

BRIDGER-TETON NATIONAL FOREST FIRE MANAGEMENT PLAN 2015

Interagency Federal fire policy requires that every area with burnable vegetation must have a Fire Management Plan (FMP). This FMP provides information concerning the fire management process for the Bridger-Teton National Forest and compiles guidance from existing sources such as, but not limited to, the Bridger-Teton National Forest Land and Resource Management Plan (LRMP), 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 management response to wildfire. Firefighter and public safety are the first consideration and are always the priority during every response to wildfire.

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 Bridger-Teton National Forest, addresses the agencies involved, and states why the forest developed 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 FMP for the Bridger-Teton National Forest implements the standards and guidelines of the Bridger-Teton Land and Resource Management Plan and will help achieve Forest resource management objectives. The April 2004 Record of Decision for the Revision of Fire Management Standards and Guidelines (Fire Amendment) contains new standards and guidelines that replace the original LRMP standards and guidelines for fire management. This allows the forest to implement the full range of fire management options currently authorized under Forest Service policy across the entire forest.

The Bridger-Teton National Forest developed this Fire Management Plan as a decision support tool to help fire personnel and decision makers determine the management response to unplanned ignitions. FMP's are not decision documents; they provide information, organized by Fire Management Units, which provides a finer scale summarization of information than is possible at the forest level. These descriptions convey specific detail about identifiable areas on the ground. FMP's are not static documents; they will evolve and be revised as ground conditions change and modifications are made to the unit's Land and Resource Management Plan.

This FMP provides specific details of the fire program that most efficiently meets fire management direction for managing unplanned ignitions. The FMP does not make decisions, but provides operational parameters that managers need to implement the LRMP. Compliance with the National Environmental Policy Act (NEPA) tiers to the Bridger-Teton Land and Resource Management Plan, which was approved in 1990.

The BTNF works under an interagency agreement with Grand Teton National Park that has similar resource objectives specified under its management plans. Shared resources include the Teton Interagency Dispatch Center, fire effects crews, fuels crews, engine crews, aviation, and planning resources. This close interagency partnership has developed over many years and is deeply embedded in fire and resource operations for both the Forest and the Park. The BTNF is also part of the Greater Yellowstone Area (GYA), designated by Congress after the 1988 fire season, which mandates that agencies within the GYA work closely together. Because of this mandate, an agreement and Annual Operating Plan were developed that increases the complexity of fire management on the forest.

The BTNF is composed of three fire zones: North Zone (Jackson and Buffalo Ranger Districts); East Zone (Pinedale and Big Piney Ranger Districts); and the West Zone (Kemmerer and Greys River Ranger Districts). Each Zone has a Zone Fire Management Officer and Assistant Fire Management Officers that work directly for the respective District Rangers. The forest responds to approximately 75 fires per year across jurisdictional boundaries.

The BTNF encompasses the headwaters of two major river systems. The Snake River originates and flows through the northern portion of the forest, while the Green River headwaters cover the southern half of the forest. The forest is also a part of the Greater Yellowstone Ecosystem, which includes three states, six national forests, two national parks, three national wildlife refuges, plus state and private lands.

Chapter 2. Policy, Land Management Planning, and Partnerships

The regulations and policy in the following documents guide 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)

The following acts authorize and guide fire management activities for the protection of National Forest system lands and resources on the BTNF.

- Organic Administration Act, Act of June 4, 1897 (16 USC. 551)
- Bankhead-Jones Farm Tenant Act, Act of July 22, 1937 (7 U.S.D. 1010, 1011)
- Wilderness Act, Act of September 3, 1964 (16 U.S.C. 1131, 1132)
- National Forest Management Act, Act of October 22, 1976 (16 U.S.C. 1600 et seq.)
- Clean Air Act, as amended (42 U.S.C. 7401 et seq.)
- Healthy Forests Restoration Act, Act of November 20, 2003

These additional authorities allow the forest to provide wildland fire protection on other federal, state, and private lands covered by contractual agreements.

- Economy Act of 1932, Act of June 30, 1932 (41 U.S.C. 686)
- Granger-Thye Act, Act of April 24, 1950 (16 U.S.C. 572)
- Reciprocal Fire Protection Act, Act of May 27, 1955 (42 U.S.C. 1856)
- Wildfire Suppression Assistance Act, Act of April 7, 1989 (42 U.S.C. 1856)

2.2. Bridger-Teton Land and Resource Management Plan

The BTNF fire management program outlined in the FMP is a detailed program of action to carry out fire management policies of the Forest Service to achieve the resource management and fire protection objectives, standards and guides identified in the Bridger-Teton NF Land and Resource Management Plan signed in 1990 and amended in 2004, as specified below:

- Bridger-Teton National Forest Land and Resource Management Plan and Record of Decision March 1990
- Bridger-Teton Land and Resource Management Plan, Revision of Fire Management Standards and Guidelines Decision Notice April 2004

2.3. Partnership

The Forest Plan was approved following an Environmental Impact Statement (EIS) completed in compliance with the National Environmental Policy Act (NEPA). The EIS provided the public, state, local and other federal agencies the chance to participate and comment on the direction for the forest plan. Participation and collaboration by the affected parties are encouraged and necessary to implement the fire management activities addressed in the FMP.

The successful implementation of the Bridger-Teton National Forests FMP is dependent on collaborative efforts between other federal, state, local agencies, the public and non-governmental groups. Firefighting resources include interagency crews, interagency dispatch office and cooperative agreements with state and local fire and resource management agencies. Key agreements are listed below:

- Grand Teton National Park agreements for the Teton Interagency Dispatch Center and for Aviation and Wildland Fire Operations
- Wyoming Statewide Agreement and county-specific Annual Operating Plans:
 - Lincoln County
 - Sublette County
 - o Teton County

The BTNF and GTNP jointly fund the Teton Interagency Dispatch Center. This center provides support for both agencies for including dispatching, , IQCS, large fire and law enforcement support.

The Teton Interagency Helitack Crew is composed of two type 3 helicopters staffed by BTNF and GTNP employees and provides helicopter support for fire management, Search and Rescue shorthaul and land management support to the forest, park and surrounding agencies. Additional interagency crews consist of a Type 3 engine, Fuels crew, Fire effects crew, Fire Ecologist, and a Fire Planner/Fire GIS Specialist.

Chapter 3. FIRE MANAGEMENT UNIT DESCRIPTIONS

The primary purpose of developing FMU's in fire management planning is to assist in organizing information in complex landscapes. FMU's divide the landscape into smaller geographic areas that describe safety considerations, physical, biological, social characteristics and 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 FMU's, helps determine the management response to an unplanned ignition and provides a quick reference to the Desired Future Conditions and Standards in the forest's LRMP.

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

Since the five FMU's are dispersed throughout the forest geographically, this section covers the characteristics that are applicable to these specific FMU's. To reduce redundancy, Section 3.2 covers only the specific information pertinent to the individual FMU's.

3.1.1. Forest-wide Standards and Guidelines, as amended, 2004

Fire Management on the Bridger-Teton will be responsive to the land management direction specified in the Fire Amendment:

Fire Management Standards

- The Fire Management Plan (FMP) will provide operational direction for implementation of the forest's land management plan. The FMP will be developed and implemented in coordination with local, state, and other federal agencies (BTNF LRMP, p. 143. Fire Amendment p. 9).
- Firefighter and public safety is the highest priority during all fire management activities (BTNF LRMP Fire Amendment, p. 9).
- Human-caused fires (either accidental or arson) are unwanted wildland fires, and will be suppressed (BTNF LRMP Fire Amendment, p. 9) using an "appropriate management response" (In 2009 this term was replaced by "response to wildland fire").

Protection: Fire Prescription

Provide an appropriate fire protection and use program that is economically efficient, responsive to land management objectives and provides for public safety and protection of property values (BTNF LRMP Fire Amendment, p. 9).

