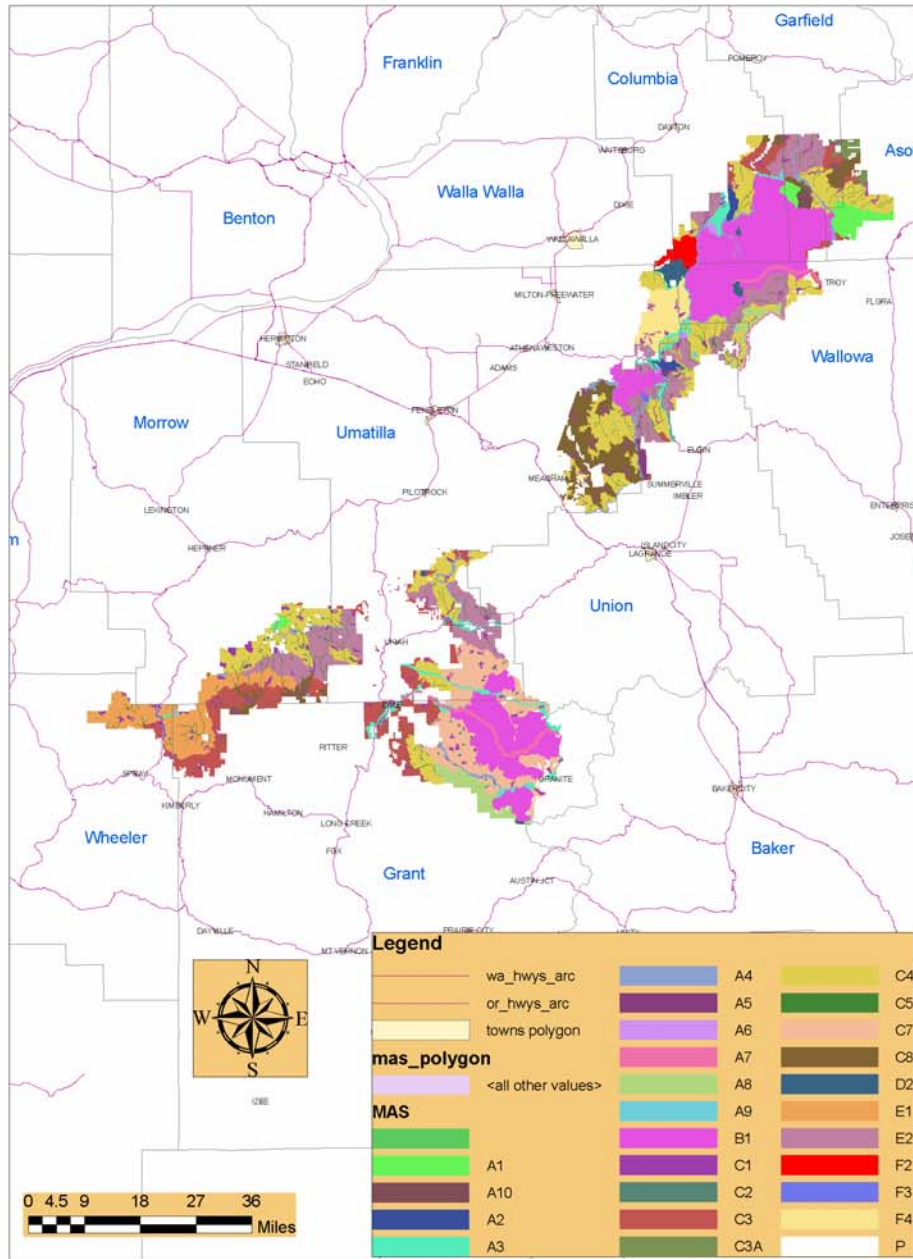
This Plan is prepared as the tool to implement fire management direction found in the Land and Resource Management Plan, Umatilla National Forest, approved by the Regional Forester, USDA Forest Service, Pacific Northwest Region (1989), and any subsequent amendments or supplements. In instances where the Land Management Plan did not address the fire management direction of the federal fire policy, implementation of those actions was supported by an environmental analysis of effects with resource management input or has been deferred until completion of the Land Management Plan revision. Examples of activities where environmental assessments are done include fuel hazard reduction and fuel bed modification projects. Examples of where implementation has been deferred until Land Management Plan is updated include Wildland Fire Use projects.

The Umatilla National Forest encompasses approximately 1.4 million acres in the Blue Mountains of Northeastern Oregon and Southeastern Washington.

The Umatilla National Forest Land and Resource Management Plan divides the forest into twenty-five different management area types.

Management Area Name	MAS	Acres	Percent
Non-motorized Dispersed Recreation	A1	26457	1.89
Wenaha Tucannon Special Management Area	A10	3308	0.24
ORV Recreation	A2	7299	0.52
Viewshed 1	A3	38641	2.76
Viewshed 2	A4	26754	1.91
Roaded Natural	A5	4598	0.33
Developed Recreation	A6	4163	0.30
Wild & Scenic River	A7	19212	1.37
Scenic Area	A8	30926	2.21
Special Interest Area	A9	3101	0.22
Wilderness	B1	289426	20.65
Dedicated Old Growth	C1	40040	2.86
Managed Old Growth	C2	3521	0.25
Big Game Winter Range	C3	121593	8.67
Sensitive Big Game Winter Range	C3A	8329	0.59
Wildlife Habitat	C4	242932	17.33
Riparian and Wildlife	C5	23881	1.70
Special Fish Management Area	C7	98103	7.00
Grass-Tree Mosaic	C8	89841	6.41
Research Natural Area	D2	11019	0.79
Timber and Forage	E1	79586	5.68
Timber/Big Game	E2	180738	12.89
Mill Creek Watershed	F2	12579	0.90
High Ridge Evaluation Area	F3	879	0.06
Walla Walla Watershed	F4	34874	2.49
	Total	1401801	100

Management Areas of the Umatilla National Forest



Section 2 - Policy, Land Management Planning and Partnerships

2.1 Fire Policy

The [Federal Fire Policy](#) was developed in 1995, and was further evaluated and updated in the 2001 Review and Update of the Federal Wildland Fire Management Policy. Some of the key points in the policy include:

- Protection of human life is the first priority in wildland fire management. Once firefighters are committed to an incident, they are the number one priority. Property and resource values are the second priority, with management decisions based on values to be protected.
- Where wildland fire cannot be safely reintroduced because of hazardous fuel build-ups, some form of pretreatment must be considered, particularly in wildland-urban interface areas.
- The role of federal agencies in the wildland-urban interface includes wildland firefighting, hazard fuels reduction, cooperative prevention and education, and technical assistance. Primary responsibility rests at the state and local levels.
- The Western Governors' Association will serve as a catalyst to involve state and local agencies and private stakeholders in achieving a cooperative approach to fire prevention and protection in the wildland-urban interface.
- Wildland fire, as a critical natural process, must be reintroduced into the ecosystem. Fire will be allowed to function as nearly as possible in its natural role to achieve the long-term goals of ecosystem health.
- Wildland fire management decisions and resource management decisions go hand in hand and are based on approved Fire Management and Land and Resource Management Plans. Fire managers also have the ability to choose from the full spectrum of fire management options, from prompt suppression to allowing fire to function in its natural ecological role.
- Structural fire protection in the wildland-urban interface is the responsibility of tribal, state, and local governments.
- Federal agencies must place more emphasis on educating internal and external audiences about how and why we use and manage wildland fire.

The [Interagency Strategy for Implementation of Federal Wildland Fire Management Policy](#) aimed to eliminate several operational differences that existed among the federal wildland fire management agencies. Several policy clarification statements include:

- Only one management objective will be applied to a wildland fire. Wildland fires will either be managed for resource benefits or suppressed. A wildland fire cannot be managed for both objectives concurrently. If two wildland fires converge, they will be managed as a single wildland fire.
- Human caused wildfires will be suppressed in every instance and will not be managed for resource benefits.
- Once a wildland fire has been managed for suppression objectives, it may never be managed for resource benefit objectives.
- The [Appropriate Management Response](#) (AMR) is any specific action suitable to meet Fire Management Unit (FMU) objectives. Typically, the AMR ranges across a spectrum of tactical

options (from monitoring to intensive management actions). The AMR is developed by using FMU strategies and objectives identified in the Fire Management Plan.

- The [Wildland Fire Situation Analysis](#) process is used to determine and document the suppression strategy from the full range of responses available for suppression operations. Suppression strategies are designed to meet the policy objectives of suppression. (see page 32 of the Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy for the suppression policy objectives.)
- Wildland fire use is the result of a natural event. The Land/Resource Management Plan, or the Fire Management Plan, will identify areas where the strategy of wildland fire use is suitable. The [Wildland Fire Implementation Plan](#) (WFIP) is the tool that examines the available response strategies to determine if a fire is being considered for wildland fire use.
- When a prescribed fire or a fire designated for wildland fire use is no longer achieving the intended resource management objectives and contingency or mitigation actions have failed, the fire will be declared a wildfire. Once a wildfire, it cannot be returned to a prescribed fire or wildland fire use status.

The rising costs of fire suppression emphasize the need for cost containment measures. Current cost containment policy is to minimize costs considering firefighter and public safety, benefits, and values to be protected, consistent with resource objectives. Agency administrator oversight and involvement during the decision-making process is critical for containing suppression costs. Long-duration fires where large numbers of resources are being committed need to be closely evaluated by National Interagency Cost Oversight Teams.

This plan is prepared under many [Fire and Aviation Management Authorities](#) that guide the development and implementation of this plan.

Other links to specific references, guidelines, policy, and directions:

- [The Healthy Forests Initiative and Healthy Forests Restoration Act Interim Field Guide](#)
- [Federal Fire & Aviation Operations Action Plan](#)
- [Accelerated Vegetation Treatment Strategy Region 6](#)
- [Wildland Fire Use Implementation Procedures Guide May 2005 rev. March/April 2006](#)
- [Interagency Prescribed Fire Planning and Implementation Procedures Reference Guide September 2006](#)
- [Protecting People and Sustaining Resources in Fire Adapted Ecosystems – A Cohesive Strategy 2006](#)
- [A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy Implementation Plan December 2006](#)

2.2 Land/Resource Management Planning (LMP)

The Fire Management Plan follows the goals and objectives identified in the [Land and Resource Management Plan](#) (LRMP). The land and resource management plan meets National Environmental Policy Act (NEPA) as well as other State and Federal Regulatory requirements.

The following documents provide additional policy, direction and guidance that affect the Umatilla National Forest's Fire Management Program.

- PACFISH—Refer to the Decision Notice/Decision Record, FONSI, Environmental Assessment—PACFISH Document, pg 1 (context slightly modified) Dated: February 1994 by the BLM and FS).
Refer to the following web site for complete details. [PACFISH-INFISH](#)
- OSHA Compliance Documents
[Thirtymile Fire OSHA Abatement Plan](#)
[Chief's Direction January 11, 2002 with Forest's response.](#)
[Chief's Direction April 16, 2002](#)
Forest Response to 4_16 Letter
Cramer Fire Citations ([part 1](#) and [part 2](#))
- Interagency, national and regional Forest Service, and local Umatilla National Forest Fire Management Direction

2.3 Partnerships

The current Umatilla National Forest Land Management direction was developed under National Forest Management Act (NFMA) direction, which included extensive coordination with local agencies and landowners. The public and interested parties scrutinized specific direction during the preparation of the Environmental Impact Statement that supported the LRMP.

Many of the implementation procedures in this Fire Management Plan are executed under Cooperative Agreements and Memorandums of Understanding (MOUs) executed with adjacent agencies and organizations.

Section 3- Fire Management Unit Characteristics

3.1 Area-wide Management Considerations

The Umatilla National Forest recognizes both fire use and fire protection as inherent parts of natural resource management. Management systems aim to provide sufficient fire suppression capabilities as well as support fire reintroduction efforts. The full range of fire suppression and fuels management practices are available for implementation on the Forest. Although the [Land and Resource Management Plan](#) (LMP) authorizes the development of Wilderness Management Plans that would allow the use of prescribed fire in wilderness areas, those plans have not been completed at this time. Therefore all ignitions in wilderness areas will be considered as suppression fires until those plans are completed.

The LMP provides broad goals for the wildfire response and fuels treatment programs. (See page 4-87 of Land and Resource Management Plan.) These forest goals reflect the goals and guiding principles of the [10 Year Comprehensive Strategy](#).

All fires will receive an appropriate management response. The Land and Resource Management Plan allows for the use of the full range of suppression response alternatives (Page 4-87, item 3 of the [LMP](#)) so long as they are executed in accordance with the LMP constraints. The forest has developed a [Special Area Management Plan](#) that deals with areas like wilderness, watersheds etc.

The LMP states “Levels and methods of fuel treatment will be guided by the protection and resource objectives of the management area.” The LMP also states “Prescribed fire will be utilized to meet management objectives and maintain fuel profiles in all ecosystems.” Goal Two of the 10-Year Comprehensive Strategy Implementation Plan states “Hazardous fuels are treated using appropriate tools to reduce risk of unplanned and unwanted wildland fire to communities and to the environment.”

The President’s [Healthy Forests Initiative](#), the 10-Year Comprehensive Strategy, the Healthy Forests Restoration Act and the National Fire Plan establish goals for reducing hazardous fuels. Reducing risk to firefighters, communities, municipal watersheds and restoring the health of public and tribal lands are the central themes of these initiatives. The safest, most effective wildland fire management strategy is predicated on an aggressive fuels reduction program using a variety of mitigation methods (including mechanical, biological, chemical, prescribed fire, etc). In fire-dependent ecosystems, the use of prescribed fire and wildland fire use, at ecologically appropriate intensities is an essential means of restoring forest health conditions. Mechanical hazard mitigation treatments may often be required before prescribed fire projects can be implemented within acceptable limits of social, economic, and ecological risk. Prescribed fires that aim to achieve resource benefits must be accompanied by supporting NEPA compliant plans. The [Accelerated Vegetation Treatment Strategy for Region 6](#) outlines priorities for hazardous fuels treatment projects. As Community Wildfire Protection Plans are completed by local groups, fuels treatment activities will be coordinated with adjacent landowners and partners to ensure that priority projects are addressed. Information on completed plans and plans in progress can be found at <http://oregon.gov/ODF/FIRE/FirePlans.shtml>

A variety of methods involving non-fire applications are available to reduce and/or manipulate unwanted organic biomass, including thinning, mulching, mastication, etc. Project environmental analyses establish the objectives, methods and mitigation measures applicable to specific projects.

The fire management goals and desired conditions of vegetation treatments depend on the potential threat to firefighter safety, communities, or other values at risk. The vegetation ecology and current and expected vegetation structures based on historical structures in plant community

types on the landscape also need to be considered. These structures are estimated in a number of ways including use of historical vegetation surveys, descriptions, aerial photos, maps etc. along with various vegetation development modeling tools. These modeling tools use information on vegetation growth, structure, and composition and the effects of various disturbances on development over time. Current and expected fire behavior can be modeled to estimate current fire hazard potential and the effects of active or passive vegetation management over time.

In general the following objectives apply across the Umatilla National Forest:

Reduce fuels and control vegetation in the understory of stands that have historically had natural occurring low intensity surface fires by using prescribed fire, mechanical treatment, and/or other tools and combinations.

Unwanted wildland fire is actively suppressed where necessary to protect life, investments and resources by using the full range of Appropriate Management Responses (control, contain, confine). Within the Wilderness suppression tactics will comply with minimum impact suppression tactics when ever possible.

Treat vegetation in high fire hazard areas within the wildland urban interface/intermix areas to reduce the risk from wildland fire.

Establish protocols and design management direction to allow for the use of wilderness and non-wilderness Wildland Fire Use (WFU) from natural ignitions in general forest.

The following fire management constraints apply across the forest:

Do not violate NAAQS (National Ambient Air Quality Standards) or [Oregon State Implementation Plan](#) requirements or [Washington State](#) requirements. Prescribed burning activities on the SE side of the Walla Walla District may be constrained by smoke considerations.

Ensure there are no unacceptable impacts to cultural resources or T&E species.

Ensure socio-political and economic impacts are considered in all program components, including wildland urban interface and wildland fire use.

Approval by the Forest Supervisor for the use of mechanized equipment such as chain saws and helicopters within wilderness areas will be done so on a case by case basis. Such approval will only be considered in situations where no practical alternative exists that would otherwise ensure firefighter safety. The Forest Supervisor has identified in the "[Direction for Fire Suppression in Special Areas](#)" certain mechanical activities that may take place based on specific staffing levels. However, these are only implemented when other practical alternatives are not available.

Consult with applicable state and federal agencies whenever undertaking any activity that involves removing water from fish bearing streams and lakes. For planned projects such as prescribed burning, this should be done prior to project execution. For wildfire suppression the consultation should be done as soon as practical, but should not interfere with ensuring firefighter safety.

