Accelerated Watershed/Vegetation Restoration Plan

10-year strategy and five-year action plan

Shoshone national forest

March 2004

Introduction

The Shoshone National Forest 10-year AWRP Strategy and Five-Year Action Plan[1] (Plan) is an integrated program approach to treat vegetation on National Forest System lands[2]. The Plan prioritizes areas of concern to efficiently deliver change in condition and address watershed health. The Forest is currently experiencing a prolific insect and fire hazard problem on about 400,000 acres. Based on current data, the acres lost to insects and risk to fire is expected to double in the next 10 years. This Plan presents a strategy to address the problem.

Forest Vision

The Forest's vision for vegetation management is an integrated program that reinforces the use of fire as a natural disturbance to achieve vegetation resource objectives. The vegetation treatments would focus on key points of the Healthy Land Initiative and Healthy Forests Restoration Act.

The guiding principle to use fire to achieve resource management objectives is well documented in the Forest's Land and Resource Management Plan. Further, the foundation for the Greater Yellowstone Area (GYA) interagency fire management planning and coordination committee is to perpetuate fire as a natural process within lands managed by the nine national forests and two national parks in the GYA.

The state of vegetation and the defensible boundaries on the Forest limit fire use opportunities on both the Forest and adjacent federal lands—a number of candidate fire use fires are suppressed annually in Yellowstone National Park and the Bridger-Teton and Gallatin National Forests due to vegetation conditions on the Shoshone. Continuous over-mature vegetation provides an avenue for fire to burn from neighboring lands managed for wilderness values through like lands on the Shoshone, into high resource value areas, structures and improvements, then onto private lands. Implementing the Forest vision tempers this situation by greatly increasing the Forest's ability to use fire as a primary vegetation management tool. Our goal is to fully engage the four approved wilderness fire management plans in the near future.

Strategy

The integrated treatments will focus on about 75,000 acres of the most critical areas in the next five years. Treatment preferences by priority are wildland urban interface, municipal watersheds, agency improvements, at-risk high resource value areas, areas that will increase the opportunity for wildland fire use, and areas of deteriorating critical wildlife habitat. About 70% of the treatments are in wildland urban interface.

Targeting the most critical areas will fashion the way to employ wildland fire use to achieve LRMP and AWRP objectives on lands that have limited timber harvest opportunities; seventy-five percent of the Forest is not suitable for timber harvest. The treatments focus on modifying potential extreme fire behavior adjacent to at-risk communities, municipal watersheds and agency improvements, and increases the ability to use wildland fire to achieve resource benefits. The treatments also address insect issues on lands that harbor timber commodities; insect spread is managed by generating a mosaic of stand density and age classes.

The trend for treating vegetation is an aggressive increase in outputs over the next three years from a current annual output of about 4,500 acres to 17,000 acres annually (Figure 1). The number of outputs levels in years four and five, then declines in years six through 10. The decline in years six through 10 (shaded table area) is not a true reduction in acres treated, but a shift in program emphasis to using wildfire to achieve resource benefits. Fire use acres are not reflected in the outputs due to the uncertainty of projecting annual acres treated in the 1.4 million acres available to use wildland fire to achieve resource benefits.

[1] See Appendix A - Shoshone National Forest Five-year Action Plan.
[2] See Appendix B - Shoshone National Forest White Paper on Forest Health.

Figure 1. 10-year vegetation treatment program (FY04 dollars).

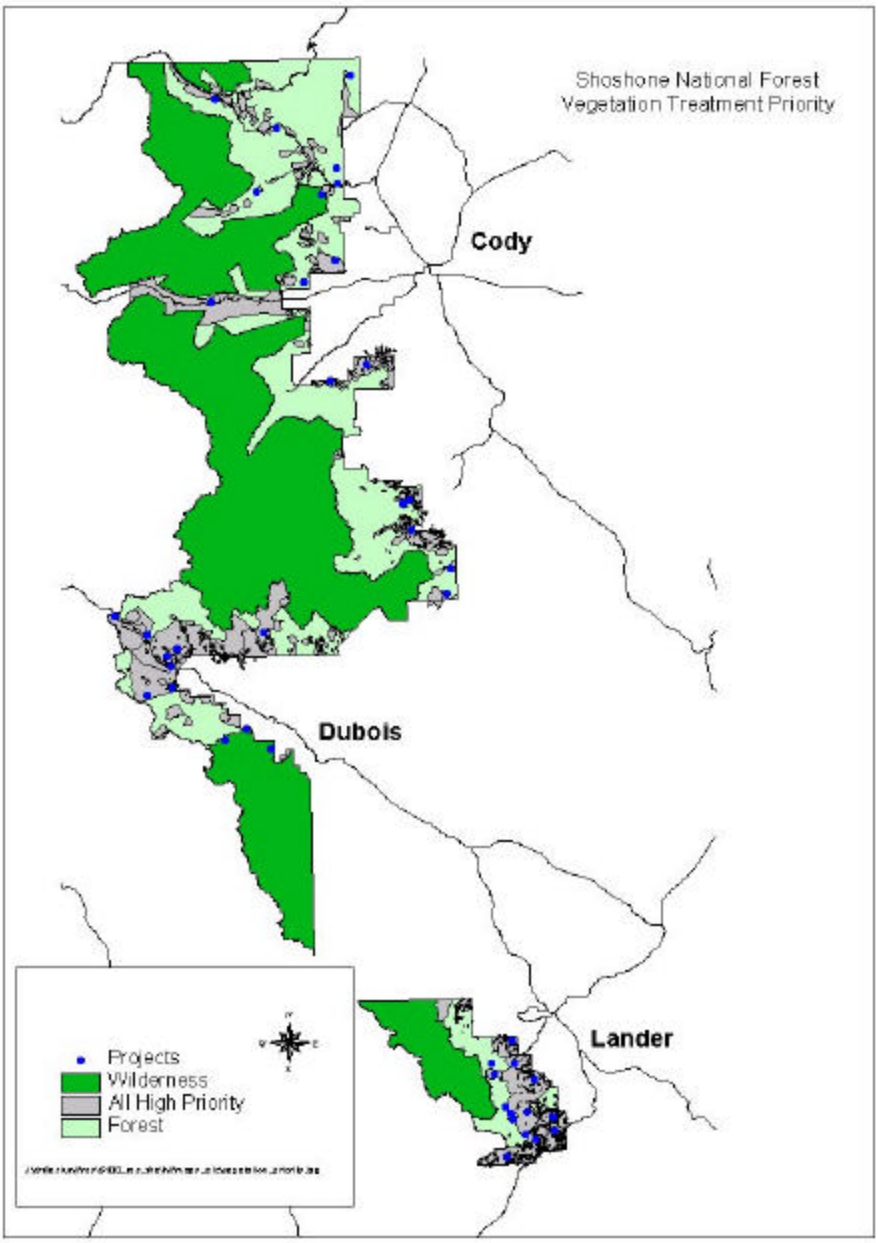
FY	Hazardous Fuels		Timber Management		Wildlife		Total	
	Acres	Funds	Acres	Funds	Acres	Funds	Acres	Dollars
04	5,586	872	1,858	1,322	3,000	450	10,444	2,644
05	11,280	1,692	1,499	1,049	3,000	450	15,779	3,191
06	11,800	1,770	1,963	1,322	3,000	450	16,763	3,542
07	11,000	1,650	2,246	3,200	3,000	450	16,246	5,300
08	10,440	1,566	1,466	1,026	3,000	450	14,906	3,042
09	6,100	1,290	1,300	910	3,000	450	10,400	
10	6,100	996	1,300	910	3,000	450	10,400	
11	6,100	996	1,300	910	3,000	450	10,400	
12	6,100	996	1,300	910	3,000	450	10,400	
13	6,100	996	1,300	910	3,000	450	10,400	