Wildland fire suppression standards

A full range of suppression tactics is authorized Forest-wide, consistent with Forest-wide and individual DFC management emphasis and direction (BTNF LRMP Fire Amendment, p. 9).

Cultural Resource Standard

Cultural resources will be protected if feasible, with priority given to sites listed on the National Historic Register. Second priority is given to sites recommended for selection to the Register (BTNF LRMP Fire Amendment, p. 9).

Wildland fire use (Wildfire to meet resource objectives) standard

Wildland fire use is authorized Forest-wide, consistent with Forest-wide and DFC emphasis and direction.

The Fire Management Plan will designate areas of high resource values that have a protection goal during wildland fires managed for resource benefits. These include:

- Administrative sites
- Developed recreation sites
- Summer homes
- Communication sites
- Oil and gas sites
- Utility corridors,
- Other sites containing capital improvements

In areas authorized for wildland fire use, the full range of management responses from full suppression to monitoring may be used (BTNF LRMP Fire Amendment, p. 10).

Fuels Standard- Forest Service Developments

Defensible areas will be defined and maintained for all Forest Service developments. The size of the area and the level of maintenance will be determined based on values of capital investments and adjacent fuel types (BTNF LRMP Fire Amendment, p. 11)

3.1.2. Forest-wide Desired Future Conditions and Associated Prescriptions, Guidelines and Standards

A map of the Desired Future Conditions (DFC's) is included at the end of this section. Not all DFC's occur in all FMU's.

Desired Future Condition 1B 181,800 acres (5%)

Substantial Commodity Resource Development with Moderate Accommodation of Other Resources

Theme: An area managed for timber harvest, oil and gas, and other commercial activities with many roads and moderate to occasionally substantial emphasis on other resources.

Experience: Overall, you notice many signs of people as a part of commercial timber harvest. Yet, you cannot drive to as many areas as you can in more intensively managed parts of the Bridger-Teton National Forest.

Management Emphasis -- Management emphasis is on scheduled wood-fiber production and use, livestock production and other commodity outputs.

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include: 1.1(a-d, h, i), 1.2(a-f), 1.4(a), 2.1(a, b), 2.4(a, b), 2.5(a-c), and 4.2(a-c) (BTNF LRMP, p. 153)

Desired Future Condition 2A 155,600 acres (5%)

Non-motorized Recreation Areas

Theme: An unroaded area managed to give a quiet, almost primitive recreation experience.

Management Emphasis -- Management emphasis is to maintain or enhance Primitive and Semiprimitive non-motorized dispersed recreation opportunities.

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include: 1. 1(e-h), 2. 1(a, b), 2.2(c, d), 2.3(a), 4.4(b), 4.5(a, b), and 4.6(b). (BTNF LRMP, p. 161)

Desired Future Condition 2B 39,805 acres (1%)

Motorized Recreation Areas

Theme: An area managed to give a motorized recreation experience.

Management Emphasis -- Management emphasis is to maintain or enhance dispersed recreation opportunities including Semi-primitive Motorized and Roaded Natural. Opportunities for dispersed,

motorized recreation are maintained and enhanced. Such areas are suitable for non-motorized uses, such as hiking, but they are not emphasized.

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include: 1. 1(f), 1.2(c, d), 2. 1(a, b), 2.4(a, b), 2.5(a-d), 4.1(b), 4.4(a-c), and 4.5(a). (BTNF LRMP, p. 167)

Desired Future Condition 3 47,210 acres (1%) River Recreation

Theme: An area managed to give river- and scenic-recreation experiences.

Management Emphasis -- River segments outside of Wilderness that have been determined eligible for potential addition to the National Wild and Scenic River system are protected from activities that could diminish or change the free-flowing characteristic, water quality, or the scenic, recreational, fish and wildlife, and other values, which make the river eligible for designation. For further information, see the Wild and Scenic River Act.

Other recreational experiences and commodities are provided from river segments classified as not eligible. If any portion of this area contains grizzly bear habitat, no surface-disturbing activities can occur there until the grizzly bear cumulative effects model can be run to help determine potential effects on the bear.

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include: 1. 1(d, e), 2.1(a, b), 2.2(a, b), 2.3(a, b), 3.2(b-f), 4.2(b), 4.3(c), 4.4(a-c), 4.6(b), and 4.7(b). (BTNF LRMP, p. 173)

<u>Desired Future Condition 4 42,200 acres (1%)</u> Special Emphasis Area for Municipal Water Supply

Theme: An area managed to protect municipal water supplies.

Management Emphasis -- Management emphasis is to protect or improve the quality of municipal water supplies.

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include: 1. 1(d-i), 1.3(a, b), 2.1(a, b), 2.3(a), 2.5(a, b, d), 4.1(b), 4.2(b), 4.4(a-c), and 4.7(b). (BTNF LRMP, p. 179)

<u>Desired Future Condition 6A-6D and 6S 1,391,300 acres (41%)</u> Wildernesses, Wilderness Study Areas, and Wild Rivers

Theme: A mostly pristine area where the presence of people is rarely or never noticed.

Protection: Fire Prescription

Fire management emphasizes preservation of Wilderness values and allows natural processes of ecological change to operate freely.

The number, size and intensity of fires approximate the natural fire regime.

Fire Protection Guideline

The favored suppression techniques should be those that have the least impact on wilderness values and resources.

Evidence of fire suppression activities will not be evident within one year.

Management Prescription 6A 497,000 acres

Management Emphasis -- Management emphasis is for the protection and perpetuation of pristine biophysical conditions, and a high degree of solitude with essentially no perceptible evidence of human use. Natural biological processes are not adversely or artificially changed over time by human use.

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include: 1.1(g), 2. 1(a,b), 3.1(a,b), 3.2(a,b-h), 4.5(a,b), and 4.6(a).

Management Prescription 6B 616,800 acres

Management Emphasis -- Management emphasis is to provide for the protection and perpetuation of natural biophysical conditions and a high degree of solitude for visitors but with some perceptible evidence of past human use.

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include: 1.1(e, g,h), 2. 1(a, b), 3.1(a), 3.2(d-h), 4.5(a,b), and 4.6(a).

Management Prescription 6D 13,500 acres

Management Emphasis -- Management emphasis is to provide for the protection and perpetuation of essentially natural biophysical conditions inside Wilderness boundaries that are adjacent to and accessed from heavily used developed recreation sites. Management is directed towards providing a natural physical setting and Semi- primitive non-motorized social setting.

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include: 1. 1(e, g, h), 2. 1(a, b), 3.1(a), 3.2(d-h), 4.5(a, b), and 4.6(a).

Management Prescription 6S 109,200 acres

Management Emphasis -- The Wyoming Wilderness Act designated two areas on the Bridger-Teton National Forest for Wilderness study: Shoal Creek and Palisades. The Wilderness Study Areas (WSA's) will be managed to protect long-term wilderness attributes. No activities will be allowed that will jeopardize the eligibility of the WSA's for future Congressional designation as Wilderness. Existing uses of the WSA's, such as snowmobiling and mountain biking, will be allowed to continue.

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition for Wilderness Study Areas include: 1. 1(f), 2.3(a,b), 4.4(c), and 4.6(a,b.). (BTNF LRMP, p. 185)

<u>Desired Future Condition 7A 39,900 acres (1%)</u> Grizzly Bear Habitat Recovery through Scheduled Timber Harvest Theme: An area managed to provide forage and security for the recovery of grizzly bears, allowing for some resource development and roads.

Management Emphasis -- Management emphasis is on enhancement of habitat and maintenance of recovered grizzly bear populations. Habitat improvement practices such as fire or silvicultural practices and human activities are managed to provide the habitat needed to meet the management emphasis. No surface-disturbing activities can occur until the grizzly bear cumulative effects model can be run to help determine potential effects on the bear.