Fire Regimes

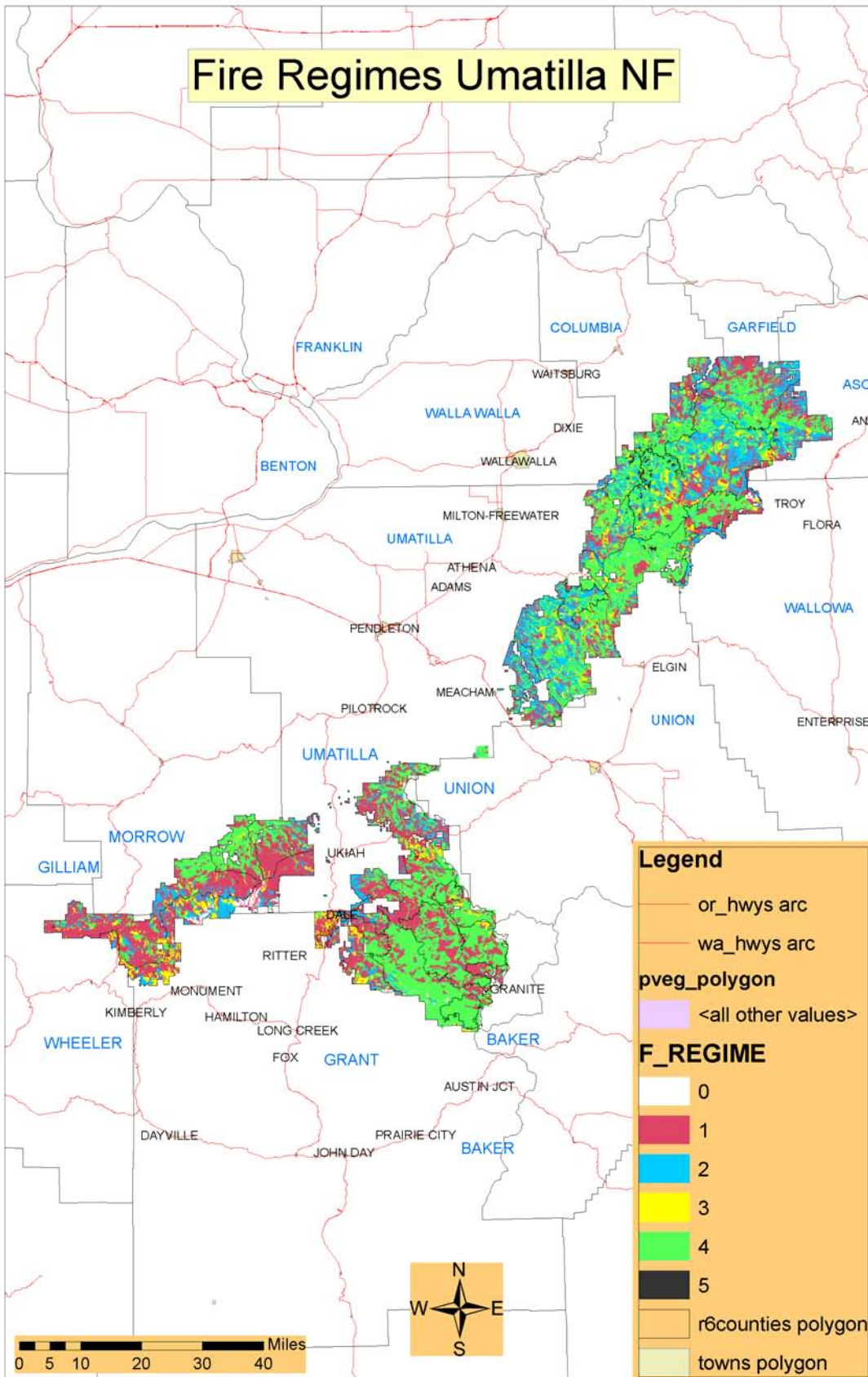
Historic fire regimes describe the historic fire conditions under which plant communities evolved. By definition these represent the structure and composition of vegetation in a fire environment in the absence of human interaction although it is possible that this assumption ignores a potentially dominant influence due to aboriginal burning ([Kay, 2007](#)). Five historical natural fire regime groups have been described in the [Cohesive Strategy](#) (Forest Service Management response to GAO Report GAO/RCED-99-65). They represent combinations of fire frequency and fire severity:

Fire Regime Group	Fire Return Frequency	Fire Severity
I	0-35 years	Low
II	0-35 years	High (stand replacement)
III	35-100+ years	Mixed
IV	35-100+ years	High (stand replacement)
V	>200 years	High (stand replacement)

Below are the Historic Fire Regime Groups for the Umatilla NF. They are based on potential natural vegetation, classified by former Forest Botanist, Karl Urban, and plant association groups (PAGs), compiled by Dave Powell, Forest Silviculturist ([Powell et. al. 2007](#)).

PAG	Fire Regime Group
Cold, Dry Grasslands	V
Cold, Dry Upland Forests	IV
Cold, Moist Grasslands	IV
Cold, Moist Shrublands	IV
Cold, Moist Upland Forests	IV
Cold, Very Moist Shrublands	V
Cold, Wet, Riparian Forest, High Soil Moisture	IV
Cold, Wet, Riparian Forest, Moderate Soil Moisture	IV
Cold, Wet, Riparian Herblands, High Soil Moisture	IV
Cool, Dry Upland Forests	III or IV
Cool, Moist Grasslands	II
Cool, Moist Upland Forests	III or IV
Cool, Very Moist Upland Forests	IV
Cool, Wet Upland Forests	IV
Hot, Dry Grasslands	II

Hot, Dry Riparian Forest, Low Soil Moisture	I
Hot, Dry Riparian Forest, Moderate Soil Moisture	I
Hot, Dry Riparian Herblands, Moderate Soil Moisture	III
Hot, Dry Riparian Shrublands, Moderate Soil Moisture	III
Hot, Dry Shrublands	II
Hot, Dry Upland Forests	I
Hot, Dry Woodlands	III
Hot, Moist Shrublands	III
Hot, Moist Upland Woodlands	III
Very Hot, Moist Shrublands	III
Warm, Dry Upland Forests	I
Warm, Moist Grasslands	II
Warm, Moist Shrublands	III
Warm, Moist Upland Forests	III
Warm, Wet Riparian Forest Low Soil Moisture	I
Warm, Wet Riparian Forest Moderate Soil Moisture	IV
Warm, Wet Riparian Herblands High Soil Moisture	IV
Warm, Wet Riparian Herblands Moderate Soil Moisture	IV
Warm, Wet Riparian Shrublands Low Soil Moisture	IV
Warm, Wet Riparian Shrublands Moderate Soil Moisture	IV
Talus, Lakes, Rock, Unvegetated	Null

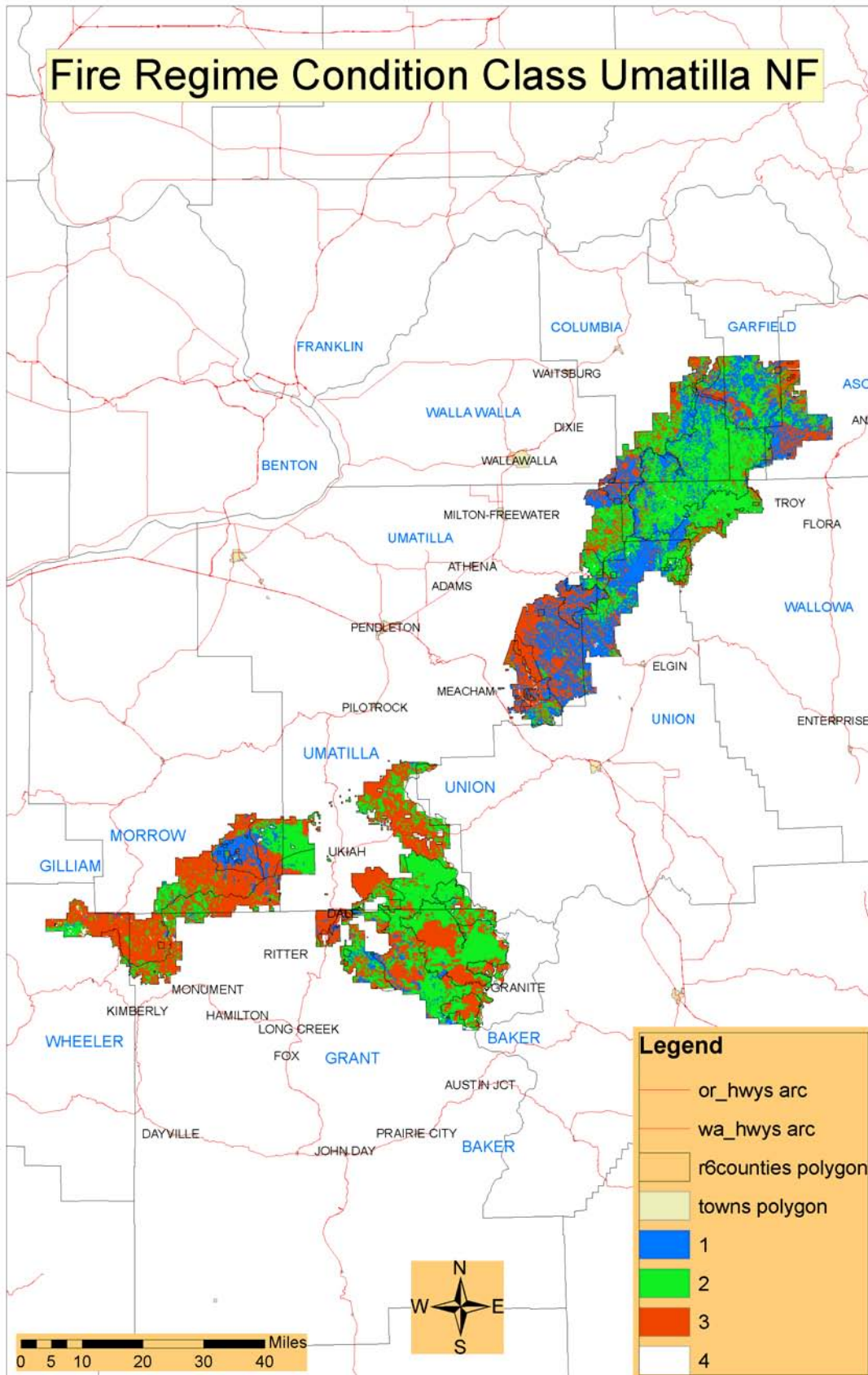


It is important to note that fire regimes are conceptual and do not actually occur as discrete areas on a landscape. Just like vegetation distribution, they are dynamic and continuous in their distributions. The concept that fire regimes are related to vegetation types is valid and serves to guide vegetation management considering the likelihood and magnitude of a potential fire disturbance event.

Some [fire regimes](#) have been altered by fire exclusion and land management practices. In the western United States, alteration of fire regimes by fire exclusion has been greatest in dry forests, primarily those dominated by ponderosa pine, Douglas-fir, or both (Graham and others, 2004). The scope and degree of fire regime alteration is still uncertain. Mixed severity regimes may have been more common and low severity regimes less common than originally estimated, prior to fire exclusion in dry forests of the Pacific Northwest ([Hessburg and others, 2007](#)). Some dry forest stands contain increased accumulations of fuels compared to fuel conditions prior to fire exclusion. Abundant surface and ladder fuels, and low canopy base heights may facilitate the development of high intensity crown fire during severe fire weather conditions in any forest stand.

Fire Regime Condition Class

The concept of fire regime condition class ([FRCC](#)) was developed to classify areas on a landscape for departures from historical rates of fire occurrence or other disturbance agents. Areas of departure may display vegetation conditions uncharacteristic of expected natural ecosystem conditions. There are three FRCC levels. Level 1 areas show little or no departure from the pre-suppression era and level 3 areas are highly departed from pre-suppression era conditions. FRCC was determined for the Blue Mountains province using a variety of tools and data sources. The process is described in the paper written by Bruce Countryman and entitled [Calculating Fire Regime Condition Class, Fire Frequency, and Fire Severity for the Blue Mountains Forest Plan Revision](#) last updated in July 2007. Analysis summaries are linked to both [Landfire](#) and Blue Mountains forest plan revision biophysical settings (potential vegetation groups). The map below provides a landscape level estimation of FRCC. It is recommended that FRCC be assessed at the project level using the [FRCC aid](#) developed for the Blue Mountains.



General Weather Considerations

The relief of the Blue Mountains creates several localized climatic affects. The diversity of landscapes between mountain ridges, rolling topography and deep, dissected canyons influences local climatic patterns. But, the major influence to the Umatilla NF's weather patterns is provided by the Cascade Mountains lying nearly 200 miles to the west. This mountain range forms a barrier against potential modifying effects of warm moist fronts out of the Pacific Ocean. As a result, the climate of the southern Blue Mountains (southern portion of the Umatilla National Forest) is labeled Temperate Continental – cool summer phase. Mean temperature is less than 72 degrees F., in the warmest month and 50 degrees F. for more than three months. Light precipitation, low relative humidity, rapid evaporation, abundant sunshine, and wide temperature and precipitation fluctuations are characteristics of this climate.

A break in the Cascade Mountains is provided by the Columbia River gorge. This topographic feature and the associated Columbia River provide an opportunity for marine climatic conditions to strongly influence the vegetation the northern Blue Mountains (and the northern portion of the Umatilla National Forest). Weather systems encounter a more abrupt increase in elevation as they pass over the northern portion of the Umatilla National Forest. This accounts for greater precipitation than the southern portion of the forest due to adiabatic lapse rates. This climate is labeled Temperate Oceanic and differs significantly from Temperate Continental climate in providing greater cloudiness, increased precipitation and higher relative humidity with less fluctuation in winter temperatures. The oceanic influence provides the environment for vegetation more similar to the western Cascades to occupy portions of the northern and northwestern Blue Mountains.

Two general factors that influence wind events associated with large fire growth have been described by incident meteorologists.

- 1) The local summer daytime circulation that develops and is most prominent ahead of a marine push or cold front:

Weather in the Ukiah area, on an average summer day, features winds from the south to southwest in the morning at ridge top level. These winds turn west and then northwest to north in the afternoon to early evening hours, likely due to valley circulation associated with wind moving up the Columbia River Gorge and then spilling southeastward into the Blue Mountain's valleys. The strength of this wind is usually tied to the pressure and temperature gradients between the west and east side of the Cascades, but likely also tied to north to south oriented pressure gradients between the Pendleton and John Day area or, possibly, between the Pendleton area and the Snake River valley of Idaho. The 2007 Otter Creek fire displayed a tendency to want to run SE up the slopes of the WNW to ESE oriented drainage that it was in from the afternoon to the evening hours as slope and valley circulations were enhanced by the NW to N late afternoon/evening wind.

- 2) Diurnal terrain driven down slope winds- often erroneously termed "Sundowners":

In the Blue Mountains terrain driven winds develop on average to higher than average temperature summer days. Generally, these terrain winds become stronger the hotter it is. These enhanced terrain driven winds are most prevalent on dry and hot summer days, often when a thermal trough/heat low is present/develops over the Columbia Basin. It is thought that, in the evening, as very dry air rapidly cools, significant down slope winds develop in some areas, likely due to differential cooling and heating effects between the evening shaded slopes of the Blue Mountains, and areas to the north where the sun sets later in the evening in the peak of the summer. Fires in this area in the past, such as the 2007 Monument Fire, have exhibited significant fire behavior in the evening due to this effect- locally mis-termed "sundowner" winds. It should be noted that this "sundowner" effect could also be due to column collapse of a plume

dominated fire caused by cool air entrainment of air draining out of the mountains into the column in the evening hours.

When a weak thermal trough set up over the Otter Creek fire and drifted to the north in the evening, a definitive down slope wind (though only 2-4mph at eye level) was observed by Field Observers, which lent support to this theory.

Many veteran IMETs in the Pacific Northwest have mentioned that critical fire weather conditions can happen in the evening and overnight hours east of the Cascades when a thermal trough is moving eastward and over the area or is being displaced farther eastward due to the arrival of some new weather feature from the west. Dry air will often persist late into the evening at ridge top level along with an increase in winds. This keeps fire growth going into the night under receptive fuel conditions.

The Temperate Oceanic climate has a higher percentage of cloudy days, than the Temperate Continental climate. This influences difference in vegetation found in the northern portion of the Umatilla National Forest as compared to that found in the southern portion of the Forest. The oceanic climate promotes the grasslands and rhizomatous shrublands characteristic of the foothills, slopes and ridge tops in the northern portion of the Umatilla National Forest, adjacent to the Palouse. The continental climate promotes sagebrush and juniper in the lower elevation sites of the south portion of the Umatilla National Forest, similar to the Great Basin to the south.

The majority of annual precipitation falls as snow during winter. Convective storms resulting either from masses of cool air crossing the Cascades or moisture laden air masses from the "Monsoon" activity in the Southwest characterize the weather during the summer and early autumn. The hot, dry surface air rises and mixes with moist upper air masses to provide lightning storms. These events provide a cyclic, annual abundance of lightning fires. The fires historically burned extensively and influenced the development and composition of vegetation on the Umatilla National Forest.

Topography and Suppression Strategies

The Umatilla National Forest topography changes considerably from the Heppner Ranger District to the Pomeroy Ranger District.

On the Heppner Ranger District the ground is relatively flat (FMU 7), except for the north slope on the northern edge of the district and the canyons walls to the south along the North Fork John Day River (FMU 9). The steeper canyon walls and north slopes require helicopter support and IA or hand crews hiking to the fires. Smoke jumpers are generally only used in support for larger fires. The single engine air tanker can be effective if used early when the fires are small. Attack by engines is effective on a majority of the district. Flat rolling terrain makes access by engine possible. Water sources exist but local knowledge is important as far a location goes and the amount of water varies as the season progresses. Some sites large enough for dipping can be found but they are not plentiful. This adds time to dip sites and reduces effectiveness.

