SALMON/CHALLIS NATIONAL FOREST
2012 FIRE MANAGEMENT PLAN

Reviewed and Updated by ___Fritz Cluff_____ Date ____2/16/2012_

Interagency Federal fire policy requires that every area with burnable vegetation must have a Fire Management Plan (FMP). This FMP provides information about the fire management planning process for the Salmon/Challis National Forest and compiles guidance from existing sources such as but not limited to, the Salmon and Challis National Forest Land and Resource Management Plans, (Salmon:1/1988, Challis:6/1987) national policy, and national and regional directives.

The potential consequences to firefighter and public safety and welfare, natural and cultural resources, and values to be protected help determine the appropriate management response (AMR) during a fire. Firefighter and public safety are the first consideration and are always the priority during every response.

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

Chapter 1 introduces the area covered by the FMP, includes a map of the Salmon/Challis National Forest, addresses the agencies involved, and states why the forest is developing the FMP.

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

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

Chapter 1. INTRODUCTION

The Salmon/Challis National Forest developed this FMP as a decision support tool to help fire personnel and decision makers determine the AMR to an unplanned ignition. FMPs do not make decisions. Instead, they provide information, organized by FMUs, which provides a finer scale summarization of information than is possible at the forest level. These descriptions bring specific detail about the identifiable areas on the ground. FMPs are not static documents. They will evolve and be revised as conditions change on the ground and as modifications are made to the unit's LRMP.

Chapter 2. POLICY, LAND MANAGEMENT PLANNING, AND PARTNERSHIPS

This fire management plan discusses the general aspects of the wildfire management program on the Salmon/Challis National Forest.

The top priority during the selection of fire management strategies and tacticts will be safety of the firefighting personnel and the public including adjacent landowners. Other priorities, which rank below safety, include protection of private property, resources, cost containment, and suppression actions, which have the least negative effect on environmental factors.

The regulations and policy in the following documents guide the fire management as outlined in this FMP.

2.1. National and Regional Fire Management Policy

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

- 1995 Federal Wildland Fire Management Policy and Program Review (January 2001)
- National Fire Plan
- Forest Service Manual 5100
- Forest Service Handbook 5109
- Guidance for Implementation of Federal Wildland Fire Management Policy (February 13, 2009)

2.2. Salmon/Challis Land and Resource Management Plans

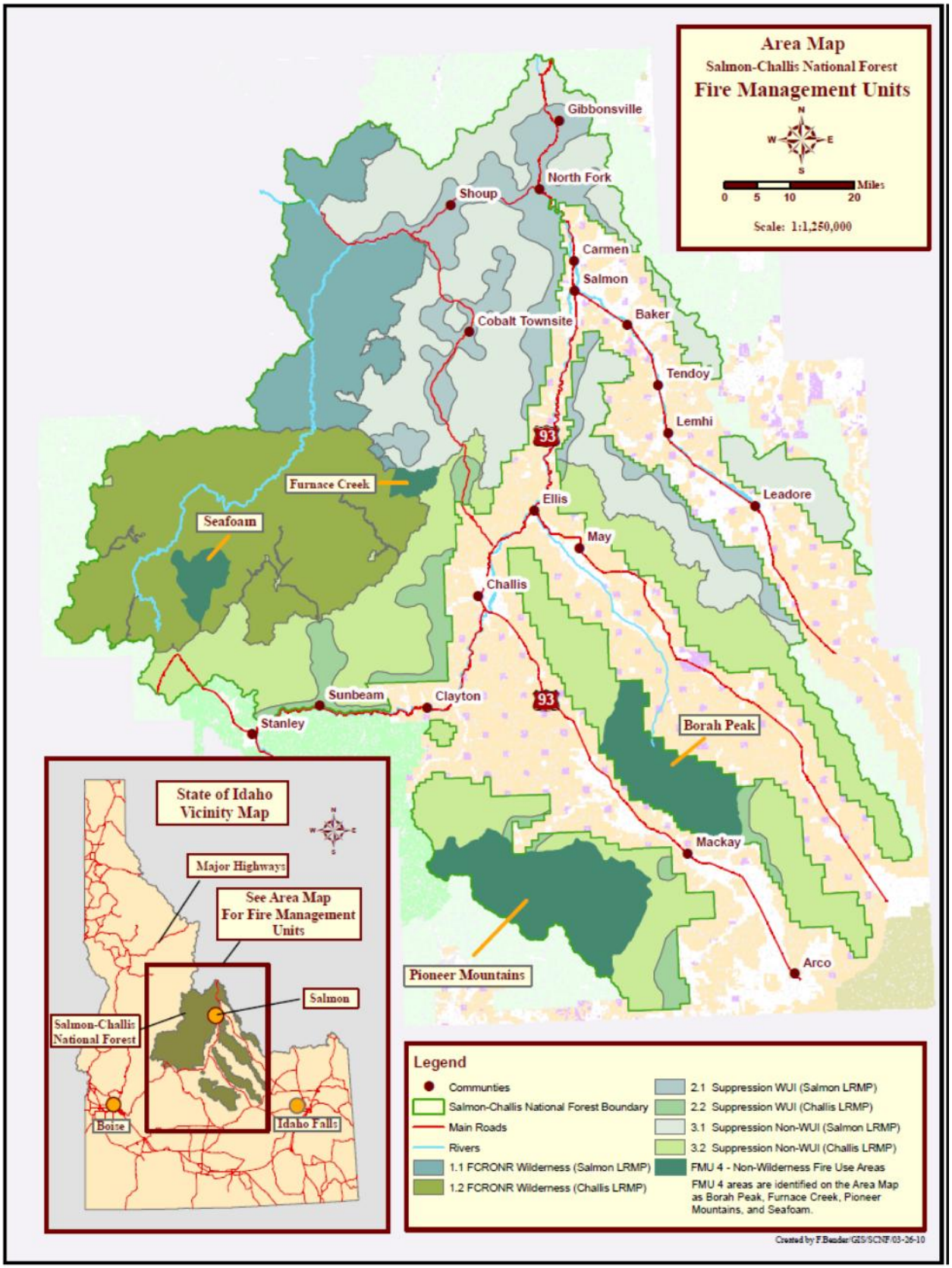
- Salmon and Challis National Forest Land and Resource Management Plan and Record of Decision (Salmon – 1/1988, Challis – 6/1987)
- The Salmon and Challis National Forests were combined administratively in 1995 but still operate under the existing Land and Resource Management Plans (LRMP) for both Forests. A joint LRMP will be developed during the ongoing revision process. The purpose of this plan is to achieve the land and resource management objectives set for in both Forest Plans
- Within the administrative boundaries of the Salmon/Challis National Forest is a portion of the Frank Church River of No Return Wilderness (FCRNR Wilderness). The area which is included in the FCRNR Wilderness is managed in accordance with the Frank Church River of No Return Wilderness Management Plan. (November, 2003)

2.3. Partnership

By using Memorandums of Understanding (MOUs), Annual Operating Plans (AOPs) and Contractual Agreements, the Salmon/Challis National Forest is able to involve a number of agencies in management of fire in Central Idaho. These key players include; Federal Agencies (Idaho Falls District BLM, Caribou-Targhee National Forest, Payette National Forest, Beaverhead-Deerlodge, Bitterroot National Forest, Sawtooth National Forest), state and local agencies (Idaho Department of

State Lands, Lemhi County, Custer County, Butte County, and local fire departments). To document the level of cooperation occurring, identify and list any internal and external fire management partnerships or planning teams that helped you develop this FMP.