Integrated Approach and Priorities

The 10-year Plan is a composite of wildlife, hazardous fuels, and timber vegetation treatment projects. Vegetation treatments are integrated, and focus on a common goal that addresses areas of high risk. The integrated approach stems from respective disciplines identifying low, moderate, and high areas of concern; overlapping areas of high concern are the treatment focus for the first five years of the AWRP 10-year Plan.

Treatment preference is based on the proximity to wildland urban interface, at-risk high resource value areas, areas that will increase the opportunity for wildland fire use, and areas of deteriorating critical wildlife habitat (Figure 2).

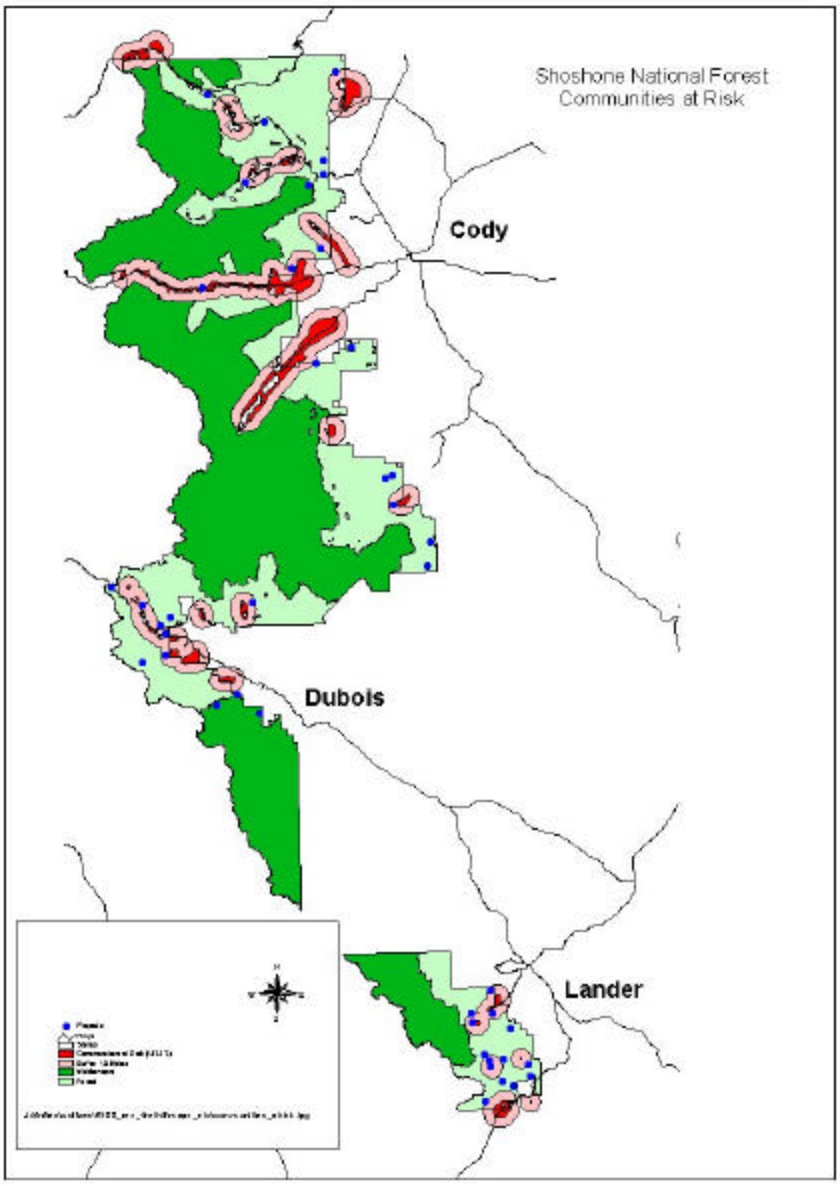
Figure 2. Proposed vegetation projects in relation to areas of high concern.



The integrated projects incorporate a collaborative approach in planning and implementation. Some collaborators are Yellowstone National Park, Wyoming State Forestry, the BIA, the BLM, non-government organizations (NGOs), three county fire districts, and private landowners. Major NGOs that have expressed interest in vegetation projects are invited to participate in project development through field trips and open houses. Programmatic agreements that streamline consultation and clearances have been developed with the U.S. Fish and Wildlife Service and the Wyoming State Historical Organization

In most instances, projects having common boundaries with other than national forest lands are generating collaborative partners in planning and implementation. Prioritization of projects is heavily influenced by proximity to communities at risk (Figure 3) and collaborative opportunities.

Figure 3. Project locations in relation to communities at risk.



Implementation and Monitoring

A number of tools are being employed to address planning and project implementation. The five new categorical exclusions are being applied where appropriate, however the vast areas of wilderness and roadless on the Forest limit the applicability of the new NEPA procedures. A myriad of computer-generated analyses are being administered to validate the effectiveness of treatments. Software such as FARSITE, FlamMap, FVS, FireFamily Plus, FIREMON, FEIS, and FMT systems will be used to produce cause and effect models.

Stewardship, Service, ID/IQ, and conventional contracts, in concert with the agency's workforce, will provide the means to accomplish the Plan's objectives.