The North Fork John Day RD has topography and suppression capability similar to Heppner on the western route (FMU 8). Much of the district is accessible by engine except for the wilderness areas (FMU 5). Here hand crews must walk to the fire or helitack or rappel crews are used. When these resources are not available smoke jumpers are often used. Travel times to part of the district are long due to distance and access issues. The IA forces currently work out of two locations, Ukiah and Frazier Rappel base east of Ukiah about 20 miles (FMU 8). The North Fork of the John Day wilderness makes up 99,047 acres of forested lands. The portion on the Umatilla is broken into three units. The main body sits between two smaller units, the Tower unit to the north and the Greenhorn unit to the south.

The Walla Walla RD (FMU 4, 2) except for 58,000 acres in Wenaha Tucannon Wilderness (FMU 1) which is located south of Wenaha Tucannon River and east of Sawtooth Ridge has steeper ground with much of the transportation system located along the ridge tops. This provides excellent access to fires on the ridge tops but also increases safety concerns for fires that start at mid or lower slopes and then rapidly run to the ridges. In Meacham Canyon, the Union Pacific Railroad has been responsible for numerous large fires in recent years. Access is limited to a road in the bottom of the canyon that parallels the track. Side slopes are very steep and IA from the bottom is difficult once the fire gets on the slope. Access times are also delayed.

Past experience with placing control lines mid-slope on steeply dissected terrain has met with limited success and exposed firefighters to increased danger from fire below. Control lines placed on ridge tops, valley bottoms, or utilizing natural barriers, and burning out control lines ahead of the fire (indirect line construction) is the safest strategy during periods of active burning.

There are numerous other terrain and political features that affect suppression. The Umatilla Indian Reservation lies adjacent to the Walla Walla Ranger District western boundary. Access is limited in this area. The Mill Creek Watershed lies to the east of Walla Walla, with heavily dissected topography and no roads except on the boundaries. The roadless North Fork of the Umatilla Wilderness is made up of steep side slopes. The Tollgate wildland urban interface area (within FMU 4) is located upslope to the north of the wilderness. Engines are the primary source of IA forces along with a small hand crew. Fires in remote areas and in Meacham Canyon are often attacked by rappellers, helitack, or smoke jumpers. Single engine air tankers (SEAT) have been effective here on smaller fires and in support of larger fires. Access from Pendleton is quick and a SEAT can work lower in the canyon than large air tankers. To reduce travel times the district supports three guard stations. One is located on the south end of the district north of I 84 (Summit). The main work center is located at Tollgate, and a third guard station is located in the eastern part of the district at Long Meadows. Additional support can come from the Walla Walla RD office in Walla Walla. The northeast side of the district bounds the Wenaha Tucannon Wilderness.

The Pomeroy RD (FMU 3) is the most steeply dissected district. The Wenaha Tucannon (FMU 1) Wilderness makes up a significant part of the district. Here terrain makes access for fire suppression extremely difficult. Helitack, rappellers or smoke jumpers are often used. The district also has (2) five person hand crews that can access fires via the trail system. Access is generally limited to ridge tops and a few roads up drainage bottoms. Fires that start low on the slope have a good chance of spreading up slope prior to IA.

The greatest chance of success for constructing control lines that will halt a fires progress may be to construct control lines that follow ridge tops and base of slope. Past experience with control lines placed mid-slope has had limited success in accomplishing control objectives. Lookouts are often difficult to establish, and vegetation may make it difficult to see the fire. Fire growth may increase exponentially with a slight increase in fuel temperature, lower relative humidity, change in wind speed or direction, and increasing slope, even with the fuel model remaining constant.

Suppression resources are stationed in Pomeroy. Travel times to incidents are often in excess of an hour to most locations due to the road system and steep terrain

The use of aerial fire fighting resources is common on the forest.

Generally the fire workload is heavier on the south end of the forest so the helicopter is located there.

A single engine air tanker base (SEAT) was established to support the Forest and BLM Lands in 2001. SEATs flying from this base can reach most of the Umatilla Forest with the exception of the most northeast portion of Pomeroy district (FMU 3) and the westernmost portion of Heppner district (FMU 7). The SEAT is funded at MEL – 10 and higher. Vale BLM helps support the cost to

offset the protection costs for the Umatilla to protect BLM lands in Umatilla and Morrow counties. The SEAT has an effective range of about 60 miles. It has been used on longer missions where a single load may be helpful. It is most effective early in initial attack when fires are small. It is less effective on fire in heavy timber because the timber canopy hinders retardant penetration. The SEAT is very effective in fine fuels such as grass and brush and especially when used in tandem with another SEAT.

A helibase is located near Frazier Campground on the North Fork John Day RD. It is currently funded outside of NFMAS by the Region and is staffed by 16 folks with 9 people on duty each day. It is also capable of IA by deploying either rappellers or helitack to fires. Bucket work and sling capability make it a versatile tool for suppression. The ship and crew are mobile and can work on any district with some lead time.

Preplanned dispatch blocks have been developed over the years that contain the number and type of resources needed to catch most fires. When a fire occurs dispatch activates the card and notifies the district Duty Officer in case deviations from resources listed on the cards are needed. The districts are responsible for managing fires.

LMP direction is varied depending on management area. Refer to [Umatilla National Forest Land and Resource Management Plan Wildfire Suppression Direction](#) and [Direction For Fire Suppression in Special Areas](#) for more information to guide appropriate management response decisions.

The forest has numerous [agreements](#) in place that help to supplement our resources. A list of this is found in other parts of the FMP.

We also protect BLM lands for the Vale BLM in Umatilla and Morrow counties and Lands in Grant County for the Prineville BLM. In Washington we protect about 600 acres for the Spokane BLM.

3.2 Fire Management Unit - Specific Descriptions

The physical and biotic characteristics of the forest are quite variable and are discussed in the Affected Environment Section (pages S-4 and 5) of the Final Environmental Impact Statement that supports the Land and Resource Management Plan.

Each FMU was assigned a NFDRS Fuel Model, slope class, and representative weather station. These conditions represent the general fuels, weather and topography conditions within the FMU.

Most FMUs have some private lands within or immediately adjacent to them, which affect the fire management program.

The three wilderness areas on the Umatilla NF were designated after the 1977 Clean Air Act enactment and therefore are not considered Class I air sheds. This aspect of compliance with the Clean Air Act is not a constraining consideration in any of the FMUs.

The communities of Pendleton and La Grande are designated Smoke Sensitive Receptor Areas (SSRA) under the [State of Oregon Smoke Management Implementation Plan](#), which may affect the scheduling of prescribed fire activities on some FMUs. The nearest Designated Area for smoke regulation in Washington is Spokane. Refer to the [Washington State DNR Smoke Management Plan](#) for more information.

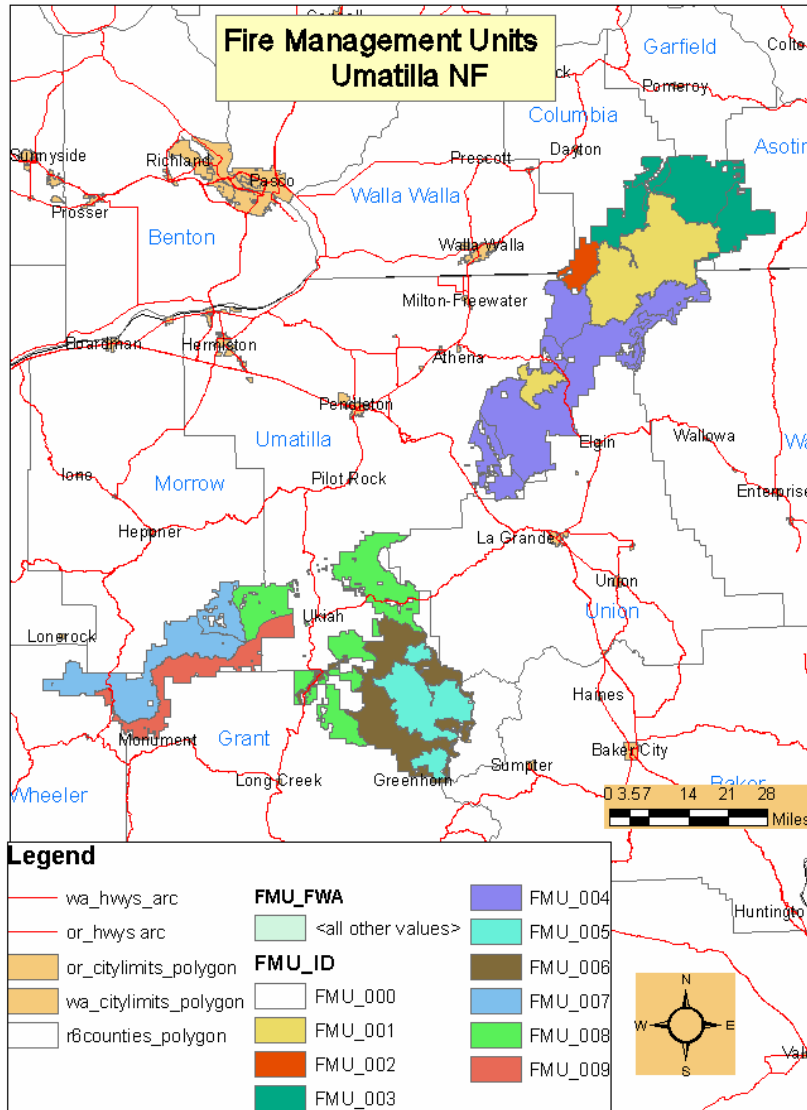
There are numerous cultural and historic sites as well as real property investments such as fences, bridges, radio towers, and etc. spread across the various FMUs.

Though the Land and Resource Management Plan states “There are no known federally-listed threatened or endangered plant species on the Forest (page 4-28)” several sensitive plants have been identified. These species must receive special consideration when planning prescribed fire activities.

Although the Final EIS supporting the Forest LMP states there “No threatened or endangered species that are known to be permanent residents” of the forest, several threatened wildlife species have been identified since that plan was approved. Many of these have recovery plans in some stage of development that will affect most of the FMUs. A key component of each of these recovery plans is consultation prior to taking any action that would affect the ecological habitat.

FMU Delineation

The Umatilla National Forest is divided into nine Fire Management Units (FMU). An FMU is a land management area definable by objectives, management constraints, topographic features, access, values to be protected, political boundaries, fuel types, major fire regime groups, etc. that set it apart from the characteristics of an adjacent FMU. The FMU may have dominant management objectives and pre-selected strategies assigned to accomplish these objectives.



FMU	Name	Acres
1	N_Wild	197,009
2	Mill_Crk	24,496
3	General_WA	183,335
4	General_WW	324,212
5	S_Wild	107,269
6	FishHab	148,816
7	Heppner	148,171
8	NFJD	188,287
9	NFJD_Break	83,078

The vegetation on the forest is a mosaic of open grassy slopes and meadows; stringers of open grown ponderosa pine; thickets of lodgepole pine; and dense stands of mixed conifers (Douglas-fir, western larch, Englemann spruce and true firs) that reflect variations in elevation and aspect. Most of the forested areas have received some level of timber harvest activity over the past 50 years that have altered the ecological condition of most areas. In addition there is heavy mortality in the true fir stands due to insect activity. Much of the North Fork John Day Wilderness was burned in the late 1990's resulting in large areas of dense lodgepole pine reproduction growing through a heavy loading of dead material on the ground.

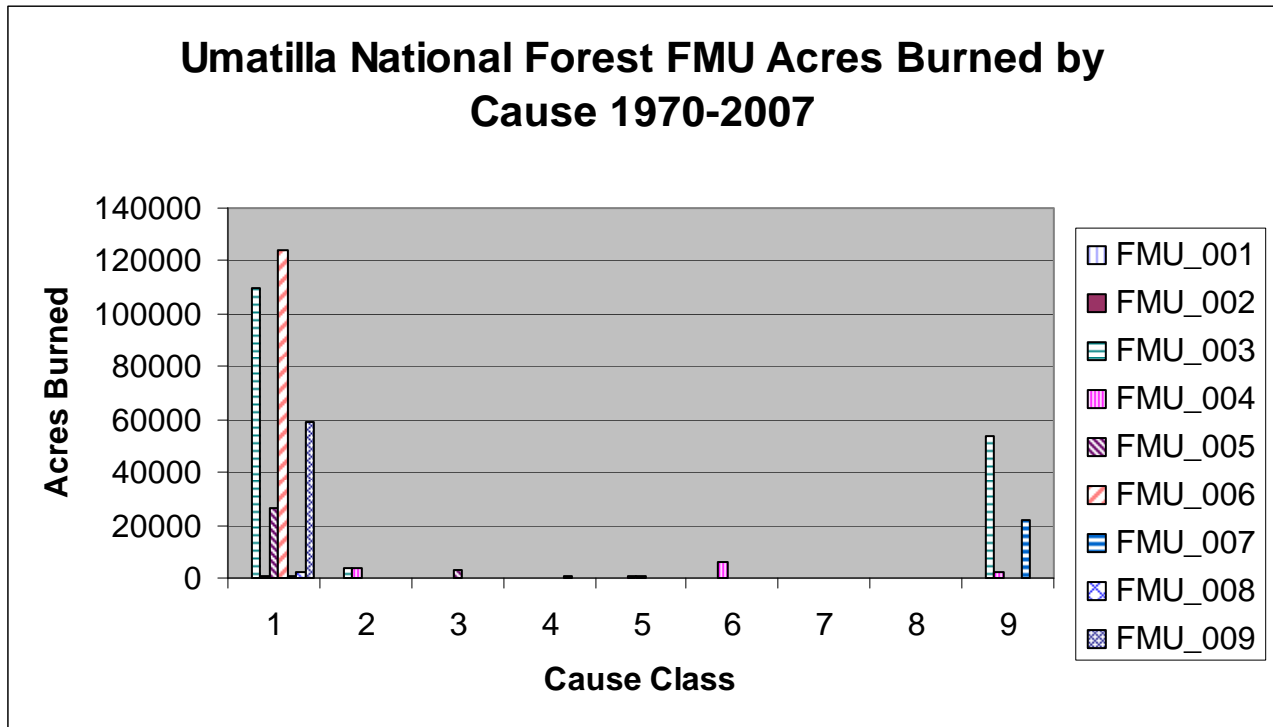
The [Blue Mountains](#) have a significant fire history. Many of the current stands can trace their origin to past fires. Mean fire return intervals vary significantly across the forest, although they generally increase in length from south to north and with increasing elevation. Past fire protection and/or harvest practices may have significantly changed the stand condition class.

Link to [Emily Heyerdahl Fire History Paper](#) for additional fire history details.

Also see "[Fire History of Pseudotsuga menziesii and Abies grandis Stands in the Blue Mountains of Oregon and Washington](#)", Maruoka, 1994.

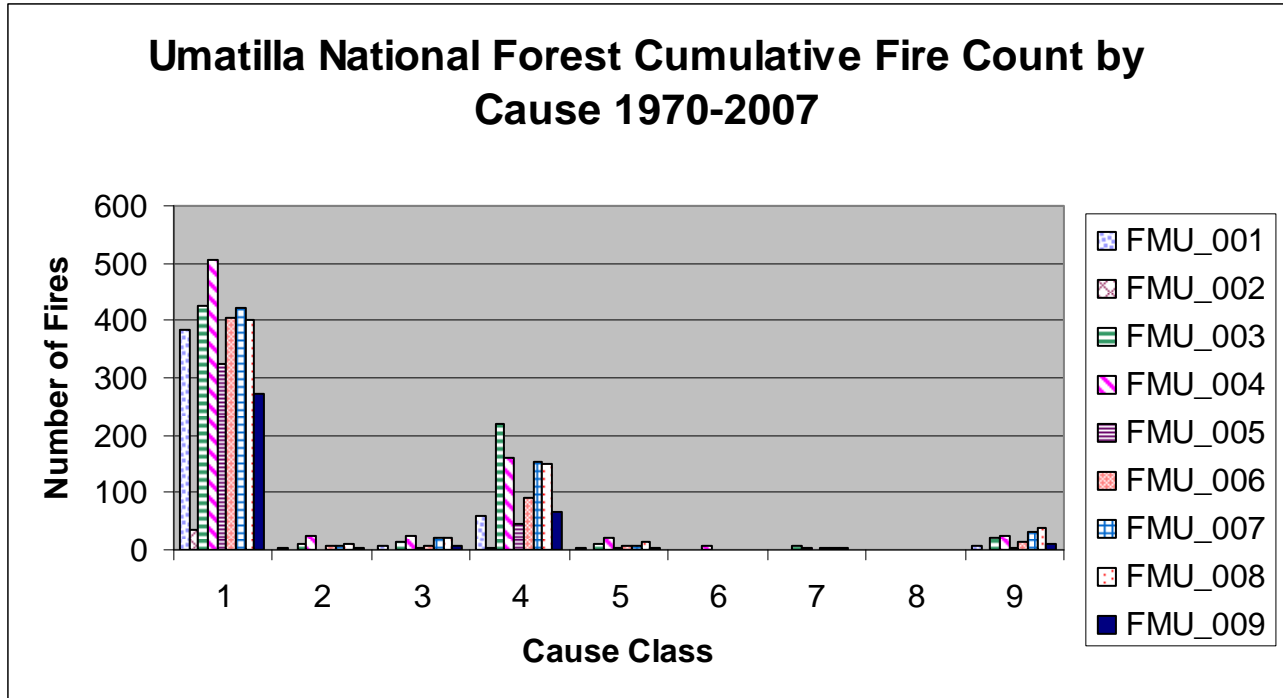
All of the FMUs on the Forest have experienced at least some large fires in the last 100 years or so. Most significant have been the large fires in FMUs 3, 5, 6 and 9. However, the potential for large fires occurs across the Forest. A century of habitation has resulted in several missed fire return intervals of 20-25 years in lower elevation Fire Regime 1 areas due to aggressive fire suppression and past forest management practices. Extensive grazing at the turn of the century also reduced fine fuels and this had the effect of reducing the extent of fires that occurred. The extent of aboriginal burning is not known but, accounts from Oregon Trail Journals suggest it was extensive.

