

United States  
Department of  
Agriculture

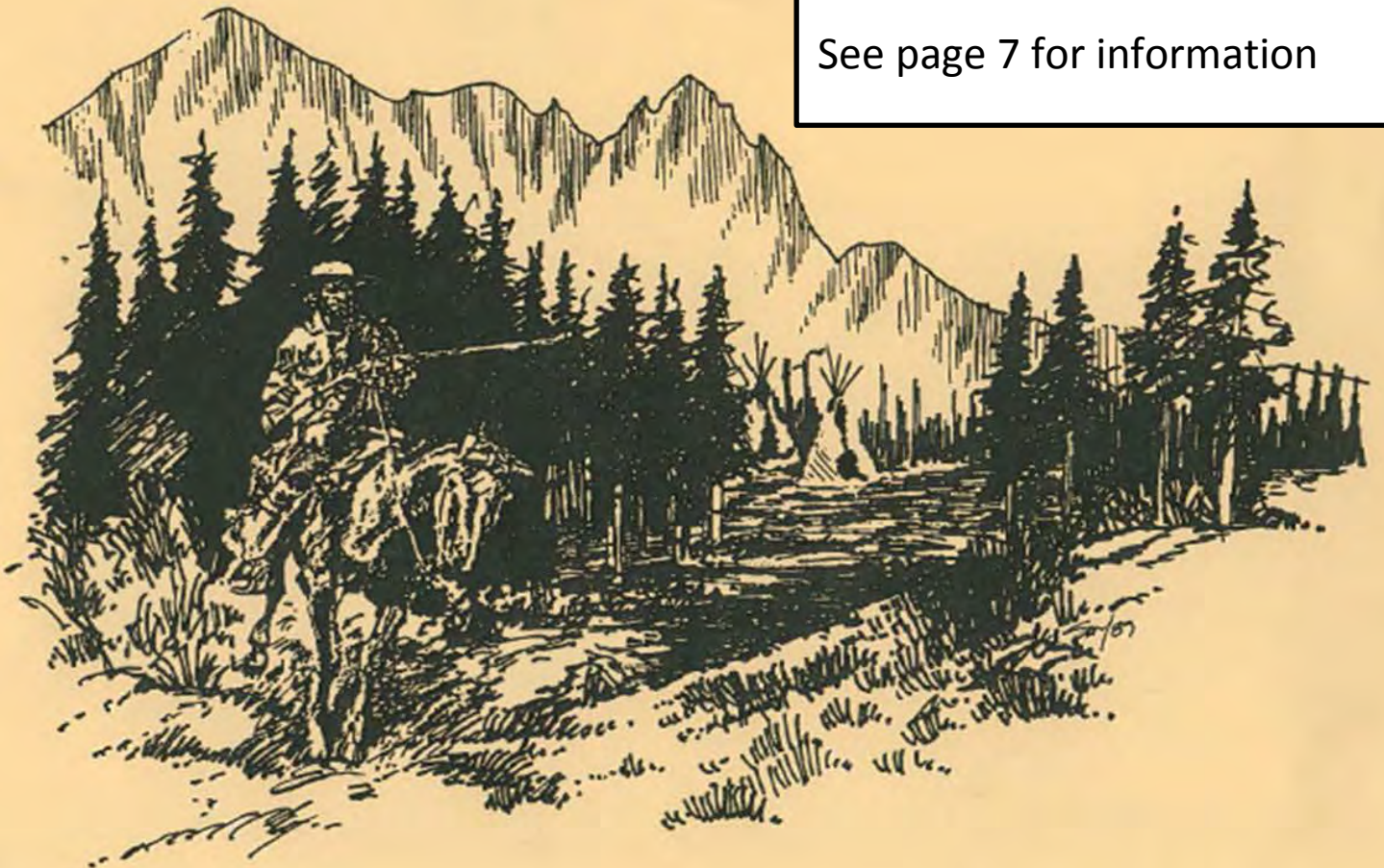


Forest Service



# BRIDGER-TETON NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN

Forest Plan with  
Amendments and Corrections  
See page 7 for information



## Contents

Amendments and Corrections included in this document .....	7
Chapter 1- Introduction .....	8
Definitions:.....	8
Forest Description.....	4
Purpose of the Forest Plan.....	4
Relationships of the Forest Plan to Other Documents and Plans.....	4
Coordination Requirements.....	6
Forest Plan Structure .....	7
Chapter 2 -Summary of the Analysis of the Management Situation.....	9
Introduction .....	9
Definitions for Chapter 2 .....	9
Forest Setting.....	9
Socioeconomic Setting.....	9
Payments in Lieu of Taxes.....	23
Physical Setting .....	24
Biological Setting and Resource Descriptions.....	29
Cultural Resources .....	50
Supply Conditions .....	73
Demand Conditions and Trends.....	79
Trends in Recreation Use .....	79
Trends in Wilderness Use.....	80
Trends in Visual Resources.....	80
Trends in Fisheries and Wildlife.....	81
Trends in Vegetation: Range.....	81
Trends in Vegetation: Timber .....	82
Trends in Watershed.....	83
Trends in Minerals and Energy .....	85
Trends in Cultural Resources .....	85

Trends in Air Quality ..... 86

Trends in Water Quality ..... 86

Trends in Soils ..... 86

Trends in Access: Roads ..... 87

Trends in Access: Trails ..... 88

Trends in Land Ownership and Trespass ..... 89

Need to Establish or Change Management Direction ..... 90

    Forest Ties to Human Communities: Problems in Livelihoods and Lifestyles..... 90

    Natural Resources on the Bridger-Teton National Forest: Problems in Use and Protection ..... 98

    Research and Inventory Needs ..... 106

Chapter 3- Summaries of Issues, Concerns, and Opportunities ..... 109

    Definitions for Chapter 3 ..... 109

    Issues, Concerns, and Opportunities: Ties to Forest Management Problems, Goals, and Objectives . 110

Chapter 4- Land Management Direction ..... 115

    Definitions for Chapter 4 ..... 116

        Education ..... 116

        Recreation ..... 116

        Fisheries and Wildlife ..... 117

        Vegetation: Range ..... 120

        Vegetation Timber ..... 121

        Minerals ..... 126

        Access: Roads and Trails ..... 129

        Water, Air ..... 138

        Protection: Fire ..... 138

Land and Resource Management Goals and Objectives ..... 140

    Forest Ties to Human Communities: Problems in Livelihoods and Lifestyles..... 140

    Natural Resources on the Bridger-Teton National Forest: Problems in Use and Protection ..... 145

Forest-wide Resource Management Prescriptions, Standards, and Guidelines..... 152

    Recreation ..... 152

    Visual Quality ..... 153

    Fisheries and Wildlife ..... 155

    Northern Rockies Lynx Management Direction Record of Decision March, 2007' ..... 160

    Vegetation: General ..... 176

Vegetation: General Prescription..... 176

Vegetation: Range..... 176

Vegetation: Timber ..... 178

Riparian Areas, Wetlands, and Floodplains ..... 183

Minerals ..... 184

Soil, Water, and Air ..... 186

Utilities ..... 188

Lands ..... 189

Facilities..... 189

Access: General ..... 189

Access: Roads ..... 190

Access: Trails ..... 191

Cultural Resources: ..... 193

Special Areas ..... 194

Protection: General..... 194

Protection: Fire Prescription ..... 194

Protection: Pests ..... 197

Desired Future Conditions ..... 199

    Desired Future Condition 1B Substantial Commodity Resource Development with Moderate  
Accommodation of Other Resources..... 208

    Desired Future Condition 2A Non-motorized Recreation Areas ..... 217

    Desired Future Condition 2B Motorized Recreation Areas ..... 224

    Desired Future Condition 3A River Recreation ..... 231

    Desired Future Condition 3B..... 237

    Desired Future Condition 3C,..... 237

    Desired Future Condition 3D, ..... 237

    Management Emphasis 3B, 3C, 3D ..... 238

    Overall Standards and Guidelines DFC 3B, 3C, 3D ..... 239

    Specific Standards DFC-3B, 3C, 3D ..... 244

Desired Future Condition 4 Special Emphasis Area for Municipal Water Supply..... 250

    Management Prescription 4 ..... 251

    Resource Prescriptions, Standards, and Guidelines ..... 251

Desired Future Condition 6A-6D and 6S Wildernesses, Wilderness Study Areas, and Wild Rivers ..... 256

Desired Future Condition 7A..... 272  
     Management Prescription 7A ..... 274  
     Resource Prescriptions, Standards, and Guidelines ..... 274  
 Desired Future Condition 7B Grizzly Bear Habitat Recovery ..... 282  
     Management Prescription 7B ..... 283  
     Resource Prescriptions, Standards, and Guidelines ..... 284  
 Desired Future Condition 8 Environmental Education about Integrated Multiple Use ..... 289  
     Management Prescription 8 ..... 290  
     Resource Prescriptions, Standards, and Guidelines ..... 291  
 Desired Future Condition 9A Developed and Administrative Sites ..... 299  
 Desired Future Condition 9B Special-Use Recreation Areas..... 305  
 Desired Future Condition 10 Simultaneous Development of Resources, Opportunities for Human Experiences, and Support for Big-Game and a Wide Variety of Wildlife Species..... 310  
 Desired Future Condition 12 Backcountry Big-Game Hunting, Dispersed Recreation, and Wildlife Security Areas ..... 319  
 Management Area Descriptions, Standards, and Guidelines ..... 328  
     Wilderness ..... 332  
     Wilderness Study Areas ..... 337  
     Shoal Creek Wilderness Study Area ..... 340  
     Management Areas..... 342  
 Chapter 5- Implementation of the Forest Plan..... 410  
     Introduction ..... 410  
     Forest Plan Implementation ..... 410  
     Monitoring and Evaluation ..... 413  
         Goals of Monitoring ..... 413  
         Monitoring Requirements..... 414  
         Monitoring and the Budget ..... 414  
         Monitoring Plan ..... 415  
         Amendments and Revisions..... 431  
 Appendix A..... 432  
 Appendix B Standard Oil and Gas Lease Form and Stipulations..... 453  
     Lease Form ..... 457  
         "Standard" Lease Stipulation ..... 458

Stipulation for Lands of the National Forest System Administered by the Bridger-Teton National Forest ..... 459

Notice -Road Access Difficult or Impossible ..... 461

Notice -Endangered or Threatened Species ..... 462

Notice -Sensitive Species..... 462

Notice - Protected Cultural or Historical Site..... 464

NOTICE - VISUAL QUALITY OBJECTIVES..... 465

Notice -Lander Trail..... 466

No-Surface-Occupancy Stipulation ..... 468

Timing-Limitation Stipulation ..... 469

Controlled-Surface-Use Stipulation ..... 470

Stipulation Applications ..... 471

Court Ordered or Administratively Required Stipulations..... 475

## Amendments and Corrections included in this document

**Amendments including additions and deletions are highlighted in red and foot noted. Deletions are crossed out. In a few cases amendments have been amendment and are shown.**

**Note that several amendments include definitions that are specific to that amendment.**

**Complete amendments , the original 1990 Land Management Plan, and this copy are located on the world wide web at:**

<http://www.fs.usda.gov/main/btnf/landmanagement/planning>

1. Forest Plan Correction No .1	1/21/1993
2. Forest Plan Correction No. 2	6/14/1993
3. Attachment One of the Record of Decision	
4. Forest Plan Correction No. 3	9/30/1993
5. Decision Notice	8/05/1993
6. Decision Notice	6/07/1991
7. Supplemental Decision Notice to #6	4/15/1992
8. Decision Notice	2/25/1992
9. Errata Sheet- Management Indicator Species	6/27/2005
10. Pronghorn Amendment	5/31/2008
11. Northern Rockies Lynx Amendment	3/23/2007
12. Revision of Fire Management Standards and Guidelines	4/08/2004
13. Designation of 4 Natural Research Areas and 2 Special Interest Areas	4/09/1999
14. Motorized Travel Plan Amendment	8/11/1995
15. Rivers Found Eligible for the National River System	3/19/1992
16. Oil and Gas Leasing on Specific Lands, MA 49-Willow Creek	4/17/1992
17. Wild and Scenic Rivers Management, LMRP Amendment 11	12/02/2013

## Chapter 1- Introduction

The Bridger-Teton Land and Resource Management Plan-the Forest Plan-attempts to solve or prevent serious problems associated with existing natural resources and people's continuing use of them. Major problem categories identified in this Forest Plan include: human access to, and commercial or recreational use of, the Bridger-Teton National Forest; the needs of Threatened, Endangered, and Sensitive plant and animal species; and the need to mitigate the impacts of human use and access to natural resources. The problem statements are shown in **Need to Establish or Change Management Direction** in Chapter 2 of this Forest Plan.

The Forest Service manages the Bridger-Teton National Forest for the American people under various laws and regulations which, while governing all aspects of forest management, provide wide latitude to decision makers.

The process followed in development of this Forest Plan involved many steps, including inventory of existing resource conditions, identification of resource and human-use trends, and determination of existing and estimation of future problems, analysis of different alternatives to solve the problems, evaluation of the impacts of alternatives on resources and people, and selection of a Preferred Alternative. Some of the process elements and conclusions are displayed in the Forest Plan; others can be viewed in the accompanying Final Environmental Impact Statement (FEIS).

Throughout the planning process, local, regional, and national publics were contacted for their thoughts about conditions and needs on the Bridger-Teton National Forest. Individuals, groups, other government agencies, and elected officials were contacted, listened to, and have seen their comments and opinions help shape this and companion documents. Many of their comments are displayed as Issues Concerns, and Opportunities in Chapter 3 of this document. Also, comments on the *October, 1986, Draft Land and Resource Management Plan* and Environmental Impact Statement are displayed in Chapter 6 and Appendix A of the FEIS.

### Definitions:

After the introduction for each chapter, a list of definitions is included for the terms appearing for the first time in that chapter. The terms listed in the definition sections also are listed in the index with a page reference for where they are defined.

**Forest Plan** -Prepared under provisions of the National Forest Management Act, a comprehensive land and resource management direction document which may be amended and revised as needed.



**Environmental Impact Statement (EIS)** - A statement of the environmental effects of a proposed action and alternatives to it. It is required for major federal actions under Section 102 of the National Environmental Policy Act (NEPA) and released to the public and other agencies for comment and review. It is a formal document that must follow the requirements of NEPA, the Council on Environmental Quality (CEQ) guidelines, and directives of the agency responsible for the project proposal.

**Preferred Alternative** -The Alternative recommended for implementation in the Forest Plan.

**Range of Alternatives** — An Alternative is one way of managing the National Forest, expressed as management emphasis leading to a unique set of goods and services being available to the public. A range of alternatives is then several different ways of managing the forest, offering many different levels of goods and services.

**Outputs** -The goods and services produced from and offered on the National Forest.

**Targets** — The annual levels of goods and services that Congress requires from the National Forests. Levels are set by national and regional managers for each National Forest.

**Policy** -What managers intend to have happen? Policies include Land and Resource Management Goals, Objectives, Desired Future Conditions, and management prescriptions in this document.

**Multiple Use Plans** — Comprehensive forest management plans prepared in the 1960's and 1970's under provisions of the Multiple Use - Sustained Yield Act.

**Unit Plans** -Plans prepared for specific units of land during the 1970's.

**Timber Management Plan** -A plan describing management needs, objectives, and policies for timber management. Last prepared and approved as an Interim Plan in 1979 for the Bridger-Teton National Forest.

**Composite Plans** -Plans prepared for areas involving many ownerships, public and private, looking at overall recreational and other opportunities for the areas involved.

**Goal** -The desired end result.

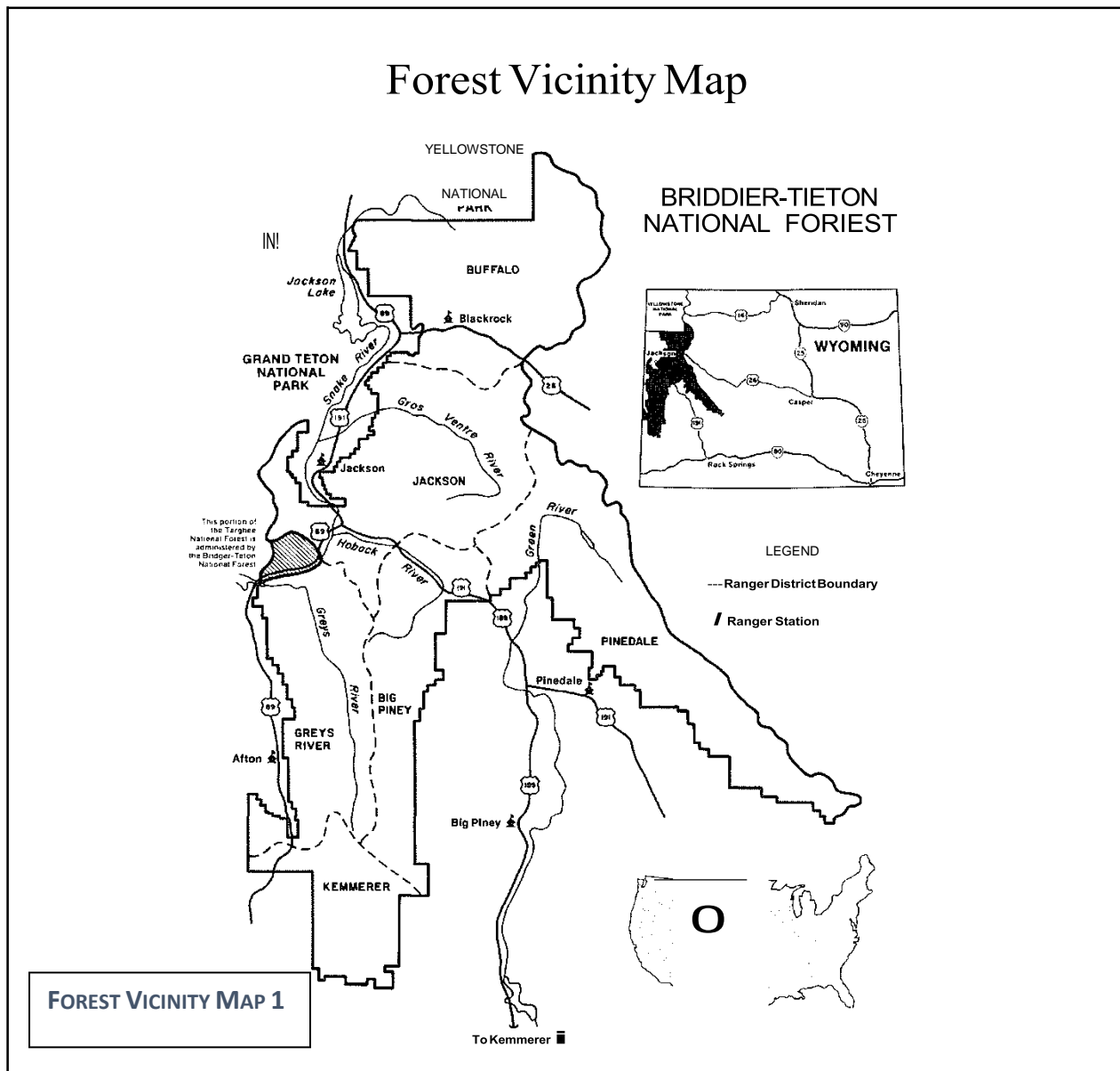
**Objective** -Accomplishment steps or points designed to achieve a goal.

**Desired Future Condition** -A future land or resource condition that achieves a set of compatible multi-resource goals and objectives.

**Management Prescription** -A set of land and resource management policies that, as expressed through Standards and Guidelines, creates a Desired Future Condition over time.

**Standard** -A land, resource, or human-use value against which organizational actions or resource conditions can be measured and limited, and usually stated as requirements in this document using the term "will be."

**Guideline** -A set of land, resource, or human-use values or parameters meant to generally constrain organizational actions or define resource conditions and usually stated as flexible and, occasionally, optional limits in this document using the terms "should be" or "may be."



## Forest Description

Location -The Bridger-Teton National Forest is located in the northwestern portion of Wyoming and contains 3.4 million acres of National Forest System Lands. The National Forest boundaries encompass parts of Fremont, Lincoln, Park, Sublette, and Teton Counties, Wyoming. Principal towns include Jackson, Dubois, Riverton, Lander, Afton, Kemmerer, Big Piney, and Pinedale.

## Purpose of the Forest Plan

Based on provisions of the National Forest Management Act (NFMA) of 1976 and other laws and regulations, the Bridger-Teton Land and Resource Management Plan-the Forest Plan-establishes which National Forest System lands are suitable for certain purposes, describes Land and Resource Management Goals and Objectives, and prescribes land and resource management policies. The Forest Plan displays projected levels of resource production and management intended to accomplish the stated goals and objectives. However, the projected levels of outputs, services, and rates of implementation are, to a significant degree, dependent on the annual Congressional budgeting process.

## Relationships of the Forest Plan to Other Documents and Plans

Regional Guide and the Forest and Rangeland Renewable Resources Planning Act - Regional planning takes place under provisions of the Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974, as amended by the National Forest Management Act of (NFMA) 1976, and under the National Environmental Policy Act (NEPA) of 1969.

Every five years, through information gathered at the local and regional levels, a comprehensive national program for forest and range renewable resources-the RPA Program-is transmitted to Congress. The RPA Program recommends a range of resource output levels to be achieved by Forest Service programs.

These outputs include timber, range, water, wildlife and fish habitat, outdoor recreation, and wilderness.

The RPA Program displays the Intermountain Region's share of the national objectives in terms of output targets and associated costs. The Regional Guide disaggregates these to National Forests and establishes standards and guidelines for their implementation. However, this resource target distribution is not binding on the individual National Forests as they develop plans. It merely provides one set of targets that must be considered.

Forest Plan Environmental Impact Statement -The Forest Plan represents the Preferred Alternative addressed in the accompanying Final Environmental Impact Statement (FEIS). The planning process and analysis procedures used in developing the Forest Plan, and the range of alternatives considered, are described or referred to in the Environmental Impact Statement (EIS). Activities and projects will be planned and implemented to carry out the direction in this Forest Plan. The further planning work associated with activities and projects will be done to conform to provisions of the National Environmental Policy Act (NEPA)

Existing Plans Superseded -Multiple Use Plans for the Ranger Districts on the Bridger-Teton National Forest were developed in the middle or late 1960's. Unit planning was done in the 1970's and resulted in four plans: (1) Greys-Salt River, (2) Big Piney, (3) North Gros Ventre-Spread Creek, and (4) Union Pass. An Interim Timber Management Plan was approved in 1979. All of these plans are superseded by the Forest Plan.

Existing Plans Incorporated or Made Part of the Forest Plan -Other plans are considered to be incorporated in the Forest Plan:

Snake River, Wyoming, a Potential Wild and Scenic River Study

Endangered, Threatened, and Sensitive Plants and Animal Species and Their Habitats

Range Allotment Management Plans

Jackson Hole Ski Area and Other Ski Area Master Plans

Riley Ridge Natural Gas Project EIS and Supplemental Environmental Assessments

Bridger Wilderness Fish, Fire, and Management Plans

Teton Wilderness Fire and Management Plans

Bald Eagle Management Plan for the Greater Yellowstone Ecosystem

Continental Divide National Scenic Trail Comprehensive Plan;

Wyoming and Sheridan National Recreation Trails and Comprehensive Plan

Buffalo, Gros Ventre, and Upper Green Recreation Composite Plans

Snake River Recreation Management Plan

**Bridger-Teton National Forest Encroachment Action Plan<sup>1</sup>**

If provisions of earlier plans conflict with those in the Forest Plan, those provisions are superseded by similar elements of the Forest Plan. Sensitivity to the public involvement history, to the need to retain existing direction, and to site-specific resource needs identified in the plans should be exercised in revising or expanding them. If valuable provisions of the plans will

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<sup>1</sup> Corrected 6/14/93 by Forest Plan Correction No. 2

be lost as provisions are changed to conform to the Forest Plan, Forest Plan amendments will be considered.

## Coordination Requirements

The Bridger-Teton Forest Plan addresses all National Forest System lands within its administrative boundaries, including that portion of the Targhee National Forest lying between Alpine, Wyoming, and Dog Creek forming the drainages of the Snake River Canyon excluding grazing.

With administrative exceptions noted, the Bridger-Teton Forest Plan also addresses those portions of:

- Fish Creek-Seven Lakes Area drainage on Pinedale Ranger District, where grazing is administered by the Shoshone National Forest;

- Phillips Canyon on the Jackson Ranger District, where grazing is administered by the Targhee National Forest; and

- Forest Plan Management Areas, which encompass lands owned by others to help p define wildlife and fisheries habitat objectives while creating management policies only for National Forest System lands.

## Forest Plan Structure

The Forest Plan is structured as follows:

**Chapter 1** provides an introduction to the Bridger-Teton National Forest planning process.

**Chapter 2** presents a summary of the Analysis of the Management Situation. Included in this chapter are:

- An assessment of the current National Forest program

- An assessment of the National Forest's potential to produce different amounts of goods and services

- An evaluation of public "demand" and condition trends for National Forest resources

- A description of National Forest management problems and challenges and a list of identified research and inventory needs

**Chapter 3** illustrates Forest Plan connections to the issues, management concerns, and opportunities.

**Chapter 4** contains the Forest Management Direction. Included in this chapter are: Land and Resource Management Goals and Objectives.

- Forest-wide Prescriptions, Standards, and Guidelines

- Desired Future Conditions and related Standards and Guidelines

- Management Area descriptions and maps with displays of Desired Future Condition areas, summaries of associated output schedules, and Management Area-specific Standards and Guidelines

**Chapter 5** discusses implementation of the proposed Forest Plan. The chapter focuses on implementation problems, provides guidance for using the document in future plan implementation studies and project planning, and discusses implementation of the monitoring and evaluation plans.

**Appendix A** contains land and resource management activity schedules.

**Appendix B** references the Standard Lease Form (Form 3100-11) and contains sample lease stipulations for oil and gas leasing.

Additional information is referred to and may be found in Bridger-Teton National Forest planning records, Forest Service Manuals and Handbooks, or documents produced by others.

These records are available for review at the Bridger-Teton National Forest Supervisor's Office in Jackson, Wyoming.

## Chapter 2 -Summary of the Analysis of the Management Situation

### Introduction

Chapter 2 of the Bridger-Teton Land and Resource Management Plan examines the "management situation" on the National Forest. The intent of the chapter is to describe the existing human and natural resource conditions on the National Forest, examine those conditions for trends and existing or anticipated problems and challenges, and, describe a list of research actions and inventory requirements to help support the future solution of problems compounded by incomplete information.

Chapter 2 is divided into seven sections: Introduction, Definitions, Forest Setting, Supply Conditions, Demand Conditions and Trends, Need to establish or Change Management Direction, and Research and Inventory Needs.

Resource condition and human-use information displayed in the third through fifth sections forms part of the basis for the problem and challenge statements displayed in the sixth section. The problem and challenge statements were also developed, in part, from the Issues, Concerns, and Opportunities displayed in Chapter 3.

Only summary information is presented in this chapter. The information has been revised since the October, 1986, *Proposed Land and Resource Management Plan and Environmental Impact Statement* was issued.

### Definitions for Chapter 2

#### Forest Setting

The Forest Setting section provides an overview of the socioeconomic, physical, and biological conditions found on and near the Bridger-Teton National Forest. An attempt is made to describe some of the relationships people have with the natural resources. If you are interested in a description of potential effects of the range of alternatives found in the Final Environmental Impact Statement (FEIS) on people's use of the National Forest, it can be found in the accompanying FEIS document.

#### Socioeconomic Setting

##### Cultural Resources



**Cultural Resources Overview** - Prehistoric human occupation on the Bridger- Teton National Forest was probably very limited when compared to other Wyoming sites that predate 10,000 BC-for example, the Colby site about 140 miles northeast of Jackson. The Colby site includes campsites and deposits from nomadic hunters and woolly mammoth butcher sites. The earliest projectile point style found on the National Forest consists of a Folsom point reported from the Upper Gros Ventre River. Evidence indicates the first large influx of people about 9,000 years ago.

The low occupation on the Bridger-Teton National Forest probably results from then- existing ice fields and melting glaciers which made most rivers of the area formidable barriers. To date, no Folsom or Clovis points have been found west of the Green River. The earliest evidence of people's presence in Jackson Hole consists of projectile points and other artifacts uncovered along the northern shore of Jackson Lake. These include points which date from 6,400 to 6,900 BC and resemble those of the Agate Basin complex and Cody complex.

The prehistoric chronology of the Bridger-Teton National Forest and adjacent areas follows quite closely with that known for the general area of the northwestern plains and the adjacent fringing intermontane basin areas. The general cultural contact and economic orientation of the prehistoric groups is typical of hunters and gatherers practicing a shifting nomadic life within defined territories.

Favored areas included the lower valley of the Green River, and, to some extent, the smaller streams and shores of the larger lakes. The great bulk of the Bridger-Teton National Forest area felt little use. Contact with Grand Teton and Yellowstone National Park areas is suggested by the presence of obsidian in almost every artifact site.

Historic occupation of the Bridger-Teton National Forest area was made by Shoshone, Snake, Gros Ventre, and Sheep Eater Indians. The first white man to visit the region is credited to John Colter, who spent the winter of 1807 exploring the Grand Teton and Yellowstone National Park areas. From 1809 to 1840, numerous mountain men visited the region to trap beaver, but only a few documented their travels. Travel through the southern edges and portions of the Bridger-Teton National Forest started in the late 1850's with the emigrant travel to California, Mormon Country, and the Oregon Territory. The west side of the Continental Divide, between South Pass and the Green River was one of the most difficult sections of the original Oregon Trail. A safer and easier route was needed for westward expansion and the Lander Cut-Off helped fulfill that need. Fredrick W. Lander, a surveyor with the Department of the Interior, surveyed the route in 1857, supervised road construction the following year, and from 1858 to 1860 built the entire portion of the road to California through the Bridger- Teton National Forest area.

Reliable records indicate that 13,000 emigrants passed over the road during the first year. With the coming of the first transcontinental railroad in the early 1860's, emigrant travel over this route rapidly declined. The last wagons to travel the Cut-Off were observed at Fort Piney between 1910 and 1912.

The next important era came in the 1860's. Although many hundreds of trappers had visited the Yellowstone country prior to 1840, their stories had been looked upon as "tall" tales and seldom taken at face value. The 1860's were the era of the surveyor, mapper, photographer, and painter. Prospectors were first known to have come through Jackson's Hole in the sixties and seventies, combing the valley looking for the mother lode that supplied flour gold in the Snake River.

The Teton National Forest portion did not see any permanent early settlers and homesteaders until 1883. The settlement of Jackson's Hole progressed steadily until after the turn of the century. Some settlements in Jackson's Hole that were established included Jackson, South Park, Grovont, Brooks, Zenith, Cheney, and Wilson. Elk, Moose, and Moran came later.

In the 1870's, Mormon settlers were influential in establishing communities in Star Valley and other areas. Cattle and sheep production was responsible for establishment of Kemmerer, Big Piney, and Pinedale in the 1880's to 1890's.

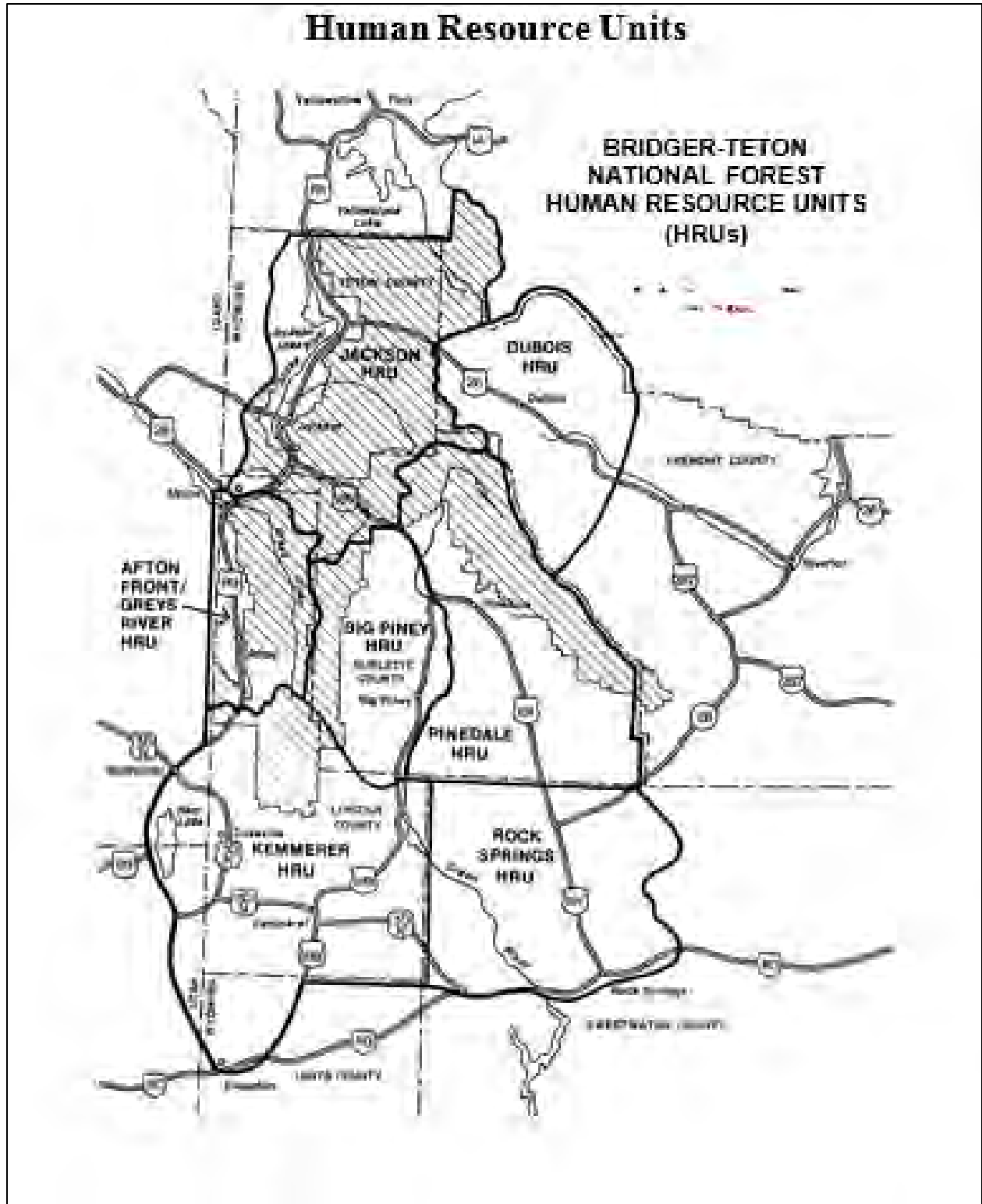
Other historical eras or sites unique to the Bridger- Teton National Forest include elk-tusk hunters, tie- hack cabins, and camps which supplied railroad ties for the railroad from 1865 to 1920, early guide and dude ranching, and the livestock industries which settled the area and formulated many of the trails, roads, and place names.



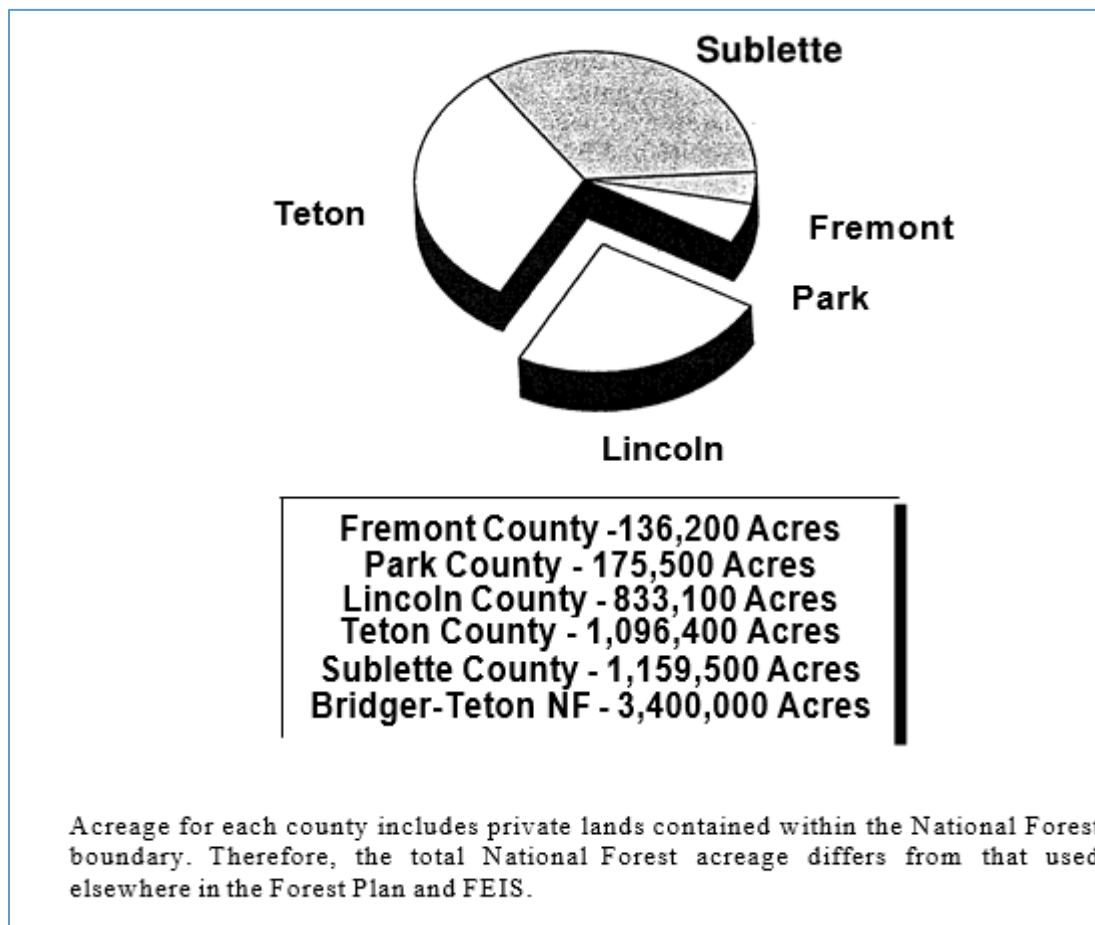
### Human Resource Units

**Human Resource Units** -"Human Resource Units" (HRUs) are geographic areas, roughly contiguous with county boundaries, that show unique patterns of lifestyles, economic conditions, and geography. HRUs characterize the unique relationships residents of an area have with one another and with the land on and near National Forests. HRUs may change over time because of changes in lifestyles, economic or resource conditions, or geographic features. The names of two HRUs were changed between Draft and Final documents.

The seven HRUs within the Bridger-Teton National Forest's area of influence are: Kemmerer and Afton Front/Greys River in Lincoln County, Jackson in Teton County, Big Piney and Pinedale in Sublette County, Rock Springs in Sweetwater County, and Dubois in Fremont County. A portion of the Teton Wilderness is included within Park County but has no HRU associated with it. People living in Uinta County have some common relationships with people living in the Kemmerer HRU and make use of the southern Bridger National Forest; however, Uinta County is not contained in a HRU. The Dubois HRU is shared with the Shoshone National Forest as noted in Figure 2-2. Portions of Park County are contained within the Bridger-Teton National Forest boundaries, but the county is not included in a HRU.



**WYOMING COUNTIES INCLUDED WITHIN THE BRIDGER-TETON NATIONAL FORESTS**



After each HRU is described, some recent trends in County employment and personal income are displayed. The source of the information shown is the U.S. Department of Commerce, Bureau of Economic Analysis

**KEMMERER HUMAN RESOURCE UNIT**

Kemmerer Human Resource Unit - The Kemmerer HRU is located in south Lincoln County. Early settlement developed along the floodplains of the rivers and major streams. Livestock production was the early major source of revenue. With the development of coal and phosphate and the coming of the railroad, a more centralized settlement of towns adjacent to mineral resources resulted.

The combination of early settlers, livestock people, and miners integrated quite well. Until recently, the area was portrayed as a "rural agrarian" community. Most of the people knew each other well and had close ties with the land. Many of the older families have two or three generations living in the area. Although some ethnic groups-Italian, Polish, and Hispanic-can be identified, there seems to be no real separation of cultures.

Today, several "hub" towns, such as Kemmerer and Evanston, Wyoming and Montpelier, Idaho are located at highway and railroad junctions. Ranches and a few settlements are situated up



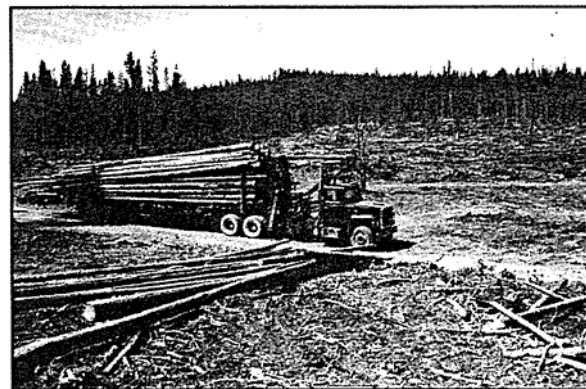
and down the rivers and streams. A strong relationship exists among Cokeville, the Thomas Fork/Bear River ranches and settlements, and Montpelier, Idaho; another exists between Cokeville and the Bear River communities of Randolph and Woodruff, Utah. The general area and the Kemmerer and Granger communities are culturally and economically related to Evanston, Wyoming.



Primary natural resources of the HRU include coal, oil, gas, and phosphate. Agricultural production includes alfalfa, wheat, barley, oats, and livestock.

Forecasts of future employment indicate that agricultural employment will remain somewhat stable, but other employment could decrease by as much as 50 percent by 1990. Direct dependency on the

National Forest, other Federal lands, and State lands is greatest for livestock, forest products, and phosphate, coal, and oil and gas industries. Outdoor recreational activities such as fishing, hunting, camping, and OHV use are dependent on these lands as well.



Virtually all major employers use seasonal workers to some extent. The highest seasonal employment is in agriculture, forest products, construction, and government. For young people who want to remain in the area, there exists sufficient employment opportunities for both skilled and unskilled labor.

A major economic impact to this area occurred in the early 1980's due to oil and gas exploration, development, and production. The southern portion of the HRU was substantially

changed by oil and gas exploration along the Overthrust Belt. Several major oil and gas fields were discovered. The energy expansion slumped in 1985 and has not yet rebounded.

These oil and gas discoveries resulted in a "boom" situation, causing an increase in population in many towns and nearby settlements. An increased need for services such as law enforcement and schools resulted, as did congested shopping areas and a more hurried lifestyle. The downturn in the energy economy has resulted in a return to a slower-paced lifestyle.

**AFTON FRONT/GREYS RIVER HUMAN RESOURCE UNIT**

The Afton Front/Greys River HRU is located entirely within north Lincoln County but contains only 23 percent of the population of Lincoln County. The county seat is located in Kemmerer which over the years has resulted in some traditional rivalry.

Strong family ties are stressed in this HRU, oriented around the Latter Day Saints church and its influence. Several generations of the same family often live within the HRU.

In the past, the HRU has shown a decreasing population trend. However, recent development of such non-traditional economic elements as summer homes and retirement homes indicate that some stabilizing influences are being felt. These influences will likely affect historic patterns, including agricultural predominance in the HRU economy.

The Star Valley area is the central area of unemployment in Lincoln County, due in part to the lack of labor-intensive industry in the area. The area's main income is derived from agriculture, lumber, dairy and cheese, livestock, and a cooperative power company based in Afton.

Generally, people feel the local economy is oriented toward dairy farming and ranching. Strong ties to certain other industries also exist because members of families



**RANCHING, LOGGING, AND DAIRY FARMING ARE IMPORTANT INDUSTRIES OF THE AFTON FRONT/ GREYS**

work in lumber mills and airplane, clothing, or cheese factories. The economic ties among these industries are significant because dairy farms are often supported by supplemental income earned at the mills and factories.

The lumber industry depends upon the Bridger- Teton National Forest for about 10 percent of mill capacity. The rest of the capacity comes from public lands outside the HRU. A local timber mill, currently owned by Tricon, Inc., has existed for the past twenty years. There are several smaller mills which primarily supply local needs for non-- standard products.

People in the Afton Front/Greys River HRU possess strong feelings of ownership toward the Bridger-Teton National Forest. They hunt, fish, gather firewood, and generally recreate on the National Forest.

**Recent Employment and Personal Income Figures for Lincoln County HRUs** – Between 1981 and 1986, the only decline in Lincoln County employment came in the mining sector from 1,379 to 611 employees. The decline was paralleled by substantial gains in jobs in most other sectors, particularly construction. Overall, employment rose from 8,252 in 1981 to 11,847 in 1986.

The roughly 40 percent gain in jobs resulted in nearly a 90 percent gain in personal income from \$133,027,000 to \$240,142,000. The sectors showing the greatest gains during 1981- 1986 period were agriculture, public administration, transportation, and construction.

#### *JACKSON HUMAN RESOURCE UNIT*

Jackson **Human** Resource Unit -The Jackson HRU is in Teton County. The Town of Jackson is the HRU's commercial "hub" and entertainment center and contains the largest population in the area. The population of the area increases from about May to October. During the winter season, many residents move to warmer climates.

The majority of the labor force in the Jackson HRU is employed by the tourism industry. Each year, over two million visitors come to Jackson Hole, the valley where Jackson is located. Tourism fluctuates seasonally: summer with the influx of National Park visitors has the highest employment period; ski season employment is lower with an "off-season" separating the two. However, the recent trend toward greater recreational winter activities has prompted an upturn in winter tourism. In the past, gasoline shortages and economic recessions have been the greatest influences on tourism in the Jackson HRU.





Major Industries of the Jackson HRU are tourism and ranching

Other towns and communities in the area include, Kelly, Wilson, Moose, Moran, and the Buffalo Valley area which all provide various forms of commercial entertainment activities. Communities like Bondurant, Wilson, Kelly, and Moran have larger proportions of their labor force involved in ranching than does Jackson. The town of Moose is a National Park Service town. As a result, it is strongly tied to government aspects of the tourist industry.

No easily identified ethnic groups exist within the Jackson HRU. Many seasonal employees come to this area to obtain work in jobs created by tourism. Teton County has over 65 motels, two major destination ski resorts, and 300 condominium units. Seasonal employees are mostly college-age people, many in school, from all over the United States.

**Recent Employment and Personal Income Figures for Jackson HRU** - Between 1981 and 1986, Teton County employment increased. Overall, employment rose from 9,663 in 1981 to 12,206 in 1986 with most of the increase in retail trade, services, and proprietors sectors.

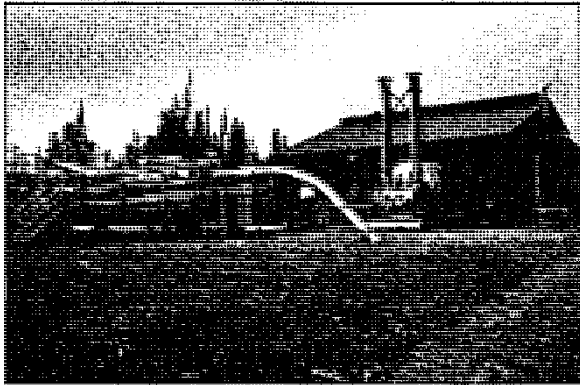
Accompanying the roughly 25 percent increase in jobs, was about a 30 percent increase in personal income from \$134,886,000 to \$174,216,000. Manufacturing, retail trade, finance, services, and public administration all showed substantial gains.

### BIG PINEY HUMAN RESOURCE UNIT

The Big Piney HRU is located in Sublette County. Agriculture has been the HRU's economic mainstay, but oil and gas development\_ has played an important role in the HRU's past.

Today, agriculture is strongly oriented toward the production of livestock, especially beef cattle, and livestock forage. However, agricultural employment may well decline as fewer, larger ranches and farms become more common.

Wages in energy industries were generally double those found on ranches during the energy boom; therefore, the energy workforce tended to grow at the expense of agriculture. Total personal income increased as well, due mostly to oil and gas development. Today's energy-sector slump has resulted in personal income decreases.



### PINEDALE HUMAN RESOURCE UNIT

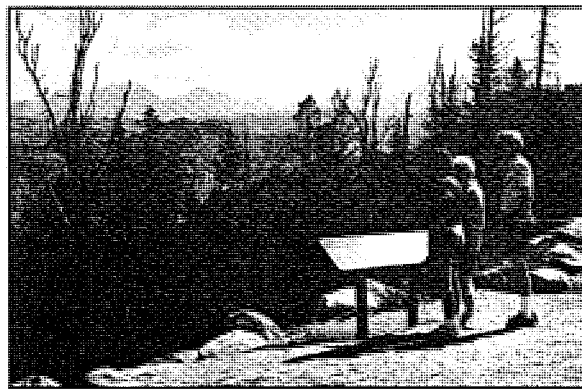
The Pinedale HRU is located in Sublette County. Ranching is the major profession of many long-time residents. Other resources in this area include oil and gas, and agricultural production, primarily related to cattle, feeder calves, sheep, and hay.

Only within the last 20 years have other economic influences have been felt in the area. The energy boom and oil and gas exploration of the 1980's had some impact to Pinedale area. Some residential impact occurred within the Pinedale HRU, but most of the direct impact was in adjoining areas

Recreation and associated industries have brought many new people to the Pinedale area, and provided jobs for some long-term residents. The highest seasonal employment is in agriculture and tourism-related industries such as shops, motels, restaurants, and construction.

Direct dependency on the Bridger-Teton National Forest and other Federal and State lands is greatest for livestock, outfitting, and small forest-products industries. Fishing, hunting, camping, snowmobiling, boating, hiking, and other outdoor recreational activities are highly dependent on these lands as well. The Bridger Wilderness, many lakes on the West Slope of the Wind River Mountains, and the Upper Green River area receive national recreation attention.

Pinedale is a small western town undergoing some cultural changes. Generally, winter jobs are scarce. But, in the summer, jobs are plentiful because of ranching and tourism. Most of the workers in the Pinedale HRU are employed in the livestock and tourism industries. Within the Pinedale HRU, no distinct ethnic groups exist.

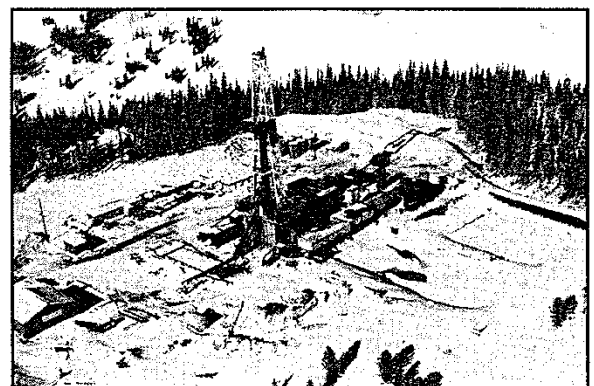


**Recent Employment and Personal Income Figures for Big Piney and Pinedale HRUs** - Between 1981 and 1986, the only decline in Sublette County employment came in the agriculture sector with a change from 398 to 372 employees. Overall, employment rose from 3,056 in 1981 to 4,918 in 1986. Construction, service, and proprietor sectors led the gains.

Accompanying the roughly 60 percent increase in jobs, was a similar increase in personal income from \$50,814,000 to \$85,807,000. The agriculture sector was hard hit during the 1981-1986 period with a loss of \$1,039,000 annually, although the losses seemed to have stabilized between 1983 and 1986. Mining, construction, services, and public administration sectors showed substantial gains.

**ROCK SPRINGS HUMAN RESOURCE**

The HRU encompasses most of Sweetwater County, Wyoming. Four National Forests, the Bridger-Teton, Shoshone, Ashley, and Wasatch, are most directly affected by the recreational and settlement interests of Rock Springs HRU residents.



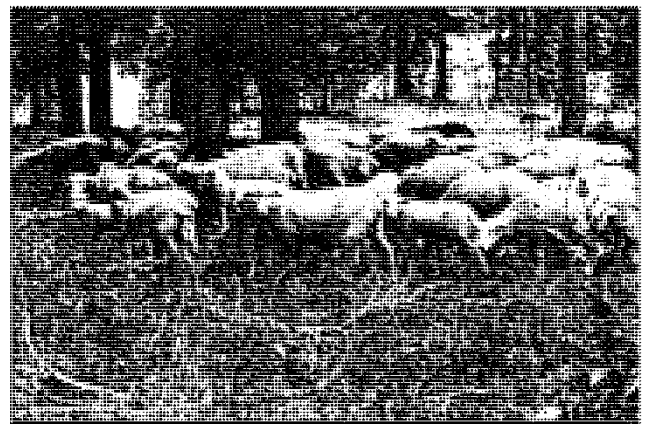
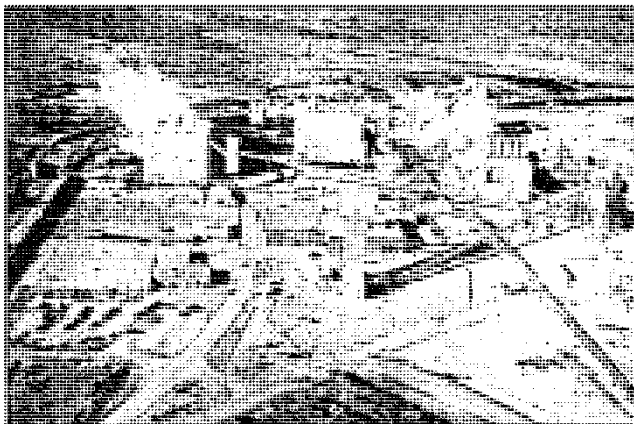
The labor market in the Rock Springs Human Resource Unit requires a diversity of skilled, semi-skilled, and unskilled labor. Ranching, mining, energy, and service industries all require people.

The Rock Springs HRU tends to be tied to fluctuating economic activities that do little to stabilize the community. For example, early in 1982, Wyoming's mining industry plunged into a deepening recession. Exploration and mining activities declined State-wide with nearly every sector of the industry announcing lay-offs. Rock Springs and Green River felt heavy impacts.

Similarly, trona mining and refining in the Green River Basin peaked in 1981 and then declined with a slackening demand for soda ash. The lower demand for the soda ash product is tied directly to the automobile and housing industries, major users of soda ash for glass manufacturing.

**Recent Employment and Personal Income Figures for the Rock Springs HRU/Sweetwater County** - Between 1981 and 1986, the major decline in Sweetwater County employment came in the mining sector from 7,739 to 4,729 employees. The decline was accompanied by loss of jobs in construction and wholesale trade. Overall, employment dropped from 29,446 in 1981 to 25,705 in 1986.

Accompanying the roughly 13 percent loss in jobs was about an 8 percent loss in personal income from \$639,455,000 to \$586,467,000. The sectors hardest hit during the 1981-1986 period were agriculture, mining, and construction. Only the public administration sector showed a substantial gain.



DUBOIS HUMAN RESOURCE UNIT

RANCHING, OIL AND GAS, AND MINING ARE PRIMARY INDUSTRIES OF THE ROCK SPRINGS HRU



The Dubois HRU is located in Fremont County, Wyoming. A major geographic feature of the area is the Wind River. The climate and elevation of the area limits most farming operations. The agriculture lands are mostly

used for cattle grazing and hay production with some cash crops being produced such as barley and sugar beets.

The timber industry started in about 1905 when tie-hacking began. Tie cutting continued into mid-1940. Since then, saw timber harvest has been a mainstay of the economy in the Upper Wind River region. The Wind River area has long been famous for its big-game, fishing, and wilderness. In the earlier years, the area was on the route to Yellowstone National Park from the railheads to the east. Dude ranching, outfitting, guiding, and other forms of tourism have long been an important economic force in the Wind River area. Riverton is a central, commercial hub for the HRU. Lander is the county seat and has little dependence on the Upper Wind River country.

Dubois lies between the energy-rich area east of Riverton and Lander, and the highly developed recreational areas to the west around Jackson Hole. Many of the year-round residents of Dubois are directly or indirectly dependent upon local sawmills for employment. The livestock industry contributes income and seasonal employment to the community. Many of the businesses in town are dependent upon tourists for income. Several restaurants, service stations, and motels are closed during the winter when tourists are few.

Many facets of the Dubois economy, and to a lesser extent Riverton and Lander economies, depend on the Bridger-Teton National Forest resources for existence. Most livestock operators depend upon the National Forest for summer range to round out their operations. Today, the local timber industry procures virtually all raw materials from National Forest System lands, including the Bridger-Teton. There is very little timber on private and other public lands. A large proportion of tourism activity takes place on National Forests. Winter recreation, primarily snowmobiling use, is growing rapidly with a proposal for the "Continental Divide Snowmobile Trail" gaining increased attention.

Recent Employment and Personal Income Figures for the Dubois HRU - Between 1981 and 1986, the major decline in Fremont County employment came in the mining sector from 3,253 to 801 employees. The decline was accompanied by loss of a few jobs in construction and wholesale and retail trade. Overall, employment dropped from 22,083 in 1981 to 20,119 in 1986.

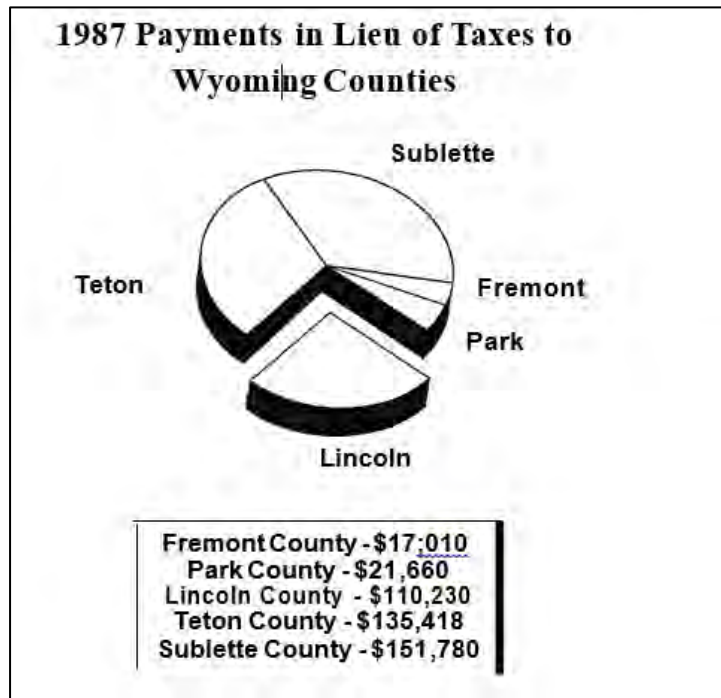
Accompanying the roughly 10 percent loss in jobs was about a 20 percent loss in personal income from \$335,479,000 to \$277,848,000. The sectors hardest hit during the 1981-1986 period were agriculture, mining, and construction. Services and public administration sectors showed substantial gains.



Major industries of the Dubois HRU are logging, tourism, and ranching.]

### Payments in Lieu of Taxes –

One effect of having a National Forest in a County is the loss of tax revenues to the County from the presence of federal lands. To compensate, Payments In Lieu of Taxes are made. Annual payments are mandated by federal laws and allocated to local governments by State laws



**Mineral Leasing Receipt Shares** -Most of the leasable minerals on the Bridger- Teton National Forest are subject to disposal under the Minerals Leasing Act of 1920, as amended and supplemented. Under that Act, States and their subdivisions share 50 percent of total receipts from lease sales, bonuses, royalties, and rentals; another 40 percent of the total receipts is paid into the "reclamation fund", created by the Reclamation Act of 1902 for use in the western states; and the remaining 10 percent of receipts is deposited in the general fund of the U.S. Treasury. Following release of the Final Environmental Impact Statement (FEIS) and clearance of the backlog of oil and gas leases, lease rentals, and applications could result in receipts of about \$29.1 million annually to the federal government.

## POPULATION

County populations are expected to remain nearly the same or decline somewhat through 1998. Oil and gas development no longer figures prominently in growth forecasts as it did only a few years ago.

## EMPLOYMENT

Employment in agriculture will most likely remain at roughly 1988 levels. Some specific decreases in the Jackson HRU will occur as agricultural acreage is converted to subdivisions. Employment in the timber and livestock industries will continue to be influenced by market conditions. Recreation employment will remain stable or increase in most HRUs. Energy developments still have some employment effects where oil or gas fields continue in production and exploration goes on.

## Physical Setting

### Geology and Land Forms

Major physiographic features in western Wyoming can be seen in Figure 2-4. Included are, from south to north, the Salt River Range, Wyoming Range, Hoback Mountains, Wind River Mountains, Gros Ventre Mountains, Teton Mountains, Jackson Hole Basin, Washakie Mountains, Absaroka Mountains, and Yellowstone Plateau.

This portion of western Wyoming contains a wide variety of structural features ranging from the complexly folded and thrust faulted mountains of the Idaho-Wyoming Thrust Belt to the block faulted Jackson Hole-Teton Range.

Sharp peaks, ridgelines, and steep cliff faces distinguish the north to northwest trending mountain ranges located within the Thrust Belt portion of the Bridger-Teton National Forest. Included are the Tump, Salt River, Hoback, and Wyoming Ranges. Each of these ranges developed along a major thrust fault and involved extensive folding and faulting of the

predominantly Paleozoic and Mesozoic age rocks involved. The Gros Ventre and Wind River Ranges are large, northwest trending asymmetrical anticlines with steep southwest flanks. Although similar structurally, these mountains are very different in appearance. The Wind River Range possesses a high, rugged terrain of Precambrian crystalline rocks flanked to the northeast mainly by Paleozoic limestone and dolomites and to the southwest mostly Cenozoic sediment that lap onto the Precambrian rocks. These mountains are a spectacular example of mountain glaciation and serve as a model-type section-for two episodes of glacial activity that occurred in North America. The Continental Divide follows the Wind River Range crest over a considerable distance as does one boundary of the Bridger-Teton National Forest.

Steep slopes and sharp ridge crests formed on Paleozoic limestones and dolomites characterize the Gros Ventre Mountains. Precambrian rocks are exposed along the range crest due to high angle faulting.

The spectacular Teton Mountains are relatively simple geologically compared to the ranges previously discussed, and are considerably younger. Uplift of the Tetons was accompanied by down drop of Jackson Hole and began approximately 10 million years ago. Evidence of fairly recent movement on the Teton fault system is apparent along the eastern mountain front. Precambrian gneiss, schist and granite form the high peaks which present a spectacular example of mountain glaciation. Paleozoic sediments form long dip slopes on the gentle west flank.

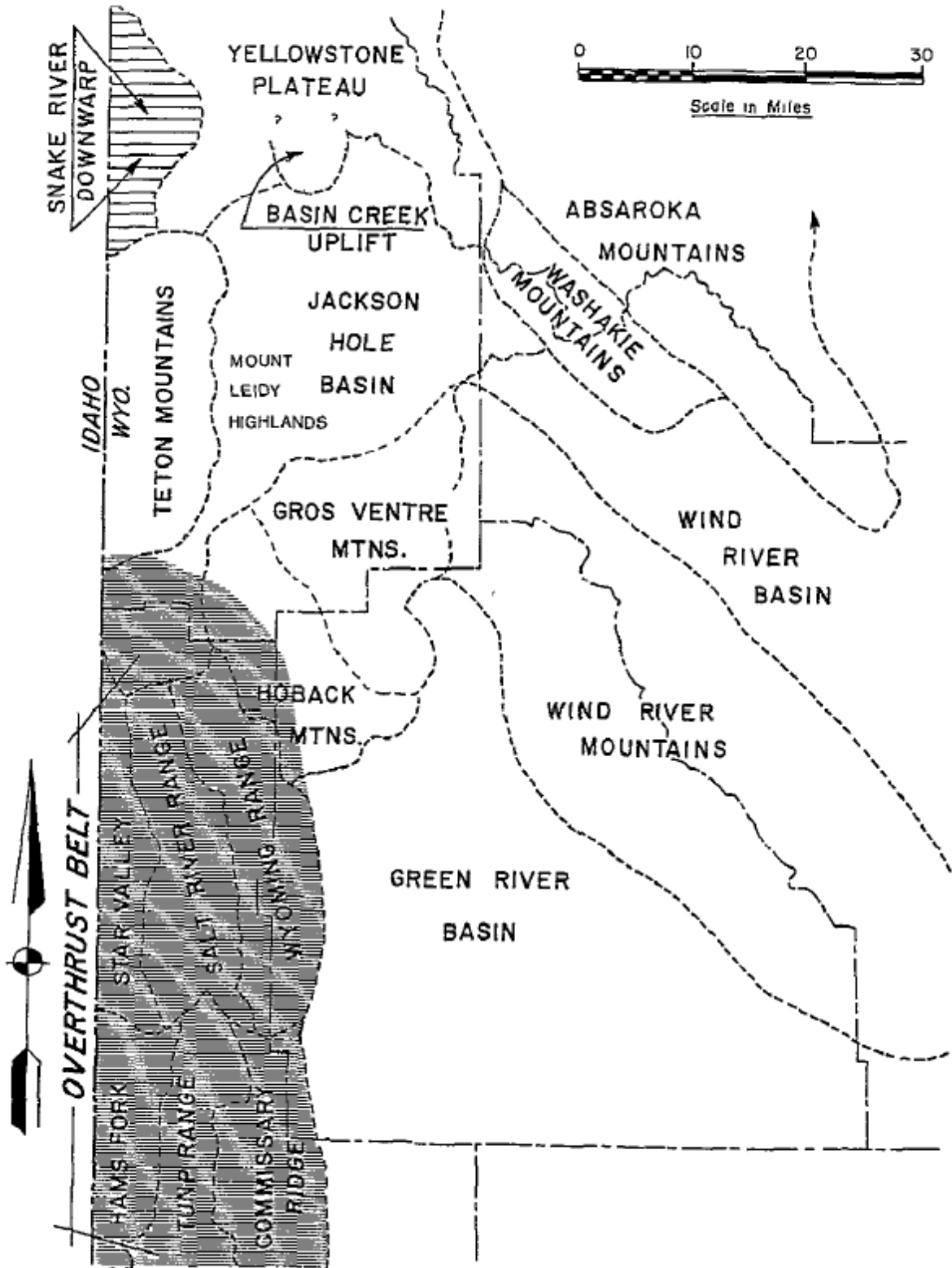
The Absaroka and Washakie Ranges are composed almost entirely of coarse andesitic volcanic flow debris. More than 6,500 feet of early to middle Tertiary rocks represent a vast outpouring of extrusive material over this area. These mountains have subsequently been extensively dissected and glaciated.

A much younger series of mainly rhyolitic volcanic rocks extend from the Yellowstone Plateau into the northern Teton County area covering Mesozoic and Cenozoic sediments and the northern end of the Teton Range.

The Mt. Leidy Highlands is an area of complex structure with several northwest- southwest trending surface anticlines cut by reverse faults on steep southwest flanks. Mesozoic and Cenozoic age rocks outcrop at the surface over much of the area.



# Physiographic Features of Western Wyoming



The flora of the Bridger-Teton National Forest are complex because of the occurrence of three vegetation groups: the Great Basin, the Southern Rocky Mountain, and the Northern Rocky Mountain. The Great Basin influences the area from the west, the Southern Rocky Mountain from the south-end, and Northern Rocky Mountain from the north and west.

Representative plant species of each are as follows:

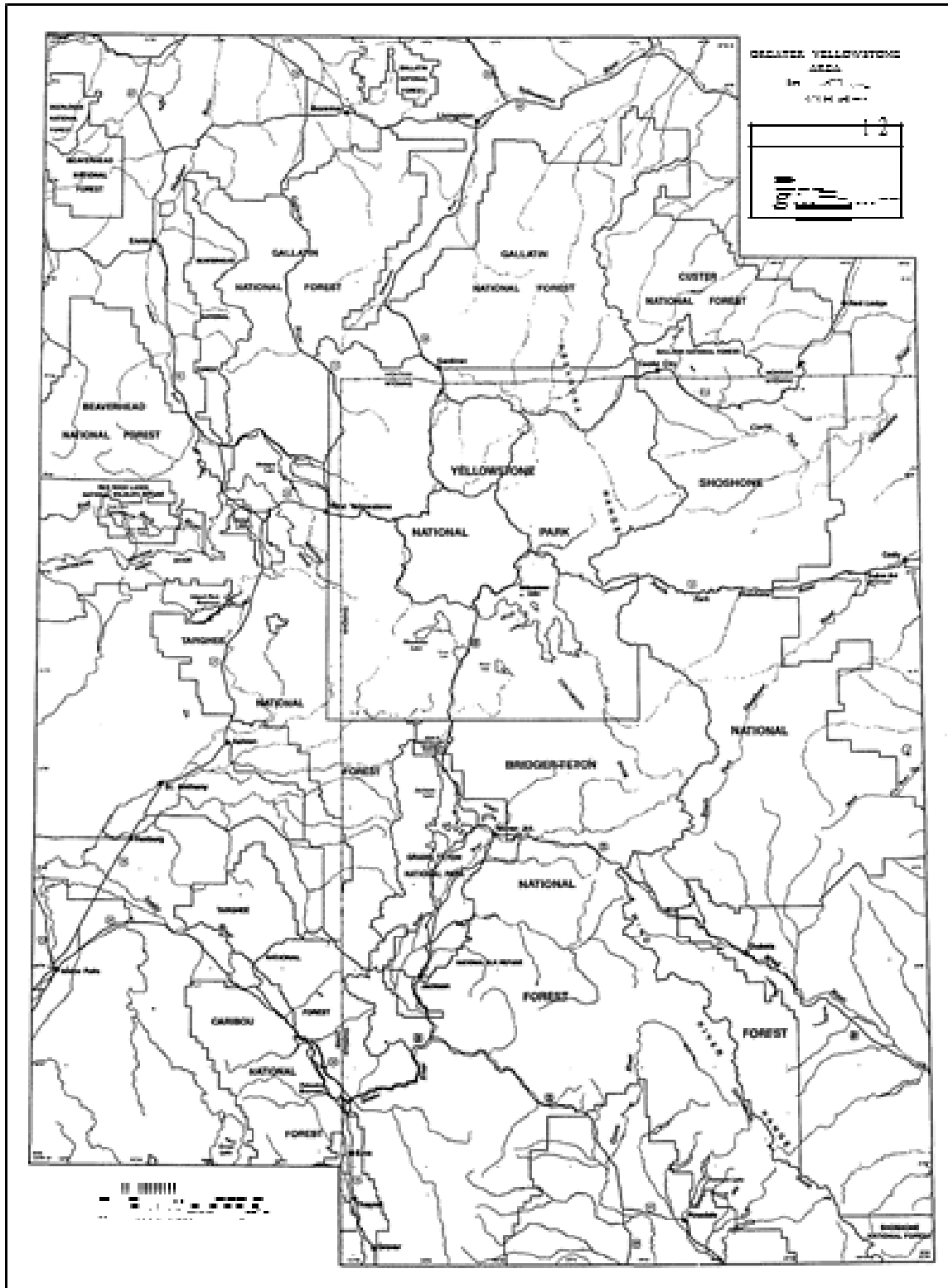
- Great Basin - Mountain mahogany, big sagebrush, salt brush, bitterbrush, and aspen.
- Southern Rocky Mountains - Blue spruce, limber pine, salt brush, big sagebrush, and rabbit brush.
- Northern Rocky Mountains - Lodgepole pine, whitebark pine, pinegrass, common juniper, menziesia, and hair grass.

Major mountain ranges associated with the Bridger-Teton National Forest form physiographic associations within these groups. Past wildfires have been a major force influencing the vegetation on the Forest.

### Greater Yellowstone Area

The northern one-half of the Bridger-Teton National Forest is also part of what has been called the "Greater Yellowstone Ecosystem." The area described encompasses part of the Targhee, Bridger-Teton, Shoshone, Gallatin, Custer, Caribou, and Beaverhead National Forests, as well as the National Parks, Wildlife Refuges, and private lands that have physiological relationship to Yellowstone National Park, the core of the Greater Yellowstone Area.

# Greater Yellowstone Area



## Climate

In general, the climate of the Bridger-Teton National Forest can be characterized as cold with moderate humidity. The forest stretches considerable distances north to south and east to west. It has a vertical height range from 5,900 to 13,785 feet. These factors result in a corresponding variability in microclimate from near desert to alpine conditions. The major mountains, the Teton, Salt, and Wyoming Ranges, have a north-south orientation and create a barrier to the prevailing westerly airflow. The presence of the mountains creates low rainfall to their lee along their eastern flanks.

Due to the generally high elevation and mountain barriers, the Bridger-Teton National Forest has a cold climate. Above 7,000 feet elevation, which includes most of the forest type, the mean annual temperature is below 32 degrees F. The total annual precipitation varies from a recorded low of 14 inches annual average in Jackson to over 60 inches in the Teton and Wind River Ranges. Over most of the National Forest, snowfall accounts for two-thirds or more of the annual precipitation.

The amount of sunshine is estimated to be 55 percent of maximum during the year. Relative humidity throughout the National Forest area is rather low, averaging 25 to 30 percent in the summer months with occasional lows of 5 to 10 percent.

## Biological Setting and Resource Descriptions

### Recreation

The attractions of the region, and increasing national interest in the Greater Yellowstone Area, have encouraged a high level of recreation use. The northern end of the Bridger-Teton National Forest is influenced by the tourism associated with Grand Teton National Park, the National Elk Refuge, and private and commercial recreation. The east side of the National Forest is heavily used by Wilderness visitors and others attracted to the Wind River Range, the large lakes on its west slope, and the upper Green River. The southern part of the National Forest also receives significant visitation; other attractions include the Fossil Butte National Monument and camping areas administered by the Forest Service and Bureau of Land Management. Privately owned camping facilities are available near the National Forest, as well as numerous resorts, hotels, and guest ranches.

Two National Parks, Yellowstone and Grand Teton, attract two to three million visitors annually. There are over 1.7 million visitor day's use of the Bridger-Teton National Forest annually. A majority of the visitor use occurs during the summer months with limited, but rapidly growing, winter activities. The National Elk Refuge, operated by the

U.S. Fish and Wildlife Service, attracts about 200,000 visitors annually with most of the use occurring during winter months. Jackson Hole draws many visitors to dude ranches and private campgrounds each year. This use occurs mainly during the summer season, with some fall hunting use. A survey in 1978 revealed that 21.4 percent or over 200,000 summer visitors stay in private campgrounds. Over 70 percent of the people contacted in this study indicated that sightseeing was their main reason for visiting Jackson Hole.

The Bridger-Teton National Forest offers a wide range of dispersed recreation opportunities. Developed campgrounds and picnic areas total 572 acres on the National Forest.

Nearby private-sector developed recreation, particularly ski resorts, is of national importance.

Over 200 outfitters and guides offer services for day and overnight trips for river floating, hiking, hunting and fishing. Commercial operators compete intensely with one another and also compete with private users for limited recreation resources on the National Forest.



OUTFITTERS OFFER DAY AND OVERNIGHT TRIPS

About 32 percent of the total recreation use reported on the Bridger-Teton National Forest in 1986 took place in developed sites, within the "Roaded Natural" Recreational Opportunity Spectrum (ROS) setting. Reported use in developed sites on the National Forest in 1986 was 519,240 Recreation Visitor Days (RVDs). Recreation use on forest roads and scenic highways within the Roaded Natural setting accounted for 1,124,352 RVDs in 1986, including activities such as camping in developed sites, downhill skiing, staying at recreation residences and resorts on the National Forest, scenic driving, and dispersed use on National Forest roads. RVDs reported for recreation in the Roaded Natural setting is 59 percent of the National Forest total.

Some developed sites are crowded and overused. Usually these sites are used to capacity on weekends, holidays, and on some weekdays during July and August.

No new developed sites have been built since 1970, and the total capacity of developed sites has remained the same. Emphasis has been on reconstruction and upgrading of existing facilities.

Commodity use activities, and in particular the road access essential for them, have changed the recreational opportunities previously available on undeveloped and non-- roaded land. Much of the Bridger-Teton National Forest today contains Primitive and Semi-primitive opportunities. However, as non-roaded areas have been developed, a change from the Primitive end of the Recreation Opportunity Spectrum toward Roaded Natural has occurred.

### Wilderness

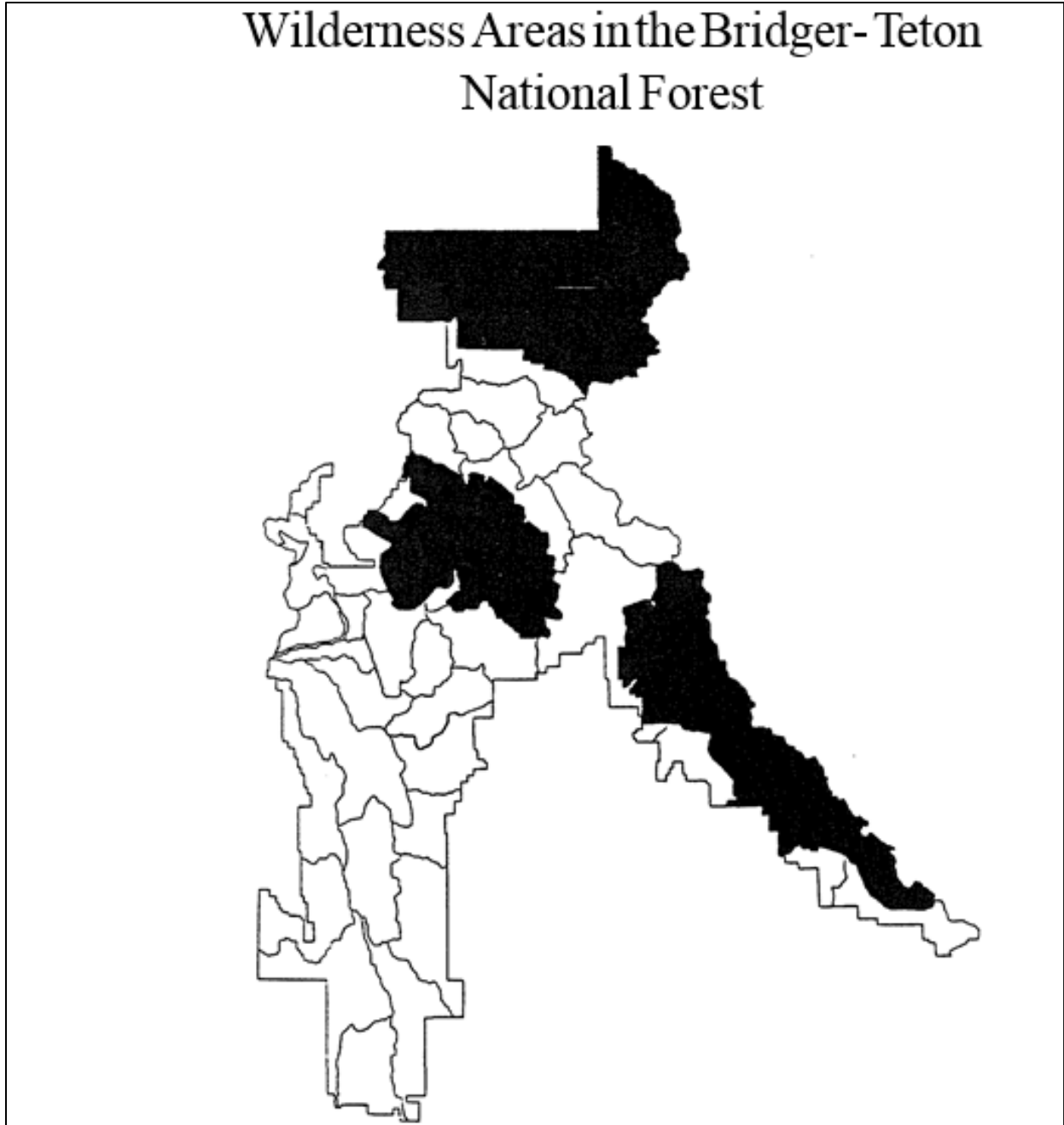
Current direction for the Bridger and Teton Wildernesses is contained in approved Management Plans for each area. The Management Plan for the Gros Ventre Wilderness has yet to be prepared.

Recently, there has been a significant rate of increase in visitor use in both the Bridger and Teton Wildernesses. About three-fourths of the annual use in the Bridger Wilderness occurs during July and August, whereas much of the annual use of the Teton Wilderness has historically been during the fall big-game season. However, summer use in the Teton Wilderness has increased dramatically in the last few years, a result of increases in both private and commercially served pack trips for fishing and sightseeing.

Crowding in Wildernesses is detrimental not only to user expectations of solitude and to physical elements such as soil and vegetation, but also to the resource of wilderness. Wildernesses are managed partly to allow for human enjoyment, but also to preserve wildlands, free from evidence of human use, intact for the future. Wildernesses beckon the recreationist, but recreation use cannot occur at the expense of the biophysical resource of wilderness.

Human use in Wildernesses is frequently concentrated on mainline trails and at popular destinations for camping. Distribution of access points, roads to portals, trails, and destinations largely determine use distribution within Wildernesses.

In the Bridger Wilderness, the special camping restrictions in seven concentrated-use areas have been effective in dispersing use to other less popular areas. However, use in the popular areas continues to remain high as a result of the overall increase in visitor use. Use in most of the other areas is naturally restricted by poor access roads, or no external road access. Public comments and research results have revealed a number of issues of key importance: user conflicts with pack and saddle stock, poor wilderness-use ethics, crowding and overuse, poorly enforced regulations, conflicts with outfitters and guides, poor signing and maps, conflicts between sheep grazing and recreation use, and horse user and hiker conflicts.



In the Teton Wilderness, there is also overuse along the main trails and in the most popular areas, resulting in trampling of vegetation, damage to trees from horse use in campsites, the creation of multiple trails across meadows, and widespread littering. The Teton Wilderness does not have significant conflicts between recreational use and domestic livestock grazing, but all of the other important use conflicts occurring in the Bridger Wilderness are also present here. Another significant problem is the proliferation of outfitter-originated trails, which sometimes cause resource damage and confusion to other users.

### Visual Resources

The Bridger-Teton National Forest has some of the most spectacular scenery to be found anywhere. Perennial snow fields on mountain peaks, lush green vegetation, and clear mountain lakes and streams are some of the attractions. **In addition to the unique landscapes which exist on the Forest, the concern for these landscapes by recreationists and adjacent landowners is high. This is reflected in the VQOs established for the Forest.**

**Approximately 38% of the Forest has the VQO of preservation, less than 15% has the VQO if modification and the remainder of the Forest has the VQOs of retention or partial retention. <sup>2</sup>**

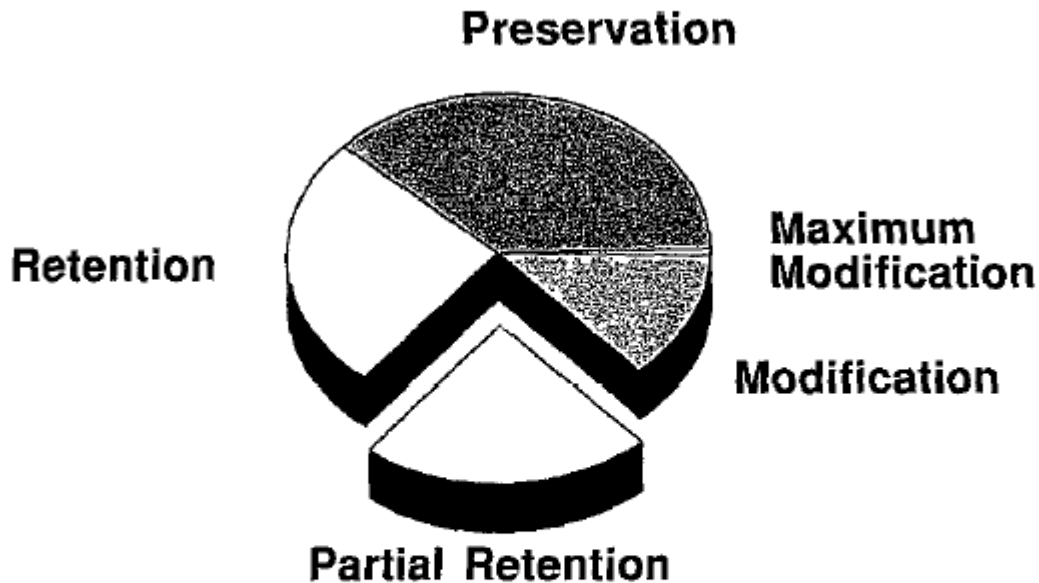
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<sup>2</sup> Corrected 1/21/93 by Forest Plan Correction No.1



The Visual Quality Objectives (VQOs) are shown below

## Visual Quality Objectives



<p>Maximum Modification - 25,700 Acres                  Modification - 447,000 Acres                  Partial Retention - 770,700 Acres                  Retention - 893,800 Acres                  Preservation - 1,300,500 Acres</p>
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**Fisheries and Wildlife** - The Bridger-Teton National Forest supports significant numbers and kinds of wildlife. The National Forest provides some of the best cold- water fisheries found anywhere in the world. Common fish species are brook trout, cutthroat trout, lake trout, mountain whitefish, speckled dace, and long-nosed dace. Twenty-three State of Wyoming and federal feedgrounds on or adjacent to the National Forest provide supplemental feed to about 22,000 elk each year. Outfitting and private hunting opportunities play a major role in the economic structure and historic-use patterns of the National Forest.

Wildlife species indigenous to the Bridger-Teton National Forest include 6 species of amphibians, 6 species of reptiles, 74 species of mammals, 208 species of birds, and 25 species of fish. In addition there are five species of mammals and 71 species of birds that are listed as rare or accidental visitors to the National Forest.

The National Forest Management Act of 1976 provides direction for selecting Management Indicator Species (MIS) for forest planning and management. Development of individual management and monitoring programs for each wildlife and fish species is impractical. Accordingly, a few of the National Forest-wide fish, wildlife, and plant species are identified as most representative of wildlife and fish species and their habitat overall and most effective for monitoring change. These management indicator species (MIS) represent federal Threatened and Endangered species, important harvest species, ecological indicator species, and Forest Service Sensitive species.

The ecological indicator species represent species narrowly restricted to a habitat and species with important requirements provided by a habitat. They are groups of species associated with key habitats likely to be significantly affected by management activities on the National Forest. The Bridger-Teton National Forest will select, where practical, MIS groups or guilds rather than individual species for habitats with a high risk of being affected by management activities. These habitats include riparian, old- growth forest, aspen, mountain meadows, wetlands, and sagebrush.

Two species, the pine marten and Brewer's sparrow, have been selected as appropriate MIS having important requirements provided by a specific habitat. Additional MIS will be selected and validated for each habitat as part of the Forest Plan implementation process.

The following species have been selected as ecological indicators: for riparian habitat, cutthroat trout; for mountain meadow habitat, bighorn sheep; for wetland habitat, boreal toad and boreal chorus frog; for aspen habitat, aspen. Any mention of 'Management Indicator Species' or 'MIS' in the Forest Plan refers to the above 4 species as well as to the pine marten and Brewer's sparrow.<sup>3</sup>

Habitat monitoring strategies will be developed for each habitat. Riparian and old- growth forest habitats will be monitored primarily by monitoring population trends for their respective guilds and by tracking trends in habitat health and diversity by total acres, amount of each seral stage, condition, and age class. The other four habitat types will be monitored by tracking trends in habitat health and diversity.

There are no known federally classified plants on the Bridger-Teton National Forest. The Forest Service designated six Sensitive plant species on the National Forest. Sensitive plant species and their habitats will be monitored and, if needed, action taken to insure they do not become listed under the Endangered Species Act.

These indicator species are:

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<sup>3</sup> This Errata Sheet , January 14, 1992 decision for Forest Plan Appeal #90-13-00-0195 requiring the identification of four additional ecological indicator species.

**Threatened and Endangered Species:**

Grizzly bear -Threatened, Bald eagle -Endangered,  
Peregrine falcon -Endangered, Whooping crane -Endangered, and  
Kendall Warm Springs Dace -Endangered.

**Harvest Species**

Fish

Cutthroat trout

Rainbow trout.

Wildlife Species

Rocky Mountain elk

Moose

Mule deer

Bighorn sheep

Pronghorn antelope



BROOK TROUT ARE ONE OF THE FISH FOUND IN NATIONAL FOREST WATERS. MULE DEER ARE IMPORTANT BIG GAME SPECIES.

**Ecological Indicator Species:**

Pine marten -Old-growth forest,

Brewer's sparrow -Sagebrush.

**Sensitive Plant Species:**

<b>Scientific Name</b>	<b>Common Name</b>
Androsace chamaejasme	none
Astragalus paysonii	Payson milk vetch
Astragalus shultziorum	Shultz milk vetch
Descurainia torulosa	none
Draba borealis	none
Saussurea webberii	none

There are five main agency or landowner groups which relate to and influence fish and wildlife habitat management on the Bridger-Teton National Forest. These include the Wyoming Game and Fish Department, National Park Service, Bureau of Land Management, U.S. Fish and Wildlife Service, and private landowners. Cooperation with each of these groups and understanding of their objectives is essential to managing fish and wildlife habitat on the National Forest.

Development activities can change existing habitats dramatically. Habitat has been modified or lost due to development on private lands, activities conducted on forest lands, and vegetative succession. Winter range off the Bridger-Teton National Forest has been reduced.

Habitat improvement projects in the past have been largely limited to the burning of sagebrush, aspen, and willow and the improvement of instream cover. These projects have largely benefited livestock, big-game, non-game, and fisheries.

Loss of big-game winter range and high economic value of big-game use has brought about a great deal of pressure for winter elk feedgrounds and habitat improvements. Maintaining elk feedgrounds has adversely changed composition of plant communities surrounding some feedgrounds.

Excessive human-caused mortality of grizzly bears and reduction in suitability or availability of grizzly habitat are the major factors which can limit grizzly bear recovery. In order to facilitate grizzly bear recovery, all National Forests have a target of zero preventable grizzly bear mortalities. A preventable mortality is one which could have reasonably been avoided by management actions under jurisdiction. Since the grizzly bear was listed as a Threatened species in 1975, at least six are known to have been killed on the Bridger-Teton National Forest. These mortalities have all occurred during the big-game hunting season and are considered as poaching. Intensive efforts are underway to prevent these mortalities through information and education, sanitation standards, and law enforcement.

The Bridger-Teton National Forest also contains approximately 2,465 miles of streams and 575 lakes that support fisheries or have fishery potential. The demands on these limited resources are increasing. While they are often areas of concentrated human populations, wildlife, and livestock use, they also include the most accessible areas in the steep terrain of the National Forest.



Development can decrease fish habitat values and potential production. Decreased bank stability, loss of instream cover, and increased sedimentation reduces productivity. Past stream habitat improvement projects have attempted to stabilize banks and provide additional instream cover.

The Bridger-Teton National Forest is recognized for its significance in wildlife and fish. Applications for hunting licenses far exceed the actual issuance for big-game. By State statute, 20 percent of moose and 25 percent of the bighorn sheep permits go to non-- resident hunters. Non-resident licenses for elk and mule deer are issued on a quota basis, as authorized by the Wyoming Game and Fish Commission.

#### Vegetation: Range

The social and economic structure of Western Wyoming is tied directly to ranching and farming. Most of the communities were built on that economic base. Livestock grazing is among

the oldest land uses on the Bridger-Teton National Forest with the majority of the local ranches dependent upon the National Forest for summer forage.

Livestock use levels have been reduced over time to improve rangeland soil and vegetation conditions. In 1924, about 51,000 cattle and 267,000 sheep were permitted to graze on the Bridger-Teton National Forest. By 1975, permitted numbers were about 39,000 cattle and 86,000 sheep. Permitted numbers in 1987 were 40,000 cattle and 78,000 sheep.

The range vegetation on the Bridger-Teton National Forest is typical of those found throughout the Intermountain Region. The various vegetation types represented are as follows: sagebrush (385,200 acres), coniferous forest (377,900 acres), aspen (157,700 acres), perennial forb meadows (134,900 acres), mountain brush (68,100 acres), dry meadows (52,500 acres), grassland (50,600 acres), and wet meadows (13,400 acres).

Several species of noxious weeds have become established on disturbed sites throughout the Bridger-Teton National Forest. Some of the more common species are: Canada thistle (*Cirsium arvense*), musk thistle (*Carduus notans*), Dyer's woad (*Isatis tinctoria*), diffuse knapweed (*Centaurea diffusa*), Russian knapweed (*Centaurea repens*), spotted knapweed (*Centaurea maculosa*), and leafy spurge (*Euphorbia esula*). Control efforts are guided by the Intermountain Noxious Weed and Poisonous Plant Control Program Environmental Impact Statement and Forest and District level Environment Assessments.

Most of the Bridger-Teton National Forest is suitable for grazing and browsing by wildlife and domestic animals. 2,164,000 acres are contained within livestock allotments. Of that amount, 908,000 acres are classed as suitable for livestock grazing. Range suitability was determined during the Range Analysis Process following Intermountain Region Range Analysis Handbooks.

270,000 acres of potentially suitable livestock range is not included in grazing allotments for various land management reasons such as watershed protection or crucial wildlife winter range.

836,500 acres within grazing allotments are considered to be in satisfactory condition, while 71,900 acres are classed as unsatisfactory condition. About 56,500 acres are trending towards potential natural communities, 786,400 acres are static, and 65,500 acres are trending away from potential natural communities.

Allotment Management Plans (AMPs) are completed for most allotments. 176 allotments or 754,665 acres are considered to be under satisfactory management. Twenty-nine allotments or 153,735 acres are considered to be without satisfactory management.

**Vegetation: Timber** -The Bridger-Teton National Forest conducted an inventory of the timber resource in 1968-1970 and again in 1980-1981. Average productivity potential on forested lands is good, averaging about 63 cubic feet of wood per acre per year. Net annual growth for all species of trees within the capable land is 21 cubic feet which is below the site potential due

to the predominance of older age classes and unmanaged conditions in both mature and immature stands.

The major commercial tree species are those associated with the major habitat type series found on the National Forest. The major habitat type series on the National Forest are the Engelmann spruce (*Picea engelmannii*) series, Douglas-fir (*Pseudotsuga menziesii*) series, subalpine fir (*Abies lasiocarpa*) series, whitebark pine (*Pinus albicaulis*) series, and the limber pine (*Pinus flexilis*) series. One of the major commercial tree species on the National Forest, Lodgepole pine is found in most habitat types as a seral species. Mainly a non-commercial species, aspen is also a seral species found in the series. Blue spruce may also be found as a minor component on the National Forest.

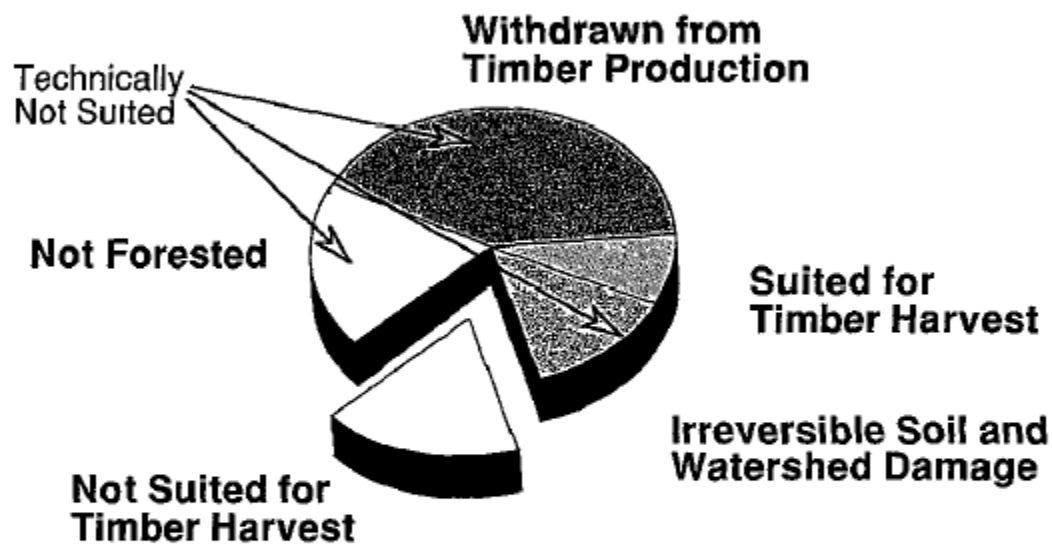
Natural mortality amounts to an average of 18 cubic feet per acre per year for all tree species. Insects and disease account for about 82 percent or an average loss of 14 cubic feet per acre per year. Mountain pine beetle, Douglas-fir beetle, spruce budworm, and Dwarf mistletoe are common pests on the Bridger-Teton National Forest accounting for the loss of wood fiber through endemic and occasionally epidemic infestations.



High levels of fuel loading are prevalent, commonly ranging from 30 to 50 or more tons of down, woody fuel per acre. Fuel loading created from natural mortality contributes to the potential for major wildfires.

Timber management on the Bridger-Teton National Forest has been guided by a Timber Management Plan prepared in 1979 and subsequent site-specific analyses. Under current management plans about 433,500 acres have been designated as suited for harvest. The Preferred Alternative designates 279,400 acres as suited for harvest as shown in Figure 2-8.

## Bridger-Teton National Forest's Area Suitable for Timber Harvest

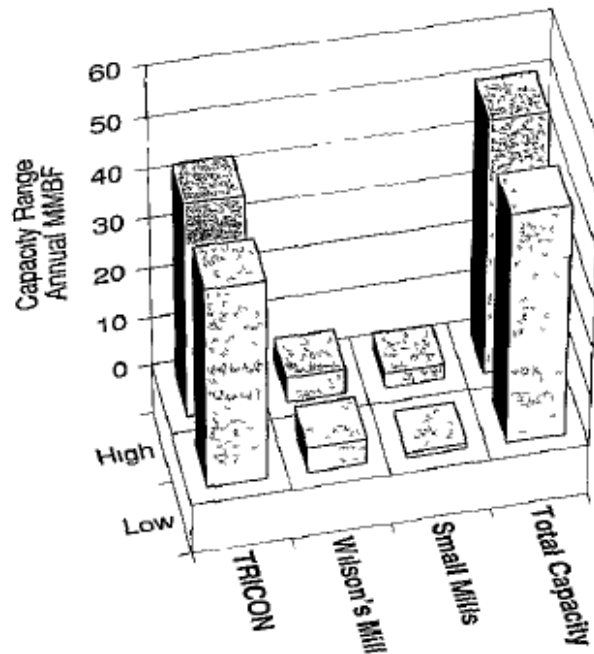


Suited for Timber Harvest - 279,400 Acres Irreversible Soil and Watershed Damage - 452,700 Acres Not Suited for Timber Harvest - 601,000 Acres Not Forested - 667,800 Acres Withdrawn from Timber Production - 1,391,300 Acres Total National Forest Lands - 3,392,200 Acres
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Demand for green saw timber comes from local and regional timber users, primarily the mills in Dubois, Wyoming, and Afton, Wyoming, which produce lumber related products. Further demand comes from smaller private mills in the Bridger-Teton National Forest zone of influence. The estimated full-production mill capacity for local mills largely dependent upon National Forest timber supplies is shown in the next figure.

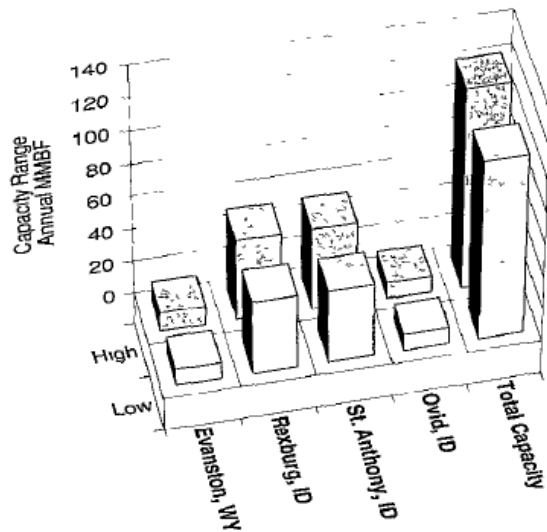


## Local Timber Mill Capacity



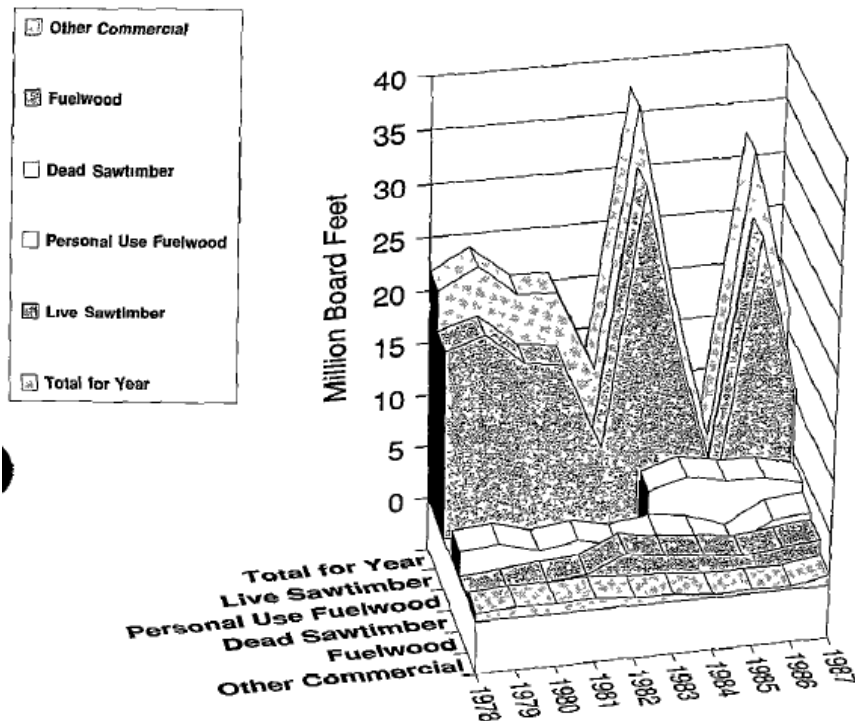
Louisiana-Pacific had a sawmill located in Dubois, Wyoming, which closed in 1988. This mill had a capacity of 40 to 45 MMBF. Other mills operate within reasonable haul distances. These mills, shown in Figure 2-10, have bid on timber offered on the Bridger- Teton National Forest but are not as dependent on the Bridger-Teton's timber supply.

### Timber Mill Capacity Within Hauling Distance



Demand for wood other than green sawtimber comes primarily from local users involved in either commercial or personal use of such products for fuelwood, posts, poles, and house logs

### Consumption of Wood Products



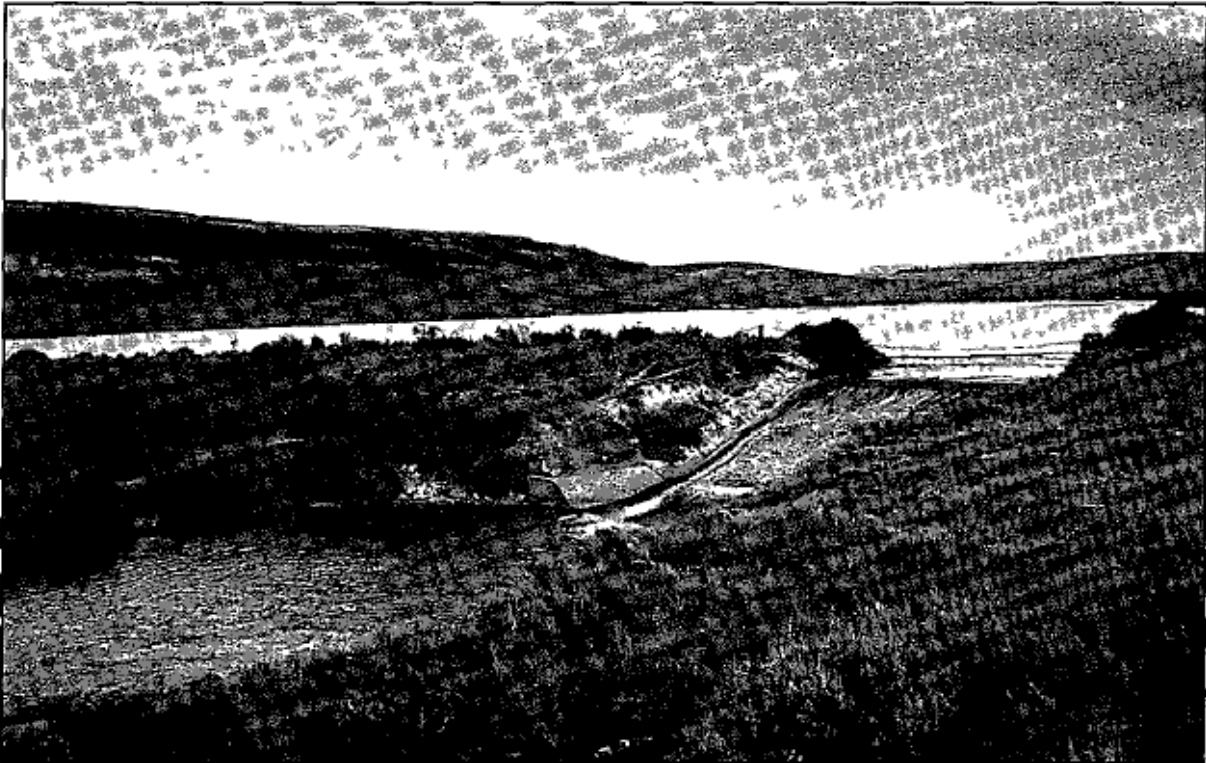
### Watershed

The watersheds of the Bridger-Teton National Forest form the headwaters of the major rivers of the western United States. The Snake-Columbia, Yellowstone-Missouri, and Green-Colorado originate from high mountain streams found on the National Forest. In addition, a major portion of the Bear River Watershed occurs on the southern portion of the National Forest.

