United States
Department of
Agriculture

Forest Service

BRIDGER-TETON NATIONAL FOREST

LAND AND RESOURCE MANAGEMENT PLAN

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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 decisionmakers

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, 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,**

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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

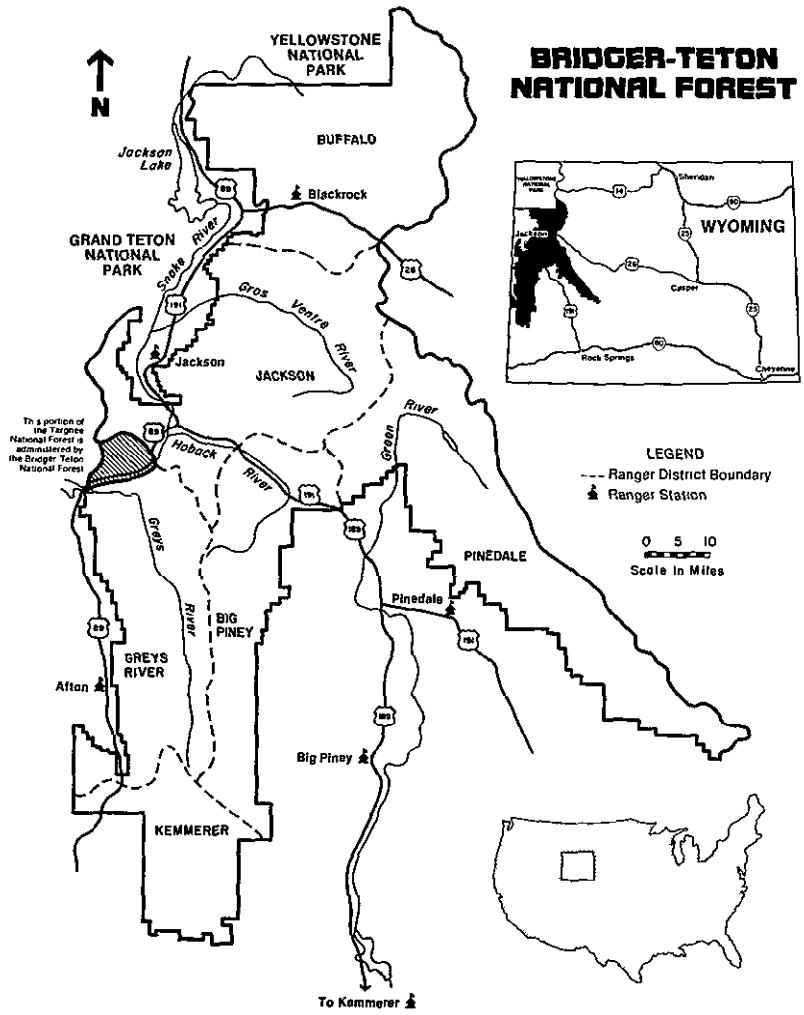
Desired Future Condition — A future land or resource condition that achieves a set of compatible multi-resource goals and objectives

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."

Figure 1-1
Forest Vicinity Map



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; and

Snake River Recreation Management Plan

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 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 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
>
> 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

Chapter 6 is the Subject Index

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

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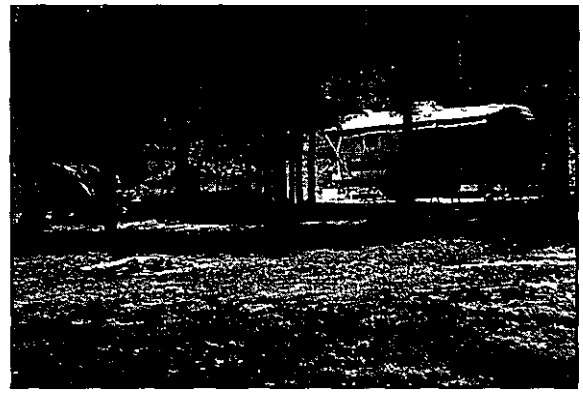
Definitions

Recreation

Developed Recreation — Recreation dependent on facilities provided to enhance recreation opportunities in concentrated use areas

Dispersed Recreation — Recreation that occurs outside developed recreation sites, requires few, if any, facilities or other improvements, and includes such activities as hunting, hiking, viewing scenery, and cross-country skiing

Campgrounds are one type of developed recreation area.



Dispersed camping is very popular

Recreation Opportunity Spectrum (ROS):

Primitive — An essentially unmodified environment, where trails may be present but structures are rare, and where probability of isolation from the sights and sounds of man is extremely high

Semi-primitive Non-motorized — Few or subtle changes by man, with a high probability of isolation from the sights and sounds of man

Semi-primitive Motorized — Classification characterized by few or subtle changes by man and with a moderate probability of isolation from the sights and sounds of man, except for the evidence of primitive roads and trails

Roaded Natural — A predominately natural environment with evidence of moderate permanent resource alternation and utilization Evidence of the sights and sounds of man is moderate but in harmony with the natural environment Opportunities exist for both social interaction and moderate isolation from the sights and sounds of man.

Rural — An area in which the sights and sounds of man are prevalent and the landscape has been altered by the works of man.

Visual Quality

Visual Quality Objectives (VQO):

Modification — Management activities may be visually dominant They must be harmonious with features of the natural landscape, in their size, form, and linear characteristics. Recreation developments, timber harvest units, and roads are examples of elements that may be found in a landscape that meets this VQO. Alterations to the landscape may not be in glaring contrast to natural forms

Partial Retention — Alterations to the natural landscape may be apparent, but they

are visually subordinate to natural features Management activities such as timber harvesting and roading may occur, but must be designed so they are not striking features

Retention — Management activities are not evident, they blend well with the natural landscape and are barely discernible Timber harvest and roading may occur in areas with a VQO of retention, but they must be designed to appear natural and unnoticeable This VQO is generally applied to areas that are in the foreground of sensitive viewing areas

Preservation — There are no management activities in areas with this VQO, it is applied to designated federal Wildernesses and Wild Rivers and any administratively designated natural area where only ecological change is allowed Such minor, localized features as trails and campsites are allowed.

Vegetation: Range

Animal Unit Month (AUM) — The amount of forage required by an animal such as a cow, sheep, or horse for 1 month.

Vegetation: Timber

Silviculture — A management process whereby forests are tended, harvested, and replaced, resulting in a forest of distinctive form

Sawtimber — Trees meeting minimum diameter and length requirements

Old-Growth — Old-growth stands composed of Douglas-fir and Engelmann spruce will be Douglas-fir, spruce, and fir multi-storied stands having two or more well-developed canopies of trees The oldest overstory trees should be 140 to 240 years of age and be greater than 18 inches diameter at breast height Understory trees will normally be composed of many age and size classes Small openings may exist in the canopy where older trees have fallen. Snags should be present in the stand and average 2 4 snags per acre Large-diameter downed logs will be a component of the forest floor.

Tie-hacking — The selective removal of trees of a size which would make railroad ties This was a common practice from the late 1800's to the early 1940's.

Board Foot — The amount of wood equivalent to a piece of wood 1 foot by 1 foot by 1 inch thick Generally, 5 board feet of log measure is equivalent to 1 cubic foot of roundwood

MBF — Thousand Board Feet

MMBF — Million Board Feet.

Cubic Foot — Amount of timber equivalent to a piece of wood 1 foot by 1 foot by 1 foot

Capable Lands — Portions of the forest that have an inherent ability to grow trees.

Habitat Type Series — Used in forest site classification An aggregation of all land areas potentially capable of producing similar plant communities at climax having the same climax-dominant tree species.

Epidemic — A wide-spread, high level of insect or disease incidence beyond normal proportions, and usually accompanied by increased damage to vegetation.

Endemic — Normal population level of potentially destructive species of insect or disease

Roundwood — Timber and fuelwood prepared in a round state, from felled trees to material trimmed, barked, and crosscut Examples are logs and transmission poles

Minerals

Locatable — Locatable minerals include uncommon varieties of sand, stone, gravel, cinders, pumice, pumicite, or cinders. All valuable mineral deposits are locatable under the General Mining Law of 1872, except those specifically excluded by law as salable or leasable minerals

Leasable — Coal, phosphate; oil, gas; chlorides, sulphates, carbonates, borates, silicates or nitrates of potassium and sodium, sulphur in the States of Louisiana and New Mexico, native asphalt, solid and semi-solid bitumen and bituminous rock including oil-impregnated rock or sands from which oil is recoverable only by special treatment after the deposit is mined. Geothermal resources and associated by products. Includes all minerals on acquired lands except salable minerals and all minerals on the Outer Continental Shelf

Salable — Common varieties of sand, gravel, stone, cinders, and pumice

Water

Riparian Areas — Geographically delineable areas with distinct resource values and characteristics, that are comprised of the aquatic and riparian ecosystems

Watershed Condition — A description of the health of a watershed as measured against management objectives in terms of the factors which affect favorable conditions of flow and soil capability. Three condition classes are used to characterize a watershed relative to its potential and tolerance

Class I — Watershed condition is at or above potential

Class II — Watershed condition is below potential but can be improved by applied management of improvement measures

Class III — Watershed condition is at or below tolerance

Soils

Mollisols — Mature soils formed under grass vegetation in climates that have a moderate-to-pronounced seasonal moisture deficit These are the most common soils of the sagebrush areas along the lower elevations and parks, meadow, and ridges of other elevations.

Alfisols — Mature soils formed under forest vegetation in climates that have water available for plant growth for more than three consecutive months during a warm season. These are the most common soils on the forested mid-mountain slopes

Inceptisols — Young, weakly developed soils, usually found on young landforms with almost any kind of vegetation Water is available for plant growth for more than three consecutive months during a warm season These soils are commonly found on areas above timberline that were glaciated during the Pleistocene, the most recent glacial period ending about 10,000 years ago

Entisols — Very young soils with no discernible development They support plants, but they may be in any climate and under any kind of vegetation These are common soils of recent alluvial fans, landslide scarps and tracks, and extensive site modification by man. These soils may also be found among the high peaks where a very short warm season slows the rate of soil development

Airshed Classes:

Class I — Federal Wildernesses, National Parks, Wildlife Refuges, and memorial parks designated in August, 1977, as areas having highest and most desirable air quality. The maximum allowable deterioration of air quality is the lowest for Class I, the deterioration for sulfur dioxide is 2 micrograms per cubic meter ($\mu g/m^3$) per year The rest of the nation is presently Class II The Bridger and Teton Wildernesses are the only Class I areas within the Bridger-Teton National Forest

Class II — All areas not designated as Class I Maximum allowable deterioration of air quality is higher than Class I. For Class II, the deterioration for sulfur dioxide annually is 20 $\mu g/m^3$.

Class III — Areas of least desirable air quality and none in U.S presently designated

Access: Roads

Forest Arterial Roads — Roads comprising the basic access network for National Forest System administrative and management activities These roads serve all resource elements to a substantial extent, and maintenance is not normally determined by the activities of any one element They provide service to large land areas and usually connect with public highways or areas or other National Forest arterial roads to form an integrated network of primary travel routes The location and standard are often determined by a demand for maximum mobility and travel efficiency rather than by a specific resource management service Usually, they are developed and operated for long-term land and resource management purposes and constant service

Forest Collector Roads — Roads built to serve two or more elements but which do not fit into the other two categories arterial or local Construction costs of these facilities are prorated to the respective element served. These roads serve smaller land areas and are usually connected to a forest arterial or public highway They collect traffic from forest local roads or terminal facilities The location and standard are influenced by both long-term, multi-resource service needs and travel efficiency National Forest collector roads are operated for constant or intermittent service, depending on land use and resource management objectives for the area served by the facility

Forest Local Roads — *Roads built and maintained for, and frequented by, the* activities of a given resource element Some use may be made of other element activities, but normally maintenance is not affected by such use These roads connect terminal facilities with forest collector or forest arterial roads or public highways The location and standard usually are determined by the requirement of a specific resource activity rather than by travel efficiency National Forest local roads may be developed and operated for either constant or intermittent service depending on land use and resource management objectives for the area served by the facility.

Cultural Resources

Cultural Resource — Remains of sites, structures, or objects used by humans in the historical or prehistorical past

National Register of Historical Places — Listing, which is maintained by the National Park Service, of areas or sites which have been designated as being of historical significance. The Register includes places of local, State, and national significance

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 Overview

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

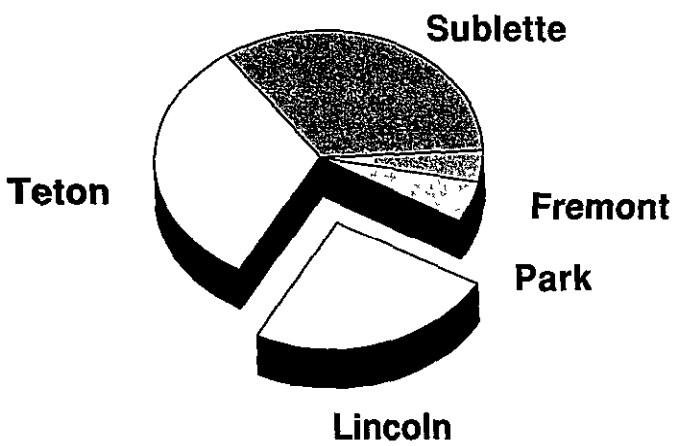
Cultural resources like this tie-hack cabin are reminders of the past

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

Figure 2-1
Wyoming Counties Included Within the Bridger-Teton National Forest Boundary

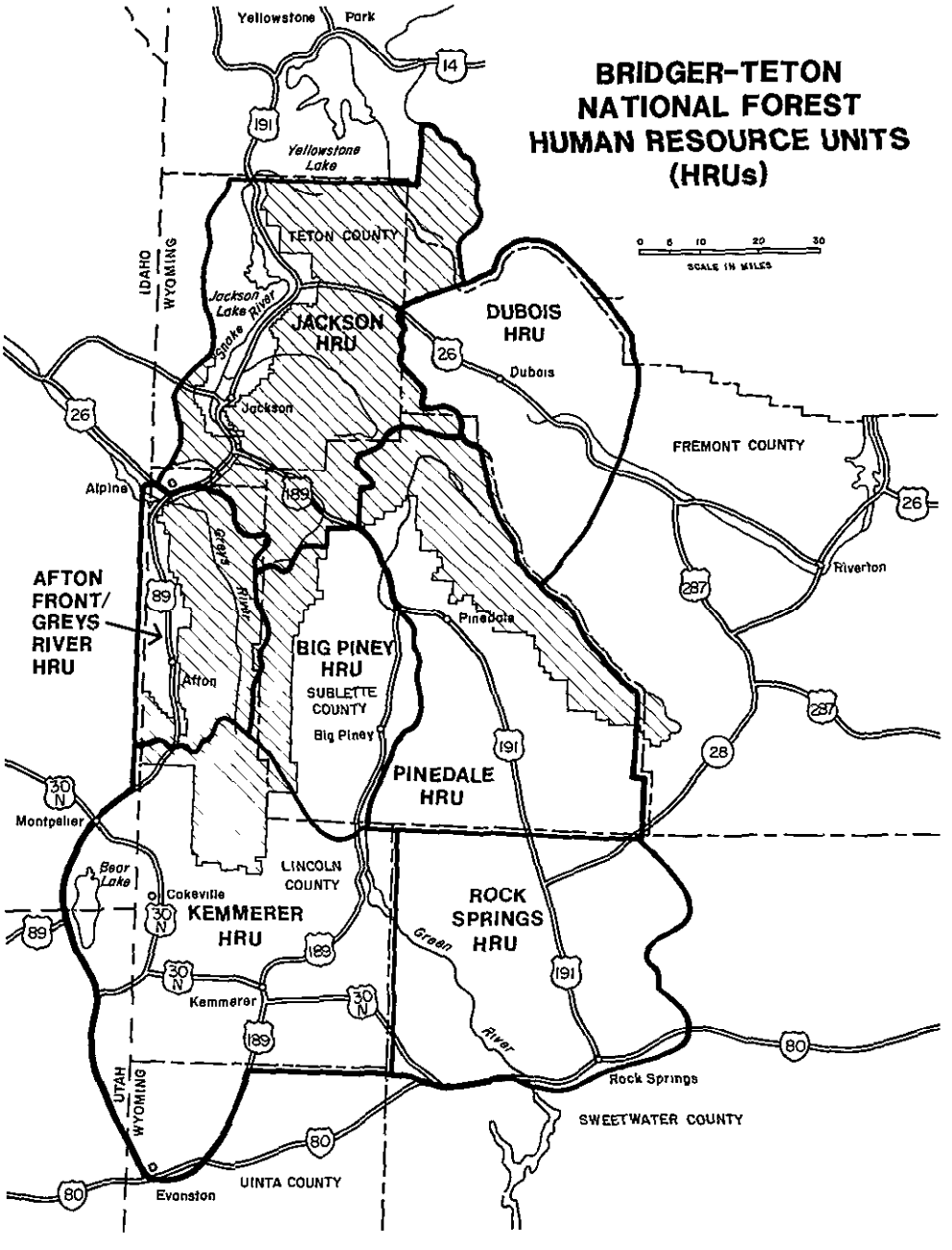


Fremont County -136,200 Acres
Park County - 175,500 Acres
Lincoln County - 833,100 Acres
Teton County - 1,096,400 Acres
Sublette County - 1,159,500 Acres
Bridger-Teton NF - 3,400,000 Acres

Acreage for each county includes private lands contained within the National Forest boundary. Therefore, the total National Forest acreage differs from that used elsewhere in the Forest Plan and FEIS.

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

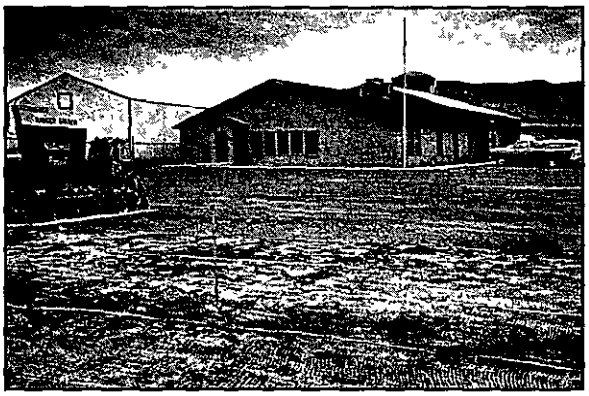
Figure 2-2
Human Resource Units

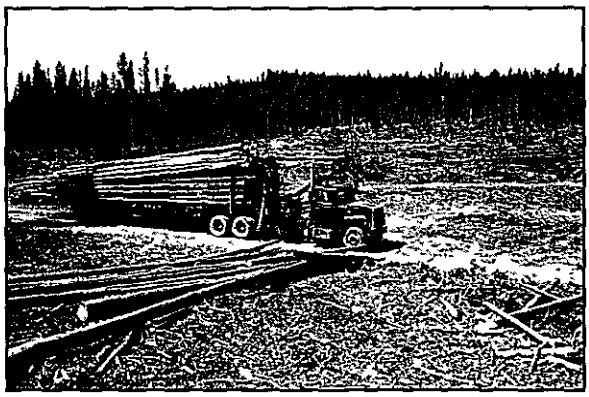


Kemmerer Human Resource Unit

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





Ranching, logging, and oil and gas are primary industries of the Kemmerer HRU

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, 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

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

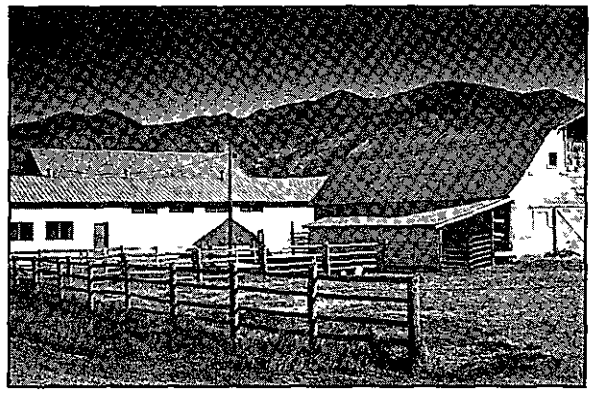
In the past, the HRU has shown a decreasing population trend However, recent development of such non-traditional economic elements as summer homes and retirement homes indicate that some stabilizing influences are being felt These influences will likely affect historic patterns, including agricultural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



Ranching, logging, and dairy farming are important industries of the Afton Front/Greys River HRU

Recent Employment and Personal Income Figures for Lincoln County HRUs — Between

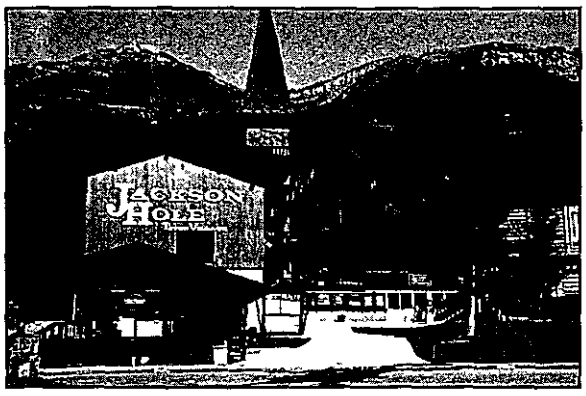
1981 and 1986, the only decline in Lincoln County employment came in the mining sector from 1,379 to 611 employees The decline was paralleled by substantial gains in jobs in most other sectors, particularly construction Overall, employment rose from 8,252 in 1981 to 11,847 in 1986

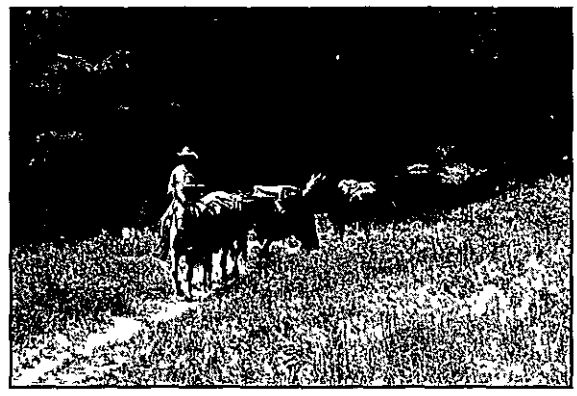
The roughly 40 percent gain in jobs resulted in nearly a 90 percent gain in personal income from $133,027,000 to $240,142,000 The sectors showing the greatest gains during 1981-1986 period were agriculture, public administration, transportation, and construction

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

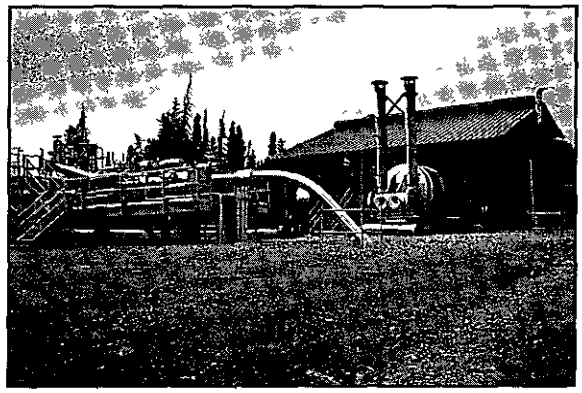
Accompanying the roughly 25 percent increase in jobs, was about a 30 percent increase in personal income from $134,886,000 to $174,216,000 Manufacturing, retail trade, finance, services, and public administration all showed substantial gains

Big Piney Human Resource Unit

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



Big Piney HRU's primary industries are ranching, oil and gas, and logging

Pinedale Human Resource Unit

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

Major industries of the Pinedale HRU are ranching and tourism

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 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 Unit

Rock Springs Human Resource Unit — 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

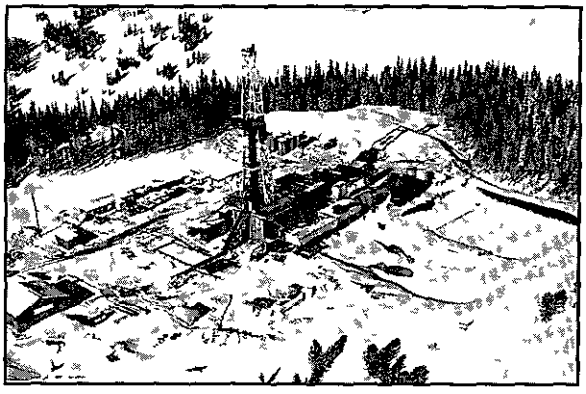
The labor market in the Rock Springs Human Resource Unit requires a diversity of skilled, semi-skilled, and unskilled labor Ranching, mining, energy, and service industries all require people.

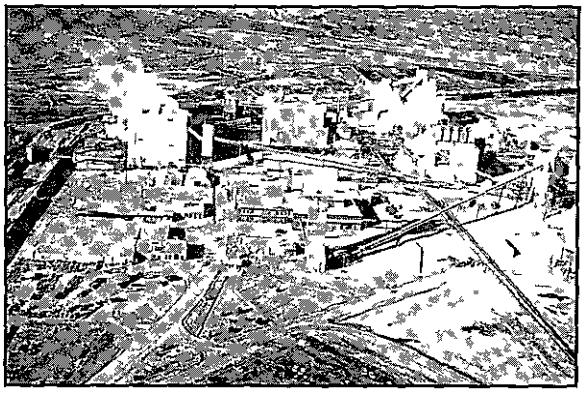
The Rock Springs HRU tends to be tied to fluctuating economic activities that do little to stabilize the community For example, early in 1982, Wyoming's mining industry plunged into a deepening recession Exploration and mining activities declined Statewide with nearly every sector of the industry announcing 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





Ranching, oil and gas, and mining are primary industries of the Rock Springs HRU

Dubois Human Resource Unit

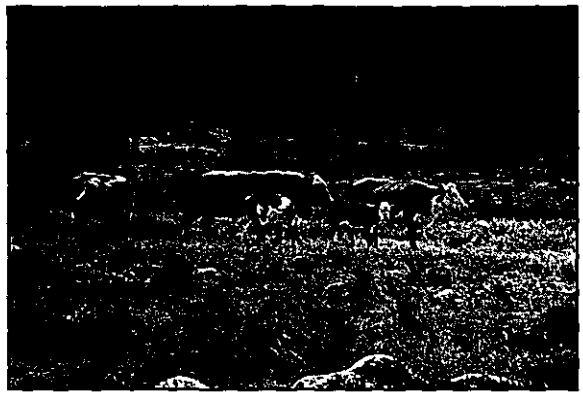
Dubois Human Resource Unit — The Dubois HRU is located in Fremont County, Wyoming A major geographic feature of the area is the Wind River The climate and elevation of the area limits most farming operations The agriculture lands are mostly used for cattle grazing and hay production with some cash crops being produced such as barley and sugar beets

The timber industry started in about 1905 when tie-hacking began The cutting continued into the mid-1940's Since then, sawtimber 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 material 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



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

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.

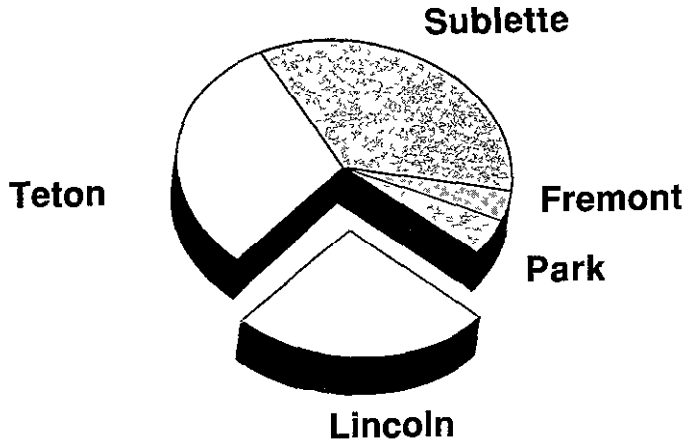
Accompanying the roughly 10 percent loss in jobs was about a 20 percent loss in personal income from $335,479,000 to $277,848,000 The sectors hardest hit during the 1981-1986 period were agriculture, mining, and construction Services and public administration sectors showed substantial gains

Payments in Lieu of Taxes

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

Figure 2-3

1987 Payments in Lieu of Taxes to Wyoming Counties



Fremont County - $17,010
Park County - $21,660
Lincoln County - $110,230
Teton County - $135,418
Sublette County - $151,780

Mineral Leasing Receipt Shares

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

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 — 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

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

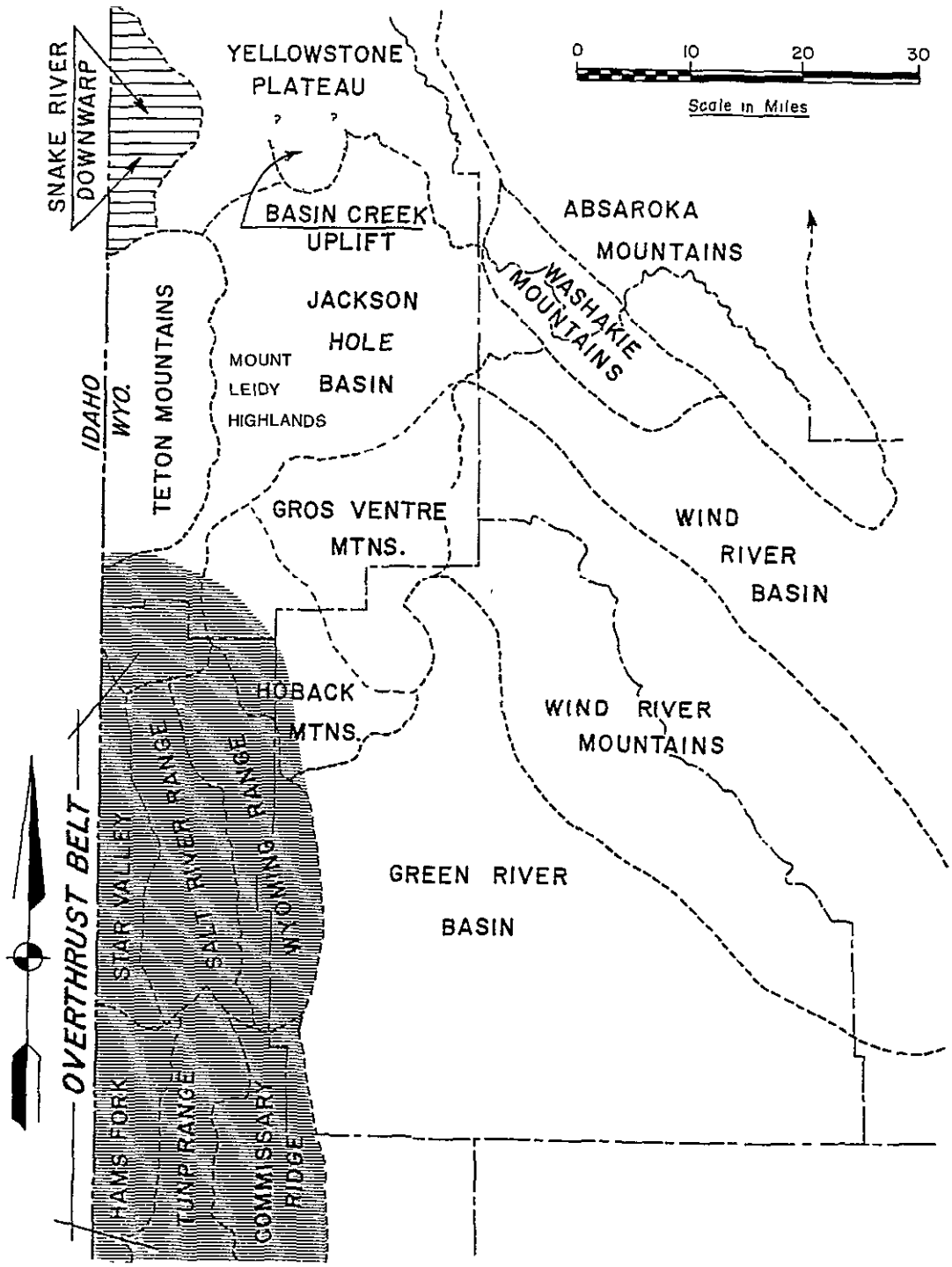
Sharp peaks, ridgelines, and steep cliff faces distinguish the north to northwest trending mountain ranges located within the Thrust Belt portion of the Bridger-Teton National Forest Included are the Tunp, Salt River, Hoback, and Wyoming Ranges. Each of these ranges developed along a major thrust fault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

Figure 2-4
Physiographic Features of Western Wyoming



ranges previously discussed, and are considerably younger. Uplift of the Tetons was accompanied by downdrop 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 Association

Physiographic Association — 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

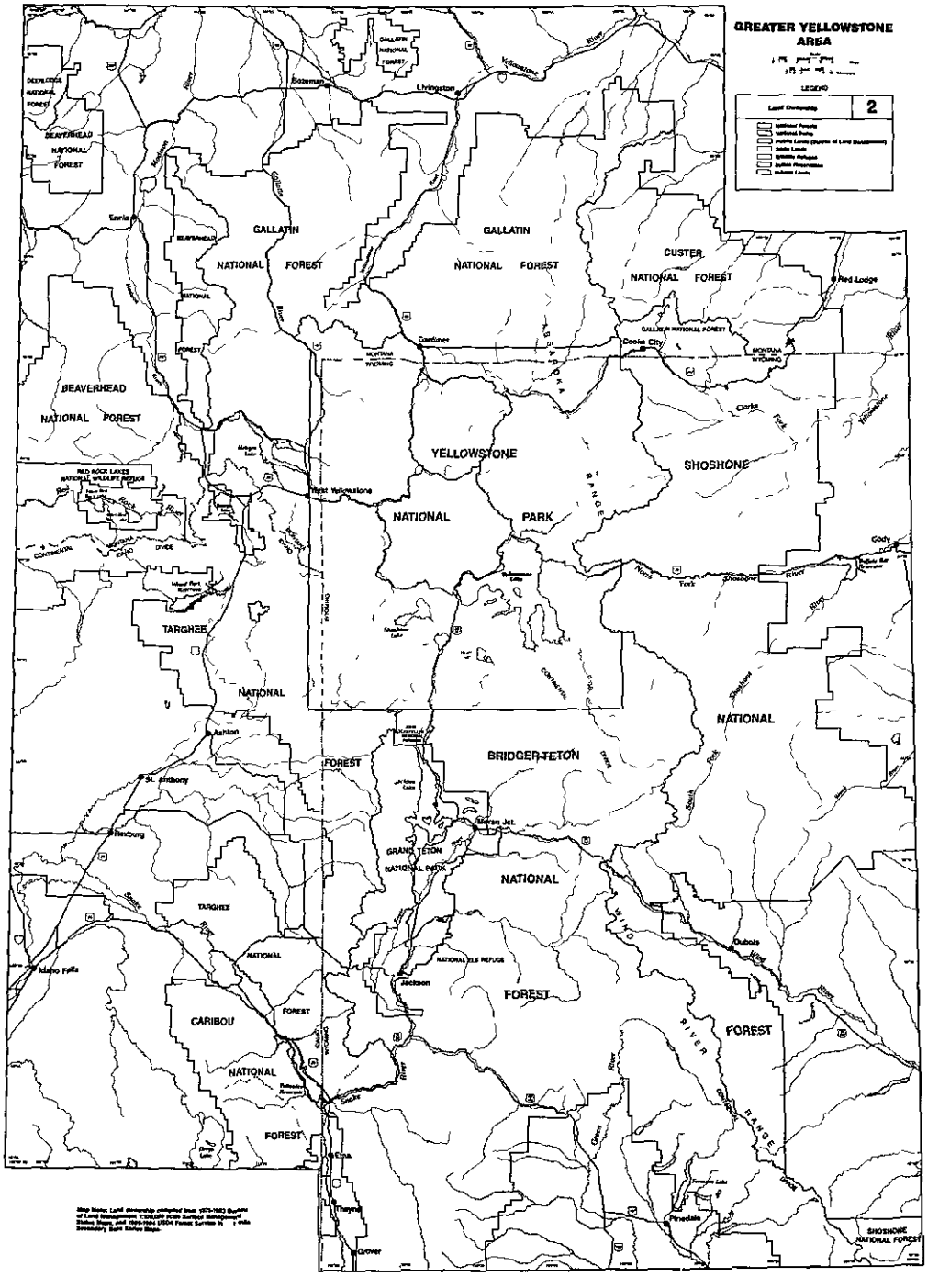
> Great Basin — Mountain mahogany, big sagebrush, saltbrush, bitterbrush, and aspen.
>
> Southern Rocky Mountains — Blue spruce, limber pine, saltbrush, big sagebrush, and rabbit brush
>
> Northern Rocky Mountains — Lodgepole pine, whitebark pine, pinegrass, common juniper, menziesia, and hair grass

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

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

Figure 2-5
Greater Yellowstone Area



Climate

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

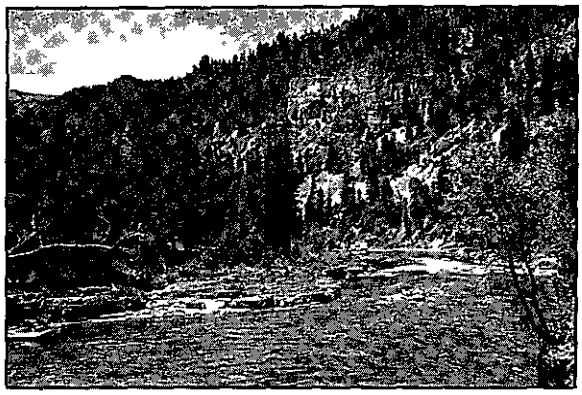
Recreation — The attractions of the region, and increasing national interest in the Greater Yellowstone Area, have encouraged a high level of recreation use The northern end of the Bridger-Teton National Forest is influenced by the tourism associated with Grand Teton National Park, the National Elk Refuge, 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 days 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

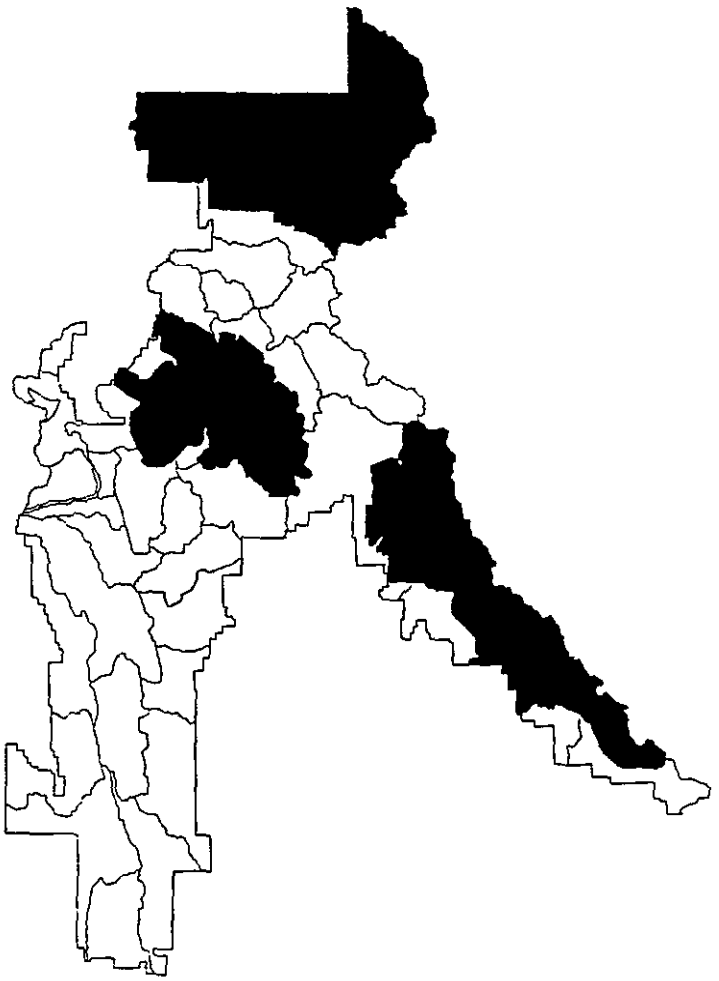
Commodity use activities, and in particular the road access essential for them, have changed the recreational opportunities previously available on undeveloped and non-roaded land Much of the Bridger-Teton National Forest today contains Primitive and Semi-primitive opportunities However, as non-roaded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

Wilderness

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,

Figure 2-6
Wilderness Areas in the Bridger-Teton National Forest



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

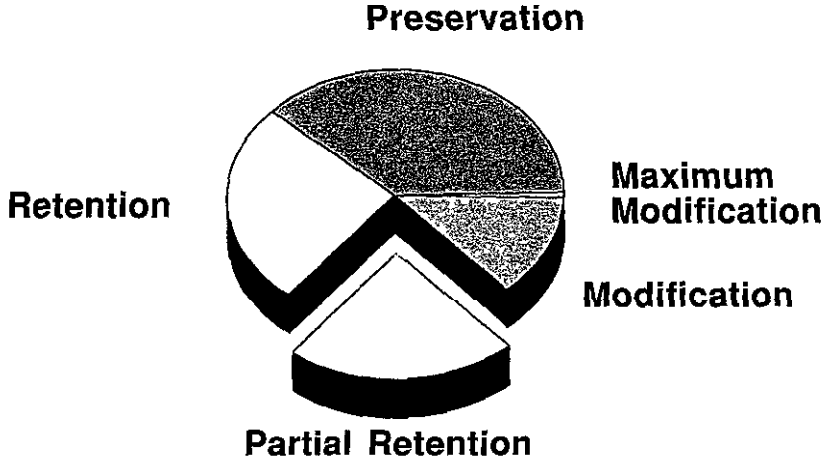
In the Bridger Wilderness, the special camping restrictions in seven concentrated-use areas have been effective in dispersing use to other less popular areas However, use in the popular areas continues to remain high as a result of the overall increase in visitor use Use in most of the other areas is 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

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 The Visual Quality Objectives (VQOs) are shown in Figure 2-7

Figure 2-7
Visual Quality Objectives



Maximum Modification - 25,700 Acres
Modification - 447,000 Acres
Partial Retention - 770,700 Acres
Retention - 893,800 Acres
Preservation - 1,300,500 Acres

Fisheries and Wildlife

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

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

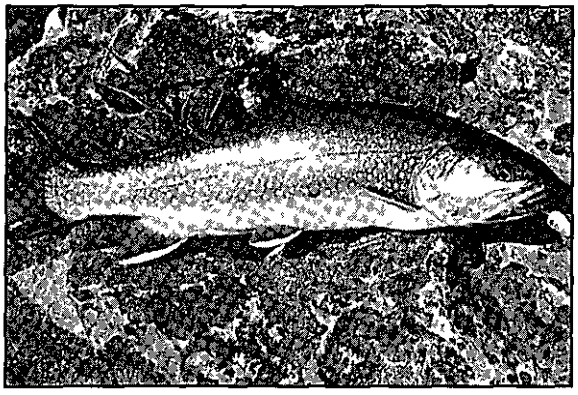
Threatened and Endangered Species:

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

Harvest Species:

Fish Species
Cutthroat trout, and
Rainbow trout

Wildlife Species
Rocky Mountain elk,
Moose,
Mule deer,
Bighorn sheep, and
Pronghorn antelope



Brook trout are one of the fish found in National Forest waters

Mule deer are an important big game species

Ecological Indicator Species:
Pine marten — Old-growth forest, and
Brewer's sparrow — Sagebrush

Sensitive Plant Species:

Scientific Name (Common Name)
Androsace chamaejasme (None),
Astragalus paysonii (Payson milk vetch),
Astragalus shultziorum (Shultz milk vetch),
Descurainia torulosa (None),
Draba borealis (None), and
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 a 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

The National Forest provides many opportunities for fishing

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

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*), Dyers 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

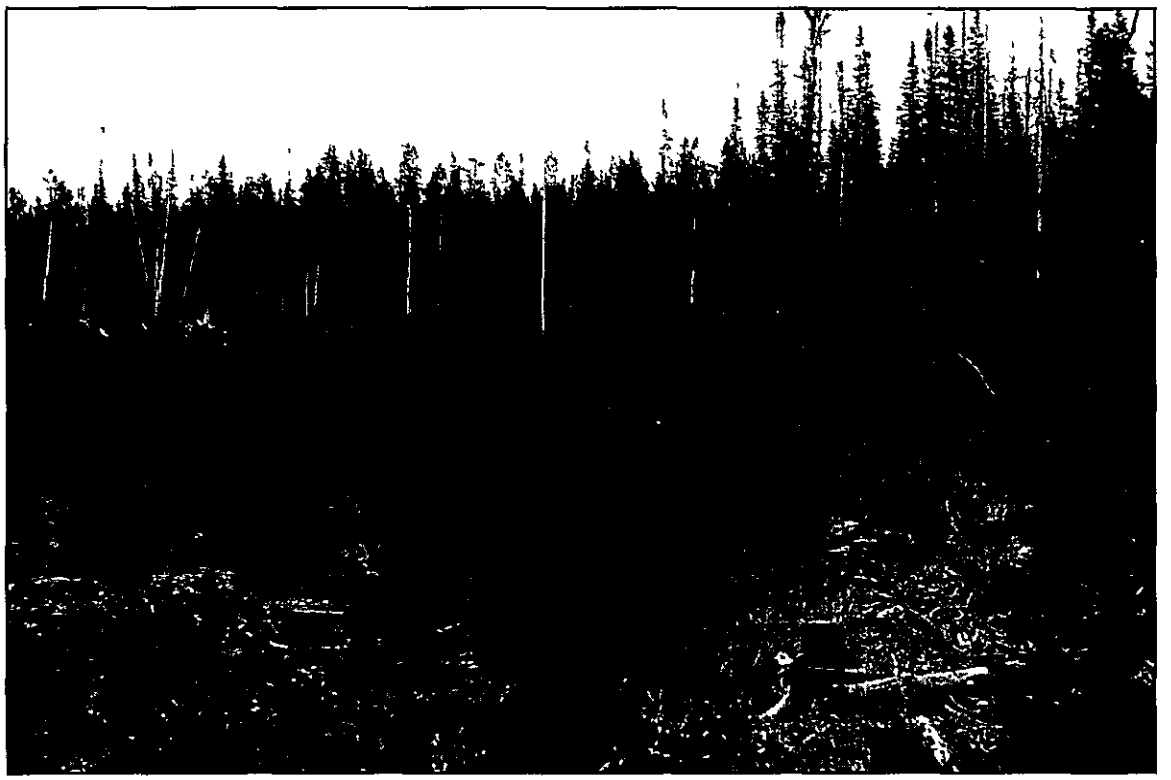
Allotment Management Plans (AMPs) are completed for most allotments 176 allotments or 754,665 acres are considered to be under satisfactory management Twenty-nine allotments or 153,735 acres are considered to be without satisfactory management

Vegetation: Timber

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

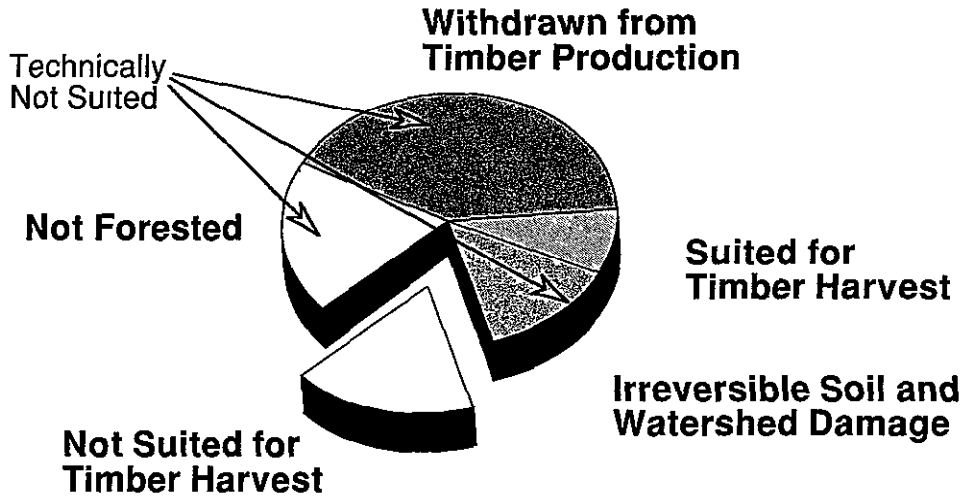


Lodgepole pine is an important commercial tree species

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

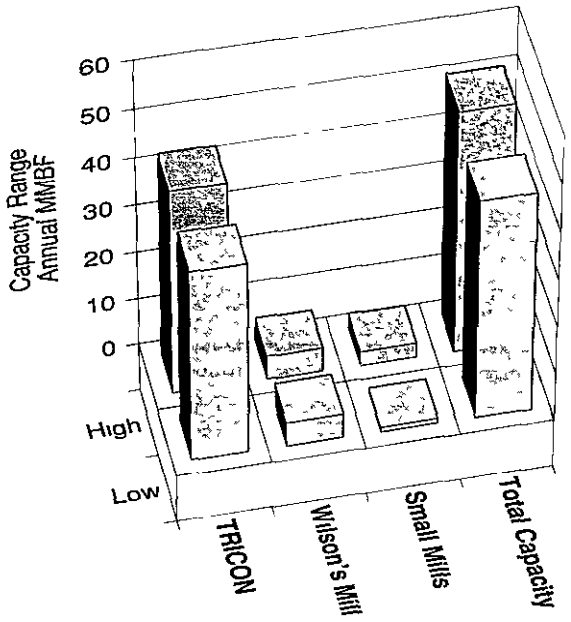
Figure 2-8
Bridger-Teton National Forest's Area Suitable for Timber Harvest



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

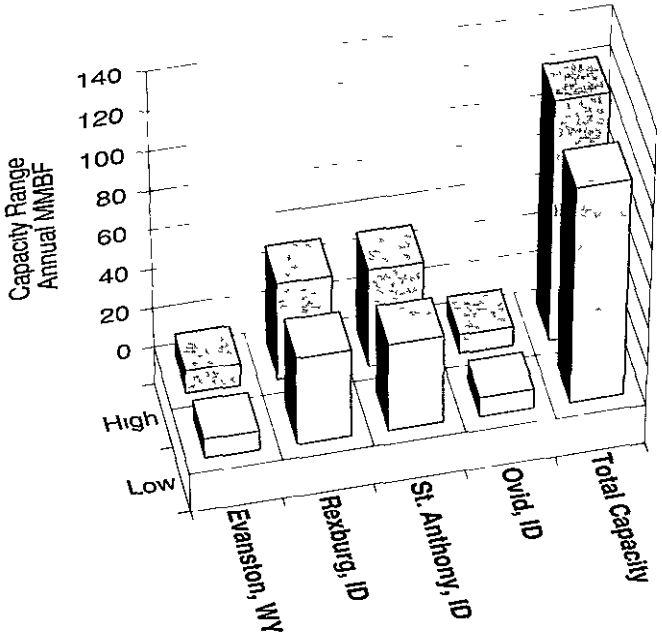
Demand for green sawtimber comes from local and regional timber users, primarily the mills in Dubois, Wyoming, and Afton, Wyoming, which produce lumber related products Further demand comes from smaller private mills in the Bridger-Teton National Forest zone of influence The estimated full-production mill capacity for local mills largely dependent upon National Forest timber supplies is shown in Figure 2-9

