APPENDIX A6

WASHAKIE FIRE MANAGEMENT UNIT

This page intentionally left blank.

1. Washakie Fire Management Unit Guidance

a) FMU Synopsis

Fire Management Unit Identification

Administrative Unit	FMU Name	FMU #	Management Response Zones	Acres
Shoshone National			01 – Suppression	17,065
Forest - South Zone	Washakie	1	02 – Resource Dependent	84,039
Forest - South Zone			03 – Wildland Fire Use	17,065

Ownership and Jurisdictions

C THIS COLLEGE COLLEGE COLLEGE				
Owner	Jurisdiction		Acres	
US Forest Service	Shoshone National Forest		315,008	
Private	Fremont County Fire District		5,103	
		Total	320,111	

Dispatch Center

Name	Phone Number
Cody Interagency Dispatch Center	307-578-5140

Radio Frequencies*

Agency	Name	Receive	Transmit	Transmit
Agency	INATITE	Frequency	Frequency	Tone
USFS	South Net	172.3750	172.3750	110.9
USFS	Cyclone	172.3750	168.7500	156.7
USFS	Black	172.3750	168.7500	131.8
USFS	S Pass	172.3750	168.7500	123.0
USFS	Lava	172.3750	168.7500	103.5
USFS	Windy	172.3750	168.7500	110.9
USFS	Indian Ridge	172.3750	168.7500	146.2
USFS	Blue Ridge	172.3750	168.7500	167.9
USFS	SZ Port	172.3750	168.7500	114.8

^{*}See the Shoshone National Forest Radio Guide in Appendix F1 for a complete list of radio frequencies.

NFDRS Weather Stations

Station Number	Station Name & Owner	Fuel Model	Location	NESDIS#	Elevation
481903	Anderson Ridge BLM	T Sagebrush- Grass	42° 14.14" 108° 56.27"	32787280	8,120 ft.
481411	Wind River BIA	H, L Timber	42° 35.24" 109° 42.00"	52117480	9,120 ft.

NFDRS Weather Station Fire Behavior Indicators and Thresholds

Station	ERC		KDBI		1,000 hr Fuel Moisture	
Station	90th %	97th %	90th %	97th %	90th %	97th %
Wind River	68	75	251	270	7	7

General Risk Category

Subjective overall risk relative to values present, fuel hazard and fire frequency is identified for each fire management unit response zone in the table below. Additional risk information related to fire behavior and length of season are described in Section III, Part D.

	Risk Rating				
Response Zone	Values Present	Fuel Hazard	Fire Frequency	Overall Risk	
01 - Suppression	4	3	2	3	
02 – Resource Dependent	3	3	2	3	
03 – Wildland Fire Use	2	2	1	2	

1 – Low; 2 – Low Moderate; 3 – Moderate; 4 - Moderate High; 5– High

Predominate Vegetation Types

Cover Type	Acres
Grassland-Sagebrush	
Forest – conifers	
Forest – aspen & willow	
Barren	

b) Management Guidance

Wildland fire management guidance for the resources associated with the fire management unit is derived from the Shoshone National Forest Land and Resource Management Plan (Forest Plan). Applicable wildland fire management Forest Plan direction, goals, desired conditions, standards, guidelines, and management area prescriptions are detailed in Section III, Part C of the Shoshone Fire Management Plan (FMP). The specific Forest Plan direction that is used to formulate wildland fire benefit and resource protection objectives; initial attack/response actions; and appropriate management response strategies and tactical options that apply to the resources, values and attributes that occur in the fire management unit (FMU) are referenced throughout this section.

Other sources of wildland fire management direction and resource protection measures that originate in other laws, policy, handbooks and guides are also used to provide direction and guidance for wildland fire management activities for this FMU.

c) Safety Considerations

Firefighter and public safety considerations

Firefighter and public safety is the priority in all fire management activities. Reduce firefighter and public injuries and loss of life, and damage to communities from unwanted wildland fires, by prioritizing firefighter and public safety above other concerns in fire management activities (Forest Plan Amendment 2008-01, page 4).

History on the Forest indicates that while the annual number of fire starts is not particularly high, the fire environment is complex as high intensity fires with rapid rates of spread are common during active burning years. The fire environment is further complicated by a Forest-wide insect epidemic; mature forest, steep terrain, and frequent wind events that are not always well forecasted. There have been three recorded fire fighter entrapments on the Forest. The most serious occurred in 1937 when ten firefighters lost their lives on the Blackwater Fire. The most recent entrapment occurred in 2006 on the Little Venus Fire where ten firefighters survived an entrapment, fortunately with only minor injuries.

Environmental and Aviation Hazards

Aviation hazards are identified on the Forest Aviation Hazard Map (FMP electronic file). High winds and terrain-influenced winds that affect aviation operations are common. Environmental hazards include steep, rocky and difficult terrain, and grizzly bears.

Travel routes

Most of the road access is in the FMU is in the southeast and extreme southern part of the FMU. State Highway 28 passes through the southern tip of the FMU. The Loop Road is the primary Forest road that provides access in the southeast portion of the FMU. The Loop Road travels southwest from Lander and connects with State Highway 28 at the south tip of the FMU. There is a network of Forest roads associated with past timber management activities in the southeast portion of the FMU. The western portion of the FMU is the Popo Agie Wilderness. The extreme north part of the FMU is comprised of the Fitzpatrick Wilderness which is accessed through the Wind River Reservation.

d) Fire Management Unit Resources and Values

Air Quality

The Fitzpatrick Wilderness is a federally designated Class I Airshed in the FMU. The Popo Agie Wilderness is designated as a Class II Airshed. The Wind River Reservation which located to the northeast of the FMU is also a Class II Airshed.