Locally, the streams and rivers of these watersheds support a wide variety of recreational pursuits and contribute substantially to the tourism economy. Neighboring or downstream from the Bridger-Teton National Forest, the ranching and farming community diverts stream water from the National Forest into flood or sprinkler irrigation systems. Many municipalities obtain their domestic water from streams originating on the National Forest. Water for home use is also provided by springs on the National Forest connected to residences on adjoining private property.

The importance of the Bridger-Teton National Forest water resource extends far beyond the locale of the National Forest. Water stored in the reservoirs of the Jackson Lake, Palisades, and American Falls Dams is essential for irrigation in southeastern Idaho. These dams, along with others on the Snake and Columbia, are the basis of the Pacific Northwest hydroelectric power generating system. On the eastern side of the divide separating the Snake and Colorado rivers, the headwaters of the Green River furnish water to the Fontenelle, Flaming Gorge, Lake Powell, and Lake Mead reservoirs and hydroelectric systems. The .reservoirs supply irrigation water, recreation, and electricity to the southwest and Southern California with treaty obligations to Mexico to provide irrigation water from the Colorado River.





*Many of the surrounding communities use water from the National Forest*

Thirteen active impoundments exist within the Bridger-Teton National Forest with a total reservoir capacity of 70,240 acre feet.

Other than the Town of Pinedale, there are two areas where communities draw upon stream water coming from the Bridger-Teton National Forest for municipal needs: the Star Valley and Kemmerer areas.

In the Star Valley area, all established towns are dependent upon water from the Bridger-Teton National Forest. Also, large acreages of farmland exist that are either sprinkler- or flood-irrigated from streams originating on the National Forest.

The Town of Kemmerer operates a reservoir on the Hams Fork River which supplies water to the communities of Frontier, Kemmerer, and Diamondville in downstream order. Most of the flow in the Hams Fork originates on the Bridger-Teton National Forest. As part of the Wyoming Water Development Commission program, Kemmerer has begun a study of long-term municipal water needs.

Except for Kemmerer and for Pinedale, where a new dam is being considered for the outlet of Fremont Lake, the present water supply for municipal needs appears to be adequate for the next decade.

## Minerals and Energy

Historically, the National Forests of western Wyoming have seen little mining of locatable minerals. Today, no producing hardrock mines exist on the Bridger-Teton National Forest.

The Greys-Salt River Land Management Unit Plan recommended a portion of the Star Valley Front be withdrawn from phosphate leasing. The Bridger and Teton Wildernesses were withdrawn from all mineral claims and energy leasing on January 1, 1984. The Gros Ventre Wilderness was withdrawn as of the effective date of the Wyoming Wilderness Act of 1984. Valid claims and leases issued prior to these dates are subject to valid existing rights. Lands north of the 11th Standard Parallel and outside the Teton Wilderness, which amount to 33,300 acres, are withheld from oil and gas leasing. Lands located in T45N, R113W, 6th PM Wyoming, outside of the Wilderness and Grand Teton National Park may be leased with the requirement that logical unit areas be established prior to drilling.

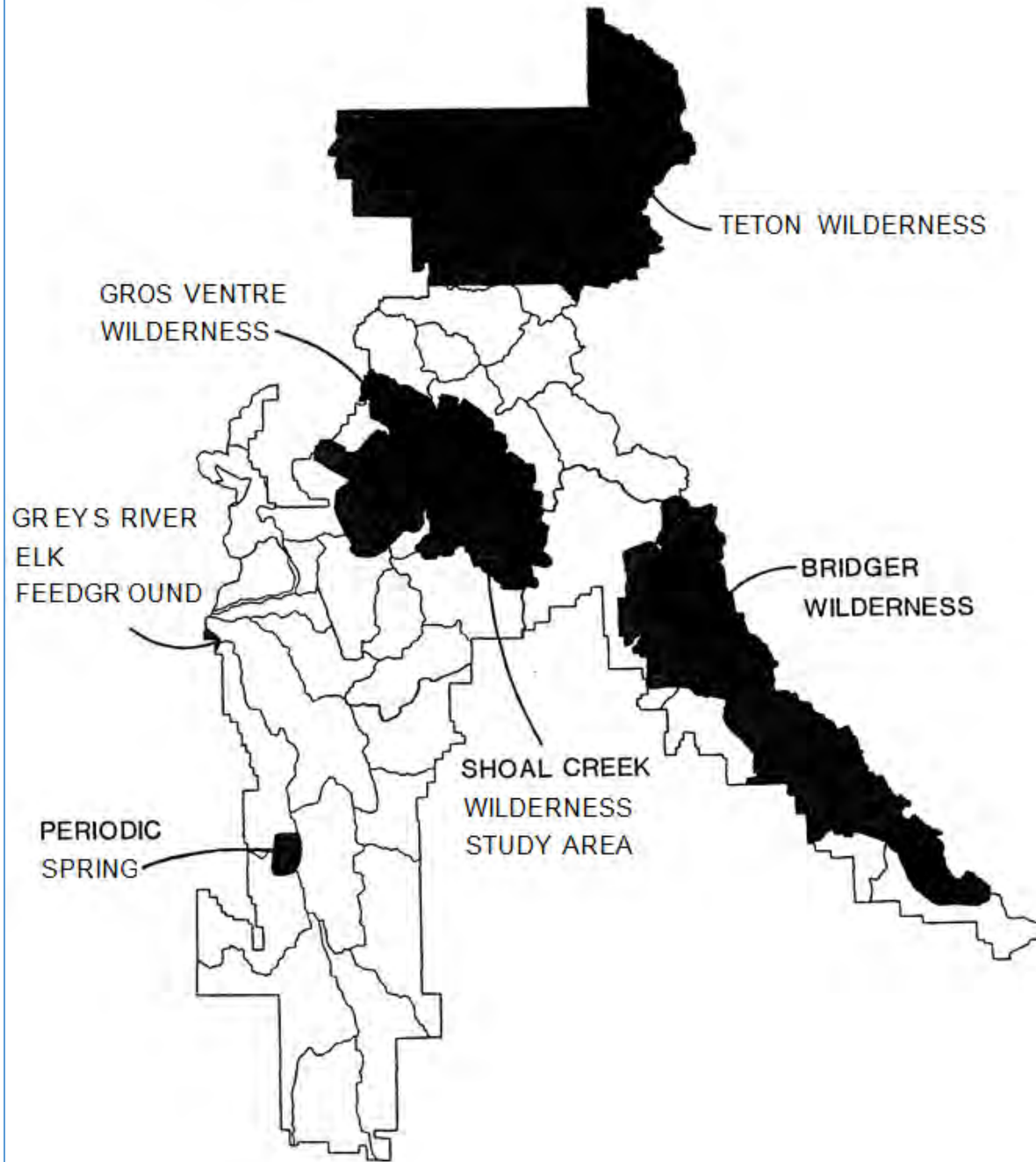
In addition, the Grey's River Elk Feedground, 700 acres in size, was withdrawn from leasing by Public Land Order 213 on March 10, 1944. The Shoal Creek Wilderness Study Area was withdrawn from leasing in Section 43 of the Federal Offshore Oil and Gas Leasing Act of 1987. Figure 2-13 shows the lands currently withdrawn from leasing.

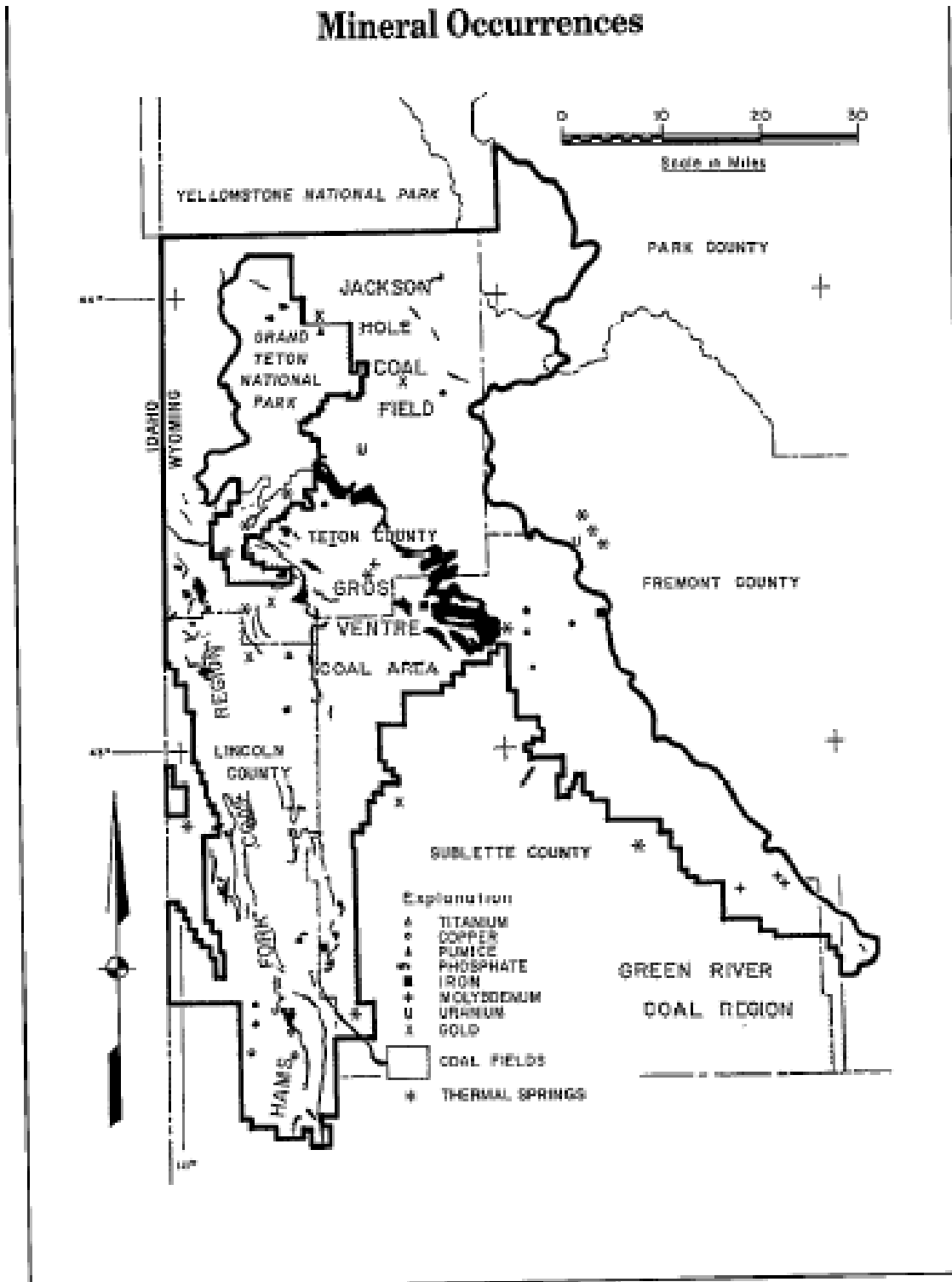
Mineral commodities present in reportable quantities on the National Forest, as shown in Figure 2-14, include: oil and gas, phosphate, geothermal, coal, copper and silver, uranium and vanadium, gold and titanium, sand and gravel, molybdenum, bentonite and pumice, and iron.



SEVERAL EXPLORATORY WELLS HAVE BEEN DRILLED ON THE NORTHERN PORTION OF THE NATIONAL FOREST

## Areas Withdrawn from Oil and Gas Leasing on the Bridger-Teton National Forest







Until recently, the Thrust Belt was one of the most active areas for exploration in the United States. Prolific discoveries on the Moxa Arch anticline, just east of the Thrust Belt on Riley Ridge, and in southwestern Wyoming and adjacent Utah spurred leasing and geophysical activity to unprecedented heights throughout the area.

Based upon this success, activity extended northward into the Bridger-Teton National Forest, amid much controversy. Large efforts were subsequently made on geophysical and geological studies, lease acquisitions, and drilling. Of the 147 wells drilled in the National Forest, only 11 are classified as producers. In the early 1980's, several companies planned to drill more test wells based on better understood geophysical and geological data and information gained in southern Thrust Belt discoveries. The current downturn in the energy sector put these plans on hold.

Recent information indicates that the newly discovered deep gas field in the Big Piney- LaBarge area appears to be much larger than originally thought. Three units are now considered part of the 21 miles-wide and 65 miles-long field including: Fogarty Creek, Lake Creek, and Graphite. The gas, which is produced from the Madison formation, contains 70 percent CO<sub>2</sub>, 20 percent methane, 4 to 10 percent H<sub>2</sub>S, and 1 to 2 percent helium. Four gas plants were originally proposed. Only Exxon is proceeding with one gas-sweetening plant. Reserves are estimated at 167 trillion cubic feet of various gases.

The western phosphate fields of Idaho, Utah, and Wyoming represent one of the world's larger phosphate reserve areas. Although western Wyoming contains substantial phosphate resources, it does not compare in quantity with other parts of the field such as southeastern Idaho. Practically all of the Bridger-Teton National Forest is underlain by the phosphorite-chert facies of the Phosphoria Formation. However, it has been broken up by faulting, folding, and subsequent erosion in some areas, such as the Thrust Belt. The largest area of outcrops is along the northeastern edge of the Gros Ventre Range. The Phosphoria Formation outcrops on the western slopes of the Teton Range and in the Wyoming and Salt River Ranges.

The apparent reasons for lack of development of phosphate resources include inconsistent quality, thin beds, steep dips, and inaccessibility. Considering the economic and environmental barriers, the probability of near future exploration for phosphate in this part of western Wyoming appears to be slight.

The Deadman coal mine, located on the Greys River Ranger District, is currently undergoing exploration and development. Limited quantities of coal have been produced for testing purposes. There are several scattered inactive coal properties on the Bridger National Forest. These coal resources are considered to have limited economic significance.

Other minerals are of little or no economic significance on the Bridger-Teton National Forest today, but future economic viability is unknown. There are no major active producing mines on the National Forest. Two small gold placer mining operations have been or are now in operation. Abandoned mines pose no known serious threats to public safety or cause environmental degradation.

## Cultural Resources

About 181 identified sites exist on the Bridger-Teton National Forest with identified Cultural Resources. In addition, a number of sites are not yet inventoried. These include log cabins, tepee rings, and possible Indian campsites. Presently, cultural resource surveys are conducted prior to other resource undertakings and the results recorded.

### National Natural Landmarks

[Existing National Natural Landmarks](#) - A single Natural Landmark has been designated on the Bridger-Teton National Forest, the Two Ocean Pass National Natural Area.

[Proposed National Natural Landmarks](#) - Natural Landmarks have been proposed for the Bridger-Teton National Forest:

- Gros Ventre Slide Geological Area
- Pinedale Glacial Area
- Periodic Spring Geologic Area
- Upper Slide of Gros Ventre River
- Cache Fault at Granite Creek
- Gannett Peak Glacial Fields;
- ~~Pinyon Conglomerate~~<sup>4</sup>
- Slate Creek Landslide
- Gates of the Hoback
- Wyoming; Camp Davis Conglomerates
- Little Greys River Anticline
- Jurassic Fossils at Lower Slide Lake
- Hoback Junction Landslides
- Cliff Creek-Granite Creek Thrust Faults
- Alpine Karst in Tosi Creek Basin;
- Darby Thrust Fault

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<sup>4</sup> Corrected 1/21/93 by Forest Plan Correction No. 1

### Existing National Historic Sites

~~Four National Historical Landmarks have been designated on the Bridger-Teton National Forest: the Rosencrans National Historic District, the Union Pass National Historic Site, the Huckleberry Mountain Fire Lookout, and the Redick-Chambers Lodge~~

There are four sites on Bridger-Teton Forest which are listed on the National Historic Register of Historic Places: Rosecrans National Historic District, the Union Pass National Historical Place, the Huckleberry Mountain Fire Lookout, and the Redick-Chambers Lodge<sup>5</sup>

### Research Natural Areas

~~The Bridger-Teton National Forest currently has no established Research Natural Areas. The National Forest identified sites or situations for further consideration as Research Natural Areas, and, after fieldwork was performed by Joel Tuhy of the Nature Conservancy and reviewed by the Forest Supervisor, the following areas have been found suitable and recommended for designation: Horse Creek, Osborne Mountain, Afton Front, and Swift Creek.~~

The Bridger-Teton National Forest established four Research Natural Areas and two Special Interest Areas in April 1999. The following areas were found suitable and have been established as Research Natural Areas (RNAs): Afton Front RNA; Swift Creek RNA; Gros Ventre RNA (previously Horse Creek Proposed RNA; name changed to avoid duplication in the National RNA network); and Osborn Mountain RNA. Kendall Warm Springs and Big Fall Creek have been established as Special Interest Areas (SIAs).<sup>6</sup>

### Air Quality

On July 7, 1977, the Teton and Bridger Wildernesses were designated as Class I areas as part of an amendment to the Clean Air Act of 1977. The remainder of the Bridger-Teton National Forest is designated as Class II, including the Gros Ventre Wilderness. There are no non-attainment areas on the National Forest.

#### Air Quality

The only lower-quality site in the vicinity is a small area near Rock Springs and Green River. Emission sources for pollutants within 50 miles of the area include coal-fired power plants at Kemmerer and Rock Springs, and numerous chemical trona-soda ash-phosphate plants between Evanston and Green River. In addition, moderate sources include the Tricon sawmill at Afton.

Minor periodic occurrences of pollutants also occur during:

<sup>5</sup> Corrected 1/21/93 by Forest Plan Correction No. 1

<sup>6</sup> Amendment #5, April 1999

- 1) Summer and fall fires,
- 2) Prescribed fires for logging slash and vegetative type conversions on both the Bridger-Teton National Forest and the National Forests in Idaho to the west,
- 3) Winter from firewood and coal used to heat homes in surrounding dependent communities. Roads and seismic operations also contribute dust into the atmosphere, Oil and gas drilling could potentially contribute hydrogen sulfide gas during accidental release of gas.

The Bridger-Teton National Forest contributions to western Wyoming baseline total suspended particulate level are unknown. What small significance exists originates from the following average yearly sources:

- Wildfire: 200 acres in summer.
- Slash disposal: 1,000 acres, mostly late fall.
- Wildlife and range habitat improvement: 500 to 3,000 acres, in the spring or fall.

Currently, the State of Wyoming has no air quality or clearing index levels. National Forest smoke management will continue to be coordinated with the State Air Quality Supervisor in Cheyenne and by monitoring weather influences and patterns for smoke dispersion.

### Water Quality

Detailed studies carried out in the 1970s on the Bridger-Teton National Forest established the nearly pristine nature of the streams and lakes. With only a few minor exceptions, the effect of the many and varied uses of the National Forest has little effect upon the quality of surface water (*Symposium on Watershed Management Volume I - Water Quality and Wildland Resource Management, Galbraith, 1980, pp. 298-310*). More recent results from monitoring of the Riley Ridge project have also shown negligible results in terms of water chemistry changes or indicators of fish habitat. The major changes in the quality of stream water take place naturally in the spring of the year with snowmelt.



THE QUALITY OF NATIONAL FOREST WATERS IS VERY GOOD.

During snowmelt the character of the sediment carried by the streams is controlled by the geology of the watersheds. In the northern area of the Bridger-Teton National Forest, where the volcanic rhyolite formations occur, the principal form of sediment movement is the bed of the streams with only minor amounts of suspended material seen in the stream water. The same is even truer of the granitic watershed in the Wind River Mountain portion of the National Forest where it is likely that most of sediment is transported along the stream bed.

In the sedimentary portions of the National Forest, the influence of geology is more complicated. In general, for the sedimentary watersheds, it is probable that more material is moved in the spring as suspended sediment. Other dominant processes in the sedimentary watersheds particularly those of younger rock types are massive slide formations generally referred\_ to as earth flows. These earth flows so common in the Gros Ventre, Hoback, and Hams Fork watersheds-and evident in many others as well-produce enormous amounts of sediment where the streams and rivers intersect these flows. Finally, another principal source of sediment to the rivers and streams across the National Forest are the rock and debris slides which occur in the steeper portions of the sedimentary watersheds often accompanying avalanches.

From 1975 to 1980, the Bridger-Teton National Forest established a wide-ranging program to monitor potential water quality effects of the major resource programs and activities. This monitoring will be summarized in the following discussion. Prescribed burning of sagebrush takes place annually on several hundred acres. Monitoring of one representative burn, which included the willow riparian zone, showed no change in the nitrate or phosphate content of stream water. This test showed there was little opportunity to increase the nutrient levels

of streams draining the burn areas, so long as the burns took place at a time when there was adequate soil moisture to protect the root growth centers and thereby assure rapid revegetation of the burn area,

Another area of concern in range management was the use of herbicides for sagebrush and noxious weed control. Several spray projects were closely monitored before and after the herbicide application with the result that in nearly half the applications the herbicide was not detected in adjacent streams, and for all the remaining projects with one exception the herbicides were well below the established minimum concentrations. The practice which resulted in the one instance of exceeding the minimum level was eliminated, and thereafter, all the results were below the minimums.

Contamination of surface waters is possible during oil and gas exploration and development. Testing of reserve pit fluids and adjacent stream waters showed that oil, grease and salts were leaching into the streams where lining of the pits or compaction of the dike walls was inadequate. No further failures of reserve pits have taken place since lining and compaction became standard requirements.

Recreational pastimes in the vicinity of lakes and streams also have the potential of affecting water quality. Bacterial testing of stream waters above and below campgrounds, a summer home complex, and a hot springs swimming area gave results well below the applicable State standards. A study of lake waters in the Bridger Wilderness near popular camp sites revealed no eutrophication effects when compared with similar areas receiving little or no camping use. A giardia survey in the Bridger Wilderness, however, did discover the cysts of this intestinal parasite in beaver, marmot, and ground squirrel populations. The incidence of giardia infection in humans appears to be on the increase over the past 10 to 15 years no doubt coinciding with a marked rise in the number of people visiting the Bridger Wilderness.

The question of road building affecting stream sediment loads on the Bridger-Teton National Forest is proving difficult to assess. There is little doubt that road building in the past has increased the amount of sediment being carried by the streams. But in a study designed to evaluate the relative increase in stream sediments, the changes in natural sediment loading due to natural causes, primarily landsliding into stream channels, was so great that it was not possible to determine the effects from roads.



Culverts reduce stream sediments from roads

A recent area of considerable interest is the possibility of acid rain causing the lakes in the Bridger Wilderness to acidify. The results of an extensive monitoring program over the past five years have demonstrated that the lakes and streams in the Bridger Wilderness have not changed despite the acid rain and heavy, industrial metal air pollution which has occurred over the past 100 years. The monitoring has also shown that the delicate

chemical balance of the lakes and streams could easily and rapidly change if increases in the air pollutants were to take place.

Overall, the water quality monitoring of the natural resource programs on the Bridger-Teton National Forest has not uncovered any widespread reduction in water quality which can be traced to wildlife and range improvement practices, use of herbicides, oil and gas exploration or development, recreational activities, or timber harvesting.

**Soils** -Without soils, terrestrial plant and animal life as we know it could not exist. Soils provide the essential nutrients and water that plants need in order to use sunlight and atmospheric carbon dioxide for growth. Characteristics of this growth media called soil influence the kinds of plants that will occur and how well they will grow. These plants, large and small, are the basis for the food chain and other materials that man uses to sustain life.

Soils are products of natural processes and consist of minerals, organic matter, water, and air. Principal soil-forming factors include: parent materials, the effects of climate, living organisms, time, and landforms.

A related factor is water flow. Other things being equal, runoff is large on steep slopes and small on level ones. Less water enters the soil on steep slopes and more water enters the soil of flatter slopes. Therefore, the amount of water that moves through the soil depends partly on topography. This causes soils in a moist valley to be very different than those on a dry ridge top.

Soils on the Bridger-Teton National Forest are classified according to the Soil Taxonomy of the National Cooperative Soil Survey, United States Department of Agriculture. The Soil Taxonomy provides a systematic way to classify soils by the dominate soil forming processes and resulting soil properties that are developed as these processes act on parent materials over time.

Of the 10 soil orders, the four which cover most of the Bridger-Teton National Forest are mollisols, alfisols, inceptisols and entisols.

For further reading about soils, see: *Soil, The Yearbook of Agriculture 1957. United States Department of Agriculture, 1957, 784 pages.*



RECENT SURVEY WORK PROVIDED MORE ACCURATE INFORMATION ON SOILS

**Access: Roads** -The roads on the Bridger-Teton National Forest vary from federal highways to "2-track" roads. Roads serve the access needs of a variety of National Forest users for many different recreational or commodity activities. Traffic intensities and road standards usually decrease as the traveler drives from the highway onto a National Forest arterial road and subsequently onto collector, local, "2-track" roads at the far reaches of road network.



COLLECTOR ROADS, LIKE GRANITE CREEK, PROVIDE GOOD ACCESS FOR NATIONAL FOREST USERS.

from  
wide

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The federal highways connect outlying areas with the small high elevation communities and federal lands of western Wyoming adjacent to the Bridger-Teton National Forest. Except for periodic closure due to winter snowfall, highway travel is maintained year-round.

National Forest arterial and collector roads provide good access into most non-- Wilderness areas of the Bridger-Teton National Forest. Outside of a few recreation roads, most of the present National Forest road network was originally built for mineral or timber access. Most arterial and collector roads are gravel surfaced and maintained for sedan travel. These roads presently serve a variety of recreational and commodity traffic. Most such roads are blocked by snow in the winter.

National Forest local roads are built to a more primitive standard than arterial and collector roads and are often closed to public access. Where traffic is allowed, they provide access for such activities as firewood gathering and hunting. Local roads are often unsurfaced and can impede travel by low-clearance vehicles.

The lowest-standard road on the Bridger-Teton National Forest is commonly called a "2-track" road. Such roads are not designed and built but simply develop by continuous vehicle travel. Many of these roads developed in parallel with the popularity of 4- wheel drive vehicles since the 1950's. Most of these roads are sited poorly and cause visual or erosion problems. In recent years, such use of the National Forest has been discouraged. Some areas of the National Forest are physically unacceptable for roading. Geological features, active landslides, and fine-textured soils impose major limits on roaded access into many areas.

**Access: Trails** - The trail system on the Bridger-Teton National Forest consists largely of traditional, decades-old routes, most of which were constructed for purposes other than recreation. Since the early days of trail use, many of them have been added to the National Forest's transportation system.

#### [Access: Trails](#)

The trail system on the Bridger-Teton National Forest consists largely of traditional, decades-old routes, most of which were constructed for purposes other than recreation. Since the early days of trail use, many of them have been added to the National Forest's transportation system.

Trails give access to most of the backcountry areas on the National Forest, and most are maintained periodically. However, the location and design of many of the trails are not suited to the heavy traffic they receive, and thus, they are deteriorating. The damage due to heavy use is compounded by lack of annual tread maintenance and adequate water drainage. Trails are most susceptible to damage during periods when the soil is wet and snowbanks remain in spring.

The trail system includes winter sports trails, many of which are located on summer roads. Ski and snowmobile trails may be groomed, marked, or both.

#### [Land Ownership and Trespass](#)

A fundamental purpose of the Forest Service is to protect its land base. The lack of access to that land, trespasses on the land, the need for special uses of the land, and the need to acquire land to protect various resources are issues that drive the land program.

Lack of access across private land to the National Forest is a growing problem as the public demand for access grows. The Bridger-Teton National Forest is fortunate in having relatively unbroken federal ownership. However, there are an estimated 55 locations on the National Forest where access across private land is not assured because an easement has not been acquired.

Trespasses on the Bridger-Teton National Forest are estimated at 125 cases. These cases range from barns to fences, from a few feet to many acres. Trespass denies the public its rightful use of those lands. The trespass in some situations is resulting in resource damage. Without active resolution of the trespass cases, the problem will continue to grow as more and more private property adjacent to the National Forest is developed.

There are some opportunities to adjust land ownership through exchange or other methods to better meet management objectives and serve the public. Land adjustments are pursued with willing land owners.

There are many special uses permitted on the Bridger-Teton National Forest. These uses range from recreation residences to outfitter and guide permits, from ski resorts to pipelines, and from electrical transmission sites to irrigation ditches. All in all, there are 852 special use permits issued for 52 different uses.



THERE ARE MANY SPECIAL USES PERMITTED ON THE NATIONAL FOREST.

Rivers Found Eligible for the National Rivers System<sup>7</sup>

**(Note: the number following the river name in the list below corresponds to the number on the accompanying location map.)**

**SNAKE RIVER SYSTEM**

The **Salt River** (1) is located in Lincoln County. It springs on Mt. Wagner in the Salt River Range, and flows southwest for about 10 miles. At the forest boundary, it turns sharply to the north, and continues flowing northward through Star Valley into the Snake River. The river's source to the Forest boundary, about 12 miles, is being considered.

**Eligibility criteria met:** Recreational (wildness) and scenic; historic in lower section. Of the drainages on the west slope of the Salt River Range, this river is the range's namesake, and offers the most opportunity for recreation in a wild setting. Its canyon offers primitive recreation opportunities in a very scenic setting; there is a spectacular view at the headwaters of the river, from which 10,709-foot Mt. Wagner is dominant. The Lander Cutoff of the Oregon Trail follows the river in its lower three miles.

**Potential classification:** Wild--source to forest road I0072, 12 miles.

**Recreation**--downstream segment to Forest boundary, 3 miles.

**Swift Creek** (2) is located in Lincoln County, on the western front of the Salt River Range. It flows from its headwaters near the crest of the mountains through the town of Afton before joining the Salt River.

**Eligibility criteria met:** Geologic, botanical, and scenic. The primary scenic and geologic attraction is Periodic Spring. The spring is tucked into a deep, narrow cleft in the limestone, and pours down a long cascade into Swift Creek. It is considered the largest of only three known cold-water geysers in the world. It is identified as a potential National Geologic Landmark in the Forest Plan. Other features include limestone erosional formations and cliffs, and an active landslide which has dammed up a small area of the creek. There is an excellent viewing area and opportunities for interpretation of the natural mass wasting process.

The upper canyon of Swift Creek has been identified in the Forest Plan as a recommended research natural area (RNA) for its outstanding example of native vegetation that has not been heavily altered by human activity. This is one of a few areas in the Salt River Range that has not been heavily grazed in the past.

**Potential classification:** Wild--source to Periodic Spring, 8 miles.

**Recreation**--Periodic Spring to upper dam. 2 miles.

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<sup>7</sup> Forest Plan Amendment # 2 3/92 (Later Amended in 2013)

**The Greys River (3)** is located in Lincoln County. It flows northward from the Tri-Basin Divide through a deep valley between the Salt River and Wyoming Ranges for 58 miles until spilling into Palisades Reservoir on the Snake River.

**Eligibility criteria met:** Scenic, recreation, wildlife, hydrologic and geologic. A distinctive feature of the Greys River is the completeness of the watershed and associated habitats that can be experienced in a relatively short distance. In 58 miles it increases water volume from a spring-fed trickle to a large river. It also has outstanding opportunities for river-related recreation, notably fishing and whitewater floating, and it draws a regional following. Because of the river corridor's diversity of habitats, it hosts great richness of wildlife species diversity as well.

**Potential classification:** Recreation--source to Mile 50, 8 miles.

**Scenic--**Mile 50 (Kinney Creek) to Forest boundary, 50 miles

**The Little Greys River (4)** springs in the mountain basins above Roosevelt Meadows, in the northern Wyoming Range. It flows west and northwest for 15 miles before joining the main Greys River.

**Eligibility criteria met:** Recreation. Opportunities for river-related recreation, including fishing, backcountry travel, and roadside camping, are significant enough to draw regional, even national visitation. The scenic quality is high, with distinctive variety and diversity throughout the river corridor.

**Potential classification:** Wild--source to end of forest road 10047, 7 miles.

**Recreation--**end of Forest Road 10047 to confluence with main stem of the Greys River, 13 miles.

**Box Canyon Creek (5)** is a 4-mile tributary of the Greys River, located in Lincoln County. It falls steeply from Box Canyon Pass on the crest of the Wyoming Range to its confluence with the Greys, 2 miles south of Corral Creek guard station.

**Eligibility criteria met:** Scenic. The undisturbed natural setting, steep canyon surrounded by high peaks, and the creek, tumbling from its source on the west slope of the Wyoming Range to its confluence with the Greys River a few miles away, make Box Canyon Creek a distinctive example of the many scenic waterways in the Wyoming Range.

**Potential classification:** Wild--4 miles, source to confluence with Greys River

**Marten Creek (6)** is a short, steep-gradient stream that flows into the upper Greys River from the Wyoming Range in Lincoln County. Access is via the Greys River Road and Marten Creek Trail, which connects with the Wyoming Range National Recreation Trail.

**Eligibility criteria met:** Scenic and recreation (wildness). There is a high opportunity for solitude in a natural setting, with ready access to the regionally significant Wyoming Range National Recreation Trail. The elements of the landscape are highly diverse over the majority of the river segment.

**Potential classification:** Wild--4 miles, source to confluence with Greys River.

**Cliff Creek (7)** is located in Sublette and Lincoln Counties. It springs near Cliff Creek Pass in the northern Wyoming Range, and flows east and north for 15 miles before joining the Hoback River about 2 miles upstream from Kozy Campground.

**Eligibility criteria met:** Scenic and recreation. The visual variety is distinctive. Red rock cliffs add color and interest to the landscape. The Cliff Creek Trail passes from forest through sagebrush/aspen hillsides, rock outcrops, and dense willow bottoms to Cliff Creek Falls, with high mountains in the background. Cliff Creek Falls is a destination for day hikers, 6 miles from the trailhead. Beyond Cliff Creek Falls, the creek runs through the open basin of Horse Heaven Meadows to Cliff Creek Pass on the crest of the Wyoming Range, giving access to the Wyoming Range National Recreation Trail.

**Potential classification:** Wild--source to Cliff Creek. Falls trailhead, 7 miles.

**The Hoback River** (Segments 8 and 9) is located in Sublette, Lincoln and Teton Counties. It springs on the eastern slope of the Wyoming Range east of Deadman Mountain lookout, and flows northeast for 20 miles before meeting U.S. 189/191, which parallels the river for the remainder of its length. It flows into the Snake River at Hoback Junction. Two segments of the Hoback have been found outstanding: the upper canyon from the river's source to the end of Forest Road #30710 (10 miles), and the lower canyon, from Cliff Creek to the confluence with the Snake River (15 miles).

**Eligibility criteria met:** Scenic, wildlife, geologic, and recreation. The visual quality of the corridor is outstanding in its uppermost stretches and the lower canyon, its landscape elements and attractions highly diverse. US 191/189 runs parallel to the river for 30 miles; it is part of the Wyoming Centennial Scenic Byway. The river corridor serves as an important migration route for wildlife, and its lower canyon is especially important for wintering bighorn sheep, elk, deer, and moose. Bald eagles forage along the river. There are outstanding opportunities for viewing wildlife in the lower canyon. Geologic features include Battle Mountain and other landmarks that are described in geologic roadside guides. The lower river segment is becoming increasingly popular for whitewater kayaking and draws boaters from a wide region.

**Potential classification:** Wild- source to end of forest road 30710, 10 miles (Segment 8).

**Recreation**--Cliff Creek to confluence with Snake River, 18 miles (Segment 9).

**Granite Creek (10)** is a tributary of the Hoback River, located in Teton and Sublette Counties. It begins at Turquoise Lake in the Gros Ventre Wilderness, and flows in a wide arc to the south. It leaves the wilderness just upstream from Granite Hot Springs, then flows into the Hoback River 9 miles south of the hot spring.

**Eligibility criteria met:** Recreation, scenic, and geologic. There are a variety of developments in the lower segment that serve the recreationist, including a resort, trailheads, a 50 unit campground, and Granite Hot Springs mineral pool. The ten-mile gravel road ends at the hot springs. Recreation use is high year-round Granite Creek is used in the spring and summer for fishing, hiking, camping, and kayaking, for developed recreation and scenic driving all summer, hunting in fall, and for snowmobiling and cross-country skiing in winter. Commercial snowmobile and dog sled trips are offered to the hot springs in winter. The creek corridor attracts visitors from around the region. Granite Falls and Granite Hot Springs are geologic features of special interest.

**Potential classification:** Wild--source to end of Granite Creek Road, 12 miles.

**Scenic,** Granite Hot Springs to confluence with Hoback River, 9 miles.

**Willow Creek (11)** is located in Teton and Lincoln Counties. It heads at Pickle Pass in the Wyoming Range, and flows north for over 20 miles to join the Hoback River just west of Camp Davis.

**Eligibility criteria met:** Recreation (wildness), wildlife, and ecological. The only access to this large drainage is by a network of trails, including the Wyoming Range National Recreation Trail, the northern terminus of which is located at Bryan Flat. There is an outstanding opportunity for solitude and primitive recreation, and the area attracts visitors from all over the country, particularly during the big game hunting season. Fishing is another activity that attracts visitors from around the region and country; several commercial outfitters operate in the area. There is significant diversity in the vegetation; old growth spruce bottoms, mixed conifer forest, sagebrush-covered slopes, and aspen. The drainage begins in the subalpine forest on the crest of the Wyoming Range at Pickle Pass, and drops to join the Hoback River over 3000 feet lower. With this range of elevations in a relatively short distance, there is a great deal of diversity of habitats, and richness of wildlife species.

**Potential classification:** Wild--source to confluence with Hoback River, 20 miles.

**The Snake River (12)** is located in Teton and Lincoln Counties. The segment described here is a 25-mile section between South Park Bridge and Palisades Reservoir.

**Eligibility criteria met:** Scenic, recreation, wildlife. This segment was studied for inclusion in the Wild and Scenic Rivers system a decade ago, and the lower 13.5 miles were recommended as a Scenic River by the Secretary of Agriculture. Congress has not acted upon that recommendation, but this river segment remains eligible for consideration. Its landscape variety is distinctive, and it attracts great numbers of visitors--over 100,000 in a two-month period--from all over the world. There are several developed campground, picnic sites, and boat launches in the river corridor to serve floaters, fishermen, and travelers. The endangered bald eagle is a year-round resident of this section of the river, using it for nesting, foraging, and winter range.

**Potential classification:** Recreation--South Park Bridge to Cabin Creek, 13 miles.

**Scenic**—Cabin Creek to Palisades Reservoir, 12.5 miles.

**Bailey Creek (13)** is located in Lincoln County. It runs from the divide with the Little Greys River north for 10 miles into the Snake River.

**Eligibility criteria met:** Wildlife and geologic. Bald eagles are frequently seen, and known to nest in the lower section near Snake River. The corridor is used by moose and elk, and the lake contains a fish population of fine-spotted cutthroat trout (a possible pure native strain) which attracts eagles and osprey. Ducks and other water birds use the lake for nesting and feeding. Bailey Lake, originally a small glacial pond, was greatly enlarged by a massive landslide that continues to build a natural dam at the lake's outlet. The landslide and lake are examples of surficial geologic action that have potential for interpretation.

**Potential classification:** Wild--10 miles.

**Wolf Creek (14)** is located in Lincoln County. It springs near the crest of the Snake River Range at Indian Peak, and flows south to join the Snake River above Palisades Reservoir.

**Eligibility criteria met:** Recreation, with outstanding features being the variety of landscapes and opportunities for primitive recreation in a pristine setting

**Potential classification:** Wild--10 miles.

**The Gros Ventre River (15)** is located in Teton County. It springs in the Gros Ventre Mountains, and flows east in the Gros Ventre Wilderness for about 15 miles. The lower river is accessed by the Gros Ventre River Road.

**Eligibility criteria met:** Wildlife, geologic, historic, recreation, and scenic. The Gros Ventre River corridor provides important winter range for elk, moose, and bighorn sheep, is used during the summer by nesting birds, including trumpeter swans, sandhill cranes, and a variety of ducks. It is used by numerous species of birds of prey, including bald eagles and peregrine falcons, both of which nest in the corridor. The river environment and adjacent hillsides have unique geologic features which include the Gros Ventre Slide and Grey, Red, and Lavender Hills. The colored sedimentary rocks have sparse vegetation and are therefore quite striking and unusual features for the northern Rockies; they look more typical of the Colorado Plateau. The Gros Ventre Slide is designated as a geologic area and has a developed interpretive trail. This landslide, which occurred in 1925 and is about 600 acres in size, formed Lower Slide Lake.

Historic values include significant prehistoric sites: one with artifacts up to 10,000 years old, another with the only known petroglyph on the forest. Large stone circle sites of undetermined age are also found in the river corridor. There is one historic cabin currently on the National Register of Historic Places. The

river corridor has been used for millennia by humans, and has the most potential to yield significant archeological information on the forest.

**Potential classification:** Wild--source to Horn Ranch, 12 miles

**Scenic**--Horn Ranch to Forest boundary, or Slide Lake, 28 miles.

**Crystal Creek (16)** is a major tributary of the Gros Ventre River, located in Teton County. It flows northward from the Gros Ventre Divide to the Gros Ventre River, a distance of approximately 15 miles. Most of this creek is located in the Gros Ventre Wilderness.

**Eligibility criteria met:** Wildlife and scenic. The visual variety and diversity of habitats from the source among 11,000-foot peaks to its confluence with the Gros Ventre River are outstanding. Wildlife values include an important migration route for bighorn sheep and elk, and nesting sites for the peregrine falcon.

**Potential classification:** Wild--source to Gros Ventre Wilderness boundary, 12 miles.

**Scenic**--End of road to confluence with Gros Ventre River, 3 miles.

**Blackrock Creek (17)** is located in Teton County. It heads near Togwotee Pass, and flows west south of, and parallel to, U.S. 26/89, before joining the Buffalo Fork near the forest boundary.

**Eligibility criteria met:** Scenic and wildlife. Its distinctive scenic values include the landscape in which it is located, with views of features such as the Teton Range, the Breccia Cliffs, and other mountains. With a segment of the Wyoming Centennial Scenic Byway (U.S. 26/89) running parallel to the creek, there are numerous opportunities for interpretation; currently there are several interpretive sites, campgrounds, and resorts along this road. The creek corridor is used by migrating elk, and by moose, deer, sandhill cranes, Canada geese, and numerous ducks. It offers a variety of riparian habitats, including small ponds of standing water, which attract a rich diversity of wildlife. Its location relative to the highway makes it ideal for wildlife viewing.

**Potential classification:** Scenic--source to Forest boundary, 20 miles.

**Pacific Creek (18)** is located in Teton County. Nearly all of this river segment is located in the Teton Wilderness. The creek begins at Parting of the Waters, where Two Ocean Creek splits into Pacific and Atlantic Creek on the Continental Divide. It flows southwest to the wilderness boundary, downstream of which it is accessed by the Pacific Creek Road from Grand Teton National Park.

**Eligibility criteria met:** Recreation, geologic, ecological, and wildlife. From its source at Parting of the Waters National Natural Landmark to the forest boundary, Pacific Creek lies nearly entirely within the Teton Wilderness. There are trails nearby for much of its length, but these provide little intrusion into the



wild character of the river segment. There is a high opportunity for solitude in a primitive setting. One of the more striking features is a large part of the "Teton Tornado" blowdown in part of the creek's corridor, of scientific interest as the highest-elevation windstorm of its type recorded. Parting of the Waters is a unique geographic landmark: at this point, Two Ocean Creek flows directly over the Continental Divide, and splits into two creeks: Pacific Creek, which flows into the Snake, and Atlantic Creek, a tributary of the Yellowstone.

**Potential classification:** Wild--source to Teton Wilderness boundary, 25 miles.

**Scenic--**Wilderness boundary (end of road) to confluence with Snake River, 8 miles.

**The Snake River**, headwaters ( 19), is located in Teton County, in the northern Teton Wilderness. The river flows for about 7 miles through open meadows and forested hills before entering Yellowstone National Park.

**Eligibility criteria met:** Historic. These headwaters of a regionally significant river, its association with historical events that are interpreted for international visitors, and its continuity with eligible river segments downstream (in both Yellowstone and Grand Teton National Parks), are factors contributing to its eligibility.

**Potential classification:** Wild, 7 miles.

**The Buffalo Fork** (20) of the Snake River consists of three major tributaries and a main stem below their confluence, in Teton County. The North, Soda, and South Forks of the Buffalo are entirely within the Teton Wilderness. Near the wilderness boundary at Turpin Meadows, the branches flow together. From Turpin Meadow downstream to the confluence with the Snake River, the Buffalo Fork is accessed by the Buffalo Valley Road and by U.S. 26/89. The lowermost reach of the river is located within Grand Teton National Park

**Eligibility criteria met:** Recreation, scenic, and wildlife. Over 80% of the river is in a wilderness or primitive setting, and has a high degree of natural character. Its forks penetrate the Teton Wilderness, and head in the alpine country of the Continental Divide. Numerous falls and lakes are found on the river forks and their tributaries there are extensive meadows through which the streams meander. The lower segment is well known for its spectacular views of the Teton Range and the pastoral setting of the Buffalo Valley. The river corridor is habitat for two species of special concern: the threatened grizzly bear and the endangered bald eagle, which nests in its lower section. The river valley provides an important migration route for elk, which winter in Jackson Hole, and is well known for its large population of wintering moose. The Buffalo River is a major cold water sport fishery for the native Snake River (fine-spotted) cutthroat trout population.

**Potential classification:** Wild, upstream from Turpin Meadows, 68 miles

**Scenic,** Turpin Meadows to Grand Teton National Park, 16 miles.

## **YELLOWSTONE RIVER SYSTEM**

**The Yellowstone River** (21) is located in Teton and Park Counties. It heads on the slopes of Younts Peak, highest point in the Teton Wilderness, and flows northwest for 25 miles before entering Yellowstone National Park. The upper Yellowstone River and its major tributaries are entirely within the Teton Wilderness.

**Eligibility criteria met:** Scenic, wildlife and fish, historic and ecological. The upper reaches of the Yellowstone River are located in some of the most remote wilderness in the continental United States. Outstanding scenic features include volcanic cliffs, cascades, narrow gorges, waterfalls, and the broad expanses of riparian vegetation at Yellowstone Meadows. The river's association with the history of wildland conservation in this country, with Yellowstone National Park as the nation's first, gives it historic significance. Its vegetation diversity and productivity as a spawning stream for trout make it important habitat for the grizzly bear and bald eagle, both of which concentrate in the river corridor when the fish are spawning. Peregrine falcons are known to nest in the river corridor as well, and it is likewise used by a variety of more common wildlife species, including ospreys, golden eagles, trumpeter swans, pelicans, sandhill cranes, Canada geese, and big game species.

**Potential** classification: Wild--source to boundary of Teton Wilderness, 28 miles. That segment entering Yellowstone National Park is also eligible.

**The Thorofare River** (22; shown on some maps as Thorofare Creek) is located in Park and Teton Counties. It heads on the Absaroka Crest and flows northwest into Yellowstone National Park before joining the Yellowstone River. Its major tributary, Open Creek, is also considered eligible as a Wild River.

**Eligibility criteria met:** Scenic, wildlife and fish, and ecological. The Thorofare River (also referred to as Thorofare Creek on some maps) is a major tributary of the Yellowstone. Like the main stem, the Thorofare River begins in the high volcanic cliffs of the Absaroka Mountains, tumbling over cascades and falls, in remote and pristine wilderness. Outstanding scenic features include volcanic cliffs, cascades, narrow gorges, waterfalls, and the broad expanses of riparian vegetation in the valley of the lower river. The Thorofare River shares the Yellowstone's attributes as a highly productive fishery for the Yellowstone Cutthroat Trout, and its value as a spawning stream make it important habitat for the grizzly bear and bald eagle.

**Potential** classification: Wild--source to Teton Wilderness boundary, 25 miles main stem;

**Open Creek**, 10 miles. Just north of the boundary lies the confluence of the Thorofare and Yellowstone Rivers; the segment downstream from the Teton Wilderness is also eligible.

**Atlantic Creek** (23) is located in Teton County, a tributary of the Yellowstone River. It begins at Parting of the Waters, where Two Ocean Creek splits to create Pacific and Atlantic Creeks. It flows northeast to join the Yellowstone River at Yellowstone Meadows, near the Yellowstone National Park boundary. Atlantic Creek is located entirely within the Teton Wilderness.

**Eligibility criteria met:** Wildlife, ecologic, geologic. The wilderness setting is outstanding, with a relatively undisturbed natural landscape and little human intrusion. The river corridor, with its wide meadows and lush riparian area, is used by numerous wildlife species. Parting of the Waters, where Two Ocean Creek splits to become Pacific Creek (draining into the Snake River) and Atlantic Creek (draining into the Yellowstone River) is an existing National Natural Landmark.

**Potential classification:** Wild--10 miles, Parting of the Waters to confluence with Yellowstone River.

## GREEN RIVER SYSTEM

**The South Fork of Fontenelle Creek** (24) is located in Lincoln County. Its source lies in the remote backcountry of Commissary Ridge, from which it flows south to the Forest boundary.

**Eligibility criteria met:** Scenic and geologic. The narrow, deep gorge of the South Fork provides dramatic scenery of geologic origin. It is the only drainage on the forest with such a readily-identified mix of textbook Overthrust geology with steeply dipping sedimentary beds, and well-preserved glacial features.

**Potential classification:** Wild--9 miles, source to private holding.

**Scenic**--1 mile, private land at Forest boundary.

**LaBarge Creek** (25) is located in Lincoln County. It flows southeast from its source on Commissary Ridge for approximately 20 miles before leaving the national forest. It is entirely accessible by Forest Road #10138.

**Eligibility criteria met:** Historic. The Lander Cutoff of the Oregon Trail passes along the creek from Witherspoon Pass to LaBarge Meadows. The trail is part of the National Historic Trail system, and is easily seen by visitors travelling the LaBarge Creek Road, making opportunities for historic interpretation outstanding.

**Potential classification:** Recreation--LaBarge Guard Station to Nameless Creek, 10 miles.

**Big Fall Creek** (26) is located in Sublette and Lincoln Counties, a 4-mile tributary of LaBarge Creek. It springs from the south slope of Deadline Ridge, and meets LaBarge Creek at the Forest boundary. Big Fall Creek is accessed by forest road #10089.

**Eligibility criteria met:** Scenic, hydrologic, and geologic. Multiple waterfalls over spring-deposited travertine and year-round flowing water are distinctive attributes of this creek. The creek's series of travertine terraces, deposited by cold water springs, is unique to the region. This series of terraces is considered a feature of special interest with regional significance.

**Potential classification:** Scenic--4 miles, source to confluence with LaBarge Creek.

**The Green River (27)** is located in Sublette County. It springs at Green River Pass in the Bridger Wilderness, and flows northwest for 15 miles to Green River Lakes. From that point, the river leaves the wilderness, and flows in a wide arc heading west, then south, to the forest boundary. It is accessed by the Green River Lakes Road.

**Eligibility criteria met:** Scenic, fish and wildlife, recreation (wilderness), and historic. Outstanding scenic values are created by the classic glacial valley through which the river passes, which includes spectacular scenic attractions such as Squaretop Mountain, towering over Green River Lakes. The river is a regional and national recreation attraction. Species of special interest known to inhabit the Green River corridor include the Kendall Warms Springs Dace, of which there is only one population (at Kendall Warm Springs). Whooping cranes have been observed in the corridor in the past, and bald eagles nest and forage on the river. The river corridor provides a regionally important wildlife migration route, particularly for pronghorns which summer in Jackson Hole and spend their winters in the upper Green River valley. Known historic sites include the Gros Ventre Lodge (Billy Wells Dude Ranch), the Tie Camp Cemetery, and Osborne Home-stead, all of which are eligible for inclusion in the National Register of Historic Sites. There are outstanding opportunities for interpretation along the river

**Potential classification:** Wild--15 miles, source to Green River Lakes

**Scenic**--15 miles, lakes to Forest boundary

**Tosi Creek (28)** is a 12-mile tributary of the upper Green River, located in Sublette County. It springs in the Gros Ventre Wilderness and flows east, joining the Green River approximately one mile south of Dollar Lake.

**Eligibility criteria met:** Recreation (wilderness) and geologic. Tosi Creek contains unique features such as an area of Karst topography, typical of limestone bedrock eroded by water, in an alpine basin, where the creek runs underground in places. The "alpine Karst" area was identified in the Forest Plan as a potential National Natural Landmark. The upper reaches in the Tosi Basin are included in the Gros Ventre Wilderness, in one of its most remote areas.

**Potential classification:** Wild--12 miles, source to end of primitive road.

**Scenic**--lower 3 miles to confluence with the Green River.

**Roaring Fork Creek (29)** is a tributary of the upper Green River located in Sublette County. It begins in the northern edge of the Bridger Wilderness, and flows west, to join the Green River four miles downstream from Green River Lakes.

**Eligibility criteria met:** Scenic. The landscape elements and attractions in the creek's corridor are highly diverse over the majority of the river segment, owing in large part to the change in elevation rock types from its source to its confluence with the Green River.

**Potential classification:** Wild--12 miles, source to confluence with Green River.

**Pine Creek (30)** is located in Sublette County, east of Pinedale. It is entirely within the Bridger Wilderness, from its source on the south slope of Green River Pass to its delta at the north end of Fremont Lake.

**Eligibility criteria met:** Recreation (wildness), scenic, and geologic. Pine Creek runs from its source at Green River Pass through a deep, classic glacial valley. Much of the heavily used trail system is beyond the creek corridor; the canyon is remote and there is a high opportunity for solitude. It can be viewed from the Skyline Drive, giving it excellent interpretive possibilities without on-site disturbance.

**Potential classification:** Wild, source to Fremont Lake, 10 miles.

**North Piney Creek (31)** is located on the east side of the Wyoming Range, in Lincoln and Sublette Counties. Roaring Fork, North Piney, Lunch, and Lake Creeks flow together and then proceed east to the forest boundary west of Big Piney.

**Potential classification:** Wild- Roaring Fork and North Piney Creeks, source to confluence of Lake and North Piney Creeks--7 miles.

**Forest Wide summary of potential Wild and Scenic Rivers:**

Wild Rivers	386 Miles
Scenic	169 Miles
Recreation	67 Miles
Total	602 Miles

Table of standards to apply to corridors of all eligible river segments, regardless of DFC. A corridor is defined as the land on both sides of the river within 1/4 mile of its banks (1/2 mile total).

Table of standards to apply to corridors of all eligible river segments, regardless of DFC. A corridor is defined as the land on both sides of the river within 1/4 mile of its banks (1/2 mile total).

RESOURCE STANDARD	WILD RIVERS	SCENIC RIVERS	RECREATION RIVERS
Visual quality objectives	<p>Preservation in river corridor.</p> <p>VQO is P or R* within 3 miles of river or adjacent trail.</p>	<p>Retention in corridor</p> <p>VQO is R/PR* within 3 miles of river or access road or trail.</p>	<p>Retention in corridor</p> <p>Same as for Scenic River.</p>
<p>* The VQO that applies depends on variety class. For a Class A landscape, the more restrictive VQO will apply. This standard is not intended to preclude the construction of visitor facilities in the viewing zones relative to the river; access roads, trails, boat launches, etc. are allowed in eligible scenic and recreation river corridors.</p>			
Timber management	<p>None within 1/4 mi of river, except as hazard removal.</p>	<p>Allowed as long as no substantial adverse impacts to the river or its immediate environment are caused. Timber is managed to emphasize visual quality.</p>	<p>Same as for scenic.</p>
Water developments	<p>Prohibited. No flood control, irrigation, or hydroelectric structures or diversions.</p>	<p>Same as for wild river.</p>	<p>Minor diversions and impoundments are acceptable, as long as river is left largely natural-appearing and riverine. Existing structures may be maintained.</p>
Mining	<p>No surface disturbance in corridor, subject to existing rights.</p>	<p>No disturbance within river corridor unless it meets VQO of Retention, subject to existing rights.</p>	<p>No disturbance in corridor that does not meet VQO R, subject to existing rights.</p>

8

<sup>8</sup> Forest Plan Amendment # 2 3/92 (Later Amended in 2013)

RESOURCE STANDARD	WILD RIVERS	SCENIC RIVERS	RECREATION RIVERS
Energy leasing	Rivers in wilderness withdrawn; NSO in river corridor for rivers not in wilderness, subject to existing rights.	Energy leasing with surface occupancy allowed, subject to visual quality standards, and subject to existing rights.	Same as for Scenic Rivers.
<p>Standards for energy leasing above apply to all eligible National Rivers, and a stipulation will be included in each lease to protect the values of the rivers until suitability studies are complete. After suitability studies have resulted in nomination and classification of rivers, those not nominated will no longer be subject to the stipulations that apply to the river corridor.</p>			
Roads and bridges	Trail bridges allowed, No roads or bridges in corridor or in narrow, incised canyons.	Roads may be located in the corridor, as long as they are not conspicuous for a long segment of the eligible river.	Roads are allowed in the corridor; river access points and bridges may be numerous.
Grazing by livestock	Allowed, subject to riparian area and range utilization standards.	Same as for Wild River.	Same as for Wild River.
Recreation developments	Simple facilities of native materials, for primitive recreation.	Developed facilities for public recreation use are allowed, screened from river, except boat ramps and occasional river access points.	Campgrounds, boat launch and swimming sites, and private developments are common, subject to visual quality standards.
Structures	None in corridor, except existing ones.	Short segments may have concentrations of structures New ones must meet VQOs.	Structures may occur along entire segment. Subject to visual quality standards.
Agriculture	Not applicable.	Traditional pasture and cultivated land is allowed in some areas.	Pastures and cultivation may be evident in entire river segment.

## Supply Conditions

Table 2-1 compares the resource production and use levels that should be provided by the Bridger-Teton National Forest. The levels displayed represent current management and supply potentials. Supply potentials will change as natural resource problems are addressed by implementing the preferred alternative. The following define the levels portrayed in the figure:

**Supply Potential (Maximum Resource Outputs)** - Supply potential is the maximum capability of the Bridger-Teton National Forest to provide single resource emphasis levels with associated costs and outputs. This assumes that management direction complies with minimum standards of applicable laws and regulations, including prevention of significant or permanent impairment of long-term productivity of the land.

**Production Levels Under Current Management** - Current management is the level of outputs and uses provided by presently approved resource plans. This level indicates what could be attained on a resource-by-resource basis, looking strictly at individual resource plans with no attempts to resolve conflicts. In the case of recreation and wilderness outputs, current management is shown as the theoretical capacity in Thousand Recreation Visitor Days (MRVD).



**Current Outputs and Supply Potentials Fisheries - Recreational Angling**

<u>Drainage</u>	<u>Present Level</u>	<b>Estimates</b>				
		<b>1988 1995</b>	<b>1996 2005</b>	<b>2006 2015</b>	<b>2016 2025</b>	<b>2026 2035</b>
<b>Current Management</b>						
<b>Green River</b>						
Lakes & Reservoirs	1,252 d/a/y	1,252	1,252	1,252	1,252	1,252
Rivers & Streams	3,223 d/m/y	3,223	3,223	3,223	3,223	3,223
<b>Bear River</b>						
Lakes & Reservoirs	7 d/a/y	7	7	7	7	7
Rivers & Streams	306 d/m/y	306	306	306	306	306
<b>Snake River</b>						
Lakes & Reservoirs	1,086 d/a/y	1,086	1,086	1,086	1,086	1,086
Rivers & Streams	3,003 d/m/y	3,003	3,003	3,003	3,003	3,003
<b>Yellowstone River</b>						
Lakes & Reservoirs	1 d/a/y	1	1	1	1	1
Rivers & Streams	90 d/m/y	90	90	90	90	90
<b>Green River</b>						
Lakes & Reservoirs	3,792 d/a/y	3,792	3,792	3,792	3,792	3,792
Rivers & Streams	10,362 d/m/y	10,362	10,362	10,362	10,362	10,362
<b>Bear River</b>						
Lakes & Reservoirs	21 d/a/y	21	21	21	21	21
Rivers & Streams	930 d/m/y	930	930	930	930	930
<b>Snake River</b>						
Lakes & Reservoirs	5,528 d/a/y	5,528	5,528	5,528	5,528	5,528
Rivers & Streams	14,220 d/m/y	14,220	14,220	14,220	14,220	14,220
<b>Yellowstone River</b>						
Lakes & Reservoirs	3 d/a/y	3	3	3	3	3
Rivers & Streams	745 d/m/y	745	745	745	745	745

**Wyoming Game and Fish Department Comprehensive Plan. The number of anglers and total catch is expected to increase. The catch per unit effort and quality of experience may be reduced in alternatives depending upon site-specific impacts or cumulative effects, d/a/y= fishermen days/acre/year and d/m/y= fishermen days/miles/year**

**Current Outputs and Supply Potentials Recreation**

**Semi-primitive Non-motorized ROS**

(Thousand Recreation Visitor Days)

	Present	<del>1986</del>	<del>1996</del>	Estimates		
	Level	<del>1986</del>	<del>1996</del>	<del>2006</del>	<del>2016</del>	<del>2026</del>
	<del>1985</del>	<del>1995</del>	<del>2005</del>	<del>2015</del>	<del>2025</del>	<del>2035</del>
Current Management	86.2	85.5	83.	79.7	75.0	74.5
Supply Potential		423.7	405.	392.5	387.6	385.3
Forest Plan Objectives		85.4	83.	88.7	87.8	87.3

**Current Outputs and Supply Potentials Recreation-**

**Semi-primitive Motorized ROS**

(Thousand Recreation Visitor Days)

	Present	<del>1986</del>	<del>1996</del>	Estimates		
	Level	<del>1986</del>	<del>1996</del>	<del>2006</del>	<del>2016</del>	<del>2026</del>
	<del>1985</del>	<del>1995</del>	<del>2005</del>	<del>2015</del>	<del>2025</del>	<del>2035</del>
Current Management	230.5	237.4	246.8	254.3	243.8	242.3
Supply Potential		456.9	454.1	452.0	450.1	449.0
Forest Plan Objectives		236.7	252.1	264.3	258.3	257.2

**Current Outputs and Supply Potentials Recreation Roded Natural ROS  
(Thousand Recreation Visitor Days)**

	Present Level	<del>1986</del>	<del>1996</del>	Estimates <del>2006</del>	<del>2016</del>	<del>2026</del>
			<del>2005</del>	<del>2015</del>	<del>2025</del>	<del>2035</del>
Current Management	625.4	651.4	701.0	767.8	789.7	805.5
Supply Potential		4,155.1	4,303.1	4,400.4	4,444.5	4,461.5
Forest Plan Objectives		664.5	706.7	735.9	758.7	762.9

**Current Outputs and Supply Potentials Recreation Wilderness  
(Thousand Recreation Visitor Days)**

	Present Level	<del>1986</del>	<del>1996</del>	Estimates <del>2006</del>	<del>2016</del>	<del>2026</del>
		<del>1995</del>	<del>2005</del>	<del>2015</del>	<del>2025</del>	<del>2035</del>
Current Management	323.8	324.0	324.	324.0	324.0	324.0
Supply Potential		502.1	502.	502.1	502.1	502.1
Forest Plan Objectives		310.0	310.	310.0	310.0	310.0

**Current Outputs and Supply Potentials Range -Grazing  
(Thousands of AUMs)**

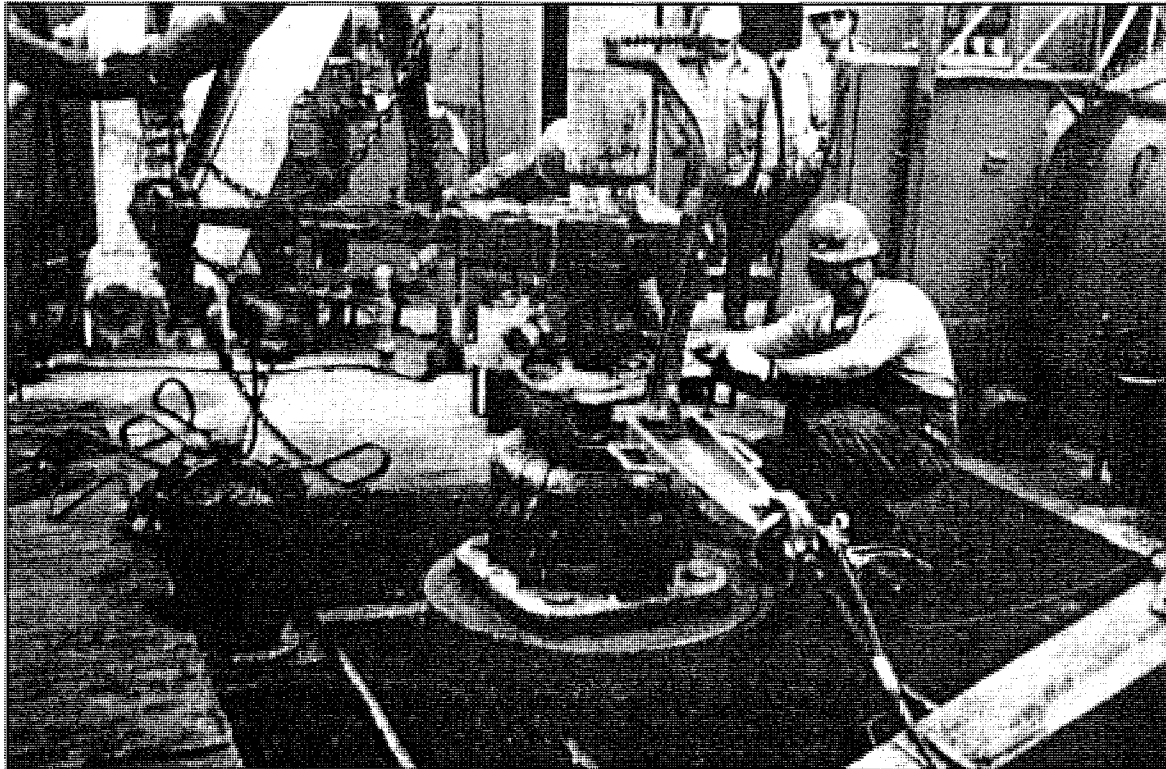
	Present Level <del>1985</del>	<del>1986</del>	<del>1996</del>	Estimates		
		<del>1995</del>	<del>2005</del>	<del>2006</del>	<del>2016</del>	<del>2026</del>
Current Management	253.3	253.7	253.5	254.0	254.3	254.8
Regional Objectives		284.0	288.0	288.0	289.0	289.0
Supply Potential		269.1	275.6	283.1	291.3	300.3
Forest Plan Objectives		253.7	253.3	253.2	253.0	252.9

**Current Outputs and Supply Potentials Timber -Sale Offerings:  
Sawtimber and Roundwood  
(Million Board Feet)**

	Present Level <del>1985</del>	<del>1986</del>	<del>1996</del>	Estimates		
		<del>1995</del>	<del>2005</del>	<del>2006</del>	<del>2016</del>	<del>2026</del>
Current Management		17.3	17.	17.5	17.5	17.5
Regional Objectives		39.0	46.	43.0	39.0	36.0
Supply Potential		119.6	122.	118.5	121.4	118.8
Forest Plan Objectives		12.0	12.	22.0	21.9	21.2

**Current Outputs and Supply Potentials Minerals and Energy:  
Lands Suitable for Leasing  
(Thousands of Acres)**

	Present Level	1985	1995	Estimates 2005	2015	2025	2035
Current Management	2,030.7	2,030.7	2,030.7	2,030.7	2,030.7	2,030.7	2,030.7
Supply Potential		2,030.7	2,030.7	2,030.7	2,030.7	2,030.7	2,030.7
Forest Plan Objectives		1,916.8	1,916.8	1,916.8	1,916.8	1,916.8	1,916.8



## Demand Conditions and Trends

The following data are merely projections of existing natural resource demand conditions and trends into the future, and as such, will not accurately express future conditions. Yet, many of the trends represent facets of existing resource problems to be solved or future resource problems to be avoided. As displayed in the next section, Need to establish or Change Management Direction, and, in Chapter 4, trends contribute to establishing Goals and Objectives addressing the problems.

### Trends in Recreation Use

Records of recreation use on the Bridger-Teton National Forest show no particular trend. Use levels have been high, but have remained stable within a 10 percent range for the past nine years. For planning purposes, recreation use is assumed to continue at the levels and within the reported range.

The non-roaded recreation settings on the National Forest are classed as Semi-primitive-Motorized and Non-motorized- and primitive, including classified Wilderness. As with developed recreation, no strong trends are apparent, although use in Wilderness appears to have increased during the past few years.



Some trails are deteriorating due to heavy use or poor design.

## Trends in Wilderness Use

In 1985, Wilderness use was 323,800 RVDs, accounting for about 17 percent of the total recreation use on the Bridger-Teton National Forest. As with the developed sites on the National Forest, a comparison between the apparent supply in acres of Wilderness and the recreational use thereof may indicate a surplus of Wilderness settings. But, although the Wilderness acreage on the National Forest exceeds 1.2 million acres, there are growing problems with overcrowding and impacts on soil, water, and vegetation.

Opportunities to disperse recreation use to little-used parts of the Wilderness may exist, but may not be compatible with Wilderness management objectives, which include preserving as much of the classified areas as possible in a pristine state. If expansion of the trail system in Wilderness is used to disperse use, no pristine areas will be left without the imprint of man.



**WILDERNESS USERS ACCOUNT FOR 17 PERCENT OF THE RECREATION USE ON THE NATIONAL FOREST.**

## Trends in Visual Resources

-Most of the Bridger-Teton National Forest is in an undisturbed condition, with an essentially natural landscape. This includes all areas within Wilderness. Classified Wilderness and roadless lands to be managed for Semi-primitive recreation will remain in an undisturbed state.

Some lands on the National Forest that are natural will be altered by activities such as timber harvest, roading, and oil and gas development. Alterations to the natural landscape will be made within the constraints of visual quality objectives (VQOs). Although landscape-altering projects will be designed to meet VQOs, there will be a change in the appearance of some parts of the National Forest. Areas that will be managed to meet VQOs of Retention and Partial Retention will appear natural, even if landscape-altering activities occur. These include National Forest lands that are visible from scenic travel routes.

As existing timber harvest units, road cuts, and other disturbances revegetate, their impact will be reduced over time.

### Trends in Fisheries and Wildlife

Increased demands on all resources has the potential to reduce fisheries production and angler success. Increases in fishing pressure is expected to range from 44 percent to 110 percent from 1980 to 1990 (*Wyoming Game and Fish Department, Region 4 Comprehensive Management Plan*). Most of the fishing pressure is expected to be concentrated on streams and lakes with road and trail access.

Increased demands on all resources has the potential to increase risk to listed threatened and endangered species and to increase the number of species listed. In turn, the public has recognized the importance of threatened, endangered, and sensitive species.

For planning purposes, big-game license demand is assumed to be unlimited within the 50-year planning horizon.

### Trends in Vegetation: Range

Present economic conditions in the livestock industry have decreased the demand for summer forage. Non-use of grazing permits averaged 15 percent from 1983 thru 1987. If this trend continues, permitted numbers may decrease to a number equal to the actual use. Vacant allotments may be combined with adjacent allotments for improved management and more economical operations.





LIVESTOCK GRAZING HAS DECREASED SLIGHTLY IN THE LAST FEW YEARS.

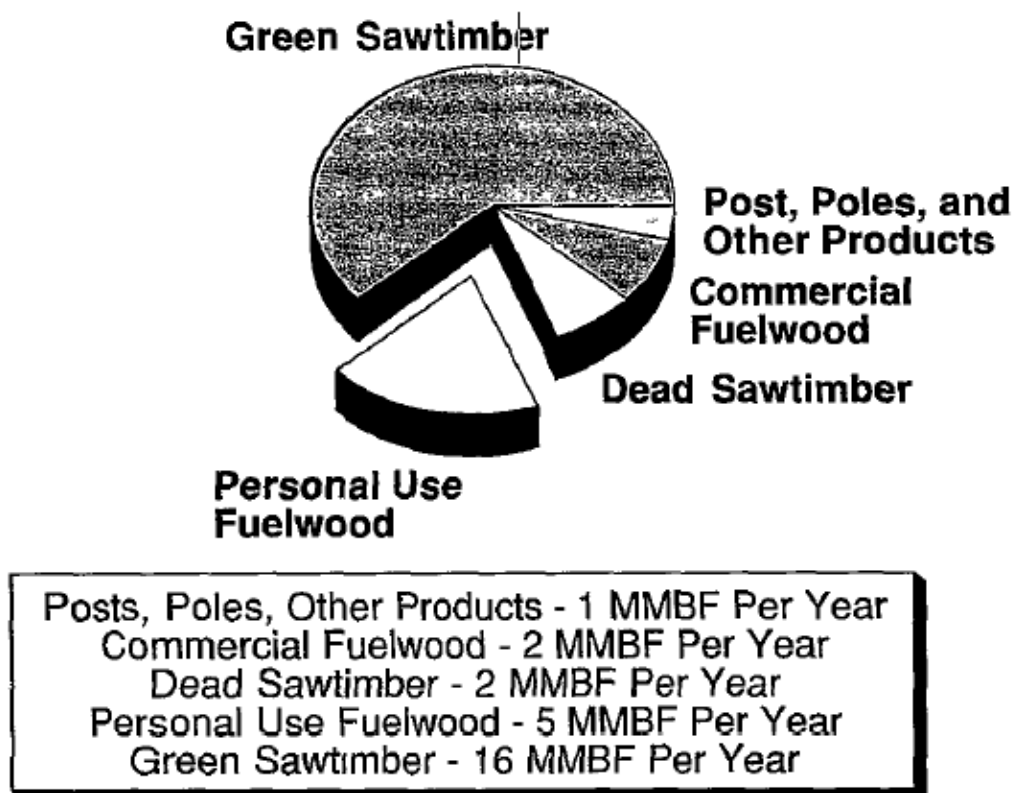


Stocking rates across the Bridger-Teton National Forest are approximately in line with range capacity. However, some allotments may have to be adjusted downward due to poor range conditions, particularly in riparian areas. Improved management may eliminate the need for these adjustments. Loss of permits due to excessive non-use may also help alleviate the situation. Ranchers are working with the Forest Service to improve conditions on the allotments. Some allotments have a potential for increased livestock use.

### Trends in Vegetation: Timber

The past 10-year average of 26 MMBF per year of sawtimber and roundwood attributable to the Bridger-Teton National Forest can be broken down into the following categories:

## Sawtimber and Roundwood Categories



### Trends in Watershed

In the western United States, the demand for water exceeds the amount available for use only in the Colorado River basin. Here, due to the rapid growth in Arizona and southern California, water shortages are likely to occur in the next 10 to 20 years. This situation has resulted in requests for increased water from National Forests in the Upper Green River basin.

In the Bear River basin, the problem of the increase in the level of the Great Salt Lake means that any additional water produced on National Forests is a downstream detriment.

In the Snake River basin, an annual runoff surplus exists beyond the extensive Snake and Columbia River reservoir system. Therefore, there is little demand for increased water from National Forest System lands in the Snake River basin.

Rehabilitation of sheep driveways and drainage control of older Bridger-Teton National Forest roads are the principal opportunities to improve watershed conditions in addition to more limited needs for streambank stabilization. Elimination or mitigation of impacts from future surface-disturbing activities is also crucial to maintaining water quality.

Demand is high for water from the Green River.



## Trends in Minerals and Energy

Oil and gas are the leasable minerals of primary concern on the Bridger-Teton National Forest. Activity at present is low, partially due to lower prices for oil and gas and because no new leases have been issued in the National Forest for several years. Prices are not expected to increase dramatically over the next 10 to 15 years although this is highly dependent on global politics and economics. Activity is expected to increase once leasing resumes and also if prices increase. The Thrust Belt portion of the National Forest is expected to be the area of highest activity. Activity in the Mt. Leidy/Fish Creek Basin area will depend largely on the outcome of two wells Amoco proposes to drill in the area in the near future.

Demand for sand and gravel is expected to increase on Bridger-Teton National Forest administered lands, especially in the Jackson area. Although these products are abundant, the opening of new sand and gravel pits is environmentally sensitive. River beds are a good source of these materials and may be used more in the future.

Interest in locatable minerals, especially placer gold deposits, appears to be increasing. Most of the streams and rivers on the Bridger-Teton National Forest contain some gold as do older deposits such as the Harebell Formation, the Pinyon Conglomerate, and the Pass Peak Formation.

## Trends in Cultural Resources

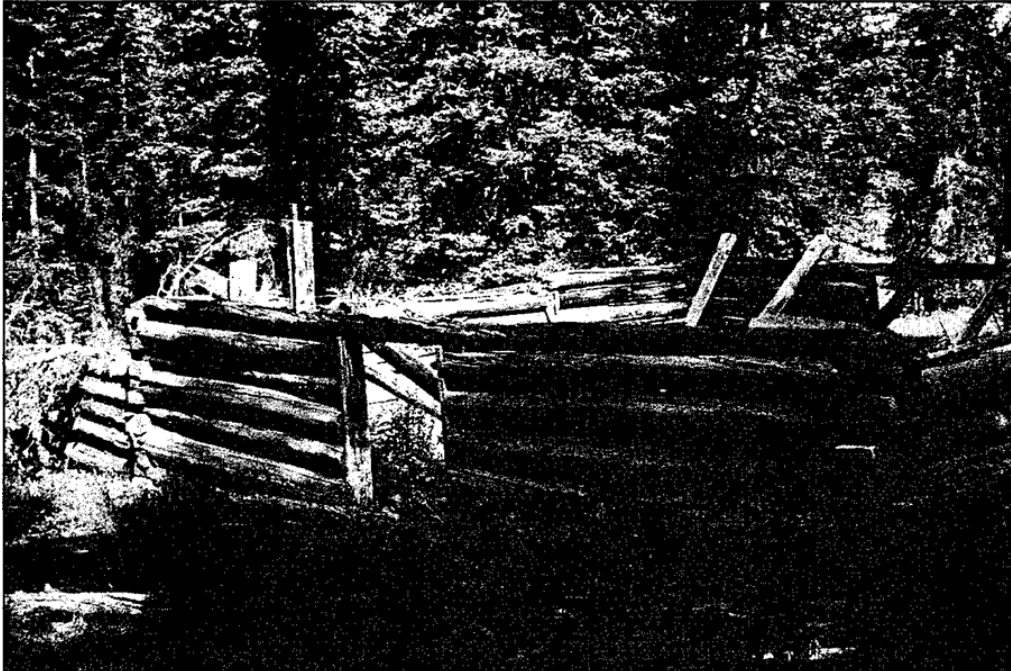
Management of cultural resources will be toward increased protection, inventory, and evaluation. A cultural resources overview of the forest will assist in development of a comprehensive cultural resource program.

Cultural resources projects will include inventory and evaluation of sites ~~to nominate for historic preservation,~~<sup>9</sup> and development of interpretive sites.

The result of increased emphasis on cultural resources will be more complete knowledge of the history and prehistory of the Bridger-Teton National Forest, increased opportunities for public enjoyment of cultural resources, and protection of sites from degradation.

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<sup>9</sup> Amended by Attachment One of the Record of Decision



CULTURAL RESOURCES ARE BEING INVENTORIED

### Trends in Air Quality

The Bridger-Teton National Forest trends will be towards more prescribed burning and natural fire management, resulting in larger amounts of particulates contributed into the atmosphere. However, redesignation or reclassification to non-attainment areas is not likely. Exxon is funding a National Atmospheric Deposition Program site near the Bridger Wilderness and two bulk samplers inside the Wilderness. Data obtained since December, 1984; do not indicate any impacts of Riley Ridge gas sweetening plants in creating acid deposition there.

### Trends in Water Quality

With the anticipated decrease in road building in the Forest Plan, as compared to the past 10 years, the annual additions to stream sediment loads due to new road building should decrease.

### Trends in Soils

Currently, there are 11 watersheds in Class I condition, 38 watersheds in Class II condition and 16 watersheds in Class III condition. Most of the Class III condition watersheds are on the sheep driveways where there has been a slowly improving trend since trailing was stopped in the mid-1970's. Due to many years of soil compaction and erosion, there will probably still be 10 watersheds in Class III

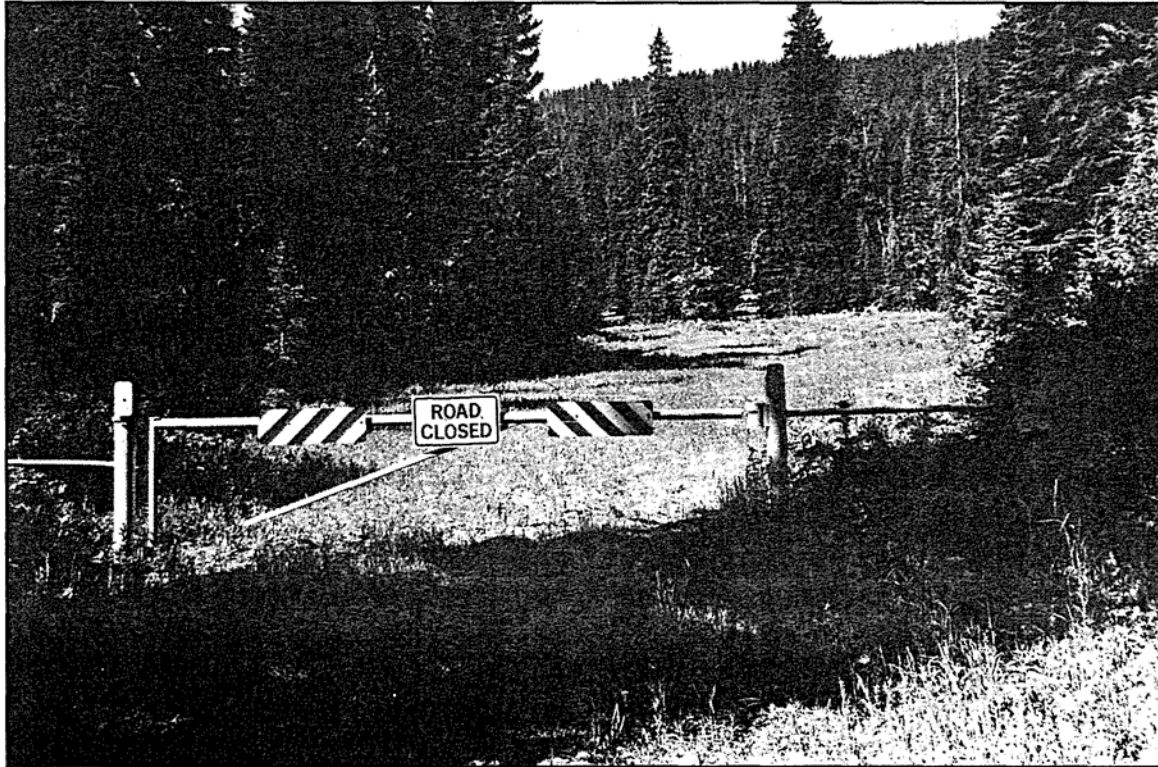
condition in 1995 and 5 watersheds in Class III condition in 2030. This information is based on the current RPA Watershed Assessment for the Bridger-Teton National Forest.

## Trends in Access: Roads

There are about 2,900 miles of road on the Bridger-Teton National Forest of varying standards and use. About 1,400 of these miles were never planned or built by the Forest Service but are "2-track" roads.

The trend will be toward a substantial reduction of "2-track" roads. Erosion and wildlife disturbance will be reduced through closure of the access areas and vegetation of tire tracks. Some present "2-track" roads will be kept open for off highway vehicle (OHV) use. OHV use will be available on designated routes best suited to this recreational activity.

Additional road closures will also be found on the National Forest road system. Most such closures will be on the lower-standard local roads. The purpose of the closures is to reduce erosion, enhance wildlife security, and provide dispersed recreation opportunities, where emphasized. Most of the popular collector and arterial roads will remain open to public use and enjoyment. Some closed roads will be opened periodically to allow public access while retaining the desired security. Longer-term road closures will not be gated but totally blocked and the roadbed revegetated. The road system remaining open will be maintained or improved provide to the necessary road standard for low erosion potential and good traffic flow.



**ROAD CLOSURES WILL BE USED TO PROVIDE WILDLIFE SECURITY.**

There will be some new road construction primarily for timber access and mineral activity. New timber access roads will be very low standard and widely spaced to allow timber removal while causing minimal disturbance of wildlife and soil. Additional short-term road closures may be found in areas adjacent to timber or mineral activity. These additional closures are to provide areas of wildlife security during temporary displacement from the activity area.

### Trends in Access: Trails

Trails have been built into most backcountry areas on the Bridger-Teton National Forest. The trail system was largely built to meet objectives other than public recreation, such as fire protection or livestock herding. Trails will be evaluated for need and adequacy, and many of them may be reconstructed or relocated to better serve future needs.

Trail maintenance will be designed to protect soil and vegetation while serving recreation needs. This will mean more work on the trail treads, including drainage structures and protection of wet sites.

Trails will be managed to serve public use and to be consistent with the ROS setting in which they are located. Seasonal or permanent closures may be used to redistribute use; closed trails will typically be those that are not needed for access to an area, places where there are multiple trails. In places where new public access to the National Forest is gained, trails will be built if needed to allow public use, and if they are needed to meet objectives for the ROS setting.

Winter sports trails and other trails designed for specialized use will increase in number. The system of ski and snowmobile trails will be expanded, and trails designed for use by vehicles, including mountain bikes, will be emphasized in some areas. Cooperation with other agencies and land management entities will be increased to provide a trail system to meet needs of a variety of recreation uses.



NEW SNOWMOBILE TRAILS WILL BE DEVELOPED.

## Trends in Land Ownership and Trespass

The lack of an easement has and will continue to restrict public access, and increase administrative and project costs. History has shown that the problem will continue to grow. Private landowners who were once willing to allow access without an easement are becoming more restrictive. Opportunities exist now to work with the private land owner to resolve the access problems. Unless the problem is resolved, the public will lose more and more of its use of National Forest System lands. The public will also pay more to administer those lands.

Trends toward more residential development on private lands adjacent to the Bridger- Teton National Forest will result in greater potential for trespass and encroachment.

The demand for special uses will continue to grow as more people move into rural areas. An example of this demand is the growing demand for electronic transmission sites as the need for communication capability grows.

The need to acquire private land to protect various resources is increasing as more people move into rural areas. Resources that need protection are migration routes, winter range, scenic vistas, and recreation areas. The public demand for these resources is growing as the



supply is shrinking. Means to acquire the lands include purchase, and exchange of federal lands for the private lands.

## Need to Establish or Change Management Direction

The prior sections of Chapter 2 culminate in this section. In addition to the human and natural resource information from Chapter 2, the Issues, Concerns, and Opportunities information contained in Chapter 3 also played a major role in defining the contents of this section.

This section describes existing and anticipated forest management problems in two categories: first, Forest Ties to Human Communities: Problems in Livelihoods and Lifestyles and, second, Natural Resources on the Forest: Problems in Use and Protection. The two categories are further divided into problem topics, problem statements and management challenges.

### Forest Ties to Human Communities: Problems in Livelihoods and Lifestyles

#### Problem Topic 1: Community Economics and Jobs from the Bridger-Teton National Forest - Competition for Resources

Problem Statement -Activities on the Bridger-Teton National Forest have some effect on nearly every person who lives in western Wyoming. Located near Yellowstone and Grand Teton National Parks, the Bridger-Teton offers opportunities and attractions for national and even international visitors and business interests as well. In order to prosper in the local, national and international markets, communities with different economic interests rely on different resources derived from the same piece of ground. Although multiple resources are often available at one site, some real and perceived conflicts are inevitable.

Jackson-area businesses provide services to people who visit the National Parks, and to those who come to hunt, fish, hike, and ski on the Teton National Forest. A multimillion dollar outfitting and guide industry has developed in the Jackson Hole area. Among other activities, visitors enjoy guided rafting and fishing experiences in the summer, hunting experiences in the fall, and snowmobiling experiences in the winter. Some nearly unique aspects of big-game hunting in the area are the exceptionally long seasons and high hunter-success rates.



JACKSON HOLE HAS A MULTI-MILLION DOLLAR OUTFITTER AND GUIDE INDUSTRY

Amidst considerable recreation activity, local ranchers still maintain traditional grazing use of some parts of the National Forest. Oil and gas interests look to some sites in the Jackson area for potential development.

Ranching, farming, and associated agri-business are some of the most important factors in the economy of western Wyoming. Some of the smaller communities are almost totally dependent upon the agricultural economy. Over 200 ranchers depend upon the Bridger-Teton National Forest summer ranges to round out their livestock operations; about 40,000 cattle and 60,000 sheep are permitted to graze on the National Forest.

Pinedale and towns in Fremont County are similar to Jackson, providing similar services to a growing number of people who visit nearby parts of the Bridger-Teton National Forest while maintaining certain traditional uses of National Forest resources.

On the other hand, the towns of Dubois and Afton have strong ties to timber harvest and sawmill operations. Also located in Fremont County, the communities of Lander and Riverton are economically tied to sawmill operations in Dubois. Afton also provides services for recreational visitors to the Bridger-Teton National Forest, but not to the same degree as Jackson or Pinedale.

The towns of Mableton, Big Piney, LaBarge, and Kemmerer are tied to the National Forest, primarily through the oil and gas and the ranching industries.

In most cases, the economic needs of the various communities can be at least partially met with Bridger-Teton National Forest resources but, in other cases, community needs are in conflict. An example is the Mt. Leidy Highlands area in the Teton division of the National Forest. The sawmill operators in Dubois would like to continue to use the area near Mt. Leidy within the Spread Creek watershed to provide timber for the mill as they have for the last 20 years. In that time, they have removed about 150 million board feet of timber and have developed a road network about 170 miles long. Over the same 20 years, increased hunting pressure from the road system has contributed to changed elk migration patterns and has caused the Wyoming Game and Fish Department to shorten elk seasons and reduce numbers allowed to be harvested. In turn, Jackson-area outfitters and guides report reduced revenues from changed elk availability and hunt quality. So, the hunting-related llama-packing and horse-packing outfitting and guide businesses in the Jackson Hole area would like to stop timbering and roading activities in order to maintain or enhance their industry.

In addition to the local community demands on the resources, rapid growth in the southwestern part of the United States—mainly Arizona and southern California—has strained existing water sources in that arid region. This threat of water supply shortage has prompted water development interest groups such as the Pacific Southwest Interagency Committee from southern California to urge the Forest Service to increase stream flows to the Colorado River. This, in turn, places a demand for increased water production from the Bridger portion of the Bridger-Teton National Forest.

In the end, some challenges are clear: in cases where there are not enough resources to go around, the access needed by one person may reduce or eliminate the livelihood of another, and one person's use of resources may eliminate use by other potential users.



MANY JOBS ARE TIED TO NATIONAL FOREST RESOURCES.

**Forest Challenge: Support Community Prosperity**

Sawmills in such towns as Dubois and Afton need trees from the Bridger-Teton National Forest to continue operation. Since 1978, the National Forest has furnished an average of 21 million board feet of saw logs and other commercial timber products to purchasers. Based on the National Forest and Rangeland Renewable Resources Planning Act figures for timber production from the Bridger-Teton, about 46 million board feet per year could be made available and used.



The Afton TRICON Sawmill depends on trees from the National Forest

A lack of timber supply may have caused as many as 25 to 30 percent of the people who live in Dubois to lose their jobs because the Louisiana-Pacific mill, which closed in 1988, has not been replaced by another mill or industry. In turn, other communities in Fremont County may also have been affected. From year to year, the timber and energy industries make intensive use of relatively small areas of the National Forest.

On the other hand, Jackson Hole, Pinedale, and Fremont County communities use extensive areas of land to supply tourists with desired experiences. Some industries such as the hunting outfitters and guides could be forced to reduce service or even go out of business if intensive development activities change the areas they depend on. Other service-related industries could be adversely changed if the number of people coming to western Wyoming to float rivers, go to school, hunt, fish, hike, or ski were reduced by increased intensive development activities.

If the challenge of providing sufficient commodity and service opportunities on the National Forest is not met, mature industries may fail for lack of dependable supply and desirable new industries may never begin.

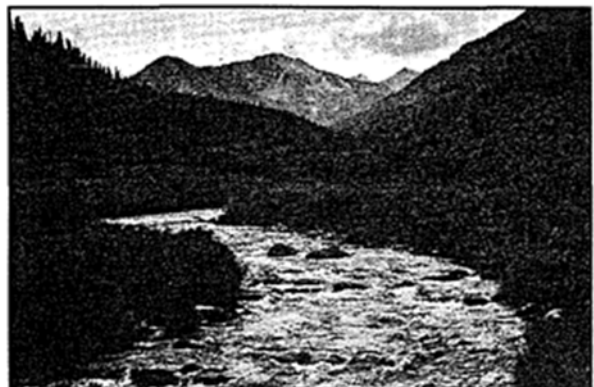
#### **Forest Challenge: Supply Access to Natural Resources**

In many cases, the key issues stated by competing users have grown from conflicts over road and trail access to the commodity resources. Open roads are needed by the timber industry to harvest trees and by the oil and gas industry to locate and develop petroleum. Ranchers use roads and trails for livestock transportation. Increased access also increase hunting and fishing pressures, and may disrupt outfitter and guide activities. Substantially increased access could eventually result in reduced recreation opportunities, hunting or fishing seasons, and numbers of "trophy" animals and fish.

If the challenge is not met, virtually all commercial National Forest users will experience a gradual and perhaps unacceptable decline in access to the opportunities and resources they depend on

#### **Forest Challenge: Ensure Needed Quantities of Clean Water**

Many local communities and ranchers rely on the Bridger-Teton National Forest's watersheds for their water and forage supplies. Parts of the National Forest are within the Green River watershed, which in turn is a part of the Colorado River watershed. Due to the demands placed on the water from the Colorado River



from such states as Arizona and California, and even Mexico, there is a demand for increased water production from the Colorado River watershed.

Although water flows may be increased by timber harvest in certain areas, the challenge to supply more water to the Colorado River system will not be met properly unless the increased water is supplied without decreasing water quantity or quality for municipal and agricultural users near the National Forest.

#### [Problem Topic 2: Personal Recreation, Enjoyment, Play, and Subsistence](#)

Problem Statement -Many people use the natural resources, including the sights, smells, and sounds, of the Bridger-Teton National Forest and other nearby public lands as places for physical and spiritual enjoyment. Wyomingites, other Americans, and foreign visitors seek the physical challenges, solitude, and change of pace that the area offers. For them, the National Forest is at once a place of change and challenge, and a source of permanence. Some visitors view the National Forest as an important part of a larger, naturally related area, the "Greater Yellowstone Ecosystem." Others express feelings and thoughts about the National Forest with a global perspective.

In some cases, generations of families and groups of friends use sites and areas of the National Forest as "their" picnic and camping spot or "their" firewood or hunting area, passing along skills and the stories of past years and other experiences. The National Forest is a link between *generations and friends*.



*Some families use the same campsite year after year*

Some individuals, groups, and families also use the Bridger-Teton National Forest resources to sustain a particular culture or lifestyle. This lifestyle is one that resembles a reliance on the National Forest for their subsistence. While such people do not necessarily need to hunt and fish for their primary food source and cut down and gather their own firewood for fuel, they pride themselves on the fact that they have "done it themselves." For these people, activities that would deprive them of their ability to provide for themselves would be objectionable.

In most cases, the private recreational needs of people can be met partially with Bridger-Teton National Forest resources, but in other cases, people's needs conflict. An example is the Union Pass area which is considered by some communities as a potential major sightseeing and log-haul route, connecting Dubois with Pinedale. Other communities, local residents, and recreationists would like to continue to use Union Pass roads to access firewood, off-highway vehicle-OHVs such as 4-wheel all-terrain vehicles-sites, trails, and snowmobile routes. Recreational drivers, including the elderly and physically challenged, rely on roads for recreational access and scenery. Other people would like to exclude motorized traffic so they can experience solitude. The Union Pass area is representative of conditions on other parts of the National Forest: beyond the conflicts inherent in the different forms of recreational use, many people using the National Forest for enjoyment, renewal, play, or subsistence find such commercial uses as timber harvesting or mining to be unacceptable.

Other perceived conflicts may occur as people drive toward the Bridger-Teton National Forest or Yellowstone and Grand Teton National Parks and see private developments where they expected unchanged forest or range. At times, visitors cannot reach portions of the National Forest because private lands and natural features combine to block access. Occasionally, buildings or other improvements developed by private individuals trespass on public lands, further limiting use by other people.



**MANY PEOPLE RECREATE ON THE NATIONAL FOREST**

**Forest Challenge: Ensure Adequate Supplies of Needed Products and Experiences**

Personal use of the Bridger-Teton National Forest for play, enjoyment, and rest or renewal is extremely difficult to quantify. People "know it when they see it" or experience it, but often find expressing their needs difficult. In addition, overuse and abuse of resources can result in lost opportunities for everyone. The challenge is to make sure people's personal and often traditional use of the National Forest is not lost.

If the challenge is not met, the personal and generational ties people have to the National Forest will be broken and they will experience a sense of personal loss.

**Forest Challenge: Supply Access to Natural Resources**

In many cases, the key conflicts between users center around their desires for road and trail access to the resources. For instance, the firewood gatherers and ORV drivers require roads to access the dead timber and ORV use areas, but many people seeking solitude object to roads and increased access.

If the challenge is not met, people will experience gradual increases in conflicts in the field, particularly those people seeking solitude.



*Roads provide access for firewood cutters*



**Forest Challenge: Control Certain Visual Disturbances and Access Restrictions**

People driving toward the Bridger-Teton National Forest or Yellowstone and Grand Teton National Parks may encounter visually disturbing developments on private lands. In addition, visitors to the National Forest may find their access to public lands blocked by private developments on private lands, or, in some cases, from private developments trespassing on public lands. The challenge is to seek the cooperation of private landowners to minimize such impacts or eliminate trespass conditions where they exist.

If the challenge is not met, potentially irretrievable losses of visual resources or people's access to and use of the National Forest may occur.

**Natural Resources on the Bridger-Teton National Forest: Problems in Use and Protection****Problem Topic 3: Threatened, Endangered, and Sensitive Species**

Problem Statement -The Bridger-Teton National Forest has five animal species on the Threatened and Endangered list, and several plant and animal species have been proposed as Sensitive. Endangered wildlife known to occur on the National Forest are the bald eagle, peregrine falcon, whooping crane, and Kendall Warm Springs dace. Threatened wildlife are limited to one species: the grizzly bear. Sensitive species of concern include Colorado River and Bonneville cutthroat trout, several species of plants, and such wildlife species as the trumpeter swan. The Endangered Species Act of 1973, as amended, prohibits the Forest Service from taking any actions that might threaten the continued existence of a federally listed species, and requires the agency to seek to conserve and improve the status of these species to the point of full recovery. The Act requires protection of Sensitive plants and animals to reduce the need for federal listing.

Threatened, endangered, and sensitive species advocates view the Bridger-Teton National Forest as a vital link in a world-class, unique environment: the "Greater Yellowstone Ecosystem." The advocates believe the area should be protected from further development and be preserved for the perpetuation of certain unique species. The decline of, and the need for recovery of the grizzly bear is a nationally known issue. In addition, the recovery of the endangered bald eagle, whooping crane, peregrine falcon, and Kendall Warm Springs dace, and the re-establishment of the gray wolf are regional or national issues of great importance to the advocates.

Some people perceive that other resource uses may prevent the attainment of recovery of threatened and endangered species as directed by the Endangered Species Act. They feel that management's first priority should be the recovery of listed species and protection of sensitive species. For example, they maintain that areas designated as grizzly bear habitat should be

totally restricted from commodity use, so as not to disturb the grizzly bear. Some also feel that the gray wolf should be re-established in the Greater Yellowstone Area.

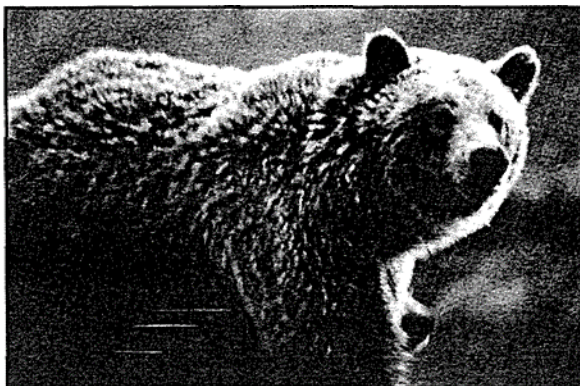
Other people feel that the concern over Threatened, Endangered, and Sensitive species should not eliminate the opportunity to provide jobs and supply commodities in the timber, oil and gas, and livestock industries. They believe that adverse effects can be minimized with the application of protective measures applied to their use. In addition, they feel that aggressive timber harvest in some areas could contribute substantially to amounts of grizzly bear habitat available.

### **Forest Challenge: Contribute to the Recovery of the Grizzly Bear**

Grizzly bear recovery is influenced by two major factors: quality and amount of habitat, and contacts with humans leading to bear mortality. If the challenges of keeping or creating habitat and modifying or eliminating negative human contact are not met, grizzly bear recovery could be delayed or even lost.

### **Forest Challenge: Contribute to the Recovery of Endangered Species**

Some other animal species on the Bridger-Teton National Forest have been declared Endangered. Today, known endangered species include: bald eagles, peregrine falcons, whooping cranes, and Kendall Warm Springs dace. Re-establishment of the gray wolf in the Yellowstone Area would add a fifth endangered species that would be present on the National Forest.



**GRIZZLY BEARS ARE A THREATENED SPECIES  
FOREST CHALLENGE**



**BALD EAGLE RECOVERY IS A NATIONAL  
FOREST CHALLENGE**

### **Forest Challenge: Prevent Sensitive Species from Becoming Threatened**

Some plant and animal species on the Bridger-Teton National Forest have been declared sensitive. If the challenge to keep the species off the Threatened list is not met, human use of

many areas of the National Forest could be changed, reduced, or stopped until the species are taken off the list.

#### Problem Topic 4: Use of Natural Resource Products and Impacts of Change in Forest Communities

Problem Statement - Timber harvesting and oil and gas development involve the removal of natural resources from the Bridger-Teton National Forest. The first involves surface resources administered by the Forest Service. The second also involves subsurface resources administered by the Bureau of Land Management. Under the Oil and Gas Leasing Reform Act of 1987, the Forest Service has new responsibilities for oil and gas leasing. People perceive that timber harvesting and energy development have the potential to adversely impact other surface-resource values.

Lodgepole pine, spruce, fir, and other forest types on the Bridger-Teton National Forest are composed mainly of mature and over-mature trees. Many are dying. The mortality is caused by old age and by accompanying insect and disease problems. In the past, forest managers have prescribed mainly clear cutting and other even-aged silvicultural systems for managing the aging timber stands. Trees have been sold and cut for many purposes: to provide wood fiber to major mills in Dubois and Afton and to small operators around the forest, to create openings for wildlife, to control insect and disease problems, and to develop healthier even-aged stands. Concern over these past management practices and perceived conflicts with other resources have led to a new considerations about how to manage timber on the National Forest.



**CLEARCUTTING WAS THE PRIMARY METHOD OF TIMBER HARVEST USED IN THE PAST.**

Portions of the Bridger-Teton National Forest lie within the "Overthrust Belt" with the oil and gas industry showing, at times, strong interest in exploring the Belt's oil and gas opportunities. In addition to the Overthrust Belt, other areas of the National Forest have a high potential for oil and gas discovery. Oil and gas leasing, exploratory drilling, and possible field development are viewed by some as having the potential to negatively affect or change other resource values.