Land and Resource Management Objectives addressed and, in part, met by achieving the desired future condition include: 1.1(a-I), 1.2(a-f), 2.1(a), 3.1(a,b), 4.2(a,c), 4.4(a-c), and 4.7(d). (BTNF LRMP, p. 199)

<u>Desired Future Condition 7B 39,900 acres (1%)</u> Grizzly Bear Habitat Recovery

Theme: A mainly primitive area with few roads and limited human access, managed to provide food and security for grizzly bears.

Management Emphasis -- Management emphasis is on enhancement of habitat and maintenance of recovered grizzly bear populations. Habitat improvement practices such as fire or silvicultural practices and human activities are managed to provide the habitat needed by the grizzly bear. No surface-disturbing activities can occur until the grizzly bear cumulative effects model can be run to help determine potential affects upon the bear.

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include: 1. 1(d-i), 2.1(a), 3. 1(a, b), 4.2(b, c), 4.4(a-c), and 4.7(d). (BTNF LRMP, p. 207)

<u>Desired Future Condition 8 22,000 acres (1%)</u> Environmental Education About Integrated Multiple Use

Theme: An area managed to provide conservation and environmental education, including the study of resources and the practice of forest management.

Management Emphasis -- Management emphasis is on environmental education understanding of how lands and resources are managed and change with management activities is emphasized.

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include: 1. 1(b-h), 1.2(a-e), 1.3(a), 2.1) a, b), 2.3)a 2.4(a,b), 2.5(a-d), 2.8(a), 3.2(e,h), 3.3(a), 4.1(a), 4.2(a,c,d), 4.3(a-c), 4.4)a-c), 4.5)a,b 4.7(a-d), and 4.9(a). (BTNF LRMP, p. 213)

<u>Desired Future Condition 9A 8,063 acres (.24%)</u> Developed and Administrative Sites

Theme: An area managed for campgrounds, other noncommercial areas, and Forest Service administrative sites, including related roads and sites.

Management Emphasis -- The management emphasis is on existing and proposed developed recreation sites and Forest Service administrative sites: campgrounds, picnic grounds, trailheads, visitor

information centers, water-related recreation facilities and concentrated use areas in Roaded Natural areas

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include: 2.2(a,b). (BTNF LRMP, p. 221)

Desired Future Condition 9B 7,355 acres (22%)

SPECIAL-USE RECREATION AREAS

Theme: An area managed for permitted, private recreation homes, permittees, and others offering services to the public, including related roads and sites.

Management Emphasis -- Management emphasis is on summer home groups, concession operations, ski areas, lodges, and group camps, and other privately operated sites on National Forest System lands and retention of selected sites for future opportunities.

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include: 1. 1(f) and 2.2(a, b).

Recreation Residence Landscape Guideline

Natural vegetation should be favored around facilities. Landscaping around all facilities should maintain an appropriate fire defensible space to protect structures from wildfires.

Protection: Fire Prescription

Fire management activities will reduce the risk to public safety and capital improvements. Permittees are responsible for fuels management.

Fuels Guideline –Permittees will be responsible for maintaining adequate defensible space to protect their capital improvements.

Specific mitigation measures will be mutually agreed upon between the Forest Service and permittees during development of annual operating plans. (BTNF LRMP, p. 227)

Desired Future Condition 10 753,400 acres (22%)

Simultaneous Development of Resources, Opportunities for Human Experiences, and Support for Big Game and a Wide Variety of Wildlife Species

Theme: An area managed to allow for some resource development and roads while having no adverse and some beneficial effects on wildlife.

Management Emphasis -- Management emphasis is to provide long-term and short-term habitat to meet the needs of wildlife managed in balance with timber harvest, grazing, and minerals development. All surface-disturbing activities are designed to have no affect or beneficial effects on wildlife. If any portion of this area contains grizzly bear habitat, no surface-disturbing activities can occur there until the grizzly bear cumulative effects model can be run to help determine potential effects on the grizzly bears.

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include: 1.1(a-i), 1.2(a-f), 2.1(a, b), 2.3(a), 2.4(a, b), 2.5(a-d), 4. 1(a, b), 4.2(a, c, d), 4.3(a-c), 4.4(a-c), and 4.7(a-d). (BTNF LRMP, p. 223)

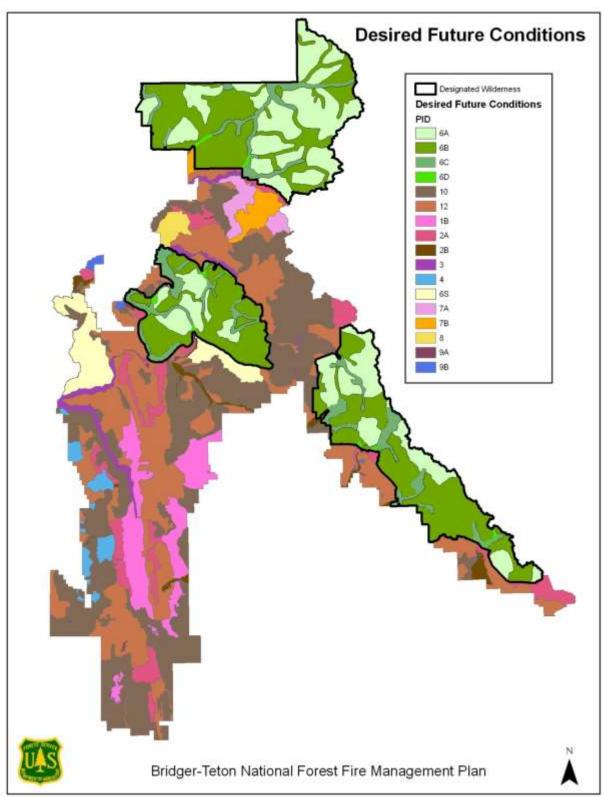
Desired Future Condition 12 664,600 acres (20%)

Backcountry Big-Game Hunting, Dispersed Recreation, and Wildlife Security Areas

Theme: An area managed for high-quality wildlife habitat and escape cover, big-game hunting opportunities, and dispersed recreation activities.

Management Emphasis -- Management emphasis is on providing such important habitat for big game as winter ranges, feed grounds, calving areas, and security areas. Management provides for habitat capability and escape cover, and maintained semi-primitive non-motorized opportunities that emphasize big-game hunting activities. If any portion of this area contains grizzly bear habitat, no surface-disturbing activities can occur there until the grizzly bear cumulative effects model can he run to help determine potential effects on the bear. (BTNF LRMP, p. 241)

Figure 3.1.2.1 Desired Future Conditions



3.2. Physical Characteristics that Apply to All Fire Management Units

A map of the BTNF FMU's can be found at the end of this section.

3.2.1.1. Topography

The Bridger-Teton topography typifies that of the northern Rocky Mountains, and contains a mix of moderate, rolling country and dramatic steep peaks and drainages. Elevations range from 5,600 feet on the valley floors to 13,800 feet on the Wind River crest.

On the northern end of the Forest – parts of the Teton Wilderness, and the area from the Mount Leidy Highlands to Union Pass – contain large areas of rolling topography with some of the most continuous stands of timber on the forest. Scattered meadows and bare ridges interrupt fuel continuity, but large fires like the 1988 Huck and Mink fires are possible. The Kemmerer district on the southwest end of the Forest includes moderate terrain, with several long north-south ridges, such as Commissary, Deadline, and Absaroka. This area has large continuous timber stands with the potential for large fires.

The Wind Rivers, Gros Ventre's, Salts, and the Wyoming Range provide substantial fuel breaks at the upper elevations, but the low- and mid-elevations have steep slopes and canyons that can encourage significant fire runs.