Monitoring methods will focus on the effectiveness of a treatment to change condition class, fire effects, treatment outputs, and compliance with the Forest Plan. A comparison of pre- and post-condition class, using outputs from FIREMON, will be documented for each treatment. The Forest has developed and

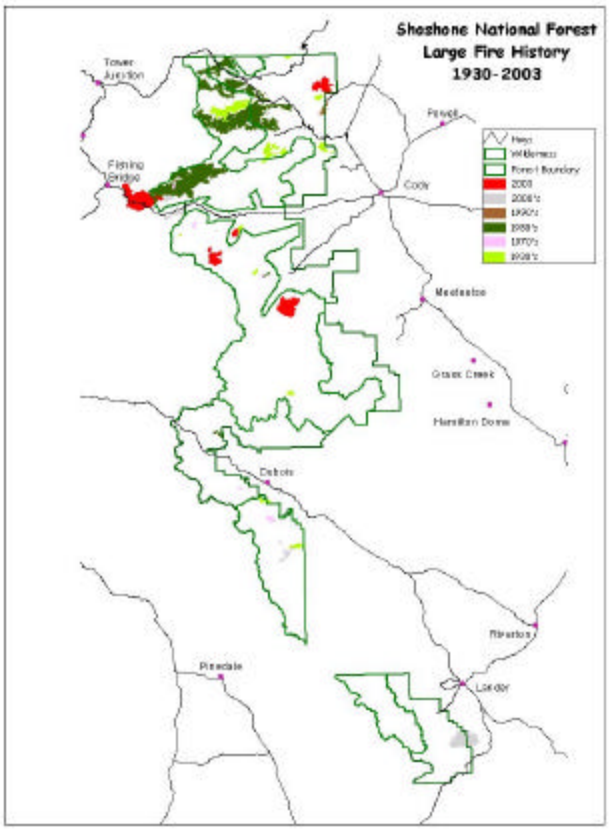
adopted a fire effects monitoring guide for wildland and prescribed fire. The methodology outlined in the guide will provide the means to evaluate and document fire effects. Accomplishments will be reported through conventional methods such as PAR and NFPORS. Forest Plan standards and guidelines provide the framework to treat vegetation on the Forest. Forest Plan monitoring standards and guidelines are addressed during project planning and annual monitoring reporting. The proposed vegetation treatment program complies with the Forest Plan.

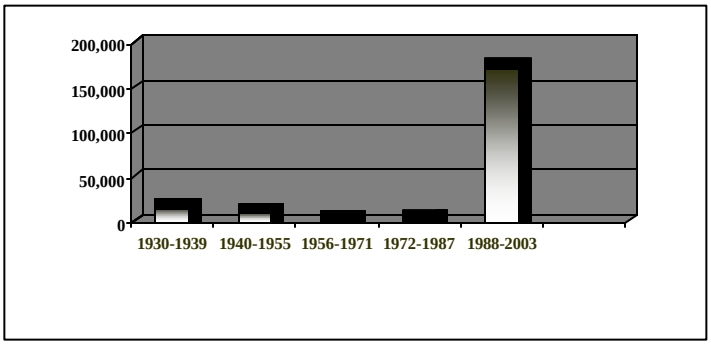
Hazardous Fuels

A trend over the past thirty years suggests that the Forest is experiencing an increase in the number of wildland fires and acres burned. The trend seems to be in correlation with an increased insect infestation and associated hazardous fuels. Suppression cost has also increased at a comparable rate. The most expensive suppression actions tie directly to urban interface; in four years, over 11 million dollars have been spent, in part, to protect one lodge from four separate lightning-caused fires.

Seventy years of fire history (Figure 4) indicate that large fire growth was more prominent the previous 15 years versus the drier decades of the 1930s and 1950s. Eighty-two percent of the acres burned during the 70-year period burned between the years 1988 and 2003. Three local fires that occurred in 2003 exemplify the unusual intensity and spread rate in bug-killed conifer: the Boulder Basin II Fire grew from 10 acres to 8,000 acres in four hours; the East Fire grew from 1,000 to 26,000 acres in an afternoon, and the Deep Lake Fire consumed 4,000 acres from ¼ acre in one afternoon. All of the major fire growths were in high mortality conifer trees. With the excessive fire growth, firefighter and public safety and structure protection were tenuous.

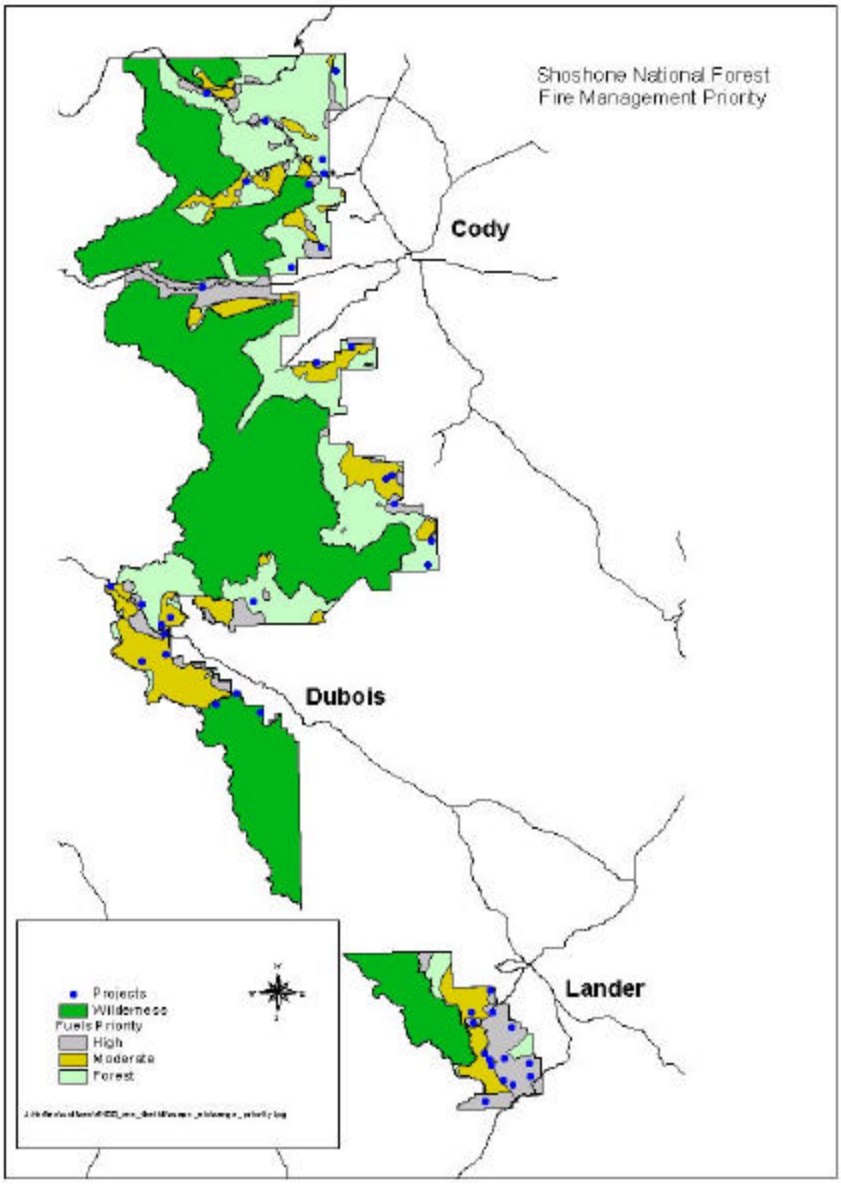
Figure 4. Large fire history, 1930-2003





To determine the best fuels dollar investments, an analysis was conducted to determine priority treatment areas. The analysis suggests 250,000 acres are considered high risk of extreme fire behavior threatening communities and improvements. Hazardous fuels treatments will focus on high-risk areas (Figure 4). The method used to analyze the risk considered historic fire patterns, fire regime, condition class, wildland urban interface, fuel model, and expected fire growth. A rating of low, moderate, and high was assigned to geographical areas based on specific criteria. A high rating was awarded to areas having fire regime 1, 2, or 3 in condition class 2 or 3; fuel model 10, 6, or 2; wildland urban interface; and potential high fire growth in the direction of structures (one burn period). A moderate rating describes an area having isolated improvements; fire regime 1, 2, or 3 in condition class 2 or 3; and fire behavior models 9, 8, 5, or 1. Low denotes all other areas.