FMU Fire Summary 1970 – 2007



Cause Classes are: 1- Lightning, 2- Equipment Use, 3- Smoking, 4- Campfire, 5- Debris burning, 6- Railroad, 7- Arson, 8- Children, 9- Miscellaneous.

Lightning is the leading cause of fires and accounts for the most acres burned from 1970 thru 2007. The next graph shows the number of ignitions by cause.



See the table below for a summary of the fire occurrence data from 1970 thru 2007

FMU	Total Ignitions	Total Acres Burned	Lightning Ignitions	Lightning Acres	Human Ignitions	Human-Caused Acres
1	461	273	383	138	78	136
2	42	20	36	19	6	1
3	709	167568	426	109694	283	57874
4	773	13019	507	664	266	12356
5	379	30312	324	26481	55	3831
6	539	124758	406	124455	133	303
7	646	23458	421	459	225	22999
8	636	2711	401	2133	235	578
9	362	59296	272	58796	90	500

Overall about 421,415 acres (30% of the total acres) on the Umatilla National Forest have burned in 4,547 wildfire incidents from 1970 to 2007.

To compare the FMUs they were ranked in terms of FMU area ignition density (fires by cause class scaled by FMU acres). The following three tables show how many acres are represented by each ignition by cause class from 1970 thru 2007. The less acreage represented by each ignition the greater the ignition density. FMUs were ranked from highest ignition density equal to 1 to lowest ignition density equal to 9.

FMU_ID	Acres per lightning ignition	Rank
FMU_001	514	7
FMU_002	680	9
FMU_003	430	5
FMU_004	639	8
FMU_005	331	2
FMU_006	367	4
FMU_007	352	3
FMU_008	469	6
FMU_009	305	1

FMU_ID	Acres per human-caused ignition	Rank
FMU_001	2525	8
FMU_002	4082	9
FMU_003	648	1
FMU_004	1220	6
FMU_005	1949	7
FMU_006	1119	5
FMU_007	658	2
FMU_008	801	3
FMU_009	923	4

FMU_ID	Acres per ignition	Rank
FMU_001	427	8
FMU_002	583	9
FMU_003	259	3
FMU_004	419	7
FMU_005	283	5
FMU_006	276	4
FMU_007	229	1
FMU_008	296	6
FMU_009	230	2

FMU 1 – N Wild

FMU 1 is comprised of the Wenaha Tucannon and the North Fork Umatilla Wildernesses. This Fire Management Unit is characterized by a mosaic of grassy slopes and upland conifer forest. These areas are comprised of scattered mosaics throughout the forest and are predominately of ponderosa pine, Douglas-fir, western larch, lodgepole pine, and grand fir with other alpine species present as well as grasses and forbs. FMU 1 is best described as a National Fire Danger Rating System (NFDRS) fuel model G, NFDRS slope class 3, and is represented by the Alder Ridge Remote Automated Weather Station (RAWS) #453803. Vegetation of the upland conifer stands varies by site due to differing soil types, elevation and aspect, disturbance factors, seed sources and soil moisture regimes. While fuel loadings also vary they can best be described as fuel model 9 in most open

locations, although fire exclusion has created conditions represented best by fuel model 10 in areas where pine/true fir mixes dominate the landscape.

The area is relatively devoid of road systems throughout the majority of the FMU. Terrain is generally steep, broken ground consisting of several major ridges running north to south intersected by sub drainages and canyons leading to the breaks of major drainages (Wenaha River, Tucannon River, Umatilla River).

FMU 1 ranks 8th among the FMUs for total acres burned (273 acres from 1970 to 2007). It ranks 7th in lightning caused ignitions and 8th in human caused ignitions in terms of ignition density. Overall FMU 1 ranks 8th considering total ignitions.

[LMP direction](#) for Wilderness (B1)

Fire will be considered an inherent part of the general wilderness ecosystem. All naturally occurring ignitions within wilderness are prescribed fire until declared wildfire. (LMP direction)

The range of appropriate management responses includes suppression, surveillance, confinement, containment, or control depending on fire location and burning conditions.

Low impact suppression measures will be applied. Some forms of mechanized equipment may be used if the result is to lessen the long-term physical and social impact on wilderness areas from suppression actions.

Prescribed fires may be used as a tool to manage ecosystems within the wilderness in accordance with management plans for each wilderness (FSM 2324).

There are also a couple of Research Natural Areas (management area D2) and Wild and Scenic River (Wenaha River management area A7) within the Wilderness

FMU 2 – Mill Crk

FMU 2 covers 24,496 acres of National Forest land on the Walla Walla Ranger District. The primary feature of this FMU is the Mill Creek watershed (management area F2) which is a municipal water supply to the city of Walla Walla. This is a high value resource covering 21,740 acres of which 19,870 acres are National Forest. This Fire Management Unit is characterized by a mosaic of grassy slopes and upland conifer forest. These areas are comprised of scattered mosaics throughout the forest and are predominately of ponderosa pine, Douglas-fir, western larch, lodgepole pine, and grand fir with other alpine species present as well as grasses and forbs. FMU 2 is best described as a National Fire Danger Rating System (NFDRS) fuel model G, NFDRS slope class 3, and is represented by the Alder Ridge Remote Automated Weather Station (RAWS) #453803.

Terrain is generally steep and dissected with a road at the top along the east side and foot trails in the interior. Access to the watershed is restricted and by permit only. Refer to [Direction For Fire Suppression in Special Areas](#) for more information.

FMU 2 ranks 9th among the FMUs for total acres burned (20 acres from 1970 to 2007). It ranks 9th in lightning caused ignitions and 9th in human caused ignitions in terms of ignition density. Overall FMU 2 ranks 9th considering total ignitions.

LMP direction is varied depending on management area. Included management area categories are A4, A9, C1, C3, C5, D2, and F2. Refer to [Umatilla National Forest Land and Resource Management Plan Wildfire Suppression Direction](#) for more information to guide appropriate management response decisions.

FMU 3 - General WA

This Fire Management Unit includes approximately 183,335 acres of General Forest comprised of a mosaic of grassy slopes and upland conifer species. FMU 3 is best described as a National Fire Danger Rating System (NFDRS) fuel model H, NFDRS slope class 3, and is represented by the Alder Remote Automated Weather Station (RAWS) #453803. This FMU includes general forest lands in Washington including some of the Walla Walla Ranger District and the Pomeroy Ranger District. FMU 3 has high investment/resource values to protect such as:

- Threatened and endangered species
- Summer homes/residences
- Improved recreation sites
- Administrative sites
- Power lines
- Merchantable timber

FMU 3 forested areas are scattered mosaics of ponderosa pine, Douglas-fir, western larch, lodgepole pine, and grand fir with other alpine species present as well as grasses and forbs. Vegetation of the upland conifer stands varies by site due to differing soil types, disturbance factors, seed sources and soil moisture regimes. While fuel loadings also vary they can best be described as fuel model 9 in most open locations, although fire exclusion has created fuel model 10 in areas where pine/true fir mixes dominate the landscape. Wildland-urban interface/intermix adds to the complexity of controlling ignitions in small portions of the FMU in the northwest corner along the Tucannon River corridor.

In 2005 the School Fire burned 52,000 acres (27,000 acres National Forest and 25,000 private acres). The fire started near the Tucannon campground and burned to the northeast, eventually crossing the Wooten Wildlife Area and nearly reaching Peola. In 2006 the Columbia Complex burned over 109,000 acres (over 47,000 acres of National Forest and over 61,000 acres on private land). These fires changed the fuel profile on much of this FMU, and this will continue to change over the next few decades as some dead trees are removed and others fall as they decay.

FMU 3 ranks 1st among the FMUs for total acres burned (167,568 acres from 1970 to 2007). It ranks 5th in lightning caused ignitions and 1st in human caused ignitions in terms of ignition density. Overall FMU 3 ranks 3rd considering total ignitions.

Road systems are well developed on the Pomeroy R.D although there are areas adjacent to the Wilderness areas that are not roaded. Terrain is generally steep, broken ground consisting of several major ridges running north to south intersected by sub drainages and canyons leading to the breaks of major drainages (Tucannon River, Asotin Creek, and Lick Creek).

Boundaries are shared with Washington State DNR, Washington Department of Fish and Wildlife, private, and adjoining counties.

LMP direction is varied depending on management area. Included management area categories are A1, A2, A3, A4, A6, A9, A10, C1, C3, C3A, C4, C5, C8, and E2. Refer to [Umatilla National Forest Land and Resource Management Plan Wildfire Suppression Direction](#) for more information to guide appropriate management response decisions.

FMU 4 - General WW

FMU 4 is best described as a National Fire Danger Rating System (NFDRS) fuel model H, NFDRS slope class 3, and is represented by the Alder Remote Automated Weather Station (RAWS) #453803.

Fuels at higher elevations and upper north slopes are typically sub-alpine fir and spruce. A large fire burned across much of the district prior to 1900. The resulting stand is even aged, dense and frequently affected by insects and disease.

Mid and lower slope plant communities are to a large degree defined by moisture regimes, which are affected by aspect, elevation and soil depth. The lower elevation riparian areas give way to grass openings on the south slopes. Mixed conifers occupy the less exposed and moister north slopes. Ridge tops are densely forested. Grass meadows occupy areas with shallow soils.

Most fires are small but the potential for large fires is evident in the 1900 USGS map. On the Walla Walla Ranger District a large fire burned from the foothills near Weston, to the east near the Grande Ronde River. This fire would have to have been over 50,000 acres. No large fires have occurred in this FMU since that time with the exception of the Balloon Tree Fire in 1988 which burned over 200 acres and was caused by logging equipment. Fires originating from operations of the Union Pacific Railroad in Meacham Canyon have been a problem. The largest of these (Mile Post 244) burned over 4,000 acres of Forest and private lands. The Mile Post 248 fire burned about 1,000 acres. Several others fires have burned but were contained a few hundred acres or less. Recent cooperative efforts headed up by the Oregon Department of Forestry seem to be working. These have included increase suppression capability in the Canyon by the railroad and in fuels reduction. The right of way is private land and therefore does not fall under the control of the Forest.

FMU 4 ranks 6th among the FMUs for total acres burned (13,019 acres from 1970 to 2007). It ranks 8th in lightning caused ignitions and 6th in human caused ignitions in terms of ignition density. Overall FMU 4 ranks 7th considering total ignitions.

The FMU has a ridge top road system and is incised by canyons whose ridges rise to as much as 5,000 feet above the rivers and valley floor. The major canyons that define the FMU are the Wenaha River Canyon, Grande Ronde River Canyon, Meacham Creek Railroad Canyon, and the Walla Walla River Canyon. A significant portion of the FMU is inventoried roadless area. Access to fires is often difficult due to a limited road system.

Features that characterize this FMU include a Wildland–Urban Interface area at Tollgate including several permitted summer homes. The Union Pacific Railroad runs through Meacham Canyon and is the mail route from Portland, OR to Chicago, IL. The Grande Ronde River Scenic Area runs along a portion of the eastern side of the FMU. Forest recreational improvements, guard stations, lookout towers and radio and cell phone towers are also present.

LMP direction is varied depending on management area. Included management area categories are A1, A2, A3, A4, A5, A7, A8, A9, C1, C4, C5, C8, F3, F4, and E2. Refer to [Umatilla National Forest Land and Resource Management Plan Wildfire Suppression Direction](#) for more information to guide appropriate management response decisions.

FMU 5 - S Wild

FMU 5 is best described as a National Fire Danger Rating System (NFDRS) fuel model G, NFDRS slope class 2, and is represented by the Case Remote Automated Weather Station (RAWS) #352329. The North Fork John Day River Wilderness Area forms this FMU. The North Fork John Day Wild and Scenic River Corridor cuts through the heart of the wilderness.

The vegetation in this FMU ranges from open grassland and ponderosa pine and Douglas-fir/grand-fir plant communities in the lower elevations up to 5,000 feet elevation depending on aspect and slope position. At the higher elevations mixed conifer stands of sub-alpine fir, western larch, grand fir, Engleman spruce and lodgepole pine with some interspersed meadows are typical.

Spruce budworm and bark beetle outbreaks and disease have modified stand structure and species composition. Deterioration of the stands has significantly increased surface fuel loadings across the FMU. Natural regeneration on these sites has increased ladder fuels as well.

High flammability, the presence of ladder fuels, and the excessive accumulations of standing dead and dead and down fuels create more intense fire behavior, causing an increase in torching, intense crowning and long range spotting.

Topography ranges from very steep terrain in the North Fork John Day River canyon to relatively gentle terrain elsewhere

Since this is wilderness access road access is very limited with only one road that comes into the area from the north off of the 52 road.

This FMU is surrounded entirely by FMU 6 and constitutes the headwaters of the some of highest quality salmonid habitat in Northeast Oregon.

A number of large fires burned in this area in the late 1800s. More recently the Dixon Bar Fire in 1979 burned about 3,000 acres. In 1986 the Crane Creek fire burned 5,800 acres. In 1987 the Ryder Creek fire burned almost 15,000 acres on both sides of the North Fork John Day River. In 2007 the Trout Meadows fire burned 3,890 acres

FMU 5 ranks 4th among the FMUs for total acres burned (30,312 acres from 1970 to 2007). It ranks 2nd in lightning caused ignitions and 7th in human caused ignitions in terms of ignition density. Overall FMU 5 ranks 5th considering total ignitions.

See FMU 1 description for Wilderness management area (B1) and Wild and Scenic River (A7) direction information.

FMU 6 – FishHab

FMU 6 is best described as a National Fire Danger Rating System (NFDRS) fuel model G, NFDRS slope class 2, and is represented by the Case Remote Automated Weather Station (RAWS) #352329. FMU 6 is entirely within the [C7](#) and A7 management areas.

This FMU generally lays upslope from the ponderosa pine plant communities. Although ponderosa pine is present, primarily on the southerly aspects, lodgepole pine is found at the higher elevations and on the northerly aspects. Sub-alpine fir, western larch, and grand fir are also abundant covering a vast area of this FMU in the mixed conifer stands.

Spruce budworm and bark beetle outbreaks and disease have modified stand structure and species composition. Deterioration of the stands has significantly increased surface fuel loadings across the FMU. Natural regeneration on these sites has increased ladder fuels as well.

High flammability, the presence of ladder fuels, and the excessive accumulations of standing dead and dead and down fuels create more intense fire behavior, causing an increase in torching, intense crowning and long range spotting.

Many large fires have burned across FMU 6 and 5. In 1996 three fires (Tower, Summit and Bull) burned over 92,000 acres of Forest Service and 4,600 of other ownership. In the late 1800s and early 1900s many large fires also occurred. A large fire that occurred in 1893 is displayed on the USGS 1900 map. This was a large fire of approximately 30,000 acres. In 1994 the Boundary Fire (just north of where the Tower Fire burned) spread from the Umatilla to the Wallowa-Whitman

National Forest. A majority of this fire burned on the W-W. In 1986 a complex of fires burned over 6,700 acres including Lost Lake 3,200 acres, Jump Off Joe 960 acres, Ten Creek 850 acres, South Fork 340 acres, and Junkens 380 acres, with a few other fires in the 100 to 200 acre range. In 2006 the Sharps Ridge fire burned 5,395 acres. In 2007 the Otter Creek fire burned 3,039 acres.

FMU 6 ranks 2nd among the FMUs for total acres burned (124,758 acres from 1970 to 2007). It ranks 4th in lightning caused ignitions and 5th in human caused ignitions in terms of ignition density. Overall FMU 6 ranks 4th considering total ignitions.

The Historical Fremont Power House and associated buildings, and a wooden historical water transfer pipe running from Olive Lake to the Fremont Power House are located in the SE portion of the FMU. Recreational developments, guard stations and lookout towers are also present throughout. Summer homes are located within the FMU to the north of the river and on the eastern edge of the Vinegar Hill Scenic area (Greenhorn area). The town of Granite is located 10 miles east of the Fremont Power House just on the outside of the FMU on the Umatilla and Wallowa Whitman National Forests boundary.

Long-term strategy for this FMU is to reduce the high concentrations of fuel with management ignited prescribed fire and Wildland Fire Use fires within scenic and roadless areas. Fuels manipulation by mechanical means followed by prescribed fire will be utilized outside the above-mentioned areas. Until such time that a Fire Use Plan is in place, available suppression strategies will be utilized.

FMU 7 – Heppner

FMU 7 is best described as a National Fire Danger Rating System (NFDRS) fuel model C, NFDRS slope class 2, and is represented by the Tupper Remote Automated Weather Station (RAWS) #351202. FMU 7 is represented by the moister plant association groups (PAG). Moist Douglas-fir and grand fir groups make up the majority of the FMU.