Figure 2-9
Local Timber Mill Capacity



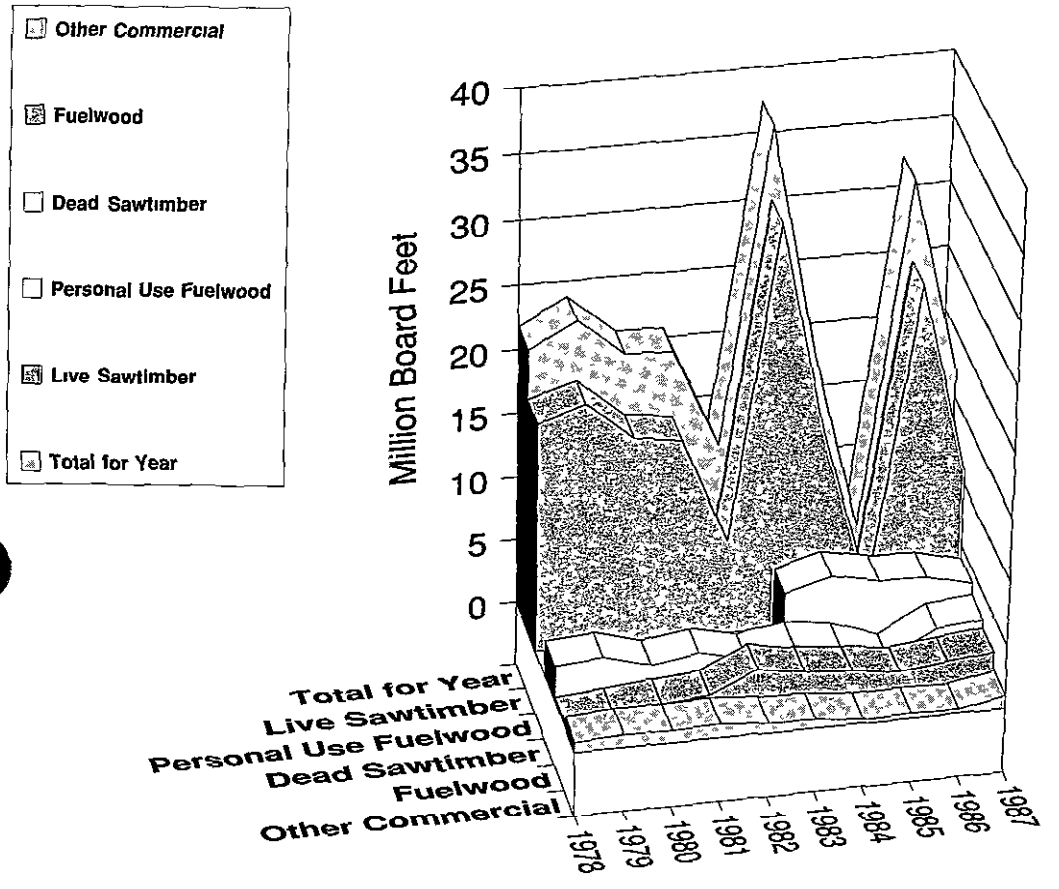
Louisiana-Pacific had a sawmill located in Dubois, Wyoming, which closed in 1988 This mill had a capacity of 40 to 45 MMBF Other mills operate within reasonable haul distances These mills, shown in Figure 2-10, have bid on timber offered on the Bridger-Teton National Forest but are not as dependent on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

Figure 2-10
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 as shown in Figure 2-11

Figure 2 -11
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

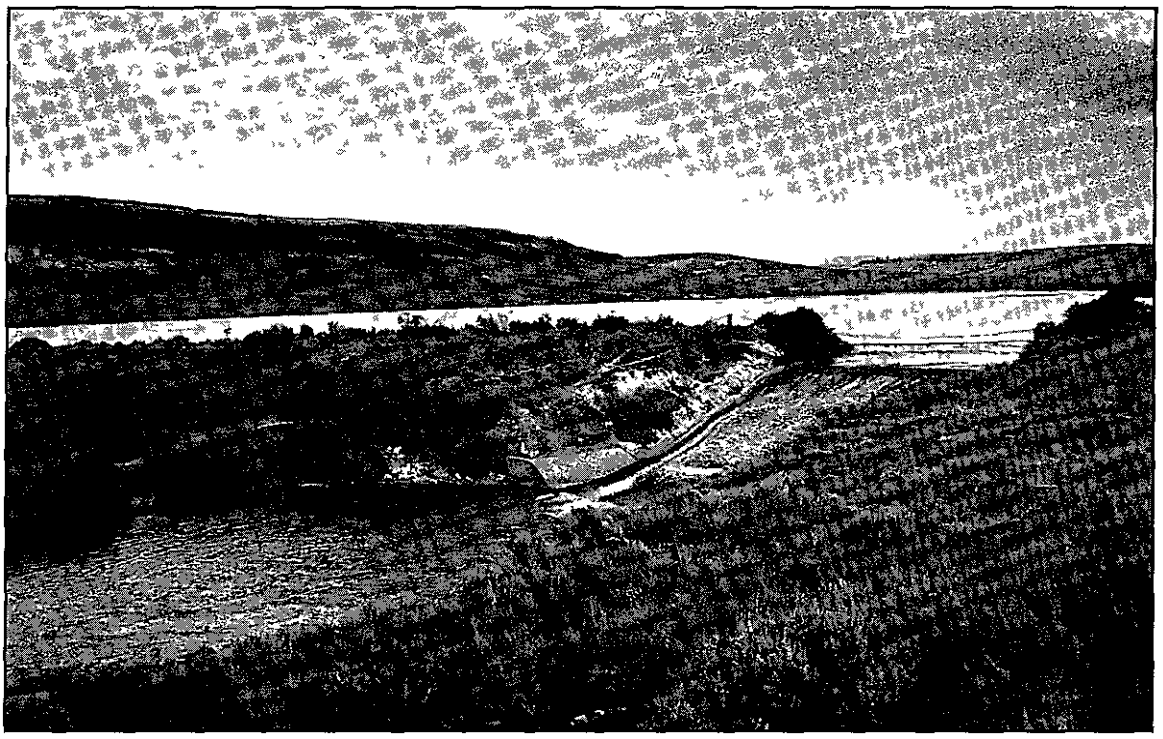
Watershed

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

Figure 2-12
Major Rivers on the Bridger-Teton National Forest

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 National 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

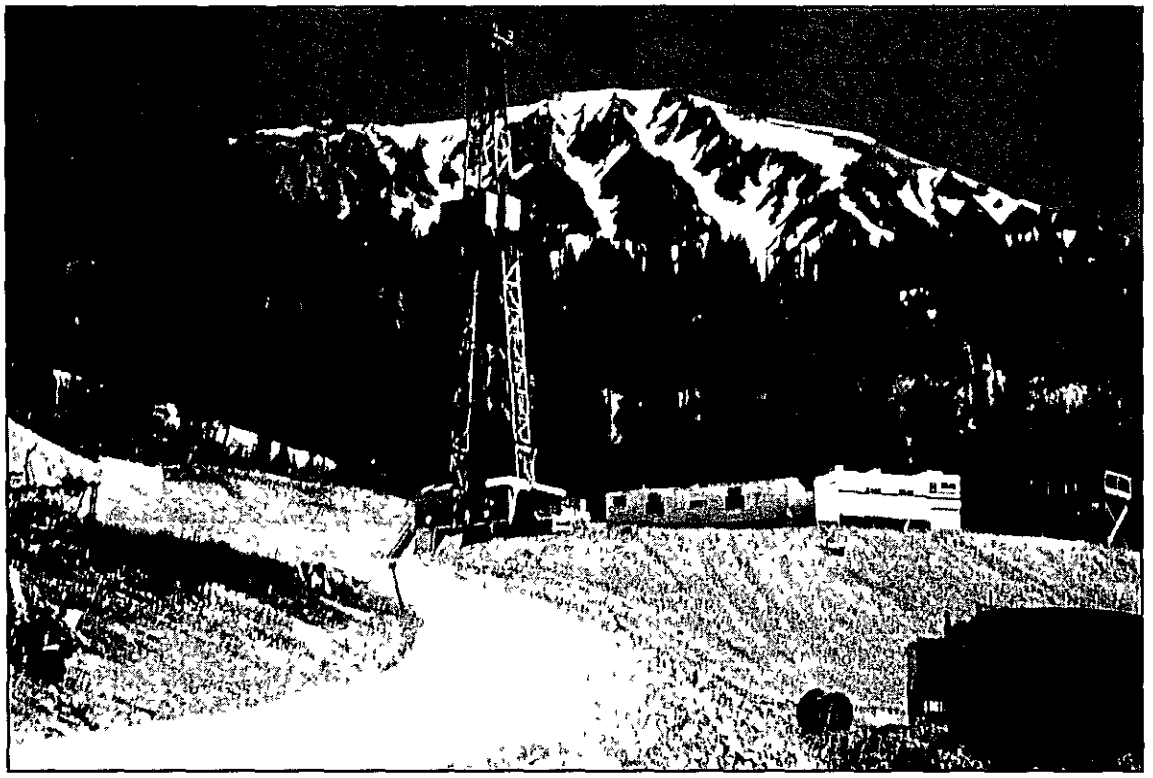
Minerals and Energy

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

Figure 2-13
Areas Withdrawn from Oil and Gas Leasing on the Bridger-Teton National Forest

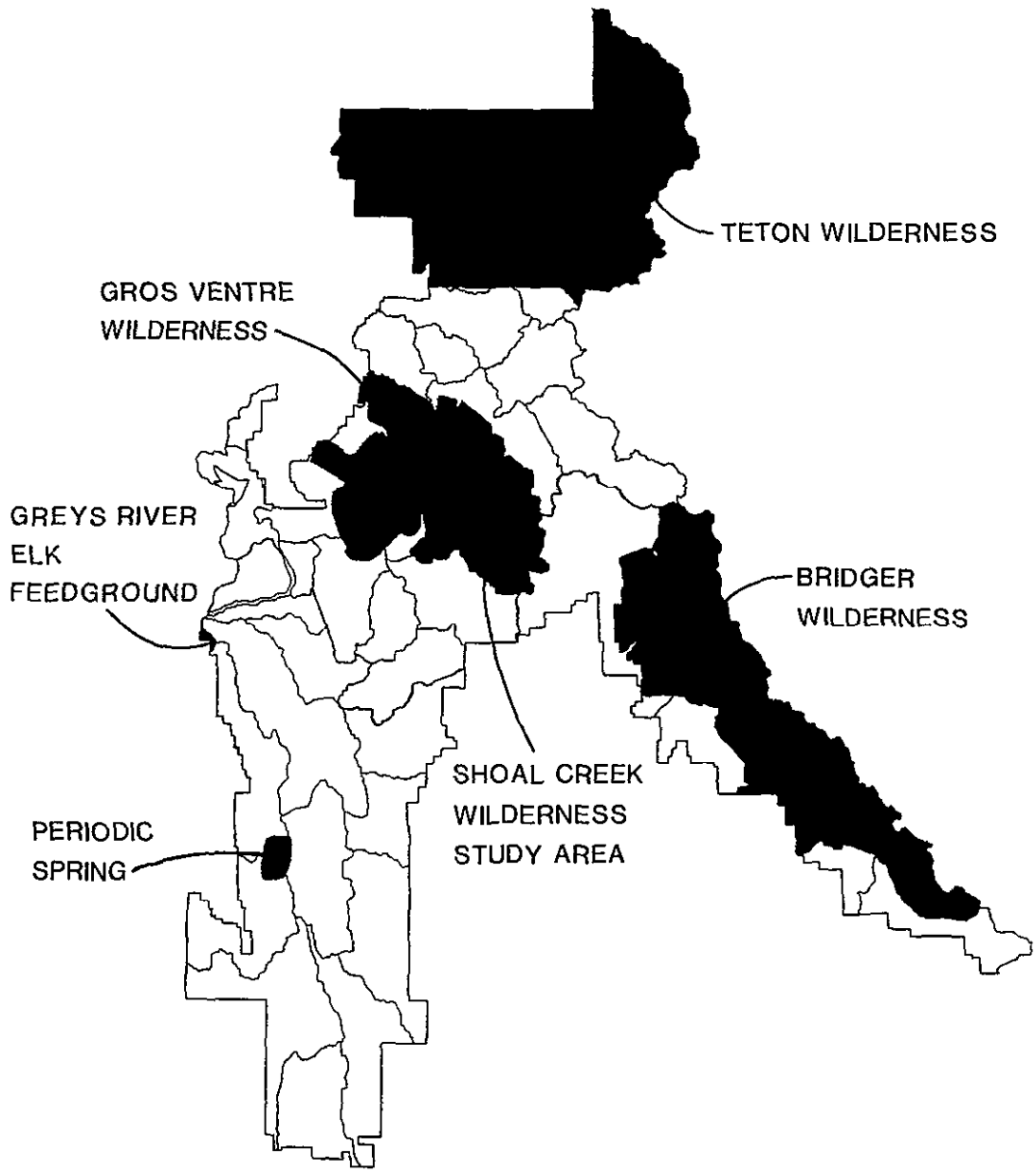
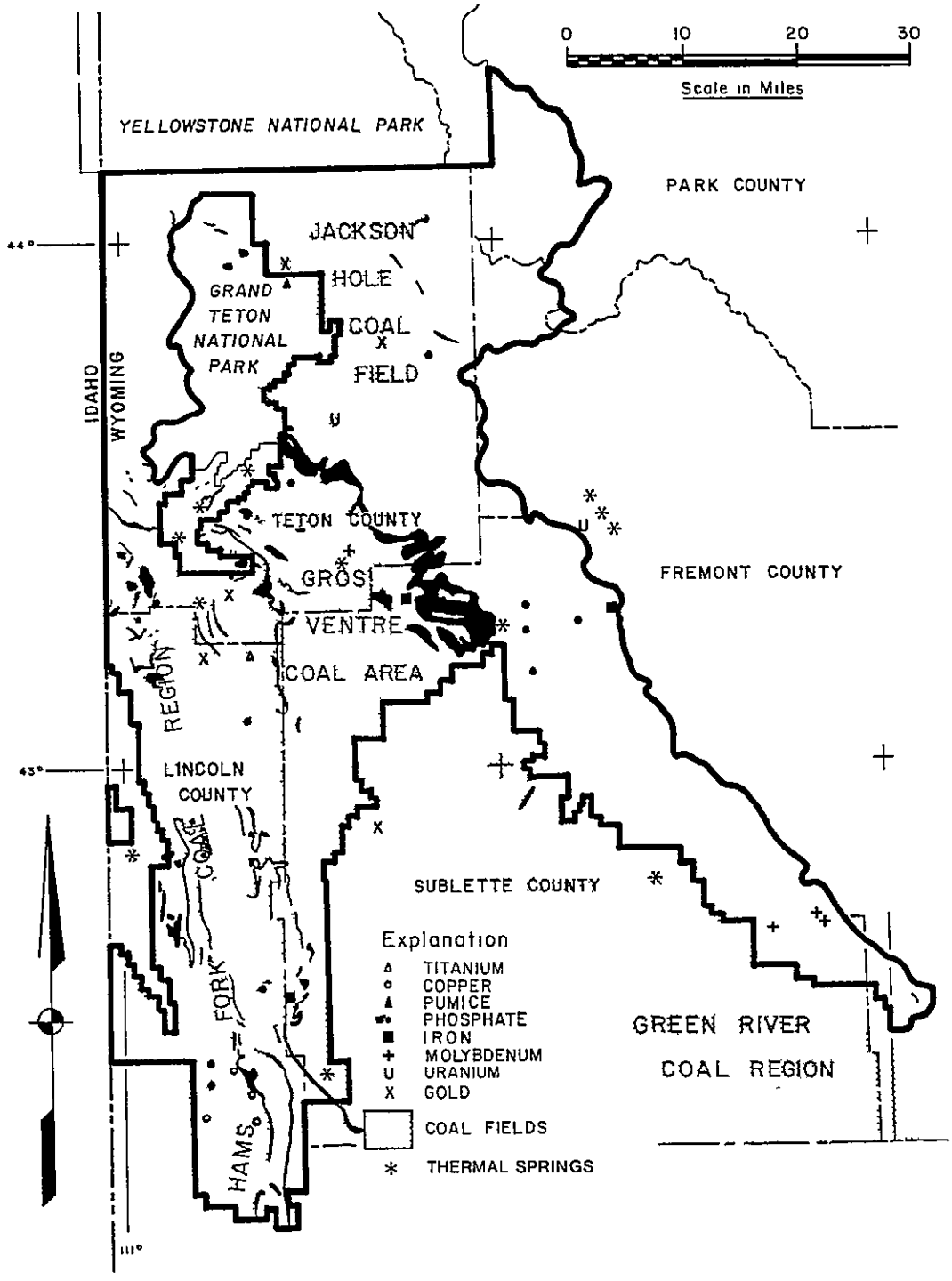


Figure 2-14
Mineral Occurrences



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_2, 20 percent methane, 4 to 10 percent H_2S, 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

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,;

Slate Creek Landslides,

Gates of the Hoback, Wyoming;

Camp Davis Conglomerates,

Little Greys River Anticline;

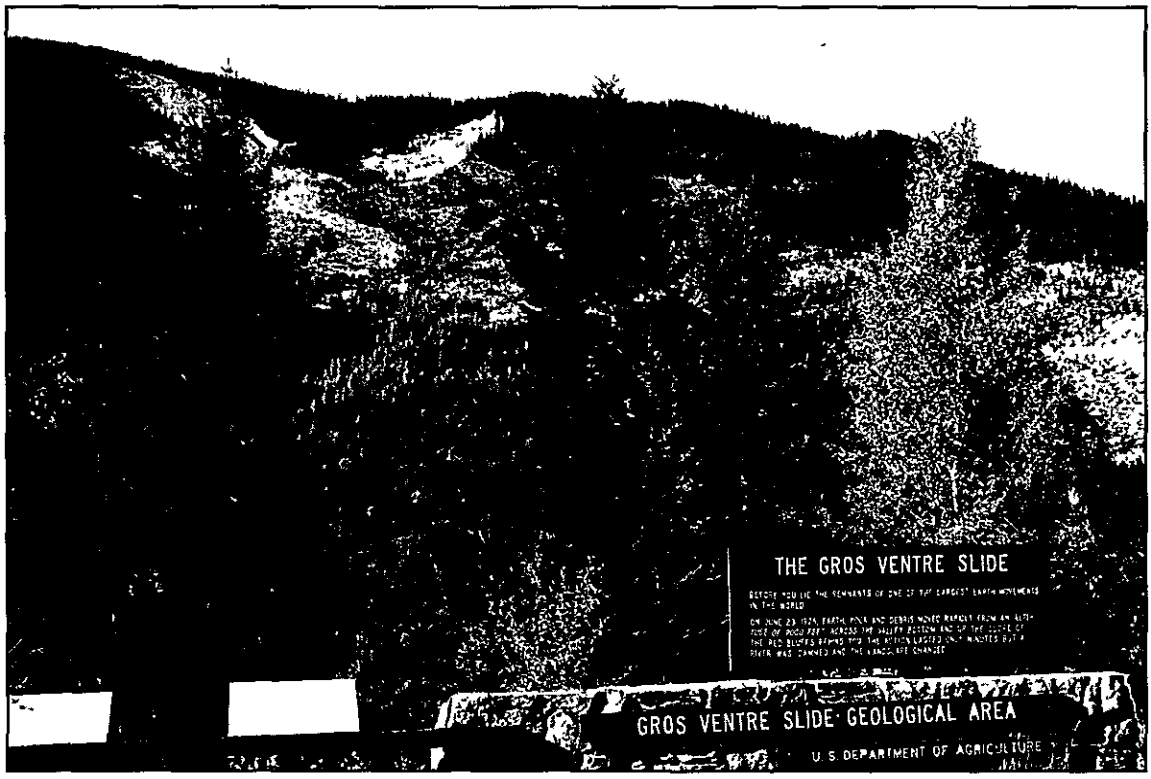
Jurassic Fossils at Lower Slide Lake;

Hoback Junction Landslides,

Cliff Creek-Granite Creek Thrust Faults,

Alpine Karst in Tosi Creek Basin, and

Darby Thrust Fault



The Gros Ventre Slide is a proposed National Natural Landmark

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

National Historic Sites

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

Research Natural Areas

Air Quality

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

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 (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, and (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

Bridger-Teton National Forest contributions to western Wyoming baseline total suspended particulate level is 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

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 more true 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,

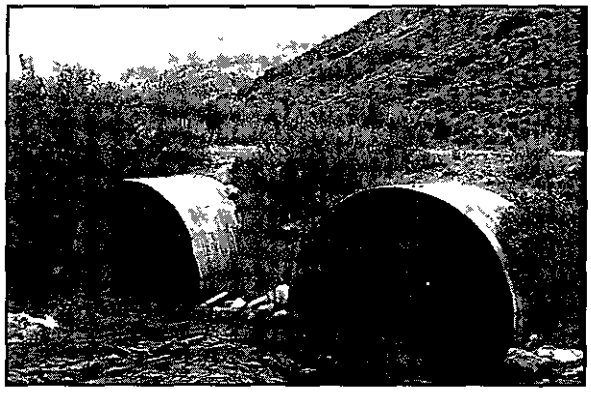
Another area of concern in range management was the use of herbicides for sagebrush and noxious weed control Several spray projects were closely monitored before and after the herbicide application with the result that in nearly half the applications the herbicide was not detected in adjacent streams, 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

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


Culverts reduce stream sediments from roads.

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

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 waterflow 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

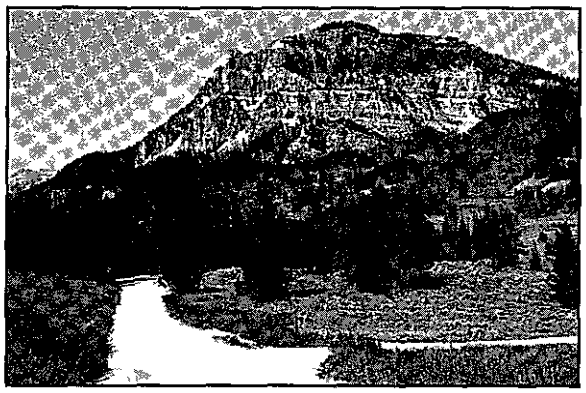
Access: Roads — The roads on the Bridger-Teton National Forest vary from federal highways to "2-track" roads Roads serve the access needs of a wide variety of National Forest users for many different recreational or commodity activities Traffic intensities and road standards usually decrease as the traveler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

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



Collector roads, like Granite Creek, provide good access for National Forest users

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

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

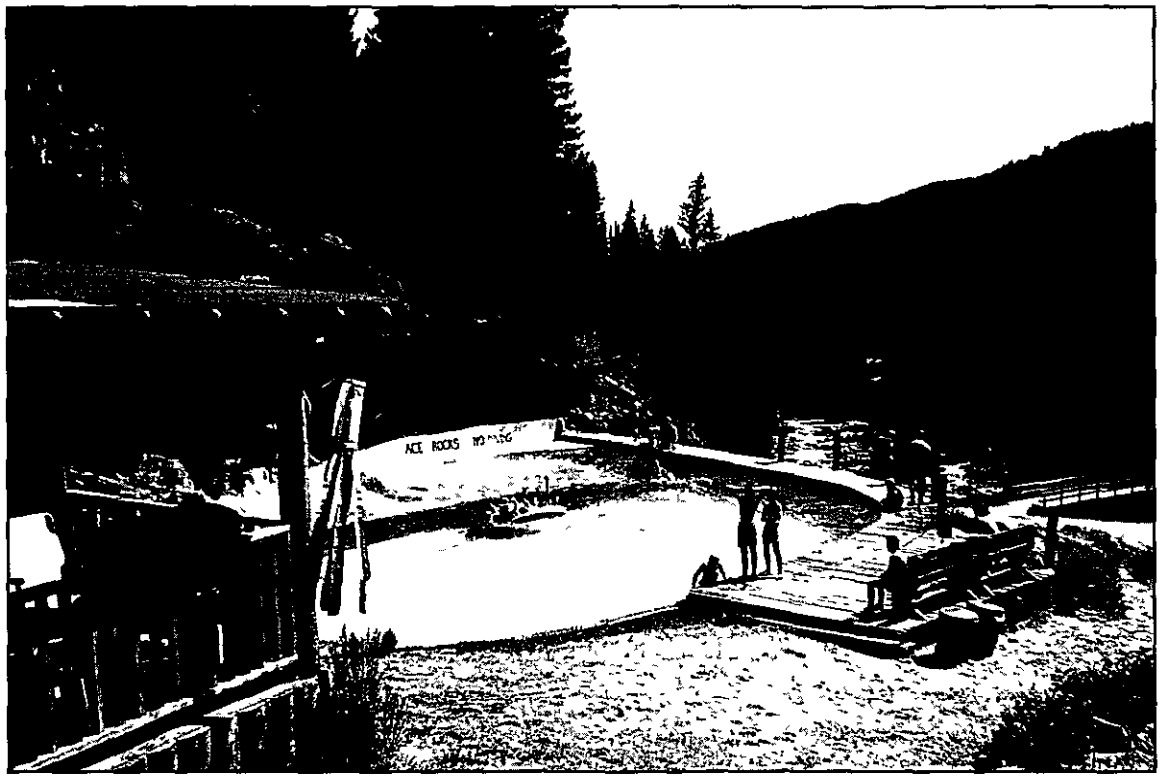
Land Ownership and Trespass — A fundamental purpose of the Forest Service is to protect its land base The lack of access to that land, trespasses on the land, the need for special uses of the land, and the need to acquire land to protect various resources are issues that drive the land program

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 the 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

Supply Conditions

Table 2-1 compares the resource production and use levels that could 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)

Table 2-1
Current Outputs and Supply Potentials
Fisheries — Recreational Angling

		Estimates				
	Present	1988	1996	2006	2016	2026
Drainage	Level	1995	2005	2015	2025	2035
Current Management[1]:						
Green River						
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
Bear River						
Lakes & Reservoirs	7 d/a/y	7	7	7	7	7
Rivers & Streams	306 d/m/y	306	306	306	306	306
Snake River						
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
Yellowstone River						
Lakes & Reservoirs	1 d/a/y	1	1	1	1	1
Rivers & Streams	90 d/m/y	90	90	90	90	90

Fisheries — Recreational Angling

Drainage	Present Level		Estimates 1988 1995	1996 2005	2006 2015	2016 2025	2026 2035
Supply Potential:							
Green River							
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
Bear River							
Lakes & Reservoirs	21	d/a/y	21	21	21	21	21
Rivers & Streams	930	d/m/y	930	930	930	930	930
Snake River							
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
Yellowstone River							
Lakes & Reservoirs	3	d/a/y	3	3	3	3	3
Rivers & Streams	745	d/m/y	745	745	745	745	745

[1]Wyoming Game & Fish Department Comprehensive Plan The numbers 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 = fisher days/acre/year and d/m/y = fisher days/mile/year

Current Outputs and Supply Potentials Recreation — Primitive ROS

(Thousand Recreation Visitor Days)

	Present Level 1985	Estimates 1986 1995	1996 2005	2006 2015	2016 2025	2026 2035
Current Management	53 3	53 3	52 7	49 8	46.8	46 7
Supply Potential		279 6	274 8	269.9	267 9	267 0
Forest Plan Objectives		51.3	48 9	48 0	47.1	47 0

Current Outputs and Supply Potentials
Recreation — Semi-primitive
Non-motorized ROS

(Thousand Recreation Visitor Days)

	Present Level 1985	Estimates 1986 1995	1996 2005	2006 2015	2016 2025	2026 2035
Current Management	86 2	85.5	83 4	79 7	75.0	74.5
Supply Potential		423 7	405 2	392 5	387 6	385 3
Forest Plan Objectives		85 4	83 3	88 7	87 8	87 3

Chapter 2

Current Outputs and Supply Potentials
Recreation — Semi-primitive
Motorized ROS

(Thousand Recreation Visitor Days)

	Present Level 1985	Estimates 1986 1995	1996 2005	2006 2015	2016 2025	2026 2035
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 — Roaded Natural ROS
(Thousand Recreation Visitor Days)

	Present Level 1985	Estimates 1986 1995	1996 2005	2006 2015	2016 2025	2026 2035
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 1985	Estimates 1986 1995	1996 2005	2006 2015	2016 2025	2026 2035
Current Management	323 8	324 0	324 0	324 0	324 0	324 0
Supply Potential		502 1	502 1	502 1	502 1	502 1
Forest Plan Objectives		310 0	310 0	310 0	310 0	310 0

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

	Present Level 1985	Estimates 1986 1995	1996 2005	2006 2015	2016 2025	2026 2035
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

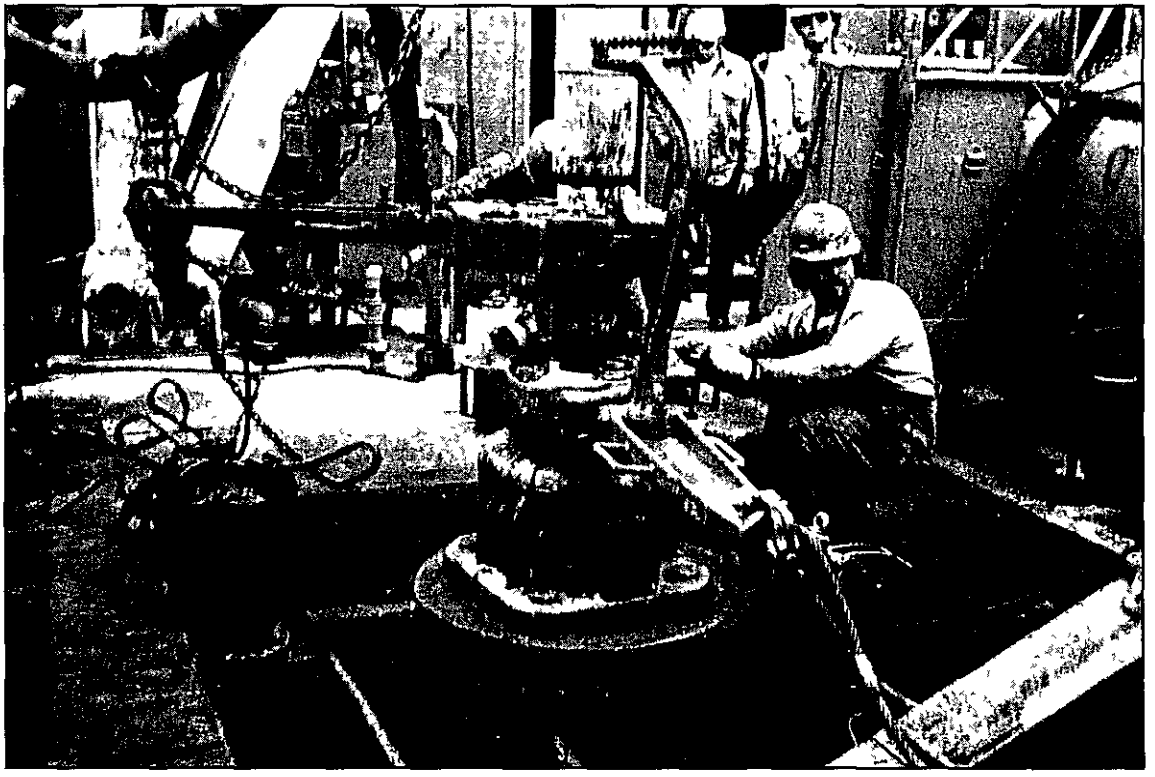
Current Outputs and Supply Potentials
Timber — Sale Offerings: Sawtimber and Roundwood
(Million Board Feet)

	Present Level 1985	Estimates 1986 1995	1996 2005	2006 2015	2016 2025	2026 2035
Current Management		17 3	17 5	17 5	17 5	17 5
Regional Objectives		39 0	46 0	43 0	39 0	36 0
Supply Potential		119 6	122 7	118 5	121 4	118 8
Forest Plan Objectives		12 0	12 0	22 0	21 9	21 2

Current Outputs and Supply Potentials
Minerals and Energy:
Lands Suitable for Leasing

(Thousands of Acres)

	Present Level 1985	Estimates 1986 1995	1996 2005	2006 2015	2016 2025	2026 2035
Current Management	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
Forest Plan Objectives		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

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 9 years For planning purposes, recreation use is assumed to continue at the levels and within the reported range

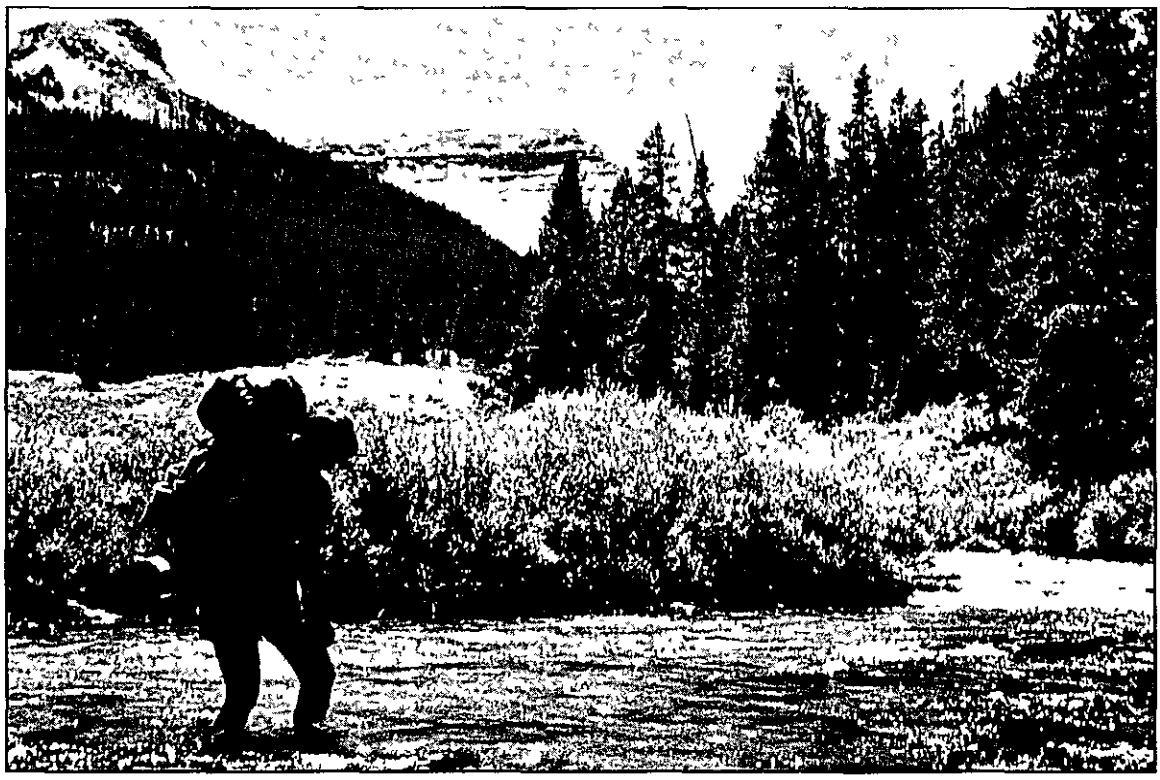
The non-roaded recreation settings on the National Forest are classed as Semi-primitive—Motorized and Non-motorized—and Primitive, including classified Wilderness As with developed recreation, no strong trends are apparent, although use in Wilderness appears to have increased during the past few years

Some trails are deteriorating due to heavy use or poor design

Trends in Wilderness Use

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

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, roadcuts, and other disturbances revegetate, their impact will be reduced over time

Trends in Fisheries and Wildlife

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

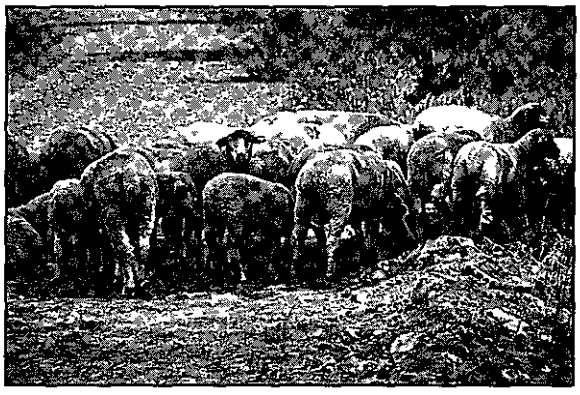
Increased demands on all resources has the potential to increase risk to listed threatened and endangered species and to increase the number of species listed In turn, the public has recognized the importance of threatened, endangered, and sensitive species.

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

Trends in Vegetation: Range

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

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

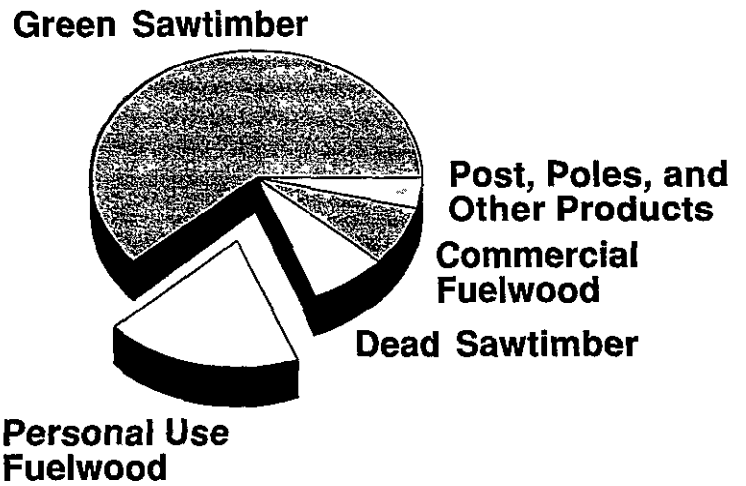


Livestock grazing has decreased slightly in the last few years

Trends in Vegetation: Timber

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

Figure 2-15
Sawtimber and Roundwood Categories



Posts, Poles, Other Products - 1 MMBF Per Year
Commercial Fuelwood - 2 MMBF Per Year
Dead Sawtimber - 2 MMBF Per Year
Personal Use Fuelwood - 5 MMBF Per Year
Green Sawtimber - 16 MMBF Per Year

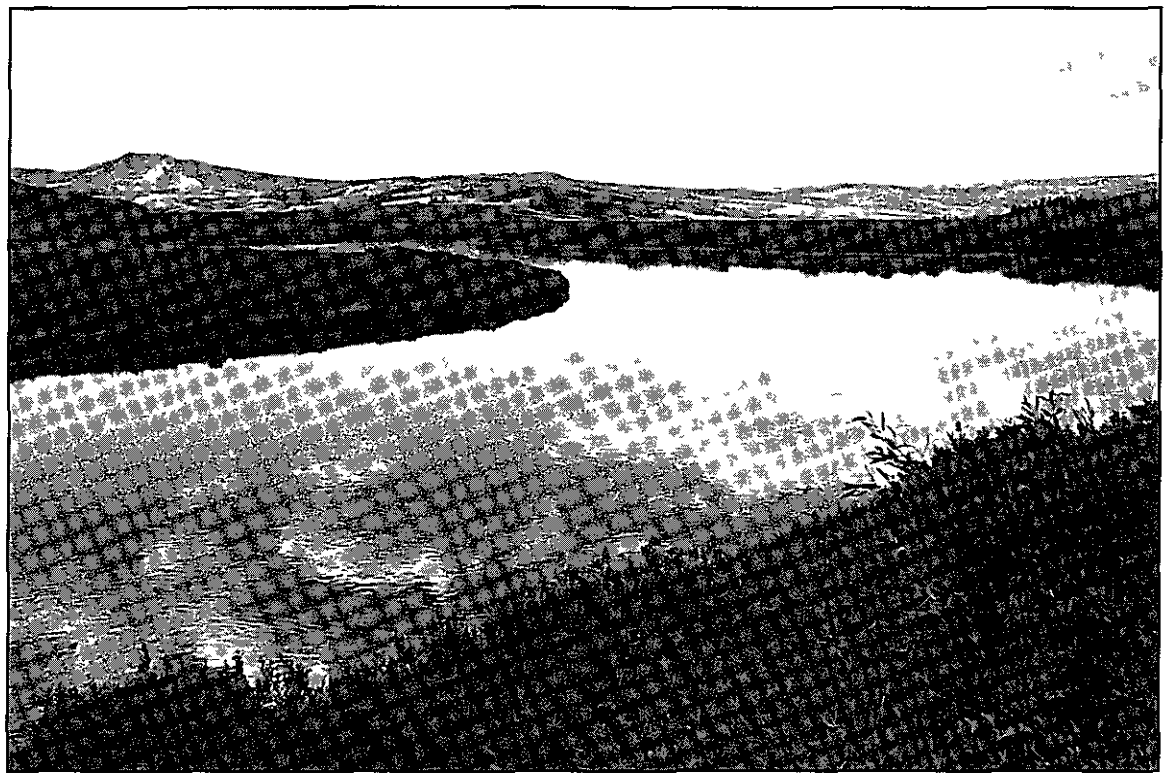
Trends in Watershed

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



Demand is high for water from the Green River

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

Trends in Minerals and Energy

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

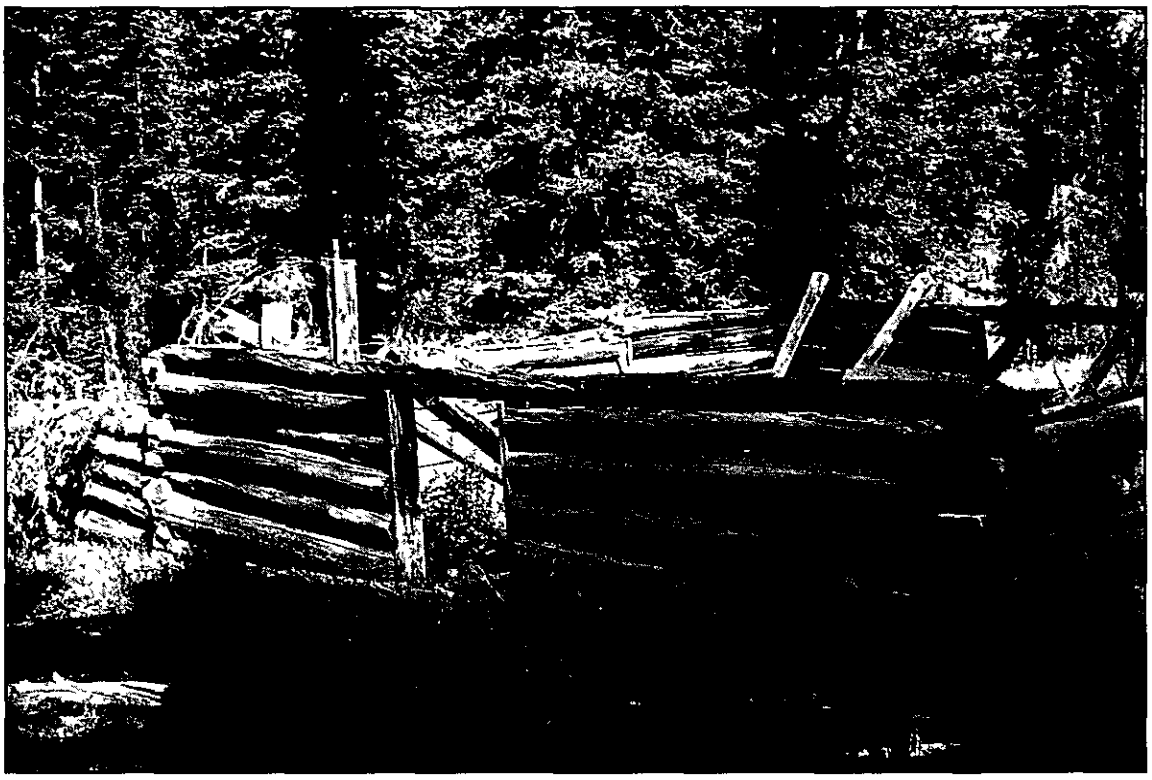
Interest in locatable minerals, especially placer gold deposits, appears to be increasing Most of the streams and rivers on the Bridger-Teton National Forest contain some gold as do older deposits such as the Harebell Formation, the Pinyon Conglomerate, and the Pass Peak Formation

Trends in Cultural Resources

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, 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



Cultural resources are being inventoried

Trends in Air Quality

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

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

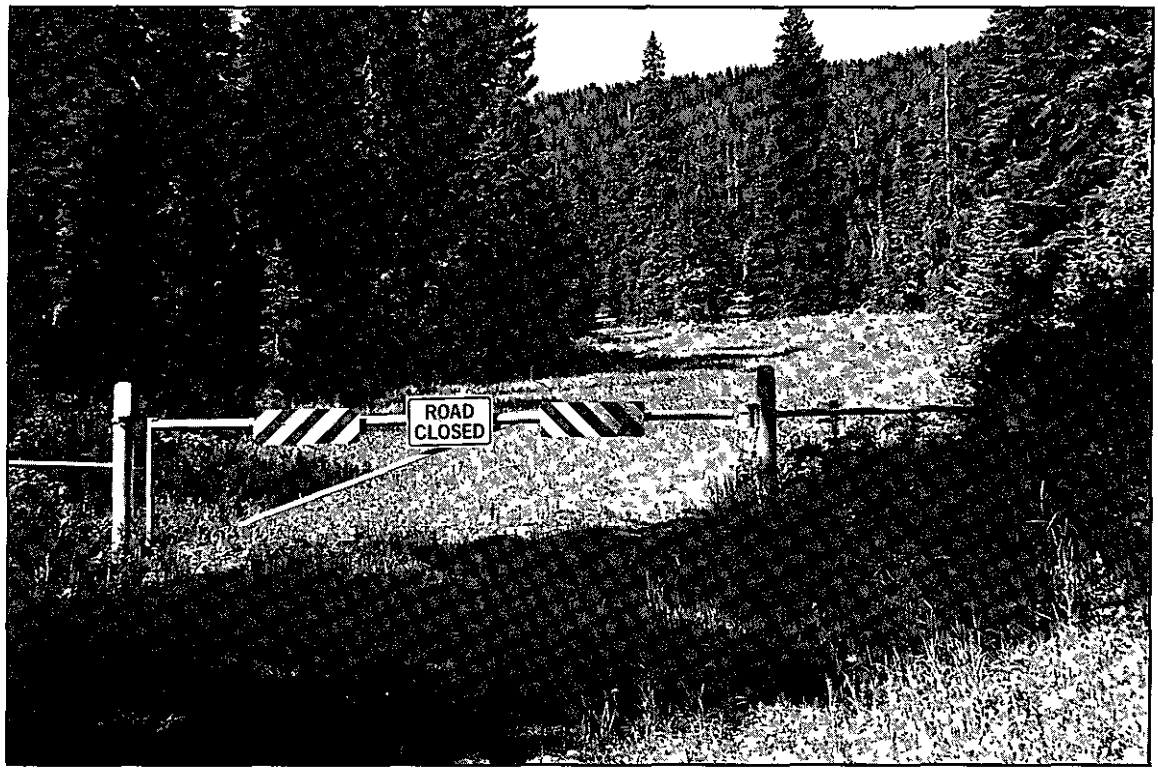
Trends in Soils — Currently, there are 11 watersheds in Class I condition, 38 watersheds in Class II condition and 16 watersheds in Class III condition Most of the Class III condition watersheds are on the sheep driveways where there has been a slowly improving trend since trailing was stopped in the 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

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 and revegetation 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

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

New snowmobile trails will be developed

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

Trends in Land Ownership and Trespass

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

Jackson Hole has a multi–million dollar outfitter and guide industry

exceptionally long seasons and high hunter-success rates 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 Marbleton, 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

Many jobs are tied to National Forest resources

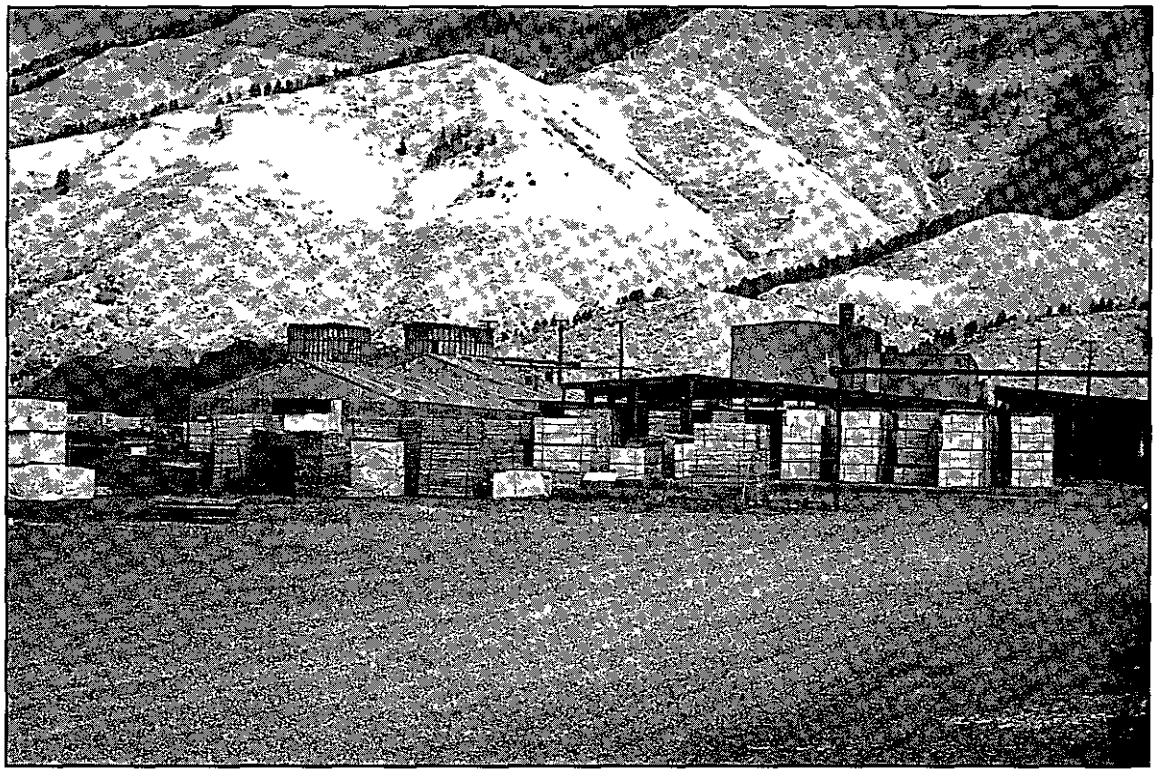
turn, Jackson-area outfitters and guides report reduced revenues from changed elk availability and hunt quality So, the hunting-related llama-packing and horse-packing outfitting and guide businesses in the Jackson Hole area would like to stop timbering and roading activities in order to maintain or 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 streamflows 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