Interagency cooperation and coordination is an vital part of the Salmon/Challis Fire program. The Salmon/Challis fire program in conjunction with the Idaho Falls District BLM manages fires in central Idaho through a closes forces concept for all initial attack incidents. The local interagency dispatch center is managed by a Salmon/Challis N.F. center manager, but is supported by 1 career seasonal and 1 seasonal dispatchers. The local fire cache is housed at the Supervisors office in a BLM facility, where the forest provides a career seasonal cache manager and the BLM provides a seasonal materials handler and one support vehicle.


Area Map
Salmon-Challis National Forest
Fire Management Units
N
W
E
S
Miles
0 5 10 20
Scale: 1:1,250,000
Gibbonsville
North Fork
Shoup
Carmen
Salmon
Cobalt Townsite
Baker
Tendoy
Lemhi
93
Furnace Creek
Seafoam
Ellis
Leadore
May
Challis
Sunbeam
Clayton
93
Stanley
Borah Peak
Mackay
Pioneer Mountains
Arco
State of Idaho Vicinity Map
Major Highways
See Area Map For Fire Management Units
Salmon
Salmon-Challis National Forest
Boise
Idaho Falls
Legend
Communties
Salmon-Challis National Forest Boundary
Main Roads
Rivers
1.1 FCRONR Wilderness (Salmon LRMP)
1.2 FCRONR Wilderness (Challis LRMP)
2.1 Suppression WUI (Salmon LRMP)
2.2 Suppression WUI (Challis LRMP)
3.1 Suppression Non-WUI (Salmon LRMP)
3.2 Suppression Non-WUI (Challis LRMP)
FMU 4 - Non-Wilderness Fire Use Areas
FMU 4 areas are identified on the Area Map as Borah Peak, Furnace Creek, Pioneer Mountains, and Seafoam.
Created by F.Bender/GIS/SCNF/03-26-10

Chapter 3. FIRE MANAGEMENT UNIT DESCRIPTIONS

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

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

3.1. Fire Management Considerations Applicable to All Forest Fire Management Units

3.1.1. Salmon and Challis Land and Resource Management Plans Guidance

- **Desired Conditions**
- Appropriate suppression response will be made on all wildfires on all management areas. Pre-suppression and fuel abatement activities will be carried out where appropriate and as possible with budgetary limitations. Intensity of suppression activities will be weighed against cost of suppression and potential for resource damage. Fire management within wilderness will include the use of fire to restore and perpetuate natural ecosystems. (Salmon LRMP, pg. III-4)
- Maintain fire suppression capabilities, which allow an appropriate suppression response to all wildfires. (Challis LRMP, pg. IV-8)
- Landscapes exhibit vegetative conditions created by natural events such as fire. (Frank Church Management Plan, pg. 2-22)
- **Objectives**
- Firefighter and public safety is the first priority in every fire management activity (Frank Church Management Plan, pg. 2-22)
- Use wildland and prescribed fire in a safe, carefully planned and cost-effective manner to benefit, protect, maintain and enhance wilderness resources; to reduce future suppression costs; and to the extent possible, restore natural ecological processes (Frank Church Management Plan, pg. 2-22)
- Provide advice to rural communities about fire protection, prevention, and control programs under the Cooperative Fire Assistance Act. (Challis LRMP, p. IV-8)
- Provide fire suppression action on all wildfires, which is cost effective and protects life and property. (Challis LRMP, p. IV-8)
- Permit lightning caused fires to play, as nearly as possible, their natural ecological role within wilderness. (Challis LRMP, p. IV-8)
- Reduce, to an acceptable level, the risks and consequences of wildfire within wilderness or escaping from wilderness. (Challis LRMP, p. IV-8)
- Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area considering the following; values of resources threatened, probability of fire occurrence, weather conditions, cost of fire protection programs, and, social, economic, political, cultural, environmental, life and property concerns. (Salmon LRMP, p. IV-69)
- Take suppression actions on all escaped fires considering; public safety, values at risk, management objectives for the area, current and projected weather, fuel beds, costs of alternatives and strategies, and social, economic, political, cultural, and environmental concerns. (Salmon LRMP, p. IV-69)

- **Guidelines**
- All lighting caused fires will be evaluated as potential Wildland Fire Use candidates (Frank Church Management Plan, pg. 2-23)
- The appropriate management response and corresponding strategies will consider the impacts of that action on the wilderness resource. Minimum Impact Management Techniques will be implemented whenever suppression actions are taken. (Frank Church Management Plan, pg. 2-23)
- Suppression actions will be taken where lightning-caused fires pose serious threats to life and/or property within wilderness or to life, property, or natural resources outside of wilderness and person-caused fires. The appropriate management response will be timely, effective and efficient, providing for safety first. (Frank Church Management Plan, pg. 2-23)
- Control will be the suppression strategy during fire season on all fires that occur below 8000 feet outside the FC-RONR Wilderness (Salmon LRMP, p.IV-69)
- Containment or confinement strategies may be chosen for pre and post-season fires and those above 7000 feet. The general fire season is May 10th through October 20th with the primary fire season from June 15th through September 30th. (Salmon LRMP, p. IV-69)
- **Goals**
- Lightning caused fires will be permitted to play, as nearly as possible, their naturalecological role within the FC-RONRW (Frank Church Management Plan, p. 2-22)
- Develop a well-planned and executed fire protection and fire use program that is cost efficient and responsive to land and resource management goals and objectives. (Challis LRMP, p.IV-8)
- Maintain fire suppression capabilities, which allow an appropriate suppression response to all wildfires. (Challis LRMP, p.IV-8)
- Provide a cost effective level of fire protection to minimize the combined costs of protection and damages, and prevent loss of human life. (Salmon LRMP, p. IV-3)
- **Standards**
- Tractor line width must be commensurate with the situation at hand. Lines in excess of one blade wide are rarely needed and will not be permitted without prior approval of the Forest Supervisor, except in emergencies. Safety zones up to 300 feet wide and vehicle turnouts may be constructed as necessary. (Salmon LRMP, p. IV-70)
- Every effort will be made to perform rehabilitation work concurrently with line construction. Wildlife openings, at intervals no greater than 200 feet will be built into slash windrows during construction. (Salmon LRMP, p. IV-70)
- Water bars will be constructed as soon as possible after line construction, based on intended use of the line, equipment availability, and safety considerations. (Salmon LRMP, p. IV-70)

3.1.2. Physical Characteristics that Apply to All Fire Management Units

Because of the large variety of physical characteristics throughout the central Idaho region and the Salmon/Challis National Forest, this Fire Management Plan establishes specific geographic areas as Fire Management Units (FMUs). Each FMU has been established to address differing physical characteristics and provide area specific guidance to managers for implementation of the objectives found in the LRMP's for the Salmon and Challis National Forests. There are 4 separate fire management units in the Salmon/Chall Fire Management Area.

3.2. Fire Management Considerations for Specific Fire Management Units

3.2.1. FMU Snap Shot

- FMU Number: Fire Management Unit 1 (**Frank Church River of No Return Wilderness**)
- Fire Behavior Indicator: Burn Index
- NFDRS Weather Station: Central Idaho Mountain SIG
- Acres/Agency: 1,278,175
- Predominant Vegetation Types: Vegetation within the Frank Church Wilderness FMU ranges from dry grass/shrub types in the lower elevations and river bottoms to moist sub-alpine vegetation at the higher elevations. At lower elevations south facing slopes are generally dominated by open stands of ponderosa pine and Douglas fir while north facing slopes are characterized by more closed stands of Douglas fir. As you rise in elevation the ponderosa pine/Douglas fir vegetative types transition into closed stands of lodge pole pine and sub-alpine fir.
- Unit: Management of this FMU is primarily the responsibility of the Middle Fork and North Fork Ranger Districts of the Salmon/Challis National Forest.
- Duty Officer: Local Duty Officers from the North Zone, South Zone and Forest level Duty Officer
- IA Dispatch Office: Central Idaho Coordination Center
- Communities adjacent or within FMU: Since this FMU encompasses a large wilderness area there are no communities within the FMU. However, this FMU does encompass a large number of private in-holdings within the wilderness boundary and a number of small isolated communities along the Salmon River road, between the town of North Fork and where the road ends at Corn Creek boat launch.