Resource Protection Objectives

Resource	Forest Plan Direction (Goal, Desired Condition, Standard, Guideline)
air quality	Comply with State and Federal air quality standards (Forest Plan 1986, page III-97).

Resource Protection Measures for Fire Management Activities

	The control of the co		
Resource	Description of Protection Measures		
air quality	Implement smoke management actions in accordance with Wyoming Air Quality Standards and Regulations (Regulations) chapter 10, section 4, Smoke		
	Management Requirements.		

Vegetation

Forested vegetation varies widely across the FMU due to variations in elevation, aspect, climatic factors, and past disturbances. The uppermost elevation zone is characterized by alpine tundra and the absence of trees. The next lower elevation zone is the subalpine zone, dominated in most places by Engelmann spruce, subalpine fir, and whitebark pine. Below the subalpine zone lies the montane zone, characterized by Douglas-fir. Other species that occur in the subalpine and montane zones include lodgepole pine, limber pine, and aspen.

Grass, sometimes mixed with sagebrush, regularly occurs in forest openings. In areas where environmental factors do not support tree reproduction, grasslands and shrublands persist. In the foothill zone below the montane zone, grass and shrubs dominate. In the montane and subalpine zones, grass and shrubs persist in areas where site conditions limit moisture, such as well-drained landforms, southern or western exposures, thin or poorly developed soils, and high windswept sites. In the severe environment of the alpine zone, grass and shrubs dominate. In portions of the subalpine and montane zones, lodgepole pine and aspen are common early seral species following fire disturbance. Fire also affects the acres that are dominated by grasses and shrubs.

Washakie FMU Vegetation Types and Acres

Cover Type	Acres	Cover Type	Acres
Grassland		Lodgepole pine	
Sagebrush		Whitebark pine	
Willow		Limber pine	
Spruce/fir		Aspen	
Douglas-fir			

Resource Benefit Objectives

Tresource Defici	at especiated
Resource	Forest Plan Direction
resource	(Goal, Desired Condition, Standard, Guideline)
vegetation	Both unplanned ignitions and prescribed fire are used as tools to achieve and maintain vegetation conditions and desired fuel levels. Fire operates within historical fire regimes appropriate to the vegetation type and management objectives. Prescribed fire plays a role in areas where managing unplanned ignitions for resource benefits is not appropriate because of high values (FPA 2008-1 p. 3). Improve the health and vigor of vegetation types outside wilderness and selected types in wilderness where necessary (Forest Plan 1986, page III-6).
	Integrate vegetation management with resource management in functional areas – range, recreation, water and wildlife (Forest Plan 1986, page III-7).
aspen	Clearcut, burn or treat aspen mechanically to in order to promote suckering and revegetation of aspen patches (Forest Plan 1986, page III-155)

Resource Protection Objectives

Resource	Forest Plan Direction (Goal, Desired Condition, Standard, Guideline)
vegetation	Fire management strategies are designed to achieve land management protection or benefit objectives, are cost effective, and meet safety objectives for firefighting and the public(Forest Plan Amendment 2008-01, page 3).

Wildlife habitats – terrestrial and aquatic

Critical Winter Range: Critical wildlife winter range areas are identified on Map 6.1. Currently, there are no issues with condition of the winter range area that would prevent a fire to be managed for resources benefits or require protection.

Grizzly Bear: This species is a Forest Service Region 2 sensitive species. Grizzlies have variable habitat, and eat everything from carcasses to moths to whitebark pine seeds to garbage. The most important elements needed to stabilize grizzly bear populations are minimizing bear/human conflicts and protecting key food sources, such as whitebark pine and moth sites. Most of the FMU is inside the Crandall Sunlight Bear Management Unit of the Primary Conservation Area.

Yellowstone Cutthroat Trout: Yellowstone cutthroat trout is a subspecies of cutthroat trout that was historically found in the Yellowstone River drainage and reaches of the Snake River drainage. Stream segments containing Yellowstone cutthroat trout are identified on Map 6.1.

Resource Benefit Objectives

Resource	Forest Plan Direction (Goal, Desired Condition, Standard, Guideline)
wildlife	Integrate vegetation management with resource management in functional areas – range, recreation, water and wildlife (Forest Plan 1986, page III-7)
	Maintain fuel conditions that permit fire suppression and prescribed fire to maintain habitat needed for selected species or species population levels (Forest Plan 1986, page III-152).

Resource Protection Objectives

. 1000000 . 1010001	
Resource	Forest Plan Direction
	(Goal, Desired Condition, Standard, Guideline)
grizzly bear -	Minimize grizzly bear/human conflicts using food storage, information and
food storage	education, and other management tools (FPA 2006-001).
grizzly bear	Maintain the productivity, to the extent possible, of the four key grizzly bear
habitat – food	food sources as identified in the Conservation Strategy (FPA 2006-001).
sources	

Resource Protection Measures for Fire Management Activities

Resource	Description of Protection Measures
grizzly bear	Implement bear safety and food storage mitigation measures as described in
	the Shoshone National Forest Wildland Fire Management Resource Protection
	Standards and Guidelines.
Yellowstone	Implement protection measures for riparian areas, lakes and streams as
Cutthroat Trout	described in the Shoshone National Forest Wildland Fire Management
	Resource Protection Standards and Guidelines.

Special areas

Research Natural Areas: The Proposed Roraring Research Natural Area in located in the South central portion of the FMU. This research natural area is also located within the Popo Agie Wilderness. Research Natural Areas are part of a national network of ecological areas designated in perpetuity for research, education, and to maintain biological diversity on National Forest System lands.

