

CHAPTER IV
FOREST MANAGEMENT DIRECTION

A. INTRODUCTION

The Forest Plan provides the long-range management direction for the Dixie National Forest. Direction is the guidance Forest personnel will use to achieve the results the Plan outlines. This chapter, by outlining that direction, will inform the public and other agencies about future programs.

Chapter IV includes:

- A - Introduction
- B - Forest multiple use goals and objectives
- C - Projected outputs and budget requirements
- D - A description of the desired future condition of the Forest
- E - Forest-wide standards and guidelines
- F - Management area standards and guidelines
- G - Proposed and probable management practices

B. FOREST MULTIPLE USE GOALS AND OBJECTIVES

The goals and objectives define the direction of Forest-wide management. Goals are broad definitions of what will be achieved, while objectives are aimed at achieving those goals. By implementing the Forest Plan, the goals and objectives are translated into on-the-ground results.

1. Recreation

Goal No. 1. Provide a broad range of outdoor recreation opportunities for all segments of the public.

Objectives

- a. Program to add facilities with a capacity of 875 PAOT to the current 5895 PAOT by 2020.
- b. Bring the condition of Developed Recreation facilities to condition classes 1 or 2 by 2000.
- c. Bring the Recreation Facilities water and sewage systems to applicable State standards by the year 2000.
- d. Recreation residences at Pine Valley and Navajo Lake will remain with current management direction unless a higher use for the area develops.

Direction

- a. Where possible provide group opportunities adjacent to communities. Maintain group recreation opportunities in proportion to demand.
- b. Regulate the opening and closing dates of facilities to serve the public in an efficient and economical manner.

- c. Develop and implement a vegetative prescription for each developed site.
- d. Rehabilitate and define the following sites to accommodate increased use:

1985-1995 Spruces - 160 PAOT, Cedar Canyon - 95 PAOT
1995-2005 Duck Creek - 395 PAOT
2005-2015 Juniper Park - 110 PAOT, Blue Springs - 100 PAOT
2015-2025 Kings Creek - 225 PAOT
2025-2035 Te-Ah - 210 PAOT

Develop the following new sites to accommodate increased use:

1985-1995 Deer Creek - 250 PAOT
1995-2005 Blue Springs Point - 250 PAOT
2005-2015 Pine Valley - 250 PAOT
2015-2025 Fish Creek Lake - 125 PAOT

Goal No. 2. Allow private sector to accomplish desired high capital investment recreation opportunities to meet recreation demand after the year 2015.

Objectives

- a. Inventory suitable sites that can be managed by organizations (other than the Forest Service) and make one available via prospectus by 1995.
- b. Provide private industry the opportunity to develop cross-country ski touring and snowmobile centers in conjunction with developed ski areas and private land development.
- c. Cooperate with private industry in developing and maintaining snowmobile and Cross Country ski trails on National Forest Lands.
- d. Encourage private and other government entities to provide camping and picnic facilities on private land within and adjacent to the National Forest.

Direction

- a. Meet more of the demand for downhill skiing by allowing additional facilities within the permitted area at Brianhead in accordance with the master plan.
- b. Crystal Mountain has included in its proposed master plan its interest in development of Navajo Ridge for downhill skiing. Crystals downhill ski proposal will require further study and support of an environmental analysis.
- c. Any Additional ski area proposals on the Forest will be evaluated via NEPA.

Goal No. 3. Provide a broad spectrum of low cost dispersed recreation opportunities.

Objectives

- a. Provide ORV Roads and Trails, winter snow play areas, hunter camp areas, recreation stock trail heads, and others as needed.

b. Develop and publish recreation guides to regulate use and provide a service to the recreationist.

Goal No. 4. Encourage other landowners to provide dispersed recreation opportunities.

Goal No. 5. Provide a trail system adequate to disperse recreation users and prevent overuse in popular areas, and provide safety for the user and provide for more year around use of the Forest.

Objectives

- a. Develop a summer and winter trail management plan.
- b. Provide a trail system consisting of 690 miles of summer trail.
- c. Provide a trail system consisting of 70 miles of trails for Cross Country skiing and snowmobiling.
- d. Program Trail Construction Funds to reconstruct or construct 30 miles of trail each decade.
- e. Build trailheads at East Hunt Creek, Deer Creek, Chriss Lake, Oak Creek Reservoir, and Blind Lake.

Goal No. 6. Provide a system of managed cross-country ski and snowmobile trails with adequate trailhead facilities.

Objective.

Develop winter sports parking in cooperation with the State Department of Park and Recreation, and the State Department of Transportation at the following areas: Midway 1990, Navajo Lake 1990, Strawberry-Uinta Flat 2000, Pine Valley 2000, Park Pasture to Sunflower Flat, Tom Best Road and U-12 and East Fork of Sevier 2000.

Goal No. 7. Provide opportunities for the use of off-road motor vehicles where they will not unacceptably impact Forest resources or unnecessarily impact other Forest users.

Objective

Review the travel plan annually and revise as necessary. The most current revisions will become a part of the management direction for the Forest Plan.

Goal No. 8. Provide for a pleasing visual landscape.

Objective

Rehabilitate or mitigate visually unacceptable conditions or facilities on the Forest by 2000. Inventory the unacceptable areas by 1990.

Goal No. 9. Protect the cultural resources located on the National Forest from land disturbing activities and public vandalism.

Objectives

a. Complete an inventory of all cultural resources on National Forest Land identified as having a high or moderate potential by 2000. Nominate qualifying significant sites for the National Register.

b. Develop an overview and a plan for all unevaluated sites and sites determined eligible and the interpretation, protection, and maintenance of sites nominated to the National Register within one year of the property's listing.

c. Complete a cultural resources overview before the next plan iteration.

Goal No. 10. Preserve the natural ecosystems in Research Natural Areas.

Goal No. 11. Coordinate recreation programs with local, county, state and other Federal recreation agencies.

Objectives

Work with the National Park Service, Bureau of Land Management, and State Parks to determine recreation needs along the Boulder-Grover Road.

Nominate U-14 Highway and Boulder-Grover Road as scenic highways by 1990.

Coordinate with other Federal and State agencies to determine what agency may best meet recreation demands.

2. Wilderness

Goal No. 12. Manage designated Wilderness Areas in accordance with National Wilderness Act of 1964 and the Utah Wilderness Act of 1984.

Objectives

a. By 1990 develop and implement a wilderness management plan which describes specific conditions to accomplish planned objectives in the Wilderness Areas.

b. Provide adequate trail and trailhead facilities to accommodate increased use of wilderness.

Direction

a. Construct 12 miles of new trail to access Box Death Hollow by 1995.

b. Evaluate and reconstruct, as needed, the major access trail to Ashdown Gorge and Pine Valley Mountain Wilderness by 1995.

c. Provide trailhead facilities as follows: Whipple - 2000, Forsythe - 1990, New Harmony - 1990, Oak Grove - 2000, Crystal Spring - 2010, Rattlesnake - 2010, Hells Backbone - 2000, Pine Creek - 2010, Blue Spruce - 2000, and Twisted Forest 1990.

3. Wildlife and Fish

Goal No. 13. Coordinate Fish & Wildlife Program with Utah DWR.

Objective

Conduct periodic meetings with Utah DWR to discuss and plan projects that may have effects on fish and wildlife habitat populations. Special emphasis will be on MIS and other selected wildlife species.

Goal No. 14. Improve the quantity and quality of aquatic habitats through direct habitat improvement and increased coordination with other land use programs.

Objectives

a. Improve aquatic habitat by developing/improving an average of 30 structures and 100 acres yearly during the period 1986 to 1990.

b. Improve aquatic habitat by developing/improving an average of 125 structures and 210 acres annually during the period 1990 to 2030.

c. Improve the aquatic habitat in approximately 20 lakes during the period from 1990 to 2000, and assist in the correction of Panguitch Lake eutrophication problems by 2030.

d. Provide aquatic habitat analysis input for timber sales, road construction projects, range allotment plans and recreational developments. Also provide input on non-Forest activities that affect the Forest such as dam construction, hydropower developments, and water rights adjudication.

e. Improve the Forest aquatic habitat data base for project and land use planning by completing aquatic inventories using GAWS and R-1 stream channel stability ratings on stream orders Class 3 and higher by 1990. Complete inventory on all streams by 1995. Inventory all lakes which have fisheries potential by 1995.

Goal No. 15. Maintain or enhance the terrestrial habitat for all wildlife species that presently occur on the Forest.

Objectives

a. Improve an average of 650 acres of wildlife habitat annually and construct an average of 6 structures annually during the period 1986 through 1990.

b. Improve an average of 700 acres of wildlife habitat and construct an average of 17 structures annually between 1990 and 2030.

- c. Provide wildlife habitat analysis input to Forest planning as required to maintain current wildlife outputs.
- d. Complete special habitat inventories using Regional guidance by the target dates specified for each of the following special habitats: riparian, 1987; old growth, 1989; aspen, 1990.
- e. Provide wildlife habitat analysis input to Forest Service and non-Forest Service land management activities that will affect the wildlife resources.

Goal No. 16. Maintain or improve the current capacity of big game winter ranges on National Forest lands.

Objectives

- a. Objectives a. and b. of Goal No. 14 are applicable to meeting this goal.
- b. By 1990, restrict or eliminate vehicular traffic (including over-the-snow vehicles) from November 1 through May 1 on identified critical winter ranges.

Goal No. 17. Manage classified species (bald eagle (E), peregrine falcon (E), Utah prairie dog (T), Astragalus perianthus (E), Bonneville cutthroat trout (S), Colorado River cutthroat trout (S), (E = Endangered, T = Threatened, S = Sensitive) habitat to maintain or enhance their status through direct habitat improvement and agency cooperation.

Objectives

- a. Monitor population status of the peregrine falcon and bald eagle annually.
- b. Cooperate with Utah Division of Wildlife Resources in the delisting of the Utah prairie dog by 1995.
- c. Give priority to structural habitat improvement work for Bonneville cutthroat trout. Complete all necessary improvements in identified Bonneville cutthroat habitat by 1990.
- d. Complete inventory of sensitive plant and animal species on the Forest to determine their status by 1990.

4. Range

Goal No. 18. Continue to improve management on all allotments.

Objective

Manage all allotments to maintain suitable range presently in satisfactory condition, and improve suitable range that are less than satisfactory condition so that all suitable range is in at least the "Fair" condition class by 2030.

Goal No. 19. Cooperate with counties and other land managers in controlling noxious weeds specifically, Scotch, musk and Canada thistle.

Goal No. 20. Manage the North Hills Wild Horse Herd in cooperation with BLM according to the Wild Horse and Burro Act and the approved plan.

Goal No. 21. Eliminate conflicts between livestock and wildlife for forage on critical big game winter ranges by revolving in favor of wildlife.

Goal No. 22. Maintain an effective predator control program in cooperation with the U.S. Fish and Wildlife Service and State agencies.

Goal No. 23. Manage recreation horse use so as to not overgraze meadows traditionally used by recreationists.

5. Timber

Goal No. 24. Emphasize harvesting productive sawtimber stands that are highly or moderately susceptible to attack by the mountain pine beetle and other forest pests.

Goal No. 25. Harvest timber in coordination with other resources

Objectives

a. Most Retention and Partial Retention Visual Quality Areas will be harvested using shelterwood or selection methods. Some small clearcuts may be made to benefit other resources, or for pest management when visual objectives can be met.

b. Timber sale and timber stand improvement activities will provide for the eradication of dwarf mistletoe while meeting visual quality standards in most cases.

c. Ponderosa pine, Engelmann spruce, subalpine fir and Douglas-fir will be harvested by shelterwood cutting where feasible. Aspen will be harvested primarily by clearcutting.

d. Some sawtimber may be harvested on slopes between 40 and 70 percent by cable or other overhead systems where it is economically feasible and can be accomplished without damaging the soils, visual quality or other resource values.

Goal No. 26. Improve the growth rate in timber stands through silvicultural treatment.

Objectives

a. Precommercially thin timber stands where numbers of saplings and poles prohibit free growth of crop trees to a reasonable commercial diameter

b. Schedule timber sales and other silvicultural treatments to convert mature timber with insect or disease problems, poor quality, and/or low value species to young, thrifty stands of high value species.

c. Use the small sales program and non-convertible product sales to intensify silvicultural management on small areas not conducive to large sales or contracts.

d. Initiate a program to release conifer understories overtapped by aspen.

Goal No. 27. Promote the utilization of insect killed trees, forest debris, slash and unmerchantable green trees through an aggressive, coordinated firewood sales program.

Objectives

a. Continue balanced personal use and commercial fuelwood programs at levels consistent with fuels management objectives and meeting projected fuelwood demand.

b. Design timber sales to provide access for fuelwood gathering where consistent with wildlife and visual objectives.

c. Design sales of green softwoods and aspen to accomplish silvicultural, fuel management, wildlife and other resource management goals.

Goal No. 28. Required short-term and intermittent timber sale roads will be constructed to the minimum standard necessary to accommodate logging traffic.

Objectives

a. A short-term local system road will be used when access is not needed beyond three years after the sale.

b. A road needed longer than three years after the sale for firewood, future timber harvest, cultural treatment or other resource development, but will not be open for continuous public use, will be managed as an intermittent service road.

6. Soil and Water

Goal No. 29. Provide water and soil guidance to other resource activities to protect or improve water quality and quantity and soil productivity.

Objectives

a. Identify and adopt best management practices applicable to the Forest and monitor effects on soil erosion and water quality in accordance with Public Law 92-500.

b. Comply with State water quality standards during land management activity.

c. Manage riparian areas according to the Riparian Management Standards and Guidelines. Protect or improve riparian dependent resources during management activities within or affecting riparian areas.

d. Protect municipal water supply watersheds.

Goal No. 30. Continue to improve and update soil and water resource inventories of the Forest to improve interpretations for management.

Objectives

- a. Complete order three soil survey for the Forest in cooperation with the National Cooperative Soil Survey Program.
- b. Complete water resource inventory on all watersheds.

Goal No. 31. Secure and quantify instream flows needed for National Forest purposes, including maintenance of favorable conditions of water flow.

Objectives

- a. Complete a water uses inventory for the Forest and update annually.
- b. Secure instream flows of perennial streams needed to maintain channel capacity to transport water and sediment, and to provide for wildlife, vegetation, and scenic diversity.

Goal No. 32. Design and implement practices on the ground that will reestablish acceptable soil, hydrologic, and vegetative conditions that are sufficient to secure and maintain favorable water flow.

Objectives

- a. Keep the watershed restoration project inventory up-to-date and complete the existing backlog of watershed restoration projects by 2000.
- b. Give priority to problem areas in high value watersheds and where accelerated erosion exists or is rapidly increasing.

Goal No. 33. Increase water yields where possible through timber harvest program when consistant with other multiple-use goals.

7. Minerals

Goal No. 34. Integrate the exploration and development of mineral and energy resources on the Forest with the use and protection of other resource values.

Direction

Administer in conjunction with Bureau of Land Management (BLM) leasable mineral activities (oil and gas, coal, geothermal, phosphate) under joint operating plan. Conduct periodic inspections to insure compliance with surface protection and reclamation requirements of the lease and the approved plan of operations. Work through BLM to correct unacceptable activities.

Mineral rights under substantial portions of the Forest are reserved to private parties or the State of Utah. Rights of access and development must be recognized in the administration of these areas of the National Forest.

Goal No. 35. Administer the mineral resources of the Forest to provide for needs of the American people and to protect and conserve other resources.

Objective

Inventory common variety mineral materials basically accessed from along arterial and collector roads by 1990.

Goal No. 36. Respond to mineral activity requests in a timely manner which complies with time limits established in the Interagency Agreement between Bureau of Land Management and Forest Service for mineral leasing, dated 6/19/84.

Objective

Program to accomplish mineral case reviews and decisions within one year.

8. Lands

Goal No. 37. Achieve the landownership best suited managing the resources of the Forest.

Objectives

Program to accomplish two land exchanges per year to improve landownership patterns and reduce management costs.

Direction

- a. Cooperate with the State of Utah to achieve land adjustments beneficial to both.
- b. Consider National Forest lands for a BLM/Forest Service interchange.

Goal No. 38. Locate and mark National Forest boundaries.

Objective

Survey and post 30 miles of property lines annually.

Goal No. 39. Provide access to National Forest lands needed for public use administration, and permittee activities.

Objective

Acquire road and trail rights-of-way as needed to provide reasonable access in accordance with the Forest rights-of-way acquisition program.

Goal No. 40. Protect National Forest lands from trespass and undesirable appropriation.

Objectives

- a. Develop and implement a monitoring system to identify occupancy trespass by 1988 and initiate action to resolve trespass (Goal No. 41).

- b. Evaluate existing withdrawals in accordance with FLPMA and BLM regulations by 1989.
- c. Recommend revocation of withdrawals no longer needed to protect National Forest surface resources by 1992.
- d. Sites where future high investments (NFRS sites, administrative sites, and downhill ski areas) are planned and where mineral potential is high, will be evaluated for withdrawal from mineral entry.

Goal No. 41. Resolve encroachment and title claims.

Objective

Use Small Tracts Act and other authorities to resolve encroachment and title claims.

9. Facilities

Goal No. 42. Manage Forest communication system in accordance with the Forest Communications Plan.

Objectives

Provide a communications system adequate to ensure efficient, Forest-wide communications.

Goal No. 43. Administrative Sites and Buildings. Develop a management program for the operation and maintenance of administrative sites, buildings, and work centers needed for the economical and efficient administration of the Forest.

Objectives

- a. Inventory possible work center sites by 1986 and construct work centers needed to facilitate resource outputs by the year 1990.
- b. Reduce the number of buildings to conform to the Forest needs as projected by the facilities management plan.
- c. Correct health, safety, and sanitation deficiencies at all sites by FY 1990.
- d. Have approved site plans for all facilities by the year 1990.

Goal No. 44. Transportation - Develop a road management program to maintain a safe, economical, functional, and environmentally sound transportation system that serves the resource elements.

Objectives

- a. Complete development of a road management program by the year 1988.
- b. Complete condition surveys and establish design criteria for all collector and arterial roads by 1988.

- c. Begin monitoring traffic on priority collector and arterial roads by 1988 and have a full scale traffic monitoring program operational by the year 1990.
- d. Complete Forest-wide detailed transportation analysis consistent with the resource needs and financial constraints by 1990.
- e. Complete reconstruction of the basic collector and arterial road system by the year 2010. Upgrade maintenance to a minimum level of "3" as reconstruction is completed.
- f. Develop an active fuelwood access program by the year 1988.

10. Protection

Goal No. 45. Develop a well planned and executed fire protection and fire use program that is cost efficient and responsive to land and resource management goals and objectives.

Objectives

- a. There will be only one Fire Management Action Plan for the Forest. Specific Action and manning Plans and Annual Mobilization and Operation Plan are chapters within the Action Plan.
- b. Include provisions in all permits and use authorizations for fire prevention and suppression.
- c. Cooperative fire protection will be emphasized to provide for joint fire protection through offset agreements, and combined fire forces.

Goal No. 46. Through cost effective analysis, develop an active fire prevention program with cooperating agencies that is directed towards specific areas and causes based on probability of occurrence, damages expected, and program costs.

Objective

Develop a cooperative fire prevention plan for the area by the 1987 fire season and update annually.

Goal No. 47. Maintain fire suppression capabilities which allow an appropriate suppression response to all wildfires.

Objectives

- a. Provide preplanned fire suppression action on all wildfires which is cost effective and protects life and property.

b. Each wildfire ignition will receive an appropriate response (confinement, containment or control). Suppression intensity and extent will be based on resource values, costs, burning conditions, safety, protection of private property, fire organization commitment and a current National Fire Management Analysis.

Goal No. 48. Establish and maintain fuel mosaics which result in an acceptable hazard and spread potential of wildfire, allow an appropriate wildfire suppression, and coordination to other resource programs and objectives.

Objectives

- a. Use prescribed fire when cost effective to achieve vegetative manipulation objectives such as for other resources including timber, range, and wildlife.
- b. Utilization (fuelwood) will be stressed as the primary method of fuel reduction with follow-up disposal by other means as needed.
- c. Continuous fuel types, especially in areas where activity created fuels have been added to natural fuels, will be broken up into blocks of forty acres or less by use of roads, constructed fuel breaks or fuel reduction corridors.
- d. Vegetative modification projects should be designed to break-up continuous fuel types and serve as fuelbreaks.

Goal No. 49. Provide adequate law enforcement to protect National Forest resources and property.

Objectives

- a. Inform the public of laws and regulations by:
 - Posting all recreational sites and areas of concentrated use.
 - News releases to the media.
 - Personal contacts with individuals and groups.
 - Other notices and signs.
- b. Keep law enforcement people visible by:
 - Recreation patrolman in uniform.
 - Identified vehicles.
 - Proper identification.
- c. Cooperate with other law enforcement agencies.
- d. Adequately train all law enforcement personnel.
- e. Maintain a special agent assigned to the zone.
- f. Have at least one trained law enforcement officer (Level II) on each Ranger District and one Level IV on Forest.
- g. Determine workload by reporting all known violations.

- h. Investigate all man-caused fires, thefts, acts of vandalism, and threats, intimidations, or assaults and battery against Forest Officers.
- i. Provide protection of funds collected and to employees collecting fees.
- j. Enforce regulations concerning campground fees.
- k. Monitor use in campgrounds and dispersed areas to ensure proper use of and protection of resources.

11. Public Information

Goal No. 50. Resource Management - Inform the public of National Forest resource management as related to the national and local economy.

Objectives

- a. Emphasize resource management as a cost-effective activity.
- b. Relate the information to the management direction as established in the Forest Plan.

Goal No. 51. Visitor Information Support - Provide interpretive service programs to help resolve management conflicts and increase public understanding of National Forest management.

Objectives

Provide safe and enjoyable use of recreation opportunities by:

- Stress the use of volunteers to supplement the Forest information program and to improve visitor contacts.
- Provide visitor information services at all Ranger District offices, and the Forest Supervisor's Office.
- Provide and participate in appropriate public displays or events.
- Complete timely updates of important Forest publications including Forest recreation maps and Travel Plan maps.
- Continue development and increase availability of the Recreation Opportunity Guide by 1990.

Goal No. 52. Environmental Education - Support the environmental education efforts of the local school systems.

Objective

The Forest will coordinate development of Environmental Education sites and curriculum, but the programs will be administered by the participating schools.

Goal No. 53. Public Involvement - Insure appropriate public participation in National Forest planning and decision making.

Objectives

Maintain full contact with all government and special interest groups and the general public by:

- Maintaining contact with state government units,
- Maintaining contact with the state legislators,
- Maintaining contact with congressional delegation,
- Maintaining contact with all counties and municipalities within or adjoining the Forest,
- Maintaining contact with all identified special interest groups including industry, environment, recreation, and permittee,
 - Maintaining local contacts will be District Rangers' responsibility.
 - Ensuring adequate public notification by mass media, personal contact, and direct mail to allow the public to participate.

Goal No. 54. Increase and maintain service to the public.

Objectives

- a. Increase public contacts in the field.
- b. Emphasize the HOST Program and "Service" concept through employee training.
- c. Inform the public of Forest activities and opportunities through the media.
- d. Improve appearance of facilities, vehicles, and work areas.
- e. Redesign facilities and visitor information centers to accommodate elderly and handicapped persons.
- f. Provide recreational opportunities such as trails on National Forest land adjacent to private resorts.
- g. Provide access to firewood.

Goal No. 55. Support Human Resource programs to ensure their availability for use in the recreation program.

Objectives

- a. Increase present quota of 20 enrollees to 30 as they become available.
- b. Maintain a HOST in all developed sites where a fee is charged.