  LMP options available for AMR: The full range for fire management options is available for this fire management unit.
- Special safety considerations: Steep and rugged terrain, extreme fire behavior, and lack of accessibility.

3.2.2. FMU Guidance

- **Desired Conditions**
  - Landscapes exhibit vegetative conditions created by natural events such as fire. (Frank Church Management Plan, pg. 2-22)
  - Appropriate suppression response will be made on all wildfires on all management areas. Pre-suppression and fuel abatement activities will be carried out where appropriate and as possible with budgetary limitations. Intensity of suppression activities will be weighed against cost of suppression and potential for resource damage. Fire management within wilderness will include the use of fire to restore and perpetuate natural ecosystems. (Salmon LRMP, pg. III-4)
  - Maintain fire suppression capabilities, which allow an appropriate suppression response to all wildfires. (Challis LRMP, pg. IV-8)
- **Objectives**
  - Firefighter and public safety is the first priority in every fire management activity (Frank Church Management Plan, pg. 2-22)
  - Use wildland and prescribed fire in a safe, carefully planned and cost-effective manner to benefit, protect, maintain and enhance wilderness resources; to reduce

future suppression costs; and to the extent possible, restore natural ecological processes (Frank Church Management Plan, pg. 2-22)

- Permit lightning caused fires to play, as nearly as possible, their natural ecological role within wilderness. (Challis LRMP, p. IV-8)
- Reduce, to an acceptable level, the risks and consequences of wildfire within wilderness or escaping from wilderness. (Challis LRMP, p. IV-8)
- Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area considering the following; values of resources threatened, probability of fire occurrence, weather conditions, cost of fire protection programs, and, social, economic, political, cultural, environmental, life and property concerns. (Salmon LRMP, p. IV-69)
- Take suppression actions on all escaped fires considering; public safety, values at risk, management objectives for the area, current and projected weather, fuel beds, costs of alternatives and strategies, and social, economic, political, cultural, and environmental concerns. (Salmon LRMP, p. IV-69)

- **Guidelines**
  - All lighting caused fires will be evaluated as potential Wildland Fire Use candidates (Frank Church Management Plan, pg. 2-23)
  - The appropriate management response and corresponding strategies will consider the impacts of that action on the wilderness resource. Minimum Impact Management Techniques will be implemented whenever suppression actions are taken. (Frank Church Management Plan, pg. 2-23)
  - Suppression actions will be taken where lightning-caused fires pose serious threats to life and/or property within wilderness or to life, property, or natural resources outside of wilderness and person-caused fires. The appropriate management response will be timely, effective and efficient, providing for safety first. (Frank Church Management Plan, pg. 2-23)
- **Standards**
  - The Wilderness Plan will serve as a guide for suppression activities. (Challis LRMP, pg. IV-52)

3.2.3. FMU Characteristics

3.2.3.1. Safety

- This FMU is a vast remote area with little to no road access, and extremely diverse and steep terrain. Access is limited to remote landing strips, rafts, and hiking trails. The FMU encompasses most of what is known as the Salmon River Breaks which is well known for rapidly spreading fires in extremely rugged terrain. Fires starting in the River Breaks often spread by rolling material and strong diurnal weather patterns which cause brisk up-slope and up-canyon winds during the day. A thermal belt with the associated inversion often establishes within the canyons of this FMU, this will cause fires to actively burn through the nighttime hours, and as the inversion lifts in the mid to late morning extreme fire behavior is very common.

3.2.3.2. Physical

- This Fire Management Unit is 1,278,175 acres in size and stretches from the Montana/Idaho boundary south to the Stanely Basin along the western boundary of the Forest. The area is dominated by the Middle Fork of the Salmon River and a number of

major tributaries including: Camas Creek, Loon Creek, Marble Creek, Little Creek, Indian Creek, Pistol Creek, the Rapid River, Soldier Creek, Sulphur Creek, Elk Creek, and Warm Springs Creek. One other major stream, Horse Creek is included in the area and is the only major stream not a tributary of the Middle Fork of the Salmon River.

The FMU encompasses the Salmon/Challis National Forest portion of the Frank Church River of No Return Wilderness. The Frank Church River of No Return Wilderness Management Plan provides fire management guidance for this Fire Management Unit. The unit is sub-divided into three fire risk zones base on fuels, topography, weather patterns, and proximity to areas outside of the wilderness. These risk zones represent a relative measure of the threat to life, property, or the management area boundary depending upon time of season and environmental conditions. These risk zones are; 1) Boundary Risk Zone, 2) Salmon River Breaks, 3) Interior.

3.2.3.3. Biological

- Vegetation within the FMU varies considerably both as a result of elevation related weather conditions and as a result of site productivity. Vegetation in the canyons bottoms tends to be sparse with timber usually confined to draws and to northern aspects. Representative vegetation at lower elevations is mostly shrubs or grass. Low elevation grass and shrub lands give way to mid slope dry ponderosa pine and Douglas-fir coniferous forest, which in turn transition to moist ponderosa pine and moist Douglas-fir forest and eventually to subalpine fir and lodgepole pine stands in the cooler higher elevations. Douglas fir and Lodge pole pine may be a major component of this forest type depending on productivity and fire history of the site. Some of the higher peaks extend above the tree line; these areas support alpine vegetative types.

  Streams and lakes within the FMU provide important habitat for a variety of fish species. Anadromous, native resident, and introduced fish species occupy the Middle Fork of the Salmon River and most of its tributaries. The Forest Service and Idaho Department of Fish and Game maintain a program to stock game fish species in a number of wilderness lakes within the area.

3.2.3.4. Resources

- This FMU contains the Main Salmon River Corridor along with the Middle Fork of the Salmon River. These river corridors provide a high amount of recreational activity to the forest and local communities, in the form a fishing, hunting, and white water rafting. The Middle Fork and Main Salmon Rivers are home to many threatened and endangered fish species including Steelhead trout and Chinook Salmon. Within the Frank Church River of No Return Wilderness there are many private in holdings which provide both seasonal and yearlong residents to some private citizens.

3.2.3.5. Fire Behavior

- **Boundary Zone:** The fire ecology of this zone is quite diverse since it is not an ecological zone but rather a wilderness boundary buffer zone. The wilderness boundary ranges from stream bottom to mountain top so the buffer is likewise diverse. This zone is of concern where fire prone habitats provide a route for fire to escape into the portion of the forest that does not allow fires to be managed for resource benefit. Slope gradients generally decrease at higher elevations but wind exposure increases so wind driven stand replacement fires are more common.

- **Salmon River Breaks Zone**: The Salmon River Breaks is well known for its rapidly spreading fires in rugged terrain. Under early season or drought conditions, the risk of down and up canyon spread from fire initiating in this area can be significant. The fire ecology of this zone is best described by fire groups two and three since they dominate the zone. These groups represent the warm, dry habitat types that support open forests of ponderosa pine and Douglas fir, and warm, moist ponderosa pine habitat types. These timber-grass types are best classified into Fire Behavior Fuel Models 2 and 8. This zone includes the location of several fires that have resulted in fatalities and near misses, Ship Island, Cramer, and the Butte fires all occurred in the River Breaks Zone.