3.2.1.2. Fuels and Fire Behavior

1. Vegetation

Vegetation and fuels on the Bridger-Teton are typical of the Northern Rockies. General Descriptions are listed below:

<u>Sagebrush/grass fuels</u> are found at elevations between 6,000 and 8,000 feet. These fuels occur as small patches and continuous areas of 5,000 acres or more. The southern end of the Forest and the Pinedale front have the largest areas of sagebrush/grass fuels and abut areas with similar fuel types on adjacent BLM and private land. These fuels are most receptive to burning when the sage and grass have cured. During a normal fire season, they are receptive for a few weeks before spring green-up and then become receptive again as curing occurs during mid- to late August. This fuel type is best classified as either a Scott and Burgan fuel model SH1 or GS2 (Anderson fuel model 8 and NFDRS model T). The older stands of sagebrush/grass that have not burned in the past 25 or more years can be extremely volatile, and can burn in fast moving, intense fires.

Subalpine fir/Engelmann spruce fuels comprise the largest percentage of the vegetated area of the forest. This type often occurs as a climax, replacing seral lodgepole pine stands around 100 years post-disturbance, but Engelmann spruce can occur in pure stands. The percentage of dead and down fuel increases as disease and insect mortality occurs. Although stand-replacing fires can occur in younger stands, areas with trees older than 150 years are the most susceptible to crown fires. Subalpine fir is prone to individual tree torching and spotting. Fires in these types often produce large runs, with numerous individual spot fires downwind of the main fire. Much of the area that burned in the 1988 Teton Wilderness fires was in this spruce/fir type. This fuel type is best characterized by Scott and Burgan fuel model TU5 (Anderson fuel model 10 and NFDRS model G).

<u>Lodgepole pine</u> normally occurs as a seral species, establishing following fire or other disturbance. Young stands normally have a low dead and down component, especially following a double burn scenario. Stand replacement burns generally occur under severe weather and fire behavior conditions. As the stands age, fuel loads increase, an understory of ladder fuels (subalpine fir and Engelmann spruce) develops and the probability of stand replacement fire increases. Young lodgepole stands are represented

by Scott and Burgan fuel model TL3 (Anderson model 8 and NFDRS model H). Older stands are classified as Scott and Burgan fuel model TU5 (Anderson fuel model 10 and NFDRS G).

Aspen occurs throughout the Forest up to approximately 8,500 feet. Depending on the understory, healthy aspen with minimal conifer encroachment will not burn or burns with low intensity. These stands often provide excellent fuel breaks that slow fire spread, and can be effective fire barriers. Due to fire exclusion, conifer invasion is common in a high percentage of aspen stands. Stands in this condition can burn like a conifer stand, and will carry fire under favorable weather and fuel moisture conditions. Scott and Burgan fuel model TU1 characterizes the un-encroached aspen stands and fuel model TU5 represents the stands with conifer encroachment (Anderson fuel model 5 or 2).

Whitebark pine occurs at elevations above 8,500 feet, normally in small to medium sized patches. During average years, fires remain confined to single patches of trees and generally do not spread from one clump to another. However, during severe fire seasons such as 1988, where wind and low fuel moistures favored spotting, large areas of whitebark will burn. Scott and Burgan fuel model TL3 (Anderson fuel model 8, NFDRS G or H) represents the Whitebark pine stands.

At mid and high elevations, large areas of meadows remain green much of the year and do not readily carry fire.

3.2.1.3. Historical fire occurrence

Fire history analysis indicates that large areas of the Bridger-Teton National Forest burned during the mid- 1700's and late 1800's. Many of these fires were large (> 5,000 acre) stand replacing fires. Timber surveys conducted during the early 1900s reported large areas of blackened landscape burned by fires.

With the exception of such years as 1931 and 1940, fire suppression efforts were quite successful, with only a few large fire years through the 1970's. It appears that one of the reasons that fire suppression was successful is that much of vegetation was relatively young due to the fires that occurred in the late 1800s.

Land use patterns also changed the occurrence and intensity of fires. Large-scale livestock grazing began at the turn of the century and reduced fine fuels across much of the Forest. More recently, increased recreation use of the Forest has increased the number of human-caused fires, particularly the number of escaped campfires.

Most fires on the Bridger-Teton occur between July and September, although in the last 20 years fires have been reported as early as April and as late as October. In the June 1 through October 10 fire season, during the time period of 1988 – 2010, 67% of fires were lightning caused and 7% of those fires were > 10 acres. Campfires accounted for 23% of the fires during this time period. Figure 3.1.2.1 summarizes fire occurrence by year, month, size class, cause, and number of fires per day for the 22 years between 1988 and 2010.

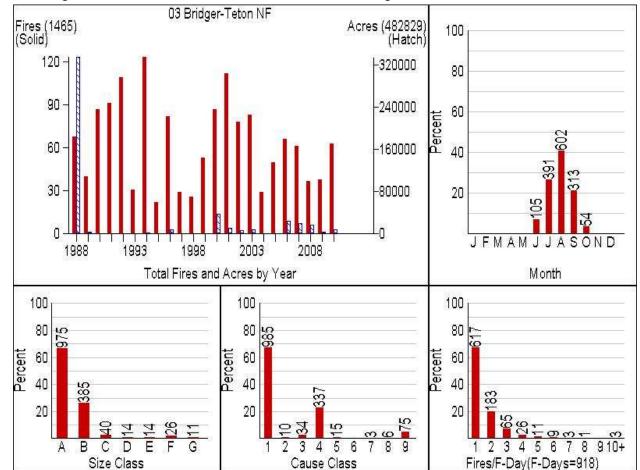


Figure 3.1.2.1: Historical fire occurrence on the Bridger-Teton NF, 1988-2010

3.2.1.4 Fire behavior fuel models

These vegetation groups are split into finer-scale map dominance types in the Bridger-Teton's vegetation map. These dominance types crosswalk to fuel models as shown in Table 3.1.2.1

Table 3.1.2.1 Vegetation map dominance type to fuel model crosswalk

Map Dominance Type	13 Model	40 Fuel Model	NFDRS	
Aspen	2- sage understory 1- Light grass understory (or grazed) 5 –low shrub understory	GS2-grass/sage/shrub understory GR2- grass understory mostly TL2 possibly following leaf drop in fall		
Aspen/Conifer Mix	8	TU 1 or TL3, TU5 in highly encroached stands		
Douglas Fir Mix	8 or 10 in heavier loadings	Dry Open Types- GR2 Wet, heavier loading-TU5	G	
Lodgepole Pine Mix	10, 8 in stands <100 years old	TU5	G, H in younger stands	
Subalpine Fir/Spruce Mix	10	TU5	G	
Whitebark Pine	8 minus	TL4	Н	
Whitebark Pine Mix	8	TL3	Н	
Limber Pine	8	TL4	Н	
Rocky Mountain Juniper		SH1	F	
Low/Alkali Sagebrush	1	GS1 (NB)		
Mountain Big Sagebrush	2	SH2, GR4 in areas of high grass load		
Sagebrush/Bitterbrush	2	SH2, GR4 in areas of high grass load	T	
Silver Sagebrush/Shrubby Cinquefoil	2 (cool end)	GS1		
Spiked Big Sagebrush	2	GS1	T	
Mountain Mahogany	1	SH1 or NB		
Mountain Shrubland	5 (cool end)	d) GS2		
Grassland/Forbland	1	GR1	L	
Tall Forbland	0, except under extreme drought	NB, except under extreme drought	L	
Alpine	1	NB		
Cottonwood	8 (very cool), often model 0	TL1		
Willow		SH8, GR6 or GR		
Riparian Herbland		GR5	0	
Agriculture	1	NB3	0	
Barren/Rock	0	NB9	0	
Sparse Vegetation		NB9		
Snow/Ice	0	NB2		
Urban/Developed	0	NB1		
Water	0	NB8		

3.2.1.5 Fire regimes

Fire regimes on the Bridger-Teton were classified in General Technical Report INT-290 "Fire Ecology of the Forest Habitat Types of Eastern Idaho and Western Wyoming." Site-specific fire history studies on the Bridger-Teton confirm these fire return intervals.

Fire Regime 1: 0-35 years, low severity.