See Map 6.2 for the location of special areas in the FMU.

Resource Benefit Objectives

Resource	Forest Plan Direction
	(Goal, Desired Condition, Standard, Guideline)
special management areas	Allow natural succession to proceed without human intervention in designated wilderness, wilderness study areas, and special management areas (Forest Plan 1986, page III-6).
	Both unplanned ignitions and prescribed fire are used as tools to achieve and maintain vegetation conditions and desired fuel levels. Fire operates within historical fire regimes appropriate to the vegetation type and management objectives. (Forest Plan Amendment 2008-1 p. 3).

Resource Protection Objectives

Resource	Forest Plan Direction
	(Goal, Desired Condition, Standard, Guideline)
research natural	Fires within research natural areas (established and proposed) should be suppressed
areas	when they threaten the values for which the research natural area was established or
	threaten other values outside the research natural area. For unwanted wildland fires
	that threaten to burn into research natural areas, the appropriate management
	response should consist of strategies and tactics that keep fires from burning into
	research natural areas (FPA 2008-1 p. 6).

Resource Protection Measures for Fire Management Activities

Resource	Description of Protection Measures
Research Natural Areas	Use minimum impact suppression techniques when suppressing fires within research natural areas area (FPA 2008-1 p. 6).

Water quality

All the 6th level hydrologic unit watersheds in the FMU are rated as being in good condition or better (Map 6.3). The City of Lander obtains its public water supply from the Middle Fork Popo Agie River watershed. Within this larger watershed is the tributary drainage of Sawmill Creek. Wildfire in this tributary drainage is a concern to the city because of potential water treatment issues. Current vegetation and fuel conditions within the Sawmill Creek drainage are such that management of a wildland fire for resource benefits is not likely to occur until conditions improve. Unplanned wildland fires that start within the drainage, or threaten to burn into the drainage from adjacent lands, would receive an appropriate management response designed to limit the amount of acres burned. This would include rapid and aggressive initial attack as well as extended attack strategies and tactics that contain and control fires as quickly as possible. At this time there are no water quality concerns with application of fire on the landscape as a means to accomplish resource benefits in the remainder of the FMU.

Resource Protection Objectives

Resource	Forest Plan Direction
	(Goal, Desired Condition, Standard, Guideline)
water	Improve or maintain water quality to meet state water quality standards (Forest plan 1986, page III-70).
public water supply	For unwanted fires that start in the Sawmill Creek sub-watershed, use aggressive initial attack actions that keep fires as small as possible. For unwanted wildland fires that threaten to burn into the sub-watershed, the appropriate management response should include of strategies and tactics that keep fires from burning into the watershed.
	Use the most effective suppression strategies and tactics that have the least impact possible on water quality.

Resource Protection Measures for Fire Management Activities

Resource	Description of Protection Measures
water quality & public water supply	Implement protection measures for riparian areas, lakes and streams as described in the Shoshone National Forest Wildland Fire Management Resource Protection Standards and Guidelines.
	Implement practices regarding fire management activities as described in the

_

¹ Alteration of fuel and vegetation conditions through the use mechanical or prescribed fire treatments could improve conditions to reduce the risk to water quality from unplanned wildland fire.

Resource	Description of Protection Measures
	Forest Service Handbook 2509.25, Watershed Conservation Practices.

Cultural Resources

The general location of known cultural resource sites and not yet surveyed areas that have a high probability of containing sites are located on the Cultural Resources Map for the FMU Map 6.4). The map with the general locations is part of the FMP electronic file and is also available for use by fire managers and agency administrators. More specific information regarding site locations will be provided by the heritage program manager when needed.

Resource Protection Objectives

Resource	Forest Plan Direction (Goal, Desired Condition, Standard, Guideline)
cultural	Wildland fire management activities should protect cultural resources when feasible with priority given to sites listed on the National Register of Historic Places, sites recommended for selection to the Register and to known unevaluated sites (FPA 2008-1 p. 6).

Resource Protection Measures for Fire Management Activities

	3
Resource	Description of Protection Measures
cultural	Follow procedures for wildland fire management activities as outlined in Appendix G of the Programmatic Agreement with the State Historic Preservation Officer for Compliance with the National Historic Preservation Act on Forest and Grasslands of Wyoming.
	Implement protection measures for cultural resources as described in the Shoshone National Forest Wildland Fire Management Resource Protection Standards and Guidelines.

Wilderness

There are two wildernesses in the FMU (Map 6.0). The Fitzpatrick comprises the north portion of the FMU and extends into the Wind River FMU to the north. The Popo Agie Wilderness comprises much of the west half of the Washakie FMU.

Resource Benefit Objectives

Resource	Forest Plan Direction (Goal, Desired Condition, Standard, Guideline)
wilderness	Permit fires to play, as nearly as possible, their natural ecological role within wilderness area (FPA 2008-1 p. 9). Allow natural succession to proceed without human intervention in designated wilderness, wilderness study areas, and special management areas (Forest Plan 1986, page III-6).

Resource Protection Measures for Fire Management Activities

Resource	Description of Protection Measures
wilderness	Implement minimum impact suppression and logistic techniques as described in the Shoshone National Forest Wildland Fire Management Resource
	Protection Standards and Guidelines.