- **Interior Zone**: The fire ecology of this zone is diverse ranging from habitats common to the breaks to cool and moist sub-alpine areas. Because of this, fire spread can begin as soon as early summer on steep, high energy sites and perhaps not at all in more moist habitats. Since fires here can be long duration, a wide range of fire types can be involved over the course of a fire season. Fire effects can also vary widely from non-lethal under burning to major stand replacing runs. Smoke production is likewise variable

3.2.3.6. Weather

- The climate of the area has considerable variation primarily as a result of the wide range of elevations represented in the FMU. The majority of annual precipitation occurs during the late fall through early spring months however; summer thunderstorms may also bring intense short duration periods of precipitation to the area, occasionally in significant quantities. Precipitation in the winter and early spring is normally in the form of snow. Snow pack development is rare in the valley bottoms along the Middle Fork of the Salmon River but common on mountain slopes with the FMU. The snow pack often persists on these mountain slopes into late May or early June. The average annual precipitation totals range from 10 inches in the deep canyon land along the Middle Fork of the Salmon River to over 50 inches in the upper reaches of the Big Horn Crags and Salmon River Mountains. The average mean winter temperature is 25° at low elevation stations and 18° at high elevation stations. The average mean summer temperature is 67° at low elevation stations and 56° at high elevation stations. Wind patterns in the area are dominated by the westerly winds however; the topography interacts with these winds and may modify wind direction locally. Local winds are also influenced by surface heating, brisk up slope/up valley breezes are common during the summer months.

3.3.1. FMU 2 Snap Shot

- FMU Number: Fire Management Unit 2 (**Suppression-Wildland Urban Interface)**
- Fire Behavior Indicator: Burn Index
- NFDRS Weather Station: Central Idaho Mountain and Desert/Range SIGs
- Acres/Agency: 626,450 acres
- Predominant Vegetation Types: Vegetation within the Suppression WUI FMU ranges from dry grass/shrub types in the lower elevations to dry Douglas fir and ponderosa types around the communities at higher elevations. At lower elevations south facing slopes are generally dominated by grass/shrub fuels intermixed with open stands of ponderosa pine and Douglas fir while north facing slopes are characterized by more closed stands of Douglas fir.
- Unit: Management of this FMU is primarily the responsibility of the North Fork, Salmon/Cobalt, Challis, Lost River, Yankee Fork and Leadore Ranger Districts of the Salmon/Challis National Forest.
- Duty Officer: Local Duty Officers from the North Zone, South Zone and Forest level Duty Officer
- IA Dispatch Office: Central Idaho Coordination Center
- Communities adjacent or within FMU: Since this FMU encompasses a large area throughout most of the forest, all of the communities in the area adjacent to this FMU. The communities include, Salmon, Challis, Gibbonsville, NorthFork, Leadore, Clayton, Mackay, Elk Bend, as well as many of the small remote communities along the Salmon River.
- LMP options available for AMR: Suppress with limited options for appropriate response to escaped fires base on resources values, and costs.
- Special safety considerations: Wildland urban interface

3.3.2. FMU Guidance

- **Desired Conditions**
  - Appropriate suppression response will be made on all wildfires on all management areas. Pre-suppression and fuel abatement activities will be carried out where appropriate and as possible with budgetary limitations. Intensity of suppression activities will be weighed against cost of suppression and potential for resource damage. Fire management within wilderness will include the use of fire to restore and perpetuate natural ecosystems. (Salmon LRMP, p.III-4)
  - Maintain fire suppression capabilities, which allow an appropriate suppression response to all wildfires. (Challis LRMP, p.IV-8)
- **Objectives**
  - Provide fire suppression action on all wildfires which is cost effective and protects life and property. (Challis LRMP, p. IV-8)
  - Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area considering the following; values of resources threatened, probability of fire occurrence, weather conditions, cost of fire protection programs, and, social, economic, political, cultural, environmental, life and property concerns. (Salmon LRMP, p. IV-69)
- **Guidelines**
  - Control will be the suppression strategy during fire season on all fires that occur below 8000 feet outside the FC-RONR Wilderness (Salmon LRMP, p.IV-69)

- Containment or confinement strategies may be chosen for pre and post-season fires and those above 7000 feet. The general fire season is May 10th through October 20th with the primary fire season from June 15th through September 30th. (Salmon LRMP, p. IV-69)
- Each fire will receive an appropriate response. (Challis LRMP, pg. IV-52)

- **Standards**
  - Tractor line width must be commensurate with the situation at hand. Lines in excess of one blade wide are rarely needed and will not be permitted without prior approval of the Forest Supervisor, except in emergencies. Safety zones up to 300 feet wide and vehicle turnouts may be constructed as necessary. (Salmon LRMP, p. IV-70)
  - Every effort will be made to perform rehabilitation work concurrently with line construction. Wildlife openings, at intervals no greater than 200 feet will be built into slash windrows during construction. (Salmon LRMP, p. IV-70)

3.3.3. FMU Characteristics

3.3.3.1. Safety

- This FMU is comprised of lands that are classified as wildland urban interface (WUI). Included are "at-risk" communities identified by the State of Idaho as a part of the National Fire Plan as well as those identified as WUI using the forest wildland urban interface definition. WUI lands pose a inherit safety risk in that fires often involve private property, structures, and risks to communities. Many of these wildland urban interface areas lie adjacent to grass/brush fuel types which often result in high rates of spread which often makes direct suppression tactics ineffective.

- Several features and conditions have an influence on firefighter safety with regards to fire fighting within this unit. Much of the FMU is located in narrow valley or canyon bottoms. In such areas there is a reason to be very concerned about adequate escape routes and safety zones, the area is frequently bordered by very steep precipitous terrain, which may limit safety options, or in narrow valleys where slope side vegetation and wind channeling may limit safety zone effectiveness. Weather inversions on fires within these areas are very common and may lead to a sudden and dramatic increase in fire behavior when they break. Firefighters fighting fires in valley and canyon bottoms should be alert and vigilant to such fire behavior changes when working these bottomlands. Air support, especially in very deep tight canyons and valleys is often limited by terrain, air tankers in particularly are limited and may not be practical on fires in these locations.

3.3.3.2. Physical

- This FMU is 626,450 acres in size and is scattered across the forest, primarily along the major river and stream corridors. Included within the unit are areas bordering the Salmon River, Owl Creek, Panther Creek, Napias Creek, Silver Creek, Spring Creek, Indian Creek, North Fork of the Salmon River, Sheep Creek, Dahlonega Creek, Fourth of July Creek, Hayden Creek, Big Timber Creek, Williams Creek, Williams Lake, Morgan Creek, Challis Creek, Garden Creek, Pass Creek, Wet Creek, Big Lost River, East Fork of the Big Lost River, Rio Grand Canyon, and Antelope Creek.

  The area making up this Fire Management Unit is uniform in that it is entirely made up from lands located in valley and canyon bottoms. Another consistent feature found

throughout much of the Unit is the presence of year round streams or rivers with associated riparian zones.

The specified suppression strategy for fires occurring within this area is full suppression. Fire management direction comes from either the Challis National Forest or Salmon National Forest Land and Resource Management Plans (Challis LRMP p.IV-8, Salmon LRMP p. IV-69).

3.3.3.3. Biological

- This Fire Management Unit is primarily located in valley bottoms; four basic vegetative conditions typify the area and can be used in a general way to describe anticipated vegetative conditions. The conditions are:

  Canyon bottoms with sparse vegetation primarily in the form of grass and shrubs. A narrow riparian zone exists along streams and Rivers.