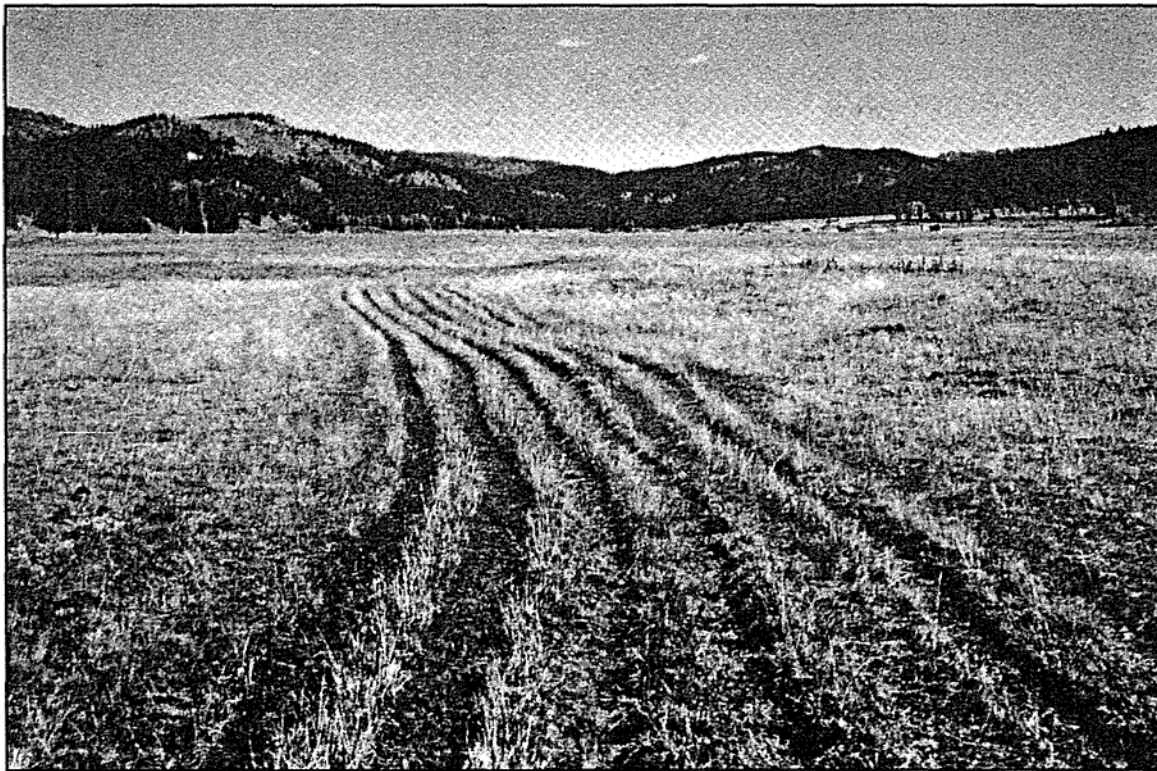
A further potential loss of resource values and use occurs when certain areas are unintentionally overused by Bridger-Teton National Forest visitors. As trails, facilities, and impromptu campsites receive more and more use, soils and water quality can suffer. Human safety and health can also be affected as conditions deteriorate. Frequently, people on foot and on horseback abandon trails in riparian or wet areas when overuse leads to boggy conditions. Unfortunately, hikers and riders often simply relocate the trail nearby and the unacceptable conditions reappear. In other cases, too many trails connect the same two points, creating soil and water quality loss. Off-highway vehicle drivers using roads and trails occasionally leave existing corridors and create new tracks, threatening soil and water values. In other cases, they may use existing trails where soils conditions should confine activity to non-motorized use.

In areas that Congress designated as Wilderness, recreationists can encounter many similar problems, particularly along trails and in popular areas. A further difficulty exists, however,

because the Wilderness itself is not primarily a recreational resource. Although many traditional uses have been allowed to continue within Wilderness boundaries, little or no evidence of people's presence is supposed to exist and changes occurring from people's presence are supposed to be quite limited.

Livestock grazing on the Bridger-Teton National Forest range is an important historic use. Future management of livestock grazing will involve increased coordination with other uses and activities competing for the same areas.

Some National Forest visitors complain that their experience is diminished by the presence of livestock. In such locations as riparian areas or on lands with unstable soils, livestock can cause serious losses of soil and water quality. At the same time, ranchers complain that visitors disrupt cattle grazing and driving. People using motorized vehicles to travel through the National Forest can be particularly disruptive.



**MULTIPLE TRAILS OCCUR WHEN PEOPLE RELOCATE TRAILS ALONGSIDE AN OVERUSED TRAIL.**

**Forest Challenge: Minimize the Loss of Resources from Road Construction and Maintenance**

Wildlife security, soil values, and water quality are often affected by poorly designed or maintained roads. Frequently, Bridger-Teton National Forest users create their own "roads" by simply driving off highway. The challenge is to manage roads and their use to minimize wildlife security, soil, and water value losses.

If the challenge is not met, irretrievable loss of resources will occur through increased hunting and human-presence pressures on wildlife, soil erosion, and stream sedimentation.



**CAREFULLY DESIGNED TIMBER HARVESTS MINIMIZE IMPACTS ON OTHER RESOURCES.**

**Forest Challenge: Avoid Unacceptable Effects of Timber Removal**

Silvicultural practices that are biologically appropriate for managing timber vary based upon the species and the condition of the trees. The biological requirements of the major tree species limit the degree to which silvicultural practices can meet other resource objectives in the short term. The challenge is to be sensitive to wildlife, recreation, aesthetic, and watershed concerns using biologically sound timber management practices.

If the challenge is not met, possible consequences could include: soil erosion, not enough new trees growing on cutover areas, increased hunting access which can reduce hunter success and hunt quality, and obvious change from a natural-appearing forest.

**Forest Challenge: Avoid Unacceptable Effects of Subsurface Resource Development**

The challenge is to protect or reduce adverse effects to other resources while making sure lands are available for minerals development and production.

If the challenge is not met, possible consequences include soil erosion and stream sedimentation, lost aesthetic quality, impacts on recovery of the grizzly bear, disruption of other wildlife uses, and, as a result, perhaps reduction in acreage of the lands available for minerals development and production.

**Forest Challenge: Avoid Unacceptable Effects from Recreation Use**

Overuse by recreationists and the existence of too many trails on the Bridger-Teton National Forest can reduce trail, recreational experience, and soil and water qualities. The challenge is to manage the pattern of use and the available trails and facilities to prevent problems with human health and safety or the loss of basic resource values.

If the challenge is not met, the experiences people seek may disappear and the potentials for human injury or illness increase.

**Forest Challenge: Avoid Effects of Human Use Which Are Inconsistent with Wilderness**

The challenge is to manage the pattern, frequency, and intensity of people's use of the Teton, Gros Ventre, and Bridger Wildernesses to limit change and essentially eliminate evidence that people were ever there.

If the challenge is not met, pristine Wilderness conditions will be lost, and people's freedom and spontaneity within the Wilderness will be gone with it.

**Forest Challenge: Avoid Unacceptable Effects from Livestock Use**

Overuse of the range by livestock, including pack and saddle stock, can cause unacceptable loss of other resources. The challenge is to manage the levels and locations of grazing livestock to maintain or enhance resource values.

If the challenge is not met, resources valuable to the livestock industry and other National Forest users will be lost.



**LIVESTOCK GRAZING IS MANAGED TO LIMIT EFFECTS ON OTHER RESOURCES.**

### **Forest Challenge: Reduce Interference with and Improve Conditions for Livestock Operations**

Livestock operators often find that otherwise-well-intentioned Bridger-Teton National Forest visitors interfere with cattle drives, herding, and grazing. Although the interference is unintended, it nonetheless results in losses in livestock value.

If the challenge is not met, legitimate livestock use of the National Forest will be disrupted and sheep and cattle values lost at market.

### **Forest Challenge: Protect Cultural Resources and Natural Features**

Cultural resources provide the basis for understanding the past effects of human activity on today's resources and use. Distinctive natural features help define recreational and esthetic



settings for Bridger-Teton National Forest visitors. By neglect or active vandalism and theft, cultural resources can be permanently lost. Natural features or landmarks can be lost or their settings changed until they are no longer relevant to the visitor.

If the challenge is not met, cultural resources and distinctive natural features or landmarks will be lost and we will have severed our ties to the past or destroyed our relationships with important components of the present.

## Research and Inventory Needs

This section includes the research needs which were identified by the Forest Supervisor in consideration of the earlier sections of Chapter 2 and the comments of other federal, State, and local governments and universities. These are considered as research proposals which are subject to the approval of the Regional Forester. This set of research needs may be supplemented by additional needs identified during Forest Plan monitoring and evaluation activities:

1. Ongoing watershed study in the Green River Basin and Teton Wilderness for air and water quality, vegetation, and micro-aquatic environment effects of atmospheric deposition, including acid rain relative to emissions from various sources including H<sub>2</sub>S gas sweetening plants in southwestern Wyoming.
2. Habitat-type relationships on the Bridger-Teton National Forest specific to identification, productivity, potentials, and biotic relationships to vertebrate wildlife species. Effects on wildlife of habitat fragmentation, particularly old-growth stands, need an effects evaluation.
3. Demand analysis of dispersed recreation and willingness-to-pay values for experiences within the Recreation Opportunity Spectrum on the National Forest.
4. Determination of the feasibility of using seasonal restrictions on trail use to prevent excessive damage during wet periods.
5. Analysis of the feasibility and equity of charging a fair market value user fee for all kinds of developed and dispersed recreation.
6. Research on natural fires and ecosystem effects.
7. Define the ecological differences between clearcutting and fire.

8. Study of impact of elk on summer range in alpine areas and related riparian zones.
9. Delineation of effects of and limitations on timber removal in areas of sensitive soils.
10. Define wildlife species requirements for old-growth, canopy closure, understory and riparian areas, using characteristics capable of measurement.
11. Describe the effects of different pack-stock types and their uses on forage conditions of the National Forest.

**Inventory needs include:**

1. Inventory wildlife species representing the alpine riparian deciduous shrubs and trees, grassland, and upland dry-meadow communities to determine respective type, specific relationships, and resource-use interactions.
2. Inventory of physical conditions at popular campsites in Wilderness and backcountry areas to serve as the baseline for monitoring change over time and to help determine management actions needed.
3. Cultural resources overview for the National Forest.
4. Completion of a soil inventory database at the intensity level necessary to implement the Forest Plan.
5. Inventory potential habitat of sensitive plant species to determine locations for management and protection.
6. Inventory general areas where botanical information is lacking for possible occurrence of other sensitive or undescribed plant species.
7. Cultural resource surveys in areas not affected by other resource management, such as Wilderness, to fill gaps in the National Forest's cultural resource atlas.
8. Inventory of land encroachments and needs for public rights-of-way.

## Chapter 3- Summaries of Issues, Concerns, and Opportunities

The sixth section, Need to Establish or Change Management Direction, in Chapter 2 described Bridger-Teton National Forest management problems and challenges. These important needs-summarizing elements of the Forest Plan were determined, in part, by the public issues, management concerns, and opportunities summarized below.

The public issues, management concerns, and opportunities were used to develop direction-setting Goals and Objectives; Desired Future Conditions; and Management Prescriptions, Standards, and Guidelines presented in Chapter 4. Then, ultimately, their influence in the direction-setting process became embodied in the Alternatives displayed in the accompanying Final Environmental Impact Statement (FEIS).

The text of this chapter represents summary information on the issues, concerns, and opportunities only. More detailed information on them and their origins is available from the planning files at the Bridger-Teton National Forest Supervisor's Office in Jackson, Wyoming.

### Definitions for Chapter 3

**Issue** -A point, matter, or question of public discussion or interest to be addressed or decided through the planning process.

**Concern** - An issue, problem, or a condition which constrains the range of management practices identified by the Forest Service in the planning process

**Opportunity** -A statement of general actions, measures, or treatments that address a public issue or management concern in a favorable way

**Planning Question** -A major policy question of long-range significance, derived from the public issues and management concerns, to be decided when selecting among management Alternatives.



## Issues, Concerns, and Opportunities: Ties to Forest Management Problems, Goals, and Objectives

### Problem Topic 1: Community Economics and Jobs from the Bridger-Teton National Forest - Competition for Resources

These issues, concerns, and opportunities are related to Planning Questions 3, 4, 5, 8, 9, 10, 12, and 15 in the Draft Bridger-Teton National Forest Land and Resource Management Plan.

The timber volume available for harvesting should be enough to maintain the economic viability of the local timber industry.

The timber supply from the Bridger-Teton National Forest should address national demands for timber.

The Bridger-Teton National Forest has the potential to meet future demands for wood products including sawtimber, house logs, posts, poles, fuelwood, landscaping plants, and Christmas trees.

If a sawmill is forced to close because of lack of adequate timber supply, the Forest Service should assist with finding an alternate industry to move into a community to maintain economic stability.

Leasing should be continued to maintain the local employment sectors that are tied to the oil and gas industry.

Leasing activities should be increased to meet the national demand for oil and gas products.

Domestic oil and gas production is declining and U.S. dependence on imports could increase to 50 percent of need by the year 2000.

Grazing levels should be high enough to maintain or enhance the local ranching industry.

Any activity on the Bridger-Teton National Forest should preserve the existing high quality of the water reserves.

The big-game wildlife species and their habitats need to be maintained at sufficient levels to ensure a viable outfitting and guide industry.

Historical elk migration routes should be re-established to enhance the outfitting and guide industry.

The acreage of land classified as Primitive or Semi-primitive should be maintained to provide those types of experiences that draw people to this area.

Due to the potential water shortage in the southwestern United States, the Bridger-Teton National Forest should increase water production.

## Problem Topic 2: Personal Recreation, Enjoyment, Play, and Subsistence

These issues, concerns, and opportunities are related to Planning Questions 3, 4, 5, 6, 8, 9, 10 and 14 in the Draft Bridger-Teton National Forest Land and Resource Management Plan.

Changing land use results in loss of some recreation opportunities. Poor condition of developed recreation facilities.

Many of the dispersed recreation opportunities are being managed to less than standard service level.

Projected use could lead to conflicts between various recreation opportunities such as motorized versus non-motorized travel and mountain bikers versus backpackers.

Development of private land adjacent to heavily travelled highways and roads within the Bridger-Teton National Forest could have an adverse effect on the visual quality of the area.

### Problem Topic 3: Threatened, Endangered, and Sensitive Species

These issues, concerns, and opportunities are related to Planning Questions 8, 11, 12, and 13 in the Draft Bridger-Teton Forest Land and Resource Management Plan.

Number of bears in the Greater Yellowstone Area grizzly bear population declined significantly after 1967. They have now stabilized and are possibly increasing.

Excessive human-caused mortality of female grizzly bears.

Reduction in suitability of grizzly bear habitat, due to adverse habitat alteration, will prevent recovery.

Displacement of bears by human activity. Reduction in suitable habitat of bald eagles. Displacement of eagles by human activities. Human-caused mortality of eagles.

Re-establishment of the gray wolf in the Greater Yellowstone Area. Re-establishment of the peregrine falcon.

Re-establishment of the whooping crane. Maintenance of the Kendall Warm Springs dace.

Establishment of the Kendall Warm Springs dace into other warm springs.

Opposed to the re-establishment of the wolf due to its effect on livestock and recreational hunting.

Do as much as possible to save Threatened, Endangered, and Sensitive Species from extinction.

People's activities can be carried out without a detrimental effect on Threatened, Endangered, or Sensitive Species.

Reduction of recreational use of the Snake River, due to bald eagle recovery objectives.

Lack of information on Sensitive plant species.

Complete Botanical Surveys to determine locations of Threatened, Endangered, and Sensitive plant species.

Develop management and monitoring plans for Threatened, Endangered, and Sensitive species.

#### Problem Topic 4: Use of Natural Resource Products and Impacts of Change in Forest Communities

These issues, concerns, and opportunities are related to Planning Questions 2, 7, 8, 11, 12, and 15 in the Draft Bridger-Teton National Forest Land and Resource Management Plan

The analysis of lands for timber suitability must take into consideration soil stability, regeneration of cut-over areas, and the potential to develop new harvesting technology.

Opportunities to manage vegetation other than by harvesting, such as prescribed burning, should be considered.

The cost effectiveness of timber sales must be evaluated and used in the decision making process.

Extensive mortality in many tree species on the Bridger-Teton National Forest is occurring due to old age and insect and disease infestations.

Existing over-mature stands of trees offer limited silvicultural opportunities to meet resource objectives.

Silvicultural prescriptions in addition to clearcutting should be considered which will help achieve soils, scenic quality, recreation, wildlife, and other resource objectives.

Increased harvesting of timber and associated road needs could decrease the scenic values in the area.

Increased harvesting of timber and associated road needs could decrease the satisfaction of users seeking more primitive recreation opportunities.

Increased harvesting of timber and associated road needs could negatively affect wildlife, such as elk migration, old-growth forest-dependent wildlife, and Threatened and Endangered species.

Increased harvesting of timber and associated road needs could decrease hunter satisfaction and negatively impact the outfitting and guiding businesses.

Timber sales need to be adequately administered by the Forest Service to ensure that resource values are being protected.

The Bridger-Teton National Forest has areas of high probability for the discovery of economic oil and gas reserves in the next 10 to 15 years.



Oil and gas field development may disrupt significant scenic and wildlife resources important to the tourist and outfitter based economy of the Bridger-Teton National Forest.

Oil and gas activities can cause increased erosion and stream sedimentation.

Timber removal and oil and gas activity can result in roads being built in roadless areas of the Bridger-Teton National Forest. Such roading is viewed as inappropriate by many publics.

Extractive development will reduce the acreage in semi-primitive• and primitive areas, converting them to roaded settings.

Lands made available for oil and gas activity need appropriate lease stipulation protection so as to encourage energy activities while protecting or reducing adverse effects on the other resources of the Bridger-Teton National Forest.

Oil and gas activity is viewed as a threat to the integrity of the Greater Yellowstone Area. Of particular concern are the probable impacts on the grizzly bear and its survival.

Heavy recreation use is endangering physical and social environments in Wilderness.

Recreational enjoyment and the condition of such basic resources as soils, water, and riparian areas in the Bridger-Teton National Forest are being jeopardized by too many people trying to use the same sites, trails, and facilities.

## Chapter 4- Land Management Direction

Chapter 4 contains six sections: Introduction; Definitions; Land and Resource Management Goals and Objectives; Forest-wide Resource Management Prescriptions, Standards, and Guidelines; Desired Future Conditions; and Management Area Descriptions, Standards, and Guidelines. The last five sections represent the land management direction for the Bridger-Teton National Forest Plan.

The Land and Resource Management Goals and Objectives are stated so that future managers and public users of the Bridger-Teton National Forest can know if the problems and challenges identified in Chapter 2-the section entitled Need to Establish or Change Management Direction-are being solved or met. They were developed in response to demands, public issues, resource production potentials, and the need for environmental standards.

Although all of the Goals are attainable, some objectives conflict with others. Consequently, some objectives will not be met on all areas of the Bridger-Teton National Forest. For example, lands used for timber production may not help re-establish historic elk migration routes as stated in Objectives 1.1(a) and 1.1(g). The conflicts are resolved by application of the different Desired Future Conditions to different areas of the National Forest.

Unless otherwise indicated, the Goals and Objectives are intended to be accomplished within the life of the Forest Plan, and then maintained afterwards and adjusted through amendments and revisions when natural resources or public needs require. The budgets and production targets provided by the Congress to do this work will have a major influence on accomplishment, extending and compressing actual implementation times.

Land and Resource Management Goals and Objectives are numbered for easier reference to the later contents of this chapter. Goals and Objectives are stated in the present tense with Goals characterized as desired "results" and Objectives as continuing National Forest Service "action focus" to achieve the goals over time.

Elements of other documents are incorporated by reference into the direction found in this chapter. Where you see "Incorporated by reference ..." the intent is to incorporate a standard, guideline, or practice from another document, but not to incorporate the entire document, according to the subject of the Bridger-Teton National Forest Plan. In other cases, materials are referred to for additional information. Each of these informational references begins with "For further information, see ...."

## Definitions for Chapter 4

### Education

**Environmental Education** - The education process dealing with human relationships to natural and constructed surroundings including the relationships to population; pollution; resource allocation, depletion, and conservation; transportation; technology; and urban and rural planning.

### Recreation

**Recreation Opportunity Guide (ROG)** -A system that inventories National Forest recreation opportunities and presents the resulting information to the public. This is intended to increase the public's awareness and participation in outdoor recreation activities.

**Less-Than-Standard Level (LTSL)** - Minimum management level designed to provide reasonable public safety, and prevent further deterioration of resources and recreation facilities.

**Standard Level (SL)** - Management level designed to enhance the recreation experience, ensure public safety, correct resource damage, and maximize the longevity and serviceability of recreation facilities.

**Persons-At-One-Time (PAOT)** -The number of people who use a facility or area at one time.

**Recreation Visitor Day (RVD)** - 12 hours of recreation use on the National Forest.

#### Site Development Scale:

**Site Development Level 1:** Minimum Site Modification -Rustic or rudimentary improvements designed for protection of the site rather than comfort of the users. Use of synthetic materials excluded. Minimum controls are subtle. No obvious regimentation. Spacing informal and extended to minimize contacts between users. Motorized access not provided or permitted.

**Site Development Level 2:** Little Site Modification - Rustic or rudimentary improvements designed primarily for protection of the site rather than the comfort of the users. Use of synthetic materials avoided. Minimum controls are subtle. Little obvious regimentation. Spacing informal and extended to minimize contacts between users. Motorized access provided or permitted. Permitted access over primitive roads. Interpretive services informal, almost subliminal.

**Site Development Level 3:** Site Modification Moderate -Facilities about equal for protection of site and comfort of users. Contemporary or rustic design of improvements

is usually based on use of native materials. Inconspicuous vehicular traffic controls usually provided. Roads may be hard surfaced and trails formalized. Development density about 3 family units per acre. Primary access may be over high standard roads. Interpretive services informal, but generally direct.

**Site Development Level 4:** Site Heavily Modified - Some facilities designed strictly for comfort and convenience of users. Luxury facilities not provided. Facility design may incorporate synthetic materials. Extensive use of artificial surfacing of roads and trails. Vehicular traffic control usually obvious. Primary access usually over paved roads. Development density 3 to 5 family units per acre. Plant materials usually native. Interpretive services often formal or structured.

**Site Development Level 5:** High Degree of Site Modification -Facilities mostly designed for comfort and convenience of users and usually include flush toilets; may include showers, bathhouses, laundry facilities, and electrical hookups. Synthetic materials commonly used. Formal walks or surfaced trails. Regimentation of users is obvious. Access usually by high-speed highways. Development density 5 or more family units per acre. Plant materials may be foreign to the environment. Formal interpretive services usually available. Design formalized and architecture may be contemporary. Mowed lawns and clipped shrubs are not unusual.

### **Frissell Condition Classes:**

Frissell Condition Class -Classification system which rates the degree of man-caused change that a wilderness, dispersed campsite or concentrated-use area has undergone.

**Frissell Condition Class 1** -Visible Indicators: Ground vegetation flattened, but not permanently injured. Minimal physical change except for possibly a simple rock fireplace.

**Frissell Condition Class 2** -Visible Indicators: Ground vegetation worn away around fireplace or center of activity.

**Frissell Condition Class 3** -Visible Indicators: Ground vegetation lost on most of the site, but humus and litter still present in all but a few areas.

**Frissell Condition Class 4** -Visible Indicators: Bare mineral soil widespread. Tree roots exposed on the surface.

**Frissell Condition Class 5** -Visible Indicators: Soil erosion obvious. Trees reduced in vigor or dead.

## **Fisheries and Wildlife**

**Cover** -Vegetation used by big game for protection from hunters and other predators. It is considered to be hiding or thermal cover.

**Hiding Cover** - Vegetation that will hide 90 percent of either a grizzly bear or elk-depending on management emphasis-from the view of a human at a distance of 200 feet or less.

**Thermal Cover** - Vegetation used by big game to help maintain comfortable body temperatures with minimal energy expenditure. For elk, a stand of coniferous trees 40 feet or taller with an average crown cover exceeding 70 percent.

**Security Area** - An area to which big game retreat for safety when disturbance in their usual range is intensified such as by logging activity or during the hunting season.



HIDING COVER PROVIDES SECURITY FOR LARGE ANIMALS.

**Biotic Conditions Index (BCI)** - A measure of the existing macroinvertebrate aquatic habitat compared to its potential as based on species numbers, diversity, biomass and tolerance to change.

**Habitat Conditions Index (HCI)** - A measure of the existing aquatic habitat condition of the physical characteristics of a stream compared to its potential. Parameters included within this measure are streambank soil and vegetation stabilities, instream substrates, stabilities, size and quality, and cover.

**Viable Population** -Minimal population level to maintain the genetic diversity of the species.

**Threatened Species** -Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range and which has been designated in the Federal Register by the appropriate Secretary as a Threatened species. In addition, some states have also declared certain species as threatened in their regulations or statutes.

**Endangered Species** -Any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insects determined by the Secretary to constitute a pest whose protection under the provisions of the Act would present an overwhelming and overriding risk to man.

**Sensitive Species** - Those plant and animal species identified by the Regional Forester for which population viability is a concern as evidenced by:

Significant current or predicted downward trends in population numbers or density.

Significant current or predicted downward trends in habitat capability which would reduce the species' existing distribution.

**Cumulative Effects Analysis** -A method to assess the effects that a series of actions may have on a selected species or habitat. Used in evaluating impacts on grizzly bear, bald eagles, and other wildlife species.

**Grizzly Bear Management Situations** - Three different grizzly bear management situations are described. Each management situation fits a type of land area where unique grizzly populations and habitat conditions exist and management direction applies.

**Grizzly Bear Management Situation 1** - Population and habitat conditions: The area contains grizzly bear population centers-areas key to the survival of grizzly bears where seasonal or year-long grizzly bear activity, under natural, free-ranging conditions is common-and habitat components needed for the survival and recovery of the species or a segment of its population. The probability is very great that major federal activities or programs may affect-have direct or indirect relationships to the conservation and recovery of-the grizzly bear.

**Grizzly Bear Management Situation 2** -Population and habitat conditions: Current information indicates that the area lacks distinct population centers; highly suitable habitat does not generally occur, although some grizzly bear habitat components exist and grizzly bears may be present occasionally. Habitat resources in Management Situation 2 either are unnecessary for survival and recovery of the species, or the need has not yet been determined but habitat resources may be necessary. Certain management actions are necessary. The status of such areas is subject to review and change according to demonstrated grizzly bear population and habitat needs. Major federal activities may affect the conservation of the grizzly bear primarily

in that they may contribute toward either human-caused bear mortalities or long-term displacement where the zone of influence could affect habitat use in Management Situation 1.

**Grizzly Bear Management Situation 3** -Population and habitat conditions: Grizzly bear presence is possible but infrequent. Developments, such as campgrounds, resorts or other high human use associated facilities and human presence result in conditions which make grizzly bear presence untenable for humans or grizzly bears. There is a high probability that major federal activities or programs may affect the species' conservation and recovery.

**Log Decomposition Classes:**

<b>Characteristic Log</b>	<b>Class 1</b>	<b>Class 2</b>
Bark	Intact	Intact
Twigs <3 cm (1.18 in)	Present	Absent
Texture	Intact	Intact to partly soft
Shape	Round	Round
Color of Wood	Original color	Original color
Portion of log on ground	Log elevated on support points	Log elevated on support points but sagging slightly

**Vegetation: Range**

**Animal Unit (AU)** - One mature cow or equivalent based upon an average daily forage consumption on of 26 pounds of dry matter per day.

**Ecological Status** - The present state of vegetation and soil protection of an ecological site in relation to the potential natural community for the site.

**Animal Damage Control** - The control of animals that cause injuries or economic damage to forest, range, livestock, and structures through the use of habitat modification, biological control, mechanical barriers and repellents, trapping and transplanting, or controlled removal.

**Range Improvement Practices:**

**Non-structural Range Improvements** -Includes practices such as prescribed fire, herbicides, or mechanical methods to improve range vegetation to meet specific rangeland objectives.

**Structural Range Improvements** - Includes practices such as fencing or water development to manage livestock for improvement of range conditions.

## Vegetation Timber

Silvicultural Systems:

**Clearcuts** -All trees within a defined area are removed at one time. Size of created opening dictated by specific management objectives but is large enough to be mapped or recorded as a separate age class under area regulation. Regeneration secured by natural or artificial means. "Patch cut" refers to a clearcut 2 to 10 acres in size.

**Seed-Tree** — Similar to clearcut, except a small number of the better seed bearing trees of the desired species per acre are left singly or in small groups distributed over the area.

**Coppice** — Same as clearcut except that the stand regenerates by vegetative means through root suckering in a clone. System can be used to produce either even-aged or uneven-aged stands. Only applicable to aspen on the Bridger-Teton National Forest

**Single-Tree Selection** -Trees are removed individually at intervals throughout all age-classes to develop an all-aged structure of the stand. Regeneration is continuous with sizes intermingled.



Clearcut



Seed-Tree



*Shelterwood**Group Selection*

**Shelterwood** -A reproduction system in which a new stand is established under the protection of a partial canopy of trees. A minimum of two harvests is required; the last or final removal cut removes the remaining old stand after the new stand is established. This results in continuous cover of large or small trees.

**Group Selection** -A modification of the selection system in which trees are removed periodically in small groups, resulting in openings that are at least one and one-half times the height of the trees removed but not exceeding two acres in size. The objective is to create a balance of size and age in a mosaic of contiguous groups in the same forest.

#### **Intermediate Treatments:**

**Release or Weeding** -Applied early in stand development, prior to reaching the pole stage. Designed to free a young stand from competition that threatens to suppress the trees.

**Improvement Cut** -Cutting made in stands where trees are pole size or larger to improve the composition and quality by removing species or trees of undesirable condition from the main canopy. All treatments accomplished at the entry interval in an uneven-aged forest.

**Thinning** -Cutting in even-aged stands to redistribute growth potential or benefit the quality of the residual stand.

**Sanitation** -Removal of dead, damaged or susceptible trees to prevent the spread of pests or pathogens.

**Salvage** -Removal of trees that are dead or in imminent danger of being killed by injurious agents in order to obtain economic gain before their value is lost.

**Site Preparation Methods** -The purpose of site preparation is to expose mineral soil and reduce vegetation competition after harvest to assist reforestation. Methods are:

Mechanical -Includes ripping, brush crushing, and use of similar machinery.

Chemical -Use of approved pesticides including herbicides.

Burning -Use of prescribed fire such as pile burning and broadcast burning.

**Created Opening Duration** — When openings created in the forest by the application of even-aged silviculture are no longer considered openings and regeneration cuts may occur in adjacent stands. The opening status is determined by the height and density of the desired regeneration.

**Created Opening Size** - Size of openings created by the application of even-aged silviculture.

**Culmination of Mean Annual Increment of Growth (CMAI)** -Age at which the average annual growth is greatest for a stand of trees, as expressed in cubic feet, and is based on expected growth according to the management intensities and utilization standards assumed in accordance with 36 CFR 219.16(a)(2)(ii). Includes regeneration harvest yields and planned intermediate harvest yields.

**Economic Efficiency** -The calculation of the relative economic value of alternative sets of conditions or outputs (benefits), and of alternative methods (costs) for achieving given sets of conditions or outputs (benefits). Economic efficiency is usually measured using present net value, benefit-cost ratios, or rate-of-return. Economic efficiency analysis includes evaluation of the relative merits of different outputs or conditions. In cost efficiency analysis, the conditions or outputs (benefits) are set at a specified level and alternative means of achieving that specified level (costs) are evaluated.

**Cost Efficiency** - A portion of economic efficiency analysis which examines alternative methods (costs) of producing a given set of outputs (benefits). In measuring cost efficiency, some outputs such as environmental, economic, or social impacts are not assigned monetary values but are achieved at specified levels in the least-cost manner. Cost efficiency is usually measured using present net value, though use of benefit-cost ratios and rate-of-return may sometimes be appropriate.

**Created Opening Dispersion** - The amount of the suited land base under that management prescription which can be in openings created by the application of even-aged silvicultural systems over a given period of time.

**Scheduled Harvest** - Planned sale and harvest of timber from lands classified as being suited for timber production and included in growth and yield projections. The timber volume generated from these suited lands is that which the Bridger-Teton National Forest attempts to provide to the timber industry on a scheduled basis. This volume considered on a Bridger-Teton National Forest-wide and annual basis is referred to as the "average annual allowable sale quantity."

**Unscheduled Harvest** - Harvest of timber from lands classified as not suited or from wood residues that do not meet utilization standards. These are timber volumes not considered in determining the "average annual allowable sale quantity." Unscheduled harvest reflects an opportunity which may exist to recover wood fiber that has been generated from cutting vegetation to meet recreation, wildlife habitat and other resource objectives. Commercial timber production is not an objective. Timber volumes generated from unscheduled harvests do not reflect a commitment on the part of the Bridger-Teton National Forest to make this volume available for wood products.

**Non-Interchangeable Component** - Identifiable elements of either lands suited for timber production or lands not suited for timber production for which timber opportunities are identified in terms of volume per year for the first decade, acres harvested during the first decade, and the long-term sustained yield volumes available per year. Opportunities are based on the Desired Future Conditions and resource objectives being emphasized. These opportunities are not interchangeable with other components.

**Suited Non-Interchangeable Components** - Timber opportunities identified are scheduled and part of the average annual allowable sale quantity. Conditions are specified which must take place prior to the opportunities being made available.

**Not-Suited Non-Interchangeable Component** - Timber opportunities identified are not scheduled and are not part of the average annual allowable sale quantity. They are provided to display the potential opportunities should specified conditions be met.

**Even-Aged Silviculture** - The combination of timber management actions that result in the creation of stands where trees of essentially the same age-a spread of 10 to 20 years is generally considered one age class-grow together. Includes clearcutting and seed tree cutting. Includes shelterwood cutting involving the removal of all trees in a series of two or three more cuts over a period of not more than 30 years.

**Uneven-Aged Silviculture** -The combination of action that results in the creation of forests or stands of trees, in which trees of several or many ages grow together.

**Stand Examination Surveys** -Procedures consisting of seven types of surveys used to collect data on forest stands. Types 1 through 4 are conducted using intensive specified standard procedures. Types 5 through 7 are less intensive examinations consisting of modifications to procedures used in Type 1 through 4 surveys. A type 6 survey collects information on selected natural resources including stand structure and down and dead woody material.

**Diameter at breast height (dbh)** -The diameter of a tree measured 4 feet 6 inches above the ground.

**Cord** -A unit of gross volume measurement for stacked roundwood based on external dimensions. Generally implies a stack of 4 feet by 4 feet vertical cross section and 8 feet long containing 128 stacked cubic feet.

**Suited Land** - Land managed for timber production in concert with meeting other land management objectives.

**Not Suited Land** -Land not managed for timber production.

**Reforestation** -The natural or artificial restocking of an area with native trees.

**Rotation** - The planned harvest number of years between the formation of a generation of trees and their harvest at a specified stage of maturity.

**Catastrophic Condition** -A significant change in forest conditions on the area that affects Bridger-Teton National Forest Plan resource management objectives and their projected and scheduled outputs, uses, costs, and effects on local communities and environmental quality.

**Utilization Standards: Timber** -Standards guiding the projection of timber yields and the use and removal of timber. The standards are described in terms of minimum diameter at breast height, minimum length, minimum diameter at the small end, and percent soundness of the wood, as appropriate.

**Silvicultural Examinations** -The process used to gather the detailed in-place field data needed to determine management opportunities and direction for the timber resource within a small subdivision of a forest such as a stand.

**Stand (Tree Stand)** -An aggregation of trees or other vegetation occupying a specific area and sufficiently uniform in composition by species, age arrangement, and condition as to be distinguishable from the forest or other vegetation or other land cover on adjoining areas.

**Habitat Typing** - A land-classification system based upon potential natural vegetation. It describes potential climax *vegetation, late seral and climax plant* communities characteristic of each habitat type and provides information on successional development, productivity potential, and other biological observations.

## Minerals

Oil and Gas Lease Terms and Stipulations:

**Terms and Stipulations Included in all Leases** - These are the terms and stipulations incorporated into every lease. These stipulations govern payments, royalties, securities, and operations of the lessor. Special stipulations are also included to protect site-specific geographical values.

**Offer to Lease and Lease for Oil and Gas, BLM Form 3100-11:** This form contains 14 lease terms to govern rental rates, royalties, bonds, operations, and general terms for minimizing environmental impacts.

**Stipulation for Lands of the National Forest System (NFS) Under Jurisdiction of Department of Agriculture:** This stipulation is attached to all mineral licenses, permits, and leases on National Forest System lands. The terms of this stipulation specify that the lessor must comply with all rules and regulations governing the use and management of NFS lands.

**Uniform Stipulations** -Uniform stipulations were developed by the Bureau of Land Management and the Forest Service to accommodate the need to manage a wide variety of resources and resource situations found on federal lands. The stipulations are categorized by how they modify the lease rights rather than by the resource to be protected.

**No-Surface-Occupancy (NSO) Stipulation:** Prohibits use or occupancy of the land surface for fluid mineral exploration or development to protect specific resource values. The No-Surface-Occupancy stipulation is intended for use only when other stipulations are determined insufficient to adequately protect the public interest. Examples include steep slopes and technically unsuitable soils.

**Timing-Limitation Stipulation:** Prohibits surface use during specified time periods to protect identified resource values. This stipulation does not apply to operation and maintenance of production facilities unless environmental analysis demonstrates the continued need for such mitigation and that less stringent, project-specific mitigation measures would be insufficient. An example would be the fall months while elk migration is taking place.

**Controlled Surface-Use Stipulation:** The Controlled Surface-Use (CSU) stipulation is intended to be used when occupancy and use are generally allowed on all or portions of the lease area

year-round, but because of special values, or resource concerns, lease activities must be strictly controlled. This stipulation is used to protect resource values within a given area of land.

**Applications of Uniform Stipulations to Protect Unique Situations on the Bridger-Teton National Forest:**

**Fremont Lake Stipulation:** This stipulation will be required for all mineral licenses, permits, and leases issued by the Bureau of Land Management for National Forest lands bordering Fremont Lake in the Bridger-Teton National Forest. This stipulation prohibits surface occupancy within 1,000 feet of the shoreline and prohibits directional drilling under this 1,000 feet and under the lake.

**Special Lake Stipulation:** This stipulation will be required for all mineral licenses, permits, and leases issued by the Bureau of Land Management for National Forest lands bordering New Fork, Willow, Half Moon, Burnt, and Boulder Lakes. This stipulation prohibits surface occupancy within 1,000 feet of the shoreline.

**Grizzly Bear Area No-Surface-Occupancy Stipulation:** This particular No-Surface-Occupancy (NSO) stipulation is intended to be used as a means of providing continued viability of the grizzly bear population and protection of its habitat upon delisting as a Threatened species under the Endangered Species Act of 1973 and to avoid relisting the grizzly bear as a Threatened or Endangered species.

**Jackson Elk Herd Crucial Winter Range Stipulation:** This particular No- Surface-Occupancy (NSO) stipulation is intended to be used as a means of providing continued viability of the Jackson Elk Herd population, protection of its crucial winter range habitat in the Jackson Hole, Wyoming, area, and as a means to prevent its harassment while the elk occupy the range.

**Court Ordered and Administratively Required Stipulations** - These are stipulations that have been required by court order or by administrative memorandum

**Jackson Hole Stipulation:** This stipulation will be required for all mineral licenses, permits, and leases issued by the Bureau of Land Management for National Forest lands within the area designated by the Secretary of the Interior in the memorandum "Oil and Gas Leases in the Jackson Hole, Wyoming, Area", dated August 15, 1947; federal Register, August 30, 1947, page 5859. This memorandum specifies the general condition under which the unitized development of the oil and gas resources is authorized and applies to all lands south of the 11th Standard Parallel in the Teton National Forest.

**Conditional No-Surface-Occupancy Stipulation (CNSO):** This stipulation will be required for mineral licenses, permits, and leases issued by the Bureau of Land Management for National Forest lands in Palisades Wilderness Study Area, administered by the Bridger-Teton National Forest.

**Coordinated Exploration Stipulation:** This stipulation will replace the Conditional No-Surface-Occupancy stipulation should that stipulation be eliminated through the preparation of a site-specific environmental assessment or environmental statement.

**Rehabilitation** -To return unproductive lands to good health through stabilization to produce the same or similar vegetation as adjacent areas.

**Reclamation** — To bring unproductive lands to a condition or use that management desires. For example, a gravel pit to a pond to increase recreation, wildlife, and fisheries values.

**Restoration** -To return an area of land including roads and trails to its former, original, or normal condition including contours and vegetation.



REHABILITATION RETURNS LANDS TO THEIR NATURAL STATE.

## Access: Roads and Trails

### Road Maintenance Levels:

**Road Maintenance Level 1** -This level is assigned to intermittent service roads during the time management direction requires that the road be closed to traffic. Basic custodial maintenance is performed to protect the road investment and to keep damage to adjacent resources to an acceptable level. Drainage facilities and runoff patterns are maintained. Planned road deterioration may occur at this level. Roads receiving level 1 maintenance may be of any type, class, or building standard, and may be managed at any other maintenance level during the time management direction requires that they be open for traffic. However, while being maintained at level 1, they are closed to traffic. Roads assigned maintenance level 1 are not required to comply with the Highway Safety Act.

**Road Maintenance Level 2** -This level is assigned where management direction requires that the road be open for limited passage of traffic. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or other specialized uses. Log haul may occur at this level. Roads in this maintenance level are intended for use by high clearance vehicles. Passenger car traffic is not a consideration. Roads assigned maintenance level 2 are not required to comply with the Highway Safety Act, and may be either constant service roads or intermittent service roads during the time they are open to traffic.

**Road Maintenance Level 3** -This level is assigned where management direction requires the road to be open and maintained for safe travel by a prudent driver in a standard four wheel passenger car. Traffic volumes are minor to moderate; however, user comfort and convenience are not considered a priority. Roads in this maintenance level are normally low speed, single lane with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material. The functional classification of these roads is normally local or collector. Roads assigned maintenance level 3 may be either constant service roads or intermittent service roads during the time they are open to traffic.

**Road Maintenance Level 4** -This level is assigned where management direction requires the road to provide a moderate degree of user comfort and convenience at moderate travel speeds. Traffic volumes are normally sufficient to require a double lane aggregate surfaced road. Some roads may be single lane and some may be paved or dust abated. The functional classification of these roads is normally collector or arterial. Roads assigned maintenance level 4 may be either constant service roads or intermittent service roads during the time they are open to traffic.

**Road Maintenance Level 5** - This level is assigned where management direction requires the road to provide a high degree of user comfort and convenience. These roads are normally double lane, paved facilities. Some may be aggregate surfaced and dust abated. Functional



classification of these roads is normally arterial. Roads assigned maintenance level 5 may be either constant service roads or intermittent service roads during the time they are open to traffic.

**Road and Trail Closure or Elimination Conditions:**

**Road and Trail Closure Condition 1: Gated Closure** -Used primarily for seasonal closure for protection of the road surface during wet or unstable seasons of the year or for security for wildlife during critical periods. Gated closures can be utilized for security of exploration or logging equipment, or during periods of rehabilitation activity following these activities.

**Road and Trail Closure Condition 2: Barricaded Closure** - Used primarily on single resource roads where long time periods exist between management activities. Barricaded roads will be revegetated and drainage structures, such as bridges and culverts, removed and streambanks restored to original contours. Barricades will be built in a manner and location that will prohibit passage of any vehicle.



*Gated Closure*



*Barricaded Closure*



*Obliteration*







*Restoration*

**Road and Trail Elimination Condition 3: Obliteration** - To return a road or trail to production, where the road will no longer be used or planned for future use as a travelway, and will be stabilized and used to produce the same product as the adjacent areas. It blots out the road or trail over time or removes the illusion that the road or trail is to be used as a travelway.

**Road and Trail Elimination Condition 4: Restoration** -To return an area of land including roads and trails to its former, original, or normal condition including contours and vegetation.

**Traffic Service Levels:**

	<b>Service Level "A"</b>	<b>Service Level "B"</b>	<b>Service Level "C"</b>	<b>Service Level "D"</b>
				
<b>Flow</b>	Free flowing with adequate parking facilities.	Congested during heavy traffic such as during peak as logging or recreation activities	Interrupted by limited passing facilities, or slowed by the road conditions	Flow is slow or may be blocked by an activity. Two-way traffic is difficult and may require backing to pass
<b>Volume</b>	Uncontrolled: will accommodate the expected traffic volumes	Occasionally controlled during heavy use periods.	Erratic, frequently controlled as the capacity is reached.	Service Level "D" Intermittent and usually controlled.  Volume is limited to that associated with the single purpose.
<b>Vehicle Type</b>	Mixed; includes the critical vehicle and all vehicles normally found on public roads	Mixed; includes the critical vehicle and all vehicles normally found on public roads.	Controlled mix; accommodates all vehicle types including the critical vehicle.	Single use; not designed for mixed traffic. Some vehicles may not be able

	<b>Service Level "A"</b>	<b>Service Level "B"</b>	<b>Service Level "C"</b>	<b>Service Level "D"</b>
			Some use may be controlled to vehicle types.	negotiate. Concurrent use traffic is restricted.
<b>Critical Vehicle</b>	Clearances are adequate to allow free travel.  Overload permits are required	Traffic control needed where clearances are marginal. Overload permits are required.	Special provisions may be needed.  Some vehicles will have difficulty negotiating some segments.	Some vehicles may not be able to negotiate. Loads may have to be off-loaded and walked in.
<b>Safety</b>	High priority in design. Protection is accomplished by traffic management.	High priority in design. Protection is accomplished by traffic management.	Most protection.  Some is provided by management.	The need for protection is minimized by low speeds and strict traffic controls.
<b>Traffic Management</b>	Employed to reduce traffic volume and conflicts.	Employed to reduce traffic volume and conflicts.	Traffic controls are frequently needed during periods of high use by the dominant resource activity.	Used to discourage or prohibit traffic other than that associated with the single purpose.
<b>User Costs</b>	Minimize; transportation efficiency is important.	Generally higher than "A" because of slower speeds and increased delays.	Not important; efficiency of travel may be traded for lower construction costs.	Not considered.
<b>Alignment</b>	Design speed is the predominant factor within feasible topographic	Influenced more strongly by topography than by speed and efficiency.	Generally dictated by topographic features and environmental	Generally dictated by topographic features and environmental

	<b>Service Level "A"</b>	<b>Service Level "B"</b>	<b>Service Level "C"</b>	<b>Service Level "D"</b>
	limitations.		factors.	factors.
			Design speeds are generally low.	Design speeds are generally low.
<b>Road Surface</b>	Stable and smooth with little or no dust, considering the normal season of use.	Stable for the predominant traffic for the normal use season.  Periodic dust control for heavy use or environmental reasons.  Smoothness is commensurate with the design speed.	May not be stable under all traffic or weather conditions during the normal use season.  Surface rutting roughness, and dust may be present, but controlled for environmental or investment protection.	Rough and irregular. Travel with low clearance vehicles is difficult.  Stable during dry conditions. Rutting and dusting controlled only for soil and water protection.

**Road Class Cross Reference** - Functional class, which is a descriptor of traffic patterns, is not technically interchangeable with road standard, as defined by service level, or with road management, as defined by maintenance level. There are exceptions to this cross reference, which is only included as an indicator of how the separate descriptors often compare

	<b>Arteria</b>	<b>Collector</b>	<b>Local</b>
<b>Traffic Service Level</b>	A or B	B or C	C or D
<b>Maintenance Level</b>	5 or 4	4 or 3	2 or 1

**Road Type Cross Reference** - Road Type, as defined in the Elk Habitat Effectiveness Model, is a relation of traffic effects on elk security and is not technically interchangeable with road standard, as defined by traffic service level, or traffic patterns, as defined by functional class. There are exceptions to this cross reference, which is only included as an indicator of how the separate descriptors often compare.

	Main	Secondary	Primitive
<b>Traffic Service Level</b>	A or B	B or C	C or D
<b>Functional Class</b>	Arterial	Collector	Local

**National Forest Development Road** - A National Forest road under the jurisdiction of the National Forest Service.

**National Forest Highway** -A National Forest road under the jurisdiction of and maintained by a public authority and open to public travel.

**National Forest Road or Trail** -A road or trail wholly or partly" within, or adjacent to, and serving the National Forest System, and which is necessary for the protection, administration, and utilization of the National Forest System and the use and development of its resources.



*Roads provide access to National Forest resources.*

**2-Track Roads** - Roads or segments of roads that are unconstructed and not maintained. Such roads were often started by a single user driving off a developed road system. The travel way becomes more apparent with each vehicle passage. They are most common on gentle terrain in unforested locations. Vegetation usually remains between the tire tracks; thus, the term "2-track."

**National Forest Development Trail** - A trail under jurisdiction of the Forest Service that has been included in the Bridger-Teton National Forest development transportation plan.

**Standard Level Maintenance (Trails)** -Maintenance that is adequate to permit the trail to serve its established objectives.

**Trail Difficulty Level** -The degree of challenge a trail presents to an average user's physical ability and skill. Difficulty is a function of trail condition and route location factors such as

alignment, steepness of grade, gain and loss of elevation, availability of drinking water, and amount and kind of natural barriers that must be crossed.

**Easiest** -A trail requiring limited skill with little challenge to travel.

**More Difficult** -A trail requiring some skill and challenge to travel.

**Most Difficult** -A trail requiring high degree of skill and challenge to travel.

**Trail Maintenance** -Activities undertaken to preserve a trail and related facilities to meet established objectives. Activities are grouped into categories involving trail tread maintenance, trailway maintenance, drainage maintenance, structure maintenance and traffic service maintenance. Trail maintenance objectives may relate to:

**Resource Protection** - Activities required to protect soil, water vegetation, wildlife and other resource objectives.

**User Safety** - Activities necessary to protect the user consistent with the normal degree of difficulty the user would encounter during the normal season of use. Examples: A bridge would likely be required on a hiker class trail of any difficulty level where normal river flows preclude a safe crossing. Trees lying across trails would be removed only if they posed a hazard to the intended users.

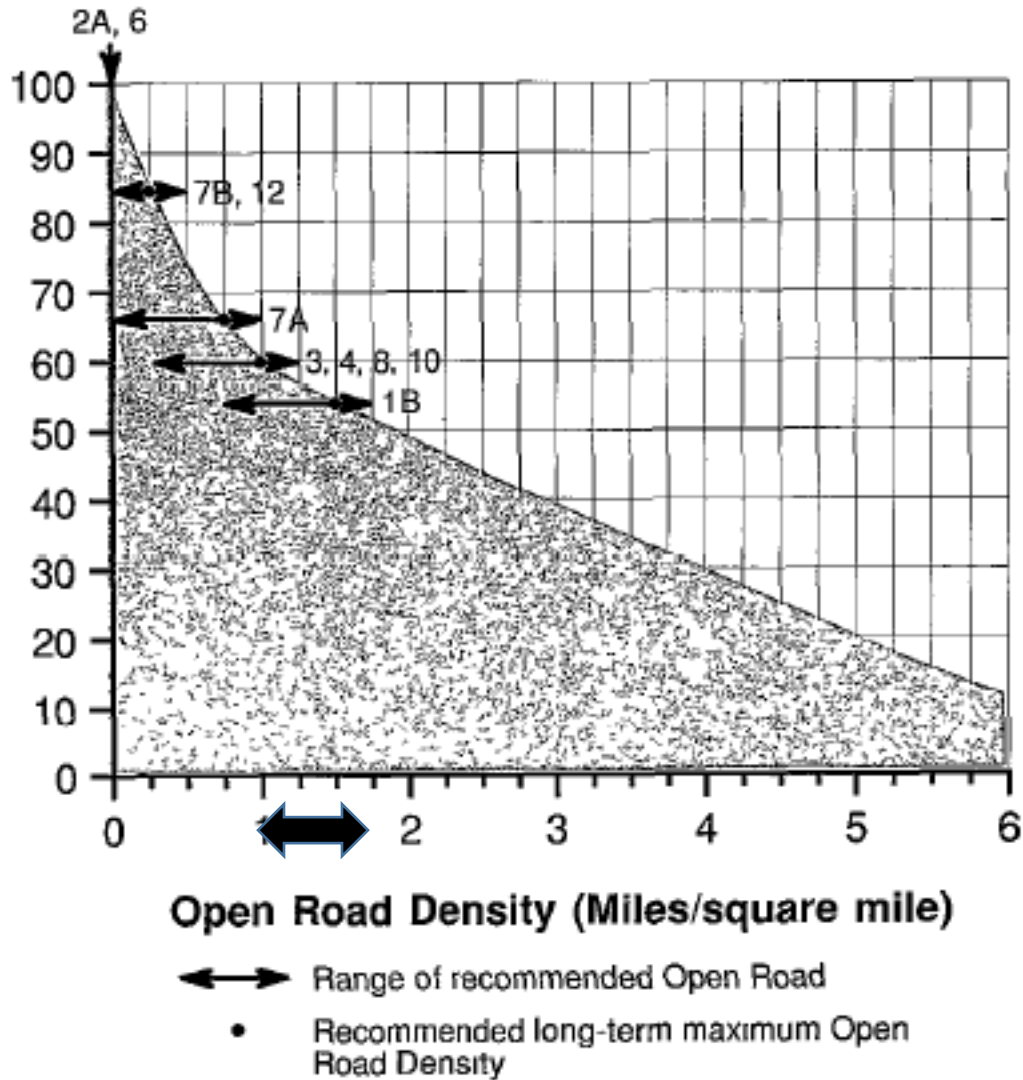
**User Convenience** - Activities which are undertaken to provide user enjoyment consistent with the desired level of difficulty. Examples: A bridge could be provided on an easiest difficulty hiker class trail for user convenience even though the bridge is not required for a safe crossing. Trees lying across trails could be removed for user convenience even though they do not pose a hazard to the intended users.

**Motorized Trail** -A trail serving either a single class or combination of classes of off- highway vehicles.

**Non-motorized Trail** -A trail serving either a single class or combination of classes of non-motorized uses. Classes of uses include hiking, pack and saddle stock, mountain biking, and cross-country skiing.

**Open Road Density** -Open road densities are a measure of the amount of vehicular use and wildlife disturbance in an area. All road access is factored into equivalent "standard road" mileages. Factors vary by road type, management, and adjacent vegetation. The total quantity of standard road miles is aggregated by Management Area or herd unit and divided by the area in square miles.

## Guidelines for Open Road Density by Desired Future Condition



Relationship between miles of open main road per square mile and potential elk use (from Lyon, 1983) This curve is used as a standard against which other road types are compared

**Equivalent Mileage of Standard Road as Modeled in  
Figure 4-1 for 1 Mile of Various Types of Roads, Road  
Closures, and Vegetation Adjacent to Roads<sup>1</sup>**

<u>Road Type</u> <sup>2</sup>	<u>Road Status</u> <sup>3</sup>	<u>Vegetation Types Adjacent to Roads</u>	
		<u>Hiding Cover</u> <sup>4</sup>	<u>Open</u>
Main	Open	80	1.20
	Closed-hunting season	71	1.06
	Closed-entire elk use period (with gates)	24	.36
	Closed-entire elk use period (with barrier)	08	.12
	Closed completely	00	.00
Secondary	Open	50	.90
	Closed-hunting season	44	.80
	Closed-entire elk use period (with gates)	15	.27
	Closed-entire elk use period (with barrier)	.05	.09
	Closed completely	00	.00
Primitive	Open	.03	.06
	Closed-hunting season	.03	.06
	Closed-entire elk use period (with gates)	.01	.02
	Closed-entire elk use period (with barrier)	.01	.01
	Closed completely	.00	.00

<sup>1</sup> These values derived from data reported by Perry and Overly (1976), Thomas et al. (1979), and Lyon (1979a, 1982) and by extrapolation to situations for which no data were available.

<sup>2</sup> Main road is improved and has constant maintenance and more than five motorized vehicles average daily traffic (ADT) during most months of the elk use period; secondary road is somewhat improved and has irregular maintenance and from 1-5 ADT; primitive road is unimproved and has little or no maintenance and less than 1adt.

<sup>3</sup> Open road status means open to motorized use during the period elk normally use the area. Closed hunting season means closed for about a 1month period when area is open for elk or deer hunting. Closed with gates means closed to motorized vehicles for entire period of elk use. Closed with barriers means to close roads with effective means for stopping all 4-wheeled traffic. Closed completely means that roads have revegetated with brush or for one reason or another all types of motorized travel are prevented. Gated closure will allow for a minimal amount of administrative activity. This, along with the trespass through or around gates, is the reason why gates are not as effective as barriers.

<sup>4</sup> Vegetation must be dense enough to qualify as hiding cover within 300 feet on both sides of road or it is classified as open.



The primary variable in determining road class-main, secondary, or primitive-will be average daily traffic. Whether seasonal or annual average daily traffic is used will depend on the traffic distribution for the road system.

Generally: Traffic Service Level D -"primitive" Traffic Service Levels B & C -"secondary" Traffic Service Level A -"main"

## Water, Air

**Favorable Conditions of Flow** - The behavioral characteristics of a watershed described in terms of its ability to sustain water quality, quantity, and timing necessary to support water dependent ecosystems, instream uses, and downstream needs for water. This includes conditions of the land contributing to water flow as well as the channels that carry the flow to downstream users.

**Soil Capability** -The inherent capacity of a soil for supporting growth of specified plants, plant communities, or sequence of plant communities.

**Cumulative Impact (40 CFR 1508.7)** - The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency-federal or non-- federal-or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

**Channel Stability Rating** - A method of visual evaluation of channel stability based on stream bottom material, streambank soil characteristics, and the type and condition of riparian vegetation.

**Aggradation** -To fill and raise the level of a streambed by deposition of sediment.

**100-Year Flood Plain** -That area adjacent to streams and rivers which is inundated by flooding produced on an historical frequency of 100 years.

## Protection: Fire

### Fire Types:

**Prescribed Fire** - Wildland fire burning under specified-prescribed-conditions which will accomplish certain planned objectives. The fire may result from planned or unplanned ignitions. Fires which burn outside the specified conditions are considered wildfires.

**Wildfire** -Any wildland fire that is not a prescribed fire.

**Normal Fire Season** -The period between June 25 and September 30.

**Historic Weather Conditions** - Local weather conditions observed over the past 25-year period.

**Suppression Strategies:**

**Control** -To complete a control line around a fire, any spot fires therefrom, and any interior islands to be saved, burn out any unburned areas adjacent to the fire side of the line, and cool down all hot spots that are immediate threats to the line until the line can reasonably be expected to hold under foreseeable conditions.

**Contain (Containment)** - To surround a fire, and any spot fires therefrom, with control line, as needed, which can reasonably be expected to check the fire's spread under prevailing and predicted conditions.

**Confine (Confinement)** - To restrict the fire within determined boundaries established either prior to the fire, during the fire, or in an escaped fire situation analysis.

**Prescribed Fire Ignition Methods:**

**Planned Ignition** -Fire started by a deliberate management action.

**Unplanned Ignition** -Fire started at random by either natural or human causes.

**Fireline Intensity** - The amount of heat released in British Thermal Units (BTU) per foot of fire front per second. The normal observable measure of fireline intensity is flame length which is the average length in feet of the flame at the head of the fire.

Fires with fireline intensities less than 100 BTU per second per foot generally have flame lengths less than 4 feet and can be directly attacked by persons using hand tools. Handlines should hold the fire.

Fires with fireline intensities between 100 BTU per second per foot and 400 BTU per second per foot generally have flame lengths of 4 to 8 feet and are too intense for direct attack by persons using hand tools. Equipment such as bulldozers, pumpers, and retardant aircraft can be effective.

Fires with fireline intensities greater than 400 BTU per second per foot may present serious control problems and control efforts at the head of the fire will likely be ineffective.

## Land and Resource Management Goals and Objectives

### Forest Ties to Human Communities: Problems in Livelihoods and Lifestyles

Problem Topic 1: Community Economics and Jobs from the Bridger-Teton National Forest - Competition for Resources

#### **Forest Challenge: Support Community Prosperity**

##### **Goal 1.1**

**Communities continue or gain greater prosperity.**

##### **Objectives:**

- a) Provide an average annual volume of 12 million board feet of green sawlogs for mills in operation in such towns as Alpine, Etna, Jackson, Dubois, Pinedale, Afton, Evanston, Rexburg, Montpelier, St. Anthony, and Lander for mills in operation in such towns as Alpine, Etna, Jackson, Dubois, Pinedale, Afton, Evanston, Rexburg, Montpelier, St. Anthony, and Lander
- b) Provide at least 5 million board feet of timber annually to allow continued use of forest products and employment in commercial firewood, house logs, and similar industries.
- c) Provide timber volumes at costs that reflect current market values and as small- and large-product sales to meet local demand.
- d) Provide leasable, locatable, and salable mineral exploration and development opportunities
- e) Provide undisturbed areas for use by outfitter and guide clients, including river floaters
- f) Provide areas for alpine skiing and commercial ski and snowmobile operations.
- g) Help re-establish historic elk migration routes to provide increased viewing and hunting opportunities for outfitters and clients.

- h) Provide forage for about 260,000 Animal Unit Months (AUMs) of livestock grazing annually.
- i) Help utilities provide services

**Forest Challenge: Supply Access to Natural Resources**

**Goal 1.2**

**A safe transportation system meets the needs of commercial users of the Bridger-Teton National Forest**

**Objectives:**

- a) Provide roads for timber contractors to obtain at least an average annual volume of 12 million board feet of green sawlogs
- b) Provide roads for timber contractors to obtain at least 5 million board feet of forest products, including commercial firewood, houselogs, posts and poles.
- c) Provide roads, trails and driveways for ranchers to manage about 260,000 AUMs of livestock grazing.
- d) Provide roads and trails for the outfitting and guide industry
- e) Provide up to 35 miles of new road access opportunities annually to areas of high mineral or oil and gas potential for exploration and development
- f) Upgrade up to 68 miles of substandard roads over the life of the Forest Plan where improved access is desirable to meet 1.2(a-e).



*Ranchers use roads to manage their livestock.*

**Forest Challenge: Ensure Needed Quantities of Clean Water**

**Goal 1.3**

**Water quantity and quality are retained or improved for local users.**

**Objectives:**

- a) Protect municipal, agricultural, and other potable water supplies and ensure that management activities do not cause deterioration in water-flow timing, quality, or quantity.
- b) Meet or exceed current State water quality standards and National Forest Service water quality goals

**Goal 1.4**

**Water production is increased in the Green River watershed.**

**Objectives:**

- a) -Locate and develop best sites for increased water production.

**Problem Topic 2: Personal Recreation, Enjoyment, Play, and Subsistence**

**Forest Challenge: Ensure Adequate Supplies of Needed Products and Experiences**

**Goal 2.1**

**Adequate habitat for wildlife, fish, and edible vegetation to help meet human food needs is preserved.**

**Objectives:**

- b) Provide suitable and adequate habitat to support the game and fish populations established by the Wyoming Game and Fish Department, as agreed to by the Forest Service
- c) Provide opportunities for people to collect edible forest products such as mushrooms and berries

**Forest Challenge: Supply Access to Natural Resources**

**Goal 2.2 –**

**High-quality developed recreation facilities exist to serve Bridger- Teton National Forest visitors.**

**Objectives:**

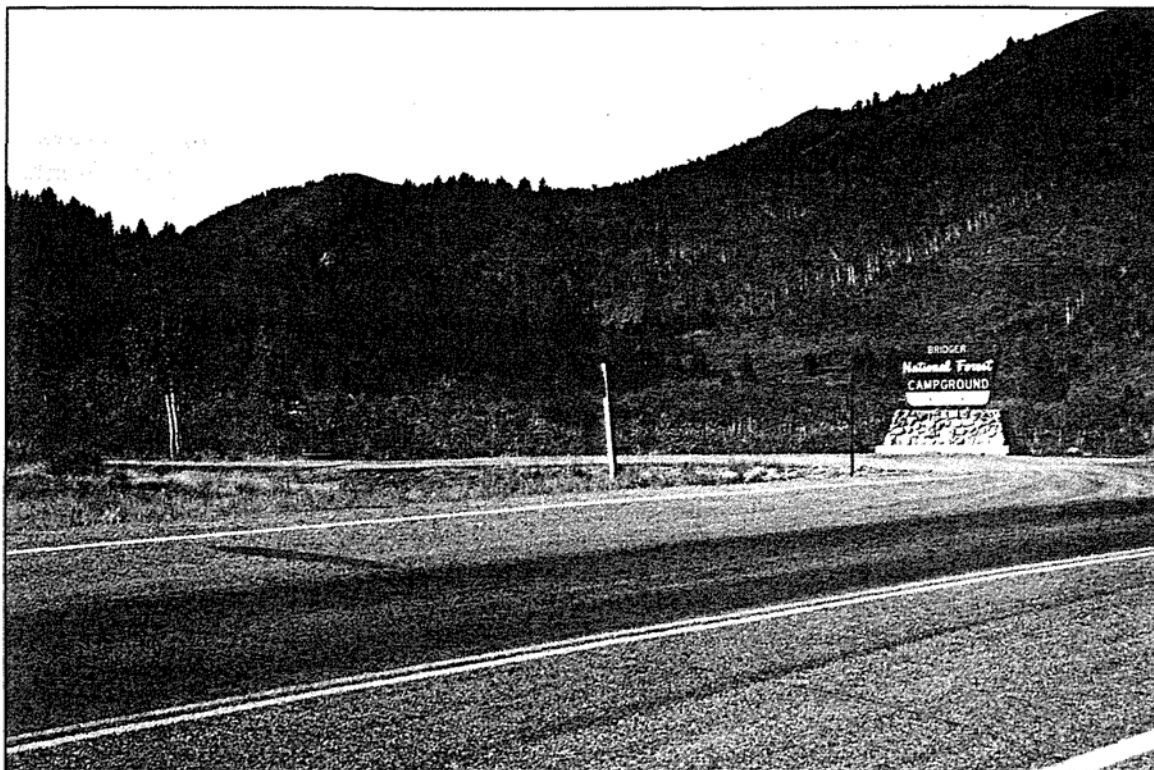
- a) Retain, improve, and add developed sites
- b) Design facilities for people of all ages and abilities

**Goal 2.3**

**High-quality dispersed recreation opportunities exist to serve Bridger-Teton National Forest visitors**

**Objectives:**

- a) Retain, improve, and add dispersed recreation opportunities.
- b) Provide opportunities for private float boaters



Allred Flats is one of many campgrounds available to National Forest visitors.

**Goal 2.4**

**Supplies of personal-use products such as firewood, Christmas trees, ornaments, rock, gravel, and other special items are available for people's use.**

**Objectives:**

- a) Provide access to an average of 2.5 cords of firewood per firewood-gathering household per year, offering commercial-timber-harvest residual material whenever possible.
- b) -Provide opportunities to get Christmas trees, ornaments, rock, gravel, and other special items.

**Goal 2.5**

**A safe road and trail system provides access to a range of recreation opportunities and settings**

- a) **Objectives** Retain some popular, traditional roads for sedan travel
- b) Retain and, in some cases, add some roads for high-clearance vehicles (4x4s).
- c) Retain, improve, and add trails for off-highway vehicles (OHVs) including snowmobiles
- d) Retain, improve, and add trails for foot, riding stock, llama, and mountain bike travel.

**Forest Challenge: Control Certain Visual Disturbances and Access Restrictions**

**Goal 2.6**

**Scenic values of certain private tracts highly visible to the Bridger-Teton National Forest visitor are protected from visual impact.**

**Objectives:**

- a) Acquire conservation easements or title to private tracts of land to protect scenic values

**Goal 2.7**

**Public lands presently blocked by private development are accessible.**

**Objectives:**

- b) Acquire easements across private lands to allow access to the Bridger-Teton National Forest.
- c) Eliminate cases of trespass on National Forest System lands.

**Goal 2.8**

**Cultural resource information is available and displayed for the public.**

**Objectives:**

- a) Study and interpret historic and prehistoric cultural resources for the public.

**Natural Resources on the Bridger-Teton National Forest: Problems in Use and Protection**

**Problem Topic 3: Threatened, Endangered, and Sensitive Species**

**Forest Challenge: Contribute to the Recovery of the Grizzly Bear**

**Goal 3.1**

**Grizzly bear recovery is achieved**

**Objectives:**

- a) Provide suitable and adequate amounts of habitat for recovery of a viable grizzly bear population in the Greater Yellowstone Area as identified in the Grizzly Bear Recovery Plan. Long-term forest habitat management should provide vegetation diversity, approximate natural conditions, and include all successional stages important to the grizzly bear.
- b) Prevent needless encounters between grizzly bears and people, and prevent grizzly bears from gaining access to such attractants as food and garbage.

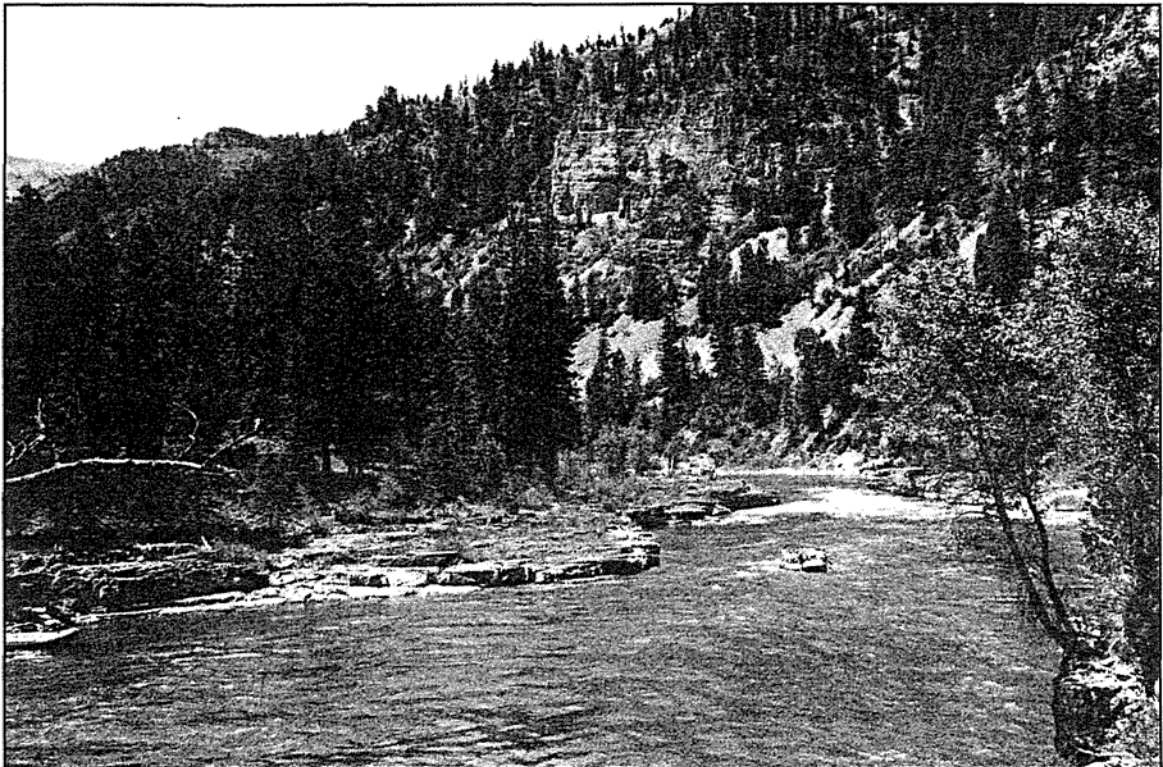
**Goal 3.2**



**Recovery is achieved for the endangered species on the Bridger-Teton National Forest.**

**Objectives:**

- a) Cooperate with the Wyoming Game and Fish Department and the U.S. Fish and Wildlife Service to establish the gray wolf in the Greater Yellowstone Area if the decision to do so is made
- b) Require that recreational use of the Snake River meets bald eagle recovery objectives.



Recreational use of the Snake River is coordinated with bald eagle recovery.

- c) By 1995, help secure and retain four nesting pairs of bald eagles in the Snake River population with an average fledging rate of 1.1 per occupied nest.
- d) Reduce preventable, human-caused mortality of bald eagles on the Bridger-Teton National Forest to zero per year, with emphasis on public education.
- e) Provide suitable and adequate amounts of habitat for bald eagles.

- f) Secure two nesting pairs and provide suitable and adequate amounts of habitat for peregrine falcons.
- g) Prevent human-caused mortality of whooping cranes
- h) Provide suitable and adequate amounts of habitat for summer-resident whooping crane
- i) Protect populations of, and provide suitable and adequate amounts of habitat for the Kendall Warm Springs dace.

### **Forest Challenge: Prevent Sensitive Species from Becoming Threatened**

#### **Goal 3.3**

**Sensitive species are prevented from becoming a federally listed Threatened species in Wyoming.**

#### **Objectives:**

- a) Protect National Forest Service Intermountain Region Sensitive plant and animal species and provide suitable and adequate amounts of habitat to ensure that activities do not cause: (1) long-term or further decline in population numbers or habitats supporting these populations; and, (2) trends towards federal listing.
- b) By 1995, in cooperation with Wyoming Game and Fish Department, Trout Unlimited, and BLM, improve 10 percent of the 77 acres of lake habitat and 166 miles of stream habitat for Colorado River cutthroat trout
- c) In cooperation with Wyoming Game and Fish Department and Trout Unlimited, rehabilitate and improve the existing stream habitat occupied within the Bear River drainage by Bonneville cutthroat trout.

### **Problem Topic 4: Use of Natural Resource Products and Impacts of Change in Forest Communities**

#### **Goal 4.1:**

- a. Road management preserves wildlife security, soil, visual resource, and water-quality values.
- b. Minimize new road building and downgrade or close existing roads and



**SOME ROADS WILL BE CLOSED TO INCREASE WILDLIFE SECURITY.S**

motorized access trails to maintain or increase wildlife security.

- c. Design roads and structures to retain soil, visual resource, and water-quality values.

#### Goal 4.11:

Waterways designated by Congress as part of the National Wild and Scenic Rivers System will be managed to protect and enhance their outstandingly remarkable values, free-flow condition, and water quality for future generations.

Objective 4.11(a): Implement applicable Comprehensive River Management Plan(s) and monitor the resource and social indicators identified.<sup>10</sup>

### **Forest Challenge: Avoid Unacceptable Effects of Timber Removal**

#### **Goal 4.2**

**Other resource values are retained or improved as timber is removed from the Bridger-Teton National Forest.**

#### **Objectives:**

- a. Apply silvicultural practices to achieve documented, site-specific, multiple-resource objectives on lands suited-scheduled-for timber production.
- b. Cut or remove timber to meet documented, site-specific recreation, wildlife, visual, or water-production objectives on lands not suited-unscheduled- for timber production.
- c. Manage the timber program on the National Forest in a manner wherein total monetary and non-monetary benefits are equal to or exceed total monetary and non-monetary costs and wherein monetary benefits and costs are discounted and non-monetary benefits and costs are not.
- d. Prevent logging or certain logging practices where potential effects on other resource values, including wildlife, Threatened and Endangered species, recreation, soils, air, visual resource, and water-quality values are unacceptable.

#### **Goal 4.3**

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<sup>10</sup> Amendment 11, 12/02/2013

**Overall diversity of and riparian habitats within the Bridger-Teton National Forest are enhanced as timber is removed.**

**Objectives:**

- a. Provide for vegetative species and age diversity, genetic quality, and forest appearance.
- b. Provide for diverse habitats to ensure viable populations of management indicator species.
- c. Protect and rehabilitate riparian areas to retain and improve their value for fisheries, aquatic habitat, wildlife, and water quality.

**Forest Challenge: Avoid Unacceptable Effects of Subsurface Resource Development**

**Goal 4.4**

**Other resources are protected during exploration and development of subsurface resources.**

**Objectives:**

- a. Require that surface occupancy of lands takes place only on lands available for mineral exploration and development
- b. Prevent surface occupancy where potential effects on other resources, including wildlife, Threatened and Endangered species, recreation, soils, air, visual resource, and water are unacceptable.
- c. Apply performance standards or stipulations in mineral plans, permits, and leases for the protection of other resource values.



WELLSITES ARE RECLAIMED AFTER DRILLING.

**Forest Challenge: Avoid Unacceptable Effects from Recreation Use**

**Goal 4.5**

**A natural or slightly modified appearance for trails and concentrated dispersed recreation areas is achieved and areas are capable of sustaining human use without unacceptable resource loss or jeopardy to human health and safety.**

**Objectives:**

- a. Close, reconstruct, or relocate trails.
- b. Close, rehabilitate, or relocate concentrated dispersed campsites, or make developed improvements to protect basic resources

**Forest Challenge: Avoid Effects of Human Use which are Inconsistent with Wilderness**

**Goal 4.6**

**The wilderness character of congressionally designated Wildernesses is retained or regained**

- a. Retain and, where necessary, restore high-quality wilderness environments **and corridors for Wild, Scenic, and Recreation rivers<sup>11</sup>**
- b. Prevent human overcrowding in Wildernesses that leads to a loss of wilderness values, providing alternate recreation locations when a wilderness setting is not key to a visitor's experience.

**Forest Challenge: Avoid Unacceptable Effects from Livestock Use**

**Goal 4.7**

**Grazing use of the National Forest sustains or improves overall range, soils, water, wildlife, and recreation values or experiences**

**Objectives:**

- a. Retain or improve forage and overall range condition.
- b. Retain or enhance riparian vegetation, stream-channel stability, sensitive soils, and water quality where livestock are present
- c. Coordinate the management of livestock with recreation use

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<sup>11</sup> Amended by Attachment One of the Record of Decision

- d. Require that suitable and adequate amounts of forage and cover are retained for wildlife and fish.

**Forest Challenge: Reduce Interference with and Improve Conditions for Livestock Operations**

**Goal 4.8**

**Livestock operations are not disrupted needlessly.**

**Objectives:**

- a. Help prevent human interference with livestock operations along driveways and in other areas
- b. Help control the spread of noxious weeds.
- c. Help implement a predator-control program where ~~intolerable~~<sup>12</sup> losses to livestock are demonstrated

**Forest Challenge: Protect Cultural Resources and Natural Features**

**Goal 4.9**

**Cultural resource values are preserved.**

**Objectives:**

- a. Find and protect cultural resources so that their scientific, historic, and social values are retained.

**Goal 4.10**

**Natural features and landmarks are preserved and retain their settings.**

**Objectives:**

- a. Find and protect natural features and landmarks so that their conditions and settings are retained.

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<sup>12</sup> Corrected 1/21/93 by Forest Plan Correction No. 1

## Forest-wide Resource Management Prescriptions, Standards, and Guidelines

The Bridger-Teton National Forest-wide resource Management Prescriptions, Standards, and Guidelines apply to all areas on the National Forest outside of congressionally designated Wilderness. Wilderness-wide Prescriptions, Standards, and Guidelines are displayed under [“Wilderness-wide resource Management Standards.”](#) The Bridger-Teton National Forest-wide and Wilderness-wide Management Prescriptions, Standards, and Guidelines are, in many cases, more general in nature than those contained in the fifth section of this chapter: **Desired Future Conditions.**

These Prescriptions, Standards, and Guidelines represent land management direction responsive to the Issues, Concerns, and Opportunities shown in Chapter 3 and the Bridger-Teton Management Problems, Challenges, Goals, and Objectives shown in Chapter 2 and the beginning of this chapter.

The resource Management Prescriptions are stated in the present tense because they apply to forest activities beginning immediately after the plan is approved. Standards are intended to be adhered to closely during plan implementation so they are stated in the future tense as "will be" requirements. Guidelines are intended to be more flexible, setting parameters rather than tight requirements. So, Guidelines are stated in the future tense as "should be" or "may be" directions. A "should be" Guideline calls for close adherence, requiring frequent application with few and documented exceptions. A "may be" Guideline anticipates that field conditions may warrant either frequent or occasional use but requires that use be evaluated and documented before another course of action is chosen.

### Recreation

Recreation Prescription - The Recreation Opportunity Spectrum (ROS) classification system is used for facility planning and to direct management. Recreation on the Bridger-Teton National Forest provides the full range of recreation opportunities, managed to create a balance of public and private uses responsive to local, regional, and national demand.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for recreation include: 1.1(f), 2.1 (a, b), 2.2(a, b), 2.3(a), 2.8(a), 4.5(b), 4.7(c), and 4.8(a).

**Winter Restrictions Standard** – Over snow vehicles and helicopters for skiing will avoid crucial winter ranges.

**Dispersed Camp Site Condition Standard** - Backcountry campsites will be managed according to the Frissell Condition Classification System. Actions-close, protect, or restore-will be taken to

restore campsites that do not meet Class 3. In some areas, where it is desirable to establish minimally developed campsites, they will meet standards appropriate to the recreation setting in which they are constructed.

**Developed Facility Standard** -Appropriate facilities will be provided at developed sites to prevent resource damage, protect public health and safety, and meet the desires of people who use developed sites.

**Dispersed Use Area Standard** -Low-development-level facilities will be provided at undeveloped concentrated-use areas to prevent resource damage and protect public health and safety.

**Recreation Information Standard** -Information about recreation opportunities will be made available to the public. This will include recreation guides, brochures, and maps.

**Recreation Riparian Area Standard** - No new recreation sites will be built in riparian areas unless a clear public need can be demonstrated and no other reasonable alternative exists. Unless designed to be submerged, recreation development will not occur in wetlands and in 100-year floodplains.

**Pack-in/Pack-out Standard** -Where disposal facilities are not available, implement a "pack-in/pack-out" solid waste-garbage-removal policy.

**Access to Recreation Sites Guideline** -Sites should be chosen so that recreational facilities can be designed to be accessed by the physically challenged.

**Outfitter and Guides Facilities Guideline** - Outfitter and guide facilities in dispersed areas should be built in less-frequented areas. To prevent unacceptable resource damage or sanitation problems, facilities may be built at popular locations. Only essential facilities will be provided at commercial outfitter camps in accordance with camp standards agreed upon with the outfitter and guides.

**Livestock Interference Guideline** -Recreationists should be informed about their effects on cattle movements and behavior, emphasizing loss of market and other resource values such as riparian and water quality values. Recreation access or traffic flow may be controlled from time to time to reduce interference with livestock trucking or driving.

## Visual Quality

**Visual Quality Prescription** -Visual quality objectives are defined in this plan and serve as a classification system used to set objectives for facility planning and resource management.



**Adopted Visual Quality Objectives** - Through the Oil and Gas leasing and Plan Implementation process, Visual Quality Objectives will be mapped and adopted by each Ranger District as objectives to be met. The procedure for mapping will be consistent with the National Forest Visual Management Stem and all standards set by the Forest Plan regarding Visual Resource Management.

**Minerals Facilities Standard** - All permanent above-ground facilities will be designed to minimize adverse visual impacts.<sup>13</sup>

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for visual quality: 2.5(a-d), and 4.1 (b), 4.2(d) and 4.4(a-b).

**Sensitive Travel Route Standard** -Along certain visually sensitive travel routes, the Visual Quality Objective will be Retention or Partial Retention. ~~The Management Area narratives at the end of this chapter contain identifications of visually sensitive routes.~~

**Scenic Byway and Wild and Scenic Rivers Visual Standard** - A sensitive travel corridor, a designated Scenic Byway, exists along U.S. Routes 26, 89, 189, 191, and 287 from Pinedale to Dubois, Wyoming through the Bridger-Teton and Shoshone National Forests and Grand Teton National Park. For areas adjacent to the Scenic Byway and within the foreground of potential Wild and Scenic Rivers, Visual Quality Objectives of Retention in the foreground and Retention or Partial Retention in the middle ground will be met, respectively.

**Grand Teton National Park Visual Quality Standard** - A Visual Quality Objective of Retention in the foreground and Retention or Partial Retention in the middle ground will be met for all areas visible to visitors to the Signal Mountain Overlook, and to boaters on the Snake River and motorists along roads within Grand Teton National Park. (This pertains to MAs 43, 61, and 62. Page 4, attachment one, Record of Decision). There are additional visual resource management standards described in specific MAs in Chapter 4.

**Sensitive Travel Route Standard** - Along certain visually sensitive travel routes, the Visual Quality Objective will be Retention or Partial Retention.<sup>14</sup>

**Slope Rounding Guideline** -All permanent Service Level A and B roads will have top-of-cut rounding to blend the cut slope into the natural slope.

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<sup>13</sup> ( Amended by Attachment One of the Record of Decision and corrected 11/21/93 by Correction No.1.)

<sup>14</sup> ( Amended by Attachment One of the Record of Decision and corrected 11/21/93 by Correction No.1.)

## Fisheries and Wildlife

**Fisheries and Wildlife Prescription** -The Bridger-Teton National Forest provides habitat adequate to meet the needs of dependent fish and wildlife populations, including those of Threatened, Endangered, and Sensitive species. If a decision to reestablish is made, the Bridger-Teton participates in implementation of the gray wolf recovery plan and formulation of guidelines for the management of gray wolf in the Greater Yellowstone Area. For further information, see: Northern Rocky Mountain Wolf Recovery Plan, U.S. Fish and Wildlife Service, August 3, 1987.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for fish and wildlife include: 2.1(a, b), 3.1 (a, b), 3.2(a-l), 3.3(a-c), and 4.1 (a).

**Security Area Standard** -Non-activity areas-security areas-will be maintained adjacent to concentrated human activity areas.

**Habitat Effectiveness Standard** -To provide for habitat effectiveness established for each Management Area, non-motorized and motorized vehicle access will be regulated either seasonally or year-round to protect such important big game habitat components as primary feeding areas, crucial winter range, calving/fawning/lambing areas, big-game rearing areas, rutting complexes, and big-game migration corridors.

**Road Location Guideline** -Roads and trail areas open to traffic should be located to avoid key areas described in the Habitat Effectiveness Standard.

**Big-Game Winter Range Standard** - Human activity and disturbance in crucial big-game winter range will be restricted from November 15 to April 30 if big-game are present in the area. Stipulations restricting oil and gas development will be applied to crucial big-game winter range as identified and agreed upon by the Forest Service and Wyoming Game and Fish Department.



GRIZZLY BEARS AND THEIR HABITAT WILL BE MANAGED TO MINIMIZE GRIZZLY BEAR-HUMAN CONFLICT.

**Elk Calving Area Standard** -Human activity and disturbance will be restricted in elk calving areas from May 15 to June 30 if elk are present in the area. Fences in elk calving areas will be designed so they do not create movement barriers to elk calves. Timing-Limitation stipulations will be applied to elk calving areas.

**Elk Wallow Standard** -Trail and open-road locations will be designed and managed to protect elk wallow complexes.

**Notification Standard** -Associated with any surface disturbance or water depletion activities that will affect Threatened or Endangered species, the operator will be formally notified that they may be subject to mitigation, which could include monetary compensation.

**Grizzly Bear-Human Management Standard** - Within Grizzly Bear Management Situation 1, 2, and 3, existing and future Interagency Grizzly Bear Management Guidelines will be followed to minimize grizzly bear-human conflict potential and resolve grizzly bear-human conflicts. The Special Order for Sanitation in Occupied Grizzly Habitat signed by the Regional Forester will also be followed.

**Grizzly Bear Habitat Management Standard** - Within Grizzly Bear Management Situation 1 and 2, existing and future Interagency Grizzly Bear Management Guidelines will be followed to maintain and improve habitat. In Management Situation 1 and 2, some changes in livestock distribution or numbers will be made where livestock grazing is demonstrated to have an adverse effect on meeting grizzly bear recovery objectives. No changes in class of livestock will be allowed.

**Bald Eagle Nesting Territory Planning Standard** - Site-specific management plans will be developed for all bald eagle territories on the Bridger-Teton. Incorporated by reference: Habitat Management Program, Threatened and Endangered Plants and Animals, Bridger-Teton National Forest, 1984, and Bald Eagle Working Group Guidelines for Yellowstone Ecosystem, 1983, will be followed in the interim:

**Peregrine Falcon Reintroduction Guideline** - In cooperation with the U.S. Fish and Wildlife Service, peregrines should be reintroduced into identified key areas suitable for peregrine recovery. *Peregrine Falcon Recovery Plan, 1977.*

**Peregrine Falcon Disturbance Standard** Land use practices or development which eliminate peregrine falcon habitat within 1.0 mile of occupied or suitable-but-unoccupied cliffs within a recovery area will not be allowed. Human activities will be restricted within 0.5 mile of occupied eyries between March 1 and July 31 or July 1 to September 15 for hack sites, depending upon the height of the nesting cliff. Those research or management activities necessary for adequate protection of the peregrine falcon habitat will be allowed under close supervision of the Wyoming Game and Fish Department, the Peregrine Fund, and the Bridger- Teton National Forest. Incorporated by reference: *Peregrine Falcon Recovery Plan, 1977.*

**Risk Reduction in Whooping Crane and Trumpeter Swan Habitat Standard** - "High- risk" transmission lines in important crane or swan habitat will be identified and work done with owners to modify or mark the transmission lines and help reduce crane and swan mortality. For

further information, see: Endangered, Threatened, and Sensitive Plant and Animal Species and Their Habitats, Bridger-Teton National Forest, 1985.

**Whooping Crane Disturbance Standard** -High levels of human disturbance such as building activities, and low-level helicopter activity associated with seismographic exploration will not occur in important crane habitat during the summer months when cranes are present. Information will be presented to prevent accidental shooting of whooping cranes. For further information, see: Endangered, Threatened, and Sensitive Plant and Animal Species and Their Habitats, Bridger-Teton National Forest, 1985.

**Fencing Riparian Area Guideline** - New or rebuilt fences across riparian areas or upland areas adjacent to riparian areas should be built using a wooden top pole or other state-of-the-art marking technique to increase visibility of the fence and reduce possible collision of cranes and waterfowl.



**HABITAT FOR THE KENDALL WARM SPRINGS DACE IS PROTECTED.**

**Kendall Warm Springs Dace Management Standard** -The existing population and habitat of the Kendall Warm Springs dace will be maintained and enhanced. Incorporated by reference: *Kendall Warm Springs Dace Recovery Plan, U.S. Fish and Wildlife Service, Region 6, July 12, 1982.*

**Sensitive Species Management Standard** - Quantifiable objectives will be developed to identify and improve the status of Sensitive species and eliminate the need for listing. Crucial habitats of priority I, II, and III species as listed by Wyoming Game and Fish and the Intermountain Region Sensitive Species List will be protected and maintained. The Forest Service will cooperate with Wyoming Game and Fish on management programs when needed to maintain population objectives of these species, especially with species which have been identified as needing immediate attention and active management to ensure a significant decline in breeding populations do not occur. Information collection and interpretive programs will promote the conservation of these species and their habitats. National Forest managers will participate in species and habitat surveys and monitoring programs needed to gain necessary data to determine population status.

**Fish Habitat Management Guideline** - For fish habitat providing a fishery at or near its potential, fish populations should be maintained at existing levels. For habitat below its potential, habitat should be improved and maintained to at least 90 percent of its natural potential. First priority

for improvement should be streams supporting Colorado River and Bonneville cutthroat trout which are Sensitive species.

**Stream bank Stability Guideline** -At least 90 percent of the natural bank stability of streams that support a fishery, particularly Threatened, Endangered and Sensitive species, and all trout species, should be maintained. Stream bank vegetation should be maintained to 80 percent of its potential natural condition or an HCI rating of 85 or greater. Stream bank stability vegetation and fish numbers and biomass should be managed by stream type.

**New Impoundments Standard** - Minimum-conservation-pools of at least one- third of the water surface for all new impoundments capable of sustaining a fishery resource will be required.

**Sensitive Cutthroat Trout Habitat Guideline** -Habitat occupied by existing and reintroduced populations of Colorado River, Bonneville, and Snake River cutthroat trout should be managed to protect species purity.

**Fish Passage Standard** - On those streams with a fisheries resource, culvert installations will be designed to facilitate fish passage. The most desirable type of culvert has a bottom consisting of native material. Structural modifications of existing culvert will be necessary where excessive water velocity; insufficient water depth, elevated outlets, and debris accumulation obstruct fish passage. For further information, see *Fish Migration and Fish Passage, A Practical Guide to Solving Fish Passage Problems, June, 1980*, and also GAWS, FISHCULVERT program now operational for culvert analysis.



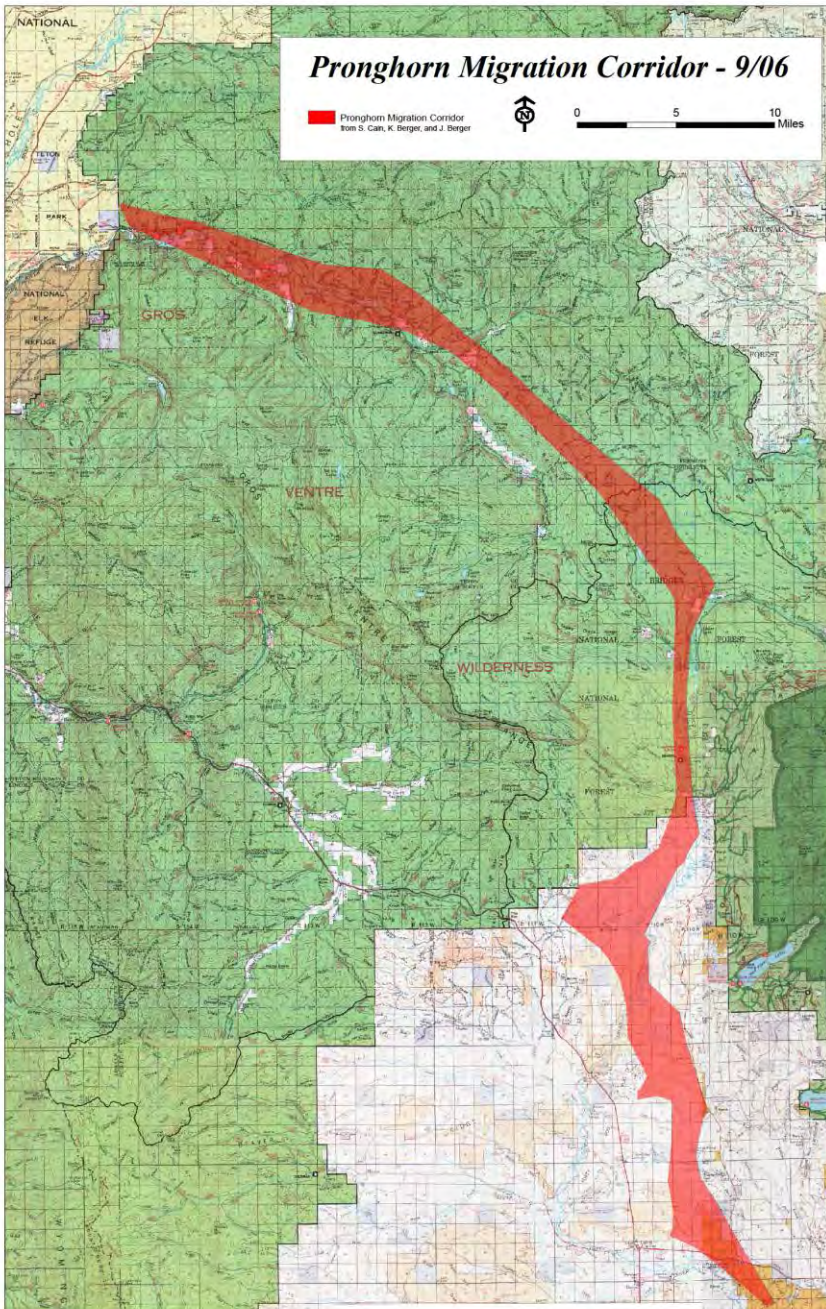
**Reintroduction Areas of Bighorn Sheep Range Standard** - On Darby Mountain and Fish Creek in the Big Piney Ranger District where bighorn sheep have been reintroduced, all development activities will be excluded and domestic sheep will not be restocked.

**Snag Management Guideline** - Snags left standing for wildlife should be marked, or access to these snags reduced, to prevent them from being cut. Firewood permit holders should be made aware of the restrictions. Firewood gathering should be controlled by signing, marking, or limiting access to reduce the amount of removal of down, woody material that has been distributed on the harvest units to meet wildlife and other management objectives.

**Snag Habitat Guideline** -Within a timber sale area or vegetative treatment area, forested stands containing dead or down and green trees should be provided to serve as wildlife snag patches. Only silvicultural practices which achieve desired snag attributes should be used in stands managed as wildlife snag patches. The snag patches should be 5 acres or more in size and well distributed. An average of 60 acres per section should be retained and be unavailable for timber harvest or firewood cutting. A mixture of snag species and diameters should be

maintained for diversity. Retention of groups of snags in and adjacent to timber harvest units should be considered when opportunities are available.

**Pronghorn Standard-** All projects, activities, and infrastructure authorized in the designated Pronghorn Migration Corridor will be designed, timed and/or located to allow continued successful migration of the pronghorn that summer in Jackson Hole and winter in the Green River basin.<sup>15</sup>



<sup>15</sup> Pronghorn Migration Corridor Forest Plan Amendment, May 31, 2008

## Northern Rockies Lynx Management Direction Record of Decision March, 2007<sup>16,17</sup>

The following management direction applies to all National Forest System lands that are known to be occupied by Canada lynx. At the time of this decision the following National Forests in the Northern Rockies lynx planning area are known to be occupied: Bridger-Teton, Clearwater, Custer, Flathead, Idaho Panhandle, Kootenai, Lolo, Shoshone, Targhee. Portions of the Custer, Gallatin, Helena, and .Lewis & Clark are also occupied.

The following National Forests in the Northern Rockies lynx planning area are not occupied by Canada lynx: Ashley, Beaverhead-Deerlodge, Bighorn, Bitterroot, Nez Perce, and Salmon-Challis. In addition, isolated mountain ranges on the Custer, Gallatin, Helena and Lewis and Clark are unoccupied - see Figure 1-1. Until such time as these National Forest System lands become occupied they should consider the following management direction, but are not required to follow it.

### **GOAL<sup>14</sup>**

Conserve the Canada lynx.

**ALL MANAGEMENT PRACTICES AND ACTIVITIES (ALL). The following objectives, standards, and guidelines apply to all management projects in lynx habitat in lynx analysis units (LAUs) in occupied habitat and in linkage areas, subject to valid existing rights. They do not apply to wildfire suppression, or to wildland fire use.**

#### Objective<sup>30</sup> ALL 01

Maintain<sup>26</sup> or restore<sup>40</sup> lynx habitat<sup>23</sup> connectivity<sup>16</sup> in and between LAU<sup>21</sup>, and in linkage areas<sup>22</sup>.

#### Standard<sup>44</sup> ALL S1

New or expanded permanent development<sup>33</sup> and vegetation management<sup>49</sup>

Projects<sup>36</sup> must maintain<sup>26</sup> habitat connectivity<sup>16</sup> in an LAU<sup>21</sup> and/ or linkage area<sup>22</sup>.

#### Guideline<sup>15</sup> ALL G1

Methods to avoid or reduce effects on lynx should be used when constructing or reconstructing highways<sup>18</sup> or forest highways<sup>12</sup> across federal land. Methods could include fencing, underpasses, or overpasses.

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<sup>16</sup> Footnotes are specific to this document

<sup>17</sup> The complete Record of Decision is located at:

[http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5277399.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5277399.pdf)

Standard<sup>44</sup> LAU S1

Changes in LAU<sup>21</sup> boundaries shall be based on site-specific habitat information and after review by the Forest Service Regional Office.

**VEGETATION MANAGEMENT ACTIVITIES AND PRACTICES (VEG). The following objectives, standards, and guidelines apply to vegetation management projects<sup>36</sup> in lynx habitat within lynx analysis units (LAUs) in occupied habitat. With the exception of Objective VEG 03 that specifically concerns wildland fire use, the objectives, standards, and guidelines do not apply to wildfire suppression, wildland fire use, or removal of vegetation for permanent developments such as mineral operations, ski runs, roads, and the like. None of the objectives, standards, or guidelines apply to linkage areas.**

Objective<sup>30</sup> VEG 01

Manage vegetation<sup>49</sup> to mimic or approximate natural succession and disturbance processes while maintaining habitat components necessary for the conservation of lynx.

Objective VEG 0 2

Provide a mosaic of habitat conditions through time that support dense horizontal cover<sup>19</sup> and high densities of snowshoe hare. Provide winter snowshoe hare

Habitat<sup>51</sup> in both the stand initiation structural stage and in mature, multi-story conifer vegetation.

Objective VEG 03

Conduct fire use<sup>11</sup> activities to restore<sup>40</sup> ecological processes and maintain or improve lynx habitat.

Objective VEG 04

Focus vegetation management<sup>49</sup> in areas that have potential to improve winter snowshoe hare habitat<sup>51</sup> but presently have poorly developed understories that lack dense horizontal cover.

Standard<sup>44</sup> VEG S1

**Where and to what this applies:** Standard VEG S1 applies to all vegetation management<sup>49</sup> projects<sup>36</sup> that regenerate<sup>38</sup> forests, except for fuel treatment<sup>13</sup> projects<sup>36</sup> within the wildland urban interface<sup>50</sup> (WUI) as defined by HFRA<sup>17</sup> subject to the following limitation:

Fuel treatment projects<sup>36</sup> within the WUI<sup>50</sup> that do not meet Standards VEG S1, VEG S2, VEGSS5, and VEG S6 shall occur on no more than 6 percent (cumulatively) of lynx habitat on each administrative unit (a unit is a National Forest). *In addition, fuel treatment projects may not result in more than three adjacent LAUs exceeding the standard.*



For fuel treatment projects<sup>36</sup> within the WUI<sup>50</sup> see guideline VEG G10.

**The standard:** Unless a broad scale assessment has been completed that substantiates different historic levels of stand initiation structural stages<sup>45</sup> limit disturbance in each LAU as follows:

If more than 30 percent of the lynx habitat in an LAU is currently in a stand initiation structural stage that does not yet provide winter snowshoe hare habitat, no additional habitat may be regenerated by vegetation management projects<sup>36</sup>.

#### Standard VEG S2

**Where and to what this applies:** Standard VEG S2 applies to all timber management<sup>47</sup> projects<sup>36</sup> that regenerate<sup>38</sup> forests, except for fuel treatment<sup>13</sup> projects<sup>36</sup> within the wildland urban interface SO (WUI) as defined by HFRA<sup>17</sup>, subject to the following limitation:

Fuel treatment projects<sup>36</sup> within the WUI<sup>50</sup> that do not meet Standards VEG S1, VEG S2, VEG S, and VEG S6 shall occur on no more than 6 percent (cumulatively) of lynx habitat on each administrative unit (a unit is a National Forest).

For fuel treatment projects<sup>36</sup> within the WUI<sup>50</sup> see guideline VEG G10.

**The standard:** Timber management<sup>47</sup> projects<sup>36</sup> shall not regenerate<sup>38</sup> more than 15 percent of lynx habitat on NFS lands within an LAU in a ten-year period.

#### Standard VEG S6

Where and to what this applies: Standard VEG SS applies to all precommercial thinning<sup>3s</sup> projects<sup>36</sup>, except for fuel treatment<sup>3</sup> projects<sup>36</sup> that use precommercial thinning as a tool within the wildland urban interface<sup>50</sup> (WUI) as defined by Forest Service HFRA<sup>17</sup>, subject to the following limitation:

Fuel treatment projects<sup>36</sup> within the wu1so that do not meet Standards VEG S1, VEG S2, VEG S2, and VEG S6 shall occur on no more than 6 percent (cumulatively) of lynx habitat on each administrative unit (a unit is a National Forest).

For fuel treatment projects<sup>36</sup> within the WUI<sup>50</sup> see guideline VEG G10.

**The Standard:** Precommercial thinning projects<sup>36</sup> that reduce snowshoe hare habitat may occur from the stand initiation structural stage<sup>45</sup> until the stands no longer provide winter snowshoe hare habitat only:

1. Within 200 feet of administrative sites, dwellings, or outbuildings; or
2. For research studies<sup>39</sup> or genetic tree tests evaluating genetically improved reforestation stock; or
3. Based on new information that is peer reviewed and accepted by the regional level of the Forest Service, and state level of FWS, where a written determination states:

- a. that a project<sup>36</sup> is not likely to adversely affect lynx; or
  - b. that a project<sup>36</sup> is likely to have short term adverse effects on lynx or its habitat, but would result in long-term benefits to lynx and its habitat; or
4. For conifer removal in aspen, or daylight thinnings around individual aspen trees, where aspen is in decline; or
  5. For daylight thinning of planted rust-resistant white pine where 80 % of the winter snowshoe hare habitat<sup>51</sup> is retained; or
  6. To restore whitebark pine.

*Exceptions 2 through 6 shall only be utilized in LA Us where Standard VEG 51 is met.*

#### Standard VEG 56

**Where and to what this applies:** Standard VEG 56 applies to all vegetation management<sup>49</sup> projects<sup>36</sup> except for fuel treatment<sup>13</sup> projects<sup>36</sup> within the wildland urban interfaces (WUI) as defined by HFRA<sup>17</sup> subject to the following limitation:

Fuel treatment projects<sup>36</sup> within the WUI<sup>50</sup> that do not meet Standards VEG S1, VEG S2, VEG S5, and VEG S6 shall occur on no more than 6 percent (cumulatively) of lynx habitat on each administrative unit (a unit is a National Forest).

For fuel treatment projects<sup>36</sup> within the WUI<sup>50</sup> see guideline VEG G10.

**The Standard:** Vegetation management projects<sup>36</sup> that reduce snowshoe hare habitat in multi-story mature or late successional forests<sup>29</sup> may occur only:

1. Within 200 feet of administrative sites, dwellings, outbuildings, recreation sites, and special use permit improvements, including infrastructure within permitted ski area boundaries; or
2. For research studies<sup>39</sup> or genetic tree tests evaluating genetically improved reforestation stock; or
3. For incidental removal during salvage harvest<sup>42</sup> (e.g. removal due to location of skid trails).