C. PROJECTED OUTPUTS AND BUDGET REQUIREMENTS

TABLE IV-1
PROJECTED AVERAGE ANNUAL OUTPUTS FOR THE FOREST PLAN

<u>OUTPUTS/ACTIVITIES</u>	1990	2000	2010	2020	2030
RECREATION (MVRD)					
Developed Recreation	474	651	1060	1652	2010
Dispersed Recreation	803	1253	1787	2692	3699
ROS-Semi-Primitive Nonmotorized	123	192	258	412	566
ROS-Semi-Primitive Motorized	205	320	430	687	944
Roaded Natural Appearing	369	575	775	1237	1700
Rural	106	166	224	355	489
WILDERNESS					
M Acres	83	83	83	83	83
Recreation Use (MRVD)	8	13	17	27	38
RANGE					
Permittee Livestock Use (M AUMS)	115	115	115	115	115
Wild Horse Use (AUMS)	300	300	300	300	300
TIMBER					
Allowable Sale Quantity (MMCF)	5.1	5.2	5.3	5.3	5.4
Allowable Sale Quantity (MMBF)	26.4	26.0	26.3	26.4	26.4
Softwood Sawtimber (MMBF)	22.9	15.7	14.9	17.4	21.3
Softwood Roundwood (MMBF)	.3	.4	.6	.7	.8
Hardwood Sawtimber (MMBF)	2.8	9.4	10.3	7.8	3.7
Hardwood Roundwood (MMBF)	.4	.5	.5	.5	.6
Softwood Firewood (MMBF)	7.7	4.2	4.3	5.7	7.1
Hardwood Firewood (MMBF)	3.0	4.2	4.2	2.3	2.3
WATER & SOIL					
Increased Yield over Natural (ACRE FT)	4300	8300	8100	6700	6000
% of Water Meeting State Standards (M ACRE FT)	98	98	98	100	100
MINERALS					
Acres Leased (M ACRES)	1410	1500	1450	1400	1400
WILDLIFE & FISH					
User Days (MWFUD)	180	202	197	202	202

TABLE IV-2
PROJECTED AVERAGE ANNUAL ACTIVITIES FOR THE FOREST PLAN

OUTPUTS/ACTIVITIES	1990	2000	2010	2020	2030
WILDLIFE & FISH					
Nonstructural Habitat Imp (Acres/Year)	2540	2602	2665	2732	2795
Structural Habitat Imp (Structures/Year)	154	162	166	170	175
TIMBER (ACRES)					
Reforestation	1588	402	454	3353	1646
Timber Stand Imp	5000	54	1769	628	250
WATER & SOIL					
Improvement (Acres)	85	138	35	20	20
MINERALS (ENERGY AND NON-ENERGY)					
Process Exploration Proposals (Cases)	35	60	55	50	50
Lease & Permit Applications (Cases)	656	690	635	615	605
HUMAN COMMUNITY DEVELOPMENT					
Senior (Enrollees)	9	9	9	9	9
Volunteer (Enrollees)	15	15	15	15	15
Other Human Resources (Enrollees)	6	6	6	6	6
LANDS					
Acquisition and Exchange (Cases)	2	3	3	4	4
RANGE					
Revegetation (Acres/Year)	1050	1050	1050	1050	1050
Noxious Weed Control (Acres/Year)	60	60	60	60	60
FACILITIES					
Trail Reconstruction (Miles)	28	65	39	0	0
Trail Construction (Miles)	5	5	1	0	0
Collector Rd Const./Reconst. (Miles)	2	1	1	1	1
Local Road Const./Reconst. (Miles)	60	52	35	33	28

TABLE IV-3
PROJECTED AVERAGE ANNUAL COSTS FOR THE FOREST PLAN

<u>OUTPUTS/ACTIVITIES</u>	1990	2000	2010	2020	2030
A20 Recreation O&M	687	773	884	870	816
A30 Recreation Const./Reconst.	172	244	167	167	0
A40 Coop Law Enforcement	37	50	52	53	54
BA0 Wilderness O&M	46	49	54	57	57
BBO Wilderness Improvements	64	20	20	20	20
C20 Wildlife & Fish O&M	222	147	176	136	169
C30 Wildlife Improvements	102	186	169	195	177
C40 Fish Habitat Improvement	51	62	56	65	60
D20 Range Land O&M	351	420	395	428	430
D30 Range Land Improvement	139	156	173	122	122
EKO Timber Sales	1575	1099	887	1445	1475
EFO Timber Sales O&M	50	30	30	40	50
E40 Approp. Reforestation	505	60	60	75	60
E50 Approp. Timber Stand Improvement	370	100	100	330	100
F20 Soil, Water, and Air O&M	115	128	148	141	107
F30 Watershed Improvement	63	68	60	73	73
G10 Minerals Mgmt. Energy	239	331	303	291	274
G20 Minerals Mgmt. Non-Energy	108	112	100	93	80
H10 Rural Community and Human Resource	98	98	98	98	98
I20 Land Mgmt. Planning	60	60	60	60	60
I30 Land Ownership Mgmt.	242	331	358	382	410
LA0 FA&O Facility O&M	140	152	100	116	184
LBO Road O&M	600	700	400	500	400
LF0 FA&O Const./Reconst.	92	42	42	42	42
LG0 Roads Const./Reconst.	152	50	50	50	50
P20 Fire Protection	332	334	334	334	334
P30 Fuels Treatment Invst.	4	30	30	30	30
T10 General Administration	1000	1000	800	950	775
GRAND TOTAL (1982 Dollars)	7616	6832	6106	7163	6508

D. DESIRED FUTURE CONDITION OF THE FOREST

This section is a description of the desired future condition of the Forest resulting from implementation of the Preferred Alternative described in the accompanying DEIS.

1. Recreation

Developed facilities will be operated at a reduced service level during the pre- and post-vacation periods. Fee and high use facilities (about 60 percent) will be operated at the full service level and the remainder at a reduced service level during the summer vacation period from June 1 to September 10.

Developed sites, both public and special use, will be crowded or overcrowded during peak use periods. The condition of developed recreation facilities will be improved to condition class 1 or 2. Additional camp sites will be provided.

The condition of riparian areas within developed recreation sites will be maintained or improved.

Trail conditions will be improved. Adequate trailhead facilities for dispersed recreation will be provided.

Projects that will benefit public health, safety, sanitation, and water supplies have highest priority for reconstruction. An average of five camping units (26 PAOT) will be rebuilt annually over the fifty year period to replace wornout facilities. New construction will add three to five family units annually until 2020. Some facilities for picnicking will be enlarged by new construction.

Downhill skiing capacity will increase by 3800 skiers at one time (SAOT) within existing and expanded ski area boundaries at Brian Head and Crystal Mountain, for a total of 6900 SAOT's on the Forest. Recreation special uses will meet at least minimum environmental and public service standards. Trailhead parking and sanitation facilities for cross country skiing and snowplay will be provided at trailhead locations.

Demand for developed recreation - public will be met until about 2015. The Forest will work with other government agencies and the private sector to help meet demand after 2015. Demand for dispersed recreation will never exceed supply. If use continues to increase at the present rate, demand for downhill skiing will be met until the year 1995, and Supply for developed recreation in the private sector will not increase unless future expansion takes place.

Some lands in the area will be identified for exchange.

About 222,300 acres will remain in the semi-primitive recreation (ROS) class until the year 2030. These areas will be managed for primitive recreation experiences.

About twelve trailhead facilities will be built. Private industry will be provided the opportunity to develop ski touring in Brian Head area. Private industry will likely provide developed snowmobile centers at Duck Creek and Brian Head on private land. The Forest will provide opportunities for trails adjacent to these centers.

The Research Natural Areas at Table Cliff, Red Canyon, and Timbered Cinder Cone will be established . The natural condition of these areas will be protected. Analysis of additional candidate areas will continue.

Cultural resources will be protected from resource activities but some will be vandalized by human activity.

General travel plan direction will be incorporated into the Forest Plan, however, the travel restrictions will be published and changed periodically or as needed. Where motorized cross country travel causes unacceptable resource damage, further ORV restrictions may be imposed.

A system of over 690 miles of summer trails will be maintained, all at Level 2 or better. Three miles of trails will be reconstructed or constructed annually. Areas for Snowmobile and cross-country ski trails will be made available. No additional trails will be included in the National Trail System.

The Bristlecone Pine Trail will be developed into an interpretive trail for the Handicapped.

Integrated pest management techniques will be used to protect, maintain, or enhance recreation resources.

The visual quality objectives for the proposed Forest Plan will be as follows:

<u>Category</u>	<u>Acres under Proposed Plan</u>	<u>Acres change from present</u>
Preservation	83,000	0
Retention	854,000	0
Partial Retention	642,000	0
Modification	205,000	-44,000
Maximum Modification	100,000	+44,000

2. Wilderness

The heavily used area of the Pine Valley Mountain Wilderness area will be managed at the full service level. The remaining area of the Pine Valley Wilderness and the Ashdown Gorge and Box-Death Hollow Wilderness areas will be managed at reduced service level. Trails will be maintained to Level 2. Trails will be reconstructed to correct degradation and provide safe passage (5 miles per year) during the period 1986 to 1995. Additional trail opportunities will be provided by new trail construction, about one mile per year during the same 10 year period.

Recreation use will be regulated to remain within the social and ecological carrying capacity of each area. Capacity studies will be completed for each area prior to limiting use. Vegetation and soil conditions should remain stable with improvement of minor areas that are now overused.

All fires in wilderness will be suppressed except where a prescribed natural fire program has been approved.

3. Wildlife and Fish

Current habitat of threatened and endangered species will be maintained. Peregrine falcon habitat will be improved through a cooperative program with the Utah Division of Wildlife Resources. Habitat will be improved for sensitive species, including aquatic species.

Fisheries habitat will be improved by increasing the habitat capability of streams and by expanding present habitat in marginal lakes. Improve riparian ecosystems that are currently in an acceptable condition. Big game winter range capacity will be maintained or increased where possible through direct habitat improvement. Non-game habitat improvement and non-consumptive wildlife uses will be emphasized in some management areas.

All MIS habitat will be maintained at levels that meet or exceed requirements for minimum viable populations.

4. Range

This plan will permit 115,000 AUM's of grazing. Riparian areas will only be moderately impacted. Allotment management plans will incorporate objectives and guidelines to ensure proper management. The program for noxious weed control will be strengthened, with priority on controlling new and small populations.

Sensitive plant species will be protected and maintained at least at current levels. The North Hills wild horse herd will remain at about 50 head. Winter game ranges used by wildlife and livestock will continue to be improved where possible.

Predator control will be allowed where needed. Integrated pest management techniques will be used to protect, maintain, and improve range resources.

5. Timber

Areas available for timber harvest will generally include slopes less than 40 percent. Some slopes over 40 percent will be available for cable logging. The Pine Valley Mountains, Ashdown Gorge and Box-Death Hollow Wilderness areas and designated Research Natural Areas will be excluded from timber harvest. Small areas of mature timber scattered throughout the Forest have tentatively been reserved for old-growth dependent wildlife species. Some of these areas may be returned to the available timber base after further evaluation. Designated stands of bristlecone pine will be excluded from timber harvest.

A combination of silvicultural harvest methods that maximize present net value will be used in conjunction with meeting multiple use objectives and associated constraints on timber management. Intensive practices such as precommercial thinning will be used in all timber working groups except aspen. Timber harvest emphasis will be shifted to the mixed conifer and spruce-fir types for the next few decades as the ponderosa pine type has been most heavily cut in the past.

Future silvicultural condition of timber stands will be improved over current conditions. Conversion of slow growing overmature stands to younger, more vigorous stands will provide the benefits of increased timber growth and reduced susceptibility to insects and disease. Emphasis on harvesting mature stands, stands of poor quality and low value species and stands with insect and disease problems will reduce mortality and growth loss.

The supply of firewood created by this alternative, when added to existing dead timber, will meet the demand on at least half of the Forest through 2030. Firewood supply on Cedar City Ranger District, where about one-half of the Forest demand exists, could be increased by offering additional green aspen and pinyon-juniper.

6. Water and Soil

Water quality and soil productivity will be maintained. The larger identified watershed improvements will be completed by 2000, reducing soil erosion and stream sedimentation. Condition of riparian areas will be maintained, or if necessary improved.. The soil and water resource inventories of the Forest will be improved. Soil erosion and water quality will be monitored. Watersheds tributary to the Colorado River may produce an average of 2800 acre-feet more water than natural annually by the year 2030. This approaches the greatest increase that can be achieved without resource damage.

7. Minerals

The decision to recommend issuance of leases for oil and gas exploration will be based on the Forest Plan with reviews on a case by case basis. Development proposals of oil and gas leases will receive an interdisciplinary field analysis.

Locatable mineral operations proposals will be evaluated on a case-by-case basis through the environmental analysis process.

The Forest transportation plan and mineral road development will be coordinated. Existing and planned roads will be used whenever possible.

8. Lands

Land will be acquired or disposed of as shown in the land adjustment program. Land exchange offers will be responded to within one month, and two or more land exchanges a year will be completed.

Access to Forest land will be assured by acquisition of road and trail rights-of-way. Road and trail rights-of-way will be acquired annually in accordance with the long range rights-of-way acquisition program.

High priority will be given to meeting standards for dam inspection. Emergency preparedness plans will be prepared for all dams. Some small, high elevation reservoirs will be abandoned for water storage when large reservoirs are built at lower elevations.

Five sites will be designated for electronic facilities - Big Mountain, Blowhard, Barney Top, Wilson Peak, and Henderson Rim.

Utilities will be allowed in designated corridors and planning windows.

Current mineral withdrawals will be evaluated as required by law. It is expected that this evaluation will result in the revocation of some withdrawals. New mineral withdrawals will be evaluated for future high investment sites that also have high mineral potential.

Special use fee returns will increase as a result of new uses and higher fees.

9. Facilities

Buildings and Administrative Sites - The number of buildings will be managed according to the facility master plan. Maintenance will stress health, safety, and energy items. The structural integrity will be preserved to continue the function of the facility. Major maintenance and reconstruction will be accomplished as funds are programmed using priority, value and budgetary systems.

Transportation - A safe, functional, and environmentally sound transportation system will be developed. Road construction will be coordinated with other resource activities. The basic arterial collector system, will be constructed or reconstructed to meet the Road Management Plan. Annual construction through 1990 will include 2 miles of public works, 28 miles of timber, development road, and 5 miles of oil and gas development. Traffic may be restricted on roads not constructed to an all-weather standard. The Road Management Plan will identify road closures.

Substandard local roads will be rebuilt to standard or abandoned as determined in the road management program. Annual local road construction and reconstruction will average 40 miles for developed recreation and timber sales. About 5 miles of local roads will be constructed annually by the oil and gas industry to accommodate their access needs. Campground roads will be maintained to Level 4 or 5. Maintenance levels for other local roads will be determined in the road management program.

About seven substandard bridges will be replaced by 2000. An accelerated program of maintenance and repair will be completed between 1989 and 1997. All stream crossing structures and fords will be evaluated for replacement with structures that will not impede fish passage or generate sediment.

10. Protection

Appropriate suppression response will be taken on all wildfires.

Prescribed fire from planned ignitions will be used for fuels treatment and resource improvement. In the three Wilderness areas, unplanned ignitions will be used to maintain natural ecosystems. Manipulation of vegetation will provide adequate fuels reduction.

Law Enforcement

Increasing public use of the Forest will increase law enforcement problems. Cooperative law enforcement agreements with state and local law enforcement agencies will be continued.

E. FOREST-WIDE STANDARDS AND GUIDELINES

This section describes the management direction and standards and guideline which are applicable forest-wide and apply on all management areas, except where the specific direction in a management area supercedes. The purpose of this section is to avoid duplicating the forest-wide direction and Standards and Guidelines in each area. The Standards and Guidelines contained in this plan incorporate the planning guidance and requirements of the Regional Guide for the Intermountain Region.

This section and the section following (Management Area Direction) provide specific direction for day to day management of the National Forest. In practice, the land manager would use the Forest map and this section to find management direction. When the map indicates a management area is involved the specific direction contained in the management prescription (next section) also applies.

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

STANDARDS AND GUIDELINES

GENERAL DIRECTION

- | | | |
|--|--|---|
| <p>Diversity on National Forests and National Grasslands (AOO)</p> | <p>1. Maintain structural diversity of vegetation on management areas that are dominated by forested ecosystems.</p> <p>A. Maintain or establish a minimum of 20 percent of the forested area within a management area to provide vertical density.</p> <p>B. Maintain or establish a minimum of 30 percent of the forested area within a management area to provide horizontal diversity.</p> <p>C. In forested areas, create or modify created openings so they have a Patton edgeshape index of at least 1.4 and have at least a medium-edge contrast.</p> <p>2. Retain existing medium- or high-contrast edges within forested management areas.</p> <p>3. If medium-contrast edges are created in units dominated by grassland or shrubland, create openings with Patton edge-shape index of at least 1.4.</p> <p>4. In forested management areas, maintain a minimum on each treated area, an average of 20-30 snags (in all stages of development) per 10 acres, well distributed over the management areas.</p> <p>5. Manage aspen for retention wherever it occurs, unless justified by one of the following:</p> <p>A. Conversion of determinate aspen to conifers, or shrub- or grass/forb serial stages for wildlife, esthetic, recreation, transportation, or watershed purposes.</p> | <p>A. Maximum size of individual treated areas is 500 acres.</p> <p>A. Provide at a minimum, an average of 2-12 hard snags per 10 acres of the following minimum diameters (where biologically feasible):</p> <ul style="list-style-type: none"> - Ponderosa pine, Douglas-fir and spruce-fir: 10 inches dbh. - Aspen: 8 inches dbh <p>B. Retain an average length per acre of down-dead logs (where feasible) of the following minimum diameters:</p> <ul style="list-style-type: none"> - Ponderosa pine, Douglas-fir and spruce-fir - 12 inch diameter 50 linear feet per acre <p>- Aspen - 10 inch diameter</p> <p>33 linear feet per acre</p> <p>A. Silvicultural standards:
(These standards may be exceeded in areas managed for old growth.)</p> <p>1. Clearcut (Stand or Clone) Rotation Age: 80-120 years Thinning Cycle: N/A</p> |
|--|--|---|

MANAGEMENT ACTIVITIES**GENERAL DIRECTION****STANDARDS AND GUIDELINES**

- B. Conversion of determinate aspen to conifers on sites with a high demand for softwood, or
- C. Areas of aspen which are larger than are needed for wildlife or esthetic purposes.

6. If determinant aspen stands are managed for regeneration, treat contiguous areas no larger than 40 acres, unless larger areas are needed to protect aspen regeneration or prevent decadence. Treat entire clones in determinate (climax) aspen stands can be converted to other cover types if needed to meet other objectives.

Cultural Resource Management (A02)

- 1. Protect, find an adaptive use for, or interpret all cultural resources on National Forest System lands (NFS) lands which are listed on or eligible for inclusion in the National Register of Historic Places, as detailed in the forest protection/maintenance and interpretive plans.
- 2. Nominate or recommend cultural resource sites to the National Register of Historic Places by 1990 in the following priority:
 - A. Sites representing multiple themes,
 - B. Sites representing themes which are not currently on the National Register within the state, or
 - C. Sites representing themes which are currently represented by single sites.
- 3. Protect and foster public use and enjoyment of cultural resources:
 - A. Complete cultural resource surveys prior to any ground-disturbing project,
 - B. Avoid disturbance of known cultural resources until evaluated and determined not significant,
 - C. Mitigate sites where there is no other way to protect the properties,
 - D. Issue antiquities permits to qualifying academic institutions or other organizations for the study and research of sites.

Visual Resource Management (A04)

- A. Follow direction provided in FSH 2380 and FSH 2309.16 through FSH 2309.25.
- 1. Apply the visual management system to all National Forest System (NFS) lands. Travel routes, use areas and water bodies determined to be of primary importance such as Sensitivity Level 1 and appropriate visual quality objectives which are established according to the Visual Management System.
- 2. Rehabilitate all existing projects and areas which do not meet the adopted visual quality objective(s) (VQO) specified for each management area. Set priorities for rehabilitation, considering the following:

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

GENERAL DIRECTION

STANDARDS AND GUIDELINES

- A. Relative importance of the area and the amount of deviation from the adopted VQO. Foreground areas have the highest priority.
 - B. Length of time it will take natural processes to reduce the visual impacts so that they meet the adopted VQO.
 - C. Length of time it will take rehabilitation measures to meet the adopted VQO, and
 - D. Benefits to other resource management objectives to accomplish rehabilitation.
3. Achieve enhancement of landscapes through addition, subtraction or alteration of elements of the landscape such as vegetation, rockform, water features or structures, examples of these include:
 - A. Addition of vegetation species to introduce unique form, color or texture to existing vegetation.
 - B. Vegetation manipulation to open up vistas or screen out undesirable views.
 4. Plan, design and locate vegetation manipulation in a scale which retains the color and texture of the characteristic, borrowing directional emphasis of form and line from natural features.
 5. Blend soil disturbance into natural topography to achieve a natural appearance, reduce erosion and rehabilitate ground cover.
 6. Revegetate disturbed soils. In large projects, this may have to be done in stages.
 7. Choose facility and structure design, color of materials, location and orientation to meet the adopted visual quality objective(s) for the management area.
 1. Provide appropriate development facilities where the private sector is not meeting the demand.
 2. Provide for 10 percent of new or rehabilitated facilities to be accessible to handicapped persons.

Recreation Site
Construction and
Rehabilitation
(A05 and 06)

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

GENERAL DIRECTION

- 3. Facilities proposed for construction or reconstruction which lie within identified 100-year floodplains will be evaluated as to the specific flood hazards and values involved with the site. Practicable alternatives will be thoroughly evaluated.

- 4. Past and probable flood heights in inventoried 100-year floodplains will be posted to provide visible warnings to the using public about possible periodic flooding of over one foot in depth.

Management of Developed Recreation Sites
(A08, 09, 11 and 13)

STANDARDS AND GUIDELINES

- A. Follow procedures in *FSM 2527.04C*.

- 1. As need dictates, design, construct and operate developed sites which are adjacent to, or provide an access into, a wilderness to complement wilderness management objectives.
- 2. Construct, reconstruct and maintain developed sites in accordance with the established recreation opportunity spectrum (ROS) classification for the management area.

A. STANDARDS AND GUIDELINES

ROS CLASS*	SITE DEVELOPMENT SCALE**
P	Not to exceed 1
SPNM	Not to exceed 2
SPM	Not to exceed 2
RN	Class 3 or 4
R	Class 3 or 4
U	Class 5

* P = Primitive
SPNM = Semi-Primitive
Non-Motorized
SPM = Semi-Primitive
Motorized
RN = Roaded Natural
R = Rural
U = Urban

** *FSM 2331.47*

- 3. Manage Development Scale 3 and 4 for full service when at least one of the following are met and funding is available to meet them.

- A. A campground is designated as a fee site;
- B. More than 20 percent of theoretical capacity is being utilized;
- C. A group campground or picnic ground has a reservation system and/or user fee; or
- D. The site is a swimming site, a boating site with a constructed ramp, or a staffed visitor information center.

- 1. Provide a broad spectrum of dispersed recreation opportunities in accordance with the established Recreation Opportunity Spectrum (ROS) classification for the management area.

Dispersed Recreation Management
(A14 and 15)

B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES

GENERAL DIRECTION

2. Close or rehabilitate dispersed sites where unacceptable environmental damage is occurring.

STANDARDS AND GUIDELINES

A. Close sites that cannot be maintained in Frissel Condition Class 1, 2 or 3 (Campsite Condition, Frissell, S.S., Journal of Forestry, August 1978).

B. Rehabilitate sites that are in Frissel Condition Class 4. Close and rehabilitate sites in Condition Class 5.

A. STANDARDS AND GUIDELINES

3. As needed to prevent deterioration, manage dispersed recreation activities to not exceed the established ROS/PAOT/ACRE capacity. Manage use of trails in dispersed areas to not exceed the established PAOT/MILE of trail guidelines. Manage dispersed areas around developed Campground facilities by those who are unwilling to pay.

RECREATION USE AND CAPACITY RANGE DURING THE SNOW-FREE PERIOD (PAOT/ACRE)

TRAIL USE AND CAPACITY RANGE (PAOT/MILE OF TRAIL):

*USE LEVEL	VERY LOW	LOW	MODERATE	HIGH
<hr/>				
ROS CLASS - PRIMITIVE				
ON TRAILS PAOT/MILE	0.5	1.0	2.0	3.0
AREA WIDE PAOT/ACRE	.001	.002	.007	.025
<hr/>				
ROS CLASS - SEMI-PRIMITIVE NONMOTORIZED				
ON TRAILS PAOT/MILE	2.0	3.0	9.0	11.0
AREA WIDE PAOT/ACRE	.004	.008	.05	.08
<hr/>				
ROS CLASS - SEMI-PRIMITIVE MOTORIZED				
ON TRAILS PAOT/MILE	2.0	3.0	9.0	11.0

AREA	.004	.008	.05	.05	.08
WIDE PAOT/ACRE					

ROS CLASS - ROADED NATURAL

ON TRAILS PAOT/MILE	---	---	---	---	---
AREA WIDE PAOT/ACRE	.04	.08	1.2	2.5	

ROS CLASS - RURAL

ON TRAILS PAOT/MILE	---	---	---	---	---
AREA WIDE PAOT/ACRE	.5	.8	5.0	7.0	

Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, a general attractiveness of the specific management area type as described in the ROS Users Guide, Chapter 25.

Reduce the above use levels where unacceptable changes to the biophysical resources will occur.

#Very low applies to alpine, low applies to rock, mountain grass and clearcuts 1-20 years old. Moderate applies to mountain, grass, PP Size Class 9, 8 and 7, DF Size Class 9, 8 and 7, aspen Size Class 9, SF Size Class 7, Shalterwood cuts 90-120 years old, selection cuts 1-20 years old and clearcuts 80-120 years old.

High applies to SF Size Class 9 and 8, aspen Size Class 8 and 7 and clearcuts 20-30 years old.

4. Discourage camping within a minimum of 100 feet from lakes and streams unless exceptions are justified by terrain or specific design which protects the riparian and aquatic ecosystems.

B. MANAGEMENT PRESCRIPTIONS
MANAGEMENT ACTIVITIES

Recreation Management
 (Private and Other Public
 Sector)
 (A16)

STANDARDS AND GUIDELINES

GENERAL DIRECTION

1. Ensure that permitted private and public sector sites on Forest lands which are adjacent to, or provide an access point into, or compliment wilderness management objectives.

**Wilderness Area
 Management
 (B02)**

1. Do not provide interpretive facilities at cultural resources sites, or restore or enhance cultural resources for recreation purposes.
2. Provide opportunities for human isolation, solitude, self-reliance and challenge while travelling cross-country and on system trails.
3. Utilize a permit system to manage use levels and patterns during the summer use period based upon the following criteria:
 - A. When acceptable use levels, as specified in the individual prescriptions, are exceeding during 20 percent of the summer use season, or
 - B. When acceptable capacities, as specified in the individual prescriptions, in primitive or pristine management areas are exceeded on 10 percent or more of the day during the summer use season.
 - C. Apply a permit system to an entire wilderness, not just impacted portions of a wilderness.
4. Do not impose party-size limits during traditionally light use seasons or during fall hunting seasons unless necessary to prevent unacceptable levels of change to the biological and physical resources.
5. Maximum party-size limit for the summer use period is 25 people and/or recreational stock. Party-size limits less than 25 people and/or recreational stock will be established where biological and physical resource capability cannot support that level of use. Party-sizes established for protection of biological resources will set limits for both people and recreational stock. Parties larger than established limits may be allowed under permit on a case-by-case basis when compatible with other wilderness management objectives.
6. Do not authorize competitive contest events, group demonstrations, ceremonies, and other similar events.
7. Protect spring sources of drinking water near trails from contamination by recreation stock and livestock where culinary sources are scarce or heavily used by recreationists.
8. Prohibit recreational stock along lake shores and stream-banks except for watering and through-travel.