Forest Challenge: Support Community Prosperity

The 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 sawlogs 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 A lack of timber supply may



The Afton TRICON Sawmill depends on trees from the National Forest

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

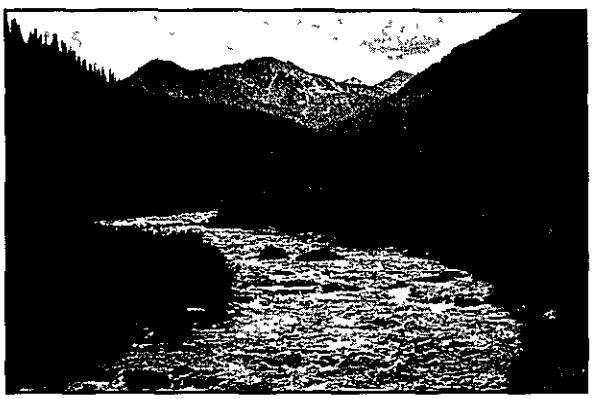
If the challenge of providing sufficient commodity and service opportunities on the National Forest is not met, mature industries may fail for lack of dependable supply and desirable new industries may never begin

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



Water from the National Forest is used as far away as California

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

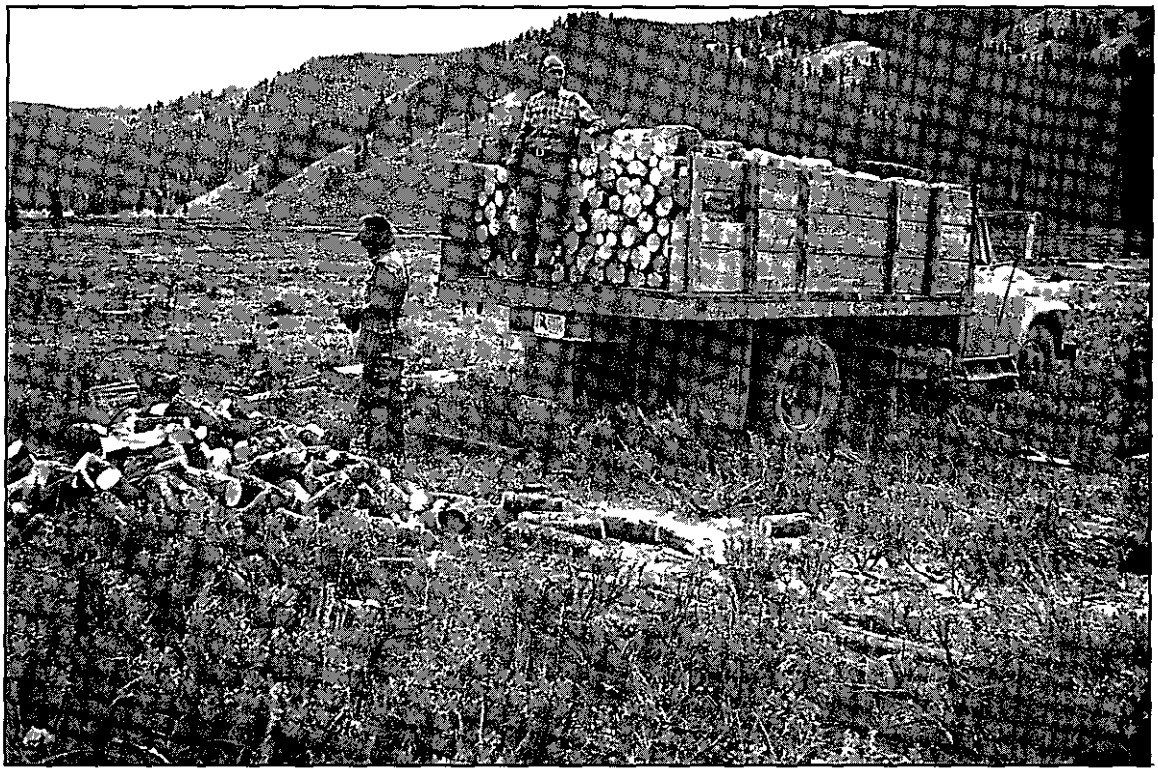
Personal use of the Bridger-Teton National Forest for play, enjoyment, and rest or renewal is extremely difficult to quantify People "know it when they see it" or experience it, but often find expressing their needs difficult In addition, overuse and abuse of resources can result in lost opportunities 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 OHV drivers require roads to access the dead timber and OHV 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

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 clearcutting 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

Portions of the Bridger-Teton National Forest lie within the "Overthrust Belt" with the

Clearcutting was the primary method of timber harvest used in the past

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

Multiple trails occur when people relocate trails alongside an overused trail

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

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 Wilderess 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_2S 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

Introduction

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

User's Guide to Chapter 3

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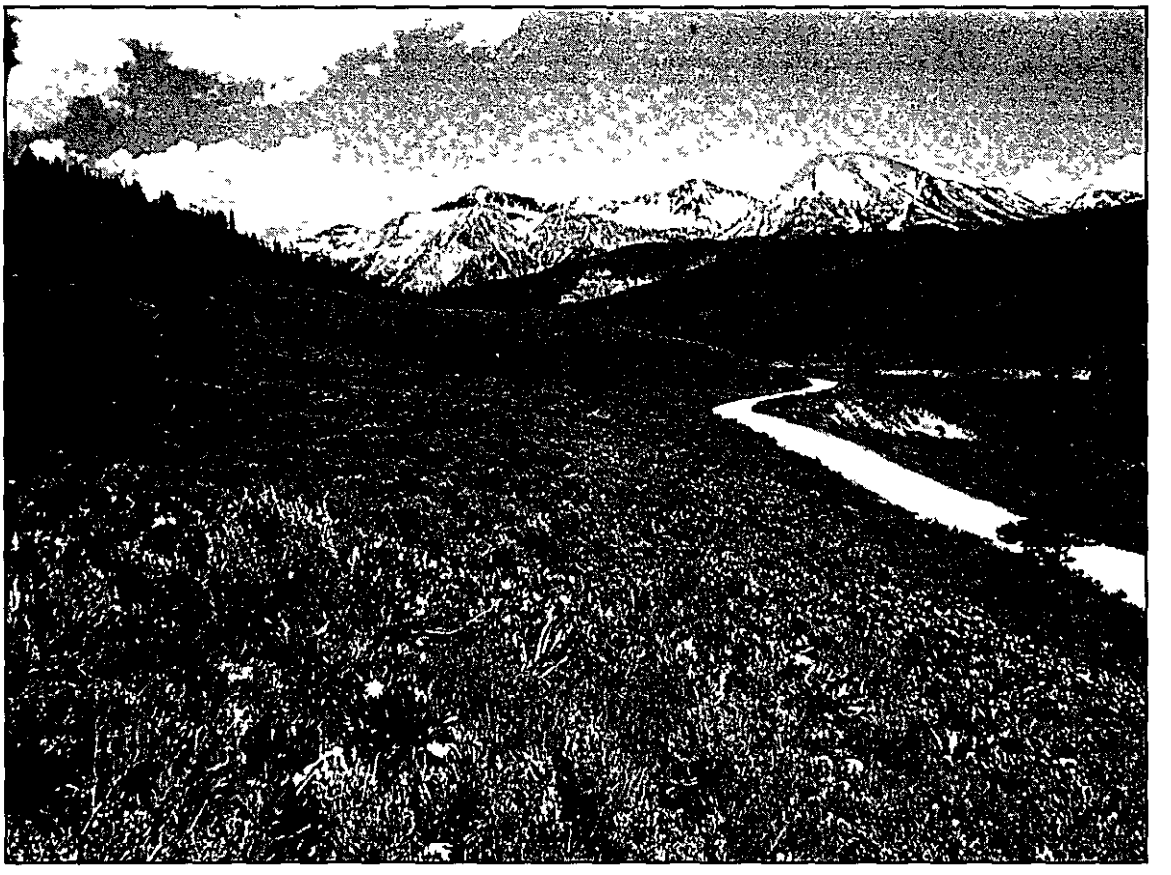
Definitions

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

The issues, concerns, and opportunities are presented according to the Problem Topics described in the sixth section of Chapter 2, **Need to Establish or Change Management Direction**, and the Planning Questions displayed in the 1986 Draft Land and Resource Management Plan and Environmental Impact Statement Issues, concerns, and opportunities usually became part of the problem and challenge statements; later, they influenced goal and objective setting

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 National 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

Introduction

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

User's Guide to Chapter 4

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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

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 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, pool/riffle 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:

Characteristic Log	Class 1	Class 2
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 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:

Clearcut — 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

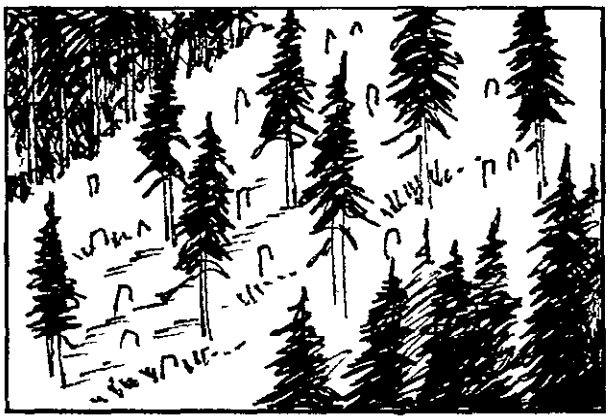
Seed-Tree — Similar to clearcut, except a small number of the better seedbearing trees of the desired species per acre are left singly or in small groups distributed over the area.

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

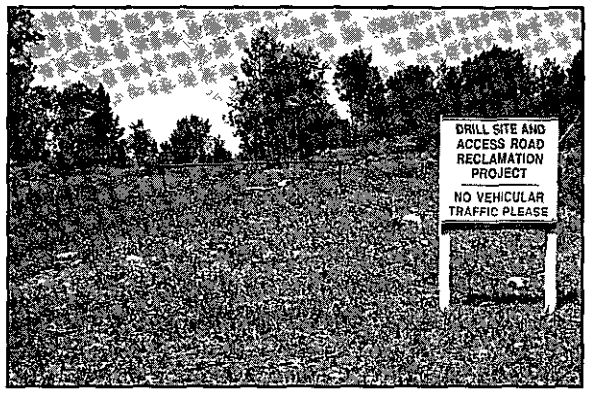
Conditional No-Surface-Occupancy Stipulation (CNSO): This stipulation will be required for mineral licenses, permits, and leases issued by the Bureau of Land Management for National Forest lands in Palisades Wilderness Study Area, administered by the Bridger-Teton National Forest

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

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

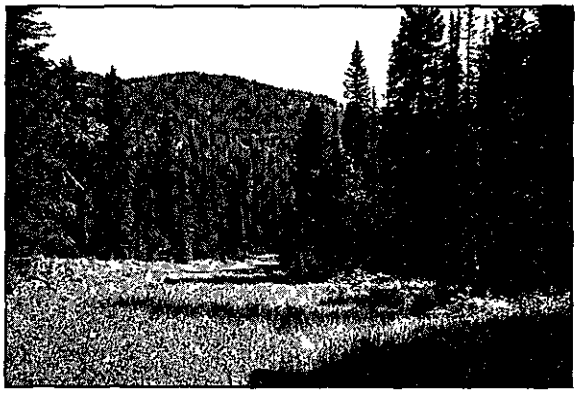
Road and Trail Closure or Elimination Conditions:

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

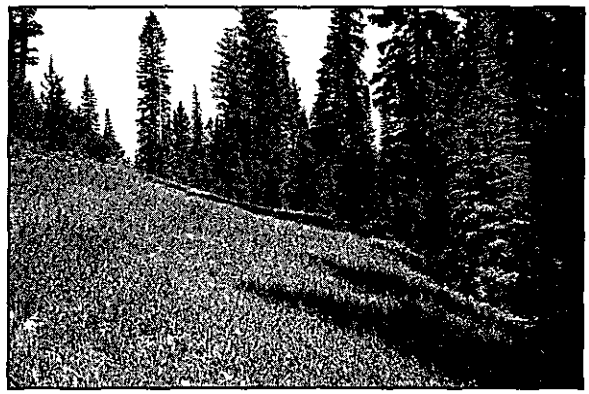
Road and Trail Closure Condition 2: Barricaded Closure — Used primarily on single resource roads where long time periods exist between management activities Barricaded roads will be revegetated and drainage structures, such as bridges and culverts, removed and streambanks restored to original contours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

Gated Closure

Barricaded Closure



Obliteration

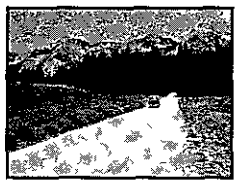


Restoration

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:

Service Level "A"	Service Level "B"	Service Level "C"	Service Level "D"	
				
Free flowing with adequate parking facilities	Congested during heavy traffic such as during peak 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	**Flow**

	Service Level "A"	Service Level "B"	Service Level "C"	Service Level "D"
Volume	Uncontrolled, will accommodate the expected traffic volumes	Occasionally controlled during heavy use periods	Erratic, frequently controlled as the capacity is reached	Intermittent and usually controlled Volume is limited to that associated with the single purpose
Vehicle Type	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 Some use may be controlled to vehicle types	Single use, not designed for mixed traffic Some vehicles may not be able negotiate Concurrent use traffic is restricted
Critical Vehicle	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
Safety	Safety features are a part of the design	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
Traffic Management	Normally limited to regulatory, warning, and guide signs and permits	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
User Costs	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
Alignment	Design speed is the predominant factor within feasible topographic limitations	Influenced more strongly by topography than by speed and efficiency	Generally dictated by topographic features and environmental factors Design speeds are generally low	Dictated by topography, environmental factors, and the design and critical vehicle limitations Speed is not important

Road Surface

Service Level "A"	Service Level "B"	Service Level "C"	Service Level "D"
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

	Arterial	Collector	Local
Traffic Service Level	A or B	B or C	C or D
Maintenance Level	5 or 4	4 or 3	2 or 1

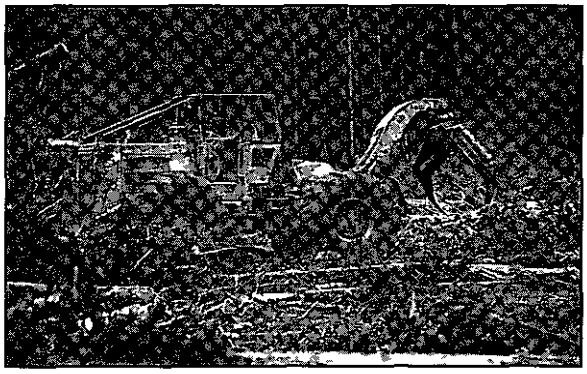
Road Type Cross Reference — Road Type, as defined in the Elk Habitat Effectiveness Model, is a relation of traffic effects on elk security and is not technically interchangeable with road standard, as defined by traffic service level, or traffic patterns, as defined by functional class There are exceptions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

	Main	Secondary	Primitive
Traffic Service Level	A or B	B or C	D
Functional Class	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 travelway 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

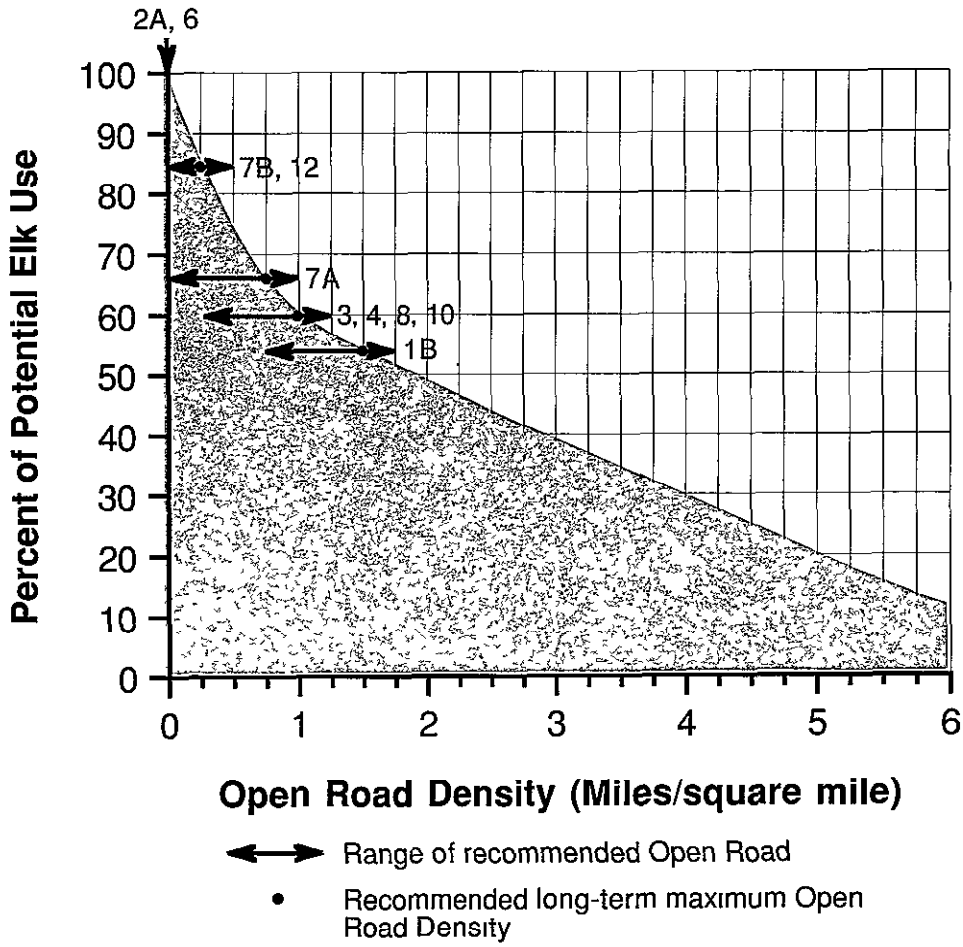
User Convenience — Activities which are undertaken to provide user enjoyment consistent with the desired level of difficulty Examples A bridge could be provided on an easiest difficulty hiker class trail for user convenience even though the bridge is not required for a safe crossing Trees lying across 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

Figure 4-1
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[1]

		Vegetation Types Adjacent to Roads	
Road Type[2]	Road Status[3]	Hiding Cover[4]	Open
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

Road type[2]	Road status[3]	Vegetation Types Adjacent to Roads: Hiding cover[4]	Open
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

[1]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

[2]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 1 adt

[3]*Open road status* means open to motorized use during the period elk normally use the area *Closed hunting season* means closed for about a 1 month 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

[4]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"

Soil, Water, and 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

Normal Fire Season — The period between June 25 and September 30

Historic Weather Conditions — Local weather conditions observed over the past 25-year period

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

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 handtools 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 firehead 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

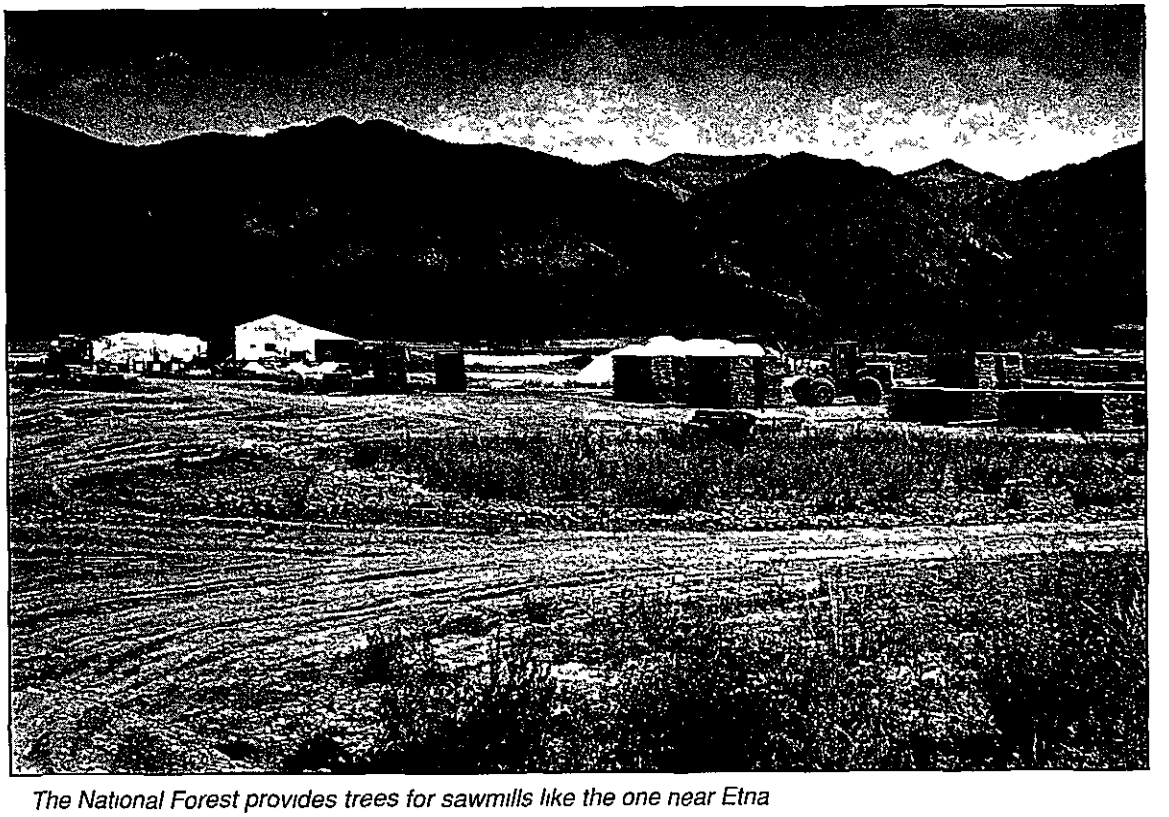
Forest Challenge: Support Community Prosperity

Goal 1.1

Goal 1.1 — Communities continue or gain greater prosperity.

Objectives

1 1(a) — *Provide an average annual volume of 12 million board feet of green sawlogs*



The National Forest provides trees for sawmills like the one near Etna

for mills in operation in such towns as Alpine, Etna, Jackson, Dubois, Pinedale, Afton, Evanston, Rexburg, Montpelier, St Anthony, and Lander

1 1(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

1 1(c) — Provide timber volumes at costs that reflect current market values and as small- and large-product sales to meet local demand

1 1(d) — Provide leasable, locatable, and salable mineral exploration and development opportunities

1 1(e) — Provide undisturbed areas for use by outfitter and guide clients, including river floaters

1 1(f) — Provide areas for alpine skiing and commercial ski and snowmobile operations

1 1(g) — Help re-establish historic elk migration routes to provide increased viewing and hunting opportunities for outfitters and clients

1 1(h) — Provide forage for about 260,000 Animal Unit Months (AUMs) of livestock grazing annually

1 1(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.

Goal 1.2

Objectives

1 2(a) — Provide roads for timber contractors to obtain at least an average annual volume of 12 million board feet of green sawlogs

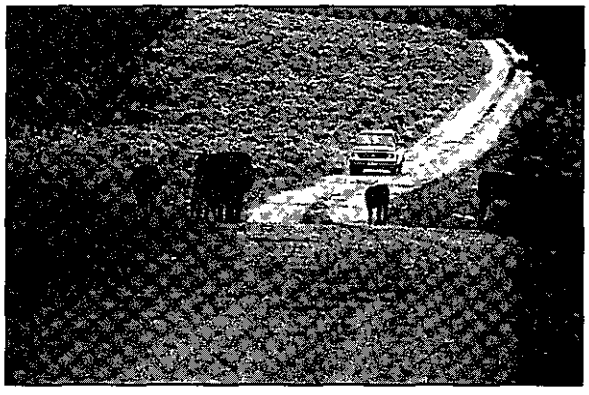
1 2(b) — Provide roads for timber contractors to obtain at least 5 million board feet of forest products, including commercial firewood, houselogs, posts and poles

1 2(c) — Provide roads, trails and driveways for ranchers to manage about 260,000 AUMs of livestock grazing

1 2(d) — Provide roads and trails for the outfitting and guide industry

1 2(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

1 2(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

Goal 1.3 — Water quantity and quality are retained or improved for local users.
Objectives
1 3(a) — *Protect municipal, agricultural, and other potable water supplies* and ensure that management activities do not cause a deterioration in water-flow timing, quality, or quantity

1 3(b) — Meet or exceed current State water quality standards and National Forest Service water quality goals

Goal 1.4

Goal 1.4 — Water production is increased in the Green River watershed.
Objectives
1.4(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

Goal 2.1 — Adequate habitat for wildlife, fish, and edible vegetation to help meet human food needs is preserved.
Objectives
2 1(a) — 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

2 1(b) — Provide opportunities for people to collect edible forest products such as mushrooms and berries

Forest Challenge: Supply Access to Natural Resources

Goal 2.2

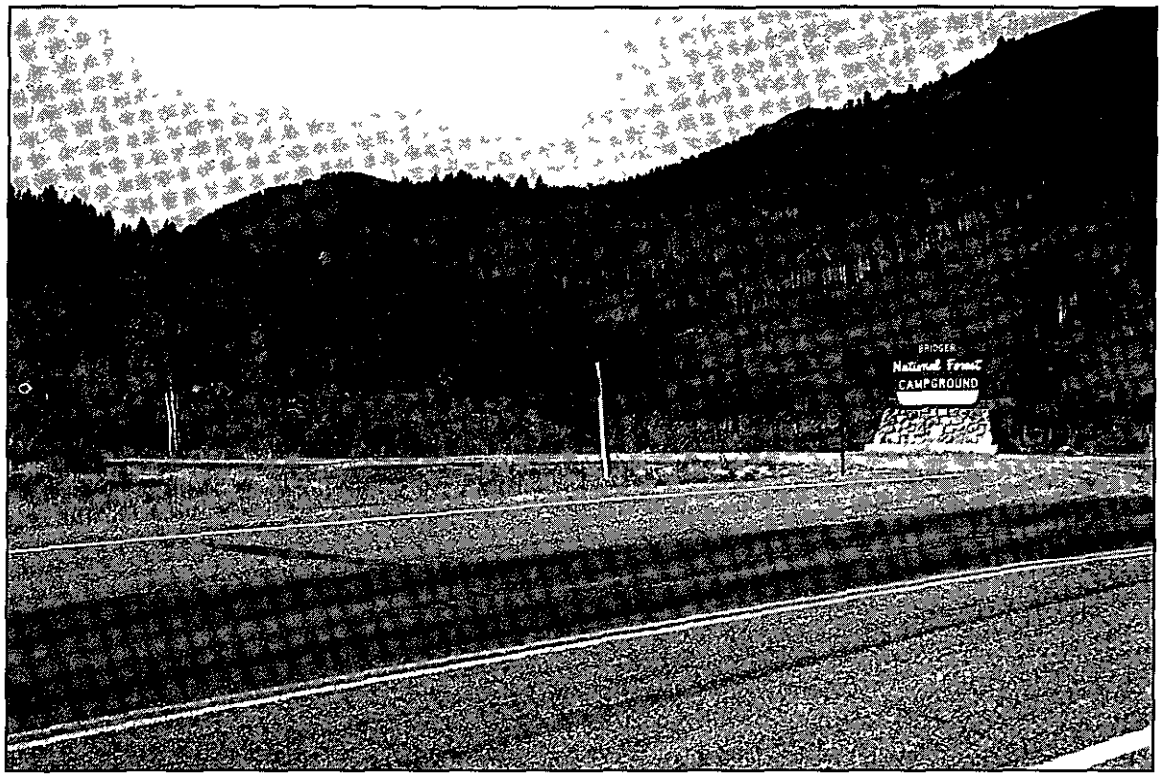
Goal 2.2 — High-quality developed recreation facilities exist to serve Bridger-Teton National Forest visitors.
Objectives
2 2(a) — Retain, improve, and add developed sites

2 2(b) — Design facilities for people of all ages and abilities

Goal 2.3

Goal 2.3 — High-quality dispersed recreation opportunities exist to serve Bridger-Teton National Forest visitors.
Objectives
2.3(a) — Retain, improve, and add dispersed recreation opportunities

2 3(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, ornamentals, rock, gravel, and other special items are available for people's use. **Goal 2.4**

Objectives

2 4(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

2 4(b) — Provide opportunities to get Christmas trees, ornamentals, 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. **Goal 2.5**

Objectives

2 5(a) — Retain some popular, traditional roads for sedan travel

2 5(b) — Retain and, in some cases, add some roads for high-clearance vehicles (4x4s)

2 5(c) — Retain, improve, and add trails for off-highway vehicles (OHVs) including snowmobiles

2 5(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

Goal 2.6 — Scenic values of certain private tracts highly visible to the Bridger-Teton National Forest visitor are protected from visual impact.
Objectives:
2.6(a) — Acquire conservation easements or title to private tracts of land to protect scenic values

Goal 2.7

Goal 2.7 — Public lands presently blocked by private development are accessible.
Objectives
2 7(a) — Acquire easements across private lands to allow access to the Bridger-Teton National Forest

2 7(b) — Eliminate cases of trespass on National Forest System lands

Goal 2.8

Goal 2.8 — *Cultural resource information is available and displayed for* the public.
Objectives·
2 8(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

Goal 3.1 — Grizzly bear recovery is achieved.
Objectives
3 1(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

3 1(b) — Prevent needless encounters between grizzly bears and people, and prevent grizzly bears from gaining access to such attractants as food and garbage

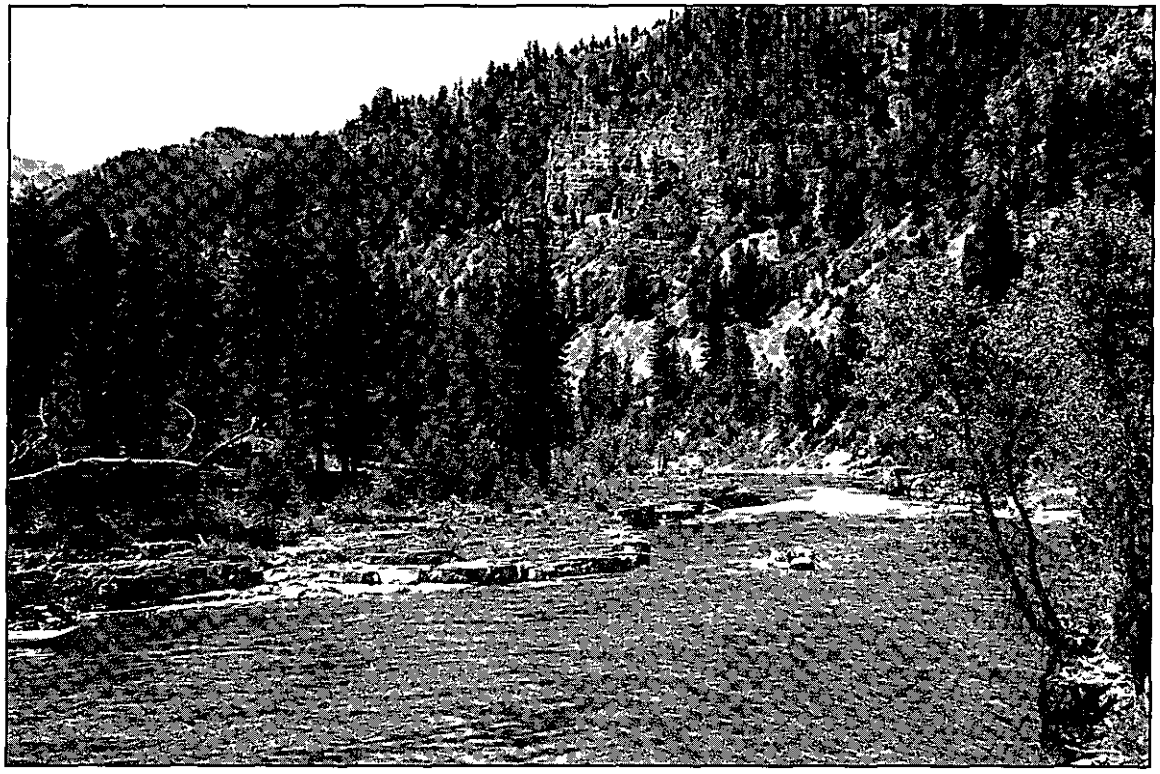
Forest Challenge: Contribute to the Recovery of Endangered Species

Goal 3.2 — Recovery is achieved for the Endangered species on the Bridger-Teton National Forest. **Goal 3.2**

Objectives

3 2(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

3 2(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

3 2(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

3 2(d) — Reduce preventable, human-caused mortality of bald eagles on the Bridger-Teton National Forest to zero per year, with emphasis on public education

3 2(e) — Provide suitable and adequate amounts of habitat for bald eagles

3 2(f) — Secure two nesting pairs and provide suitable and adequate amounts of habitat for peregrine falcons

3 2(g) — Prevent human-caused mortality of whooping cranes

3 2(h) — Provide suitable and adequate amounts of habitat for summer-resident whooping cranes

3 2(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

Goal 3.3 — Sensitive species are prevented from becoming a federally listed Threatened species in Wyoming.

Objectives

3 3(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

3 3(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

3 3(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

Forest Challenge: Minimize the Loss of Resources from Road Construction

Goal 4.1

Some roads will be closed to increase wildlife security

Goal 4.1 — Road management preserves *wildlife security, soil, visual resource, and* water-quality values.

Objectives

4 1(a) — Minimize new road building and downgrade or close existing roads and motorized access trails to maintain or increase wildlife security

4 1(b) — Design roads and structures to retain soil, visual resource, and water-quality values

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. **Goal 4.2**

Objectives

4.2(a) — Apply silvicultural practices to achieve documented, site-specific, multiple-resource objectives on lands suited—scheduled—for timber production

4 2(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

4 2(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

4 2(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 — Overall diversity of and riparian habitats within the Bridger-Teton National Forest are enhanced as timber is removed. **Goal 4.3**

Objectives

4 3(a) — Provide for vegetative species and age diversity, genetic quality, and forest appearance

4 3(b) — Provide for diverse habitats to ensure viable populations of management indicator species

4 3(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

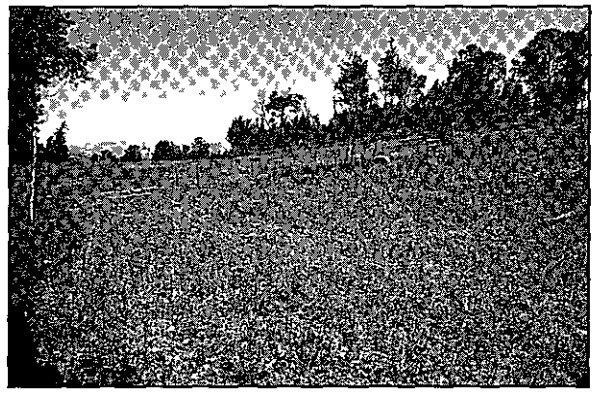
Goal 4.4 — Other resources are protected during exploration and development of subsurface resources. **Goal 4.4**

Objectives

4 4(a) — Require that surface occupancy of lands takes place only on lands available for mineral exploration and development

4 4(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

4 4(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

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

4 5(a) — Close, reconstruct, or relocate trails

4 5(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

Goal 4.6 — The wilderness character of Congressionally designated Wildernesses is retained or regained.

Objectives

4 6(a) — Retain and, where necessary, restore high-quality wilderness environments

4 6(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

Goal 4.7 — Grazing use of the National Forest sustains or improves overall range, soils, water, wildlife, and recreation values or experiences.

Objectives

4 7(a) — Retain or improve forage and overall range condition

4 7(b) — Retain or enhance riparian vegetation, stream-channel stability, sensitive soils, and water quality where livestock are present

4 7(c) — Coordinate the management of livestock with recreation use

4 7(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

Goal 4.8 — Livestock operations are not disrupted needlessly.

Objectives

4 8(a) — Help prevent human interference with livestock operations along driveways and in other areas.

4 8(b) — Help control the spread of noxious weeds

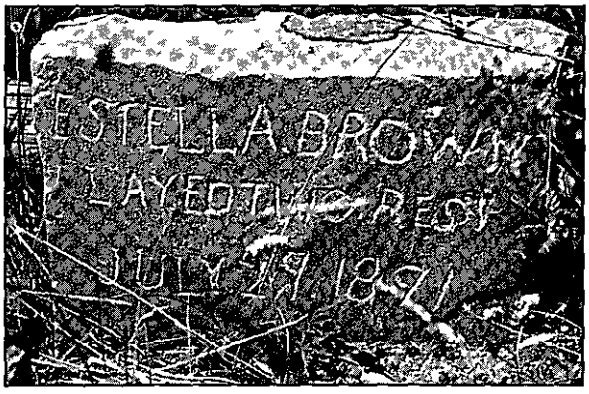
4 8(c) — Help implement a predator-control program where intolerable losses to livestock are demonstrated

Forest Challenge: Protect Cultural Resources and Natural Features

Goals 4.9 and 4.10

Goal 4.9 — Cultural resource values are preserved.
Objectives
4 9(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
4 10(a) — Find and protect natural features and landmarks so that their conditions and settings are retained



Cultural resources are being protected

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 on pages 186 to 191 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 — Oversnow 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

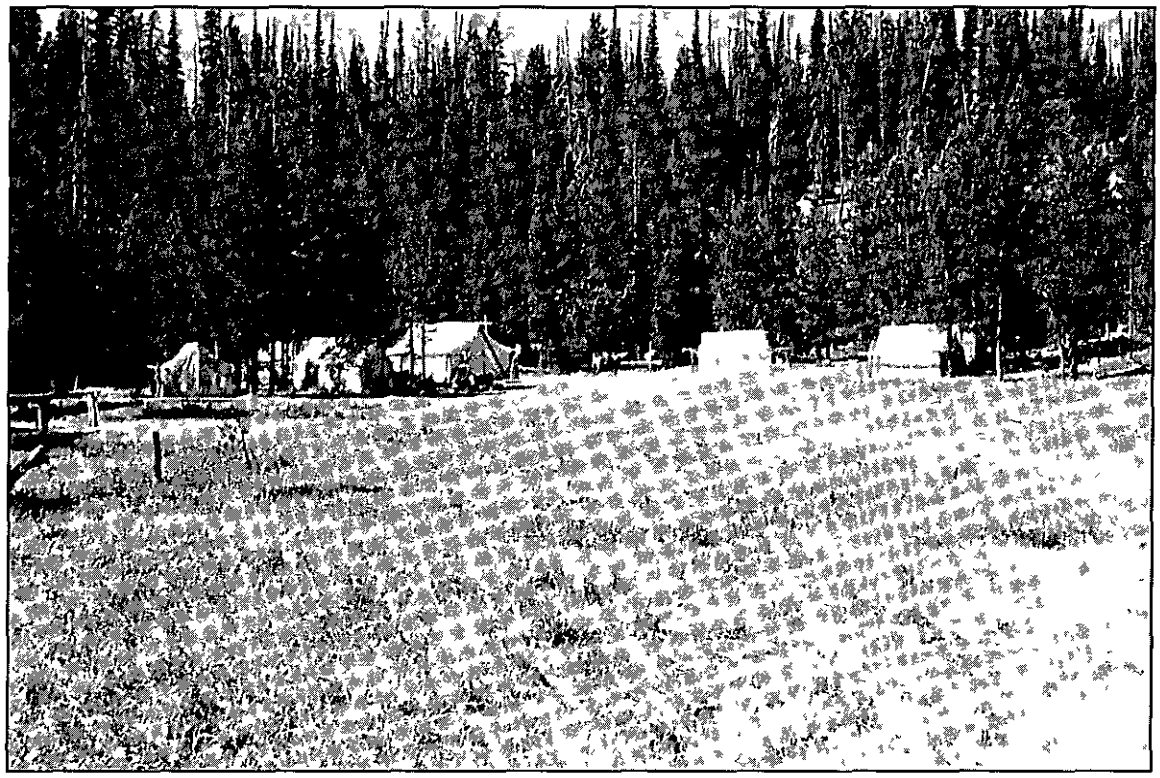
Recreation Riparian Area Standard — No new recreation sites will be built in riparian areas unless a clear public need can be demonstrated and no other reasonable alternative exists Unless designed to be submerged, recreation development will not occur in wetlands and in 100-year floodplains

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



Outfitter camps are designed to minimize impacts

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

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)

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

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

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-i), 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

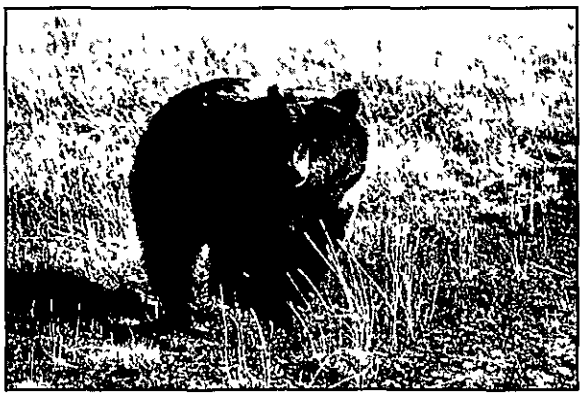
Road Location Guideline — Roads and trail areas open to traffic should be located to avoid key areas described in the Habitat Effectiveness Standard

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

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 bears and their habitat will be managed to minimize grizzly bear-human conflict

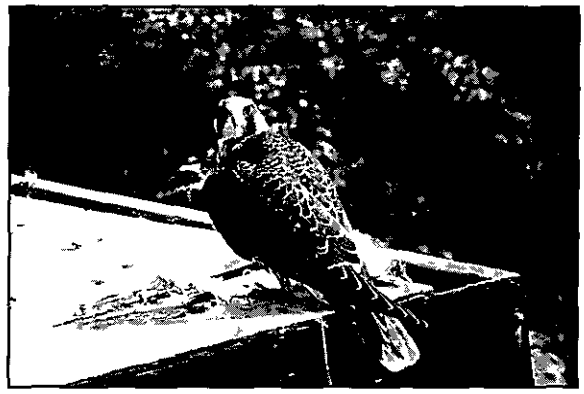
Grizzly Bear-Human Management Standard — Within Grizzly Bear Management Situation 1, 2, and 3, existing and future Interagency Grizzly Bear Management Guidelines will be followed to minimize grizzly bear-human conflict potential and resolve grizzly bear-human conflicts The Special Order for Sanitation 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*



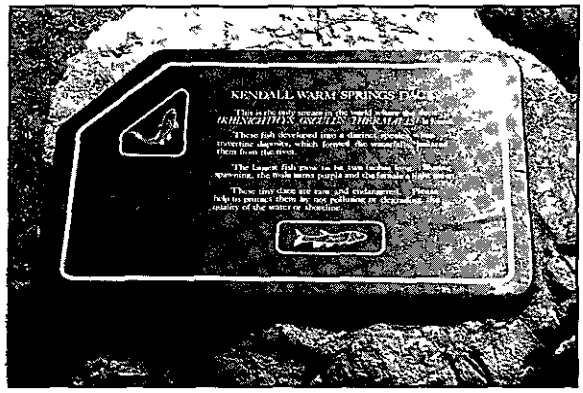
Peregrine falcons are being reintroduced on the National Forest

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

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*



Habitat for the Kendall Warm Springs dace is protected

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

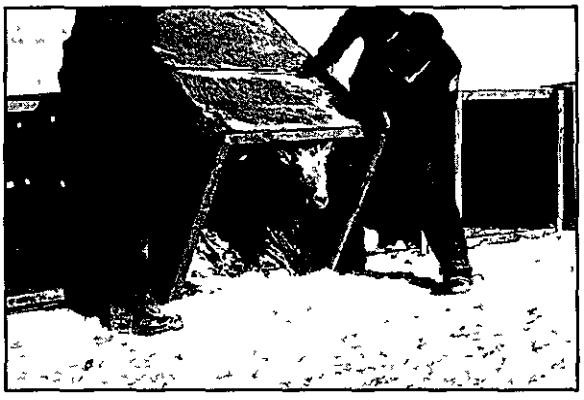
Fish Habitat Management Guideline — For fish habitat providing a fishery at or near its potential, fish populations should be maintained at existing levels For habitat below its potential, habitat should be improved and maintained to at least 90 percent of its natural potential First priority for improvement should be streams supporting Colorado River and Bonneville cutthroat trout which are Sensitive species

Streambank 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 Streambank vegetation should be maintained to 80 percent of its potential natural condition or an HCI rating of 85 or greater Streambank stability vegetation and fish numbers and biomass should be managed by streamtype

New Impoundments Standard — Minimum—conservation—pools of at least one-third of the water surface for all new impoundments capable of sustaining a fishery resources 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



Bighorn sheep were reintroduced on Darby Mountain

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

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

*Season-Long Grazing		Rotation Grazing	
Unsatisfactory Condition	Satisfactory Condition	Unsatisfactory Condition	Satisfactory Condition
40%	50%	50%	60%

Riparian Range Sites

*Season-Long Grazing		Rotation Grazing	
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

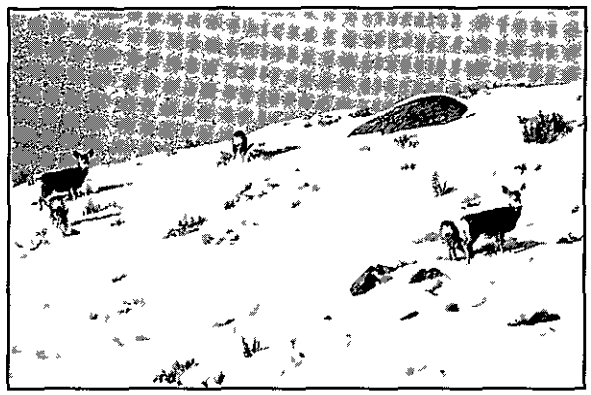
Riparian areas will be protected from overgrazing

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



Crucial winter range will be protected

Structural Improvement Standard — Structural improvements will be designed to allow big-game movement and avoid or reduce hazards to other wildlife species

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 (CMAI) 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 silviculturalist 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 watertable should be restored

Streambank Vegetation Standard — Grass and shrub vegetation will be maintained within about 25 feet plus 2 to 4 feet for each 1 percent sideslope 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 characteristics

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

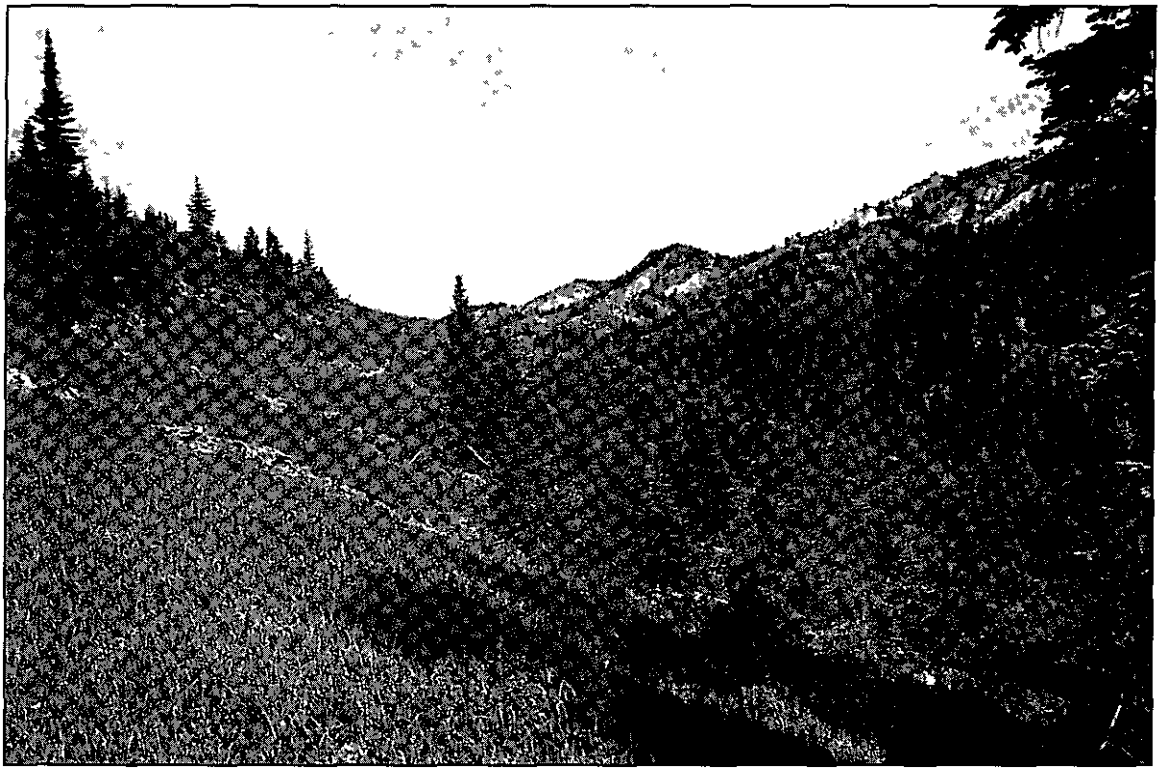
Seismic Activity Standard — Helicopter-access seismic activity will be permitted Surface and sub-surface use of explosives will be restricted to protect Threatened and Endangered species, potable water supplies, and unique natural features

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 wellsites 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