This regime is not currently inventoried on the Bridger-Teton National Forest.

Fire Regime 2: 0-35 years, mixed and high severity

This class represents most of the widespread sagebrush-dominated lower and mid elevations of the Bridger-Teton. Grass-dominated types are also included, but these areas have largely succeeded to woody shrub types.

Fire Regime 3: 35-100+ years, mixed severity

Fire-induced mortality in this regime is "thinning" coupled with stand replacing events, both at fine scales due to limits in topography and diurnal burning conditions. Drainages where cool, dry Douglas-fir habitat types intermix with moist Douglas-fir habitat types, aspen communities, and some sagebrush types (basin and Wyoming big sage) are in this regime. Some persistent lodgepole stands likely experience fire return intervals associated with this class.

Fire Regime 4: 35-100+ years, high severity (stand replacement)

This pattern is infrequent and often includes mid- and low-elevation subalpine fir and Engelmann spruce communities. Persistent lodgepole may experience widespread fire mortality. This regime occurs when warm and dry conditions align with topography to permit large burn patterns.

Fire Regime 5: 200+ years, mixed and high severity

The mesic subalpine fir and Engelmann spruce communities see the longest fire return intervals on the Bridger-Teton. When fire does occur, it typically comes as stand replacing fire driven by extreme burning conditions. The cold, upper subalpine and timberline areas including whitebark pine communities may occasionally burn under similar conditions but commonly experience frequent, small lightning fires that clear understory fuels and cause only scattered tree mortality.

3.2.1.6 Beetle Kill Areas

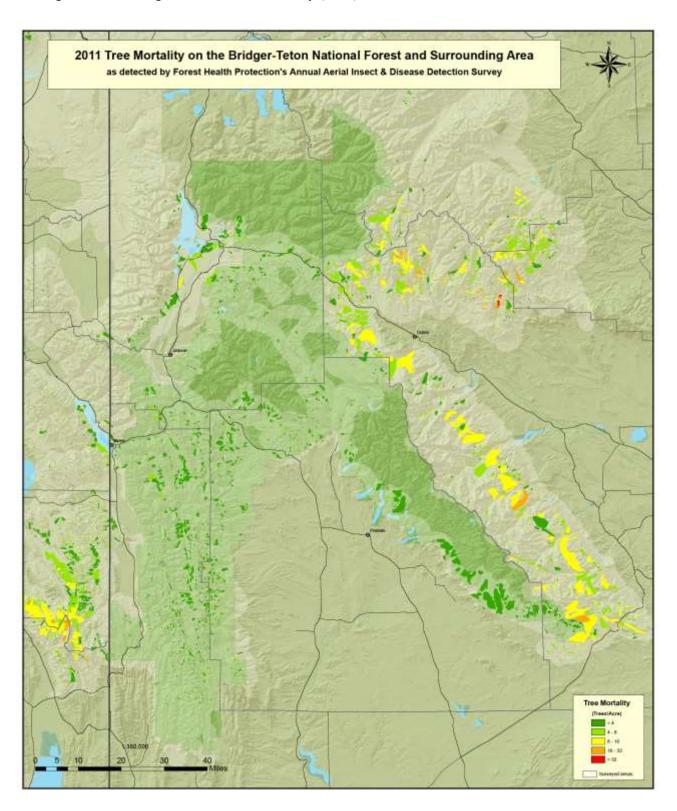
Approximately 1,000,000 acres of the Bridger-Teton have been affected by mountain pine beetle, spruce beetle, and Douglas-fir beetle since 1996. While this number is based on locations where tree mortality was apparent from the air, damage intensity does vary. The Purdy Fire (2006) ,the Gunsight Fire (2009) and the Red Rock Fire (2011) made energetic runs through beetle-killed stands.

This widespread mortality affects fuel characteristics in several ways based on time since infestation:

- Red-needled stage: crowns are entirely red-needled. At this stage, the canopy has lower foliar moisture than green stands and is equivalent to a canopy of 1-hour fuels. The low foliar moisture helps crown fire initiation and spread.
- Gray skeleton stage: red needles have dropped from standing trees. Areas with a large number of trees in this gray skeleton stage can act as barriers to crown fire spread since the canopy is either more open or non-existent. The higher surface fuel load contributed by needle cast/drape and lower wind reduction can increase surface fire behavior characteristics.
- Deadfall: gray skeletons fall to the ground and add to the surface fuel bed. Conifer mortality on the Bridger-Teton is starting to show accumulation of dead and down fuel loading in affected stands.

The map in Figure 3.1.2.2 illustrates the areas with the highest conifer canopy mortality, based on 2008 satellite imagery. Areas identified as having high mortality in 2008 are probably transitioning to the gray skeleton stage. Areas identified as low/moderate and moderate mortality in 2008 could now have a higher percentage of red-needles in the canopy.

Figure 3.1.2.2 Bridger-Teton conifer mortality (2011)



3.2.1.4. Weather

Weather patterns

The Bridger-Teton has a continental climate with large daily and seasonal temperature changes. Summers are short with moderate daytime temperatures and cool nights while winters are long and cold. High temperatures in the summer range from the 70's at the upper elevations to mid-80's at the valley floor. Average low temperatures during winter months reach near zero. Freezing temperatures can occur at all elevations yearlong. National Weather Service Fire Weather Zones include: 411, 414, 415, 416.

Winds

Summertime prevailing winds are generally from the south/southwest to west, but are modified by local topography. Winds during the fire season are normally light, except during thunderstorms and cold front passages. Cold fronts are a significant concern during late summer and early fall and can have a dramatic effect on fire behavior. These winds were one of the significant factors in the 1988 Yellowstone fires. Cold front passages can produce extreme fire behavior as late in the season as mid-October. On October 15, 1991, the Dry Cottonwood prescribed fire escaped and grew to 7,000 acres in less than 2 days.

The Grand Teton RAWS station, one of the three stations in the Teton SIG, picks up the general south/southwest flow better than the other stations. Figure 3.1.2.3 shows the fire season wind summary for the Grand Teton RAWS. Figure 3.1.2.4 shows the wind rose for the Half Moon RAWS and illustrates the general westerly wind directions for the Pinedale front area.

Station: 480708 GRAND TETON N ,20% All hours combined NNE MNN 16% NW NE 12% 8% WWW ENE calm Ε 22.0% WSV ESE MPH 4 - 8 SE SW 8 - 13 13 - 19 19 - 25 Days: 2138 of 2138 (100%) 25 - 32 SSE Observations: 6686 (13%) 32 - 39 Data years: 2000 - 2010 39 - 47 Annual filter dates: April 1 thru October 15 47 +

Figure 3.1.2.3 Wind rose for Grand Teton RAWS with hourly observations, 2000-2010, April 1 – October 15

Station: 481309 HALF MOON All hours combined 15% NNE MNM 12% NW NE 9% 6% ENE WWW 3% calm W Ε WSV ESE MPH 4 - 8 SW SE 8 - 13 13 - 19 19 - 25 Days: 2028 of 2028 (100%) 25 - 32 SSE Observations: 6574 (13%) 32 - 39 Data years: 2000 - 2010 39 - 47 Annual filter dates: April 1 thru October 15 47+

Figure 3.1.2.4 Wind rose for Half Moon RAWS with hourly observations, 2000-2010, April 1 – October 15

Precipitation

Average precipitation ranges from less than 14 inches per year at the lowest elevations to over 40 inches at the upper elevations. Most of the precipitation occurs as snow during the winter and springtime. Summertime precipitation normally falls in conjunction with afternoon thunderstorms. These thunderstorms are often dry and ignite many of the forest's wildland fires. Lightning storms and the resulting fires are possible from May to October, although they are most common from July to the first week in September. Snowstorms are possible at all elevations at any time throughout the summer. The first significant snowfall can happen as early as the first week in September or as late as the middle of November. Drought seasons occur and include 1988, 1994, 1996, and 2000, which coincided with active fire seasons.