Topography in FMU 7 tends to have relatively steep slopes on the north aspects with drainages aligned north and south. To the north, slopes remain very steep until the forest blends into the grasslands on the lower elevations. To the south, slopes will flatten and blend into the FMU 9 drier PAGs. The Wheeler point fire started on State protected land in 1996 and burned close to 22,000 acres, of which over 8,000 actually burned on the western portion of the District. This fire made several north-south runs as the smoke column built during the day and collapsed in the evening. Down slope runs were significant until the fire reached a transition to the sparse fuels located south of the forest on private lands. Numerous structures were lost during this fire. An evacuation was ordered for the town of Spray but never occurred.

Fuels tend to dry out slower through the year on the higher elevation north slopes in this FMU. Fuel loadings tend to be higher than FMU 9 based on different vegetation components. Fuel profiles have changed considerably due to fire suppression, logging, grazing and insect infestation episodes. Several landscape burns occurred in the mid 1980's through the 1990's lowering the fine fuel loading and thinning the understory. These areas are scheduled to be burned periodically allowing fire to play a role on the landscape.

FMU 7 ranks 5th among the FMUs for total acres burned (23,458 acres from 1970 to 2007). It ranks 3rd in lightning caused ignitions and 2nd in human caused ignitions in terms of ignition density. For combined ignitions FMU 7 ranks 1st although 7 and 9 are essentially the same.

Road access is generally good except for some areas in the north around Madison Butte, Bald Mountain, and Black Mountain.

FMU 7 includes two communities at risk as recognized by the Federal Register: Blake's addition, and Penland Lake communities. Federal investments within the FMU are Madison Butte lookout, several radio towers on Black Mountain, Tupper Guard Station, Bull Prairie campground and Ditch Creek rental cabin. Several collaborative fuel reduction projects are planned near communities at risk.

LMP direction is varied depending on management area. Included management area categories are A1, A4, A6, C1, C2, C4, C5, C8, E1 and E2. Refer to [Umatilla National Forest Land and Resource Management Plan Wildfire Suppression Direction](#) for more information to guide appropriate management response decisions.

FMU 8 – NFJD

FMU 8 is best described as a National Fire Danger Rating System (NFDRS) fuel model H, NFDRS slope class 3, and is represented by the Case Remote Automated Weather Station (RAWS) #352329. Fuel profiles have changed considerably due to fire suppression, logging, grazing and insect infestation episodes.

The vegetation in this FMU ranges from open grassland and ponderosa pine and Douglas-fir/grand-fir plant communities in the lower elevations and generally up to 5,000 feet elevation depending on aspect and slope position. At the higher elevations mixed conifer stands of sub-alpine fir, western larch, grand fir, Engleman spruce and lodgepole pine with some interspersed meadows are typical.

Spruce budworm and bark beetle outbreaks and disease have modified stand structure and species composition. Deterioration of the stands has significantly increased surface fuel loadings across the FMU. Natural regeneration on these sites has increased ladder fuels as well.

High flammability, the presence of ladder fuels, and the excessive accumulations of standing dead and dead and down fuels create more intense fire behavior, causing an increase in torching, intense crowning and long range spotting.

Topography ranges from very steep terrain in some of the creeks and canyons to relatively gentle terrain elsewhere

FMU 8 ranks 7th among the FMUs for total acres burned (2,711 acres from 1970 to 2007). It ranks 6th in lightning caused ignitions and 3rd in human caused ignitions in terms of ignition density. Overall FMU 8 ranks 6th considering total ignitions. The largest fire during the period occurred in 2003 when the Bull Spring 2 fire burned 1,266 acres.

Road access is generally good except for some areas in the north around Pearson Creek. The small hamlet of Dale is located adjacent to the Forest along Highway 395. The Frazier Helibase and Lehman Hot Springs Resort are located in this FMU.

LMP direction is varied depending on management area. Included management area categories are A3, A4, A6, C1, C2, C3, C4, C5, D2, and E2. Refer to [Umatilla National Forest Land and Resource Management Plan Wildfire Suppression Direction](#) for more information to guide appropriate management response decisions.

FMU 9 – NFJD Break

FMU 9 is best described as a National Fire Danger Rating System (NFDRS) fuel model A, NFDRS slope class 3, and is represented by the Tupper Remote Automated Weather Station (RAWS) #351202. On the Heppner Ranger District the ground is relatively flat except for north slopes on the northern edge of the district and the canyon walls into the North Fork John Day River. Fires are generally accessible by engines, with helicopter support and hand crews hiking to the fires on the

north slopes and on the steeper canyon walls. Smoke jumpers are generally only used in support for larger fires.

FMU 9 is represented by the drier plant association groups. Ponderosa pine typifies the area with grass and sagebrush in the understory and lower elevation sites.

Influences from the John Day river corridor have an effect on diurnal wind patterns and lightning occurrence in portions of the FMU. Nighttime down slope winds allow fire behavior to stay active well in to the night. This area experiences a higher than average incidence of lightning as storms track along the John Day River. On the east side of the district steeper canyons align with the normal flow of SW to NE winds (Potamus, Ditch and Mallory Creeks).

Ladder fuels have increased with the ingrowth of shade intolerant species. Fuel profiles have changed considerably in large areas of the FMU. The combination of increase in surface fuel and ladder fuel has compounded the threat of stand replacement fires, where historically they were rare. Some areas within this FMU suffered a severe Douglas-fir tussock moth outbreak in 2000/2001. Many areas suffered high mortality, which is increasing ground fuels as the trees fall.

In 1961 the Ditch Creek fire burned over 27,000 total acres and 5,600 acres of National Forest east of Potamus Creek and on both sides of the North Fork of the John Day River. In 2001, the Mallory Fire (part of the Monument Complex), which started from lightning burned about 8,000 acres of Forest and BLM lands in the same area as the fire described above. It also burned on both sides of the North Fork John Day River. In 2007 the Red Hill and Wall Creek fires started on Federal land and became part of the Monument Complex that burned over 53,000 combined acres in FMU 7 and 9, and over 33,000 acres on private land.

FMU 9 ranks 3rd among the FMUs for total acres burned (59,296 acres from 1970 to 2007). It ranks 1st in lightning caused ignitions and 4th in human caused ignitions in terms of ignition density. For combined ignitions FMU 9 ranks 2nd although 9 and 7 are essentially the same.

Recent timber harvest—Includes Rimrock Timber Sale, Bologna Basin Salvage and Ant timber sale, Rail and Stalling timber sales (sold June 2004).

Investments in this area include Tamarack L.O. and cabin. Several landscape burns occurred in the mid 1980s through the 1990s lowering the fine fuel loading and thinning the understory. This area is ready to be burned again allowing fire to play a role on the landscape, and the Rimrock and Mallory prescribed underburn projects are currently underway in this area.

LMP direction is varied depending on management area. Included management area categories are C1, C3, C4, C5, C8, and E2. Refer to [Umatilla National Forest Land and Resource Management Plan Wildfire Suppression Direction](#) for more information to guide appropriate management response decisions.

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Section 4 – Wildland Fire Management Operational Guidance

A. General Implementation Procedures

The Umatilla National Forest currently has 9 Fire Management Units ([FMU](#)). New FMUs have been developed to meet the intent of the Forest Plan revision and ongoing national fire planning (Fire Program Analysis efforts). Some Fire Management Units are subdivided into Fire Workload Areas ([FWA](#)). A [FWA](#) is an area or areas within an FMU which has characteristics that distinguish it from the rest of the FMU. These differences may include travel time/access, wildland-urban interface, dispatch logic, fire frequency and/or cause, unique resource value, areas of strategic fuel treatments.

The preferred fire suppression strategies and tactics are those that provide primarily for firefighter and public safety and secondly will be the most cost-effective commensurate with the objectives for the Fire Management Unit (FMU) and/or [Land Management Area](#) within which the fire occurs.

Fire is considered an inherent part of the general wilderness ecosystem. All naturally-occurring ignitions in wilderness areas shall be treated as wildfires until Wildland Fire Use plans are developed and approved. All ignitions evaluated under a WFSA will receive an appropriate management response.

1. Setting out Implementation Procedures

Although the current Umatilla National Forest [LRMP](#) does allow for wildland fire use from natural ignitions in wilderness areas, there are currently no management plans in place for wildland fire use. As a result, all fire starts are treated as wildfires to be suppressed and will receive appropriate management response per existing LMP guidelines. Land allocations in the Forest Plan that allow wildfire to play a more historic or natural role (wildland fire use) are:

- C3 Big Game Winter Range (limited to less than 2 foot flame length)
- C3A Sensitive Big Game Winter Range (limited to less than 2 foot flames length)
- C8 Grass-Tree Mosaic (limited to less than 2 foot flame length)
- A10 Wenaha-Tucannon Special Management Area (however all investments must be protected)
- E2 Timber Big Game (protect investments in managed stands and prevent large fires)
- C4 Wildlife Habitat (protect investments in managed stands and prevent large fires)
- E1 Timber Forage (protect timber stands and minimize acres burned)

A few other allocations also allow for fire use such as A8 (Scenic) but they also restrict flame lengths to less than 2 feet. These restrictions in the current plan restrict the use of wildland fire use, as it is not uncommon for flame lengths to exceed 2 feet just about any time during fire season.

Reference: [Umatilla Wildland Fire Use](#)

B. Wildland Fire Suppression

1. Range of Potential Behavior (Fire Danger)

Fire behavior mirrors fire danger. It is typically in the low to moderate range through June and increases slowly through July. It usually peaks in mid-August and drops off slowly to low by the middle of October. Occasionally weather patterns result in a late summer/early

fall where moderate to high fire danger conditions can exist into early November. In these instances the season usually comes to an abrupt end with a season ending rain or snow event.

Refer to [pocket card](#) for a graphic display of seasonal fire danger

2. Preparedness Actions

a. Fire Prevention, Community Assistance, Community Risk Assessment, and Other Community Assistance Activities

The most frequent human caused fire on the Umatilla National Forest, based upon historical records, is described as a small fire originally built for warming, located a short distance from a road and occurring in September or October. It is discovered quickly and suppression action limits fire growth to less than 1/10th acre. The responsible party who abandoned the warming fire is usually not determined.

The biggest human caused threat in [Meacham Canyon](#) (FMU_004_FWA_001) to National Forest land is a fire that initiates from the railroad that crosses through the forest. These fires usually originate on state protected private lands and quickly spread to the National Forest. In recent years the State of Oregon has required specific prevention measures along the 20+ miles of track that cross through the forest in an effort to reduce the risk of railroad caused fires. This, combined with recent aggressive vegetation control within the railroad right-of-way, has reduced somewhat the risk of railroad fires.

Vehicle use on Interstate 84 and the various state highways (Highway 395, for example) that traverse between the north and south halves of the forest do not constitute a significant source of historical fire starts.

Since industrial operations have been regulated by the Industrial Fire Precaution Level system, fire starts from this source has been limited.

Most of the small communities and concentrations of residences within or near the Forest are within larger parcels of private land that fall under the protection jurisdiction of the Oregon Department of Forestry or the Washington State Department of Natural Resources. Fires originating from these sites have been limited to date.

The status of [Community Wildfire Protection Plans](#) involving the Umatilla National Forest are shown in the table below. Plans can be downloaded from the internet by following the web links. Forest and District staffs have provided assistance, as advisors, to the local communities involved in these efforts.

	CWPP	Umatilla NF Acres	Status	Complete d Date	On the WEB
Oregon	Baker County	3	Completed	July, 2005	www.odf.state.or.us/AREAS/eastern/northeast/bakerco_cwpp.htm
	Grant County	310,153	Completed	July, 2005	http://egov.oregon.gov/ODF/FIRE/docs/PREV/GrantCoCWPP.pdf
	Morrow County	143,305	Completed	May, 2006	http://egov.oregon.gov/ODF/FIRE/docs/PREV/MorrowCWPP.pdf
	Umatilla County (East)	376,003	Completed	June, 2005	www.odf.state.or.us/AREAS/eastern/northeast/umatco_cwpp.htm
	Union County	102,268	Completed	August, 2005	www.odf.state.or.us/AREAS/eastern/northeast/unionco_cwpp.htm
	Wallowa County	123,708	Completed	April, 2005	www.odf.state.or.us/AREAS/eastern/northeast/wallowaco_cwpp.htm
	Wheeler County	40,348	Completed	November , 2006	http://egov.oregon.gov/ODF/FIRE/WheelerCWPP.pdf
	Mill Crk Watershed	27,473	Completed	February, 2006	http://www.wwemd.info/CWPP.pdf
	Washington	Asotin County	53,797	In Progress	
Columbia County		159,500	In Progress		
Garfield County		95,467	In Progress		
Walla Walla County		2,433	In Progress		

Oregon status: <http://egov.oregon.gov/ODF/FIRE/FirePlans.shtml>

Washington status: http://www.dnr.wa.gov/RecreationEducation/Topics/FireBurningRegulations/Pages/rp_burn_countymitigationplans.aspx

The Umatilla National Forest encourages local participation in [Firewise](#) Councils where they exist.

(1) Annual Prevention Program.

The Umatilla National Forest has a full time Fire Prevention Officer currently stationed on the Walla-Walla Ranger District who provides oversight to the fire prevention program on the Forest while at the same time contributing to the agency's regional and national fire prevention programs.

Fire prevention activities build around the Smokey Bear, Project Impact, Firewise and Firebusters programs and include participation at county fairs and community parades, conducting fire prevention presentations at public schools and local fire departments, and distribution of fire prevention materials through public areas and offices.

The goal of the Umatilla National Forest is to maintain the human caused fire starts at or below current levels.

(2) Special Orders and Closures

The Forest enforces established Regional Forester Orders targeted at high risk activities such as spark arrestors on exhaust systems, Industrial Fire Precaution Levels, and use of fireworks.

In addition, as conditions warrant, the Forest Supervisor issues special orders that restrict off road vehicle use, campfire use, and smoking while traveling. In extreme conditions area closures may be ordered.

(3) Industrial Operations and Fire Precautions

The Industrial Fire Precautions Level ([IFPL](#)) system has been in place across the region since the early 1980's. This system uses daily NFDRS outputs of Energy Release Component and Ignition Component to calculate an industrial fire precaution level (IFPL) or value, which is made available daily to affected parties. All contracts and permits involving spark emitting equipment or activities contain language that outlines measures to be taken by the contractor or permit holder to reduce the chances of a fire start, keyed to the daily IFPL value. This system has been very successful in reducing the number of operations-related fires. Umatilla NF IFPL levels are coordinated with adjacent national forests.

Regulation of public woodcutting activities involving the use of chain saws is directly tied to Public Use Restrictions that are triggered by break points in the IFPL system. Currently permit owners must call a toll free number that will inform them of whether it is a cut or no cut day. The use of this number to find out if wood cutting is allowed or not on any given day is a condition in the terms of the woodcutting permits.

The following references contain additional information regarding fire prevention activities on the Umatilla National Forest

[Umatilla NF IFPL, Staffing Level, and Public Use Restriction "triggers"](#)
[Umatilla National Forest Prevention Plan 2006](#)
[Walla Walla Ranger District Fire Prevention Plan 2004](#)
[Human Caused.xls](#)
[local communities at risk.doc](#)
[Public Use Restrictions.doc](#)
[Sign Implementation Plan.doc](#)
[sign plan specifics.doc](#)
[Northeast Oregon District ODF Prevention Plan.doc](#)
[Industrial Fire Precaution Level M.O.U.](#)
[ODOT Fire Precaution Agreement.](#)

b. Annual Fire Training Activities

Fire training activities fall into two categories: those needed to enhance fire qualifications (NWCG S, M and I courses) and those needed to maintain qualifications (refresher training). The forest as part of the Northeast Oregon Training Area/Zone schedules and executes S-100 and S-200 level courses; the Regional Training Center is responsible for 300 level

courses and the National Training Center is responsible for 400 and 500 level courses. The Forest and Districts are responsible for refresher training.

(1) Qualifications and Needs Assessment.

S, M and I Courses--Individual fire qualifications are reviewed and training needs identified each year as part of the annual fire qualifications review conducted using NWCG and Forest Service procedures. The Fire Qualifications Committee reviews completed training task books and recommends all fire qualifications. A listing of individuals by current fire qualification is in the Umatilla National Forest Mobilization Guide.

Refer to [Red Card Committee Charter](#) for current qualifications committee charter

At the completion of the annual qualification review, training needs are summarized on a forest wide basis. The forest's fire training committee prioritizes training needs balancing agency and individual career development needs. Forest needs are combined with other units within the training area/zone. Based on demand, the zone members determine which courses will be offered the next training season.

The entire training schedule is available through the web site listed below:

[National Wildland Fire Training](#)

The cost of fire and fuels training for Umatilla National Forest employees will be covered under the following general guidelines:

- **Salary** should be covered by the employee's regular program management funds. If the employee is not in Fire of Fuels Management then the salary is not covered by Fire or Fuels. On the job training (completing taskbooks) will generally be funded by fire or fuels project funds.
- **Travel and per diem** costs are negotiable on a case by case basis dependent generally on fire/fuels program needs and available funding.
- **Tuition** will be covered by fire/fuels program management funds.

Fire training will be provided for those employees that will be available for fire assignments for which they are trained and qualified. AD hire training costs are generally covered by a national fund code established for that purpose if the training exceeds 2 hours in duration.

Refresher Training—Required annual refresher training changes from year to year. Umatilla National Forest sub-units schedule the training using materials provided by the national and regional offices. Refer to the [Red Book](#) for a current listing of required annual refresher training. The Forest Service amended the Red Book policy to reflect the Fire Suppression Doctrine in [February 2007](#). Visit the [WFSTAR website](#) for annual direction on content of fire safety refreshers.