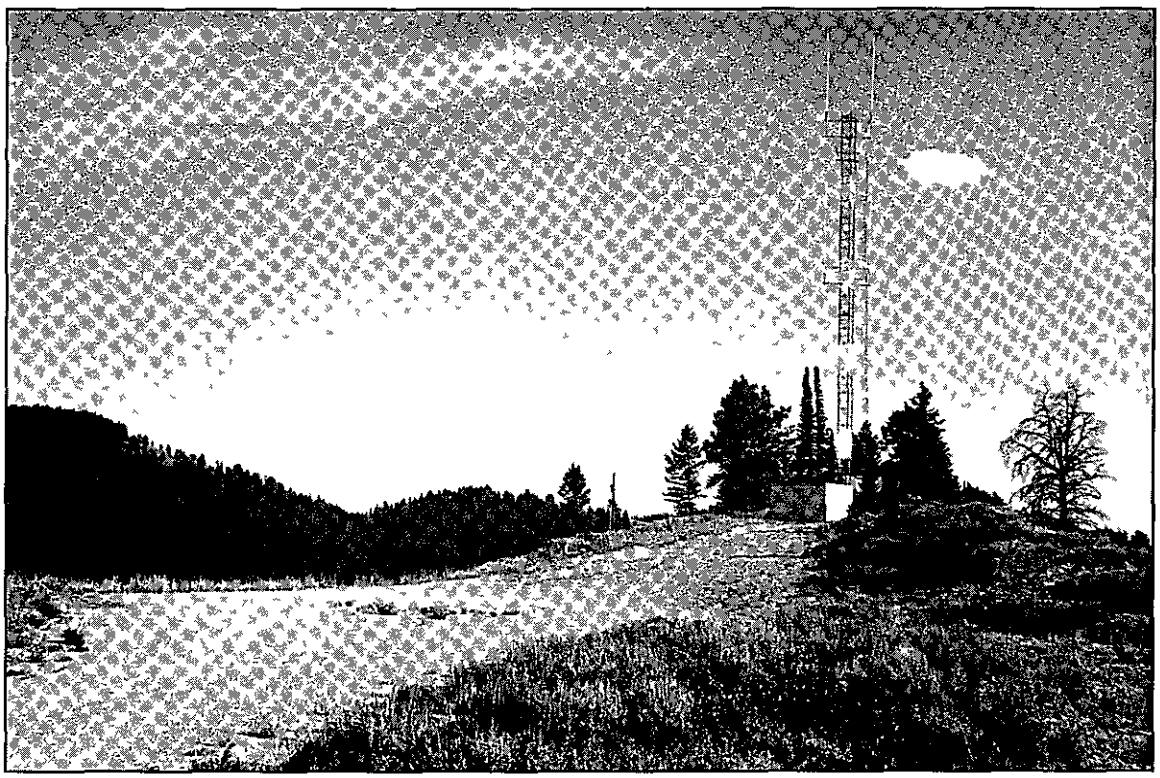
Watershed Disturbance Standard — Not more than 30 percent of the forested area of any second-order or higher watershed will be in a clearcut or equivalent condition within a three-decade period The effects of forest vegetation alteration upon water quantity, timing, and quality will be evaluated by means 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(i-j) and 3 2(d,g)

Electronic Site Selection Guideline — Existing electronic sites should be used in lieu of new installations



Existing electronic sites will be used for new equipment if possible

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

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 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 Powerlines*

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)

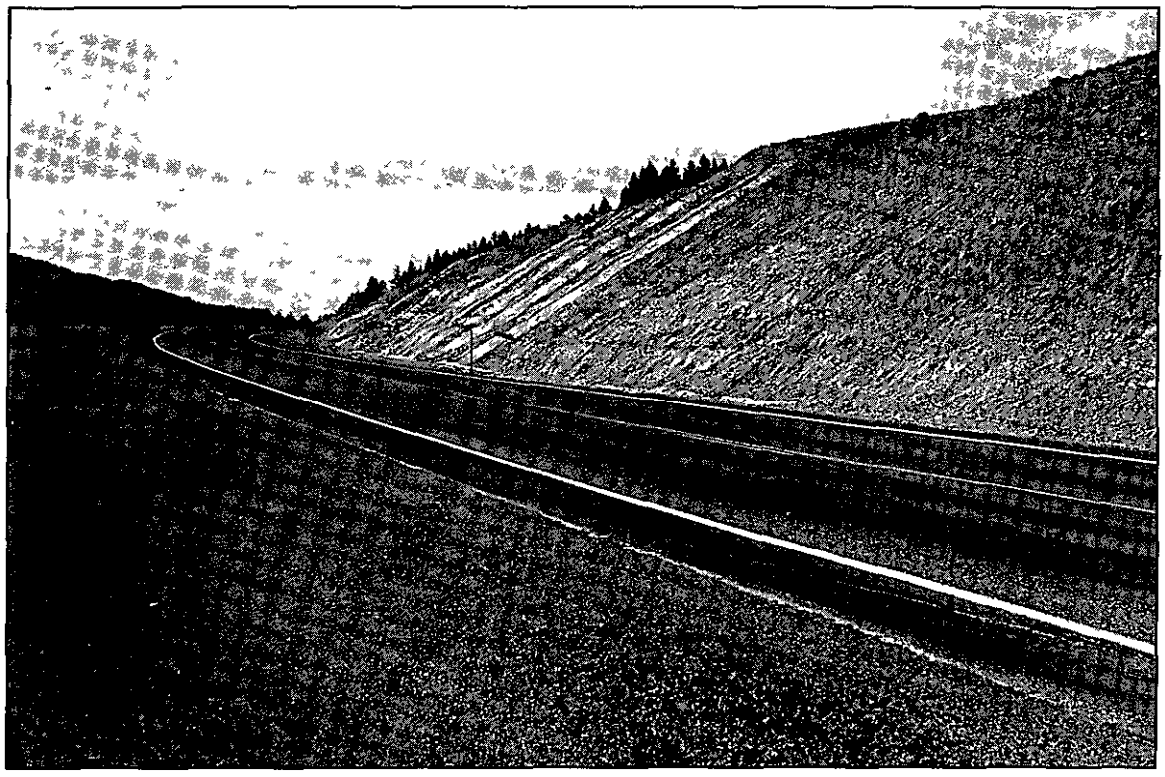
Facility Safety Standard — Structures will be structurally sound and safe or they will be closed

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

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



Rehabilitation along Salt Pass reduced erosion

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 breakup, 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 drainageways Where riparian areas or drainageways 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

Access: Trails

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

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 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

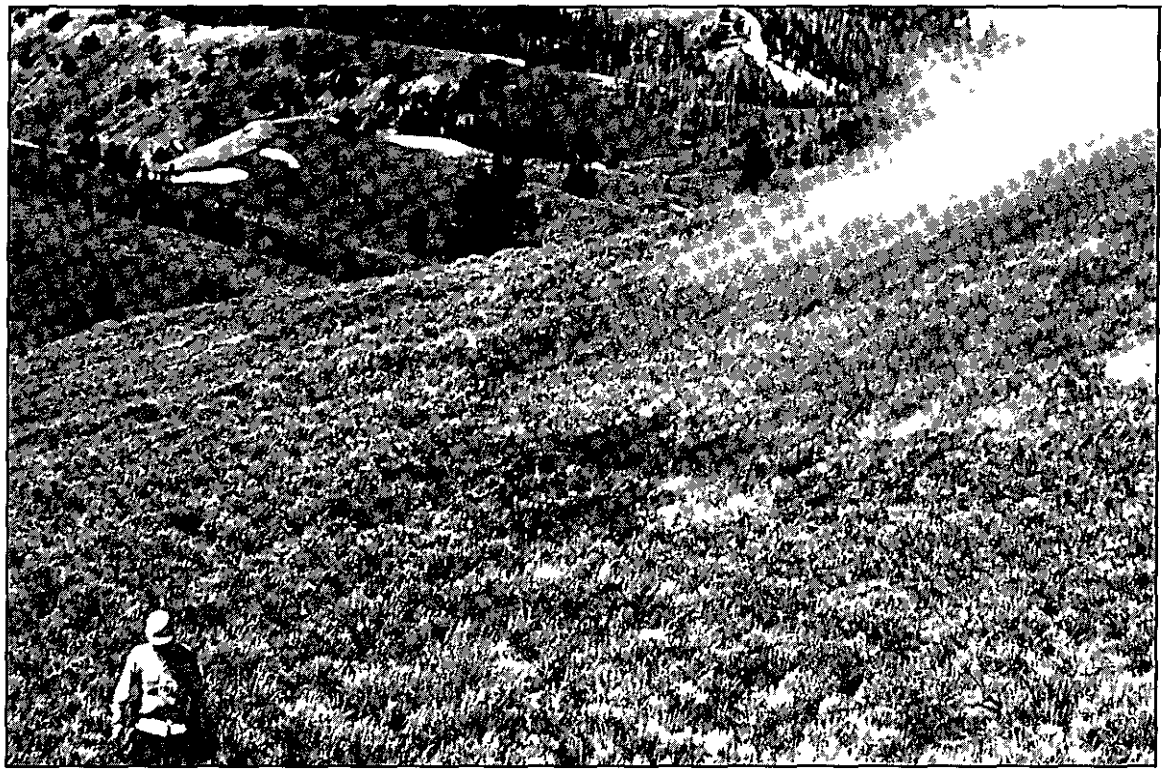
Protection: Fire

Protection: Fire Prescription — Fire is managed as a tool to accomplish resource objectives while protecting identified values within acceptable levels of risk

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), 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 Prevention Guideline — Fire prevention activities should be concentrated in human high-use areas



Prescribed fire is used to improve wildlife habitat

Prescribed Fire Guideline — Prescribed fire may be used to accomplish resource management objectives which include

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

'rotection: 'ests

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)

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 species

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

Mountain pine bark beetle can kill large numbers of trees

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

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

Desired Future Condition

Silviculture Matrix[1]

The following table allows comparison of the various silvicultural opportunities used to achieve the Desired Future Conditions

	Desired Future Condition											
Cutting Method	**1B**	**2A**	**2B**	**3**	**4**	**6A-D,S**	**7A**	**7B**	**8**	**9AB**	**10**	**12**
Sanitation/Salvage[2]	X	X	X	X	X		X	X	X	X	X	X
Single–Tree Selection	X	X	X	X	X		X	X	X	X	X	X
Group Selection	X	X	X	X	X		X	X	X	X	X	X
Patch Cut	X		X		X		X	X	X	X	X	X
Seed Tree	X		X		X		X	X	X	X	X	X
Shelterwood	X		X		X		X	X	X	X	X	X
Clearcut	X		X				X	X	X	X	X	
Scheduled for Harvest	X						X				X	
Max acres individual created openings	40						10				25	
Average acres individual created openings	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

[1]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

[2]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

Desired Future Condition																	Predominate ROS
1B	2A	2B	3	4	6A	6B	6C	6D	6S	7A	7B	8	9A	9B	10	12	Class by DFC
X				X	X			X		X							Primitive
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 (VQO) 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

Desired Future Condition													Predominate VQO
1B	2A	2B	3	4	6A-D, S	7A	7B	8	9A	9B	10	12	Class by DFC
					X								Preservation
	X	X	X	X		X	X	X	X	X		X	Retention
X			X	X		X	X	X	X	X	X	X	Partial Retention
X	X								X			X	Modification

Desired Future Condition

Common Recreation Activity Matrix[1]

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 DFC	Desired Future Condition																
	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

[1]Appropriateness under each
X = appropriate
x = appropriate with area restrictions
= not appropriate

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

	Desired Future Condition											
Lease Option	1B	2A	2B	3	4	6A-D,S	7A	7B	8	9AB	10	12
Lease with General Forest Direction[1]	X		X				X	X	X		X	X
No Leasing		X				X						
Lease with No-Surface-Occupancy[2]	X	X	X	X	X		X	X	X	X	X	X

[1]Includes the 14 lease terms found in the Standard Oil and Gas lease, BLM 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

[2]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

Scheduled Timber Harvest DFCs

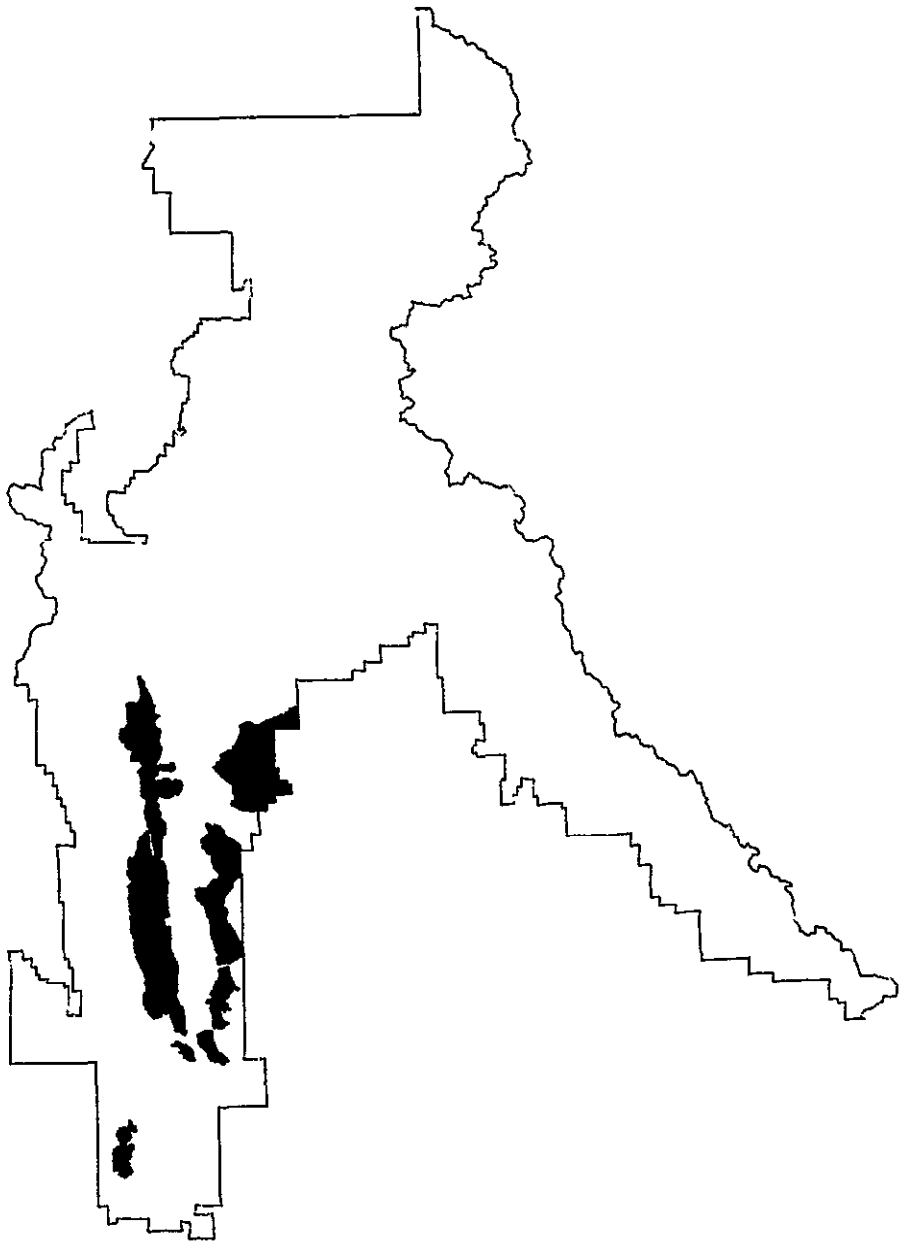
1B	7A	10	
Extensive	Low level	Moderate	Network (general)
B-D	B-D	B-D	TSL New Roads
B-D	B-D	B-D	TSL Existing Roads
Economically optimum	Grizzly bear	Wildlife	Density Criteria
700 feet	1500 feet	1200 feet	Yarding Average
1500 feet	4000 feet	4000 feet	Yarding Maximum
0 75-1 75	0-1 0	0 25-1 25	Open Road Density

Unscheduled Timber Harvest DFCs

2A & 6	2B	4 & 8	7B	9AB & 3	12	
None	Low level	Low level	Low level	Variable	Low level	Network (general)
None	B-D	B-D	B-D	A-D	D	TSL New Roads
None	B-D	B-D	B-D	A-D	B-D	TSL Existing Roads
None	Recreation	Mixed	Grizzly bear	Recreation	Big game	Density Criteria
NA	NA	1000 feet	2000 feet	NA	2000 feet	Yarding Average
NA	NA	4000 feet	5000 feet	NA	5000 feet	Yarding Maximum
0	NA	0 25-1 25	0-0 5	0 25-1 25[1]	0-0 5	Open Road Density

[1]Refers to DFC 3 only; DFC 9 areas will be highly variable

Figure 4-2
Desired Future Condition 1B

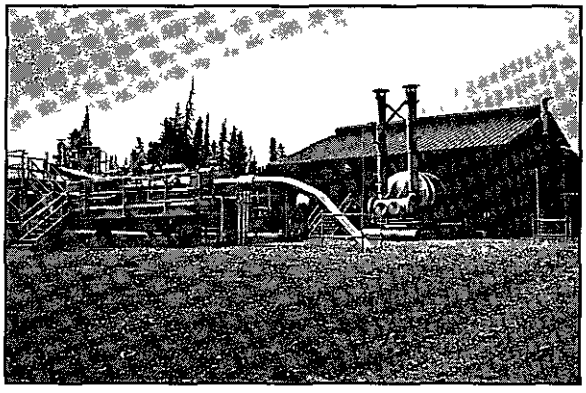


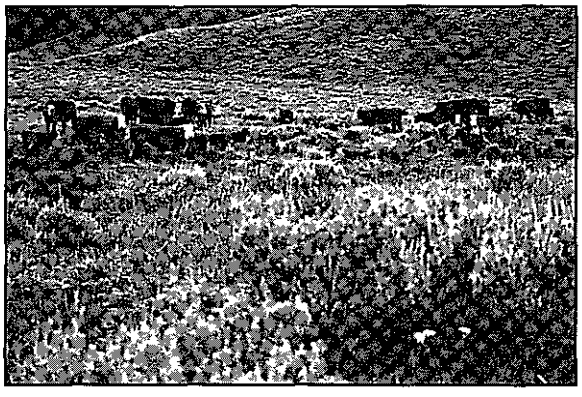
Desired Future Condition 1B
Substantial Commodity Resource Development with Moderate Accommodation of Other Resources

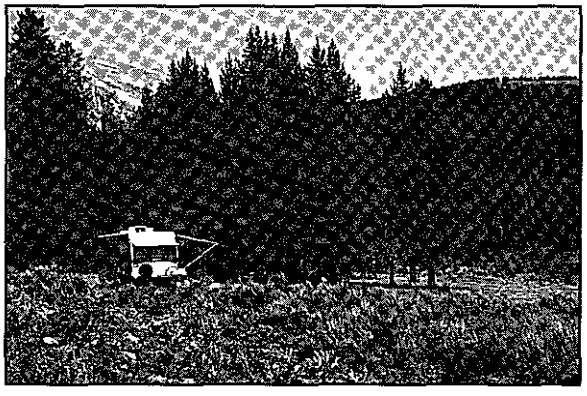
Theme: An area managed for timber harvest, oil and gas, and other commercial activities with many roads and moderate to occasionally substantial emphasis on other resources

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

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 1B

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, cattleguards, water developments, and gates You meet relatively large flocks of sheep on sidehills 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,i), 1.2(a-f), 1 4(a), 2.1(a,b), 2 4(a,b), 2 5(a-c), and 4 2(a-c)

Resource Prescriptions, Standards, and Guidelines

Recreation

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

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

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

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 — A full range of biologically appropriate silvicultural practices is used to emphasize production and use of sawtimber 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 Type	Rotation Age (yrs)	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 Type	Stand Age at Thinning (yrs)	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 are met These standards will be met within five years of final harvest

Forest Cover Type	Site Productivity (cu ft/acre/yr)	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

Forest Cover Type	Site Productivity (cu ft/acre/yr)	Trees Per Acre	Percent Of Area Stocked	Percent Species Composition
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

Minerals Prescription — Minerals or energy exploration and development is encouraged Lease stipulations emphasize mineral commodity production, while meeting some other resource objectives

Access: Roads

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

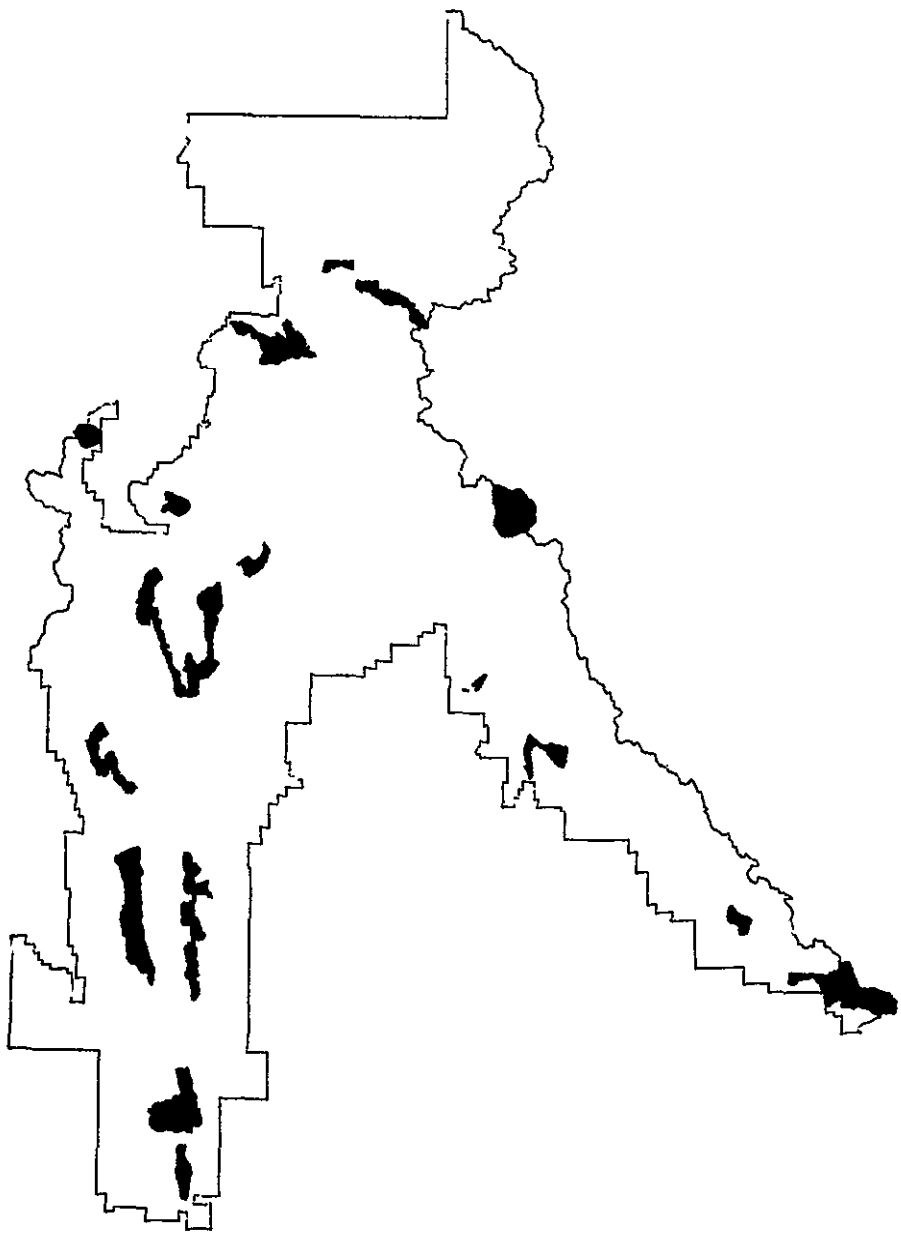
Prescribed Fire Guideline — Prescribed fire should be used to favor reducing fuel loadings, improving livestock forage conditions on primary ranges, and improving site conditions to increase wood fiber production

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

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 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

Figure 4-3
Desired Future Condition 2A



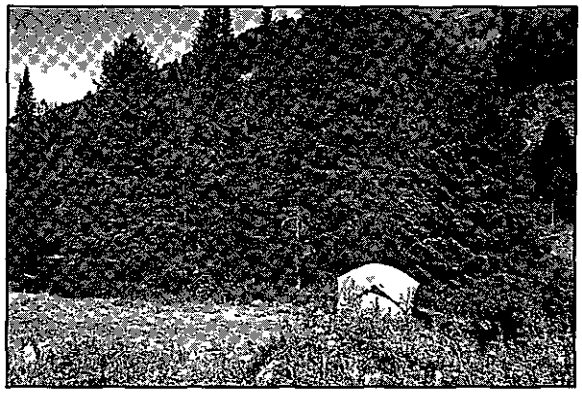
Desired Future Condition 2A
Non-motorized Recreation Areas

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



Non-motorized recreation is the main resource use of DFC 2A

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

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 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

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 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

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

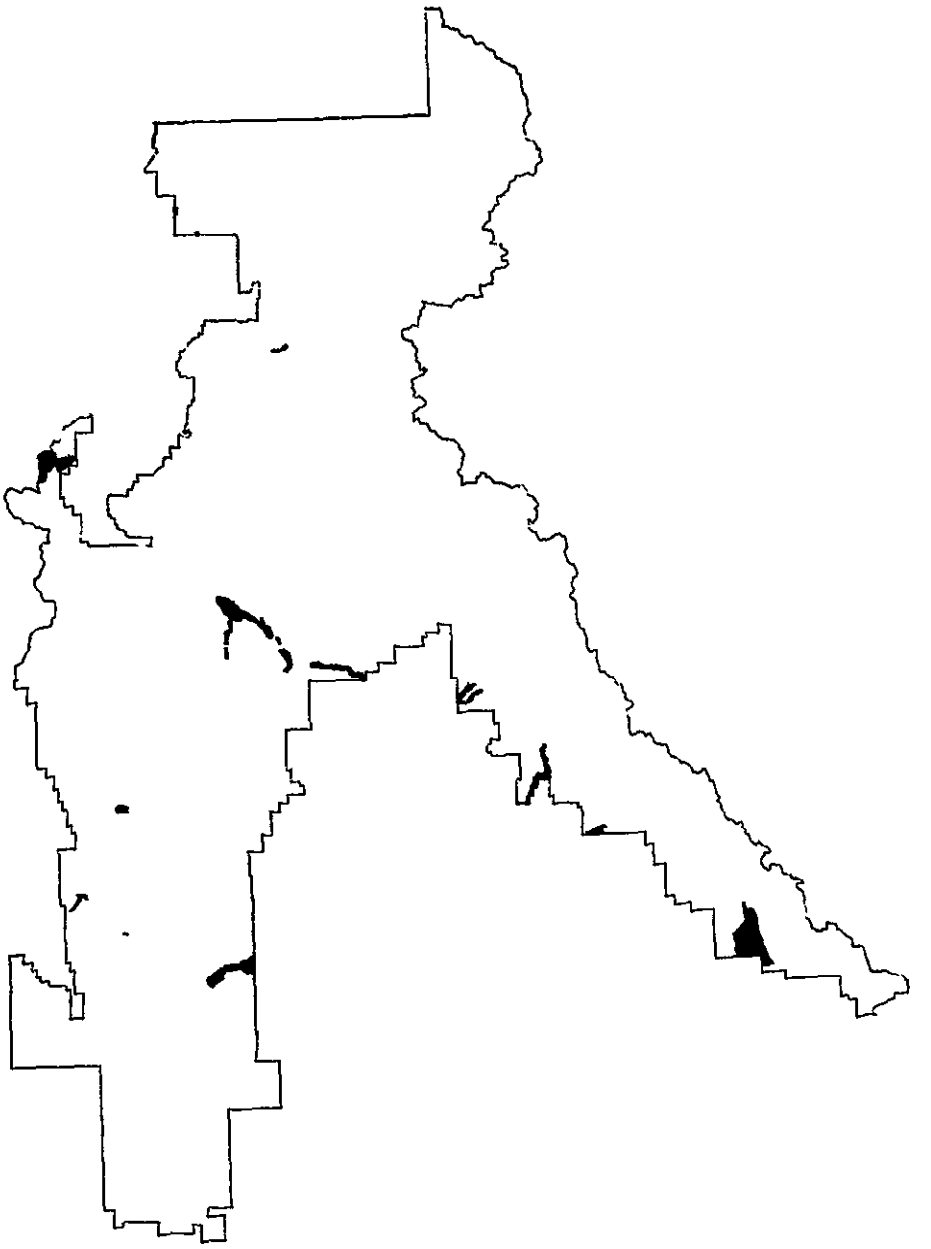
Encounters Per Day Guideline — Parties encountered per day during peak recreational use seasons should average 12 per day, varying from 6 to 15 depending on conditions

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

Figure 4-4
Desired Future Condition 2B



Desired Future Condition 2B
Motorized Recreation Areas

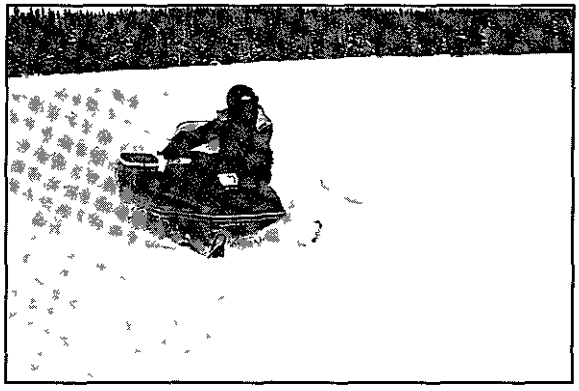
Theme: An area managed to give a motorized recreation experience

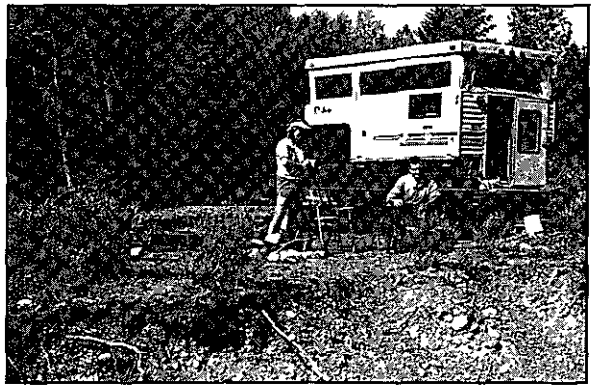
Experience: Overall, you find few signs of people away from roads If you hike through the area, you see little or no evidence of logging, oil and gas equipment, or other development

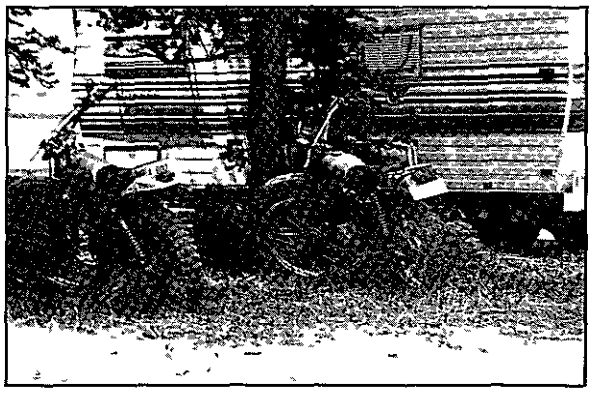
Some popular, established roads are open and you reach or pass through the area on them Such roads are mainly gravel surfaced and well maintained with gentle grades They allow unrestricted two-way traffic You may find a few roads as you hike along trails or across country

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







Primary activities in DFC 2B are recreation and grazing

vehicles So, you find occasional-to-frequent encounters with motorized trailbikes, jeeps, and other off-highway vehicles in some areas

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 Roaded 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 roaded 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 1 mile of trail per square mile of area should be attained

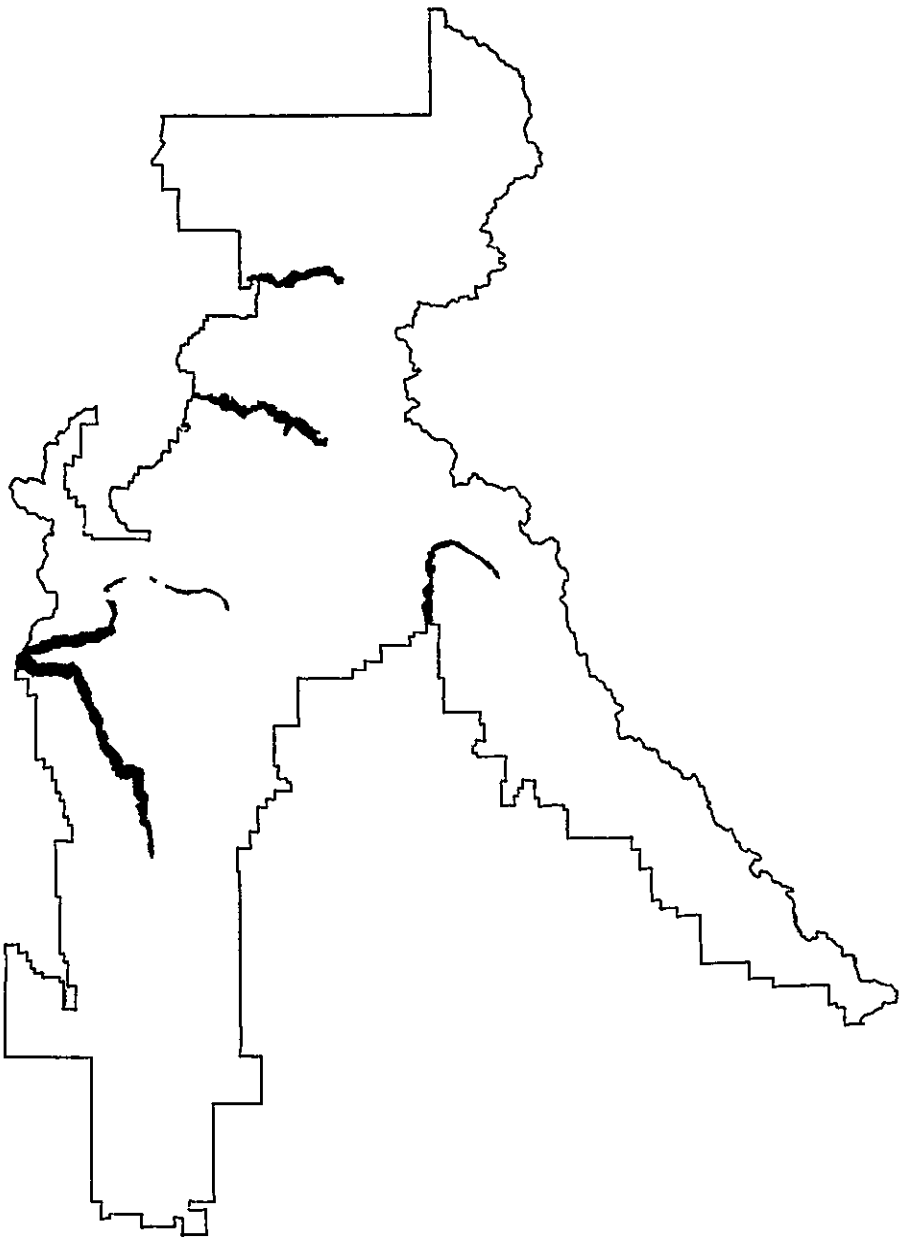
Encounters Per Day Guideline — Parties encountered per day during peak recreational use seasons should average 12 per day, varying from 6 to 15 depending on conditions

Protection: Fire

Protection: Fire Prescription — Fire management emphasizes a slightly modified landscape

Fire Protection Standard — Wildfires will be suppressed using strategies that keep fireline intensities below 400 BTU per second per foot

Figure 4-5
Desired Future Condition 3



Desired Future Condition 3
River Recreation

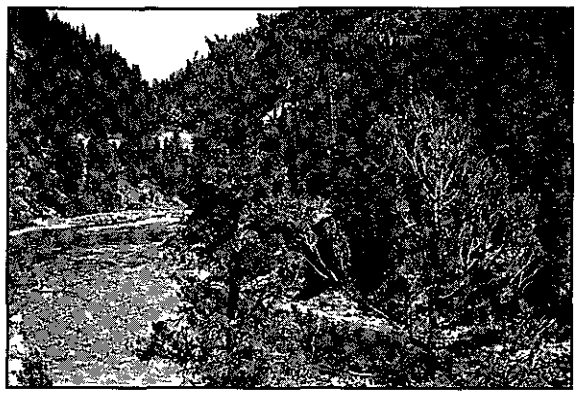
Theme: An area managed to give river- and scenic-recreation experiences

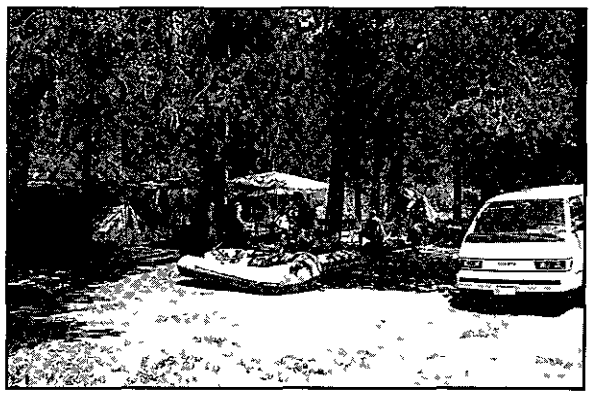
Experience: Overall, you find little obvious sign of people away from public facilities You see little evidence of development as you walk through the area or float the river You see that old-growth forest is approaching maximum levels of acres with the result that some loss of shrubs and other forage species has happened

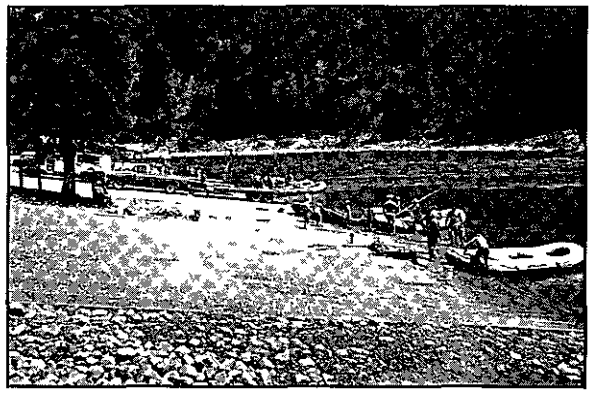
Driving a vehicle, your travel is limited to only a few road systems You find that many of the road systems are unsuited to travel by sedan The exceptions are a few popular, established roads that may access or pass through the area

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







River related recreation is the primary activity in DFC 3

You can fish the rivers and streams by standing on the streambanks, 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 3

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

Other recreational experiences and commodities are provided from river segments 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

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

River Permits Standard — On 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 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 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

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

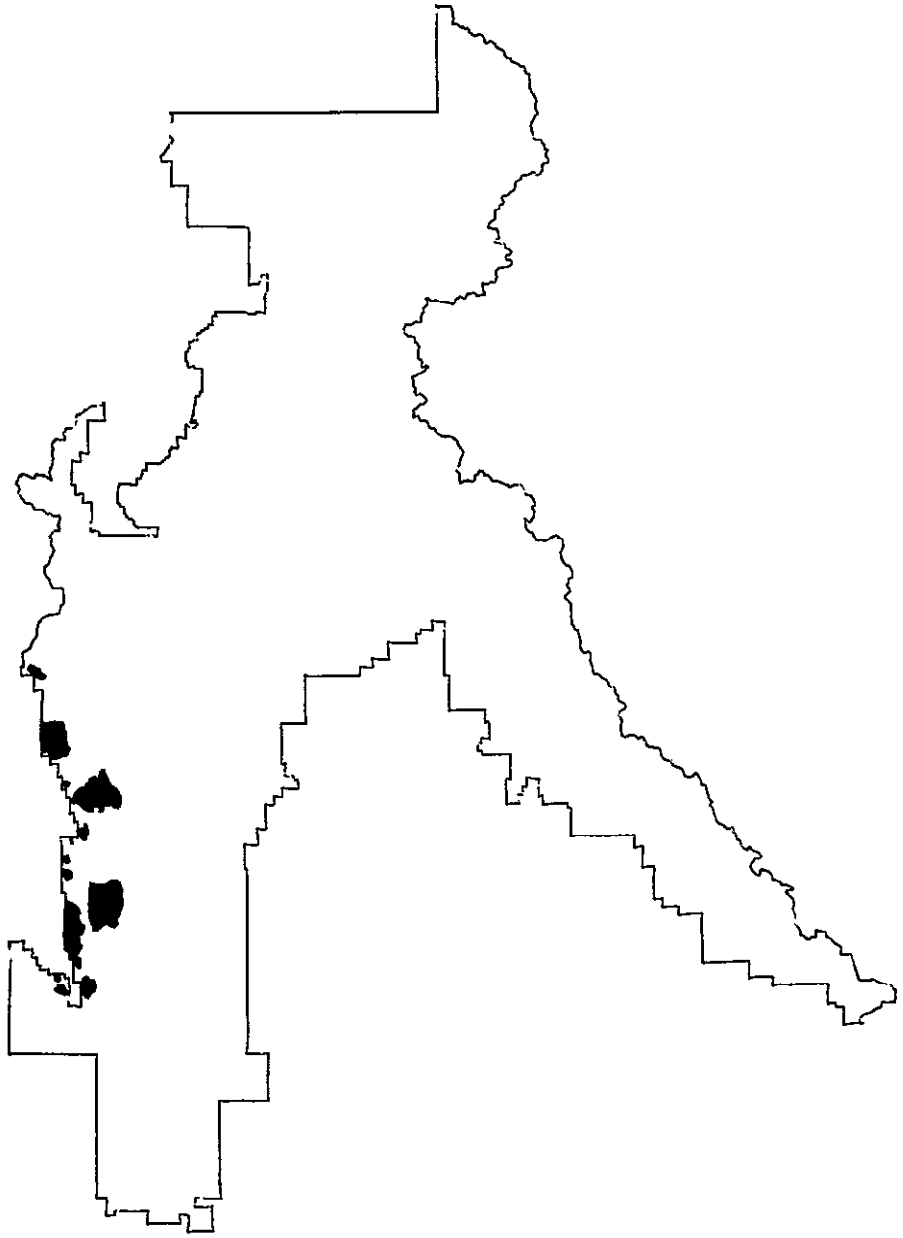
Protection: Fire

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 Home Owners and Developers, Wildfire Hazard and Residential Development, Utah and California*

Figure 4-6
Desired Future Condition 4



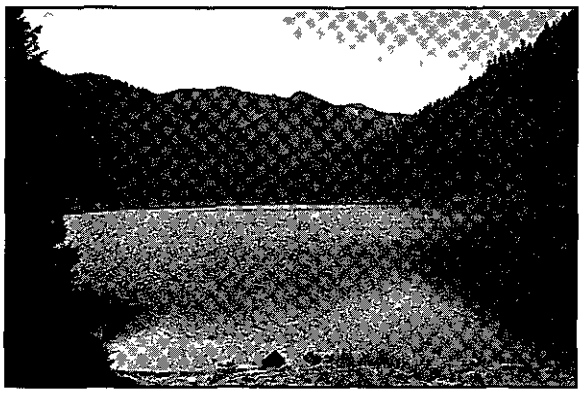
Desired Future Condition 4
Special Emphasis Area for Municipal Water Supply

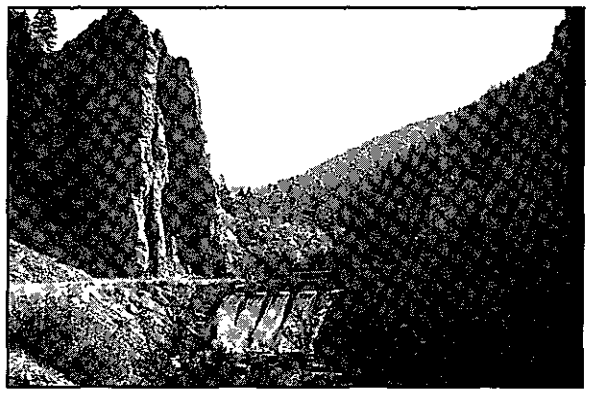
Theme: An area managed to protect municipal water supplies

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

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-i), 1 3(a,b), 2 1(a,b), 2 3(a), 2 5(a,b,d), 4 1(b), 4 2(b), 4 4(a-c), and 4 7(b)

Resource Prescriptions, Standards, and Guidelines

Recreation

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

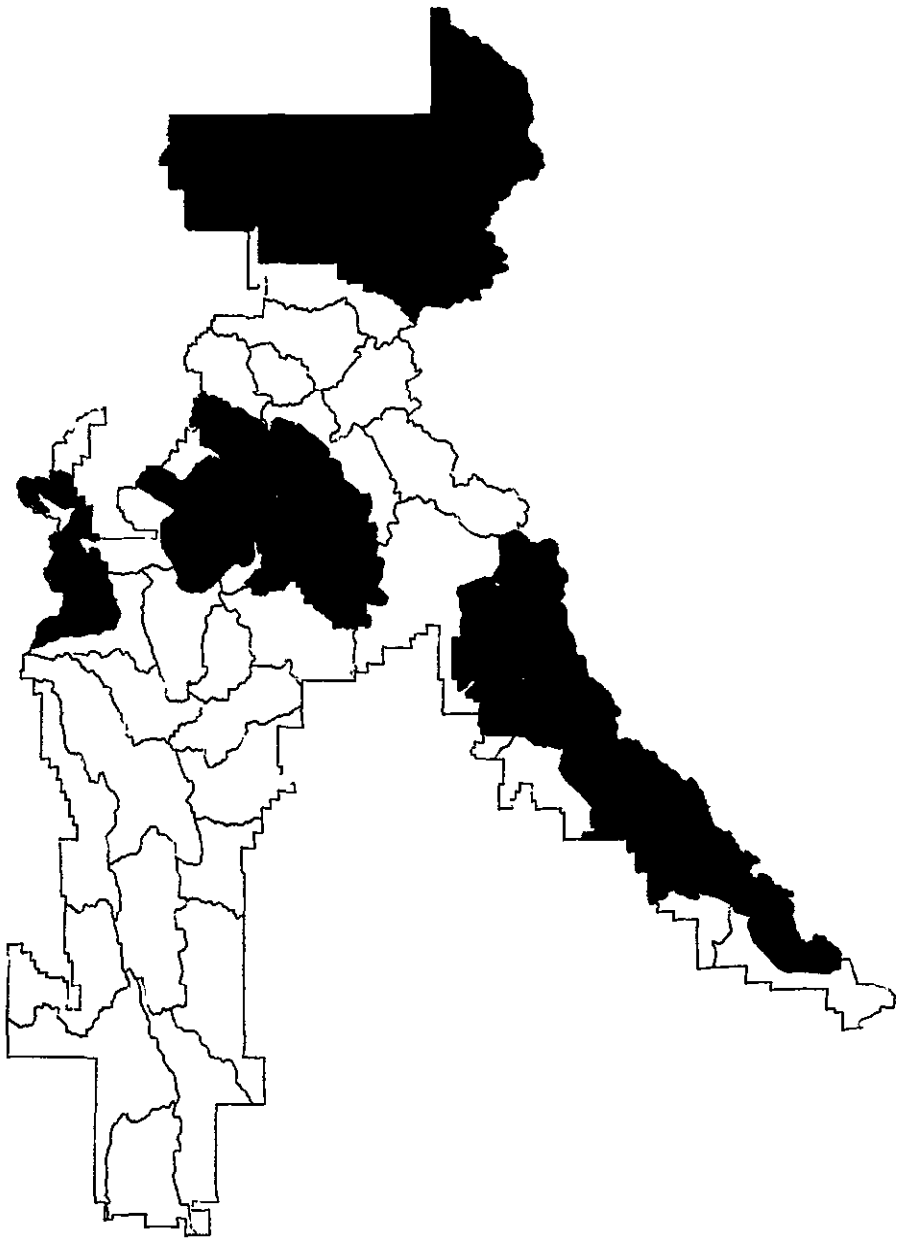
Protection: Fire Prescription — Fire management emphasizes preservation of soil and water values A full range of suppression techniques is used

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

Figure 4-7
Desired Future Conditions 6A-6D and 6S

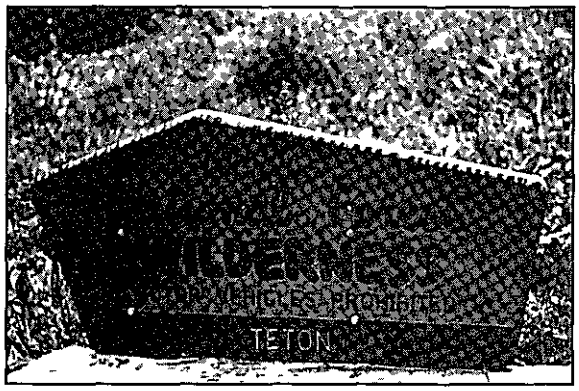


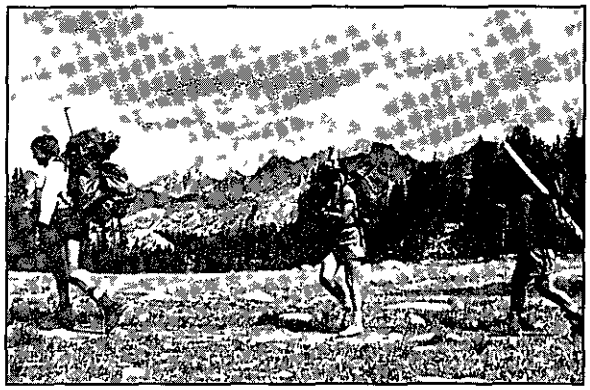
Desired Future Condition 6A-6D and 6S
Wildernesses, Wilderness Study Areas, and Wild Rivers

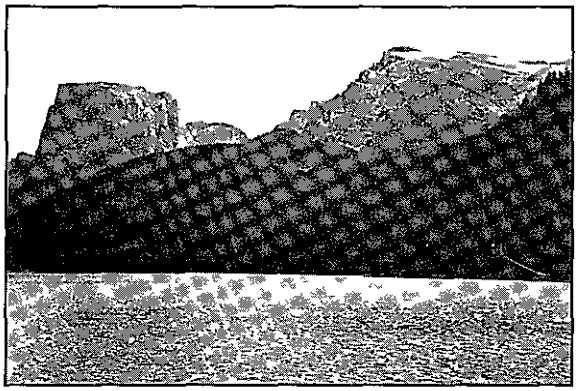
Theme: A mostly pristine area where the presence of people is rarely or never noticed