Weather stations

There are six operational Remote Automated Weather Stations (RAWS) located on the Forest: Burro Hill, Hoback, Half Moon, Snider Basin, Raspberry, and Kelly. These RAWS locations were selected to be

representative of the primary fuel model used for inputs into NFDRS and representative of the general weather conditions surrounding the six sites.

Two additional stations are used to monitor day-to-day weather conditions: Anderson Ridge, on BLM land south of the Wind River Range; and Diamond Flat, west of Star Valley. The Forest abandoned the Big Piney and Blackrock stations in the mid 1990's with Snider Basin and Burro replacing them respectively.

The current NFDRS plan uses a Special Interest Group (SIG) composed of three stations: Grand Teton, Halfmoon and Snider RAWS. Grand Teton RAWS is useful to show the general southwest winds. Half Moon can be a useful station for winds on the south half of the forest.

The Forest also maintains three portable RAWS stations with satellite transmission capability.

The map in Figure 3.1.2.4 shows the Bridger-Teton RAWS stations' locations, station numbers and elevations.

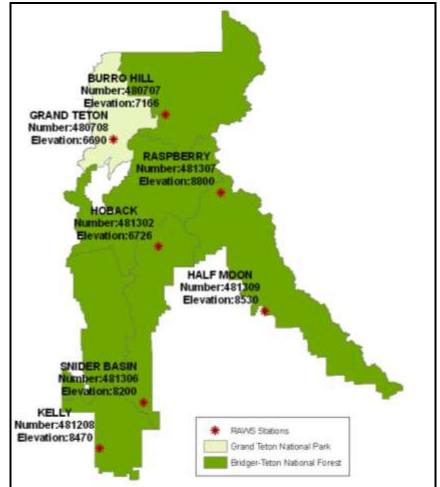


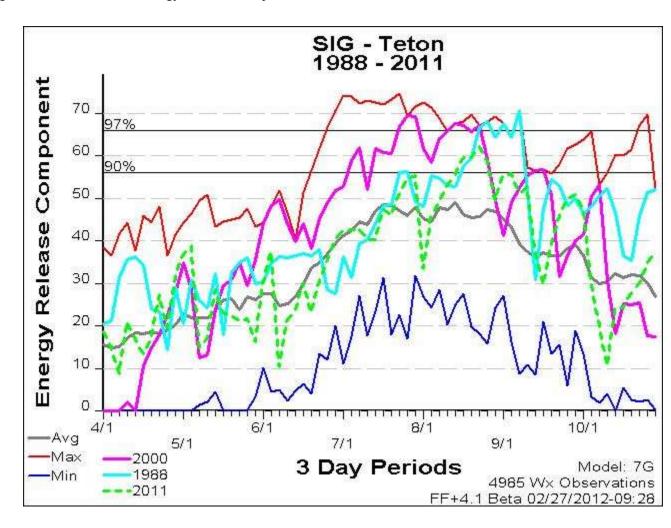
Figure 3.1.2.4 Bridger-Teton NF RAWS station locations

Fire Danger Indicator

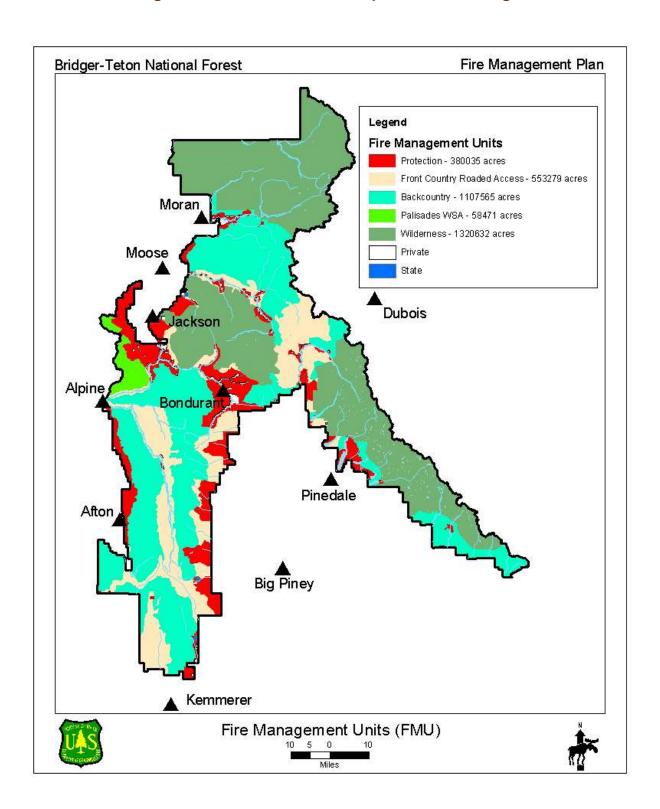
Energy Release Component (ERC) provides one of the best indicators of potential fire season length and severity. Figure 3.1.2.5 shows average, high, and low ERCs for the Teton Interagency SIG 1988-2010.

The gray line shows the mean ERC, indicative of an average year, where ERC starts rising the first of June and peaks around the end of August. The red line represents the highest ERC recorded for that day. As shown by the graph, many of the most severe seasons occur when no precipitation falls in September and the ERC continues to climb through the month and into October.

Figure 3.1.2.5 Teton SIG Energy Release Component, 1988-2010



3.2 Fire Management Considerations for Specific Fire Management Units



The BTNF is divided into five Fire Management Units which are differentiated by land management objectives, access, political boundaries and values to be protected. Since the five FMU's are dispersed throughout the forest geographically, they share many of the same characteristics and only differ in respect to resource objectives and management goals. The five FMU's are described below:

- **FMU 1 Wilderness**: includes the Gros Ventre, Bridger and Teton Wilderness Areas, plus the Shoal Creek Wilderness Study Area in the Gros Ventre range.
- **FMU 2 Front Country/Roaded Access**: Encompasses those BTNF lands that are adjacent to the valleys, which include other land ownerships and areas with access by motorized vehicles on forest road systems. These areas include developed recreation sites, special use permit areas, timber base areas and dispersed development of private lands, lodges and ranches.
- **FMU 3 Backcountry**: Composed of mostly roadless areas and those areas with limited motorized vehicle access through gated or open roads. Includes dispersed recreation, grazing allotments, timber base areas outside of DFC 1A & 1B (DFC 10 and 12) wildlife habitat, and other resource management activities.
- **FMU 4 Palisades Wilderness Study Area**: This area consists of mostly Targhee NF lands administered by the BTNF along the western boundary of the forest, north of the Snake River and south of Teton Pass.
- **FMU 5 Protection**: Includes BTNF lands where there are increased risks to higher resource values, other land ownerships and complicating factors that require a suppression oriented response. These areas may involve urban interface, high value developed sites, or are managed for human use. Examples include: campgrounds, picnic grounds, trailheads, visitor information centers, water-related recreation facilities, Forest Service administrative sites, summer home groups, concession operations, ski areas, lodges, group camps and all related roads and sites. The areas included are in Desired Future Conditions 9A (Developed and Administrative Sites); 9B (Special Use Recreation Areas); and areas in other DFC's that fit the above criteria.