*Exceptions 2 and 3 shall only be utilized in LAUs where Standard VEG 51 is met. (NOTE: Timber harvest is allowed in areas that have potential to improve winter snowshoe hare habitat but presently have poorly developed understories that lack dense horizontal cover [e.g. uneven age management systems could be used to create openings where there is little understory so that new forage can grow]).*

Guideline VEG G1

Vegetation management<sup>49</sup> projects<sup>36</sup> should be planned to recruit a high density of conifers, hardwoods, and shrubs where such habitat is scarce or not available.

Priority for treatment should be given to stem-exclusion, closed-canopy structural stage<sup>46</sup> stands to enhance habitat conditions for lynx or their prey (e.g. mesic, monotypic lodgepole stands). Winter snowshoe hare habitat<sup>51</sup> should be near denning habitat<sup>6</sup>.

Guideline VEG G4

Prescribed fire<sup>34</sup> activities should not create permanent travel routes that facilitate snow compaction. Constructing permanent firebreaks on ridges or saddles should be avoided

Guideline VEG G5

Habitat for alternate prey species, primarily red squirrel<sup>37</sup>, should be provided in each LAU.

Guideline VEG G10

Fuel treatment projects<sup>36</sup> within the WUI<sup>50</sup> as defined by HFRA17 should be designed considering Standards VEG S1, S2, S5, and S6 to promote lynx conservation.

Guideline VEG G11

Denning habitat<sup>6</sup> should be distributed in each LAU in the form of pockets of large amounts of large woody debris, either down logs or root wads, or large piles of small wind thrown trees ("jack-strawed" piles). If denning habitat appears to be lacking in the LAU, then projects<sup>36</sup> should be designed to retain some coarse woody debris<sup>4</sup>, piles, or residual trees to provide denning habitat<sup>6</sup> in the future.

**LIVESTOCK MANAGEMENT (GRAZ): The following objectives and guidelines apply to grazing projects in lynx habitat in lynx analysis units (LAUs) in occupied habitat. They do not apply to linkage areas.**

Objective<sup>30</sup> GRAZ 0 1

Manage livestock grazing to be compatible with improving or maintaining<sup>26</sup> lynx habitat<sup>23</sup>.

Guideline<sup>31</sup> GRAZ G1

In fire- and harvest-created openings, livestock grazing should be managed so impacts do not prevent shrubs and trees from regenerating.

Guideline GRAZ G2

In aspen stands, livestock grazing should be managed to contribute to the long-term health and sustainability of aspen.

Guideline GRAZ G3

In riparian areas<sup>41</sup> and willow carrs<sup>3</sup>, livestock grazing should be managed to contribute to maintaining or achieving a preponderance of mid- or late-seral stages<sup>28</sup>, similar to conditions that would have occurred under historic disturbance regimes.

Guideline GRAZ G4

In shrub-steppe habitats<sup>43</sup>, livestock grazing should be managed in the elevation ranges of forested lynx habitat in LAUs<sup>21</sup>, to contribute to maintaining or achieving a preponderance of mid- or late-seral stages, similar to conditions that would have occurred under historic disturbance regime.

**HUMAN USE PROJETS (HU): The following objectives and guidelines apply to human use projects, such as special uses (other than grazing), recreation management, roads, highways, and mineral and energy development, in lynx habitat in lynx analysis units (LAUs) in occupied habitat, subject to valid existing rights.**

**They do not apply to vegetation management projects or grazing projects directly. They do not apply to linkage areas.**

Objective<sup>30</sup> HU 01

Maintain<sup>26</sup> the lynx's natural competitive advantage over other predators in deep snow, by discouraging the expansion of snow-compacting activities in lynx habitat<sup>23</sup>.

Objective HU 0 2

Manage recreational activities to maintain lynx habitat and connectivity<sup>16</sup>

Objective HU 03

Concentrate activities in existing developed areas, rather than developing new areas in lynx habitat

Objective HU 04

Provide for lynx habitat needs and connectivity when developing new or expanding existing developed recreation<sup>9</sup> sites or ski areas.

Objective HU 05

Manage human activities, such as special uses, mineral and oil and gas exploration and development, and placement of utility transmission corridors, to reduce impacts on lynx and lynx habitat.

Objective HU 06

Reduce adverse highway<sup>18</sup> effects on lynx by working cooperatively with other agencies to provide for lynx movement and habitat connectivity<sup>16</sup>, and to reduce the potential of lynx mortality.

#### Guideline HU G1

When developing or expanding ski areas, provisions should be made for adequately sized inter-trail islands that include coarse woody debris<sup>4</sup>, so winter snowshoe hare habitat<sup>51</sup> is maintained.

#### Guideline HU G2

When developing or expanding ski areas, lynx foraging habitat should be provided consistent with the ski area's operational needs, especially where lynx habitat occurs as narrow bands of coniferous forest across mountain slopes.

#### Guideline HU G3

Recreation developments and operations should be planned in ways that both provide for lynx movement and maintain the effectiveness of lynx habitat<sup>23</sup>.

#### Guideline HU G4

For mineral and energy development sites and facilities, remote monitoring should be encouraged to reduce snow compaction

#### Guideline HU G5

For mineral and energy development sites and facilities that are closed, a reclamation plan that restores<sup>40</sup> lynx habitat should be developed.

#### Guideline HU G6

Methods to avoid or reduce effects on lynx should be used in lynx habitat<sup>23</sup> when upgrading unpaved roads to maintenance levels 4 or 5, if the result would be increased traffic speeds and volumes, or a foreseeable contribution to increases in human activity or development.

#### Guideline HU G7

New permanent roads should not be built on ridge-tops and saddles, or in areas identified as important for lynx habitat connectivity<sup>16</sup>, new permanent roads and trails should be situated away from forested stringers.

#### Guideline HU G8

Cutting brush along low-speed<sup>25</sup>, low-traffic-volume roads should be done to the minimum level necessary to provide for public safety.

#### Guideline HU G9

On new roads built for projects<sup>36</sup>, public motorized use should be restricted. Effective closures should be provided in road designs. When the project<sup>36</sup> is over, these roads should be reclaimed or decommissioned, if not needed for other management objectives.

#### Guideline HU G10

When developing or expanding ski areas and trails, consider locating access roads and lift termini to maintain and provide lynx security habitat<sup>10</sup> if identified as a need.

#### Guideline HU G1 1

Designated over-the-snow routes or designated play areas should not expand outside baseline areas of consistent snow compaction<sup>1</sup>, unless designation serves to consolidate use and improve lynx habitat. This may be calculated on an LAU basis, or on a combination of immediately adjacent LAUs.

This does not apply inside permitted ski area boundaries, to winter logging, to rerouting trails for public safety, to accessing private inholdings, or to access regulated by Guideline HU G12.

Use the same analysis boundaries for all actions subject to this guideline.

#### Guideline HU G1 2

Winter access for non-recreation special uses and mineral and energy exploration and development, should be limited to designated routes<sup>8</sup> or designated over-the snow routes<sup>7</sup>

**LINKAGE AREAS (LINK): The following objective, standard, and guidelines apply to all projects within linkage areas in occupied habitat, subject to valid existing rights.**

#### Objective<sup>30</sup> LINK 01

In areas of intermingled land ownership, work with landowners to pursue conservation easements, habitat conservation plans, land exchanges, or other solutions to reduce the potential of adverse impacts on lynx and lynx habitat.

#### Standard<sup>44</sup> LINK S1

When highway<sup>18</sup> or forest highway<sup>12</sup> construction or reconstruction is proposed in linkage areas<sup>22</sup>, identify potential highway crossings.

#### Guideline<sup>15</sup> LINK G1

NFS lands should be retained in public ownership.

#### Guideline LINK G2

Livestock grazing in shrub-steppe habitats<sup>43</sup> should be managed to contribute to maintaining or achieving a preponderance of mid- or late-seral stages<sup>28</sup>, similar to conditions that would have occurred under historic disturbance regimes.

## REQUIRED MONITORING

Map the location and intensity of snow compacting activities and designated and groomed routes that occurred inside LAUs during the period of 1998 to 2000. The mapping is to be completed within one year of this decision, and changes in activities and routes are to be monitored every five years after the decision.

When project decisions are signed report the following:

### 1. Fuel treatments:

- a. Acres of fuel treatment in lynx habitat by forest and LAU, and whether the treatment is within *or outside* the WUI as defined by HFRA.
- b. Whether or not the fuel treatment met the vegetation standards or guidelines. If standard(s) are not met, report which standard(s) are not met, why they were not met, and how many acres were affected.

*c. Whether or not 2 adjacent LAUs exceed standard VEG S1 (30% in a stand initiation structural stage that is too short to provide winter snowshoe hare habitat), and what event(s) or action(s) caused the standard to be exceeded.*

### 2. *Application of exception in Standard VEG S5*

- a. *For areas where any of the exemptions 1 through 6 listed in Standard VEG S5 were applied: Report the type of activity, the number of acres, and the location (by unit, and LAU) and whether or not Standard VEG S1 was within the allowance.*

### 3. *Application of exceptions in Standard VEG S6*

- a. *For areas where any of the exemptions 1 through 3 listed in Standard VEG S6 were applied: Report the type of activity, the number of acres, and the location (by unit, and LAU) and whether or not Standard VEG S1 was within the allowance.*

### 4. *Application of guidelines*

- a. *Document the rationale for deviations to guidelines. Summarize what guideline(s) was not followed and why.*

Directions in italics were terms and conditions that were incorporated from the FWS Biological Opinion (USDI FWS 2007).



GLOSSARY (This glossary is specific to the Lynx amendment)

1. *Area of consistent snow compaction* - An area of consistent snow compaction is an area of land or water that during winter is generally covered with snow and gets enough human use that individual tracks are indistinguishable. In such places, compacted snow is evident most of the time, except immediately after (within 48 hours) snowfall. These can be areas or linear routes, and are generally found in or near snowmobile or cross-country ski routes, in adjacent openings, parks and meadows, near ski huts or plowed roads, or in winter parking areas. Areas of consistent snow compaction will be determined based on the acreage or miles used during the period 1998 to 2000.

2. *Broad scale assessment* - A broad scale assessment is a synthesis of current scientific knowledge, including a description of uncertainties and assumptions, to provide an understanding of past and present conditions and future trends, and a characterization of the ecological, social, and economic components of an area. (LCAS)

3. *Carr* - Deciduous woodland or shrub land occurring on permanently wet, organic soil. (LCAS)

4. *Course woody debris* - Any piece(s) of dead woody material, e.g., dead boles, limbs, and large root masses on the ground or in streams. (LCAS)

5. *Daylight thinning* - Daylight thinning is a form of precommercial thinning that removes the trees and brush inside a given radius around a tree.

6. *Denning habitat (lynx)* - Denning habitat is the environment lynx use when giving birth and rearing kittens until they are mobile. The most common component is large amounts of coarse woody debris to provide escape and thermal cover for kittens.

Denning habitat must be within daily travel distance of winter snowshoe hare habitat - the typical maximum daily distance for females is about three to six miles. Denning habitat includes mature and old growth forests with plenty of coarse woody debris. It can also include young regenerating forests with piles of coarse woody debris, or areas where down trees are jack-strawed.

7. *Designated over-the-snow routes* - Designated over-the-snow routes are routes managed under permit or agreement or by the agency, where use is encouraged, either by on-the-ground marking or by publication in brochures, recreation opportunity guides or maps (other than travel maps), or in electronic media produced or approved by the agency.

The routes identified in outfitter and guide permits are designated by definition; groomed routes also are designated by definition. The determination of baseline snow compaction will be based on the miles of designated over-the-snow routes authorized, promoted or encouraged during the period 1998 to 2000.

8. *Designated route* - A designated route is a road or trail that has been identified as open for specified travel use.

9. *Developed recreation* - Developed recreation requires facilities that result in concentrated use. For example, skiing requires lifts, parking lots, buildings, and roads; campgrounds require roads, picnic tables, and toilet facilities.

10. *Security habitat (lynx)* - Security habitat amounts to places in lynx habitat that provide secure winter bedding sites for lynx in highly disturbed landscapes like ski areas.

Security habitat gives lynx the ability to retreat from human disturbance. Forest structures that make human access difficult generally discourage human activity in security habitats. Security habitats are most effective if big enough to provide visual and acoustic insulation and to let lynx easily move away from any intrusion. They must be close to winter snowshoe hare habitat. (LCAS)

11. *Fire use* - Fire use is the combination of wildland fire use and using prescribed fire to meet resource objectives. (NIFC) Wildland fire use is the management of naturally ignited wildland fires to accomplish resource management objectives in areas that have a fire management plan. The use of the term wildland fire use replaces the term prescribed natural fire. (Wildland and Prescribed Fire Management Policy, August 1998)

12. *Forest highway* - A forest highway is a forest road under the jurisdiction of, and maintained by, a public authority and open to public travel (USC: Title 23, Section 101(a)), designated by an agreement with the FS, state transportation agency, and Federal Highway Administration.

13. *Fuel treatment* - A fuel treatment is a type of vegetation management action that reduces the threat of ignition, fire intensity, or rate of spread, or is used to restore fire adapted ecosystems.

14. *Goal* -A goal is a broad description of what an agency is trying to achieve, found in a land management plan. (LCAS)

15. *Guideline* - A guideline is a particular management action that should be used to meet an objective found in a land management plan. The rationale for deviations may be documented, but amending the plan is not required. (LCAS modified)

16. *Habitat connectivity (lynx)* - Habitat connectivity consists of an adequate amount of vegetation cover arranged in a way that allows lynx to move around. Narrow forested mountain ridges or shrub-steppe plateaus may serve as a link between more extensive areas of lynx habitat; wooded riparian areas may provide travel cover across open valley floors. (LCAS)

17. *HFRA (Healthy Forests Restoration Act)* - Public Law 108-148, passed in December 2003. The HFRA provides statutory processes for hazardous fuel reduction projects on certain types of at-risk National Forest System and Bureau of Land Management lands. It also provides other

authorities and direction to help reduce hazardous fuel and restore healthy forest and rangeland conditions on lands of all ownerships. (Modified from Forest Service HFRA web site.)

18. *Highway* - The word highway includes all roads that are part of the National Highway System. (23 CFR 470.107(b))

19. *Horizontal cover* - Horizontal cover is the visual obscurity or cover provided by habitat structures that extend to the ground or snow surface primarily provided by tree stem and tree boughs, but also includes herbaceous vegetation, snow, and landscape topography.

20. *Isolated mountain range* - Isolated mountain ranges are small mountains cut off from other mountains and surrounded by flatlands. On the east side of the Rockies, they are used for analysis instead of sub-basins. Examples are the Little Belts in Montana and the Bighorns in Wyoming.

21. *LAU (Lynx Analysis Unit)* - An LAU is an area of at least the size used by an individual lynx, from about 25 to 50 square miles (LCAS). An LAU is a unit for which the effects of a project would be analyzed; its boundaries should remain constant.

22. *Linkage area* - A linkage area provides connectivity between blocks of lynx habitat. Linkage areas occur both within and between geographic areas, where basins, valleys, or agricultural lands separate blocks of lynx habitat, or where lynx habitat naturally narrows between blocks. (LCAS updated definition approved by the Steering Committee 10/23/01)

23. *Lynx habitat* - Lynx habitat occurs in mesic coniferous forest that experience cold, snowy winters and provide a prey base of snowshoe hare. In the northern Rockies, lynx habitat generally occurs between 3,500 and 8,000 feet of elevation, and primarily consists of lodgepole pine, subalpine fir, and Engelmann spruce. It may consist of cedar-hemlock in extreme northern Idaho, northeastern Washington and northwestern Montana, or of Douglas-fir on moist sites at higher elevations in central Idaho. It may also consist of cool, moist Douglas-fir, grand fir, western larch and aspen when interspersed in subalpine forests. Dry forests do not provide lynx habitat. (LCAS)

24. *Lynx habitat in an unsuitable condition* -Lynx habitat in an unsuitable condition consists of lynx habitat in the stand initiation structural stage where the trees are generally less than ten to 30 years old and have not grown tall enough to protrude above the snow during winter. Stand replacing fire or certain vegetation management projects can create unsuitable conditions. Vegetation management projects that can result in unsuitable habitat include clearcuts and seed tree harvest, and sometimes shelterwood cuts and commercial thinning depending on the resulting stand composition and structure. (LCAS)

25. *Low-speed, low-traffic-volume road* - Low speed is less than 20 miles per hour; low volume is a seasonal average daily traffic load of less than 100 vehicles per day.

26. *Maintain* – In the context of this decision, maintain means to provide enough lynx habitat to conserve lynx. It does not mean to keep the status quo.

27. *Maintenance level* - Maintenance levels define the level of service provided by and maintenance required for a road. (FSH 7709.58, Sec 12.3) Maintenance level 4 is assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most level 4 roads have double lanes and an aggregate surface. Some may be single lane; some may be paved or have dust abated. Maintenance level 5 is assigned to roads that provide a high degree of user comfort and convenience.

Normally, level 5 roads are have double lanes and are paved, but some may be aggregate surfaced with the dust abated.

28. *Mid-seral or later* - Mid-seral is the successional stage in a plant community that is the midpoint as it moves from bare ground to climax. For riparian areas, it means willows or other shrubs have become established. For shrub-steppe areas, it means shrubs associated with climax are present and increasing in density.

29. *Multi-story mature or late successional forest* -This stage is similar to the *old multistory structural* stage (see below). However, trees are generally not as old, and decaying trees may be somewhat less abundant.

30. *Objective* - An objective is a statement in a land management plan describing desired resource conditions and intended to promote achieving programmatic goals. (LCAS) 31 *Old multistory structural stage* - Many age classes and vegetation layers mark the old forest, multistoried stage. It usually contains large old trees. Decaying fallen trees may be present that leave a discontinuous overstory canopy. On cold or moist sites without frequent fires or other disturbance, multi-layer stands with large trees in the uppermost layer develop. (Oliver and Larson, 1996)

32 *Old growth* - Old growth forests generally contain trees that are large for their species and the site, and are sometimes decadent with broken tops. Old growth often contains a variety of tree sizes, large snags, and logs, and a developed and often patchy understory.

33. *Permanent development* - A permanent development is any development that results in a loss of lynx habitat for at least 15 years. Ski trails, parking lots, new permanent roads, structures, campgrounds, and many special use developments would be considered permanent developments.

34. *Prescribed fire* - A prescribed fire is any fire ignited as a management action to meet specific objectives. A written, approved prescribed fire plan must exist, and NEPA requirements met, before ignition. The term prescribed fire replaces the term management ignited prescribed fire. (NWCG)

35. *Precommercial thinning* - Precommercial thinning is mechanically removing trees to reduce stocking and concentrate growth on the remaining trees, and not resulting in immediate financial return. (Dictionary of Forestry)

36. *Project* - All, or any part or number of the various activities analyzed in an Environmental Impact Statement, Environmental Analysis, or Decision Memo. For example, the vegetation management in some units or stands analyzed in an EIS could be for fuel reduction, and therefore those units or stands would fall within the term *fuel treatment project* even if the remainder of the activities in the EIS are being conducted for other purposes, and the remainder of those units or stands have other activities prescribed in them. All units in an analysis do not necessarily need to be for fuel reduction purposes for certain units to be considered a *fuel reduction project*.

37. *Red squirrel habitat* - Red squirrel habitat consists of coniferous forests of seed and cone-producing age that usually contain snags and downed woody debris, generally associated with mature or older forests.

38. *Regeneration harvest* - The cutting of trees and creating an entire new age class; an even-age harvest. The major methods are clearcutting, seed tree, shelterwood, and group selective cuts. (Helms, 1998)

39. *Research* - Research consists of studies conducted to increase scientific knowledge or technology. For the purposes of Standards VEG S5 and VEG S6, research applies to studies financed from the forest research budget (FSM 4040) and administrative studies financed from the NF budget.

40. *Restore, restoration* - To restore is to return or re-establish ecosystems or habitats to their original structure and species composition. (Dictionary of Forestry)

41. *Riparian area* - An area with distinctive soil and vegetation between a stream or other body of water and the adjacent upland; includes wetlands and those portions of floodplains and valley bottoms that support riparian vegetation. (LCAS)

42. *Salvage harvest* - Salvage harvest is a commercial timber sale of dead, damaged, or dying trees. It recovers economic value that would otherwise be lost. Collecting firewood for personal use is not considered salvage harvest.

43. *Shrub steppe habitat* - Shrub steppe habitat consists of dry sites with shrubs and grasslands intermingled.

44. *Standard* - A standard is a required action in a land management plan specifying how to achieve an objective or under what circumstances to refrain from taking action. A plan must be amended to deviate from a standard.

45. *Stand initiation structural stage* - The stand initiation stage generally develops after a stand-replacing disturbance by fire or regeneration timber harvest. A new single-story layer of

shrubs, tree seedlings, and saplings establish and develop, reoccupying the site. Trees that need full sun are likely to dominate these even-aged stands. (Oliver and Larson, 1996)

*46. Stem exclusion structural stage (Closed canopy structural stage)* in the stem exclusion stage, trees initially grow fast and quickly occupy all of the growing space, creating a closed canopy. Because the trees are tall, little light reaches the forest floor so understory plants (including smaller trees) are shaded and grow more slowly. Species that need full sunlight usually die; shrubs and herbs may become dormant. New trees are precluded by a lack of sunlight or moisture. (Oliver and Larson, 1996)

*47. Timber management* - Timber management consists of growing, tending, commercially harvesting, and regenerating crops of trees.

*48. Understory re-initiation structural stage.* In the understory re-initiation stage, a new age class of trees gets established after overstory trees begin to die, are removed, or no longer fully occupy their growing space after tall trees abrade each other in the wind. Understory seedlings then re-grow and the trees begin to stratify into vertical layers. A low to moderately dense uneven-aged overstory develops, with some small shade tolerant trees in the understory. (Oliver and Larson, 1996)

*49. Vegetation management* - Vegetation management changes the composition and structure of vegetation to meet specific objectives, using such means as prescribed fire or timber harvest. For the purposes of this decision, the term does not include removing vegetation for permanent developments like mineral operations, ski runs, roads and the like, and does not apply to fire suppression or to wildland fire use.

*50. Wildland urban interface (WUI)* - Use the definition of WUI found in the Healthy Forests Restoration Act. The full text can be found at HFRA § 101. Basically, the wildland urban interface is the area adjacent to an at-risk community that is identified in the community wildfire protection plan. If there is no community wildfire protection plan in place, the WUI is the area 0.5 mile from the boundary of an at-risk community; or within 1.5 miles of the boundary of an at-risk community if the terrain is steep, or there is a nearby road or ridgetop that could be incorporated into a fuel break, or the land is in condition class 3, or the area contains an emergency exit route needed for safe evacuations. (Condensed from HFRA. For full text see HFRA § 101.)

*51. Winter snowshoe hare habitat* - winter snowshoe hare habitat consists of places where young trees or shrubs grow densely - thousands of woody stems per acre - and tall enough to protrude above the snow during winter, so snowshoe hare can browse on the bark and small twigs (LCAS). Winter snowshoe hare habitat develops primarily in the stand initiation, understory reinitiation and old forest multistoried structural stages.

### Pronghorn Standard

All projects, activities, and infrastructure authorized in the designated Pronghorn Migration Corridor will be designed, timed and/or located to allow continued successful migration of the pronghorn that summer in Jackson Hole and winter in the Green River basin.

### Vegetation: General

**Vegetation: General Prescription** - Whether range or timber, vegetation management activities enhance diversity of plant communities and various successional stages of those plant communities within the Management Areas. For aspen, priority is placed on perpetuating stands being invaded by conifers. Vegetation treatment projects are designed to retain diverse age classes

### Vegetation: Range

**Vegetation: Range Prescription** - Forage is provided on a sustained-yield basis that protects rangeland values, wildlife habitat, and meets other resource needs. All practices available can be used to improve forage supplies and quality.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for range vegetation include: 1.1(i), 1.2(c), 2.1(a), 3.1(a, b), 3.2(i), 3.3(a-c), and 4.7(a-d).

**Vacant Allotment Guideline** -Vacant allotments should be stocked, incorporated into adjacent allotments, or withdrawn from grazing to benefit other resource needs.

**Allotment Planning Standard** -All livestock grazing use will be managed under the direction of an allotment management plan.

**Allotment Management Plan Standard** - Fisheries; riparian habitats; and Threatened, Endangered, and Sensitive species' needs will be addressed in allotment management plans. Findings from big-game winter range evaluations will be incorporated into allotment management plans as wildlife habitat objectives and management procedures. Plans will identify the amount and kind of streamside vegetation needed to maintain or improve riparian areas.

**Livestock Movement Standard** - The allotment management plan will identify roads and trails needed to facilitate trucking and trailing. Trucking of some stock will be required to prevent other resource damage.

**Proper-Use Guideline** - Range proper-use standards, including forage utilization standards, should vary depending on site-specific objectives.

**Forage Utilization Standard** - The following utilization standards will be maximum utilization levels allowed for all herbivores on key vegetative species. For further information, see *Range Analysis and Management Handbook, FSH 2209.14 Chapter 4*.

### **Upland Range Sites**

<u><b>*Season-Long Grazing</b></u>		<u><b>Rotation Grazing</b></u>	
Unsatisfactory Condition	Satisfactory Condition	Unsatisfactory Condition	Satisfactory Condition
40%	50%	50%	60%

### **Riparian Range Sites**

<u><b>*Season-Long Grazing</b></u>		<u><b>Rotation Grazing</b></u>	
Unsatisfactory Condition	Satisfactory Condition	Unsatisfactory Condition	Satisfactory Condition
45%	55%	55%	65%

\*Season-long grazing only exists on a few allotments and will be changed to rotational grazing as Allotment Management Plans (AMPs) are revised.

During AMP revision, the Interdisciplinary (ID) Team and livestock permittees will prescribe site-specific utilization levels needed to meet Forest Plan objectives.

The maximum forage utilization guidelines apply to all types of grazing use including wildlife, livestock, and recreational stock.

During monitoring and evaluation a Utilization Guideline may be changed if the prescribed level is not accomplishing planned objectives.

Site-specific utilization levels on key wildlife ranges will be established by an ID Team.

ID Teams will prescribe other proper-use standards to achieve site-specific objectives for the rangeland being managed. The standards will be a combination of forage utilization, ground cover, plant vigor, soil disturbance, or streambank stability. For example, on domestic sheep range, an objective of minimizing soil disturbance will be more important than forage utilization.

**Livestock Grazing of Riparian Areas Standard** -Livestock grazing in riparian areas will be managed to protect stream banks. This may be achieved through the use of gravel crossings, tree- debris barriers, fencing, riparian pastures, development of alternate watering sites out of



the riparian area, longer allotment rests, or improved livestock distribution. For further information, see *Stabilizing Stream Banks in Wyoming*, N.A. Binns, 1986, and *R-4 Riparian Action Plan and R-4 Supplement to Riparian Areas*, FSM 2633.7 *supp.* Also, refer to Fisheries Standards in this Forest Plan.

**Forage Improvement Standard** -Range in less- than-satisfactory condition will be improved. Disturbed areas will be stabilized or regenerated prior to resuming grazing use. For further information, see *Range Analysis Handbook*, FSH 1109.21.

**Livestock Grazing Coordination Guideline** -Integration of improved management on associated public and private lands should be encouraged. Coordinated resource management and development of allotment management plans should be done.

**Fish; Wildlife; and Threatened, Endangered, and Sensitive Species Standard** - Range improvements, management activities, and trailing will be coordinated with and designed to help meet fish and wildlife habitat needs, especially on key habitat areas such as crucial winter range, seasonal calving areas, riparian areas, sagegrouse leks, and nesting sites. Special emphasis will be placed on helping to meet the needs of Threatened, Endangered, and Sensitive species.

**Structural Improvement Standard** Structural improvements will be designed to allow big-game movement and avoid or reduce hazards to other wildlife species



CRUCIAL WINTER RANGE WILL BE PROTECTED

## Vegetation: Timber

**Vegetation: Timber Prescription** -A wide range of silvicultural opportunities is used to manage the timber resource consistent with other resource objectives.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for timber vegetation include: 1.1(a-c), 1.2 (a, b), 1.3(a, b), 4.2(a-d), and 4.3(a).

**Old-Growth Standard** - Only silvicultural practices which achieve desired old- growth attributes will be used in stands managed as old-growth. Twelve percent or more of existing old-growth Douglas-fir and spruce forest will not be harvested in order to provide for viable populations of old-growth dependent species. Designated old- growth stands will be at least 200 acres contiguous patches, generally spaced 1 to 2 miles apart, but attached by stringers of forested riparian areas or mature timber.

**Silvicultural System Standard** -Appropriate silvicultural systems by forest cover type will be:

Cover Type	Silvicultural System
Lodgepole Pine	Clearcut, Shelterwood, Group Selection
Spruce and Fir	Clearcut, Shelterwood, Single-tree Selection, Group Selection
Douglas-fir	Clearcut, Shelterwood, Seed-tree, Group Selection
Aspen	Coppice

**Silvicultural System Restriction Standard** - Silvicultural systems on soils identified as Stable/Marginally Stable on slopes greater than 70 percent, or soils identified as Unstable less than 40 percent, will be limited to openings of two acres or less. Silvicultural systems on soils identified as Marginally Unstable on slopes greater than 55 percent, or soils identified as Unstable on slopes greater than 40 percent, will not be allowed. These requirements may be changed if site-specific analysis shows the activities can be done without damage to soil and water resources.

**CMAI Standard** - All stands managed for timber production using even-aged silvicultural systems will generally have reached culmination of mean annual increment (CMAD of growth prior to final harvest.

**Yarding Method Standard** - Log-yarding activities on soils identified as Stable/Marginally Stable and on slopes greater than 40 percent but less than 70 percent, or soils identified as Marginally Unstable and on slopes greater than 40 percent but less than 55 percent, will use a system that suspends one end of the log. Log yarding activities on soils identified as Stable/Marginally Stable on slopes greater than 70 percent will use a system that suspends the entire log.

**Reforestation Guideline** -Silvicultural practices should favor natural reforestation where site and stand conditions allow. Plantations should be protected from rodent and livestock damage to meet desired stocking levels.



**HARVESTED AREAS WILL BE REFORESTED.**

**Created Opening Size Standard** - The maximum allowed size of an opening created by application of even-aged management will be 40 acres regardless of forest cover type. Exceptions will be: (1) Proposals for larger openings subject to 60-day public review and approval by the Regional Forester. (2) Larger openings which are the result of natural catastrophic conditions of fire, insect or disease attack, or windstorm; or smaller openings specified in the Forest Plan's Desired Future Conditions.

**Timber Harvest Efficiency Standard** - Scheduled and unscheduled timber harvest will be used to meet multiple-resource objectives when it is the most efficient method available as determined by a documented analysis.

**Small Products Guideline** - Christmas trees, fuelwood, and other small products should be made available from areas where compatible with meeting other resource objectives.

**Timber Sale Layout Guideline** - Use of all products for which a market exists should be considered in design of vegetation manipulation projects.

**Utilization Standard** - Regional utilization standards will be used in determining harvest levels. For further information, see: *R-4 Regional Guide*.

**Silvicultural Prescription Standard** - Silvicultural examinations, diagnosis of treatment needs, and preparation of prescriptions detailing methods and timing of silvicultural activities necessary to achieve established objectives will be required prior to any silvicultural treatment.

Prescriptions will also be reviewed by a certified silviculturist and approved by a line officer prior to treatment.

**Examination Standard** - Complete vegetation classification will be done in conjunction with Forest Plan implementation studies and NEPA analysis. This information will be used during project analysis to aid in determining cumulative effects, site capabilities, and silvicultural opportunities. For further information, see *Forest Habitat Types of Eastern Idaho- Western Wyoming, Forest Service General Technical Report INT-144, July 1983.*

**Catastrophic Salvage Guideline** - Salvage of merchantable timber following a catastrophic event may be considered for any area. Time is of the essence in salvage operations, and analysis should be promptly completed.



*Blowdown areas outside Wilderness may be harvested.*

**Improvement Plan Guideline** - Sale Area Improvement Plans should provide for wildlife habitat improvement and enhancement of other renewable resources.

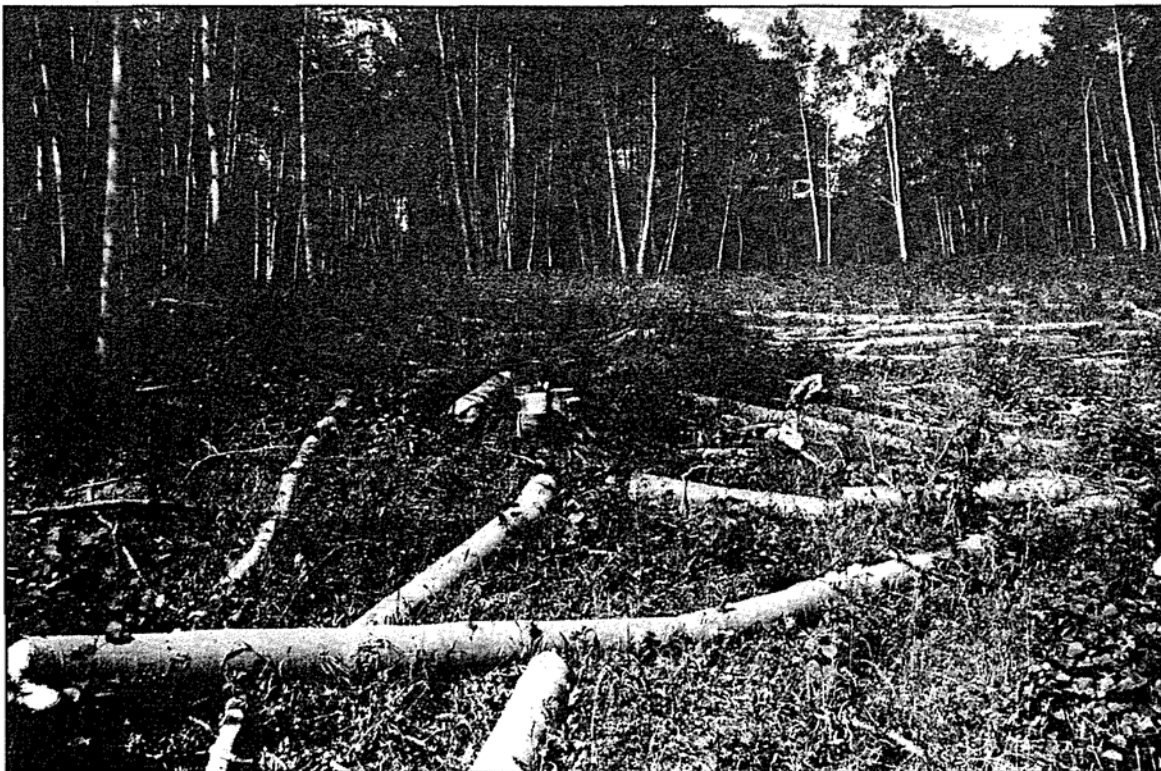
**Water Yield Standard** - When developing silvicultural prescriptions to increase water yield, preference will be given to the following site conditions and cutting unit specifications: soils with depths greater than two feet, stands with crown closure greater than 50 percent and basal areas greater than 100 square feet, north and east aspects, toe slope or bench locations, less

than 10 acres clearcutting size, and cutting unit widths will be five to eight times the average tree height of the adjacent stands.

**Log Skidding Standard** -Logs will not be skidded across live streams except where temporary crossing structures are in place. These structures will not impede water flow or irreversibly change the stream channel. Structures will be removed and the channel or channels restored immediately following completion of skidding.

**Avoidance of Productivity Loss Standard** - Analysis will be made for every potential soil impacting activity to identify opportunities to avoid compaction. Certain methods-operate on dry soil, skid logs over snow, use designated skid trails, use low- ground-pressure equipment, and rip compacted areas-have been proven to avoid and mitigate soil compaction and resultant loss of productivity.

**Aspen Management Guideline** - Aspen sites should be managed for aspen-type perpetuation. The loss of aspen stands due to old age, conifer encroachment, and possible overgrazing should be prevented. Priority areas for aspen treatment should be big-game winter ranges, calving areas, and stands where type loss or conversion is imminent.



*Aspen will be managed to promote regeneration.*

**Soil Displacement Standard** - Brush rakes will be used for all mechanical slash piling operations. Soil displacement and water runoff concentration will be minimized during yarding operations.

**Logging in Riparian Area Standard** -The following logging requirements will be used in riparian areas: log landings and decking areas will not be allowed within riparian areas; directional falling of trees away from a stream will be required; logging slash will be removed from riparian areas-the exception is where large woody debris is placed in the streams for habitat improvement projects; and a mature forested appearance will be maintained within 100 feet of live streams.

**Treatment Block Guideline** -Treatment blocks should be large enough to preclude loss of stand or secure aspen suckering. Size of openings may exceed that established for each management prescription if required to secure aspen suckering. Aspen suckers should be protected from animal damage as needed to ensure adequate restocking.

### Riparian Areas, Wetlands, and Floodplains

**Riparian Areas, Wetlands, and Floodplains Prescription** - These areas are managed as basic resources for forest management, key to the future productivity of the Bridger-Teton National Forest.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for riparian areas, wetlands, and floodplains include: 1.3(a, b), 4.3(c), 4.7(b).

**Vegetative Type Conversion Standard** -Vegetation-type conversions in riparian areas will only be done to meet the needs of riparian-dependent species.

**Restoring Stream Channel Conditions Guideline** - Areas where human activities have resulted in adverse impacts such as channel widening, channel aggradation, or lowering of the water table should be restored.

**Streambank Vegetation Standard** - Grass and shrub vegetation will be maintained within about 25 feet plus 2 to 4 feet for each 1percent side slope adjacent to live streams. Vegetation which gives greater stability due to rooting structure will be planted during the revegetation of channel banks following construction.

**Crossing Guideline** - Stream structural crossings should be avoided in reaches which are rated 4 or 5 in channel stability. For further information, see *Stream Reach Inventory and Channel Stability Evaluation. Northern Region, Forest Service-USDA*.

**Natural Drainage Channel Standard** - The natural drainage channels of any stream will be protected during building activities. Following building activities, the stream channel will be returned to the original width, depth, gradient, and curvature. Culverts will be installed to minimize stream transition and, where needed, retain natural flow

**Clear-Water-Diversion Standard** - Clear-water-diversion methods will be employed whenever building activities such as pipeline trenching must pass through a stream channel.

**Construction Staging-Area Guideline** - Construction staging and equipment service areas will be located outside of riparian areas.

## Minerals

**Minerals Prescription** -Locatable, salable, and leasable mineral opportunities are available.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for minerals include: 1.1(e), 1.3(a, b), 2.4(b), 3.1(a; b), 3.2(d-f, i), 4.4(a-c), and 4.10(a).

**Bald Eagle and Peregrine Falcon Nest Standard** -Based on determinations from bald eagle and peregrine falcon nest-site management plans or ecosystem guidelines, oil and gas leases may include a No-Surface-Occupancy leasing stipulation.

**Grizzly Bear Recovery Standard** -Any exploration and development activities will require a biological evaluation or assessment and consultation with the U.S. Fish and Wildlife Service.

**Periodic Springs Withdrawal Standard** -An area sufficient to protect Periodic Springs will be recommended for withdrawal from all mineral entry.

**Kendall Warm Springs Withdrawal Standard** - An area sufficient to protect Kendall Warm Springs will be recommended for withdrawal from all mineral entry.

**Lease Standard** -Consent to issuance of new leases will be given subject to current policies and the direction established in this Forest Plan. Leases that are subject to discretionary actions such as suspension or reinstatement will be brought into line with current policies and the direction established in this Forest Plan. All unit agreements on lands subject to the direction in the Krug memorandum will be conditioned to meet current policies and the direction established in this Forest Plan.

**Lease Stipulations Standard** - Appendix B: Standard Lease Terms and Stipulations, Uniform Stipulations, and Court Ordered or Administratively Required Stipulations, will be incorporated into all leases on the Bridger-Teton National Forest. Changes or modifications to lease terms will be made only after an environmental analysis, which includes public input, is completed.

**Locatable Minerals Standard** - All lands will be available for locatable mineral entry except those which have been protected by notation or administratively withdrawn, including sites with capital investments, historical and cultural features, and those designated with special management requirements such as campgrounds, Periodic Springs, Kendall Warm Springs, and Research Natural Areas. Operating plans will be subject to the Desired Future Conditions established for the area.

**Mineral Compliance Standard** -All operating plans and Applications for Permit to Drill will be conditioned or will include provisions, as much as lease terms and legal rights will allow, to reflect policies and the direction established in this Forest Plan.

**Facilities Standard** - All permanent above-ground facilities will be designed to minimize adverse visual impacts.

**Phosphate Leasing Standard** -An area sufficient to protect the west side of the Salt River Range from phosphate leasing will be recommended for withdrawal from leasing.

**Salable Minerals Standard** -Saleable minerals will be available.

**Coal Leasing Standard** - Coal leasing will be allowed. Strip mining will not be permitted unless no other mining options exist.

**Hydrogen Sulfide Standard** - Signs will be posted to warn the public at locations where hydrogen sulfide may be present.

**Geothermal Leasing Standard** - Geothermal leasing will be allowed with restrictions to protect related resources.\

**Seismic Activity Standard** - Helicopter-access seismic activity will be permitted. Surface and sub-surface use of explosives will be restricted to protect Threatened and Endangered species, potable water supplies, and unique natural features.

**Seismic Activity Termination Guideline** - Seismic activity may be seasonally restricted.

**Seismic Activity Termination Standard** -Seismic activities involving helicopters or explosives must be terminated 5 days before the opening of big-game rifle seasons and remain closed throughout the season.

**Reclamation Bond Standard** -Reclamation bonds will be commensurate with the requirements of the approved operating plan.

**Reclamation Standard** -Disturbed areas will be returned to near-pre-construction conditions, unless changed conditions would benefit other resources.





*Roads built to well sites are usually reclaimed.*

**Water Resources and Watershed Management Standard** - Waste water from mineral development projects will not be discharged onto the land or into streams until the water has been tested, and, if necessary, treated to bring it to compliance with applicable standards.

**Reserve Pit Standard** -Reserve pit fluids will be taken to an approved disposal site or chemically treated on site to meet State of Wyoming water-quality standards prior to spreading on appropriate National Forest System land.

## Soil, Water, and Air

**Soil, Water, and Air Prescription** -Activities are planned to protect the quality of the basic watershed resources of soil, water, and air.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for soil, water, and air include: 1.3 (a, b), 4.2(d), and 4.3(c).

**Waste Disposal Standard** - Humans will be encouraged to bury their feces at least 100 feet from streams and lakes. For further information, see *1986 CFR 261.11 a, b, c and Wyoming Department of Environmental Quality, Water Quality Rules and Regulations, Chapter 11, Table 1, p. 93.*

**Sediment Control Standard** - Sediment control will take into account drainage density, slope position and configuration, and subsurface flow conditions.

**Water Development Standard** - Channel condition will be determined and instream flows will be measured along with other measurements on selected second- or higher-order streams in response to hydropower development, reservoir construction, anticipated adjudications, or other proposals which have the potential of affecting water quantity, quality, or flow regimes. For further information, see *R-4 Supplement to Watershed Supplement, FSM 2531.*

**Reserved Water Right Standard** -A federal reserved water right will be asserted for water needed for programs of watershed management, timber management, fisheries habitat, and fire protection. A reserved right will also be used to acquire water needed in the form of instream flow sufficient to maintain stability of the stream channel for the purposes of securing favorable conditions of water flow and protecting against the loss of productive timber lands.

**State Water Right Standard** - The State of Wyoming will be applied to for water rights in the name of the federal government for those uses of water needed to maintain the multiple uses of the Bridger-Teton National Forest.

**Water Quality Standard** -Forest Service or permitted activity or project will, at a minimum, adhere to state rules and regulations concerning surface and ground water quality.

**Watershed Restoration Standard** -Watershed restoration will be scheduled so that headwater areas are treated first with successive treatment measures proceeding downstream.

**Smoke Management Standard** - Prescription fires will not be ignited during predicted periods of atmospheric inversions.

**Soil Management Standard** -A geotechnical evaluation will be conducted prior to earth moving activities on marginally stable, unstable, and landslide areas. Special design considerations will be incorporated as needed to control the risk of mass wasting and sedimentation. A slope-stability assessment or evaluation will be conducted on marginally stable, unstable, and landslide areas prior to vegetative manipulation.

**Logging Method Guideline** - Low-ground-disturbance equipment and harvest methods should be used on marginally stable and unstable slopes, landslides, and highly erodible soils-fine, very fine, or montmorillonitic clay soil types. For further information, see *Water Resources Evaluation of Non-Point Silvicultural Sources, USEPA, Chapters 2 and 5, 1980.*

**On-Site Erosion Guideline** - Project-caused on-site potential soil erosion should be reduced by 50 percent one year after disturbance, and 95 percent five years after disturbance.

**Rehabilitation Standard** - Rehabilitation plans will identify quantities of topsoil-A and B horizons-to be reserved for stockpiling prior to project initiation. Rehabilitation seed mixes or other plantings will be designed for each vegetation community type that meets the desired future condition.

**Watershed Disturbance Standard** -Not more than 30 percent of the forested area of any second-order or higher watershed will be in a clearcut or equivalent condition within a three-decade period. The effects of forest vegetation alteration upon water quantity, timing, and quality will be evaluated by means of a watershed analysis procedure and included in the National Environmental Policy Act process. For further information, see An Approach to Water Resources Evaluation of Non-Point Silvicultural Sources, Chapter 3, USEPA, 1980.

## Utilities

**Utilities Prescription** -Utilities and utility corridors are permitted on the Bridger- Teton National Forest.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for utilities include: 1.1 (l -j) and 3.2(d, g).

**Electronic Site Selection Guideline** - Existing electronic sites should be used in lieu of new installations.

**Electrical Transmission Standard** - Utility and telephone lines will be buried wherever technically feasible. Existing overhead utilities will be converted to underground when upgrading or improving becomes necessary. Upgrading involves a change in line voltage or use of other than "in kind" materials. Improvement occurs when replacement of materials such as poles or line is needed and less than 20 percent useful life remains.

**Utility Corridors Guideline** -Utilities should be constrained to one utility corridor except as needed to meet other resource objectives.

**Corridor Rights-of-Way Guideline**-When new corridors are designed and existing corridors reevaluated, features that allow Off -Highway-Vehicle use in the rights-of-way, including use by snowmobiles, should be considered. The features considered should include wider corridors and connections to adjacent cleared areas.<sup>18</sup>

**Transmission Lines in Riparian Areas Standard** -If new or rebuilt transmission lines are built across riparian areas or upland areas adjacent to riparian areas, they will be placed underground when feasible to eliminate possible collision with birds. When case-by-case analysis determines that transmission lines cannot be placed underground, then above-ground

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<sup>18</sup> Amended by Attachment One of the Record of Decision

line visibility will be increased using state-of-the-art marking to reduce possible collision or electrocution. For further information, see *Suggested Practices for Raptor Protection on Power lines*.

## Lands

**Lands Prescription** -The lands program is an essential component of managing the Bridger-Teton National Forest.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for range vegetation include: 2.6(a) and 2.7(a, b).

**Rights-of-Way Standard** -Rights-of-way will be acquired for existing and proposed forest development roads and trails that cross other than National Forest System lands.

**Easement Standard** - Roads and trail easements will be acquired across private land needed to provide public access to the Bridger-Teton National Forest. Conservation easements will be acquired on private inholdings to limit future development that would adversely affect wildlife habitat on or migration routes across the private lands. Procedural priorities for acquiring easements will be: "willing seller- willing buyer", and, if that approach fails and only as a last resort, condemnation.

**Road Easement Guideline** - Road easements should be granted, acquired, or exchanged with other agencies, States, Counties, and private interests to assure management objectives are met for all ownerships.

## Facilities

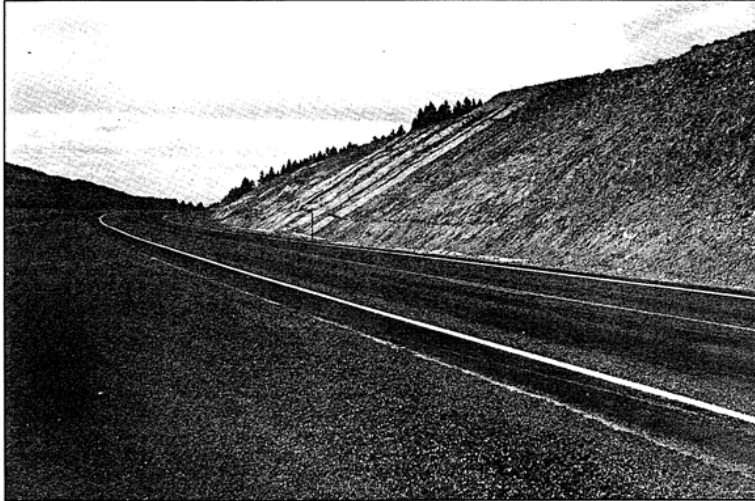
**Facilities Prescription** - Facilities provide essential services for the American people.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for facilities include: 2.2(a, b).

**Facility Safety Standard** - Structures will be structurally sound and safe or they will be closed.

**Avalanche Zone Standard** - New developments other than roads and trails will be prohibited within avalanche zones unless avalanche hazard is reduced to an acceptable risk.

## Access: General



*Rehabilitation along Salt Pass reduced erosion.*

**Access: General Prescription** - A network of roads and trails reflects designs adapted to resource conditions and meets the needs of National Forest users.

**Road and Trail Drainage Standard** -Existing roads will be evaluated for sediment delivery to live streams, lakes, and riparian areas. Roads and trails will be designed and maintained so that drainage from the road or trail surface does not directly enter live streams, ponds, lakes, or impoundments. Water will be directed off the road or trail into vegetation buffer strips or controlled through other sediment-reduction practices.

### Access: Roads

**Access: Roads Prescription** - The road system provides access to Bridger-Teton National Forest resources for National Forest users, using appropriate service and maintenance levels.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for roads include: 1.2 (a-f), 2.5(a, b), and 4.1 (b).

**Forest Highway Standard** - Roads on the Bridger-Teton National Forest that meet Forest designation requirements will be recommended for inclusion in the National Forest Highway Program.

**Scenic Byway Guideline** -Eligible highways that pass through the Bridger-Teton National Forest should be nominated for the National Scenic Byway System.

**Closed Road Use Standard** - Closed or restricted roads will be used only when authorized by the Bridger-Teton National Forest Supervisor when recommended by the District Ranger.

**Road Restriction Guideline** - Road use restrictions may be applied in many situations, including: during cattle trailing, to meet recreation objectives, during critical periods for wildlife, during spring break up, and to limit effects on soil or water quality. Restrictions applied may include temporary closures, vehicle size restrictions, and weight limits.

**Commercial Users Payment Standard** -Commercial users of forest roads will be required to contribute to road maintenance and reconstruction commensurate with levels of use. National Forest managers will determine whether the contribution will be in the form of reimbursement or actual work performed.

**Signing Guideline** -Informational and directional signing should be consistent with the setting of the road and adjacent area.

**Streamside Roads Standard** -Wherever possible, roads will avoid riparian areas or drainage ways. Where riparian areas or drainage ways cannot be avoided, location and design of roads will apply sediment-reduction practices to prevent degradation of riparian or stream quality. Roads presently within riparian areas will be relocated outside riparian areas where possible.

**Road Maintenance in Riparian Areas Standard** -Maintenance, improvement, or repair of roads within riparian zones will avoid or mitigate water quality and fish habitat degradation. Debris from road maintenance, snow removed from roads, and earthwork soil materials-except designed-for riprap-will be diverted or removed to avoid deposition in ponds, lakes, stream channels, or the 100-year floodplain.

**Road Maintenance Jurisdiction Standard** - Regardless of maintenance responsibilities, Bridger-Teton National Forest roadways will be maintained in accordance with the Standard and Guidelines in this document. A Separate Rights-Of- Way Management Agreement will be developed between the Bridger-Teton National Forest and State or County governments for all roads the State or Counties maintain on National Forest System lands.

**Off-Road Parking Guideline** -Motorized vehicles will be permitted to park within 200 feet of designated open routes except for areas and trails that are signed to prevent unacceptable impacts on other resources.

**Road Construction Standard** -Road access construction or reconstruction is restricted to those areas which are determined to be physically, suitable. Suitability is based on watershed resource characteristics described in Appendix B of the Final Environmental Impact Statement pages B:-34 through B-47.<sup>19</sup>

## Access: Trails

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<sup>19</sup> (Amended 5/22/92 Forest Plan Amendment No. 1 )

**Access: Trails Prescription** -Non-motorized and motorized trails are provided for a wide variety of uses and difficulty levels. Trails are maintained to appropriate levels or signed as closed with reasons stated. Driveways are maintained for stock movement.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for trails include: 1.2(c, d), 2.5(c, d), 4.5(a), 4.7(c), and 4.8(a).

**Standard Level Maintenance Guideline** - National Forest development trails should meet standard level maintenance criteria.

**Trail Closure Guideline** -Trails may be relocated, and seasonally or permanently closed.

**Snow Trail Standard** -A system of snow trails will be designated and marked.

**Snow Trail Location Guideline** - Snow trails should be located to avoid areas of high avalanche hazard and crucial wildlife winter ranges.



*Poorly designed trails may be relocated.*

**National Forest Development Trail Standard** - National Forest development trails will be protected. Trails disrupted by resource development activities will be relocated or rebuilt.

**Trail User Conflict Minimization Guideline** - The trail system should be managed to minimize conflicts among users, including motorized and non-motorized recreation and livestock.

**Dude Trail Guideline** - Particularly in areas with potential for activities causing surface-disturbance or noise, sensitivity should be displayed towards the need to protect or help relocate trails used by dude ranches or other outfitters and guides.

**Off-Highway Vehicle Standard** - Motorized off-highway vehicles will be restricted to routes or open roads designated for that use. Vehicle use will be consistent with State law and federal regulations for both licensed and unlicensed vehicles and operators.

**Trail Signing Guideline** -Trails should be signed at all intersections and terminal points showing multiple destinations and distances. Signs for physical features may be appropriate. Trailheads may be signed to indicate the degree of trail difficulty. For further information, see *Trails Management Handbook, FSH 2309.18*.

**Trail Condition Standard** -Trail tread width will not exceed 24 inches. Multiple "braided" trails that develop will be obliterated and relocated so that there is only one tread.

**Historic Trail Standard**- Historic trails will be evaluated for historic significance and protected, maintained, or interpreted in accordance with the National Historic · Historic trails will be evaluated for historic significance and Preservation Act.<sup>20</sup>

### Cultural Resources:

**Cultural Resources Prescription** - A full range of measures necessary to find, study, interpret, and protect cultural resources is used in forest management decisions and activities.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for cultural resources include: 2.8(a) and 4.9(a).

**Cultural Resources Management Guideline** - Cultural resources should be studied, evaluated, and the results made the basis for informing people about relationships with the past.

**Cultural Resources Program Management Activity Standard** - Cultural resources will be managed through the following activities:

Collect information and create a general overview of the types, magnitude, and significance of the cultural resources by 1991;

Evaluate cultural resources and prepare documents necessary to nominate some eligible sites for the National Register of Historic Places by 1992;

Develop a program for maintenance, protection, and rehabilitation of cultural resources by 1992;

Complete an interpretive program by 1992; and

Develop programs to manage specific site type resources by 1998.

**Coordination Standard** -Cultural resource surveys and reports will be provided for review by the Wyoming State Historic Preservation Office (SHPO). Coordination with adjacent National

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<sup>20</sup> Amended by Attachment One of the Record of Decision



Forests, the Bureau of Land Management, SHPO, and the National Park Service will occur as needed during cultural resource survey and evaluation and nomination of significant properties to the National Register of Historic Places.

## Special Areas

**Special Areas Prescription** -Special areas identified in this plan include existing and proposed National Landmarks. The National Landmark system includes both historic and national sites, districts, and landmarks.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for special areas are: 2.8(a), 4.9 (a), and 4.10 (a).

**Protection Standard** -Existing and identified potential special areas are withdrawn from locatable mineral entry. Other surface-disturbing activities will be managed to preserve the integrity of these areas.

## Protection: General

~~**Protection: General Prescription** -Natural resources of and human presence on the Bridger-Teton National Forest are protected from catastrophic events and endemic or epidemic pests<sup>21</sup>~~

## Protection: Fire Prescription

~~Fire is managed as a tool to accomplish resource objectives while protecting identified values within acceptable levels of risk.~~

**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.<sup>22</sup>**

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for fire include: 2.1 (a, b), 3.1 (a), 3.3(a, b), 4.2(b, J), 4.3(a-c), 4.7(a, b, d), 4.9(a), and 4.10 (g).

~~**Fire Protection Standard** - A Fire Protection Program will be developed and coordinated with local, State and other federal agencies. A program for reducing fuel loadings adjacent to or on private inholdings will be included.~~

## Fire Management Standards

<sup>21</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

<sup>22</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

The Forest Fire Management Plan (FMP) will provide operational direction for implementation of the Forest's land management plan. The interdisciplinary developed FMP will be developed and implemented in coordination with local, state, and other federal agencies

Firefighter and public safety is the highest priority during all fire management activities.

Human-caused fires (either accidental or arson) are unwanted wildland fires, and will be suppressed using an appropriate management response.

### **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.

### **Cultural Resource Standard**

Cultural resources will be protected if feasible with priority given to sites listed on the National Historic Register. Second priority will be given to sites recommended for selection to the Register.<sup>23</sup>

**Fire Prevention Guideline** - Fire prevention activities should be concentrated in human high-use areas.

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<sup>23</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004



Prescribed fire is used to improve wildlife habitat.

#### Prescribed Fire Standard

Prescribed fire is authorized Forest-wide consistent with Forest-wide and DFC emphasis and direction.

Prescribed fire use in wilderness must meet current Forest Service wilderness and wildland fire policy and manual direction.<sup>24</sup>

Prescribed Fire Guideline - Prescribed fire may be used to accomplish resource management objectives which include, **but are not limited to:**

- Protecting, enhancing, or providing desirable habitat for Threatened, Endangered, and Sensitive species;
- Insect and disease suppression;
- Reducing fuel loading to acceptable levels;
- Improving or developing desired wildlife habitat conditions; Improving livestock forage conditions;
- Achieving other desired vegetation conditions to meet management objectives; and
- Maintaining fire-dependent animal or plant species.

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<sup>24</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

**Wildland fire use 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 will be protected during fire use. These sites 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.

**Activity Fuels Standard**

The amount and composition of activity fuels that are left on project sites will be determined through project level NEPA and site-specific silvicultural prescriptions.

**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.<sup>25</sup>

**Protection: Pests**

**Protection: Pests Prescription** - Endemic and epidemic pest populations are managed to reduce or eliminate their threat to resources and people's enjoyment of the Bridger-Teton National Forest.

Land and Resource Management Objectives substantially supported by Bridger-Teton National Forest-wide Standards and Guidelines for pest management include: 1.1(a, b), 2.4(a), 4.3(a, b), 4.7(a), and 4.8(b, c).

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<sup>25</sup>Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

**Noxious Weeds Control Standard** -Effective management of noxious weeds will be accomplished by cooperating with the Wyoming Department of Agriculture and County weed control districts, using Integrated Pest Management techniques, following the procedures outlined in the Bridger-Teton Environmental Assessment for noxious weed control and appropriate technical guides. No toxic chemicals will be applied in a manner that will adversely affect non-target specie

**Animal-Caused Damage Control Standard** - Predatory animal damage will be managed in cooperation with the Wyoming Game and Fish Department. Animal Plant Health Inspection Service (APHIS), and cooperators. Control efforts will be used to protect livestock, particularly domestic sheep from predation by coyotes and bears. Methods such as trapping, snaring, denning, aerial gunning, calling and shooting, guard dogs, and the use of toxicants will be considered for control based upon an analysis of losses and the need for control. Control efforts will be directed toward offending animals where need is demonstrated. The Forest Service advises APHIS on predator control needs, control methods, and special precautions needed for each grazing allotment. APHIS provides information on losses and the effectiveness of control methods.

**Insect and Disease Suppression Standard** -Forest insects and diseases will be evaluated annually through an aerial-detection survey conducted by the Forest Service's Forest Pest management staff. The need for pest suppression projects will be determined with the assistance of the Wyoming Game and Fish Department, APHIS, and other cooperators through a decision making process called integrated pest management (IPM). IPM employs cultural, biological, and chemical control measures to protect identified resource values and objectives after careful consideration of environmental and economic factors.

**Epidemic Insect and Disease Treatment Guideline** -Epidemic insect and disease populations should be controlled or prevented.



Mountain pine bark beetle can kill large numbers of trees.

## Desired Future Conditions

Like the Bridger-Teton National Forest-wide Management Prescriptions, Standards, and Guidelines, the Desired Future Conditions (DFCs) describe land management direction intended to accomplish the Goals and Objectives. In one sense, the DFCs are consequences of the response to demands, public issues, resource productivity potential, and the need for environmental standards found in the Goals and Objectives. That the DFCs exist at all is in recognition that not all the Goals and Objectives can be achieved at the same time from the same land areas. Therefore, 17 DFCs- (13 non-Wilderness and 4 Wilderness)-have been developed to accomplish multiple, compatible Goals and Objectives.

The DFCs are used as basic "tools for land management" in the design of the alternatives displayed in the accompanying Final Environmental Impact Statement (FEIS). By applying the DFCs in different patterns on the land and resources, different forest commodity and service levels are displayed and evaluated.

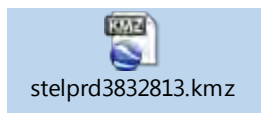
Each Desired Future Condition will be achieved over the 50-year planning horizon by applying Management Prescription "policies" and Standard and Guideline "limits" specific to that DFC. Therefore, each DFC has a unique set of Prescriptions, Standards, and Guidelines.

The DFCs have a consistent structure: title, theme statement, forest-user experience description, and Management Prescription. The title, theme, and experience portions of the DFCs are not direction for Forest Service employees to follow. Rather, they are general descriptions of desired land and resource conditions to be created over the 50- year planning horizon by applying the Management Prescriptions. They are stated in the present tense to help the reader picture them mentally and regard them as accomplishments.

Each Management Prescription contains a management emphasis statement that ties the prescription to specific Land and Resource Management Objectives, individual resource Management Prescriptions, and resource management Standards and Guidelines to further define the Prescriptions. Sometimes, a Prescription, Standard, or Guideline is not needed and does not appear in that Management Prescription. In such cases, the Bridger-Teton National Forest-wide or Wilderness-wide Standards and Guidelines apply.

The following matrices are intended to allow comparisons of several aspects of each Desired Future Condition and associated Management Prescription. The reader should review them in context with whole DFC narratives because the information in each matrix is often a simplification. However, they do provide a quick reference and introduction to the substance of each Desired Future Condition.

The following KMZ file contains the DFC’s for the Forest, and can be open in Google Earth to view DFCs.



[Desired Future Condition Silviculture Matrix<sup>1</sup>](#)

The following table allows comparison of the various silvicultural opportunities used to achieve the Desired Future Conditions.

<b>Cutting Method</b>	<b>1B</b>	<b>2A</b>	<b>2B</b>	<b>3</b>	<b>4</b>	<b>6A-D,S</b>	<b>7A</b>	<b>7B</b>	<b>8</b>	<b>9A-B</b>	<b>10</b>	<b>12</b>
<b>Sanitation/Salvage<sup>2</sup></b>	X	X	X	X	X		X	X	X	X	X	X
<b>Single Tree Selection</b>	X	X	X	X	X		X	X	X	X	X	X
<b>Patch Cut</b>	X	X	X	X	X		X	X	X	X	X	X
<b>Seed Tree</b>	X		X		X		X	X	X	X	X	X
<b>Shelterwood</b>	X		X		X		X	X	X	X	X	X
<b>Clearcut</b>	X		X				X	X	X	X	X	
<b>Scheduled for Harvest</b>							X				X	
<b>Max Acres: Individual created openings</b>	40						10				25	
<b>Average Acres: individual created</b>	25						5				15	

X = Yes, may be appropriate depending upon specific objectives of Desired Future Condition, site conditions, and silvics of the tree species involved.

<sup>1</sup>For major forest cover types of lodgepole pine, Engelmann spruce-subalpine fir and Douglas-fir. Use of coppice in Aspen is appropriate under all Desired Future Conditions except 6A-D and S.

<sup>2</sup>Could be any harvest method used to remove trees damaged or killed by fire, disease, or insects.

Desired Future Condition Recreation Opportunity Spectrum Matrix

This matrix displays the predominate Recreation Opportunity Spectrum (ROS) class that will occur as a Desired Future Condition is achieved. Because DFCs encompass large areas and prescribed activities may not occur everywhere within the area, other ROS classes may be present, particularly those tending toward the primitive end of the spectrum.

1B	2A <sup>26</sup>	2B	3	4	6A	6B	6C	6D	6S	7A	7B	8	9A	9B	10	12	Predominate ROS Class by DFC
X	X			X	X			X		X							Primitive
X	X	X	X			X	X	X	X	X	X				X		Semi Primitive, Non-Motorized
X		X	X	X					X	X	X	X			X	X	Semi Primitive, Motorized
x			X							X		X	X	X	X	X	Roaded Natural

Desired Future Condition Visual Quality Objective Matrix

This matrix displays the predominate Visual Quality Objectives (CVQO) being met as a part of achieving a Desired Future Condition. Because Desired Future Conditions are applied to large areas and every landscape-altering activity may not occur everywhere within the area, other VQOs may apply.

1B	2A	2B	3	4	6A	6B	6C	6D	6S	7A	7B	8	9A	9B	10	12	Predominate VQO Class by DFC
					X	X	X	X	X								Preservation
	X	X	X	X						X	X	X	X	X		X	Retention
X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	Partial Retention
X	X												X			X <sup>27</sup>	Modification

<sup>26</sup> (Corrected 9/3/93 by Corrections No. 3)

<sup>27</sup> (Corrected 9/3/93 by Corrections No. 3)



Desired Future Condition Common Recreation Activity Matrix

This matrix displays many of the common recreation activities that might be found after a Desired Future Condition is applied to an area. Because Desired Future Conditions are applied to large areas and every prescribed activity may not occur everywhere within the area, the recreationist may find a considerable range of opportunities available.

Common Recreation Activity by	1B	2A	2B	3	4	6A	6B	6C	6D	6S	7A	7B	8	9A	9B	10	12
Off-road Motors	X		X	x									x			X	X
Snow vehicles/Heli-Skiing	X	x	X	X	x					x	x	x	x	x	x	x	x
Mountain Biking	X	X	X	X	X					x	x	x	X	X	X	X	X
Christmas Tree Cutting	x		x		X						x	x	x			x	X
Private Firewood	X		x		X						X	x	x			X	X
Developed Recreation Facility			x	X	X									X	X		
Concentrated Recreation													X	X	X	X	X
Concession Facility				x											X		
4 x 4s on Roads	X		X	X							X		x	x	x	X	X
Scenic Driving	X		x	X							X		x	X	X	X	x
Hiking/Pack Trails	x	X	X	X	x		X	X	X	X	X	X	x	X	X	X	X
Cross Country Skiing	X	X	X	X	x	X	X	X	X	X	X	X	X	X	X	X	X
Hunting	X	X	X	x	x	X	X	X	x	X	X	X	X			X	X
Fishing	X	X	X	X	x	X	X	X	X	X	X	X	X	X	X	X	X

Appropriateness under each:

- X = Appropriate
- x = Appropriate with area restrictions
- = not appropriate

Desired Future Condition Fisheries and Wildlife Objectives Matrix

Desired Future Condition

**Desired Future Condition  
Fisheries and Wildlife Objectives Matrix**

**Desired Future Condition**

Habitat maintained for viable populations of management indicator species

1B 2AB 3 4 6 7AB 8 9A 9B 10 12

Provides habitat for existing populations and fifty percent of harvest levels, success rates, and recreation days

1B 2AB 3 4 6 7AB 8 9A 9B 10 12

Provides habitat for existing populations, harvest levels, success rates, and recreation days

1B 2AB 3 4 6 7AB 8 9A 9B 10 12

Meets State objectives Provides habitat for populations, harvest levels, success rates, and recreation days

1B 2AB 3 4 6 7AB 8 9A 9B 10 12

Habitat will be managed to help meet state wildlife populations, harvest levels, success rates, and recreation days and fully meet state fish standards for fish size, success rates, and recreation days

1B 2AB 3 4 6 7AB 8 9A 9B 10 12

May meet state objectives depending upon the area and the recreation emphasis.

1B 2AB 3 4 6 7AB 8 9A 9B 10 12

Does not meet state objectives Includes commercial developed recreation sites

1B 2AB 3 4 6 7AB 8 9A 9B 10 12

Desired Future Condition Oil and Gas Lease Opportunities Matrix

This matrix displays the oil and gas lease opportunities available as each Desired Future Condition is applied. Some Desired Future Conditions may require No-Surface-Occupancy lease stipulations to meet certain surface-resource objectives, but permit leasing under standard or special stipulations elsewhere. Some Desired Future Conditions exclude leasing for the current planning period, allowing reexamination of leasing opportunities when the Forest Plan is revised. Existing lease provisions are valid rights that will remain in effect under the Forest Plan.

Lease Option	Desired Future Condition											
	1B	2A	2B	3	4	6A-D,S	7A	7B	8	9AB	10	12
Lease with General Forest Direction <sup>1</sup>	X		X				X	X	X		X	X
No Leasing		X				X						
Lease with No-Surface-Occupancy <sup>2</sup>	X	X	X	X	X		X	X	X	X	X	X

<sup>1</sup> Includes the 14 lease terms found in the Standard Oil and Gas lease, ELM Form 3100- 11, "Offer to Lease and Lease for Oil and Gas", and the "Stipulations for Lands of the National Forest System Under Jurisdiction of the Department of Agriculture." In addition, specific administrative stipulations such as the Jackson Hole, Fremont Lake, Special Lake, and the Palisades Conditional No-Surface-Occupancy stipulation and No- Surface-Occupancy, Timing, Restrictions and Controlled Surface-Use stipulations in portions of a lease tract may be included.

<sup>2</sup> Authorizes no use or occupancy of the land surface over portions of the lease tract.

Acreage by lease option, by Forest Plan alternative, and by the potential to contain economic accumulations of oil or gas is summarized in the Bridger-Teton Land and Resource Management Plan Final Environmental Impact Statement (FEIS).

Desired Future Condition Transportation and Yarding Distance Matrix

This matrix displays the general levels of transportation system and comparative log- yarding distance, where applicable, that would be found when a specific desired future Condition is applied to an area. This matrix shows the estimated transportation related developments and activities as described in the following narrative of Desired Future Conditions and management prescriptions.

**Transportation and Yarding Matrix Definitions:** Network -The entire integral existing and proposed road system.

**TSL** -Traffic Service Level.

**Density Criteria** - Refers to the Desired Future Condition emphasis used when deciding how closely roads will be built to each other. "Economically optimum" means that economics will be used to determine road spacing and the economically optimum spacing will be used. Road density will therefore vary from high to low depending on need.

**Yarding** -Also referred to as skidding distance for ground-based logging system. This has a direct relationship to road density.

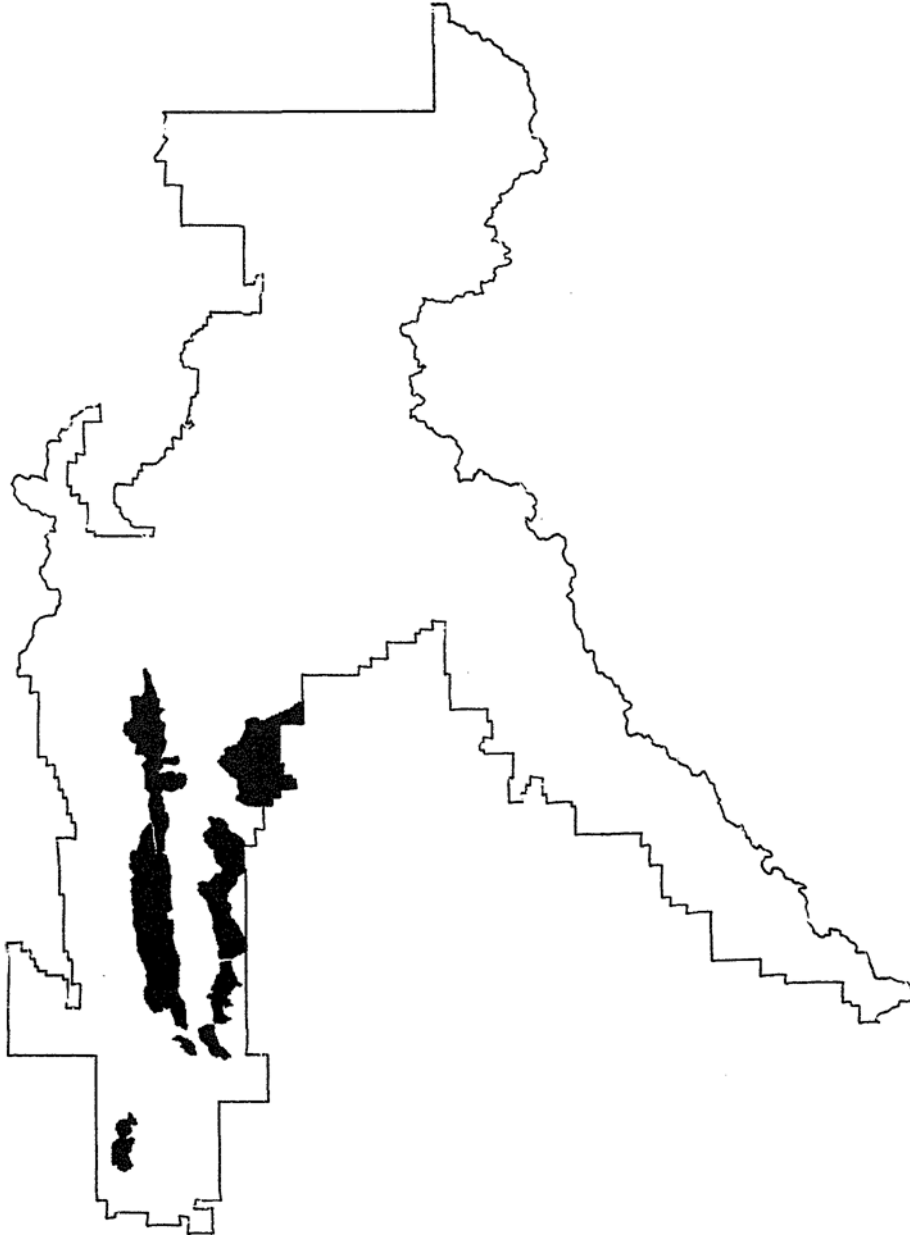
**Open Road Density** - The average miles of standard road that will be open per square mile of land with adjustment of actual road miles to standard road miles.

<b>Scheduled Timber Harvest DFCs</b>		
<b>1B</b>	<b>7A</b>	<b>10</b>
Extensive	Low level	Moderate
B-D	B-D	B-D
B-D	B-D	B-D
Economically optimum	Grizzly bear	Wildlife
700 feet	1500 feet	1200 feet
1500 feet	4000 feet	4000 feet
0.75-1.75	0-1.0	0.25-1.25
		Network (general)
		TSL New Roads
		TSL Existing Roads
		Density Criteria
		Yarding Average
		Yarding Maximum
		Open Road Density

<b>Unscheduled Timber Harvest DFCs</b>					
<b>2A &amp; 6</b>	<b>2B</b>	<b>4 &amp; 8</b>	<b>7B</b>	<b>9AB &amp; 3</b>	<b>12</b>
None	Low level	Low level	Low level	Variable	Low level
None	B-D	B-D	B-D	A-D	D
None	B-D	B-D	B-D	A-D	B-D
None	Recreation	Mixed	Grizzly bear	Recreation	Big game
NA	NA	1000 feet	2000 feet	NA	2000 feet
NA	NA	4000 feet	5000 feet	NA	5000 feet
0	NA	0.25-1.25	0-0.5	0.25-1.25 <sup>1</sup>	0-0.5
					Network (general)
					TSL New Roads
					TSL Existing Roads
					Density Criteria
					Yarding Average
					Yarding Maximum
					Open Road Density

<sup>1</sup>Refers to DFC 3 only; DFC 9 areas will be highly variable

**Desired Future Condition 1B**



## Desired Future Condition 1B 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 note 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.

As you drive, you notice an extensive roading system and timber harvest activity in some areas. The main road system is gravel-surfaced and well maintained, with gentle grades and potentially high cut-and-fill slopes well suited for sedan travel. You may see timber harvest equipment at roadside and meet logging truck traffic along the roadway. Driving a sedan, you can travel about two-thirds of the main road system. About one-third of the main road system is closed seasonally for wildlife security or roadway protection.



*Timber harvest, oil and gas activity, grazing, and roaded natural recreation are the primary activities of DFC 18.*

You notice frequent lower-standard branch roads with native surfaces. Most of the lower-standard roads are closed seasonally to vehicle access. About two-thirds of the closed roads are blocked seasonally by gates, and about one-third blocked year-round by semi-permanent barricades and also reseeded. Some branch roads remain open for public access and Forest Service purposes.

Hiking off-road, you find a road about every one-half mile. Down some barricaded roads, stream channels seem natural because of removal of bridges and culverts. Down other gated roads, recent vehicle travel may be seen. You may hear sounds of nearby timber harvesting.

The forest is a mosaic of tree groups of different ages and heights. Yet, older, taller trees dominate the landscape. Some recently cut areas show tree stumps, slash, and disturbed soil. Other recently cut areas still have a partial canopy of older trees. Older cut areas show tree saplings, poles, or young trees up to 45 feet tall and have a less-disturbed appearing forest floor. Scattered dead trees are seen in openings and in older tree stands.

Firewood is available from dead trees, designated aspen areas, slash, and logs decked for this purpose. Occasionally, you find large patches of old-growth trees of many heights.

If you watch for wildlife, you find that such mature-growth-dependent or old-growth-dependent species as the marten, red breasted nuthatch, and goshawk have been replaced by other animals like the snowshoe hare and mountain bluebird. Resident elk have remained at the same numbers for many years. Due to human activity and reduced wildlife security, some elk and other big game have been displaced to areas with greater security. Over time, big-game seasons may have been shortened or restricted. Because of the setting, outfitted hunting may not be as common as it is in less-developed areas. Resident trophy elk, deer, and moose may be limited.

If you go fishing, you find adequate supplies of fish, but improved access to some streams and lakes may have resulted in more people coming there over time. Seasonal limits on fishing some waters may have been needed to preserve quality sport-fishing opportunities. Some restrictions may have been applied over the years such as catch-and-release or slot limits to maintain statewide average fish numbers, size, and fishing success rates.

During the summer and fall, you encounter sheep or cattle and notice signs of intensive management practices, such as burning, spraying, seeding, fences, cattle guards, water developments, and gates. You meet relatively large flocks of sheep on side hills and ridgetops or some cattle within streamside riparian areas and on nearby slopes. Away from the streams, you see scattered small- to medium-sized groups of livestock. You may find traffic delays when livestock are being moved.



You find such non-motorized activities as hiking and biking along roads closed to vehicle traffic. Some roads and nearby areas are available for year-around snowmobile, motorcycle, and 4-wheel-drive vehicle use.

Mineral or gas and oil development roads are gravel-surfaced, similar to main roads elsewhere on the forest. Access to energy development sites may be controlled. In oil development areas, you might see pumping equipment, storage tanks, and a safety and flow regulation device called a "Christmas tree." Gas fields reveal "Christmas trees", compressors, and dehydration units. Occasionally, you can hear noise from pumpjacks, heavy equipment, and compressors.

#### Management Prescription 1B

**Management Emphasis** - Management emphasis is on scheduled wood-fiber production and use, on livestock production, and on 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, l), 1.2 (a-f), 1.4 (a), 2.1 (a, b), 2.4(a, b), 2.5(a-c), and 4.2(a-c).

#### Resource Prescriptions, Standards, and Guidelines

##### Recreation Prescription

Recreation is managed to provide Roaded Natural appearing opportunities in roaded areas, and Semi-Primitive opportunities in other areas. Roaded recreation opportunities are compatible with timber, livestock grazing, and minerals development. Recreation activities suitable for this area include dispersed, road-oriented uses such as firewood gathering, roadside camping and day use, off-highway vehicle (OHV) use on open routes, hunting, and winter sports. Use of closed roads for semi-primitive forms of recreation such as horseback riding and hiking is suitable.

**Visual Quality Prescription** - The Visual Quality Objective is generally Partial Retention or Modification. In sensitive foreground areas, the Visual Quality Objective is retention.

**Fisheries and Wildlife Prescription** - Habitat is provided for existing populations of game and fish, but hunter-success and recreation-day objectives identified by the Wyoming Game and Fish Department may decrease. A use-attainability study may be needed for a specific stream segment to determine if fishery-beneficial use is being protected to an adequate level.

**Big-Game Habitat Guideline** - Sufficient habitat should be provided to maintain desired populations and distribution of big game species. For example:

**Elk Calving Areas** - About 30 percent of the brush/grassland- rangeland type-should be maintained in a brush/forb type, emphasizing the aspen or conifer/brush ecotone.

**Mule Deer Winter Ranges** - About 75 percent of the brush/grassland- rangeland type-should be maintained in a brush type with about 55 percent in a mature age class.

**Moose Winter Ranges** -About 75 percent of the brush/grassland- rangeland type such as serviceberry and mountain mahogany-should be maintained in a brush type with about 30 percent in a mature age class. About 95 percent of the willow/grass range should be maintained in a willow type.

**Elk Winter Ranges** - About 50 percent of the brush/grassland should be maintained in a brush type with about 30 percent in a mature age class.

**Bighorn Sheep Winter Ranges** -About 75 percent of the brush/grassland type should be maintained in grass.

**Vegetation: Range Prescription** - Range is managed to maintain and enhance range and watershed condition while providing forage for livestock and wildlife.

**Vegetation: Timber Prescription** -A full range of biologically appropriate silvicultural practices is used to emphasize production and use of saw timber and other wood by-products. Timber harvest is scheduled.

**Silvicultural System Guideline** - Clearcut and shelterwood methods should be emphasized on existing and future managed stands. The remaining stands may be treated using other appropriate silvicultural systems.

**Silvicultural System Standard** -as indicated:

Forest Cover	Rotation Age (years)	Desired DBH at Rotation (Inches)
Lodgepole Pine	100	10-12
Spruce and Fir	110	11-15
Douglas-fir	90	11-15

**Intermediate Treatment Guideline** - All methods are permitted. Those which most economically produce sawlog-sized trees of desired dbh at rotation age should be applied. Stands should be protected from wood-fiber-production losses caused by insects or diseases.

**Desired Stocking Guideline** -Managed stands should have tree stocking control to provide timber production and big game hiding cover.

Forest Cover	Stand Age at Thinning (Years)	Desired Trees Per Acre
Lodgepole Pine	15-20	550
	25-30	400
Spruce and Fir	25-30	400
Douglas-fir	15-20	350

**Site Preparation Guideline** - Methods should be applied that favor meeting reforestation standards as soon as possible after final harvest.

**Reforestation Guideline** - Plantations should be protected from rodent and livestock damage.

**Reforestation Standard** -A harvested unit will be considered restocked when the following minimum standards by forest cover type and site productivity harvest: These standards will be met within five years of final harvest:

Forest Cover	Site Productivity	Trees Per Acre	Percent of area stocked	Percent Species Composition
Lodgepole Pine	20-49	150	70	LP 60
	50+	195	70	LP 60
Spruce and Fir	20-49	50	70	ES 60
	50+	195	70	ES 60
Douglas-fir	20-49	145	70	DF 70
	50+	200	70	DF 70

If natural regeneration fails to meet these standards, then trees will be planted.

Created Opening Duration Standard - A created opening will be closed when reforestation standard is met and the area begins to take on the appearance of a young forest represented by either 95 percent of the trees in the cut-over area exceeding 10 feet in height or regeneration provides elk hiding cover from a horizontal ground point of view.

**Created Opening Size Guideline** -Maximum opening should be 40 acres with an average of 25 acres.

**Created Opening Dispersion Guideline** -No more than 20 percent of the suitable timber base under this management prescription should be in a created-opening condition over a three-decade period.

**Utilization Guideline** -Harvest and treatment residues should be made available for firewood and other products in a manner compatible with site preparation and restocking requirements. Designated aspen areas should be made available for firewood.

**Timber Sale Cost-Efficiency Guideline** - Commercial wood-product sales should only be offered when benefits are equal to or exceed costs. Benefits and costs to be considered in cost efficiency analysis of commercial wood-product sales should be:

**Benefits** - Involve monetary receipts from the sale of the products, social and economic benefits associated with providing wood fiber for public use, and benefits from providing habitat needed to support big-game population objectives.

**Costs** - Consist of sale preparation, administration, essential reforestation, and roading. Where roads are developed to meet multiple-resource objectives, costs will be apportioned to the benefitting resources. Road costs include construction, operation, and maintenance. Road costs are amortized over the useful life of the road.

**Aspen Management Guideline** -Aspen should be managed for its value as wildlife habitat, emphasizing browse and cover for big-game species, and for providing seasonal colors.

**Minerals Prescription** - Minerals or energy exploration and development is encouraged. Lease stipulations emphasize mineral commodity production, while meeting some other resource objectives.

**Access: Roads Prescription** -Management of the area requires an extensive road system with some seasonal and long-term road closures. Most vehicle access is limited to arterial and collector roads. Seasonally, local roads may be accessible. Some roads remain open to vehicles, and the main roads are maintained for passage of all vehicles.

**Road Improvement and New Road Building Standard** - National Forest development roads will be built and maintained to standards appropriate for Traffic Service Levels B through D.

**Road Management Standard** - Over the life of the plan, the average Open Road Density is 1.5 miles per square mile of standard or equivalent road with 1-year to 5- year variations of 0.75 to 1.75.

### **Access Trails**

**Access: Trails Prescription** -Trails are provided for motorized and non-motorized use appropriate to the recreation setting.

**Trail System Guideline** -Motorized trails should be developed primarily using local roads and trails not being actively used for commodity recovery. Existing Bridger-Teton National Forest development trails designated for non-motorized use should be maintained.

**Standard Maintenance Level Guideline** -The standard maintenance level should be that needed to protect soil and water values, and to provide for user safety and user convenience appropriate to the trail's difficulty level.

**Trail Density Guideline** -No limit should be imposed on the numbers of miles of trail per square mile of area. Closed roads may be considered as a part of the trail system.

**Encounters Per Day Guideline** - No limit should be imposed on numbers of encounters per day along the trail system.

### **Protection Fire**

~~**Protection: Fire**—Fire management emphasizes preservation and enhancement of timber and range values scheduled for current use. A full range of suppression techniques is used.~~

~~**Prescribed Fire Guideline**—Prescribed fire should be used to favor reducing fuel loadings, improving livestock forage conditions on primary ranges, and improving site conditions to increase wood fiber production.~~

~~**Fire Protection Standard**—Wildfires will be suppressed using control strategies during the normal fire season. Pre- and post-fire season strategies may include containment, confinement, or surveillance.~~

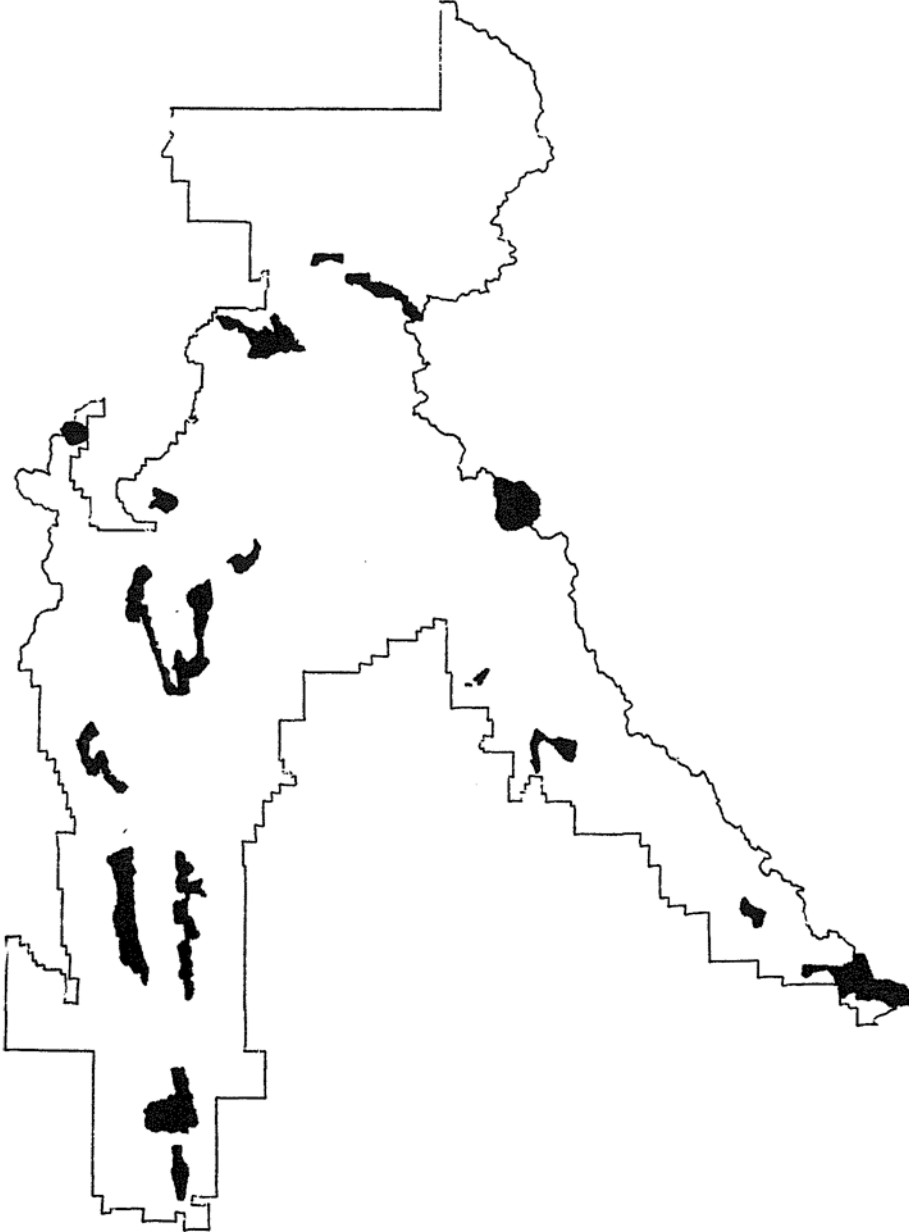
~~**Fuels Guideline**—Fuel conditions should be maintained that permit fire suppression forces to meet fire protection objectives for the area under historic weather conditions.~~

~~**Activity Fuels Standard**—Natural fuels, in areas of high resource values, and Activity fuels will be reduced or otherwise treated so the potential fireline intensities will not exceed 400 BTU per second per foot on 90 percent of the days during the regular fire season, or continuous fuels concentrations exceeding the above standard will be broken up into manageable units with breaks, or additional protection will be provided for areas exceeding the above standards when such protection will not be required for more than five years. **Around buildings and facilities,**~~

~~natural fuels will be reduced or otherwise treated so potential fireline intensities will not exceed 100 BTU per second per foot on 90 percent of the days during the regular season.<sup>28</sup>~~

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<sup>28</sup>(Amended by Attachment One of the Record of Decision.) This was later superseded by the 2004 Fire Amendment



Desired Future Condition 2A

### Desired Future Condition 2A Non-motorized Recreation Areas

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

**Experience:** Overall, you find few, if any, signs of people as you hike through the area. Because much of the area is accessible by trails or cross-country, you find no roads. All-terrain-vehicles and motorcycles cannot use the area. Encounters with other people diminish as you move away from nearby roads and trailheads. Generally, you experience a backcountry setting with a high likelihood of solitude. However, you may meet large groups occasionally.

Trails allow easy passage by hikers, horses, llamas, and mountain bikes. You may find oversnow vehicles, helicopters for skiing, stock tanks or fences, seismic exploration, or predator control devices in some areas. Otherwise, the forest presents a natural appearance. Some areas show recent wildfires. Other areas show stands with many dead trees. Firewood is available for camping, but is not available generally for home use.

As you look for wildlife, you find that habitat for such old-growth-dependent wildlife as the marten is approaching the maximum level that could be available. Habitat for big game is less than the best, but resident elk numbers have remained stable over many years. As a result of the lack of resource development, big-game hunting seasons are generally longer than elsewhere on the Bridger-Teton and -less restrictive. You are likely to find outfitted hunting available. Resident trophy elk, deer, and moose are generally more available than in other parts of the forest where substantial timber or mineral development is taking place.







*Non-motorized recreation is the main resource use of DFC 2A.*

If you go fishing and hike into a remote area, you may find that access is difficult and takes quite a bit of time. Better fishing is generally available to you if you are willing to travel longer distances. Fish supplies are abundant except for popular areas where some restrictions may have been applied

You find some sheep, cattle, and pack animals throughout the area. Recent livestock grazing is evident in some areas but not in others. You may see range improvements such as fencing and stock tanks.

#### [Management Prescription 2A](#)

**Management Emphasis** - Management emphasis is to maintain or enhance Primitive and Semi-primitive 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).

#### [Resource Prescriptions, Standards, and Guidelines](#)

## Recreation

**Recreation Prescription** - Manage the physical and social setting to provide Primitive and Semi-primitive, Non-motorized opportunities.

**Helicopter Use Guideline** -Helicopters for skiing and geophysical exploration ~~should use~~ **may be allowed to use**<sup>29</sup> designated non-motorized areas.

**Off-Highway Vehicle Standard** -Off-highway vehicles (OHVs) will not use the area. Oversnow, motorized vehicles will be allowed to use designated trails and dispersed- use areas.

**Campsite Guideline** - High-impact campsites should be restored to meet Frissell Condition Class 3. In some locations, designated campsites may be established, not to exceed Development Level 1.

**Education Guideline** -Visitor education and no-trace guidelines should be used to minimize social and physical impacts to the area.

**Signing Guideline** - Signing may be used for user safety, education, convenience, and interpretation.

**Group Size Standard** -Group sizes larger than those allowed in Wilderness areas will be allowed. The social setting will be managed as Semi-primitive Non-motorized.

## Visual Quality

**Visual Quality Prescription** - The Visual Quality Objective for this area is Retention. Structures, trails, and signs repeat the form, line, color, and texture found in the characteristic natural landscape

## Fisheries and Wildlife

**Fisheries and Wildlife Prescription** -Habitat is managed to achieve the game and fish populations, harvest levels, success and recreation day objectives identified by the Wyoming Game and Fish Department and agreed to by the Forest Service.

**Habitat Diversity Guideline** - Diverse fish and wildlife habitat types should be maintained in each watershed to provide sufficient habitat to meet Wyoming Game and Fish Department population objectives and distribution of native wildlife including non-game, small game, big game, fish, and Threatened and Endangered species.

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<sup>29</sup> Corrected 1/21/93 by Forest Plan Correction No 1

**Vegetation: Range**

**Vegetation: Range Prescription** - Range is managed to maintain and enhance range and watershed condition while providing forage for livestock and wildlife.

**Vegetation: Timber**

**Vegetation: Timber Prescription** -Only silvicultural practices necessary to meet specific recreation objectives are used. Timber harvest is not scheduled. Few, if any, opportunities to use wood fiber for firewood and other products exist.

**Silvicultural System Guideline** -Single-tree selection and group selection systems should be favored for application to conifer forest types to meet specific recreation objectives.

**Intermediate Treatment Guideline** - Sanitation and salvage treatments should only be applied when needed to meet specific recreation objectives.

**Site Preparation Guideline** -None are permitted.

**Aspen Management Guideline** -Aspen should be managed for its value as wildlife habitat and for its seasonal colors and scenic value.

**Minerals**

**Minerals Prescription** -Development of leasable mineral resources is normally not allowed or, if allowed, done from sites outside the area except for existing leases **as of the date of the Record of Decision.**<sup>30</sup> Surface exploration and development under existing leases and claims is authorized, subject to existing lease terms. Seismic activities can be authorized with helicopter access permitted. The area is not withdrawn to locatable mineral entry.

**Lease Stipulation Standard** - For areas leased, the No-Surface-Occupancy stipulation will be applied.

**Access: Roads**

**Access: Roads Prescription** -Roads are only built for exploration or development of existing oil and gas leases or to access validated mining claims.

**New Road Building Guideline** - Roads should be built to the minimum standard needed to provide safe access.

**Road Management Standard** - Exploration and development roads will be managed as temporary roads and will be returned to Class 4 standards when use ends.

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<sup>30</sup> ( Amended by Attachment One of the Record of Decision)

**Motorized Access Guideline** -Motorized vehicles and equipment may be permitted on a case-by-case basis to maintain or build range improvements needed to meet allotment objectives.

**Access: Trails**

**Access: Trails Prescription** -Management of the area requires a trail system for exclusively non-motorized travel.

**Access Guideline** - Adequate access and trail systems should accommodate and disperse use without encouraging concentrated use. Winter-sport trails should avoid areas of high avalanche hazard.

**Trail System Guideline** - Non-motorized trails should be developed providing experiences at all levels of difficulty.

**Trail System Standard** - Motorized trails will not be developed except for designated snow trails.

**Standard Maintenance Level Guideline** -The standard maintenance level should be that needed to protect soil and water values and to provide for user safety and user convenience appropriate to the trail's difficulty level.

**Trail Density Guideline** -Over the life of the plan, an average of no more than 1 mile of trail per square mile of area should be attained.

**Encounters Per Day Guideline** - Parties encountered per day during peak recreational use seasons should average 12 per day, varying from 6 to 15 depending on conditions.

**Protection: Fire**

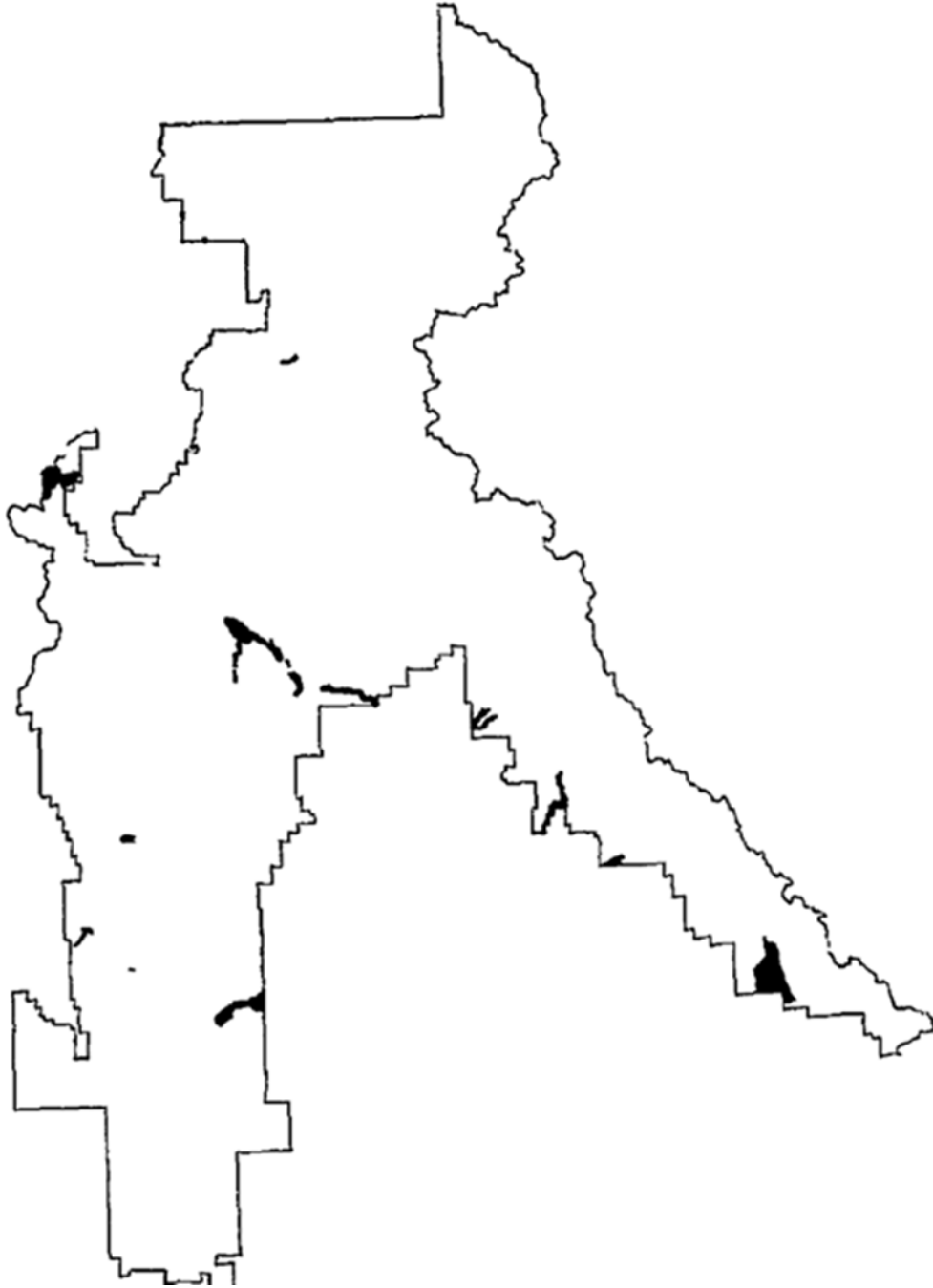
~~**Protection: Fire Prescription** - Fire management emphasizes a natural appearing landscape.~~

~~**Fire Protection Standard** - Wildfires will be suppressed using strategies that keep fireline intensities below 400 BTU per second per foot<sup>31</sup>~~

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<sup>31</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

Desired Future Condition 2B



## Desired Future Condition 2B Motorized Recreation Areas

### Note:

Forest Plan Amendment #4: A DFC 2B corridor is established along 10 miles at roads in the Seven Lakes DFC 2A area and 1 mile in the Sweetwater River DFC 2A --.The DFC 2B corridor will be 300 feet on either side of the existing roads.<sup>32</sup>

### Theme:

An area managed to give a motorized recreation experience.

**Experience:** Overall, you find few signs of people away from roads. If you hike through the area, you see little or no evidence of logging, oil and gas equipment, or other development.

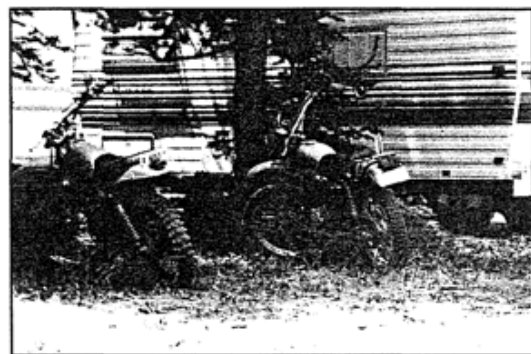
Some popular, established roads are open and you reach or pass through the area on them. Such roads are mainly gravel surfaced and well maintained with gentle grades. They allow unrestricted two-way traffic. You may find a few roads as you hike along trails or across country.

Many trails are available to you if you are riding an all-terrain vehicle or a motorcycle. When you drive your car, you frequently meet other vehicles along the roads. If you go hiking, you meet other people at trailheads. People encounters diminish as you move away from roads and trailheads.

Trails are designed and maintained to allow easy passage by people, horses, and vehicles. So, you find occasional-to-frequent encounters with motorized trail bikes, jeeps, and other off-highway vehicles in some areas.

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<sup>32</sup> LMRP Amendment #4 8/95



*Primary activities in DFC 2B are recreation and grazing.*

The forest appears to be mature. Some areas show recent wildfires. Other areas show stands with many dead trees. Firewood is available for camping, and is generally available for home use.

As you look for wildlife, you find that habitat for such old-growth-dependent wildlife as the marten is close to the maximum amount available there. Habitat for big game is less than best, but resident elk numbers have remained stable for some time. Because of little disturbance in much of the area, big-game hunting seasons are generally longer than in other parts of the Bridger-Teton National Forest and less restrictive. You are likely to find outfitted hunting here. Resident trophy elk, deer, and moose are generally more available than in other parts of the forest where substantial timber or mineral development is taking place.

If you go fishing and hike into a remote area, you may find that access is difficult and takes quite a bit of time. But, better fishing is generally available to you if you are willing to travel longer distances. Fish are abundant except for popular areas where some restrictions may have been applied.

You find some sheep, cattle, and pack animals throughout the area. Recent livestock grazing is evident in some areas but not in others. You may see range improvements such as fencing and stock tanks.



## Management Prescription 2B

**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).

## Resource Prescriptions, Guidelines, and Standards

### Recreation

**Recreation Prescription** — Management provides Roaded Natural and Semi-Primitive Motorized opportunities, and meets ROS setting criteria for Semi-primitive Motorized class in backcountry areas.

**Campsite Guideline** — High-impact campsites should be restored to meet Frissell Condition Class 3. In some locations, designated campsites may be established, not to exceed Development Level 2.

**Education Standard** — Visitor education, especially the "Tread Lightly" program, will be used to minimize social and physical impacts to the area.