Figure 4. Proposed projects in relation to areas of high hazardous fuels concern.



The need for treating hazardous fuels is not a new concept for the Forest. The Forest recognized the value in increasing outputs in the 1990s. The acres treated have steadily increased over the past several years, and are projected to double within the next two years (Figure 5) with appropriate funding.

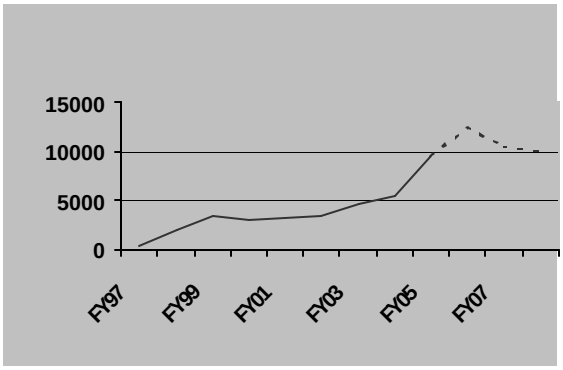
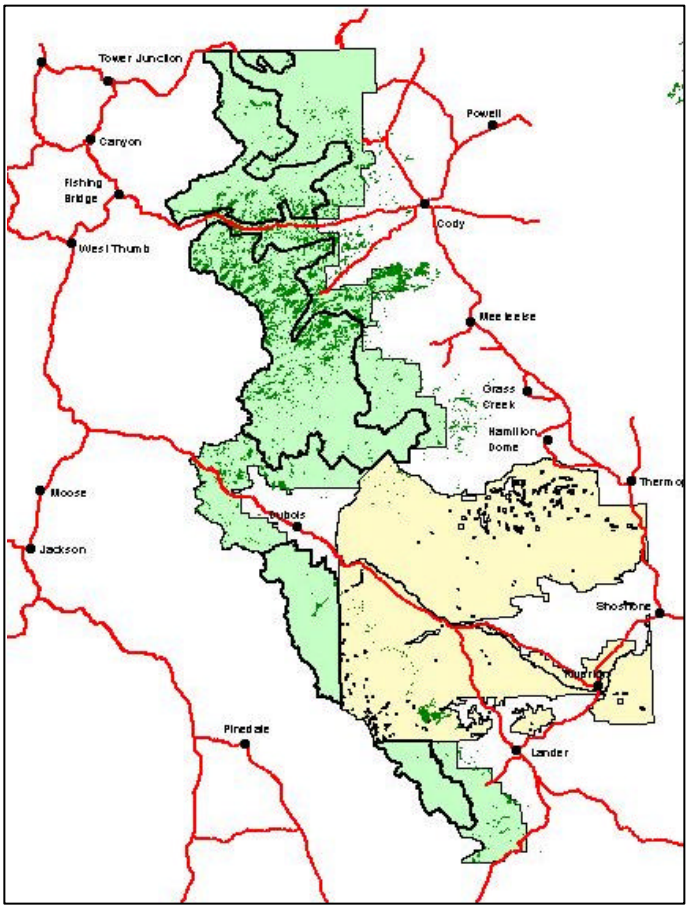


Figure 5. Trend in hazardous fuels outputs, in acres.

Insects and disease

The Forest is seeing an increase in insect mortality in all conifer tree species. The increase is most notable in the past four years and is considered epidemic in scale, 300,000 acres (Figure 6).

Figure 6. Insect infestation on the Forest (seven-year composite).



Priority areas were established by evaluating cover type, structural stage, roaded areas, suitable base, and roadless and wilderness areas, overlaid with the most recent inter-regional aerial survey detection flights. Conifer cover types pole size and above were evaluated for treatment. Aerial detection flights were used heavily to determine where treatments should be performed. Vegetation treatments will focus on high priority areas (Figure 7).

Priorities are broken into two categories, outside of roadless and inside roadless:

1. Areas outside of wilderness and roadless.

   Low represents areas that have potential for insect and disease spread/epidemic, but have poor accessibility or other factors reducing implementation feasibility.

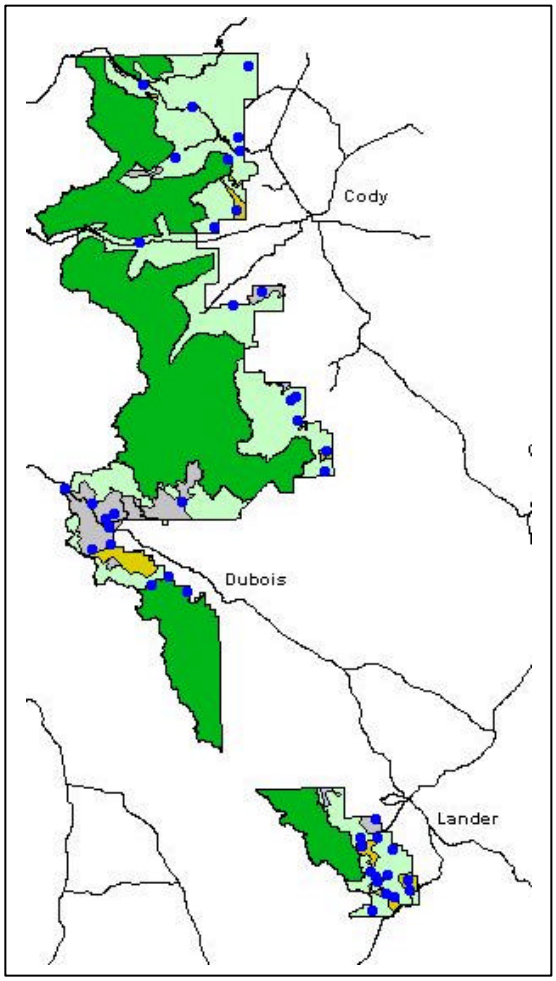
   Moderate represents areas where some insect and disease problems exist but are lower in comparison to other areas of the Forest. Preventative treatments would be beneficial in these areas.