  Canyon bottoms dominated by a broad band of riparian vegetation types including cottonwood and willow thickets

  Forested canyon bottoms with a narrow band of riparian vegetation giving way to coniferous forest stands including ponderosa pine, Douglas fir lodgepole pine or mixed stands

  Altered forest or rangelands where natural vegetation has been removed or modified as a result of agriculture, habitation, mining, road construction or other human activities.

Major variation in the vegetation type across the unit can be attributed to differences in annual precipitation. Altered vegetation conditions are primarily found outside of the unit on privately owned lands, but do exist within the unit on sites of former homesteads and in areas were mining has occurred.

3.3.3.4. Resources

- A number of sensitive plants potentially occupy the area. These include both Forest Service designated sensitive species as well a species listed by the US Fish and Wildlife Service under the provisions of the Endangered Species Act. Fire managers should consider these plant species when planning and implementing fire suppression, prescribed fire or other fuel treatment activities.
- Rivers and streams within the FMU provide important habitat for a variety of fish species. Anadromous, native and introduced fish species can be found in the Salmon River and its tributaries and the tributaries of the Lemhi River within the unit. Native and introduced fish species inhabit the Big Lost Rivers and tributaries as well as the included tributaries of the little Lost River.

  NOAA Fisheries and the US Fish and Wildlife Service list several sensitive species of fish that occupy waters within the unit. NOAA Fisheries listing includes: *Oncorhynchus tshawytscha* (Chinook Salmon) listed as threatened, *Oncorhynchus mykiss* (Steelhead trout) listed as threatened, *Oncorhynchus nerka* (Sockeye Salmon) listed as endangered. US Fish and Wildlife Listing

includes: *Salvelinus confluentus* (Bull Trout) listed as threatened and *Oncorhynchus clarki lewisi* (Westslope Cutthroat Trout) considered for listing but determined to be not warranted.

- Wildlife habitat within the Fire Management Unit is moderately to highly altered as a result of human activities associated with habitation, agriculture, mining, logging and transportation. This has resulted in some wildlife displacement particularly for the more sensitive species. Some wildlife still inhabit the area especially the riparian zones along streams while transient occupation by even some of the most sensitive species is possible. Waterways and riparian zones remain critically important to wildlife in the area. A number of sensitive and threatened or endangered species potentially occupy portions of the area either as resident or transient populations. Managers should consider the impacts on such wildlife species when planning and implementing fire suppression, prescribed fire or other fuel treatment activities within the unit.

  The US Fish and Wildlife Service recognizes four wildlife species with potential habitat in the area as threatened or endangered species, these include: *Canis Lupus* (gray wolf) listed as endangered (Note: The USFWS has reintroduced gray wolf into the area, the reintroduced population is declared an experimental non-essential population but is indistinguishable from the listed population). *Haliaeetus leucocephalus* (bald eagle) listed as threatened, *Lynx canadensis* (Canada lynx) listed as threatened and *Ursus arctos horribilis* (Grizzly bear) listed as threatened. A fifth species living in the area, *Falco peregrinus* (Peregrine falcon), was de-listed as an endangered species in 1999.

- Real property within the Fire Management Unit is of high concern. This property consists primarily of structures, Infrastructure and improvements.

  There are three primary types of structures located within the unit:

  - Forest Service administrative structures such as fire guard stations, and recreation related structures including rental cabins and support facilities such as restrooms at recreation sites;

  - Structures connected to mining activities, these range from large very expensive buildings to small sheds. Heavy equipment is often stored at these locations and constitutes a related concern;

  - Structures on private lands in holdings or on lands in close proximity to the forest, these include communities, businesses, ranches, homes and summer cabins.

  Developed infrastructure is widely scattered across the unit. Included in this category of real property are such things as power transmission lines, telephone lines, and highway bridges.

  Improvements are also are widely scattered and include such things as spring improvements, fence lines, corrals, trails, foot bridges, campgrounds, and picnic areas.

The protection of real property is a concern both with suppression operations and with prescribed fire activities. Managers should consider potential impacts when planning and implementing fire management activities.

3.3.3.5. Fire Behavior

- The area making up this Fire Management Unit is uniform in that it is entirely made up from lands located in valley and canyon bottoms. Another consistent feature found throughout much of the Unit is the presence of year round streams or rivers with associated riparian zones. A moist microclimate contributing to elevated fuel moistures is associated with these bodies of water and riparian zones. This moisture has a retarding effect on fire and under most conditions results in reducing fire behavior. Because of this effect on fire behavior, valley and canyon bottom are often considered ideal places for fire line location. This may or may not always be the case and a number of related considerations should be evaluated prior to making such a determination. Terrain influenced weather is common within this FMU, differential heating resulting in the development of local up slope/up valley breezes is very common especially during the summer months. Valley topography in the area also tends to channel winds and often results in local wind conditions far different from those predicted in general area fire weather forecasts. Fires that start within this Fire Management Unit commonly burn out of the Unit and up hill into the surrounding mountains in such cases; the effect of slope on spotting outside of the Unit can affect the behavior of the fire within the Unit. Most of the lands within this Unit are in close proximity to human habitation therefore; wildland urban interface issues almost always influence strategic and tactical thinking with regards to fires burning within the unit. Topography within this Fire Management Unit limits spotting. Normally the lack of elevational differences from place to place limits the distance that firebrands are likely to travel, this couples with the relatively moist conditions found along the streams and rivers make long range spotting less common. Topographically related problems can be encountered from spotting within the Unit from fire activity on the adjacent mountain slopes bordering them. Fires have spread from these locations to inside the Unit both as a result of lofted firebrands as well as from rolling materials.

3.3.3.6. Weather

- The climate within the Fire Management Unit is consistent with valley bottom weather patterns in Central Idaho. Precipitation is light with average annual precipitation ranging from 7.4 inches per year to 15 inches. The majority of annual precipitation occurs during late fall through early spring months however, summer thunderstorms may also bring intense short duration periods of precipitation to the area, occasionally in significant quantities. Fall, winter and early spring precipitation may come in the form of rain or snow; snow pack development is uncommon in the area. Representative weather stations in Salmon, Challis and Stanley Idaho provide 70-year precipitation average of: 9.12 inches, 7.4 inches and 14.33 inches respectively. Temperatures are cool in the winter and warm in the summer, the January mean average winter temperature at Salmon, Challis and Stanley is 18°, 20° and 13° degrees respectively. The July mean average summer temperature at these three stations is: 68°, 68° and 57° respectively. The upper air wind pattern in the area is dominated by westerly winds however; surface winds are heavily influenced by topography with wind funneling very common. A number of canyons and valleys in the unit are aligned with the predominant winds and this has a marked influence on fire behavior. Local winds are also influenced by surface heating so up slope/up valley breezes are common during the summer months.