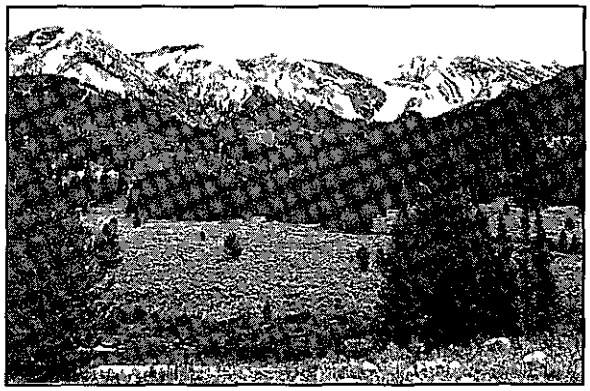
Experience: In the National Forest Wilderness, you find almost no signs of people away from trails or camping areas The Wilderness shows you the natural processes of plants and animals living and dying You see that old-growth forest is approaching maximum levels of acres with the result that some loss 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









Primitive recreation, scenery, and wildlife are the primary resources of DFC 6A-6D 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

Wilderness-wide Prescriptions, Standards, and Guidelines apply to all resources within Wilderness

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, and

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, and

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 Exclosure Structures Standard — New exclosure 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 1 3(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

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

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, and

Thorofare River

Protection: Fire

Protection: Fire Prescription — Fire management emphasizes preservation of Wilderness values and allows natural processes of ecological change to operate freely

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

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 1(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

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 — 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

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

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)

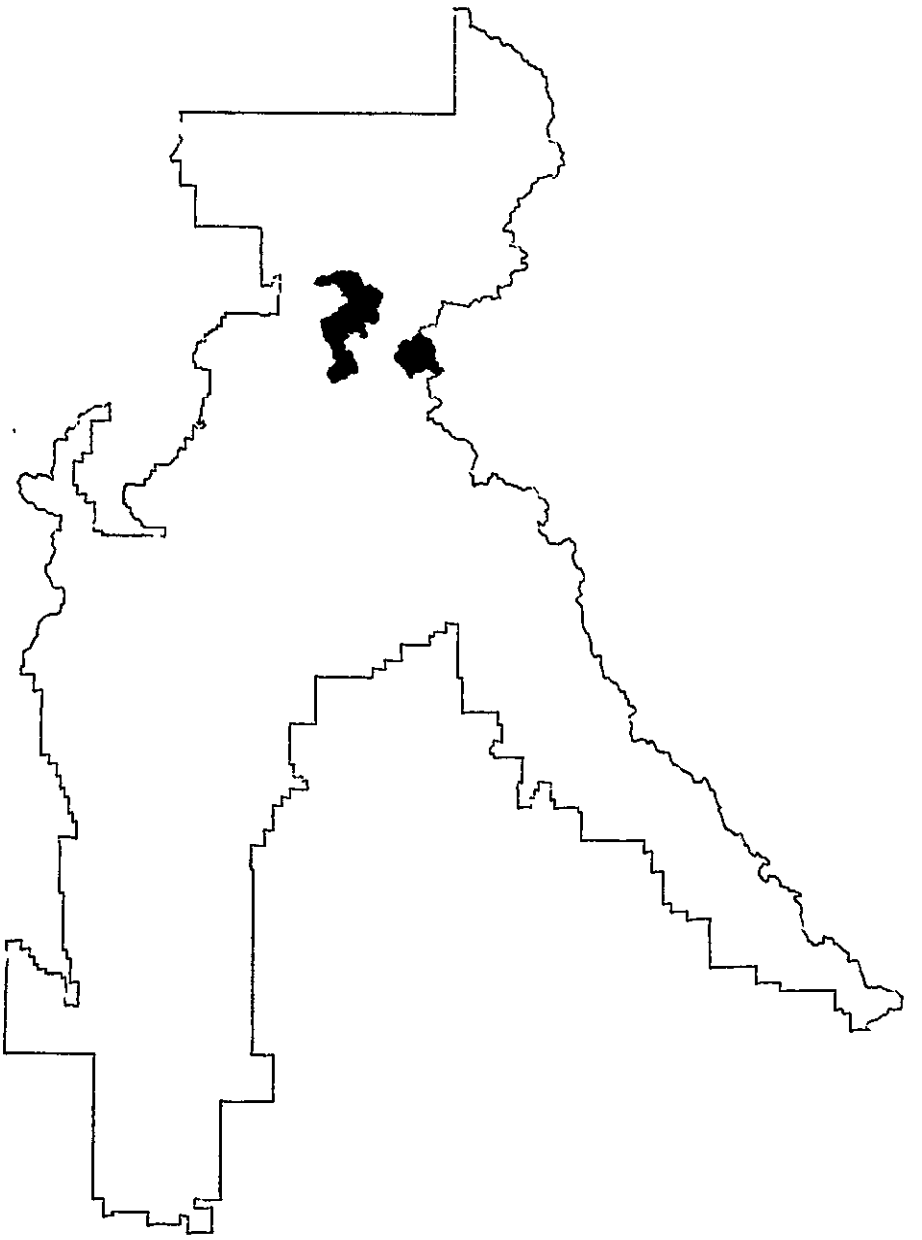
Resource Prescriptions, Standards, and Guidelines

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

Figure 4-8
Desired Future Condition 7A

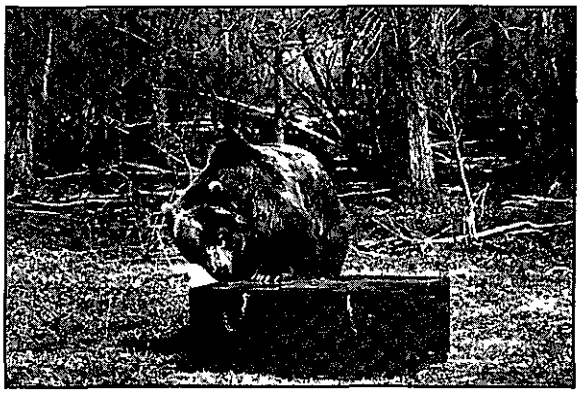


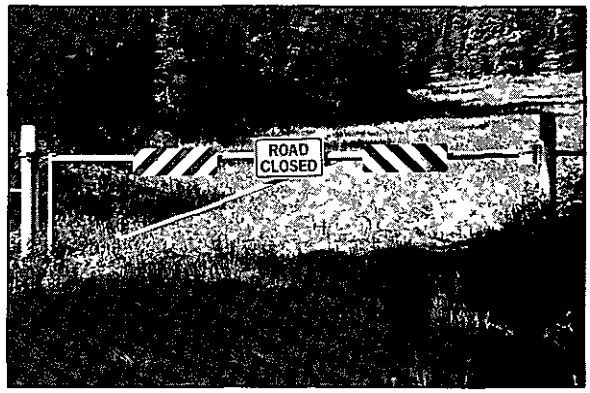
Desired Future Condition 7A
Grizzly Bear Habitat Recovery Through Scheduled Timber Harvest

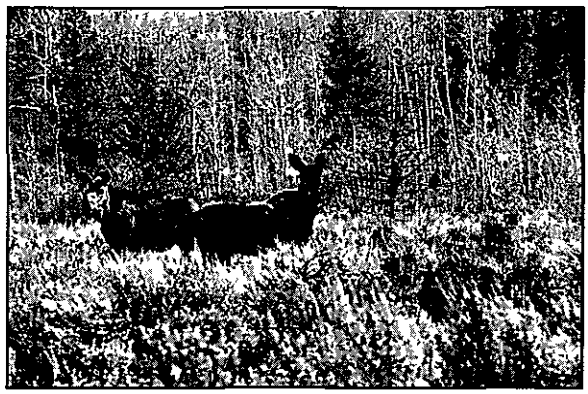
Theme: An area managed to provide forage and security for the recovery of grizzly bears, allowing for some resource development and roads

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 exception 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 affects on the bear

Land and Resource Management Objectives addressed and, in part, met by achieving

this Desired Future Condition include 1 1(a-i), 1 2(a-f), 2 1(a), 3 1(a,b), 4 2(a,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 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

Visual Quality Prescription — The Visual Quality Objectives are Retention and Partial Retention

Fisheries and Wildlife

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 75

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 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 1 and 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, 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 interspersion in key grizzly foraging areas

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 Type	Rotation Age (yrs)	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 Type	Stand Age at Thinning (yrs)	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

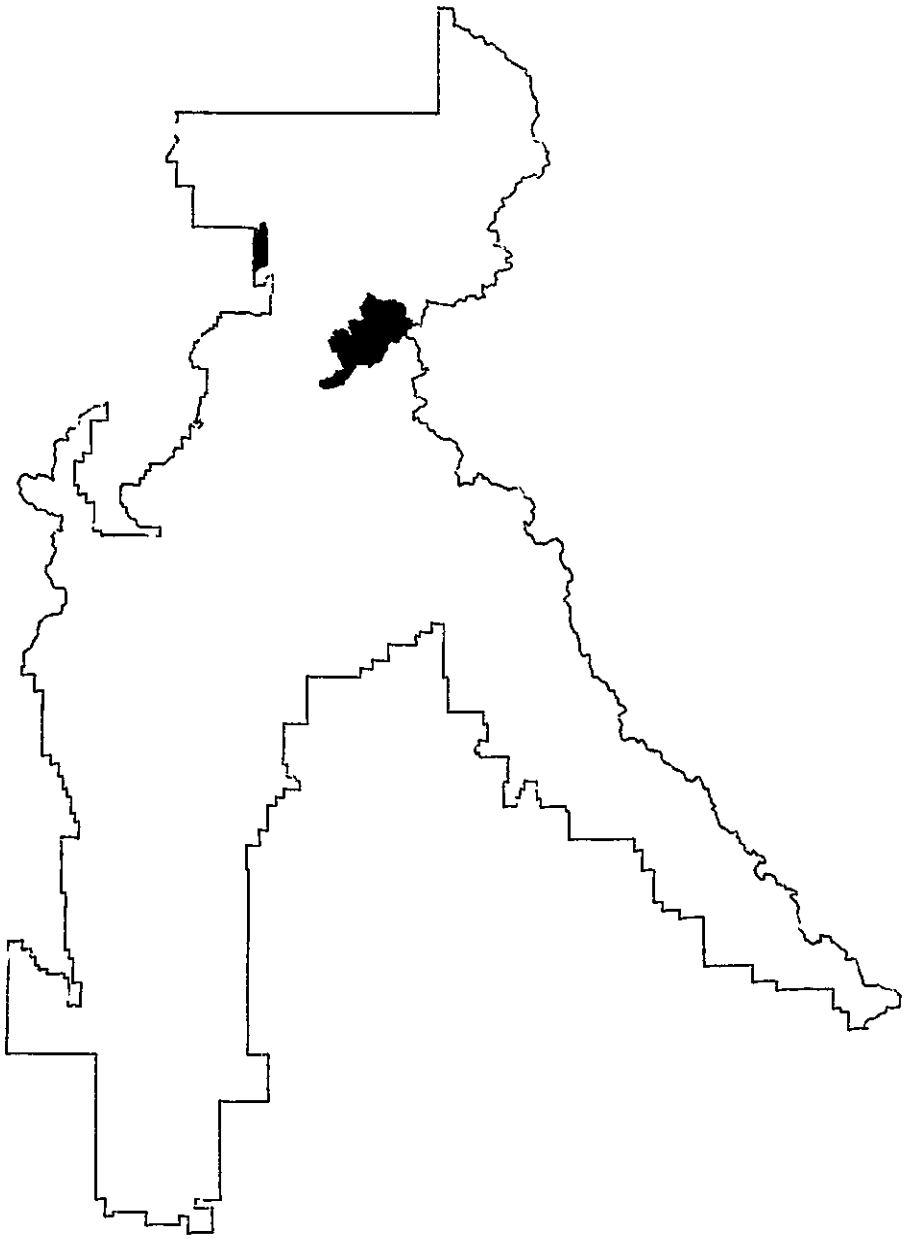
Protection: Fire Prescription — Fire management emphasizes preservation and enhancement of grizzly bear food, cover, and security habitat

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

Figure 4-9
Desired Future Condition 7B



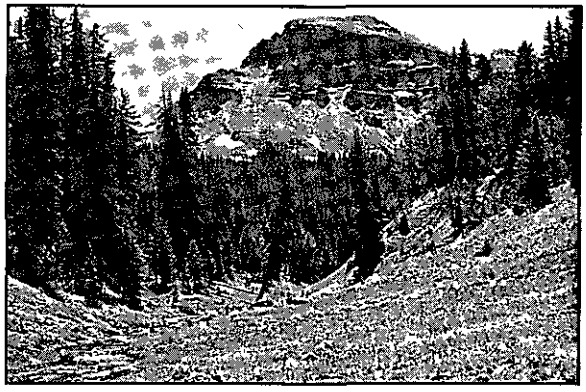
Desired Future Condition 7B
Grizzly Bear Habitat Recovery

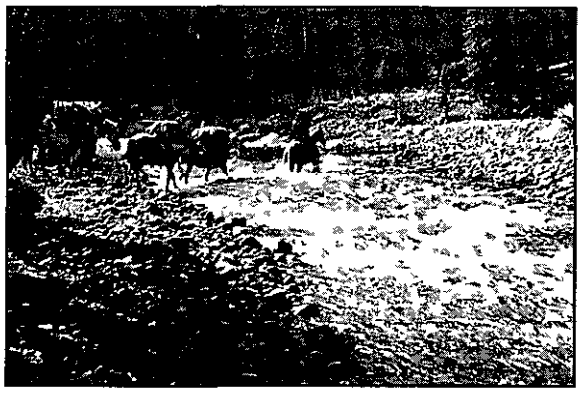
Theme: A mainly primitive area with few roads and limited human access, managed to provide food and security for grizzly bears

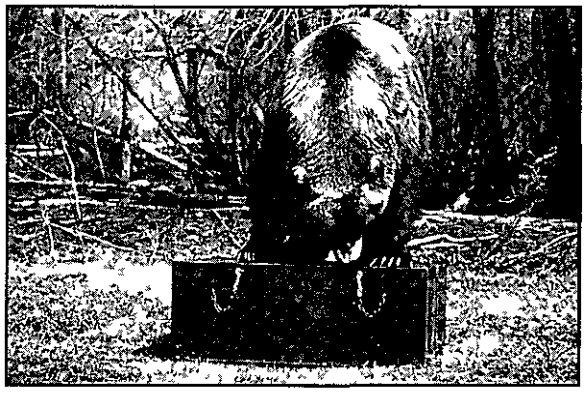
Experience: Overall, you find few, if any, signs of people In a few areas, you may see burns and limited evidence of timber harvest

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







DFC 7B is managed for food and security for grizzly bears

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

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-i), 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 Roaded recreation occurs on most established routes that pass through the area

Visual Quality

Visual Quality Prescription — 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 75

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 existing 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 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 1 and 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, 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

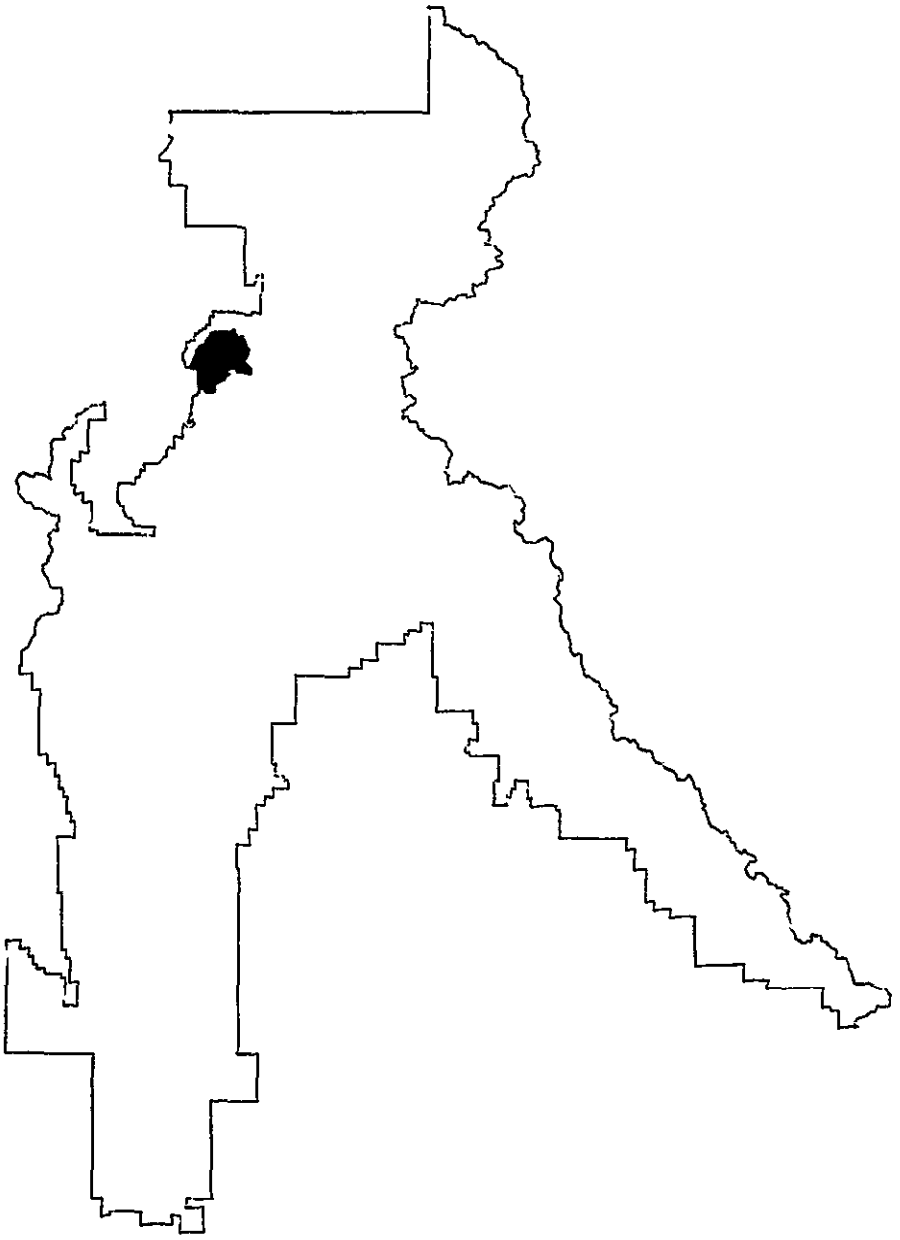
Protection: Fire

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

Figure 4-10
Desired Future Condition 8

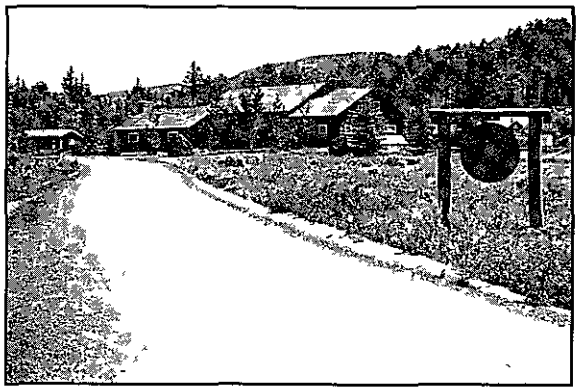


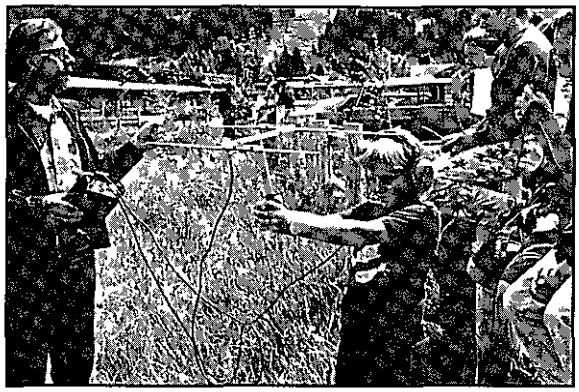
Desired Future Condition 8
Environmental Education About Integrated Multiple Use

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,





The primary purpose of DFC 8 is environmental education on forest management

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

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

Exclosure Size Standard — Exclosure 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 75

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 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 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 1 and 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 Prescription — 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 Type	Rotation Age (yrs)	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 Type	Stand Age Thinning (yrs)	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

Forest Cover Type	Trees Per Acre	Percent of Area Stocked	Percent Species Composition
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 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

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

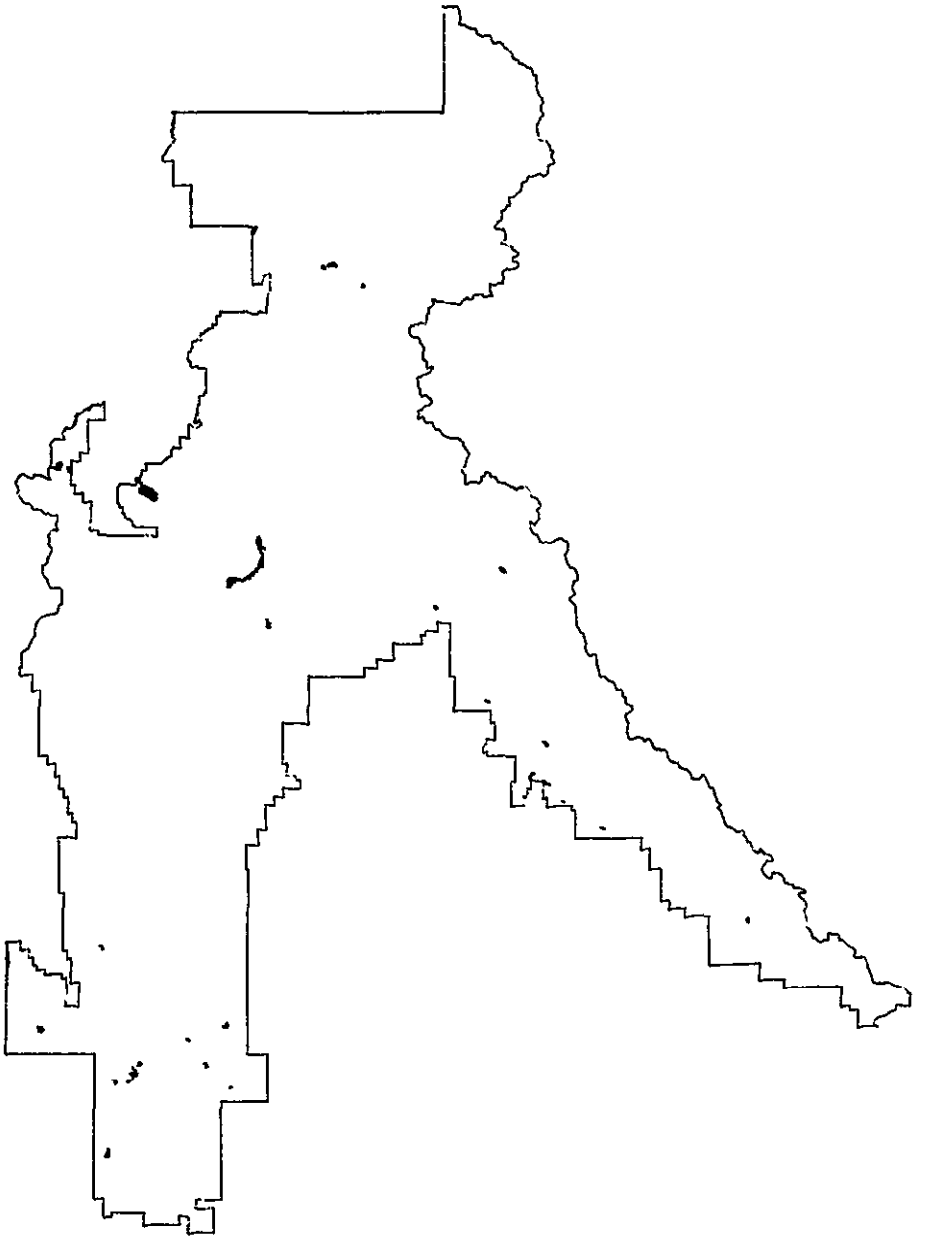
Protection: Fire Prescription — Fire management emphasizes preservation and enhancement of management indicator species habitat, particularly hiding cover for big-game A full range of suppression techniques is used

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

Figure 4-11
Desired Future Condition 9A



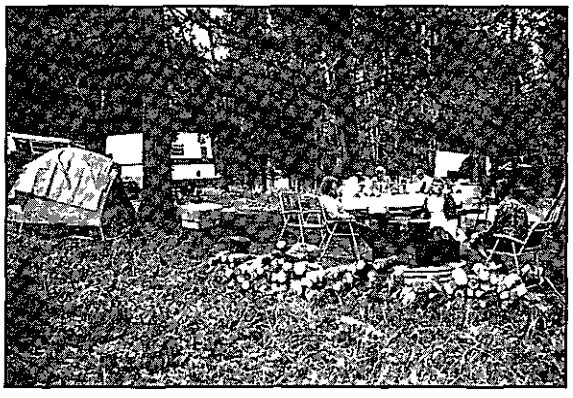
Desired Future Condition 9A
Developed and Administrative Sites

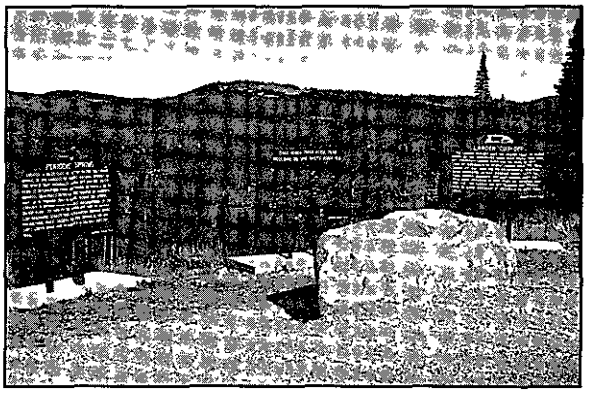
Theme: An area managed for campgrounds, other noncommercial areas, and Forest Service administrative sites, including related roads and sites

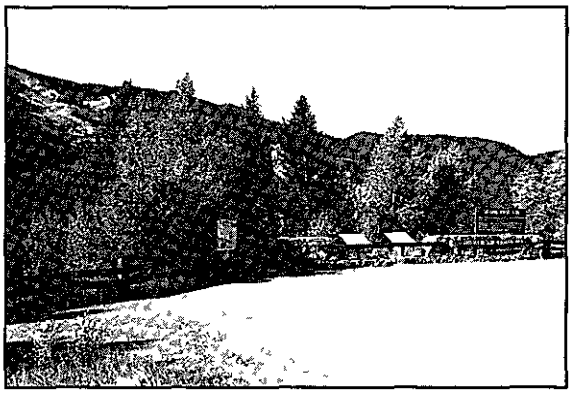
Experience: Overall, you find many signs of people You see little or no evidence of resource development except for recreation Picnic tables, roads, buildings, and camping spots are obvious to you You often hear sounds of vehicles and other human activity Signs indicate to you that the use of off-highway vehicles is not allowed except to enter and depart the site on roads

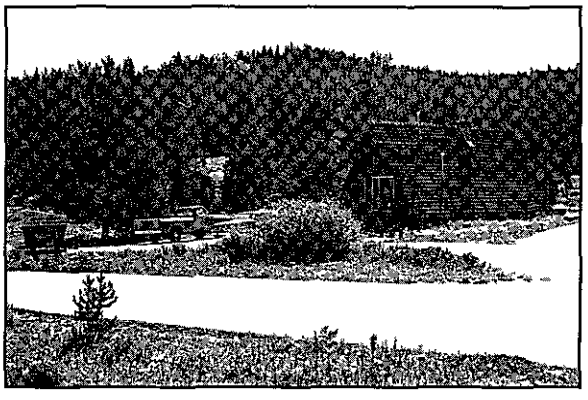
You can gather firewood for camping, but you cannot gather it for home use Access to fishing may be rather easy if the facility is near a stream or river, but the fishing may be less satisfactory than in more remote areas

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 Roaded 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.

1) In new recreation sites and improved sites, provide at least one unit for use by the physically challenged,

2) Design at least 25 percent of the units in new sites and improved sites to accommodate two or more families,

3) Where alternatives exist, choose sites where recreational facilities can be designed to be accessed by the physically challenged, and

4) 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

Development Level Standard

ROS Class	Recreation Development Level
Primitive	None
Semi-primitive Non-motorized	Not to exceed 1

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

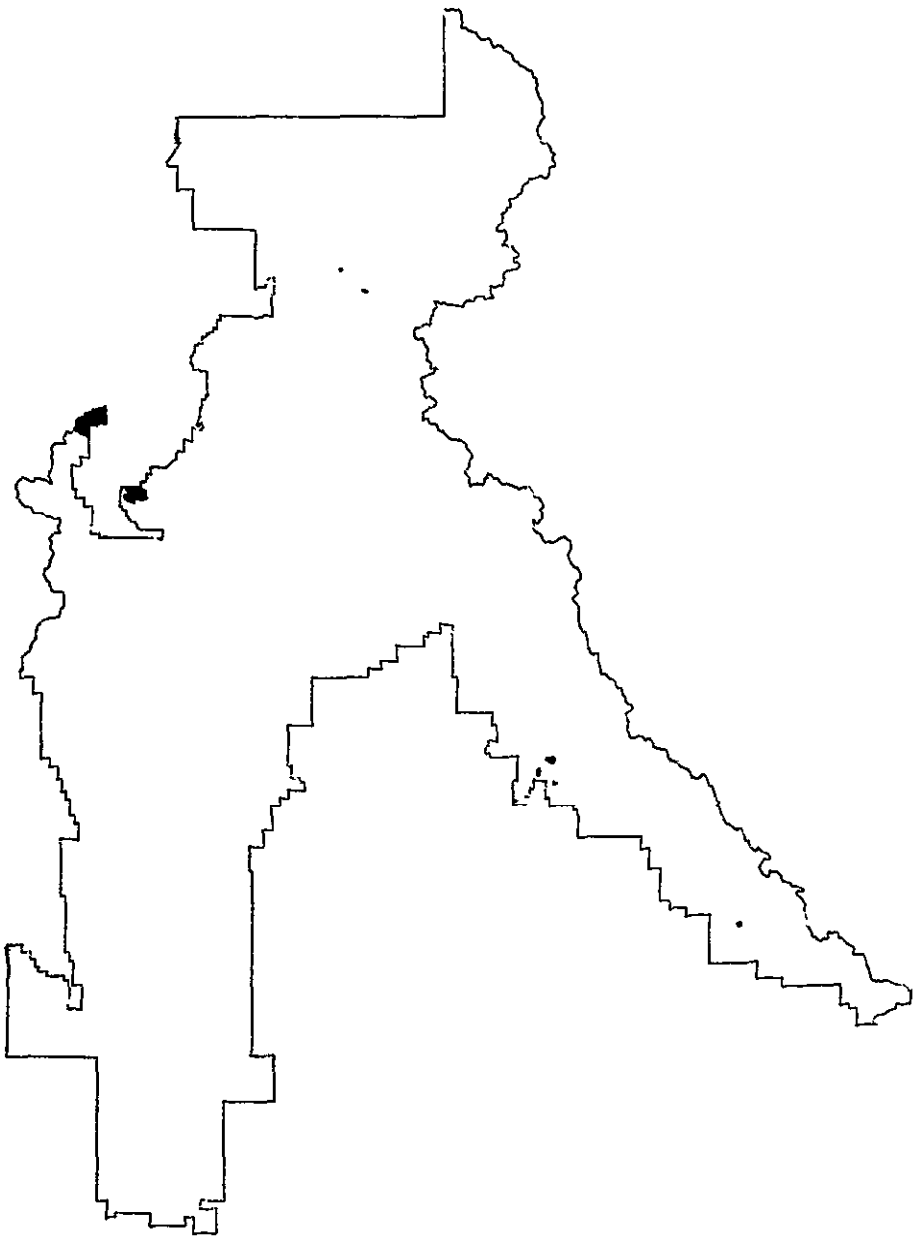
Prescribed Fire Guideline — Prescribed fire should be used to reduce fuel loadings and accomplish vegetation manipulation objectives

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

Figure 4-12
Desired Future Condition 9B

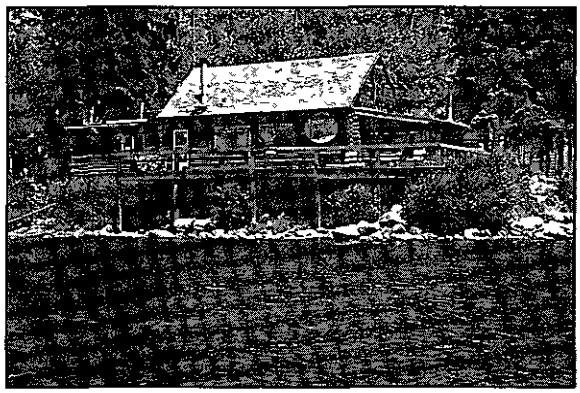


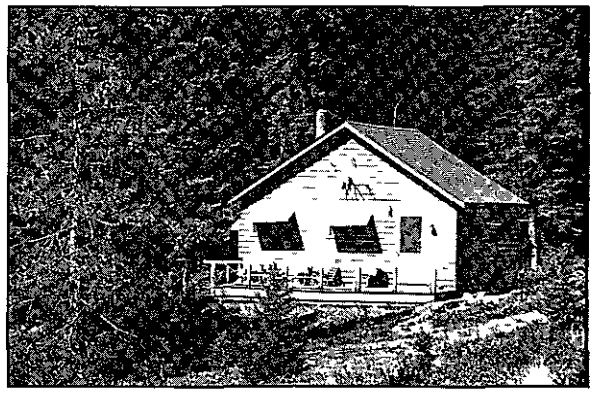
Desired Future Condition 9B
Special-Use Recreation Areas

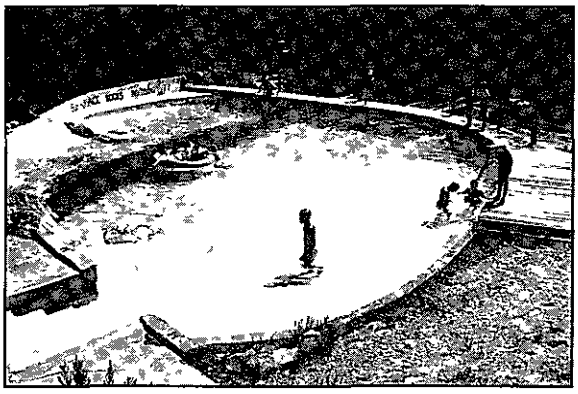
Theme: An area managed for permitted, private recreation homes, permittees, and others offering services to the public, including related roads and sites

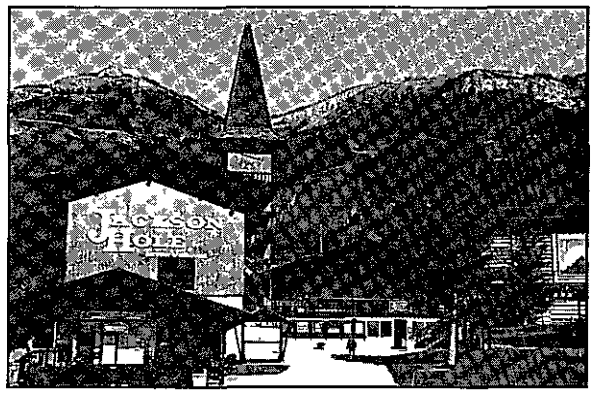
Experience: Overall, you find many signs of people But, you see little or no evidence of resource development other than recreation Cabins and buildings used by permittees are visible but blend into the surroundings Roads are generally gravelled, but may be paved in higher-use areas Off-highway vehicle (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 sno-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.

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.

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

Protection: Fire Prescription — Fire management emphasizes protection of private permitted developments Permittees are responsible for fuels management A full range of suppression techniques is used

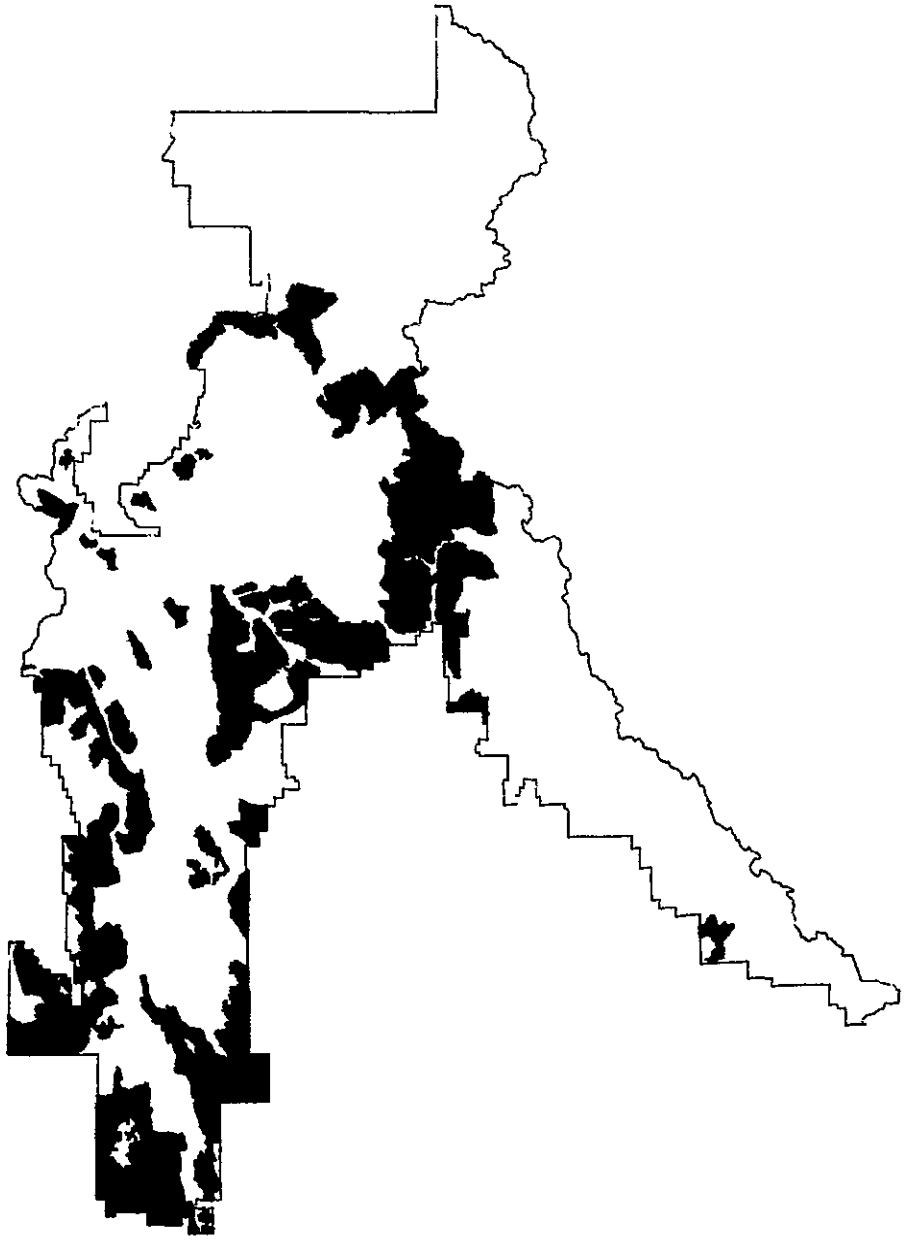
Prescribed Fire Guideline — Prescribed fire should be used to reduce fuel loadings and accomplish vegetation manipulation objectives.

Fire Protection Standard — Wildfires will 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 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.

Figure 4-13
Desired Future Condition 10

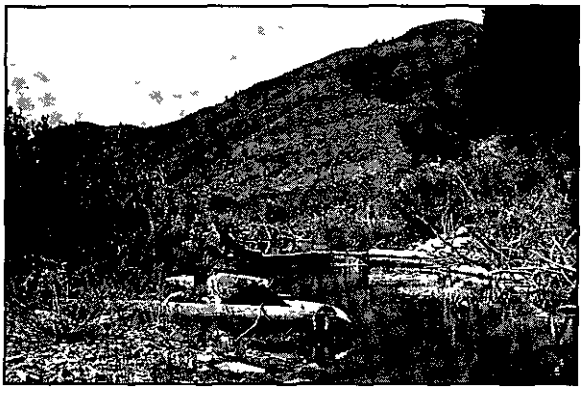


Desired Future Condition 10
Simultaneous Development of Resources, Opportunities for Human Experiences, and Support for Big-Game and a Wide Variety of Wildlife Species

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



DFC 10 is managed for some resource development and support of wildlife species

are unsuited for travel by sedan The exceptions are popular, established roads that access or pass through the area

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 1 square 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 affects on the grizzly bears

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include 1 1(a-i), 1 2(a-f), 2 1(a,b), 2 3(a), 2 4(a,b), 2 5(a-d), 4 1(a,b), 4 2(a,c,d), 4 3(a-c), 4 4(a-c), and 4 7(a-d)

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 75

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 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 1 and 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 Type	Rotation Age (yrs)	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 to have big-game hiding cover Thinning should happen before crown competition and canopy closure occur

Forest Cover Type	Stand Age at Thinning (yrs)	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

Forest Cover Type	Trees Per Acre	Percent of Area Stocked	Percent Species Composition
Spruce and fir	400	80	ES 60
Douglas-fir	350	80	DF 70

Created Opening Duration Standard — A created opening will be closed when 1) it meets reforestation standards, 2) it begins to take on the appearance of a young forest rather than a restocked opening, and 3) 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

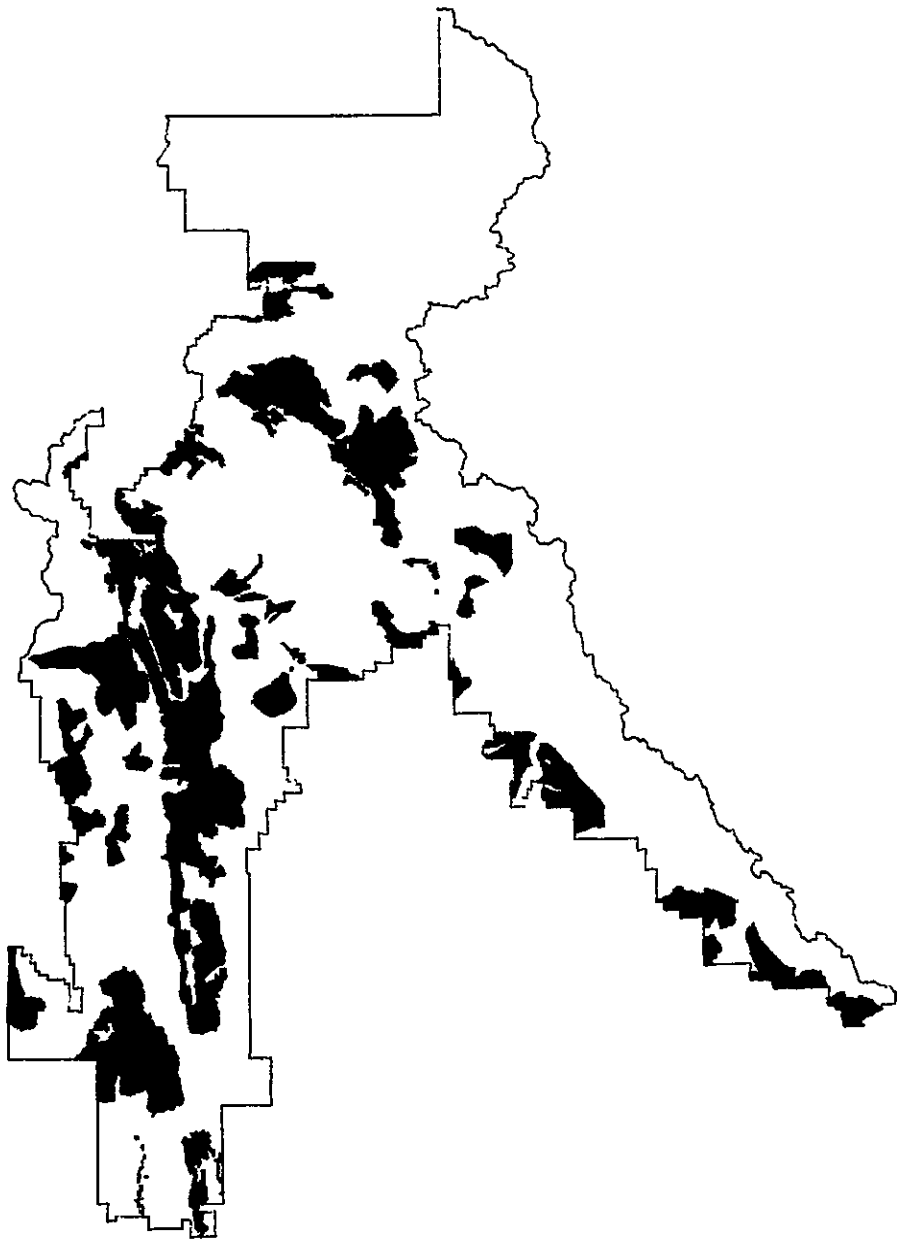
Protection: Fire Prescription — Fire management emphasizes preservation and enhancement of habitat A full range of suppression techniques is used

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

Figure 4-14
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

Wildlife habitat, big-game hunting, and dispersed recreation are the major emphasis areas for DFC 12

by pickup truck, you see dispersed low-standard branch roads About half of branch roads will have been closed off by barricade and revegetated

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 affects on the bear

Land and Resource Management Objectives addressed and, in part, met by achieving this Desired Future Condition include 1 1(d-i), 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 75

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 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 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 1 and 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

Vegetation: Range

Vegetation: Range Prescription — Range is managed to maintain and enhance range and watershed condition while providing forage for livestock and wildlife, particularly big-game

Vegetation: Timber

Vegetation: Timber Prescription — Silvicultural practices emphasize preserving and enhancing critical big-game habitat values Timber harvest is not scheduled Vegetation management practices provide opportunities to obtain firewood and other products

Silvicultural System Guideline — Other than for designated old-growth, all systems should be available but only as required to achieve big-game habitat objectives To provide security habitat, methods should be applied that favor the development of an all-aged structure in existing and regenerated conifer stands, and where favored methods can not be used in existing over-mature conifer stands due to windfall risks, lack of adequate regeneration, and other similar stand conditions methods appropriate to the site-specific conditions should be applied.

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 other treatments should be available but only as required to meet critical big-game habitat needs including hiding cover

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 Type	Stand Age at Thinning (yrs)	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 big-game habitat needs

Created Opening Duration Standard — A created opening will be considered closed when it meets reforestation standards, and the area 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

Aspen Management Guideline — Aspen should be managed for its value as wildlife habitat and for providing seasonal colors while emphasizing browse and cover for big-game species

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 encouraged

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 5 miles of road per square mile Temporary roads will be returned to Elimination 4 Standards

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 1 mile 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

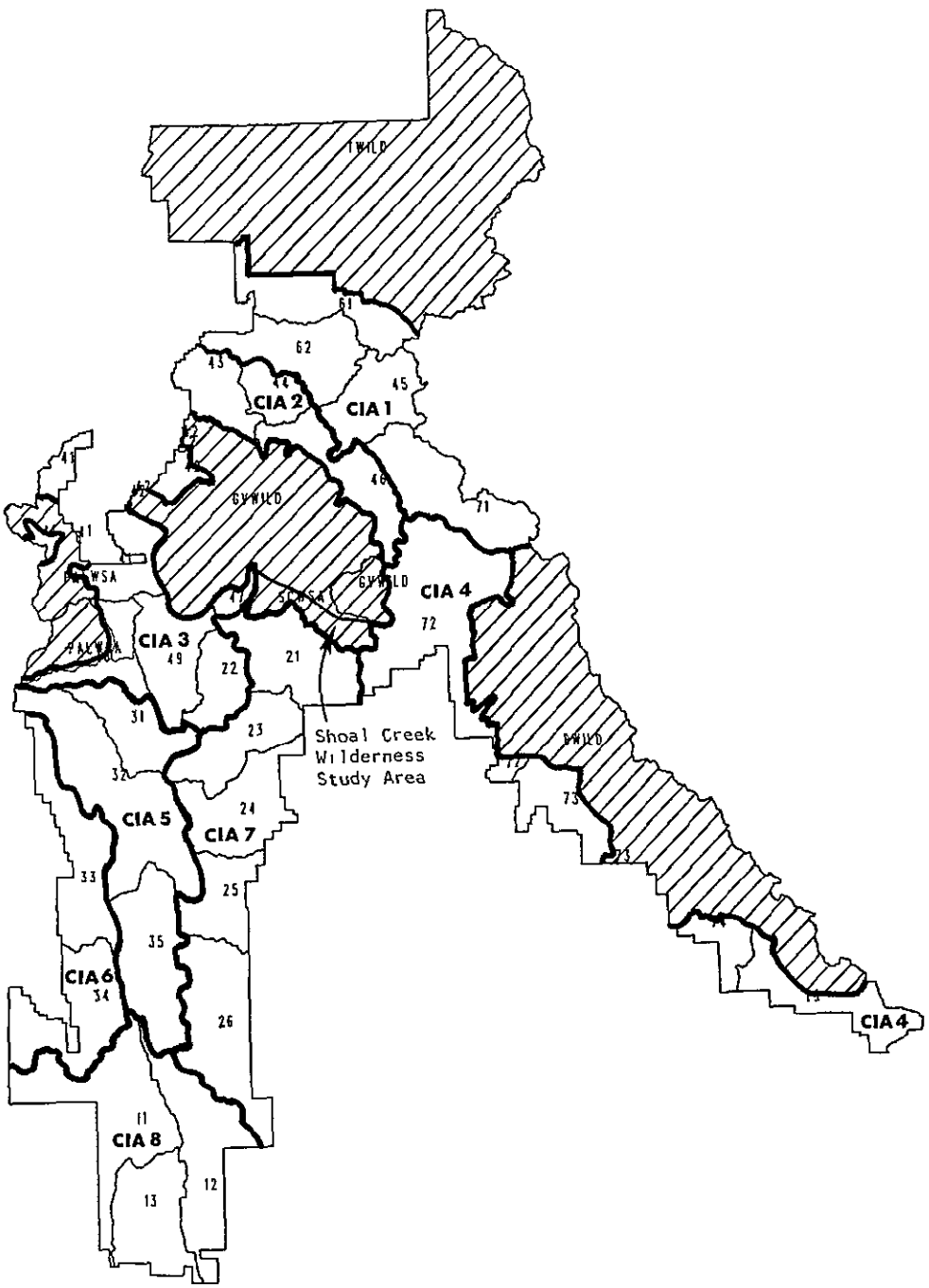
Protection: Fire

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.