   High represents areas with heavy insect and disease infestation, or where preventative treatments would limit spread of infestation.

2. Areas inside roadless, but would benefit from treatment.

   Low, moderate, and high definitions are the same. These areas are separated to show the need for treatment in roadless, but are also more difficult to treat politically because of the roadless rule and because of evaluation of these areas for wilderness during forest plan revision.

Figure 7. Project locations in relation to areas of high timber/insect concerns.

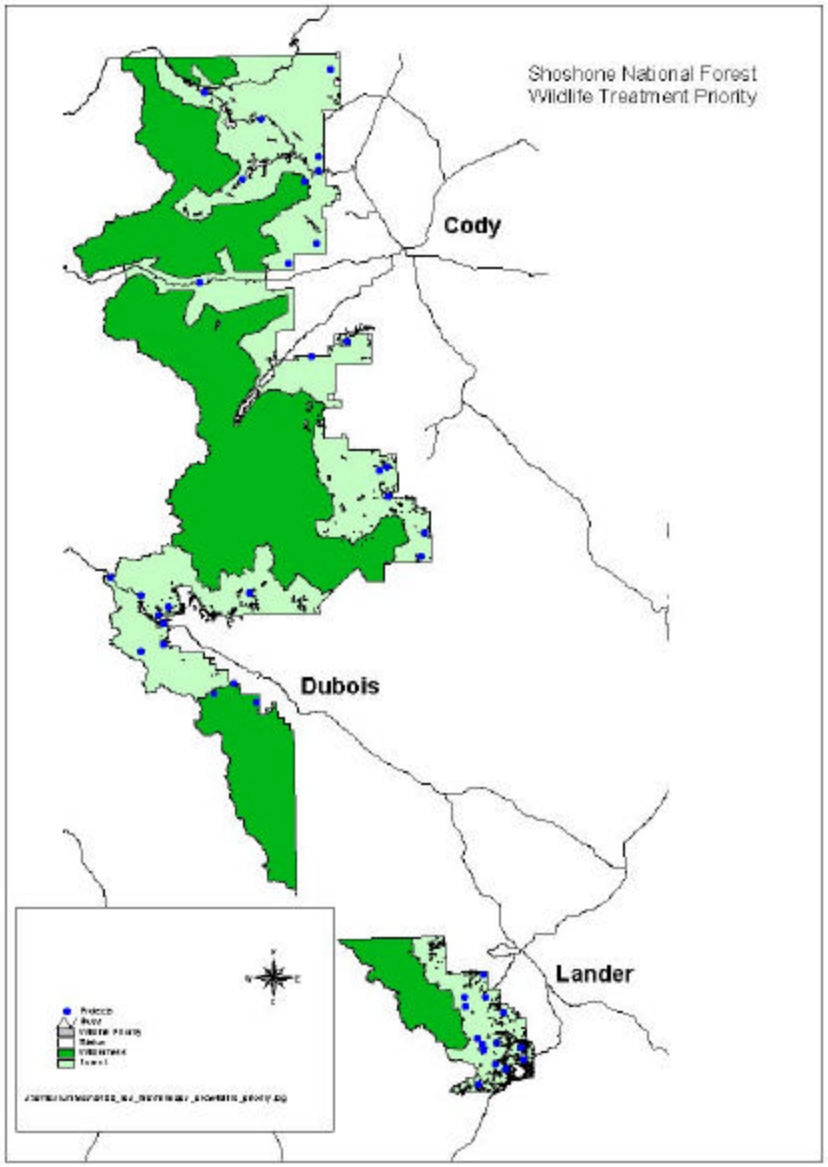


Wildlife

Historic migration routes for bighorn sheep and elk and deer winter ranges are being compromised by encroaching conifer and loss of open space on adjacent private land. The Forest is losing timber stands with multi-aged structure that are critical to support snowshoe hare populations, crucial for Canada lynx foraging areas. Aspen communities, which are important for both game and non-game species, are also in decline and in need of treatments. Vegetation treatments focus on the best opportunities to address these issues.

The highest priority is vegetation projects that focus on lower elevation migratory bighorn sheep routes. The lower elevation projects also address a large portion of the critical winter ranges for elk and mule deer (Figure 8).

Figure 8. Projects in relation to areas of wildlife habitat concern.



Summary

The 10-year Plan initiates a process to address forest health through an integrated and collaborative approach. The Plan prioritizes vegetation treatments by key points, while respecting Forest LRMP and Regional Office direction. To be efficient and effective, the Plan recommends a large increase in outputs over the next five years. Success is contingent on adequate staffing and funding.

Appendix A—Shoshone National Forest Five-year Action Plan

FY	PROJECT Name	Purpose and Need	OUTPUT	EBLI	PARTNERS	Forest Priority	CRITICAL Paths
2004	Deadman Bench	I&D and Fuels	340 MX -1000 CCF	WFHF NFTM	None	H	Implementation
2004	Jim Mtn.	Wildlife Habitat	1000 RX	NFWF	WY G&F, FNAWS	H	Implementation
2004	Carter Marquette	I&D and Fuels	1418 MX, 25000 CCF	WFHF NFTM	WY ST, Park CO.	H	Implementation
2004	Dead Indian	Fuels Reduction	600 RX	WFHF - WUI	NW Community College, Park Co, PVT,	H	Implementation
2004	Bald Ridge	Fuels Reduction	125 MX, 1250 CCF	WFHF - WUI	NW Community College, Park Co, PVT,	H	Implementation
2004	North Fork	Fuels	500 MX, 2000 CCF	WFHF - WUI	Park Co, PVT, WY F&G	H	Implementation
2004	Logan Mtn	Fuels Reduction	1000 Rx	WFHF - WUI	Park Co, PVT,	H	Implementation
2004	Gwinn Fork Dick Creek	Fuels Reduction	700 RX	WFHF	Park Co, PVT,	H	Implementation
2004	Warm Springs	Fuels Reduction	160 MX, 20 CCF	WFHF - WUI	Fremont Co, PVT	H	Implementation
2004	South Pass/Loop Road	Fuels Reduction	100 RX	WFHF-WUI	Fremont Co	H	Implementation
2004	Sheep Ridge	Wildlife Habitat	100 MX, 100 RX	NFWF	WY G&F, FNAWS	H	Implementation
2004	Loop Road ROW	Road Reconstructio n/ Fuels Red.	130 CCF	NFTM	WYDOT	H	Implementation
2004	Fiddlers Lake	I&D and FUELS	100 MX, 2400 CCF	NFTM WFHF	Fremont Co.	H	Implementation
2004	Little Pine	Fuels Reduction	1000 RX	WFHF - WUI	Fremont CO.	H	Implementation
2004	Homestead II	Fuels Reduction & Forest Health I&D	NEPA	WFHF - WUI NFTM	Fremont Co.	M	SHPO, ESA, ROW
2004	Freak Mtn.	Fuels/Wildlife Habitat	NEPA	WFHF - WUI	Fremont Co./ PVT land holders/ TNC	M	SHPO, ESA, ROW
2004	Washakie Aspen	Wildlife Habitat	NEPA	NFWF	Fremont Co.	M	SHPO, ESA
2004	Torry Rim	Wildlife Habitat	2000 RX	NFWF	FNAWS	H	SHPO, ESA, WY G&G Agreement
2004	Wiggins Fork	Fuels Red., Forest Health /Wildlife	NEPA	WFHF NFTM	Fremont Co./ PVT land	M	SHPO, ESA
2004	Mud Butte	Fuels/Wildlife Habitat	NEPA	WFHF	Fremont Co./ PVT land	M	SHPO, ESA
2004	Trout Cr.	Fuels/Wildlife Habitat	NEPA	WFHF	Fremont Co./ PVT land	M	SHPO, ESA
2004	Upper Wind River	Fuels/Wildlife Habitat/I & D	NEPA	NFIM	Fremont Co./ PVT land	H	SHPO, ESA