3.4.1. FMU 3 Snap Shot

- FMU Number: Fire Management Unit 3 (**Suppression-Non-WUI)**
- Fire Behavior Indicator: Burn Index
- NFDRS Weather Station: Central Idaho Mountain and Desert/Range SIGs
- Acres/Agency: 2,040,315 acres
- Predominant Vegetation Types: Vegetation within the Suppression Non-WUI FMU ranges from dry grass/shrub types in the lower elevations to dry Douglas fir and ponderosa types at the mid elevations, and as elevation again increases more the vegetation turns to lodgepole pine and sub-alpine fir. At lower elevations south facing slopes are generally dominated by grass/shrub fuels intermixed with open stands of ponderosa pine and Douglas fir while north, facing slopes are characterized by more closed stands of Douglas fir. In recent years the mid to high elevation timber types have been affected by insects and currently a high percentage of the Douglas fir and Lodge Pole pine is dying and becoming available to burn.
- Unit: Management of this FMU is primarily the responsibility of the North Fork, Salmon/Cobalt, Challis, Lost River, Yankee Fork and Leadore Ranger Districts of the Salmon/Challis National Forest.
- Duty Officer: Local Duty Officers from the North Zone, South Zone and Forest level Duty Officer
- IA Dispatch Office: Central Idaho Coordination Center
- Communities adjacent or within FMU: This FMU encompasses a large area throughout most of the forest, however nearly all of the communities lie within the Suppression WUI FMU. This FMU does not contain any actual communities; however, it does contain many areas of private land in holdings, and areas of high recreational use.
- LMP options available for AMR: Suppress with limited options for appropriate response to escaped fires base on resources values, and costs.
- Special safety considerations: Structures on isolated private lands, and private citizens around recreation areas.

3.4.2. FMU Guidance

- **Desired Conditions**
  - Appropriate suppression response will be made on all wildfires on all management areas. Pre-suppression and fuel abatement activities will be carried out where appropriate and as possible with budgetary limitations. Intensity of suppression activities will be weighed against cost of suppression and potential for resource damage. Fire management within wilderness will include the use of fire to restore and perpetuate natural ecosystems. (Salmon LRMP, p.III-4)
  - Maintain fire suppression capabilities which allow an appropriate suppression response to all wildfires. (Challis LRMP, p.IV-8)
- **Objectives**
  - Provide fire suppression action on all wildfires, which is cost effective and protects life and property. To the extent of the suppression will be based on resorce values, costs, burning conditions, safety, and protection of private property, spread potential, and fire organization availability. (Challis LRMP, p. IV-8)
  - Provide a level of protection from wildfire that is cost efficient and that will meet management objectives for the area considering the following; values of resources

threatened, probability of fire occurrence, weather conditions, cost of fire protection programs, and ,social, economic, political, cultural, environmental, life and property concerns. (Salmon LRMP, p. IV-69)

- **Guidelines**
  - Control will be the suppression strategy during fire season on all fires that occur below 8000 feet outside the FC-RONR Wilderness (Salmon LRMP, p.IV-69)
  - Containment or confinement strategies may be chosen for pre and post-season fires and those above 7000 feet. The general fire season is May 10th through October 20th with the primary fire season from June 15th through September 30th. (Salmon LRMP, p. IV-69)
  - Each fire will receive an appropriate response. (Challis LRMP, pg. IV-52)
- **Standards**
  - Tractor line width must be commensurate with the situation at hand. Lines in excess of one blade wide are rarely needed and will not be permitted without prior approval of the Forest Supervisor, except in emergencies. Safety zones up to 300 feet wide and vehicle turnouts may be constructed as necessary. (Salmon LRMP, p. IV-70)
  - Every effort will be made to perform rehabilitation work concurrently with line construction. Wildlife openings, at intervals no greater than 200 feet will be built into slash windrows during construction. (Salmon LRMP, p. IV-70)

3.4.3. FMU Characteristics

3.4.3.1. Safety

- All of the hazards that are common to the wildland fire environment including snags, steep slopes, driving hazards, heavy fuels etc. exist in this FMU.
- Special attention should be given to snags and other hazards associated with the mortality of the timber due to the insect outbreak in this FMU.

3.4.3.2. Physical

- This Fire Management Unit is 2,040315 acres in size. The area includes most of the upland area of the Salmon National Forest and Challis National Forest. Mountain Ranges dominate this Fire Management Unit and these mountain ranges can be used to describe the area. Included in the FMU is the Southern end of the Bitterroot Range, the Southern part of the Beaverhead Range, The Salmon River Mountain Range except for the portion included in the Frank Church River of No Return Wilderness, the upper northeastern quarter and entire northern half of the Lemhi Range, the Lost River Range, the White Knob Mountains and the eastern portions of the Boulder Mountains and Pioneer Mountains.

  This Fire Management Unit encompasses the majority of non-wilderness lands managed under the provisions of the Salmon National Forest and the Challis National Forest Land and Resource Management Plans. These plans specify the suppression of all wildland fires as the primary fire management strategy for use within the FMU with considerations to be given for cost, resource values and safety.

3.4.3.3. Biological

- Vegetation tends to vary both across the area and with elevation. In general terms, the lower elevations areas within the FMU especially those along the Salmon, Lemhi,

Pahsimeroi, Big Lost and Little Lost Rivers tend to be dominated by open grass and shrub zone. With an increase in elevation this gives way to broken conifer, continuous conifer, alpine and barren rock vegetative zones. The northern part of the Fire management Unit tends to be more heavily forested that the southern end of the Unit. On the southern end, especially in those area south of Challis, within the White Knob, Boulder and Pioneer mountains the continuous forest zone gives way to a more open sagebrush steppe with scattered stands of aspen, Douglas fir and lodgepole pine in draws and on northern exposures.

3.4.3.4. Resources

- Fire managers should consider both noxious weeds and sensitive plant species when planning and implementing fire suppression and prescribed fire activities. A number of sensitive plants potentially occupy the area. These include both Forest Service designated sensitive species as well as species listed by the US Fish and Wildlife Service under the provisions of the Endangered Species Act.

- Streams and lakes within the FMU provide important habitat for a variety of fish species. Anadromous native and introduced fish species can be found in the Salmon River and its tributaries. Native and introduced fish species inhabit the Big and Little Lost Rivers tributaries. Fish are also present in many of the mountain lakes found throughout the unit. Most lake fish have been stocked through a program to introduce game fish to lakes in the area.

  In addition the above, the following sensitive anadromous fish species listed by NOAA Fisheries as threatened or endangered species are found in the Salmon River and tributaries, *Oncorhynchus tshawytscha* (Chinook Salmon) listed as threatened, *Oncorhynchus mykiss* (Steelhead trout) listed as threatened and *Oncorhynchus nerka* (Sockeye Salmon) listed as endangered. The following sensitive fish species listed by the US Fish and Wildlife Service as threatened or Endangered species are found within the area, *Salvelinus confluentus* (Bull Trout) listed as threatened, and *Oncorhynchus clarki lewisi* (Westslope Cutthroat Trout) considered for federal listing but determined to be not warranted.

- A number of sensitive animals occupy the area including a number of Forest Service designated sensitive species and several species that US Fish and Wildlife Service have listed under the Endangered Species Act. Managers must consider impacts on such animal species when planning and implementing fire use or fire suppression activities within the Fire Management Unit.

  The US Fish and Wildlife Service recognize 4 animal species with potential habitat in the area as threatened or endangered, these include: *Canis Lupus* (gray wolf) listed as endangered (Note: The USFWS has reintroduced gray wolf into the area, the reintroduced population is declared an experimental non-essential population but is indistinguishable from the listed population), *Haliaeetus leucocephalus* (bald eagle) listed as threatened, *Lynx canadensis* (Canada lynx) listed as threatened, *Ursus arctos horribilis* (Grizzly bear) listed as threatened and *Falco peregrinus* (Peregrine falcon) de-listed as an endangered species in 1999.

- Cultural resources found in the unit consist of both prehistoric and historic items, sites and structures. Prehistoric resources include artifacts and sites associated with Native American hunting, gathering, daily life and religious activities. This includes such things as campsites, lithic scatter areas, hunting blinds, rock art, and areas along major streams with noticeable depressions. Historic resources of cultural significance are primarily associated with early use and travel in the area and include both standing buildings and ruins of such things as ranches, homesteads, mines and hunting camps. In close association with buildings are trails, roads and artifacts of daily life including 19th and 20th century human burial sites.