### Visual Quality

**Visual Quality Prescription** -The Visual Quality Objective is Retention

### Fisheries and Wildlife

**Fisheries and Wildlife Prescription** -Habitat is managed to achieve the game and fish populations, harvest levels, success and recreation day objectives identified by the Wyoming Game and Fish Department and agreed to by the Forest Service.

### Vegetation: Range

**Vegetation: Range Prescription** - Range is managed to maintain and enhance range and watershed condition while providing forage for livestock and wildlife.

### Vegetation: Timber

**Vegetation: Timber Prescription** -Silvicultural practices are used to meet specific recreation and big-game habitat objectives. Timber harvest is not scheduled. Vegetation management practices provide opportunities to use wood fiber for firewood and other products.

**Silvicultural System Guideline** - All are available, but only to meet specific recreation and big-game objectives. Selection, shelterwood, and other methods should be favored to meet big-game habitat objectives which generally maintain a mature- forest appearance.

**Intermediate Treatment Guideline** -Sanitation in stands should be applied when epidemic conditions are present or imminent and threaten meeting resource objectives within or adjacent to the Management Area. All others should be available but only to meet specific recreation or big-game objectives.

**Site Preparation Guideline** - All should be available but only to meet specific recreation or big-game objectives.

**Aspen Management Guideline** -Aspen should be managed for its value as wildlife habitat and for its scenic value and fall colors.

### **Minerals**

**Minerals Prescription** -Energy exploration and development under existing leases is authorized with requirements to meet other surface-management objectives. The area is available for locatable mineral entry and leasing.

**Lease Stipulation Standard** - Oil and gas leases issued in areas classified as Primitive, Semi-primitive Non-motorized, and Semi-primitive Motorized will contain a No-Surface-Occupancy stipulation, but access corridors for surface occupancy elsewhere may be allowed when no other feasible alignments exist. New leases will be issued in Roded Natural under general National Forest direction.

### **Access: Roads**

**Access: Roads Prescription** - Management of the area requires roads that are designated for use by motorized off-highway vehicles.

**Road Improvement and New Road Building Standard** - Forest development roads will be built and maintained to standards appropriate for Traffic Service Levels B through D. New road building will be kept to the minimum standard and density necessary to achieve resource objectives, predominately roded recreation.

### **Access: Trails**

**Access: Trails Prescription** -Trails are provided for a variety of motorized uses.

**Trail System Guideline** -Motorized trails should be developed to provide all levels of difficulty, using existing roads and trails where possible. Use should be dispersed rather than concentrated.

**Trail System Standard** - New non-motorized trails will not be developed.

**Standard Maintenance Level Guideline** -The standard maintenance level should be that needed to protect soil and water values and to provide for user safety and user convenience appropriate to the trail's difficulty.

**Trail Density Guideline** -Over the life of the Forest Plan, an average of no more than 1mile of trail per square mile of area should be attained.

**Encounters Per Day Guideline** - Parties encountered per day during peak recreational use seasons should average 12 per day, varying from 6 to 15 depending on conditions.

**Protection: Fire**

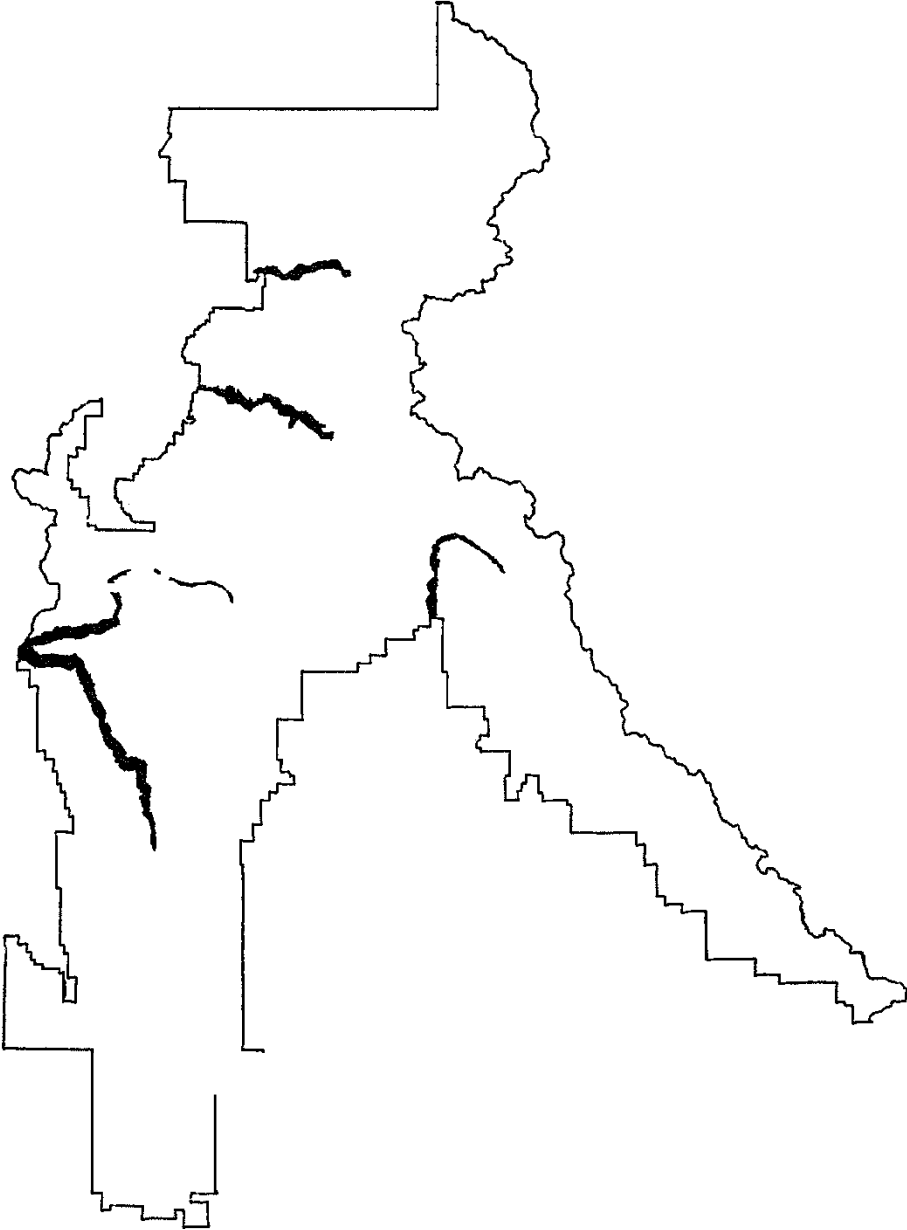
~~**Protection: Fire Prescription** -Fire management emphasizes a slightly modified landscape.~~

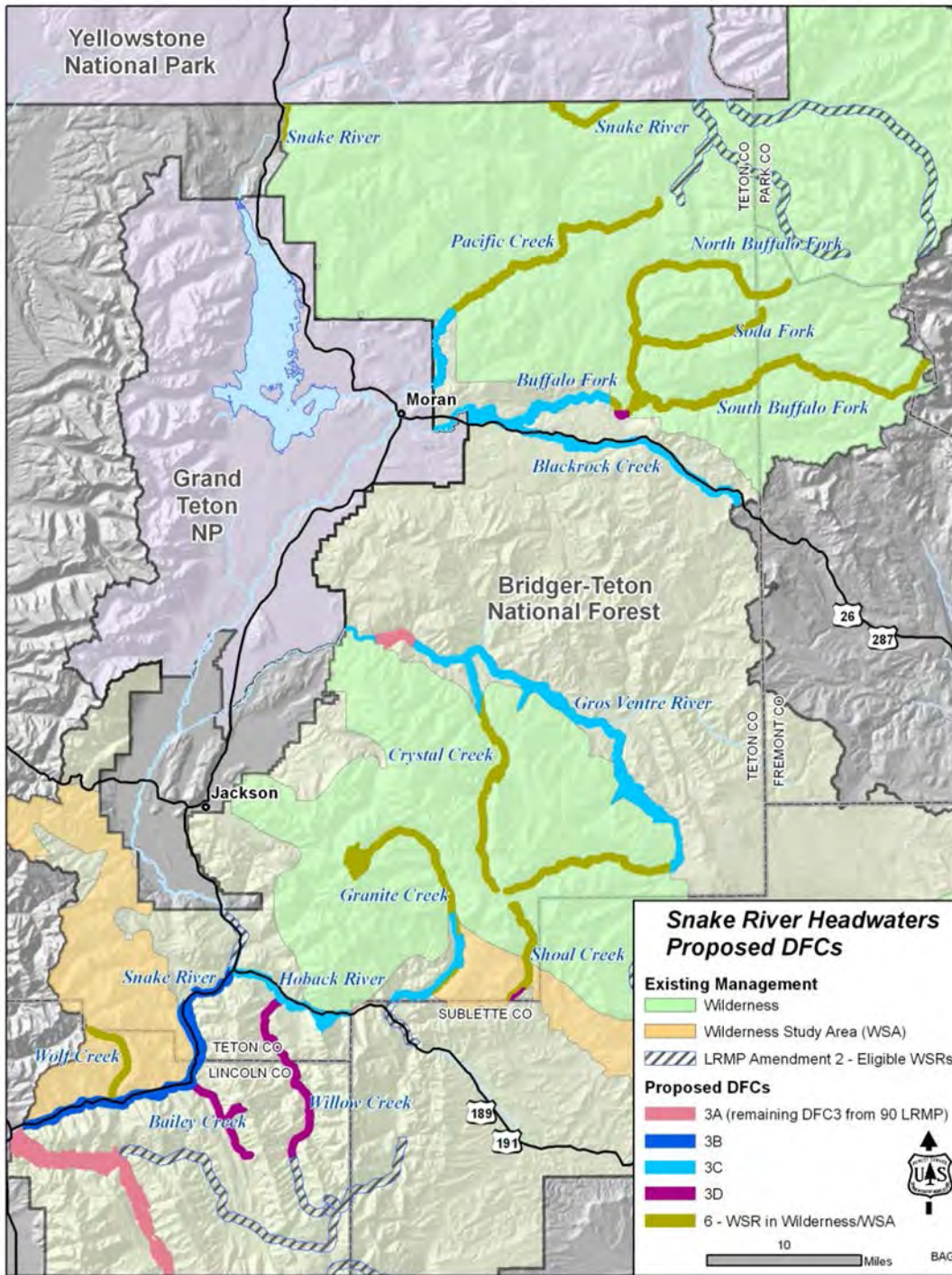
~~**Fire Protection Standard** -Wildfires will be suppressed using strategies that keep fireline intensities below 400 BTU per second per foot.<sup>33</sup>~~

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<sup>33</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

Desired Future Condition 3





## Desired Future Condition **3A River Recreation**<sup>34</sup>

Eligible, but non-designated rivers outside Wilderness and Wilderness Study Areas

Re-categorized from DFC 3 to DFC 3A; managed in accordance with existing DFC 3 and Forest Plan Amendment Two direction.<sup>35</sup>

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

**Experience:** Overall, you find little obvious sign of people away from public facilities. You see little evidence of development as you walk through the area or float the river. You see that old-growth forest is approaching maximum levels of acres with the result that some loss of shrubs and other forage species has happened.

Driving a vehicle, your travel is limited to only a few road systems. You find that many of the road systems are unsuited to travel by sedan. The exceptions are a few popular, established roads that may access or pass through the area.

Some areas show signs of recent wildfires. Other areas show stands with many dead trees. You find almost no signs of timber harvest.

Along and in the river, you see and experience all kinds of water-related recreation: river floating, boating, and fishing. Near the river, you may see picnicking, camping, and hiking. You may find such facilities as boat-launch ramps, picnic tables, and toilets at river-access points.

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<sup>34</sup> Amendment 11, 12/02/2013

<sup>35</sup> Amendment 11, 12/02/2013



*River related recreation is the primary activity in DFC 3.*

You can fish the rivers and streams by standing on the stream banks, wading, or floating in a boat or raft. You may find that some spots have too many people trying to fish. Such restrictions as catch-and-release or slot limits may have been applied.

Bald eagles and osprey may be present.

You may find some sheep, cattle, and pack animals throughout the area. Recent livestock grazing is evident in some areas but not in others.

If you have an off-highway vehicle, you are limited to the road system when you drive it.

### **MANAGEMENT PRESCRIPTION 3A<sup>36</sup>**

**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*.

<sup>36</sup> Amendment 11, 12/02/2013

Other recreational experiences and commodities are provided from river segments 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)

## RESOURCE PRESCRIPTIONS, STANDARDS, AND GUIDELINES

### Wild and Scenic Rivers

~~**Wild and Scenic Rivers Prescription**—River segments that have been found eligible for inclusion in the Wild and Scenic River system are managed to protect or enhance their wild, scenic, and recreational values.<sup>37</sup>~~

**Wild and Scenic Rivers Management Standard:** Resource development which would diminish the free-flowing characteristics, water quality, and scenic, recreational, fish and wildlife, or other values of eligible segments will be prohibited.<sup>38</sup>

**Facility Improvement Standard** -Where facilities exist in eligible river corridors, improvements to roads, trails, facilities, and structures will be designed to protect and enhance scenic and recreation values

### Recreation

**Recreation Prescription** - Roaded Natural opportunities are provided in areas of existing system roads and at major river-access points. All other areas will provide Semi-primitive or Primitive opportunities.

**Facilities Guideline** -Where roads and developed recreation exist, facilities should be provided to enhance existing opportunities. These may include launch ramps, interpretive facilities, campsites and picnic areas, toilets, and parking areas.

**Development Location Guideline** -Developments should be confined to launch and fishing access points, to allow a natural appearing setting for recreationists on the river.

**River Experience Standard** -In Semi-Primitive and Primitive settings, rivers will be managed to meet social and physical criteria appropriate to each ROS class.

**Rivers** where permits are allowed but not currently issued, only annual permits will be issued for commercial recreation services until intensity and frequency have been determined. On the

<sup>37</sup> Forest Plan Amendment # 2 3/92 (Later Amended in 2013)

<sup>38</sup> Forest Plan Amendment # 2 3/92 (Later Amended in 2013)



same rivers, no permits will be issued for outfitted recreational floating until intensity and frequency have been determined and decisions made about allocations among commercial and non-- commercial users.

**Motorized Vehicle Standard** - Motorized vehicles will be allowed in parking lots and on designated roads and trails only.

### **Visual Quality**

**Visual Quality Prescription** - The Visual Quality Objectives for this area are Retention and Partial Retention. Partial Retention is generally applied to recreation developments that are visually evident but subordinate to the natural landscape.

### **Fisheries and Wildlife**

**Fisheries and Wildlife Prescription** - Habitat is managed to help meet fish and game populations, harvest levels, success, and recreation-day objectives and to fully achieve fish and game populations, harvest levels, success, and recreation day objectives identified by the Wyoming Game and Fish Department and agreed to by the Forest Service. Cumulative effects analysis is performed for all development proposals within grizzly bear habitat.

**Big-Game Habitat Guideline** - Sufficient habitat should be provided to maintain desired populations and distribution of big-game species. For example:

**Elk Calving Areas** - About 30 percent of the brush/grassland-rangeland type-should be maintained in a brush/forb type emphasizing the aspen or conifer/brush ecotone.

**Mule Deer Winter Ranges** - About 75 percent of the brush/grassland- rangeland type-should be maintained in a brush type with about 55 percent in a mature age class.

**Moose Winter Ranges** -About 75 percent of the brush/grassland- rangeland type, such as serviceberry, mountain mahogany-should be maintained in a brush type with about 30 percent in a mature age class. About 95 percent of the willow/grass range should be maintained in a willow type.

**Elk Winter Ranges** - About 50 percent of the brush/grassland should be maintained in a brush type with about 30 percent in a mature age class.

**Bighorn Sheep Winter Ranges** -About 75 percent of the brush/grassland type should be maintained in grass.

**Diversity of Wildlife Habitat Guideline** -Diverse wildlife habitat types should be maintained within each watershed. Sufficient habitat should be provided to maintain Wyoming Game and Fish Department population objectives and distribution of native wildlife including non-game, small game, big-game, fish, threatened, endangered, and sensitive species.

### **Vegetation: Range**

Vegetation: Range Prescription - Range is managed to maintain and enhance range and watershed condition while providing forage for livestock and wildlife.

**Vegetation: Timber**

**Vegetation:** Timber Prescription - Primarily uneven-aged silvicultural practices are used to preserve and enhance river-oriented-recreation experiences and wildlife values. Timber harvest is not scheduled, but can be used to enhance recreation sites and visual quality. Examples of how tree removal can be used include development or expansion of existing recreation facilities, removal of trees that pose a hazard and "daylighting" of roads and parking areas where mud and snow persist. Vegetation management practices provide limited opportunities to obtain firewood and other products.

**Silvicultural System Guideline** -Single-tree selection and group selection methods should be applied to forest conifer types favoring development of all-aged stands to meet specific wildlife habitat and river-oriented recreation objectives.

**Intermediate Treatment Guideline** -Improvement cuts should be applied only to meet specific wildlife and river-oriented recreation objectives. Sanitation should be applied when epidemic conditions are present or imminent and threaten meeting resource objectives within or adjacent to the management area.

**Site Preparation Guideline** -Are permitted subject to other surface-management requirements.

**Aspen Management Guideline** -Aspen should be managed for its value as wildlife habitat and for its fall colors and scenic values.

**Minerals**

**Minerals Prescription** -The area is available for mineral or energy exploration and development, subject to other surface-management requirements.

**Lease Stipulation Standard** -Leases will be issued with the No-Surface-Occupancy stipulation on all areas.

**River Status Guideline** -Subject to existing rights, segments of rivers eligible for Wild, Scenic, or Recreation status may be recommended for withdrawal from mineral entry.

**Access: Roads**

**Access: Roads Prescription** -Management of the area requires periodic local roads providing river access.

**Road Improvement and New Road Building Standard** - Forest development roads will be built and maintained to standards appropriate for Traffic Service Levels B through D. New road

building will be kept to the minimum standard and density necessary to achieve resource objectives, predominately river access.

**Road Management Standard** -Over the life of the Forest Plan, the average open road density will be 1 mile per square mile of standard or equivalent road with 1-year to 5-year variations of 0.25 to 1.25 miles per square mile. Temporary roads will be returned to Elimination Class 3 or 4 standards.

The Upper Green River corridor is exempted from DFE3 open road densities standards.<sup>39</sup>

#### **Access: Trails**

**Access: Trails Prescription** -Hiking trails are provided.

**Trail System Guideline** -Hiking trails of easiest difficulty should be developed that access points of interest along rivers and streams.

**Standard Maintenance Level Guideline** -The standard maintenance level should be that needed to protect soil and water values and to provide for user safety and user convenience appropriate to the trail's difficulty level.

**Trail Density Guideline** — Over the life of the plan, an average of no more than 1 mile of trail per square mile of area should be attained.

**Encounters Per Day Guideline** — Parties encountered per day during peak recreational use seasons should average 12 per day, varying from 6 to 15 depending on conditions.

#### **Protection: Fire**

~~**Protection: Fire Prescription**—Fire management emphasizes preservation of fish and wildlife values and river-oriented recreation opportunities.~~

~~**Fire Protection Standard**—Wildfires will be suppressed using primarily containment and control strategies during the normal fire season. Pre- and post-season period strategies could include containment, confinement, and surveillance.~~

~~**Fuels Guideline**—Hazardous fuels in the form of native vegetation will be cleared from around buildings and facilities. For further information, see *Wildfire Protection a Guide for Homeowners and Developers, Wildfire Hazard and Residential Development, Utah and California.*<sup>40</sup>~~

<sup>39</sup> LMRP Amendment #3 8/11/95

<sup>40</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

## Desired Future Condition 3B

### **Snake River, recreational segment (Confluence with the Hoback River to one mile east of Alpine Junction):**

This is the most heavily developed recreational corridor within the Bridger-Teton National Forest, with frequent, ready access from U.S. 26/89 and developed boating and camping facilities. With its unique level of development and high use, including large groups, this river segment will be managed to accommodate that visitation style. It will continue to be managed under the existing Snake River Recreation Plan, which contains specific direction to manage high numbers of visitors, including commercial outfitted publics, to protect the desired recreational experience and other identified values of the corridor. Visitor opportunities will be accessible and relevant to diverse populations, promoting understanding and enjoyment of the environment, preservation of natural settings, and encouragement of healthy river-related activities to invigorate the human spirit and create lasting memories, especially among the large groups that frequent this corridor.<sup>41</sup>

## Desired Future Condition 3C,

### **Hoback River, recreational segment; Blackrock Creek, scenic class; scenic river segments of Pacific, Crystal, and Granite Creeks; Buffalo Fork River and the Gros Ventre River scenic sections:**

These segments are accessible via paved roads and highways, some of which are scenic byways, and/or Forest roads. However, the level of development is lower, and the use is primarily by small groups and individuals. Boat launches are primitive, campgrounds are few, and there are many opportunities for dispersed camping and day use. The corridors provide for day-use and overnight camping in developed or dispersed settings. A wide range of recreational and educational experiences, including fishing, hunting and wildlife viewing, will be encouraged. Information will describe opportunities to explore the full Headwaters system. Interpretation of both natural and cultural resources will educate the public about river values and how activities in the Headwaters system help protect and enhance these values. Resource adaptation and resilience will be promoted through retention of management flexibility, especially regarding fish and wildlife habitat projects.<sup>42</sup>

## Desired Future Condition 3D,

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<sup>41</sup> Amendment 11, 12/02/2013

<sup>42</sup> Amendment 11, 12/02/2013

### Bailey and Willow Creek Wild Segments

These segments are classified as wild rivers, yet are located outside of designated Wilderness or Wilderness Study Areas (WSA). They are accessed by non-motorized trail and have no facilities other than trails and trail bridges, food storage poles, and undeveloped campsites. Fishing, hunting and wildlife viewing continue to be key activities. Visitors will adapt to changing natural conditions, with new recreation activities allowed only if they are consistent with the protection and enhancement of river values. Activities that might result in a more developed classification will not be allowed, but management to restore natural conditions or functions will be supported. Interpretation and education will primarily occur off-site.

Note: Approximately two miles each of Shoal Creek and Buffalo Fork wild segments are also outside Wilderness/Wilderness Study Area boundaries and will be managed under DFC 3D, as will any WSA portions of a designation that may be released from Wilderness management in the future.<sup>43</sup>

### Management Emphasis 3B, 3C, 3D

All designated river segments will be managed to protect and enhance their outstandingly remarkable values, free-flowing condition, and water quality for future generations. This protection, defined as a non-degradation standard, derives from a baseline of developments, conditions and ecosystem functions present at the time of designation.

Management will:

1. Promote the rivers' natural hydrological processes, channel form and function, and ability to shape the landscape, reduce impediments to free flow, ensure sufficient flows to protect and enhance outstandingly remarkable values, and ensure the maintenance of water quality.
2. Protect and enhance the natural biodiversity, complexity, and resiliency of riparian areas, wetlands, floodplains and adjacent uplands.
3. Protect and enhance cultural resources as important links to the human history of the river corridors, including historical and archeological sites, cultural landscapes, and ethnographic resources.

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<sup>43</sup> Amendment 11, 12/02/2013

4. Provide a diversity of settings for visitors of varying abilities to experience, learn about, and have a direct connection with the rivers and their special values. Such opportunities must be consistent with the values which caused the rivers to be designated.
5. Allow for legal and permitted multiple uses and associated developments, consistent with each river segment's classification, while supporting the protection and enhancement of river values.<sup>44</sup>

## Overall Standards and Guidelines DFC 3B, 3C, 3D

Designated Rivers outside Wilderness and Wilderness Study Areas.

### ECOLOGICAL AND WILDLIFE RESOURCES

**Wildlife and Vegetative Habitat Guideline:** The composition, structure and function of native plant and animal habitats should be maintained, restored or enhanced by promoting natural ecological processes to the extent practical throughout mapped corridors (riverine, riparian and upland habitats).

**Forest Health Guideline:** Native insects and disease should be managed only as necessary to protect human life and critical infrastructure.

**Fencing and Safe Road Crossings Guideline:** Fences should be modified when being replaced or newly constructed to meet Wyoming Game and Fish Department wildlife-friendly guidelines or removed if the fence is no longer necessary. Special purpose fencing, for example, corrals, elk-proof fencing, or yard fencing, may be allowed provided river values are protected. Wildlife-impermeable fences, overpasses and underpasses may be used to facilitate safe passage for wildlife across roads.

**Biodiversity Guideline:** To the fullest practical extent, management should maintain genetic integrity of native plant and animal species, and maintain native populations at all trophic levels. \*\*

**Migration Corridors Guideline:** Management actions should be designed so that timing, location and duration of activities allow for successful use of historic and new fish and wildlife migration routes.

### AQUATIC RESOURCES

**Fisheries Habitat Guideline:** Fisheries habitat management should give preference to maintenance of self-sustaining native fish populations in their native range.

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<sup>44</sup> Amendment 11, 12/02/2013

**Aquatic Habitat Guidelines:** Managers should maintain, restore or enhance self-perpetuating floodplain and riparian conditions. Natural stream habitat conditions as reflected by channel dimensions, shape, gradient, and presence of hydric vegetation and large woody debris should be sustained. Direct restoration of spawning, rearing, and adult fish habitats in designated corridors may also occur. Landscapes affected by restoration projects should be natural-appearing and compatible with other identified river values.

## **ROADS AND FACILITIES**

**Road Maintenance Guideline:** Existing roads should be managed to protect or enhance water quality, conditions of free-flow and the outstandingly remarkable values of each river segment. Best Management Practices should be utilized to improve drainage and reduce erosion and sedimentation.

**Road Density Guideline:** A transportation system should be provided that is the minimum necessary for adequate access to popular recreation sites, private lands, and to meet resource management needs, including permitted forest land uses. Where appropriate to protect or enhance river values within the corridor, roads should be evaluated for decommissioning, which includes restoring natural contours, drainage and vegetation.

**Administrative and Permitted Structures and Facilities Guideline:** New facilities should be located within existing developed areas unless relocation or new structures would reduce actual or potential impacts to river values. Facilities and structures should be designed or redesigned, located and maintained to protect river values.

**Stream Crossings Standard:** Wherever occurring on designated segments and adjacent tributaries, crossing structures must be designed to accommodate the bankfull channel, and flows, sediment and debris from 100-year return interval floods. Existing non-compliant structures will be modified as funding permits. Temporary crossings must be removed and the site rehabilitated upon completion of use.

**Road Improvement and New Road Building Standard:** Service level of permanent new or reconstructed roads must be consistent with the Recreation Opportunity Spectrum for the project area.

## **SCENERY**

**Scenery Management Guideline:** Management practices should maintain a high level of scenic integrity for identified foreground features and middle-ground or background scenic vistas. Changes in visual character resulting from natural processes such as fire (including smoke), flooding, wind events, insects and disease, landslides and naturally-impounded ponds should only be modified where necessary to provide for public safety or to the degree necessary to maintain critical infrastructure.

Scenery Perspective Standard: River facilities and management activities will be designed to be compatible with the river scenery as viewed, in priority order, first from the waterways and second from travel routes within corridors.

#### ECOLOGICAL AND WILDLIFE RESOURCES

**Wildlife and Vegetative Habitat Guideline:** The composition, structure and function of native plant and animal habitats should be maintained or restored by promoting natural ecological processes to the extent practical throughout mapped corridors (riverine, riparian and upland habitats).

**Forest Health Guideline:** Insects and disease should be managed only as necessary to protect human life and critical infrastructure.

**Fencing and Safe Road Crossings Guideline:** Fences should be modified to meet Wyoming Game and Fish Department wildlife-friendly guidelines or removed. Wildlife-impermeable fences, overpasses and underpasses may be used to facilitate safe passage for wildlife across roads.

**Biodiversity Guideline:** To the fullest practical extent, management should maintain genetic integrity of native plant and animal species, and maintain native populations at all trophic levels. \*\*

\*\*Biodiversity guideline is not intended to limit planting disease-resistant whitebark pine seedlings

**Migration Corridors Guideline:** Management actions should be designed so that timing, location and duration of activities allow for successful use of historic and new fish and wildlife migration routes.

#### AQUATIC RESOURCES

**Fisheries Habitat Guideline:** Fisheries habitat management should give preference to maintenance of self-sustaining native fish populations in their native range.

**Aquatic Habitat Guidelines:** Managers should maintain and/or restore self-perpetuating floodplain and riparian conditions. Natural stream habitat conditions as reflected by channel dimensions, shape, gradient, and presence of hydric vegetation and large woody debris should be sustained. Direct restoration of spawning, rearing, and adult fish habitats in designated corridors may also occur. Landscapes affected by restoration projects should be natural-appearing and compatible with other identified river values.

#### ROADS AND FACILITIES



**Road Maintenance Guideline:** Existing roads should be managed to protect or enhance water quality, conditions of free-flow and the outstandingly remarkable values of each river segment. Best Management Practices should be utilized to improve drainage and reduce erosion and sedimentation.

**Road Density Guideline:** A transportation system should be provided that is the minimum necessary for adequate access to popular recreation sites, private lands, and to meet resource management needs. Where appropriate to protect or enhance river values within the corridor, roads should be decommissioned, which includes restoring natural contours, drainage, and vegetation.

**Administrative Structures and Facilities Guideline:** New facilities should be located within existing developed areas. Facilities and structures should be designed or redesigned, located and maintained to protect identified values.

**Stream Crossings Standard:** Whenever occurring on designated segments and adjacent tributaries, crossing structures must be designed to safely pass water flows, sediment, and debris associated with the bank-full flows. Existing non-compliant structures will be modified as funding permits. Temporary crossings must be removed and rehabilitated upon completion of use.

**Road Improvement and New Road Building Standard:** Service level of permanent new or reconstructed roads must be consistent with the Recreation Opportunity Spectrum for the project area.

## SCENERY

**Scenery Management Guideline:** Management practices should maintain a high level of scenic integrity for identified foreground features and middle-ground or background scenic vistas. Changes in visual character resulting from natural processes such as fire (including smoke), flooding, wind events, insects and disease, landslides and naturally-impounded ponds should only be modified where necessary to provide for public safety or to the degree necessary to maintain critical infrastructure.

**Scenery Perspective Guideline:** River facilities and management activities should be designed to be compatible with the river scenery as viewed, in priority order, first from the waterways and second from travel routes within corridors.<sup>45</sup>

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<sup>45</sup> Amendment 11, 12/02/2013



Specific Standards DFC-3B, 3C, 3D

**(Replaces Amendment Two Direction)**

Resource Area	DFC 3B	DFC 3C	DFC 3D	DFC 6/6S
Water Resource Projects	Subject to valid existing rights, existing diversions and impoundments may be maintained, utilizing methods that are protective of current free-flow and identified river values. All proposed federally-assisted or –permitted (non-FERC hydropower) water resources projects within or adjacent to designated segments are subject to Section 7 evaluation for potential effects on the values for which the river was added to the National System. New (non-FERC hydropower) water resources projects may be permitted only if river values are protected.		All flood control or irrigation structures, impoundments and diversions are prohibited, subject to valid existing rights.	
Forest Health Projects	Silvicultural activities are allowed only to enhance ecological function or visual quality, or if necessary for selective hazard removal or reduction of fuels risks in WUI, must maintain ecological function and visual quality.		Only WUI fuels treatments, habitat restoration, or hazard tree removal allowed.	Only hazard tree removal at designated facilities allowed.
Dispersed Camping	None allowed in corridor during the high use season, between May 1 and Labor Day.	Allowed except where seasonally (May 1-Labor Day) prohibited. All vehicles at dispersed campsites shall remain outside a 100’ setback from waterways; Hitching, tethering or picketing pack and saddle stock shall remain outside 200’ lake and 100’ stream setbacks.	Hitching, tethering or picketing pack and saddle stock shall remain outside 200’ lake and 100’ stream setbacks.	
Recreation	No new	New and existing developed	No facilities allowed, although	

Resource Area	DFC 3B	DFC 3C	DFC 3D	DFC 6/6S
Facilities and Structures	campgrounds; other facilities may be approved, appropriate to setting; enhancements of existing facilities are allowed.	sites, river access, trailhead facilities, interpretive sites are allowed appropriate to setting. Facilities that might result in a more developed classification would not be allowed.	minimal structures such as bear poles may be installed to protect identified values.	
River-related Recreation Permits	Follow Snake River Recreation Plan limits on commercial use. Group (>15) permit required. Recreation events allowed.	Proposed outfitter-guide or recreation event permits must enhance identified river values and river stewardship.	No events allowed; New outfitter-guide permits must enhance wild river character, identified river values and stewardship.	
Visual Quality	The Visual Quality Objectives are Retention in the foreground or Partial Retention beyond the foreground.		The Visual Quality Objectives are Preservation in the foreground or Retention beyond the foreground.	The Visual Quality Objective is Preservation.
Non-recreation Developments	New structures on NFS lands may not have exterior lights, signals or illumination, except for specific safety needs. Height of any new structures should be consistent with county Land Development Regulations. New structures must be evaluated as to appropriateness for character of immediate vicinity, river classification, and according to Visual Quality Standards.		New structures are not allowed in river corridors.	

Resource Area	DFC 3B	DFC 3C	DFC 3D	DFC 6/6S
Bank Stabilization	Stabilization projects are allowed, subject to approval through the Section 7 review process, for safety or protection of river values. Materials used must be natural or natural-appearing, consistent with site characteristics.		Stabilization projects are allowed only to correct human-caused resource damage. Materials used must be natural, consistent with site characteristics.	
Road and Trail Fords	No developed or improved road or trail stream fords are allowed.	No new developed or improved road or trail stream fords shall be allowed, unless an existing crossing must be re-located or re-designed to minimize impacts on river values or water quality.		
Common Variety Minerals	Visual screening from waterway and roadway of new or existing in-use pits is required. Pits must be outside the bed or banks of designated segments and must apply established Best Management Practices to protect river values. Unused pits will be rehabilitated.		<i>Withdrawn by law from mining entry, subject to valid existing rights.</i>	
Leasable Minerals	Available (except where subject to other No Lease or withdrawal decisions) with No Surface Occupancy stipulation on any new oil and gas leases. All leasing operations shall minimize surface disturbance and visual impairment, and avoid impacts to water quality.		<i>Withdrawn by law from mineral leasing, subject to valid existing rights.</i>  Existing valid claims in wild corridors will be managed to minimize surface disturbance and visual impairment, and avoid impacts to water quality.	
Locatable Minerals	Areas available except where subject to other withdrawals. All operations shall minimize surface disturbance and visual impairment, and avoid impacts to water quality.		<i>Withdrawn by law from mining entry, subject to valid existing rights.</i>  Existing valid claims in wild corridors will be managed to minimize surface disturbance and visual impairment, and avoid impacts to water quality.	

## DEFINITIONS OF STANDARDS SPECIFIC TO DFC 3B, 3C, AND 3D:

**Definitions of Terms Used in Standards and Guidelines**

**Critical Infrastructure:** This includes administrative and visitor facilities such as buildings and trails and resource features such as whitebark pine 'plus' trees that can serve as vital resilient seed stock.

**Designated Facilities:** In wilderness, this includes defined outfitter-guide or livestock camps and cabins under permit, as well as administrative facilities such as cabins, fences and trails.

**Dispersed Camping:** Campsites chosen by visitors, without Forest Service developments such as picnic tables and rest rooms. Bear poles and bear boxes may be provided in high use dispersed campsite locations.

**Administrative and Permitted Facilities and Structures (Non-recreation):** This includes but is not limited to cell towers, grazing structures, wildlife management structures, administrative sites, communications sites, transmission lines and pipelines.

**Recreation Facilities and Structures:** Facilities include developments and areas associated with campgrounds, picnic areas and major boat launches; structures include bear boxes or poles, hitch rails, corrals, etc. associated with recreation sites. Designated facilities in wilderness include Forest System trailways, outfitter-guide camp locations, and guard stations.

**Recreation Opportunity Spectrum (ROS):** A conceptual tool for managing recreation and integrating recreation with other land uses by assessing physical, social and managerial attributes of various settings and how settings combine with activities to create a variety of recreation opportunities.

**Road Decommissioning:** Closing a road and restoring the natural contours, drainage, and vegetation to the area impacted by the road or trail (see p. 104-5 Forest Plan—Road Elimination Condition 4—Restoration)

**Visual Quality Objectives:** Defined protocol for determining the allowable amount of visual alterations to the natural landscape. *Retention/Partial Retention:* natural-appearing scenic quality with few alterations evident to the viewer beyond recreational facilities, roads and bridges. Alterations beyond the corridor are subordinate and compatible with the natural setting. *Preservation:* preserve natural scenery in the corridor and retain a natural-appearing backdrop with no evident alterations in the foreground relative to the river. Few structures other than trail bridges or primitive camps are evident.

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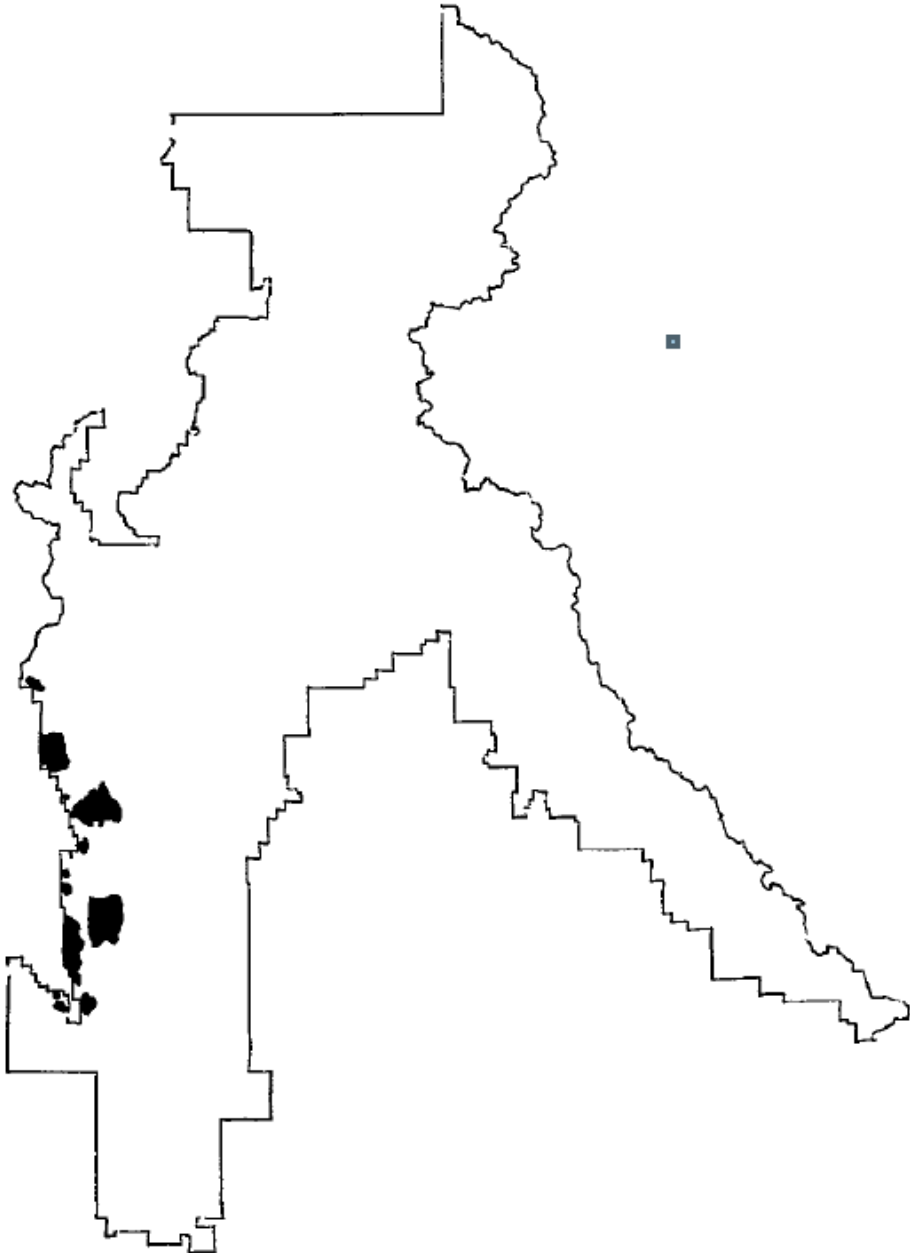
<sup>46</sup> Amendment 11, 12/02/2013

**Wildland Urban Interface (WUI):** The zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. On the Bridger-Teton National Forest, these zones are spatially identified by local community wildfire protection plans (CWPP's).<sup>47</sup>

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<sup>47</sup> Amendment 11, 12/02/2013

### Desired Future Condition 4





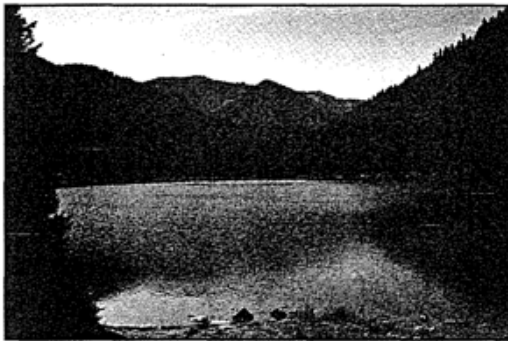
## Desired Future Condition 4 Special Emphasis Area for Municipal Water Supply

**Theme:** An area managed to protect municipal water supplies.

**Experience:** Overall, you find few signs of people away from roads. You see little evidence of development as you walk through the area. You see that old-growth forest is approaching maximum levels of acres with the result that some loss of shrubs and other forage species has happened.

If you are driving, your vehicle is restricted to only a few road systems. Many of these road systems are unsuited to travel by sedan. The exceptions are a few popular, established roads that may access or pass through the area. Traveling the main roadway, you see dispersed low-standard branch roads.

Some areas show signs of recent wildfires. Other areas show stands with many dead trees. Infrequently, you find signs of timber harvest.



*Water and semi-primitive recreation are the major resource uses of DFC 4.*

If you take a closer look at the road system, you find a limited number of "2-track" roads winding through the timber. "2-track" roads are most appropriate for four-wheel-drive vehicles. If you go hiking, you will meet "2-track" roads infrequently.

You may find big-game habitat in less-than-best condition in some areas, but you also find other open areas that provide better seasonal forage. You may find that resident and migratory elk numbers have increased over time because of the closure of roads and reduced disturbance by humans. You may enjoy longer and less-limited big-game hunting seasons than in other areas with many open roads. You may find outfitted hunting available here. Resident trophy elk, deer, and moose are generally available.

If you go fishing and hike into a remote area, you may find that access is difficult and takes quite a bit of time. Better fishing is generally available to you if you are willing to travel longer distances. Fish supplies are abundant except for popular areas where some restrictions may have been applied.

Cattle and sheep are excluded from critical water-supply areas, but you may find sheep and cattle visible in other areas.

~~Recreational use of off-highway vehicles is limited to the road system.~~ Recreation use of off-highway vehicle is limited to designated roads and trails as shown on the current Travel Map for the area.<sup>48</sup>

If you seek a primitive hiking or camping experience, you can find it mainly at higher elevations.

## Management Prescription 4

**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-l ), 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).

## Resource Prescriptions, Standards, and Guidelines

### Recreation

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<sup>48</sup> (Corrected 1/21/93 by Forest Plan Correction No 1 )

**Recreation Prescription** - Roaded Natural opportunities are provided in areas of existing system roads. All other areas provide Semi-primitive or Primitive recreation opportunities. Recreation use is managed to retain 1988 levels and is limited to existing facilities.

### **Visual Quality**

**Visual Quality Prescription** - The Visual Quality Objectives are Retention and Partial Retention.

### **Fisheries and Wildlife**

**Fisheries and Wildlife Prescription** - Habitat may be provided for existing populations of game and fish, harvest levels, success, and recreation-day objectives identified by the Wyoming Game and Fish Department and agreed to by the Forest Service.

### **Vegetation: Range**

**Vegetation: Range Prescription** - Range is managed to maintain and enhance range and watershed condition while providing forage for livestock and wildlife.

**Water Quality Protection Standard** - Livestock will be removed or numbers reduced in areas where municipal water quality is endangered.

### **Vegetation: Timber**

**Vegetation: Timber Prescription** — Silvicultural practices emphasize protecting and improving soil and water values. Timber harvest is not scheduled. Vegetation management practices provide limited opportunities to obtain firewood and other products.

**Silvicultural System Guideline** -All systems should be available as required to improve or protect water quality. Methods may be applied to meet wildlife habitat objectives only when water quality is not degraded.

**Intermediate Treatment Guideline** -All treatments should be available but used only when water quality is either protected or improved. Sanitation should be applied in stands when epidemic conditions are present or imminent and threaten meeting resource objectives within or adjacent to the Management Area.

**Site Preparation Guideline** -All methods should be available but used only when water quality is either protected or improved.

**Aspen Management Guideline** -Manage aspen for its value as wildlife habitat and to provide fall colors, while emphasizing browse and cover for big-game species and maintaining soil and water values.

### **Minerals**

**Minerals Prescription** - New oil and gas leasing is allowed. Exploration and development under existing leases is authorized but is constrained to meet water supply and quality needs and other resource objectives. All of the area is withdrawn from locatable mineral entry and phosphate leasing.

**Oil and Gas Leasing Standard** -New oil and gas leases will be issued with a No- Surface-Occupancy stipulation

#### **Access: Roads**

**Access: Roads Prescription** -Management of the area for water quality protection requires a range of actions from limiting vehicle access on local roads to road closure for locations off of arterial or collector roads.

**Road Improvement and New Road Building Standard** - Forest development roads will be built and maintained to standards appropriate for Traffic Service Levels B through D. New road building will be kept to the minimum standard and density necessary to achieve resource objectives, predominately water quality protection.

**Road Management Standard** -Over the life of the Forest Plan, the average open road density will be 1 mile per square mile of standard or equivalent road with 1-year to 5-year variations of 0.25 to 1.25 miles per square mile.

#### **Access: Trails**

**Access: Trails Prescription** -Forest development trails existing in 1988 continue to be maintained and used.

**Trail System Guideline** - Types and locations of use existing in 1988 should be continued as long as soil and water values are maintained.

**Trail System Standard** -New trail systems will not be developed.

**Standard Maintenance Level Guideline** -The standard maintenance level should be that needed to protect soil and water values, provide for user safety and user convenience appropriate to the trail's difficulty level.

**Trail Density Guideline** -Over the life of the plan, an average of no more than 0.5 mile of trail per square mile of area should be attained.

**Encounters Per Day Guideline** - Parties encountered per day during peak recreational use seasons should not exceed a maximum of two.

#### **Protection: Fire**

~~**Protection: Fire Prescription**—Fire management emphasizes preservation of soil and water values. A full range of suppression techniques is used.~~

~~**Fire Protection Standard**—Wildfires will be suppressed using primarily contain and control strategies during the normal fire season. Pre- and post-season period strategies may include containment, confinement, and surveillance.~~

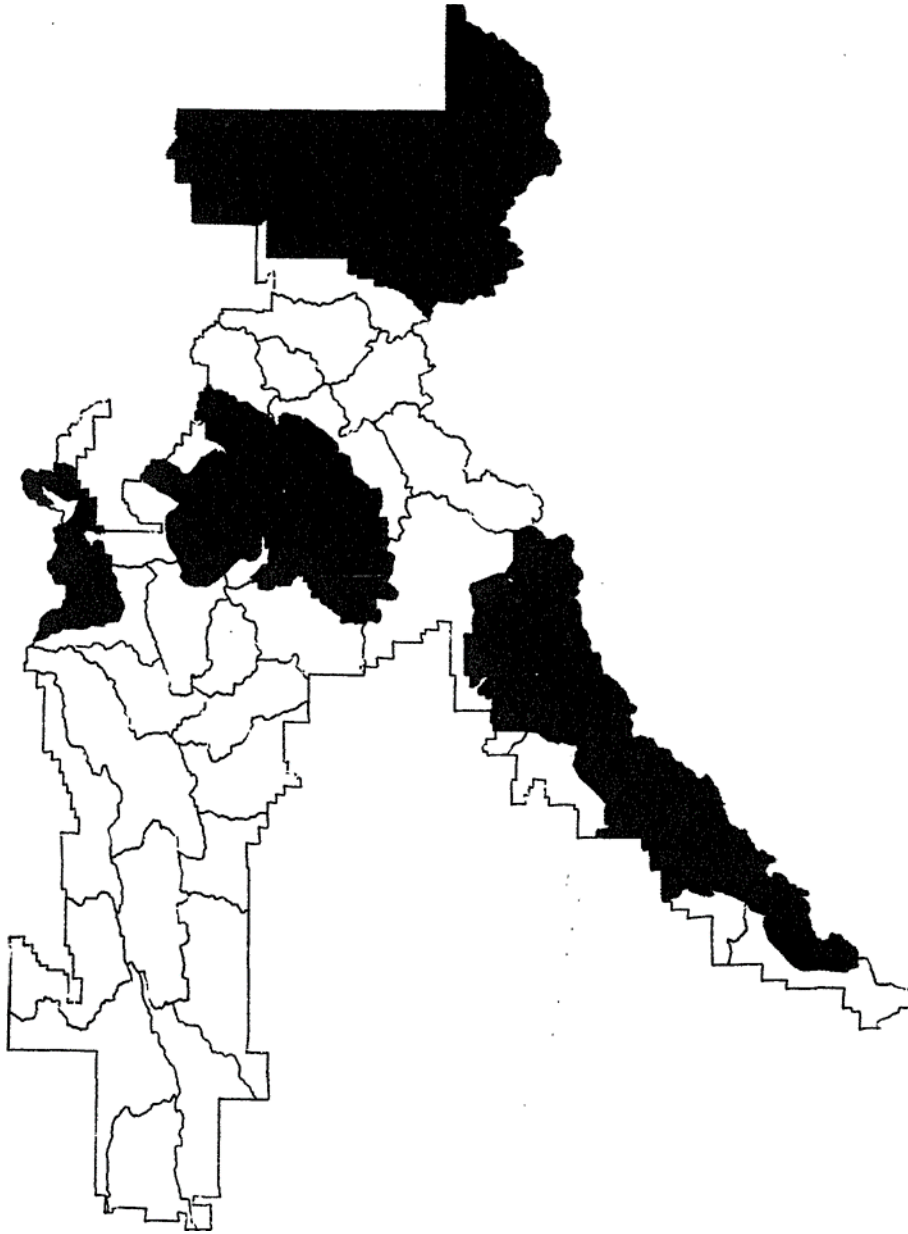
~~**Fuels Guideline**—Fuel conditions should be maintained that permit fire suppression forces to meet fire protection objectives for the area under historic weather conditions.~~

~~**Fuels Standard**—Activity fuels will be reduced or otherwise treated so the potential fireline intensities will not exceed 400 BTU per second per foot on 90 percent of the days during the regular fire season, or continuous fuels concentrations exceeding the above standard will be broken up into manageable units with fire breaks, or additional protection will be provided for areas exceeding the above standards when such protection will not be required for more than five years.<sup>49</sup>~~

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<sup>49</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

**Desired Future Conditions 6A-6D and 6S**



## Desired Future Condition 6A-6D and 6S Wildernesses, Wilderness Study Areas, and Wild Rivers

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

**Experience:** In the National Forest Wilderness, you find almost no signs of people away from trails or camping areas. The Wilderness shows you the natural processes of plants and animals living and dying. You see that old-growth forest is approaching maximum levels of acres with the result that some loss of shrubs and other forage species has happened. You may find areas of the forest where recent burns or blowdowns dominate the landscape.

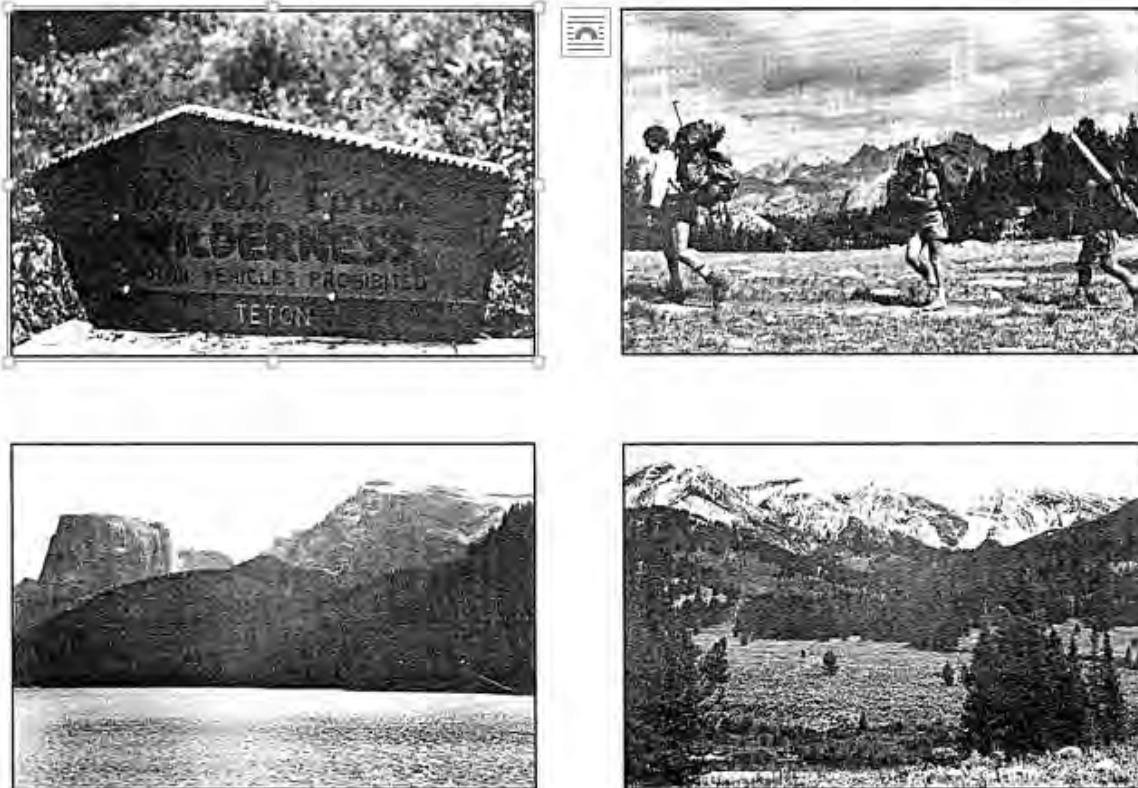
You find big-game habitat in less-than-best condition in some areas. Hunters find that resident and migratory elk numbers are high because they are rarely disturbed. Big- game hunting seasons are longer and less restricted than in other areas of the National Forest with many open roads. You can usually find outfitted hunting available. Resident trophy elk, deer, and moose are generally available.

**Wilderness and Wilderness Study Areas (WSA):** Designated Rivers located within Wilderness or Wilderness Study Areas continue to be managed under Desired Future Condition 6. New Standards and Guidelines are added, but no existing guidance is removed.

Applicable wild river segments include the upper portions of Crystal, Granite, Pacific, and Shoal Creeks, all of Wolf Creek and the upper portions of Snake, Gros Ventre, and Buffalo Fork Rivers, generally from the source to Wilderness or Wilderness Study Area boundary (or as mapped). Additional standards applies only to these river corridors, which exist in all five Wilderness/WSA subcategories (DFC 6A-D and DFC 6S). The Forest Geographic Information System data will depict these corridors as an overlay<sup>50</sup>

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<sup>50</sup> Amendment 11, 12/02/2013



*Primitive recreation, scenery, and wildlife are the primary resources of DFC 6A-60 and 6S.*

If you go fishing and hike into a remote area, you may find that access is difficult and takes quite a bit of time. Better fishing is generally available to you if you are willing to travel longer distances. Fish are abundant except for popular areas where some restrictions may have been applied.

You may find some sheep, cattle in some areas, and pack animals throughout the Wilderness. Recent livestock grazing is evident in some areas but not in others.

Those seeking a primitive experience will find it here.

Mineral and energy development is not permitted except where allowed under prior rights, or through Congressional direction as in the Palisades Wilderness Study Area.

#### [Wilderness-wide Resource Management Prescriptions, Standards, and Guidelines](#)



**Recreation**

**Recreation Prescription** -Management seeks to preserve spontaneity of use and as much freedom from regulation as possible by relying on visitor education as a management tool. The primary management strategy is to use the minimum amount of tools, equipment or structures needed to accomplish site-specific work and those that least degrade wilderness values.

Personal risk and challenge associated with adverse weather conditions, isolation, physical hazards, and lack of rapid communication and travel are appropriate features of the wilderness setting, and it is neither practical nor desirable to eliminate such risks.

Land and Resource Management Objectives addressed and, in part, met by the Wilderness recreation prescription include: 1.1(e), 2.1(a, b), 2.3(a), and 4.6(a, b).

**Recreation Strategy Guideline** - The following recreational strategies should be used, listed in descending order of preference:

First Action - Efforts are directed towards information and education programs and correction of visible resource damage. Emphasis will be placed on physical restoration of campsites and visitor contacts.

Second Action - If the first action is unsuccessful, restrict activities by regulation.

Third Action - If the first and second actions fail, restrict numbers of visitors.

Fourth Action - If first, second, and third actions are not successful, a zone can be closed to all recreation use until the area is rehabilitated and restored to natural conditions.

**Education Standard** - Information and education, emphasizing no-trace camping, will be a primary method for controlling the impact of use on the Wilderness environment.

**Limits of Acceptable Change Standard** - Standards for acceptable physical and social conditions will be described for opportunity classes within the Wilderness in order to determine limits of acceptable change.

**Campsite Restoration Standard** - Managers will concentrate on improving conditions at degraded campsites.

**Recreation Opportunity Guide (ROG) Standard** -Descriptive sheets will not be prepared for Wilderness

**Pet Control Standard** -Pets will be under owner's physical control at all times such that pets don't interfere with other visitors, livestock, or wildlife.

**Cache Standard** -The National policy on caches will be followed.

**Frequency of Encounters Guideline** - Social impacts considered unacceptable include numerous encounters with other parties on trails and vary by opportunity class within Wilderness. A permit system may be established to achieve frequency-of- encounter standards.

**Frequency of Encounters Standard** -Frequencies of Encounters will be measured as stated:

A (pristine) -No more than two other parties met per day.

B (primitive) -No more than five other parties met per day.

C (semi-primitive) -No more than 12 other parties met per day.

D (transition) -No more than 20 other parties met per day.

**Party Size Guideline** -By 1992, party size limits of 15 people and 25 stock should be implemented to reduce impacts on the physical and social setting. Outfitters may be allowed larger groups under terms of their special-use permits.

**Signing Guideline** -Signs may be placed at these locations and in these situations:

System trail junctions

Wilderness restoration sites

Area or trail closures

**Signing Standard** - Signs will not be placed at these locations and in these situations:

Trail-less areas

Along non-system trails

To identify natural features

To provide for on-site interpretation

**Lakeshore Stock Use Standard** -Grazing of recreational stock will be at least 100 feet from lakes. The picketing or tethering of recreational stock overnight must be at least 200 feet from lakes, trails, facilities, and other occupied camps.

**Forage Utilization Standard** - Site-specific standards will be developed to determine the amount of grazing allowed by recreational stock.

**Salt Standard** -Salt for recreational livestock will be in block form and will be kept in leach-proof containers. Salt will be packed out of the Wilderness at the end of each trip or at the end of the permitted use period.

**Weed-Free Feed Standard** -Pack-in feed will consist of certified weed-free pellets and grain.

**Outfitter and Guide Permit Standard** -Additional outfitter or guide permits will be issued only after a decision is made establishing the maximum desired level of outfitter services on each District. Additional analysis and public involvement will be necessary.

**Non-Recreation Special-Use Permit Standard** - No additional non-recreation special-use permits will be authorized and existing permits will be phased out unless they are specifically provided for in law or regulation.

### **Visual Quality**

**Visual Quality Prescription** -The Visual Quality Objective is Preservation.

Land and Resource Management Objectives addressed and, in part, met by the Wilderness visual quality prescription include: 4.6(a).

### **Fisheries and Wildlife**

**Fisheries and Wildlife Prescription** - Native animal and plant species are maintained, with special emphasis on the preservation of Threatened, Endangered, and Sensitive species and their habitats. Visitor actions which tend to alter the natural behavior of wildlife, such as the practice of leaving food or garbage available to be eaten by bears, is not allowed. Visitor education is emphasized as a tool to gain compliance. Native wildlife can be re-established if eliminated by human influence.

Land and Resource Management Objectives addressed and, in part, met by the Wilderness fisheries and wildlife prescription include: 1.1(g), 2. 1(a), 3.1 (a, b), 3.2(d-h), 3.3(a), 4.6(a), and 4.7(d).

**Fish and Wildlife Enclosure Structures Standard** -New enclosure structures will be installed using primitive materials.

**Habitat Diversity Guideline** - Diverse fish and wildlife habitat types should be maintained within each watershed to provide sufficient habitat to meet Wyoming Game and Fish Department population objectives and distribution requirements of native wildlife including non-game, small game, big-game, fish and Threatened, Endangered, and Sensitive plants and animals.

**Fisheries Habitat Guideline** -The Wilderness-wide Standards and Guidelines are the same as the Forest-wide Standards and Guidelines.

### **Vegetation: Timber**

**Vegetation: Timber Prescription** -Logging is not permitted.

### **Minerals**

**Minerals Prescription** - No mineral or energy development is allowed except for valid rights established prior to Wilderness designation by Congress.

Land and Resource Management Objectives addressed and, in part, met by the wilderness minerals prescription include: 4.4(a, c).

### **Soil, Water, and Air**

**Soil, Water, and Air Prescription** - Soil, water, and air values are protected to retain pristine wilderness characteristics.

**Land and Resource Management** Objectives addressed and, in part, met by the Wilderness soil, water, and air prescription include: L3(a, b), 4.6(a), and 4.7(b).

**Water Protection Standard** -A recreation guide will be developed covering health, sanitation and safety issues. Humans will be encouraged to bury human and dog feces at least 100 feet from streams and lakes in Wildernesses. For further information, see *1986 CFR 261.11 a, b, c and Wyoming Department of Environmental Quality, Water Quality Rules and Regulations, Chapter 11, Table 1, p. 93.*

**Class I Area Standard** -The potential effects of air pollution upon the air-quality- related values of Class I Wildernesses will be evaluated

### **Facilities**

**Facilities Prescription** - Facilities are kept to a minimum and removed from the Wilderness when no longer needed.

Land and Resource Management Objectives addressed and, in part, met by the Wilderness facilities prescription include: 4.6(a).

**Facility Maintenance Standard** -Except for sites with inventoried historic value, administrative sites will be removed when they can no longer be maintained.

**New Facility Standard**-No new facilities or expansion of existing facilities-administrative sites, lookouts, or Forest Service fences-will be considered.

**Telecommunication Standard** - Self-contained radio repeaters or electronic sites will not be installed.

### **Access: Trails**

**Access: Trails Prescription** - Management of areas other than those in DFC 6A requires a trail system for exclusively non-mechanized travel.

Land and Resource Management Objectives addressed and, in part, met by the Wilderness trails prescription include: 2.3(a), 2.5(d), and 4.6(a).

**Trail System Planning Standard** -The trail system will only be expanded into areas without trails after determination that it is necessary to meet Wilderness-management needs. Remote and pristine areas will be kept as they are in most cases.

**Trail Construction Guideline** -Native, local materials should be preferred in trail construction and maintenance, including bridges and drainage structures.

**Trail Bridge Standard** -Bridges and culverts will not be built for user convenience, but will be installed to protect resources or provide for visitor safety. Bridges will be built only to standards needed for safe crossing.

**Trail Maintenance Standard** -On trails appropriate for stock use, brush removal will be kept to the minimum needed to provide safe passage. Trailside snags will not be felled unless they present a safety hazard.

**Trail Blazing Guideline** -Trail marking will be minimal, as natural-appearing as possible, and only used where needed to ensure safe travel. Cairns and posts will not be painted.

**Trail Management Standard** -Trails will be built, relocated, and maintained for the following purposes:

Visitor safety,

Prevention of resource damage,

Use distribution if determined desirable,

As required for administrative or permitted resource purposes,

To reduce potential for human/grizzly bear contact, and to reduce the chance for contact with threatened and endangered species.

## **Cultural Resources**

**Cultural Resources Prescription** -Cultural sites are protected from destruction and vandalism, and allowed to deteriorate with time. Active maintenance of structures included on the National Register of Historic Places is appropriate. Scientific study of cultural resources is permissible within the intent and concept of Wilderness. Study or management does not normally include any excavation, restoration, or on-site interpretation activities.

### Designated River Corridors

In Wilderness and Wilderness Study Areas, existing direction meets much of the intent of Wild and Scenic Rivers designation. Without removing those protections, the requirements in Table 2.2 are added to existing DFC 6 direction within designated corridors across all DFC 6 subcategories, including 6S (Wilderness Study Areas).

Additional DFC 6 Standards and Guidelines for Designated Rivers inside Wilderness and Wilderness Study Areas

#### ECOLOGICAL AND WILDLIFE RESOURCES

**Biodiversity Guideline:** Genetic integrity of native plant and animal species and native populations at all trophic levels should be maintained, within the context of Wilderness character.

**Forest Health Projects Standard:** Only hazard tree removal at designated facilities allowed.

#### RECREATION RESOURCES

**Recreation Permits Standards:** Proposed outfitter-guide special uses must help enhance identified river values. No recreation events allowed.<sup>51</sup>

#### ECOLOGICAL AND WILDLIFE RESOURCES

Biodiversity Guideline: Genetic integrity of native plant and animal species and native populations at all trophic levels should be maintained, within the context of Wilderness character.

Forest Health Projects Standard: Only hazard tree removal at designated facilities allowed.

#### RECREATION RESOURCES

Recreation Permits Standards: Proposed outfitter-guide special uses must help enhance identified river values. No recreation events allowed.

Land and Resource Management Objectives addressed and, in part, met by the Wilderness cultural resources prescription include: 4.9(a).

#### Protection: Wilderness

**Protection: Wilderness Prescription** -Wilderness character is preserved.

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<sup>51</sup> Amendment 11, 12/02/2013

Land and Resource Management Objectives addressed and, in part, met by the Wilderness resource protection prescription include: 4.6(a, b).

**Human Influence Standard** -Natural agents of ecological change will be allowed to operate freely in the Wilderness. All other uses allowed in Wilderness, including commercial activities, will be managed to preserve Wilderness character.

**Weed Control Guideline** - Non-native plants, especially those which may significantly alter natural plant succession, should be controlled as needed, by means that have the least impact on the Wilderness resource

**Research Guideline** - Research that will help resolve Wilderness management problems should be given encouragement and cooperative aid, as administrative time and funding permit.

~~Wild and Scenic River Standard~~ — On the following river segments within Wilderness identified as eligible for Wild River status, no actions will be taken that might affect eligibility:

~~Buffalo River~~

~~Yellowstone River~~

~~Thorofare River~~<sup>52</sup>

#### Protection: Fire

**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.<sup>53</sup>

Land and Resource Management Objectives addressed and, in part, met by the Wilderness fire prescription include: 4.6(a).

**Fire Protection Guideline** - Wildfires will be managed in accordance with approved Wilderness Fire Management Plans for each Wilderness Area. The favored suppression techniques should be those which have the least long-term impact on Wilderness resources.

#### Protection: Pests

~~Protection: Pests Prescription~~ — Insects, diseases, and noxious weeds are not controlled.

Protection: Pests Prescription

Natural mechanisms of disturbance, such as insects and diseases are not controlled. Non-native plants, especially those that may significantly alter natural plant succession, are controlled by means that have the least impact on the wilderness resource.<sup>54</sup>

<sup>52</sup> Forest Plan Amendment # 2 3/92 (Later Amended in 2013)

<sup>53</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

Land and Resource Management Objectives addressed and, in part, met by the Wilderness insect, disease, and noxious weed prescription include: 4.6(a).

### Management Prescription 6A

**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), 2.11 a, b), 3.1 (a, b), 3.2(a, d-h), 4.5(a, b), and 4.6(a).

### Resource Prescriptions, Standards, and Guidelines

#### Recreation

**Recreation Prescription** - Little evidence of human use or presence exists. Primitive recreation opportunities are available.

#### Visual Quality

**Visual Quality Prescription** -The Visual Quality Objective is Preservation. Only natural processes are appropriate. Evidence of human activities, including trails, signs, and obvious campsites is minimized

#### Fisheries and Wildlife

**Vegetation: Range Prescription** -Livestock grazing is not permitted. Pack and saddle stock grazing is permitted.

#### Access: Trails

**Access: Trails Prescription** -All travel is cross-country.

**Trail Standard** - All user-created trails will be physically closed with native materials and allowed to rehabilitate and no new trails will be built. There are no system trails within this prescription.

**Signing Standard** -All existing signs will be removed and no new ones installed.

**Encounters Per Day Guideline** - Parties encountered per day during peak recreational use seasons should not exceed a maximum of two.

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<sup>54</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004



### Management Prescription 6B

**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).

### Resource Prescriptions, Standards, and Guidelines

**Recreation Prescription** -On-site regulation of recreation use is minimal.

**Campsite Restoration Guideline** -Restore campsites in Frissell Condition Classes 3, 4, and 5, to meet Class 2 or better

### Visual Quality

**Visual Quality Prescription** -The Visual Quality Objective is Preservation

### Fisheries and Wildlife

**Fisheries and Wildlife Prescription** - Animal populations and distribution are affected by natural processes. Management of habitat is not permitted except to meet recovery level for Threatened and Endangered species as required by the Endangered Species Act.

### Vegetation: Range

**Vegetation: Range Prescription** - Range is managed to maintain and enhance range and watershed condition while providing forage for livestock and wildlife.

**Vacant Allotment Guideline** - Vacant allotments will be restocked only to meet resource-management needs

### Access: Trails

**Access: Trails Prescription** -Travel is cross-country or by low-density trail system.

**Trail Construction Standard** -Trails will be built or improved only when needed to meet Wilderness objectives.

**Trail Location Guideline** — Main trails should be rerouted away from lakes. Vegetation screens should be maintained between the trail and lake or stream. Spur trails providing access to lakes or streams may be built.

**Trail Density Guideline** -Over the life of the Forest Plan, an average of no more than 0.2 mile of trail per square mile of area should be attained.

**Encounters Per Day Guideline** — Parties encountered per day during peak recreational use seasons should not exceed a maximum of five.

**Sign Placement Standard** — To provide for user safety, directional signs without distances indicated and showing only major destinations will be located only at major intersections. The number of signs will be minimized and all other existing signs will be removed.

**Signing Materials Standard** -Signs will be built of wood with routed lettering and left unfinished. Signs will be mounted on round, unfinished posts.

**Bridge Construction Standard** -Bridges will be built and maintained to protect soil and streambanks only where no safe opportunity exists to cross a stream during periods of normal water flow. Bridges will be built of native materials and require primitive skills and construction techniques.

### Management Prescription 6C

**Management Emphasis** -Management emphasis is to provide for the protection and perpetuation of essentially natural biophysical conditions. Solitude, a low level of encounters with other users, and little evidence of past use are important.

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).

### Resource Prescriptions, Standards, and guidelines

#### Recreation

**Recreation Prescription** - Concentrated use areas show evidence of repeated but acceptable levels of use.

**Campsite Restoration Standard** -Campsites will be managed to maintain Frissell Condition Class of 3 or better. Non-permitted campsites in Classes 4 or 5 will be restored and naturalized. Permitted campsites will be managed to minimize visual impact and comply with the Standards for Class 3.

#### Visual Quality

**Visual Quality Prescription** -The Visual Quality Objective is Preservation.

#### Fisheries and Wildlife

**Fisheries and Wildlife Prescription** - Animal populations and distribution are affected by natural processes. Management of habitat is not permitted except to meet recovery level for Threatened and Endangered species as required by the Endangered Species Act.

#### Vegetation: Range:

**Vegetation: Range Prescription** — Range is managed to maintain and enhance range and watershed condition while providing forage for livestock and wildlife.

**Vacant Allotment Standard** — Vacant allotments will be restocked only to meet resource-management needs.

**Forage Management Practices Standard** — Grazing management will control livestock numbers so that livestock use will be within grazing capacity. Distribution will be achieved through riding, herding, or salting. Improvements will be minimal and built only to the extent needed to cost-effectively maintain stewardship of the range. Improvements will be built with native material when possible.

**Access: Trails**

**Access: Trails Prescription** -Travel is primarily along system trails.

**Signing Placement Standard** -To provide for user safety, directional signs without showing distances and indicating only major destinations will be placed only at major intersections. All other signs will be removed. Administrative signs such as "Closed to Camping" will be appropriate.

**Sign Materials Standard** -Signs will be built of wood with routed lettering and left unfinished. Signs will be mounted on round unfinished wood posts.

**Trail Density Guideline** - Over the life of the Forest Plan, an average of no more than 1 mile of trail per square mile of area should be attained.

**Encounters Per Day Guideline** - Parties encountered per day during peak recreational use seasons should average 12, varying from 6 to 15 depending upon conditions.

**Trail Construction Standard** -Trails, bridges, and drainage structures will be built or improved as needed to prevent soil and water damage and to accommodate recreation use.

**Bridge Construction Standard** - Bridges will be built only where no safe opportunity exists to cross a stream during periods of normal water flow. Bridges will be built with native materials, using primitive skills and construction techniques.

**Portal Information Standard** - Trail portal information and facilities-bulletin boards and detailed signs-will be located outside the Wilderness.

[Management Prescription 6D](#)

**Management Emphasis** -Management emphasis is to provide for the protection and perpetuation of essentially natural biophysical conditions inside Wilderness boundaries which 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).

[Resource Prescriptions, Standards, and Guidelines](#)**Recreation**

**Recreation Prescription** -Solitude and low level of encounters with other users, or evidence of past human use are not an essential part of the social setting.

**Visual Quality**

**Visual Quality Prescription** -The Visual Quality Objective is Preservation.

**Fisheries and Wildlife**

**Fisheries and Wildlife Prescription** — Animal populations and distribution are affected by natural processes. Management of habitat is not permitted except to meet recovery level for threatened and endangered species as required by the Endangered Species Act.

**Vegetation: Range**

**Vegetation: Range Prescription** - Range is managed to maintain and enhance range and watershed condition while providing forage for livestock and wildlife.

**Vacant Allotment Standard** - Vacant allotments will be restocked only to meet resource-management needs.

**Forage Management Practices Standard** - Grazing management will control livestock numbers so that livestock use is within grazing capacity. Distribution will be achieved through riding, herding, or salting. Improvements will be minimal and built only to the extent needed to cost-effectively maintain stewardship of the range. Improvements will be built with native materials when possible.

**Access: Trails**

**Access: Trails Prescription** -Travel on trails includes large numbers of day-users traveling short distances into the Wilderness.

**Trail Density Guideline** -Over the life of the Forest Plan, an average of no more than 2 miles of trail per square mile of area should be attained.

**Encounters Per Day Guideline** - Parties per day during peak recreational use seasons should not exceed 20.

**Trail Construction Standard** - Trails and bridges will be built or improved to accommodate heavy use.

**Trail Condition Standard** - Trail tread width may exceed 24 inches. Multiple "braided" trails that develop will be obliterated and relocated so there is only one tread.

**Portal Information Standard** - Trail portal information and facilities-bulletin boards, detailed signing-will be located outside the Wilderness.

**Boundary Posting Standard** -Boundary signs will be located on all entrance trails.

#### [Management Prescription 6S](#)

**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 (WSAs) will be managed to protect long-term wilderness attributes. No activities will be allowed that will jeopardize the eligibility of the WSAs for future Congressional designation as Wilderness. Existing uses of the WSAs, 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.)

#### [Resource Prescriptions, Standards, and Guidelines](#)

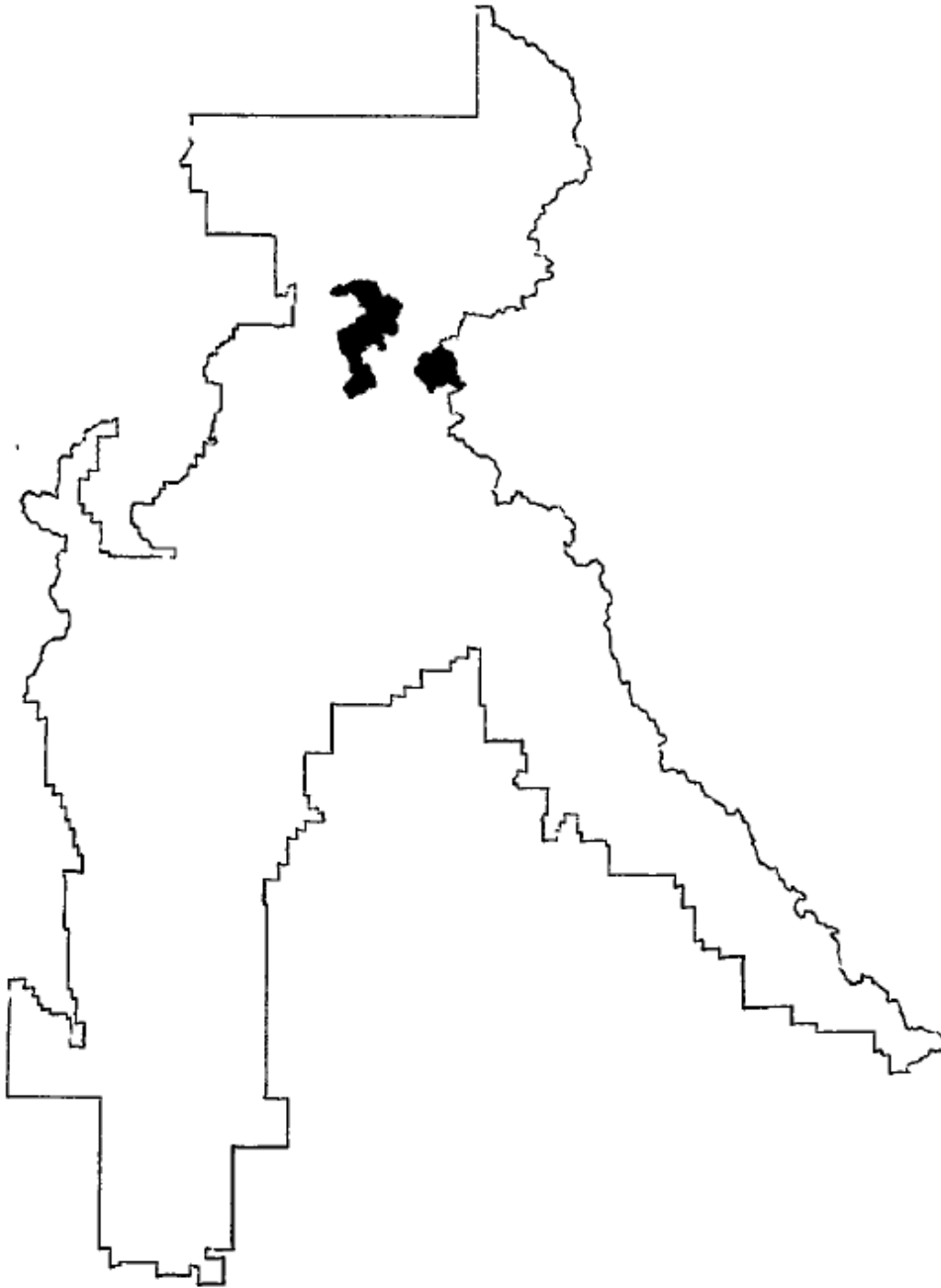
##### **Minerals**

**Minerals Prescription** - Oil and gas leasing and development is allowed in the Palisades WSA but not in the Shoal Creek WSA.

**Energy Development Standard** -The Conditional Surface-Occupancy stipulation specified in *Sierra Club v. Peterson* applies to the Palisades Wilderness Study Area.

Desired Future Condition 7A

**Desired Future Condition 7A**



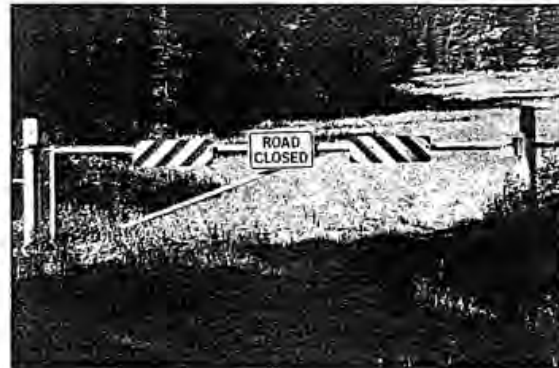
## Desired Future Condition 7A

### 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.

**Experience:** In many locations, you find signs of people, but not as many as are found in other, more developed areas. Roads, timber harvest, and fire-blackened areas are the most obvious signs. You find a limited road system in some areas. You also find most roads permanently closed by barriers, or seasonally closed by gates, to provide grizzly bear security. If you walk down one of the closed roads, you notice the road surface has been reseeded with forage plants. These plants are preferred by the grizzly bear.

Outside harvest areas, travel is limited to only a few main road systems and these are often unsuitable for sedan travel. The exceptions are popular, established roads that access or pass through the area. Traveling these roads by pickup truck, you see dispersed low-standard branch roads most of which have been closed off by barricade and then reseeded. Some of the lower-standard roads are gated and opened seasonally.



*DFC 7A is managed for grizzly bear recovery with some resource development and roads.*

You see timber-harvest activity infrequently.

If you are hiking, you may find closed trails in areas important to grizzly bear security.

The forest is a mixture of young and, more frequently, old trees. As you pass by, you see stands of young trees and recently cut or burned areas. The forest also contains scattered large trees with young spruce and fir growing underneath. Selected Douglas- fir, spruce, and fir are being managed to provide one-third- to one-square-mile stands composed of trees of all ages. Inside these stands, you get the feeling that you are standing under a forest canopy made up of three or more layers.

Old-growth stands are distributed across the landscape as old-growth "islands" within the forest. Twelve percent or more of the original old-growth forest in the area has been retained to provide for wildlife. If you walk through the forest, you will notice that some old-growth stands are about one to two miles apart and connected by mature stands of trees following streams, creeks, and rivers. Firewood from dead trees is generally plentiful.

If you are watching for wildlife, you notice that mature or old-growth-dependent species such as the marten, red breasted nuthatch, and goshawk are present throughout that portion of the forest that remains as mature or old-growth trees. You see such species as the snowshoe hare and mountain bluebird in openings around seedling to pole- sized trees.

You may find big-game habitat in less-than-best condition, but, in some areas, big-game can find improved seasonal forage. If you are hunting, you find that resident and migratory elk numbers have been increasing over the years because roads have been closed and human disturbance reduced. So, you may discover that big-game hunting seasons are longer and less restricted than in those areas with many open roads. You usually find outfitted hunting available. Resident trophy elk, deer, and moose are generally available.

For areas where grizzly bear recovery and recreation activities might conflict, you may find fishing restricted. Fish are abundant except for popular areas where some restrictions may have been applied.

You may find some cattle and pack animals throughout the area. Recent livestock grazing is evident in some areas but not in others. You may encounter traffic delays while livestock are being moved.

You find that mineral or oil and gas exploration and development are limited by regulations for bear recovery. Any development requires closed roads, tight security, and seasonal human-access restrictions.



## Management Prescription 7A

**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 this Desired Future Condition include: 1.1 (a-l), 1.2 (a-D), 2.1(a), 3.1 (a, b), 4.2(a, c), 4.4(a-c), and 4.7(d).

## Resource Prescriptions, Standards, and Guidelines

**Recreation Prescription** -Recreation opportunities are limited to favor grizzly bear security. Food, garbage, and game meat is stored such that it is unavailable to bears. Roaded recreation continues on most established routes that pass through the area. Developed facilities are not appropriate in this area.

**Recreation Use Guideline** -Recreation use should be restricted as needed to meet grizzly bear habitat objectives.

**Visual Quality Prescription** - The Visual Quality Objectives are Retention and Partial Retention.

**Fisheries and Wildlife Prescription** - Long-term grizzly habitat management provides for vegetation diversity, approximates natural conditions, and includes all stages of forested environment from old growth to grass and forb stages. Thus, seasonal production of grizzly foods and cover and denning habitat is provided. Habitat is managed to achieve the game and fish populations, harvest levels, success and recreation day objectives identified by the Wyoming Game and Fish Department and agreed to by the Forest Service. Cumulative effects analysis is performed for all development proposals within grizzly bear habitat.

**Sight Distance Guideline** - In forested areas, hiding cover 2 to 4 sight distances wide-1 sight distance is 200 feet-should be maintained on at least 80 percent of the perimeter of all natural openings, along at least 75 percent of the edge of arterial and collector roads, and along 60 percent of streams and rivers. Cover should be evenly distributed across the watershed.

**Hiding and Security Cover Guideline** -In areas dominated by other than forested ecosystems, hiding and security cover should be maintained as follows:

Percent of Unit Forested	Percent of Forested Area in Cover
35-50	At least 50
20-34	At least 60
Less than 20	At least 70

**Management Activity Guideline** - All management activities should be concentrated within the shortest period of time and confined to the smallest possible area.

**Tree Thinning Guideline** -Where tree regeneration is present alongside roads and adjacent to open stands, meadows, natural openings, and unstocked created openings, and the regeneration is serving as a screen, the edge of the screen should not be thinned to a spacing any greater than one where big-game can be seen 1sight distance away.

**Dead and Down Large Woody Material Guideline** -Dead-and-down spruce and fir should be retained on logged sites to provide wildlife habitat.

**Dead and Down Large Woody Material Standard** -Where available on site, four or more decomposition class 1and 2 logs will be retained per acre on logged sites. Down logs will be at least 12 inches in diameter at the large end and 20 feet in length. Two or more brush piles about 10 feet across and 7 feet high per acre may be retained. Dead- and-down woody material will not exceed an average depth of 18 inches. An average of 2 dead or cull-leaning trees per acre during the mature stage will be sought. To be acceptable, leaning trees will be greater than 8 inches in diameter and 40 feet in length, and will be lodged in adjacent trees.

**Forest Stand and Opening Interspersion Guideline** - Forest stands of an adequate size and distribution to provide hiding cover, thermal cover, and security cover needed to conceal the movement of big-game should be maintained. Allowed openings should not exceed 600 feet in width. Allowed openings should be interspersed with cover patches 26 to 60 acres in size and 1200 feet to 1800 feet in width and length. Emphasis should be on retaining 75 percent of the cover patches in the 60 acre or larger size class. To facilitate big-game movement, corridors of forest cover 600 feet to 1200 feet in width should be retained between patches of cover. Distances between cover patches along a cover corridor should not exceed 1200 feet.

**Big-Game Habitat Guideline** - Sufficient habitat should be provided to maintain desired populations and distribution of big-game species. For example:

Elk Calving Areas - About 30 percent of the brush/grassland- rangeland type-should be maintained in a brush/forb type, emphasizing the aspen or conifer/brush ecotone.

Moose Winter Ranges -About 75 percent of the brush/grassland- rangeland type such as serviceberry, mountain mahogany-should be maintained in a brush type with about 30 percent in a mature age class. About 95 percent of the willow/grass range should be maintained in a willow type.

Elk Winter Ranges - About 50 percent of the brush/grassland should be maintained in a brush type with about 30 percent in a mature age class.

**Created Opening Guideline** - Created forest openings may adjoin meadows if no more than one-fifth of the periphery of the meadow edge is affected. Size, shape, and arrangement of created openings should vary to fit naturally into existing landscapes. Created openings should not exceed 600 feet in width unless site-specific analysis identifies the need for larger openings for grizzly bear habitat management purposes. Created openings should be interspersed with cover patches at least 60 acres in size.

**Vegetation Diversity Guideline** -Vegetative diversity should be maximized to the extent that it approximates natural conditions and includes all successional stages. A minimum of 10 percent of the following size/age classes should be sought: old-growth, mature, young, pole/sapling, shrub/seedling, and grass/forb. The percentages should be established more specifically using on-site information and cumulative effects modeling.

#### **Vegetation: Range**

**Vegetation: Range Prescription** -Range vegetation is managed to provide needed vegetative composition and species interspersions in key grizzly foraging areas.

#### **Vegetation: Timber**

**Vegetation: Timber Prescription** -Silvicultural practices are used to preserve and enhance grizzly bear habitat values. Timber harvest is scheduled. Vegetation management practices provide limited opportunities to obtain firewood and other products.

**Silvicultural System Guideline** — Other than in designated old-growth areas, all systems should be available but used only for achieving desired grizzly bear habitat conditions. The following species and systems should be favored: blue spruce, Engelmann spruce, Douglas-fir, whitebark pine and aspen species, shelterwood methods in existing and regenerated lodgepole pine stands, and group selection and shelterwood methods in existing and regenerated Douglas-fir, spruce and fir stands.

Silvicultural System Standard -as indicated:

Forest Cover	Rotation Age (years)	Desired DBH at Rotation (Inches)
Lodgepole Pine	100	9-11
Spruce and Fir	120	12-16
Douglas-fir	120	15-17

**Intermediate Treatment Guideline** -Sanitation should be applied in stands when epidemic conditions are present or imminent and threaten meeting resource objectives within or adjacent to the Management Area. All others treatments should be available but only for achieving desired grizzly bear habitat conditions.

**Desired Stocking Guideline** — Managed stands should have stocking control to provide grizzly bear hiding cover. Thinning should be done before crown competition and canopy closure occur:

Forest Cover	Stand Age at Thinning (Years)	Desired Trees Per Acre
Lodgepole Pine	10-15	400
Spruce and Fir	20-25	400
Douglas-fir	10-15	350

**Site Preparation Guideline** -All preparation methods should be available but used only for achieving desired grizzly habitat conditions based on vegetation habitat type.

**Reforestation Standard** -A harvested unit will be considered restocked when the following minimum Standards by forest cover type, regardless of site productivity, are met. These Standards are to be met within five years of final harvest. Exception: When needed to meet specific grizzly bear habitat needs such as maintaining a grass/forb stage, created openings may be retained permanently.

Forest Cover Type	Trees Per Acre	Percent of area stocked	Percent Species Composition
Lodgepole Pine	400	80	LP 60
Spruce and Fir	400	80	ES 60
Douglas-fir	350	80	DF 70

If natural regeneration fails to meet these standards, trees will be planted

**Created Opening Duration Standard** -A created opening will be considered closed when it meets the reforestation standards, and the area begins to take on the appearance of a young forest rather than a restocked opening, and the site begins to take on the appearance of the adjoining characteristic landscape represented by an average tree height of 20 feet or when regeneration provides grizzly bear hiding cover from an elevated-ground view point.

**Created Opening Size Standard** -Size, shape, and spacing of treatment units will be designed to meet escape-cover considerations and resemble natural openings. Maximum size will be 10 acres with an expected average of 5 acres.

**Created Opening Dispersion Guideline** -No more than 15 percent of the suitable timber base should be in a created opening condition over a three-decade period.

**Utilization Guideline** -Harvest and treatment residues should be made available for firewood and other products in a manner compatible with grizzly bear objectives, site preparation, and reforestation requirements. Designated aspen areas should be made available for firewood.

**Timber Sale Cost-Efficiency Standard** -Commercial wood-product sales will only be offered when benefits are equal to or exceed costs. Benefits and costs to be considered in cost efficiency analysis of commercial wood-product sales are:

**Benefits** - Consist of meeting specified grizzly bear habitat needs, monetary receipts gained from the sale of wood products, and associated social and economic values.

**Costs** - Consist of sale preparation, administration, essential reforestation, roading, and impacts to selected management indicator species from timber harvesting activities. Where roads are developed to meet multiple-resource objectives, costs will be

apportioned to the benefitting resources. Road costs include construction, operation, and maintenance. Road costs are amortized over the useful life of the road.

**Aspen Management Guideline** -Manage aspen for its value as grizzly bear habitat including consideration of cover and browse for big-game species.

## Minerals

**Minerals Prescription** -The area is available for mineral or energy exploration and development. New leases will be issued with the appropriate Threatened and Endangered stipulations to ensure grizzly bear recovery and compatibility with other resource objectives.

**Oil and Gas Lease Standard** - Oil and gas leases will be issued with Timing- Limitation and Controlled Surface-Use stipulations and with a No-Surface-Occupancy stipulation that anticipates the delisting **of the grizzly bear**.

### Access: Roads

**Access: Roads Prescription** - Management of the area requires a limited road system providing access for some public and commodity uses. Most vehicle access is limited to arterial and collector roads with closure of most local roads for grizzly bear security.

**Road Improvement and New Road Building Standard** - Forest development roads will be built and maintained to standards appropriate for Traffic Service Levels B through D. New road building will be kept to the minimum standard and density needed to achieve resource objectives. Timber and mineral roads will be built to a standard and density that is less than economic optimum for commodities in consideration of grizzly bear habitat and security.

**Road Management Standard** -Over the life of the Forest Plan life, average open road density will be 0.75 mile per square mile of standard or equivalent road with 1-year to 5-year variations of 0 to 1 mile per square mile. Temporary roads will be returned to Elimination Class 3 or 4 standards.

### Access: Trails

**Access: Trails** -Trail use is not encouraged. Trails are managed to be compatible with meeting grizzly bear objectives.

**Trail Use Standard** -1988 use-levels will not be exceeded.

**Standard Maintenance Level Guideline** -The standard maintenance level should be that needed to protect soil and water values, to provide for user safety appropriate to the trail's difficulty level, and to meet grizzly bear management concerns.

**Trail Density Guideline** -Over the life of the Forest Plan, an average of no more than 0.5 mile of trail per square mile of area should be attained.

**Encounters Per Day Guideline** - Parties encountered per day during peak recreational use seasons should be a maximum of ten.

**Protection: Fire**

~~**Protection: Fire Prescription**—Fire management emphasizes preservation and enhancement of grizzly bear food, cover, and security habitat.~~

~~**Prescribed Fire Guideline**—Prescribed fire should be used to favor producing desired grizzly bear and wildlife forage with consideration for reducing fuel loadings.~~

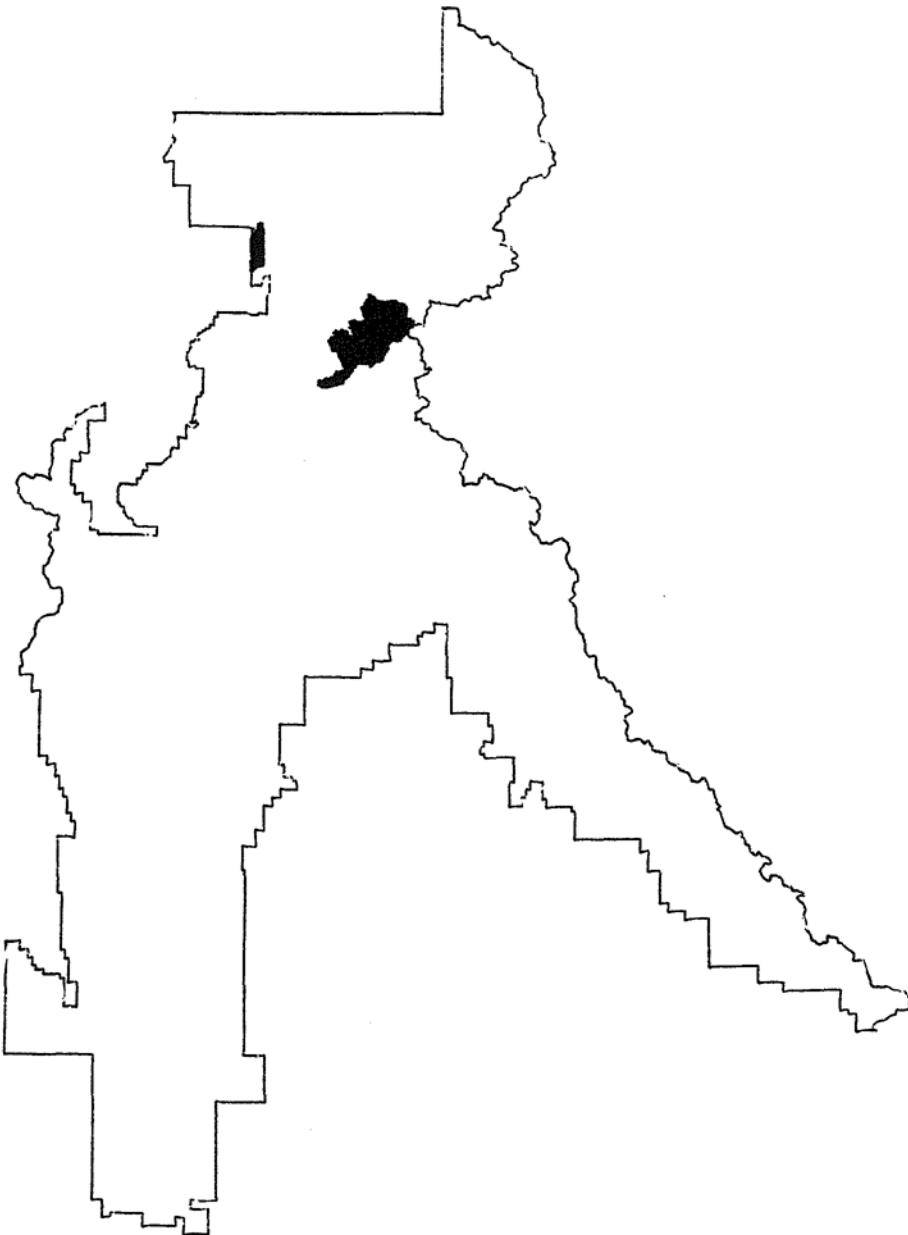
~~**Fire Protection Standard**—Wildfires will be suppressed using strategies that will keep fireline intensities below 400 BTU per second per foot.~~

~~**Fuels Guideline**—Fuel conditions should be maintained which permit fire suppression forces to meet fire protection objectives for the area under historic weather conditions<sup>55</sup>~~

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<sup>55</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

**Desired Future Condition 7B**





## Desired Future Condition 7B 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.

**Experience:** Overall, you find few, if any, signs of people. In a few areas, you may see burns and limited evidence of timber harvest.

As you drive along, you find yourself limited to only a few major road systems. You readily see that most of these roads system are in poor condition for sedan travel due to low construction standards and a lack of regular road maintenance. The exceptions you find are popular, established roads that access or pass through the area. Traveling along the main roads, you notice few branch roads. You see some "2-track" roads winding through the timber. If you are hiking you encounter "2-track" roads infrequently.

You see and hear little or no timber-harvest activity. You find that firewood from dead trees is abundant where you can get to it. You see that the forest appears to be mature. You see scattered stands of young trees, occasional small areas showing recent cutting, and, more prominently, an extensive forest of scattered large trees with young spruce and fir growing underneath. Twelve percent or more of the existing old-growth forest has been retained to provide for old-growth-dependent animals.

Some areas show recent wildfires. Other areas show timber stands with many dead trees.

You find that such mature or old-growth-dependent animals as the marten, red breasted nuthatch, and goshawk are present throughout areas of mature or old-growth trees. In areas cut or burned, you find that the mature or old-growth-dependent species have been replaced other animals such as the snowshoe hare and mountain bluebird which are adapted to openings around seedlings to pole-sized trees.

You find that habitat for big-game is in less than best condition, but big-game can find improved seasonal forage. You find that resident and migratory elk numbers have increased over time because of road closures and reduced disturbance by people. Big- game hunting seasons may be longer and less restrictive than in other areas with many open roads. You may find outfitted hunting available. Resident trophy elk, deer, and moose are generally available.

If you go fishing and hike into a remote area, you may find that access is difficult and takes quite a bit of time. Better fishing is generally available to you if you are willing to travel longer distances. Fish are abundant except for popular areas where some restrictions may have been

applied. Needs for habitat and security for the grizzly bear may restrict your fishing access in places where recreational use and grizzly bear use might conflict.

You find some cattle and pack animals throughout the area. Recent livestock grazing is evident in some areas but not in others. You may see range improvements such as fencing and stock tanks. You may encounter traffic delays when livestock are being moved.

Mineral or oil and gas exploration and development are limited by regulations for bear recovery. Any development requires closed roads, tight security, and seasonal human- access restrictions.



*DFC 78 is managed for food and security for grizzly bears.*

### Management Prescription 7B

**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-l), 2.1(a), 3. 1(a, b), 4.2(b, c), 4.4(a-c), and 4.7(d).

## Resource Prescriptions, Standards, and Guidelines

### Recreation

**Recreation Prescription** -Recreation opportunities are limited to favor grizzly bear security. Food, garbage, and game meat are stored such that they are unavailable to bears. Roded recreation occurs on most established routes that pass through the area.

### Visual Quality

The Visual Quality Objectives are Retention and Partial Retention.

### Fisheries and Wildlife

**Fisheries and Wildlife Prescription** — Long-term grizzly habitat management provides for vegetative diversity, approximates natural conditions, and includes all stages of forested environment from old growth to grass and forb stages. Thus, seasonal production of grizzly foods and cover and denning habitat is provided. Habitat is managed to achieve the game and fish populations, harvest levels, success, and recreation-day objectives identified by the Wyoming Game and Fish Department and agreed to by the Forest Service. Cumulative effects analysis is performed on all development proposals within grizzly bear habitat.

**Sight Distance Guideline** – In forested areas, hiding cover should be maintained 2 to 4 sight distances wide-1 sight distance is 200 feet-on at least 80 percent of the perimeter of all natural openings, along at least 75 percent of the edge of arterial and collector roads, and along 60 percent of streams and rivers. Cover should be evenly distributed across the watershed.

**Hiding and Security Cover Guideline**-In areas dominated by other than forested ecosystems, hiding and security cover should be maintained as follows:

Percent of Unit Forested	Percent of Forested Area in Cover
35-50	At least 50

20-34	At least 60
Less than 20	At least 70

**Management Activity concentrated within the possible area.**

**Guideline** - All management activities should be shortest period of time and confined to the smallest possible area.

**Tree Thinning Guideline** - Where existing tree regeneration is present alongside roads and adjacent to open stands, meadows, natural openings, and unstacked created openings, and the regeneration is serving as a screen, the edge of the screen should not be thinned to a spacing any greater than one where big-game can be seen 1 sight distance away.

**Dead and Down Large Woody Material Guideline** -Dead-and-down spruce and fir should be retained on logged sites to provide wildlife habitat.

**Dead and Down Large Woody Material Standard** -Where available on site, four or more decomposition class 1and 2 logs will be retained per acre on logged sites. Down logs will be at least 12 inches in diameter at the large end and 20 feet in length. Two or more brush piles about 10 feet across and 7 feet high per acre may be retained. Dead- and-down woody material will not exceed an average depth of 18 inches. An average of 2 dead or cull-leaning trees per acre during the mature stage will be sought. To be acceptable, leaning trees will be greater than 8 inches in diameter and 40 feet in length, and will be lodged in adjacent trees.

**Forest Stand and Opening Interspersion Guideline** - Forest stands of an adequate size and distribution to provide hiding cover, thermal cover, and security cover needed to conceal the movement of big-game should be maintained. Allowed openings should not exceed 600 feet in width. Allowed openings should be interspersed with cover patches 26 to 60 acres in size and 1200 feet to 1800 feet in width and length. Emphasis should be on retaining 75 percent of the cover patches in the 60 acre or larger size class. To facilitate big-game movement, corridors of forest cover 600 feet to 1200 feet in width should be retained between patches of cover. Distances between cover patches along a cover corridor should not exceed 1200 feet.

**Big-Game Habitat Guideline** - Sufficient habitat should be provided to maintain desired populations and distribution of big-game species. For example:

Elk Calving Areas - About 30 percent of the brush/grassland-rangeland type-should be maintained in a brush/forb type, emphasizing the aspen or conifer/brush ecotone.

Moose Winter Ranges -About 75 percent of the brush/grassland- rangeland type such as serviceberry, mountain mahogany-should be maintained in a brush type with about 30 percent in a mature age class. About 95 percent of the willow/grass range should be maintained in a willow type.

Elk Winter Ranges - About 50 percent of the brush/grassland should be maintained in a brush type with about 30 percent in a mature age class.

**Created Opening Guideline** -Created forest openings may adjoin meadows if no more than one-fifth of the periphery of the meadow edge is affected. Size, shape, and arrangement of created openings should vary to fit naturally into existing landscapes. Created openings should not exceed 600 feet in width unless site-specific analysis identifies the need for larger openings for grizzly bear habitat management purposes. Created openings should be interspersed with cover patches at least 60 acres in size.

**Vegetation Diversity Guideline** -Vegetative diversity should be maximized to the extent that it approximates natural conditions and includes all successional stages. A minimum of 10 percent of the following size/age classes should be sought: old-growth, mature, young, pole/sapling, shrub/seedling, and grass/forb. The percentages should be established more specifically using on-site information and cumulative effects modeling.

#### **Vegetation: Range**

**Vegetation: Range Prescription** - Rangeland vegetation is managed to provide needed vegetative composition and species interspersion in key grizzly foraging areas.

#### **Vegetation: Timber-**

**Vegetation: Timber Prescription** -Only silvicultural practices which preserve and enhance grizzly bear habitat values are used. Timber harvest is not scheduled. Few, if any, opportunities exist to obtain firewood and other products.

**Aspen Management Guideline** -Aspen should be managed for its value as grizzly bear habitat including cover and browse for big-game species.