Figure 4-15
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

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Teton	**251**
Gros Ventre	**253**
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Shoal Creek	**259**
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MA 62 — Spread Creek	**265**
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Wilderness/Management Area	Page
Management Areas (MAs):	
MA 48 — Snake River Canyon	**283**
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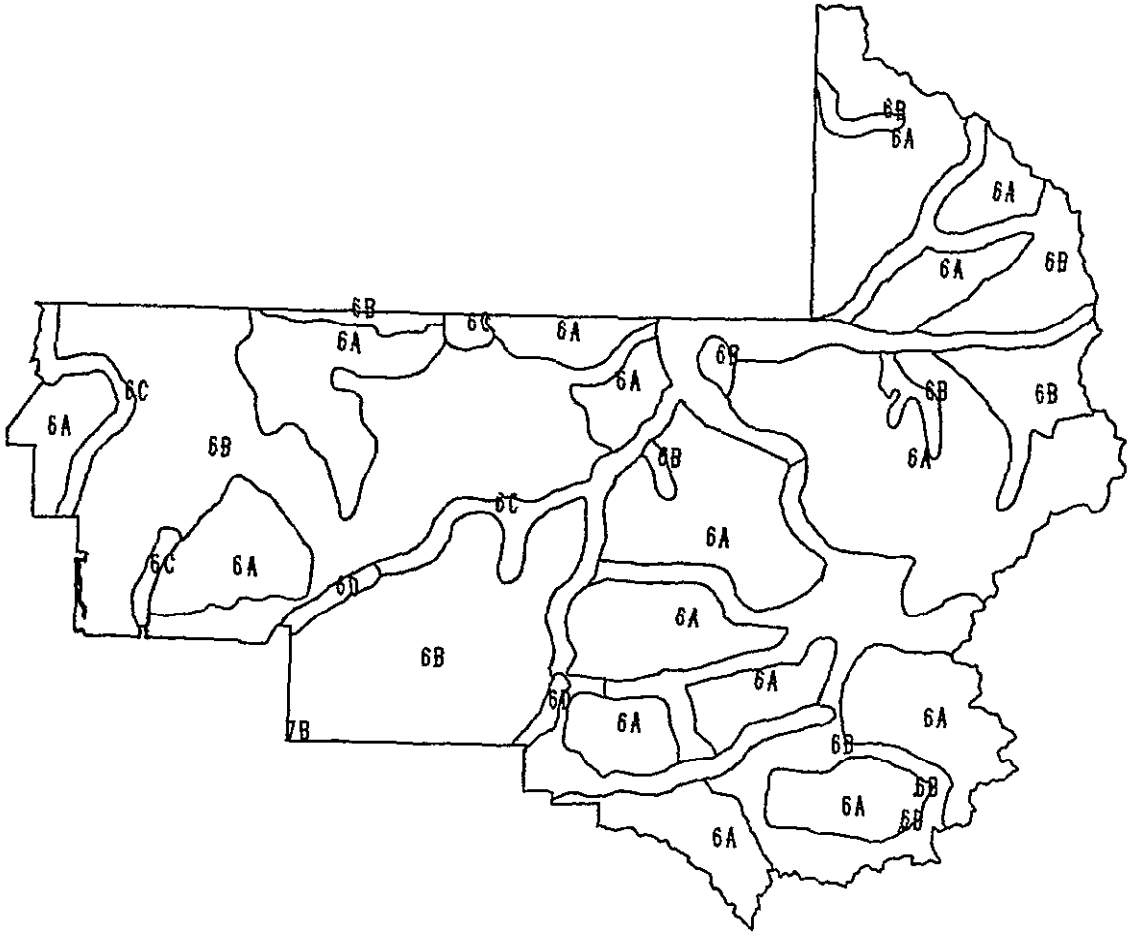
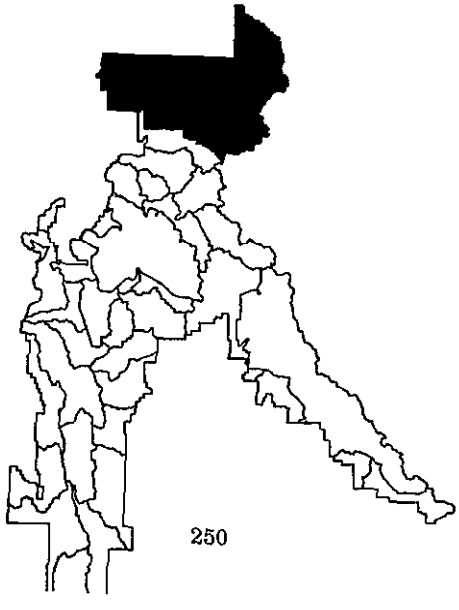
MA 21 — Hoback Basin	**305**
MA 23 — Upper Hoback	**307**
MA 24 — Horse Creek	**309**
MA 25 — Cottonwood Creek	**311**
MA 26 — Piney Creeks	**313**
MA 11 — Smith Forks	**315**
MA 12 — LaBarge Creek	**317**
MA 13 — Hams Fork	**319**

Figure 4-16
Teton Wilderness





N

1/8 inch = 1 mile

0 2 4 6 8

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

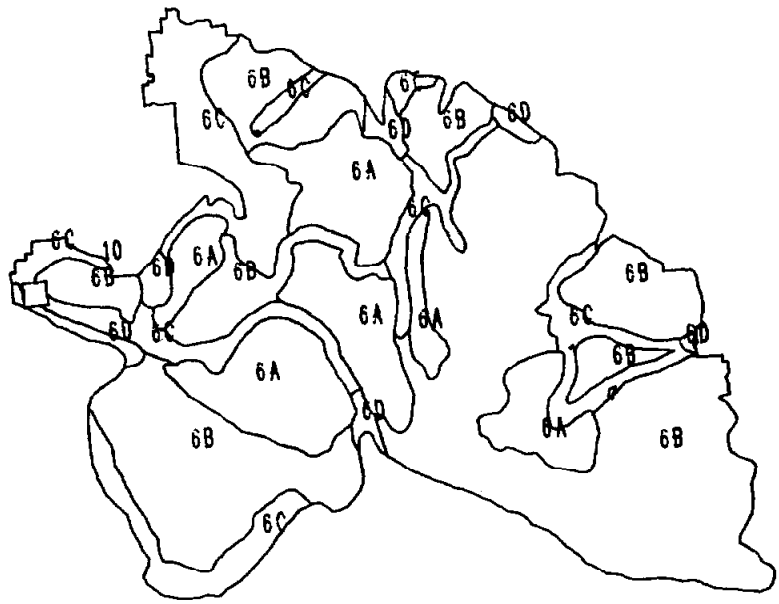
Desired Future Condition Acreage

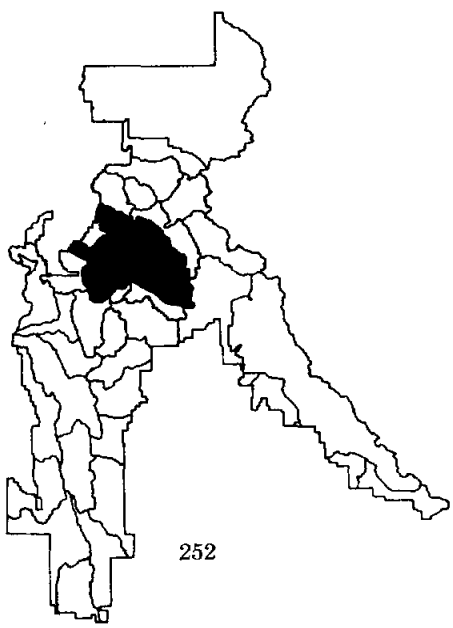
DFC	Acreage
6A	279,000
6B	249,100
6C	51,400
6D	4,000
Total	583,500

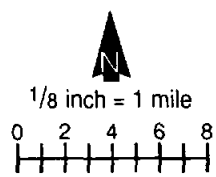
Teton Wilderness-Specific Standards and Guidelines

None.

Figure 4-17
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

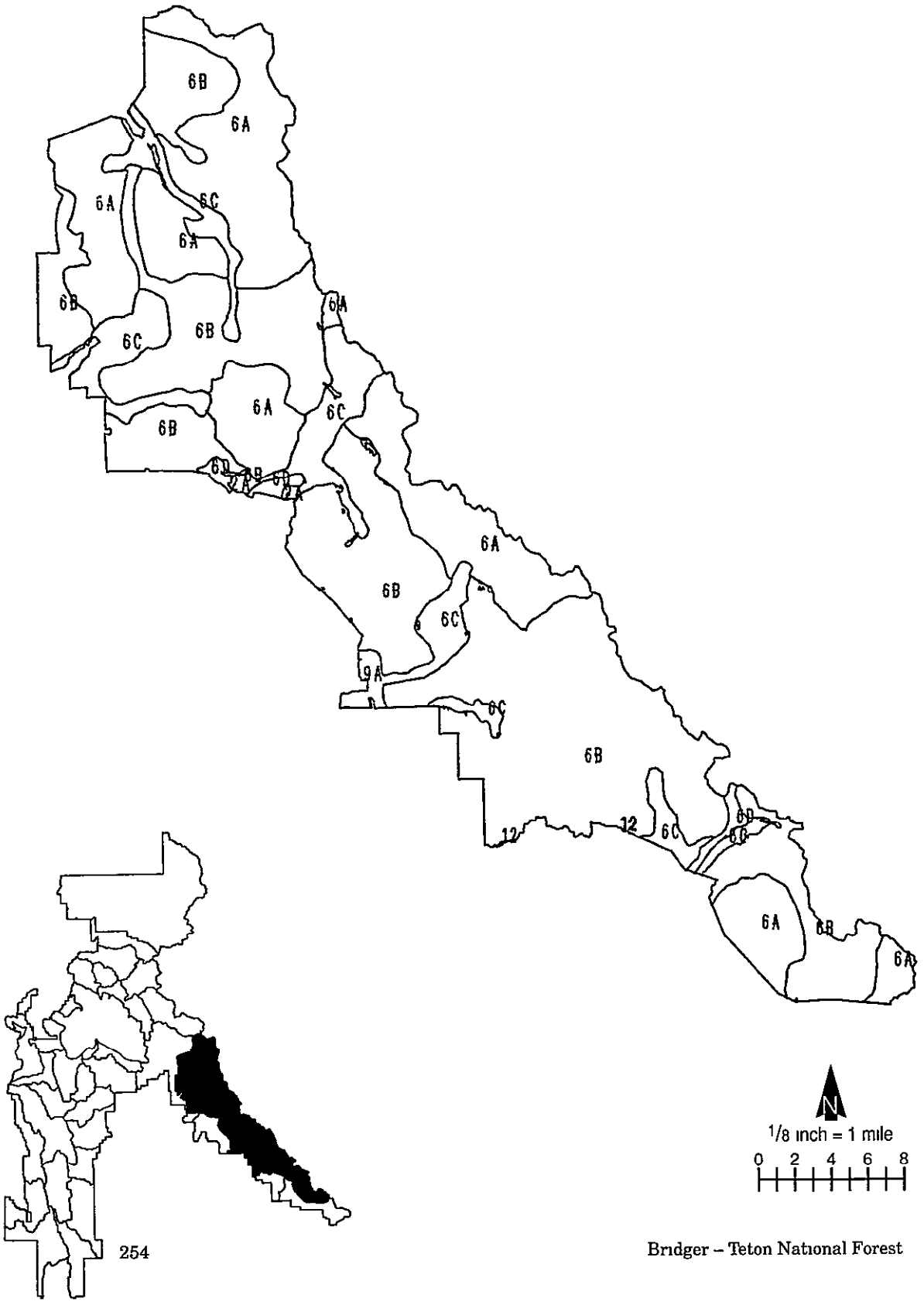
Desired Future Condition Acreage

DFC	Acreage
6A	60,900
6B	164,100
6C	52,500
6D	7,400
Total	284,900

Gros Ventre Wilderness-Specific Standards and Guidelines

None.

Figure 4-18
Bridger Wilderness



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 Research Natural Area

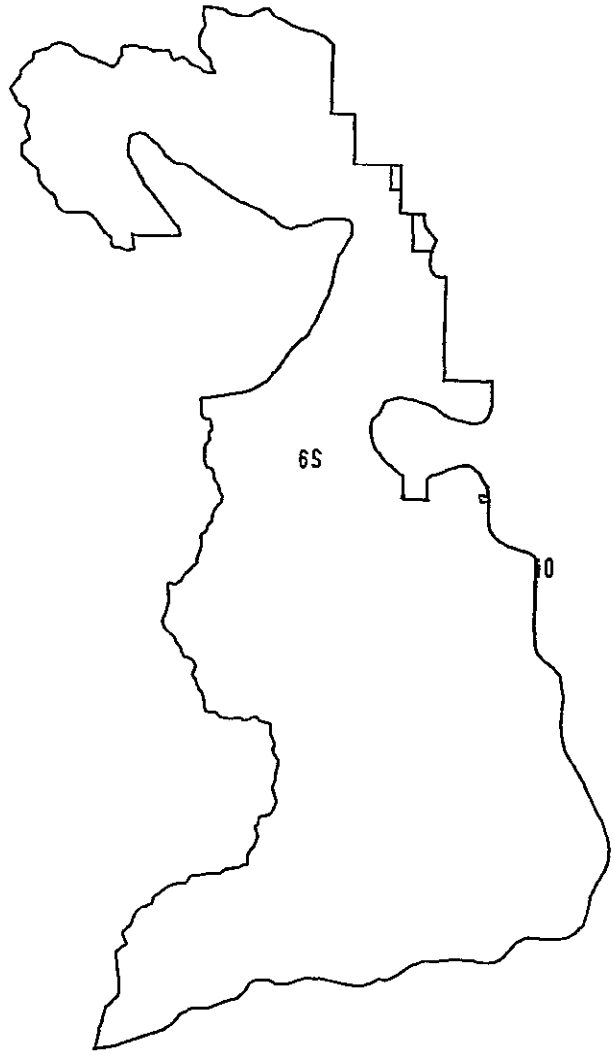
Desired Future Condition Acreage

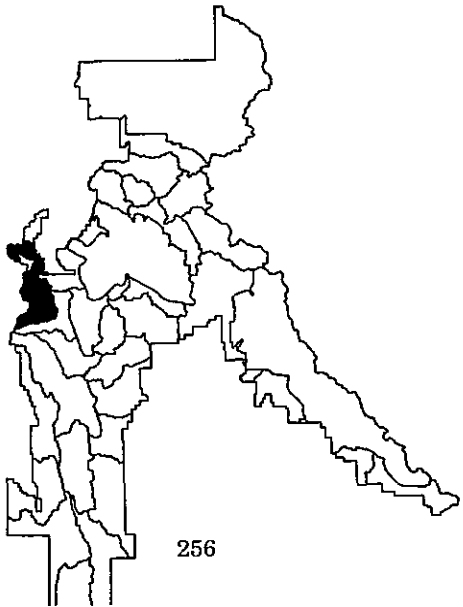
DFC	Acreage
6A	157,100
6B	203,600
6C	50,900
6D	2,100
Total	413,700

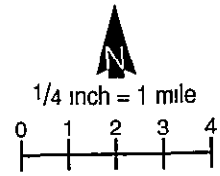
Bridger Wilderness-Specific Standards and Guidelines

None.

Figure 4-19
Palisades Wilderness Study Area







Bridger – Teton National Forest

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

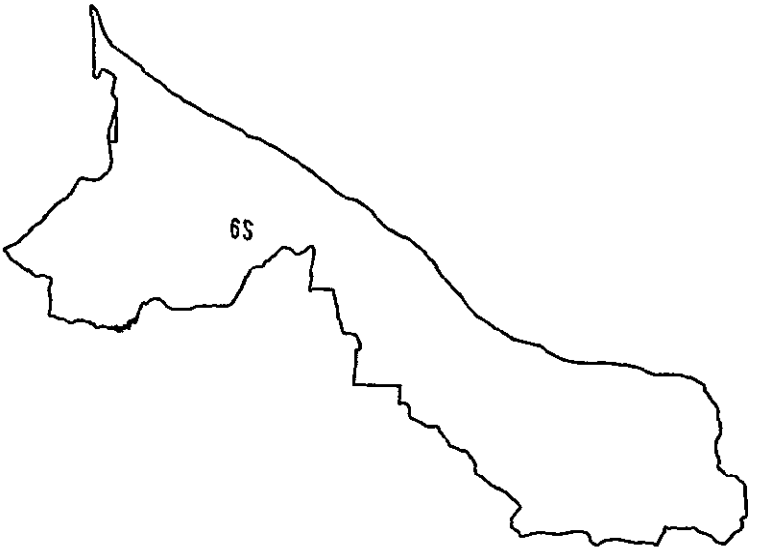
DFC	Acreage
6S	76,800

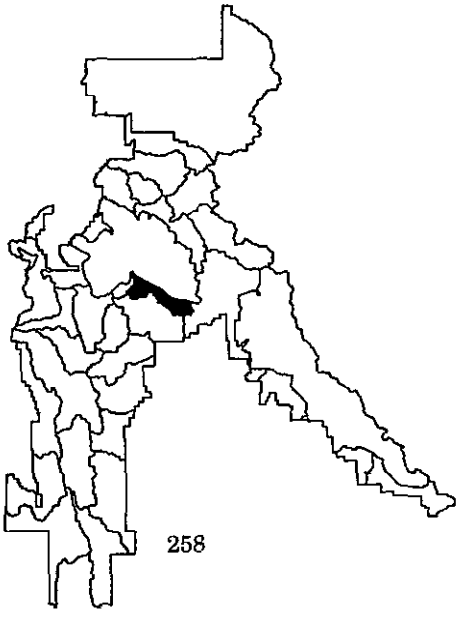
Wilderness Study Area-Specific Standards and Guidelines

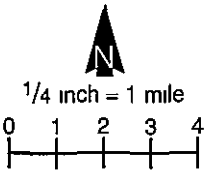
Lease Stipulation Standard — The Conditional No-Surface-Occupancy stipulation specified in *Sierra Club* v *Peterson* applies to this area

Wilderness Eligibility Standard — No activities will occur that would jeopardize the eligibility of the Palisades Wilderness Study Area for future Congressional designation as Wilderness

Figure 4-20
Shoal Creek Wilderness Study Area







Bridger – Teton National Forest

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

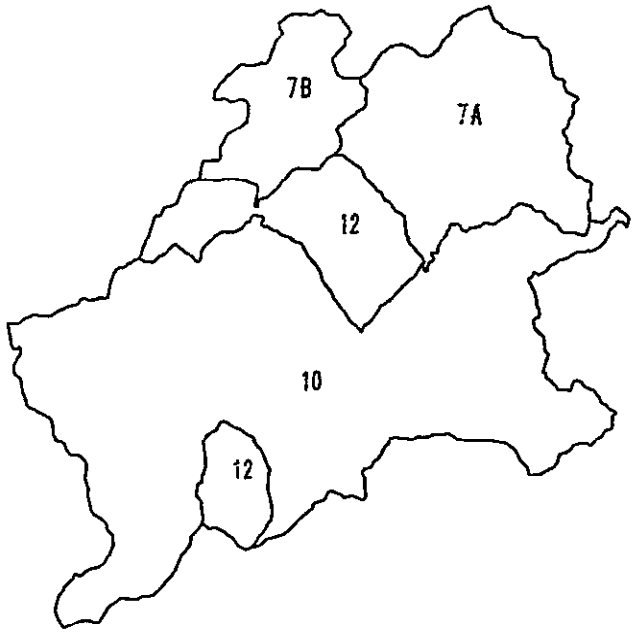
DFC	Acreage
6S	32,400

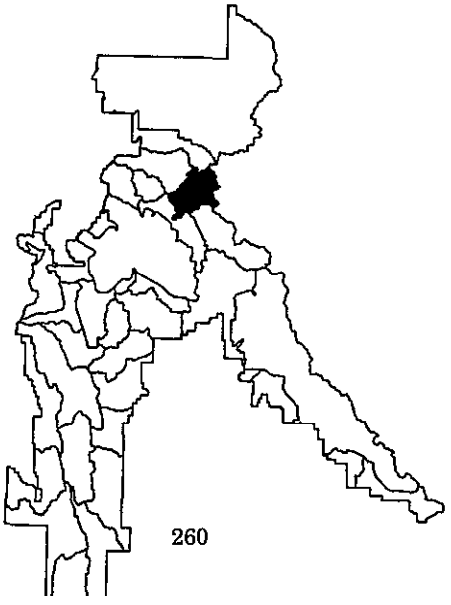
Wilderness Study Area-Specific Standards and Guidelines

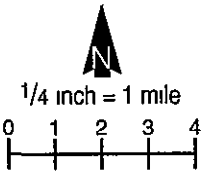
Lease Standard — The Shoal Creek Wilderness Study Area will not be available for lease

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







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

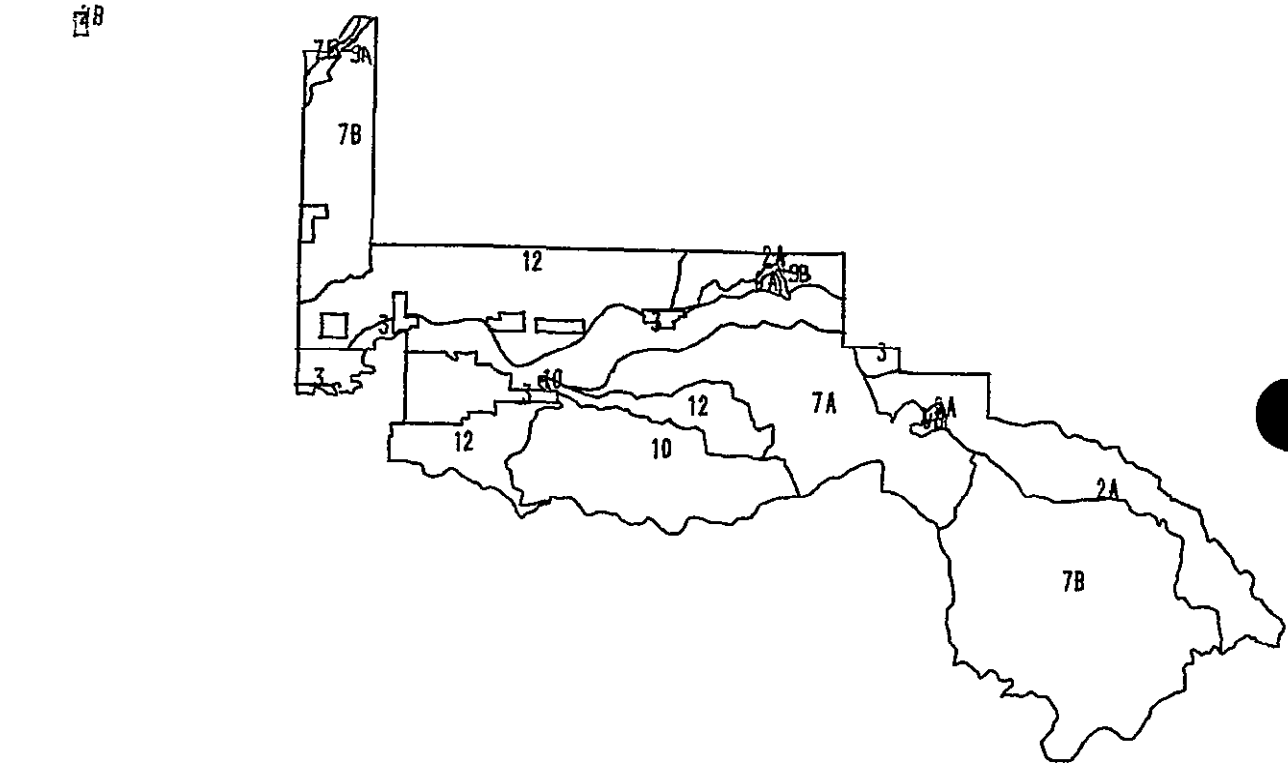
DFC	Acreage
7A	10,700
7B	4,800
10	34,600
12	7,900
Total	58,000

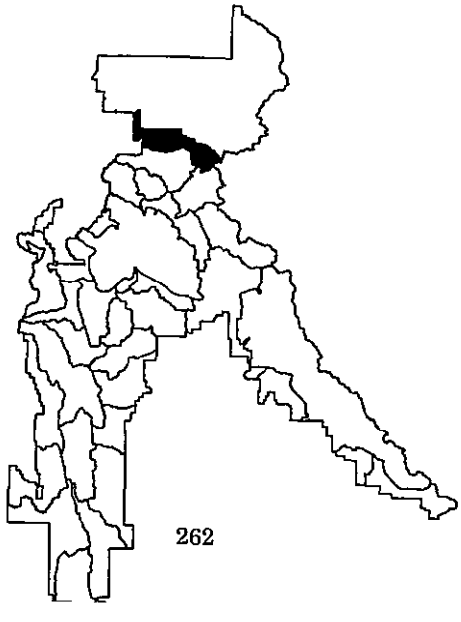
Management Area 45 Standards and Guidelines

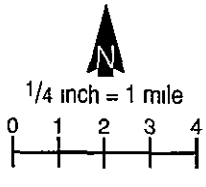
Lease Stipulation Standard — Leases will be issued for crucial elk winter ranges with the Jackson Elk Herd stipulation

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

Figure 4-22
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 — Rosencrans 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

Management Area 61 Standards and Guidelines

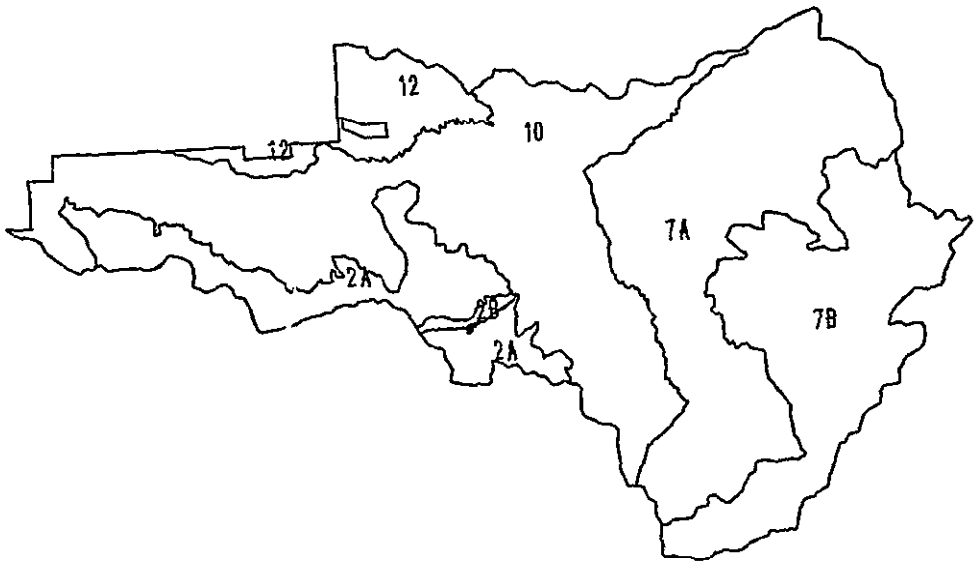
Visual Quality Standard — The DFC 2A area just south of the Breccia Cliffs and DFC 12 area along Blackrock Creek will be managed under a Visual Quality Objective of Retention in the foreground and middle ground and Partial Retention in the background

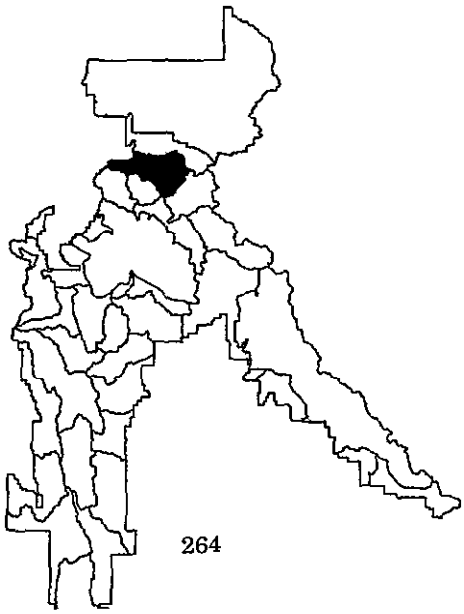
Lease Stipulation Standard — Leases in the DFC 2A area and DFC 3 area south of the 11th Standard Parallel and along the Buffalo River will be issued with a No-Surface-Occupancy stipulation

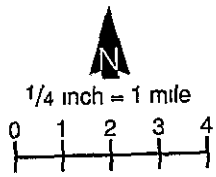
River Qualities Standard — Along the Buffalo River, the DFC 3 area will be managed to protect values that make it eligible for designation as a Scenic or Recreation River

Coordination Standard — Sensitivity will be shown towards the documented management needs of Grand Teton National Park

Figure 4-23
Management Area 62 — Spread Creek







Bridger – Teton National Forest

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

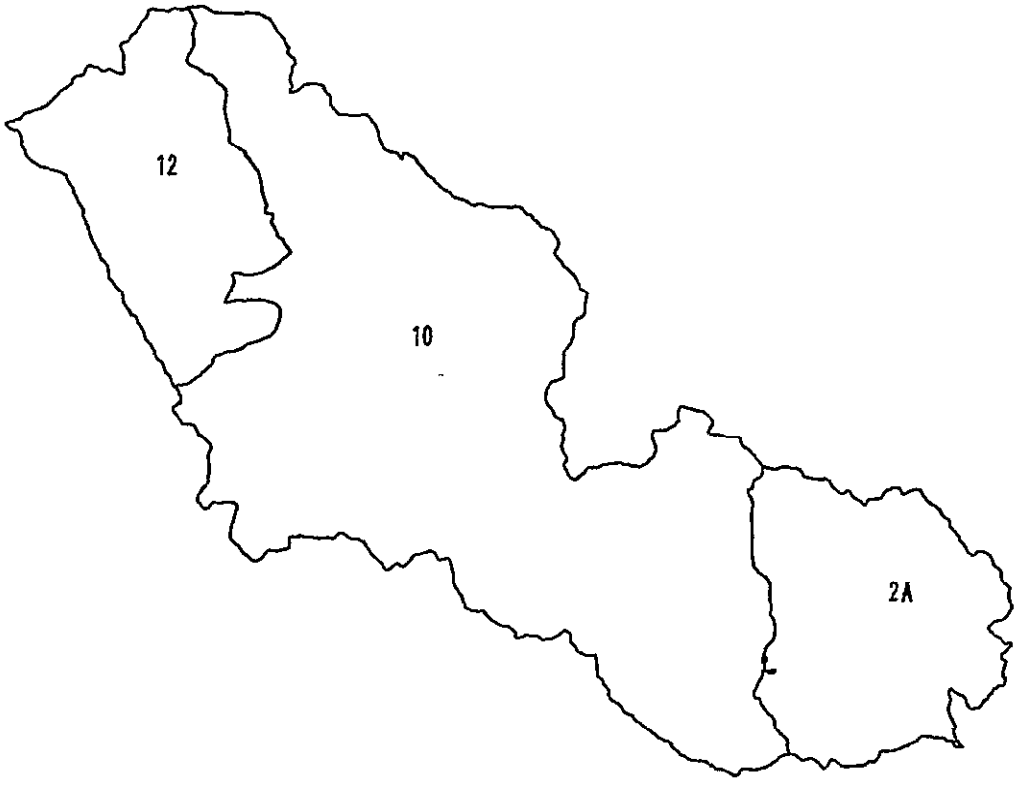
DFC	Acreage
2A	7,800
2B	300
7A	20,200
7B	14,400
10	25,000
12	3,900
Total	71,600

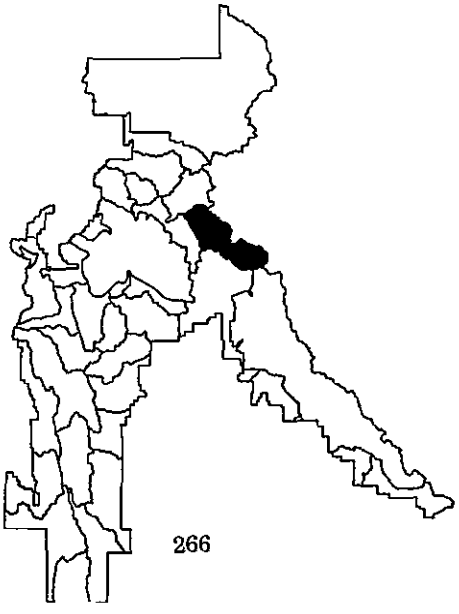
Management Area 62 Standards and Guidelines

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.

Figure 4-24
Management Area 71 — Union Pass





N

1/4 inch = 1 mile

0 1 2 3 4

Bridger – Teton National Forest

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.

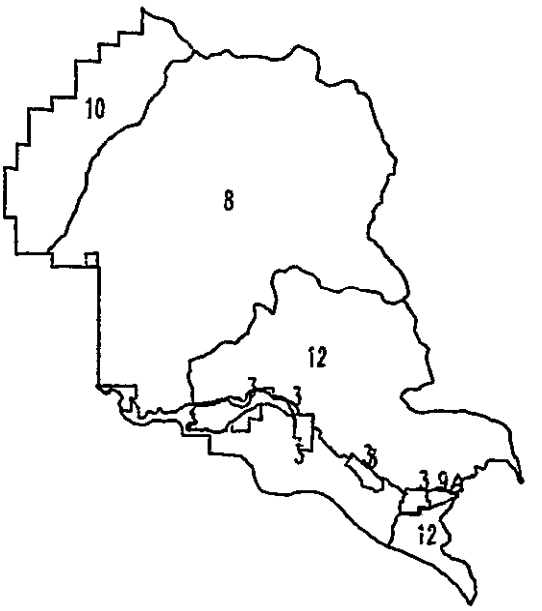
Lease Stipulation Standard — Leases will be issued in crucial elk winter ranges with the Jackson Elk Herd stipulation

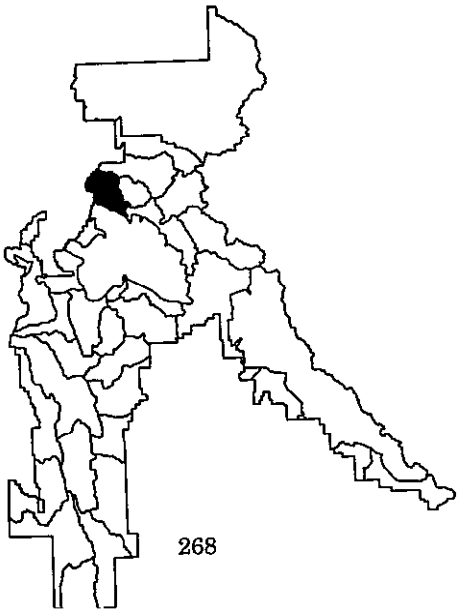
Union Pass Road Standard — Based on road surface conditions, site distances, and turning limitations on the present alignment, traffic will be restricted along the 4 3 mile link between the Union Pass Road and the Green River Road to a vehicle length of 40 feet to provide for safe passage of recreational 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

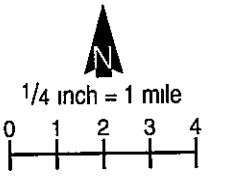
The Desired Future Conditions for Management Area 71 require a single Traffic Service Level B or C link road Closure of adjacent roads will be made to retain the prescribed open road density for the area The probable future alignment has been determined through a joint study with the surrounding counties 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

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

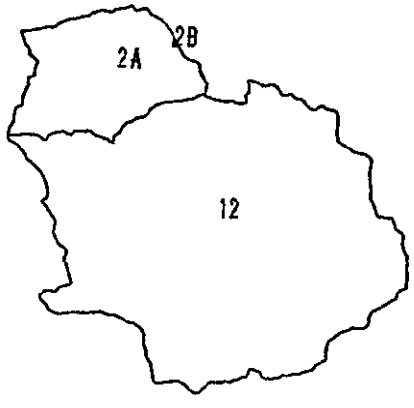
Lease Stipulation Standard — Leases will be issued in the crucial elk winter ranges with the Jackson Elk Herd stipulation

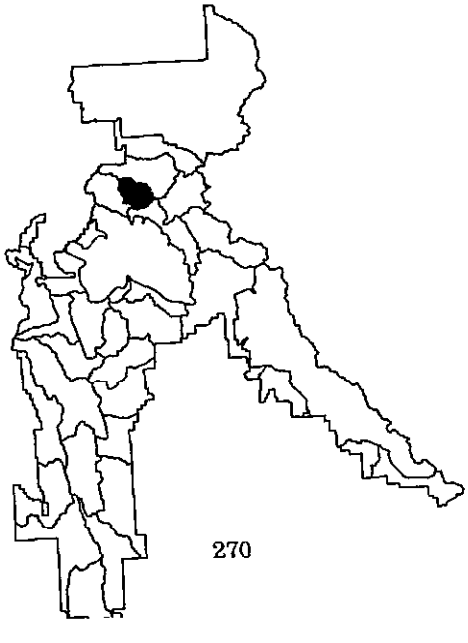
River Qualities Standard — Along the Gros Ventre River, the DFC 3 area will be managed as a Scenic or Recreation River.

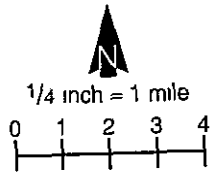
Visual Quality Standard — The DFC 3 area along the Gros Ventre River will be managed to achieve a Visual Quality Objective of Retention in all foreground areas relative to the river and the road

Coordination Standard — Sensitivity will be shown towards the documented management needs of Grand Teton National Park

Figure 4-26
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

DFC	Acreage
2A	5,000
2B	5
12	22,700
Total	27,705

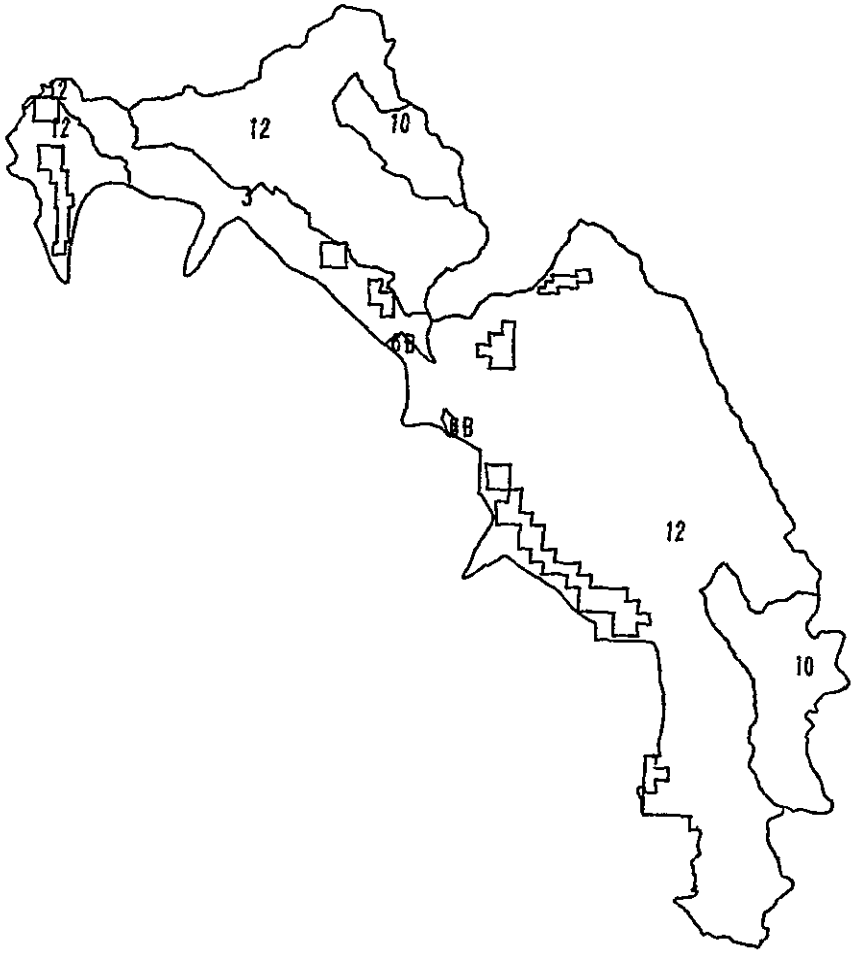
Management Area 44 Standards and Guidelines

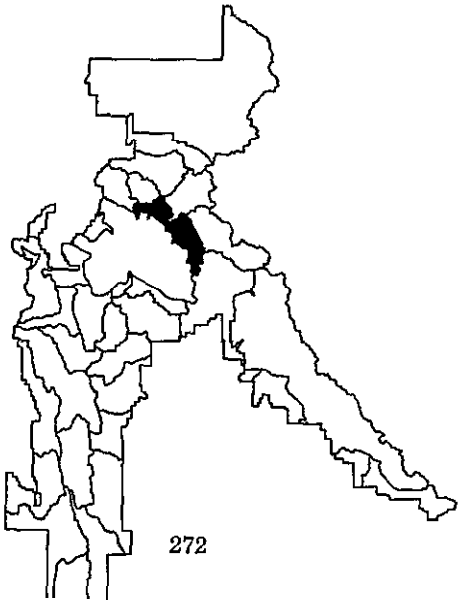
Lease Standard — The DFC 2A area, Carmichael Fork and Mt Leidy, will not be available for lease

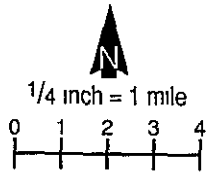
Lease Stipulation Standard — Leases will be issued in the crucial elk winter ranges with the Jackson Elk Herd stipulation

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

Figure 4-27
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

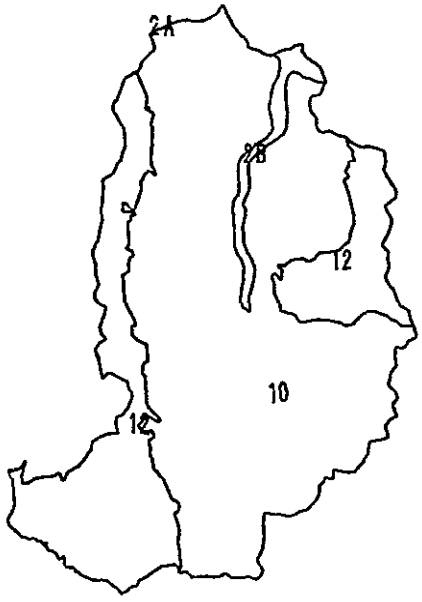
Management Area 46 Standards and Guidelines

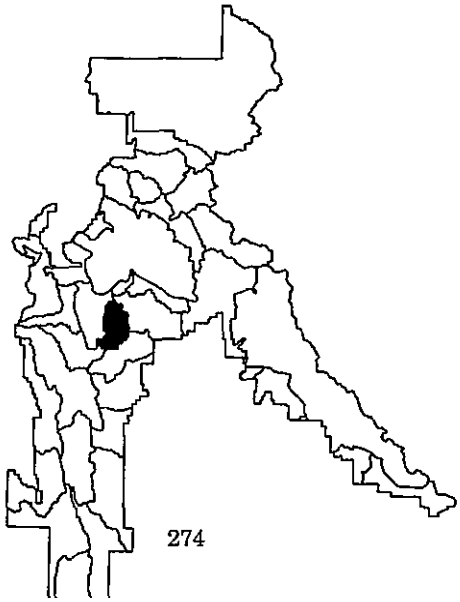
River Qualities Standard — Along the Gros Ventre River, the DFC 3 area will be managed to protect values that make it eligible for designation as a Scenic or Recreation River

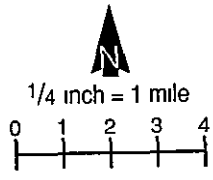
Lease Stipulation Standard — Leases will be issued in the crucial elk winter ranges with the Jackson Elk Herd stipulation

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

Figure 4-28
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

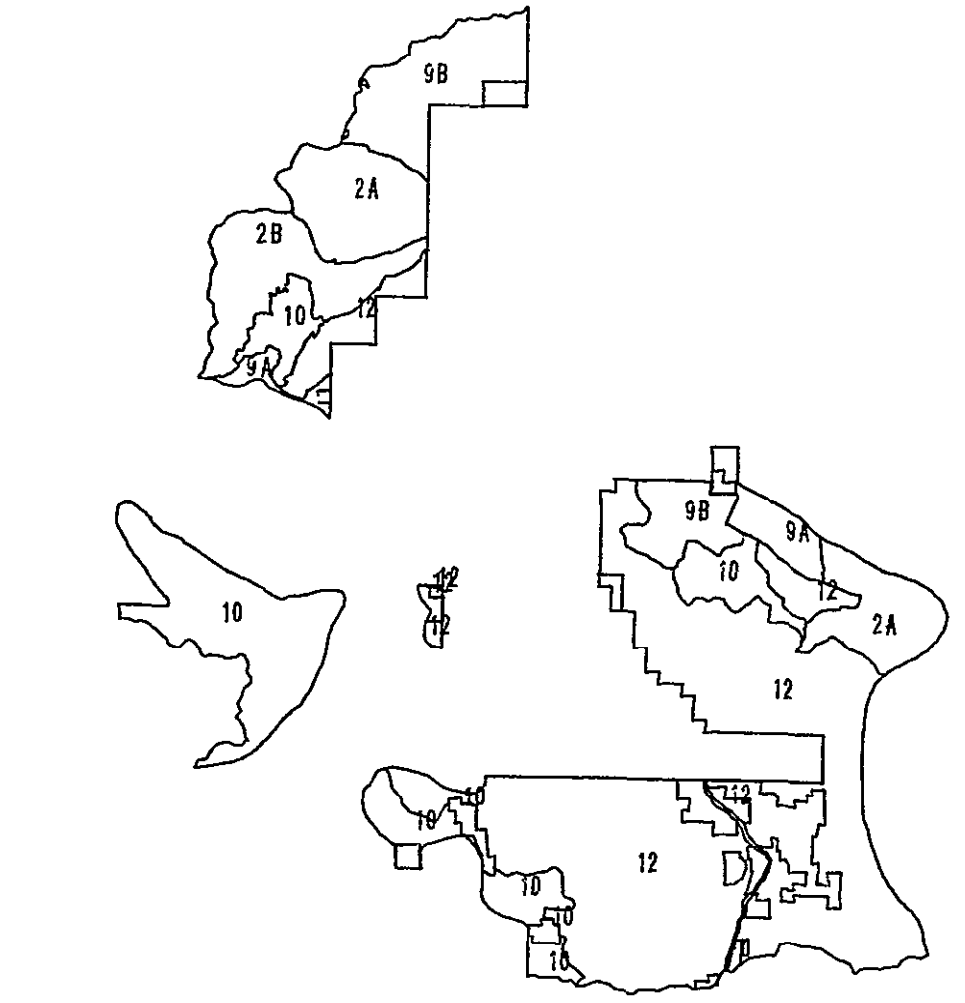
Management Area 22 Standards and Guidelines

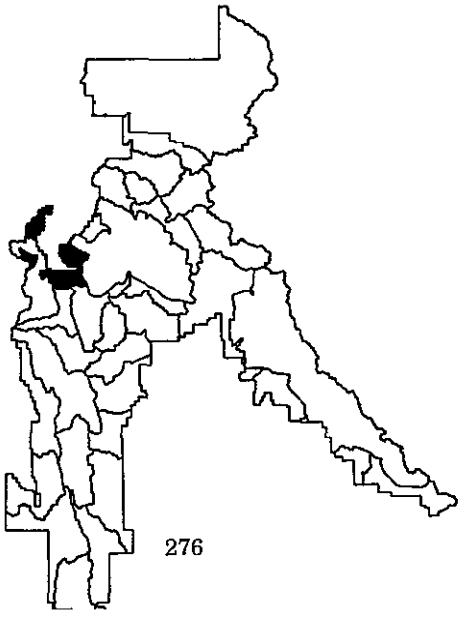
Lease Stipulation Standard — Leases will be issued in the crucial winter ranges with a Timing-Limitation stipulation The DFC 2B area along the Hoback River will be leased with a No-Surface-Occupancy stipulation

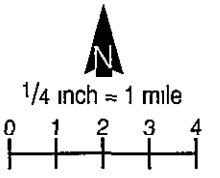
River Qualities Standard — The Hoback River in DFCs 2B and 12 will be managed to protect values that make it eligible for designation as a Scenic or Recreation River

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

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 Research Natural Area

Desired Future Condition Acreage

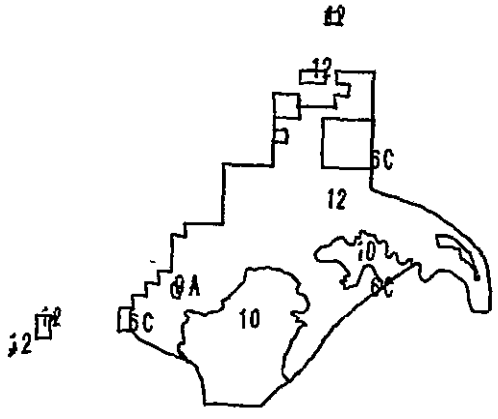
DFC	Acreage
2A	6,700
2B	4,200
9A	2,000
9B	6,100
10	11,300
12	28,500
Total	58,800

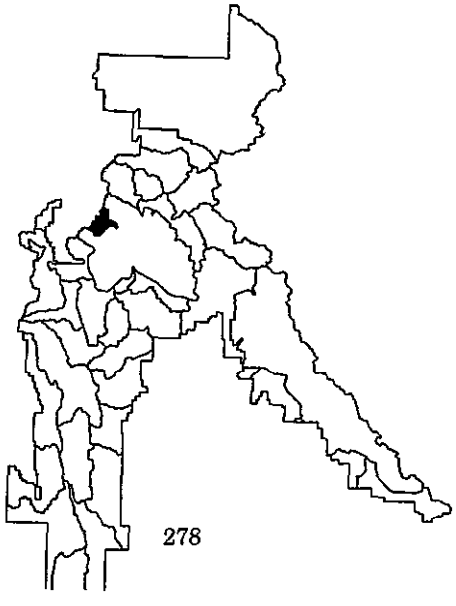
Management Area 41 Standards and Guidelines

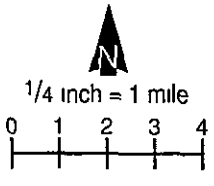
Lease Standard — The DFC 9B area, Teton Village, the DFC 2A/B areas, Phillips Canyon, and the DFC 9A/B and 2A areas, Cache Creek and Snow King, will not be available for lease Other DFCs are available for lease