Goods and Services

Timber: Lands suitable for timber production are present within the FMU and are primarily located within the resource dependent zone. Lands suitable for timber production are identified on the Values at Risk Map for the FMU (Map 6.5) Lands suitable for timber production are considered high value assets and under most circumstances would not be allowed to burn unless it was determined there would be beneficial effects or no effects. Development of strategies to manage a fire for resource benefits would consist of an assessment of what areas would benefit from fire and what areas should be protected from fire or subject to limited fire intensity.

There may be a few instances where lands suitable for timber production may be allowed to burn and commercial timber products destroyed or damaged while managing a fire as wildland fire use or as an unwanted wildland fire. For example, situations where it is infeasible to protect an isolated stand, or where the value of the timber does not warrant the cost or commitment of resources and a substantial resource benefit may be achieved.

Washakie FMU Active and Planned Timber Sales

Sale Name	Location	Status	Purchaser
Fiddlers Lake	T31N, R101W, Sec. 26	Active	Western Wood Products
Washakie Aspen Unit 11	T32 and 31N, R100W	Active	Russ Linneman
Washakie Aspen Unit 14	T32 and 31N, R100W	Active	Dean Knight
Washakie Aspen Unit 15	T32 and 31N, R100W	Active	Russ Linneman
Washakie Aspen Unit 16	T32 and 31N, R100W	Active	Mountain States Supply
Washakie Aspen Unit 17	T32 and 31N, R100W	Active	Western Wood Products
Washakie Aspen Unit 18	T32 and 31N, R100W	Active	Mountain States Supply

Grazing: There several grazing allotments within the FMU and they are identified on the Values at Risk Map (Map 6.5). Forest-wide Forest Plan direction and desired conditions regarding vegetation is generally consistent with range management objectives. Whether a fire is being managed for resource benefits or protection objectives, coordination with range management specialist and permittees occur.

Special Uses: Permitted outfitter and guide operations occur throughout the FMU. Camp locations are identified on the Values at Risk Map (Map 6.5). Whether a fire is being managed for resource benefits or protection objectives, coordination with special uses managers and outfitters occur.

Minerals: There are no mining, drilling or exploration operations occurring in the FMU.

Resource Benefit Objectives

Resource	Forest Plan Direction (Goal, Desired Condition, Standard, Guideline)
timber and grazing	Both unplanned ignitions and prescribed fire are used as tools to achieve and maintain vegetation conditions and desired fuel levels. Fire operates within historical fire regimes appropriate to the vegetation type and management objectives. Prescribed fire plays a role in areas where managing unplanned ignitions for resource benefits is not appropriate because of high values. Fire management strategies are designed to achieve land management protection or benefit objectives, are cost effective, and meet safety objectives for firefighting and the public(Forest Plan Amendment 2008-01, page 3).

Resource Protection Objectives

Resource	Forest Plan Direction (Goal, Desired Condition, Standard, Guideline)
goods and services	Wildland fire plays a role within and outside of wilderness where appropriate and desirable, but active suppression of fire occurs where necessary to protect life, investments, and valuable resources. Valuable resources include the

Resource	Forest Plan Direction
11000000	(Goal, Desired Condition, Standard, Guideline)
	wildland urban interface, utility corridors and communication sites. Other valuable resources include public water supply, recreation facilities, administrative sites, range allotments, special management areas, fish and wildlife habitats, and lands suitable for timber production (Forest Plan Amendment 2008-01, page2).

Developments, Facilities and Infrastructure

Developments, facilities and infrastructures occur within and adjacent to the FMU and are displayed on the Values at Risk Map (Map 6.5). Most of the sites are located within the Resource Dependent Management Zone. There are some facilities and developments in the Wildland Fire Use Management Zone.

Washakie FMU Recreation Sites (developed)

Name	Geographic Location
Bears Ears TH	T33N, R102W, Sec 8
Dickenson Park	T33N, R102W, Sec 17
Smith Lake TH	T33N, R102W, Sec 17
Sinks Canyon	T32N, R101W, Sec 19
Bruce Picnic Area	T32N, R101W, Sec 24
Middle Fork TH	T32N, R101W, Sec 23
Worthen Meadows	T32N, R101W, Sec 32
Roaring Fork TH	T32N, R101W, Sec 31
Youth Camp	T32N, R101W, Sec 33
Fiddlers Lake CG	T31N, R101W, Sec 27
Fiddlers Lake TH	T31N, R101W, Sec 27
Little Popo Agie CG	T30N, R 101W, Sec 1
Louis Lake Picnic Area	T30N, R101W, Sec 1
Louis Lake CG	T30N, R101W, Sec 12
South Pass/Loop Rd Parking Area	T29N, R100W, Sec 4

Washakie FMU Backcountry Administrative Sites

Name	Geographic Location
none	

Washakie FMU Utilities and Communication Sites

Name	Geographic Location
Blue Ridge Repeater (SZ Port)	T31N, R100W, Sec. 23
Cyclone Repeater	T33N, R102W, Sec. 36
South Pass Repeater	T30N, R99W, Sec. 18
Microwave Station	T30N, R101W, Sec. 25

Resource Protection Objectives

Resource	Forest Plan Direction (Goal, Desired Condition, Standard, Guideline)
developments, facilities and infrastructure	Wildland fire plays a role within and outside of wilderness where appropriate and desirable, but active suppression of fire occurs where necessary to protect life, investments, and valuable resources. Valuable resources include the wildland urban interface, utility corridors and communication sites. Other valuable resources include public water supply, recreation facilities, administrative sites, range allotments, special management areas, fish and wildlife habitats, and lands suitable for timber production (Forest Plan Amendment 2008-01, page2).
	Fire management strategies are designed to achieve land management protection or benefit objectives, are cost effective, and meet safety objectives for firefighting and the public(Forest Plan Amendment 2008-01, page 3).