#### **Minerals**

**Minerals Prescription** -The area is available for mineral or energy exploration and development. New leases are issued with appropriate Threatened and Endangered stipulations to ensure grizzly bear recovery and compatibility with other resource objectives.

**Oil and Gas Lease Standard** - Oil and gas leases will be issued with Timing- Limitation and Controlled Surface-Use stipulations and with a No-Surface-Occupancy stipulation that anticipates the delisting of the grizzly bear. The Controlled Surface- Use stipulation requires mitigation activities for the effects of roading, exploration, and development on wildlife. Activities will be directed first at onsite effects, then at effects within the contiguous herd unit, and finally at effects within other herd units.

**Access: Roads**

**Access: Roads Prescription** - Management of the area for grizzly bear security requires few open roads. Some historical access is provided through the area with most other roads closed.

**Road Improvement and New Road Building Standard** - Forest development roads will be built and maintained to standards appropriate for Traffic Service Levels B through D. New road building will be kept to the minimum standard and density needed to achieve resource objectives, predominately for grizzly bear habitat and security.

**Road Management Standard** -Over the life of the Forest Plan, the average open road density will be 0.25 miles per square mile of standard or equivalent road with 1-year to 5-year variations of 0 to 0.5 miles per square mile. Temporary roads will be returned to Elimination Class 3 or 4 Standards.

**Access: Trails**

**Access: Trails Prescription** -Trail use is not encouraged. Trails are managed to be compatible with meeting grizzly bear objectives.

**Trail Use Standard** -1988 use-levels will not be exceeded.

**Standard Maintenance Level Guideline** -The standard maintenance level should be that needed to protect soil and water values, to provide for user safety appropriate to the trail's difficulty level, and to meet grizzly bear management concerns.

**Trail Density Guideline** - Over the life of the Forest Plan, an average of no more than 0.5 mile of trail per square mile of area should be attained.

**Encounters Per Day Guideline** - Parties encountered per day during peak recreational use seasons should be a maximum of ten.

**Protection: Fire**

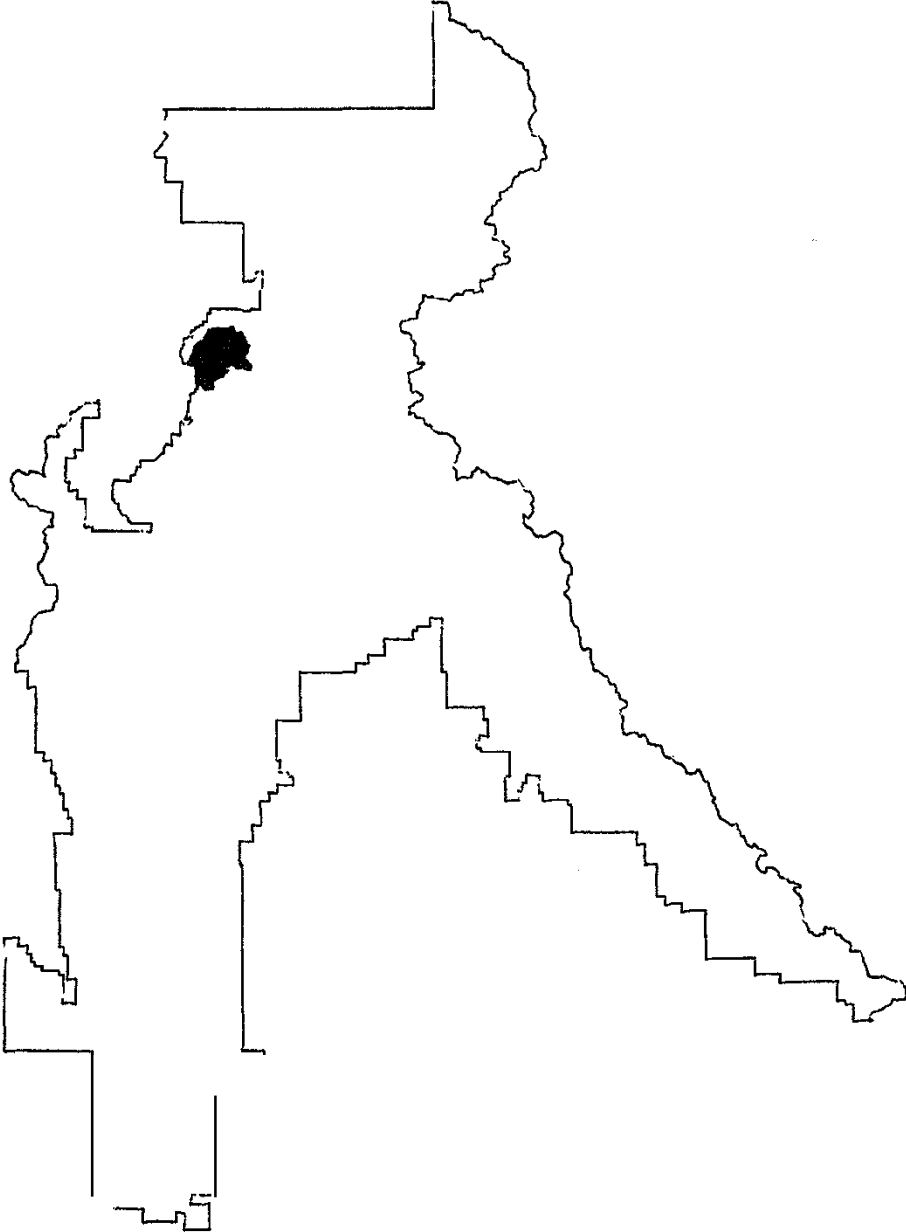
~~**Protection: Fire Prescription**—Fire management emphasizes preservation and enhancement of grizzly bear food, cover, and security habitat.~~

~~**Prescribed Fire Guideline**—Prescribed fire should be used to favor producing desired grizzly bear and wildlife forage with consideration for maintaining adequate security habitat.~~

~~**Fire Protection Standard**—Wildfires will be suppressed using strategies that will keep fireline intensities below 400 BTU second per foot.<sup>56</sup>~~

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<sup>56</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004



## Desired Future Condition 8 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.

**Experience:** As you pass through the area, you find some signs of people, but not to the extent you might see in more intensively developed areas. People's effect on the environment is evident by the presence of roads, timber-harvest disturbance, and field- study camps and plots.

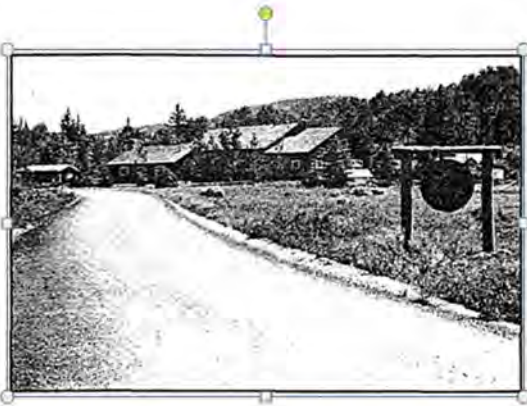
You find a road system through parts of the area with many roads permanently closed by barriers or seasonally closed by gates. The closed roads have been generally reseeded with grass and forbs. You may find slash barriers across some of the roads to reduce recreation use and disturbance in important wildlife habitat. You find that vehicle travel outside of timber-harvest areas is limited to only a few major road systems. Many roads are unsuitable for travel by sedan. You find that the exceptions are popular, established roads that access or pass through the area. If you travel the main roads by pickup truck, you see dispersed low-standard branch roads and many are closed off by barricade and reseeded. You might see and hear timber harvest activity.

Some timber harvest may occur during the summer, fall, and winter and involve the use of trucks, bulldozers, horses, and gasoline-powered chainsaws. The forest appears as a mixture of young and, more frequently, old trees. You find that twelve percent or more of the existing old-growth forest has been kept to provide habitat for old-growth- dependent animals. Firewood is available from dead trees, slash piles, and logs decked for that purpose.

If you are watching for wildlife, you may find that such mature or old-growth- dependent species as the marten, red breasted nuthatch, and goshawk have been replaced in some areas by other animals such as snowshoe hare and mountain bluebird in openings around seedling to pole-size trees. Resident elk habitat has been kept at 1988 levels. Due to human activity and reduced security, some elk and other big-game may be displaced to areas with less activity and greater security.

You may find that big-game hunting seasons have been shortened or limited over time, depending on hunter access and likely pressure on the animals. You may find outfitted hunting available. Resident trophy elk, deer, and moose are probably limited.





*The primary purpose of DFC 8 is environmental education on forest management.*

Access to many fishing areas will change due to new road access and closure of some existing roads. If you go fishing and hike into a remote area, you may find that access is difficult and takes quite a bit of time. Better fishing is generally available to you if you are willing to travel longer distances. Fish supplies are abundant except for popular areas where some restrictions may have been applied. You may find that restrictions have been applied such as catch-and-release or slot limits.

You may find some sheep, cattle, and pack animals throughout the area. Recent livestock grazing is evident in some areas but not in others. You may encounter traffic delays while livestock are being moved.

Mineral or gas and oil development roads are gravel-surfaced, similar to main roads elsewhere on the forest. Access to energy development sites may be controlled. In oil development areas, you might see pumping equipment, storage tanks, and a safety and flow regulation device called a "Christmas Tree." Gas fields reveal "Christmas trees", compressors, and dehydration units. Occasionally, you can hear noise from pumpjacks, heavy equipment, and compressors.

### Management Prescription 8

**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).

## Resource Prescriptions, Standards, and Guidelines

### Environmental Education

**Environmental Education Prescription** - Environmental education provides maximum numbers of opportunities for ecological and resource-management-related learning experiences throughout the area. Emphasis will be on experiential learning activities.

**Research Standard** - Areas will be managed for studying multiple-resource management and associated activities over short- and long-term periods. Research projects may be evident to visitors. Short- and long-term research projects will be encouraged that are compatible with the natural environment and on-going resource activities.

**Enclosure Size Standard** -Enclosure areas for education study plots will be limited to one acre. All structures used for educational purposes will be designed to have no adverse impact on wildlife. Larger enclosures may be considered on a case-by- case basis.

**Safety Standard** - Safety hazards associated with educational activities will be identified and the hazards corrected or signed.

### Recreation

**Recreation Prescription** -A Roaded Natural recreation setting is provided along existing roads. All other areas provide Semi-Primitive or Primitive recreation opportunities.

### Visual Quality

**Visual Quality Prescription** -The Visual Quality Objectives are Retention, Partial Retention, and Modification.

### Fisheries and Wildlife

**Fisheries and Wildlife Prescription** - Wildlife and fish management maintains habitats to meet the Wyoming Game and Fish population objectives, harvest levels, and hunter-success objectives. Management emphasis is on providing habitat to maintain resident elk habitat, migration corridors, calving areas, moose summer and winter range, and fisheries. Additional information about habitat needs is established through field research.

**Sight Distance Guideline** - In forested areas, hiding cover 2 to 4 sight distances wide-1 sight distance is 200 feet-should be retained on at least 80 percent of the perimeter of all natural openings, along at least 75 percent of the edge of arterial and collector roads, and along 60 percent of streams and rivers. Cover should be evenly distributed across the watershed.

**Hiding and Security Cover Guideline** -In areas dominated by other than forested ecosystems, hiding and security cover should be maintained as follows:

Percent of Unit Forested	Percent of Forested Area in Cover
35-50	At least 50
20-34	At least 60
Less than 20	At least 70

**Management Activity Guideline** -All management activities should be concentrated to within the shortest period of time and to the smallest possible area.

**Tree Thinning Guideline** -Where tree regeneration is present alongside roads and adjacent to open stands, meadows, natural openings, and unstacked created openings, and the regeneration is serving as a screen, the edge of the screen should not be thinned to a spacing any greater than one where big-game can be seen 1sight distance away.

**Dead and Down Large Woody Material Guideline** - Dead-and-down spruce and fir should be retained on logged sites to provide wildlife habitat.

**Dead and Down Large Woody Material Standard** -Where available on site, four or more decomposition class 1and 2 logs will be retained per acre on logged sites. Down logs will be at least 12 inches in diameter at the large end and 20 feet in length. Two or more brush piles about 10 feet across and 7 feet high per acre may be retained. Dead- and-down woody material will not exceed an average depth of 18 inches. An average of 2 dead or cull-leaning trees per acre during the mature stage will be sought. To be acceptable, leaning trees will be greater than 8 inches in diameter and 40 feet in length, and will be lodged in adjacent trees.

**Forest Stand and Opening Interspersion Guideline** - Forest stands of an adequate size and distribution to provide hiding cover, thermal cover, and security cover needed to conceal the movement of big-game should be maintained. Allowed openings should not exceed 1200 feet in width. Allowed openings will be interspersed with cover patches 26 to 60 acres in size and 1200 feet to 1800 feet in width and length. Emphasis should be on retaining 75 percent of the cover patches in the 60 acre or larger size class. To facilitate big-game movement, corridors of forest cover 600 feet to 1200 feet in width should be retained between patches of cover. Distances between cover patches along a cover corridor should not exceed 1200 feet.

**Big-Game Habitat Guideline** - Sufficient habitat should be provided to maintain desired populations and distribution of big-game species. For example:

Elk Calving Areas - About 30 percent of the brush/grassland-rangeland type-should be maintained in a brush/forb type, emphasizing the aspen or conifer/brush ecotone,

Moose Winter Ranges -About 75 percent of the brush/grassland- rangeland type such as serviceberry, mountain mahogany-should be maintained in a brush type with about 30 percent in a mature age class. About 95 percent of the willow/grass range should be maintained in a willow type.

Elk Winter Ranges - About 50 percent of the brush/grassland should be maintained in a brush type with about 30 percent in a mature age class.

**Created Opening Guideline** - Created forest openings may adjoin meadows if no more than one-fifth of the periphery of the meadow edge is affected. Size, shape, and arrangement of created openings should vary to fit naturally into existing landscapes. Created openings should not exceed 1200 feet in width unless site-specific analysis identifies the need for larger openings. Created openings should be interspersed with cover patches at least 60 acres in size.

### **Vegetation: Range**

**Vegetation: Range Prescription** - Range is managed for livestock and wildlife production and the retention of riparian values.

### **Vegetation: Timber**

Silvicultural practices are used to support environmental education activities. Timber opportunities are managed as a not-suited, non-interchangeable component of the timber program. Utilization of wood fiber for firewood and other products is encouraged in ways compatible with maintaining educational values.

**Silvicultural System Guideline** -Other than for areas of designated old-growth, all systems should be permitted. The following species and practices should be favored: blue spruce, Engelmann spruce, Douglas-fir, and aspen tree species, shelterwood and clearcutting methods

in existing and regenerated lodgepole pine stands, methods favoring the development of an all-aged structure in existing and regenerated spruce and fir stands, and shelterwood and clearcutting methods in existing and regenerated Douglas-fir stands.

Where favored methods cannot be used in existing over-mature conifer stands due to windfall risks, lack of adequate regeneration and other similar stand conditions, methods should be applied that are appropriate to the site-specific conditions.

**Silvicultural System Standard** -as indicated:

Forest Cover	Rotation Age (years)	Desired DBH at Rotation (Inches)
Lodgepole Pine	100	9-11
Spruce and Fir	120	12-16
Douglas-fir	120	15-17

**Intermediate Treatment Guideline** -To the extent wildlife objectives can be met, sanitation and salvage should be applied to reduce potential tree mortality caused from insects and diseases. Sanitation should be applied in stands when epidemic conditions are present or imminent and threaten meeting resource objectives within or adjacent to the Management Area. All other methods should be available but only to meet habitat objectives.

**Desired Stocking Guideline** -Managed stands should have tree stocking control for big-game management. Thinning should happen before crown competition and canopy closure occur.

Forest Cover	Stand Age at Thinning (Years)	Desired Trees Per Acre
Lodgepole Pine	10-15	400
Spruce and Fir	20-25	400
Douglas-fir	10-15	350

**Site Preparation Guideline** -All methods should be available but only as required to meet environmental education and big-game habitat needs.

**Reforestation Standard** - A harvested unit will be considered restocked when the following minimum standards by forest cover type, regardless of site productivity, are met:

Forest Cover Type	Trees Per Acre	Percent of area stocked	Percent Species Composition
Lodgepole Pine	400	80	LP 60
Spruce and Fir	400	80	ES 60
Douglas-fir	350	80	DF 70

**Created Opening Duration Standard** -A created opening will be closed when it meets reforestation standards, and it begins to take on the appearance of a young forest rather than a restocked opening, and it takes on the appearance of the adjoining characteristic landscape represented by an average tree height of 20 feet or regeneration provides elk hiding cover from an elevated ground view point.

**Created Opening Size Standard** -Maximum size will be 25 acres with an expected average of 15 acres. Clearcuts in Douglas-fir will not exceed 10 acres in size.

**Utilization Guideline** -Harvest and treatment residues should be made available for firewood and other products in a manner compatible with environmental education needs, wildlife objectives, site preparation, and reforestation requirements. Designated aspen areas should be made available for firewood.

**Not Suited Non-Interchangeable Component Standard** - Cumulative effects analysis and site-specific project analyses must be completed prior to scheduling timber opportunities.

**Aspen Management Guideline** -Aspen should be managed for its value as wildlife habitat and for providing seasonal colors while emphasizing its value as habitat for selected management indicator species.

## Minerals

**Minerals Prescription** - The area is available for mineral or energy exploration and development. New leases are issued with the appropriate stipulations to ensure compatibility with other resource objectives.

## Access: Roads

**Access: Roads Prescription** -Management of the area requires a moderate road system to provide commodity, research, and public access. Most travel is limited to arterial and collector roads with seasonal or long-term closure of many local roads for wildlife security.

**Road Improvement and New Road Building Standard** - Forest development roads will be built and maintained to standards appropriate for Traffic Service Levels B through D.

**Road Management Standard** -Over the life of the Forest Plan, the average open road density will be 1mile per square mile of standard or equivalent road with 1-year to 5-year variations of 0.25 to 1.25 miles per square mile. Temporary roads will be returned to Elimination Class 3 or 4 Standards

**Access: Trails**

**Access: Trails Prescription** - Trails are provided for a variety of uses consistent with meeting environmental education objectives.

**Trail System Guideline** -Motorized and non-motorized trails should be developed in locations and to difficulty levels appropriate to meeting environmental education objectives and to accommodate existing recreation use.

**Standard Maintenance Level Guideline** -The standard maintenance level should be that needed to protect soil and water values and to provide for user safety and user convenience appropriate to the trail's difficulty level.

**Trail Density Guideline** - Over the life of the Forest Plan, an average of no more than 1 mile of recreational trail per square mile of area should be attained. No limit should be imposed on trails used for educational purposes.

**Encounters Per Day Guideline** - Parties encountered per day during peak recreational use seasons should average 12, varying from 6 to 15 depending on conditions. No limit should be imposed on numbers of parties in the area for educational purposes.

**Protection: Fire**

~~**Protection: Fire Prescription**—Fire management emphasizes preservation and enhancement of management indicator species habitat, particularly hiding cover for big game. A full range of suppression techniques is used.~~

~~**Fire Protection Standard**—Wildfires will be suppressed using control strategies during the normal fire season. Pre- and post-season period strategies may include containment, confinement, and surveillance.~~

~~**Fuels Guideline**—Fuel conditions should be maintained that permit fire suppression forces to meet fire protection objectives for the area under historic weather conditions.~~

~~**Fuels Standard**—Activity fuels will be reduced or otherwise treated so the potential fireline intensities will not exceed 400 BTU per second per foot on 90 percent of the days during the regular fire season, or continuous fuels concentrations exceeding the above standard will be broken up into manageable units with fire breaks, or additional protection will be provided for~~

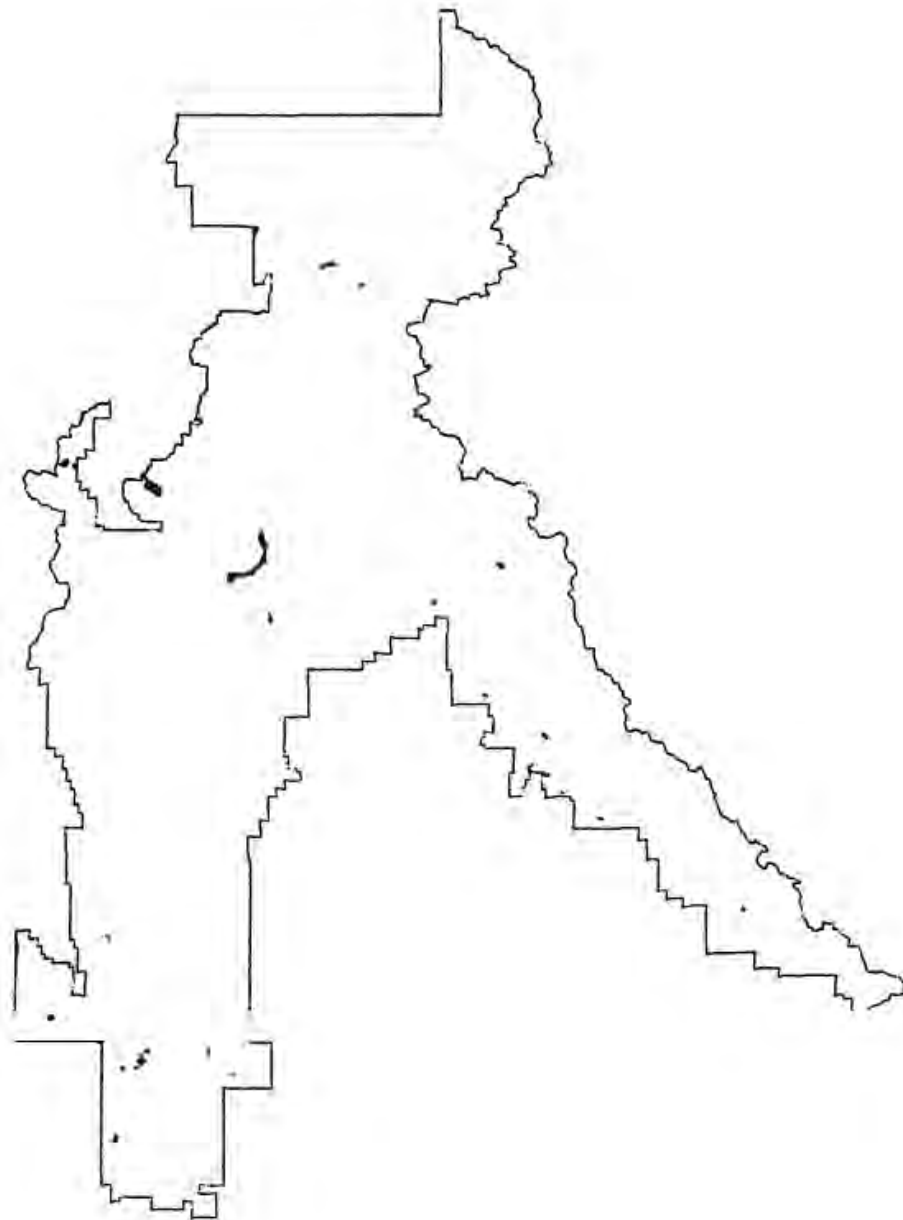
~~areas exceeding the above standards when such protection will not be required for more than five years.~~<sup>57</sup>

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<sup>57</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004



**Desired Future Condition 9A**



## Desired Future Condition 9A Developed and Administrative Sites

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

**Experience:** Overall, you find many signs of people. You see little or no evidence of resource development except for recreation. Picnic tables, roads, buildings, and camping spots are obvious to you. You often hear sounds of vehicles and other human activity. Signs indicate to you that the use of off-highway vehicles is not allowed except to enter and depart the site on roads.

You can gather firewood for camping, but you cannot gather it for home use. Access to fishing may be rather easy if the facility is near a stream or river, but the fishing may be less satisfactory than in more remote areas.

You will not find cattle within the campgrounds, but they may be visible nearby.



*DFC 9A is managed for developed recreation.*

### Management Prescription 9A

**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 Roded Natural areas.

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

### Resource Prescriptions, Standards, and Guidelines

**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 Roded Natural areas.

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

### Resource Prescriptions, Standards, and Guidelines

#### Recreation

**Recreation Prescription** - Developed recreation is the focus, but management includes campgrounds, picnic areas, and Forest Service administrative sites.

**Site Development Standard** - Recreation sites will be developed according to the following Standards:

- b. In new recreation sites and improved sites, provide at least one unit for use by the physically challenged,
- c. Design at least 25 percent of the units in new sites and improved sites to accommodate two or more families,
- d. Where alternatives exist, choose sites where recreational facilities can be designed to be accessed by the physically challenged, and
- e. Fences around developed facilities will be of natural materials.

**Occupancy Standard** - Stays in campgrounds will be limited to 16 days or less. Use will be limited to no more than two vehicles per family unit, unless posted as a multi-- family unit.

**Variable Fee Guideline** - Higher fees should be considered for multi-family and more popular units within campgrounds.

**Campground and Picnic Area Service Level Guideline** -Campground and picnic areas which have an average seasonal use level of 40 percent or higher should be managed at the Standard Service Level. Those from 40 to 20 percent should be managed at a Less-Than-Standard Service Level. Those less than 20 percent may require closure of individual sites first and then, if needed, the closure of the entire facility.

**Development Level Guideline** - Developed sites should be built, improved and maintained in accordance with the established Recreation Opportunity Spectrum (ROS) classification for the Management Area and the development standards.

ROS Class	Recreation Development Level
Semi-primitive Motorized	Not to exceed 2
Roaded Natural	Not to exceed 3
Rural	Not to exceed 4

**Vegetation Management Guideline** - Vegetative management plans should be prepared for each developed site to define a program for maintaining the desired vegetative mix and character and to provide for public safety.

**Visual Quality**

**Visual Quality Prescription** - The Visual Quality Objectives are Retention or Partial Retention. Facilities are often evident, but harmonize and blend with the natural setting.

**Fisheries and Wildlife**

**Fisheries and Wildlife Prescription** - Habitat management is not intended to achieve the game and fish populations, harvest levels, success, and recreation-day objectives identified by the Wyoming Game and Fish Department.

**Vegetation: Range**

**Vegetation: Range Prescription** - Grazing is allowed seasonally for vegetative management purposes.

**Vegetation: Timber**

**Vegetation: Timber Prescription** - Only vegetation management practices which preserve or enhance recreation values are used. Timber harvest is not scheduled. Vegetation management practices provide limited opportunities to obtain firewood and other products.

**Silvicultural System Guideline** - All systems should be available but only as required to meet specific recreation objectives.

**Intermediate Treatment Guideline** -All treatments should be available but only as required to meet specific recreation objectives.

**Site Preparation Guideline** -All methods should be available but only as required to meet specific recreation objectives.

**Reforestation Guideline** -Desired stocking levels should be guided by the desired vegetative condition associated with specific recreation objectives. Introduction of tested and adapted plants may be done to meet landscape architecture objectives.

**Aspen Management Guideline** - Aspen should be managed for its value in providing seasonal colors.

**Minerals**

**Minerals Prescription** - The area is available for new energy leasing but is not available for other mineral entry. Exploration and development under existing leases is constrained to meet the objectives of this Desired Future Condition.

**Lease Stipulation Standard** -Leases will be issued with a No-Surface-Occupancy stipulation.

**Locatable Minerals Standard** -All developed and proposed recreation sites will be protected from locatable mineral entry.

**Facilities**

**Facilities Prescription** - Forest Service operated facilities are safe or they are closed.

**Facility Maintenance Guideline** - Developed public sector sites should be maintained to have a minimum usable life of 25 years. An average site capacity of 300 persons-at-a-time (PAOT) should be improved or rehabilitated each year to be consistent with this average usable life. Priority should be given to rehabilitation of sites with highest levels of use among those sites having facilities in poorest condition.

**Reconstruction Standard** - Facilities will be replaced when rehabilitation costs become 50 percent or more of replacement costs.

**Facility Safety Standard** - Safe drinking water standards must be met at facilities with water systems. Facilities will be designed and maintained to meet structural and utility safety requirements.

**Access: Trails**

**Access: Trails Prescription** - Trails are provided for the convenience of people using developed sites.

**Trail Density Guideline** - Short trails providing access to facilities and opportunities for interpretation should be developed to whatever density is needed.

**Encounters Per Day Guideline** - No limit should exist on the number of parties encountered per day.

**Protection: Fire**

~~**Protection: Fire Prescription** - Fire management emphasizes protection of developed facilities and related site values. A full range of suppression techniques is used.~~

~~**Prescribed Fire Guideline** - Prescribed fire should be used to reduce fuel loadings and accomplish vegetation manipulation objectives.~~

~~**Fire Protection Standard** - Wildfires will be suppressed using control strategies.~~

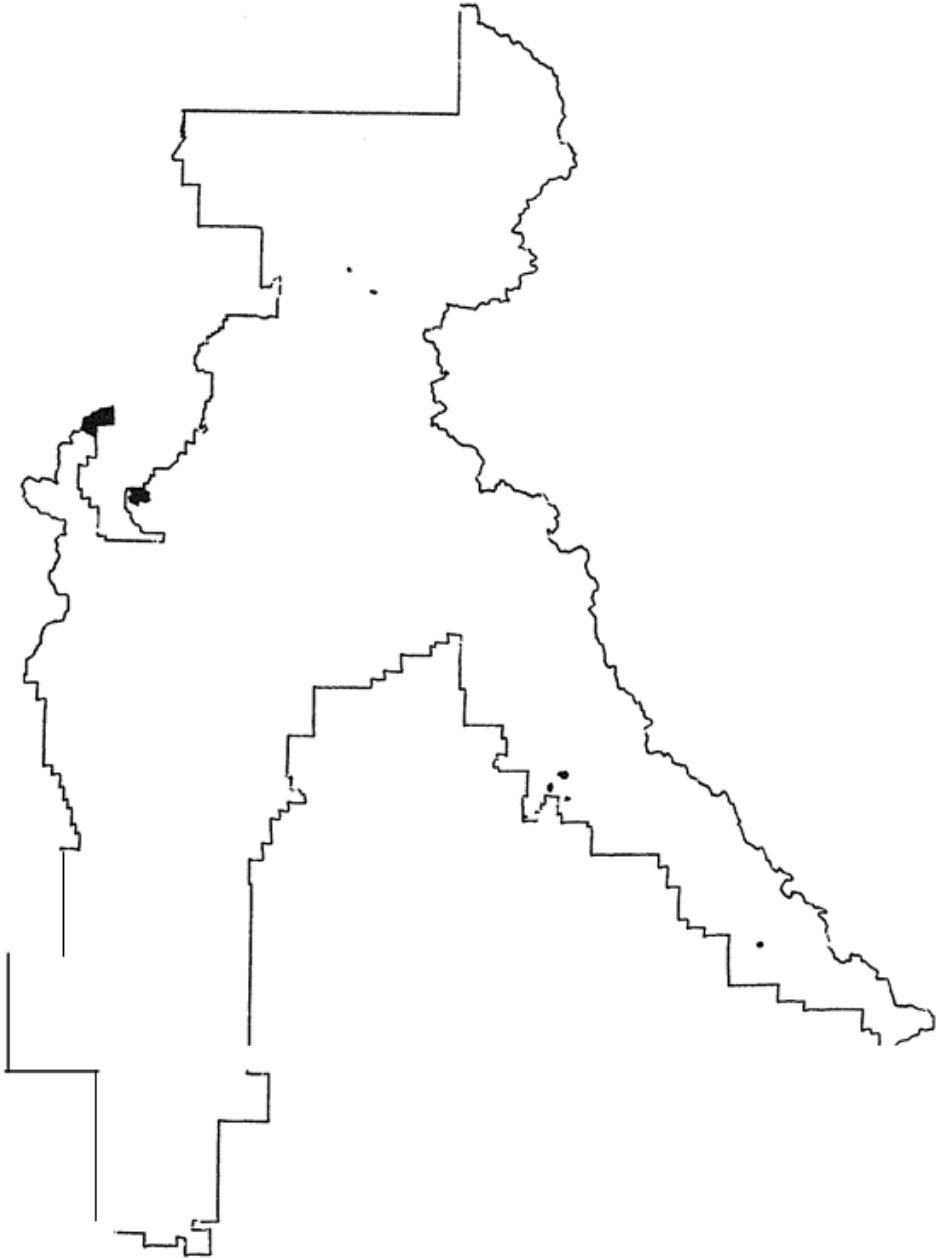
~~**Fuels Near Facilities Standard** - Hazardous fuels will be cleared from around buildings and facilities within administrative sites, campgrounds, and other developed sites. For further information, see *Wildfire Protection a Guide for Home Owners and Developers, Wildfire Hazard and Residential Development, Utah and California*.~~

~~**Fuels Standard** - Natural fuels will be reduced or otherwise treated so the potential fireline intensities will not exceed 100 BTU per second per foot on 90 percent of the days during the regular fire season.<sup>58</sup>~~

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<sup>58</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

**Desired Future Condition 9B**

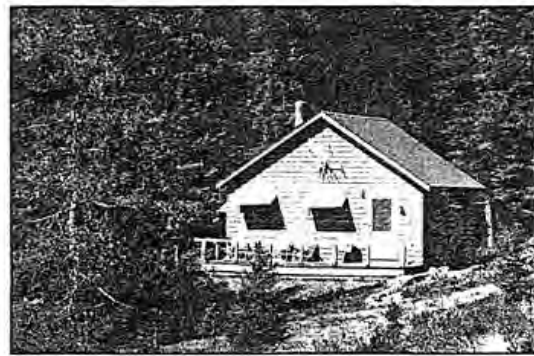


## Desired Future Condition 9B Special-Use Recreation Areas

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

**Experience:** Overall, you find many signs of people. But, you see little or no evidence of resource development other than recreation. Cabins and buildings used by permittees are visible but blend into the surroundings. Roads are generally graveled, but may be paved in higher-use areas. Off-highway vehicle (OHV) use is limited to entry and departure routes.

In some locations, you see extensive development associated with ski areas: hotels, buildings, ski lifts, gondolas, and snow-cat equipment. In the winter, such areas are often quite crowded with roads clogged and many pedestrians in the area.



*Special recreation uses are the primary activities in DFC 9B.*



### Management Prescription 9B

**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).

### Resource Prescriptions, Standards, and Guidelines

#### Recreation

**Recreation Prescription - Opportunities for privately owned facilities are continued.**

**Recreation Residence Standard** - No new recreation residence tracts will be established. No new residences will be permitted on vacant lots in existing tracts, except for up to 12 lots in the Sylvan Bay tract for permittees who may be displaced from the Fremont Lake South Shore tract.

~~**Recreation Residence Landscape Guideline** - Natural vegetation should be favored around facilities. However, mowing natural vegetation around facilities may be allowed.~~

**Natural vegetation should be favored around facilities. Landscaping around all facilities should maintain an appropriate fire defensible space to protect structures from wildfires.**<sup>59</sup>

**Recreation Residence Design Standard** - Recreation residences will be no larger than 1500 square feet, excluding outdoor porches. Existing buildings that are larger are permitted, but, measured together, new additions on old structures will not exceed the standard. One story or 20 feet will be the maximum allowed height for new recreation residences or additions.

**Privately Owned Facility Standard** - A similar architectural theme will be followed for all structures within a development. All permittees will prepare a Master Plan before any site developments occur. Vegetation management plans will be developed for each special-use area to define a program for maintaining a desired vegetative mix and character. Operation and possible expansion of existing recreation special-use facilities will be authorized when needed to meet public demand. An analysis and future use determination of each facility will be completed before the preparation of the revised Forest Plan.

#### Visual Quality

**Visual Quality Prescription** - The Visual Quality Objectives are Partial Retention and Modification. Facilities are often dominant, but harmonize and blend with the natural setting.

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<sup>59</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

**Fisheries and Wildlife**

**Fisheries and Wildlife Prescription** -Habitat management is not intended to meet State wildlife population, recreation-day, or harvest objectives.

**Vegetation: Range**

**Vegetation: Range Prescription** - Grazing is allowed seasonally for vegetative management purposes.

**Vegetation: Timber**

**Vegetation: Timber Prescription** Only silvicultural practices which preserve or enhance recreation values are used. Timber harvest is not scheduled. Vegetation management practices provide limited opportunities to obtain firewood and other products.

**Silvicultural System Guideline** - All systems should be available but only as required to meet specific recreation objectives.

**Intermediate Treatment Guideline** -All methods should be available but only as required to meet specific recreation objectives.

**Site Preparation Guideline** - All techniques should be available but only as required to meet specific recreation objectives.

**Reforestation Standard** - Desired stocking levels will be guided by the desired vegetative condition associated with specific recreation objectives.

**Aspen Management Guideline** - Aspen should be managed for its value in providing seasonal colors.

**Minerals**

**Minerals Prescription** -The area is available for new energy leasing but may not be available for other mineral activity. Exploration and development under existing leases are constrained to meet the objectives of this Desired Future Condition.

**Lease Stipulation Standard** -Leases will be issued with a No-Surface-Occupancy stipulation.

**Locatable Minerals Standard** -All developed and proposed recreation sites will be protected from locatable mineral entry.

**Facilities**

**Facilities Prescription** - Forest Service operated facilities are safe or they are closed.

**Facility Safety Standard** -Safe drinking water standards must be met at facilities with water systems. Facilities will be designed and maintained to meet structural and utility safety requirements.

**Access: Trails**

**Access: Trails Prescription** -Trails are permitted in and around sites.

**Trail Density Guideline** -Short trails providing access to homesites or facilities and opportunities for interpretation should be developed to whatever density is needed.

**Encounters Per Day Guideline** -No limit should exist on the number of parties encountered per day.

**Protection: Fire**

**Fire Prescription:** Fire Management emphasizes protection of private permitted developments. Permittees are responsible for fuels management. ~~A fuel range of suppression techniques is used.~~

~~**Prescribed Fire Guideline** -Prescribed fire should be used to reduce fuel loadings and accomplish vegetation manipulation objectives.~~

~~**Fire Protection Standard** -Wildfires will normally be suppressed using control strategies during the normal fire season. Pre- and post-season period strategies could include containment, confinement, and surveillance. Access to special-use recreational sites will allow for safe ingress and egress during wildfire suppression.~~

~~**Fuels Guideline** -Hazardous fuels should be cleared from around permitted facilities and dwellings. For further information, see *Wildfire Protection a Guide for Home Owners and Developers, Wildfire Hazard and Residential Development, Utah and California.*~~

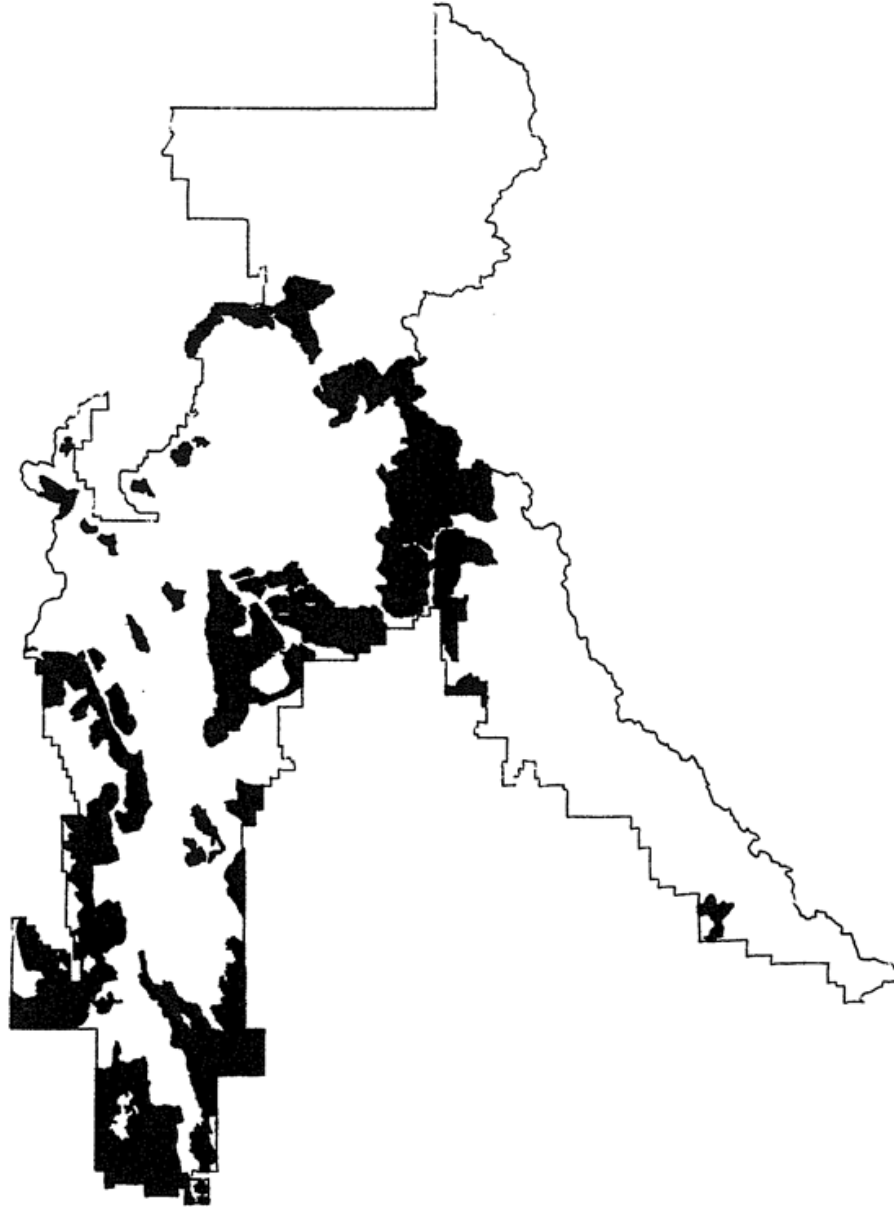
**Fuels Guideline** -Permittees will be responsible for maintaining adequate defensible space to protect their capital improvements. Specific mitigation measures will be mutually agreed upon between the Forest Service and permittees during development of annual operating plans.

~~**Fuels Standard** -Around buildings and facilities, natural fuels will be reduced or otherwise treated so potential fireline intensities will not exceed 100 BTU per second per foot on 90 percent of the days during the regular season, and in other areas, natural fuels will be reduced or otherwise treated so that potential fireline intensities will not exceed 400 BTU per second per foot on 90 percent of the days during the regular fire season, or continuous fuel concentration exceeding the above standards will be broken up into manageable units with firebreaks, or additional protection will be provided for areas exceeding the above standards when such protection will not be required for more than five years.<sup>60</sup>~~

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<sup>60</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

**Desired Future Condition 10**



## Desired Future Condition 10 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.

**Experience:** In timber-harvest locations, you find many signs of people, but not to the extent found in more intensively developed areas. Elsewhere, only few signs exist.

If you are driving, you notice an identifiable roading system in some areas and a less obvious system elsewhere. Many roads are permanently closed by barriers or seasonally closed by gates. If you walk along some closed roads, you may see that they have been reseeded with grass and forbs. Vehicle travel, outside of harvest areas, is restricted to only a few main road systems. You find that many of these road systems are unsuited for travel by sedan. The exceptions are popular, established roads that access or pass through the area.



*DFC 10 is managed for some resource development and support of wildlife species.*

You may notice timber-harvest activity in some locations during the summer, fall, and winter involving the use of trucks, bulldozers, horses, and gasoline-powered chainsaws. The forest appears as a mixture of young and, more frequently, old timber stands. As you move through

the area, you see stands of young trees and recently cut or burned areas. You notice that the forest also contains scattered large trees with young spruce and fir growing underneath.

Selected Douglas-fir, spruce, and fir trees are managed to provide large-0.33 to 1square mile -stands containing seedlings to old-growth trees. In these areas, you get the feeling of standing under a forest canopy made up of three or more layers.

The amount of old-growth forest has been reduced somewhat over time, but twelve percent or more of the existing old-growth forest has been retained to provide for old-growth-dependent animals. You find that the old-growth stands remaining are distributed across the landscape as old-growth "islands" within the overall forested area. Some old-growth stands useful for wildlife security and migration are about one to two miles apart and connected by mature stands of trees following streams, creeks, and rivers.

Some areas show signs of recent wildfires. Other areas show stands with many dead trees. Firewood is available from dead trees, designated aspen areas, slash piles, and logs decked for that purpose.

If you look for wildlife, you discover many different species. You find that such mature or old-growth dependent species as the marten, red breasted nuthatch, and goshawk have been replaced in some areas by other animals such as snowshoe hares and mountain bluebirds that live around openings with seedling to pole-size trees. Resident and migratory elk numbers have increased over time. Due to human activity and reduced security in some areas, some elk and other big-game are displaced to areas having greater habitat security during hunting season. Big-game hunting seasons have remained the same over time or even improved to longer and less restricted ones for some areas. You find that outfitted hunting is available.

If you have an off-highway vehicle, you find limited areas dedicated to year-round off-highway vehicle use and other areas set aside for primitive hiking and camping.

Access to many fishing areas will change due to new road access and closure of some existing roads. If you go fishing and hike into a remote area, you may find that access is difficult and takes quite a bit of time. Better fishing is generally available to you if you are willing to travel longer distances. Fish are abundant except for popular areas where some restrictions may have been applied. You may find that restrictions have been applied such as catch-and-release or slot limits.

You may find some sheep, cattle, and pack animals throughout the area. Recent livestock grazing is evident in some areas but not in others. You may encounter traffic delays while livestock are being moved.

Mineral or gas and oil development roads are gravel-surfaced, similar to main roads elsewhere on the forest. Access to energy development sites may be controlled. In oil development areas, you might see pumping equipment, storage tanks, and a safety and flow regulation device called a "Christmas tree." Gas fields reveal "Christmas

trees", compressors, and dehydration units. Occasionally, you can hear noise from pumpjacks, heavy equipment, and compressors.

#### Management Prescription 10

**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-l), 1.2(a-f l, 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).

#### Resource Prescriptions, Standards, and Guidelines

##### Recreation

**Recreation Prescription** -Existing roaded recreation opportunities continue where they do not interfere with the objectives for this area. Areas of both Semi-primitive Motorized and Semi-primitive Non-motorized are provided.

##### Visual Quality

**Visual Quality Prescription** -The Visual Quality Objectives are Retention, Partial Retention, and Modification.

##### Fisheries and Wildlife

**Fisheries and Wildlife Prescription** - Groups of species are emphasized, such as early- or late-succession-dependent species, in order to increase species richness or diversity. Habitat is managed to achieve the game and fish populations, harvest levels, success, and recreation-day objectives identified by the Wyoming Game and Fish Department and agreed to by the Forest Service.

**Sight Distance Guideline** - In forested areas, hiding cover 2 to 4 sight distances wide- 1 sight distance is 200 feet-should be maintained on at least 80 percent of the perimeter of all natural openings, along at least 75 percent of the edge of arterial and collector roads, and along 60 percent of streams and rivers. Cover should be evenly distributed across the watershed.

**Hiding and Security Cover Guideline** -In areas dominated by other than forested ecosystems, hiding and security cover should be maintained as follows:

Percent of Unit Forested	Percent of Forested Area in Cover
35-50	At least 50
20-34	At least 60
Less than 20	At least 70

**Management Activity Guideline** -All management activities should be concentrated to within the shortest period of time and to the smallest possible area at a time.

**Tree Thinning Guideline** -Where tree regeneration is present alongside roads and adjacent to open stands, meadows, natural openings, and unstocked created openings, and the regeneration is serving as a screen, the edge of the screen should not be thinned to a spacing any greater than one where big-game can be seen one sight distance away.

**Dead and Down Large Woody Material Guideline** -Dead-and-down spruce and fir material should be retained on logged sites to provide wildlife habitat.

**Dead and Down Large Woody Material Standard** -Where available on site, four or more decomposition class 1and 2 logs will be retained per acre on logged sites. Down logs will be at least 12 inches in diameter at the large end and 20 feet in length. Two or more brush piles about 10 feet across and 7 feet high per acre may be retained. Dead- and-down woody material will not exceed an average depth of 18 inches. An average of 2 dead or cull-leaning trees per acre during the mature stage will be sought. To be acceptable, leaning trees will be greater than 8 inches in diameter and 40 feet in length, and will be lodged in adjacent trees.

**Forest Stand and Opening Interspersion Guideline** - Forest stands of an adequate size and distribution to provide hiding cover, thermal cover, and security cover needed to conceal the movement of big-game should be maintained. Allowed openings should not exceed 1200 feet in width. Allowed openings should be interspersed with cover patches 26 to 60 acres in size and 1200 feet to 1800 feet in width and length. Emphasis should be on retaining 75 percent of the cover patches in the 60 acre or larger size class. To facilitate big-game movement, corridors of forest cover 600 feet to 1200 feet in width should be retained between patches of cover. Distances between cover patches along a cover corridor should not exceed 1200 feet.

Big-Game Habitat Guideline - Sufficient habitat should be provided to maintain desired populations and distribution of big-game species. For example:

Elk Calving Area - maintain about 30 percent of the brush/grassland- rangeland type-in a brush/forb type, emphasizing maintenance of the aspen or conifer/brush ecotone.



Moose Winter Range - maintain about 75 percent of the brush/grassland- rangeland type such as serviceberry and mountain mahogany-in a brush type with about 30 percent in a mature age class. Maintain About 95 percent of the willow/grass range in a willow type.

Elk Winter Range - maintain about 50 percent of the brush/grassland in a brush type with about 30 percent in a mature age class.

Bighorn Winter Range - maintain about 75 percent of the brush/grassland type in grass.

**Created Opening Guideline** -Created forest openings may adjoin meadows if no more than one-fifth of the periphery of the meadow edge is affected. Size, shape, and arrangement of created openings should vary to fit naturally into existing landscapes. Created openings should not exceed 1200 feet in width unless site-specific analysis identifies the need for larger openings for wildlife habitat management purposes. Created openings should be interspersed with cover patches at least 60 acres in size.

**Vegetation: Range**

**Vegetation: Range Prescription** - Range is managed to maintain and enhance range and watershed condition while providing forage for livestock and wildlife.

**Vegetation: Timber Prescription** - Silvicultural practices including scheduled timber harvest emphasize achieving desired wildlife habitat conditions while developing long-term, overall big-game hiding cover values. Utilization of firewood and other products is encouraged in ways compatible with maintaining wildlife values.

**Silvicultural System Guideline** -Other than for areas of designated old growth, all systems should be permitted. The following species and practices should be favored: blue spruce, Engelmann spruce, Douglas-fir, and aspen tree species, shelterwood and clearcutting methods in existing and regenerated lodgepole pine stands, methods favoring the development of an all-aged structure in existing and regenerated spruce and fir stands, and shelterwood and clearcutting methods in existing and regenerated Douglas-fir stands.

Where favored methods cannot be used in existing over-mature conifer stands due to windfall risks, lack of adequate regeneration and other similar stand conditions, methods should be applied that are appropriate to the site-specific conditions.

**Silvicultural System Standard:**

Forest Cover	Rotation Age (years)	Desired DBH at Rotation (Inches)
Lodgepole Pine	100	9-11
Spruce and Fir	120	12-16

Douglas-fir	120	15-17
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**Intermediate Treatment Guideline** -To the extent wildlife objectives can be met, sanitation and salvage should be applied to reduce potential tree mortality caused from insects and diseases. Sanitation should be applied in stands when epidemic conditions are present or imminent and threaten meeting resource objectives within or adjacent to the management area. All other methods should be available but only to meet habitat objectives.

**Desired Stocking Guideline** -Managed stands should have tree stocking control to have big-game hiding cover. Thinning should happen before crown competition and canopy closure occur.

Forest Cover	Stand Age at Thinning (Years)	Desired Trees Per Acre
Lodgepole Pine	10-15	550
	25-30	400
Spruce and Fir	20-25	400
Douglas-fir	10-15	350

**Site Preparation Guideline** -All methods should be available but only as required to meet wildlife habitat needs.

**Reforestation Standard** - A harvested unit will be considered restocked when the following minimum standards by forest cover type, regardless of site productivity, are met

Forest Cover Type	Trees Per Acre	Percent of area stocked	Percent Species Composition
Lodgepole Pine	400	80	LP 60
Spruce and Fir	400	80	ES 60
Douglas-fir	350	80	DF 70

**Created Opening Duration Standard** - A created opening will be closed when:

- a. It meets reforestation standards;
- b. It begins to take on the appearance of a young forest rather than a restocked opening

- c. It takes on the appearance of the adjoining characteristic landscape represented by an average tree height of 20 feet or regeneration provides elk hiding cover from an elevated ground view point.

**Created Opening Size Standard** -Maximum size will be 25 acres with an expected average of 15 acres. Clearcuts in Douglas-fir will not exceed 10 acres in size.

**Created Opening Dispersion Guideline** -No more than 15 percent of the suitable timber base should be in a created opening condition over a three-decade period.

**Utilization Guideline** -Harvest and treatment residues should be made available for firewood and other products in a manner compatible with wildlife objectives, site preparation, and reforestation requirements. Designated aspen areas should be made available for firewood.

**Timber Sale Cost-Efficiency Standard** -Commercial wood-product sales will only be offered when benefits are equal to or exceed costs. Benefits and costs to be considered in cost efficiency analysis of commercial wood-product sales are:

**Benefits** - Consist of those associated with providing habitat to support selected management indicator species. These include monetary receipts gained from the sale of wood products, and the associated social and economic benefits.

**Costs** - Consist of sale preparation, administration, essential reforestation, roading, and impacts to selected management indicator species from timber- harvesting activities. Where roads are developed to meet multiple-resource objectives, costs will be apportioned to the benefitting resources. Road costs include construction, operation and maintenance. Road costs are amortized over the useful life of the road.

**Aspen Management Guideline** -Aspen should be managed for its value as wildlife habitat and for providing seasonal colors while emphasizing its value as habitat for selected management indicator species.

## **Minerals**

**Minerals Prescription** -The area is available for minerals location, sale or energy leasing, exploration, and development. New leases are issued with the appropriate stipulations to require compatibility with other resource objectives.

## **Access: Roads**

**Access: Roads Prescription** -Management of the area requires a moderate road system to provide commodity and public access. Most travel is limited to arterial and collector roads with seasonal or long-term closure of many local roads for wildlife security.

**Road Improvement and New Road Building Standard** - Forest development roads will be built and maintained to Standards appropriate for Traffic Service Levels B through D.

**Road Management Standard** - Over the life of the Forest Plan, the average open road density will be 1 mile per square mile of standard or equivalent road with 1-year to 5-year variations of 0.25 to 1.25 miles of road per square mile. Temporary roads will be returned to Elimination Class 3 or 4 Standards.

**Access: Trails**

**Access: Trails Prescription** - Non-motorized and motorized trails for a variety of users are managed consistent with the recreation setting and compatible with wildlife objectives.

**Trail System Guideline** - Motorized and non-motorized trails should be developed to provide a full range of difficulty levels where compatible with meeting wildlife objectives. Existing roads and trails should be used where possible.

**Standard Maintenance Level Guideline** - The standard maintenance level should be that needed to protect soil and water values, and to provide for user safety and user convenience appropriate to the trail's difficulty level.

**Trail Density Guideline** - Over the life of the Forest Plan, an average of no more than 1 mile of trail per square mile of area, including closed roads, should be attained.

**Encounters Per Day Guideline** - Parties encountered per day should be limited to an average of 12, varying from 6 to 15 depending on conditions.

**Protection: Fire**

~~**Protection: Fire Prescription – Fire Protection Standard** – Wildfires will be suppressed using strategies that will keep fireline intensities below 400 BTU per second per foot. Wildfires will be suppressed using control strategies when they threaten plantations.~~

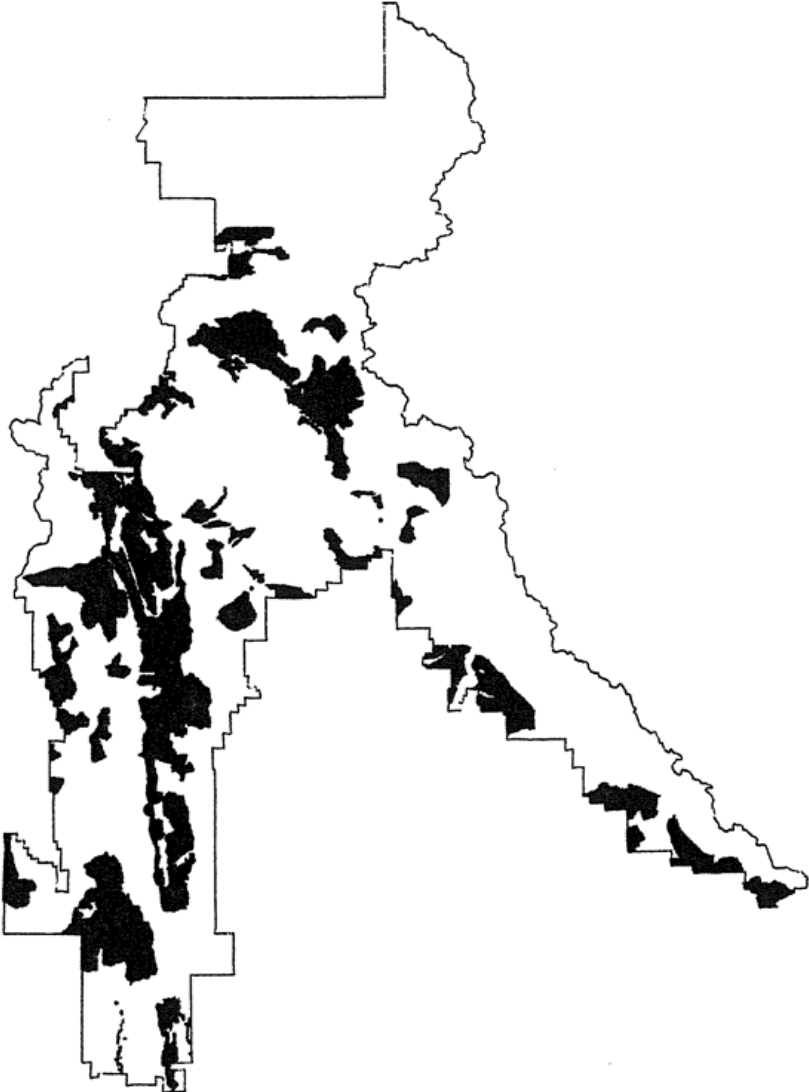
~~**Fuels Guideline** – Fuel conditions should be maintained that permit fire suppression forces to meet fire protection objectives for the area under historic weather conditions.~~

~~**Fuels Standard** – Activity fuels will be reduced or otherwise treated so the potential fireline intensities will not exceed 400 BTU per second per foot on 90 percent of the days during the regular fire season, or continuous fuels concentrations exceeding the above standard will be broken up into manageable units with fire breaks, or additional protection will be provided for areas exceeding the above standards when such protection will not be required for more than five years.<sup>61</sup>~~

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<sup>61</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

**Desired Future Condition 12**



## Desired Future Condition 12 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.

**Experience:** Overall, you find few signs of people away from existing roads. You see little evidence of timber harvest as you walk through the area. Old-growth is at near- maximum levels of acres and some loss of shrubs and other forage is taking place. You see stands of young trees, burns from past fires, and many of the dense forested areas becoming more open as older and diseased trees die.

If you are driving your car or truck, you will find yourself limited to only a few major road systems. You find some popular, established roads open because they access or pass through the area. These roads will be gravel surfaced and well maintained with gentle grades. They will allow unrestricted two-way traffic.

Most other road systems will be unsuited to travel by sedan. Traveling these systems by pickup truck, you see dispersed low-standard branch roads. About half of branch roads will have been closed off by barricade and revegetated.



*Wildlife habitat, big-game hunting, and dispersed recreation are the major emphasis areas for DFC 12.*

If you take a closer look at the road system, you see a limited number of "2-track" roads winding through the timber. With other than 4-wheel-drive vehicles or off-highway vehicles (OHVs), travel on these roads is difficult or impossible. If you are hiking cross-country, you find "2-track" roads infrequently.

You find habitat for big-game in less-than-best condition in some areas, but burns and some cut areas provide improved seasonal forage. Some areas will show recent wildfires. Other areas will show stands with many dead trees.

Hunters find that resident and migratory elk numbers have been increasing because of the closure of area roads and reduced disturbance. Big-game hunting seasons have gotten longer and less restrictive over time than in those areas containing open roads. You find that outfitted hunting is available. Resident trophy elk, deer, and moose are generally more available.

Access to many fishing areas will change due to new road access and closure of some existing roads. If you go fishing and hike into a remote area, you may find that access is difficult and takes quite a bit of time. Better fishing is generally available to you if you are willing to travel longer distances. Fish are abundant except for popular areas where some restrictions may have been applied. You may find that restrictions have been applied such as catch-and-release or slot limits.

You may find some sheep, cattle, and pack animals throughout the area. Livestock are not permitted on crucial big-game winter ranges closed to grazing. Livestock grazing is permitted on other big-game ranges if it does not conflict wildlife needs. You can see evidence of recent livestock grazing in some areas but not in others. You may encounter traffic delays while livestock are being moved.

If you have an off-highway vehicle, you notice that use is limited to the open road and trail system. Winter range has seasonal restrictions on other recreational activities. If you are seeking a primitive hiking or camping experience, you find it generally at higher elevations.

Mineral and energy development may be restricted by season. Energy exploration roads may be closed. Mineral or gas and oil development roads are gravel-surfaced, similar to main roads elsewhere on the Bridger-Teton National Forest. Access to energy development sites may be controlled. In oil development areas, you might see pumping equipment, storage tanks, and a safety and flow regulation device called a "Christmas tree." Gas fields reveal "Christmas trees", compressors, and dehydration units. Occasionally, you can hear noise from pumpjacks, heavy equipment, and compressors.

## Management Prescription 12



**Management Emphasis** - Management emphasis is on providing such important habitat for big-game as winter ranges, feedgrounds, 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 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-l), 1.2(c-e), 2.1(a, b), 2.3(a), 2.5(a-d), 4.1(a, b), 4.2(b, d), 4.4(a-c), 4.5(a, b), and 4.7(a-d).

### Resource Prescriptions, Standards, and Guidelines

#### Recreation

**Recreation Prescription** - Recreation and other human activities are managed to meet needs of the big-game species.

**Recreation Opportunity Guideline** - Existing roaded recreation opportunities should be allowed to continue where they do not interfere with objectives for this area. Areas of Semi-primitive recreation should be provided for both motorized and non-motorized use. Existing and future road systems should be managed to retain backcountry areas that are large and remote enough to provide Semi-primitive recreation.

#### Visual Quality

**Visual Quality Prescription** - The Visual Quality Objectives are Retention and Partial Retention.

#### Fisheries and Wildlife

**Fisheries and Wildlife Prescription** - Habitat will be managed to help meet the game populations, harvest levels, success, and recreation-day objectives, and to fully achieve the fish populations, harvest levels, success, and recreation-day objectives identified by the Wyoming Game and Fish Department and agreed to by the Forest Service.

**Sight Distance Guidelines** - In forested areas, hiding cover 2 to 4 sight distances wide-1 sight distance is 200 feet-should be maintained on at least 80 percent of the perimeter of all natural openings, along at least 75 percent of the edge of arterial and collector roads, and along 60 percent of streams and rivers. Cover should be evenly distributed across the watershed.

**Hiding and Security Cover Guideline** - In areas dominated by other than forested ecosystems, hiding and security cover should be maintained as follows:

Percent of Unit Forested	Percent of Forested Area in Cover
35-50	At least 50
20-34	At least 60
Less than 20	At least 70

**Management Activity Guideline** -All management activities should be concentrated to within the shortest period of time and to the smallest possible area.

**Tree Thinning Guideline** -Where tree regeneration is present alongside roads and adjacent to open stands, meadows, natural openings, and unstacked created openings, and the regeneration is serving as a screen, the edge of the screen should not be thinned to a spacing any greater than one where big-game can be seen 1 sight distance away.

**Dead and Down Large Woody Material Guideline** - Dead-and-down spruce and fir material should be retained on logged sites to provide wildlife habitat

**Dead and Down Large Woody Material Standard** -Where available on site four or more decomposition class 1and 2 logs will be retained per acre on logged sites. Down logs will be at least 12 inches in diameter at the large end and 20 feet in length. Two or more brush piles about 10 feet across and 7 feet high per acre may be retained. Dead- and-down woody material will not exceed an average depth of 18 inches. An average of 2 dead or cull-leaning trees per acre during the mature stage will be sought. To be acceptable, leaning trees will be greater than 8 inches in diameter and 40 feet in length, and will be lodged in adjacent trees.

**Forest Stand and Opening Interspersion Guideline** - Where available on site, forest stands of an adequate size and distribution to provide hiding cover, thermal cover, and security cover needed to conceal the movement of big-game should be maintained. Allowed openings should not exceed 600 feet in width. Allowed openings should be interspersed with cover patches 26 to 60 acres in size and 1200 feet to 1800 feet in width and length. Emphasis should be on retaining 75 percent of the cover patches in the 60 acre or larger size class. To facilitate big-game movement, corridors of forest cover 600 feet to 1200 feet in width should be retained between patches of cover. Distances between cover patches along a cover corridor should not exceed 1200 feet.

**Big-Game Habitat Guideline** - Sufficient habitat should be provided to maintain desired populations and distribution of big-game species. For example:

**Elk Calving Area** - maintain about 30 percent of the brush/grassland- rangeland type-in a brush/forb type, emphasizing maintenance of the aspen or conifer/brush ecotone.

**Moose Winter Range** - maintain about 75 percent of the brush/grassland- rangeland type such as serviceberry and mountain mahogany-in a brush type with about 30 percent in a mature age class. Maintain About 95 percent of the willow/grass range in a willow type.

**Elk Winter Range** - maintain about 50 percent of the brush/grassland in a brush type with about 30 percent in a mature age class.

**Bighorn Winter Range** - maintain about 75 percent of the brush/grassland type in grass.

**Created Opening Guideline** - Created forest openings may adjoin meadows if no more than one-fifth of the periphery of the meadow edge is affected. Size, shape, and arrangement of created openings should vary to fit naturally into existing landscapes. Created openings should not exceed 600 feet in width unless site specific analysis identifies the need for larger openings for wildlife habitat management purposes. Created openings should be interspersed with cover patches at least 60 acres in size.

### **Minerals**

**Minerals Prescription** -Minerals or energy exploration and development of existing leases is allowed. Energy development areas must meet habitat capability and escape cover. Although some energy development projects do not meet Semi-primitive opportunity classifications, every effort is made to make them compatible. Exploration and development methods and practices that minimize road building, noise, and other game disturbance will be encourage

**Lease Stipulation Standard** -New oil and gas leases will be issued with Timing- Limitation and Controlled Surface-Use stipulations. The latter requires mitigation activities for the effects of roading, exploration, and development on wildlife. Activities will be to be directed first at onsite effects, then at effects within the contiguous herd unit, and finally at effects within other herd units.

#### **Access: Roads**

**Access: Roads Prescription** -Management of the area requires a limited amount of open roads for public access and some commodity removal. Most travel is limited to arterial and collector roads with long-term closure of most local roads for wildlife security.

**Road Improvement Standard** - Existing National Forest development roads needing improvement to meet transportation, resource or safety requirements will be designed and improved to standards appropriate for Traffic Service Levels B through D.

**New Road Building Standard** - National Forest development roads will be designed and built to standards appropriate for Traffic Service Level D. Traffic Service Level B or C roads may be allowed where proper mitigation is assured. Mitigation will conform to requirements set by the Forest Service, at times calling for the return of additional roads to Elimination 3 or 4 Standards or use other mitigation measures to meet open road density or area closure standards.

**Road Management Standard** -Over the life of the Forest Plan, the average open road density will be 0.25 miles per square mile of standard or equivalent road with 1-year to 5-year variations of 0 to 0

#### **Access: Trails**

**Access: Trails Prescription** -Primarily non-motorized trails are offered to a variety of users and managed consistent with the recreation setting and compatible with wildlife objectives.

**Trail System Guideline** -Non-motorized trails should be developed providing a full range of difficulty levels where compatible with meeting wildlife objectives. Existing roads and trails should be used where possible. Motorized trails may be provided.

**Standard Maintenance Level Guideline** -The standard maintenance level should be that needed to protect soil and water values and to provide for user safety and user convenience appropriate to the trail's difficulty level.

**Trail Density Guideline** -Over the life of the Forest Plan, an average of no more than 1mile of trail per square mile of area should be attained.

**Encounters Per Day Guideline** -Parties encountered per day should be limited to an average of 12, varying from 6 to 15 depending on conditions.

**Protection: Fire**

~~**Protection: Fire Prescription**—Fire management emphasizes preservation and enhancement of habitat, particularly through prescribed fire. A full range of suppression techniques is used.~~

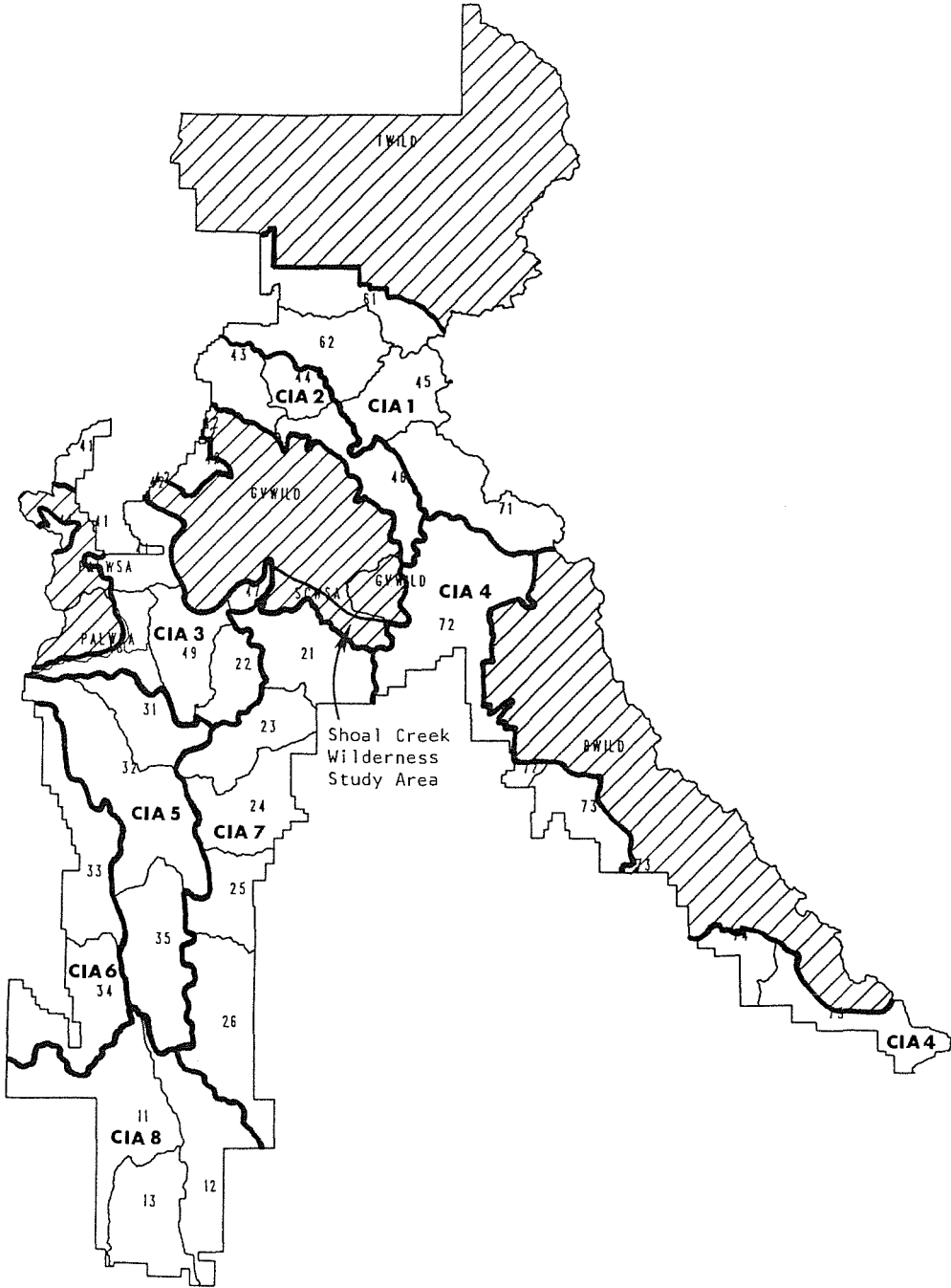
~~**Fire Protection Standard**—Wildfires will be suppressed using control strategies during the normal fire season. Pre-season and post-season period strategies will include containment, confinement, and surveillance.~~

~~**Fuels Standard**—Activity fuels will be reduced or otherwise treated so the potential fireline intensities will not exceed 400 BTU per second per foot on 90 percent of the days during the regular fire season, or continuous fuels concentrations exceeding the above standard will be broken up into manageable units with fire breaks, or additional protection will be provided for areas exceeding the above standards when such protection will not be required for more than five years.<sup>62</sup>~~

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<sup>62</sup> Bridger-Teton LMRP Revision of Fire Management Standards and Guidelines, April 2004

Community Interest and Management Areas



## Management Area Descriptions, Standards, and Guidelines

This section displays the key parts of the Preferred Alternative. Additional information on a Forest-wide color map of the Preferred Alternative is shown in the Final Environmental Impact Statement <FEIS) that accompanies this Forest Plan.

In this section, the forest is divided into eight Community Interest Areas, each containing several management areas. Wildernesses and Wilderness Study Areas are also displayed. Figure 4-15 shows their boundaries.

The maps in this section are displayed in a specific order: 1) Wildernesses, 2) Wilderness Study Areas, and 3) Management Areas. Management Areas are grouped by Community Interest Area.

Each Management Area description includes: a map showing land areas where Desired Future Conditions will be achieved, a brief location statement, a list of special geologic, land, cultural, or historical features, and a table showing the total numbers of acres to be managed to achieve Desired Future Conditions in that Management Area.

Desired Future Conditions and the Management Prescriptions that direct their achievement are described in Chapter 4. Wherever the Desired Future Conditions are shown on the Management Area map, the Management Prescriptions will be applied during Forest Plan implementation.

Additional Management Area Standards and Guidelines are prescribed with Management Area specific resource conditions and the need to achieve the Desired Future Conditions locally in mind. Management Area Standards and Guidelines apply only within that Management Area.

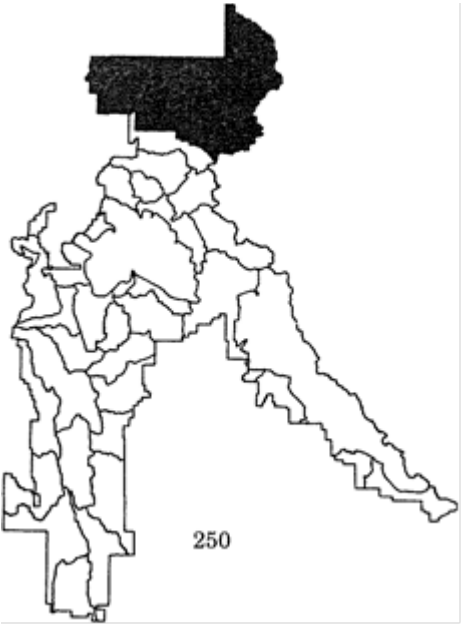
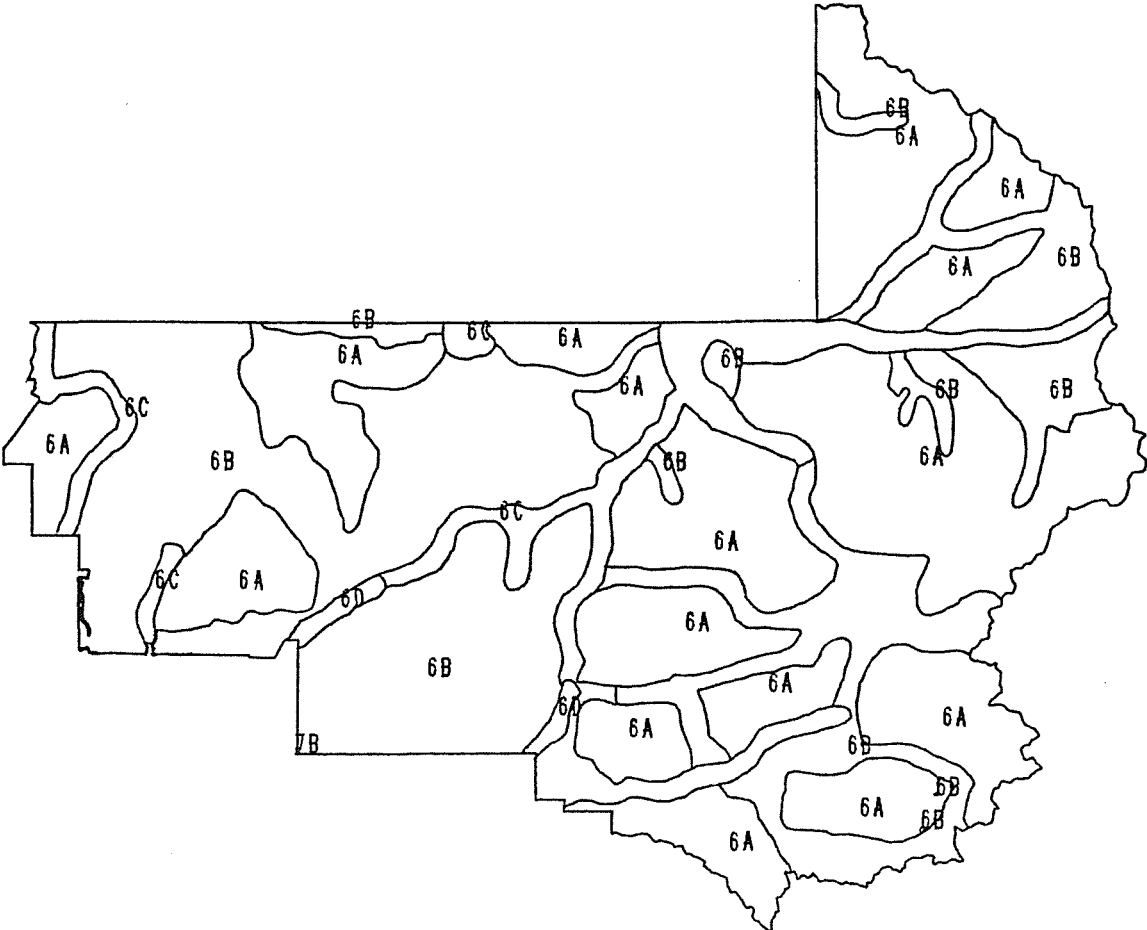
<b>Wilderness/Management Area</b>		Page
<b>Wildernesses</b>		
	Teton	
	Gros Ventre	
	Bridger	
<b>Wilderness Study Areas:</b>		
	Palisades	
	Shoal Creek	
<b>Management Areas (MAs):</b>		

MA 45	Moccasin Basin	
MA 61	Blackrock	
MA 62	Spread Creek	
MA 71	Union Pass	
MA 43	Ditch Creek	
MA 44	Slate Creek	
MA 46	Gros Ventre	
MA 22	Cliff Creek	
MA 41	Jackson Hole South	
MA 42	Curtis Canyon	
MA 47	Granite Creek	
MA 48	Snake River Canyon	
MA 49	Willow Creek	
MA 72	Upper Green River	
MA 73	Pole Creek	
MA 74	East Fork River	
MA 75	Sweetwater	
MA 31	Little Greys River	
MA 32	Lower Greys River	
MA 35	Upper Greys River	
MA 33	Star Valley North	
MA 34	Star Valley South	



MA 21	Hoback Basin	
MA 23	Upper Hoback	
MA 24	Horse Creek	
MA 25	Cottonwood Creek	
MA 26	Piney Creeks	
MA U	Smith Forks	
MA 12	LaBarge Creek	
MA 13	Hams Fork	

Teton Wilderness



**Wilderness**

Teton Wilderness

**Location** - Located in the northern-most part of the Teton Division of the Bridger-Teton National Forest.

**Special Features** - Two Ocean Pass National Natural Area and Huckleberry Mountain Fire Lookout.

**Desired Future Condition Acreage**

<b>DFC</b>	<b>Acreage</b>
6A	279,831
6B	249,842
6C	51,553
6D	4,012
Total	583,238

Above total acreage is congressional passed figure. The “Geological” (sic) Information System are:

<b>DFC</b>	<b>Acreage</b>
6A	279,000
6B	249,100
6C	51,400
6D	4,000
Total	583,500

The difference between congressional figure and current “Geological” (sic) Information System is due to use of different tools to measure wilderness. The wilderness boundary has NOT been changed<sup>63</sup>

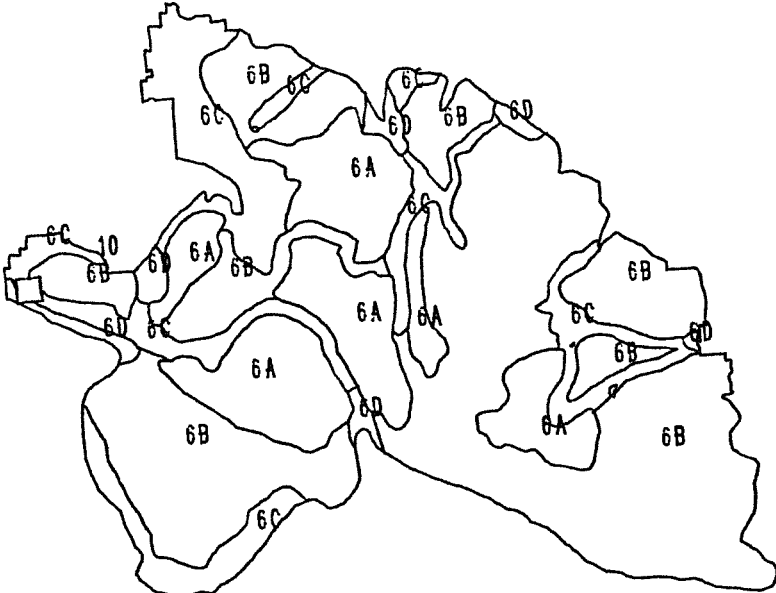
**Teton Wilderness-Specific Standards and Guidelines:**

None.

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<sup>63</sup> Corrected 1/21/93 by Forest Plan Correction No 1.

Gros Ventre Wilderness



Gros Ventre Wilderness

**Location** - Located in the Teton Division of the Bridger-Teton National Forest, south of the Slate Creek/Ditch Creek area and east of Jackson Hole area.

**Special Features** - Upper Slide of Gros Ventre River, Alpine Karst in Tosi Creek Basin, and Gros Ventre Slide Geological Area National Natural Landmark.

**Desired Future Condition Acreage**

DFC	Acreage
6A	61,349
6B	165,309
6C	52,887
6D	7,455
Total	287,000

Above total acreage is congressional passed figure. The “Geological” (sic) Information System are:

**Gros Ventre Wilderness-Specific Standards and Guidelines**

None.

DFC	Acreage
6A	60,900
6B	164,100
6C	52,500
6D	7,400
Total	284,900

Total	583,500
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The difference between congressional figure and current “Geological” (sic) Information System is due to use of different tools to measure wilderness. The wilderness boundary has NOT been changed<sup>64</sup>

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<sup>64</sup> Corrected 1/21/93 by Forest Plan Correction No. 1)

[Bridger Wilderness](#)

**Location** - Located in the Bridger East Division of the Bridger-Teton National Forest, along the entire eastern edge of the division.

**Special Features** - Gannett Peak Glacial Fields and Osborne Mountain ~~Proposed~~<sup>65</sup> Research Natural Area.

**Desired Future Condition Acreage**

**Gros Ventre**

<b>DFC</b>	<b>Acreage</b>
6A	157,100
6B	203,600
6C	50,900
6D	2,100
Total	413,700

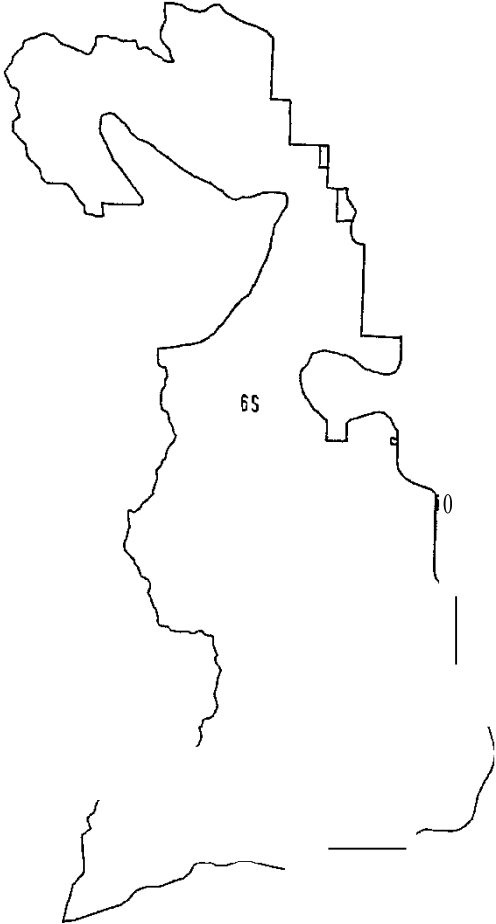
**Bridger Wilderness-Specific Standards and Guidelines**

**None.**

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<sup>65</sup> Amendment # 5, April 1999

Palisades Wilderness Study Area



## Wilderness Study Areas

### Palisades Wilderness Study Area

Location - Located in the Snake River Range, in the Teton Division of the Bridger-Teton National Forest, south of Teton Pass and west of the Snake River Canyon.

Special Features: Snake River Ridge Trail.

Desired Future Condition Acreage:

76,800



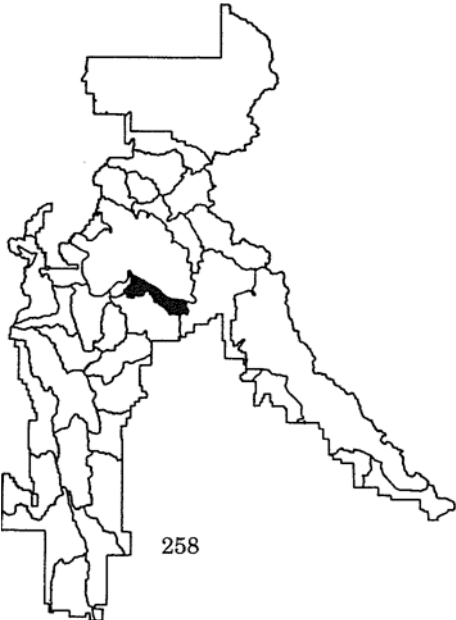
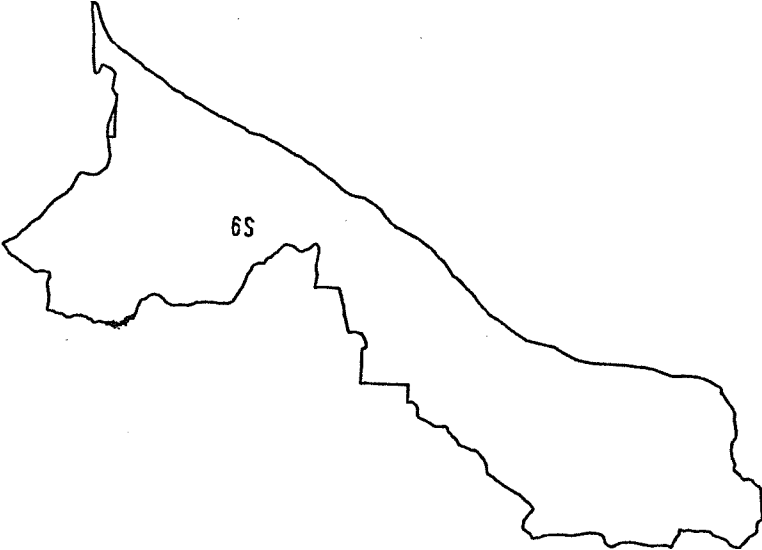
DFC 6S

Wilderness Study Area-Specific Standards and Guidelines

Lease Stipulation Standard -The Conditional No-Surface-Occupancy stipulation specified in *Sierra Club v. Peterson* applies to this area.

Wilderness Eligibility Standard -No activities will occur that would jeopardize the eligibility of the Palisades Wilderness Study Area for future Congressional designation as Wilderness.

Shoal. Creek Wilderness Study Area



### Shoal Creek Wilderness Study Area

Location -Located in the Teton Division of the Bridger-Teton National Forest, south of the Gros Ventre Wilderness and north of highway U.S. 187 and the Hoback River.

Special Features - Tin Can Park.

#### Desired Future Condition Acreage

DFC 6S	Acreage 32,400
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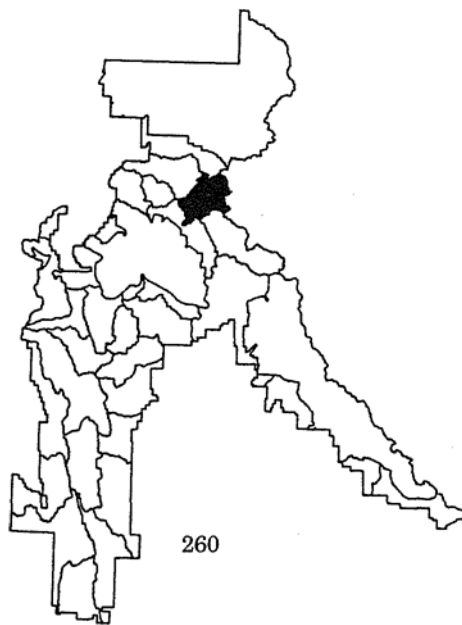
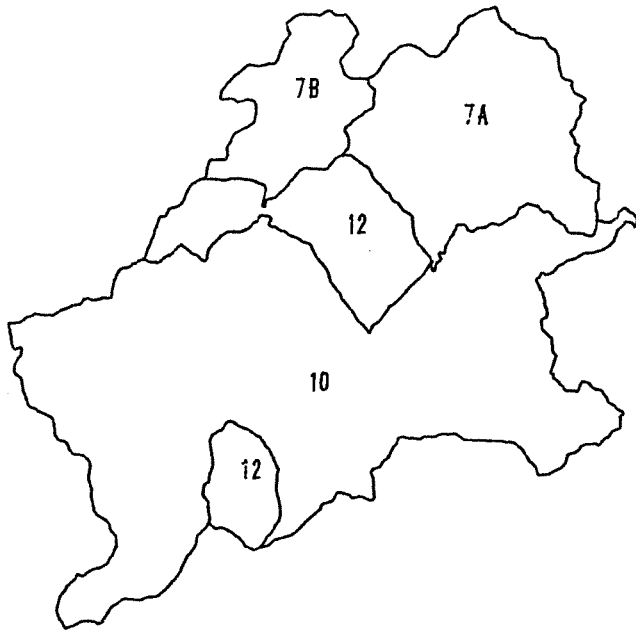
#### Wilderness Study Area-Specific Standards and Guidelines

Lease Standard -The Shoal Creek Wilderness Study Area will not be available for lease.

Wilderness Eligibility Standard -No activities will occur that would jeopardize the eligibility of the Shoal Creek Wilderness Study Area for future Congressional designation as Wilderness.

Figure 4-21

Management Area 45 - Moccasin Basin



**Management Areas**

**Community Interest Area 1 - Dubois**

**Management Area 45 - Moccasin Basin**

**Location** - Located in the Teton Division of the Bridger-Teton National Forest, southeast of Spread Creek and Slate Creek areas, and adjacent to the Gros Ventre area.

**Special Features** -Sheridan National Recreation Trail.

**Desired Future Condition Acreage**

DFC	Acreage
7A	10,700
7B	4,800
10	34,600
12	7,900
Total	58,000

**Management Area 45 Standards and Guidelines**

**Lease Stipulation Standard** - Leases will be issued for crucial elk winter ranges with the Jackson Elk Herd stipulation.

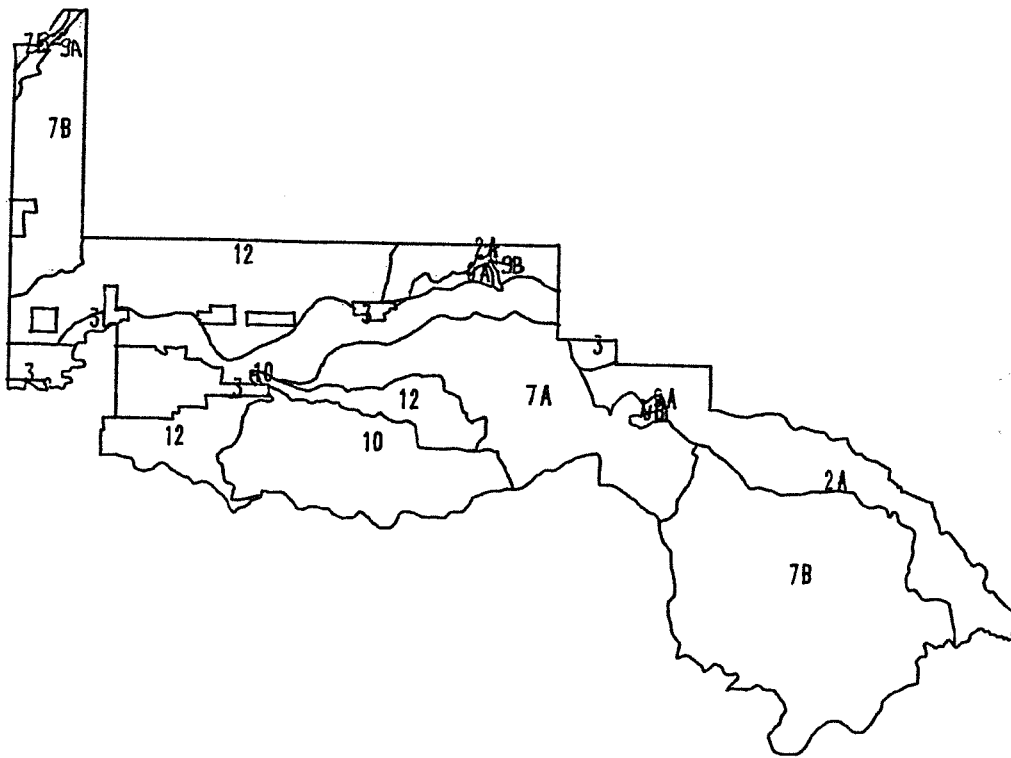
**Timber Management Standard** - Timber harvest programmed for the DFC 7A areas will be sensitive to the intensive timber harvest (7E) programmed on adjacent Shoshone National Forest lands.

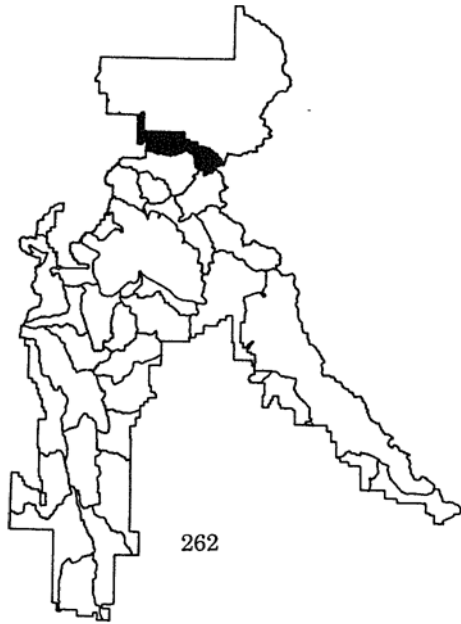
**Transportation System Connection Standard**- No connection between the existing Moccasin Basin Road and the Gros Ventre Road will be permitted if a transportation system is developed in MA 45 <sup>66</sup>

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<sup>66</sup> (Amended by Attachment One of the Record of Decision)

**Management Area 61 - Blackrock**





Community Interest Area 1 - Dubois

Management Area 61 – Blackrock

**Location** -Located in the Teton Division of the Bridger-Teton National Forest, south of the Teton Wilderness and north of Spread Creek. Lands in this management area north of the 11th Parallel are withheld from leasing by the Krug Memorandum.

**Special Features** - Rosecrans National Historic District.

**Desired Future Condition Acreage**

DFC	Acreage
2A	8,500
2B	300
3	5,000
7A	9,000
7B	19,800
9A	700
9B	200
10	6,700
12	12,000

Total	62,200
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### Management Area 61 Standards and Guidelines

**Visual Quality Standard** -The DFC 2A area just south of the Breccia Cliffs and DFC 12 area along Blackrock Creek will be managed under a Visual Quality Objective of Retention in the foreground and middle ground and Partial Retention in the background.

**Grand Teton National Park Visual Standard:** A Visual Quality Objective of Retention in the foreground and Retention or Partial Retention in the middle ground, will be met for all areas visible to visitors to the Signal Mountain Overlook, and to boaters on the Snake River and motorists along roads within Grand Teton National Park.<sup>67</sup>

**Lease Stipulation Standard** -Leases in the DFC 2A area and DFC 3 area south of the 11th Standard Parallel and along the Buffalo River will be issued with a No- Surface-Occupancy stipulation.

~~**River Qualities Standard**—Along the Buffalo River, the DFC 3 area will be managed to protect values that make it eligible for designation as a Scenic or Recreation River.<sup>68</sup>~~

**Coordination Standard** - Sensitivity will be shown towards the documented management needs of Grand Teton National Park.

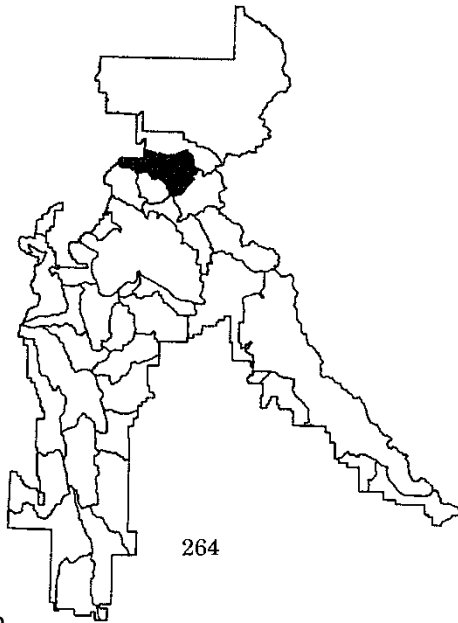
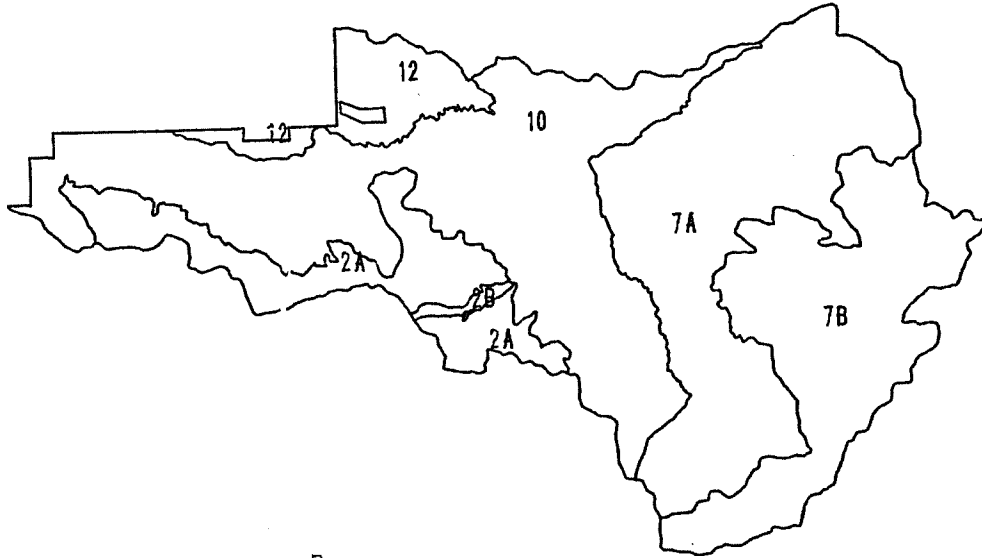
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<sup>67</sup> Forest Plan Amendment # 2 3/92 and Attachment One of the Record of Decision (Later Amended in 2013)

<sup>68</sup> Forest Plan Amendment # 2 3/92 and Attachment One of the Record of Decision (Later Amended in 2013)



**Management Area 62 - Spread Creek**



## Community Interest Area 1-Dubois

[Management Area 62 -Spread Creek](#)

Location -Located in the Teton Division of the Bridger-Teton National Forest, south of the Blackrock area and north of Moccasin Basin and Slate Creek areas.

**Desired Future Condition Acreage**

<b>DFC</b>	<b>Acreage</b>
7A	10,700
7B	4,800
10	34,600
12	7,900
<b>Total</b>	<b>58,000</b>

## Management Area 62 Standards and Guidelines

Lease Standard -The DFC 2A/B areas, Carmichael Fork and Mt. Leidy, will not be available for lease.

Coordination Standard - Sensitivity will be shown towards the documented management needs of Grand Teton National Park.

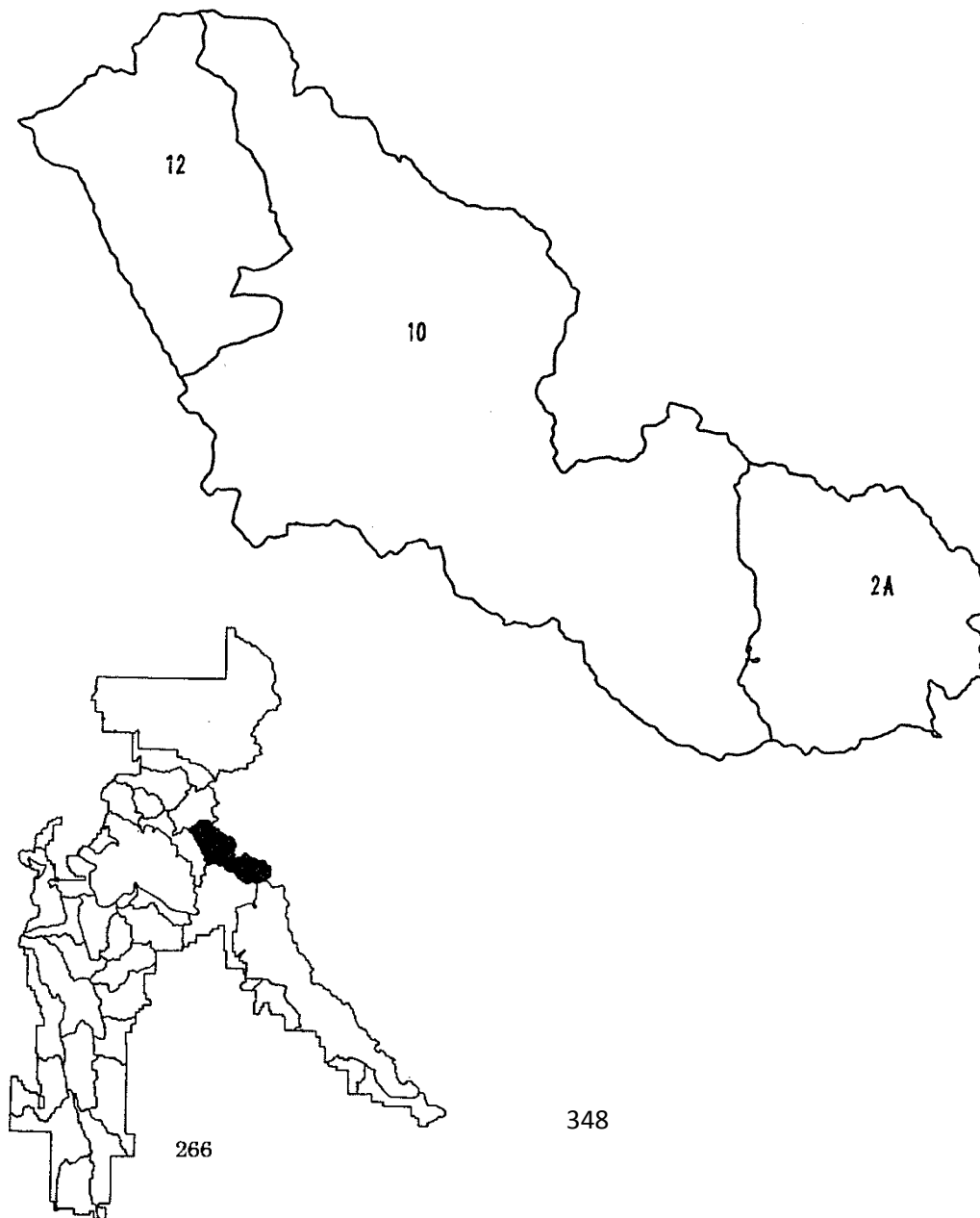
**Grand Teton National Park Visual Quality Standard**-A Visual Quality Objective of the Retention in the foreground and Retention of Partial Retention in the middle ground will be met for all areas visible to visitors to the Signal Mountain Overlook, and to boaters on the Snake River and motorists along roads within Grand Teton National Park<sup>69</sup>

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<sup>69</sup> (Amended by Attachment One of the Record of Decision)

**Figure 4-24**

**Management Area 71 - Union Pass**



**Community Interest Area 1 - Dubois**

**Management Area 71 - Union Pass**

**Location** - Located in the Teton Division of the Bridger-Teton National Forest, south of the Moccasin Basin area and adjacent to the Gros Ventre area.