FY	PROJECT Name	Purpose and Need	OUTPUT	EBLI	PARTNERS	Forest Priority	CRITICAL Paths
2005	Beartooth Face	Fuels	700 RX	WFHF - WUI	WY ST, Park CO.	H	Implement
2005	Dead Indian	Fuels Reduction	300 RX	WFHF - WUI	NW Community College, Park Co, PVT,	H	Implement
2005	North Fork	Fuels	4000 RX 800 MX, 8000 CCF	WFHF - WUI	Park Co, PVT, WY F&G	H	Implement
2005	Logan Mtn	Fuels Reduction	1000 Rx	WFHF - WUI	Park Co, PVT,	H	Implement
2005	Warm Springs	Fuels Reduction	80 MX, 100 RX	WFHF - WUI	Fremont Co./ PVT land holders/ TNC	H	Implement
2005	South Pass/Loop Road	Fuels Reduction	100 RX	WFHF- WUI	Fremont Co./ PVT land holders/ TNC	H	Implement
2005	Sheep Ridge	Wildlife Habitat	100 RX	NFWF	WY G&F, FNAWS	H	Implement
2005	Togwotee Road ROW	Road Reconstruction/ Fuels Red.	2000 CCF	NFTM	WYDOT	H	Implement
2005	Fiddlers Lake	I&D and FUELS	Carry Over Activity this FY	NFTM WFHF	Fremont Co./ PVT land holders/ TNC	H	Implement
2005	Homestead II	Fuels Reduction & Forest Health I&D	70 MX, 500 CCF	WFHF - WUI NFTM	Fremont Co./Home Owners	H	Implement
2005	Freak Mtn.	Fuels/Wildlife Habitat	60 MX, 500 RX	WFHF - WUI	Fremont Co./ PVT land holders/ TNC	H	Implement
2005	Washakie Aspen	Wildlife Habitat	500 RX	NFWF	Fremont Co./ PVT land holders/ TNC	H	Implement
2005	Wiggins Fork	Fuels Red., Forest Health /Wildlife	320 MX	WFHF - WUI NFTM	Fremont Co./ PVT/ TNC	M	SHPO, ESA
2005	Mud Butte	Fuels/Wildlife Habitat	500 RX	WFHF	Fremont Co./ PVT	H	Implement
2005	Trout Cr.	Fuels/Wildlife Habitat	1000 RX	WFHF	Fremont Co./ PVT	H	Implement
2005	Upper Wind River	Fuels/Wildlife Habitat/I & D	Assessment	NFIM	Fremont Co./ PVT land holders/ TNC	M	SHPO, ESA
2005	Upper Clarks Fork	Fuels Red., Wildlife, I&D	NEPA	WFHF	Park Co, PVT,	M	SHPO, ESA
2005	Lower Wood River	Fuels - WUI, Wildlife	NEPA	WFHF	Park Co, PVT,	M	SHPO, ESA
2005	Middle Fork	Fuels - WUI, Wildlife	1500 RX	WFHF - WUI	Fremont Co./ WY Parks	H	Implement
2005	Little Pine	Fuels, I&D	500 RX, 75 MX, 600 CCf	WFHF - WUI	Fremont Co./ PVT	H	Implement

FY	PROJECT Name	Purpose and Need	OUTPUT	EBLI	PARTNERS	Forest Priority	CRITICAL Paths
2006	Carter Marquette	I&D and Fuels	600 RX	WFHF	WY ST, Park CO.	H	Implement
2006	Dead Indian	Fuels Reduction	350 RX	WFHF - WUI	NW Community College, Park Co, PVT,	H	Implement
2006	North Fork	I&D and Fuels	4800 RX	WFHF - WUI	Park Co, PVT, WY F&G	H	Implement
2006	Logan Mtn	Fuels Reduction	200 MX, 1500 CCF	WFHF - WUI	Park Co, PVT,	H	Implement
2006	Fiddlers Lake	Forest Health (I&D)	Carry Over Activity this FY	NFTM WHHF	Fremont Co./ PVT land	H	Implement
2006	Homestead II	Fuels Reduction & Forest Health I&D	70 MX, 500 CCF	WFHF WUI NFTM	Fremont Co.	H	Implement
2006	Freak Mtn.	Fuels/Wildlife Habitat	2650 RX 65 MX	WFHF - WUI	Fremont Co./ PVT land holders/ TNC	H	Implement
2006	Washakie Aspen	Wildlife Habitat	500 RX	NFWF	Fremont Co./ PVT land	H	Implement
2006	Wiggins Fork	Fuels Red., Forest Health /Wildlife	300 MX, 1000 CCF	WFHF - WUI NFTM	Fremont Co./ PVT land	M	SHPO, ESA
2006	Mud Butte	Fuels/Wildlife Habitat	500 RX	WFHF	Fremont Co./ PVT land	M	SHPO, ESA
2006	Trout Cr.	Fuels/Wildlife Habitat	1000 RX	WFHF	Fremont Co./ PVT land	M	SHPO, ESA
2006	Upper Wind River	Fuels/Wildlife Habitat/I & D	260 MX, 2050 CCF	WFHF - WUI NFWL	Fremont Co./ PVT land	H	Implement
2006	Beartooth Face	Fuels Red.	900 RX	WFHF - WUI	Park Co, PVT,	H	Implement
2006	Upper Clarks Fork	Fuels Red., Wildlife, I&D	2000 RX, 800 MX 800 CCF	WFHF - WUI NFTM	Park Co, PVT,	H	Implement
2006	Lower Wood River	Fuels - WUI, Wildlife	1000 RX	WFHF	Park Co, PVT,	H	Implement
2006	Middle Fork	Fuels - WUI, Wildlife	1000 RX	WFHF - WUI	Fremont Co./ WY Parks	H	Implement
2006	Little Pine	Fuels, I&D	175 MX,	WFHF - WUI	Fremont Co./ PVT land	H	Implement
2006	Bald Ridge 2	Fuels	NEPA	WFHF	NW Community College, Park Co, PVT,	M	SHPO, ESA
2006	Louis Lake	Fuels -WUI	NEPA	WFHF	Fremont Co./ PVT land	M	SHPO, ESA
2006	Loop Road Fuel Break	Fuels	NEPA	WFHF	Fremont Co./ PVT land	M	SHPO, ESA
2006	Limestone	Fuels	NEPA	WFHF	Fremont Co./ PVT/ TNC	M	SHPO, ESA