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

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

DFC	Acreage
9A	25
10	3,900
12	10,300
Total	14,225

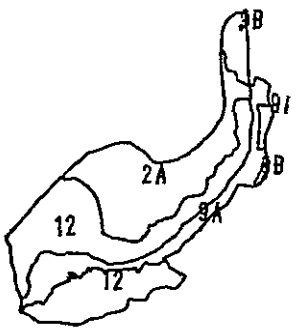
Management Area 42 Standards and Guidelines

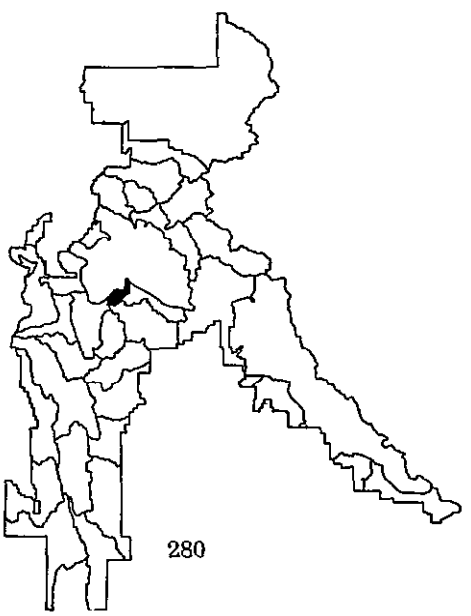
Lease Stipulation Standard — Leases will be issued in the crucial elk winter ranges with the Jackson Elk Herd stipulation

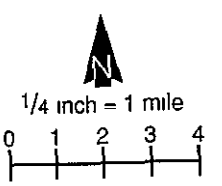
Coordination Standard — Sensitivity will be shown towards the documented management needs of the National Elk Refuge

Livestock Grazing Standard — Livestock grazing will not be permitted

Figure 4-31
Management Area 47 — Granite Canyon







Bridger – Teton National Forest

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

DFC	Acreage
2A	2,900
9A	2,000
9B	35
12	4,200
Total	9,135

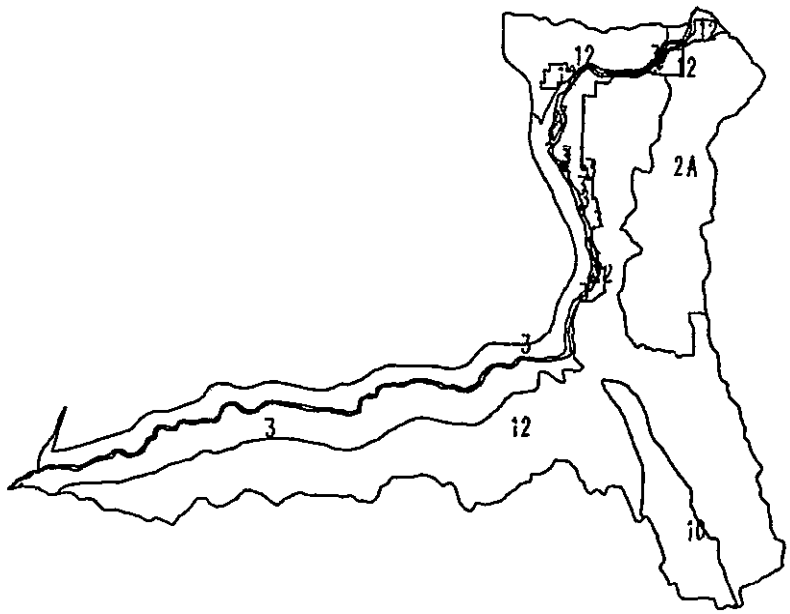
Management Area 47 Standards and Guidelines

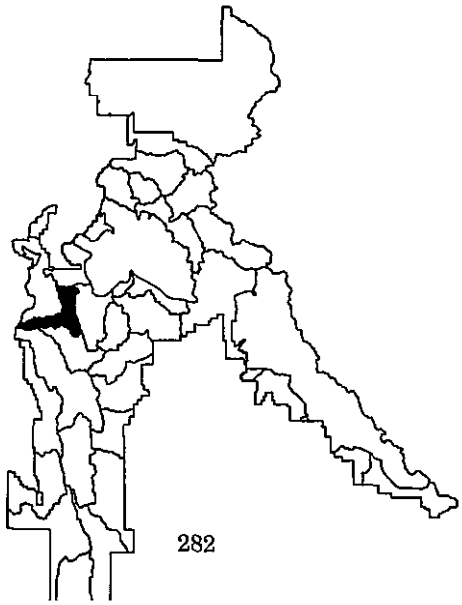
Lease Standard — The DFC 2A areas along Granite Creek will not be available for lease

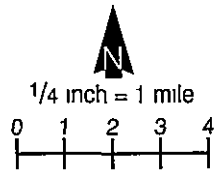
Lease Stipulation Standard — Leases in crucial winter ranges will be issued with a No-Surface-Occupancy stipulation

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

Figure 4-32
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 in the Bridger West Division of the Bridger-Teton National Forest, north of the Greys River area and west of the Willow Creek area

Special Features — Wyoming Range National Recreation Trail and Snake River

Desired Future Condition Acreage

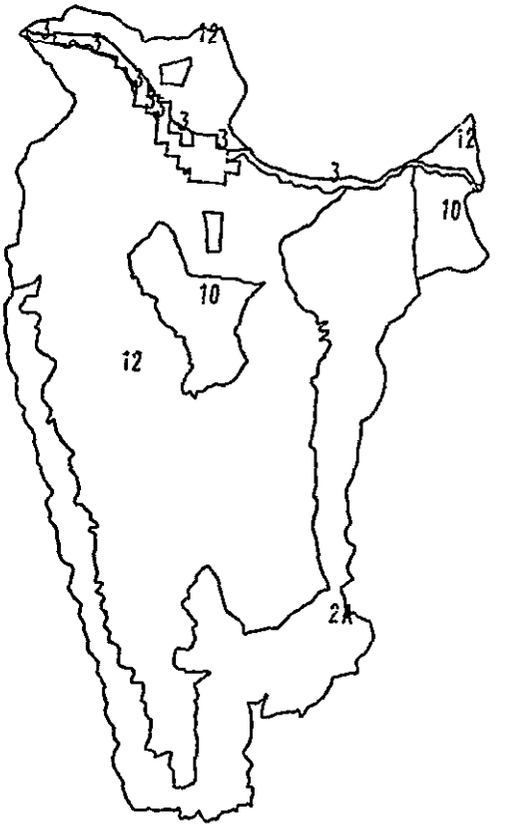
DFC	Acreage
2A	6,500
3	9,200
10	2,500
12	22,000
Total	40,200

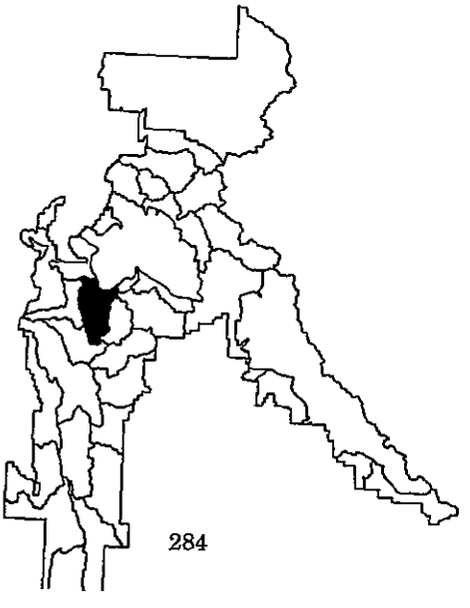
Management Area 48 Standards and Guidelines

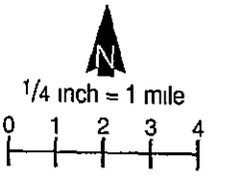
Lease Stipulation Standard — Leases will be issued in moose winter ranges with a Timing-Limitation stipulation Leases in crucial elk, moose, and deer winter ranges along the Snake and Hoback Rivers and in DFC 2A and 3 areas will be issued with a No-Surface-Occupancy (NSO) stipulation Surface occupancy 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

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

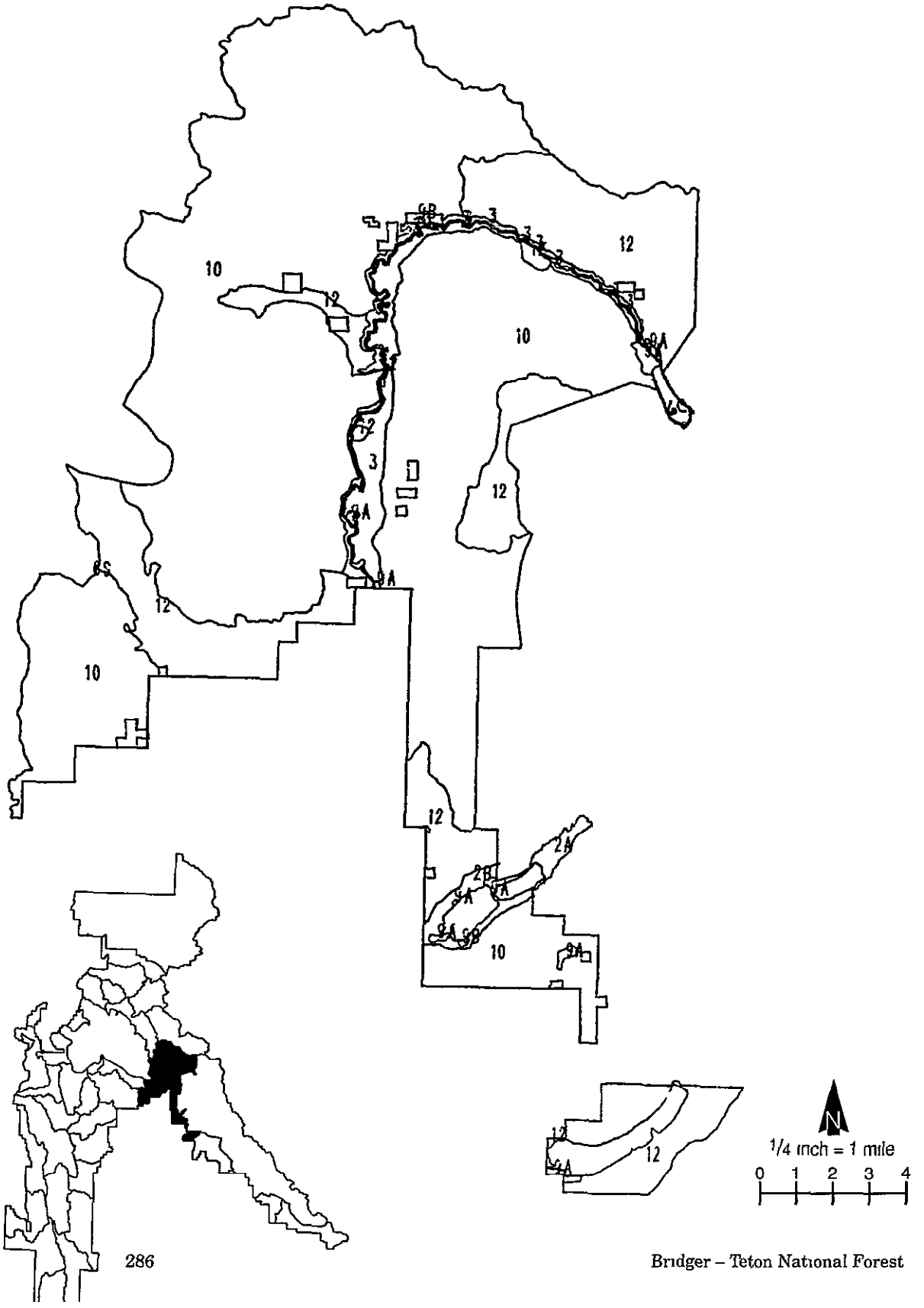
Desired Future Condition Acreage

DFC	Acreage
2A	19,100
3	800
10	4,600
12	37,700
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

Figure 4-34
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

Desired Future Condition Acreage

DFC	Acreage
2A	700
2B	1,200
3	4,500
9A	600
9B	30
10	111,200
12	34,300
Total	152,500

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

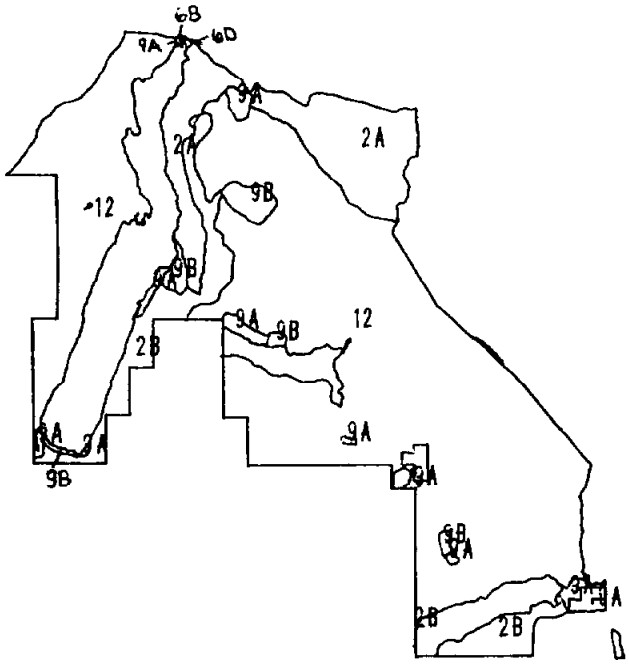
Union Pass Road Standard — Base on road surface conditions, site distances, and turning limitations on the present alignment, traffic will be restricted along the 4 3 mile link between the Union Pass Road and the Green River Road to a vehicle length of 40 feet to provide for safe passage of recreational 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 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

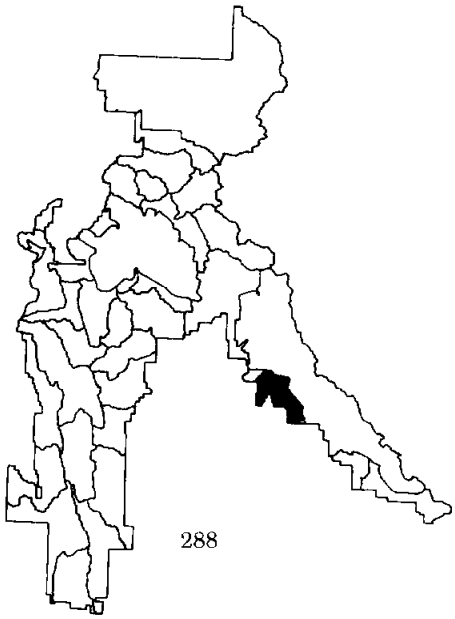
The Desired Future Conditions for Management Area 71 require a single Traffic Service Level B or C link road Closure of adjacent roads will be made to retain the prescribed open road density for the area The probable future alignment has been determined through a joint study with the surrounding counties 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

Kendall Warm Springs Withdrawal Standard — To protect Kendall Warm Springs, 1200 acres will be recommended for withdrawal from all mineral entry

Figure 4-35
Management Area 73 — Pole Creek





N

1/4 inch = 1 mile

0 1 2 3 4

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

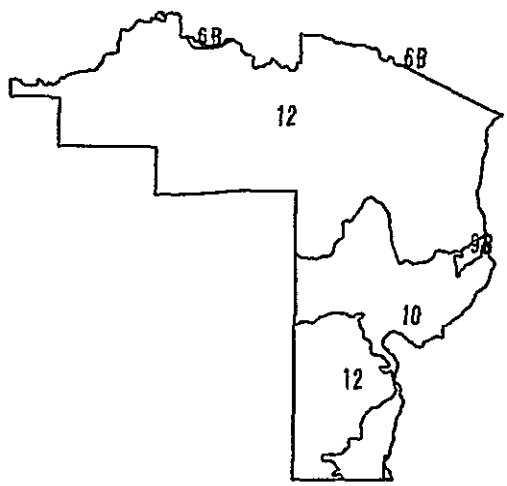
DFC	Acreage
2A	5,100
2B	3,300
3	10
9A	800
9B	800
12	30,300
Total	40,310

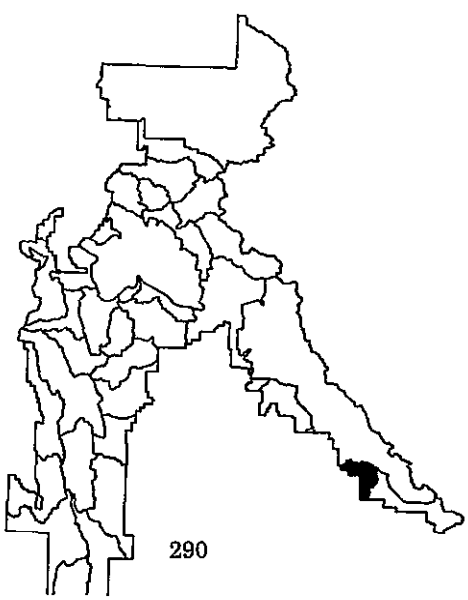
Management Area 73 Standards and Guidelines

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





N

1/4 inch = 1 mile

0 1 2 3 4

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

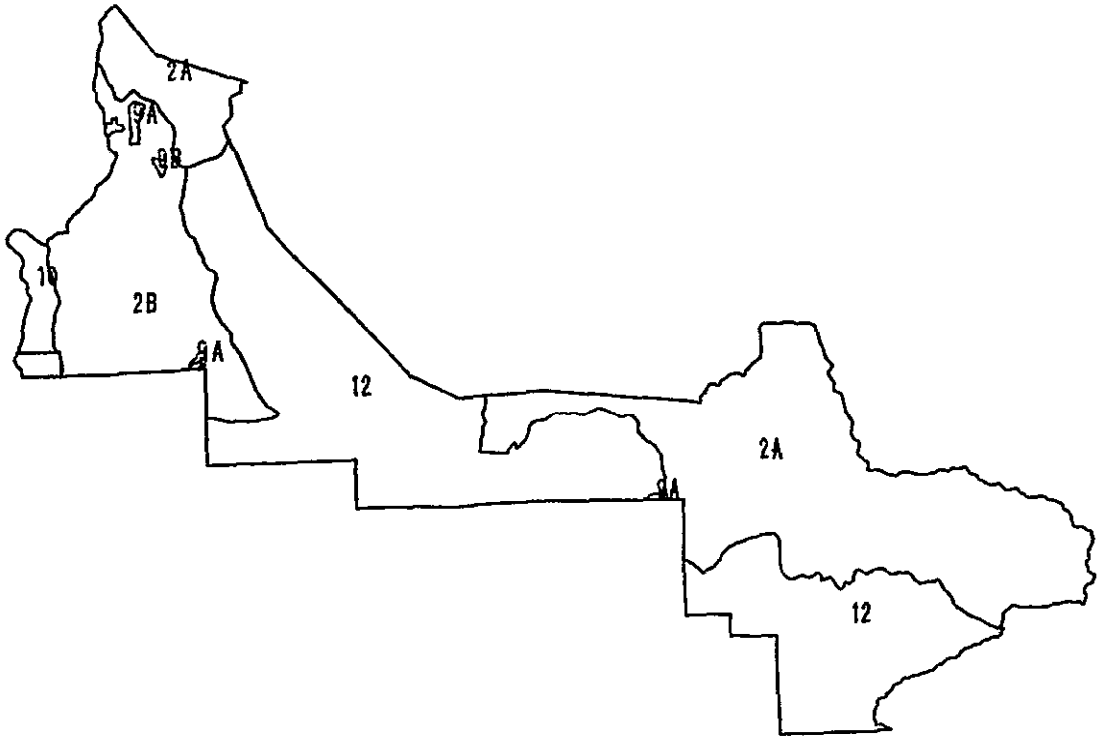
Desired Future Condition Acreage

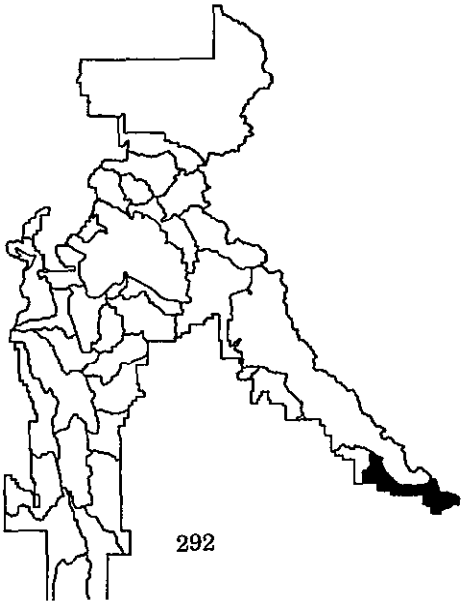
DFC	Acreage
9B	100
10	5,500
12	21,200
Total	26,800

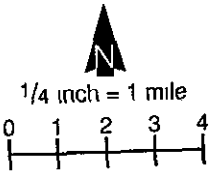
Management Area 74 Standards and Guidelines

Lease Stipulation Standard — Leases will be issued in crucial elk winter ranges with a Timing-Limitation stipulation

Figure 4-37
Management Area 75 — Sweetwater







Bridger – Teton National Forest

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

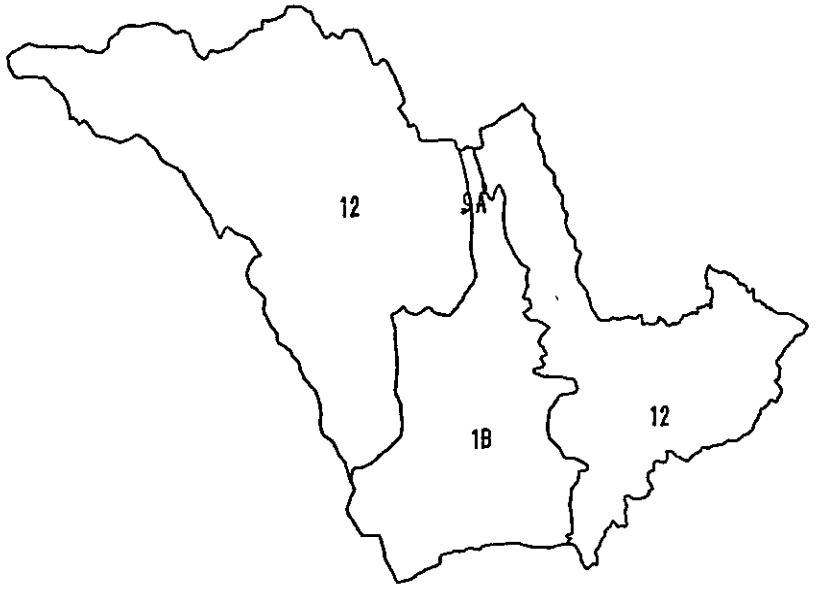
DFC	Acreage
2A	22,500
2B	9,700
9A	200
9B	30
10	1,100
12	26,200
Total	59,730

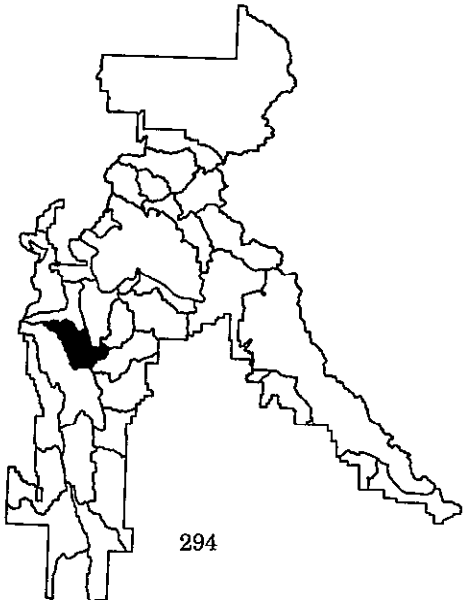
Management Area 75 Standards and Guidelines

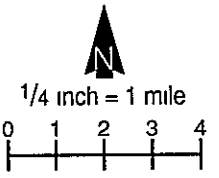
Lease Standard — The DFC 2A areas at the head of Big Sandy and the south end of the Wind River Range will not be available for lease The DFC 2A area west of Pool Creek, however, will be leased with a No-Surface-Occupancy stipulation

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

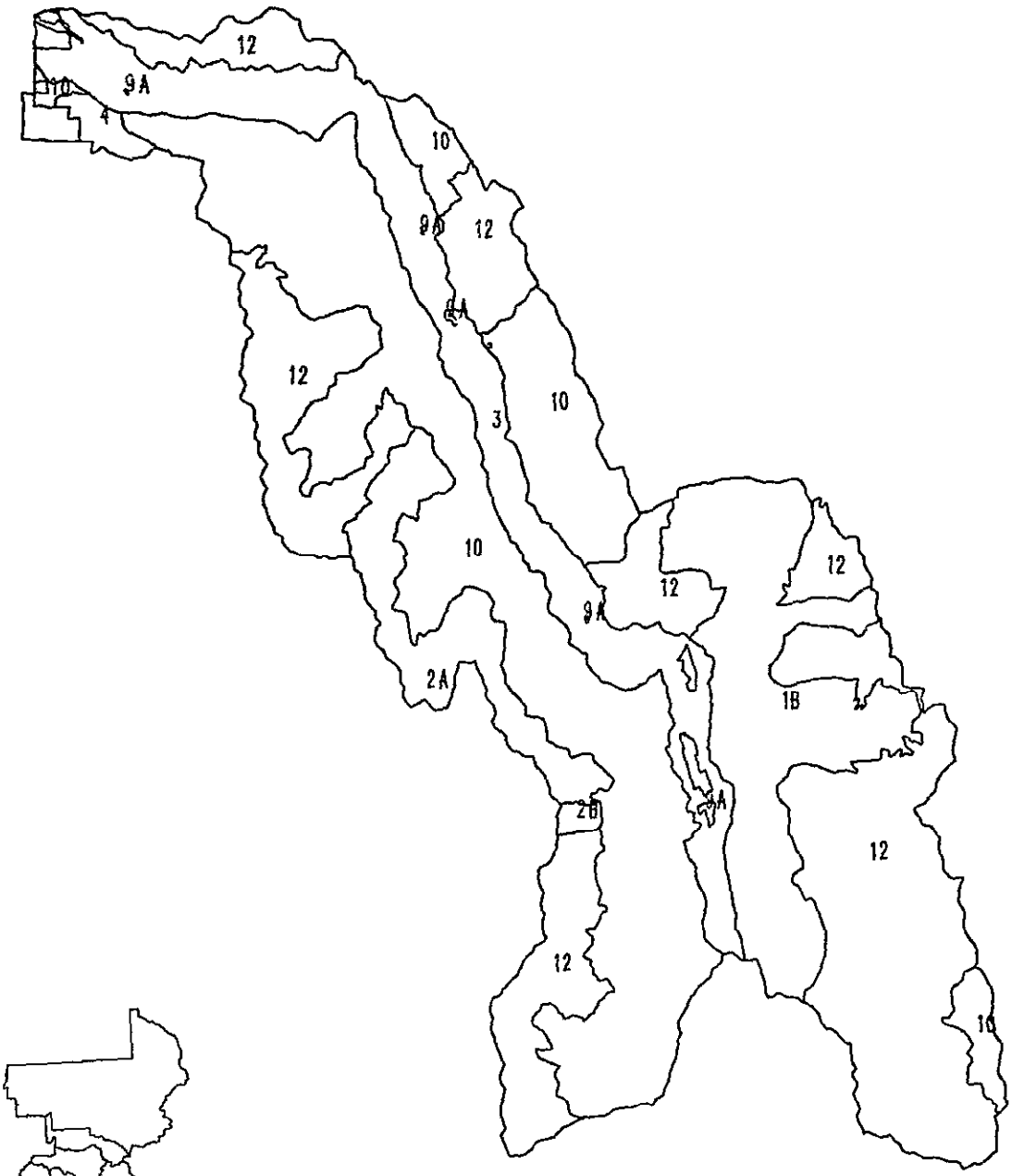
Desired Future Condition Acreage

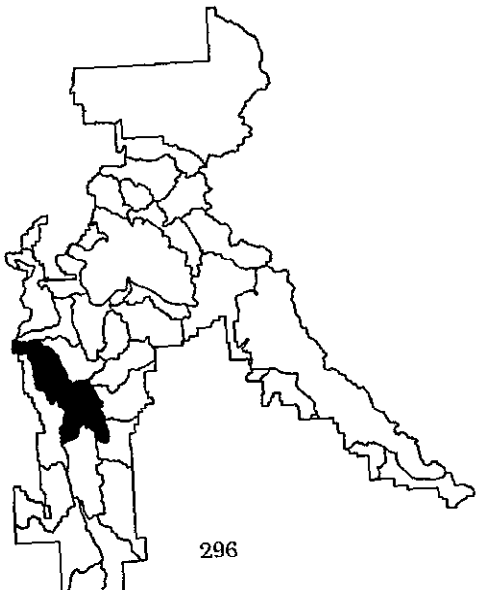
DFC	Acreage
1B	13,900
9A	3
12	40,000
Total	53,903

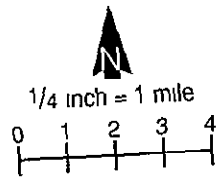
Management Area 31 Standards and Guidelines

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







Bridger – Teton National Forest

Community Interest Area 5 — Greys River
Management Area 32 — Lower Greys River

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

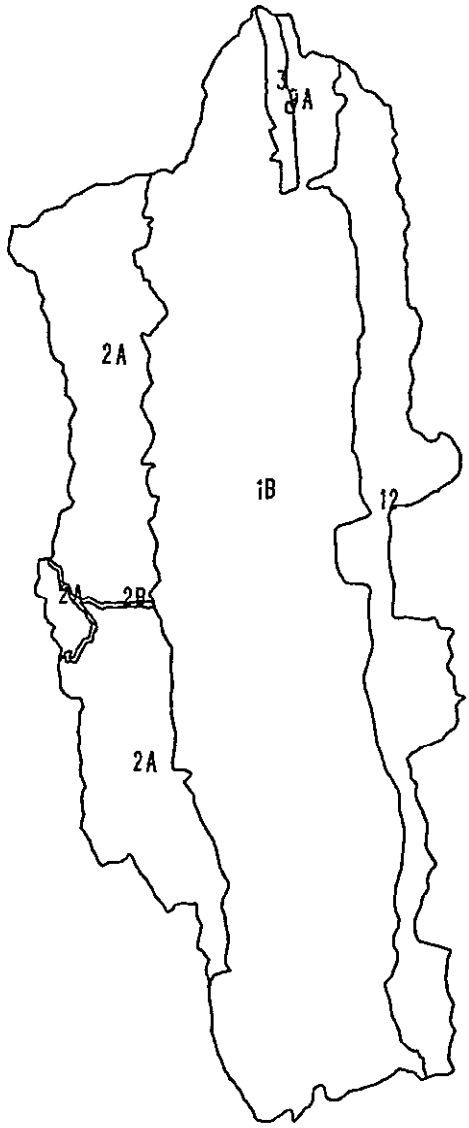
Management Area 32 Standards and Guidelines

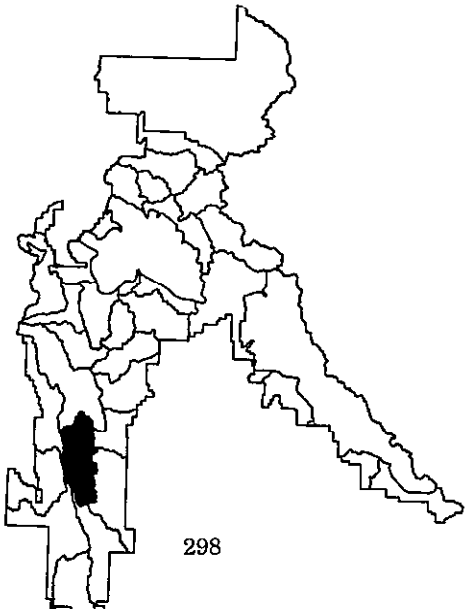
Lease Stipulation Standard — Areas within 0 5 mile of the crests of the Salt River and Wyoming Ranges will be issued with a No-Surface-Occupancy stipulation Leases will be issued in the DFC 10, 12, and 1B areas in crucial elk winter range with a Timing-Limitation stipulation The DFC 2A areas west of the Absaroka Fault in the Salt River Crest will be leased with a No-Surface-Occupancy stipulation

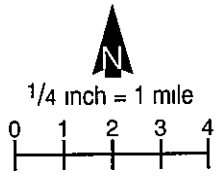
Visual Quality Standard — The DFC 3 areas will be managed under a Visual Quality Objective of Retention in the foreground and Partial Retention in the middle ground

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

Figure 4-40
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

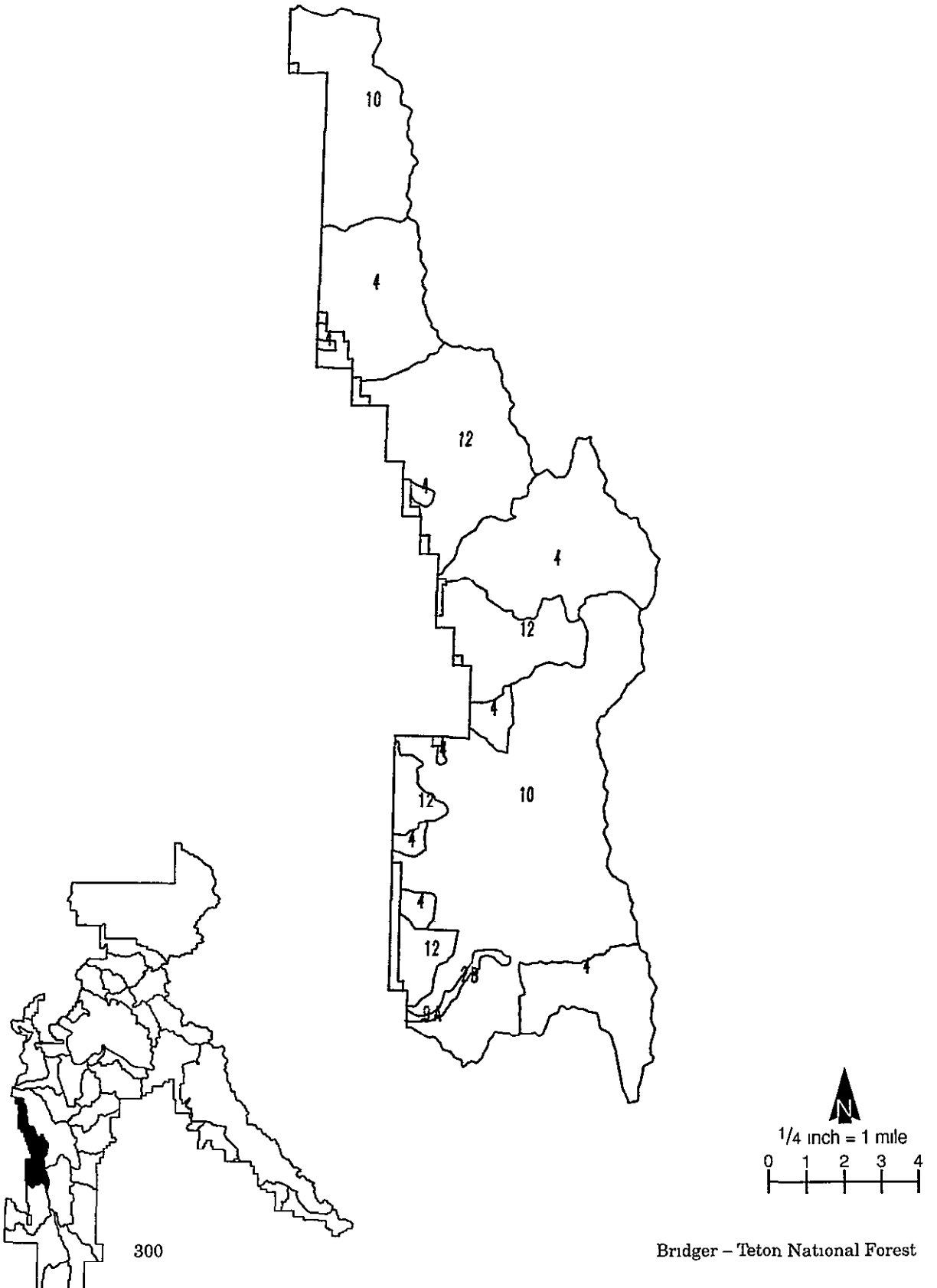
Management Area 35 Standards and Guidelines

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

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

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 West 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 Research Natural Area, and Afton Front Proposed Research Natural Area

Desired Future Condition Acreage

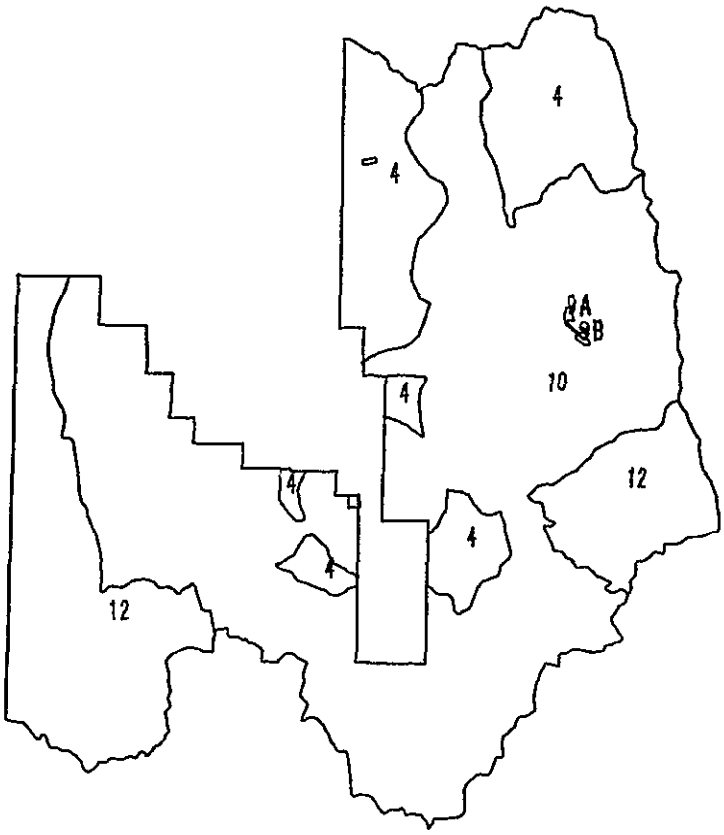
DFC	Acreage
2B	500
4	24,900
10	38,200
12	18,300
Total	81,900

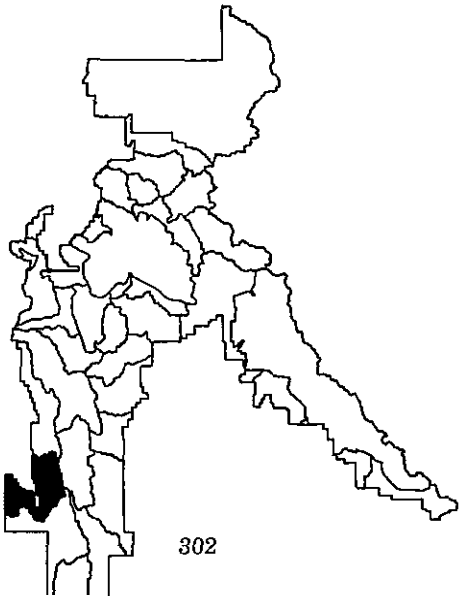
Management Area 33 Standards and Guidelines

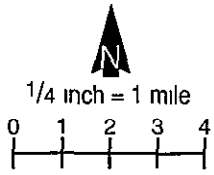
Lease Standard — A portion of the DFC 4 area at Periodic Spring to be determined by further study of protection needs is to be withdrawn and unavailable for lease

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

Figure 4-42
Management Area 34 — Star Valley South







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

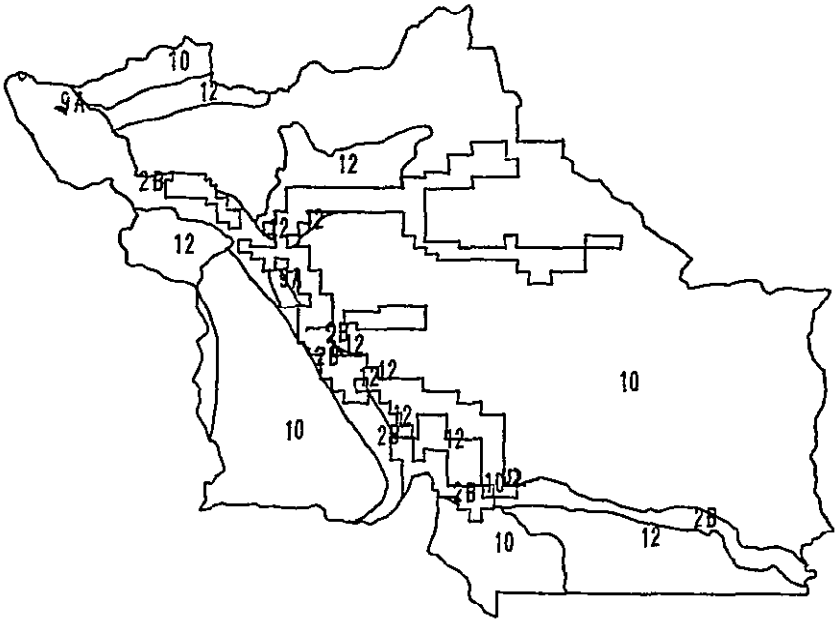
Desired Future Condition Acreage

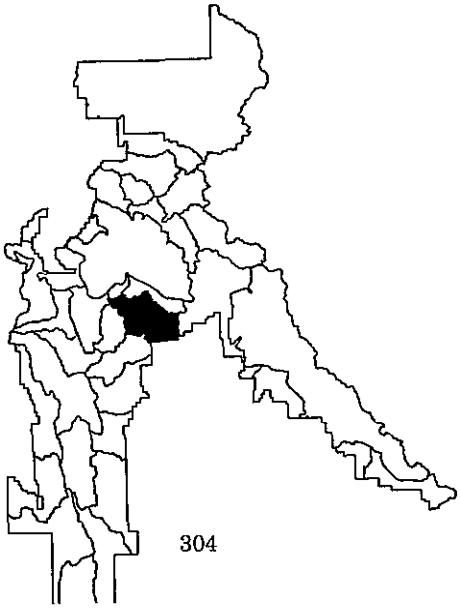
DFC	Acreage
4	16,300
9A	40
9B	20
10	52,900
12	18,100
Total	68,360

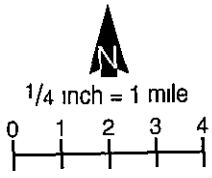
Management Area 34 Standards and Guidelines

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

Figure 4-43
Management Area 21 — Hoback Basin







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

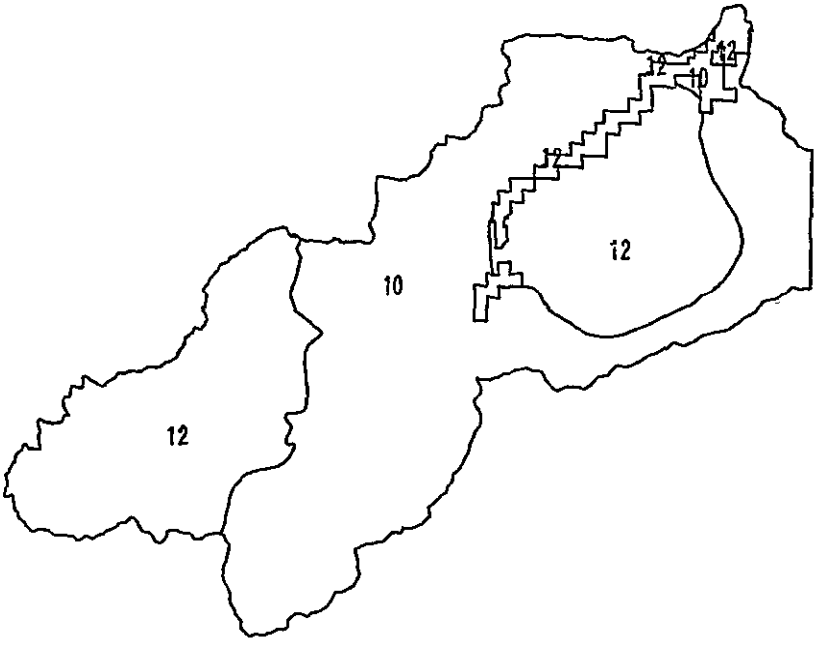
Management Area 21 Standards and Guidelines

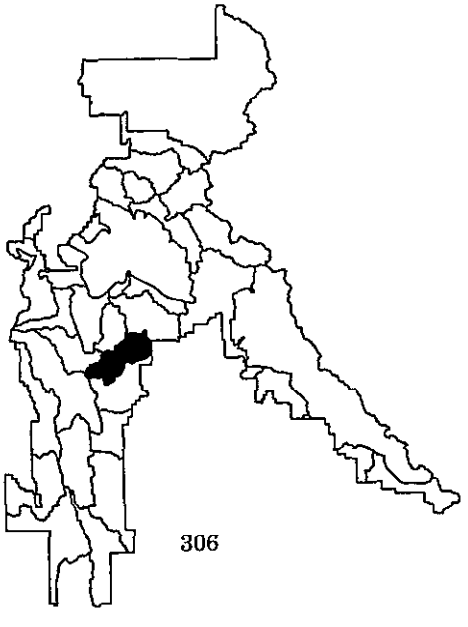
River Qualities Standard — Along the Hoback River, the DFC 2B and 12 areas will be managed to protect values that make them eligible for designation as a Scenic or Recreation River

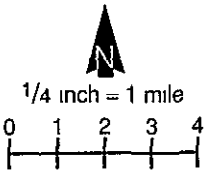
Lease Stipulation Standard — Leases in the Raspberry Ridge crucial elk winter range will be issued with a Timing-Limitation stipulation and a requirement for off-site production facilities

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

Figure 4-44
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

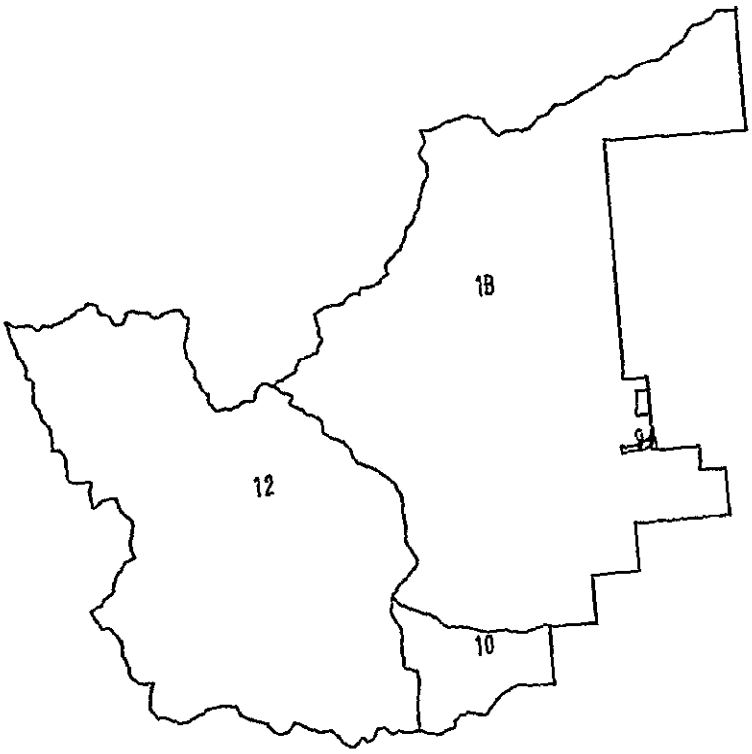
Desired Future Condition Acreage

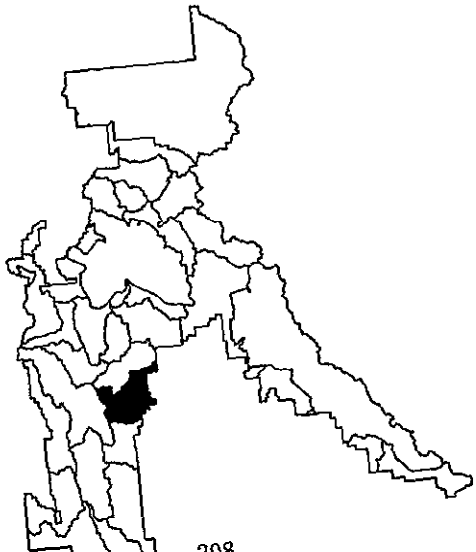
DFC	Acreage
10	34,300
12	24,700
Total	59,000

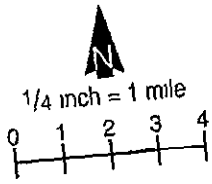
Management Area 23 Standards and Guidelines

Lease Stipulation Standard — Leases within 0 5 mile of the Wyoming Range Crest will be issued with a No-Surface-Occupancy stipulation

Figure 4-45
Management Area 24 — Horse Creek







Bridger – Teton National Forest

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

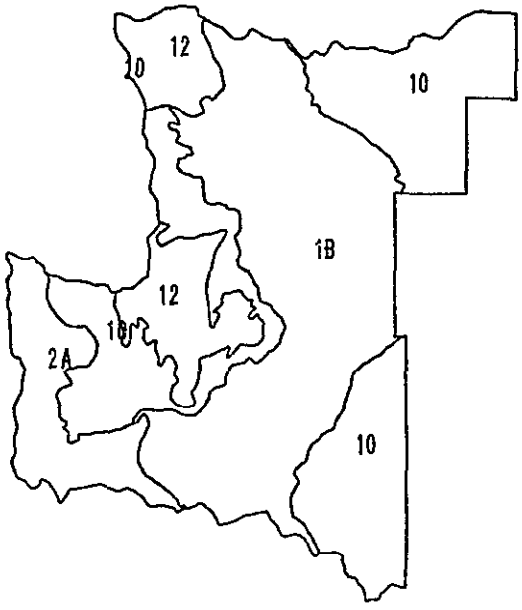
Desired Future Condition Acreage

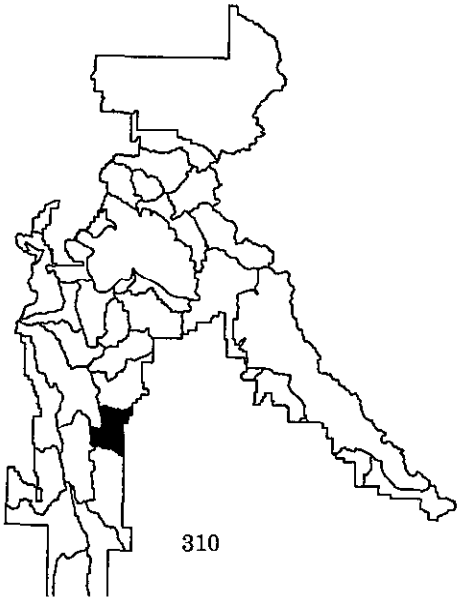
DFC	Acreage
1B	40,700
10	3,500
12	29,600
Total	73,800