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

GENERAL DIRECTION

STANDARDS AND GUIDELINES

9. Restore soil disturbances caused by human use (past mining, grazing, trail construction and use, camping, etc.) to soil loss tolerance levels commensurate with the natural ecological processes for the treatment area.
10. Construct or implement soil and water restoration measures so as to meet the visual quality standard prescribed for the prescription area. Utilize native materials whenever possible to help meet visual quality objectives.
 - A. Use FSH 2323.4 as guidance.
11. Control overnight grazing of recreational stock in subalpine ecosystems according to use standards established by range allotment analysis.
 - A. Base range condition on the standards in Range Analysis Handbook (FSH 2209.21).
12. Prohibit new range improvement structures other than corrals, fences or water developments essential to sustain current permitted numbers.
 - A. Base range condition on the standards in Range Analysis Handbook (FSH 2209.21).
13. Implement revegetation only for rehabilitation of areas in less than fair range condition based upon their natural potential. Use only native species for revegetation. Implement only where natural vegetation possibilities are poor, and only where degradation was due to human activities.
14. Permit fish and wildlife research and management utilizing guidelines adopted by the International Association of Fish and Wildlife Agencies (FSM 2323.3).
15. See mining law compliance and administration and minerals management activities in Forest Direction for minerals direction.
16. Suppress man-caused wildfires.
17. Maintain fire dependent ecosystems using prescribed fires ignited naturally. Reclaims areas disturbed as part of fire control activities to meet the visual quality objective of retention.
18. Protect air quality related values from adverse effects from air pollution.
 - A. See criteria and standards in FSH 2120.
19. Control natural insect or disease outbreaks in wilderness only when justified by predicted loss of resource values outside of wilderness. Conduct analysis in accordance with FSH 3430.
20. Control problem animals on a case-by-case basis in cooperation with other agencies (FSM 2610) using methods directed at the offending animal but which present the least risk to other wildlife, and/or visitors.

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

Wildlife and Fish Resource Management	GENERAL DIRECTION	STANDARDS AND GUIDELINES
(C01)	<ol style="list-style-type: none">1. Where present, the following species are management indicator species: -Deer, -Elk, and-All federally-listed endangered or threatened plant and animal species that might be affected by management activities.In addition to the above, use indicator species that represent the following categories:<ol style="list-style-type: none">A. Riparian and/or wetland dependent species (yellow-breasted chat).B. Species dependent on either climax plant communities or one serial stage of a plant community or communities (goshawk, wild turkey).C. Tree cavity-dependent species, (common flicker).D. Game fish (brook, brown, rainbow, and cutthroat trout).E. Species which have particular scientific, local or national interest, and species needing special management to prevent federal listing as threatened or endangered (Bonneville cutthroat, mule deer, elk).Manage habitat for viable populations of all existing vertebrate wildlife species.Allow for re-establishment of deer herds to the population levels outlined in the Utah Deer Herd Unit Management PlansCooperate in the establishment of elk, pronghorn, bighorn sheep, or other suitable species, and threatened and endangered species on sites that can supply the habitat needs of the species and the population levels and distribution agreed to with the State and other concerned parties only where conflict with established uses can be established. (FSM 26(0)Manage waters capable of supporting self-sustaining trout populations to provide for those populations.	<p>Where natural geologic and biologic conditions will allow, maintain the following stream habitat conditions:</p> <ol style="list-style-type: none">A. Maintain 40 percent or more of over-hanging grasses, forbs, sedges and shrubs along banks of streams.B. Maintain 50 percent or more of total streambank length in stable conditionC. No more than 25 percent of stream substrate should be covered by inorganic sediment less than 3.2mm in size(use R-4 GAWs Aquatic Habitat Surveys Handbook).

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

GENERAL DIRECTION

STANDARDS AND GUIDELINES

D. Maintain overall stream habitat condition at or above 40 percent of optimum (use R-4 GAWS Aquatic Habitat Surveys Handbook).

7. Manage and provide habitat for recovery of endangered and threatened species.

Wildlife Habitat Improvement and Maintenance (C02, 04, 05, and 06)

1. Use appropriate silvicultural practices to accomplish wildlife habitat objectives forestwide.

A. In forested areas, where biologic-hiding cover \geq 50 percent or more of the perimeter of all natural and created openings along at least 75 percent of the edge of arterial and collector roads \geq 2 λ and along at least 50 percent along streams and rivers. In areas of winter and transition ranges at least 20 percent of the cover should qualify as thermal cover.

1/ Big game hiding cover is defined as that needed to hide 90 percent of a standing deer or elk at a distance of at least 200 feet.

2/ Road design speed and vehicle and animal safety need to be considered on a case-by-case basis

B. In management areas dominated by non-forested ecosystems, maintain deer and elk hiding cover as follows:

% of Unit Forested	% of Forested Area in Cover
35-50	At least 50%
20-34	At least 60%
Less than 20	At least 75%

Those levels may be exceeded temporarily during periods when stands are being regenerated to meet the cover standard, or to correct tree disease, problems, in aspen stands, or where windthrow or wildfire occurred. In critical big game habitat maintain hiding cover along at least 75 percent of the edge of arterial and collector roads, and at least 60% along streams and rivers, where trees occur.

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

GENERAL DIRECTION

C. Alter age classes of browse stands in a management area, no more than 25 percent within a ten-year period.

2. Improve habitat capability through direct treatments of vegetation, soil, and waters.
3. Where possible, conduct habitat improvement projects jointly or cooperatively funded with the UDWR.

4. Provide maximum wildlife habitat diversity.

A. Where silviculturally practical, maintain edge contrast* of at least medium or high between tree stands created by evenaged management.

A. CONTRAST BY AGE CLASS IS:

AGE CLASS*	CONTRAST*				
	O	S	G	S	G
G	M	P	F	R	A
OG	-	L	M	H	M
M	L	-	M	M	H
P	M	H	-	M	M
SSS	H	M	M	-	L
GF	H	H	H	L	-
SHR	M	M	M	L	M
GRA	H	H	H	L	M

B. Utilize both even and unevenaged timber management systems and a variety of harvest methods.

5. Plan timber harvest on a drainage by drainage basis.

A. A portion of each drainage should be in each age class. Seven to ten percent should be managed as old growth and no less than 10% should be grassland. The remainder should be more or less evenly distributed in the other age class (20% \pm 3% in each).

* OG = Old Growth
M = Mature
P = Poles
SSS = Shrub-Seedling-Sapling
GF = Grass-Forb
SHR = Shrubland
GRA = Grassland

** H = High Contrast
M = Medium Contrast
L = Low Contrast

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

GENERAL DIRECTION

Wildlife and Fish Cooperation With Other Agencies (C12)

1. Manage animal damage in cooperation with the Utah Division of Wildlife Resources (Utah DWR), the Fish and Wildlife Service and other appropriate agencies, and cooperators to prevent or reduce damage to other resources and direct control toward preventing damage or removing only the offending animals.

2. Allow trapping denning or aerial gunning under the following conditions:

A. Methods and locations are specified in the Forest Animal Control Plan,

- B. Aerial gunning is done by an authorized individual.

Range Resource Management (D07)

1. Provide forage to sustain local dependent livestock industry.

2. Remove livestock from allotments for the remainder of the grazing season when proper use is reached.

3. Manage livestock and wild herbivores forage use by implementing allowable use guides.

A. Livestock and wild herbivores allowable forage use by grazing system and range type are:

1. Rest Rotation System:

- A. Use by Range Type:

-Mainly seed reproduction (Bunchgrass, grassland, foothills shrub and subalpine range types):

Up to 60 percent on heavy use pastures.

Up to 50 percent on other use areas.

B. Allowable soil disturbance or recovery criteria:
Soil and vegetation condition must be restored to at least the pretreatment condition by the return to the same point in the grazing cycle.

2. Deferred Rotation System:

- A. Use by Range Type:

Up to 50 percent on all species except crested wheatgrass resedings and wet meadows where 60 percent is allowable.

- B. Allowable soil disturbance or recovery criteria:

B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES

GENERAL DIRECTION

STANDARDS AND GUIDELINES

	<p>Soil and vegetation conditions must be restored to at least the pretreatment condition by the return to the same point in the grazing cycle.</p>
4. Achieve or maintain satisfactory range conditions on all rangelands.	A. All suitable rangelands currently in "poor" condition, as determined according to FSH 2209.21 (R-4) will be improved to "fair" or better condition by 2030.
5. Salt blocks shall be placed so as to minimize impact upon riparian ecosystem.	
6. Control noxious farm weeds in the following priority: A. Musk thistles, Scotch thistle, Canada thistle. B. Invasion of new plant species classified as noxious farm weeds. C. Infestation in new areas; D. Expansion of existing infestations of Scotch, Musk and Canada thistle, and other noxious farm weeds; and E. Reduce acreage of current infestation.	
7. Protect and manage the North Hills Wild horse herd in cooperation with BLM.	A. The wild horse herd will be managed according to Public Law 92-195 and any amendments. B. The wild horse population will be kept within the population and forage utilization limits as outlined in the Joint FS/BLM Management Plan for the herd.
Range Improvement and Maintenance (D03, 04, 05 and 06)	1. Structural range improvement should be designed to benefit wildlife and livestock. 2. To facilitate the control of soil erosion within acceptance tolerance, soil survey or site specific soils data will be used to develop revegetation projects.
Timber Resource Management Planning and Inventories	1. Identify lands available and suitable for timber production on a sale-by-sale basis.
Silvicultural Prescriptions (E03, 06 and 07)	1. Provide for wildlife habitat improvement and enhancement of other renewable resources in sale area improvement plans. A. Stand volume growth data will be collected during stand examination.

2. Apply a variety of silviculture systems and harvest methods which best meet resource management objectives.

A. The appropriate harvest methods by forest cover type are:

DESIRED FOREST CHARACTER	HARVEST CUTTING METHODS
	EVEN-AGE : UNEVEN-AGE
Two-Storyed Yer. Mosaics	SW, ST : N/A
Old Growth	CC, SW, ST : GS
Closed Canopy	ST : STS, GS
Continuous Site Occupancy	CC, SW, ST : N/A
With Trees	SW, ST : AS

HARVEST CUTTING METHODS		
COMPETING TYPE	EVEN AGE	UNEVEN AGE
High Elev. Brush	SW	AS
Low Elev. Brush	CC, ST	N/A
Low Elev. Brush	SW	AS
Low Elev. Brush	CC, ST	N/A
Grasses (Warm Site)	SW	AS
Grasses (Cool Site)	SW	GS

COMPETING TYPE	KEY HAB. SERIES	Critical Aspect
High Elev. Brush	AF	All
Low Elev. Brush		N and E
Low Elev. Brush	DF	S and W with slopes +30%
Low Elev. Brush	DF	S and W with slopes -30%
Grasses (Warm Site)	PP, DF	S and W
Grasses (Cool Site)	DF, AF	All

B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES

GENERAL DIRECTION

STANDARDS AND GUIDELINES

SW=Shelterwood, ST=Seed-Trees,
CC=Clearcutting
GS=Group Selection, STS=Single-Tree
Selection, AS=All Selection

1. The series of habitat types is identified by the climax overstory species associated with a given site.
AF represents Subalpine Fir, DF represents Douglas-fir and PP represents Ponderosa Pine.

MANAGEMENT INTENSITY

CLASS OF
TIMBER STAND : ACTIVITIES

Existing Sawtimber: Commercial thinning
Stands :if harvest is delayed
:20 years or more and
:response to treatment
:can be expected.

Existing Pole-
timber, Sapling :Weeding, precommercial
and Seeding Stands: Thinning, and commer-
cial thinning to meet
management objectives.

Existing and
Future Harvested :Appropriate release,
or Deforested :paratration, planting or
Areas :seeding, release,
:weeding, precommercial
:thinning and commer-
cial thinning to meet
management objectives.

D. To facilitate the control of soil
erosion within acceptable tolerance soil
surveys or site specific soil data will
be used to develop project level harvest
systems.

3. Clearcuts may be applied to dwarf mistletoe infected stands of any forest cover type.
4. Assure that all even-aged stands scheduled to be harvested during the planning period will generally have reached the culmination of mean annual increment of growth.

5. Minimize soil surface compaction and disturbance by curtailing logging activities during periods of high soil moisture. Design skid trail system to minimize extent of area impacted.

6. The maximum size of openings created by the application of even-aged silviculture will be 40 acres regardless of forest cover type. Exceptions are:
- A. Proposals for larger openings are subject to a 60-day public review and are approved by the Regional Forester.
 - B. Larger openings are the result of natural catastrophic conditions of fire, insect or disease attack, Windstorm, or
 - C. The area does not meet the definition of created openings.

7. Acceptable management intensity activities to determine harvest levels are:

MANAGEMENT ACTIVITY*	SUITABLE LAND					UNSUITABLE LAND				
	ENGELMANN SPRUCE/SUB-ALPINE FIR	INTERIOR PINE	DOUglas-FIR	ASPEN	OTHER HARD PINES	WOOD	WHITE FIR	ALL FOREST TYPES	ALL FOREST TYPES	ALL FOREST TYPES
Tree Imp.	X	X	X	X	N	N	X	0	0	0
Site Prep.	X	X	X	N	N	N	X	0	0	0
Reforestation										
Planting	X	X	X	X	N	N	X	N	N	N
Seeding	N	N	N	0	0	0	N	N	N	N
Natural	X	X	X	X	X	X	O	N	N	N
Regeneration										
Protection	X	X	X	X	N	N	X	N	N	N
Stocking										
Control (Thinning):										
Precomm.	X	X	X	X	0	N	N	0	0	0
Comm.	X	X	X	X	0	N	N	0	0	0
Salvage of Dead Material	X	X	X	X	N	N	X	X	X	X
Cutting Methods:										
Clearcut	X	X	X	X	X	N	X	N	N	N
Shelterwood	X	X	X	X	N	N	X	N	N	N
Selection	X	X	X	N	X	X	N	N	N	N

*Various combinations of these activities provide the acceptable range of management intensity for timber production (36 CFR 291.2(B)(2)).

X = Appropriate Practice

O = Not an Appropriate Practice

N = Appropriate, but not a Standard Practice.

May be Acceptable Where Justified.

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

GENERAL DIRECTION

STANDARDS AND GUIDELINES

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| <p>8. Make Christmas trees available in areas where other resource objectives can be accomplished through commercial or personal use Christmas tree sales.</p> <p>9. Examine modifications to silvicultural techniques and harvest practices in the spruce-fir and mixed conifer timber types to increase water yield. Implement changes when not inconsistent with other multiple use management goals.</p> <p>Reforestation (E04)</p> | <p>A. Reference FSH 2409.26b - Reforestation Handbook.</p> <p>1. Establish a satisfactory stand on cutover areas, emphasizing natural regeneration within five years, where feasible, after final harvest except:</p> <ul style="list-style-type: none">A. For permanent openings that serve specific management objectives;B. When other resource objectives dictate a different period, such as spruce-fir clearcuts where planting must occur within three years after harvest;C. When provided for otherwise in specific management prescriptions. <p>2. Do not apply final shelterwood removal cut until the desired number (as specified) of well-established seedling/acre are expected to remain following overwood removal.</p> <p>3. Use trees of the best genetic quality available which are adapted to the planting site.
(Reference FSM 2475)</p> <p>4. Where appropriate, use K-Y funds for soil and watershed rehabilitation and/or wildlife habitat improvement.</p> <p>Riparian Area Management (F03)</p> | <p>A. The Silvicultural Prescriptions will be followed on a stand basis.</p> <p>1. Special protection and management will be given to land and vegetation for a minimum of 100 feet from the edges of all perennial streams, lakes and other bodies of water or to the outermargin of the riparian ecosystem if wider than 100 feet.</p> <p>2. Design and implement activities in management areas to protect and manage the riparian ecosystem.</p> <p>3. Prescribe livestock grazing systems to achieve riparian objectives.</p> <p>A. Allow a maximum of 60 percent use (season-long system), of desirable and intermediate species forage production to riparian areas.</p> <p>B. Allow a maximum of 50 percent use of current year's growth on browse species in riparian areas.</p> <p>C. Maintain ground cover of at least 70 percent within riparian areas.</p> |
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**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

STANDARDS AND GUIDELINES

GENERAL DIRECTION	
4. Prescribe silvicultural systems to achieve riparian area objectives.	<p>A. Maintain shade, bank stability and sediment standards as specified under Wildlife and Fish Resource Management Standards and Guidelines.</p> <p>B. Maintain at least 70 percent of the linear distance of all riparian eco-systems in at least an upper mid-seral successional stage.</p>
5. Locate and construct arterial and collector roads to maintain basic natural condition and character of riparian areas. (0087)	<p>A. Maintain fish passage during all flow levels except peak flow events. Follow Guidelines in Evans and Johnston, 1980.</p> <p>A. Utilize methodology in draft FSH 2509,17, Chapter 30, "Procedure for Quantifying Channel Maintenance Flows".</p>
Water Uses Management (F04)	<p>A. Determine and obtain rights to instream flows needed to protect and maintain stream channel stability and capacity and for other National Forest purposes.</p> <p>1. Determine and obtain rights to instream flows needed to protect and maintain stream channel stability and capacity and for other National Forest purposes do not exist.</p> <p>B. Select stream crossing points to minimize bank and channel disturbance.</p> <p>2. Protest water right applications of others when such uses will lower streamflows, springflows, lake levels, or groundwater tables below levels acceptable for National Forest uses and purposes. (0602)</p> <p>3. Special use permit, easements, rights-of-way, and similar authorizations for use of NFS lands shall contain conditions and stipulations to maintain instream or bypass flows necessary to fulfill all National Forest uses and purposes. (0604)</p> <p>4. Determine and obtain rights to instream flow and conservation pools in cooperation with Utah DWR to support a yield of natural fisheries resources.</p> <p>A. Determine instream flows by R4 GAWs Aquatic Habitat Surveys or other accepted methodology.</p>
Water Resource Improvement and Maintenance (F05 and 06)	<p>1. Maintain needed instream flows and protect public property and resources.</p> <p>2. Improve or maintain water quality to meet State water quality standards. However, where the natural background water pollutants cause degradation, it is not necessary to implement improvement actions. Short-term or temporary failure to meet some parameters of the State standard, such as increased sediment from road crossing construction or water resource development may be permitted in special cases.</p>

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

GENERAL DIRECTION

STANDARDS AND GUIDELINES

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| <p>3. Evaluate all management activities within 100 feet of any spring for impacts on springflow, riparian habitat and soil disturbance.</p> <p>4. Rehabilitate disturbed areas that are contributing sediment directly to perennial streams as a result of management activities to maintain water quality and re-establish vegetation cover.</p> <p>5. Limit use of herbicides, insecticides, rodenticides, or other chemicals which are harmful to either the aquatic ecosystem, desired terrestrial fauna or human health. Use these chemicals only when and where possible transport to surface water has a low probability of occurrence. Follow all label requirements concerning water quality protection.</p> <p>1. Administer areas with producing sites and known reserves with consideration of ongoing and potential mineral activities.</p> <p>2. Avoid or minimize significant public or private investments in and near areas where mineral activities can be expected in the foreseeable future. This includes consideration for reserved and outstanding rights.</p> <p>3. In designated Wilderness, ensure that provisions in operating plan satisfy the rights of the claimant while creating the least impact on wilderness values and for restoration of disturbed lands as near as practical to their natural condition as soon as possible during and/or after the mining activity.</p> <p>4. Other classified lands not withdrawn from operations under the general mining laws: such lands may include research natural areas, national recreation areas, national recreation trails, special interest areas, such as scenic and geologic, national historic sites, or some other special classification: the status of the land must be determined before an operating plan is processed. Provide reasonable protection for the purposes for which the lands were classified and for reasonable reclamation of disturbed lands to a condition suitable for those purposes.</p> <p>5. On unclassified (remaining) lands, provide for reasonable reclamation of disturbed lands to achieve the planned uses specified in the Forest plan, when those lands are no longer needed for mining operations.</p> | <p>A. Reduce to natural rate any erosion due to management activities in the season of disturbance and sediment yields within one year of the activity through necessary mitigation measures such as water barring and revegetation.</p> |
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Minerals Management
(G00)

1. MANAGEMENT PRESCRIPTION MANAGEMENT ACTIVITIES

GENERAL DIRECTION

- Mining Law Compliance and Administration (Locatables)
1. Minimize or, as appropriate, prevent adverse impacts on surface resources.

2. Review cases of suspected abuse of the mining laws such as occupancy of the land for purposes other than prospecting, mining, and related activities. Initiate appropriate action to resolve.
 1. Leasing, permitting, or licensing of National Forest System lands will be based on site specific considerations using appropriate standards and guidelines for the management unit concerned. Criteria for these actions should minimize impacts on or conflicts with other resource uses and should return disturbed lands to planned surface resources or uses.

Minerals Management Leasables

1. Minimize or, as appropriate, prevent adverse impacts on surface resources.
2. Review cases of suspected abuse of the mining laws such as occupancy of the land for purposes other than prospecting, mining, and related activities. Initiate appropriate action to resolve.
 1. Leasing, permitting, or licensing of National Forest System lands will be based on site specific considerations using appropriate standards and guidelines for the management unit concerned. Criteria for these actions should minimize impacts on or conflicts with other resource uses and should return disturbed lands to planned surface resources or uses.
 - A. Forest Service authorization of geophysical exploration will include terms and conditions controlling operating methods and times to prevent or control adverse impacts on surface resources and uses.
 - B. Recommendations or consent to BLM for issuance of leases and permits will include all current standard stipulations and the Regionally approved special stipulations that may be necessary for additional protection of specific surface resources and uses.
 - C. Recommend against or deny consent or concurrence to BLM for issuance of leases, permits, or licenses where operational damages on surface resources, including the impacts of surface-based access, product transportation and ancillary facilities necessary to production and related operations, would be irreversible 1/ and irretrievable, 2/ with low potential for reclamation. Negative recommendations or consent denials will be based on site-specific considerations using the appropriate standards and guidelines.
3. National scenic trails and existing Wilderness', occur. (Mining in these areas is prohibited by the Coal Leasing Amendments Act of 1975. Coal leasing and coal exploration licenses will not be authorized on any of the foregoing described lands, unless mining can occur without conflicting with the purpose for which the area was established.)

1/ Irretrievable. Applies to losses of production, harvest, or commitment of renewable natural resources. For example, some or all of the timber production from an area is irretrievably lost during the time an area is used as a winter sports site. If the use is changed, timber production can be resumed. The production lost is irretrievable, but the action is not irreversible.

2/ Irreversible. Applies primarily to the use of nonrenewable resources, such as minerals or cultural resources, or to those factors that are renewable only over long time spans, such as soil productivity. Irreversible also includes loss of future options.

STANDARDS AND GUIDELINES

- A. All leasable and salable minerals: Activities may be denied or limited where the current uses or activities exceed, or the proposed activities may result in exceeding, the established critical resource(s) or use thresholds.
 - B. Oil and gas, geothermal, and CO2 activities may be limited by standard and current Regionally approved special stipulations, which are listed in Appendix C.
 - C. Coal and leasable uranium and non-energy minerals activities may be limited where:
 1. Terrain does not provide for adequate waste dumps and tailings disposal, leaving them unstable or unreclaimable.
 2. Surface-based access, product transportation and ancillary facilities necessary to operations are on slopes steeper than 60 percent with high erosion hazard, or with high geologic hazard.
 3. National scenic trails and existing Wilderness', occur. (Mining in these areas is prohibited by the Coal Leasing Amendments Act of 1975. Coal leasing and coal exploration licenses will not be authorized on any of the foregoing described lands, unless mining can occur without conflicting with the purpose for which the area was established.)

B. MANAGEMENT PRESCRIPTION

GENERAL DIRECTION

STANDARDS AND GUIDELINES

MANAGEMENT ACTIVITIES

- Minerals Management Salaries
1. Forest Service Authorizes common variety exploration and disposal under terms and conditions to prevent, minimize or mitigate adverse impacts on surface resources and uses. The objective of reclamation requirements will be to return disturbed land to the planned uses.

**Withdrawals
Modifications
and Revocations**

1. Withdrawals must be for the purpose of protecting specific existing or proposed uses. Initiate action for withdrawal from entry when other applicable laws and regulations will not provide the capability for protection of the surface resources and uses.

A. See the standards and guidelines for leasable minerals.

**Special Use Management
(Non-recreation)**
(J01)

1. Act on Special Use applications according to the following priorities:
 - A. Land and land use activity requests relating to public safety, health and welfare, e.g., highways, powerlines and public service improvements.
 - B. Land and land use activities contributing to increased economic activity associated with National Forest resources, e.g., oil and gas, and energy minerals.
 - C. Land and land use activities that benefit only private users, e.g., road permits, rights-of-way for powerlines, telephones, waterlines, etc.
2. Do not approve any Special Use applications that can be reasonably met on private or other Federal lands unless it is clearly in the public interest.
 3. Bury electrical utility lines or 33 KV or less and telephone lines except when:
 - A. Visual quality objectives of the area can be met using an overhead line.
 - B. Burial is not feasible due to geologic hazard or unfavorable geologic conditions.
 - C. It is not economical as determined by a cost analysis.
 - D. Greater long-term site disturbance would result.
 - E. It is not technically feasible.
 4. Do not approve Special Use applications for areas adjacent to developed sites unless the proposed use is compatible with the purpose and use of the developed site.

B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES

GENERAL DIRECTION

STANDARDS AND GUIDELINES

5. Hydropower. Standards and guidelines for small hydro-projects – Federal Energy Regulatory Commission (FERC).

The Forest's ID team will review proposed projects when notices of application for licensing are received from the Federal Energy Regulatory Commission.

Management concerns identified by the ID team will be resolved in the environmental assessment before approval of Special-Use Permits.

Minimum instream flow needs required by the Forest Service to secure favorable water flows as outlined in the Organic Act and to protect minimum viable populations of trout will be quantified by the Forest Service.

In addition to the above items, Forest Service input to the environmental assessment or EIS will include cumulative effects of actions proposed in the Plan and the proposed hydropower project.

Forest management area direction contained in Chapter IV will discuss the specific management requirements listed in 36 CFR 219.27 and give direction through the management multiple-use prescriptions for the resource areas listed in 36 CFR 219.13-219.26.