The Forest's fire training officer maintains the master list documenting all training, whether it be S or M courses or refresher training, in the IQCS program. Once appropriate fitness scores are provided, a Fire Qualifications Card is issued to the individual for the current year. A complete listing of current year's fire qualifications is found in the Forest's Mobilization Guide.

c. Fire Season Readiness

(1) Annual preparedness reviews.

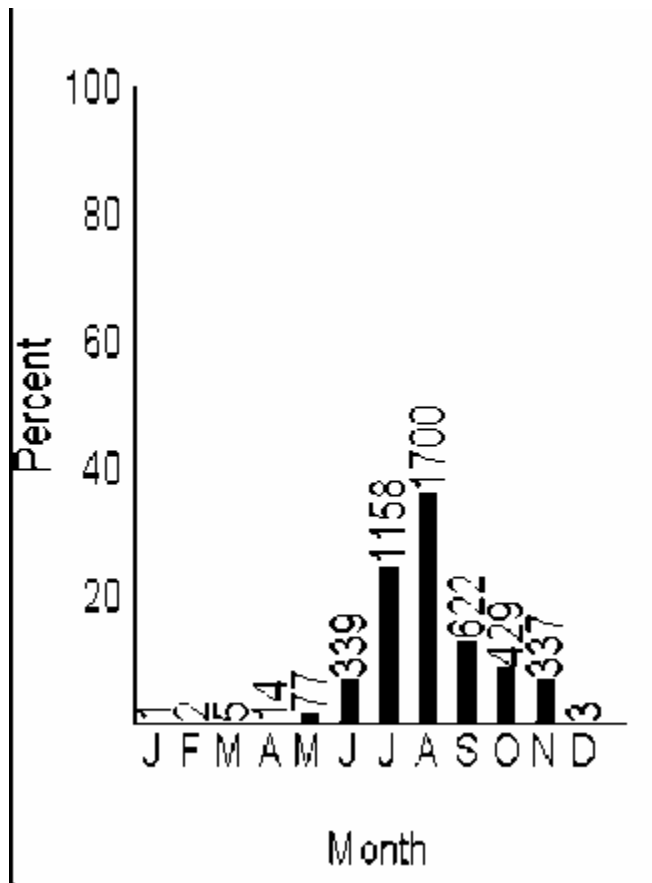
Both the Regional Office and the Umatilla National Forest conduct preparedness reviews to ensure fire program readiness. Forest reviews are conducted annually and regional reviews every 3 years. This schedule puts much of the responsibility for program readiness on the forest.

In addition to preparedness reviews, the forest conducts Incident Commander meetings (as required by the [30 Mile Prevention Plan](#)) annually to communicate Forest Supervisor and District Ranger expectations of Type III/IV/V incident commanders; review safety policies and procedures; critique the previous season's activity; and review communications, fire operations and dispatch procedures.

(2) Season start and stop criteria with typical dates.

The budgeted fire season for the forest was established during the NFMAS planning process and encompasses the portion of the year during which the majority of the damaging fires have historically occurred. The current plan establishes the fire season as June 1 thru October 15. Fire funded resources are expected to be available during that period. Currently increasing pressures have forced the Forest to increase the grade and length of tours for many employees in order to stay competitive. As a result current funding levels do not cover the total costs of the NFMAS organization. Occasionally weather conditions are such that resources needed exceed the current budget levels in these situations "Severity" funding is usually available. Severity funding may also be requested and if approved used to extend the helicopter and crew at Frazier and the SEAT at Pendleton.

**Cumulative Seasonal Fire Distribution
Umatilla National Forest 1970-2006**



Refer to [NFMAS seasonal fire distribution](#) for additional details regarding the determination of fire season.

- (3) Forest or District-level fire cache considerations, including appropriate stocking levels and management.

Each district on the Umatilla National Forest maintains a fire cache that will supply district resources and an additional 20-person crew for the first 24 hours of an incident with water, tools, and rations.

d. Detection

The Umatilla National Forest depends on a combination of fixed-point lookouts and aerial detection flights to accomplish its fire detection needs. Forest users are a non-scheduled but valuable contributor to detecting wildfires on the forest.

There are seven primary lookouts are staffed for a specified budgeted period regardless of fire danger, although they may be unavailable during periods of low fire danger. Two additional lookouts may be staffed on an emergency basis following lightning activity.

Refer to [Detection Plan](#) for listing of lookouts, current year staffing periods and other elements of the forest's detection plan.

In addition to fixed detection points, aerial detection is also used on the Umatilla National Forest. A Unit Duty Officer, Fire Management Officer, or the Forest Fire Staff may initiate aerial detection flights following lightning storms and during periods of elevated fire danger (ERC above the 90th percentile). Detection flights are ordered through Pendleton Interagency Communication Center.

The Forest uses both the Bureau of Land Management and Oregon Department of Forestry lightning tracker programs to track lightning activity. Both systems generate a map showing the approximate locations of lightning strikes in the area. This information assists in the decision making process when determining detection flight need and flight routes.

Many smoke reports are received from the general public. These reports of fires come through the local 911 offices, Ranger District offices, or directly to Pendleton Interagency Communication Center, or to a 24/7 answering service when PICC is unstaffed.

e. Fire Weather and Fire Danger

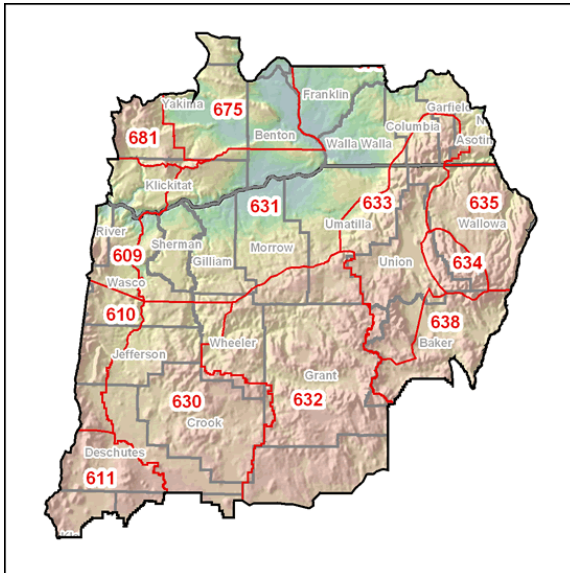
(1) Weather stations

Data monitoring weather conditions on the 1.4 million acre Umatilla National Forest is gathered at five permanent Remote Automated Weather Stations (RAWS) locations. In addition one quick deploy weather station is used to gather local data for project uses.

The RAWS stations are sited to NFDRS standards and are intended to monitor average worst-case fire danger scenarios.

Refer to [Fire Danger Operating Plan](#) for additional details regarding weather station locations, etc.

NFDRS



The National Weather Service Office in Pendleton provides all weather forecasting services for the forest. Weather Information Management System (WIMS) is used to calculate forecasted and observed fire danger indices and components based on 1978 NFDRS fuel models. Though the automated weather stations collect and transmit data yearlong, the data is only edited for NFDRS calculations from April 1 through October 31. All observed weather data is archived in NIFMID (National Interagency Fire Management Integrated Database) and at the Western Regional Climate Center.

The forest currently uses two fire danger rating areas for evaluating local conditions and managing most of its fire

protection activities. The North area encompasses the Walla Walla and Pomeroy Ranger Districts and the South area encompasses the North Fork John Day and Heppner Ranger Districts.

Currently, climatology-based breakpoints are used to determine staffing levels and guide other fire management activities keyed to fire danger levels. Once the fire danger operating plan is updated to current standards such decisions will be based on fire business thresholds.

Refer to the [Fire Danger Operating Plan](#) for additional details on how NFDRS outputs are developed on the forest.

Refer to [Umatilla Forest Standard Operating Procedures](#) for additional details on how NFDRS outputs are used on the forest.

Refer to <http://www.nwccweb.us/predict/weather.asp> for the most current National Weather Service Fire Weather Operating Plan

f. Policy and Forest Service Manual and Handbook Direction

Firefighter and public safety continue to be the highest priority when implementing all phases of the fire program. All Umatilla National Forest suppression resources will be qualified for the task to which they are assigned and have qualified supervision in place when deployed.

(1) Engine configuration and other staffing

All Type 4 and 6 Initial Attack Engine Modules are staffed with three person crews. Current funding is adequate for many of these engines to be staffed only 5 days per week, with overtime and detailers being used to staff engines 7 days a week as fire business dictates.

Type 7 Prevention Patrols are staffed with 2 people per day, 5 days per week.

IA Hand Crews are staffed with five people per day, five days per week, with use of overtime and detailers to staff seven days per week as needed.

The Frazier Rappel Crew is staffed with a normal complement of 9 rappellers and a spotter seven days per week.

(2) Draw down levels:

Fire Program Management—During periods of heavy fire activity in the West, the forest often finds itself short of qualified fire managers. This coupled with the increased concern for firefighter safety has led the Forest to identifying a minimum draw down level to ensure it has the capability to safely and efficiently manage any emerging fire situation it may experience.

The Umatilla National Forest drawdown plan has three elements: fire management oversight, initial attack capability, and extended (Type III) attack organizations. It is critical that fully qualified personnel handle fire business and that dynamic fire situations be managed by experienced fire leaders. To achieve this policy, the following will guide staffing and availability.

i). Fire Management Oversight

Each Unit (districts, SO, and PICC) will have a duty officer available each day during fire season. This availability of district fire managers and duty officers is managed by the districts. This duty officer will be identified in the daily resource status summary from PICC. Duty Officers should not be engaged in tactical operations on a fire. Back up duty officers should be available and known to the primary duty officer in the event that the primary becomes engaged in fire suppression operations. Umatilla NF Ranger District Fire Programs are rated as Moderate Complexity units in IFPM. As such, District Duty Officers need to hold, or have held, qualifications as ICT3 and TFLD.

ii). Initial Attack Capability

The forest initial attack resources (engines, hand crews, dozers, SEAT, rappellers) can gain valuable experience participating in fire assignments across the country. However, their primary role is the initial attack of new fire starts on and adjacent to the Umatilla National Forest. Our challenge is to balance the competing demands for these initial attack crews between large fires out of the area and remaining prepared for new starts at home. We have developed the following drawdown plan, based on the forests' daily staffing level and our budgeted initial attack capability:

Staffing Level	IA capability	FFPC (2008)
3L and below	50%	110
3H	75%	164
4,5	90%	197

Our current budgeted IA capability is a Fire Fighter Production Capability (FFPC) of 219 (7 day coverage). This is the basis we are using to calculate our drawdown levels. During the fire season, the SO fire staff will calculate a daily available FFPC and compare it to the drawdown level called for based on the staffing level.

Each resource has an assumed FFPC associated with it, based on the NFMAS planning tables:

Resource	FFPC	# on Umatilla NF
Engine, type 7	6.99	4
Engine, type 6	11.44	11
Engine, type 4	15.18	2
5 person handcrew	10.94	5
SEAT	4.03	1

Frazier rappellers are a regional resource, and can be prepositioned by the region based on impending fire threats. The FFPC associated with rappellers is not included in our targeted or budgeted FFPC, and is not included in the calculation of our drawdown resources.

iii). Extended Attack Capability

Each of the four districts is responsible to ensure that a fully qualified type III IC is available each day during fire season; the IC will usually be one of the district staff, but a district can arrange to have a qualified Type III IC from the adjacent district cover their need. "Adjacent" refers to the two "zones" of the forest, with the two south districts adjacent to each other and the two north districts adjacent to each other. The type III IC will be identified by name in the Daily Resource Status report provided to PICC.

The Umatilla NF supports and participates in the West Blue Mountains IMT3, a type III team made up of personnel from the Umatilla NF, ODF, and fire services in the counties in and adjacent to the Umatilla NF. This team can be assigned to emerging incidents of type III complexity, and will be able to staff incidents with a qualified IC, OPS, 1-2 DIVS, and specialists in finance, plans, logistics, safety, and information.

The tasks of the Type III organization include:

- Arrange for sleeping and eating
- Maintain records and documents
- Prepare Incident Action Plans (IAPs)
- Deal with contracts and EERAs (also BPA and purchasing)
- Time keeping, both equipment and personnel
- Sign travel routes
- Manage staging areas
- Process material for briefings (WX briefings, fire behavior, safety etc)
- Maintain link with Dispatch for ordering and information transfer
- Support inbrief of subsequent teams

The Forest supports the staffing of the Blue Mountain Type II Incident Management Team, and has representation on the steering committee for this team. The Forest also provides personnel to other Interagency Type II teams in Washington and Oregon, two Type I Pacific Northwest Incident Management Teams, and the PNW Wildland Fire Use Team.

Deviation from the above policy—Deviations to this policy will only occur when the Forest Supervisor has been thoroughly briefed on the local, regional and national situation fire situation and has agreed to a drawdown level below the established minimum staffing levels. The rationale for deviations from this drawdown level, when they occur, will be documented on a daily basis by the Forest duty officer.

(3) Out of Area Assignments:

Overhead positions—Out of area assignments to fill overhead requests are based on individual availability and position qualifications. If more than one qualified person is available to fill a resource order request, the Unit Duty Officer will prioritize the dispatch of individual resources thru PICC. Maintaining currency, trainee opportunities, draw down level, and/or an interagency mixture are all considered when determining how resource requests are filled.

Often, the individuals available and qualified for off-unit overhead positions are district duty officers and fire managers. Therefore, the drawdown plan may constrain the availability of overhead for these assignments.

Engine and Crew Assignments—The drawdown plan outlined above will govern the availability of engines and crews for off-unit assignments, based on local fire danger levels and the availability of resources as determined by Unit Duty Officers and reported to PICC. When resources return to their duty stations and have resumed duty after sufficient rest, another engine or crew may be made available for off forest assignment thru PICC.

(4) Maintaining Firefighting Resource Viability

Suppression resources are only effective if they have adequate rest. Work schedules will be such that they comply with the established work/rest guidelines. With rare exceptions, individuals will not be work more than 12 hours per day and six days per week unless assigned to an active incident. See the [Regional direction for work/rest and length of assignment](#).

(5) Severity Funded Resources

During periods of elevated fire danger, the Forest may supplement its budgeted Initial Attack Capability with “Severity funded” resources. These additional resources are phased in as fire danger increases. Level 1 and 2 severity strengthens IA capability. Level 3 adds large fire capability.

The threshold for identifying local severity conditions is when the current ERC value for a fire danger rating area (measured over a 5 day period) exceeds one standard deviation of what it is normally expected for the time of year.

The first level of severity supplements District IA capability by adding an additional engine module to each ranger district. The second level of severity adds a second SEAT and second Type III helicopter with rappel crew. The third level of severity adds a task force based in Pendleton consisting of a 20-person crew, one tender, a dozer, 5 type 6 engines, and appropriate leadership for a Type III organization.

(6) Other

The Umatilla National Forest will not maintain Self Contained Breathing Apparatus (SCBA) equipment on any of its engines.

First aid and HAZMAT training are offered at least once each year on each district and for the SO. The Forest does not specifically train or maintain EMTs, but there are several EMTs employed in various positions on the Forest.

g. Aviation Management

The Umatilla National Forest shares a Unit Aviation Officer position with the Malheur and Wallowa-Whitman National Forests. The Unit Aviation Plan provides guidance and forest-wide direction on aviation safety, lines of authority, Air Operations plan, Flight Hazard maps, and how aircraft is managed.

Refer to the [Unit Aviation Plan](#) for specific details regarding forest wide operations

The Forest also hosts an exclusive use helicopter with rappel capability based at Frazier. Refer to the [Frazier Operations Plan](#) for specific details regarding that operation

The Forest hosts a single engine air tanker (SEAT) from July 1 to September 15th. Refer to the [SEAT Operations Plan](#). Extensions are possible at either end depending on funding and seasonal fire severity.

Any project not specifically covered by the Unit Aviation Plan or the Frazier Operations Plan must have a Project Aviation Safety Plan prepared and approved by the Unit Aviation Officer before the aircraft service is ordered.

3. Initial Attack

Initial attack is an aggressive suppression action consistent with firefighter and public safety and the values being protected.

Due to the light flashy fuels that border the Umatilla National Forest, as a general rule a fire start within two miles of the Forest boundary will be considered a threat to the Forest and suppression action will be initiated to assist the agency with protection jurisdiction. Cooperative agreements are in place to facilitate this action.

The same "rules" apply to BLM lands the Forest is contracted to protect.

a. Information Used To Set Up Initial Attack Priorities

All fires will receive an appropriate management response. Completing the Northwest Incident Organizer satisfies the requirements for completing the Stage 1 Initial Fire Assessment on all incidents.

Priorities for Initial Attack are addressed in the Forest LMP (Page 4-87):

- Wildfires which threaten life, property, public safety, improvements, or investments will receive aggressive suppression action using an appropriate suppression strategy.
- All wildfires require a timely suppression response with appropriate forces and strategy of either one, or a combination of the alternatives of confinement, containment, or control.
- When wildfires do not threaten to exceed the acceptable sizes and intensities of the management area, the lowest cost suppression action is appropriate.
- If more than 5 percent of a sub-watershed (outside wilderness) has sustained high intensity fires during the preceding 3 years, or visibly accelerated erosion is occurring within a sub-watershed due to past burns, emphasize a control strategy on all wildfires in the remainder of the watershed to minimize further damage.

b. Criteria for Appropriate Initial Attack Response

The Forest LMP describes the preferred fire suppression practices (control, contain or confine) for each land management area. The plan does not prioritize management areas however. In the interim, when simultaneous ignitions occur, the specific management area direction will be used to establish response priorities.