Wildland Urban Interface

Structures occurring within and adjacent to the FMU are primarily located within the Resource Dependent Management Zone (Values at Risk - Map 6.5).

Local fire departments and agencies are responsible for structure protection; management of wildland fires burning on the Shoshone National Forest is the responsibility of the Forest Service. Keeping fires from reaching structures and private property adjacent to the Forest as well as permitted lodges and residences located on the Forest is consistent with current federal policy and Forest Plan direction. In addition, cooperative agreements and operating plans are in place that permits Forest Service firefighters to assist local jurisdictions with structure protection on private property, but for not entering structures to suppress fires.

The approach for developing the appropriate management response for wildland fire burning on the Forest that threatens individual structures or the wildland urban interface is the same for fire being managed for resource benefit or suppression objectives. Aggressive or intense management actions would occur in locations that have the highest probability of success in preventing damage or loss while ensuring the safety of the public and firefighters. These actions could occur near structures in close cooperation with the local jurisdiction or at some distance from structures where circumstances are favorable for stopping the advance of a fire toward structures.

Washakie FMU Communities and Subdivisions

Community Name	Geographic Location
Use communities referenced in	
the Fremont County CWPP.	

Washakie FMU Permitted recreation residences

Community Name	Geographic Location
Louis Lake Sub Division	T30N, R101W, Sec.12
Middle Fork Sub Division	T32N, R101W, Sec. 24
Youth Camp (Organization	T32N, R101W. Sec. 34
Camp)	
Dickenson Park	T33N, R102W, Sec. 8

Washakie FMU Permitted lodges

Lodge Name	Geographic Location
Louis Lake Lodge	T30N, R101W, Sec.12

Washakie FMU Administrative sites

Site Name	Geographic Location
Louis Lake Guard Station	T30N, R101W, Sec 12
Middle Fork Work Station	T32N, R101W, Sec 24

Resource Protection Objectives

1 to so di con i i i i i i i i i i i i i i i i i i i				
Resource	Forest Plan Direction (Cool Registed Condition Standard Cuideline)			
	(Goal, Desired Condition, Standard, Guideline)			
wildland urban interface	Wildland fire plays a role within and outside of wilderness where appropriate and desirable, but active suppression of fire occurs where necessary to protect life, investments, and valuable resources. Valuable resources include the wildland urban interface, utility corridors and communication sites. Other valuable resources include public water supply, recreation facilities, administrative sites, range allotments, special management areas, fish and wildlife habitats, and lands suitable for timber production (Forest Plan Amendment 2008-01, page2).			
	Fire management strategies are designed to achieve land management protection or benefit objectives, are cost effective, and meet safety objectives for firefighting and the public(Forest Plan Amendment 2008-01, page 3).			

e) Invasive species

Invasive plants: There are over 20 high priority terrestrial invasive species on the Shoshone with many more invasive species with the potential to spread across large portions of the Forest. Wildfires of any cause can enhance conditions for spread if fires expose soil, reduce native vegetation, and facilitate the introduction or movement of invasive seed sources into an area. Locations of invasive plants are mapped (Map 6.6) and are located in the FMP electronic files.

Invasive aquatics: Aquatic nuisance species occur just inside or adjacent to the Forest (Map 6.7), including whirling disease, New Zealand mudsnails, and didymo. Fire suppression equipment can travel long distances to the Forest, and with them, the potential to introduce other aquatic nuisance species or move them to another area.

Whirling disease has been found adjacent to the FMU in the following locations:

- Little Popo Agie River Upper PFA off forest
- Little Popo Agie River above Pass Ck confluence on Forest
- Squaw Creek 2001 near West Elementary school off forest
- North Fork Popo Agie River off Forest

New Zealand mudsnails and didymo have not been document in or near the FMU.

Resource Protection Measures for Fire Management Activities

Resource	Description of Protection Measures
vegetation	Implement protection measures for invasive plants as described in the Shoshone National Forest Wildland Fire Management Resource Protection Standards and Guidelines.
	Follow practices related to fire management activities described in Forest Service Manual 2080 Noxious Weed Management for Forest Service activities.
aquatic	Implement protection measures for riparian areas, streams and lakes as described in the Shoshone National Forest Wildland Fire Management Resource Protection Standards and Guidelines.

f) Fire Environment

Historic Fire Occurrence and Behavior

Map 6.8 displays the historic fire occurrence and cause for the FMU. Additional information related to fire behavior on the Forest is described in Section III, Part D.

Fire Weather

Historical weather information, patterns influencing fire behavior and fire seasons are described in Section III, Part D. Additional weather and fire behavior related information is located in the Shoshone National Forest Weather Handbook in Appendix J.

Fire Behavior and fuels

Map 6.9 displays the fuel types and relative acres for each type associated with the FMU. GIS data layers are also available in the FMP electronic file. Additional information regarding fuel conditions and topography that influence fire behavior and potential control problems are described in Section III, Part D.

Resource Benefit Objectives

Resource	Forest Plan Direction (Goal, Desired Condition, Standard, Guideline)				
fuels	Both unplanned ignitions and prescribed fire are used as tools to achieve and maintain vegetation conditions and desired fuel levels (Forest Plan Amendment 2008-01, page 3).				
Reduce the accumulation of natural fuels (Forest Plan 1986, page III-8)					
	Prescribed fire will be utilized as a vegetative and fuels management technique where it is the most cost-efficient and acceptable alternative to achieve management objectives (Forest Plan 1986, page III-96).				
	Maintain fuel conditions that permit fire suppression and prescribed fire to maintain habitat needed for selected species or species population levels (Forest Plan 1986, page III-152).				