Land use decisions for small hydro-projects will be guided by the above-referenced Forest-wide standards and guidelines in conjunction with other resource uses and values. Therefore, when implementing a plan:

1. Assess small hydro-project proposals in response to Forest-wide standards and assess cumulative effects in context to both resource tradeoffs and other hydro-project proposals. The Cumulative Effects Study will address instream flow needs required by the Forest Service and impacts on fisheries and other resources. The actual feasibility of this land use for individual projects may occur prior to the completion of the Forest Plan or after a Plan is completed in a coordinated NEPA effort with the FERC, and resulting in a decision at the Washington Office level.
2. Assess small hydro-project proposals in response to Forest-wide standards and assess cumulative effects in context to both resource tradeoffs and other hydro-project proposals. The Cumulative Effects Study will address instream flow needs required by the Forest Service and impacts on fisheries and other resources. The actual feasibility of this land use for individual projects may occur prior to the completion of the Forest Plan or after a Plan is completed in a coordinated NEPA effort with the FERC, and resulting in a decision at the Washington Office level.
3. NEPA process. An Environmental Assessment (EA) or Environmental Impact Statement (EIS) is required for each project proposal. FERC requires the applicant to prepare an environmental report. The Forest Service will provide input into the report to FERC on cumulative effects, resources activities, and other land uses on National Forest Lands. If an EIS is necessary, the FERC will act as lead agency and the Forest Service will be a cooperating agency unless otherwise agreed. The environmental report prepared by the applicant may be used by the Forest Supervisor to complete site-specific EA/EIS for land use occupancy. On exempt licenses (small hydro less than 5 megawatts) the Forest Supervisor is responsible for the preparation of EA/EIS.

1. Acquire rights-of-way on existing Forest System roads and trails that cross private land.
2. Ensure floodplain and wetland values are approximately equal on both offered and selected tracts in proposed land exchanges or that values are in favor of the United States.

Rights-of-Way and
Land Adjustments
(J02, 13, 15, 16, 17
and 18)

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

GENERAL DIRECTION

STANDARDS AND GUIDELINES

3. Classify lands or interest in lands for acquisition where lands are valuable for NFS purposes according to the following priorities:
 - A. In designated wilderness areas and other Congressionally-classified areas.
 - B. Where lands or rights-of-way are needed to meet resource management goals and objectives.
 - C. Lands which provide habitat for threatened and endangered species of animals or plants.
 - D. Lands which include floodplain or wetlands.
 - E. On lands having historical or cultural resources, outstanding scenic values or critical ecosystems, when these resources are threatened by change of use or when management may be enhanced by public ownership.
4. Classify lands for disposal according to the following priorities:
 - A. To States, counties, cities, or other Federal agencies when disposal will serve a greater public interest.
 - B. In small parcels intermingled with mineral or homestead patents.
 - C. When suitable for development by the private sector, if development (residential, agricultural, industrial, recreational, etc.) is in the public interest.
 - D. When critical or unique resource (wetlands, floodplains, essential big game winter range, threatened or endangered species habitat, historical or cultural resources, critical ecosystems, etc.) exist. Effects are mitigated by reserving interests to protect the resource, or by exchange where other critical resources to be acquired are considered to be of equal or greater value.
5. Effect jurisdiction transfers which achieve the following objectives:
 - A. Reduce duplication of efforts by users and agencies in terms of time, cost, and coordination.
 - B. Improve or maintain user access to the administering agency.
 - C. Decrease travel and enhance management.
 - D. Improve public understanding of applicable laws, regulations, policies, and procedures.
 - E. Develop more effective and efficient work units.
 - F. Reduce administrative cost.

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

STANDARDS AND GUIDELINES

GENERAL DIRECTION

Property Boundary Location (J06)

1. Locate, mark, and post landlines according to the following priorities:
 - A. Lines needed to meet planned activities,
 - B. Lines needed to protect NFS lands from encroachment and
 - C. All other lines.

Soil Resource Management (KA1)

1. Maintain soil productivity, minimize man-caused soil erosion, and maintain the integrity of associated ecosystem.
 - A. Use site preparation methods which are designed to keep fertile, friable topsoil essentially intact.
 - B. Give roads and trails special design considerations to prevent resource damage on capability areas containing soils with high shrink-swell capacity.
 - C. Provide adequate road and trail cross drainage to reduce sediment transport energy.
 - D. Revegetate all areas capable of supporting vegetation, disturbed during road construction and/or reconstruction to stabilize the area and reduce soil erosion.
 - E. Prevent livestock and wildlife grazing which reduces the percent of plant cover to less than the amount needed for watershed protection and plant health.
 - F. Place tractor-built firelines on the contour where practical, and avoid use of tractors on highly erodible sites.
 - G. Provide natural channel drainage and establish protective vegetative cover on all new roads or equipment ways, and all existing roads which are being removed from the transportation system.
 - H. Minimize soil compaction by limiting vehicle travel; skidding on snow, frozen or dry soil; or using off-ground logging systems.
 - I. Restore disturbed soil areas caused by human use to soil loss tolerance levels commensurate with the natural ecological processes for the treatment areas.
 2. Repair and improve degraded watershed areas through initiation of watershed restoration projects.
 3. Maintain watershed improvement structures as necessary.
- A. Use the following standards and guidelines unless more site specific requirements are developed during project design.
 1. Limit intensive ground disturbing activities on unstable slopes and highly erodible sites.
 2. Apply Packer's Guide in designing for cross drain spacing and buffers.
 3. Chisel or rip compacted soils. Soils are considered compacted where there is a 15 percent increase in bulk density or 50 percent decrease in macro pore space.
 - A. Eliminate watershed restoration backlog by year 2000.
 - B. Base priority of watershed restoration projects on watershed improvement needs inventory & cost-benefit analysis emphasizing improvement opportunities in wet meadows and riparian areas.
 - A. Develop a watershed maintenance plan, including inventory and inspection schedules, for all watershed improvement structures.

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

GENERAL DIRECTION

4. Identify at the project level, upland areas that are immediately adjacent to riparian (prescription 9A) management areas. Adjacent upland areas are those portions of a management area which, when subjected to management activities have a potential for directly affecting the condition of the adjacent riparian management area. The magnitude of effects is dependent upon slope steepness, and the kind, amount, and location of surface and vegetation disturbance within the adjacent upland unit.

STANDARDS AND GUIDELINES

- A. The following is a guide to identifying the approximate extent of adjacent upland areas:
- | Slope Gradient
of Upland Areas
Adjacent to
Riparian Manage-
ment Area | Upslope Distance
from Boundary
of Riparian
Management
Area |
|---|--|
| % | Feet |
| 0-20 | 100 |
| 20-30 | 180 |
| 30-40 | 280 |
| 40-50 | 400 |
| 50-60 | 520 |
| 60-70 | 640 |
| 70-80 | 760 |
| 80-90 | 880 |
| 90-100 | 1000 |
| 100-150 | 1000-1300 |

% Slope Range	Feet
0-20	100
20-30	180
30-40	280
40-50	400
50-60	520
60-70	640
70-80	760
80-90	880
90-100	1000
100-150	1000-1300

- B. Reduce, through designed management practices and appropriate erosion mitigation and vegetation/ restoration measures, the project caused on-site erosion rates (calculated with appropriate universal soil loss equation methodology) by 75% within the 1st year after disturbance. Reduce project caused on-site erosion by 95 percent within five years after initial disturbance.
- C. Design continuing mitigation/ restoration practices and follow-up maintenance activities to ensure that 80 percent original ground cover (vegetation) recovery occurs within five years after disturbance.
- A. Specify off-road vehicle restrictions based on ORV use management.
1. Classify areas as to whether off-road vehicle use is permitted.
2. Manage road use by seasonal closure if:
- A. Use causes unacceptable damage to soil and water resources due to weather or seasonal conditions.

**Transportation System
Management
(L01 and 20)**

- B. Use conflicts with the ROS class established for the area.
- C. Use causes unacceptable wildlife conflict or habitat conditions.
- D. Use results in unsafe conditions due to weather conditions.
- E. They serve a seasonal public or administration need.
- F. Area accessed has seasonal need for protection or no use, or
- G. Use causes unacceptable damage to road due to weather or seasonal conditions.
- H. Use degrades the hunting experience.

3. Keep all existing, and newly constructed, roads open to public motorized use unless:

- A. Financing is not available to maintain the facility or manage the associated use of adjacent resources;
- B. Use causes unacceptable damage to soil and water resources;
- C. Use conflicts with the ROS class established for the area
- D. They are located in areas closed to motorized use and are not designated routes in the Forest travel management direction;
- E. Use results in unsafe conditions unrelated to weather conditions;
- F. There is little or no public need for them; or
- G. Use conflicts with wildlife management objectives.

4. Closed or restricted roads may be used for and to accomplish administrative purposes when:

- A. Prescribed in management area direction statements;
- B. Authorized by the Forest Supervisor; and
- C. In case of emergency.

5. Avoid, where possible, locating roads on geologic contact zones (e.g. Wasatch-Kaiyapowits Contact, Carmel-Naajo Sandstone Contact, etc.). If roads must be located in these zones, road cuts should be kept to a minimum height, roads should follow the slope contour, road width should be kept to a minimum and fill should be used to cross highly susceptible mass movement areas rather than cutting into the slopes.

Arterial and Collector
Road Construction and
Reconstruction
(L02 thru L09,
L16 thru L18)

1. Construct and reconstruct arterial and collector roads to meet multiple resource needs.

A. Construction and reconstruction standards for arterial and collector roads are:

STANDARD	ARTERIAL	COLLECTOR
TRAVEL SPEED	AVERAGE 30-35 MPH	AVERAGE 10-30 MPH
Surface	All Weather generally asphalt or gravel	Generally gravel or native surfacing, sometimes asphalt

**B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES**

GENERAL DIRECTION

STANDARDS AND GUIDELINES

	Width	Typically 24 to 28 feet, but some single lane with intervisible turnouts	Typically 14 feet, with inter- visible 10 foot turn- outs
Local Road Construction and Reconstruction (L11, 12 and 13)	A. Construction and reconstruction for specific resource activities such as campgrounds, trail- heads, timber sales, range allotments, mineral leases, etc., with the minimum amount of earthwork.	A. Standards for local roads are: TRAVEL SPEED AVERAGE LESS THAN 5-15 MPH	
		Lanes	Usually single lane, except for developed recreation sites.
		Surface	Varies from asphalt to native surface, majority are native surface.
		Width	Typically 14 feet Turnouts optional, depending upon traffic management, usually intervisible.
		Drainage	Dips and culverts
Road Maintenance (L19)	1. Maintain all roads to the following minimum requirements: A. All arterial and open collectors - Level 3 and above, B. All open local roads - Level 2 and above, and C. All closed roads - Level 1.	A. Levels of maintenance: Level 1. Basic custodial maintenance is performed to protect the road investment and to keep damage to adjacent resources to an acceptable level. Drainage facil- ties and runoff patterns are maintained while being maintained at Level 1, roads are closed or blocked to traffic. Level 2. Roads in this maintenance level are normally characterized as single lane, primitive type facilities intended for use by high clearance vehicles. Passenger car traffic is not a consideration.	

Level 3. Roads at this maintenance level are normally characterized as 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 minor collector.

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 and/or dust abated. The functional classification of these roads is normally collector or minor arterial.

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.

2. Maintain structures, bridges, cattleguards, etc., to be structurally sound and safe for use.

Trail System Management
(L23)

1. Maintain all trails travel unless specifically closed to either or both class of user.

2. Maintain all trails in accordance with the standards in the Trail Handbook (FSH 7709.12).

Trail Construction
and Reconstruction
(L22)

1. Construct or reconstruct trails when needed as part of the transportation system.

Dam Administration
and Maintenance
(L28)

- A. Cross drains and conveyance structures are planned according to Forest design standards.
 1. Design impoundments to conform to visual quality objectives established for the project.

B. MANAGEMENT PRESCRIPTION
MANAGEMENT ACTIVITIES

GENERAL DIRECTION

STANDARDS AND GUIDELINES

2. Provide opportunities for dispersed and developed recreation adjacent to the impoundment site that are commensurate with land and water capabilities and the multiple use goals for the project.
3. Require new impoundment projects to provide recreation facilities in one of two ways:
 - A. Proponent will provide facilities meeting Forest Service standards and requirements.
 - B. Forest Service will construct facilities at expense of proponent.
4. Allow hunting and fishing subject to State laws and regulations.
5. Design impoundments so that a lake fishery is created or enhanced.
6. Provide the instream flows and conservation pools necessary to maintain fisheries and wildlife habitat. Provide mitigation or compensation measures as determined in cooperation with the Utah DWR and the U.S. Fish and Wildlife Service.
7. Encourage riparian habitat by establishing vegetation on potential areas around the periphery of the impoundment.
8. Resolve conflicts between livestock use and recreation/water quality/wildlife in favor of the latter.
9. Clear merchantable and unmerchantable trees and shrubs to a line two feet above the high water line when this vegetation will later substantially interfere with water level regulation, recreation use or public safety.
- A. Base tree removal on an evaluation of: clearing costs, wildlife habitat, fire danger, site aesthetics, public safety and utilization for reforestation, dam spillway capacity and plugging problems and maintenance (FSM 7531.4)
 - B. Clear the entire pool area if the brush remaining creates greater use, maintenance, user safety and dam safety costs than clearing costs.
10. Coordinate design, water rights, diversions, etc., with State laws and regulations.
11. Revegetate areas of exposed soils.

Fire Planning and Suppression (P01)

1. Plan and provide a level of protection from wildfire that will meet management objectives for the area, considering the following:
 - A. The values of the resources that are threatened by fire,
 - B. The probability of fire occurrence,
 - C. The fuelbeds that fires will probably occur in,
 - D. The weather conditions that will probably influence fires that occur,
 - E. The costs of fire protection programs (FFF and FFF),
 - F. The social, economic, political, cultural, environmental, life and property concerns, and,
 - G. Management objectives for the area. Use the National Fire Management Analysis Process (NFMAS).

Escaped Fire Suppression (P09)

1. Take suppression action on all escaped fires considering the following:
 - A. The values of the resources threatened by the fire (both positive and negative),
 - B. Management objectives for the threatened area(s),
 - C. The fuelbeds the fire may burn in,
 - D. The current and projected weather conditions that will influence fire behavior,
 - E. Natural barriers and fuel breaks,
 - F. Social, economic, political, cultural, and environmental concerns,
 - G. Public safety,
 - H. Firefighter safety, and
 - I. Costs of alternative suppression strategies. Use the Escaped Fire Situation Analysis (EFSAs) to make this determination.

Fuel Treatment (P11 thru 14)

1. Maintain fuel conditions which permit fire suppression forces to meet fire protection objectives for the area.
 - A. Reduce or otherwise treat all fuels so the potential fireline intensity of an area will not exceed 400 BTU's/sec/ft (B.I.-68) on 90 percent of the days during the regular fire season,
OR
Break up continuous fuel concentrations exceeding the above standard into manageable units with fuel breaks or fire lanes,
OR
Provide additional protection for areas exceeding the above standards when such protection will not be required for more than five years.

B. MANAGEMENT PRESCRIPTION MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS AND GUIDELINES
Vegetation Treated by Burning (P15)	<ul style="list-style-type: none"> 1. Use prescribed fire to accomplish resource management objectives, such as reducing fuel load buildup, wildlife habitat improvement, etc. 2. Limit use of prescribed fire on areas in or adjacent to riparian areas to protect riparian and aquatic values. 	<ul style="list-style-type: none"> A. Prescribed burning on National Forest System lands will be planned in accordance with existing direction and Forest direction must be consistent with Federal and State laws.
Air Resource Management (P16)	<ul style="list-style-type: none"> 1. Comply with State and Federal Air Quality Standards. (FSM 2120 and 5180) 	
Insect and Disease Management/Suppression (P35)	<ul style="list-style-type: none"> 1. Prevent or suppress epidemic insect and disease populations that threaten forest stands with an integrated pest management (IPM) approach consistent with resource management objectives. 	

F. MANAGEMENT AREA STANDARDS AND GUIDELINES

This section describes the 20 Management Areas on the Forest, and the management direction, and standards and guidelines that apply to each area. The standards and guidelines which apply universally to all management areas are discussed earlier in the Chapter. The proposed and probable management practices which list, by resource, specific projects to be accomplished in each Management Area are shown Chapter VII, Appendix B.

The Forest was divided into Management Areas to facilitate implementation of the Forest Plan. Each Management Area is composed of lands to which the management prescription will apply.

The Forest Plan map displays the location(s) of the Management Areas using a number and letter code that identifies the prescription.

The Management Areas, listed by code number, name, acres, and page number follow:

<u>Area Number</u>	<u>Name</u>	<u>Page</u>
1A	Developed Recreation	IV-57
1B	Winter Sports Sites	IV-60
2A	Semi Primitive Recreation	IV-63
2B	Roaded Natural Recreation	IV-68
4A	Fish & Aquatic Habitat	IV-73
4B	Wildlife Habitat-Mis. Species	IV-82
4C	Wildlife Habitat-Brushy Range	IV-88
4D	Aspen Mgt. for Wildlife	IV-93
5A	Big Game Winter Range	IV-97
5B	Big Game Winter Range	IV-102
6A	Livestock Grazing	IV-109
7A	Wood Prod. & Utilization	IV-114
8A	Wilderness	IV-121
8A1	Antone Bench Exclusion	IV-126
8A2	Other Box Death Hollow Exclosure	IV-131
9A	Riparian Management	IV-135
9B	Riparian Management Int.	IV-144
10A	Research Natual Area	IV-153
10B	Municipal Watersheds	IV-156

MANAGEMENT AREA 1A
DEVELOPED RECREATION

Characteristics

This management area consists of both existing and proposed developed recreation sites.

Desired Future Condition

Developed facilities will be adequate to protect the site and provide comfort for the user. Improvements will be designed to harmonize with the environment and to minimize maintenance costs. Traffic controls will be inconspicuous unless stricter control is needed. Roads will be hard surfaced in high use areas where it is necessary to protect the resource. Development density will average 3 family units per acre. Interpretive services will be informal but generally direct. Vegetation will be managed to perpetuate the desired cover type. Vegetation will provide screening between units and shade from the hot afternoon sun. New sites will be constructed to a development scale three or less

Size

This management area contains a total area of 19,400 acres, including 1265 acres of developed sites. Sixteen thousand eight hundred seventy one acres are unsuitable for timber harvest.

Management Area Direction

Management emphasis is for developed recreation in existing and proposed campgrounds, picnic grounds, trailheads, visitor information centers, summer home groups, and water-based support facilities. Proposed sites (sites scheduled for development in the plan) are managed to maintain the site attractiveness until they are developed.

Facilities such as roads, trails, toilets, signs, etc., may be dominant, but harmonize and blend with the natural setting. Livestock grazing is generally excluded from developed sites. Existing and proposed sites are withdrawn from locatable mineral entry.

PRACTICES/MFH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
MANAGEMENT PRESCRIPTION 01A – EXISTING AND PROPOSED DEVELOPED RECREATION SITES		
Visual Resource Management (A04)	<p>1. Emphasize visually appealing landscapes (vista openings, rock outcroppings, diversity of vegetation, etc.)</p>	<p>A. Do not go below an adopted VIS Quality Objective (VQO) of:</p> <ul style="list-style-type: none"> -Partial retention in development level 2 sites. -Modification in development level 3, 4 and 5 sites. <p>B. Sensitivity Level: Development level 3, 4 and 5 sites are sensitivity level one.</p> <p>C. Apply rehabilitation practices where the above objectives are not currently being met.</p>
Recreation Site Construction and Rehabilitation (A05 and 06)	<p>2. Facilities may dominate, but will harmonize and blend with the natural foreground and middleground landscape.</p> <p>1. Design facilities and access to provide site protection, efficient maintenance, and user convenience. Design developed sites to ensure that capacity is not exceeded except during heavily used weekends and holidays.</p> <p>2. Provide at least 10 percent of the units in level 3 and 4 camp and picnic sites to accommodate two or more family groups.</p>	<p>A. Construct and reconstruct existing and new developed sites in accordance with the guideline in FSM 2331.</p> <p>1. Maintain all developed sites in accordance with Regional acceptable work standards (FSM 1310)</p> <p>2. Maintain facilities in a safe condition. Replace facilities A. See FSH 2309.11, section 122. when rehabilitation costs 50 percent or more of replacement costs or when existing facilities are no longer compatible with site design or ROS classification.</p>
Management of Developed Recreation Sites (A08, 09, 11 and 13)		

<u>PRACTICES/MTH CODE</u>	<u>MANAGEMENT DIRECTION (01A)</u>	<u>STANDARDS AND GUIDELINES</u>
Range Resource Management (D07)	<ul style="list-style-type: none"> 1. Manage livestock grazing to enhance recreation opportunities in existing and proposed recreation sites. 2. Exclude grazing of recreational stock and livestock in developed recreation sites. 	<ul style="list-style-type: none"> A. Construct fences of material other than barbed wire around developed sites. A. Maintain vegetation in fair or better range condition.
Silvicultural Prescriptions (E03, 06, and 07)	<ul style="list-style-type: none"> 1. Manage tree stands to enhance visual quality and recreation opportunities on existing and proposed recreation sites.¹ 2. Remove unsafe or dead trees in developed sites. Plant new trees to provide desired tree cover. 	<ul style="list-style-type: none"> A. Include applicable no surface occupancy special stipulations (See Appendix C)
Mineral Management Oil, Gas and Geothermal	<ul style="list-style-type: none"> 1. Review and process mineral lease applications, permits, and licenses in a timely fashion, recommending to Bureau of Land Management measures and stipulations necessary to protect surface resources. 	<ul style="list-style-type: none"> A. Use "Chapter 6 of State of Utah Public Drinking Water Regulations as a guide.
Water Resource Improvement and Maintenance	<ul style="list-style-type: none"> 1. Within riparian areas apply management direction in riparian acre prescription except as amended by the direction in this prescription. 2. Provide for special protection zone within 1500 feet up gradient and 100 feet down gradient of spring sources of water supplies. 	<ul style="list-style-type: none"> B. Consider mineral entry withdrawals or restrictive lease stipulations to protect quantity and quality of water supplies.

MANAGEMENT AREA 1B
WINTER SPORTS SITES

Characteristics

This management area occurs in the Brian Head-Crystal Mountain area on the Cedar City Ranger District.

Desired Future Condition

Any ski area development on the Forest will remain in the Brian Head-Crystal Mountain area. All expansion in this area will be according to an approved master plan. Runs and lift lines will be blended into the existing environment through vegetation management and the use of existing openings. Buildings and structures on the Forest will be designed to duplicate features that exist naturally. Colors used on man-made structures will meet the safety requirements of a ski area and match colors found in the characteristic landscape.

Size

This management area contains 3800 acres. Three thousand forty acres are unsuitable for timber harvest.

Management Area Direction

Management emphasis provides for downhill skiing on existing sites and maintains selected inventoried sites for future downhill skiing recreation opportunities. Management integrates ski area development and use with other resource management to provide healthy tree stands, vegetative diversity, forage production for wildlife and livestock, and opportunities for nonmotorized recreation.

Visual resources are managed so that the character is one of forested areas interspersed with openings of varying widths and shapes. Facilities may dominate, but harmonize and blend with the natural setting. Harvest methods in forested areas between ski runs is clearcutting in aspen, shelterwood in ponderosa pine and mixed conifers, and group selection in Engelmann spruce-subalpine fir, or as specified in the permittee's site-specific development plan.

PRACTICES/MTH CODE	MANAGEMENT DIRECTION (01B)	STANDARDS AND GUIDELINES
MANAGEMENT PRESCRIPTION 01B – EXISTING AND PROPOSED WINTER SPORTS SITES		
Visual Resource Management (A04)	1. Emphasize visually appealing landscapes (vista openings, rock outcroppings, diversity of vegetation, etc.)	A. Do not go below an adopted Visual Quality Objective (VQO) of modification B. Apply rehabilitation practices where the above objectives are not currently being met.
Recreation Site Construction and Rehabilitation (A05 and 06)	1. Design and locate improvements on winter sport sites to provide safety to users and to harmonize with the natural environment.	A. Follow construction, reconstruction standards specified in the approved master development plan.
Management of Developed Recreation Sites (A08, 09, 11 and 13)	1. Provide opportunities for year-round recreation use of the permitted area and facilities.	
Range Resource Management (D07)	1. Manage livestock grazing to enhance recreation opportunities A. Maintain vegetation in fair or better range condition.	
Silvicultural Prescriptions (E03, 06 and 07)	1. Manage forest cover types on the permitted area to enhance visual quality, diversity, and recreation opportunities and to provide for a healthy forest cover in existing and proposed winter sports sites. Specific timber management prescription to be determined by certified silviculturist. 2. Limit timber harvest activities to periods of low recreation use activity or to coincide with ski area construction activity. 3. Encourage utilization of firewood and other forest products.	A. When the visual quality objective of an area is modified or maximum modification the regenerated stand shall meet or exceed all of the following characteristics before a cutover area is no longer considered an opening:
	4. The combined water yield effects of type conversion on ski runs and increased on-site water from stand regeneration must be determined. Do not exceed threshold limits of water quality and drainage system stability.	A. When the visual quality objective of an area is modified or maximum modification the regenerated stand shall meet or exceed all of the following characteristics before a cutover area is no longer considered an opening: -Forage and/or browse production drops below 40 percent of potential production; -Deer and elk hiding cover reaches 60 percent of potential;
	6. For management purposes of forested areas between ski trails or other openings, a cut-over area is considered an opening until such time as: -Forage and/or browse production drops below 40 percent of potential production;	

PRACTICES/MR CODE**MANAGEMENT DIRECTION (01B)****STANDARDS AND GUIDELINES**

- Minimum stocking standards specified in the silvicultural prescription are met; and
- The area appears as a young forest rather than a restocked opening, and takes on the appearance of the adjoining characteristic landscape.