The following table describes which DFC's occur in specific Fire Management Units:

DFC's	Fire Management Unit					
	Wilderness	FC/Roaded	Backcountry	Palisades	Protection	
1B		X			X	
2A		X	X		X	
2B		X	X		X	
3		X	X		X	
4		X	X		X	
6A	X					
6B	X	X			X	
6C	X				X	
6D	X	X			X	
6S	X			X	X	
7A			X		X	
7B			X		X	
8		X	X		X	
9A		X			X	
9B		X			X	
10		X	X	X	X	
12		X	X		X	

3.2.1 FMU Snap Shot

3.2.1 Wilderness FMU Snap Shot

- FMU Number: 1
- Radio Frequency: See Operations Plan Communications Guide
- General Risk Category: Low
- NFDRS Weather Station: Teton Area SIG
- Nearest Weather Stations: Burro Hill, Grand Teton, Raspberry, Hoback, Half Moon
- Acres/Agency: 1,282,300/BTNF
- Predominant Vegetation Types: Timber, sagebrush and mixed conifer with brush understory. Lower elevation fuels include a large component of annual and perennial grasses. Higher elevations are often above the tree line.
- Units: North and East Zones
- Duty Officer: North and East Zone

- IA Dispatch Office: Teton Interagency Dispatch
- Communities adjacent or within FMU: Buffalo Valley, Jackson Hole, Private inholdings in the Gros Ventre River and the Hoback River Drainages, Pinedale, Upper Green River, Big Sandy

3.2.2 FMU Guidance

- **Desired Conditions:** DFC's 6A through 6S
- **Objectives:** Fire management emphasizes preservation of Wilderness values and allows natural processes of ecological change to operate freely. The number, size and intensity of fires approximate the natural fire regime (Fire Amendment p. 3).
- **Guidelines:** The favored suppression techniques should be those that have the least impact on wilderness values and resources. Evidence of fire suppression activities will not be evident within one year.

3.2.3 FMU Characteristics

3.2.3.1 Safety

- Grizzly Bears occur in most areas of the Wilderness FMU.
- Complex terrain features and remoteness of the Wilderness FMU can impact the effectiveness of radio and cell phone communications.
- Fire management operations in the Wilderness FMU rely heavily on aviation resources.
- The remoteness of the Wilderness FMU means longer response times during emergencies. Extraction of injured personnel is likely to depend on the use of aviation assets.
- Elevation on the Bridger-Teton and within the Wilderness FMU ranges from 6,000 feet in the valley bottoms to 13,800 feet at the highest peak. The high altitudes at which firefighters work can pose serious health and safety risks that must be recognized and mitigated.

3.2.3.2 Physical

- FMU 1 Wilderness covers approximately 1,320,632 acres, and includes the GrosVentre, Bridger, Teton Wilderness areas, and the Shoal Creek WSA in the Gros Ventre range.
- The Teton Wilderness is found on the northern end of the Bridger- Teton National Forest. It borders Yellowstone NP to the north, the Washakie Wilderness (Shoshone NF) to the east, the Buffalo Valley area to the south and Grand Teton NP to the west. The Teton Wilderness is administered by the Buffalo Ranger District. Elevation ranges from about 7500 feet to over 12,000 feet. The Teton Wilderness is a Class 1 airshed.
- The Gros Ventre Wilderness is found near the center of the Bridger-Teton National Forest. It borders the Gros Ventre River Valley to the north, the Upper Green River drainage to the east, the Hoback River Canyon and Bondurant area to the south, and the Jackson Hole area to the west including the town of Jackson, WY. The Gros Ventre Wilderness falls mostly within lands administered by the Jackson Ranger District, with the southeast corner of the Wilderness administered by the Big Piney and Pinedale Ranger Districts. The Shoal Creek Wilderness Study area abuts the southeast corner of the Gros Ventre Wilderness. Elevation ranges from about 6500 feet to over 11,500 feet. The Gros Ventre Wilderness and Shoal Creek WSA are considered a Class 2 airshed.

• The Bridger Wilderness makes up the southeast and eastern border of the Bridger-Teton Naitonal Forest. It borders with the Upper Green River Valley to the north, the Popo Agie Wilderness (Shoshone NF) to the east, the Big Sandy area to the south, and the Pinedale front to the west. Bridger Wilderness lands are administered by the Pinedale Ranger District. Elevations range from around 7000 feet to over 13,000 feet. The Wind River Mountain Range is the predominant feature and serves as a divide between the Bridger-Teton and Shoshone National Forests. The Bridger Wilderness is a Class 1 airshed.

3.2.3.3 Biological

- Vegetation types found in the Wilderness FMU run the full range from sagebrush/grasslands to alpine tundra.
- Threatened and Endangered species known to occur throughout the Wilderness FMU include: Grizzly Bear, Canada Lynx and Gray Wolf.
- Coldwater fisheries are plentiful with the Wilderness FMU being the source for many large river systems and high elevation lakes.
- Whitebark Pine is present in this FMU.

3.2.3.4 Resources

- Infrastructure present is primarily limited to trail improvements within the Wilderness. Some backcountry cabins do exist.
- Some portions of the Wilderness FMU borders designated Wildland Urban Interface, specific areas of concern are around the town of Jackson, the southern Gros Ventres and along the Pinedale front.
- Isolated occurrences of cultural and historic resources occur.
- Throughout the Wilderness FMU numerous permitted outfitters and guides operate, utilizing remote spike camp locations.

3.3.1 Front Country/Roaded FMU Snap Shot

- FMU Number: 2
- Radio Frequency: See Operations Plan Communications Guide
- General Risk Category: High
- NFDRS Weather Station(s): Teton Area SIG
- Nearest Weather Station: Raspberry, Kelly, Snider Basin, Burro Hill, Halfmoon
- Acres/Agency: 553,279 /BTNF.
- Units: All Zones
- Predominant vegetation types: Sagebrush and mixed conifer with brush understory. Lower elevation fuels also include a large component of annual and perennial grasses.
- Duty Officer: Zone Duty Officers
- IA Dispatch Office: Teton Interagency Dispatch Center
- Communities adjacent or within FMU: Private inholdings along the Gros Ventre River

3.3.1 FMU Guidance

- **Desired Conditions:** DFC's 1B, 2A, 2B, 3, 4, 6B, 6D, 8, 9A, 9B, 10, 12
- **Objectives:** Fire management emphasizes preservation of Wilderness values and allows natural processes of ecological change to operate freely. The number, size and intensity of fires approximate the natural fire regime.
 - **Guidelines:** The favored suppression techniques should be those that have the least impact on values and resources. Suppression activities should be only those necessary to control the fire and rehabilitation done under BAER guidance. **Review the guidance** in the forest's LRMP and other planning documents if multiple agencies are involved. List the desired conditions, objectives, standards, and guidelines that apply to the specific FMU. Directly tie the information in the forest's LRMP to the specific FMU.

3.3.2 FMU Characteristics

3.3.2.1 Safety

- Firefighter and public safety is the first priority.
- FMU 2 is characterized by roaded access; therefore travel hazards exist and should be emphasized within this FMU. The presence of roads and vehicles bring heightened possibilities that the public could be exposed to risk from fires.
- The presence of private vehicles and traveling publics adds to the complexity of fires within this FMU. In addition, previously burned areas adjacent to open roads could pose snag risks to the public.

3.3.2.2 Physical

- 6 communication sites exist within the FMU
- 4 Snow-tel sites exist within the FMU
- 7 Administrative sites with a total of 28 structures occur within the FMU
- 43 developed recreation sites occur within the FMU.
- Within the FMU 132,795 acres are designated as WUI

3.3.2.3 Biological

• 548,320 acres are within a Lynx Analysis Unit (LAU).

3.3.2.4 Resources

- The Snake River Wild and scenic river corridor exists within this FMU
- 308,795 acres are within Inventoried roadless areas.
- 229 different grazing allotments exist within this FMU.

3.2.2. Backcountry FMU Snap Shot

- FMU Number: 3
- Radio Frequency: See Operations Guide Communications Plan
- General Risk Category: Moderate
- NFDRS Weather Station: Teton Area SIG
- Nearest Weather Station: Burro Hill, Raspberry, Snider Basin
- Acres/Agency: 1,107,565/BTNF

- Predominant Vegetation Types: Timber, sagebrush and mixed conifer with brush understory.
 Lower elevation fuels include a large component of annual and perennial grasses. Higher elevations are often above the tree line.
- Unit: Predominately on North and West Zones.
- Duty Officer: All zones.
- IA Dispatch Office: Teton Interagency Dispatch
- Communities adjacent or within FMU: Communities of Alpine, the Buffalo Valley and areas along the Pinedale front.
- Special safety considerations: Remoteness, Grizzly Bears, elevation

FMU Guidance

The response to wildland fire will be based on the value of the resource to be protected.