Fire Regime Condition Class

Seventy-nine percent of the FMU is in a fire regime condition class 1. One vegetation condition is in some jeopardy based on the time since the last disturbance. This includes approximately 66,095 acres of fire regime III that is in condition class 2. This represents approximately 21 percent of the FMU. A summary of the number of acres by fire regime condition class are displayed in the table below and on Map 6.10.

Washakie FMU Fire Regimes and Condition Classes

Fire regime	Condition class	Fire return interval	Burn severity	Acres	Percent
П	1	35 – 70	Stand	0	0%
11	2	years	replacement	0	0%
III	1	35 -100	Mixed	7,789	2%
	2	years	IVIIXEU	66,095	21%
IV	1	70 - 150 years	Stand replacement	148,611	47%
V	1	200 – 300 years	Stand replacement	93,853	29%
Barren	None	None	None	3,764	1%

Resource Benefit Objectives

11030dice Delici	it Objectives
Resource	Forest Plan Direction (Goal, Desired Condition, Standard, Guideline)
fire regime condition class	Both unplanned ignitions and prescribed fire are used as tools to achieve and maintain vegetation conditions and desired fuel levels. Fire operates within historical fire regimes appropriate to the vegetation type and management objectives. Prescribed fire plays a role in areas where managing unplanned ignitions for resource benefits is not appropriate because of high values (Forest Plan Amendment 2008-01, page 3).

g) FMU Initial Response/Attack Run Card

This page intentionally left blank.

Washakie Fire Management Unit Initial Response/Attack Run Card

Full Suppression Response Zone						
	Fire Danger - Wind River RAWS 481411					
Dispatch Resource	Low	Mod	High	VH	EXT	
Engine	1	1	1	1 - 2	1 - 2	
Hand Crew (2 - 4 person)	0	0	1	0 -1	0 -1	
Helicopter/Aerial Recon	0	0	0 -1	1	1	
Duty Officer/AFMO/FMO Notification	1	1	1	1	1	

Unplanned ignitions are considered to be unwanted fires and initial attack responses will consist of the safest and most effective and cost efficient actions to contain and control fires as quickly as possible.

Resource Dependent Response Zone					
Engine (T3, T4, or T6)	1	1	1	1 - 2	1 - 2
Hand Crew (2 - 4 person)	0	0	1	0 -1	0 -1
Helicopter/Aerial Recon	0	0	0 -1	1	1
Duty Officer/AFMO/FMO	Χ	Χ	Χ	Χ	Χ
Local Jurisdiction Notification (if structures are threatened)	Х	Х	Х	Х	Х

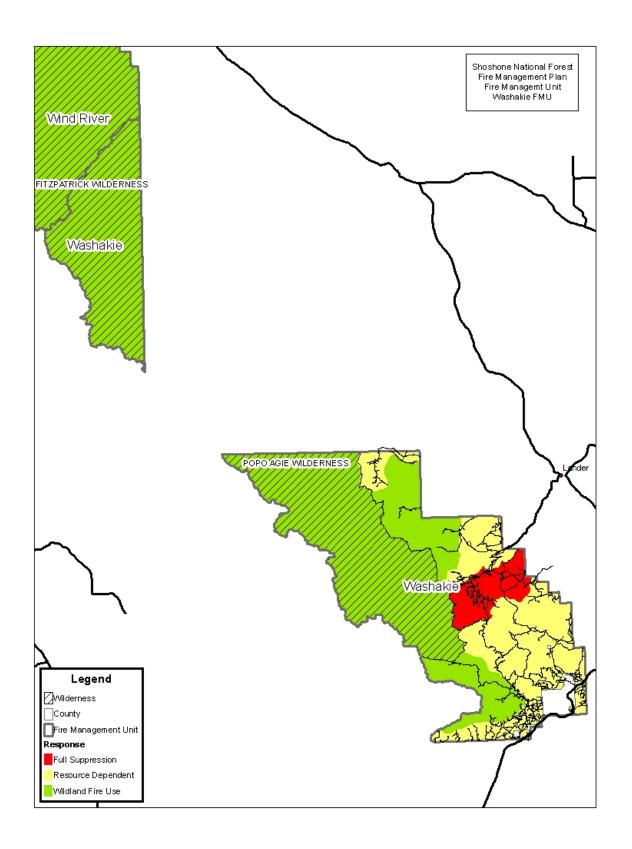
Initial response to fires within the Resource Dependent Response Zone will require an assessment as to whether or not the fire is a wildland fire use candidate. The Duty Officer/AFMO/FMO begins this assessment immediately by evaluating the probable cause and location of the fire relative to resource values. Commensurate with the assessment, initial attack resources are dispatched to a fire under the assumption that the fire is to receive a suppression response unless directed otherwise. Human caused fires are classed as an unwanted fire and will receive a suppression response.