FY	PROJECT Name	Purpose and Need	OUTPUT	EBLI	PARTNERS	Forest Priority	CRITICAL Paths
2007	Carter Marquette	I&D and Fuels	600 RX	WFHF	WY ST, Park CO.	H	Implement
2007	Dead Indian	Fuels Reduction	350 RX	WFHF - WUI	NW Community College, Park Co, PVT,	H	Implement
2007	North Fork	Fuels	4800 RX	WFHF WUI	Park Co, PVT, WY F&G	H	Implement
2007	Fiddlers Lake	I&D and Fuels	100 RX, 100 MX	NFTM WFHF	Fremont Co./ PVT land	H	Implement
2007	Homestead II	Fuels Reduction & Forest Health I&D	140 RX	WFHF - WUI	Fremont Co.	H	Implement
2007	Freak Mtn.	Fuels/Wildlife Habitat	2000 RX	WFHF - WUI	Fremont Co./ PVT land holders/ TNC	H	Implement
2007	Wiggins Fork	Fuels Red., Forest Health /Wildlife	818 MX 5000 CCF 1000 RX	WFHF - WUI NFTM	Fremont Co./ PVT land	H	Implement
2007	Upper Wind River	Fuels/Wildlife Habitat/I & D	250 MX, 2000 CCF	WFHF - WUI NFWL	Fremont Co./ PVT land	H	Implement
2007	Upper Clarks Fork	Fuels Red., Wildlife, I&D	2000 RX, 400 MX 4000 CCF	WFHF - WUI NFTM	Park Co, PVT,	H	Implement
2007	Lower Wood River	Fuels - WUI, Wildlife	1000 RX	WFHF - WUI	Park Co, PVT,	H	Implement
2007	Little Pine	Fuels, I&D	1000 RX	WFHF - WUI	Fremont Co./ PVT land	H	Implement
2007	Bald Ridge 2	Fuels	200 MX, 2000 CCF	WFHF - WUI	NW Community College, Park Co, PVT,	H	Implement
2007	Louis Lake	Fuels-WUI	NEPA	WFHF	Fremont Co./ PVT land	M	SHPO, ESA
2007	Loop Road Fuel Break	Fuels	NEPA	WFHF	Fremont Co./ PVT land	M	SHPO, ESA
2007	Limestone	Fuels	100 MX	WFHF	Fremont Co./ PVT land	M	SHPO, ESA
2007	Dick Cr.	I&D and Fuels	NEPA	NFTM	Park Co, PVT,	M	SHPO, ESA
2007	Lower Wind River	I&D and Fuels	NEPA	NFTM	Fremont Co./ PVT land	M	SHPO, ESA
2007	Beaver Cr	I&D and Fuels	NEPA	NFTM	Fremont Co./ PVT land	M	SHPO, ESA

FY	PROJECT Name	Purpose and Need	OUTPUT	EBLI	PARTNERS	Forest Priority	CRITICAL Paths
2008	Carter Marquette	I&D and Fuels	240 RX	WFHF	WY ST, Park CO.	H	Implement
2008	North Fork	Fuels	1000 RX	WFHF - WUI	Park Co, PVT, WY F&G	H	Implement
2008	Freak Mtn.	Fuels/Wildlife Habitat	2000 RX	WFHF - WUI	Fremont Co./ PVT land holders/ TNC	H	Implement
2008	Wiggins Fork	Fuels Red., Forest Health /Wildlife	1000 RX 816 MX 5000 CCF	WFHF WUI NFTM	Fremont Co./ PVT land	M	Implement
2008	Upper Wind River	Fuels/Wildlife Habitat/I & D	100 RX	NFIM	Fremont Co./ PVT land	H	Implement
2008	Upper Clarks Fork	Fuels Red., Wildlife, I&D	2000 RX, 400 MX 2000 CCF	WFHF - WUI NFTM	Park Co, PVT,	H	Implement
2008	Lower Wood River	Fuels - WUI, Wildlife	1000 RX	WFHF - WUI	Park Co, PVT,	H	Implement
2008	Little Pine	Fuels, I&D	No Activity This FY	WFHF	Fremont Co./ PVT land	H	Implement
2008	Louis Lake	Fuels -WUI	100 MX	WFHF - WUI	Fremont Co./ PVT land	H	Implement
2008	Loop Road Fuel Break	Fuels	100 MX	WFHF - WUI	Fremont Co./ PVT land	H	Implement
2008	Limestone	Fuels	100 MX	WFHF	Fremont Co./ PVT ;/TNC	H	Implement
2008	Dick Cr.	I&D and Fuels	250 MX, 2000 CCF	WFHF NFTM	Park Co, PVT,	H	Implement
2008	Lower Wind River	I&D and Fuels	NEPA	WFHF NFTM NFWL	Fremont Co./ PVT land	M	SHPO, ESA
2008	Beaver Cr	I&D and Fuels	100 RX	WFHF - WUI NFWL	Fremont Co./ PVT land	M	SHPO, ESA
2008	Fitzpatrick	Fuels	1000 RX	WFHF	Fremont Co./ PVT land	H	Implement
2008	Sunlight	Fuels	NEPA	WFHF NFWLN FTM	Park Co, PVT,	M	SHPO, ESA

Appendix B—SNF Forest Health Committee - White Paper on Forest Health

February 2003

"The Forest needs to determine what measures are needed to address forest health concerns."

I. What are our current policies and direction?

Forest Plan Direction

- ?? Allow natural succession to proceed without human intervention in designated wilderness (III-6)
- ?? Manage vegetation types outside wilderness to provide multiple benefits commensurate with land capability and resource demand
- ?? Improve the health and vigor of vegetation types outside wilderness and selected inside wilderness where necessary
- ?? Integrate vegetation management with resource management.
- ?? Improve tree age class and species diversity to benefit forest health
- ?? Reduce accumulation of natural fuels
- ?? Improve habitat conditions that are significantly below biological potential
- ?? Implement integrated pest management to prevent and control insect and disease infestations
- ?? Reduce damages by insect/disease and other forest pests to acceptable levels through integrated management of vegetation
- ?? Manage designated wilderness to protect and perpetuate essentially natural biophysical conditions
- ?? Maintain or restore riparian ecosystems
- ?? Improve or maintain the quality of habitat in winter range

Appendix : Some areas outside wilderness where fire serves the intent of management

Note: Tentative suited base is mapped; suited base is not. Note that many of these objectives are not limited to the suited base.