  Two areas with special historical interest in the area include parts of the Custer Motorway a former toll road constructed in 1879 for access to the Yankee Fork goldfields and portions of the Lewis and Clark Trailed used by the Lewis and Clark Expedition when traveling through Idaho in 1805. Lemhi Pass, the site where the Lewis and Clark Expedition first entered Idaho, is included within the Fire Management Unit and is listed as a historic site on the National Register of Historic Places.

- Real property within the Fire Management Unit is of moderate concern. This property consists primarily of structures, Infrastructure and improvements.

  There are three primary types of structures within the unit:

  - Forest Service administrative structures such as fire guard stations, fire lookouts and related structures including rental cabins and support facilities such as restrooms at recreation sites.

  - Structures connected to mining activities, these range from large very expensive buildings to small sheds. Heavy equipment is often stored at these locations and constitutes a related concern.

  - Structures on private in holdings or on lands in close proximity to the forest; these are normally ranches, homes, businesses and summer cabins.

  Infrastructure are widely scattered across the unit and includes such things as power transmission lines, telephone lines and relay towers, radio relays, highway bridges and aviation navigational aids such as the Salmon VOR site.

  Improvements are also are widely scattered and include such things as spring improvements, fence lines, corrals, trails, foot bridges, campgrounds, and picnic areas.

3.4.3.5. Fire Behavior

- The area making up this Fire Management Unit is wide spread and non contiguous, because of this fire behavior can vary greatly throughout the FMU. Terrain influenced weather is common within this FMU, differential heating resulting in the development of local up slope/up valley breezes is very common especially during the summer months. Valley topography in the area also tends to channel winds and often results in local wind

conditions far different from those predicted in general area fire weather forecasts. Topography within this Fire Management Unit creates spotting concerns since the entire FMU is dominated by steep slopes and mountainous terrain. These steep slopes create many areas of great elevation differences which increases spotting potential. Other topographic related problems can be encountered in the form of rolling fire brands, slope driven fire runs, and high rates of spread associated with up valley winds aligning with slopes in the drainages. Much of this FMU could be classified as a fuel model 10 which lends itself to high BTU's and control difficulties due to the amount of ground work needed to establish control lines.

3.4.3.6. Weather

- The climate of the area varies both as a result of topography as well as geographic location across the landscape. The majority of annual precipitation occurs during from late fall through early spring months however; summer thunderstorms may also bring intense short duration periods of precipitation to the area, occasionally in significant quantities. Much of the precipitation falls in the form of snow and annual snow packs, which persist into late May or early June, are common. The Beaverhead, Lemhi and Lost River Ranges tend to receive slightly more annual precipitation during the summer months than the rest of the Forest as a result of summer monsoonal thunderstorm patterns. Precipitation in the winter and early spring is normally in the form of snow. Snow packs commonly develop in the upland areas and often persist into late May or early June. The average annual precipitation totals range from 20 inches to 60 inches. The average mean summer temperature range from 68° at Kriley Creek RAWS station on the northern end of then unit to 54° at Cooper Basin RAWS station on the southern end of the unit. The average mean winter temperatures range from 22° at the Kriley Creek RAWS and 14°at the Copper Basin RAWS. Wind patterns in the area are dominated by the westerly winds however the topography interacts with these winds and may modify wind direction locally. Local winds are also influenced by surface heating so up slope/up valley breezes are common during the summer months.

3.5.1. FMU 4 Snap Shot

- FMU Number: Fire Management Unit 4 (**Non-Wilderness Fire Use)**

  This FMU is characterized by four separate areas within the Challis portion of the forest that we once being considered for wilderness designation. Each one of the four areas are defined by a specific management area within the Challis LRMP. They are:

  - **Borah Peaks (MA 16)**
    - Fire Behavior Indicator: Burn Index
    - NFDRS Weather Station: Road Creek – 101816, Mulkey Bar – 101906, Copper Basin - 101804
    - Acres/Agency: 156,220acres
    - Predominant Vegetation Types: The diversity of vegetation produces a broad spectrum of life zones ranging from semi-arid shrublands to alpine rock/scree.
    - Unit: Management of this FMU is primarily the responsibility of the the South Zone FMO and the Lost River Ranger District.
    - Duty Officer: South Zone and Forest level Duty Officer
    - IA Dispatch Office: Central Idaho Coordination Center

  - Communities adjacent or within FMU: Mackay, Pahsimeroi Valley
  - LMP options available for AMR: Full range of fire management options are available for this management area.
  - Special safety considerations: The area is very rugged and terrain poses a threat to firefighter safety and makes suppression operations potentially expensive.
- **Pioneer Mountains (MA 11)**
  - Fire Behavior Indicator: Burn Index
  - NFDRS Weather Station: Road Creek – 101816, Mulkey Bar – 101906, Copper Basin - 101804
  - Acres/Agency: 245,972 acres
  - Predominant Vegetation Types: Douglas-fir and lodge pole pine scattered within a sagebrush and grass community
  - Unit: Management of this FMU is primarily the responsibility of the the South Zone FMO and the Lost River Ranger District.
  - Duty Officer: South Zone and Forest level Duty Officer
  - IA Dispatch Office: Central Idaho Coordination Center
  - Communities adjacent or within FMU: Mackay
  - LMP options available for AMR: Full range of fire management options are available for this management area.
  - Special safety considerations: High rates of spread in the sagebruss and grass fuel types.
- **Seafoam (MA 2)**
  - Fire Behavior Indicator: Burn Index
  - NFDRS Weather Station: Ezra Creek – 101314, Bonanza – 101801, Little Creek - 101805
  - Acres/Agency: 37,684 acres
  - Predominant Vegetation Types: Douglas-fir, Subalpine fir
  - Unit: Management of this FMU is primarily the responsibility of the the South Zone FMO and the Middle Fork District.
  - Duty Officer: South Zone and Forest level Duty Officer
  - IA Dispatch Office: Central Idaho Coordination Center
  - Communities adjacent or within FMU: None
  - LMP options available for AMR: Full range of fire management options are available for this management area.
  - Special safety considerations: Heavy fuel loading and extreme fire behavior
- **Furnace Creek (MA 23)**
  - Fire Behavior Indicator: Burn Index
  - NFDRS Weather Station: Ezra Creek – 101314, Bonanza – 101801
  - Acres/Agency: 12,975 acres
  - Predominant Vegetation Types: Douglas-fir, Lodge pole pine
  - Unit: Management of this FMU is primarily the responsibility of the the North Zone FMO and the Salmon/Cobalt Ranger District.
  - Duty Officer: North Zone and Forest level Duty Officer

- IA Dispatch Office: Central Idaho Coordination Center
- Communities adjacent or within FMU: Myers Cove
- LMP options available for AMR: Full range of fire management options are available for this management area.
- Special safety considerations: Heavy fuel loading, continuous fuels and potential for extreme fire behavior

3.5.2. FMU Guidance

- **Desired Conditions**
  - Maintain fire suppression capabilities, which allow an appropriate suppression response to all wildfires. (Challis LRMP, p.IV-8)
- **Objectives**
  - Provide fire suppression action on all wildfires which is cost effective and protects life and property. To the extent of the suppression will be based on resorce values, costs, burning conditions, safety, protection of private property, spread potential, and fire organization availability. (Challis LRMP, p. IV-8)
- **Guidelines**
  - **Borah MA direction** - Within the recommended Borah Peaks Wilderness, use prescribed fire from unplanned ignitions to meet management objectives. Use unplanned ignitions outside recommended wilderness where cost effective. (Challis LRMP, p. IV-143)
  - **Pioneer MA direction** - Within proposed wilderness, use prescribed fire from unplanned ignitions to meet management objectives. Use unplanned ignitions outside proposed wilderness where it is cost effective. (Challis LRMP, p. IV-113)
  - **Seafoam MA direction** – Evaluate area for inclusion into the Frank Church River of No Return Wilderness Fire Management Plan (Challis LRMP, p. IV-57)
  - **Furnace Creek MA direction** – Evaluate the area for the development of a fire management plan that would allow use of unplanned ignitions (Challis LRMP, p. IV-183)
- **Standards**
  - Each fire will receive an appropriate response. (Challis LRMP, pg. IV-52)

3.5.3. FMU Characteristics

3.5.3.1. Safety

- All of the hazards that are common to the wildland fire environment including snags, steep slopes, driving hazards, heavy fuels etc. exist in this FMU. In addition, see "Special Safety Consideration" described above for each management area.
- Special attention should be given to snags and other hazards associated with the mortality of the timber due to the insect outbreak in this FMU.