Wildland Fire Use Response Zone					
Engine	0	0	1	1 - 2	1 - 2
Hand Crew (2 - 4 person)	1	1	1	0 -1	0 -1
Helicopter/Aerial Recon	0 -1	0 -1	0 -1	1	1
Duty Officer/AFMO/FMO Notification	Х	Х	Х	Х	Х

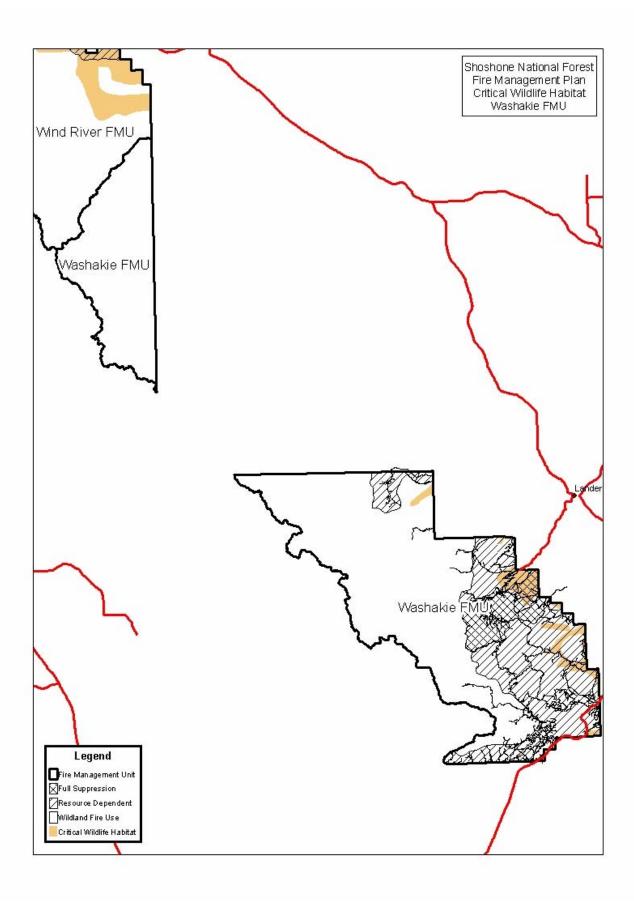
Initial response to fires within the Wildland Fire Use Response Zone will require an assessment as to whether or not the fire is a wildland fire use candidate. The Duty Officer/AFMO/FMO begins this assessment immediately by evaluating the probable cause and location of the fire relative to resource values. Human caused fires are classed as an unwanted fire and will receive a suppression response. Initial response resources are dispatched to a fire under the assumption that the fire is a potential wildland fire use candidate and would not begin suppression actions unless directed otherwise.

Other Instructions

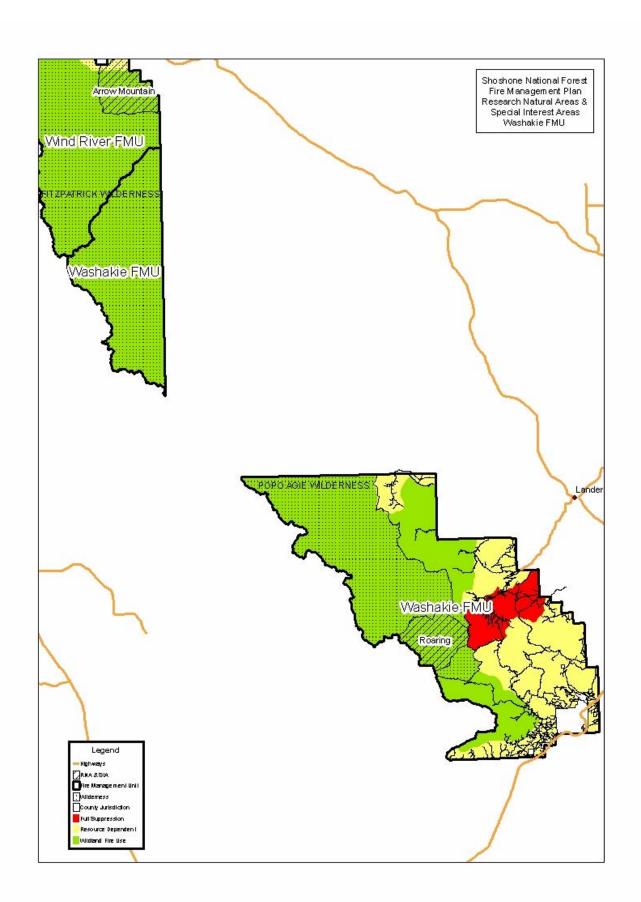
Map 6.0 - Washakie FMU Boundaries and Response Zones



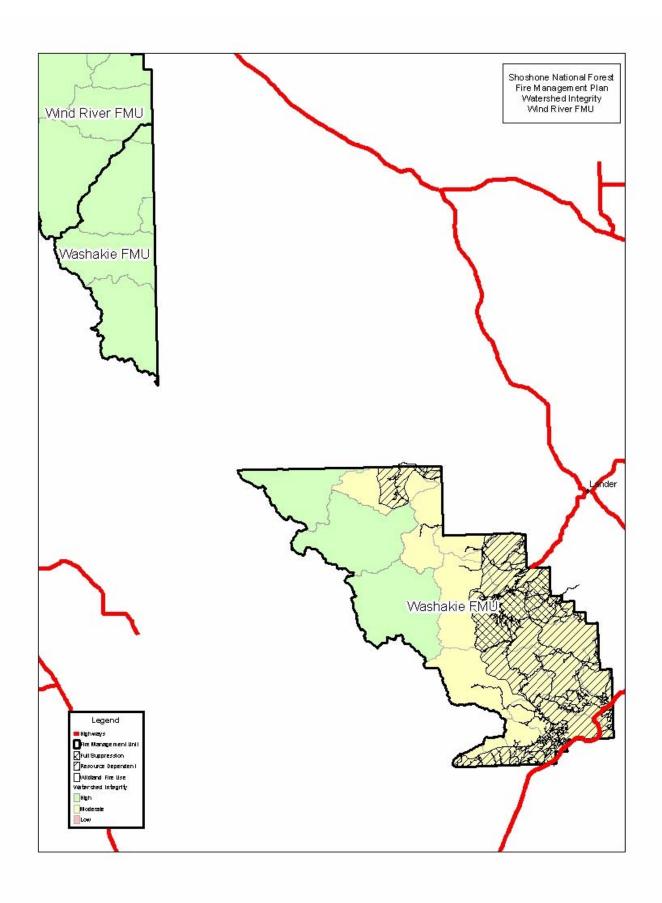
Map 6.1 - Washakie FMU Wildlife Critical Winter Range and Yellowstone Cutthroat Trout Locations