- Priority 1 areas are those management areas where control is the preferred suppression response emphasis
- Priority 2 are areas where control/contain are appropriate response emphasis
- Priority 3 area management areas where all strategies are appropriate

Designation	Description	Strategy
F2	Mill Creek Municipal Watershed - Undeveloped	high priority for control, no heavy equipment on slopes over 50%
A6	Developed Recreation	control, protect lives and facilities
A9	Special Interest Area	Cultural-Historical sites, Botanical Areas, Viewpoints, All strategies maybe used, use of heavy equipment on cultural sites is prohibited
D2	Research Natural Area	control, extinguished by least disturbing means possible
A7	Wild and Scenic Rivers	control using low impact methods where possible
C1	Dedicated Old Growth	control of fires with FL>2'. Low impact methods preferred but heavy equipment acceptable within the objective of minimizing impact
C2	Managed Old Growth	control of fires with FL>2', Low impact methods preferred but heavy equipment acceptable if it minimizes overall impact
F3	High Ridge Evaluation Area	control using standard practices
C7	Special Fish Management Area	control or contain, low impact methods where possible
A3	Viewshed	control using low impact methods where possible
F4	Walla Walla Watershed	control or contain, low impact methods where possible
A8	Scenic Area	control but low intensity fires permitted to play a natural role FL<2'
C5	Riparian (Fish and Wildlife)	control or contain, low impact methods preferred but heavy equipment can be used
A5	Roaded Natural	control or contain using minimum impact methods where possible
A4	Viewshed 2	control or contain using minimum impact methods where possible
A2	OHV Recreation	contain or control but low intensity fires permitted to play a natural role FL<2'
E1	Timber and Forage	all strategies, protect investments, prevent large acreage losses
E2	Timber Big Game	all strategies, protect investments, prevent large acreage losses
C4	Wildlife Habitat	All strategies but must provide for the protection of managed forests and large acreage losses
C3A	Sensitive Big Game Winter Range	All strategies
C3	Big Game Winter Range	Any strategy
A10	Wenaha-Tucannon Special Management Area	all suppression responses but protect investments in managed forests
A1	Non-motorized Dispersed Recreation	contain or control but low intensity fires permitted to play a natural role FL<2'
C8	Grass Tree Mosaic	All strategies
B1	Wilderness	all suppression strategies, including surveillance, low impact methods, some power equipment maybe used to reduce long term physical and social impacts

Refer to [LMP Wildfire Suppression Direction](#) Wildfire Response subsection for specific initial attack direction for each of the LMP management areas.

The Table above displays the Priority by Land Management Plan Allocation. This list descends from the highest priority to the lowest priority for IA and for extended attack. However, any given fire may require additional consideration based on rate of spread and intensity, proximity to other resources, private lands or other factors not considered during the development of the LMP such as firefighter and public safety.

Preplanned [dispatch blocks](#) that guide initial response actions have been established that recognize the varying directions associated the management areas. Under a given level of fire danger, Priority 1 areas receive a heavier response than Priority 2 or 3 areas. Between the hours of 0900 and 1800, the resources identified on the dispatch block cards are dispatched to reported fires, then the district Duty Officer is notified and can make any adjustments they deem necessary. Between 1800 and 0900, the Duty Officer will be contacted to confirm resources to be dispatched.

c. Confinement as an Initial Attack Strategy

Under the existing LMP, confinement is an acceptable initial attack strategy in some management areas. Confinement is a suppression strategy used to manage costs, suppression impacts, and risks to firefighters and the public, and will not be used to meet other resource objectives.

The [Wildland Fire Situation Analysis \(WFSA\)](#) process is used to determine and document the selection of a suppression strategy, from the full range of strategic suppression options that could be applied to an incident where initial attack fails. Confinement can be a strategic selection through the WFSA process.

Refer to the [Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy](#)

d. Response Times

Response times vary significantly by resource type and FMU. Typical response times for each Fire Management Unit were developed as part of the modeling applied during the Historical Analysis portion of the NFMAS analysis. Duty Officers are responsible for using the appropriate suppression response.

Refer to the [2002 NFMAS documentation](#) for typical resource response times for the various FMUs.

e. Restrictions and Special Concerns

Restrictions and special concerns applicable to the various management areas on the Forest are described in several documents provided as attachments and references supporting this plan.

In general, tactics that effectively manage costs, protect firefighter and public safety, and reach forest plan goals will be used to suppress wildfires. Firefighting can have effects on natural, economic, and social values, and incident commanders need to select tactics that have the least impact on the land while meeting safety and economic objectives. See appendices for [Direction for Fire Suppression in Special Areas](#) and [M.I.S.T. Guidelines](#). When consistent with the need to protect firefighter and public safety, minimum impact suppression tactics will be applied in several management areas on the forest. These

include Wilderness Areas (Management Area B1), the Mill Creek Watershed (Management Area F2), and areas covered by the PACFISH agreement (Salmon and Steelhead habitats).

f. Social and Political Concerns

Several cooperative agreements are in place to minimize potential conflicts that might develop during the initial phases of an incident.

The Bureau of Land Management (Vale and Prineville) has an agreement with the Umatilla National Forest to make the Forest Service responsible for fire suppression on BLM lands within and adjacent to the Forest and in Umatilla and Morrow counties. The Forest also protects scattered parcel of Spokane BLM land near the Forest boundary in Washington. Agreements are in place and approved annually.

Cooperative agreements are in place between the Forest and Washington Department of Natural Resources, Oregon Department of Forestry and between the Forest and local rural fire district jurisdictions regarding management of initial attack actions. Supplemental suppression agreements are prepared addressing potential issues that might arise during extended attack where multiple jurisdictions are involved.

Refer to the [Cooperative Agreements](#) folder for the current cooperative agreements.

Tribal forested lands on the Umatilla Indian Reservation are protected by the Oregon Department of Forestry and are thus covered under the cooperative agreements between the Umatilla National Forest and ODF.

There are few issues relating to local hires. Crews, engines, and water tenders are contracted services. Emergency Equipment Rental Agreements (EERA) are used when all contracted resources are committed.

The Forest follows the R and R guidelines issued by NWCG and the region. Line officers are responsible for monitoring work/rest cycles and hours worked.

Refer to [NWCG Work Rest-Length of Assignment Standards](#) for specific details on Rest and Recuperation requirements.

Refer to [NWCG Incident Operations Driving Standards](#) for specific details on driving as it relates to R and R requirements.

4. Extended Attack and Large Fire Suppression

a. Determine Extended Attack Needs

An incident is considered an extended attack situation when the any of the following occur:

- (1) The initial dispatch response fails to contain the fire as called for on the dispatch card.
- (2) The fire is not contained within the management objectives for the area as outlined in the LMP.
- (3) The fire is not contained within the first operational period and there is no estimate of containment or control.

An incident complexity analysis will be completed on all fires to determine potential incident complexity. Complexity checklists can be found in the IRPG Pocket Guide, the Interagency Standards for Fire and Fire Aviation Operations (Red Book), and on the Northwest Incident

Organizer. A Wildland Fire Situation Analysis (WFSA) will be initiated on any fire that escapes initial attack and that can not be contained by the end of the second operational period.

b. Implementation Plan Requirements – WFSA Development

Preparation of the WFSA for extended attack and large fire suppression should be done to evaluate suppression responses to wildland fires that have exceeded initial attack response or exceeded planned management capability. Enhanced resource values may be a collateral benefit of the planned action under the WFSA, but cannot be part of the objective of the action. The Umatilla National Forest Wildland Fire Situation Analysis Preparation Guidelines guides local WFSA preparation.

Refer to: [WFSA preparation Guidelines](#) for WFSA preparation responsibility and approval authorities based on expected suppression cost.

c. Incident Management Transition

Transfer of management responsibilities on incidents from the local unit to an incoming management team will follow the guidelines outlined in Appendix the “Interagency Standards for Fire and Fire Aviation Operations, (Red Book).

Refer to: [Transfer of Command](#) section of Chapter 11 (page 11-13) of the Red Book.

Line Officer and Agency Administrator briefings will follow the template outlined in the [Large Fire Appendix](#).

Refer to: [Incident Commander Briefing](#) and [Agency Administrator Briefing](#), in the Red Book for examples of briefing outlines.

d. Unit Example of Delegation of Authority for the Incident Commander

The forest has prepared several examples of Delegation of Authority for Incident Commanders letters covering all levels of Incident Complexity. In addition there is a Sample Delegation of Authority letter in Appendix H of the “Red Book.”

Refer to the [Delegation of Authority](#) section of the Appendix of this plan, and the [Large Fire AA Package](#) for samples of delegation letters.

Refer to the [Wildland Fire Use Guide](#) and [Interagency Prescribed Fire Reference Guide](#) for additional details.

5. Other Fire Suppression Considerations

The Umatilla National Forest has cooperative agreements with adjacent counties, Federal, Tribal, state and county agencies to facilitate implementation of fire protection programs. The Umatilla also has a moderate urban interface that is at risk in some locations due to the nature of the fuels between the National Forest and occupied properties.

Mill Creek Watershed is the municipal watershed for the City of Walla Walla and is included within the Umatilla National Forest. The Watershed is closed to the public, road access is to the top of the watershed, and terrain is steeply dissected. The specific constraints on fire

management activities in this area are outlined in the "[Suppression Guidelines for Special Management Areas.](#)"

C. Wildland Fire Use

Wildland Fire Use refers to the management of naturally ignited wildland fires to accomplish specific, pre-stated resource management objectives as defined in the Land and Resource Management Plan for the unit. The LRMP authorizes Wildland Fire Use in several different management areas but as of this date the Forest has not completed the risk assessment necessary to complete the specific implementation plans. Therefore Wildland Fire Use is currently not a component of the Umatilla National Forest Fire Management Program. The LRMP is in revision at this time, and District and Forest Staffs have worked with the planning team to identify areas of the forest where Wildland Fire Use is appropriate.

D. Prescribed Fire---

1. Planning and Documentation

- a. All prescribed fire projects comply with NEPA and involve the collaboration with an interdisciplinary team and consultation in some cases with external regulatory agencies. A variety of NEPA processes are used depending on the scope, scale, and intensity of the action.

Prescribed fire activities on the Umatilla National Forest typically occur in the fall and spring of the year. For a prescribed fire to be successful, units need an adequate budget to conduct the burn, available and trained staff, a burn window for acceptable fire effects, an appropriate smoke management forecast, a burn plan properly developed, coordinated, and approved, and a particular area of the Forest identified as needing prescribed fire. It is intended that when the budget is available and the burn window arrives, these different elements leading to a successful burn are in place. Typically there are more completed plans available than there is budget to complete them, and the Forest Fuels Group works to periodically prioritize available projects.

Prioritization for which of the available (planned) units will be burned is based on available funds and associated direction. Prioritization for areas to initiate the prescribed burn planning process follow "A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment, 10-Year Comprehensive Strategy, Implementation Plan", May, 2002. This Congressional direction sets the following goals:

1. Improve Fire Prevention and Suppression
2. Reduce Hazardous Fuels
3. Restore Fire-adapted Ecosystems
4. Promote Community Assistance

Prescribed Fire Planning Umatilla National Forest

Annual activities to prepare for and implement the Forest's prescribed fire program occur in a year-round planning cycle. Most projects are planned in an integrated, interdisciplinary process, with fire being used as one of the tools to reduce fuels,

improve forest health, and protect the public, workforce, and improvements on public and private ground.

Most prescribed burns occur after mechanical treatment of dense stands, so that fire can play its' historical role in maintaining healthy forests and healthy forest structure. Therefore, most burns are planned with a broader NEPA document, one that typically includes commercial and non-commercial thinning and the associated road work.

All prescribed burns are implemented only after the completion and approval of a prescribed burn plan. Burn plans are reviewed annually to ensure that they meet current standards and that they are still applicable.

Between planning, layout, and implementation of mechanical treatments and prescribed burns, the work and activities that enable the Forest to properly implement fuels treatment projects goes on year-round.

In the late fall, after and during periods of significant season ending weather events, the districts ignite any areas where the fuels have been piled after thinning projects.

The Umatilla NF is also managing an aggressive mechanical fuels treatment program that generates biomass in the form of small logs and poles that can chipped and/or removed from the forest.

Maintaining a capable and trained workforce with the tools it needs to carry out our fuels management program is a challenging task. It involves but is not limited to: fleet management, equipment maintenance and storage, training of personnel in leadership and process, proper methods of performing the tasks, igniting activity fuels areas, igniting landscape broadcast burns, holding perimeter lines, burning piles, writing burn plans, smoke management, establishing, maintaining and fostering contacts with Joint Fire Sciences research community, conducting briefings, conducting and attending training at all levels, and interactive communications with a large cast of neighbors, specialists and support personnel.

The Forest planning and implementation process begins and ends with a strong collaborative effort with our surrounding communities, State Agencies, adjacent land owners and businesses, and land management specialists. We also have established and maintain cooperative relationships with Resource Advisory Committees and Councils, the Rocky Mountain Elk Foundation, and other cooperators. These groups all provide valuable financial support.

The Umatilla NF has established an Integrated Vegetation Management Group at the Forest Supervisor's Office level to coordinate our activities and treatments and allow us to focus on the agencies' priorities. This group, composed of the Deputy Fire/Fuels Staff, Forest Wildlife Biologist, Forest Silviculturist, and Forest Timber Contracting Officer, helps develop out-year priorities and identify opportunities for focusing our entire program of work on priority areas for fuels treatment.

The Forest Fuels group, made up of fuels management representatives from the districts and the S.O., helps focus our current program of work on priority areas across the forest. This group develops the annual budget, recommends projects to the FLT for funding, and improves communication/cooperation between the units on the forest.

- b. Relate the long-term prescribed fire strategy for each relevant fire management unit by fire regime and condition class and display planned burn units.

FMU 1,5,6

The long-term strategy for these FMUs is to reduce the high concentrations of fuel build-up with management ignited prescribed fire and wildland fire use within wilderness, scenic and roadless areas. Until such time that a Fire Use Plan is in place, unplanned ignitions will receive a suppression response.

FMU 2,3,4,7,8 and 9

Long-term strategy for these FMUs is to reduce hazardous fuels and restore fire-adapted ecosystems by maintaining condition class 1 with prescribed fire and treating condition class 2 and 3 areas. Acres treated would be between 10,000-15,000 acres annually with appropriated fuels funding, with an additional 5,000-10,000 acres per year of mechanical treatments funded by other than fuels funding (thinning accomplished by timber sales, silviculture, BD funds treating activity fuels, etc.). Current projects are focusing on reducing hazardous fuels near communities at risk. Mechanical treatment is the preferred treatment followed by prescribed fire at intervals consistent with the historic natural fire regime.

- c. The Umatilla National Forest is made up of fire dependent ecosystems, where a history of fire suppression and logging practices has led to an accumulation of forest fuels in many areas. The most effective means of reducing large fire suppression costs, protecting community values, restoring forest and grassland health, and improving firefighter safety, is an aggressive fuel treatment program. Prescribed fire use at ecologically appropriate intensities is an essential means of restoring forest health conditions.

FMU 1,2,3,4 and 8

The Forest's long term prescribed fire strategy involves the management of prescribed fire in Fire Regime I, predominantly ponderosa pine plant associations. These areas in the Umatilla NF have a fire return interval of 17 to 22 years and are the priority target fuel type. There are large blocks of higher elevation plant associations that are not targeted for high priority prescribed fire applications, as well as lodgepole pine tracts, northern exposure, mixed conifer stands and numerous non-vegetated areas. The Wenaha-Tucannon Wilderness is 177,000 acres and also contains a broad range of vegetative types and elevations. Fire use plans are currently being developed for this wilderness and this will result in the application of fire to areas that have had fire excluded over the past 90 years.

General Strategy is to focus treatments on Condition Class I and II in the Fire Regime I and III with prescribed broadcast fire and treat Condition Class II and III in Fire Regime I and III with mechanical fuel treatments, followed by prescribed broadcast fires.

Refer to the Projects and Accomplishments [spreadsheets for FY08](#) projects. The Forest has developed plans to manage vegetation with mechanical and fire introduction in many additional drainages, sub-drainages and acres for years to come.

- d. Identify numbers and kinds of qualified personnel necessary to plan and execute the proposed annual prescribed fire program.

**UMF Prescribed Fire Qualifications
Current Staffing**

Position Qualified Trainee

FEMO	1	8
FFT1	79	13
FFT2	173	0
FIRB	30	4
LTAN	2	0
RXB1	5	2
RXB2	38	6
RXB3	6	1
RXCM	12	2
RXM1	3	1
RXM2	6	1

There is an apparent shortage of qualified FEMO, LTAN, and RXM1 on the forest. We view all prescribed burns as opportunities for providing quality on the job training for trainees, under the tutelage of well-experienced and qualified personnel.

At each of the four Districts on the Umatilla National Forest, there is a Fire Management Officer (FMO), an Assistant Fire Management Officer–Fuels (AFMO), and a Fuels Technician that have primary duties in prescribed fire. The fire program at each district also includes an AFMO for Operations and a number of crew leaders and assistants, each of which hold prescribed fire qualifications. Other District temporary and permanent personnel are vital to our successful prescribed fire program. These other personnel include suppression staff and other personnel with an interest and experience in the use of prescribed fire.