3.5.3.2. Physical

- **Borah Peaks Management Area**
  The Borah Peak Management Area comprises the central one-third of the Lost River Mountain Range. The Double Springs Pass Road, Pass Creek Road, and other roads and trails leading off Highway 93 and Pahsimeroi Valley roads can easily reach its boundaries.

This unit is characterized by high peaks, large cirque basins, steep slopes and narrow canyon bottoms below cirque basins, leading to alluvial fans. The area is very rugged, with outstanding geological features due to repeated glaciations. One of the most outstanding features is Borah Peak, the highest mountain in Idaho, reaching 12,655 feet in elevation.

- **Pioneer Management Area**
  The Pioneer Mountains Management Area lies between the Mackay Front Management Area and the Sawtooth National Forest with which it forms a common boundary. The Trail Creek Road in the north, and the Cherry Creek Road from Antelope Creek and Highway 93 provide access, in the south. The road through Copper Basin connects the two routes.

  The mountainous terrain varies from alpine basins, flats and benches, to rocky walls and mountain peaks. Glacial cirques with vertical relief of 3,000 to 4,000 feet are found at the base of many peaks. The Pioneer Range is the second highest in Idaho with Hyndman Peak exceeding 12,000 feet. There are gently, rolling hills in the eastern portion of the area.

- **Seafoam Management Area**
  The Seafoam Management Area is an exclusion surrounded by wilderness in the southwest corner of the Frank Church—River of No Return Wilderness. It is surrounded by lands administered by the Salmon- Challis National Forests. Highway 21 and the Forest Service system road provide access over Vanity Summit.

  Elevations run from 6,000 to 9,300 feet with steep slopes, high rocky peaks, deep valleys, and glaciated cirque basins characterizing the area. The western border of the area fringes on some high mountain lakes that offer good scenic quality. Vegetation varies from Douglas-fir/pine grass to subalpine fir types above 6,000 feet. The area is classified as a grand fir/Douglas-fir ecosystem.

- **Furnace Creek Management Area**
  The Furnace Creek Management Area is located along the northern boundary of the Forest adjacent to the Frank Church—River of No Return Wilderness and the Salmon-Challis National Forests. The area is roadless with the exception of the poorly maintained road along Camas Creek, which forms this unit's western boundary. This road originates at Meyers Cove.

  The topography ranges from gentle slopes of benches and bottomlands to near vertical headwalls in cirque basins. The Furnace Creek watershed is entirely within and comprises the majority of this Management Area. Elevations rise in excess of 9,000 feet.

3.5.3.3. Biological

Vegetation tends to vary throughout the FMU due to the wide spread geographic location of each management area.

- **Borah Peaks Management Area**
  The diversity of vegetation produces a broad spectrum of life zones ranging from semi-arid shrub lands to alpine rock/scree. Several vegetation types are present, including sagebrush and grass, mountain mahogany, spruce, subalpine fire, whitebark pine, and Douglas fir. The steep slopes and high mountaintops and ridges provide a scenic

backdrop to the valley ranches and communities. The surrounding valleys include irrigated hayfields and pastures, and riparian willow/cottonwood plant communities.

- **Pioneer Management Area**
  Vegetation at the lower elevations consists of Douglas fir and lodge pole pine scattered within a sagebrush and grass community. Spruce and wet sedge meadows occur throughout. At higher elevations, vegetations range from subalpine forests to alpine meadows under the barren mountain summits. The large and varied topographic features supports habitat for diverse communities of plants and animals, and is characterized with high quality vegetative diversity. This area is classified as a western spruce/fir forest and sagebrush steppe ecosystem.

- **Seafoam Management Area**
  Vegetation varies from Douglas-fir/pine grass to subalpine fir types above 6,000 feet. The area is classified as a grand fir/Douglas-fir ecosystem.

- **Furnace Creek Management Area**
  Vegetation consists of extensive stands of Douglas fir, lodge pole pine, Engelmann spruce, and subalpine fir. Small stands of quaking aspen are also present. The timber has suffered from an extensive pest epidemic.

  Curl-leaf mountain mahogany, sagebrush and bunchgrass exist on drier sites. Extensive riparian/wet meadow areas are present within the unit. The ecosystem is classified as western spruce/fir and grand fir/Douglas-fir.

3.5.3.4. Resources

- **Borah Peaks Management Area**
  Current uses include grazing, minerals and gas exploration, timber and firewood harvest, and dispersed recreation including hunting, fishing, hiking, mountain climbing, and cross-country skiing.

  Major scenic attractions include Mt. Borah and “Little Switzerland” in the upper reaches of the Pahsimeroi. The back country nature and diversity of vegetation types provide habitat for elk, mule deer, bighorn sheep, pronghorn antelope and a multitude of other game and non-game animal species. Historically, mountain goats occupied the range, but today, none exist. There are several small high mountain lakes, most of which contain fisheries.

- **Pioneer Management Area**
  Current use includes livestock grazing, timber harvest, mining activity, hunting, fishing, camping, backpacking, horseback riding and snowmobiling.

  Elk and mule deer are the most common big game species. Pronghorn antelope, mountain goat, bighorn sheep, mountain lion and black bear also inhabit the unit. Cold water resident lake and stream fisheries are present throughout the area.

- **Seafoam Management Area**
  Current uses include mining, big game hunting, fishing, camping and backpacking. Most roads and developments in the area are associated with past or present mining activity. Lead, zinc, silver and gold were the leading minerals produced, beginning after 1880.

Elk and mule deer are the most common big-game species encountered. This area may play a role in the Gray Wolf Recovery Plan, which is to be completed at a later date. Anadromous fisheries are also present in Rapid River and its tributaries.

- **Furnace Creek Management Area**
  Current use consists primarily of hunting and some fishing. Elk hunting is popular in this unit. The area supports elk, mule deer, bighorn sheep, black bear and anadromous fisheries.

3.5.3.5. Fire Behavior

- Fire Behavior will vary throughout this FMU depending on time of season, fuels, topography. The lower elevations which are characterized by grass shrub types have been impacted by grazing, in many of the grazing areas fire behavior is often of low to moderate intensity levels. As you gain in elevation in all of these management areas, you transition into timber fuel types. These timber fuels have had fire excluded for the better part of the last century, this has created have fuel accumulations and the potential for high severity fires and extreme fire behavior.

  In addition, the Furnace Creek management area and adjacent areas have suffered an extensive insect epidemic which has left the majority of conifers dead or currently dying. This increases the likelihood of extreme fire behavior and the chances of a fire leaving the management area once it begins burning. Because of these situations, resource benefit opportunities would likely be constrained to late summer or early fall with active management likely.