Regional Direction

R2 Emphasis areas

Healthy land/clean water: maintain and improve watershed conditions and protect stream flows to achieve forest health, protect ecological values, and provide sustainable goods and services. (Region assigned a target on integrated watershed assessments)

National Direction

Healthy Forest Initiative

Tiers to two documents: "A collaborative approach to reducing wildland fire risks to communities and the environment"; and "Protecting people and sustaining resources in fire-adapted ecosystems"

- ?? Catastrophic fires are caused by deteriorating forest and rangeland health
- ?? These deteriorated forest and rangeland conditions significantly affect people property and ecosystem health
- ?? Enhanced measures are needed to restore forest and rangeland health to reduce the risk of these catastrophic wildfires

The Healthy Forest Initiative will implement core components of the National Fire Plan:

> Hazardous fuels program reduces the impacts of unwanted wildland fires on communities' natural resources, and cultural resources. Past disruptions of natural fire cycles, as well as other management practices have resulted in wildfires of increasing intensity, and severity. Treatment of hazardous fuels will help reduce the impacts of wildfires on communities and restore health to fire-adapted ecosystems.

Wildland fire policy of 1995, and 2001 review: Treatment to ensure ecosystem sustainability.

CFRs: Manage vegetation

Comment: This policy is in not manual or handbook direction

II. Existing condition of forest health and targets and organization

The condition of the Forest

Fires cycles: this forest probably burned around 30,000 to 40,000 acres per year (fire intervals correlated with fuel model and habitat types). (Sisk)

Structural stages: Forest is skewed to older ages.

Lodgepole dead and dying

Whitebark pine - 96% is mature based on RIS data

Every drainage appears to have a majority of dead trees.

Aspen is on its way out.

Condition class ratings:

?? 1 = Natural range of variability
?? 2 = Outside natural range but can return with prescribed fire
?? 3 = Major restoration needed – beyond one or two fire cycles. This takes a stand replacement event. I t cannot be brought back through mechanical or prescribed fire.

Most of our Forest is in condition class 2 (about 60%). Remainder is 1. But with the insects and disease we are going towards a 3 for some of the 2 and the 1 is going to a 2. Condition class does not take into account insect infestations. Where we have 3 is limber pine in sagebrush areas. Areas like Bald Ridge would not have trees normally.

Fires on the Shoshone go west to east; drainage alignments are such that it is nearly impossible to do fire use in wilderness because every wilderness fire will end up near a structure.

Seventy percent of the dollars that come to the region are for urban interface; remaining dollars should be made available for fire use because that indirectly affects the urban interface on the Shoshone. Pass Ck – goes off the forest and into structures. So a treatment 10 miles from a structure protects structures. It can be a priority treatment if it's a landscape treatment.

Need to be treating what is the problem – not sagebrush and grass but canopy and trees. Focus on species that is the most effective for fuel reduction.

Our 30-year average for wildfire is 2120 acres burned.

Existing programs

Forest Plan, amendments, and pink pages in the Forest Plan provide some guidelines and projects on size of timber and fire programs:

Fire program

1997- 200 acres

2001 – 5200 acres (accomplished 4010 acres)

2002 – 4300 acres (accomplished 2800 acres)

Wildlife program

200-300 acres per year but accomplishment is 50-100 acres (this year accomplished 170 acres)

*this is aspen enhancement, sheep habitat and winter range improvement

Range program

Would like to treat 200-300 acres per year; no accomplishments recently.

Both wildlife and range programs have been affected by primary purpose; they rarely have the funds to fully accomplish a burn activity where they are the primary purpose. These projects are not always the

most important projects for fuel reduction. They also compete for "burn windows" with other fuel projects.

Timber program

4.5 MMBF which should treat about 600 - 800 acres; the majority of this should be in the tentative suited base, plus other forest products from the forest (includes nonsuited areas too). Mostly ground based harvesting.

Total acres treated through management: 4000+ 100 +100 + 500 = 4700 acres.

Acres through wildfire = 2100

Total acres is a little less than 7000 acres per year between mgmt and wildfire, as opposed to 30,000 to 40,000 acres per year historically.

III. How to move where we want to go

Watershed assessments provide a way to focus practices; we are not that focused.

Treating a fraction (20-25%) of what we need to treat but can't treat it all, so need to focus our practices.

If we were to look at the forest as a whole and overlay all the high priority issues for each resource - this should give us a way to focus our practices.

From a wildlife perspective, to keep common species common need to treat key habitats regularly

Are we doing our fuels projects where they should be done? If we stress mechanical fuel treatments in the urban interface need to keep economics in mind. Have to be careful of landscape treatments – large scale is needed but people are not used to it. Need to have a forest strategy of where we want to go.

Recommendation: Identify high priority vegetation needs (fuels, insect and disease, important habitat needs) across the forest. This is driven by the Healthy Forest Initiative and National Fire Plan direction. Area analysis (watershed assessment) could then be conducted. Integrated focused project planning with multiple resource outputs would be generated from area analysis. This would streamline NEPA, specialist input and support, and implementation efforts. January 2003. This group plus district rangers, range, watershed, and wildlife.

National Fire Plan is flexible and is ground based: get planning dollars to plan the work, then work the plan. Starts with district submitting projects; once planned, then we are accountable to accomplishing those burns. There is a distinction between planning and implementation dollars.

In the short term we do not have a dollar issue for fire implementation.

Recommendation: Develop skills for fire use; have a home-grown fire use team. Increase the number of fire use managers, fire behavior analysts, as well as support people.

For timber: Two years ago, we assumed north end would be post and pole, house logs, and small sales. Currently have complex large sales on the north end to address forest health issues, including massive insect epidemics: Deadman, North Fork, Carter Mt., and Dick Creek. These large sales require a lot of NEPA, responding to comments and to appeals and litigation. Appears that every project will have a lot of time in NEPA (planning, comment, appeals). A lot of these challenges are on wildlife. And it is hard to get ahead.

Recommendation: Streamline NEPA. Focused and coordinated project planning will help with NEPA, as well as continue with present efforts on training and use of NEPA coordinators.

Recommendation: 7000 acres does not fully treat forest health needs. This is a forest plan revision need. To go much higher would likely be through fire, not mechanical treatments (limits on road construction, ASQ, markets). If we pay to mechanically treat fuels, may be able to treat more. Many acres are inaccessible. Focus on urban interface (but some of this will be fire use in wilderness).