FOREST COVER TYPE	MINIMUM STOCKING LEVEL (TREES/ACRE)	TREE STAND HEIGHT (FEET)		DISTRIBUTION 3/
		CROWN CLOSURE (PERCENT)	4/	
Ponderosa Pine	150 2/ 6			
Mixed Conifers	150 2/ 6			
Eugelmann Spruce-Subalpine Fir	150 2/ 6			
Aspen	300	6		
FOREST COVER TYPE	CROWN CLOSURE (PERCENT)	DISTRIBUTION 3/		
Ponderosa Pine	30	60%	60%	
Mixed Conifers	30	60%	60%	
Eugelmann Spruce-Subalpine Fir	30	60%	60%	
Aspen	30	75%	75%	

1/ Applies to trees specified at minimum stocking level
 2/ Or as otherwise specified in the Silvicultural Prescription
 3/ Percent of plots or transects that are stocked.

1. Design and locate local roads in the permitted area.
 - A. To facilitate management of tree stands and wildlife as well as recreation; and
 - B. With the minimum of mileage and earthwork.

1. Review and process mineral lease applications, permits, and licences in a timely fashion recommending to Bureau of Land Mgt. measures and stipulations necessary to protect surface resources.
 - A. Include applicable no surface occupancy special stipulations. (See Appendix C)

Local Road Construction and Reconstruction (L11, 12 and 13)

Mineral Management Oil, Gas, and Geothermal

MANAGEMENT AREA 2A
SEMPRIMITIVE RECREATION

Characteristics

The Recreation Opportunity Spectrum Semi Primitive management setting provides a special kind of outdoor experience, one dependent upon a perception of remoteness. In some cases, it also provides Forest managers with opportunities for active management, including habitat improvement, timber harvest, and travel coordinated management prescriptions can be developed. The term semi primitive refers to a management objective and not to a land classification.

Desired Future Condition

This area will provide the user with a moderate to high probability to experience isolation from the sights and sounds of human, independence, closeness to nature, tranquility and self-reliance through the application of woodsman and outdoor skills in an environment that offers challenge and risk. This opportunity exists for users to have a high degree of interaction with the natural environment.

Size

This management area contains 222,300 acres. Two hundred five thousand eight hundred five acres are unsuitable for timber harvest.

Management Area Direction

Management emphasis is for semi-primitive recreation opportunities. Motorized travel may be restricted or seasonally prohibited to designated routes to protect physical and biological resources and to meet management objectives.

Visual resources are managed so that management activities are not evident or remain visually subordinate. Past management activities such as historical changes caused by early mining, logging, and ranching may be present which are not visually subordinate, but appear to have evolved to their present state through natural processes. Landscape rehabilitation is used to restore landscapes to a desirable visual quality. Enhancement aimed at increasing positive elements of the landscape to improve visual variety is also used.

Livestock distribution and stocking rates are managed to be compatible with recreation use. The timber resource is managed using both commercial and noncommercial methods. Silvicultural prescriptions should be designed to maintain a visual quality objective of partial retention, enhance long term visual quality, diversity, and provide for insect and disease control.

Mineral and energy resources activities are generally compatible with goals of this management area subject to appropriate stipulations provided in management activities G00 - G07 in Forest direction.

Local roads may be constructed for non-recreation purposes to a minimal standard compatible with a primitive environment and located so they will not detract from the objective. Once the activity is completed, the traffic will be controlled to whatever degree necessary to maintain the desired forest setting. This will continue until the road is again needed for more intensive management purposes.

PRACTICES/MH CODE**MANAGEMENT DIRECTION****STANDARDS AND GUIDELINES****MANAGEMENT PRESCRIPTION 2A - SEMI-PRIMITIVE RECREATIONAL OPPORTUNITIES****Visual Resource Management (AO4)**

1. Design and implement management activities to provide a visually appealing landscape. Enhance or provide more viewing opportunities and increase vegetation diversity in selected areas.

A. Do not go below an adopted Visual Quality Objective (VQO) or partial retention.

B. FS system travel routes will be mapped according to sensitivity levels and will be managed accordingly.

C. Apply rehabilitation practices where the above objectives are not currently being met.

D. Manage visual resources using the above standards in accordance with FSH 2380 and FSH 2309.16 through FSH 2309.25.

Dispersed Recreation Management (A14 and 15)

1. Emphasize semi-primitive recreation opportunities. Specific land areas or travel routes may be closed seasonally or year-round for compatibility with adjacent area management, to prevent resource damage, for economic reasons, to prevent conflicts of use, and for user safety. The semi primitive management setting provides a special kind of outdoor experience, one dependent on a perception of remoteness.

2. Manage use to allow low to moderate contact with other groups and individuals.

A. Maximum use and capacity levels are:

-Trail and camp encounters during peak use days are less than 30 other parties per day.

-Trail and area-wide use capacities

-ROS CLASS - SEMI-PRIMITIVE-MOTORIZED

USE LEVEL	VERY LOW	LOW	MODERATE	HIGH
On Trails	PAOT/Mile 2.0	3.0	9.0	11.0
Area-Wide	PAOT/Acre .004	.008	.05	.08

PRACTICES/MIN. CODE	MANAGEMENT DIRECTION (2A)	STANDARDS AND GUIDELINES
		Reduce the above use level co-efficients as necessary to reflect usable acres, patterns of use, and general attractiveness of the specific management area type as described in the RGS Users Guide, Chapter 25.
		Reduce the above use levels where unacceptable changes to the biophysical resources will occur.
3. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in subalpine and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat.	4. Permit undesignated sites in Frissell Condition Class 1 through 3 where unrestricted camping is permitted.	A. Composite condition class based upon Frissell, SS., Journal of Forestry, May 1978.
5. Manage site use and occupancy to maintain sites within Frissell Condition Class 3 except for designated sites which may be Class 4. Close and restore Class 5 sites.	6. Facilities provided include Development Level 1 and 2 campgrounds. Trails suitable for motorized trailbike use, local roads with primitive surface and parking lots at trailheads where compatible with management objectives. Provide signing compatible with intended use.	A. See FFSM 2331, FFSM 7732, FFSH 7709, 12 (Trails Handbook), FFSH Z109, 11A and 11B (Sign Handbook).
Mineral Management Oil, Gas and Geothermal	1. Review and process mineral lease applications, permits and licenses in a timely fashion recommending to Bureau of Land Management measures and stipulations necessary to protect surface resources.	A. Include applicable special stipulations. (See Appendix C.)
Recreation Management (Private and Other Public Sector) (A16)	1. Encourage development of private sector recreation oriented support services.	
Range Resource Management (D07)	1. Manage livestock distribution and stocking rates to be compatible with recreation use. Locate structural improvements to meet Visual Quality Objectives.	
Silvicultural Prescriptions (E03, 06 and 07)	1. Manage tree stands using both commercial or noncommercial methods. Enhance visual quality, diversity and provide for insect and disease management. 2. Manage forest cover types using the following harvest methods: -Clearcut in aspen -Shelterwood in ponderosa pine, mixed conifer and Engelmann spruce-subalpine fir	

PRACTICES/HIT CODE**MANAGEMENT DIRECTION (2A)****STANDARDS AND GUIDELINES**

- Selection/group selection in any forest type except aspen
- Clearcut (patch) in dwarf mistletoe infected Douglas-fir and ponderosa pine.

3. Apply intermediate treatments to maintain growing stock level standards as specified in the silvicultural prescription.
4. Utilize firewood material using both commercial and noncommercial methods where compatible with management objectives.

5. For management purposes, a cut-over area is considered an opening until such time as:
 - Forage and/or browse production drops below 40 percent of potential production,
 - Deer and elk hiding cover reaches 60 percent of potential minimum stocking standards by forest cover type and site productivity are met; and
 - The area appears as a young forest rather than a restocked opening, and takes on the appearance of the adjoining characteristic landscape.

- A. When the Visual Quality Objective of an area is partial retention. The regenerated stand shall meet or exceed all of the following characteristics before a cut-over area is no longer considered an opening:

	FOREST COVER TYPE	MINIMUM STOCKING LEVEL (TREES/ACRE)	TREE STAND HEIGHT (FEET)	DISTRIBUTION 3/ (PERCENT)
Ponderosa Pine	150 2/	15		
Mixed Conifers	150 2/	15		
Engelmann Spruce-Subalpine Fir	150 2/	15		
Aspen	300	15		
	FOREST COVER TYPE	CROWN CLOSURE (PERCENT)		
Ponderosa Pine	30	60%		
Mixed Conifers	30	60%		

PRACTICES/MIN. CODE	MANAGEMENT DIRECTION (2A)	STANDARDS AND GUIDELINES						
		<table> <tr> <td>Engelmann Spruce-Subalpine Fir</td> <td>30</td> <td>60%</td> </tr> <tr> <td>Aspen</td> <td>30</td> <td>75%</td> </tr> </table> <p>1/ Applies to trees specified at minimum stocking level. 2/ Or as otherwise specified in the Silvicultural Prescription 3/ Percent of plots or transects that are stocked.</p>	Engelmann Spruce-Subalpine Fir	30	60%	Aspen	30	75%
Engelmann Spruce-Subalpine Fir	30	60%						
Aspen	30	75%						
Special Use Management (Non-Recreation) (J01)	<ol style="list-style-type: none"> Permit special uses which are complimentary and compatible with the objectives of the management area . Permit special uses which are complementary and compatible with the kind and development level of the associated Forest area. 	<p>A. Reference the ROS users guide.</p>						
Local Road Construction		<ol style="list-style-type: none"> Local roads may be constructed for nonrecreation purposes to a minimal standard compatible with a primitive environment and located so they will not detract from the objective. Once the activity is completed, the traffic will be controlled to whatever degree necessary to maintain the desired forest setting. This will continue until the road is again needed for more intensive management purpose. <p>Maintain local roads to level 2 during periods when access for resource utilization is not required.</p>						
F&O Construction Reconstruction and Maintenance (L24 and 25)		<ol style="list-style-type: none"> Use of F&O facilities will be limited to minimal shelter type structures. F&O facilities will be constructed/reconstructed and maintained according to resource needs. 						
Transportation System Management (L01 and 02)		<ol style="list-style-type: none"> Roads will be designed and located to be compatible with a primitive setting. 						

MANAGEMENT AREA 2B
ROADED NATURAL RECREATION

Characteristics

This management area consists of travel corridors along major traveled routes across the Forest or to specific recreational attractions on the Forest.

Desired Future Condition

This area is characterized by a modified natural environment. Resource modification and utilization practices usually harmonize with the natural environment. In some of the more modified zones within this area utilization practices enhance recreation activities, maintain vegetative cover, and soil. The opportunity to have a high degree of interaction with the natural environment and to face challenges associated with more primitive forms of recreation will not be important. Both motorized and non-motorized forms of recreation are possible in this area. The natural features of the landscape will dominate.

Size

This management area contains 131,700 acres. One hundred twenty four thousand two hundred seventy eight acres are unsuitable for timber harvest.

Management Area Direction

Management emphasis is for rural and roaded-natural recreation opportunities. Motorized and nonmotorized recreation activities such as driving for pleasure, viewing scenery, picnicking, fishing, snowmobiling, and cross-country skiing are possible. Conventional use of highway-type vehicles is provided for in design and construction of facilities. Motorized travel may be prohibited or restricted to designated routes, to protect physical and biological resources.

Visual resources are managed so that management activities maintain or improve the quality of recreation opportunities. Management activities are not evident, remain visually subordinate, or may be dominant, but harmonize and blend with the natural setting. Landscape rehabilitation is used to restore landscapes to a desirable visual quality. Enhancement aimed at increasing positive elements of the landscape to improve visual variety is also used.

The harvest method by Forest cover type is clearcutting in aspen, shelterwood in ponderosa pine, mixed conifer and Englemann spruce-subalpine fir.

PRACTICES/MFH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES																																
MANAGEMENT PRESCRIPTION 2B - EMPHASIZE RURAL AND ROADED NATURAL RECREATIONAL OPPORTUNITIES																																		
Visual Resource Management (A14 and 15)	<p>1. Design and implement management activities to provide a visually appealing landscape. Enhance or provide more viewing opportunities and increase vegetation diversity in selected areas.</p> <p>Dispersed Recreation Management (A14 and 15)</p> <p>1. Provide roaded natural or rural recreation opportunities along Forest arterial, collector and local roads which are open to public motorized travel. Manage recreation use to provide moderate to high incidence of contact with other groups and individuals.</p> <p>Where arterial, collector or local roads or areas are closed to public motorized recreation travel, provide for dispersed non-motorized recreation with a moderate to high incidence of contact with other groups and individuals in a roaded natural or rural setting.</p>	<p>A. Do not go below an adopted Visual Quality Objective (VQO) of partial retention.</p> <p>B. Maintain or establish a minimum of 30 percent of the forested area within a unit to provide horizontal diversity.</p> <p>A. Maximum use and capacity levels are:</p> <ul style="list-style-type: none"> -Trail and camp encounters during peak use day may exceed 30 other parties per day. <p>-Trail and area-wide use capacities:</p> <table border="1"> <thead> <tr> <th colspan="4">ROS CLASS - ROADED NATURAL</th> </tr> <tr> <th>USE LEVEL</th> <th>VERY LOW</th> <th>LOW</th> <th>MOD.</th> <th>HIGH</th> </tr> </thead> <tbody> <tr> <td>On Trails PACT/Mile</td> <td>--</td> <td>--</td> <td>--</td> <td>--</td> </tr> <tr> <td>Area-Wide PLOT/Acre</td> <td>.04</td> <td>.08</td> <td>1.2</td> <td>2.5</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="4">ROS CLASS - RURAL</th> </tr> <tr> <th>On Trails PACT/Mile</th> <td>--</td> <td>--</td> <td>--</td> </tr> </thead> <tbody> <tr> <td>Area-Wide PACT/Acre</td> <td>.5</td> <td>.8</td> <td>5.0</td> <td>7.5</td> </tr> </tbody> </table> <p>Reduce the above use levels where as necessary to reflect usable acres, patterns of use, and general attractiveness of the specific management area type as described in the ROS User's Guide, Chapter 25.</p> <p>Reduce the above use levels where unacceptable changes to the biophysical resources will occur.</p>	ROS CLASS - ROADED NATURAL				USE LEVEL	VERY LOW	LOW	MOD.	HIGH	On Trails PACT/Mile	--	--	--	--	Area-Wide PLOT/Acre	.04	.08	1.2	2.5	ROS CLASS - RURAL				On Trails PACT/Mile	--	--	--	Area-Wide PACT/Acre	.5	.8	5.0	7.5
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PRACTICES/MH_CODE

MANAGEMENT DIRECTION (2B)

STANDARDS AND GUIDELINES

- B. Manage local roads for public use. Designate routes and areas which can be periodically closed:
-Gathering firewood.
-Operating oversnow vehicles.
2. Permit undesignated sites in Frissell Condition Class 1 through 3 where unrestricted camping is permitted.
3. Manage site use and occupancy to maintain sites within Frissell Condition Class 3 except for designated sites which may be Class 4. Close and restore Class 5 sites.
4. Facilities provided include development level 1 and 2 campgrounds, trails suitable for motorized trailbike use, local roads with primitive surface and parking lots at trailheads. Provide signing compatible with intended use.
5. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in subalpine, and other ecosystems, Where needed to protect soils, vegetation, or special wildlife habitat.
6. Close roads and trails to motorized travel when the surface would be damaged to the degree that resulting runoff into adjacent water bodies would exceed sediment yield threshold limits.
- A. Specify off-road vehicle restrictions based on ORV use management (FSM 2355)
- B. See FSM 2331, FSM 7732, FSH 7709.12 (Trails Handbook), FSH 7109.11A and 11B (Sign Handbook)
1. Encourage development of private sector recreation oriented support services.

Recreation Management
(Private and Other
Public Sector)
(A16)

Range Resource
Management
(D07)

Silvicultural
Prescriptions
(E03, 05, 06 and 07)

1. Manage livestock distribution and stocking rates to be compatible with recreation use. Locate structural improvements to meet Visual Quality Objectives.

1. Manage tree stands using both commercial or noncommercial methods. Enhance visual quality, diversity and insect and disease control.

2. Manage forest cover types using the following harvest methods:

- Clearcut in aspen
- Shearwood in ponderosa pine, mixed conifer and Engelmann spruce-subalpine fir
- Selection/group selection in any forest type except aspen
- Clearout (patch) in dwarf mistletoe infected ponderosa pine and Douglas-fir.
- Or as specified by the silvicultural prescription.

3. Apply intermediate treatments to maintain growing stock level standards as specified in the silvicultural prescription.

4. Utilize firewood material using both commercial and non-commercial methods.

- 5. For management purposes, a cutover area is considered an opening until such time as:**
- Forage and/or browse production drops below 40 percent of potential production;
 - Deer and elk hiding cover reaches 60 percent of potential;
 - Minimum stocking standards by forest cover type and site productivity are met; and
 - The area appears as a young forest rather than a restocked opening, and takes on the appearance of the adjoining characteristic landscape.

A. When the Visual Quality Objective or an area is partial retention, the regenerated stand shall meet or exceed all of the following characteristics before a cutover area is no longer considered an opening:

FOREST COVER TYPE	MINIMUM STOCKING LEVEL	TREE STAND HEIGHT
Ponderosa Pine	150 2/	25

FOREST COVER TYPE	MINIMUM STOCKING LEVEL	TREE STAND HEIGHT
Mixed Conifers	150 2/	25

FOREST COVER TYPE	MINIMUM STOCKING LEVEL	TREE STAND HEIGHT
Engelmann Spruce-Subalpine Fir	150 2/	25

FOREST COVER TYPE	MINIMUM STOCKING LEVEL	TREE STAND HEIGHT
Aspen	300	25

FOREST COVER TYPE	MINIMUM STOCKING LEVEL	TREE STAND HEIGHT
Ponderosa Pine	30	60%

- A. Include applicable special stipulations. (See Appendix C)
1. Review and process mineral lease applications, permits, and licences in a timely fashion recommending to Bureau of Land Mgt. measures and stipulations necessary to protect surface resources.

PRACTICES/NR CODE	MANAGEMENT DIRECTION (2B)	STANDARDS AND GUIDELINES	
	Mixed Conifers	30	60%
	Engelmann Spruce-	30	60%
	Subalpine Fir		
	Aspen	30	75%
		1/ Applies to trees specified at minimum stocking level	
		2/ Or as otherwise specified in the Silvicultural Prescription	
		3/ Percent of plots or transects that are stocked.	
Special Use Management (Non-Recreation) (J01)	1. Permit special uses which are complimentary and compatible with the kind and development level of the associated Forest Service facilities within the area.	A. Reference the ROS User's Guide.	
Transportation System Management (L01 and 20)	1. Manage public use of roads with techniques such as, seasonal closure, time of day closures, etc.		
Trail System Management (L23)	1. Maintain existing motorized routes or construct new routes needed as part of the transportation system. Develop loop routes and coordinate them to compliment semi-primitive motorized opportunities in adjacent semi-primitive motorized ROS class areas.	A. On all nonforested areas, motorized trail and local road density is not to exceed 2 miles/square mile.	

MANAGEMENT AREA 4A
FISH AND AQUATIC HABITAT

Characteristics

The management area is located adjacent to perennial streams and lakes in all areas of the Forest. Components of this management area are the aquatic ecosystem (the water and its associated biota), the riparian ecosystem (the land area immediately adjacent to the stream and characterized by distinct vegetation types), and adjacent ecosystems within approximately 100 feet of both edges of perennial streams and the shores of lakes and other still water bodies. All of the components are to be managed as a single land unit.

Desired Future Condition

The acreage of riparian areas would remain essentially the same as currently exists. The riparian ecosystems as a whole, would be healthy. Habitat would be available to support in excess of minimum viable populations of riparian dependent wildlife and fish species. Habitat improvement work would be accomplished when natural conditions were not sufficient desired populations. Water quality would not fall below existing levels and would be improved in many areas. Currently, stable stream channels would be maintained. Unstable channels would be improved to at least minimally acceptable standards. These areas should be capable of providing multiple resource outputs while providing protection to riparian dependent values.

Size

This management area contains 1100 acres. Nine hundred twenty eight acres are unsuitable for timber harvest.

Management Area Direction

The goals of management are to provide healthy, self-prepetuating plant communities, meet water quality standards, provide habitats for viable populations of wildlife and fish, and provide stable stream channels and still water body shorelines. The aquatic ecosystem may contain fisheries habitat improvement and channel stabilizing facilities that harmonize with the visual setting and maintain or improve wildlife or fish habitat.

Forest riparian ecosystems can be treated to improve wildlife and fish habitat diversity through specified silvicultural objectives. Timber harvest and other vegetation treatments are used to achieve multi-resource benefits while emphasizing riparian values.

Livestock grazing is at a level that will assure maintenance of the vigor and regeneration capacity of the riparian plant communities. Developed recreation and other construction of facilities is restricted or prohibited within the 100 year floodplain. Dispersed recreation will be managed to maintain ecological stability and visual objectives of the management area.

This management area will also be affected by other management activities in the Forest "General Direction". Most notable is the direction involving riparian area management, water resource improvement and maintenance, water uses management, and dam administration and maintenance.

PRACTICES/MH CODE**MANAGEMENT DIRECTION (CON)****STANDARDS AND GUIDELINES****MANAGEMENT PRESCRIPTION 04A - EMPHASIS ON FISH AND AQUATIC HABITAT****Visual Resource Management (AO4)**

1. Design and implement management activities which sustain inherent visual values of riparian areas and blend with the surrounding natural landscapes.

2. Provide roaded natural recreation opportunities within 1/2 mile of Forest arterial, collector and local roads with better than primitive surfaces which are open to public travel.

Provide roaded natural recreation opportunities with a low to moderate incidence of contact with other groups and individuals within 1/2 mile of designated local roads with primitive surfaces and trails open to motorized recreation use.

Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities. Management recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS class.

Provide semi-primitive non-motorized recreation opportunities in all areas more than 1/2 mile away from roads and trails open to motorized recreation use.

A. Do not go below an adopted visual quality objective (VQO) of partial retention or modification.

A. Maximum use and capacity levels are:

RECREATION USE AND CAPACITY RANGE
(PAOT/ACRE)

TRAIL USE AND CAPACITY RANGE
(PAOT/MILE OF TRAIL)

CAPACITY RANGE

USE LEVEL	VERY LOW	LOW	MOD.	HIGH
ROS CLASS - SEMI-PRIMITIVE NONMOTORIZED				

On Trails PAOT/Mile	2.0	3.0	9.0	11.0
Area-Wide PAOT/Acre	.004	.008	.05	.08

ROS CLASS - SEMI-PRIMITIVE MOTORIZED				
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On Trails PAOT/Mile	2.0	3.0	9.0	11.0
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Area-Wide PAOT/Acre	.004	.008	.05	.08
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ROS CLASS - ROADED NATURAL				
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On Trails PAOT/Mile	--	--	--	--
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Area-Wide PAOT/Acre	.04	.08	1.2	2.5
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ROS CLASS - RURAL

On Trails	—	—	—	—
PAOT/Mile	—	—	—	—

Area-Wide	.5	.8	5.0	7.5
PAOT/Acre	—	—	—	—

Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, general attractiveness of the specific management area type as described in the ROS User's Guide, Chapter 25.

Reduce the above use levels when unacceptable changes to the biophysical resources will occur.

B. Specify off-road vehicle restrictions based on ORV use management (FSM 2355,

C. See FSM 2331, FSM 7732, FSH 7709.12 (Trails Handbook), FSH 7109.11A and 11B (Sign Handbook)

3. Permit undesignated sites in Frissell Condition Class 1 through 3 where unrestricted camping is permitted.
4. Manage site use and occupancy to maintain sites within Frissell Condition Class 3 except for designated sites which may be Class 4. Close and restore Class 5 sites.
5. Prohibit motorized vehicle use (including snowmobiles) off Forest system roads and trails in alpine shrub ecosystems. Prohibit motorized vehicle use off Forest systems roads (except snowmobiles) in other alpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat.
 1. Provide habitat diversity to meet or exceed our population goals for all aquatic vertebrate species.

Wildlife Habitat Improvement and Maintenance.
(C02, 04, 05 and 06)

A. Where natural biologic and geologic conditions will allow. Maintain or improve overall stream habitat condition at or above 70 percent of optimum. (Use R-4 GAWS Aquatic Habitat Surveys Handbook)

PRACTICES/MFH CODE**MANAGEMENT DIRECTION (MDA)****STANDARDS AND GUIDELINES**

2. Coordinate lake and stream habitat improvement projects with the State wildlife agencies, where aquatic habitats are below productive potential.

3. Maintain a current fish habitat inventory in cooperation with State wildlife agencies.

4. Maintain instream flows in cooperation with State wildlife agencies to support a sustained yield of natural fisheries resources.

**Range Resource Management
(D07)**

1. Maintain proper stocking and livestock distribution to protect riparian ecosystems.

A. Instream flows will be determined by R-4 GAWs Aquatic Habitat Surveys procedures or other accepted methodology.

A. Livestock grazing in riparian areas will be controlled at the following levels of utilization:

		VEGETATION GRAZING SYSTEM	TOTAL FORAGE CONDITION CLASS	BY WEIGHT
Rest-	Use up to		60% desire-	
Rotation			able & inter-	
Deferred-	Use up to		mediate spec-	
Rotation			ies.	
Deferred-	Use up to		50% desire-	
Rotation			able & inter-	
			mediate spec-	
			ies.	

(1) Disturbances on heavy use pasture should be stabilized or healed prior to use the following year.

(2) Disturbances on heavy use pasture should be stabilized or healed prior to use the following year.