- **Desired Conditions:** DFC's 2A. 2B, 3, 4, 7A, 7B, 8, 10, 12
- **Objectives:** The response to wildland fire will consider positive and negative benefits from those actions to the key characteristics of each DFC such as developed and dispersed recreation, higher public use (due to road systems) and other resource values.

3.2.3. FMU Characteristics

3.2.3.1. Safety

- Grizzly Bears occur in most areas of the Backcountry FMU.
- Complex terrain features and remoteness of the can impact the effectiveness of radio and cell phone communications.
- Fire management operations rely heavily on aviation resources.
- The remoteness means longer response times during emergencies. Extraction of injured personnel is likely to depend on the use of aviation assets.
- Elevation on the Bridger-Teton and within the Backcountry FMU ranges from 6,000 feet in the valley bottoms to about 11,000 feet at the highest peaks. The high altitudes at which firefighters work can pose serious health and safety risks that must be recognized and mitigated.

3.2.3.2. Physical

- FMU 3 Backcountry covers approximately 1,107,565 acres, and includes large areas north of the Gros Ventre River to the southern border of the Teton Wilderness, large areas throughout the Salt River and Wyoming Mountain ranges, a large portion of the Kemmerer Ranger District, and some isolated pieces in the Upper Green River area and along the Pinedale front.
- Elevations range from the valley bottoms at about 6000 feet to over 11,000 feet in the Salt and Wyoming ranges.
- The Backcountry FMU lands are considered Class 2 airsheds.

3.2.3.3. Biological

- Vegetation types found in the Backcountry FMU run the full range from sagebrush/grasslands to alpine tundra.
- Threatened and Endangered species known to occur throughout the Backcounrtry FMU include: Grizzly Bear, Canada Lynx and Gray Wolf.

- Coldwater Fisheries are plentiful with the Backcountry FMU being the source for many large river systems and high elevation lakes.
- Whitebark Pine is present at high elevations

3.2.3.4. Resources

- Some portions of the Backcountry FMU do border designated Wildland Urban Interface, specific areas of concern are around the town of Jackson, the Alpine area and along the Pinedale front.
- Isolated occurrences of cultural and historic resources do occur.
- Throughout the Backcountry FMU numerous permitted outfitters and guides operate, some utilizing remote spike camp locations.

3.2.4. Palisades Wilderness Study Area FMU Snap Shot

- FMU Number: FMU 4
- Radio Frequency: See Operations Guide Communications Plan
- General Risk category: Moderate
- NFDRS Weather Station: Teton Area SIG
- Acres/Agency: 82,584 /BTNF
- Predominant Vegetation Type: Timber, sagebrush and mixed conifer with brush understory. Lower elevation fuels include a large component of annual and perennial grasses. Higher elevations are often above the tree line.
- Units: North Zone
- Duty Officer: North Zone
- IA Dispatch: Teton Interagency Dispatch
- Special safety considerations:
 - Remote, steep and rocky terrain.
 - WUI occurs along fringes of the south and east boundaries of the WSA.
 - Management actions rely heavily on aviation resources.
 - Wildlife concerns include grizzly bear and moose.
 - High visibility to the public and media.
 - There are 3 abandoned oil and gas wells within this FMU. T
 - Traffic associated with tourists could impact operations and fire response.

3.2.5. FMU Guidance

Because of the proximity to higher resource values of the Snake River corridor and the urban interface and intermix in the Jackson Hole Valley south of Wilson, fire management activities must be carefully analyzed and adequate risk assessment completed for both prescribed and wildfire for resource objectives.

- **Desired Conditions:** DFC's 6S and 10
- **Objectives:** Fire management emphasizes preservation of Wilderness values and allows natural processes of ecological change to operate freely. The number, size and intensity of fires approximate the natural fire regime.
- **Guidelines:** The favored suppression techniques should be those that have the least impact on wilderness values and resources. Evidence of fire suppression activities will not be evident within one year.

3.2.6. FMU Characteristics

3.2.6.1. Safety

- Firefighter and public safety are the number one priority.
- Complex terrain features and remoteness of the Palisades FMU can impact the effectiveness of radio and cell phone communications.
- Fire management operations in the Palisades FMU rely heavily on aviation resources.
- The remoteness means longer response times during emergencies. Extraction of injured personnel is likely to depend on the use of aviation assets.

3.2.6.2. Resources

- The Palisades WSA includes high peaks (Indian and Observation Peak) with subalpine terrain. A variety of plant communities and vegetation types exists in the area, including some that are not common within the BTNF (curl-leaf mahogany; bigtooth maple).
- The Palisades WSA is suitable for outdoor education, and is currently used by outdoor and educational groups. At least one special use permittee, who offers summer hikes in the Palisades WSA, emphasizes natural history interpretation and education.
- The Palisades WSA includes a number of attributes that contribute to high scenic integrity and natural beauty. These include landforms, diverse vegetation, water features, and the natural character of the landscape. Wolf Creek is an eligible wild and scenic river, nearly all of which is within the WSA.
- A few trapper's caches and cabins have been found in the WSA, but have not been evaluated for their historic significance. Considerable evidence of seasonal use by prehistoric people exists, including obsidian quarry sites near Teton Pass.
- There is one inholding of approximately 190 acres in the Palisades WSA (in the South Fork of Fall Creek, Trails End Ranch). Other ranches and subdivisions exist at the forest boundary and are adjacent to the WSA. Two existing power lines skirt the edges of the WSA; one in the Snake River Canyon, the other over Teton Pass.
- A primary use of the WSA is backcountry recreation, including horsepacking, hiking, hunting, fishing, and trail vehicle use.
- The area is grazed annually by approximately 4,917 AUMs of cattle and 15,000 AUMs of sheep. In the Snake River Range, 9,326 acres are roaded and have been managed for timber.
- Three oil and gas wells have been drilled since 1978.

3.2.7. Protection FMU Snap Shot

- FMU Number: 5
- Radio Frequency: See Operations Plan Communications Guide
- General Risk Category: High
- NFDRS Weather Station: Teton Area SIG
- Acres/Agency: 380,035/BTNF
- Predominant Vegetation Types: Sagebrush/grassland, timber
- Unit: All Zones
- Duty Officer: Zone Duty Officers
- IA Dispatch Office: Teton Interagency Dispatch
- Special safety considerations: Oil/gas developments in Pinedale and Big Piney areas

3.2.8. FMU Guidance

- **Desired Conditions** Desired Future Conditions 9A, 9B
- **Objectives** Management emphasis of developed sites such as summer homes, concession operations, ski areas, group camps, trailheads, and other concentrated use areas (BTNF LRMP p. 222, 228)
- **Guidelines:** Portions of wildfires in this FMU may be managed for benefits in relationship to fuels management treatments.
- Natural vegetation should be favored around facilities. Landscaping around the facilities should maintain an appropriate defensible space to protect structures from wildfires (BTNF Fire Amendment p. 18)

3.2.9. FMU Characteristics

3.2.9.1. Safety

- Gas and oil development infrastructure is a special safety concern
- Coordination with structural and personnel specifically trained in Haz-Mat
- Aviation hazards including power lines
- Increased public presence

3.2.9.2. Physical

• Elevation is generally lower than the other FMU's on the forest

3.2.9.3. Biological

- Fuel and vegetation types are typical for the Bridger-Teton, from sagebrush/grass to timber.
- Various TES species and/or habitats may be present

3.2.9.4. Resources

- Multiple locations of high use developed recreation areas are present
- Oil and gas infrastructure and developments, mostly in the Pinedale/Big Piney areas
- Cultural sites