Map 6.2 - Washakie FMU Special Areas



Map 6.3 - Washakie FMU Watershed Condition



Map 6.4 - Washakie FMU Cultural Resources

A hard copy map of the approximate location of known cultural sites and not yet surveyed areas that have high probability of containing sites have been distributed to the zone FMOs. Detailed site-specific information is held by the Forest heritage program manager and can be obtained when needed. The information is stored in a GIS database as well.

Map 6.5 - Washakie FMU Values at Risk

A comprehensive map displaying the values in the FMU that may be at risk is available in hardcopy and can be printed from the FMP electronic file. The associated data is also stored in a GIS data format that can be accessed from the Forest's GIS fire files at anytime when needed.

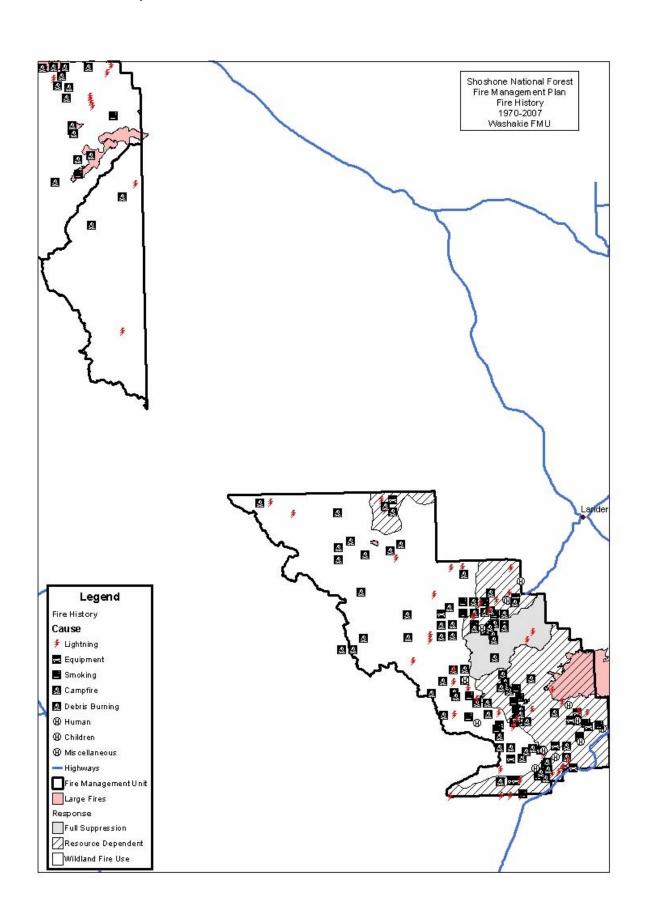
Map 6.6 - Washakie FMU Invasive Plants

Invasive plant locations are mapped and available from the Forest's GIS corporate database.

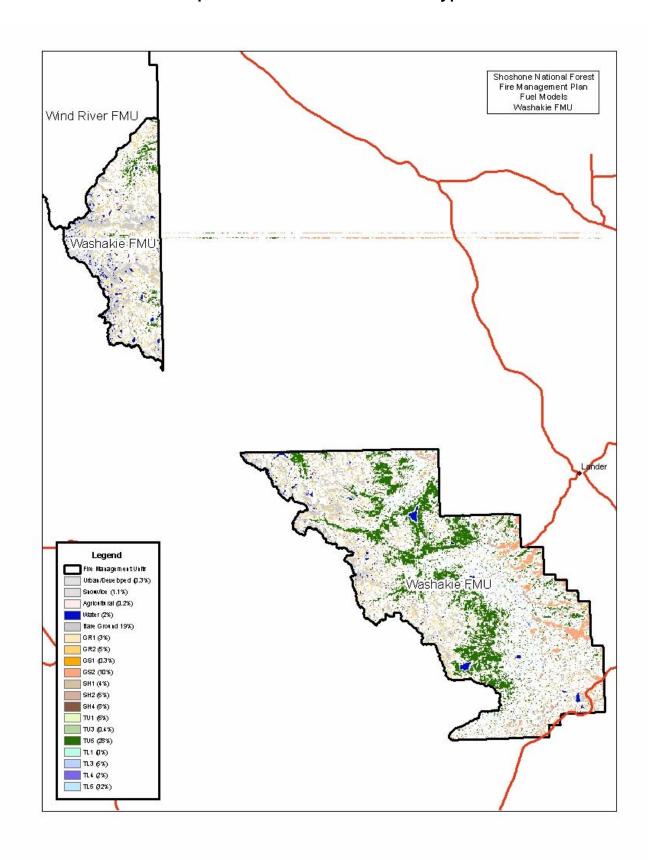
Map 6.7 - Washakie FMU Invasive Aquatics

To be developed

Map 6.8 - Washakie FMU Historical Fire Occurrence



Map 6.9 - Washakie FMU Fuel Type



Map 6.10 - Washakie FMU Fire Regimes and Condition Classes