PRACTICES/MTH CODE	MANAGEMENT DIRECTION (OMA)	STANDARDS AND GUIDELINES										
Salvinicultural Prescriptions (E03, 06 and 07)	<p>1. Management forest cover types to perpetuate tree cover and provide healthy stands, high water quality and wildlife and fish habitat.</p> <p>2. Manage forest cover types using the following harvest methods:</p> <ul style="list-style-type: none"> -Clearcut in aspen, and -Selection (group or single tree) in all other cover types 	<p>Browse utilization within the riparian ecosystem will not exceed 50% of new leader production.</p> <p>A. SILVICULTURAL STANDARDS: (These standards may be exceeded on areas managed for old growth.)</p> <table> <tr> <td>1. CLEARCUT</td> <td>FOREST COVER TYPE</td> </tr> <tr> <td></td> <td>ASPEN</td> </tr> <tr> <td></td> <td>Rotation Age 80-120 years</td> </tr> </table> <p>2. SELECTION (GROUP OR SINGLE TREE)</p> <table> <tr> <td>ALL OTHER FOREST COVER TYPES</td> <td>Rotation Age 90-160 years</td> </tr> <tr> <td></td> <td>Cutting Cycle 20-30 years</td> </tr> </table> <p>For group selection, size of openings are less than two acres.</p> <p>3. Apply intermediate treatments to maintain growing stock level standards.</p> <p>4. Adjust stocking levels by site quality. Higher stocking should occur on better sites.</p> <p>5. Establish a satisfactory stand, either naturally or through artificial regeneration methods, within a five-year period after disturbance.</p> <p>6. Prohibit log landing and decking areas within the riparian area.</p> <p>7. Reduce debris jam potential by cutting stumps to near ground level in the 100-year floodplain.</p>	1. CLEARCUT	FOREST COVER TYPE		ASPEN		Rotation Age 80-120 years	ALL OTHER FOREST COVER TYPES	Rotation Age 90-160 years		Cutting Cycle 20-30 years
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PRACTICES/MFH CODE	MANAGEMENT DIRECTION (MDA)	STANDARDS AND GUIDELINES																																
	<p>8. For management purposes, a cut-over area is considered an opening until such time as:</p> <ul style="list-style-type: none"> -Increased water yield drops below 50 percent of the potential increase, -Forage and/or browse production drops below 40 percent of potential production, -Deer and elk hiding cover reaches 70 percent of potential minimum stocking standards by forest cover type and site productivity are met; and -The area appears as a young forest rather than a restocked opening, and takes on the appearance of the adjoining characteristic landscape. 	<p>A. When the visual quality objective of an area is partial retention. The regenerated stand shall meet or exceed all of the following characteristics before a cut-over area is no longer considered an opening:</p> <table border="1"> <thead> <tr> <th></th> <th>FOREST COVER TYPE</th> <th>TREE STOCKING LEVEL</th> <th>TREE HEIGHT 1/ (% of the adjacent mature stand height)</th> </tr> </thead> <tbody> <tr> <td>Mixed Conifers</td> <td>190</td> <td>25%</td> <td></td> </tr> <tr> <td>Engelmann Spruce-Subalpine Fir</td> <td>150</td> <td>25%</td> <td></td> </tr> <tr> <td>Aspen</td> <td>300</td> <td>25%</td> <td></td> </tr> <tr> <th></th> <th>FOREST COVER TYPE</th> <th>CROWN CLOSURE (PERCENT)</th> <th>DISTRIBUTION 2/</th> </tr> <tr> <td>Mixed Conifers</td> <td>30%</td> <td>75%</td> <td></td> </tr> <tr> <td>Engelmann Spruce - Subalpine Fir</td> <td>30%</td> <td>75%</td> <td></td> </tr> <tr> <td>Aspen</td> <td>30%</td> <td>75%</td> <td></td> </tr> </tbody> </table> <p>1/ Applies to trees specified as minimum stocking level.</p> <p>2/ Percent of plots or transects that are stocked.</p> <ol style="list-style-type: none"> 1. Prevent or remove debris accumulations that reduce stream channel stability and capacity. 2. Proposed new land-use facilities (roads, campgrounds, buildings) will not normally be located within floodplain boundaries for the 100-year flood. Protect present and all future facilities that cannot be located out of the 100-year floodplain by structural mitigation (deflection structures, riprap, etc.). <p>Water Resource Improvement and Maintenance (P05 and 06)</p> <p>A. Implement mitigation measures when present or unavoidable future facilities are located in the active floodplain to ensure that State Water Quality standards, sediment threshold limits, bank stability criteria, flood hazard</p>		FOREST COVER TYPE	TREE STOCKING LEVEL	TREE HEIGHT 1/ (% of the adjacent mature stand height)	Mixed Conifers	190	25%		Engelmann Spruce-Subalpine Fir	150	25%		Aspen	300	25%			FOREST COVER TYPE	CROWN CLOSURE (PERCENT)	DISTRIBUTION 2/	Mixed Conifers	30%	75%		Engelmann Spruce - Subalpine Fir	30%	75%		Aspen	30%	75%	
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PRACTICES/MH CODE

MANAGEMENT DIRECTION (Q4A)

STANDARDS AND GUIDELINES

- reduction and instream flow standards are met during and immediately after construction.
3. Prevent stream channel instability, loss of channel cross-sectional areas, and loss of water quality resulting from activities that alter vegetative cover.
 4. Utilize appropriate sediment modeling techniques to determine sediment yield threshold limits for ground and vegetation disturbing management activities to meet the aquatic habitat condition objectives for these stream reaches.
 - A. Limit changes in channel rating or classification scores to an increase of 10 percent or less.
 - B. Maintain at least 80 percent of potential ground cover within 100 feet from the edges of all perennial streams, lakes and other waterbodies, or to the outer margin of the riparian ecosystem, where wider than 100 feet.
 5. Avoid channelization of natural streams. Where channelization is necessary for flood control or other purposes, use stream geometry relationships to re-establish meanders, width/depth ratios, etc., consistent with each major stream type.
 6. Treat disturbed areas resulting from management activities, to reduce sediment yields to the natural erosion rates in the shortest possible time.
 7. Stabilize streambanks which are damaged beyond natural recovery in a reasonable time period with appropriate methods or procedures that emphasize control by vegetation.
 8. Design and locate settling ponds to reduce downstream sediment yield and to prevent washout during high water. Locate settling ponds outside of the active channel. Restore any channel changes to hydraulic geometry standards for each stream type.
 9. Include wildlife and fish habitat, aesthetic, or safety goals when planning projects that result in vegetation type conversion.
 10. Require concurrent monitoring to ensure that mitigation measures are effective and in compliance with State Water quality standards.

PRACTICES/MR CODE**MANAGEMENT DIRECTION (M4)****STANDARDS AND GUIDELINES****Soil Resource Management
(K41)**

1. Rehabilitation disturbed soils areas where adverse impacts would occur according to the following priorities:
 - Aquatic ecosystems,
 - Riparian ecosystems, and
 - Riparian areas outside of aquatic and riparian ecosystems.
2. Prevent soil surface compaction and disturbance in riparian ecosystems. Allow use of heavy construction equipment for construction, residue removal, etc., during periods when the soil is least susceptible to compaction or rutting.
3. Maintain or enhance the long-term productivity or soils within the riparian ecosystem.

**Mineral Management
Oil, Gas and Geothermal**

1. Review and process mineral lease applications, permits and licenses in a timely fashion recommending to Bureau of Land Management measures and stipulations necessary to protect surface resources.
 1. Minimize detrimental disturbance to the riparian area by mineral activities. Initiate timely and effective rehabilitation of disturbed areas and restore riparian areas to a state of productivity comparable to that disturbance.

**Mining Law Compliance
and Administration
(G01)**

- A. Include special Stipulation #1. (No-surface-occupancy) for designated areas. (See Appendix H.)
 - A. Prohibit the depositing of soil material from drilling, processing, or site preparation in natural drainageways.
 - B. Locate the lower edge of disturbed or deposited soil banks outside the active floodplain.
 - C. Prohibit stockpiling of topsoil or any other disturbed soil in the active floodplain.
 - D. Prohibit mineral processing (milling) activities within the active floodplain.
 - E. Discontinue heavy equipment use when soil compaction, rutting, and puddling is present.
2. Locate mineral removal activities away from the water's edge or outside the riparian area.
 - A. Locate drilling mud pits outside the active floodplain unless alternate locations are more environmentally damaging. If location is unavoidable seal and dike all pits to prevent leakage.
 - B. Drain and restore roads, pads, and drill sites immediately after use is discontinued. Revegetate to 80 percent of ground cover in the first year. Provide surface protection during stormflow and snowmelt runoff events.

PRACTICES/MIN CODE	MANAGEMENT DIRECTION (OMA)	STANDARDS AND GUIDELINES
Mineral Management Oil, Gas and Geothermal Management (L01 and 20)	<p>3. Design and locate placer mine settling ponds to prevent washout during high water. Locate settling ponds outside of the active channel. Restore any channel changes to hydraulic geometry standards for each stream type.</p> <p>4. Confine heavy equipment use to areas necessary for mineral extraction.</p> <p>5. Locate mining camps outside the active floodplain.</p> <p>6. Require concurrent monitoring to ensure that mitigative measures are effective and in compliance with State water quality standards.</p>	<p>A: Permit diversion activities within the riparian zone where technology is available to maintain water quality standards, sediment threshold limits, and instream flow standards.</p> <p>A: Include special Stipulation #1. (No-surface-occupancy) for designated areas. (See Appendix H.)</p>
Transportation System	<p>1. Review and process mineral lease applications, permits and licenses in a timely fashion recommending to Bureau of Land Management measures and stipulations necessary to protect surface resources.</p> <p>2. Locate roads and trails outside riparian areas unless alternative routes have been reviewed and rejected as being more environmentally damaging.</p> <p>3. Create artificial sediment traps with barriers where the natural vegetation is inadequate to protect the waterway or lake from significant accelerated sedimentation.</p> <p>4. Minimize detrimental disturbance to the riparian area by construction activities. Initiate timely and effective rehabilitation of disturbed areas and restore riparian areas so that a vegetation ground cover or suitable substitute protects the soil from erosion and prevents increased sediment yield.</p>	<p>A: Do not parallel streams when road location must occur in the riparian areas except where absolutely necessary. Cross streams at right angles. Locate crossings at points of low bank slope and firm surfaces.</p>

MANAGEMENT AREA 4B
WILDLIFE HABITAT MIS SPECIES

Characteristics

This management area occurs in areas which have been determined to be of especially high value as wildlife habitats; i.e., deer fawning/elk calving areas, prairie dog towns, sage grouse booming grounds, etc. The area is not typified by any particular vegetation type, but is dependent on the requirements of the emphasized wildlife or fish species.

Desired Future Condition

The area(s) should provide nearly optimum habitat conditions for the fish or wildlife species being emphasized.

Size

This management area contains 36,700 acres. Thirty-six thousand six hundred ninety two acres are unsuitable for timber harvest.

Management Area Direction

Management emphasis is on the habitat needs of one or more management indicator or other emphasized species. Species with compatible habitat needs are selected for an area. The goal is to optimize habitat capability, and thus numbers of the species. The prescription can be applied to emphasize groups of species, such as early succession dependent or late succession dependent, in order to increase species richness or diversity.

Vegetation characteristics and human activities are managed to provide optimum habitat for the selected species, or to meet population goals jointly agreed to with the state fish and wildlife agencies. Tree stands are managed for specific size, shape, interspersion, crown closure, age, structure, and edge contrast. Grass, forb, and browse vegetation characteristics are regulated. Rangeland vegetation is managed to provide needed vegetation species composition and interspersed grass, forb, and shrub sites or variety in age or browse plants. Fish habitat improvement treatments are applied to lakes and streams to enhance habitats and increase fish populations.

Recreation and other human activities are regulated to favor the needs of the designated species. Roaded-natural recreation opportunities are provided along Forest arterial and collector roads. Local roads and trails are either open or closed to public motorized travel. Semi-primitive motorized recreation opportunities are provided on those local roads and trails that remain open, semi-primitive nonmotorized opportunities are provided on those that are closed. A full range of tree harvest methods and rangeland vegetation treatment methods are available. Investments in other compatible resource uses may occur but will be secondary to wildlife habitat requirements. Management activities may dominate in foreground and middleground, but harmonize and blend with the natural setting.

PRACTICES/MTH CODE	MANAGEMENT DIRECTION (04B)	STANDARDS AND GUIDELINES													
MANAGEMENT PRESCRIPTION 04B - EMPHASIZE WILDLIFE HABITAT FOR MANAGEMENT INDICATOR SPECIES															
Visual Resource Management (A04) Dispersed Recreation Management (A14 and 15)	<p>1. Design and implement management activities to blend with the natural landscape.</p> <p>1. Management human recreational activities so they do not conflict with habitat needs of selected indicator species.</p> <p>2. Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided.</p>	<p>A. Do not go below an adopted Visual Quality Objective (VQO) of modification.</p> <p>A. Maximum use and capacity levels are:</p> <p style="margin-left: 2em;">RECREATION USE AND CAPACITY RANGE DURING THE SNOW-FREE PERIOD (PAOT/ACRE)</p> <table border="1"> <thead> <tr> <th colspan="4">CAPACITY RANGE</th> </tr> <tr> <th>USE LEVEL</th> <th>VERY LOW</th> <th>LOW</th> <th>HIGH</th> </tr> </thead> <tbody> <tr> <td>PAOT/Acre</td> <td>.004</td> <td>.008</td> <td>.05</td> <td>.08</td> </tr> </tbody> </table> <p style="margin-left: 2em;">ROS CLASS - SEMI-PRIMITIVE NONMOTORIZED</p> <p>On Trails PAOT/Mile 2.0 3.0 9.0 11.0</p> <p>Area-Wide PAOT/Acre .004 .008 .05 .08</p> <p style="margin-left: 2em;">ROS CLASS - SEMI-PRIMITIVE MOTORIZED</p> <p>On Trails PAOT/Mile 2.0 3.0 9.0 11.0</p> <p>Area-Wide PAOT/Acre .004 .008 .05 .08</p> <p style="margin-left: 2em;">ROS CLASS - ROADED NATURAL</p> <p>On Trails PAOT/Mile --- --- --- ---</p> <p>Area-Wide PAOT/Acre .04 .08 1.2 2.5</p>	CAPACITY RANGE				USE LEVEL	VERY LOW	LOW	HIGH	PAOT/Acre	.004	.008	.05	.08
CAPACITY RANGE															
USE LEVEL	VERY LOW	LOW	HIGH												
PAOT/Acre	.004	.008	.05	.08											

PRACTICES/WITH CODE MANAGEMENT DIRECTION (04B) STANDARDS AND GUIDELINES

ROS CLASS - RURAL						
	On Trails PAO/Mile	--	--	--	--	--
Area-Wide PAO/Acre	.5	.8	5.0	7.5		
Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, general attractiveness of the specific management area type as described in the ROS User's Guide, Chapter 25.						
Reduce the above use levels when unacceptable changes to the biophysical resources will occur.						
B. Specify off-road vehicle restrictions based on ORV use management (FSM 2355,						
C. See FSM 2331, FSM 7732, FSH 7709.12 (Trails Handbook), FSH 7109.11A and 11B (Sign Handbook)						
3. Permit undesignated sites in Frissell Condition Class 1 through 3 where unrestricted camping is permitted.						
4. Manage site use and occupancy to maintain sites within Frissell Condition Class 3 except for designated sites which may be Class 4. Close and restore Class 5 sites.						
5. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in subalpine and other ecosystems where needed to protect soils, vegetation, or special wildlife habitat.						
1. Manage for habitat needs of management indicator, unique threatened and/or endangered species.						
2. Emphasis on species commonly hunted, fished, or trapped will follow species priorities established by States.						
A. Maintain habitat capability at a level at least 80 percent of potential capability for all emphasized species.						
A. Maintain the habitat needed to support the coordinated population goals for each species.						
Wildlife and Fish Resource Management (COI)						

3. Maintain hiding cover for elk and deer, where present.

- A. Maintain along 75 percent of all arterial and collector road edges cover that hides 90 percent of an adult standing deer or elk from human view at a distance of 200 feet from the road.
- B. In management areas dominated by forested ecosystems, maintain a minimum of 50 percent in deer or elk hiding cover. This hiding cover should be well distributed over the unit. Maintain 30 percent of the unit in thermal cover (winter or spring-fall). Hiding cover can be used to meet thermal cover requirements if they indeed coincide biologically.

Silvicultural Prescriptions
(E03, E05, 06 and 07)

1. Manage forest cover types to provide variety in stand sizes, shape, crown closure, edge contrast and age structure.

2. Manage forest cover types using the following harvest methods:

- Clearcut in aspen
- Shelterwood in ponderosa pine and mixed conifer
- Selection (group or single tree) in Engelmann spruce - subalpine fir
- Clearcut (patch) in dwarf mistletoe infected ponderosa pine and Douglas fir
- Or as specified in the silvicultural prescription for emphasis of wildlife indicator species.

3. Apply intermediate treatments to maintain growing stock level standards as specified in the silvicultural prescription.

4. Utilize firewood material using both commercial and non-commercial methods.

5. For management purposes, a cutover area is considered an opening until such time as:
 - Forage and/or browse production drops below 40 percent of potential,
 - Deer and elk hiding cover reaches 80 percent of potential
 - Minimum stocking standards by forest cover type and site productivity are met; and

- A. When the Visual Quality Objective of an area is partial retention, the regenerated stand shall meet or exceed all of the following characteristics before a cutover area is no longer considered an opening:

PRACTICES/JTH CODE

MANAGEMENT DIRECTION (04B)

STANDARDS AND GUIDELINES

-The area appears as a young forest rather than a restocked opening, and takes on the appearance of the adjoining characteristic landscape.

FOREST COVER TYPE	MINIMUM STOCKING LEVEL (TREES/ACRE)	TREE STAND HEIGHT (FEET)	DISTRIBUTION 3/	
			CROWN CLOSURE (PERCENT)	ASPECT
Ponderosa Pine	150 2/	6		
Mixed Conifers	150 2/	6		
Engelmann Spruce-Subalpine Fir	150 2/	6		
Aspen	300	6		
Ponderosa Pine	30	60%		
Mixed Conifers	30	60%		
Engelmann Spruce-Subalpine Fir	30	60%		
Aspen	30	75%		

- 1/ Applies to trees specified at minimum stocking level
 2/ Or as otherwise specified in the Silvicultural Prescription
 3/ Percent of plots or transects that are stocked.

- Transportation System Management (1D) and (2b) periods and specific needs.
1. Manage road use to provide for habitat needs of management indicator species, including road closures and area closures, and to maintain habitat effectiveness. Management and/or closures will be specified by time

PRACTICES/MTH CODE	MANAGEMENT DIRECTION (04B)	STANDARDS AND GUIDELINES
Fuel Treatment (P11 through 14)	1. Maintain fuel conditions which permit fire suppression and prescribed fire to maintain habitat needed for selected species or species population levels.	Optimum vegetation stages for wildlife habitat are described in wildlife section of this plan.
Range Resource Management (D07)	1. Implement rotation grazing systems. 2. Apply wildlife and livestock forage allowable use guides specified in Forest direction. Modify so that needs of management indicator species are met. 3. Structural range improvement should be designed to benefit wildlife and livestock.	A. Structural improvements will not adversely affect big game movement (FSH 2209.22)

MANAGEMENT AREA 4C
WILDLIFE HABITAT - BRUSHY RANGE

Characteristics

This management area occurs one sites dominated by gambel oak, pinyon-juniper, cottonwoods, mountain mahogany, or other woody plant species with a similar growth form.

Desired Future Condition

Acreage of these areas will remain the same as currently exists. Diversity sufficient to support all native wildlife species characteristic of the type will be maintained. Adequate regeneration within the type will be maintained so that all age classes are represented.

Size

This management area contains 72,900 acres. Seventy two thousand eight hundred one acres are unsuitable for timber harvest.

Management Area Direction

Management emphasis is on wildlife habitat in hardwood and shrub-dominated draws and other areas of woody vegetation to sustain their inherent biological, physical, and visual values. Deciduous trees are regenerated. Diversity is achieved among individual sites of pinyon-juniper, gambel oak, cottonwood, mountain mahogany and other woody plant species. Vegetation characteristics on individual sites are diversified according to the wildlife goals for the site. Trees and shrubs are planted to supplement natural regeneration where needed. Woody cover in late seral stage is emphasized and is maintained adjacent to water. Direct habitat improvement projects occur.

Investments in compatible resources are made. Livestock grazing may occur, but is secondary to maintenance of desired woody plant characteristics. Management activities may dominate in foreground or middleground, but harmonize and blend in the natural setting. Recreational opportunities vary between semi-primitive nonmotorized and roaded natural.

PRACTICES/MIN CODE	MANAGEMENT DIRECTION (O4C)	STANDARDS AND GUIDELINES						
MANAGEMENT PRESCRIPTION O4C - EMPHASIZE WILDLIFE HABITAT IN WOODY DRAWS AND OTHER VEGETATION AREAS ON RANGELANDS								
Visual Resource Management Management (A14 and 15)	<p>1. Design and implement management activities to blend with the natural landscape.</p> <p>2. Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided.</p>	<p>A. Maximum use and capacity levels are:</p> <p>RECREATION USE AND CAPACITY RANGE DURING THE SNOW-FREE PERIOD (PAOT/ACRE)</p>						
Dispersed Recreation Management (A14 and 15)	<p>1. Manage human recreational activities so they do not conflict with habitat needs of selected indicator species.</p>	<p>TRAIL USE AND CAPACITY RANGE (PAOT/MILE OF TRAIL)</p>						
		<table> <thead> <tr> <th>USE LEVEL</th> <th>VERY LOW</th> <th>LOW</th> <th>MOD.</th> <th>HIGH</th> </tr> </thead> </table>	USE LEVEL	VERY LOW	LOW	MOD.	HIGH	
USE LEVEL	VERY LOW	LOW	MOD.	HIGH				
		CAPACITY RANGE						
		<table> <thead> <tr> <th>ROS CLASS - SEMI-PRIMITIVE NONMOTORIZED</th> <th>USE LEVEL</th> <th>VERY LOW</th> <th>LOW</th> <th>MOD.</th> <th>HIGH</th> </tr> </thead> </table>	ROS CLASS - SEMI-PRIMITIVE NONMOTORIZED	USE LEVEL	VERY LOW	LOW	MOD.	HIGH
ROS CLASS - SEMI-PRIMITIVE NONMOTORIZED	USE LEVEL	VERY LOW	LOW	MOD.	HIGH			
		On Trails PAOT/Mile						
		2.0 3.0 9.0 11.0						
		Area-Wide PAOT/Acre						
		.004 .008 .05 .08						
		ROS CLASS - SEMI-PRIMITIVE MOTORIZED						
		On Trails PAOT/Mile						
		2.0 3.0 9.0 11.0						
		Area-Wide PAOT/Acre						
		.004 .008 .05 .08						
		ROS CLASS - ROADED NATURAL						
		On Trails PAOT/Mile						

		Area-Wide PAOT/Acre						
		.04 .08 1.2 2.5						

MFH PRACTICES	CODR	MANAGEMENT DIRECTION (04C)	STANDARDS AND GUIDELINES																		
			<p style="text-align: center;">ROS CLASS - RURAL</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>On Trails</td> <td colspan="5">-- -- --</td> </tr> <tr> <td>PAOT/Acre</td> <td>.5</td> <td>.8</td> <td>5.0</td> <td>7.5</td> <td></td> </tr> <tr> <td>PAOT/Mile</td> <td>--</td> <td>--</td> <td>--</td> <td>--</td> <td></td> </tr> </table> <p>Area-Wide</p> <p>Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, general attractiveness of the specific management area type as described in the ROS User's Guide, Chapter 25.</p> <p>Reduce the above use levels when unacceptable changes to the biophysical resources will occur.</p> <p>B. Specify off-road vehicle restrictions based on ORV use management (FSM 2355)</p> <p>C. See FSM 2331, FSH 7732, FSH 7709.12 (Trails Handbook), FSH 7109.11A and 11B (Sign Handbook)</p> <p>D. Prohibit open fires when the occurrence of fire rings exceed Frissell Class 1 site condition on 10 percent or more of the known campsites.</p> <p>3. Permit undeesignated sites in Frissell Condition Class 1 through 3 where unrestricted camping is permitted.</p> <p>4. Manage site use and occupancy to maintain sites within Frissell Condition Class 3 except for designated sites which may be Class 4. Close and restore Class 5 sites.</p> <p>1. Manage for habitat needs of emphasized species.</p> <p>A. Maintain habitat capability at a level at least 80 percent of potential capability for species other than early succession-oriented species.</p>	On Trails	-- -- --					PAOT/Acre	.5	.8	5.0	7.5		PAOT/Mile	--	--	--	--	
On Trails	-- -- --																				
PAOT/Acre	.5	.8	5.0	7.5																	
PAOT/Mile	--	--	--	--																	

Wildlife Habitat
Improvement and
Maintenance
(02, 04, 05 and 06)

PRACTICES/MFH CODE	MANAGEMENT DIRECTION (OMC)	STANDARDS AND GUIDELINES
Range Resource Management (D07)	<ol style="list-style-type: none"> 1. Prevent habitat degradation adjacent to water sources. 	<ol style="list-style-type: none"> A. Unregulated livestock access to water impoundments behind dams must be managed to preserve the adjacent vegetative ecosystem.
Range Improvement and Maintenance (D03, 04, 05 and 06)	<ol style="list-style-type: none"> 2. Perpetuate woody vegetation. 	<ol style="list-style-type: none"> B. Maintain late seral stage vegetation on at least 20-50 percent of the area, within 100-400 foot radius around all created water sources except impoundment behind dams.
Transportation System Management (L01 and 20)	<ol style="list-style-type: none"> 3. Apply wildlife and livestock forage allowable use guides specified in Forest direction. Modify so that needs of management indicator species are met. 	<ol style="list-style-type: none"> A. Maintain woody vegetation in all stages of development on at least 60 percent of the area.
Silvicultural Prescriptions (E03, 06 and 07)	<ol style="list-style-type: none"> 4. Implement rotation grazing systems. 	<ol style="list-style-type: none"> A. Structural improvements will not adversely affect big game movement (FSH 2209.22)
	<ol style="list-style-type: none"> 1. Structural range improvement should be designed to benefit wildlife and livestock. 	<ol style="list-style-type: none"> A. Determine off-road vehicle restrictions based on the needs of wildlife.
	<ol style="list-style-type: none"> 1. Restrict off-road vehicle travel as needed to protect management indicator species and other species. 	<ol style="list-style-type: none"> 1. Manage forest cover types using the following harvest methods: <ul style="list-style-type: none"> -Clearcut in aspen -Shelterwood in ponderosa pine and mixed conifer -Selection (group or single tree) in any forest type except aspen -Clearcut (patch) in dwarf mistletoe infected ponderosa pine and Douglas-fir -Or as specified in the silvicultural prescription to emphasize wildlife

PRACTICES/MIN. CODE	MANAGEMENT DIRECTION (M/C)	STANDARDS AND GUIDELINES		
2. For management purposes, a cutover area is considered an opening until such time as:		A. When the Visual Quality Objective of an area is partial retention, the regenerated stand shall meet or exceed all of the following characteristics before a cutover area is no longer considered an opening:		
-Forage and/or browse production drops below 40 percent of potential production,		FOREST COVER TYPE	MINIMUM STOCKING LEVEL (TREES/ACRE)	TREE STAND HEIGHT (FEET)
-Deer and elk hiding cover reaches 80 percent of potential,		Ponderosa Pine	150 2/	6
-Minimum stocking standards by forest cover type and site productivity are met; and		Mixed Conifers	150 2/	6
-The area appears as a young forest rather than a restocked opening, and takes on the appearance of the adjoining characteristic landscape.		Engelmann Spruce- Subalpine Fir	150 2/	6
		Aspen	300	6
		FOREST COVER TYPE	CROWN CLOSURE (PERCENT)	DISTRIBUTION 3/
		Ponderosa Pine	30	60%
		Mixed Conifers	30	60%
		Engelmann Spruce- Subalpine Fir	30	60%
		Aspen	30	75%
				1/ Applies to trees specified at minimum stocking level
				2/ Or as otherwise specified in the Silvicultural Prescription
				3/ Percent of plots or transects that are stocked.