**Special Features** - Union Pass National Historic Site and Sheridan National Recreation Trail.

**Desired Future Condition Acreage**

DFC	Acreage
2A	15,700
10	56,500
12	14,800
Total	87,000

**Management Area 71 Standards and Guidelines**

**Lease Standard** - The DFC 2A area which includes Union Peak is not available for lease.

**Lease Stipulation Standard** - Leases will be issued in crucial elk winter ranges with the Jackson Elk Herd stipulation.

~~**Union Pass Road Standard** - Based on road surface conditions, site distances, and turning limitations on the present alignment, traffic will be restricted along the 4.3 mile link between the Union Pass Road and the Green River Road to a vehicle length of 40 feet to provide for safe passage of recreational and commercial vehicles. Exceptions will be granted under special-use permit for passage of occasional larger vehicles when~~

~~acceptable safety measures are employed. Closure of the road section to vehicles exceeding 25,000 pounds will be employed during periods when the roadbed is wet to avoid unacceptable impacts to the road surface and resulting stream sedimentation. Stabilization of the roadbed and improvement of drainage will be made to reduce erosion and resultant sedimentation to acceptable levels. For further information, see Forest-wide Standards and Guidelines for Soil, Water, and Air; Riparian Areas, Wetlands, and Floodplains; and Wildlife and Fish in this chapter.~~

~~The Desired Future Conditions for Management Area 71 require a single Traffic Service Level B or C link road. Closure of adjacent roads will be made to retain the prescribed open road density for the area. The probable future alignment has been determined through a joint study with the surrounding counties and the State of Wyoming. A project Environmental Impact Statement will be prepared using the Standards and Guidelines of the Forest Plan.~~

~~The Final Environmental Impact Statement (FEIS) Appendix A discusses the Union Pass issue.~~

**Union Pass Road Standard** – Until a new alignment is chosen and developed, the pre Union Pass Road Standard - Until a new alignment is chosen and developed, the present alignment will be used. Based on road surface conditions, sight distances, and turning limits, traffic will be restricted along the 4.3 mile link between the Union Pass Road and the Green River Road to a vehicle length of 40 feet. Closure of the link to vehicles exceeding 25,000 pounds will be employed year round to mitigate unacceptable effects to the road surface and prevent stream sedimentation. Exceptions will be granted under special-use permit for passage of occasional larger and heavier vehicles when acceptable safety measures are employed and the road surface will allow passage.

The present standard of the road will not be upgraded. Maintenance will be performed to maintain the current standard and mitigate unacceptable environmental effects. Spot stabilization of the roadbed and improvement of drainage may be necessary to reduce erosion and sedimentation to acceptable levels. For further information, please see Forest-wide Standards and Guidelines for Soil, Water, Air, Riparian Areas, Wetlands and Floodplains, and Wildlife and Fish.

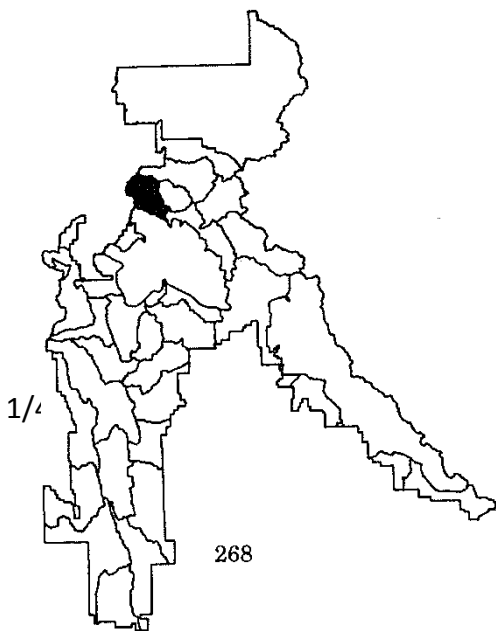
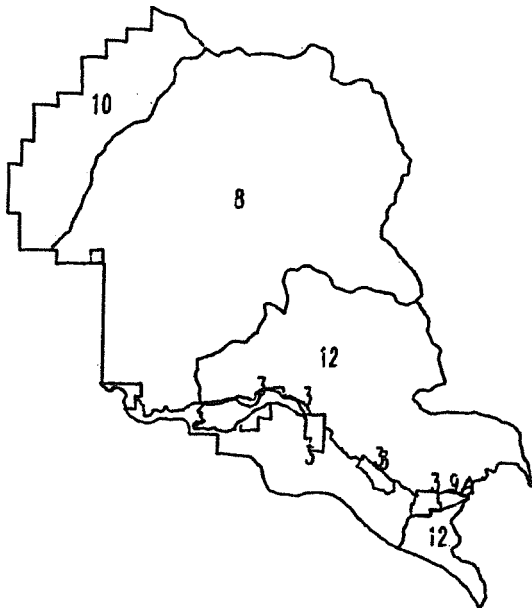
Desired Future Conditions for National Forest System lands In Management Area 71 and 72 supports the need for a single-access road built to a Traffic Service Level B or C. Needs, location, standards, and jurisdiction of a new facility have been determined jointly with the State of Wyoming and the Council of County Governments in the 1989 Union Pass Road Study, prepared by David Ohde and Associates. Construction or reconstruction will provide an opportunity for closure of adjacent roads in the area. Closure of adjacent roads will be made to retain the prescribed open-road density for the area. Size or weight restrictions will meet State of Wyoming limits. A project Environmental Impact Statement will be prepared based on Plan direction and the Record of Decision.<sup>70</sup>

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<sup>70</sup> Amended by Attachment One of the Record of Decision)

Figure 4-25

Management Area 43 -Ditch Creek



**Community Interest Area 2 -Gros Ventre**

**Management Area 43 -Ditch Creek**

Location -Located in the Teton Division of the Bridger-Teton National Forest, north of the Gros Ventre Wilderness and west of the Slate Creek area.

Special Features -Jurassic Fossils at Lower Slide Lake.

Desired Future Condition Acreage

DFC	Acreage
3	3,000
8	22,000
9A	15
10	5,200
12	10,600
Total	40,815

Management Area 43 Standards and Guidelines

**Lease Stipulation Standard** -Leases will be issued in the crucial elk winter ranges with the Jackson Elk Herd stipulation.

~~**River Qualities Standard** -Along the Gros Ventre River, the DFC 3 area will be managed as a Scenic or Recreation River<sup>71</sup>.~~

**Visual Quality Standard** - The DFC 3 area along the Gros Ventre River will be managed to achieve a Visual Quality Objective of Retention in all foreground areas relative to the river and the road.

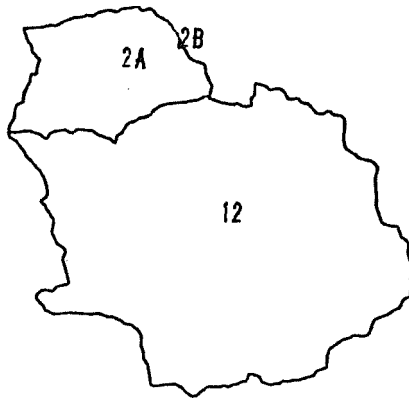
**Grand Teton National Park Visual Standard:** A Visual Quality Objective of Retention in the foreground and Retention or Partial Retention in the middle ground, will be met for all areas visible to visitors to the Signal Mountain Overlook, and to boaters on the Snake River and motorists along roads within Grand Teton National Park.<sup>72</sup>

**Coordination Standard** - Sensitivity will be shown towards the documented management needs of Grand Teton National Park.

<sup>71</sup> Forest Plan Amendment # 2, 3/92 and Attachment One of the Record of Decision (Later Amended in 2013)

<sup>72</sup> Forest Plan Amendment # 2, 3/92 and Attachment One of the Record of Decision (Later Amended in 2013)

**Management Area 44 - Slate Creek**



**Community Interest Area 2 - Gros Ventre**



**Management Area 44 - Slate Creek**

**Location** - Located in the Teton Division of the Bridger-Teton National Forest, south of the Spread Creek area and adjacent to the Moccasin Basin and Ditch Creek areas.

**Desired Future Condition Acreage**

<b>DFC</b>	<b>Acreage</b>
2A	5,000
2B	5
12	22,700
Total	27,705

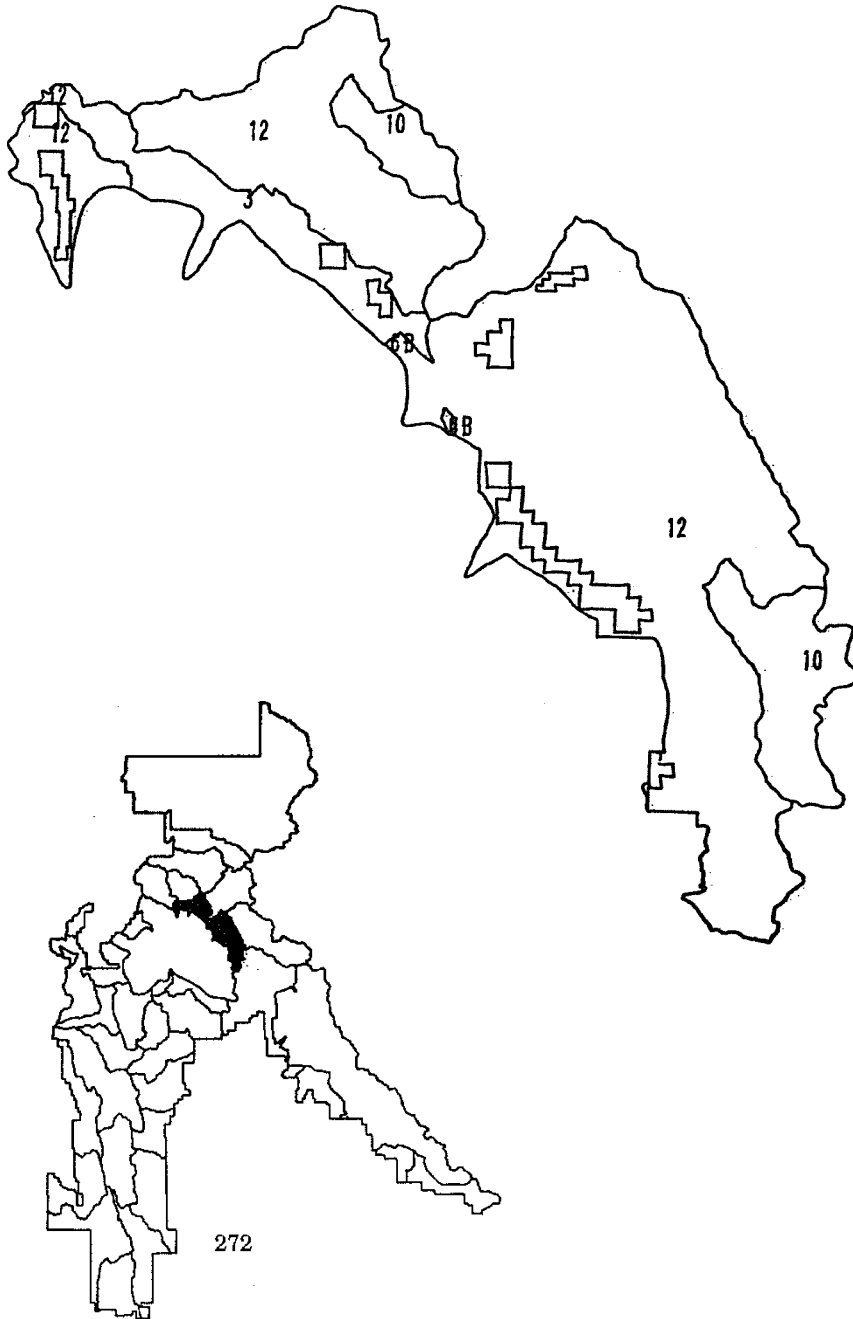
**Management Area 44 Standards and Guidelines**

**Lease Standard** - The DFC 2A area, Carmichael Fork and Mt. Leidy, will not be available for lease.

**Lease Stipulation Standard** - Leases will be issued in the crucial elk winter ranges with the Jackson Elk Herd stipulation.

**Visual Quality Standard** - The DFC 3 area along the Gros Ventre River will be managed to achieve a Visual Quality Objective of Retention in all foreground areas relative to the river and the road.

**Management Area 46 - Gros Ventre**



**Community Interest Area 2 - Gros Ventre**

**Management Area 46 - Gros Ventre**

**Location** - Located in the Teton Division of the Bridger-Teton National Forest, northeast of the Gros Ventre Wilderness and adjacent to the Moccasin Basin and Union Pass areas.

**Special Features** - Slate Creek Landslides.

**Desired Future Condition Acreage**

DFC	Acreage
3	5,000
10	7,000
12	46,300
Total	58,300

**Management Area 46 Standards and Guidelines**

~~**River Qualities Standard** - Along the Gros Ventre River, the DFC 3 area will be managed to protect values that make it eligible for designation as a Scenic or Recreation River.<sup>73</sup>~~

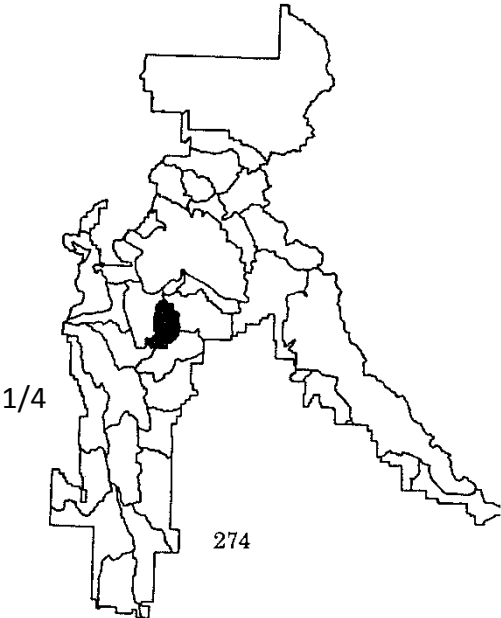
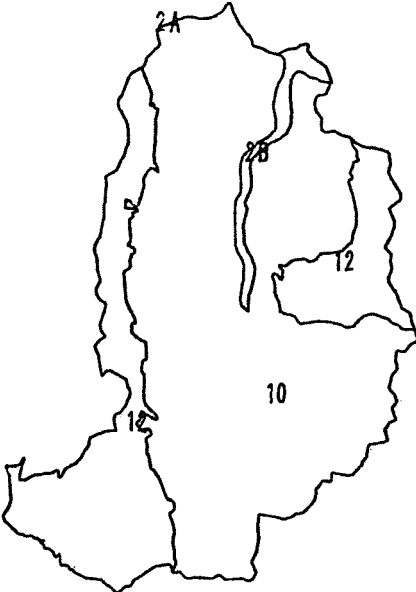
**Lease Stipulation Standard** -Leases will be issued in the crucial elk winter ranges with the Jackson Elk Herd stipulation.

**Visual Quality Standard** - The DFC 3 area along the Gros Ventre River will be managed under a Visual Quality Objective of Retention in all foreground areas relative to the river and the road.

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<sup>73</sup> Forest Plan Amendment # 2 3/92

Management Area 22 - Cliff Creek



**Community Interest Area 3 - Jackson**

Management Area 22 - Cliff Creek

**Location** - Located in the Bridger-West Division of the Bridger-Teton National Forest, south of the Gros Ventre Wilderness and adjacent to the Willow Creek and Hoback Basin areas.

**Special Features** -Cliff Creek Falls.

**Desired Future Condition Acreage**

DFC	Acreage
2B	1,000
10	27,100
12	11,200
Total	39,300

**Management Area 22 Standards and Guidelines**

**Lease Stipulation Standard** - Leases will be issued in the crucial winter ranges with a Timing-Limitation stipulation. The DFC 2B area along the Hoback River will be leased with a No-Surface-Occupancy stipulation.

~~**River Qualities Standard** -The Hoback River in DFCs 2B and 12 will be managed to protect values that make it eligible for designation as a Scenic or Recreation River.<sup>74</sup>~~

**Visual Quality Standard** -The foreground zones, relative to the Hoback River and U.S. 187, will be managed to meet a Visual Quality Objective of Retention. Partial Retention will apply to middle ground and background.

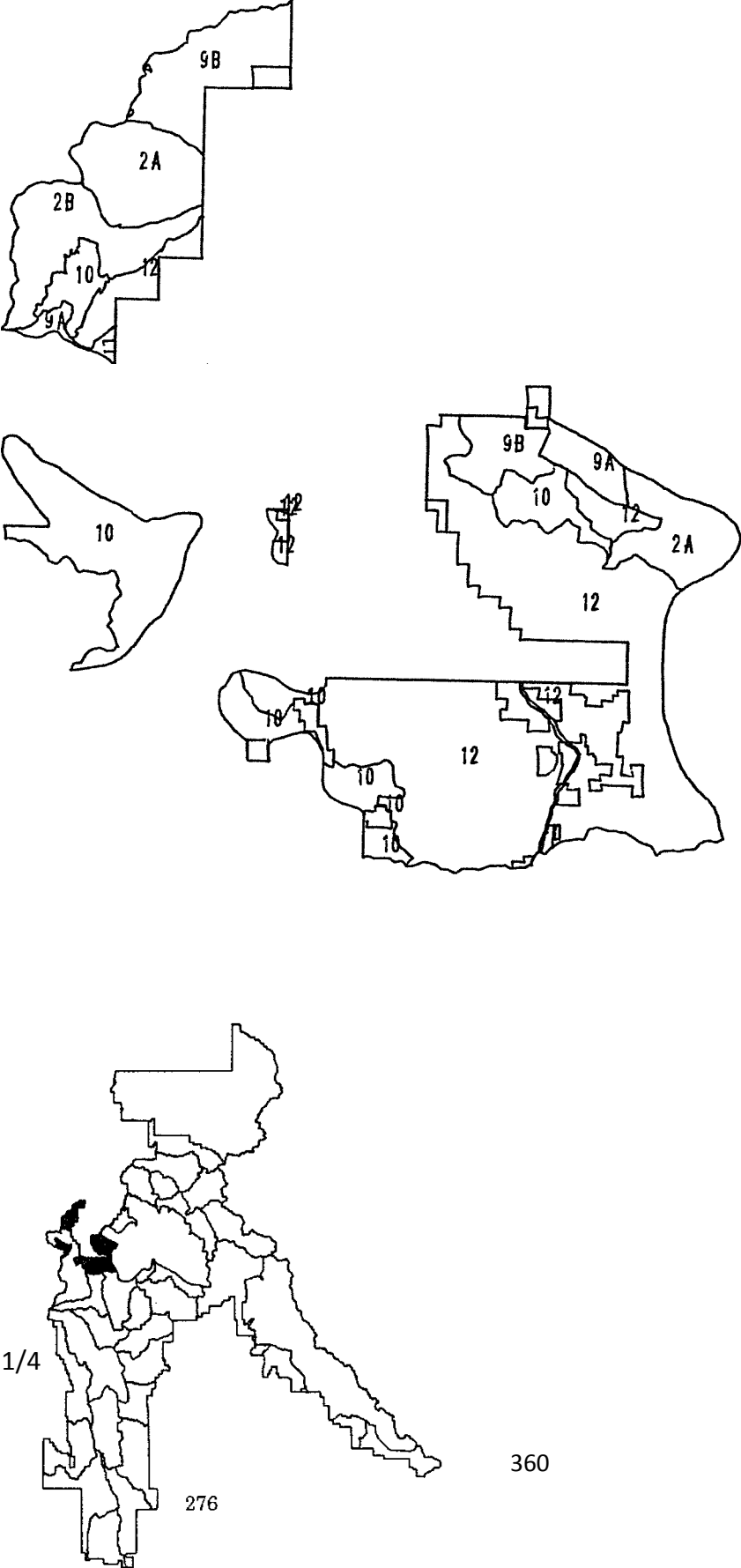
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<sup>74</sup> Forest Plan Amendment # 2 3/92



Figure 4-29

Management Area 41 - Jackson Hole South



**Community Interest Area 3 - Jackson**

Management Area 41 - Jackson Hole South

**Location** - Located in the Teton Division of the Bridger-Teton National Forest, west of the Gros Ventre Wilderness and surrounding the Town of Jackson.

**Special Features** - Camp Davis Conglomerates, Hoback Junction Landslides, and ~~Horse Creek Proposed Gros Ventre~~<sup>75</sup> Research Natural Area.

**Desired Future Condition Acreage**

DFC	Acreage
2A	6,700
2B	4,200
9A	2,000
9B	6,100
10	11,300
12	28,500
Total	58,800

**Management Area 41 Standards and Guidelines**

**Lease Standard** - The DFC 9B area, Teton Village; the DFC 2A/B areas, Phillips Canyon; and the DFC 9A/B and 2A areas, Cache Creek and Snow King; will not be available for lease. Other DFCs are available for lease.

**Lease Stipulation Standard** - Leases will be issued in the important wildlife habitats and moose winter ranges with a Timing-Limitation stipulation. Leases in crucial elk, deer, and moose winter ranges along the Snake and Hoback Rivers will be issued with a No-Surface-Occupancy stipulation.

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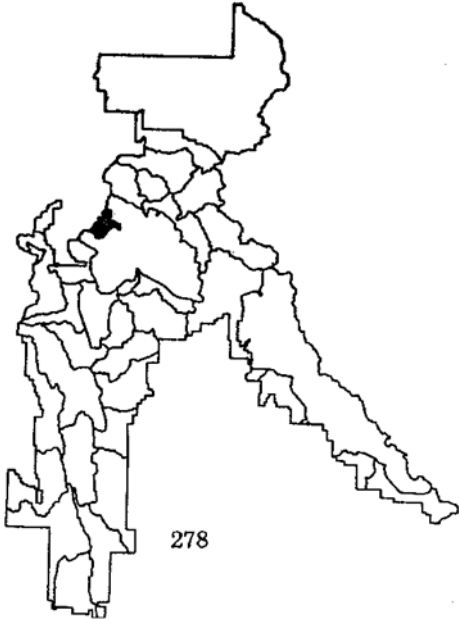
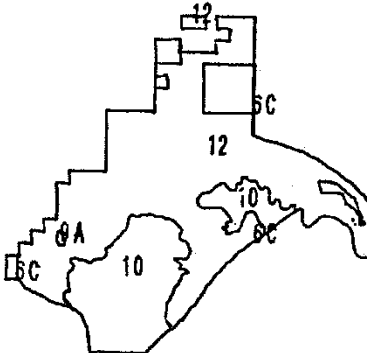
<sup>75</sup> Amendment # 5, April 1999





Figure 4-30

Management Area 42 - Curtis Canyon



Community Interest Area 3 -Jackson

Management Area 42 -Curtis Canyon

Location - Located in the Teton Division of the Bridger-Teton National Forest, adjacent to the Gros Ventre Wilderness and the National Elk Refuge.

Desired Future Condition Acreage

<b>DFC</b>	<b>Acreage</b>
9A	25
10	3,900
12	10,300
Total	14,225

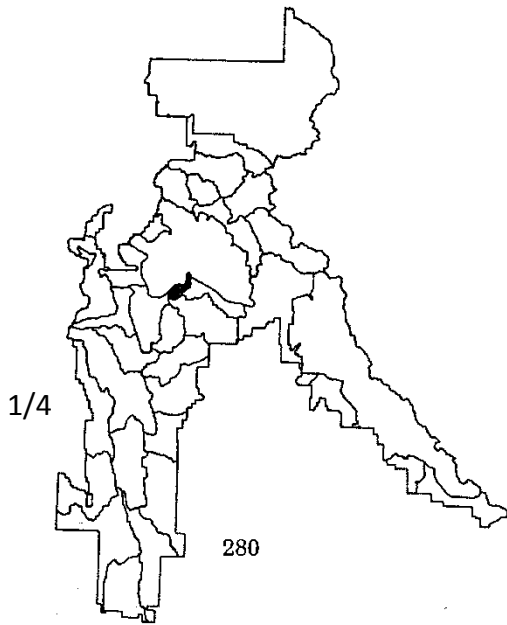
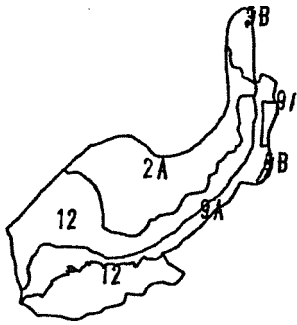
Management Area 42 Standards and Guidelines

Lease Stipulation Standard -Leases will be issued in the crucial elk winter ranges with the Jackson Elk Herd stipulation.

Coordination Standard - Sensitivity will be shown towards the documented management needs of the National Elk Refuge.

Livestock Grazing Standard -Livestock grazing will not be permitted.

**Management Area 47 - Granite Canyon**



**Community Interest Area 3 - Jackson**

Management Area 47 - Granite Creek

**Location** -Located in the Teton Division of the Bridger-Teton National Forest, south of the Gros Ventre Wilderness and north of the Cliff Creek and Hoback Basin areas.

**Special Features** - Cliff Creek-Granite Creek Thrust Faults and Granite Hot Springs.

**Desired Future Condition Acreage**

<b>DFC</b>	<b>Acreage</b>
2A	2,900
9A	2,000
9B	35
12	4,200
Total	9,135

**Management Area 47 Standards and Guidelines**

**Lease Standard** -The DFC 2A areas along Granite Creek will not be available for lease.

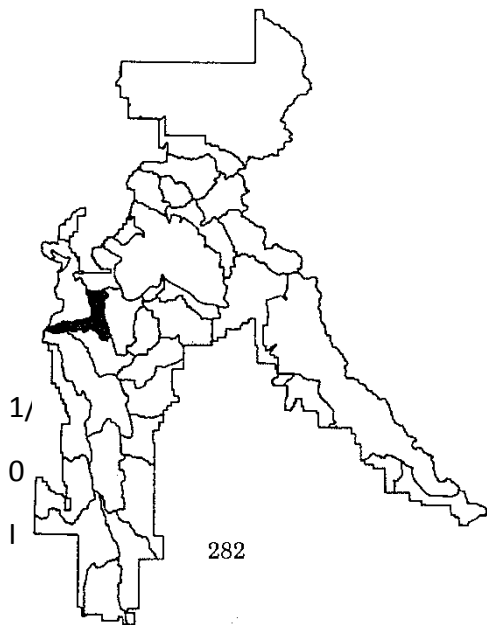
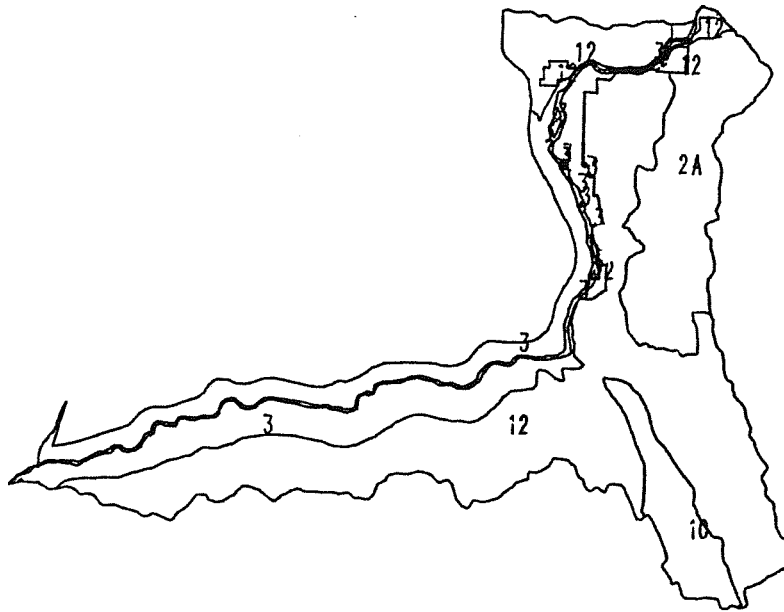
**Lease Stipulation Standard** -Leases in crucial winter ranges will be issued with a No-Surface-Occupancy stipulation.

~~**River Qualities Standard** - Along the Hoback River, the DFC 12 area will be managed to protect values that make it eligible for designation as a Scenic or Recreation River.<sup>76</sup>~~

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<sup>76</sup> Forest Plan Amendment # 2 3/92

Management Area 48 - Snake River Canyon



Community Interest Area 3 -Jackson

Management Area 48 -Snake River Canyon

Location -Located partially in the Teton Division and the in the Bridger Division of the Bridger-Teton National Forest, north of the Greys River and west of the Willow Creek Area.

Special Features - Wyoming Range National Recreation Trail and Snake River.

Desired Future Condition Acreage

Desired Future Condition Acreage

DFC	Acreage
2A	6,500
3	9,200
10	2,500
12	22,000
Total	40,200

Management Area 48 Standards and Guidelines

**Lease Stipulation Standard** -Leases will be issued in moose winter ranges with a Timing-Limitation stipulation. Leases in crucial elk, moose, and deer winter ranges along the Snake and Hoback Rivers and in DFC 2A and 3 areas will be issued with a No-Surface-Occupancy (NSO) stipulation. Surface occupancy or surface disturbance will not be allowed in a designated area surrounding a bald eagle nesting territory. The specific area where the NSO applies will be based upon consultation with the U.S. Fish and Wildlife Service.

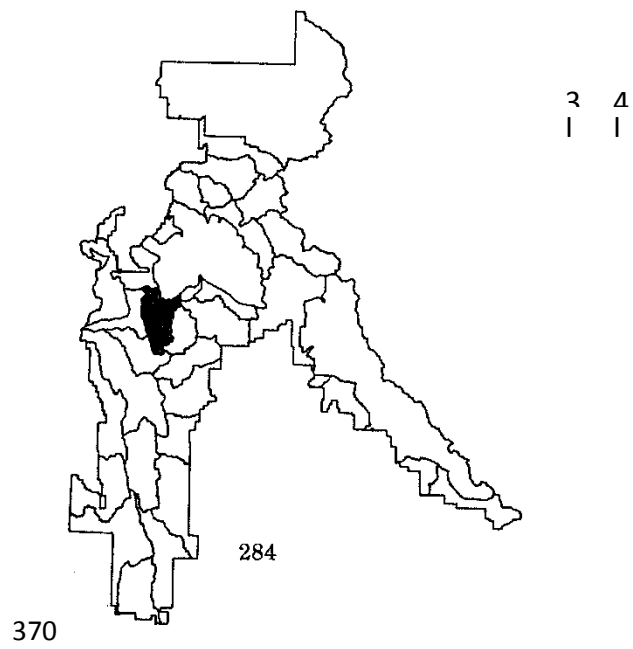
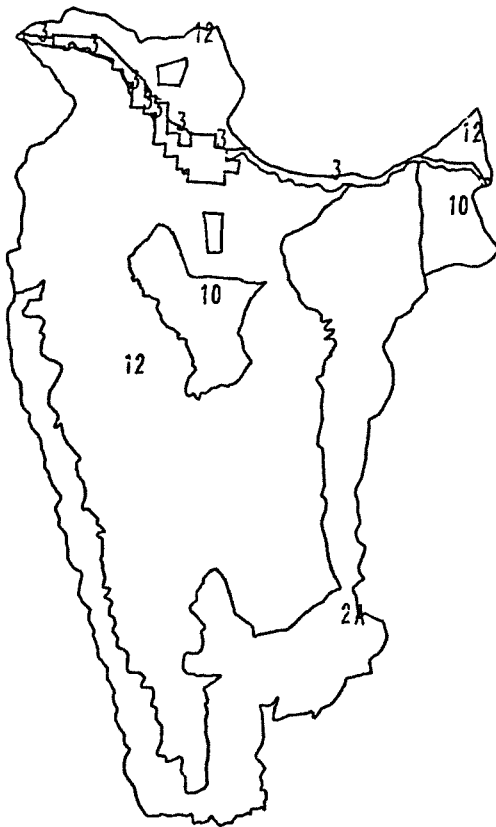
~~**River Qualities Standard** -The Snake River, nominated as a Scenic River, and the lower Hoback River, which has been determined eligible for inclusion in the Wild and Scenic River System, will be managed to protect their scenic and recreational values.<sup>77</sup>~~

<sup>77</sup> Forest Plan Amendment # 2 3/92



Figure 4-33

Management Area 49 - Willow Creek



**Community Interest Area 3 - Jackson**

**Management Area 49 - Willow Creek**

**Location** - Located in the Teton Division of the Bridger-Teton National Forest, south of the Gros Ventre Wilderness and adjacent to the Cliff Creek and Snake River Canyon areas.

**Special Features** - Gates of the Hoback and Wyoming Range National Recreation Trail.

**Desired Future Condition Acreage**

DFC	Acreage
2A	19,100
3	800
9	320 <sup>78</sup>
10	4,600
12	37,380 <sup>79</sup>
Total	62,200

**Management Area 49 Standards and Guidelines**

**Lease Stipulation Standard** -Leases in DFC 2A will be issued with a No-Surface- Occupancy stipulation. Leases will be issued in the crucial winter ranges with a Timing-Limitation stipulation.

Leases will be issued in the Bighorn sheep area identified in the oil and gas leasing analyses for Management Area 49 and Management Areas 22 and 23 with a No-Surface-Occupancy Stipulation.

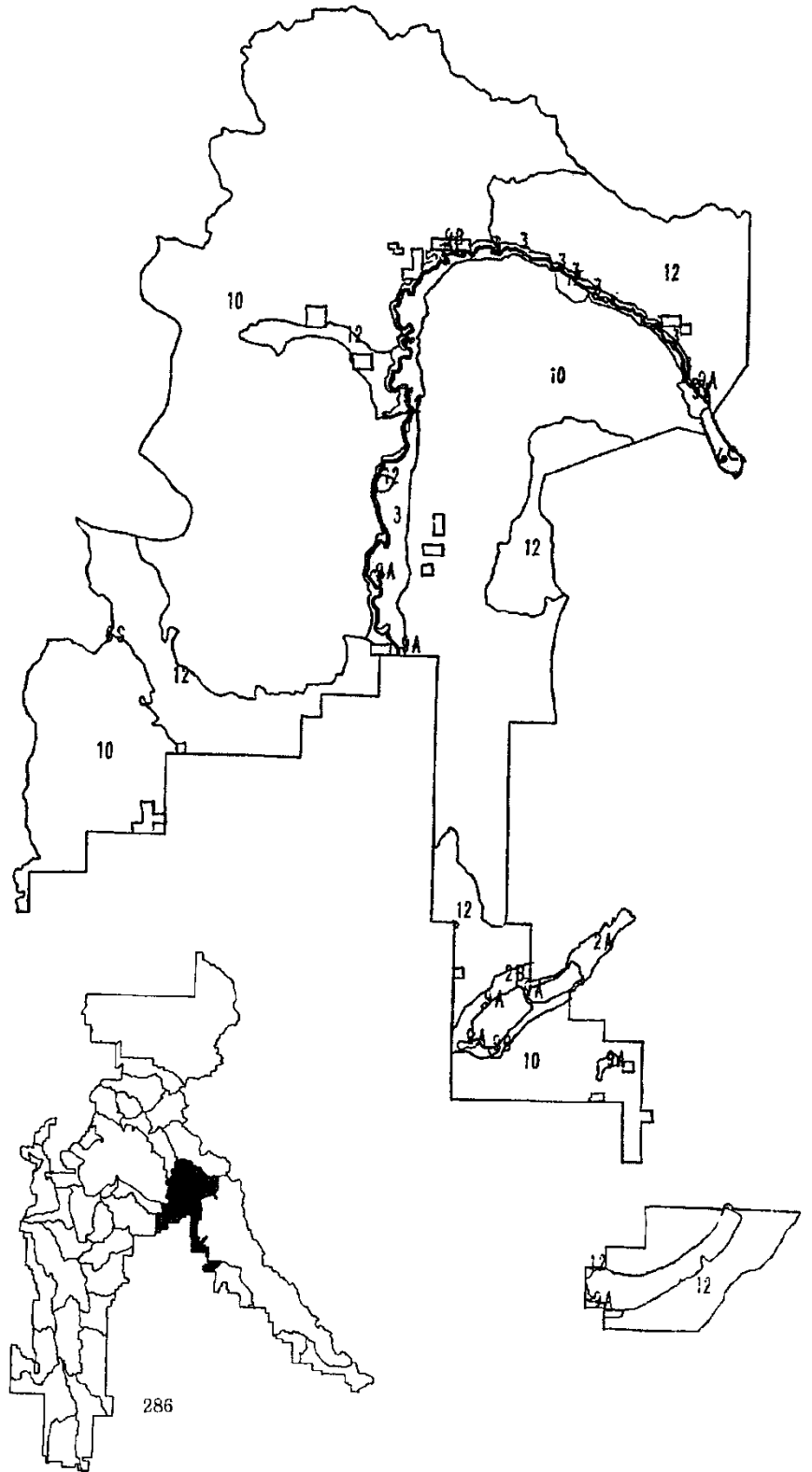
The Gros Ventre Wilderness is withdrawn from leasing. The wilderness area and its boundary, that are not available for leasing, have been identified by legal description in the oil and gas leasing analysis for Management Area 49.<sup>80</sup>

<sup>78</sup> (Amended 4/17/92 by Forest Plan Amendment No .1)

<sup>79</sup> ( Amended 4/17/92 by Forest Plan Amendment No .1)

<sup>80</sup> (Amended 4/17/92 by Forest Plan Amendment No .1)

Management Area 72 - Upper Green River



**Community Interest Area 4 - Pinedale**

**Management Area 72 - Upper Green River**

**Location** - Located in the Bridger-East Division of the Bridger-Teton National Forest, adjacent to the Bridger and the Gros Ventre Wildernesses and south of the Union Pass area.

**Special Features** – Billy Wells Dude Ranch and Kendall Warm Springs **Special Interest Area** <sup>81</sup>

**Desired Future Condition Acreage**

<b>DFC</b>	<b>Acreage</b>
2A	700
2B	1,200
3	4,500
9A	600
9B	30
10	111,200
12	34,300
<b>Total</b>	<b>152,500</b>

**Management Area 72 Standards and Guidelines**

**Lease Standard** -The DFC 2A area at the east end of New Fork Lake will not be available for lease.

**Lease Stipulation Standard** -Leases in the DFC 2B area near New Fork Lake will be issued with a No-Surface-Occupancy stipulation. Leases will be issued in the crucial elk winter range along the Upper Green River with a Timing-Limitation stipulation.

~~**River Qualities Standard** -Along the Upper Green River, the DFC 3 area will be managed to protect values that make it eligible for designation as a Scenic or Recreation River.~~

~~**Union Pass Road Standard** -Base on road surface conditions, site distances, and turning limitations on the present alignment, traffic will be restricted along the 4.3 mile link between the Union Pass Road and the Green River Road to a vehicle length of 40 feet to provide for safe passage of recreational and commercial vehicles. Exceptions will be granted under special use permit for passage of occasional larger vehicles when acceptable safety measures are employed. Closure of the road section to vehicles exceeding 25,000 pounds will be employed during periods when the roadbed is wet to avoid unacceptable impacts to the road surface and resulting stream sedimentation. Stabilization of the roadbed and improvement of drainage will~~

<sup>81</sup> Amendment # 5, April 1999

~~be made to reduce erosion and resultant sedimentation to acceptable levels. For further information, please see Forest-wide Standards and Guidelines for Soil, Water and Air; Riparian Areas, Wetlands, and Floodplains; and Wildlife and Fish.~~

~~The Desired Future Conditions for Management Area 71 require a single Traffic Service Level B or C link road. Closure of adjacent roads will be made to retain the prescribed open road density for the area. The probable future alignment has been determined through a joint study with the surrounding counties and the State of Wyoming. A project Environmental Impact Statement will be prepared using the Standards and Guidelines of the Forest Plan.~~

~~The Final Environmental Impact Statement (FEIS Appendix A discusses the Union Pass issue.<sup>82</sup>~~

~~**Union Pass Road Standard** -Until a new alignment is chosen and developed, the present alignment will be used. Based on road surface conditions, sight distances, and turning limits, traffic will be restricted along the 4.3 mile link between the Union Pass Road and the Green River Road to a vehicle length of 40 feet. Closure of the link to vehicles exceeding 25,000 pounds will be employed year round to mitigate unacceptable effects to the road surface and prevent stream sedimentation. Exceptions will be granted under special-use permit for passage of occasional larger and heavier vehicles when acceptable safety measures are employed and the road surface will allow passage.~~

~~The present standard of the road will not be upgraded. Maintenance will be performed to maintain the current standard and mitigate unacceptable environmental effects. Spot stabilization of the roadbed and Improvement of drainage may be necessary to reduce erosion and sedimentation to acceptable levels. For further information, please see Forest-wide Standards and Guidelines for Soil, Water and Air, Riparian Areas, Wetlands and Floodplains, and Wildlife and Fish.~~

~~Desired Future Conditions for National Forest System lands in Management Area 72 and 71 support the need for a single-access road built to a Traffic Service Level B or C. Needs, location, standards, and jurisdiction of a new facility have been determined jointly with the State of Wyoming and the Council of County Governments in the 1989 Union Pass Road Study, prepared by David Ohde and Associates. Construction or reconstruction will provide an opportunity for closure of adjacent roads in the area. Size or weight restrictions will meet State of Wyoming limits. A project Environmental Impact Statement will be prepared based on Plan direction and the Record of Decision.<sup>83</sup>~~

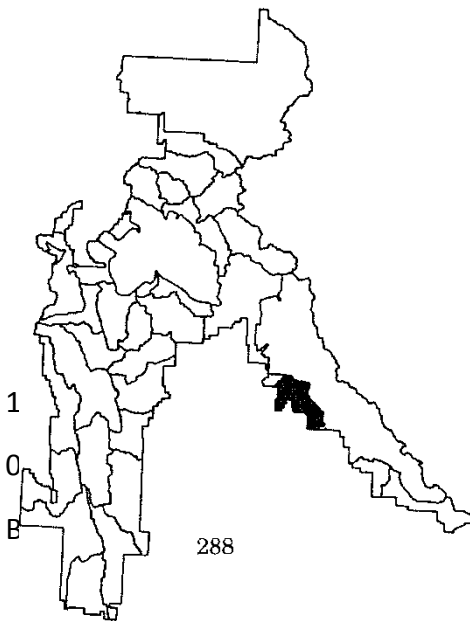
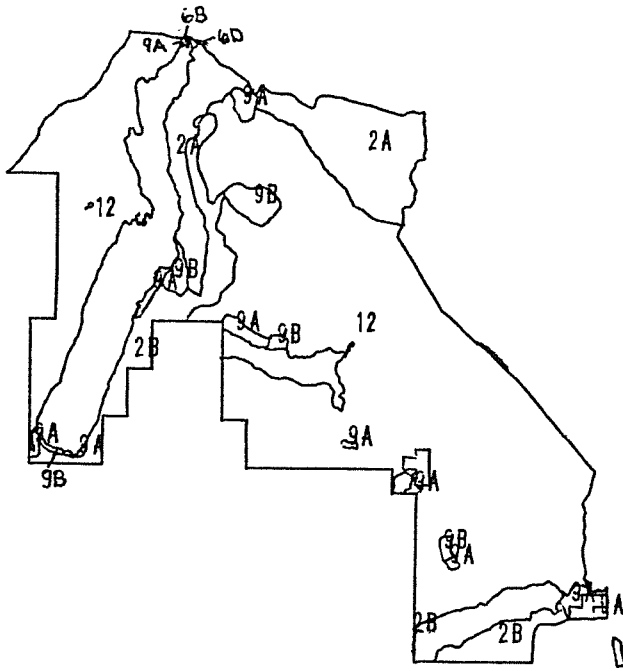
~~**Kendall Warm Springs Withdrawal Standard** -To protect Kendall Warm Springs, 1200 acres will be recommended for withdrawal from all mineral entry.~~

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<sup>82</sup> Forest Plan Amendment # 2 3/92 , and by Attachment One of the Record of Decision

<sup>83</sup> Forest Plan Amendment # 2 3/92 , and by Attachment One of the Record of Decision

**Management Area 73 - Pole Creek**



Community Interest Area 4 -Pinedale

Management Area 73 -Pole Creek

Location -Located in the Bridger-East Division of the Bridger-Teton National Forest, west of the Bridger Wilderness and south of the Upper Green River area.

Special Features - Pinedale Glacial Area National Natural Landmark and Redick-Chambers Lodge National Historical Site.

Desired Future Condition Acreage

Desired Future Condition Acreage

DFC	Acreage
2A	5,100
2B	3,300
3	10
9A	800
9B	800
12	30,300
Total	40,310

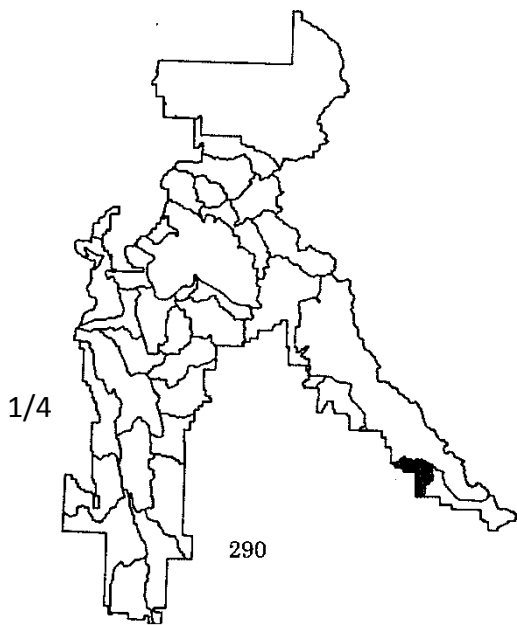
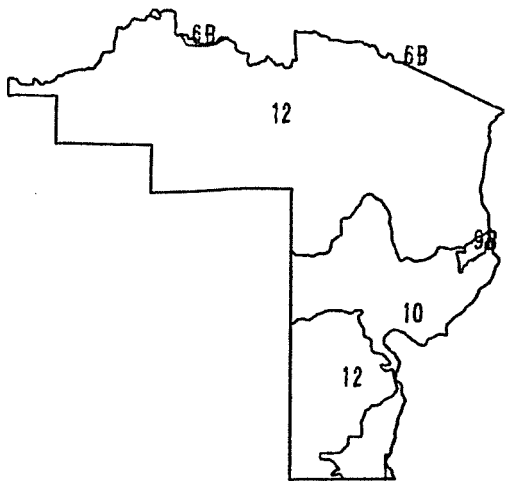
Management Area 73 Standards and Guidelines

Lease Standard -The DFC 2A area around Sweeny Lakes will not be available for lease.

Lease Stipulation Standard -Leases in DFC 9A/B and 2B areas will be issued with a No-Surface-Occupancy stipulation. The DFC 2A/B areas around Fremont Lake will be leased with a No-Surface-Occupancy stipulation. Areas around Fremont, Willow, Half Moon, Burnt, and Boulder Lakes will be leased with either the Fremont Lake stipulation or the Special Lake stipulation. The 2B area on the south shore of Boulder Lake will also be leased as No-Surface-Occupancy. Leases will be issued in crucial elk winter ranges with a Timing-Limitation stipulation.

Figure 4-36

Management Area 74 - East Fork River





Community Interest Area 4 -Pinedale

Management Area 74 -East Fork River

Location -Located in the Bridger East Division of the Bridger-Teton National Forest, west of the Bridger Wilderness and north of the Sweetwater area.

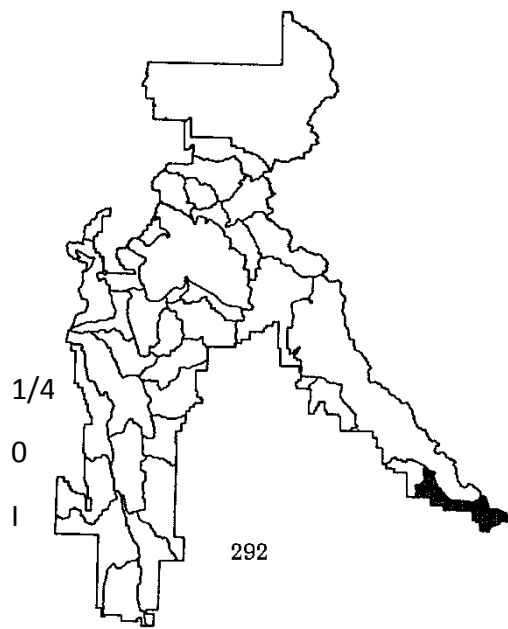
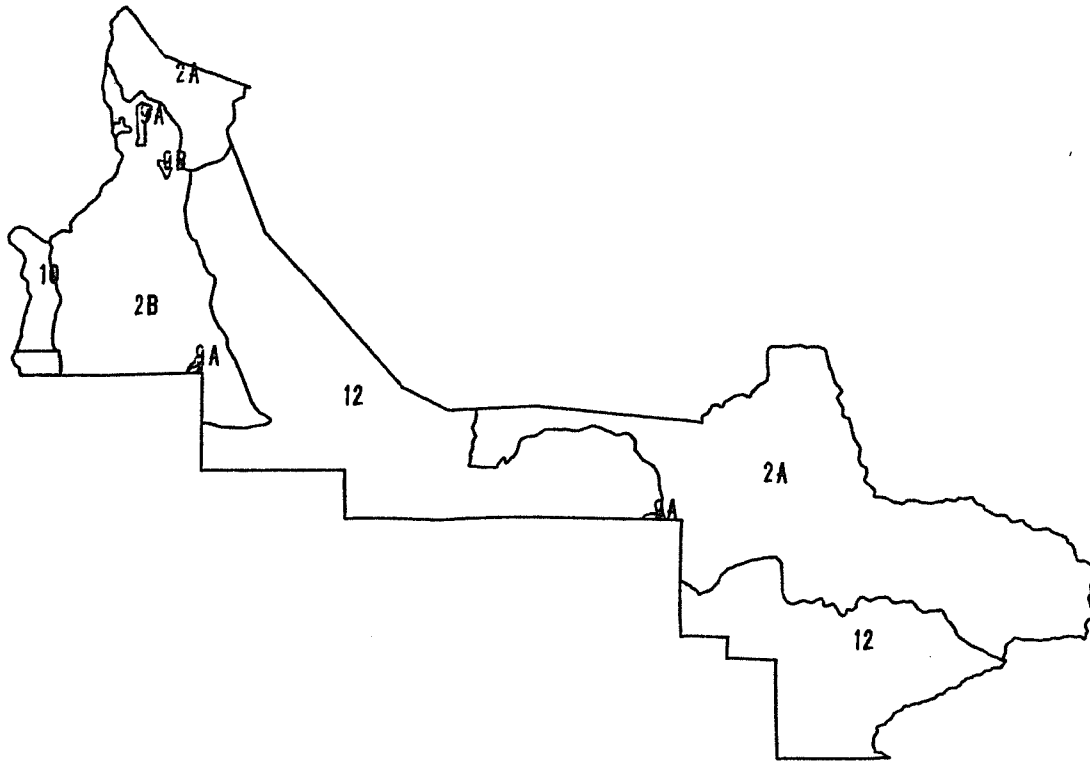
Desired Future Condition Acreage

DFC	Acreage
9B	100
10	5,500
12	21,200
Total	26,800

Management Area 74 Standards and Guidelines

Lease Stipulation Standard - Leases will be issued in crucial elk winter ranges with a Timing-Limitation stipulation.

Management Area 75 - Sweetwater



**Community Interest Area 4 - Pinedale**

**Management Area 75 - Sweetwater**

**Location** -Located in the Bridger-East Division of the Bridger-Teton National Forest, south of the Bridger Wilderness and east of the East Fork River area.

**Desired Future Condition Acreage**

<b>DFC</b>	<b>Acreage</b>
2A	22,500
2B	9,700
9A	200
9B	30
10	1,100
12	26,200
<b>Total</b>	<b>59,730</b>

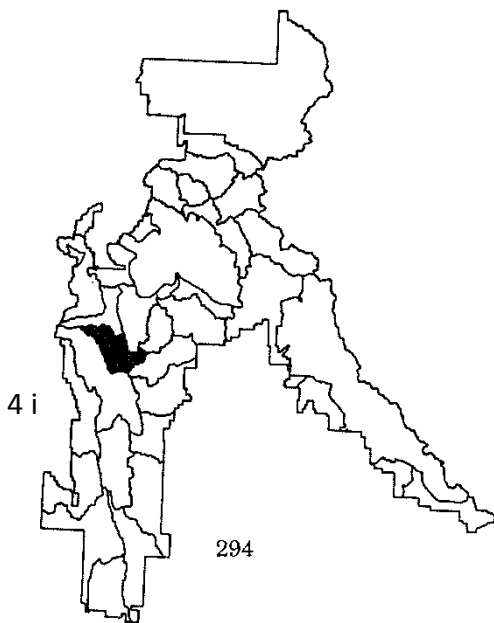
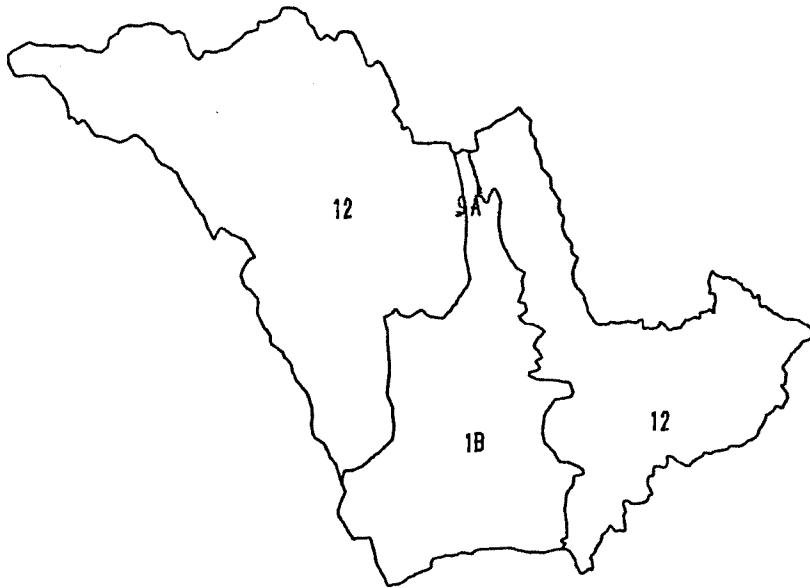
**Management Area 75 Standards and Guidelines**

**Lease Standard** -The DFC 2A areas at the head of Big Sandy and the south end of the Wind River Range will not be available for lease. The DFC 2A area west of Pool Creek, however, will be leased with a No-Surface-Occupancy stipulation.

**Visual Quality Standard** -The scenic and recreational values of the 2B areas along Big Sandy Creek will be protected by meeting a Visual Quality Objective of Retention in the foreground and middle ground relative to the creek and road.

Figure 4-38

Management Area 31 - Little Greys River



Community Interest Area 5 –Greys River

Management Area 31-Little Greys River

Locations - Located in the Bridger West Division of the Bridger-Teton National Forest, south of the Snake River Canyon area and north of the Greys River area.

Special Features -Wyoming Range National Recreation Trail.

Desired Future Condition Acreage

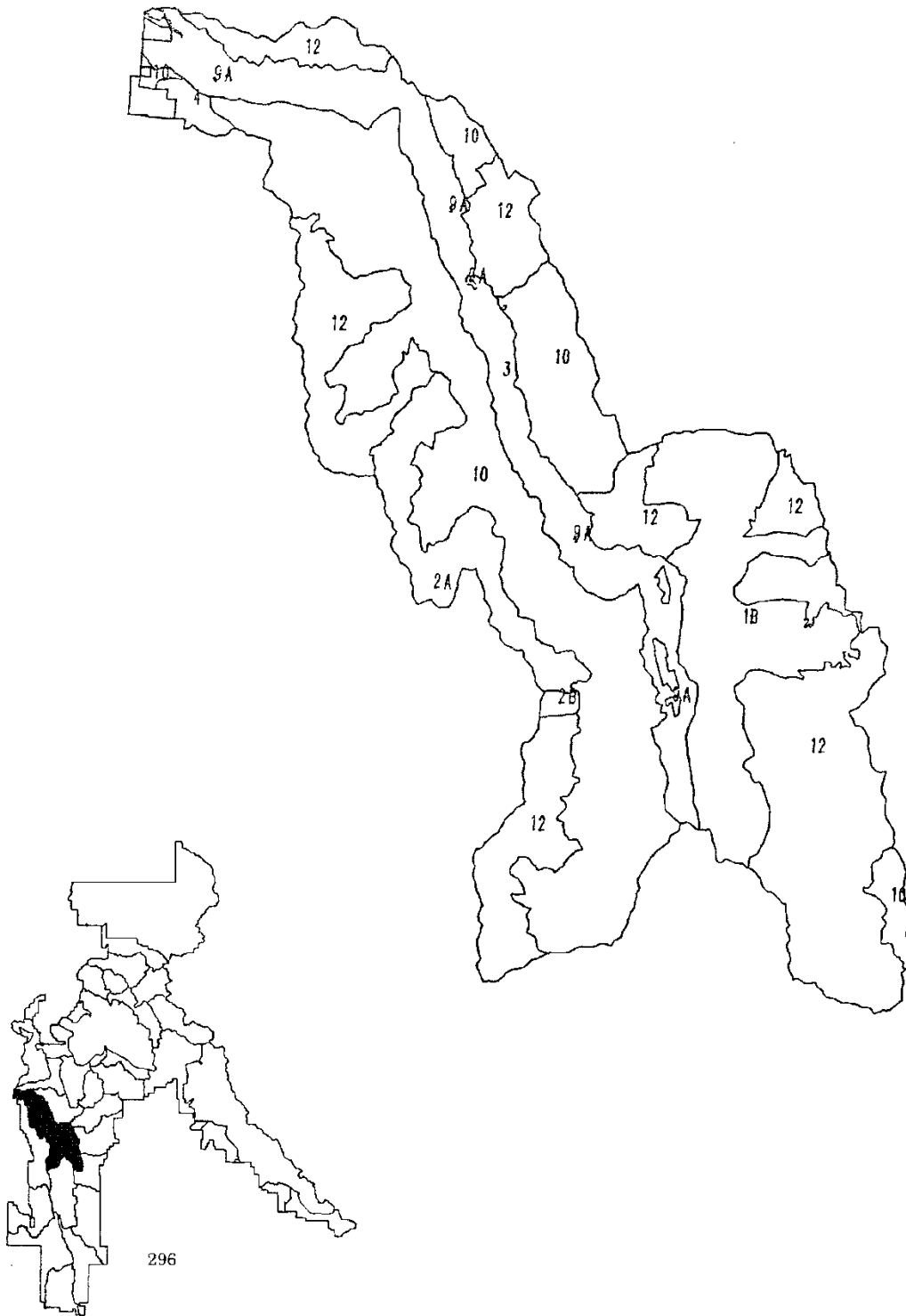
DFC	Acreage
1B	13,900
9A	3
12	40,000
Total	53,903

Management Area 31 Standards and Guidelines

Lease Stipulation Standard -Leases will be issued in the crucial elk winter ranges in the DFC 12 area with a Timing-Limitation stipulation.

Figure 4-39

Management Area 32 -Lower Greys River



**Community Interest Area 5 - Greys River**

Management Area 32 - Lower Greys River

**Lease Standard**- DFC 4 and the DFC 10 located northwest of the DFC 4 area are not available for lease<sup>84</sup>

**Location** - Located in the Bridger West Division of the Bridger-Teton National Forest, adjacent to the Star Valley and Horse Creek areas.

**Special Features** - Little Greys River Anticline and Wyoming Range National Recreation Trail.

**Desired Future Condition Acreage**

DFC	Acreage
1B	18,300
2A	7,900
2B	400
3	18,700
4	1,000
10	49,400
12	46,600
Total	142,400

**Management Area 32 Standards and Guidelines**

**Lease Stipulation Standard** -Areas within 0.5 mile of the crests of the Salt River and Wyoming Ranges will be issued with a No-Surface-Occupancy stipulation. Leases will be issued in the DFC 10, 12, and 1B areas in crucial elk winter range with a Timing- Limitation stipulation. The DFC 2A areas west of the Absaroka Fault in the Salt River Crest will be leased with a No-Surface-Occupancy stipulation.

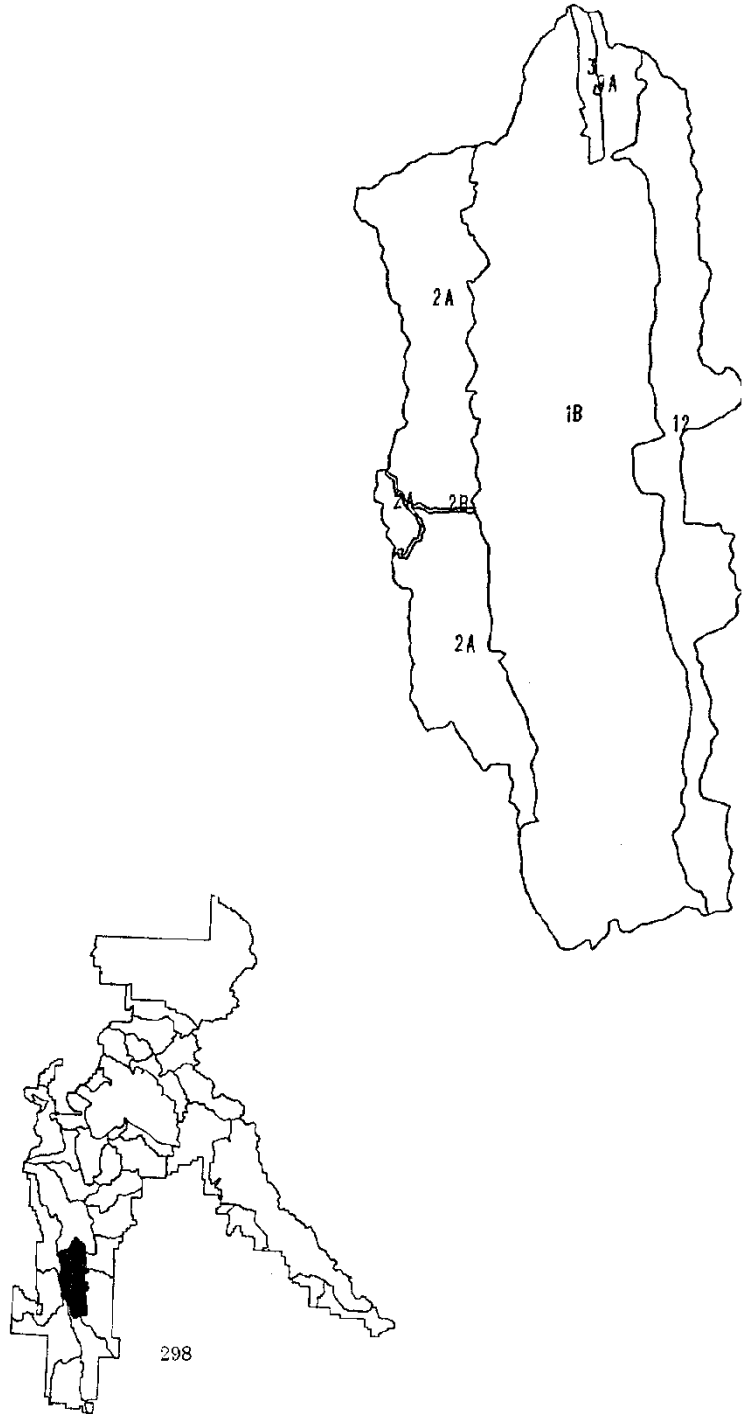
**Visual Quality Standard** -The DFC 3 areas will be managed under a Visual Quality Objective of Retention in the foreground and Partial Retention in the middle ground.

~~**River Qualities Standard** -The Greys River will be managed to protect scenic and recreational values that make it eligible for inclusion in the Wild and Scenic River System.<sup>85</sup>~~

<sup>84</sup> Forest Plan Amendment # 2 3/92 , and by Attachment One of the Record of Decision

<sup>85</sup> Forest Plan Amendment # 2 3/92 , and by Attachment One of the Record of Decision

**Management Area 35 - Upper Greys River**





**Community Interest Area 5 - Greys River**

**Management Area 35 - Upper Greys River**

**Location** -Located in the Bridger West Division of the Bridger-Teton National Forest, adjacent to the Star Valley area and the Cottonwood Creek and Piney Creek areas.

**Special Features** -Wyoming Range National Recreation Trail.

**Desired Future Condition Acreage**

DFC	Acreage
1B	55,700
2A	20,600
2B	300
3	1,000
9A	20
12	14,700
Total	92,320

**Management Area 35 Standards and Guidelines**

**Lease Standard** -The DFC 2A areas will not be available for lease.

**Lease Stipulation Standard** -Leases in areas within 0.5 mile of the crests of the Salt River and Wyoming Ranges will be issued with a No-Surface-Occupancy stipulation. Leases will be issued in the crucial winter ranges with a Timing- Limitation stipulation.

Leases in the Forest Park elk feed ground area will be issued with a No-Surface Occupancy Stipulation, as shown in Appendix C of the oil and gas leasing analysis for Management Area 35. This stipulation will apply to approximately 1,100 acres.

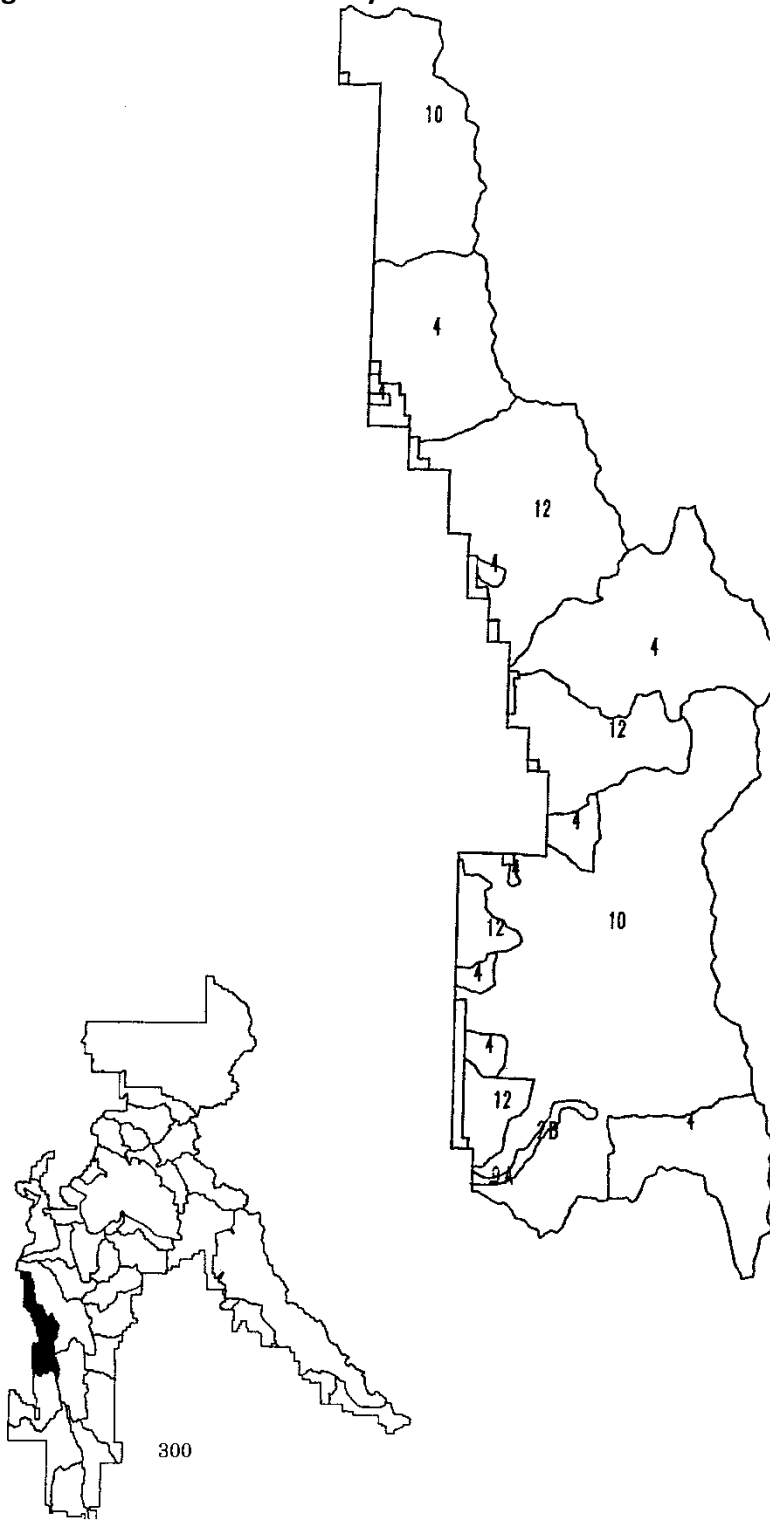
Leases in the Periodic Spring recharge area will be issued with a No-Surface Occupancy Stipulation, as shown in Appendix B of the oil and gas leasing analysis for Management Area 35. This stipulation will apply to approximately 1,380 acres.<sup>86</sup>

**Visual Quality Standard** -The Greys River and Greys River Road will be managed under a Visual Quality Objective of Retention in the foreground and Partial Retention in the middle ground.

<sup>86</sup> (Amended 8/5/93 by a Decision Notice)

Figure 4-41

Management Area 33 - Star Valley North



**Community Interest Area 6 -Afton Front**

**Management Area 33 - Star Valley North**

**Location** - Located in the Bridger We.st Division of the Bridger-Teton National Forest, west of the Greys River area.

**Special Features** - Periodic Spring Geological Area National Natural Landmark, Swift Creek ~~Proposed~~<sup>87</sup> Research Natural Area, and Afton Front ~~Proposed~~<sup>88</sup>-Research Natural Area.

**Desired Future Condition Acreage**

<b>DFC</b>	<b>Acreage</b>
2B	500
4	24,900
10	38,200
12	18,300
Total	81,900

**Management Area 33 Standards and Guidelines**

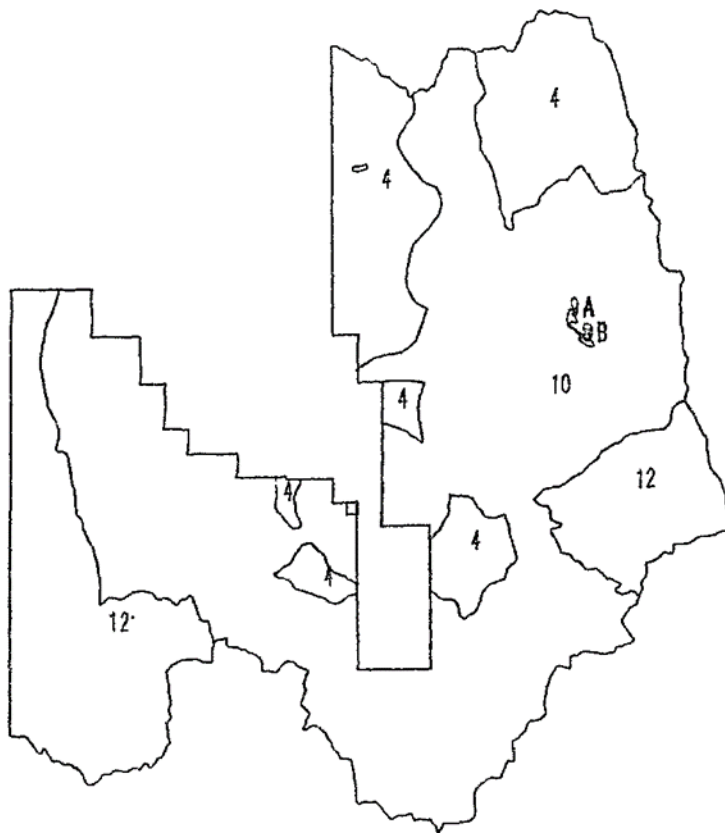
**Lease Standard** -A portion of the DFC 4 area at Periodic Spring to be determined by further study of protection needs is to be withdrawn and unavailable for lease.

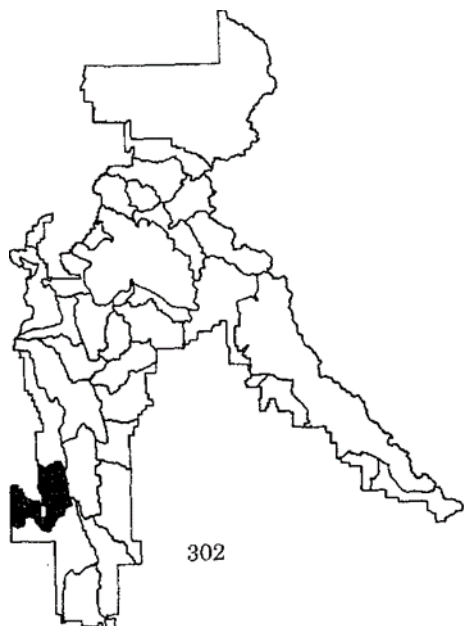
**Lease Stipulation Standard** -Leases in the crucial winter ranges and DFC 4 areas along the Afton Front will be issued with a No-Surface-Occupancy stipulation.

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<sup>87</sup> Amendment # 5, April 1999

<sup>88</sup> Amendment # 5, April 1999





**Community Interest Area 6 -Afton Front**

[Management Area 34 - Star Valley South](#)

**Location** - Located in the Bridger-West Division of the Bridger-Teton National Forest, west of the Greys River area and north of the Smiths Forks area.

**Desired Future Condition Acreage**

DFC	Acreage
4	16,300
9A	40
9B	20
10	52,900
12	18,100
Total	68,360

**Management Area 34 Standards and Guidelines**

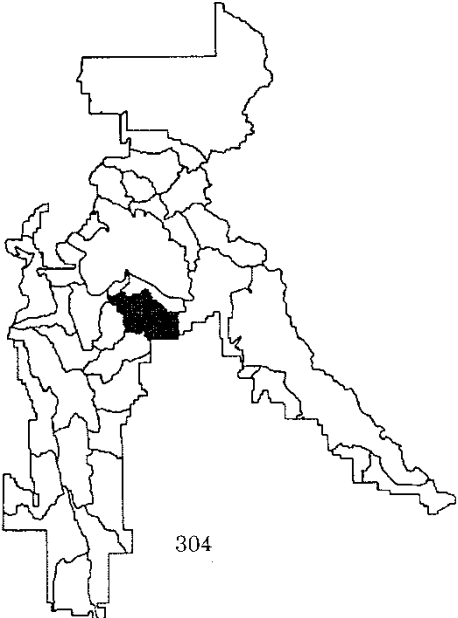
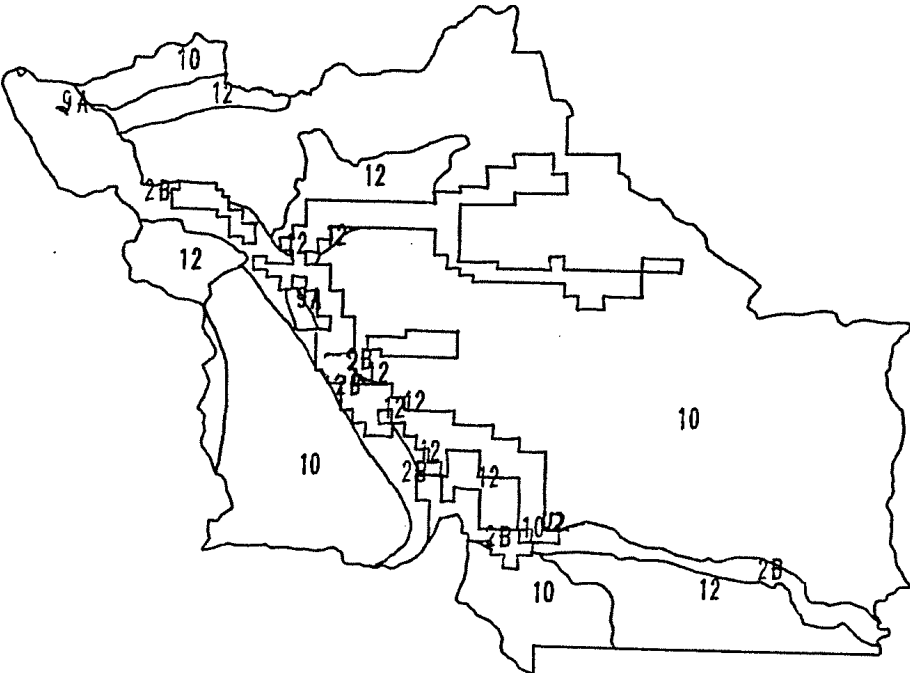
**Lease Stipulation Standard** -Leases in the crucial winter ranges and DFC 4 areas along the Afton Front will be issued with No-Surface-Occupancy. Leases will be issued in the remaining crucial elk winter range with a Timing- Limitation stipulation.

Leases within the designated corridor along the Lander Trail (1/4 mile on either side of the Trail, or the visual horizon, whichever is less), will be issued with the Lease Notice - Lander Trail where the Trail has been modified substantially from its original appearance, and with the No-Surface Occupancy Stipulation – Lander Trail where the Trail has not been modified substantially from its original appearance. The purpose is to protect the many pioneer graves, tree engravings, and campsites which may be adjacent to the Trail, and to protect the scenic and historic values of the Trail.<sup>89</sup>

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<sup>89</sup> (Amended 6/7/91 by a Decision Notice and 4/15/92 by a supplemental Decision Notice)

Management Area 21 - Hoback Basin



1/4 inch = 1 mile

**Community Interest Area 7 - Big Piney**

**Management Area 21 - Hoback Basin**

**Location** -Located in the Bridger West Division of the Bridger-Teton National Forest, south of the Union Pass area and east of the Cliff Creek and Upper Hoback areas.

**Desired Future Condition Acreage**

DFC	Acreage
2B	6,600
9A	200
10	55,000
12	10,600
Total	72,400

**Management Area 21 Standards and Guidelines**

~~**River Qualities Standard** - Along the Hoback River, the DFC 2B and 12 areas will be managed to protect values that make them eligible for designation as a Scenic or Recreation River.<sup>90</sup>~~

**Lease Stipulation Standard** - Leases in the Raspberry Ridge crucial elk winter range will be issued with a Timing-Limitation stipulation and a requirement for off-site production facilities.

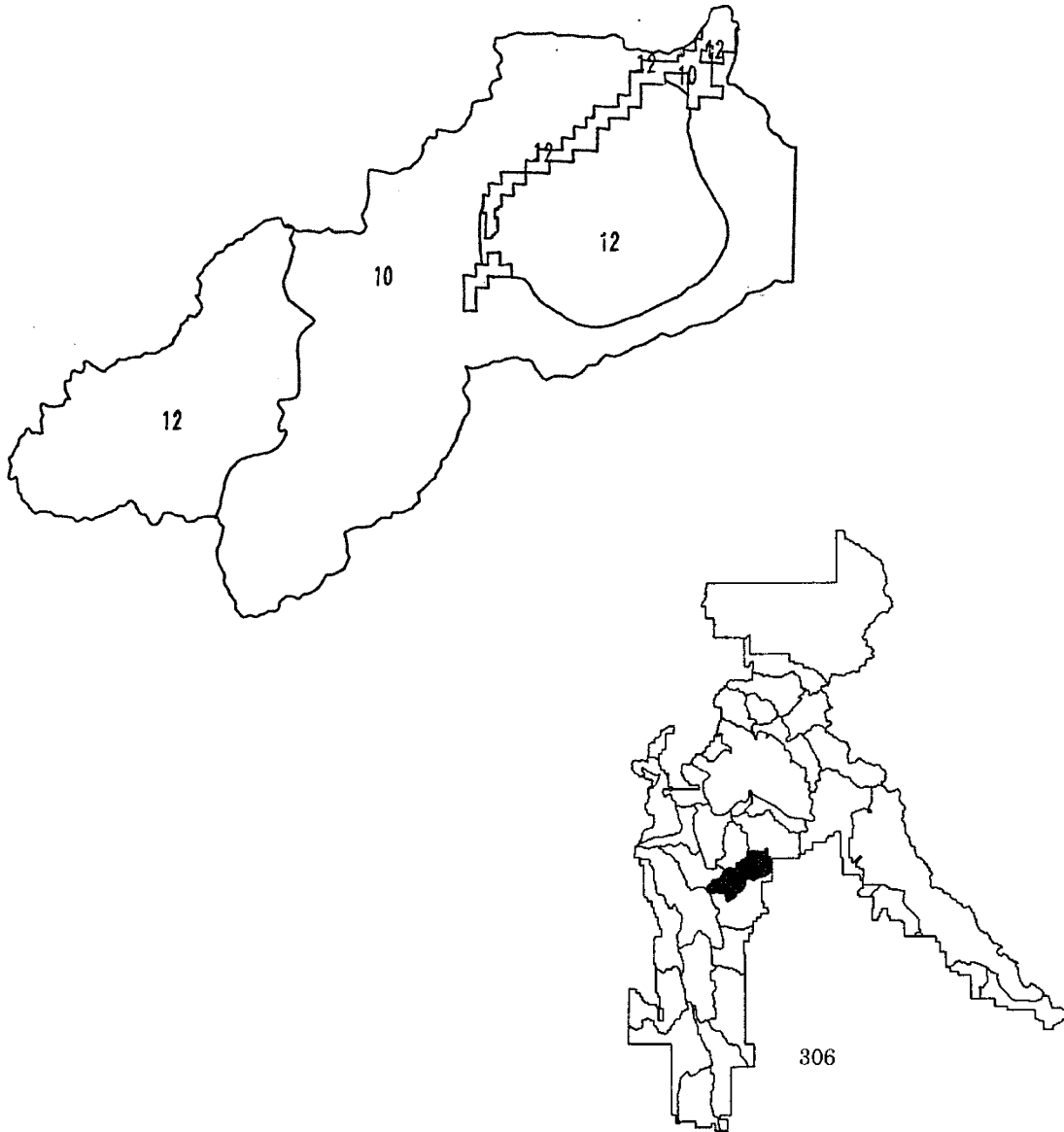
**Visual Quality Standard** - The foreground zone relative to the Hoback River and U.S. 191 will be managed to meet a Visual Quality Objective of Retention. Middle ground and background zones will be managed to meet Partial Retention.

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<sup>90</sup> Forest Plan Amendment # 2 3/92 , and by Attachment One of the Record of Decision



**Management Area 23 - Upper Hoback**



**Community Interest Area 7 - Big Piney**

**Management Area 23 - Upper Hoback**

**Location** - Located in the Bridger-West Division of the Bridger-Teton National Forest, south of the Hoback Basin area and north of the Horse Creek area.

**Special Features** -Wyoming Range National Recreation Trail.

**Desired Future Condition Acreage**

DFC	Acreage
10	34,300
12	24,700
Total	59,000

**Management Area 23 Standards and Guidelines**

**Lease Stipulation Standard** -Leases within 0.5 mile of the Wyoming Range Crest will be issued with a No-Surface-Occupancy stipulation.

Leases in the Bighorn sheep area Identified in the oil and gas leasing analysis for Management Areas 22 and 23 will be issued with a No-Surface Occupancy Stipulation.

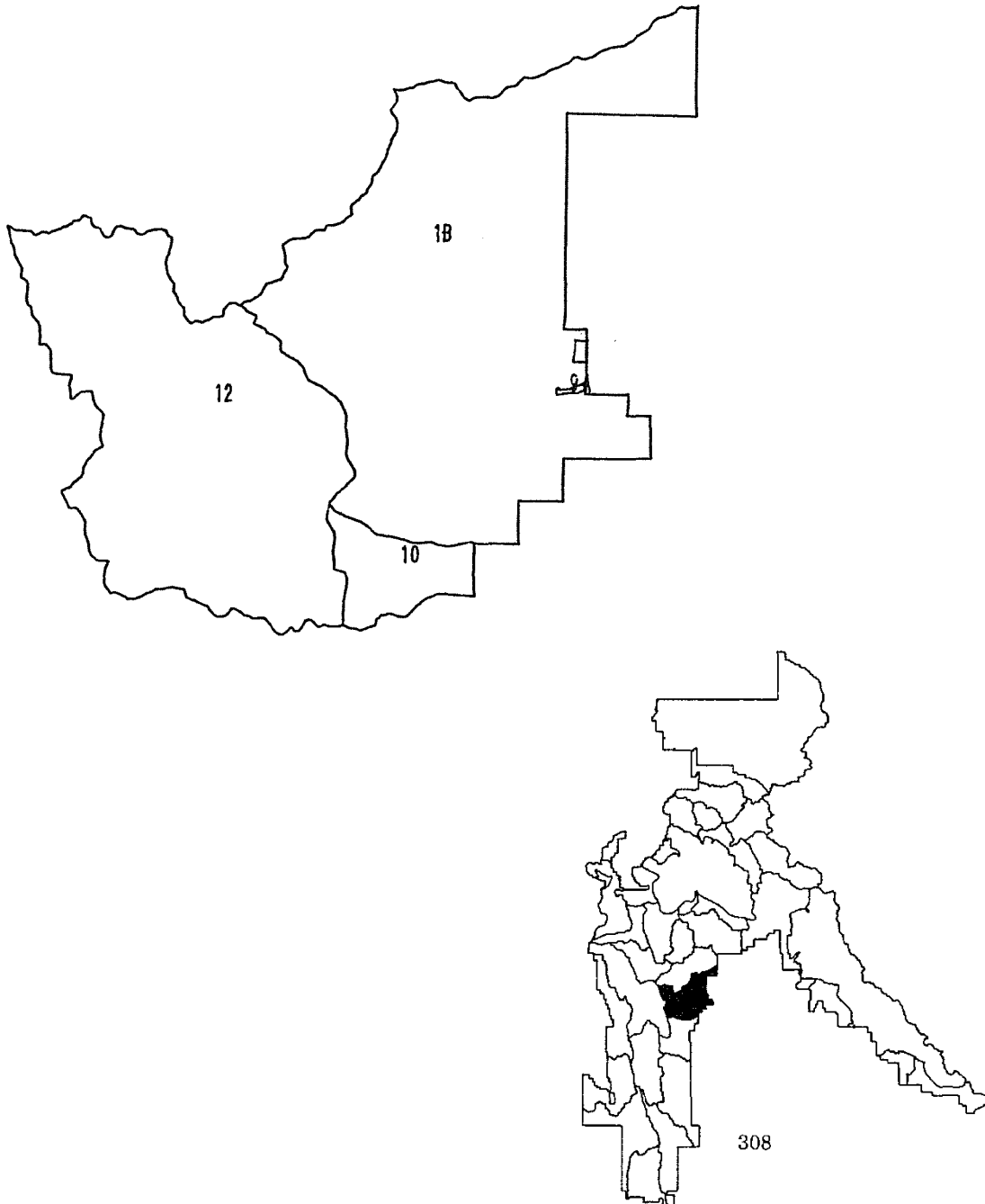
Leases in the vicinity of the elk feedground area Identified in the oil and gas leasing analysis for Management areas 22 and 23 will be issued with a No-Surface-Occupancy Stipulation<sup>91</sup>

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<sup>91</sup> (Amended 02/25/92 by a Decision Notice)

Figure 4-45

Management Area 24 - Horse Creek



**Community Interest Area 7 -Big Piney**

**Management Area 24 -Horse Creek**

Location - Located in the Bridger-West Division of the Bridger-Teton National Forest, south of the Upper Hoback area and east of the Greys River area.

Special Features -Wyoming Range National Recreation Trail.

Desired Future Condition Acreage

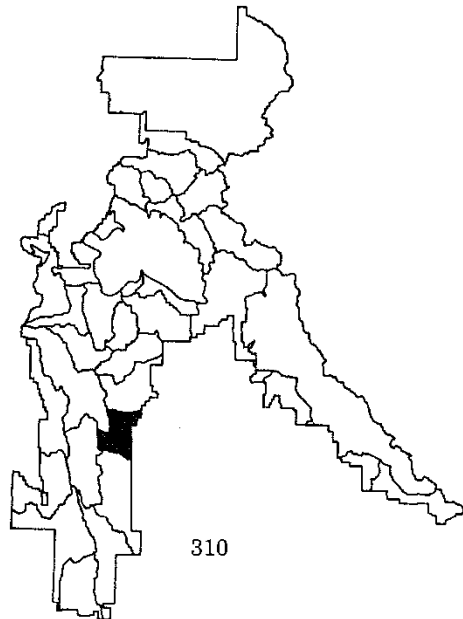
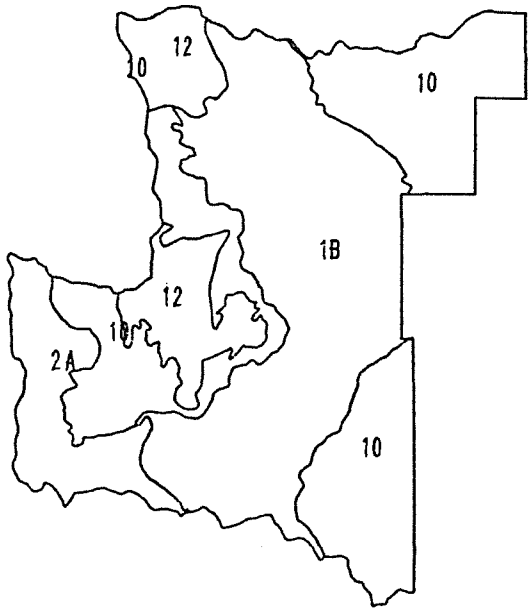
DFC	Acreage
1B	40,700
10	3,500
12	29,600
Total	73,800

Management Area 24 Standards and Guidelines

Lease Stipulation Standard -Leases within 0.5 mile of the Wyoming Range Crest will be issued with a No-Surface-Occupancy stipulation.

Figure 4-46

Management Area 25 - Cottonwood Creek



**Community Interest Area 7 - Big Piney**

**Management Area 25 - Cottonwood Creek**

**Location** - Located in the Bridger-West Division of the Bridger-Teton National Forest, east of the Greys River area and south of the Horse Creek area.

**Special Features** -Wyoming Range National Recreation Trail

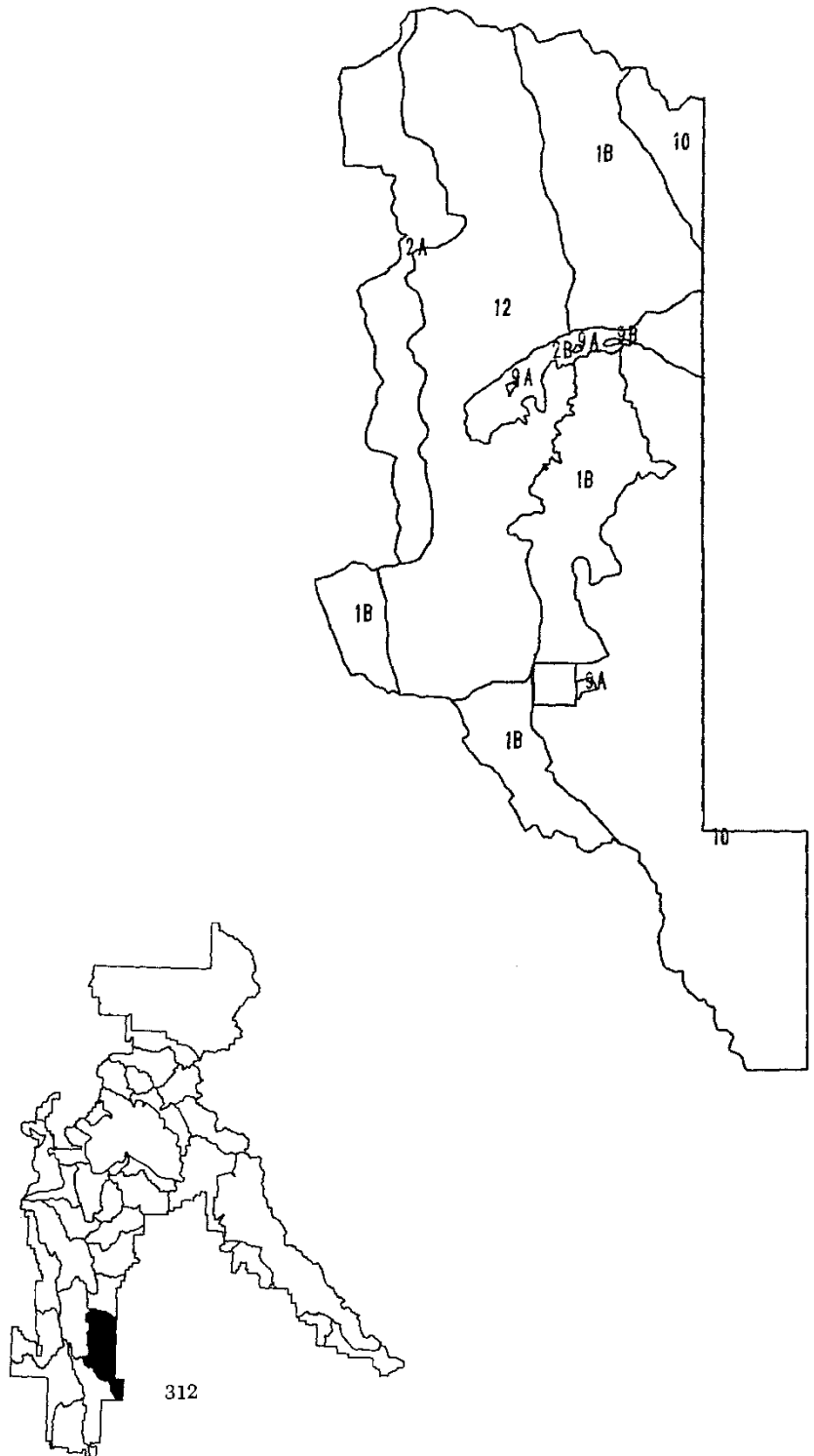
**Desired Future Condition Acreage**

<b>DFC</b>	<b>Acreage</b>
1B	19,600
2A	4,900
10	18,200
12	5,800
<b>Total</b>	<b>48,500</b>

**Management Area 25 Standards and Guidelines**

**Lease Stipulation Standard** -In the DFC 2A area along the crest of the Wyoming Range, leases will be issued with a No-Surface-Occupancy stipulation; leases within 0.5 mile of the Wyoming Range Crest will be issued with a No-Surface-Occupancy stipulation.

**Management Area 26 - Piney Creeks**



**Community Interest Area 7 - Big Piney**

**Management Area 26 - Piney Creeks**

**Location** - Located in the Bridger-West Division of the Bridger-Teton National Forest, south of the Cottonwood Creek area and north of the LaBarge Creek area.

**Special Features** -Wyoming Range National Recreation Trail and Lander Cut-Off of the Oregon Trail.

<b>DFC</b>	<b>Acreage</b>
1B	25,700
2A	8,900
2B	3,400
10	32,100
12	30,000
Total	100,200

**Management Area 26 Standards and Guidelines**

**Lease Stipulation Standard** -Leases in DFC 2A and in the bighorn sheep area will be issued with a No-Surface-Occupancy stipulation.

Leases within the designated corridor along the Lander Trail (1 /4 mile on either side of the Trail, or the visual horizon, whichever is less), where the Lander Trail has not been modified substantially from its original appearance, will be Issued with the Lease Notice Stipulation - Lander Trail - No-Surface Occupancy. Where the area has been modified substantially from its original appearance the leases will be issued with the Lease Notice - Lander Trail. The purpose is to protect the many pioneer graves, tree engravings, and campsites which may be adjacent to the Trail, and to protect the scenic and historic values of the Trail.<sup>92</sup>

**Visual Quality Standard** - In DFC 2B areas along Middle Piney Creek a Visual Quality Objective of Retention will be applied to foreground and middle ground zones, relative to the road.

**Coordination Standard** - Sensitivity will be shown towards the documented management needs of the "Area of Critical Environmental Concern" in the Pinedale Resource Area of the Bureau of Land Management

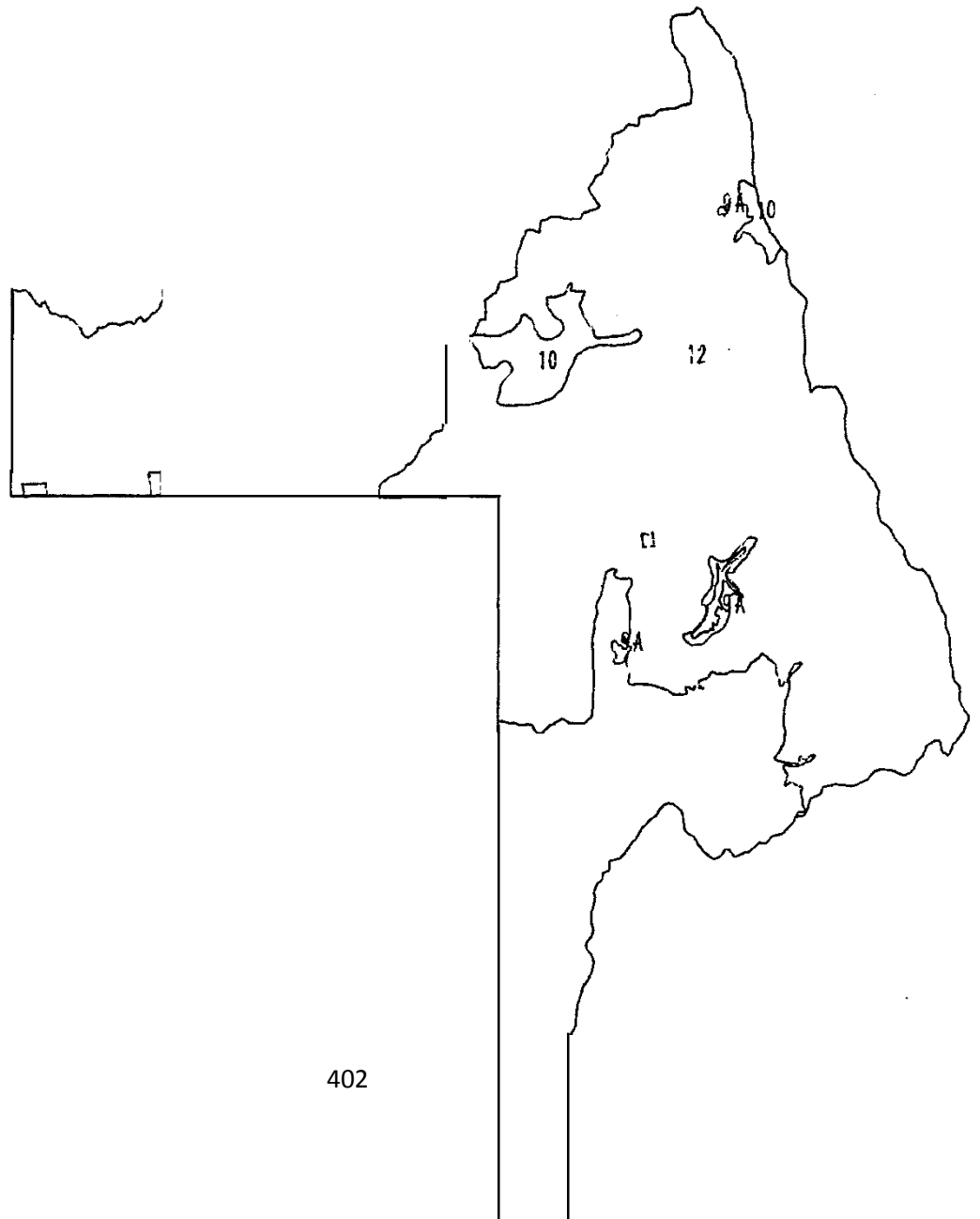
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<sup>92</sup> (Amended 6/7/91 by a Decision Notice and 4/15/92 by a Supplemental Decision Notice)



**Figure 4-48**

**Management Area 11 - Smiths Forks**





Community Interest Area 8 -Kemmerer

[Management Area 11-Smiths Forks](#)

Location - Located in the Bridger-West Division of the Bridger-Teton National Forest, south of the Star Valley area and west of the LaBarge Creek area.

Special Features -Lander Cut-Off of the Oregon Trail.

Desired Future Condition Acreage

DFC	Acreage
9A	800
10	54,600
12	63,300
<b>Total</b>	<b>118,700</b>

## Management Area 11 Standards and Guidelines

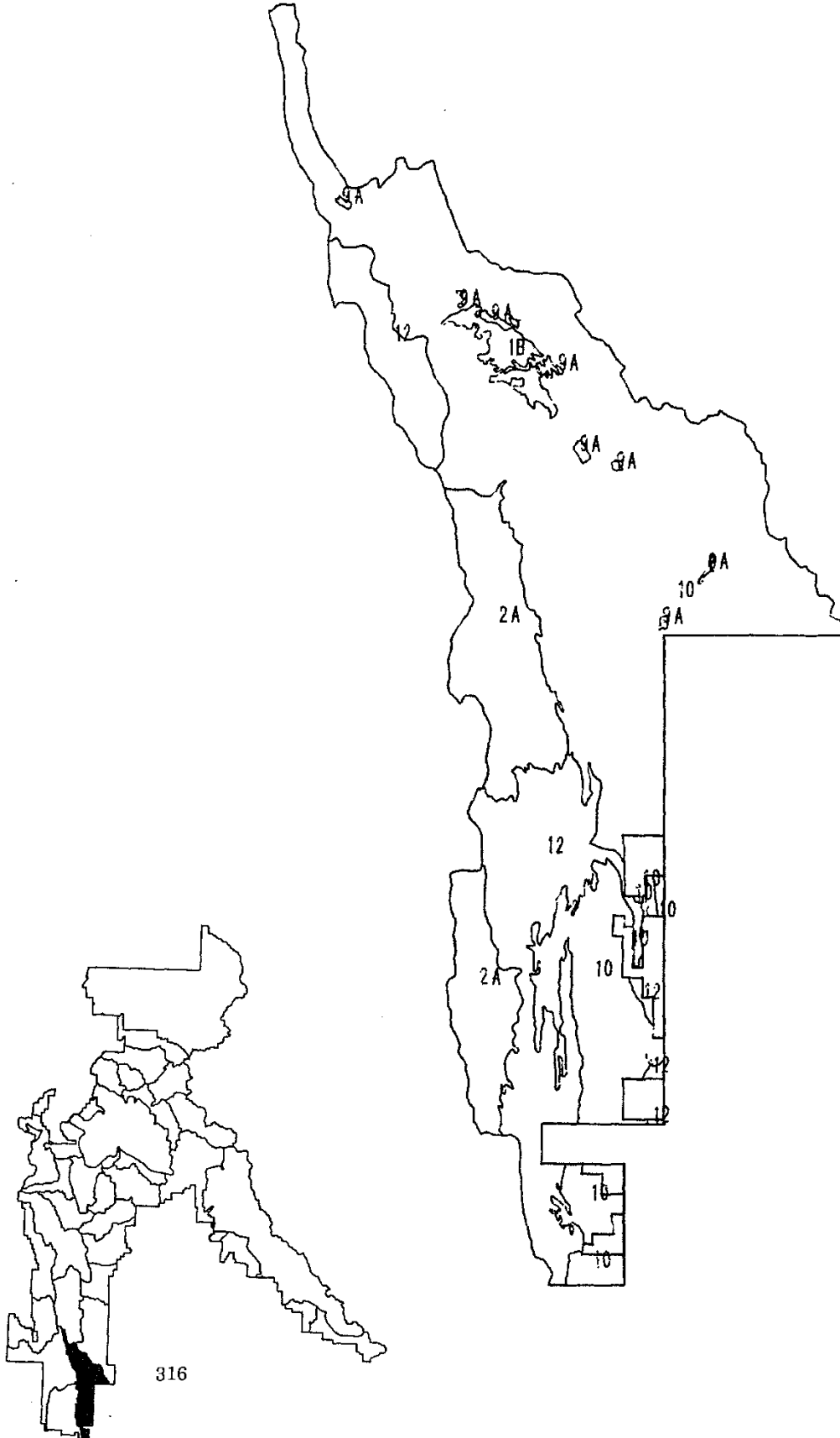
Lease Stipulation Standard -Leases will be issued in the crucial elk winter ranges with a Timing-Limitation stipulation. Leases in the DFC 12 area within 1mile of the crest along Commissary Ridge will be issued with a No-Surface-Occupancy stipulation.

Leases within the designated corridor along the Lander Trail (1 /4 mile on either side of the Trail, or the visual horizon, whichever is less), where the Lander Trail has not been modified substantially from its original appearance, will be issued with the Lease Notice Stipulation - Lander Trail - No-Surface Occupancy. Where the area has been modified substantially from its original appearance the leases will be issued with the Lease Notice - Lander Trail. The purpose is to protect the many pioneer graves, tree engravings, and campsites which may be adjacent to the Trail, and to protect the scenic and historic values of the Trail.<sup>93</sup>

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<sup>93</sup> (Amended 6/7/91 by a Decision Notice and 4/15/92 by a Supplemental Decision Notice)

Management Area 12 - LaBarge Creek



**Community Interest Area 8 - Kemmerer**

**Management Area 13 -Hams Fork**

Location - Located in the Bridger-West Division of the Bridger-Teton National Forest, west of LaBarge Creek and south of the Smiths Forks area.