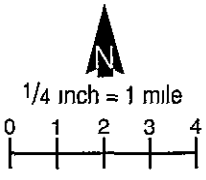
Management Area 24 Standards and Guidelines

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

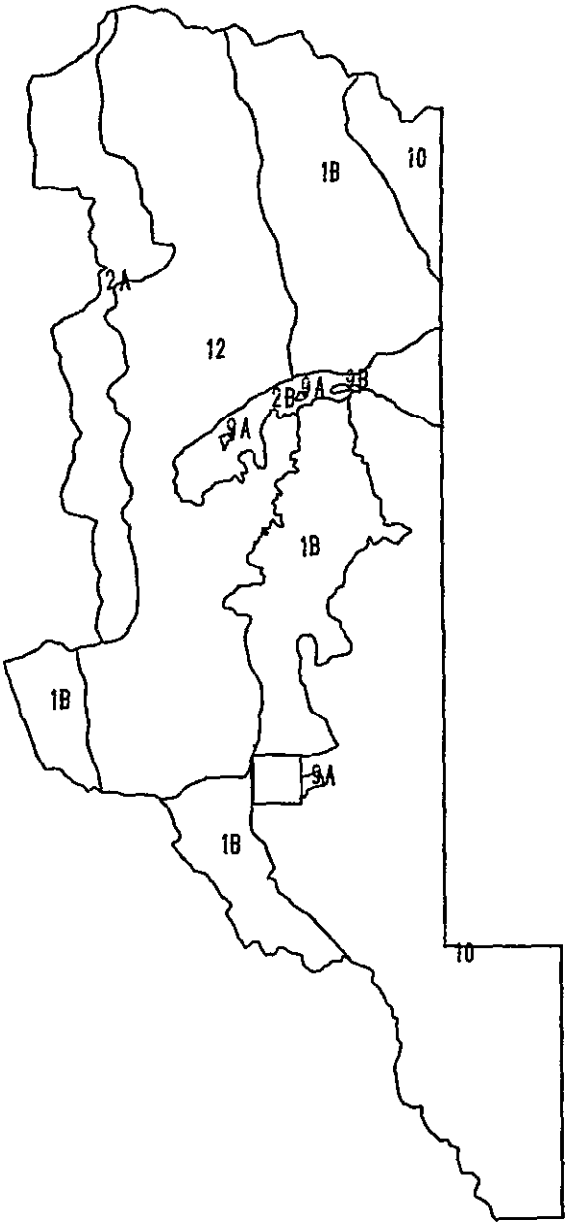
Desired Future Condition Acreage

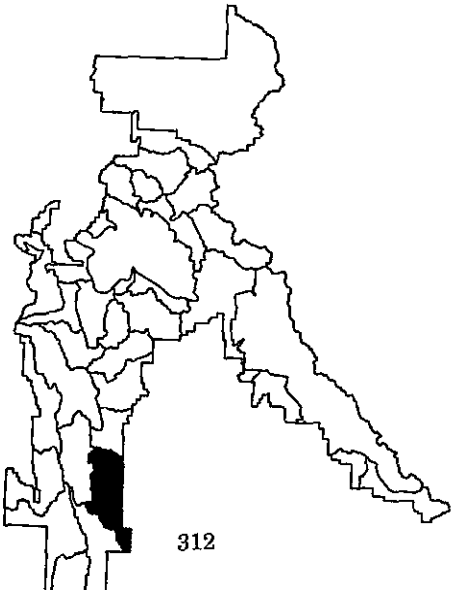
DFC	Acreage
1B	19,600
2A	4,900
10	18,200
12	5,800
Total	48,500

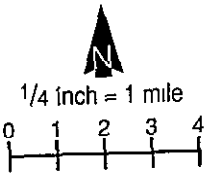
Management Area 25 Standards and Guidelines

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

Figure 4-47
Management Area 26 — Piney Creeks







Bridger – Teton National Forest

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

Desired Future Condition Acreage

DFC	Acreage
1B	25,700
2A	8,900
2B	3,400
10	32,100
12	30,000
Total	100,200

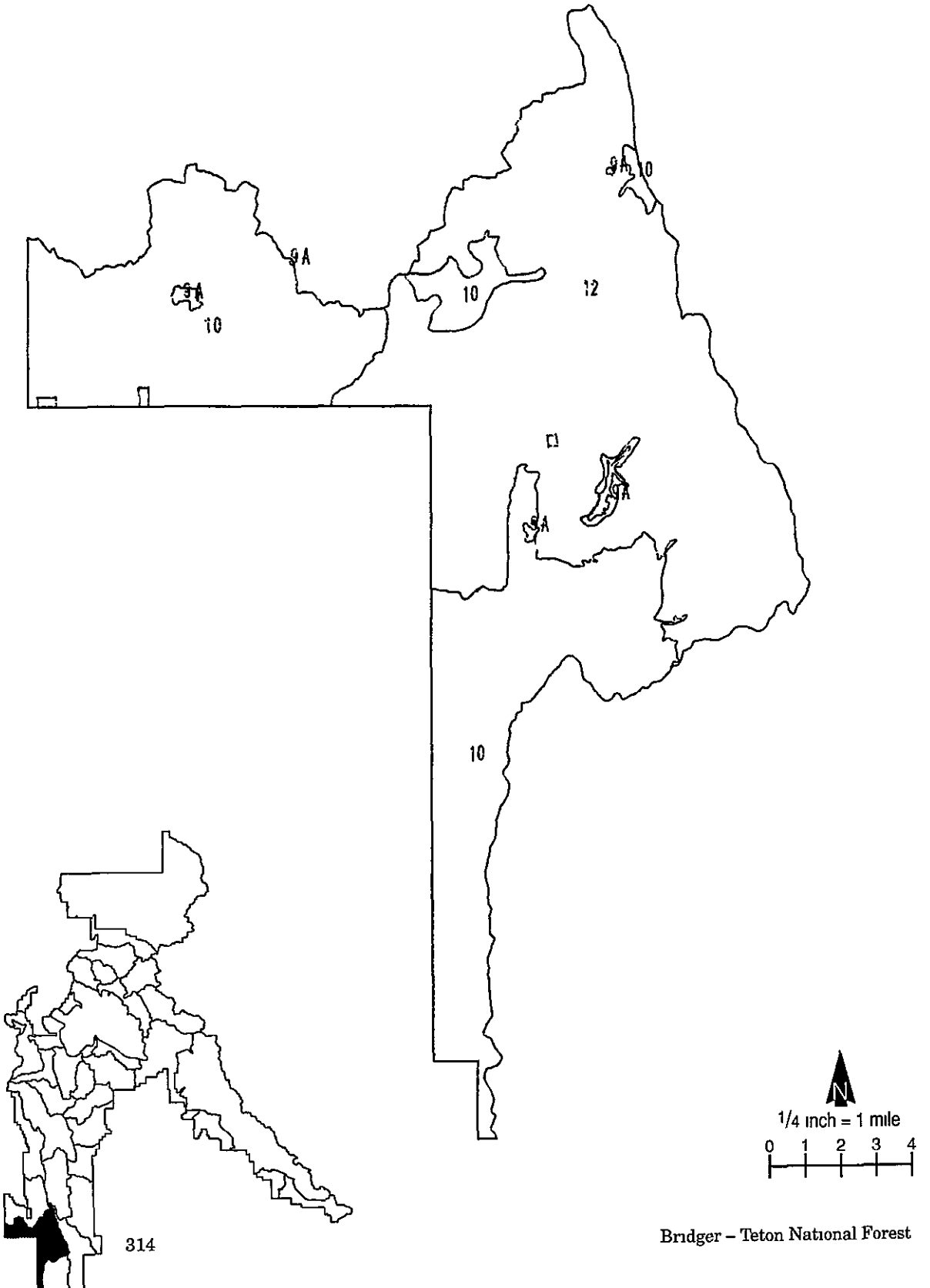
Management Area 26 Standards and Guidelines

Lease Stipulation Standard — Leases in DFC 2A and in the bighorn sheep area will be issued with a No-Surface-Occupancy stipulation

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

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

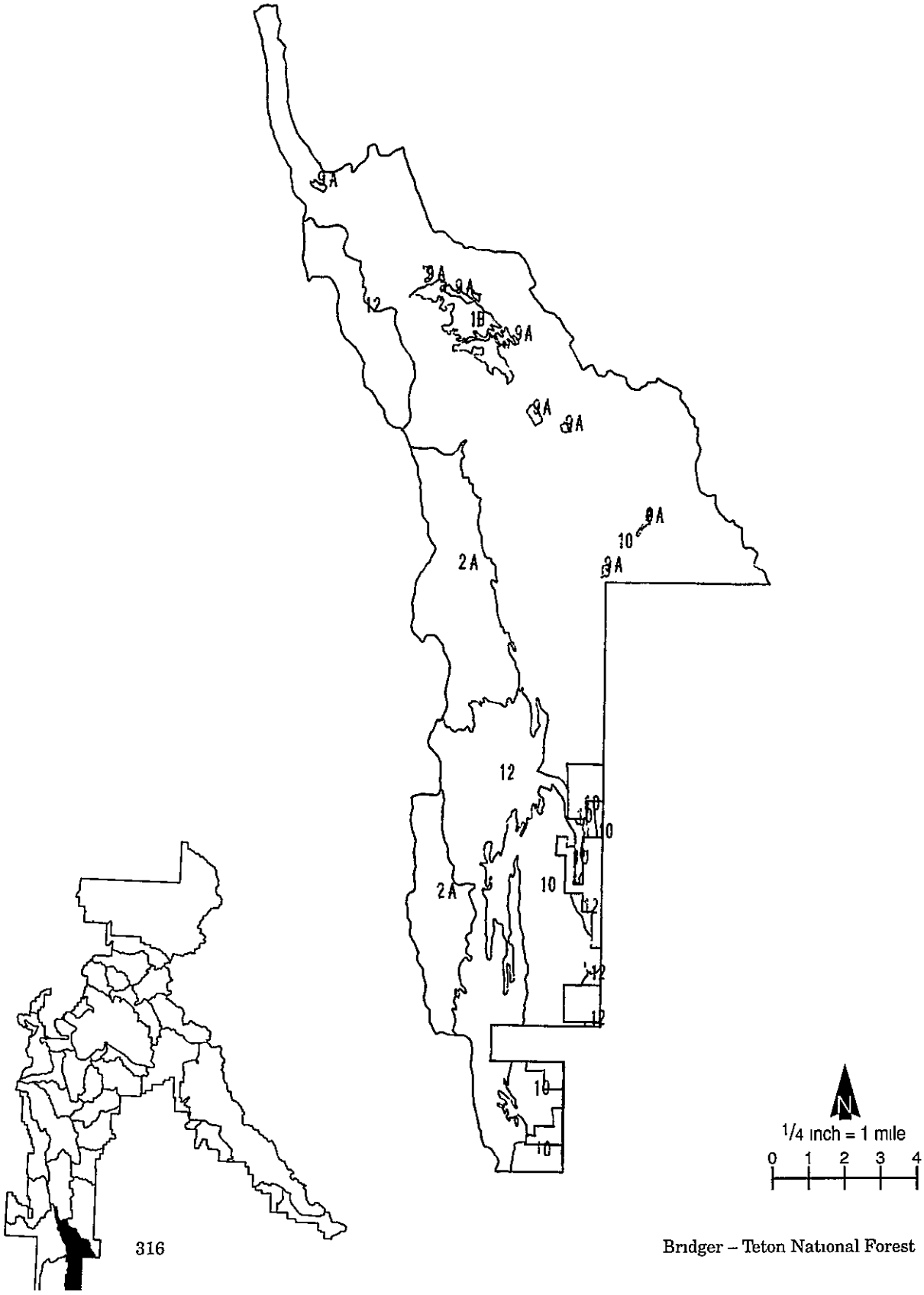
Desired Future Condition Acreage

DFC	Acreage
9A	800
10	54,600
12	63,300
Total	118,700

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 1 mile of the crest along Commissary Ridge will be issued with a No-Surface-Occupancy stipulation

Figure 4-49
Management Area 12 — LaBarge Creek



Community Interest Area 8 — Kemmerer 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

Desired Future Condition Acreage

DFC	Acreage
1B	1,400
2A	12,800
9A	400
10	57,500
12	17,200
Total	89,300

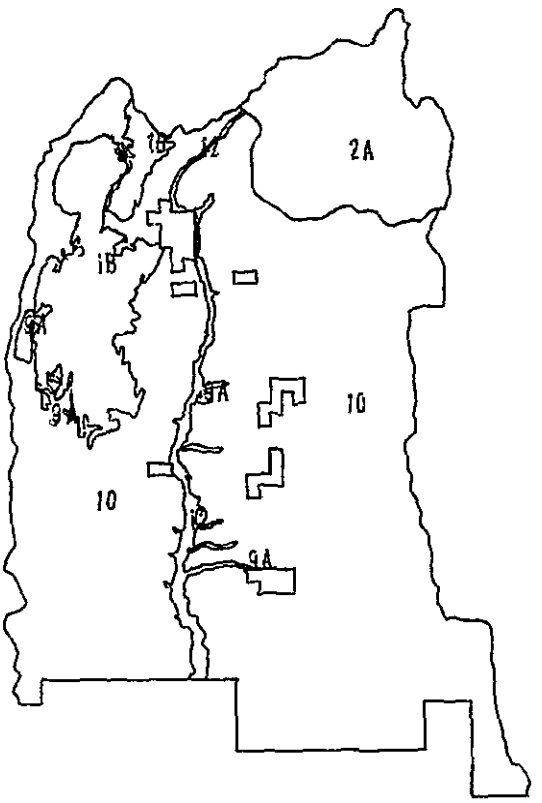
Management Area 12 Standards and Guidelines

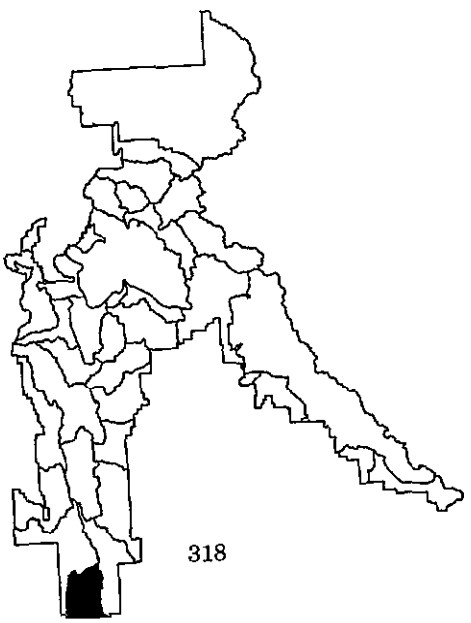
Lease Standard — The DFC 2A area on Commissary Ridge will not be available for lease

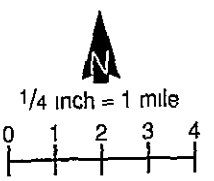
Lease Stipulation Standard — Leases in the crucial elk winter range on Mahogany Ridge will be issued with a No-Surface-Occupancy stipulation In addition, leases will be issued in the crucial elk winter ranges with a Timing-Limitation stipulation

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

Figure 4-50
Management Area 13 — Hams Fork







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
Total	72,500

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

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

User's Guide to Chapter 5

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Monitoring and Evaluation	323
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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 in Figure 5-1 on page 325

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 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 judgement 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

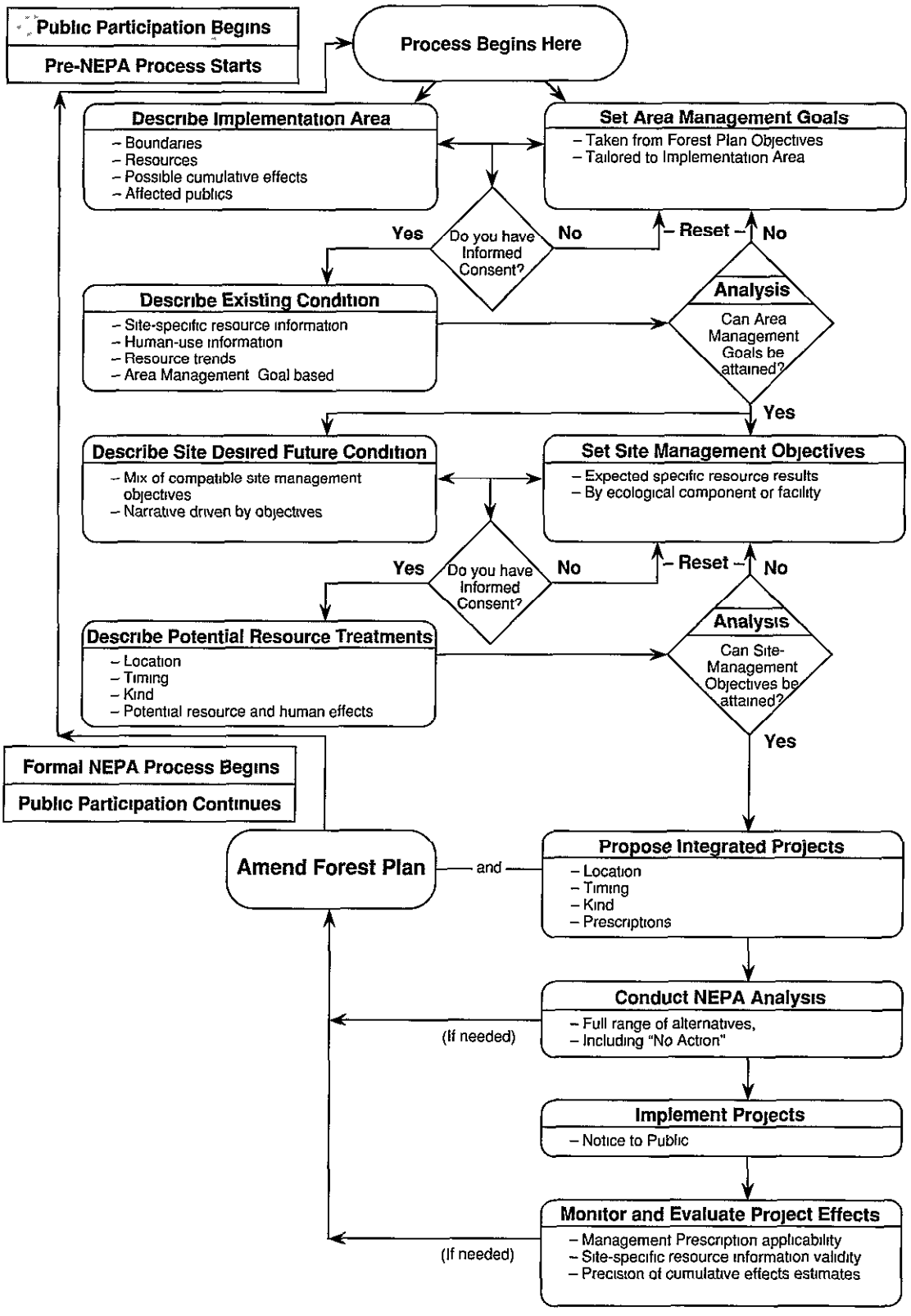
Monitoring requirements for the Forest Plan are outlined in the Monitoring Plan at the end of this section This action plan addresses the items to be monitored, techniques, expected precision and reliability, measurement frequency, reporting period and acceptable variation

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

Figure 5-1
Forest Plan Implementation Process



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, and

A list of needs for continuing evaluation of the Forest Plan and for alternative methods of management

Policy

Element and Priority	Monitoring Technique	Precision/Reliability	Frequency of Measurement	Deviation Requiring Further Evaluation or Change in Management
Goals Accomplishment				**Goals Accomplishment**
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.	Monitoring will commence immediately after implementation of the Forest Plan begins with formal annual reviews conducted by the teams jointly in the month prior to out-year budget consideration.	No actions designed to accomplish all goals and objectives are begun within three years of the Forest Plan EIS Record of Decision.
Desired Future Condition Implementation				**Desired Future Condition Implementation**
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.	Monitoring will commence immediately after implementation of the Forest Plan begins with a minimum of one formal annual field review performed for each Ranger District and continuous monitoring through management reporting systems.	Actions being performed that are outside the policies, standards, or guidelines detailed in the Desired Future Conditions.
Cumulative Effects Analysis				**Cumulative Effects Analysis**
Effectiveness monitoring of performance of cumulative affects 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 affects analyses prior to commencing programs, projects, or activities that might result in surface disturbance.	100 percent reliability is expected.	Monitoring will commence immediately after implementation of the Forest Plan begins with formal review of each cumulative affects analysis by the Core Planning Team and Forest Supervisor or Deputy.	Three years after the Forest Plan Record of Decision is signed, surface disturbing programs, projects, or activities are being performed prior to cumulative effects analysis.
Emerging Issues/Conflicts Analysis				**Emerging Issues/Conflicts Analysis**
Effectiveness monitoring of performance of emerging issues and resource conflicts — Priority 1.	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.	Monitoring will commence immediately after implementation of the Forest Plan begins with formal review at the discretion of the Forest Supervisor or Deputy.	An emerging issue or resource conflict will have the foreseeable impact of preventing accomplishment of a Forest Plan goal or objective or obstructing the implementation of Forest management direction.

Resource

Element and Priority	Monitoring Technique	Precision/Reliability	Frequency of Measurement	Deviation Requiring Further Evaluation or Change in Management
Recreation				**Recreation**
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.	Every two years.	Survey indicates a condition class 4 or 5.
Wilderness				**Wilderness**
Effectiveness monitoring of user impacts to determine if wilderness setting attributes are being maintained — Priority 2.	Record physical conditions of campsites.	80 percent.	20 percent of sites in each wilderness, each year.	Campsite condition deterioration to class 3 in Primitive or to class 4 in Semi-primitive.
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.	20 percent of trails and campsites annually.	An increase in trail encounters per day: 20 percent in excess of the established encounters per day specified by opportunity setting.

Element and Priority	Monitoring Technique	Precision/Reliability	Frequency of Measurement	Deviation Requiring Further Evaluation or Change in Management
Fisheries and Wildlife				**Fisheries and Wildlife**
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.	Update the GIS maps as projects are completed. Review 100 percent of all project Environmental Assessments. Field review 25 percent of completed projects.	+ or - 10 percent non-compliance with stated prescription, standard, or guideline; + or - 20 percent change in herd composition or a + or - 20 percent change in herd population after three years.
Implementation monitoring of compliance with interagency grizzly bear guidelines — Priority 1.	Ground check 75 percent of all active special use permits, outfitter-guide camps, recreationists, timber, grazing, and mineral operators temporary living facilities to ensure compliance with food storage and refuse disposal regulations in areas of grizzly bear habitat	Moderate.	Annually.	Any negative action that is discovered.
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.	Annually.	Any decrease in the population and average fledging rate of 1.1 per occupied nest.
Validation and effectiveness monitoring of Kendall Warm Springs dace populations and associated stream and riparian areas — Priority 1.	Periodic assessment of population numbers, effective fencing from livestock and from human disturbances as per the Kendall Warm Springs Dace Recovery Plan.	High.	Annually monitor to see if fences are maintained and people are not using the spring or removing the dace. State will monitor dace population.	Any changes in fence condition, human use of the spring, or dace population.
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.	Biannually.	20 percent on a 6-year average (three samples).
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.	Monitor habitats every five years. Do baseline counts of wildlife in riparian and old-growth MIS groups or guilds for five years prior to initiating actual population monitoring, then once every five years for riparian and old-growth habitats.	15 percent variation in population or habitat.
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.	Three to five years or as planned disturbances or activities are proposed.	Any change in plant density or distribution.
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.	Annually.	20 percent change in species habitat distribution or long term population declines.
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.	Annually with consideration of 5-year averages.	Two to five percent change in losses.
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.	Once every three to five years for transportation plan revision. As needed for site-specific projects.	Anytime the maximum amount of open roads, such as roads and trails with motorized vehicles, is exceeded or the open road density exceeds the upper bounds allowed for an area, except when approved in specific areas through the area analysis process.
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.	On going.	10 percent.
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.	Annually review 100 percent of all proposed and planned project environmental assessments, evaluated using the Bald Eagle Cumulative Effects Model, and consult with the U.S. Fish and Wildlife Service.	Any negative change in the percent of suitable habitat available to the bald eagle based upon the cumulative effects model and consultation.

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Element and Priority	Monitoring Technique	Precision/Reliability	Frequency of Measurement	Deviation Requiring Further Evaluation or Change in Management
Fisheries and Wildlife				**Fisheries and Wildlife**
Effectiveness monitoring of reintroduction of peregrine falcons — Priority 2.	Monitor hack-site performance and any natural aeries of peregrine falcons on the Bridger-Teton National Forest through surveying techniques.	High.	Annually.	Any decrease in the number of nesting pairs of peregrine falcons on the Bridger-Teton National Forest.
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.	As planned disturbances or activities are proposed and as cranes are observed in the vicinity of or on the Bridger-Teton National Forest.	Any negative actions.
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.	Inspection of improvements annually.	Change from the project design for the expected life of the project.
Validation monitoring of big game Management Indicator Species (MIS) — Priority 3.	Aerial/ground reconnaissance on winter range using State records.	Moderate.	Annually.	20 percent change.
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.	When observations are reported and also in conjunction with annual big game winter census flights.	If observations of animals, tracks or howling are verified.
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.	Update the GIS maps as projects are completed; review 100 percent of all project Environmental Assessments; field review 25 percent of completed projects.	+ or – 10 percent non–compliance with stated prescription, standard, or guideline.
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.	Every large sale and 10 percent of the small sales.	Continual non–compliance of 30 percent or greater.
Vegetation: Range				**Vegetation: Range**
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 *FSH 2209.14, Chapter 4*.	80 percent probability.	20 percent per year.	Change to downward trend or ecological status dropping one class.
Implementation monitoring of rangeland proper-use criteria — Priority 2.	Establish proper use criteria and monitor using techniques stipulated by allotment management plans.	80 percent.	At least once annually.	Exceeding standards established in allotment management plan.
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.	At least once annually.	Deviations from Annual Plans of Use.
Validation monitoring of range condition — Priority 2.	Update the range analysis on each allotment, big game winter ranges, and other rangeland areas.	80 percent.	10 percent per year.	Soil and plant conditions in a downward trend.
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.	Measured prior to treatment, second year after treatment, and fifth year after treatment.	Objectives of vegetation manipulation are not met within the project parameters.
Vegetation: Timber				**Vegetation: Timber**
Validation monitoring of reforestation of harvested areas — Priority 1.	Type 3 stand examination surveys for all reforested areas.	High.	Years one, three and five.	Less than the minimum stocking levels established in the management prescriptions.
Validation monitoring of land area suitable for timber harvest — Priority 1.	Timber volume inventory for all forested areas.	High.	Over 10 years after plan implementation.	None. Part of plan revision procedure.
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.	Years five and ten.	None. Part of the plan revision procedure.

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Element and Priority	Monitoring Technique	Precision/Reliability	Frequency of Measurement	Deviation Requiring Further Evaluation or Change in Management
Vegetation: Timber				**Vegetation: Timber**
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.	25 percent of the annual sales.	Any of the resource objectives described in the Environmental Assessment or Area Analysis are not achieved.
Validation monitoring of levels of forest pests — Priority 1.	Forest pest management surveys; stand exam inventories	High.	Annually.	Survey indicates an outbreak could become epidemic.
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.	Report at ten years.	20 percent or more deviation from predicted yields.
Minerals				**Minerals**
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.	5 percent ground verified; 20 percent office verified.	If over 5 percent of the area is incorrectly designated.
Effectiveness monitoring of reclamation — Priority 1.	Inspect all reclamation projects to evaluate surface conditions as specified in the reclamation plan.	100 percent.	Once per week during actual reclamation work. Every two years until site meets reclamation goals and objectives.	Backlog of inspecting would cause a reevaluation. Reclamation goals and objectives are not met.
Implementation monitoring of seismic operations — Priority 2.	Inspect seismic permittee operations for compliance with permit.	80 percent.	Based on length and type of program, minimum of one inspection per year.	Below standards established in the monitoring plan for the specific seismic project.
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.	Once weekly during construction and development phase. Minimum of twice a year during operation phase.	Below standards established in the operating plan.
Soil, Water, and Air				**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 *Region 4, Forest Service - USDA, Integrated Riparian Evaluation Guide.*	80 percent.	Level II during AMP update and area analysis and Level III on demonstration areas on biannual basis.	Riparian area management objectives are not met.
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: *Guidelines for Sampling Some Physical Conditions of Surface Soils, Howes S., Hazard, J., and Geist, M., Pacific Northwest Forest and Range Experiment Station, 1983.*	75 percent.	Monitoring will commence immediately following the conclusion of the management operation and will be conducted annually the following year and every alternate year to the fifth year after the conclusion of the management operation	Redisturbance of the site or unattainment of compaction, revegetation, or erosion control objectives.
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 *Bridger and Fitzpatrick AQRV Action Plan, Bridger-Teton National Forest, 1984.*	Given in Gen. Tech. Rpt.—146 cited above.	Annually.	Exceeding limit of acceptable change determined for each sensitive receptor.
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 commercial chemistry lab testing procedures and instruments.	Annually or when contamination suspected.	Exceeding applicable State of Wyoming and federal water quality standards.
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.	Monthly during season of use for biological testing and as needed for chemical.	Exceeding standards as prescribed by the U.S. Environmental Protection Agency.
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.	Monitoring will begin immediately following the burn and continue the year following the fire and for the next two alternate years thereafter.	Unacceptable recovery of the soil and water problems following application of rehabilitation treatments.

Page 332 does not exist

Element and Priority	Monitoring Technique	Precision/Reliability	Frequency of Measurement	Deviation Requiring Further Evaluation or Change in Management
Soil, Water, and Air				**Soil, Water, and Air**
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 mangement 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 *Stream Reach Inventory and Channel Stability Northern Region, Forest Service, USDA, 1978*, (2) Width to Depth Ratio, (3) Macroinvertebrate survey — see *General Aquatic Wildlife System (GAWS) Users Guide, Intermountain Region, Forest Service – USDA*, (4) Cobble Imbeddedness.	70 to 80 percent.	Monitoring will commence immediately prior to the conclusion of the management operations and the year following management operations and alternate years thereafter to the fifth year after the conclusion of the management operation.	<30 percent increase in channel stability rating; >20 percent increase in width/depth ration; >25 percent decrease in Biotic Condition Index.
Validation monitoring of lake chemistry — Priority 1.	Alkalinity water analysis computed using the Gran titration method.	95 percent.	Annually.	Bridger/Fitzpatrick Air Quality Related Value monitoring baseline as determined from samples taken after lake overturn in the fall season.
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 *National Handbook of Recommended Methods for Water Data Acquisition by U.S. Government Agencies, Office of Water Data Coordination, Geological Survey, U.S. Department of Interior*.	Variable depending upon intensity and duration of activity to be monitored.	Exceeding applicable State of Wyoming and federal water quality standards.
Validation and effectiveness monitoring of lake water quality — Priority 3.	Bacterial water sampling of selected lakes and streams in high use areas.	95 percent.	Initial and then once every five years.	If fecal coliform/fecal strep ration indicates human contamination, then additional water sampling will test for chlorophyll A, Pheophytin A, Ortho phosphate, total phosphate, and nitrate. See *Bridger Wilderness Lakes Water Quality Study, Bridger-Teton National Forest., 1978*.
Effectiveness monitoring of instream flow — Priority 2.	Measurement of instream flow for water development projects will be accomplished using accepted methodology. See *Region 4, Forest Service – USDA, Technical Guide and General Aquatic Wildlife Systems (GAWS)*.	80 percent.	As needed.	+/- 10 percent change in fish habitat; reduction in streamflow below that needed to transport 80 perceent of average sediment load.
Access: Roads				**Access: Roads**
Effectiveness monitoring of road closures — Priority 1.	Check such things as road closure effectiveness and maintenance needs.	High.	At least once annually or more frequently if needed.	Maintenance needs are not met, or closures are violated.
Effectiveness monitoring of road maintenance — Priority 2.	Condition surveys.	High.	Established by Traffic Service Levels.	A change by one condition class of the desired traffic service level.
Validation monitoring of traffic — Priority 2.	Measure road and trail traffic use and type of use through traffic count device, trail head surveys and traffic component sampling.	Medium.	Five percent of Forest use annually.	An increase of use exceeding traffic service level standards for roads. Trail use exceeds acceptable levels.
Facilities				**Facilities**
Validation monitoring of buildings — Priority 1.	Inspect building for health and safety problems, structural defects, maintenance needs, and energy conservation opportunities.	High.	Annually.	Hazards present, maintenance needs are not met or malfunctioning mechanical systems.
Validation monitoring of dam administration — Priority 1.	Inspect dams for unsafe conditions.	High.	Based on class and hazard of dam.	Detection of unsafe conditions.

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Amendments and Revisions

A comparison will be made of overall progress in 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, and

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

Chapter 6

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Introduction

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

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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 presented in Table A-1

Table A-1
Timber Resource Suitability

Not Suited

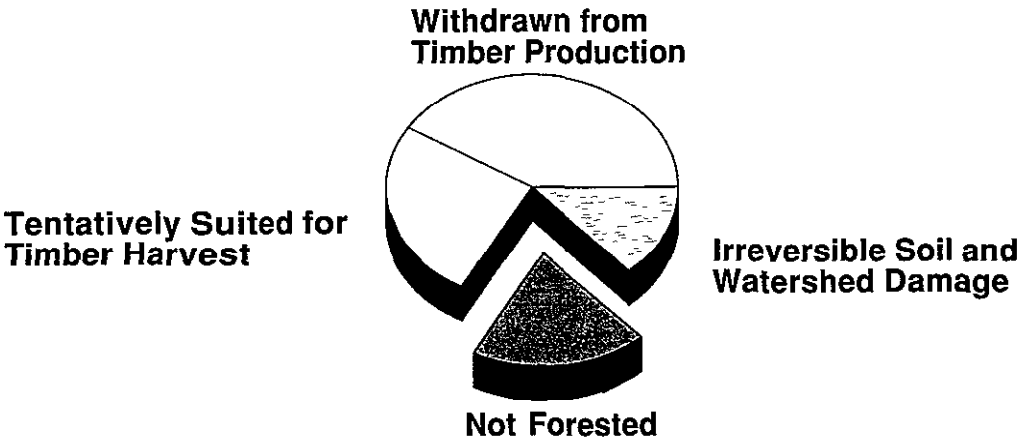
		Acres
Not Forest		667,800
Irreversible Soil and Watershed Damage and No Assurance of Adequate Restocking		452,700
Withdrawn from Timber Production		1,391,300
Wildernesses		
Bridger	413,700	
Gros Ventre	284,900	
Teton	583,500	
Wilderness Study Areas		
Palisades	76,800	
Shoal Creek	32,400	
Subtotal		**2,511,800**

Tentatively Suited for Timber Harvest 880,400

Lands Determined Suited		Timber Resource Opportunity First Decade Acres	MMBF/Yr
Direct Benefits Exceed Direct Costs	271,900	24,200	11 5
Meet Other Objectives (Non-timber/Local jobs)	7,500	4,000	0 2
Subtotal	**279,400**	**28,200**	**11.7**
Lands Determined Not Suited			
Additional Components			
1—Environmental Education — DFC 8	11,900	700	0 5
2—Aspen Managed for Type Perpetuation	169,500		
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			
Subtotal	**601,000**	**21,600**	**9.2**

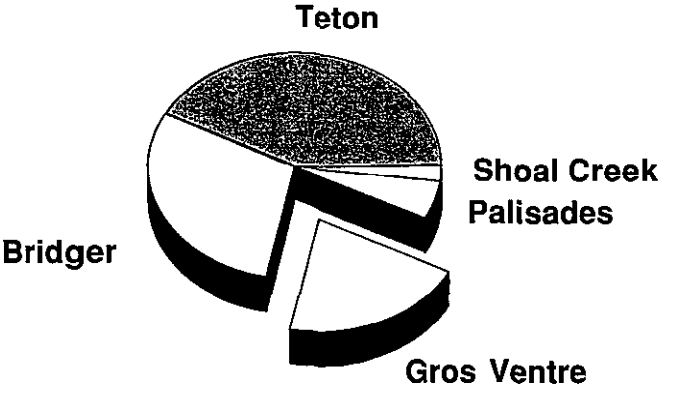
Total National Forest Lands 3,392,200

Figure A-1
Timber Resource Suitability



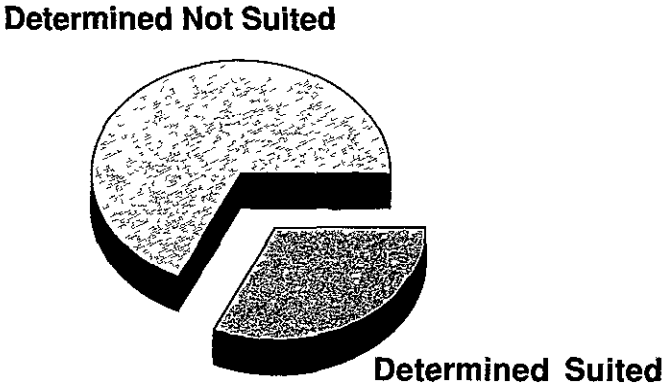
Irreversible Soil and Watershed Damage - 452,700 Acres
Not Forested - 667,800 Acres
Tentatively Suited for Timber Harvest - 880,400 Acres
Withdrawn from Timber Production - 1,391,300 Acres
Total National Forest Lands - 3,392,200 Acres

Figure A-2
Lands Withdrawn from Timber Harvest



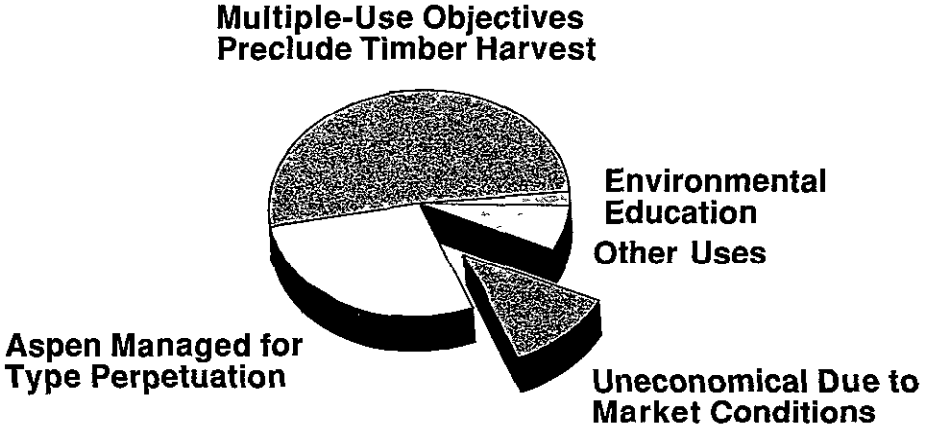
Shoal Creek Wilderness Study Area - 32,400 Acres
Palisades Wilderness Study Area - 76,800 Acres
Gros Ventre Wilderness - 284,900 Acres
Bridger Wilderness - 413,700 Acres
Teton Wilderness - 583,500 Acres
Subtotal - 1,391,300 Acres

Figure A-3
Lands Tentatively Suited for Timber Harvest



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



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 - 169,500 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.

Table A-2
Timber Program

Output/Activity	Units	Decade 1	2	3	4	5
Allowable Sale Quantity	MMCF	2 4	2 4	4.3	4 3	4 3
	MMBF	11 7	11 7	21 3	21.3	20 6
Silviculture System· Clearcut	Acres	290	110	540	590	350
Silviculture System Shelterwood	Acres	300	410	360	510	390
Silviculture System Selection	Acres	2240	3100	3680	3150	3710
Salvage	MMCF	0 9	0.9	1.7	1.7	1 6
	MMBF	4 1	4.1	7.5	7.4	7 2
Roundwood	MMCF	0 1	0 1	0 1	0.1	0 1
	MMBF	0 4	0.4	0 6	0.6	0 6
Fuelwood – Green	MMCF	0 4	0.2	0 8	0 9	0 6
	MMBF	2 0	1 1	3 6	3 9	2 9
Fuelwood – Dead	MMCF	0 2	0 2	0 2	0.2	0 2
	MMBF	1 1	1 1	1 1	1 1	1 1
Total Timber Sale Program	MMCF	4 1	3 9	7.1	7 2	6 9
	MMBF	19 2	18 3	34 1	34.4	32 4
Inventory on Suited Lands	MMCF	63 2	63 1	62 8	61 9	62 2
Growth on Suited Lands	MMCF	2 3	2 1	3 5	4 6	5 2
Long-Term Sustained Yield (LTSY) – After 5 Decades						11 8
Growth as a Percentage of LTSY After 5 Decades						44 0%

Opportunities and Activities CIA 1

Opportunities and Activities (Units)	Number
Recreation Construction/Reconstruction (Projects)	5
Pacific Creek Campground	
Moccasin Basin Trailhead	
Teton View 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)	39
Road Reconstruction (Miles)	0
Grazing (Animal Unit Months)	270,000
Timber Harvest (Millions of Board Feet)	24

	Years After Plan Implementation		
Management Area	1-3	4-5	6-10
45		3	9
61, 62, 71	6	4	2

Watershed Restoration Program (Acres)	
Rosies Ridge	15
Davis Hill	8
Sheffield Creek	10
District Wilderness Trails	23
North Fork Fish Creek	48
South Fork Fish Creek	10
Moccasin Basin	12

Opportunities and Activities CIA 2

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	4
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	1-3	4-5	6-10
43, 46			1

Watershed Restoration Program (Acres)	
Red Hills	39
Red-Cottonwood Creek	8
Lightning Creek	10

Opportunities and Activities — CIA 3

Opportunities and Activities (Units)	Number
Recreation Construction/Reconstruction (Projects)	10
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 — Pitchard 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)	335
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)	180,000
Timber Harvest (Millions of Board Feet)	4

	Years After Plan Implementation		
Management Area	1-3	4-5	6-10
41, 42, 49	1	1	2

Watershed Restoration Program (Acres)	
Fall Creek	28

Opportunities and Activities CIA 4

Opportunities and Activities (Units)	Number
Recreation Construction/Reconstruction (Projects)	12
Continental Divide S M Trailhead Toilet	
Continental Divide S M Trailhead	
Willow Creek Trailhead	
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)	171
Wildlife/Fish Structural Habitat Improvement (Structures)	
Access Management	
Teepee Creek Gates	2
Little Sheep Mountain Gates	1
Coop T S Gates and Barriers	36
Kendall Warm Springs Dace Enclosure Fence	1
Kendall Dace and Riparian Exclosures	3
Trumpeter Swan Habitat — Mud Lake	1
Upper Green River Habitat Improvement	250
Meadow Creek Bank Stabilization	5
Tosi Creek Habitat Improvement	10
Tepee Creek Habitat Improvement	15
Klondike Creek Habitat Improvement	10
Gypsum Creek Habitat Improvement	10
Klondike Creek Dam Construction	1
Big Sandy River Habitat Improvement	10
Kendall Warm Springs Dace Fence Reconstruction	6
Kendall Warm Springs Dace Culvert Replacement	1
Rock Creek Habitat Improvement	10
Leads Creek Habitat Improvement	38
Additional Structures After 5 Years	400
Wildlife/Fish Non-Structural Habitat Improvement (Acres)	
Aspen/Sagebrush/Willow Burns	
Beaver-Twin Creek/Badger Creek	1,000
McDowell Flat and Soda Lake	54
West Squaw	470
Aspen Clearcuts	
Squaw Creek	50
McDowell Flat	70
Pole Creek	24
Packer Creek	30
Willow Lake Rim	200
Willow Burn — Upper Green River/Klondike Creek	160
Conifer Burn — Big Sheep Mountain/Mount Osborn and Triple Divide	500
Additional Acres Treated (To be determined in project analyses)	660

Opportunities and Activities CIA 4

Opportunities and Activities (Units)	Number
Range Improvements Water Development (Units)	15
Range Improvements Forage Improvement (Acres)	2,270
Range Improvements Fence (Miles)	40
Road Construction (Miles)	15
Road Reconstruction (Miles)	5
Grazing (Animal Unit Months)	900,000
Timber Harvest (Millions of Board Feet)	5

	Years After Plan Implementation		
Management Area	1-3	4-5	6-10
72	1	2	1
74	0 2	0 2	0 6

Watershed Restoration Program (Acres)	
Tepee Creek	64
Red Creek	40

Opportunities and Activities CIA 5

Opportunities and Activities (Units)	Number
Recreation Construction/Reconstruction (Projects)	21
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 Area	1-3	4-5	6-10
32	4	2	13
35	3	3	14
31	2	1	1

Watershed Restoration Program (Acres)	
Stewart Creek	85
Deadman Creek	27
North Fork Sheep Creek	125
Corral Creek Pass	47

Opportunities and Activities — CIA 6

Opportunities and Activities (Units)	Number
Recreation Construction/Reconstruction (Projects)	18
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)	
Aspen Regeneration	685
Big Game Winter Range (Elk, Mule Deer) Sagebrush Hand Grubbing — Star Valley Front	60
Sagebrush Treatment (Sharptail, Sage Grouse, Elk) — Gannett Hills	110
Salt River Pass Timber Sale	30
Swift Creek Rehabilitation	
Dredge Lower Dam	3
Dredge Upper Dam	1
Additional Acres Treated (To be determined in project analyses)	195
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

	Years After Plan Implementation		
Management Area	1-3	4-5	6-10
34	0 6	0 5	0.7

Opportunities and Activities

CIA 7

Opportunities and Activities (Units)	Number
Recreation Construction/Reconstruction (Projects)	9
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)	
Bowlsby Lake Waterfowl Improvement	13
Bowlsby 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.	
Apperson Creek	26
Cliff Creek	35
Middle Piney Creek	10
Beaver Country	10
Stream Barrier Removal — Middle Beaver Creek	2
Trumpeter Swan Nesting Habitat Enhancement	
Jack Creek Pond	1
North Horse Creek Beaver Pond	2
Nylander Creek	16
Additional Structures After 5 Years	140
Wildlife/Fish Non-Structural Habitat Improvement (Acres)	
Aspen/Sagebrush Burning (Elk, Mule Deer, Moose)	
South Cottonwood Creek	100
Middle Beaver Creek	100
Avalanche Path Burning (Elk, Mule Deer, Bighorn Sheep) — Mount Darby	378
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
Range Improvements Water Development (Units)	5
Range Improvements Forage Improvement (Acres)	2,800
Range Improvements Fence (Miles)	19
Road Construction (Miles)	0
Road Reconstruction (Miles)	3

Opportunities and Activities CIA 7

Opportunities and Activities (Units)			Number
Grazing (Animal Unit Months)			59,000
Timber Harvest (Millions of Board Feet)			23
		Years After Implementation	
Management Area	1-3	4-5	6-10
21, 23	0 2	0 3	0 5
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

Opportunities and Activities CIA 8

Opportunities and Activities (Units)	Number
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	
Salt Creek	20
Coantag Creek	20
Hobble Creek	40
Wildlife/Fish Structural Habitat Improvement (Structures)	
Access Control (Gates)	
Coantag Creek #35	1
West Branch #36 and #37	2
Grindstone Creek #23 and #24	2
Shafer Creek #40	1
Nugent Park Ridge #3	1
Basin Creek	2
Tri-Basin	1
Middle Ridge	2
Pothole Blasting for Waterfowl — Hams Fork River/Fontenelle Creek	5
Nesting Structures (Bald Eagle/Osprey) — Lake Alice	10
Bank Stabilization and Instream Habitat Improvement	
Hams Fork River/Fontenelle Creek	10
Hobble Creek	40
Nameless Creek	20
Fish Migration Barrier and Interpretive Sign — Nameless Creek	1
Bonneville Cutthroat Trout Habitat Improvement	
Salt Creek	20
Coantag Creek	20
Colorado River Cutthroat Trout Habitat Improvement — District-wide	20
Additional Structures After 5 Years	160

Opportunities and Activities CIA 8

Opportunities and Activities (Units)	Number
Wildlife/Fish Non-Structural Habitat Improvement (Acres)	
Aspen/Sagebrush Treatment	
Lower Salt Creek	164
LaBarge	100
Little Hornet	200
Aspen/Sagebrush Treatment — Fontenelle	200
Willow Treatment	
Fontenelle	290
Hams Fork	100
LaBarge	10
Sawmill Creek	1
Nameless Creek	1
Salt Creek	1
Aspen Clearcutting	
Basin Creek	40
Sams-Allen	20
Pole Creek	20
Minnie Holden	100
Closure Signs for Nugent Park Winter Range	10
Riparian Planting	
Sams-Allen	10
Coal Creek (Howland Creek)	5
Additional Acres Treated (To be determined in project analyses)	275
Range Improvements Water Development (Units)	42
Range Improvements Forage Improvement (Acres)	83,000
Range Improvements Fence (Miles)	7
Road Construction (Miles)	24
Road Reconstruction (Miles)	12
Grazing (Animal Unit Months)	260,000
Timber Harvest (Millions of Board Feet)	15

	Years After Plan Implementation		
Management Area	1-3	4-5	6-10
12	2	2	4
13	3	1	3

Watershed Restoration Program (Acres)	
Devils Hole	336
Poker Creek	860
Sams Coal Creek	2751
Big Park	125
Nugent Park	108
Beaver Creek	172
Hams Fork Basin	1,700

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

User's Guide to Appendix B

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Introduction	1
Lease Form	2
Stipulations	2
"Standard" Lease Stipulation	2
Uniform Stipulation Formats	3
Stipulation Apllications	7
Court Ordered or Administratively Required Stipulations	10

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/operat-ing 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.

_____
Signature of Licensee/Permittee/Lessee

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

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 finding 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.*

Appendix B

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

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 documentedin 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 forseeable 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:

November 15 to April 30

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*

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

Appendix B

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

Appendix B