MANAGEMENT AREA 4D
ASPEN MANAGEMENT

Characteristics

This management area typically occurs in areas that are dominated by extensive stands of more or less pure aspen.

Desired Future Condition

Acreage of these areas will remain essentially the same as currently exists. A variety of age classes will be maintained in all areas so that all native wildlife species characteristic of the habitat type will be provided for.

Size

This management area contains 10,539 acres. Four thousand forty two acres are unsuitable for timber harvest.

Management Area Direction

Management emphasis is on maintaining and improving aspen sites. Other tree species, if present, are de-emphasized. Aspen is managed to produce wildlife habitat, wood products, visual quality, and plant and animal diversity. Aspen clones are maintained. On larger areas, a variety of aspen stand ages, sizes, shapes, and interspersion are maintained. Both commercial and noncommercial treatments are applied. Even-aged management is practiced and is achieved by varying the size, age, shape, and interspersion of individual stands. Management activities in foreground and middleground are dominant, but harmonize and blend with the natural setting. Individual treatments generally are smaller than 40 acres.

Recreational opportunities available are semi-primitive nonmotorized and motorized or roaded natural. Some temporary or seasonal road and area use restrictions are implemented to prevent disturbance of wildlife or improve hunting and fishing quality.

Investments in other compatible resources occur. Livestock grazing can occur, but is subordinate to wildlife habitat needs and required protection of young aspen needed for regeneration.

PRACTICES/IN CODE	MANAGEMENT DIRECTION (MD)	STANDARDS AND GUIDELINES
MANAGEMENT PRESCRIPTION 04D - EMPHASIZE ASPEN MANAGEMENT FOR WILDLIFE		
Diversity on National Forests and National Grasslands (A00)	1. Maintain aspen clones.	A. Regeneration by clearcutting before clone reaches decadence.
Visual Resource Management (A04)	1. Vary location of treated clones to maintain naturally appearing diversity in age classes. 2. Emphasize aspen viewing areas.	A. Do not go below an adopted Visual Quality Objective (VQO) of modification.
Management of Developed Recreation Sites (A08, 09, 11 and 13)	1. Prohibit development of new recreation sites.	A. Maintain big game hiding cover next to aspen viewing areas, and along the edge of arterial and collector roads.
Wildlife and Fish Resource Management (C01)	1. Manage for habitat needs of emphasized species.	B. Maintain habitat capability at a level at least 70 percent of potential capability for aspen dependent and big game species.
Range Resource Management (D07)	1. Protect aspen regeneration. 2. Maintain fair or better range conditions.	A. Maintain at least 80 percent habitat effectiveness.
Silvicultural Prescriptions (E03, 06 and 07)	1. Manage aspen forest cover type to perpetuate aspen using even-aged silviculture.	A. Silvicultural Standards: (These standards may be exceeded on areas managed for old growth.)

PRACTICES/MRH CODE	MANAGEMENT DIRECTION (OND)	STANDARDS AND GUIDELINES			
	1. Clearcut (Stand or Clone)				
	FOREST COVER TYPE				
	ASPEN				
	Rotation Age 40-120 years				
	Thinning Cycle N/A				
	2. Limit individual regeneration acres to a 40 acre maximum or the size of a clone, whichever is smaller.	A. When the Visual Quality Objective of an area is partial retention, the regenerated stand shall meet or exceed all of the following characteristics before a cutover area is no longer considered an opening:			
		FOREST COVER TYPE	MINIMUM STOCKING LEVEL	TREE STAND HEIGHT (FEET)	DISTRI- BUTION 3/ (PERCENT)
		Ponderosa Pine	150 2/	6	
		Mixed Conifers	150 2/	6	
		Engelmann Spruce- Subalpine Bir	150 2/	6	
		Aspen	300	6	
		FOREST COVER TYPE	CROWN CLOSURE (PERCENT)	DISTRI- BUTION 3/ (PERCENT)	
		Ponderosa Pine	30	60%	

PRACTICES/MTH CODE	MANAGEMENT DIRECTION (MID)	STANDARDS AND GUIDELINES
	Mixed Conifers	30 60%
	Engelmann Spruce-Subalpine Fir	30 60%
	Aspen	30 75%
Fuel Treatment (F11 thru 14)	1/ Applies to trees specified at minimum stocking level 2/ Or as otherwise specified in the Silvicultural Prescription 3/ Percent of plots or transects that are stocked.	A. Allow aspen regeneration to occur naturally. B. Emphasize prescribed burning where feasible to regenerate aspen to benefit wildlife. C. Protect wildlife trees during fuelwood cutting and prescribed burning as needed to meet snag density guidelines.

MANAGEMENT AREA 5A
BIG-GAME WINTER RANGE

Characteristics

This management area typically occurs on the lower elevation foothills, benches, and valleys at the base of mountains and plateaus. The dominant vegetation; is pinyon-juniper, oak, mountain shrub and sagebrush.

Desired Future Condition

Acreage of these areas will remain essentially the same as currently exists. Forage production will be improved and increased. Various browse species; sagebrush, bitterbrush, mountain mahogany, oak, etc., provide the majority of winter forage in these areas. The most palatable browse and other forage species will be favored. Thermal cover will be retained and improved. Vehicle traffic and public access will be restricted to prevent stress on wintering animals.

Size

This management area contains 313,600 acres. Three hundred seven thousand six hundred one acres are unsuitable for timber harvest.

Management Area Direction

Management emphasis is on winter range for deer, elk, and pronghorn. Treatments are applied to increase forage production of existing grass, forb, and browse species or to alter plant species composition. Prescribed burning, seeding, spraying, planting, and mechanical treatments may occur. Browse stands are regenerated to maintain a variety of age classes and species.

Investments in compatible resource activities occur. Livestock grazing is compatible, but conflicts will be resolved in favor of wildlife. Structural range improvements benefit wildlife. Management activities are not evident, remain visually subordinate, or are dominant in the foreground or middleground, but harmonize or blend with the natural setting.

New roads other than short-term (temporary) roads are located outside of the management area. Short term roads are obliterated within one season after intended use. Existing local roads are closed and new motorized recreation use is managed to prevent unacceptable stress on big game animals during the primary big game use season.

PRACTICES/MFH_CODE	MANAGEMENT DIRECTION (MDA)	STANDARDS AND GUIDELINES																						
MANAGEMENT PRESCRIPTION 05A - EMPHASIZE BIG GAME WINTER RANGE ON NON-FORESTED AREAS																								
Visual Resource Management (A04)	<p>1. Design and implement management activities to blend with the natural landscape.</p>	<p>A. Do not go below an adopted Visual Quality Objective (VQO) of modification.</p>																						
Management of Developed Recreation Sites (A08, 09, 11 and 13)	<p>1. Design, construct and operate only those developed sites which are needed to meet summer season management objectives, and are appropriate for the established ROS designation. Close all developed sites during the winter management season.</p>	<p>A. Maximum use and capacity levels are:</p> <table> <thead> <tr> <th>RECREATION USE AND CAPACITY RANGE DURING THE SNOW-FREE PERIOD (PAOT/ACRE)</th> </tr> </thead> </table>	RECREATION USE AND CAPACITY RANGE DURING THE SNOW-FREE PERIOD (PAOT/ACRE)																					
RECREATION USE AND CAPACITY RANGE DURING THE SNOW-FREE PERIOD (PAOT/ACRE)																								
Dispersed Recreation Management (A14 and 15)	<p>1. Manage summer use-season for appropriate ROS opportunities Provide roaded natural recreation opportunities within one-half mile of Forest arterial, collector and local roads with better than primitive surfaces which are open to public motorized travel.</p> <p>Provide semi-primitive motorized recreation opportunities with a low to moderate incident of contact with other groups and individuals within one-half mile of designated local roads with primitive surfaces and trails open to motorized recreation use.</p> <p>Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities. Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS class.</p> <p>Provide semi-primitive non-motorized recreation opportunities in all areas more than one-half mile away from roads and trails open to motorized recreation use.</p>	<table> <thead> <tr> <th>TRAIL USE AND CAPACITY RANGE (PAOT/MILE OF TRAIL)</th> </tr> </thead> </table> <table> <thead> <tr> <th>CAPACITY RANGE</th> </tr> <tr> <td>USE LEVEL</td> <td>VERY LOW</td> <td>LOW</td> <td>MOD.</td> <td>HIGH</td> </tr> </thead> </table> <p>ROS CLASS - PRIMITIVE</p> <table> <thead> <tr> <th>On Trails PAOT/Mile</th> <th>0.5</th> <th>1.0</th> <th>2.0</th> <th>3.0</th> </tr> </thead> </table> <p>Area-Wide PAOT/Acre .001 .002 .007 .025</p> <p>ROS CLASS - SEMI-PRIMITIVE NONMOTORIZED</p> <table> <thead> <tr> <th>On Trails PAOT/Mile</th> <th>2.0</th> <th>3.0</th> <th>9.0</th> <th>11.0</th> </tr> </thead> </table> <p>Area-Wide PAOT/Acre .004 .008 .05 .08</p> <p>ROS CLASS - SEMI-PRIMITIVE MOTORIZED</p> <table> <thead> <tr> <th>On Trails PAOT/Mile</th> <th>2.0</th> <th>3.0</th> <th>9.0</th> <th>11.0</th> </tr> </thead> </table> <p>Area-Wide PAOT/Acre .004 .008 .05 .08</p>	TRAIL USE AND CAPACITY RANGE (PAOT/MILE OF TRAIL)	CAPACITY RANGE	USE LEVEL	VERY LOW	LOW	MOD.	HIGH	On Trails PAOT/Mile	0.5	1.0	2.0	3.0	On Trails PAOT/Mile	2.0	3.0	9.0	11.0	On Trails PAOT/Mile	2.0	3.0	9.0	11.0
TRAIL USE AND CAPACITY RANGE (PAOT/MILE OF TRAIL)																								
CAPACITY RANGE																								
USE LEVEL	VERY LOW	LOW	MOD.	HIGH																				
On Trails PAOT/Mile	0.5	1.0	2.0	3.0																				
On Trails PAOT/Mile	2.0	3.0	9.0	11.0																				
On Trails PAOT/Mile	2.0	3.0	9.0	11.0																				

PRACTICES/MFH CODE

MANAGEMENT DIRECTION (MDA)

STANDARDS AND GUIDELINES

ROS CLASS - ROADED NATURAL					
On Trails	PAOT/Mile	--	--	--	--
Area-Wide	PAOT/Acre	.04	.08	1.2	2.5
--	--	--	--	--	--

Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, general attractiveness of the specific management area type as described in the ROS User's Guide, Chapter 25.

Reduce the above use levels when unacceptable changes to the biophysical resources will occur.

- B. Specify off-road vehicle restrictions based on ORV use management (FSM 2355)
 - C. See FSM 2331, FSM 7732, FSH 7709.12 (Trails Handbook), FSH 7109.11A and 11B (Sign Handbook)
 - D. Prohibit open fires when the occurrence of fire rings exceed Frissell Class 1 site condition on 10 percent or more of the known campsites.
- A. Close management area to cross-country ski trail development and to snowmobile use.
2. Manage winter use for very low or low densities. Close areas to human use to the degree necessary during periods of maximum wildlife use.
- B. Do not provide parking or trailhead facilities during winter.
1. Provide big-game forage and cover, and habitat.

Wildlife and Fish
Resource Management
(C01)

PRACTICES/MTB CODE	MANAGEMENT DIRECTION (OSA)	STANDARDS AND GUIDELINES
Range Resource Management (D07)	1. Manage grazing to favor big-game and to achieve the wildlife populations identified in State-wide comprehensive wildlife plans.	C. Maintain habitat effectiveness during winter of at least 90 percent. D. Maintain habitat capability to meet coordinated population goals for big game. A. Maintain vegetation in fair or better range condition. B. Limit livestock use of browse and herbaceous plant production to that not needed by big game.
Special Use Management (Non-Recreation) (J01)	1. Resolve special uses that conflict with wintering animals.	
Rights-of-Way and Land Adjustments (J02, 13, 15, 16, 17 and 18)	1. Acquire private lands needed for big-game winter range.	
Transportation System Management (L01 and 20)	1. Road traffic and road cut or fill slopes must not block big game movement in delineated migration routes or corridors. 2. Allow new roads in the management area only if needed to meet priority goals outside the management area to meet big game goals on the management area. Obliterate temporary roads within one season after planned use ends.	A. New permanent or temporary roads constructed in the management area must meet the following criteria: 1. There is no feasible alternative to build the road outside the area and the road is essential to achieve priority goals and objectives of contiguous management areas, or to provide access to land administered by other Government agencies or to contiguous private land. 2. The Utah DWR has been fully involved in the road location, planning and alternative evaluation. 3. Planned management of road use during winter will prevent or minimize disturbance of wintering big game animals, or will allow hunting and other management activities needed to meet wildlife management objectives.

PRACTICES/MTH CODE

MANAGEMENT DIRECTION (05A)

STANDARDS AND GUIDELINES

3. Manage existing roads, prohibit off-road vehicle use and manage non-motorized use to prevent stress on big game animals.
 - A. Opening of existing roads during winter can be approved if the following criteria are met:
 1. There is no reasonable alternative for owners or managers of contiguous private land or public land to reach their land during winter.
 2. Road use, off-road vehicle use, or non-motorized use of the area is essential and is the minimum necessary to meet priority resource management goals and objectives.
 3. The Utah DWR is fully involved in planning human use of the area during winter.
4. Roads are constructed to the minimum standards necessary to provide safety for the road use purpose.
5. Roads cross the winter range in the minimum distance feasible to facilitate the necessary use.

Mineral Management
Oil, Gas and Geothermal

1. Review and process mineral lease application, permits and licences in a timely fashion recommending to Bureau of Land Mgt. measures and stipulations necessary to protect surface resources.

- A. Include applicable special stipulations. (See Appendix C)

MANAGEMENT AREA 5B
BIG-GAME WINTER RANGE

Characteristics

This management area occurs on the southeast slopes of Mt. Dutton on the Powell Ranger District, where it is typified by patches of mixed conifer (Douglas fir, subalpine fir, white fir) interspersed with mountain brush and sagebrush and on the east slopes of the Teasdale Ranger District where it is typified by ponderosa pine grading into mountain brush (Gambel oak).

Desired Future Conditions

Acreage of these areas will remain essentially the same as currently exists. Forage production will be improved and increased, favoring the most palatable browse and other forage species. Thermal cover will be retained and improved. Vehicle traffic and public access will be restricted to prevent stress on wintering animals.

Size

This management area contains 23,600 acres. Twenty two thousand three hundred thirty three acres are unsuitable for timber harvest.

Management Area Direction

Management emphasis is on forage and cover on winter ranges. Winter habitat for deer and elk is emphasized. Treatments to increase forage production or to create and maintain thermal and hiding cover for big game are applied. Tree stand treatments can be clearcut, shelterwood, single tree selection or group selection. Commercial and noncommercial stand treatments occur. Specific cover-opening ratios, and stand designs are maintained. Treatments to grass, forb, browse, and noncommercial tree species include seeding, planting, spraying, burning, falling and mechanical chopping or crushing. A variety of browse age classes are maintained. Continuous Forest cover is maintained on some sites.

Investments in compatible resources occur. Livestock grazing is compatible, but conflicts will be resolved in favor of wildlife. Structural range improvements benefit wildlife. Management activities are not evident, remain visually subordinate, or dominate in the foreground and middleground, but harmonize and blend with the natural setting.

Short term roads are obliterated within one season after intended use. Existing local roads and new motorized recreation uses all managed to prevent unacceptable stress on big game animals.

PRACTICES/ETH. CODE

MANAGEMENT DIRECTION (05B)

MANAGEMENT PRESCRIPTION 05B

Visual Resource Management
(A04)

1. Design and implement management activities to blend with the natural landscape.

Management of Developed Recreation Sites
(A08, 09, 11 and 13)

1. Design, construct and operate only those developed sites which are needed to meet summer season management objectives, and are appropriate for the established ROS designation. Close all developed sites during the winter management season.

Dispersed Recreation Management
(A14 and 15)

1. Manage summer use-season for appropriate ROS opportunities Provide roaded natural recreation opportunities within one-half mile of Forest arterial, collector and local roads with better than primitive surfaces which are open to public motorized travel.

Provide semi-primitive motorized recreation opportunities with a low to moderate incident of contact with other groups and individuals within one-half mile of designated local roads with primitive surfaces and trails open to motorized recreation use.

Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities. Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS class.

Provide semi-primitive non-motorized recreation opportunities in all areas more than one-half mile away from roads and trails open to motorized recreation.

		A. Do not go below an adopted Visual Quality Objective (VQO) or modification.			
Management of Developed Recreation Sites (A08, 09, 11 and 13)		A. Maximum use and capacity levels are:			
		RECREATION USE AND CAPACITY RANGE DURING THE SNOW-FREE PERIOD (PAOT/ACRE)			
		TRAIL USE AND CAPACITY RANGE (PAOT/MILE OF TRAIL)			
		CAPACITY RANGE			
		USE LEVEL	VERY LOW	LOW	HIGH
		PAOT/MILE	0.5	1.0	2.0
		AREAS-WIDE	.001	.002	.007
		ROS CLASS - PRIMITIVE			
		On Trails			
		PAOT/MILE	2.0	3.0	9.0
		AREAS-WIDE	.004	.008	.05
		ROS CLASS - SEMI-PRIMITIVE			
		On Trails			
		PAOT/MILE	2.0	3.0	9.0
		AREAS-WIDE	.004	.008	.05

ROS CLASS - ROADED NATURAL	
On Trails	
PAOT/Acre	.04
PAOT/Mile	--
Area-Wide	
PAOT/Acre	.04
PAOT/Mile	--
	--
	2.5

Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, general attractiveness of the specific management area type as described in the ROS User's Guide, Chapter 25.

Reduce the above use levels when unacceptable changes to the biophysical resources will occur.

- B. Specify off-road vehicle restrictions based on ORV use management (FSM 2355)
- C. See FSM 2331, FSM 7732, FSH 7709.12 (Trails Handbook), FSH 7109.1A and 11B (Sign Handbook)
- D. Prohibit open fires when the occurrence of fire rings exceed Frissell Class 1 site condition on 10 percent or more of the known campsites.
- 2. Manage winter use for very low or low densities. Close areas to human use to the degree necessary in winter to prevent disturbance of wildlife.
 - A. Close management area to cross-country ski trail development and to snowmobile use.
 - B. Do not provide parking or trailhead facilities during winter.
 - A. Maintain at least 30 percent of the area in created or natural openings.
 - B. Do not eliminate presence of any browse species.

PRACTICES/MTH CODE	MANAGEMENT DIRECTION (05B)	STANDARDS AND GUIDELINES
Range Resource Management (D07)	<p>1. Manage grazing to favor big game and to achieve the wildlife populations identified in State-wide comprehensive wildlife plans.</p> <p>2. Emphasize intensive management of grazing through use of rotation grazing systems.</p>	<p>C. Provide thermal cover for elk or deer on at least 20 percent of the area.</p> <p>D. Maintain, along 75 percent of all arterial and collector road edges, cover that hides 90% of an adult standing deer or elk from human view at a distance of 200 ft from the road.</p> <p>E. In management areas dominated by forested ecosystems, maintain a minimum of 50% of the diversity in deer or elk hiding cover. This hiding cover should be well distributed over the unit. Maintain 30% of the diversity unit in thermal cover (winter or spring-summer). Hiding cover can be used to meet thermal cover requirements if they indeed coincide biologically.</p> <p>F. Maintain habitat effectiveness during winter of at least 90 percent.</p> <p>G. Maintain habitat capability at a level at least 80 percent of potential capability.</p> <p>A. Maintain vegetation in fair or range condition.</p> <p>B. Limit livestock use of browse and herbaceous plant production to that not needed by big game. (6173)</p>
Silvicultural Prescriptions (E03, 06 and 07)	<p>1. Manage forest cover types to achieve and maintain desired thermal and hiding cover, cover-opening ratios and other habitat needs associated with tree cover.</p> <p>2. Manage forest cover types using the following harvest methods:</p> <ul style="list-style-type: none"> -Clearcut in aspen -Shelterwood in ponderosa pine and Engelmann spruce - subalpine fir 	

PRACTICES/MTH CODE

MANAGEMENT DIRECTION (M5B)

STANDARDS AND GUIDELINES

- Selection (group or single tree) in any forest subtype except aspen
 - Clearcut (patch) in dwarf mistletoe infected ponderosa pine and Douglas-fir
 - Or as specified in the silvicultural prescription
3. Utilize firewood material using both commercial and noncommercial methods.

4. For management purposes, a cutover area is considered an opening until such time as:
- Forage and/or browse production drops below 40 percent of potential production,
 - Deer and elk hiding cover reaches 60 percent of potential,
 - Minimum stocking standards by forest cover type and site productivity are met; and
 - The area appears as a young forest rather than a restocked opening, and takes on the appearance of the adjoining characteristics landscape.

A. When the Visual Quality Objective of an area is partial retention, the regenerated stand shall meet or exceed all of the following characteristics before a cutover area is no longer considered an opening:

FOREST COVER TYPE	MINIMUM STOCKING LEVEL	TREE STAND HEIGHT (FEET)	DISTRIBUTION 3/
Ponderosa Pine	150 2/	6	
Mixed Conifers	150 2/	6	
Engelmann Spruce-Subalpine Fir	150 2/	6	
Aspen	300	6	
FOREST COVER TYPE	CROWN CLOSURE (PERCENT)	DISTRIBUTION 3/	
Ponderosa Pine	30	60%	
Mixed Conifers	30	60%	

PRACTICES/MTH CODE	MANAGEMENT DIRECTION (05B)	STANDARDS AND GUIDELINES
Special Use Management (Non-Recreation) (J01)	Engelmann Spruce- Subalpine Fir Aspen -	30 60% 30 75%
Rights-of-Way and Land Adjustments (J02, 13, 15, 16, 17 and 18)		<p>1/ Applies to trees specified at minimum stocking level</p> <p>2/ Or as otherwise specified in the Silvicultural Prescription</p> <p>3/ Percent of plots or transects that are stocked.</p>
Transportation System Management (L01 and 20)		<p>1. Resolve special uses that conflict with wintering animals.</p> <p>1. Acquire private lands needed for big game winter range.</p> <p>1. Road traffic and road cut or fill slopes must not block big game movement in delineated migration routes or corridors.</p> <p>1. Allow new roads in the management area only if needed to meet priority goals outside the management area or to meet big game goals on the management area. Obliterate temporary roads within one season after planned use ends.</p> <p>A. New permanent or temporary roads constructed in the management area must meet the following criteria:</p> <p>1. There is no feasible alternative to build the road outside the area, and the road is essential to achieve priority goals & objectives of contiguous mgt areas, or to provide access to land administered by other Government agencies or to contiguous private land.</p> <p>2. The Utah DWR has been fully involved in the road location, planning and alternative evaluation.</p> <p>3. Planned management of road use during winter will prevent or minimize disturbance of wintering big game animals, or will allow hunting or other management activities needed to meet wildlife management objectives.</p>

PRACTICES/MTH CODE	MANAGEMENT DIRECTION (05B)	STANDARDS AND GUIDELINES
	<p>3. Manage existing roads, prohibit off-road vehicle use and manage non-motorized use to prevent stress on big game animals. (0764)</p> <p>4. Roads are constructed to the minimum standards necessary to provide safety for the road use purpose.</p> <p>5. Roads cross the winter range in the minimum distance feasible to facilitate the necessary use.</p> <p>A. Opening of existing roads during winter can be approved if the following criteria are met:</p> <ol style="list-style-type: none"> 1. There is no reasonable alternative for owners or managers of contiguous private land or public land to reach their land during winter. 2. Road use, off-road vehicle use, or non-motorized use of the area is essential and is the minimum necessary to meet priority resource management goals and objectives. 3. The Utah DWR is fully involved in planning human use of the area during winter. 	