Desired Future Condition Acreage

DFC	Acreage
1B	6,500
2A	8,600
9A	300
10	55,500
12	1,600
<b>Total</b>	<b>72,500</b>

Management Area 13 Standards and Guidelines

Lease Standard -The DFC 2A areas will not be available for lease.

Lease Stipulation Standard -Leases in the crucial elk winter range on Tunp Ridge will be issued with a requirement for off-site production facilities. Leases will be issued in the remaining crucial elk winter range with a Timing-Limitation stipulation.

All lands in DFC 12 within 1 mile of the crest of Commissary Ridge will be leased with a No Surface Occupancy Stipulation.<sup>94</sup>

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<sup>94</sup> (Amended 6/7/91 by a Decision Notice and 4/15/92 by a Supplemental Decision Notice)

Management Area 12 - LaBarge Creek

**Location** - Located in the Bridger-West Division of the Bridger-Teton National Forest, east of the Smiths Forks area and south of the Piney Creeks area.

**Special Features** -Lander Cut-Off of the Oregon Trail, **Big Fall Creek Special Interest Area**<sup>95</sup>.

**Desired Future Condition Acreage**

DFC	Acreage
1B	1,400
2A	12,800
9A	400
10	57,500
12	17,200
Total	89,300

**Management Area 12 Standards and Guidelines**

**Lease Standard** -The DFC 2A area on Commissary Ridge will not be available for lease.

**Lease Stipulation Standard** -Leases in the crucial elk winter range on Mahogany Ridge will be issued with a No-Surface-Occupancy stipulation. In addition, leases will be issued in the crucial elk winter ranges with a Timing-Limitation stipulation.

Leases within the designated corridor along the Lander Trail (1/4 mile on either side of the Trail, or the visual horizon, whichever is less), where the Lander Trail has not been modified substantially from its original appearance, will be issued with the Lease Notice Stipulation - Lander Trail - No-Surface Occupancy. Where the area has been modified substantially from its original appearance the leases will be issued with the Lease Notice - Lander Trail. The purpose is to protect the many pioneer graves, tree engravings, and campsites which may be adjacent to the Trail, and to protect the scenic and historic values of the Trail. This guidance is documented in the oil and gas leasing analysis for Management Area 12.

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<sup>95</sup> Amendment # 5, April 1999

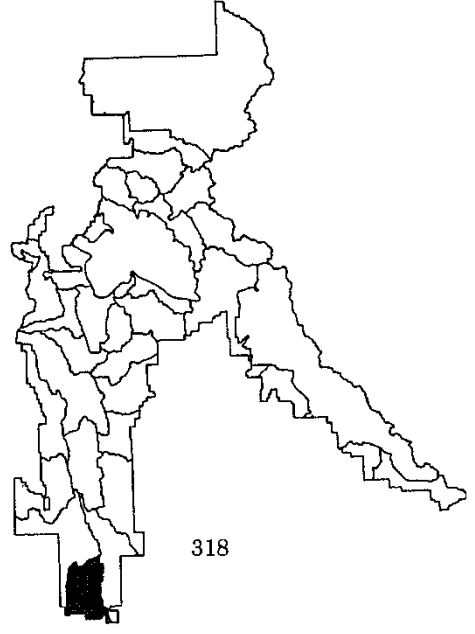
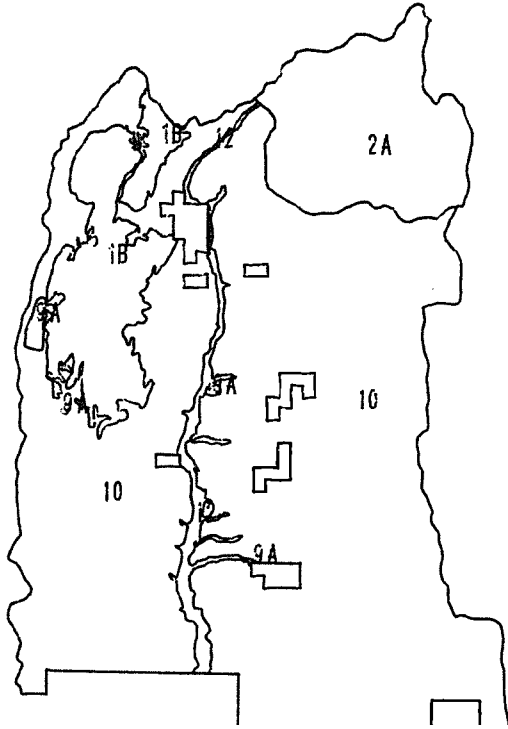
Leases will be issued within designated old growth stands with the Lease Notice - Old Growth Stands, 11 documented in the oil and gas leasing analysis for Management Area 12. The purpose is to protect attributes of designated old growth spruce/fir and/or Douglas fir habitats.<sup>96</sup>

**Coordination Standard** - Sensitivity will be shown towards the documented management needs of the "Area of Critical Environmental Concern" in the Pinedale Resource Area of the Bureau of Land Management

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<sup>96</sup> (Amended 6/7/91 by a Decision Notice and 4/15/92 by a Supplemental Decision Notice)

**Management Area 13 - Hams Fork**





## Chapter 5- Implementation of the Forest Plan

### Introduction

Chapter 5 has two sections: Forest Plan Implementation and Monitoring and Evaluation. The implementation section describes the approach to be used to solve the problems described in the sixth section, Need to Establish or Change Management Direction, in Chapter 2. The problems will be solved by implementing the Preferred Alternative shown in the companion Final Environmental Impact Statement (FEIS) using the Desired Future Conditions described in Chapter 4 as the means.

The monitoring and evaluation section details how the Forest Service and cooperators will keep track of implementation. Ultimately, the focus of this section is on accomplishment of Goals and Objectives of the Preferred Alternative detailed in the third section, Land and Resource Management Goals and Objectives, in Chapter 4.

### Forest Plan Implementation

This Forest Plan establishes the direction for the Bridger-Teton National Forest for the next 10 to 15 years when used in connection with procedure shown in Forest Service Manuals, Handbooks, and the Intermountain Region Guide. During implementation, Forest Service employees will be also guided by existing laws, regulations, policies, and guidelines.

The Forest Plan replaces all previous management plans. As soon as practicable, after the Forest Plan is approved, the Forest Supervisor will ensure that the Forest Plan is valid for existing rights and all outstanding and future permits and that other occupancy and use documents which affect National Forest System lands are consistent with this Forest Plan.

A key element of implementation is consultation with the public. Throughout implementation, the full range of public information and involvement techniques must be applied, including frequent contact with groups involved with day-to-day management of the Bridger-Teton National Forest.

The management direction contained in the Forest Plan will be used in analyzing proposals by prospective Bridger-Teton National Forest users. All permits, contracts, and other instruments for occupancy and use of the National Forests must be consistent with management requirements in both the Forest and Management Area direction sections. This is required by 16 USC 1604 (i) and 36 CFR 219.10 (e).

Full implementation of the Forest Plan, especially the ability to meet the programmed Bridger-Teton National Forest activity schedules, depends upon receiving an adequate budget for the

Bridger-Teton National Forest. Reduced budgets may limit the number and types of activities, but those that take place will be done within appropriate standards.

**Project Implementation and Environmental Analysis** -The Forest Plan defines the Goals and Objectives, Desired Future Conditions, Management Prescriptions, and Standards and Guidelines for projects scheduled for completion over the next 10 to 15 years.

Beyond the information used in preparing the Forest Plan, additional, more site-specific information may often have to be gathered and analyzed before project development and implementation can occur. The more site-specific information will be used to:

Confirm the applicability of a Desired Future Condition to an area or indicate the need for Desired Future Condition change;

Validate the resources information used to prepare the Forest Plan or indicate errors and the need to revise planning assumptions including resource production expectations;

Form the basis, along with production levels suggested in Forest Plan Appendix A, for informal scoping of project-related issues and resource capabilities with potentially affected public interests;

Become at least a portion of the information needed to proceed with formal project-related National Environmental Policy Act (NEPA) process; and

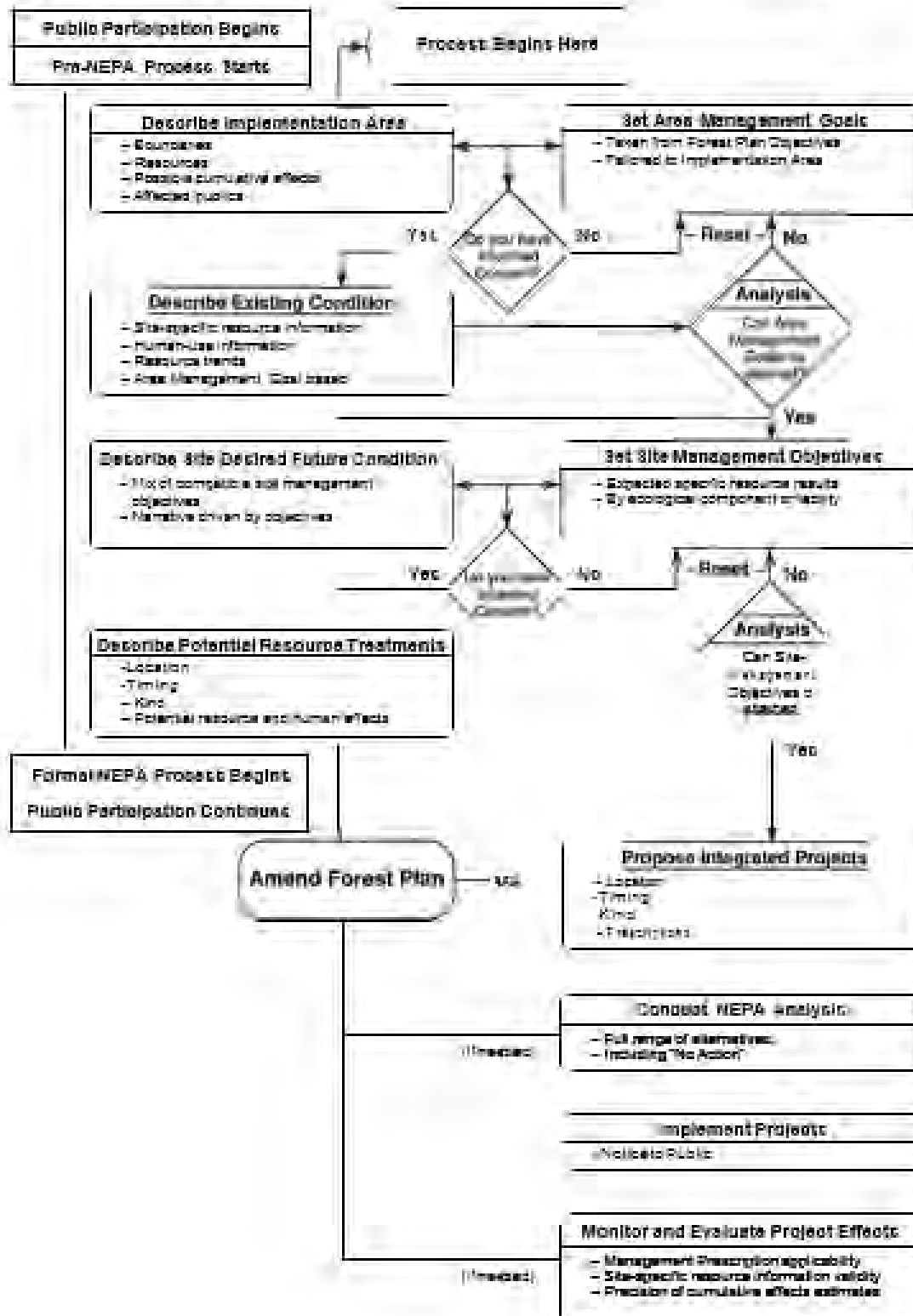
Provide part of the data needed to improve the Geographic Information System (GIS) data base, to support program and project decisions, and to contribute to the eventual revision of the Forest Plan.

Forest Plan implementation will normally result from several actions as shown on the following figure on page xx.

Such items as the scope, sampling procedures, quality, and quantity of site-specific information to be gathered will be determined in consultation with the public by an Interdisciplinary Team operating at the Ranger District level. Attention must be paid to establishing the boundaries for the implementation area in light of potential cumulative effects on all resources implied in the Desired Future Conditions. Often, boundaries vary by resource when describing potential projects. Therefore, boundaries may encompass more than a forested area, single watershed, Management Area, or Ranger District. Required remote sensing acquisitions and interpretations, and field data gathering and analysis, will also be conducted by the Interdisciplinary Team and shared and discussed with the public.

The full range of site-specific objectives will be explored for the implementation area within the limits imposed by the Forest-wide Standards and Guidelines and the Desired Future Conditions.

## Forest Plan Implementation Process



These must be discussed in depth with potentially affected public interests, including a semi-annual report of projects to be evaluated in the NEPA process.

Once the Ranger District and Interdisciplinary Team have established objectives and defined resource treatments needed to accomplish the objectives for the implementation area, formal NEPA process must begin. A report of the information gathered, conclusions, and people consulted during the informal scoping effort should accompany communications during formal scoping. The range of alternatives explored must contain the "No Action" alternative.

Each year, projects or activities will be scheduled by Ranger District and Management Area and displayed to the public. Whenever possible, out-year prospective listings will also be prepared and shared with the public.

NEPA procedures to be applied for projects covered in the Forest Plan and FEIS include:

**Environmental Assessment** - A NEPA document used for projects requiring additional analysis beyond that in the Forest Plan and FEIS. Alternatives would evaluate different methods of accomplishing project objectives within Standards, Guidelines, and Management Prescriptions contained in the Forest Plan. The "no action" alternative would be to discuss the consequences of not implementing the project.

**Categorical Exclusions** -Projects or activities that in the judgment of the responsible line officer are adequately covered in the Forest Plan, or are not Environmentally significant and do not require additional environmental analysis.

## Monitoring and Evaluation

Monitoring and evaluation are the management control systems for the Forest Plan. They provide the decision maker and the public information on the progress and results of implementing the Forest Plan.

Monitoring and evaluation compare the results being achieved to those projected in the Forest Plan. Costs, outputs, benefits, and environmental effects, both experienced and projected, will be considered. The Forest Plan is sensitive to costs. Those tasks which are not funded may not be performed; however, the Bridger-Teton objective is to monitor any changes to the ten-year average. The Bridger-Teton will monitor changes on an annual basis, but only be concerned about those changes which affect the decadal average.

### Goals of Monitoring

The goals for monitoring and evaluating the Forest Plan are to determine:

- If the Bridger-Teton National Forest is meeting its planned goals and objectives;

- If existing and emerging public issues and management concerns are being adequately addressed;

If the Forest Plan's management directions are being followed;

If the effects of implementing the Forest Plan are occurring as predicted;

If the costs of implementing the Forest Plan are as predicted;

If Forest Plan implementation effects on the land, resources, and communities adjacent to or near the Bridger-Teton National Forest significantly different than predicted;

If activities on nearby lands managed by other federal agencies, or under the jurisdiction of local governments, are affecting management of the Bridger-Teton National Forest are significantly different than predicted

If research is needed to support the management of the Bridger-Teton National Forest, beyond that identified in Chapter 2 of the Forest Plan; and

If there is a need to correct, amend, or revise the Forest Plan.

### Monitoring Requirements

Monitoring requirements for the Forest Plan are outlined in the Monitoring Plan at the end of this section. This action plan addresses the items to be monitored, techniques, expected precision and reliability, measurement frequency, reporting period and acceptable variation.

Monitoring of items not identified with specific outputs will be evaluated from such sources as the data base, Bridger-Teton National Forest attainment reports, public involvement processes, and non-Forest Service sources.

### Monitoring and the Budget

The monitoring outlined in the following action plan is the optimal monitoring for each program area on a reoccurring basis and is based on the presumption of full funding of the Forest Plan. It is doubtful if annual budgets will fully fund the monitoring described.

Priorities for the annual monitoring plans will be based on annual budgets and program direction, and according to their classification, in descending order, from "Priority 1" to "Priority 3." Priority 1 monitoring is required. Priority 2 monitoring is important but optional. Priority 3 monitoring is less important and optional. However, funding sensitivity will be displayed towards those Priority 2 and 3 monitoring efforts that must be perpetuated over several years to be effective. Projects will not be implemented unless they can be properly monitored.

## Monitoring Plan

The monitoring plan contains two categories: policy management and resources management. The two are closely linked, but the first deals with how closely the forest management direction is adhered to during implementation and the second deals with primary or baseline natural resource information about the effects of Forest Plan implementation. Monitoring is further classified according to function: implementation, effectiveness, or validation monitoring. Implementation monitoring examines whether policies were executed or not. Effectiveness monitoring examines whether policies applied resulted in the desired resource conditions. Validation monitoring examines the quality of data and assumptions used in the planning process.

### Evaluation of Monitoring Results

Evaluation of data gathered during the monitoring process will be guided by the direction shown in the Monitoring Plan. As indicated, the results of this evaluation lead to decisions on further action of the following types:

- Referring the problem to the appropriate line officer for improvement of the application of the management practice

- Modifying the management practice as a Forest Plan amendment, Revising the cost unit of output, and Initiating revision of the Forest Plan.

### Evaluation Report

The document resulting from the evaluation of data constitutes the evaluation report. As applicable, the following will be included in each evaluation report:

- A quantitative comparison of outputs, costs, and services with those projected by the Forest Plan,

- Documentation of any change in productivity of the land,

Unit costs associated with implementing planned activities as compared with unit costs estimated during Forest Plan development,

Recommendations for changes

A list of needs for continuing evaluation of the Forest Plan and for alternative methods of management.

Policy

Precision/Reliability	Monitoring Technique	Precision/Reliability
<b>Goals Accomplishment</b>		
Implementation monitoring of goals and objective accomplishment -Priority 1	Each goal and objective for the preferred alternative will be reviewed by the interdisciplinary and management teams. Goals and objectives are presently stated in Chapter 4 of the Forest Plan.	100 percent for quantified objectives.
<b>Desired Future Condition Implementation</b>		
Implementation monitoring of desired future condition, management prescription, and standard and guideline use - Priority 1.	Regular management reviews will be conducted by cooperators, the interdisciplinary team, and the management team as to the on-the-ground observance and application of the Desired Future Conditions, management prescriptions, and standards and guidelines detailed in Chapter 4 of the Forest Plan. Reports will be obtained from PAMARS or other management reporting systems if appropriate.	100 percent reliability is expected for quantified or mapped elements in the direction. No expected precision or reliability for non-quantified direction, although the reviewers could expect to find close qualitative conformance.
<b>Cumulative Effects Analysis</b>		
Effectiveness monitoring of performance of cumulative effects analysis -Priority 1.	Regular management reviews will be conducted by the Core Planning Team and Forest Supervisor or Deputy as to the implementation of cumulative effects analyses prior to commencing programs, projects, or activities that might result in surface disturbance.	100 percent reliability is expected
<b>Emerging Issues/Conflicts Analysis</b>		
	Regular reviews will be conducted by cooperators and the management team to assess the importance of emerging issues or resource conflicts and potential involvement with plan implementation.	A high degree of qualitative reliability is expected.



**Resource**

Element and Priority	Monitoring Technique	Precision/Reliability
<b>Recreation</b>		
Effectiveness monitoring of condition of developed recreation facilities -Priority 2.	A facility condition survey will be conducted. Each facility will be evaluated according to the RIM Condition Classification System to determine if the standards of maintenance are being met.	Good/High
<b>Wilderness</b>		
Effectiveness monitoring of user impacts to determine if wilderness setting attributes are being maintained -Priority 2.	Record physical conditions of campsites	80 percent
Effectiveness monitoring of user impacts to determine if wilderness social setting attributes are being maintained - Priority 3.	Monitor user encounters per day on trails and campsites	70 percent
<b>Fisheries and Wildlife</b>		
Effectiveness monitoring of vegetative manipulation, and the maintenance of critical habitat components such as cover, aspen, old-growth, and security necessary to meet the population objectives identified in the DFCL and Management Policy - Priority 1.	(1) Update the Geographic Information System maps to reflect changes in the total acreage of vegetation manipulation/treatment for all key vegetative types such as. aspen, old-growth, and cover and changes in roads and trails and their management status; (2) Review of environmental assessments and field review of vegetative management activities; (3) Annual trend and classification counts of big game species; (4) Elk Habitat Evaluation Procedure	High.
Effectiveness monitoring of retention of habitat and recovery of bald eagle populations -Priority 1.	Monitor the fledging rate of bald eagles and survey the mid-winter bald eagle population on the Bridger-Teton National Forest.	High
Validation and effectiveness monitoring of Kendall Warm Springs dace populations and associated stream and riparian areas - Priority	Periodic assessment of population numbers, effective fencing from livestock and from human disturbances as per the Kendall Warm Springs Dace Recovery Plan.	High

1.		
Validation monitoring of Colorado cutthroat trout populations - Priority 2.	Measurement of population trends in index streams will be conducted by Wyoming Game and Fish Department in cooperation with the Forest Service.	80 percent
Validation and effectiveness monitoring of ecological management indicator species - Priority 2.	Riparian and old-growth will be monitored by tracking population trends of groups or guilds of species. Pre-monitoring or baseline counts will be used to determine the most appropriate monitoring sites. All key habitats will be monitored by tracking trends in habitat diversity, such as total acres, age class and condition. Wildlife habitat relationship models will be used to interface predicted trends in habitats with those of wildlife populations	Moderate.
Validation monitoring of Sensitive plant species -Priority 2	Use of maps of sensitive plant populations and Wyoming Natural Heritage database maintained by the Nature Conservancy and the Wyoming Department of Environmental Quality; established permanent monitoring sites and sampling methods.	Moderate to high.
Validation monitoring of Sensitive wildlife species -Priority 2.	Use of GIS vegetation data base, and aerial and ground reconnaissance of such things as osprey nests and trumpeter swan nests	Moderate to high.
Validation monitoring of livestock depredation losses -Priority 2.	Permittees will provide information on livestock depredation losses on National Forest System lands for each allotment. APHIS, ADC will monitor losses throughout the grazing season and to the best of their ability, verify actual numbers.	Moderate.
Effectiveness monitoring of motorized use of existing and planned roads and trails through open motorized access route density -Priority 2.	Periodic update/revision of transportation plan by district; road density analysis using Elk Habitat Effectiveness model for site specific projects	High.
Effectiveness monitoring of compliance with interagency grizzly bear guidelines to ensure habitat capability -Priority 2.	Use Cumulative Effects Model to ensure habitat capability is not dropped below recovery levels as specified in the Greater Yellowstone Grizzly Bear Recovery Plan.	Moderate.
Effectiveness monitoring of retention of occupied bald eagle habitat -Priority 2.	Use the bald eagle cumulative effects model to measure changes in the percent of suitable foraging and perching habitat available	High
Effectiveness monitoring of reintroduction of	Monitor hack-site performance and any natural aeries of peregrine falcons on	High

peregrine falcons - Priority 2.	the Bridger-Teton National Forest through surveying techniques.	
Implementation monitoring of planned disturbances and construction or reconstruction of transmission lines and fences in important whooping crane summer habitat - Priority 2	Conduct surveys of the whooping cranes on the Bridger-Teton National Forest	High.
Effectiveness monitoring of fisheries habitat improvement projects -Priority 3.	Evaluation of habitat improvement effectiveness in relation to project objectives. Visual inspection of improvement to determine maintenance needs.	100 percent.
Validation monitoring of big game Management Indicator Species (MIS) -Priority 3.	Aerial/ground reconnaissance on winter range using State records.	Moderate
Validation monitoring to verify reported observations of wolf activity -Priority 3	Attempt to promptly verify reported observations of animals, tracks, or howling. Field surveys for wolf activity will be conducted in conjunction with big game winter census flights.	Moderate.
Effectiveness monitoring of maintenance of aspen - Priority 3	Update the Geographic Information System maps to reflect changes in total amount-acres-of vegetation manipulation/treatment in aspen. Review of environmental assessments and field review of vegetative management activities	High.
Effectiveness monitoring of compliance with leaving marked and unmarked wildlife trees-snags; wildlife snag patches, and down woody material-in timber harvest areas -Priority 3.	On site inventory of snags, wildlife snag patches, and down woody material aspen the standard and guideline.	Moderate.
<b>Vegetation: Range</b>		
Effectiveness monitoring of range trend -Priority 1.	Benchmark studies will be established to determine the trend in range condition and the objectives of the AMP are being met. There will be one benchmark area for each grazing unit of each allotment. For further information refer to <i>FSH 2209.14, Chapter 4.</i>	880 percent probability
Implementation monitoring of rangeland proper-use criteria - Priority 2.	Establish proper use criteria and monitor using techniques stipulated by allotment management plans.	80 percent.
Implementation monitoring of livestock distribution and grazing practices -Priority 2.	Conduct and document range allotment inspections on all stocked allotments to insure compliance with grazing objectives.	NA

Validation monitoring of range condition -Priority 2.	Update the range analysis on each allotment, big game winter ranges, and other rangeland areas.	80 percent.
Effectiveness monitoring of vegetation manipulation projects - Priority 3.	Studies to monitor changes in vegetation and soil conditions to determine success of vegetation manipulation projects. Noxious weed control projects require annual monitoring	80 percent.
<b>Vegetation: Timber</b>		
Validation monitoring of reforestation of harvested areas - Priority 1.	Type 3 stand examination surveys for all reforested areas	High.
Validation monitoring of land area suitable for timber harvest - Priority 1.	Timber volume inventory for all forested areas.	High
Validation and effectiveness monitoring of clearcut size limits determination -Priority 1	Type 3 stand examination surveys for all reforested areas and growth-to-wildlife-cover studies.	High
Effectiveness monitoring of timber management practices including harvest on lands not suited for timber production meet multiple-use objectives - Priority 1.	Program reviews; activity reviews	High.
Validation monitoring of levels of forest pests - Priority 1.	Forest pest management surveys; stand exam inventories	High.
Validation monitoring of growth and yield in response to silvicultural prescriptions to verify yield tables and management intensities -Priority 3.	Review a statistical sample of stand examinations and yield information including timber cruise data and scaling data	Moderate.
<b>Minerals</b>		
Implementation monitoring of mineral leasing - Priority 1	Verify that stipulations attached to new mineral leases were necessary to implement Forest Plan Direction and the leases were issued per the timeframes established	90 percent.
Effectiveness monitoring of reclamation -Priority 1	Inspect all reclamation projects to evaluate surface conditions as specified in the reclamation plan	100 percent.
Implementation monitoring of seismic operations- Priority 2	Inspect seismic permittee operations for compliance with permit.	80 percent
Implementation monitoring of operations: leasable, locatable, salable -Priority 2	Inspect operation for compliance with stipulations, conditions and direction found in the operating plans.	100 percent

Soil, Water, and Air		
Validation monitoring of riparian areas –Priority 1	Conduct a Level III riparian evaluation on up to six demonstration areas and Level II riparian evaluation on stocked allotments and other areas with key riparian values to solve site-specific problems and/or to assess impacts of management activities on riparian resources. Collection and assembling of data on riparian complexes and riparian dependent values will use accepted methodology. See <i>Region 4, Forest Service - USDA, Integrated Riparian Evaluation Guide</i> .	80 percent
Validation monitoring of soil and watershed impacts such as compaction, revegetation, and erosion control -Priority 1.	Soil condition will be based on five projects per year selected by the interdisciplinary team as part of the area analysis process, or individual project analysis. Analysis of projects will be based on: <i>Guidelines for Sampling Some Physical Conditions of Surface Soils, Howes S., Hazard, J., and Geist M. Pacific; Northwest Forest and Range Experiment Station, 1983</i>	75 percent.
Validation monitoring of air quality related values (AQRV) - Priority 1.	Atmospheric deposition effects on plant growth and productivity, lichen growth, water quality, soil characteristics and buffering capacity, visibility, and precipitation chemistry. See <i>Bridger and Fitzpatrick AQRV Action Plan, Bridger-Teton National Forest, .1984</i> .	Given in Gen. Tech. Rpt.- 146 cited above
Validation monitoring of reserve pit drilling fluids – Priority 1	A chemical analysis will be made of all reserve pit drilling fluids prior to disposal on National Forest land. When in the vicinity of surface waters-streams and lakes-one chemical water analysis upstream and immediately downstream of the reserve pit will be made.	Detection limits of standard chemistry lab testing instruments
Validation monitoring of potable water quality developed recreation and administrative sites - Priority 1.	First sample evaluated biologically prior to water system being allowed to become operational; new systems and suspect water systems will be evaluated biologically and chemically before becoming operational; monthly testing during season of use for bacteriological and periodic chemical	98 percent
Effectiveness monitoring of burn-area rehabilitation -Priority 1.	Soils: Problem soil areas, such as hydrophobic conditions and fertility or soil moisture problem areas, will be identified. Treatments will be recommended to ameliorate the problems.	90 percent
Validation and effectiveness monitoring of watershed and stream channel condition trend. No more than two streams in undisturbed watersheds. 6 to 8 streams of order 3 or larger watersheds for which management activities are planned or scheduled during the next 10 to 15 years -Priority 1.	Designated stream cross-sections will be selected at which the following measurements will be made: (1) Stream Channel Stability -see <i>Stream Reach Inventory and Channel Stability Northern Region, Forest Service, USDA, 1978</i> , (2) Width to Depth Ratio, (3) Macroinvertebrate survey -see <i>General Aquatic Wildlife System (GAWS) Users Guide, Intermountain Region, Forest Service - USDA</i> , (4) Cobble Imbeddedness.	70 to 80 percent

Validation monitoring of lake chemistry -Priority 1.	Alkalinity water analysis computed using the Gran titration method.	95 percent
Effectiveness monitoring of water quality related to specific projects or activities -Priority 2	Sample waters for chemical, physical, and biological parameters for all projects deemed by an ID team to be capable of affecting water quality.	Given in <i>National Handbook of Recommended Methods for Water Data Acquisition</i> by U.S. Government Agencies, Office of Water Data Coordination, Geological Survey, U.S. Department of Interior.
Validation and effectiveness monitoring of lake water quality - Priority 3.	Bacterial water sampling of selected lakes and streams in high use areas.	95 percent.
Effectiveness monitoring of instream flow -Priority 2.	Measurement of instream flow for water development projects will be accomplished using accepted methodology. See <i>Region 4, Forest Service - USDA, Technical Guide and General Aquatic Wildlife Systems (GAWS)</i>	80 percent.
<b>Access: Roads</b>		
Effectiveness monitoring of road closures -Priority 1.	Check such things as road closure effectiveness and maintenance needs.	High.
Effectiveness monitoring of road maintenance - Priority 2.	Condition surveys.	High
	Measure road and trail traffic use and type of use through traffic count device, trail head surveys and traffic component sampling.	Medium
<b>Facilities</b>		
Validation monitoring of buildings -Priority 1.	Inspect building for health and safety problems, structural defects, maintenance needs, and energy conservation opportunities.	High
Validation monitoring of dam administration -Priority 1.	Inspect dams for unsafe conditions.	High.

## Monitoring Protocol Additions Management Indicator Species

**Cutthroat Trout Monitoring Protocol:***Population and Trend data*

Population and trend data will continue to be gathered for the trout species with the majority of the information collected by the Wyoming Game and Fish and supplemented with information collected by the Forest Service. Both agencies use the same standardized monitoring protocol for population data collection. The Forest service looks at distribution of species and the habitat quality/quantity at the drainage level and then determines where to collect more specific data at the sub-drainage level. This is done in coordination with the Wyoming Game and Fish.

*Habitat Conditions:*

This will be monitored at the most basic level. The FLMP, 1990, indicated that Riparian would be monitored primarily by monitoring population trends for its respective guild *and* by tracking trends in habitat health and diversity (total acres, amount in each seral stage, condition, and age class).

Currently the Forest uses Basin Wide Inventory methodology for collecting habitat information. This collects information such as bank stability and bank trampling – two key indicators to health of aquatic ecosystems. The Wyoming Game and Fish has a similar level three data collection done by stream reach. The two agencies are currently making sure their data collection is compatible.

The Bridger-Teton National Forest is starting to look at the Green River and Bear River drainages on Forest in an effort similar to the information gathered on distribution and habitat done for the Upper Snake River cutthroat trout populations. This effort is starting in 2005 and will take several years to complete.

At the same time, additional vegetation information is being collected on Forest by the range vegetation managers on riparian communities utilizing information from the technical report - *Monitoring the Vegetation Resources in Riparian Areas*, Winward, Alma H., and April 2000. General Technical Report GTR 47, Rocky Mountain Research Station. The GREENLINE methodology described in this report monitors riparian habitat condition.

*Assumption:* If there is a set kind of composition of community types within a complex in undisturbed conditions, and if new types develop within that complex when unnatural disturbance factors are present, such as livestock grazing and trampling or damages from recreational or other land disturbing activities, changes in kinds and amounts of community types can be measured to determine the degree of impact. For example, new communities that may increase or develop as a result of excessive disturbances often include Kentucky bluegrass and retop. The Method as described in the above listed general technical report provides a measurement of the streamside vegetation. Evaluation of the vegetation on the green line area provides a good indication of a stream bank's ability to buffer the hydrologic forces of moving water.

Since a greenline is located where the forces of water are greatest, a green line measurement can provide an indication of health of the total watershed above the point of sampling. This method allows the land manager to make an early evaluation of effects of management on a particular area.

The Forest will continue to monitor habitat using the GREENLINE methodology. Each District on the Forest has "greenline" information gathered on representative riparian ecological communities (except Kemmerer Ranger District). These areas would continue to be monitored. New areas would be chosen for GREENLINE inventory depending on management concerns. Currently, in 2005 the Jackson, Buffalo, and Greys River Ranger Districts are adding greenline inventory.

Response to changes will be detected by subsequent measurements made in the same area 5-10 years apart, depending on trend of habitat conditions. If trend is down than monitored every 5 years and if trend is stable or increasing every 10 years. Data can be compared to provide indications of long-term trend for that riparian area.

#### **Bighorn Sheep Monitoring Protocol:**

##### *Population and Trend*

This data will continue to be collected by the Wyoming Game and Fish.

##### *Habitat monitoring*

In the Bridger-Teton National Forest Properly Functioning Condition (PFC) Assessment of September 1997, 12 vegetative communities were evaluated on the Forest and the risk to these vegetative communities for a loss of biological/physical components of the ecosystem. *Tall Forb* meadows came out with HIGH risk. The Forest will monitor this habitat. This follows direction from the Forest Plan (1990) in that it indicated that we would monitor the health and diversity of habitat for the mountain meadow ecological indicator.

##### *Data collection*

Utilizing the species list (*The Tall Forb Type*, A.H. Winward, April 27, 1998) the following parameters and assumptions for monitoring are as follows:

- a) If there is a high composition of species appearing from the first two thirds of the species list; *and* for example one can step from one desirable plant to another (from 1<sup>st</sup> two thirds of species list) on a given area, then the area is capable of seeding and reestablishing the tall forb component.
- B) If the site is dominated by species from the last one-third of the species list this indicates disturbance situation or drier (non-tall forb) type. If the site is determined to be a disturbed tall forb site (recovery would involve seeding of desirable species and appropriate management.
- c) If the site is so altered that desirable tall forb species cannot be supported (lack of soil requirements) than the area should be managed as a new type and not tall forb.

A response to change can be monitored by measuring a, b., c above.

Each district will conduct monitoring in 2005 on known tall for meadow communities where baseline data has already been collected.

The districts will monitor tall forb meadows through rangeland permit administration and/or District survey crews.



For those Districts that do not have baseline data on a tall forb community meadow, a minimum of one tall forb meadow per District (new) will have baseline data collected through 2006 and will subsequently be monitored every five years.

**Boreal Toad and Boreal Chorus Frog Monitoring Protocol:**

Monitoring would be designed to measure presence/absence of breeding activity for amphibians and their occupancy. The purpose of the monitoring program would be to examine long term changes to amphibians. A monitoring program detailing sample design is in the process of being designed with the help of Dr. Chuck Peterson and Debra Patla and will be complimentary to studies being done in the Greater Yellowstone Ecosystem.

Methodology for monitoring such as timed constrained or area constrained searches, are relatively simple, non-time consuming and provide good data. Species distribution and status for amphibians was conducted by Debra Patla in 1999 and information for the species from this document will be utilized as baseline data for breeding sites.

Population Trend: occupancy at documented sites.

Habitat Changes: changes in aquatic habitat conditions within or adjacent to documented sites; changes in human activities within or adjacent to documented sites.

*Methodology for monitoring*

Monitoring will take place at known amphibian breeding sites (Patla, 2000) to detect changes in numbers and distribution. In 2005, all identified breeding sites of rare species (Boreal Toad) will be monitored and boreal chorus frog breeding sites identified (Patla, 2002), for each district where there are breeding sites will also be monitored as time allows.

Subsequent to 2005, each year random sampling of occupancy will be done using techniques and procedures developed for use in Yellowstone and Grand Teton National Park and adapted for the Bridger Teton National Forest with Dr. Chuck Peterson.

**Aspen Monitoring Protocol:**

*Habitat condition monitoring*

This will be monitored at the most basic level. As indicated in the FLMP, 1990, aspen will be monitored by tracking the trend in this habitats health and diversity by monitoring total acres, amount of each seral stage, condition and age class. This information will be put into a database that will also have a link to GIS. All aspen habitats will have information from on-site inventory (see sampling methodology in *Aspen Response to Prescribed Fire, Mechanical Treatments, and Ungulate Herbivory*, Steve Kilpatrick, Dean Clause, Dave Scott, 2003); before any vegetative manipulation takes place. This methodology keys in on density and height of aspen and also involves a photo plot. This information would be documented and put in the Forest database. Information at the 6<sup>th</sup> code HUC at a minimum would be gathered relative to aspen vegetation.

Inventory of aspen would provide information on seral stage, condition (density, height, and photo plot), and age class. There is forest-wide stand exam inventory (1969) in hard copy from which to draw historical information; however, the BTNF in the next 2-3 years will be building/updating the vegetation layer for the Forest. Once this is in place we will have an updated baseline with better data on Aspen. Method of data collection, inventory, and forms will be attached as metadata for the vegetation layer.

Because it is of particular importance to the health and diversity of aspen to manage browse levels by livestock and other ungulates, the *Browsed Plant Method* which assesses the level of herbivory occurring on young and sprouting aspens will be used when monitoring and inventory of Aspen.

The method gathers data on the percentage of young plants browsed in a delineated stand of cohorts and the degree to which the population, as a whole, has interrupted or arrested growth. This would provide for an effective and consistent method of evaluating browse effects on this species.

Methods for data collection can be found in the following report –*Browsed Plant Method for Young Quaking Aspen, An Annual Monitoring Method for Determining the Incidence of Use on Sprouts and Young Plants during the Growing Season-Dec. 2004*).

Locations to monitor will be chosen based on *critical area/ key area concept*. An individual aspen stand may be referred to as *Critical Areas* if special management consideration is needed because of biodiversity characteristics OR an individual stand can be described, as a *key area* where the stand is representative sample of a larger stratum of aspen stands at the pasture, herd unit, watershed, or landscape level.

Updated baseline information (that can be linked to GIS) will not be available until the Vegetation Layer is completed for the forest in 2-3 years.

Response to change would be detected through aerial photo interpretation and utilizing the Five Risk Factors listed above when monitoring aspen.<sup>97</sup>

#### Snake River Headwaters Amendment #11 Monitoring

In order to evaluate whether the proposed standards are effectively protecting the identified resources and river values, a new monitoring program is added for designated Wild and Scenic Rivers. (See Table 4.4) These indicators have been selected as the minimum necessary to ascertain the earliest likely changes across the system that could lead to negative impacts. Other additions to the monitoring plan may take place as the opportunity arises and when funding allows. For example, new reference reaches using all of the applicable Multiple Indicator Monitoring indices have also been collected on streams within the designation and will provide comparison data for the future if necessary. Permanent photo points will also be established on each segment, with more outside wilderness where greater pressure may be expected, that can provide a quick look at conditions for relatively little expense. The intent underlying all of these measures is to provide long-term trend analysis rather than simply offering snapshots of conditions.

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<sup>97</sup> Errata Sheet Signed June 27,2005

Indicators are the resource or experience element to be measured; thresholds for specific locations across the Headwaters are **the point at which managers need to assess and potentially implement other strategies to protect the resources of the designation.**

None of these thresholds are limits, except in the recreational segment of the Snake River, where limits on commercial use were established through a prior Recreation Plan decision document (2002).

**Definitions of Terms Used in Indicators:**

**Watercraft:** any contrivance used or designed primarily for navigation on the water that is designed to be propelled by hands, arms, paddles, oars, sails or motors; to include devices considered water sport toys—any aid to swimming or fishing on the water.

**Motorized Watercraft:** Watercraft utilizing an internal combustion engine or motor. Official training and operational Search and Rescue missions are excluded.

**Campsite Condition Class: Frissel rating** system that classifies the degree of human-caused change that a campsite has undergone.

**Stock Impact Rating (SIR):** Evaluates the combined impacts of all recreation stock use areas associated with an individual recreation site. The SIR is a numerical score based on the sum of the numerical rating of three categories of recreation stock related impacts: **Size, Vegetation Impact, and Tree Damage.**

**Multiple Indicator Monitoring (MIM):**

Statistically-significant protocols developed to evaluate short- and long-term indicators of riparian and stream channel conditions are used to determine if resource objectives are being met for these areas.

**Selected indicators are:**

- Streambank stability
- Cumulative Bankfull Width distribution
- Greenline composition: Foliar cover, percent by species
- Woody species age class

**Live/Dead (L/D) Index:**

Protocol developed by Keigley et al (2002) that assesses regeneration potential in browsed shrub habitats.

The above ecological indicators are to be monitored every five years, except Greenline composition, which will be monitored every ten years. No 2009 baseline exists for Greenline composition, but the agency commits to establishing a baseline for the selected sections at a minimum (see Chapter 5).

Ecological thresholds are considered to be any statistically significant downward trend noted in more than two observations, not attributed to natural causes. Downward trends in the ecological indicators or exceedances of criteria are determined considering a confidence interval around the measurement or

metric’s mean. This helps address variability due to site complexity, observer variation, and other variables.

If new monitoring methods are deemed more scientifically accurate or would likely provide better answers to the questions listed in the introduction to this section, those may be substituted for the ones listed here.

	Indicator	Thresholds			
		DFC 3B	DFC 3C	DFC 3D	DFC 6
<b>Recreation</b>	Total number of watercraft passing by a selected location per day.	@ Sheep Gulch; 146 noncommercial, 171 commercial boats* more than 3 days/ month	Hoback : 40 craft per day, more than 10% of times sampled  Buffalo, Gros Ventre, Granite: 30 craft per day more than 10% of times sampled	Willow:  20 craft per day  more than 10% of times sampled	Presence of watercraft in collective corridors more than 60% of monitoring days
	Occupancy of total mapped dispersed campsites in defined areas	<i>Not monitoring this indicator in DFC 3B</i>	Buffalo: Exceeding 80% more than 5 days per month;  Granite, Gros Ventre, Pacific: Exceeding 80% more than 10 days per month per segment	<i>Not monitoring this indicator in DFC 3D</i>	<i>Not monitoring this indicator in DFC 6</i>
	Number of days existing vehicle access areas at selected locations reach facility design capacity	Boat Ramps:  10 days per season	Hoback fishing pullout: 10 days per season  Crystal fishing pullout: 10 days per season	<i>Not monitoring this indicator in DFC 3D</i>	Wolf Creek Trailhead: 10 (sampled in winter and summer/fall)
	Number of campsite or stock holding areas per specified reach exceeding listed Class & Impact Ratings	<i>Not monitoring this indicator in DFC 3B</i>	8 areas with Condition Class Ratings $\geq 3$ or  8 areas with Stock Impact Rating $\geq 10$  <i>Not monitoring this indicator in the Hoback segment</i>	5 areas with Condition Class Ratings $\geq 3$ or  3 areas with Stock Impact Rating $\geq 10$	4 areas with Condition Class Ratings $\geq 3$ or  2 areas with Stock Impact Rating $\geq 10$

	<p>Number of motorized watercraft passing selected location per season (May-July)</p>	<p><i>Not monitoring this indicator in DFC 3B</i></p>	<p>Hoback: 10 craft per season Buffalo and Gros Ventre: 5 craft per season</p>	<p><i>Not monitoring this indicator in DFC 3D</i></p>	<p><i>Not monitoring this indicator in DFC 6</i></p>
<p><b>Wildlife; Ecological Function</b></p>	<p>% Streambank stability;  Greenline Composition (%Foliar Cover by Species);  Cumulative Bankfull Width;  Live/Dead Index;  Woody Species Age Class</p>	<p><i>Not regularly monitoring these indicators in DFC 3B</i></p>	<p><i>Gros Ventre River @ Fish Creek confluence; and reference stretch upstream of Fish Creek</i></p> <p><i>Monitor every 5 years except Greenline Composition, every 10 years.</i></p> <p><i>Threshold is any statistically significant downward trend based on more than 2 consecutive observations</i></p>	<p><i>Not regularly monitoring these indicators in DFC 3D</i></p>	<p><i>Not regularly monitoring these indicators in DFC 6</i></p>

<sup>98</sup> Amendment 11, 12/02/2013

## Amendments and Revisions

A comparison will be made of overall progress implementing the Forest Plan, as well as whether the overall relationships on which the Forest Plan is based have changed. When changes occur, they will be evaluated as to their significance, and appropriate amendments or revisions made

### Amendments

The Forest Supervisor may find it necessary to amend the Forest Plan based on such things as:

- Results of monitoring and evaluating implementation of the Forest Plan
- Changes in proposed implementation schedules resulting from differences between funding levels requested and actually appropriated
- Changes resulting from resolution of administrative appeals
- Changes to correct planning errors found during Forest Plan implementation
- Changes necessitated by changed physical, social, or economic conditions

Based upon advice and recommendation of the Interdisciplinary Team, the Forest Supervisor will determine whether the proposed changes in the Forest Plan are significant or non-significant, document the determination in a decision document, and provide appropriate public notification prior to implementing the changes

### Revisions

The Forest Plan will ordinarily be revised on a 10-year cycle or at least every 15 years. It also may be revised whenever it is determined that conditions or demands in the area covered by the Forest Plan have changed significantly, or when changes in Forest and Rangeland Renewable Resource Planning Act policies, goals or objectives would have a significant effect on Bridger-Teton National Forest-level programs

In the monitoring and evaluation process, the Interdisciplinary Team may recommend a revision of the Forest Plan at any time revisions are not effective until considered and approved in accordance with the requirements for the development and approval of a Forest Plan. The Forest Supervisor will review the conditions on the land covered by the Forest Plan at least every five years to determine whether conditions or demands of the public have changed significantly

## Appendix A

Appendix A contains descriptions of lands suitable for timber harvest on the Bridger-Teton National Forest and lists proposed opportunities and activities that are likely to take place during the first ten years of Forest Plan implementation. For ease of reference to the maps, descriptions, and prescriptions in Chapter 4 of the Forest Plan, the opportunities and activities are displayed by Community Interest Area (CIA).

Suitability is established for the 10-year life of the Forest Plan subject to amendment or revision as needed.

The lists in Appendix A are limited and are subject to change as the Forest Plan is implemented. New opportunities may be identified during plan implementation studies, project planning, monitoring efforts, and plan evaluation. Such natural events as wildfires, floods, and landslides may change the nature and timing of opportunities and activities. Budget levels will also influence the scope, nature, and timing of plan implementation efforts.

### **Timber Resource Suitability**

Table A-1 displays the suitability of the Bridger-Teton National Forest land for timber management. Out of the total acres on the National Forest, 880,400 are "Tentatively Suited for Timber Harvest" and of that, 279,400 acres are classified as "Lands Determined Suited." This is an increase of 46,500 acres from the Preferred Alternative on the 1986 Proposed Forest Plan.

Table A-1 shows the majority of the acres in the "Lands Determined Suited" category are classified as "Direct Benefits Exceed Direct Costs." The difference between these acres and the final suitable acres exists because of moving timber harvest activities away from some areas of the National Forest to meet different resource objectives and toward other areas to meet volume requests for local mills.

Efforts were made to concentrate timber management activities on the more productive and accessible lands in response to concerns over "below cost sales." However, for some timber sales, the cash receipts may not cover the costs of administration. These sales will be used to meet other resource objectives such as wildlife habitat improvement, while still providing volume to local mills.

Table A-1 also shows three "Additional Components" presently classified as "Lands Determined Not Suited." These components describe additional opportunities presently not needed to meet Forest Plan Objectives, but have the potential to increase the Allowable Sale Quantity above 12 MMBF should demand or market conditions change.

These components are described below:

Component 1 contains 11,900 acres of "Tentatively Suited for Timber Harvest" land in a Desired Future Condition 8 area-one which places an emphasis on providing environmental education opportunities. This volume was taken out of the scheduled timber base, but opportunities exist to harvest timber volume in educational projects worked out in cooperation with local schools.

Component 2 contains 169,000 acres of aspen manageable for type perpetuation. Aspen volumes will result from these activities, but no efforts have been made to estimate an annual harvest amount.

Component 3 contains 70,700 acres that could be harvested without significantly affecting the attainment of other resource objectives; they were not scheduled because of the high cost of accessing and harvesting these lands.

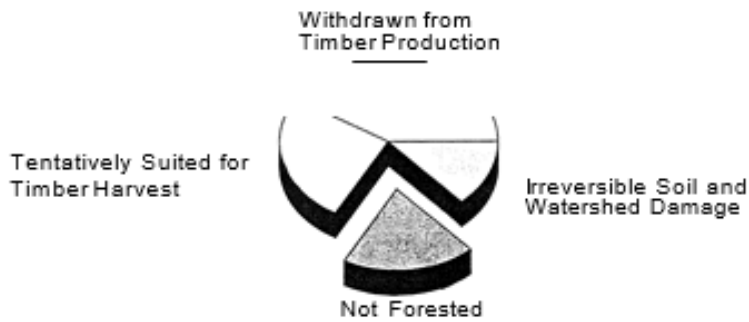
On pages 4 and 5, Figures A-1, A-2, A-3, and A-4 graphically show the information





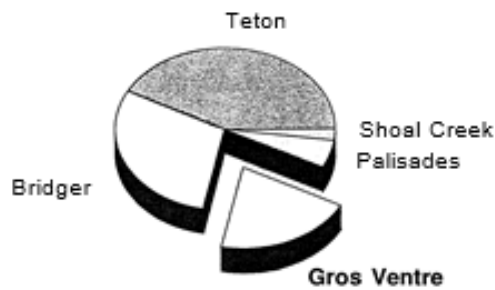
<b>Table A-1</b>			
<b>Timber Resource Suitability</b>			
<b>Not Suited</b>		<b>Acres</b>	
Not Forest		667,800	
Irreversible Soil and Watershed Damage and No Assurance of Adequate Restocking		452,700	
Withdrawn from Timber Production		1,391,500	
Wildernesses:			
Bridger	413,700		
Gros Ventre	284,900		
Teton	583,500		
Wilderness Study Areas:			
Palisades	76,800		
Shoal Creek	52,400		
<b>Subtotal</b>		<b>2,511,800</b>	
<b>Tentatively Suited for Timber Harvest</b>		<b>880,400</b>	
<b>Lands Determined Suited</b>		<b>Timber Resource Opportunity First Decade</b>	
		<b>Acres</b>	<b>MMBF/Yr</b>
Direct Benefits Exceed Direct Costs	271,900	24,200	11.5
Meet Other Objectives (Non-timber/Local jobs)	7,500	4,000	0.2
<b>Subtotal</b>	<b>279,400</b>	<b>28,200</b>	<b>11.7</b>
<b>Lands Determined Not Suited</b>			
Additional Components			
1—Environmental Education — DFC 8	11,900	700	0.6
2—Aspen Managed for Type Perpetuation	169,600		
3—Lands Uneconomical Due to Market Conditions	70,700	20,900	8.7
Multiple-Use Objectives Preclude Timber Production	310,200		
Other Uses	38,700		
Proposed Wilderness			
<b>Subtotal</b>	<b>601,000</b>	<b>21,600</b>	<b>9.2</b>
<b>Total National Forest Lands</b>		<b>3,392,200</b>	

Figure A-1  
**Timber Resource Suitability**



Irreversible Soil and Watershed Damage - 452,700 Acres
Not Forested - 867,800 Acres
Tentatively Suited for Timber Harvest - 880,400 Acres
Withdrawn from Timber Production - 1,391,300 Acres
<b>Total National Forest Lands - 3,392,200 Acres</b>

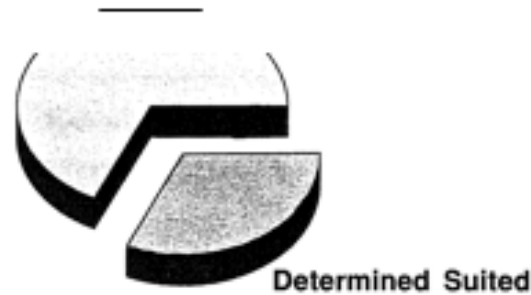
Figure A-2  
**Lands Withdrawn from Timber Harvest**



Shoal Creek Wilderness Study Area - 32,400 Acres
Palisades Wilderness Study Area - 76,800 Acres
Gros Ventre Wilderness - 284,900 Acres
Bridger Wilderness - 413,700 Acres
Teton Wilderness - 583,500 Acres
<b>Subtotal - 1,391,300 Acres</b>

Figure A-3  
**Lands Tentatively Suited for Timber Harvest**

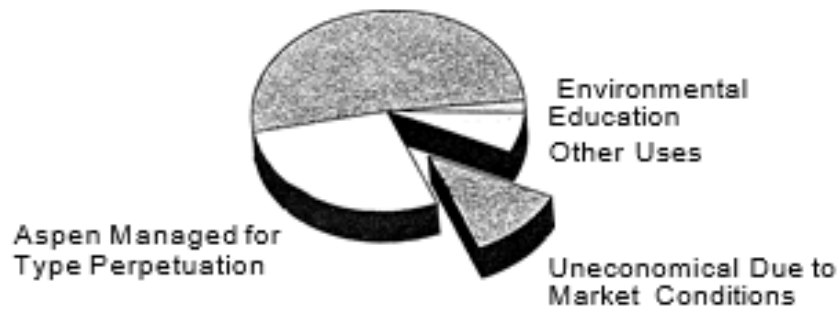
Determined Not Suited



Lands Determined Suited - 279,400 Acres
Lands Determined Not Suited - 601,000 Acres
Total: Lands Tentatively Suited - 880,400 Acres

Figure A-4  
**Lands Determined Not Suited for Timber Harvest**

Multiple-Use Objectives  
 Preclude Timber Harvest



Environmental Education (DFC 8) - 11,900 Acres
Other Uses - 38,700 Acres
Lands Uneconomical Due to Market Conditions - 70,700 Acres
Aspen Managed for Type Perpetuation - 189,500 Acres
Multiple-Use Objectives Preclude Timber Harvest - 310,200 Acres
Total: Lands Determined Not Suited - 601,000 Acres

**Timber Program**

Table A-2 shows the estimated outputs from the timber program. These figures are from the FORPLAN analysis. Site-specific project analysis will result in deviations from these estimates.

Decade

Output/ Activity	Units	1	2	3	4	5
<b>Allowable Sale Quantity</b>	MMCF	2.4	2.4	4.3	4.3	4.3
	MMBF	11.7	11.7	21.3	21.3	20.6
<b>Silviculture System: Clearcut</b>	Acres	290	110	540	590	350
<b>Silviculture System:</b>	Acres	300	410	360	510	390
<b>Silviculture System: Selection</b>	Acres	2240	3100	3680	3150	3710
<b>Salvage</b>	MMCF	0.9	0.9	1.7	1.7	1.6
	MMBF	4.1	4.1	7.5	7.4	7.2
<b>Roundwood</b>	MMCF	0.1	0.1	0.1	0.1	0.1
	MMBF	0.4	0.4	0.6	0.6	0.6
<b>Fuelwood - Green</b>	MMCF	0.4	0.2	0.8	0.9	0.6
	MMBF	2.0	1.1	3.6	3.9	2.9
<b>Fuelwood - Dead</b>	MMCF	0.2	0.2	0.2	0.2	0.2
	MMBF	1.1	1.1	1.1	1.1	1.1
<b>Total Timber Sale Program</b>	MMCF	4.1	3.9	7.1	7.2	6.9
	MMBF	19.2	18.3	34.1	34.4	32.4
<b>Inventory on Suited Lands</b>	MMCF	63.2	63.1	62.8	61.9	62.2
<b>Growth on Suited Lands</b>	MMCF	2.3	2.1	3.5	4.6	5.2
<b>Long-Term Sustained Yield</b>						11.8
<b>(LTSY) - After 5 Decades</b>						
<b>Growth as a Percentage of</b>						44.0%
<b>LTSY After 5 Decades</b>						

# Opportunities and Activities CIA I

<b>Opportunities and Activities (Units)</b>	<b>Number</b>
Recreation Construction/Reconstruction ( Projects)	5
Pacific Creek Campground	
Moccasin Basin Trailhead	
TetonView Campground	
Togwotee Overlook	
Blackrock Interpretive	
Site Togwotee Pass	
Information Box Creek	
Trailhead Hatchet	
Campground Topping	
Trailhead	
Trail Construction/Reconstruction Outside Wilderness (Miles)	19
Wildlife/Fish Structural Habitat Improvement (Structures)	
Fisheries Habitat -North Fork Fish Creek	30
Road Access Management	4
Trumpeter Swan Nest Site Development -Buffalo River	5
Food Storage Structures	150
Additional Structures after 5 Years	40
Wildlife/Fish Non-Structural Habitat Improvement (Acres)	
Randolph Mountain Aspen Treatment	300
Rosies Ridge Aspen Treatment	50
Lower Spread Creek Willow Treatment	300
Buffalo River Willow Treatment	22
Additional Acres Treated (To be determined in project analyses)	225
Range Improvement: Fence (Miles)	4
Road Construction (Miles) Road Reconstruction (Miles) Grazing	39
(Animal Unit Months)	0
Timber Harvest (Millions of Board Feet)	27000
Years after Plan Implementation	24
6-10	6-10
<u>Management Area</u>	9
45	4-5
61, 62, 71	3
6	4
4	2
Watershed Restoration Program (Acres)	
Rosie’s Ridge	15
Davis Hill	8
Sheffield C r e e k	10
District Wilderness Trails	23
North Fork Fish Creek	48

South Fork Fish Creek  
Moccasin Basin

10  
12

**Opportunities and Activities**

**CIA2**

**Opportunities and Activities (Units)**

**Number**

Recreation Construction/Reconstruction (Projects)	5
Tepee and Goosewing Trailheads	
Crystal Creek Trailhead Blue	
Miner/Crystal Ramp	
Trail Construction/Reconstruction Outside Wilderness (Miles)	15
Wildlife/Fish Structural Habitat Improvement (Structures)	
Upper Slide Lake -Rehabilitation	3
Peregrine Falcon -Hacking Program	5
Gros Ventre Winter Range -Interpretive Signs	12
Dallas Lake -Enlargement	1
Fisheries Habitat -Gros Ventre River	30
Trumpeter Swan Interpretive Sign-Upper Slide Lake	1
Trumpeter Swan Nest Platform -Soda Lake	1
Additional Structures after 5 Years	50
Wildlife/Fish Non-Structural Habitat Improvement (Acres)	
Gros Ventre Winter Range -Range Pitting	400
Gros Ventre Winter Range -Sagebrush Burning	1200
Gros Ventre Winter Range -Aspen Slashing	675
Upper Slide Lake Mitigation -Trumpeter Brood Rearing Additional Acres Treated (To be determined in project analyses)	495
Range Improvements: Water Development (Units)	8
Range Improvements: Forage Improvement (Acres)	6,700
Range Improvements: Fence (Miles)	18
Road Construction (Miles)	0
Road Reconstruction (Miles)	2
Grazing (Animal Unit Months)	110,000
Timber Harvest (Millions of Board Feet)	1

Years after Plan Implementation

Management Area

4-5

6-10

43, 46

1

Watershed Restoration Program (Acres)	
Red Hills	39
Red-Cottonwood Creek	8
Lightning Creek	10
Recreation Construction/Reconstruction	
(Projects) Cache Creek Trailhead	
Granite Snowmobile Toilets	
Gros Ventre Snowmobile	
Toilets Granite Campground	
Picnic Pritchard Creek	
Boating	
West Table Boating	
East Table Boating	
Wolf Creek Campground	
Station Creek Campground	
Willow Creek Trailhead	
Trail Construction/Reconstruction Outside Wilderness (Miles)	20
Wildlife/Fish Structural Habitat Improvement (Structures)	
Access Management -Curtis Canyon	6
Bald Eagle Habitat Improvement -Pitcard Creek Area	1
Bald Eagle Interpretive Sign -Snake River, West Table	1
Bald Eagle Interpretive Sign-Snake River, Astoria	1
Additional Structures after 5 Years	10
Wildlife/Fish Non-Structural Habitat Improvement (Acres)	
Beaver Mountain Conifer -Prescribed Burn	750
Beaver Mountain Sage/Grass-Prescribed Burn	250
Beaver Mountain/Elk Ridge -Aspen Slashing	200
Curtis Canyon/Sheep Creek-Sagebrush Burn	250
Curtis Canyon/Sheep Creek-Aspen Slashing	100
Additional Acres Treated (To be determined in project analyses)	33
Range Improvements: Water Development (Units)	9
Range Improvements: Forage Improvement (Acres)	0
Range Improvements: Fence (Miles)	19
Road Construction (Miles)	0
Road Reconstruction (Miles)	0
Grazing (Animal Unit Months)	18000



BT Plan with Corrections and Amendments

April 15, 2015

Timber Harvest (Millions of Board Feet)			4
	Years after Plan Implementation		
<u>Management Area</u>	1-3	4-5	6-10
41			
	<b>1</b>	<b>1</b>	2
,42,49			
Watershed Restoration Program (Acres)			
Fall Creek			28

Recreation Construction/Reconstruction ( Projects) Continental Divide S.M. Trailhead Toilet Continental Divide S.M. Trailhead Willow Creek Trailhead	12
New Fork Lake and Boulder Water Green River Lake Boat Ramp Burnt Lake Toilet Meadow Lake Trailhead Boulder Lake Campground Sweetwater Gap Pine Creek Campground Fremont Lake Boating Camp Fremont Lake Handicap Ramp Kelly Park Ski Parking Fremont Lake Outlet 2 Toilet	
Trail Construction/Reconstruction Outside Wilderness (Miles) Wildlife/Fish	171
Structural Habitat Improvement (Structures)	
Access Management:	2
Teepee Creek Gates	1
Little Sheep Mountain Gates	36
Coop T.S. Gates and Barriers	1
Kendall Warm Springs Dace Enclosure Fence	3
Kendall Dace and Riparian Exlosures	1
Trumpeter Swan Habitat -Mud Lake	250
Upper Green River Habitat Improvement	5
Meadow Creek Bank Stabilization	10
Tosi Creek Habitat Improvement	15
Tepee Creek Habitat Improvement	10
Klondike Creek Habitat Improvement	10
Gypsum Creek Habitat Improvement	1
Klondike Creek Dam Construction	10
Big Sandy River Habitat Improvement	6
Kendall Warm Springs Dace Fence Reconstruction	1
Kendall Warm Springs Dace Culvert Replacement	10
Rock Creek Habitat Improvement	38
Leads Creek Habitat Improvement	400
Additional Structures after 5 Years	
Wildlife/Fish Non-Structural Habitat Improvement (Acres)	
Aspen/Sagebrush/Willow Burns:	1000
Beaver-Twin Creek/Badger Creek	54
McDowell Flat and Soda Lake	470
West Squaw	
Aspen Clearcuts:	50
Squaw Creek	70
McDowell Flat	24
Pole Creek	30
Packer Creek	200
Willow Lake Rim	160
Willow Burn -Upper Green River/Klondike Creek	500
Conifer Burn -Big Sheep Mountain/Mount Osborn and Triple Divide	660
Additional Acres Treated (To be determined in project analyses)	

Range Improvements:

Water Development (Units) Range Improvements:				15
Forage Improvement (Acres) Range Improvements:				2,270
Fence (Miles)				40
Road Construction (Miles) Road				15
Reconstruction (Miles) Grazing				5
(Animal Unit Months)				900,000
Timber Harvest (Millions of Board Feet)				5
		Years after Plan Implementation		
<u>Management Area 72</u>	1-3	4-5	6-10	
74	<b>1</b>	2	<b>1</b>	
	0.2	0.2	0.6	

Watershed Restoration Program  
(Acres)

Tepee Creek	64
Red Creek	4

**Opportunities and Activities**

**CIA5**

**Opportunities and Activities (Units)**

**Number**

Recreation Construction/Reconstruction (Projects)		
Moose Flat Campground		
Moose Flat Trailhead		
Snowmobile Parking -Alpine		
Little Greys River Trailhead		
Trail Construction/Reconstruction (Miles)		85
Wildlife/Fish Structural Habitat Improvement (Structures)		
Road Closures -Stewart, North Murphy, North Three Forks, Corral, and Kinney		5
Anchor Trees:		
Greys River		5
Little Greys River		17
Sheep Creek		10
Boulder Placement -Greys River		45
Shade Platforms:		
Greys River		15
Sheep Creek		15
Osprey and Bald Eagle Nest		1
Additional Structures after 5 Years		120
Wildlife/Fish Non-Structural Habitat Improvement (Acres)		
Winter Range (Elk/Mule Deer) Shrub Planting -Middle Ridge		30
Bank Stabilization (Riparian Planting) -Little Greys River		2
Aspen Regeneration:		
Small Timber Sales (Elk)		30
Tri-Basin Timber Sale (Elk)		30
Ongoing Timber Sale (Elk)		300
Additional Acres Treated (To be determined in project analyses)		85
Range Improvements: Water Development (Units)		18
Range Improvements: Forage Improvement (Acres)		1,040
Range Improvements: Fence (Miles)		20
Road Construction (Miles)		25
Road Reconstruction (Miles)		10
Grazing (Animal Unit Months)		220,000
Timber Harvest (Millions of Board Feet)		43
		Years after Plan Implementation
Management	1-3	4-5
Area 32	4	2
35	3	3
31	2	1

Watershed Restor

ation Program (Acres)	
Stewart Creek	85
Deadman Creek	27
North Fork Sheep Creek	125
Corral Creek Pass	47

<b>Opportunities and Activities</b>		<b>CIA6</b>	
<b><u>Opportunities and Activities (Units)</u></b>		<b>Number</b>	
Recreation Construction/Reconstruction		18	
( Projects) Cottonwood Campground			
Cottonwood Boat Ramp			
Cottonwood Campground Trailhead			
Cottonwood Lake Trailhead			
Swift Creek Trailhead			
Swift Creek Campground			
Swift Creek Geologic Site			
Wildlife/Fish Non-Structural Habitat Improvement (Acres)		685	
Aspen Regeneration			
Big Game Winter Range (Elk, Mule Deer) Sagebrush Hand			
Grubbing -Star Valley Front		60	
Sagebrush Treatment (Sharptail, Sage Grouse, Elk) -Gannett		110	
Hills Salt River Pass Timber Sale		30	
Swift Creek			
Rehabilitation: Dredge		3	
Lower Dam Dredge		1	
Upper Dam		195	
Additional Acres Treated (To be determined in project analyses)			
Trail Construction/Reconstruction Outside Wilderness (Miles)		29	
Range Improvements: Water Development (Units)		15	
Range Improvements: Forage Improvement (Acres)		50	
Range Improvements: Fence (Miles)		20	
Road Construction (Miles)		0	
Road Reconstruction (Miles)		0	
Grazing (Animal Unit Months)		70,000	
Timber Harvest (Millions of Board Feet)		2	
<u>Management</u>		Years after Plan	
Area 34		Implementation	
1-		6-10	
3		4-5	
0.		0.5	
6			

<b>Opportunities and Activities</b>	<b>CIA7</b>
<b><u>Opportunities and Activities (Units)</u></b>	<b>Number</b>
Recreation Construction/Reconstruction	9
(Projects) Middle Piney Lake Campground	
Middle Piney Lake Trailhead	
Rim Bike Campground	
Upper Hoback Canyon	
Trailhead Shoal Creek	
Trailhead	
Kozy Campground Addition	
Trail Construction/Reconstruction Outside Wilderness (Miles)	44
Wildlife/Fish Structural Habitat Improvement	
(Structures) Bowsby Lake Waterfowl Improvement	13
Bowsby Lake Diversion Ditch	1
Mud Lake Water Level Control -Waterfowl Habitat	3
Access Control for Big Game -District-wide	19
Coal Creek Lake Construction	1
North Piney Lake -Control Water Leak	1
Streambank Stabilization and Instream	
Structures:	26
Apperson Creek	35
Cliff Creek	10
Middle Piney Creek	10
Beaver Country	2
Stream Barrier Removal -Middle Beaver Creek	1
Trumpeter Swan Nesting Habitat Enhancement:	2
Jack Creek Pond	16
North Horse Creek Beaver Pond	140
Nylander Creek	
Additional Structures after 5 Years	
Wildlife/Fish Non-Structural Habitat Improvement (Acres)	
Aspen/Sagebrush Burning (Elk, Mule Deer, and Moose):	
South Cottonwood Creek	100
Middle Beaver Creek	100
Avalanche Path Burning (Elk, Mule Deer, Bighorn Sheep) -Mount	378
Darby Willow Burning on Moose Winter Range:	
North Horse Creek	75
South Piney Creek	40
Fish Creek	45
N.F. Fisherman Creek	50
North Piney Creek	75
South Horse Creek	75
Seeding Elk Calving Area -Lander Cutoff of Oregon Trail	2
Additional Acres Treated (To be determined in project analyses)	225

BT Plan with Corrections and Amendments

April 15, 2015

Range Improvements:			
Water Development (Units)			5
Range Improvements: Forage Improvement (Acres)			2,800
Range Improvements: Fence (Miles)			
Road Construction (Miles)			19
Road Reconstruction (Miles)			0
Grazing (Animal Unit Months)			30
			59,000
Timber Harvest (Millions of Board Feet)			23
		Years after Implementation	
Management Area	1-3	4-5	6-10
21, 23	02	03	05
24	11		
25,26		4	7
Watershed Restoration Program			
(Acres) South Fork Horse Creek			420
North Horse Creek			68
Watershed Restoration Program			
(Acres)			
Dead Cow Creek			130
Silver Mine Creek			910
County Creek			850
South Horse			492



<b>Opportunities and Activities</b>	<b>CIA8</b>
<b>Opportunities and Activities (Units)</b>	<b>Number</b>
Recreation Construction/Reconstruction (Projects)	9
Salt Pass Warm Hut	
Big Park Trailhead	
Hams Fork	
Campground Big Park	
Warm Hut	
Absaroka Ridge Trailhead	
Little Corral Creek Trailhead	
South LaBarge Trailhead	
Clear Creek Trailhead	
Lake Alice Dispersed Camp	
Smith's Fork Warm Hut	
Lander Trail Campground	
Hobble Creek Trailhead	
Little Indian Creek Trailhead	
Salt Spring Trailhead	
Trail Construction/Reconstruction Outside Wilderness (Miles)	49
Wildlife Structural Habitat Improvement (Structures)	
Pothole Blasting for Waterfowl -Hams Fork River/Fontenelle Creek	12
Bonneville Cutthroat Trout Habitat Improvement:	20
Salt Creek	20
Coantag Creek	40
Hobble Creek	
Wildlife/Fish Structural Habitat Improvement (Structures)	
Access Control (Gates):	1
Coantag Creek #35	2
West Branch #36 and #37	2
Grindstone Creek #23 and #24	1
Shafer Creek #40	1
Nugent Park Ridge #3	2
Basin Creek	1
Tri-Basin	2
Middle Ridge	5
Pothole Blasting for Waterfowl -Hams Fork River/Fontenelle Creek Nesting Structures (Bald Eagle/Osprey) -Lake Alice	10
Bank Stabilization and Instream Habitat Improvement:	10
Hams Fork River/Fontenelle Creek	40
Hobble Creek	20
Nameless Creek	1
Fish Migration Barrier and Interpretive Sign -Nameless Creek	20
Bonneville Cutthroat Trout Habitat Improvement:	20
Salt Creek	20
Coantag Creek	160
Colorado River Cutthroat Trout Habitat Improvement -District-wide Additional Structures After 5 Years	

Wildlife/Fish Non-Structural Habitat Improvement (Acres)			
Aspen/Sagebrush Treatment:			
			164
Lower Salt Creek			100
LaBarge			200
Little Hornet			200
Aspen/Sagebrush Treatment - Fontenelle			
Willow Treatment:			
Fontenelle			290
Hams Fork			100
LaBarge			10
Sawmill Creek			1
Nameless			1
Creek Salt			40
Creek			20
Aspen Clearcutting:			
Basin Creek			20
Sams-Allen			100
Pole Creek			10
Minnie Holden			10
Closure Signs for Nugent Park Winter Range			5
Riparian Planting:			
Sams-Allen			275
Coal Creek (Howland Creek)			42
Additional Acres Treated (To be determined in project analyses)			83000
Range Improvements: Water Development (Units)			7
Range Improvements: Forage Improvement (Acres)			24
Range Improvements: Fence (Miles)			12
Road Construction (Miles)			260000
Road Reconstruction (Miles)			
Grazing (Animal Unit			
Months)			
Timber Harvest (Millions of Board Feet)			15
			Years after Plan Implementation
<u>Management Area</u>	1-3	4-5	6-10
12	2	2	4
13	3	1	

Watershed Restoration Program (Acres)

Devils Hole	336
Poker Creek	<del>860</del>
Sams Coal Creek	2751
Big Park	125
Nugent Park	108
Beaver Creek	172
Hams Fork Basin	170

## Appendix B Standard Oil and Gas Lease Form and Stipulations

### Introduction

Appendix B, coupled with the direction found in the Implementation section of the Forest Plan Chapter 5, serves to assist the District Ranger in responding to requests made by the Bureau of Land Management for consent regarding oil and gas leasing proposals for National Forest lands.

Appendix B contains:

The Standard Lease Form (Form 3100-11),

The stipulation for lands of the National Forest System under Jurisdiction of the Department of Agriculture,

The uniform stipulation formats, and

The format for the application of stipulations uniquely needed to implement the direction in the Forest Plan for leasing lands within the Bridger-Teton National Forest.

The Federal Onshore Oil and Gas Leasing Reform Act of 1987 and its implementing regulations, codified in 36 CFR 228 Subpart E, direct the Forest Service to conduct oil and gas leasing analyses which comply with the National Environmental Policy Act of 1969 and the National Forest Management Act of 1976. Two levels of leasing decisions are described within the Forest Service leasing regulations:

- 1) Area-wide or Forest-wide decisions determining which lands are administratively available for leasing; and
- 2) Leasing decisions for specific lands, which verify adequacy of NEPA documentation and consistency with the Land and Resource Management Plan.

Two types of oil and gas leasing decisions are identified above. There are two other types of Forest Service decisions for oil and gas activity which require the operator to have or control a lease for an area before conducting the activity. Both wildcat drilling to discover oil or gas, and field development to produce oil or gas can only occur in leased areas. Excluded from the types of oil and gas resource decisions described below is geophysical prospecting, including seismic exploration, which does not require a lease. The four types of oil and gas resource decisions connected to leasing are:

- 1) Area-wide or Forest-wide decision that certain lands are available for leasing; 2) decision to authorize leasing of specific lands;
- 3) Decision to approve the surface operating plan for an application for permit to drill;
- 4) Decision to approve the surface operating plans for a field development, after oil or gas is discovered.

Environmental analyses which support any of these four types of decisions must project and analyze the type and amount of post-leasing activity that is reasonably foreseeable. This description of reasonably foreseeable development is revised, as appropriate, as projects become more site-specific, and as more information about the oil and gas resource becomes available.

Similarly, each level of environmental analysis will contain mitigating measures to lessen the impact of the proposed activity on other resources and activities. The mitigating measures required will be more site specific for drilling than they are for leasing.

Some examples of mitigating measures which may be required for proposed activities are described below. These examples are not all inclusive -there may be additional ones. Neither will they apply to all projects. However, by reviewing these examples, the potential lessee or operator will be better able to anticipate design requirements and costs for projects located on Bridger-Teton National Forest administered lands. Technical and safety design limitations of the proposed operation, the nature of the target being evaluated, or the nature of the field being developed will contribute toward determining the specific mitigating measures which can be required for a project.

Possible mitigating measures:

**Access**-Road locations and standards may be altered through realignment, relocation, screening, use of construction methods and materials having less Impact, and reclamation, to meet the Intent of adopted visual quality objectives, coordinate with recreation activities, and minimize Impacts on other resources. Mitigating measures may Include: fewer stream crossings; longer access roads which have less impact on other resources; insloped roads will drainage relief Instead of outsloped roads, to lessen visual Impact; construction techniques which lessen the amount of sidecast fill material; use of materials for bridges, traffic control devices, guard rails, retaining walls, and culverts which visually blend with surroundings; Interim re-contouring or revegetation to minimize the visual Impact of ongoing operations; providing alternate recreation opportunities, such as a groomed snowmobile trail, when a road used by snowmob1es must be plowed; and, considering the use of a helicopter or other non-road access during wildcat exploration of a remote area.

**Visual Impacts** -To maintain aesthetic values, surface disturbing activities may require special design, screening, or location to blend with the natural surroundings and meet the Intent of adopted visual quality objectives. Mitigating measures may Include moving facilities or disturbance to an area where it can be screened by vegetation or topography (or better reclaimed); constructing artificial "hills" or berms or planting vegetation to screen the disturbance; shaping and revegetating topsoil stockpiles and other temporary disturbances to blend with the natural surroundings; removing trees and other vegetation in a manner which creates a natural appearing opening; limiting the height of facilities; selecting construction materials which blend with the surrounding area; painting or staining facilities ; treatment of disturbance to blend with the surrounding area; or moving or burying transmission lines, pipelines, or other facilities.

**Activity Coordination** -Operations will be coordinated with recreation and other activities. Operations other than drilling or production may be limited or halted on weekends, holidays, or during other periods of high use, such as hunting season, snowmobile season, or during livestock trailing. Construction of facilities, such as a snowmobile parking area, or fences designed with consideration for livestock and wildlife, may be required In order to reduce conflicts.

**Wildlife**- Operations may be limited within key habitat components during periods of use by wildlife. The number of daily or weekly trips made to a site may be limited. Roads may be closed in other areas in order to meet established road density standards. Surface disturbing activities and facilities may be moved or centralized to minimize the impacts on wildlife. Mitigating measures may Include moving some facilities off-lease, such as: camps and temporary housing (during drilling); centralized tank batteries or other facilities; and treatment or processing facilities. Pipelines and other transmission corridors may be re-routed, and lengthened to minimize Impacts on other resources. Reserve pits may be covered by screen or netting to avoid Injury or mortality to migratory waterfowl.

**Watershed** - Projects will be designed to minimize Impacts to the surrounding watershed, Including minimizing impacts to surface and ground Water quality, wetlands, floodplains, and associated riparian and fisheries habitats. Mitigating measures may Include: relocation of surface disturbance away from water courses, steep slopes, sensitive soil, and landslides; stabilization of landslides; limiting the number of stream crossings; diversion of surface runoff away from areas of surface disturbance; Interim revegetation of disturbed areas to minimize erosion and sedimentation; construction of sediment control structures; limiting or halting construction activities during spring runoff, or during spawning periods for fisheries; halting construction activities when materials are frozen; containment of potentially contaminated fluids, Including installation of leak detection systems; and monitoring of surface and groundwater quality.

**Reclamation** - During and following operations, reclamation measures will be required to restore resource values, including recreation, scenic, watershed, wildlife, and fisheries, to the extent practical. Reclamation measures may include: recontouring disturbed areas and road cuts and fills; aesthetic placement of downed timber, snags, or boulders to camouflage recontoured areas; re-establishment of appropriate vegetation which blends visually and ecologically with the surrounding area, and which provides erosion control; re-establishment of effective drainage and erosion control for the disturbed area; construction of sediment control structures; re-establishment of wetlands and riparian areas; re-establishment or Improvement of wildlife and fisheries habitat; construction of fences and other structures which are designed with considerations for livestock, wildlife and fisheries; control of noxious weeds; and monitoring to ensure that reclamation objectives are being met.<sup>99</sup>

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<sup>99</sup> (Amended 4/17/92 by Forest Plan Amendment No. 1)

## Lease Form

### **Offer to Lease and Lease for Oil and Gas (BLM Form 3100-11)**

This lease form is used for all oil and gas leases issued by the Bureau of Land Management. The form is available at the Forest Supervisor's Office in Jackson, Wyoming.

### **Stipulations**

The lease stipulations have been divided into the following categories:

- Stipulation for Lands of the National Forest System under Jurisdiction of the Department of Agriculture,

- Uniform Stipulations, and

- Court Ordered or Administratively Required Stipulations.



## "Standard" Lease Stipulation

### Stipulation for Lands of the National Forest System under Jurisdiction of Department of Agriculture

This is the "standard" stipulation required by the Secretary of Agriculture for inclusion in all mineral licenses, permits, and leases involving National Forest System lands issued by the Bureau of Land Management.

#### STIPULATION FOR LANDS OF THE NATIONAL FOREST SYSTEM UNDER JURISDICTION OF DEPARTMENT OF AGRICULTURE

The licensee/permittee/lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights granted by the Secretary of the Interior in the license/prospecting permit/lease. The Secretary of Agriculture's rules and regulations must be complied with for:

- (1) All use and occupancy of the NFS prior to approval of a permit/operating plan by the Secretary of the Interior,
- (2) Uses of all existing improvements, such as Forest development roads, within and outside the area licensed, permitted or leased by the Secretary of the Interior, and
- (3) Use and occupancy of the NFS not authorized by a permit/operating plan approved by the Secretary of the Interior.

All matters related to this stipulation are to be addressed to:

Forest Supervisor  
Bridger-Teton National Forest  
340 North Cache  
Box 1888  
Jackson, WY 83001  
Telephone: (307)733-2752

Who is the authorized representative of the Secretary of Agriculture:

### Uniform Stipulation Formats

Uniform stipulation formats were developed by the Bureau of Land Management and the Forest Service to accommodate the wide variety of resources encountered on federal lands. The stipulations are categorized as to how they modify the lease rights rather than by the resource to be protected.

The uniform formats for and a brief description of the No-Surface-Occupancy Stipulation, the Timing-Limitation Stipulation, and the Controlled-Surface-Use Stipulation are presented below. These will be filled in as needed to meet the direction in the Forest Plan.

### Stipulation for Lands of the National Forest System Administered by the Bridger-Teton National Forest

This is a standard stipulation to be Included In all oil and gas leases involving National Forest System lands administered by the Bridger-Teton National Forest.

The National Forest Management Act of 1978 requires all National Forests to be managed In accordance with their respective Land and Resource Management Plans. All leases, permits, and licenses for the use and occupancy of National Forest System lands are required to be consistent with completed Plans. The management standards and guidelines which apply to this lease holding are contained within Chapter 4 (Land Management Direction) of the Land and Resource Management Plan for the Bridger-Teton National Forest. The accompanying Record of Decision document contains some changes and additions to standards contained In Chapter 4. An enclosure to an accompanying letter from the Regional Forester dated February 20, 1990, contains some clarifying information about management standards. Some additions to Chapter 4 and Appendix B of the Land and Resource Management Plan are described In the Decision Notice and Environmental Assessment for OU and Gas Leasing In Management Area 49, Jackson Ranger District, Bridger-Teton National Forest Additional site-specific standards apply to this lease holding, and are contained within the Environmental Assessment and Decision Notice for 011 and Gas Leasing in Management Area \_\_\_\_\_, Ranger District, Bridger-Teton National Forest. All of the documents listed above are available for review at the Forest Service office listed at the end of this stipulation.

Standards and guidelines within the Land and Resource Management Plan establish the framework for the design and implementation of any surface disturbing project. Mitigating measures required for a project will be identified through a site-specific environmental analysis and decision which complies with the National Environmental Policy Act.

All matters related to this stipulation are to be addressed to:

Forest Supervisor  
Bridger-Teton National Forest

Address: 340 North Cache  
P.O. Box 1888  
Jackson, WY 83001

Telephone: (307) 739-5500

Who is the authorized representative of the Secretary of Agriculture

Signature of Licensee/Permittee/Lessee<sup>100</sup>

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<sup>100</sup> (Amended 4/17/92 by Forest Plan Amendment No. 1)

### Notice -Road Access Difficult or Impossible

This lease notice is used when Forest Plan standards may prohibit or severely limit roaded access to the leaseholding.

The construction, reconstruction, or use of roads to access this leaseholding may not be permitted. Management standards contained in the Land and Resource Management Plan for the Bridger-Teton National Forest prohibit or severely limit any type of roaded access across lands in the proximity of or adjacent to this leaseholding. The National Forest Management Act of 1978 requires that all National Forests be managed in accordance with their respective land and resource management plans.

Any surface-disturbing activities proposed for this leaseholding, which also will require surface disturbance or occupancy of adjacent lands, will be reviewed to determine whether the proposed activities can meet the standards contained within the Land and Resource Management Plan. If existing standards cannot be met, the proposal can be denied or standards can be revised through an amendment to the Land and Resource Management Plan.<sup>101</sup>

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<sup>101</sup> (Amended 4/17/92 by Forest Plan Amendment No. 1)

## Notice -Endangered or Threatened Species

This notice is used to emphasize the requirements for protection of Threatened or Endangered Species.

The lease area may contain habitat necessary for the continued existence of the threatened and endangered species listed below, which are protected by the 1973 Endangered Species Act (as amended).

The FS is responsible for ensuring that the leased land is examined through a biological evaluation, prior to undertaking any surface-disturbing activities, to determine effects upon any plant or animal species listed or proposed for listing as endangered or threatened, or their habitats. The findings of this biological evaluation may result in some restrictions to the operator's plans or even disallow use and occupancy that would be in violation of the 1973 Endangered Species Act (as amended), by detrimentally affecting endangered or threatened species or their habitats.

The lessee/operator may, unless notified by the FS that the biological evaluation is not necessary, conduct the evaluation on the leased lands at his discretion and cost. This biological evaluation must be done by or under the supervision of a qualified resource specialist approved by the FS. An acceptable report must be provided to the FS identifying the anticipated effect of a proposed action on endangered or threatened species or their habitats.

If proposed, threatened, or endangered species are discovered in the area after any required biological evaluation has concluded, an evaluation will be conducted to assess the effect of ongoing and proposed activities. Based on the conclusion drawn in the evaluation, additional restrictions or prohibitions may be imposed to protect the species or their habitats.

The following proposed, threatened and endangered species and their habitats are known to occur or can be expected to occur within this leaseholding, or may be affected by activities conducted within this lease holding. The potential effects upon any other federally classified threatened or endangered species discovered during the biological evaluation also must be addressed.

The lessee/operator shall take such measures as may be required by the authorized officer, Forest Service, to protect such species.<sup>102</sup>

## Notice -Sensitive Species

This notice is used to emphasize the requirements for protection of sensitive species.

The lease area may contain habitat necessary for the continued viability of the sensitive species listed below, and surface disturbing activities may lead to the listing of these species as threatened or endangered.

In order to implement the management standards contained within the land and Resource Management Plan for the Bridger-Teton National Forest, (Forest Plan is required by the National Forest Management Act of 1976), the FS is responsible for ensuring that the leased land is examined through a

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<sup>102</sup> (Amended 4/17/92 by Forest Plan Amendment No. 1)

biological evaluation, prior to undertaking any surface-disturbing activities, to determine effects upon any plant or animal species listed as sensitive, or their habitats. The findings of this biological evaluation may result in some restrictions to the operator's plans or even disallow use and occupancy that would lead to the listing of a sensitive species as threatened or endangered.”

The lessee/operator may, unless notified by the FS that the biological evaluation is not necessary, conduct the evaluation on the leased lands at his discretion and cost. This biological evaluation must be done by or under the supervision of a qualified resource specialist approved by the FS. An acceptable report must be provided to the FS Identifying the anticipated effects of a proposed action on sensitive species or their habitats.

If a sensitive species is discovered in the area after any required biological evaluation has concluded, an evaluation will be conducted to assess the effect of ongoing and proposed activities. Based on the conclusion drawn in the evaluation, additional restrictions or prohibitions may be imposed to protect sensitive species or their habitats.

The following sensitive species and their habitat are known to occur or can be expected to occur within this leaseholding, or may be affected by activities conducted within this leaseholding. They shall be addressed in the biological evaluation. The potential effects upon any other sensitive species discovered during the biological evaluation also must be addressed.

The lessee/operator shall take such measures as may be required by the authorized officer, Forest Service, to protect such species.<sup>103</sup>

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<sup>103</sup> (Amended 4/17/92 by Forest Plan Amendment No. 1 )

## Notice - Protected Cultural or Historical Site

This notice is used to emphasize compliance with existing regulations, when a cultural or historical site is known to occur within the leaseholding.

A preliminary review of FS files indicates that cultural or historical resources included or eligible for inclusion within the National Register of Historic Places are present within this leaseholding. The protected site is located in \_\_\_\_\_.

Pursuant to Section 106 of the National Historic Preservation Act, Implementing regulations 38 CFR 800, this property will be avoided by lease activities. If avoidance is not feasible, measures will be required to mitigate any impact to the site.<sup>104</sup>

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<sup>104</sup> (Amended 4/17/92 by Forest Plan Amendment No.1)

## NOTICE - VISUAL QUALITY OBJECTIVES

This notice is used to emphasize the adopted visual quality objectives.

Surface disturbing activities within this leaseholding are required to meet the visual quality objectives adopted for this Management Area. Activities which do not meet adopted visual quality objectives may be approved through an analysis which complies with the National Environmental Policy Act and includes public involvement. Management standards and guidelines contained within the Land and Resource Management Plan for the Bridger-Teton National Forest establish the framework for the visual quality objectives adopted in the Decision Notice/Finding of No Significant Impact for Oil and Gas Leasing in Management Area , \_\_\_\_\_ Ranger District.

The National Forest Management Act of 1976 requires that all National Forests be managed in accordance with their respective land and resource management plans. The Environmental Assessment/Decision Notice described above contains site-specific analysis and decisions which are tiered to the Record of Decision and the Final Environmental Impact Statement accompanying the Land and Resource Management Plan for the Bridger- Teton National Forest.

Address all matters related to this notice and all requests for additional information on visual quality analyses and visual quality objectives to:

Forest Supervisor  
Bridger-Teton National Forest

Address:

340 North Cache  
P.O. Box 1888  
Jackson, WY 83001

Telephone: (307) 733-2752

who is the authorized representative of the Secretary of Agriculture<sup>105</sup>.

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<sup>105</sup> (Amended 4/17/92 by Forest Plan Amendment No. 1 )



## Notice -Lander Trail

PROTECTED CULTURAL OR HISTORICAL SITE- A preliminary review of FS files indicates that cultural or historical resources Included or eligible for Inclusion within the National Register of Historic Places are present within this leaseholding. The protected site is the Lander Trail located in \_\_\_\_\_

In accordance with the National Trails System Act, the Comprehensive Management and Use Plan, and the National Historic Preservation Act, a corridor has been established to protect the scenic and historic values associated with the Lander Trail. The following restraints will be applied to the Lander Trail.

Surface occupancy may be restricted for 1/4 mile or to the visual horizon, whichever is less, for sections of the Trail where original ruts have been replaced by the improved gravel road. Conditions of approval of the Application for Permit to Drill (APD) will contain the necessary restrictions to protect the scenic and historic values of the Trail In these areas, or to mitigate potential Impact caused by physical or visual Intrusion to the Trail corridor.<sup>106</sup>

### No-Surface-occupancy Stipulation • Lander Trail

No surface occupancy for 1/4 mile or to the visual horizon, whichever is less, for sections of the Lander Trail where the original ruts still exist (see enclosed map).

For the purpose of:

Protecting the many pioneer graves, tree engravings, and campsites which may be adjacent to the trail, and to protect the scenic and historic values of the trail.<sup>107</sup>

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<sup>106</sup> (Amended 6/7/91 by Management Area 12 Decision Notice, and 4/15/ by a Supplemental Decision Notices)

<sup>107</sup> ((Amended 6/7/91 by Management Area 12 Decision Notice, and 4/15/ by a Supplemental Decision Notices)

NO SURFACE OCCUPANCY STIPULATION

No surface occupancy or use is allowed on the lands described below (legal subdivision or other description): 1/4 mile on either side of the \_\_\_\_\_ River from \_\_\_\_\_.

See Attached Maps

For the purpose of:

Protecting the existing condition along the portion of the \_\_\_\_\_ River which has been determined to be eligible for Inclusion in the National Rivers System as a Wild River. If a suitability study finds that this waterway corridor is not suitable for Wild and Scenic River classification, the No Surface Occupancy stipulation for this purpose/resource will not apply, and the area will be managed as directed in the Forest Plan (as amended), including Forest Plan Amendment No. 2 (Wild and Scenic Rivers eligibility study and management guidance).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. *(For guidance on the use of the stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)*<sup>108</sup>

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<sup>108</sup> {Amended 4/17/92 by Forest Plan Amendment No.2.}

### No-Surface-Occupancy Stipulation

Prohibits use or occupancy of the land surface for fluid mineral exploration or development to protect specific resource values. The No-Surface-Occupancy Stipulation (NSO) is intended for use only when other stipulations are determined insufficient to adequately protect the public interest.

**No-Surface-Occupancy Stipulation**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description):**

**For the purpose of:**

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. For guidance on the use of this stipulation, see *BLM Manual 1624 and 3101* or *FS Manual 1950 and 2820*.

### Timing-Limitation Stipulation

Prohibits surface use during specified time periods to protect identified resource values.

This stipulation does not apply to operation and maintenance of production facilities unless the findings of analysis demonstrate the continued need for such mitigation and that less stringent, project-specific mitigation measures would be insufficient.

**Timing-Limitation Stipulation**

**No surface use is allowed during the following time period(s): This stipulation does not apply to operation and maintenance of production facilities:**

**On the lands described below:**

**For the purpose of (reasons):**

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. For guidance on the use of this stipulation, see *BLM Manual 1624 or FS Manual 1950 and 2820*.

### Controlled-Surface-Use Stipulation

Allows use and occupancy on all or portions of the lease year-round (unless restricted by another stipulation), but because of special values or resource concerns, lease activities must be strictly controlled. The Controlled-Surface-Use Stipulation is used for operating guidance and is not a substitute for the No-Surface-Occupancy or Timing- Limitation Stipulations.

#### **Controlled-Surface- Use Stipulation**

**Surface occupancy or use is subject to the following special operating constraints:**

**On the lands described below:**

**For the purpose of:**

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. For guidance on the use of this stipulation, see *BLM Manual 1624 and 3101 or FS Manual 1950 and 2820*

## Stipulation Applications

Included below are some of the ways that the uniform stipulations will be used to protect the resources on the Bridger-Teton National Forest as directed in the Forest Plan. These are not the only applications of these stipulations that will be used, just those that meet unique situations

**Application of the No-Surface- Occupancy Stipulation for the protection of Fremont Lake**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Within 1,000 feet of the shoreline of Fremont Lake or its outlet. Directional drilling is not allowed.

**For the purpose of:**

To protect the integrity of Fremont Lake and its watershed.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. For guidance on the use of this stipulation, see *BLM Manual 1624 and 3101 or FS Manual 1950 and 2820*.

**Application of the No-Surface-Occupancy Stipulation for the Protection of New Fork, Willow, Half Moon, Burnt, and Boulder Lakes**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description):**

Within 1,000 feet of the shoreline of (New Fork Lake, Willow Lake, Half Moon Lake, Burnt Lake, Boulder Lake) or its outlets. Directional drilling is authorized.

**For the purpose of:**

To protect the integrity of the Lake and protect water quality.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. For guidance on the use of this stipulation, see *BLM Manual 1624 and 3101 or FS Manual 1950 and 2820*.

**Application of the No-Surface-Occupancy Stipulation for the Protection of Steep Slopes and Unstable Soils**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description):**

On slopes in excess of 40 percent or on technically unsuitable soils.

**For the purpose of:**

Protecting steep slopes and unstable soils.

Any changes to this stipulation will be made in accordance with the land use plan and/or the-regulatory provisions for such changes. For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.

Application of the No-Surface-Occupancy Stipulation for the Protection of the Grizzly Bear and its Habitat

**Application of the No-Surface-Occupancy Stipulation for the Protection of the Grizzly Bear and its Habitat**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description):**

**For the purpose of:**

Providing for the continued viability of the grizzly bear population and protection of its habitat upon delisting as a Threatened species under the Endangered Species Act of 1973 and to avoid relisting the bear as a Threatened or Endangered species.

Any change to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.

The Authorized Officer will not waive or in any manner modify this stipulation unless the Authorized Officer determines that the proposed operations will not have a significant adverse effect on the grizzly bear population and its habitat or be inconsistent with standards set forth in the Grizzly Bear Recovery Plan, Interagency Grizzly Bear Guidelines, the applicable land and resource management plan, and any future amendment of these documents in effect on the date when the lessee submits the operating proposal

Requests for waiver, exception, or modification of this stipulation, must be accompanied by the lessee/operator's surface use proposal which describes in specific detail the measures that will be undertaken to protect the bear and maintain or improve habitat effectiveness. Such measures shall include, but are not limited to, a plan to reclaim and restore the bears' habitat upon abandonment and the coordination of the timing, spacing, and sequence of activities. The Authorized Officer will ensure that the analysis of the proposal will be documented in a site-specific environmental assessment or, if necessary, an environmental impact statement. The assessment or statement will analyze both the singular and cumulative effects on the grizzly bear and its habitat of the proposal-including access-together with the existing situation and other reasonably foreseeable actions whether or not proposed to be undertaken by the lessee. Upon completion of the analysis, modifications to the lessee/operator's proposal or additional protective measures may be required or, if it is determined that unacceptable impacts will occur, approval may be denied by the Authorized Officer. The lessee, by accepting this stipulation, understands that operations may never be approved on the leasehold and beneficial use or enjoyment of this lease may never be realized.



**Application of the Timing-Limitation Stipulation for the Protection of the Jackson Elk Herd and its Crucial Winter Range**

~~No surface use is allowed during the following time period(s): This stipulation does not apply to operation and maintenance of production facilities.~~<sup>37</sup>

November 15 to April 30.

This stipulation does apply to operation and maintenance of production facilities, except that access to and production from the facilities will be allowed year round. Such activities as drilling, construction, and routine work-over of will not be allowed year round.<sup>109</sup>

**On the lands described below:****For the purpose of (reasons):**

Providing continued viability of the Jackson Elk Herd and protection of its crucial winter range habitat in the Jackson Hole, Wyoming, area, and to prevent its harassment while the elk occupy the range.

Preplanning will be essential to assure that all approved activities such as construction, drilling, workover, and heavy maintenance occur when the Jackson Elk Herd are not using the crucial winter range. The Forest Service may require time to observe and study wintering elk on a proposed activity site to develop mitigating measures, and operating standards and access routes.

If it is determined that the proposed activities cannot be conducted in a manner that will maintain or enhance the carrying capacity of the winter range, alternatives will be proposed or the proposal will be denied.

Development and production facilities will require the same careful planning and will be limited to centralized locations.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. For guidance on the use of this stipulation, see *BLM Manual 1624 or FS Manual 1950 and 2820*

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<sup>109</sup> (Amended 03/02/90 by Attachment one of the Record of Decision )

## Court Ordered or Administratively Required Stipulations

### For the Protection of the Palisades Wilderness Study Area

The April 11, 1984, Order of the United States District Court for the District of Columbia in *Sierra Club v. Peterson*, Civil No. 81-1230, directed that the following stipulation be included in all leases issued for lands within the Palisades Further Planning Area-designated as the Palisades Wilderness Study Area by the Wyoming Wilderness Act of 1984.

#### **Palisades Wilderness Study Area Conditional-No-Surface Occupancy Stipulation**

The lessee agrees not to occupy or use the surface of the leased lands which are within the boundary of the Palisades RARE II Further Planning Area except for certain limited uses as permitted in writing by an authorized officer of the surface management agency. This stipulation, at a later date, may be modified, supplemented, eliminated, or remain unchanged. Alteration of this stipulation will be conditional upon the preparation of a site specific environmental assessment or, if required, an environmental statement. In the event this stipulation is eliminated, it will be replaced by a Coordinated Exploration Stipulation and other special stipulations as required to protect the surface resources.

**For Coordinated-Exploration within the Palisades Wilderness Study Area**

The Coordinated-Exploration Stipulation is required by the Conditional-No-Surface- Occupancy for application to leases within the Palisades RARE II Further Planning Area-Palisades Wilderness Study Area-in the event that the Conditional No Surface Occupancy Stipulation is eliminated from leases in the Area.

**Palisades Wilderness Study Area Coordinated-Exploration Stipulation**

**All or portions of the lands covered by this lease are within the Palisades Further Planning Area, an area of critical environmental concern. Therefore, the lessee agrees that:**

1. In order to protect the special resource values, drilling on the subject lease will be authorized only under a plan of operation approved pursuant to the Mineral Leasing Act of February 25, 1920, 41 Stat. 437, as amended, 30 U.S.C. 181 et seq. and;
2. All plans of operation will contain a provision vesting in the Secretary, USDI, or his duly authorized representative(s) control over the rate of drilling and development including in particular the spacing of wells and such other conditions as may be deemed necessary, for the protection of the Palisades Further Planning Area.

## For the Protection of the Jackson Hole Area

The following stipulation is required by the Secretary of the Interior Krug Memorandum of August 15, 1947, for inclusion in oil and gas leases issued for lands south of the 11th Standard Parallel in the Teton National Forest.

## Jackson Hole Area Oil and Gas Lease Stipulation

The lands embraced in this lease being within the area designated in the memorandum of August 15, 1947, by the Secretary of the Interior ("Oil and Gas Leases in the Jackson Hole, Wyoming Area"; Federal Register, August 30, 1947, page 5859), which specifies the general conditions under which the unitized development of the oil and gas resources is authorized, the lessee hereby agrees:

- (1) To drill only such wells on the leased land as may be authorized by the Secretary of the Interior under an approved unit plan; to drill no well within 1250 feet of any public road on or adjacent to the leased land without the consent of the Secretary of the Interior first had and obtained; to refrain from defacing, injuring, or destroying trees, shrubs, or natural features, or removing same outside of the authorized work limits .or pipeline and road rights-of-way as established pursuant to, or revised in accordance with, the unit plan. After designation of the authorized work limits by the Secretary of the Interior or his representatives, lessee shall mark such limits by some acceptable visual means. The location of camps, storage, parking of equipment, and storage of materials shall be confined within the authorized work limits. Sludge or other waste by-products from drilling or operations shall be so confined or disposed of that they do not destroy scenic or wildlife or pollute streams.
- (2) To remove at the termination of drilling operations, all camps and buildings not essential to a continuing operation of any well, and to fill all sump holes, ditches, and other excavations, remove or cover all debris, and to restore the sites to a neat and presentable condition appropriate to the surrounding landscape, and, upon any partial or total relinquishment, cancellation, or expiration of this lease as to that part of the leased land to which his rights have terminated, so far as reasonably possible, to restore the surface of the leased land to its former condition to the extent deemed necessary by the Secretary of the Interior and the Regional Forester, U.S. Forest Service, Ogden, Utah, or their authorized representatives.
- (3) To keep to an absolute minimum the number of access, tote roads, and other travelways necessary to conduct the lessee's operations, the location of which shall be designated by the Supervisor prior to the time of their construction. Access to existing public highways shall be determined by the Supervisor at such points on the highways with due regard for sight distance restrictions, safety, or scenic considerations. The location, alignment and cross section of all roads constructed for the convenience of lessee's operations, shall be such that after discontinuance of use, they can be obliterated and the area over which they traverse can be restored to its original condition. All types of roads constructed for operational uses shall, at the termination of these uses, be obliterated where required' and the area over which they traversed restored in such a manner that revegetation will be encouraged. All roads constructed for operational purposes are to be considered as private roads and the erection of signs, locked gates, or other devices that may be required, at the discretion of the Supervisor, to discourage or prevent their use by the public shall be constructed and maintained by the lessee.

- (4) To protect the scenic and aesthetic values of roadsides, waterfronts, and recreation area zones as far as possible consistent with the authorized use in connection with construction, operation, and maintenance facilities.
- (5) To conduct operations in a manner that will offer the least possible disturbance to wildlife on or adjacent to the leased land; to exercise no methods of control or interference with such wildlife without authority first obtained from the authorized representative of the Secretary of the Interior and/or the State Game and Fish Commission; to make no claim against the federal government or the State on account of damage by such wildlife to improvements placed on the leased land.
- (6) To observe and comply with all State and federal laws and regulations relating to wildlife and to take such action as is necessary to assure observation and compliance with these laws and regulations by lessee's employees and agents.

As to any land within the Cache Creek Municipal Watershed, the lease will contain the following additional stipulation.

- (7) To comply with plans heretofore made through agreement with the Forest Service and the Town Council of Jackson, Wyoming, for the protection from pollution of the municipal water during the term of this lease or any extension thereof.