At the Forest level is a Forest Fire Staff Officer, a Deputy, a Forest Fire Planner, and a Training Officer, all of which have roles in a successful prescribed fire program. There are numerous resource specialists and others with prescribed fire qualifications working at the Supervisor’s Office.

Fuels staff and resource specialists do a good job of keeping up with the planning processes for the prescribed fire program. Execution of prescribed fires can be challenging, as no single district has a deep, complete component of all prescribed fire qualifications. District and Forest staff work together to develop and carry out priority projects.

In the past, we have relied on the contract community to accomplish a portion of our prescribed fire program when the program exceeded our in-house capabilities. The contractors have provided a wide array of service from full service ignition/hold/mop-up contracts to burning only hand piles.

In 2006, two districts implemented a new monitoring protocol on prescribed burns on their unit (North Fork and Pomeroy RDs). This monitoring protocol on selected projects is intended to describe the weather, fire behavior, and fire effects

associated with burn projects in order to determine the effectiveness of the projects in achieving fuel reduction and forest health improvement objectives.

Define the weather, fire behavior and fire effects monitoring associated with prescribed fire applications. Include both short-term and long-term effectiveness monitoring objectives, and any issues or concerns identified in related NEPA documents. Verify and monitor for the measurable objectives identified for prescribed fire (see section III-C, "Description of Fire Management Units"). Emphasize protocols and criteria needed to determine if objectives have been met. The full monitoring plan should be included as an appendix or addendum.

Prescribed Fire Monitoring

The Forest has RAWs that collect weather data year round, and help identify upcoming prescribed burn windows. All burn projects use spot weather forecasts generated by the Pendleton Office of the National Weather Service to verify that conditions are suitable for burning. All burn plans include requirements for monitoring burning conditions during the start-up and implementation phases, and post burn fire effects monitoring to determine if objectives were met. Each fuels project has objectives, and a post treatment evaluation to assure quality is maintained. The Forest fuels management program has some short term record keeping requirements in the burn plans.

The objective of any monitoring program would be to determine if the objectives stated in the original NEPA documents and then the subsequent burning plans were being met. Additional monitoring would also evaluate areas of concern identified by the interdisciplinary team, such as soil compaction, mortality rates, etc. and could be established on a site by site basis.

The parameters and criteria currently listed in the burn plans for the implementation of our landscape and activity fuels ignitions ensure that Forest Plan standards will not be compromised.

In developing the burn plan, the prescribed fire specialist identifies fire effects objectives, and weather and fire behavior are modeled to identify the range of parameters that will meet the fire effects objectives. Weather conditions affecting short and long term fuel moisture at the burn site are recorded by one or more of the following: permanent Remote Automated Weather Stations (RAWs), portable weather stations, and on-site observations. Weather forecasts are obtained from the National Weather Service in a daily general Fire Weather Forecast, and prior to initiating a prescribed fire, a site and time specific Spot Weather Forecast is required to identify weather conditions meeting the burn window. Test fires are lit to determine whether intended fire effects will be met. Burn crews are briefed on unit lighting techniques, and crews monitor and continually adjust burn patterns and tempo as conditions change over time and space to meet the fire effects objectives.

Post burn effects are evaluated by resource specialists to verify that fire effects objectives were met. Where they were not, specialists help to develop mitigation strategies. The Burn Boss assesses down and dead woody fuel consumption to document fuel reduction by size class as a desired outcome in the burn plan. The effect of smoke production is monitored by the burn boss and by the Smoke Management regulatory systems for Oregon and Washington.

- e. Provide the format for critiques of prescribed fire projects.

For burn projects that met the intent of the burn plan, an in-house, informal after action review is used to evaluate the implementation and to identify potential improvements. District Interdisciplinary Teams (IDTs) should schedule reviews after fuels treatments to evaluate compliance with the original NEPA document.

If a prescribed burn project escapes or significantly fails to meet objectives, a burn plan review is conducted, IDTs may review actions, and an on-site evaluation by specialists is conducted as necessary.

- f. Describe reporting and documentation requirements for accomplishments and escaped fires.

The FACTS database is used to track accomplishments. Process for escaped burns is documented in each burn plan.

- g. Develop a historic fuel treatment map of post burn activities that affect planned actions.

The Forest Fuels group is currently updating the map of past burn activities, and with the conversion to the FACTS database, the Forest data can be displayed in map form.

A description of the required prescribed burn plan elements can be found in the [implementation guide](#).

The Umatilla National Forest utilizes the Umatilla National Forest burn template. This template, along with national and regional standards for prescribed fire planning, can be found at: [J:\fsfiles\office\fuels\Policy](#)

2. Exceeding Existing Prescribed Fire Burn Plan

- a. There may be prescribed fires where the implemented prescribed fire exceeds the conditions of the burn plan and is converted to a wildfire.. As described in the fire suppression section of the FMP, the wildland fire situation analysis is initiated at this stage. Develop the WFSA using the elements listed in that section. Report escaped fires consistent with direction provided in FSM 5140.
- b. Air Quality and Smoke Management. Fuel consumption and smoke production should be submitted to States following the States Smoke Management Programs. Changes in direction of smoke plume or excessive consumption may require the suspension of burning for the day. Aggressive mop up may also be required to minimize smoke impacts.

3. Describe pertinent air quality issues.

- a. Smoke generated from prescribed burning of forest and grasslands can affect public health and visibility by reducing air quality. The USDA Forest Service, Region 6, has entered into agreements with state and other federal agencies to provide a system to ensure agencies creating wildland prescribed fire smoke are coordinated and timed to minimize the impact of smoke on the public. Prescribed fire on the Umatilla National Forest must comply with the 1990 Clean Air Act requirements for Prevention of Significant Deterioration (PSD), compliance with National Ambient Air Quality Standards (NAAQS), and visibility protection.

- b. Develop a program of action to manage smoke that complies with the requirements of the Clean Air Act, and any additional issues identified through the NEPA process. Include all potential measures to prevent or mitigate adverse smoke events. A detailed smoke management plan may be developed cooperatively with the State regulatory agency responsible for regulatory air quality management for each Forest and include in the appendix to the FMP or as an addendum. Describe any pertinent air quality issues, including:

(1) Location of Class I airsheds.

- Eagle Cap Wilderness
- Hells Canyon National Recreation Area

(2) Description of pre-identified smoke sensitive areas.

La Grande and Pendleton are designated “Smoke Sensitive Receptor Areas” under the Oregon Smoke Management Plan.

Lewiston Clarkston valley is pre-identified as a smoke sensitive area and conditions are closely monitored to avoid intrusions into this municipality.

(3) Local and regional smoke management restrictions and procedures.

The Umatilla National Forest Land and Resource Management Plan, 1990, discusses Air Quality in section 4-88.

The Umatilla National Forest coordinates with the Oregon Department of Forestry administering the State of Oregon Smoke Management Plan, and with the Washington Department of Natural Resources administering the State of Washington Smoke Management Plan. Coordination includes monitoring accomplishment reports for payment based on acres burned, providing proposed burn activities, obtaining approval prior to burning, and providing accomplished burn data. The Umatilla National Forest prescribed fire program will comply with state and federal air quality requirements.

The Pomeroy District voluntarily coordinates with the Montana/Idaho State DEQ and the Lewis-Clark Valley Air Quality Advisory Commission to minimize the impact of smoke on people and to promote the use of fire as a forest management tool.

A. Non-Fire Fuel Applications

Describe the scope of non-fire treatment activities related to fuel hazard reduction and the total fire management program. Include discussion on collaborative processes in planning, priority setting, and implementation.

The Umatilla National Forest is comprised of fire dependent ecosystems, where a long history of successful fire suppression has led to an unnatural accumulation of fuels in many areas. The most effective means of reducing large fire suppression costs, protecting community values, restoring forest and grassland health, and improving firefighter safety, is an aggressive fuel treatment program. Prescribed fire use at ecologically appropriate intensities is an essential means of restoring forest health conditions.

Non-fire fuel treatment can be an effective tool to reduce accumulated fuels, without some of the risk or effects involved with introducing fire as a first treatment. Non-fire fuel treatments can provide a means to reintroduce fire and ecological benefits while minimizing the risk of escaped fire and undesirable fire effects due to high intensity burns resulting from burning excessive fuel loadings. It also allows acres to be treated any time of the year, and not compete for the few available burn windows and specialized training and experience necessary to conduct a prescribed fire.

Prioritization for planning and implementation of non-fire fuel treatments follows “A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment, 10-Year Comprehensive Strategy, Implementation Plan”, May, 2002. This Congressional direction sets the following goals:

- Improve Fire Prevention and Suppression
- Reduce Hazardous Fuels
- Restore Fire-adapted Ecosystems
- Promote Community Assistance

Coordination within the Umatilla National Forest occurs between fire/fuels, silviculture, state and Federal fish and wildlife agencies, and timber specialists. External coordination occurs with the Oregon Department of Forestry, Washington Department of Natural Resources, Counties, private industry, and private landowners. This coordination is necessary to ensure the greatest benefit is being reaped for all participants, in a cost effective manner, based on the direction provided by Congress.

1. Mechanical Treatment and Other Applications.

After an area is identified as needing treatment, mechanical treatment is identified as being the best alternative, and the area is prioritized for planning, a project plan is developed through the NEPA process. Once the project passes NEPA, and funds are available, district staff lays out the project on the ground, develops a contract to meet the objectives, and advertises, awards, and administers the contract.

The Forest’s mechanical fuels program planning and implementation is incorporated directly into our overall fuels program. Any mechanical projects are the result of a weighing of all the tools at our disposal and the application of a mechanical treatment when it accomplishes the objectives. The Forest, whenever possible, attempts to utilize any forest products that could be available, treat the vegetation or residue to the greatest extent with a method that removes or reduces smoke output. We have an active stewardship contract program on the two southern districts, where appropriated funds are used to remove material with product value to landings, and then to haul the material to facilities that purchase the material from the government. The proceeds from these sales are then used to pay for the treatment of more acres.

Equipment and seasonal use restrictions by management area or FMU, including restrictions due to weather, species sensitivity, or other concerns that may affect equipment use.

Specific restrictions are developed on a case by case basis, identified in the project planning process, and addressed in the contract.

Slope is our primary limiting factor when it comes to the application of mechanical treatments to all FMU's. In flatter areas, the full spectrum of ground based options is used to accomplish mechanical fuels treatments, but on steeper ground the opportunities for machinery use decreases. We still perform and contract a number of hand crew based methods, such as hand piling when slopes prevent the use of heavy equipment. Operating seasons are dictated by weather and type of activity. Use of machinery requires dry or frozen soil to avoid compaction, and favorable fire weather conditions to avoid fire starts from industrial operations. This limits the operating season for mechanized equipment in most cases to the summer months, after soil moisture is reduced by some drying and before the forest has dried out enough to become highly flammable. The hand work season starts and ends before and after the mechanized season by a couple of months of either end.

Define the effects monitoring required. Include both short-term and long-term monitoring objectives, and any issues or concerns identified in related NEPA documents. Verify and monitor for the measurable objectives identified for non-fire applications (see the preceding Chapter 3 "Description of Fire Management Units"). Emphasize protocols and criteria needed to determine if objectives have been met. The full monitoring plan should be included as an appendix or addendum.

Monitoring requirements are developed on a case by case basis, identified in the NEPA process, and addressed in fuels treatment contracts.

Provide the format for critiques of mechanical treatment projects. Critiques generally are in-house and informal for mechanical treatments that meet prescription according to the plan. If a mechanical treatment project has problems, it is generally dealt with via the contract, with input from specialists when needed. Those projects that are accomplished with force account labor are also critiqued in house and issues are discussed and resolved within the various disciplines involved.

Describe cost accounting. Cost accounting is administered based on the contract, or internal budgeting process for force account projects. Planned operations are identified in WorkPlan.

Describe reporting and documentation requirements. Fuel treatment accomplishments are documented in the FACTS database.

Provide the annual planned project list.

[Planned Projects spreadsheet 2008.](#)

Annual planned project list is also available in the FACTS database as provided for all districts on the Umatilla NFs

SECTION 5 - Organization and Budgetary Parameters

A. Current fiscal year budget and the ability to support planned and unplanned actions.

The basic fire program budgetary need was developed through a NFMAS analysis updated in 2002. Implementation costs are updated annually and submitted as part of the Forest's out-year budget request. Annual allocations vary from year to year based on Congressional Appropriations and Agency priorities. Form 5100-2, Integrated Fire Management Organization and Financial Plan, details the baseline funding at the "Most Efficient Level" for the Forest. Each year, after the final allocation is received, an updated 5100-2 is prepared to document how the current years budget is distributed to achieve the maximum program capabilities with the funds available.

Refer to [Forest NFMAS Analysis updated in 2002](#) for more details regarding the Most Efficient Level of funding and associated organization.

Refer to [Current Year Form 5100-2](#) for this year's allocation and distribution of fire management budget.

The prescribed fire program budget varies greatly from year to year. The [Accelerated Vegetation Treatment Strategy—Region 6](#) establishes the priorities for projects across the Pacific Northwest. Each national forest develops project proposals that are submitted to the Region that are used to determine annual allocations to the forest.

Refer to the [Fuels Project Plan List](#) for Umatilla National Forest Projects.

Brush Disposal funded projects vary significantly from year to year. Units with Brush Disposal funding will schedule projects for treatment based on available collections and project objectives.

B. Organization chart supported by the current fiscal year budget

The basic fire management organization for the forest fluctuates across the funding levels. The forest has difficulty in hiring when budgets come late in the year (as has happened lately). This has resulted in the hiring of students that often leave before the end of the fire season. As a result this fact and recognition after the South Canyon tragedy that we needed to build and develop a stronger initial attack force the forest has hired more PSE's at a higher cost.

A full time fire prevention officer is housed at the Walla Walla Ranger District but is responsible for fire prevention for the entire forest.

The forest is organized in the traditional Forest Service manner. At the forest headquarters there is a full time Fire Staff Officer, a Deputy, a Fire Planner a Training Officer and a Communications Center that performs the dispatch function. Ranger Districts have a Fire Management Officer, two assistant FMO's (one for suppression and one for fuels), fuels technician, and various engine and crew leaders. In addition the North Fork Ranger District fire management staff includes a rappel program manager and an assistant.

Refer to [Current Year Form 5100-2](#) for the current funded fire organization.

C. Cooperative agreements and interagency contacts

As previously stated in this plan, interagency coordination is a critical component for the successful execution of the fire management program on the Umatilla National Forest. Numerous cooperative agreements exist to facilitate this coordination.

Refer to the [Cooperative Agreement](#) folder for specific agreements affecting execution of the fire program on the forest.

D. Equipment rental agreements

In recent years there has been an effort both regionally and nationally to standardize engine and crew resources procured under emergency hire authorities. This has resulted in regional and national contracts for engines and crews that receive preference to such equipment hired under emergency rental agreements. EERA's are prepared for specialized equipment such as dozers and lowboys, tenders, etc.

The forest maintains a database for other equipment available under Equipment Rental Agreements.

Consult the Pendleton Interagency Communications Center ([PICC](#)) for a complete listing of crews and equipment available under contract and/or rental agreement.

E. Contract suppression and prescribed fire resources

In recent years there has been an effort both regionally and nationally to standardize engine and crew resources procured under emergency hire authorities. This has resulted in regional and national contracts for engines and crews that receive preference to such equipment hired under emergency rental agreements.

Consult [PICC](#) for a complete listing of crews and engines available under contract in the local area.

SECTION 6 - Monitoring and Evaluation

A. Annual Monitoring Requirements

The Land and Resource Management Plan lists three monitoring requirements directly involving the fire management program.

Refer to [Land and Resource Management Plan-Umatilla National Forest-1990](#) Chapter 5 page 5-16 for details regarding the required monitoring associated with the Fire Management Program

In addition the Thirtymile Fire Abatement Plan requires that several components of the fire program be monitored throughout the season.

Refer to [Thirtymile Fire Information](#) for a listing of monitoring and reporting requirements associated with compliance to the OSHA Thirtymile fire abatement plan

B. Reporting Requirements

In addition to the items listed in A above, agency policy requires that an Individual Fire Report, FS-5100-29, be prepared for all wildland fires.

The National Fire Plan initially required reporting of hazardous fuel treatment accomplishments through NFPORS. Since October 1, 2006, hazardous fuel treatment for Forest Service accomplishments has been entered into FACTS.

Prescribed burning and management of smoke will be conducted in compliance with the Clean Air Act, and the state smoke management programs for the state burning is being conducted in.

For Washington, a web based data management program is being developed. The interim plan is to notify Washington Department of Natural Resources (WADNR) smoke management personnel by email at least a week prior to burning. Notification by email or phone is completed by at least 1200 hours the day prior to ignition. WADNR will call if approval is granted to generate the smoke. Reporting accomplishment is then completed by email following the burn with WADNR, and in NFPORS within 2 weeks after completing the activity.

For Oregon, the computer web based database FASTRACS is used to register, plan, and accomplish smoke management reporting. Using FASTRACS, the burn is to be registered at least 2 weeks prior to burning, and planned by 1000 hours the day of the burn. The burn boss will comply with smoke management guidance produced daily by the Oregon Department of Forestry smoke management program in conducting a prescribed fire. Accomplishment will be reported in FASTRACS by noon the day following the burn and in FASTRACS within 2 weeks after completing the activity.