MANAGEMENT AREA 6A LIVESTOCK GRAZING

Characteristics

This management area consists of benchlands, valleys and basins at lower elevations with pinyon-juniper or sagebrush vegetation. Most of these areas have been chained and reseeded. At higher elevations this management area consists of mountain meadows and parks with sage-grass or grass-forb vegetation.

Desired Future Conditions

Acreage of areas receiving this emphasis will remain essentially the same as presently. Production and range condition will be improved. Areas where vegetation manipulation practices have been accomplished will be maintained for optimum forage production. Numbers of livestock improvements (water developments, fences) will increase.

Size

This management area contains 276,600 acres. Two hundred sixty seven three hundred sixty seven acres are unsuitable for timber harvest.

Management Area Direction

The area is managed for livestock grazing. Intensive grazing management systems are favored over extensive systems. Range condition is maintained through use of forage improvement practices, livestock management, and regulation of other resource activities. Periodic heavy forage utilization occurs. Investment in structural and nonstructural range improvements to increase forage utilization is moderate to high. Structural improvements benefit, or at least do not adversely affect wildlife. If conflicts occur between livestock and wildlife in areas of critical wildlife habitat they will be resolved in favor of wildlife. Nonstructural restoration and forage improvement practices available are seeding, planting, burning, fertilizing, pitting, furrowing, spraying, crushing, and plowing. Cutting of encroaching trees may also occur.

Investments are made in compatible resource activities. Dispersed recreational opportunities vary between semi-primitive nonmotorized and roaded natural. Management activities are evident but harmonize and blend with the natural setting.

PRACTICES/MTH CODE	MANAGEMENT DIRECTION (OSA)	STANDARDS AND GUIDELINES																																				
MANAGEMENT PRESCRIPTION 06A - EMPHASIZE LIVESTOCK GRAZING (INTENSIVE)																																						
Visual Resource Management (A04)	<p>1. Design and implement management activities to blend with the natural landscape.</p> <p>2. Provide roaded natural recreation opportunities within 1/2 mile of Forest arterial, collector and local roads with better than primitive surfaces which are open to public travel.</p> <p>Provide semi-primitive motorized recreation opportunities with a low to moderate incidence of contact with other groups and individuals within one-half mile of designated local roads with primitive surfaces and trails open to motorized recreation use.</p> <p>Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities. Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS class.</p> <p>Provide semi-primitive non-motorized recreation opportunities in all areas more than one-half mile away from roads and trails open to motorized recreation use.</p>	<p>A. Do not go below an adopted Visual Quality Objective (VQO) or modification.</p> <p>B. When projects require clearing of vegetation and/or soil disturbance, use irregular clearing edges and shapes to blend with the natural landscapes.</p> <p>A. Maximum use and capacity levels are:</p> <table> <thead> <tr> <th colspan="4">RECREATION USE AND CAPACITY RANGE DURING THE SNOW-FREE PERIOD (PAOT/ACRE)</th> </tr> </thead> <tbody> <tr> <td colspan="4">TRAIL USE AND CAPACITY RANGE (PAOT/MILE OF TRAIL)</td> </tr> <tr> <td colspan="4">CAPACITY RANGE</td> </tr> <tr> <th>USE LEVEL</th><th>VERY LOW</th><th>LOW</th><th>HIGH</th></tr> </tbody> </table> <p>ROS CLASS - SEMI-PRIMITIVE NONMOTORIZED</p> <table> <thead> <tr> <th colspan="4">On Trails PAOT/Mile</th> </tr> </thead> <tbody> <tr> <td>Area-Wide PAOT/Acre .004</td><td>.008</td><td>.05</td><td>.08</td></tr> <tr> <td colspan="4">ROS CLASS - SEMI-PRIMITIVE MOTORIZED</td> </tr> <tr> <th colspan="4">On Trails PAOT/Mile</th> </tr> <tr> <td>Area-Wide PAOT/Acre .004</td><td>.008</td><td>.05</td><td>.08</td></tr> </tbody> </table>	RECREATION USE AND CAPACITY RANGE DURING THE SNOW-FREE PERIOD (PAOT/ACRE)				TRAIL USE AND CAPACITY RANGE (PAOT/MILE OF TRAIL)				CAPACITY RANGE				USE LEVEL	VERY LOW	LOW	HIGH	On Trails PAOT/Mile				Area-Wide PAOT/Acre .004	.008	.05	.08	ROS CLASS - SEMI-PRIMITIVE MOTORIZED				On Trails PAOT/Mile				Area-Wide PAOT/Acre .004	.008	.05	.08
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On Trails PAOT/Mile																																						
Area-Wide PAOT/Acre .004	.008	.05	.08																																			
Dispersed Recreation Management (A14 and 15)	<p>1. Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided.</p>																																					

PRACTICES/MH CODE

MANAGEMENT DIRECTION (OSA)

STANDARDS AND GUIDELINES

ROS CLASS - ROADED NATURAL	
On Trails	
PAOT/Mile	--
Area-Wide	
PAOT/Acre	.04
	.08
	1.2
	2.5

ROS CLASS - RURAL

ROS CLASS - RURAL	
On Trails	
PAOT/Mile	--
Area-Wide	
PAOT/Acre	.5
	.8
	5.0
	7.5

Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, general attractiveness or the specific management area type as described in the ROS User's Guide, Chapter 25.

Reduce the above use levels when unacceptable changes to the biophysical resources will occur.

B. Specify off-road vehicle restrictions based on ORV use management (FSM 2355)

C. See FSM 2331, FSH 7712, FSH 7709.12 (Trails Handbook), FSH 7109.11A and 11B (Sign Handbook)

3. Permit undesignated sites in Frissell Condition Class 1 through 3 where unrestricted camping is permitted.
4. Manage site use and occupancy to maintain sites within Frissell Condition Class 3 except for designated sites which may be Class 4. Close and restore Class 5 sites.
5. Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in subalpine and other ecosystems where needed to protect soils, vegetation, or special wildlife habitat.

PRACTICES/MTH CODE	MANAGEMENT DIRECTION (06A)	STANDARDS AND GUIDELINES
Wildlife and Fish Resource Management (C01)	<p>1. Maintain habitat capability for management indicator species.</p> <p>2. Provide adequate forage to sustain big game population levels agreed to in approved wildlife management plans on NFS lands.</p>	<p>A. Maintain habitat capability at 70 percent of potential.</p> <p>A. When conflicts arise develop utilization standards for big game. Resolve conflicts in favor of big game.</p>
Range Resource Management (D07)	<p>1. On rangeland in less than satisfactory condition, remove livestock when recovery of range condition cannot be accomplished by the grazing system.</p> <p>2. Improve range condition to fair or better.</p> <p>3. Invest in cost effective grazing management and associated range improvements.</p> <p>4. Invest in cost effective grazing management and rangeland productivity improvements. Where improvements include water developments, obtain a water right in the name of the United States.</p>	<p>A. Base range condition on the standards in Range Analysis Handbook (FSH 2209.21).</p> <p>A. Base economic analysis on Project Effectiveness Analysis Handbook (FSH 2209.11)</p> <p>A. Structural improvements will not adversely affect big game movement.</p> <p>B. Reference FSM 2541.23.</p>
Silvicultural Prescriptions (E03, 06 and 07)	<p>1. Maintain and manage forested inclusions to provide a high level of forage production, wildlife habitat, and diversity.</p> <p>2. Manage forest cover types using the following harvest methods:</p> <ul style="list-style-type: none"> -Clearcut in aspen -Shelterwood in ponderosa pine -Selection in Engelmann spruce and mixed conifers -Clearcut (patch) in dwarf mistletoe infected ponderosa pine -Or as specified in the silvicultural prescription to emphasize livestock grazing. <p>3. Utilize firewood material using both commercial and noncommercial methods.</p> <p>4. For management purposes, a cutover area is considered an opening until such time as:</p> <ul style="list-style-type: none"> -Forage and/or browse production drops below 40 percent of potential production, -Deer and elk hiding cover reaches 60 percent of potential, 	<p>B. Apply release and weeding as needed to improve visual quality.</p> <p>A. When the Visual Quality Objective of an area is partial retention, the regenerated stand shall meet or exceed all of the following characteristics before a cutover area is no longer considered an opening:</p>

PRACTICES AND CODE

MANAGEMENT DIRECTION (OSA)

STANDARDS AND GUIDELINES

- Minimum stocking standards by forest cover type and site productivity are met; and
- The area appears as a young forest rather than a restocked opening, and takes on the appearance of the adjoining characteristics landscape.

FOREST COVER TYPE	MINIMUM STOCKING LEVEL (TREES/ACRE)	TREE STAND HEIGHT (FEET)	STAND DISTRIBUTION 3/	
			CROWN CLOSURE (PERCENT)	PERCENT
Ponderosa Pine	150 2/	6		
Mixed Conifers	150 2/	6		
Engelmann Spruce-Subalpine Fir	150 2/	6		
Aspen	300	6		
Ponderosa Pine	30	60%		
Mixed Conifers	30	60%		
Engelmann Spruce-Subalpine Fir	30	60%		
Aspen	30	75%		

1/ Applies to trees specified at minimum stocking level
 2/ Or as otherwise specified in the Silvicultural Prescription
 3/ Percent of plots or transects that are stocked.

MANAGEMENT AREA 7A
WOOD PRODUCTION AND UTILIZATION

Characteristics

This management area consists of the major Forested areas on the Forest. At lower elevations ponderosa pine is dominant. Mixed conifer species occupy mid elevation while the spruce-fir type is dominant at the highest elevation.

Desired Future Conditions

This management area contains most of the commercial timber on the Forest and is the most highly productive for growing timber.

The basic long-range objectives of timber management for this area are:

1. Create and maintain nearly equal areas in seedlings and saplings, poletimber, immature sawtimber and mature sawtimber.
2. Create and maintain stand conditions that will minimize growth loss and mortality from insects and diseases.
3. Convert slow growing stands of mature sawtimber (beyond culmination of mean annual increment for the product size objective) to young, thrifty stands of desirable species.

These basic objectives, if implemented, will contribute toward the goal of reaching 90 percent of optimum timber growth rates at long-term sustained yield by 2030. The harvest schedule offered by the Preferred Alternative precludes attainment of this goal by 2030 because of the severe departure from the current base sale schedule that would be required. Substantial progress, however, is expected.

Ponderosa Pine Type

Areas of ponderosa pine will be managed almost exclusively through shelterwood methods. Sapling and pole stands will be precommercially thinned to leave between 120 and 150 trees per acre depending on site productivity. Stands of immature sawtimber will receive improvement harvests (intermediate cutting or commercial thinning) once or twice during the 110 to 130 year rotation on a 20 to 40 year entry period. Seed cutting will be done primarily to provide site protection for planted seedlings. These activities will be implemented on a schedule to provide a reasonable balance of acres in each of the age classes in the shortest time possible as constrained in the management area prescription. This balance should be achieved by 2030 with close to 90 percent of the optimum growth rate for most sites realized. Conditions favorable for significant insect and disease losses will be minimized. Small scattered areas of relatively inaccessible ponderosa pine on slopes over 40 percent will likely remain in an unmanaged condition.

Mixed Conifer Type

Species diversity will be lessened over time, as large areas of mistletoe infected Douglas-fir are regenerated. The aspen component of this type is currently in a remnant condition and will not be regenerated by design. Douglas-fir will be the main species planted with some mixture of ponderosa pine on south and west aspects. White fir will decrease in numbers because it likely will not be planted and will not regenerate naturally with removal of seed sources in harvests where Douglas-fir is favored for crop trees. An accelerated regeneration program will be necessary in much of this type. Conversion of the old growth and unevenaged conditions to young, thrifty, even-age stands will help to lessen the current western spruce budworm infestation. Although a balance of acres in each age class may be delayed because of accelerated regeneration, much of this type should reach 90 percent of optimum growth rates by 2030. Most of this type will be managed through shelterwood methods. Significant areas on slopes over 40 percent and isolated areas may remain in an unmanaged condition, depending on sawlog demand and the Forest budget. Insects and diseases should be at endemic levels in managed areas of this type by 2030.

Spruce-fir Type

Management objectives will be directed toward improving three basic situations: tomentosis root rot, low value species (subalpine fir and aspen) and conversion of old growth to young, thrifty stands. The extent of root rot is not known, but it is a potentially serious problem on portions of the Forest. Possible solutions to the root rot problem include removal of stumps of infected trees or growing a crop of aspen before Engelmann spruce is regenerated. A mosaic of clearcuts regenerated immediately to spruce and some to aspen will probably result in areas where the problems are severe enough to require treatment.

Where root rot is not a problem, old growth overstories will be removed, usually on a two-stage schedule. These stands will either be regenerated in conjunction with the final overstory removal or become stands of thrifty immature sawtimber and/or advanced regeneration, depending on what is present in the understory. Creation and maintenance of evenaged stands will be the general objective where possible. Site conditions and mitigation for other resource values will cause some stands to remain in an unevenage or multi-storied condition.

As in the mixed conifer type, species diversity will be reduced over time as the remnant interspersed aspen and subalpine fir become a smaller part of the species mixture.

Aspen Type

Where aspen occurs in pure stands of manageable size, aspen will generally be perpetuated by prescribed clearcutting and natural regeneration. Some small decadent stands incapable of sprouting may be regenerated to conifers. Where aspen stands are not conducive to management for commercial wood products or during periods of low demand for aspen products, wildlife habitat or visual quality objectives will be used to develop prescribed treatments. Demand for aspen wood products has been sporadic at best and this factor will have the most influence on management of the larger stands and attainment of 90 percent of optimum growth rates and a balance of age classes by 2030.

Size

This management area contains 270,400 acres. Fifty one thousand seven hundred seven acres are unsuitable for timber harvest.

Management Area Direction

Management emphasis is on wood-fiber production and utilization of large roundwood of a size and quality suitable for sawtimber. The harvest method by Forest cover type is clearcutting in aspen, and Engelmann spruce-subalpine fir, and shelterwood in ponderosa pine and mixed conifers.

The area generally will have a mosaic of fully stocked stands that follow natural patterns and avoid straight lines and geometric shapes. Management activities are not evident or remain visually subordinate along Forest arterial and collector roads and primary trails. In other portions of the area, management activities may dominate in foreground and middleground, but harmonize and blend with the natural setting.

Roaded-natural recreation opportunities are provided along Forest arterial and collector roads. Semi-primitive motorized recreation opportunities are provided on those local roads and trails that remain open, semiprimitive nonmotorized opportunities are provided on those that are closed.

MTR CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES										
MANAGEMENT PRESCRIPTION 07A - EMPHASIZE WOOD FIBER PRODUCTION AND UTILIZATION												
Visual Resource Management (A04)	1. Meet stated visual quality objective.	A. Do not go below an adopted visual quality objective (VQO) of:										
		Partial retention within the foreground of arterial/collector roads and primary trails. Modification on all other areas.										
		B. Apply rehabilitation practice where the above objectives are now currently being met.										
Dispersed Recreation Management (A14 and 15)	<ol style="list-style-type: none"> 1. Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided. 2. Provide roaded natural recreation opportunities within 1/2 mile of forest arterial, collector and local roads with better than primitive surfaces which are open to public travel. <p>Provide semi-primitive motorized recreation opportunities with a low to moderate incidence of contact with other groups and individuals within 1/2 mile of designated local roads with primitive surfaces and trails open to motorized recreation use.</p> <p>Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities. Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS Class.</p> <p>Provide semi-primitive non-motorized recreation opportunities in all areas more than 1/2 mile away from roads and trails open to motorized recreation use.</p>	<p>A. Maximum use and capacity levels are:</p> <table> <tr> <td>Recreation use and capacity range during the snow-free period (PAOT/Acre).</td> <td>Capacity Range</td> </tr> <tr> <td>Trail use and capacity range (PAOT/Mile of trail).</td> <td>Capacity Range</td> </tr> </table> <p>Use Very Low Moderate High</p> <p>Level</p> <p>ROS Class - Semi-Primitive Nonmotorized</p>	Recreation use and capacity range during the snow-free period (PAOT/Acre).	Capacity Range	Trail use and capacity range (PAOT/Mile of trail).	Capacity Range						
Recreation use and capacity range during the snow-free period (PAOT/Acre).	Capacity Range											
Trail use and capacity range (PAOT/Mile of trail).	Capacity Range											
		<table> <tr> <td>On trails PAOT/Mile</td> <td>2.0</td> <td>3.0</td> <td>9.0</td> <td>11.0</td> </tr> <tr> <td>Area-wide PAOT/Acre</td> <td>.004</td> <td>.008</td> <td>.05</td> <td>.</td> </tr> </table>	On trails PAOT/Mile	2.0	3.0	9.0	11.0	Area-wide PAOT/Acre	.004	.008	.05	.
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		ROS Class - Semi-Primitive Motorized										
		<table> <tr> <td>On trails PAOT/Mile</td> <td>2.0</td> <td>3.0</td> <td>9.0</td> <td>11.0</td> </tr> <tr> <td>Area-wide PAOT/Acre</td> <td>.004</td> <td>.008</td> <td>.05</td> <td>.</td> </tr> </table>	On trails PAOT/Mile	2.0	3.0	9.0	11.0	Area-wide PAOT/Acre	.004	.008	.05	.
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PRACTICES/MTH CODE

MANAGEMENT DIRECTION (MDA)

STANDARDS AND GUIDELINES

ROS Class - Roaded Natural					
On trails	---	---	---	---	---
PAOT/Mile	---	---	---	---	---
Area-wide	.04	.08	1.2	2.	
PAOT/Acre					

ROS Class - Rural					
On trails	---	---	---	---	---
PAOT/Mile	---	---	---	---	---
Area-wide	.5	.8	5.0	7.	
PAOT/Acre					

Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, general attractiveness of the specific management area type as described in the ROS Users Guide, Chapter 25.

Reduce the above use levels when unacceptable changes to the biophysical resources will occur.

B. Specify off-road vehicle restrictions based on ORV Use Management (FSM 2355).

C. See FSM 2331, FSH 7732, FSH 7709.12 (Trails Handbook), GSH 7109.11A and 11B (Sign Handbook).

3. Permit undesignated sites in Frissell condition Class 1 through 3 where unrestricted camping is permitted.
4. Manage site use and occupancy to maintain sites within Frissell condition Class 3 except for designated sites which may be Class 4. Close and restore Class 5 sites.
5. Prohibit motorized vehicle use off-forest system roads and trails (except snowmobiles operating on snow) in other sub-alpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat.

PRACTICES/MTH CODE	MANAGEMENT DIRECTION (07A)	STANDARDS AND GUIDELINES										
Range Improvement and Maintenance (D03, 04, 05 and 06)	<p>1. Utilize transitory forage that is available where demand exists, and where investments in regeneration can be protected.</p> <p>2. Protect regeneration from livestock damage.</p> <p>Silvicultural Prescriptions (E03, E05, 06 and 07)</p> <ol style="list-style-type: none"> 1. Manage forest cover types using the following harvest methods: <ul style="list-style-type: none"> -Clearcut in aspen, and when appropriate in Engelmann spruce-subalpine fir. -Shelterwood in ponderosa pine, mixed conifer, and Engelmann spruce-subalpine fir. -Selection (tree/group) in any forest type except aspen. -Clearcut (patch) in dwarf mistletoe infected ponderosa pine and Douglas-fir. -Or as specified in the silvicultural prescription. -Exercise special care when dealing with high elevation species (ex. Boulder Top.) 2. Clearcuts may be applied to dwarf mistletoe infected stands of any forest cover type. 3. Apply intermediate treatments to maintain growing stock level standards as specified in the silvicultural prescription. 4. Utilize firewood material using both commercial and noncommercial methods. 5. For management purposes, a cut-over area is considered an opening until such time as: <ul style="list-style-type: none"> -Forage and/or browse production drops below 40% of potential production; -Deer and elk hiding cover reaches 60 % of potential; -Minimum stocking standards by forest cover type and site productivity are met; and -The area appears as a young forest rather than a restocked opening, and takes on the appearance of the adjoining characteristic landscape. 	<p>A. Vary utilization standards with grazing system and ecological condition. Specify standards in the allotment management plan.</p> <p>B. Maximum grazing use on transitory ranges resulting from clear cuts is:</p> <ul style="list-style-type: none"> -Grasses 50 percent of current growth. <p>A. When the visual quality objective of an area is modification or maximum modification the regenerated stand shall meet or exceed all of the following characteristics before a cut-over area is no longer considered an opening:</p> <table> <thead> <tr> <th>Forest Cover Type</th> <th>Minimum Stocking Level</th> <th>Tree Height (ft.)</th> <th>Stand Level</th> <th>Tree Height (ft.) 1 / Acre</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Forest Cover Type	Minimum Stocking Level	Tree Height (ft.)	Stand Level	Tree Height (ft.) 1 / Acre					
Forest Cover Type	Minimum Stocking Level	Tree Height (ft.)	Stand Level	Tree Height (ft.) 1 / Acre								

	Forest Cover Type	Crown Closure (percent)	Distribution
Inland ponderosa pine	150	2/	6
Mixed conifers	150	2/	6
Engelmann spruce - sub-alpine fir	150	2/	6
Aspen	300		6

1/ Applies to trees specified at minimum stocking level.

2/ Or as otherwise specified in the silvicultural prescription.

3/ Percent of plots or transects that are stocked. (6014)

MANAGEMENT AREA 8A
WILDERNESS

Characteristics

This management area consists of the Pine Valley Mountain Wilderness, the Ashdown Gorge Wilderness and the Box-Death Hollow Wilderness.

Size

This management area contains 83,000 acres.

Management Area Direction

Management emphasis is to provide for the protection and perpetuation of essentially natural bio-physical conditions. Solitude and a low level of encounters with other users or evidence of past use is an essential part of the social setting. Human travel, though not restricted to, is principally on system trails. Popular campsites show evidence of repeated but acceptable levels of use. Minimum impact camping techniques will be encouraged.

Past resource management activities have been managed in such a way that current human use has left only limited site-specific evidence of their passing. Areas with evidence of unacceptable levels of past use will be rehabilitated and the affected area restored. Range allotments with authorized permanent structures may be present within the area. Scientific and other authorized practices utilizing nonmotorized equipment, but requiring up to season-long occupancy are compatible.

PRACTICES/MFH CODE**MANAGEMENT DIRECTION (08A)****STANDARDS AND GUIDELINES****MANAGEMENT PRESCRIPTION 08A - PROVIDE FOR SEMI-PRIMITIVE WILDERNESS OPPORTUNITIES****Visual Resource**

1. Manage for maximum retention of the natural landscape. Design and locate management activities to meet the visual quality objective of preservation in all areas except where specific surface occupancy is authorized by wilderness legislation. In these areas, the visual quality objective is retention.

**Dispersed Recreation Management
(A14 and 15)**

1. Provide wilderness recreation opportunities requiring predominately unmodified natural settings, with a moderate to high degree of challenge and risk while traveling cross-country or on trails.
2. Prohibit open fires in subalpine, meadow areas and within riparian areas when:
 - A. Use of dead and down wood for fuel is likely to violate diversity requirements, soil nutrient and erosion protection, or
 - B. Visual resource objectives for the area likely could not be met.
3. Permit undesignated sites in Frissell Condition Class 1 through 3 where unrestricted camping is permitted.
4. Manage site use and occupancy to maintain sites within Frissell Condition Class 3 except for undesignated sites which may be Class 4. Close and restore Class 5 sites.
5. Manage summer use to allow low to moderate contact with other groups and individuals.

- A. Area-wide capacity: .02 PAOT/Acre)
 - Open Lands
 - Subalpine, Rock, Mountain Grass Forest and Shrub Lands
 - Ponderosa Pine, Douglas-fir, Riparian areas, spruce/fir, aspen
- B. Maximum use and capacity levels
 - Trail and camp encounter during peak use days are less than 20 other parties per day.

PRACTICES/MR CODE	MANAGEMENT DIRECTION (08A)	STANDARDS AND GUIDELINES																		
		-Trail capacity is displayed below:																		
		<table border="1"> <thead> <tr> <th>Use Level</th> <th>Open Lands</th> <th>Forest & Shrub Land</th> </tr> </thead> <tbody> <tr> <td>On Trails (PAOT/Mile)</td> <td>2-3</td> <td>9-11</td> </tr> </tbody> </table>	Use Level	Open Lands	Forest & Shrub Land	On Trails (PAOT/Mile)	2-3	9-11												
Use Level	Open Lands	Forest & Shrub Land																		
On Trails (PAOT/Mile)	2-3	9-11																		
6.	Reduce visitor use when the level of use exceeds capacity for more than 20 percent of the summer use season.	A. Locate campsites at least 300 feet apart.																		
7.	Permits for parties larger than the established limit may be used when their presence can be adequately screened from the sights and sounds of other parties in the area.	B. Occupied site guidelines: (Maximum number of sites occupied at one time.)																		
8.	Manage location of campsites to provide a moderate degree of solitude.	<table border="1"> <thead> <tr> <th>Lakes</th> <th><5 Acres</th> <th>2</th> </tr> </thead> <tbody> <tr> <td>Streams and Trails</td> <td>5-25 Acres</td> <td>3</td> </tr> <tr> <td>Open areas</td> <td>>25 Acres</td> <td>4</td> </tr> <tr> <td>Forested areas</td> <td></td> <td></td> </tr> <tr> <td></td> <td>2 sites/mile</td> <td></td> </tr> <tr> <td></td> <td>4 sites/mile</td> <td></td> </tr> </tbody> </table>	Lakes	<5 Acres	2	Streams and Trails	5-25 Acres	3	Open areas	>25 Acres	4	Forested areas				2 sites/mile			4 sites/mile	
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Streams and Trails	5-25 Acres	3																		
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Forested areas																				
	2 sites/mile																			
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9.	Manage site use and occupants to maintain sites within Frissell Condition Class 3.	<p>A. Allow sites to be occupied 20 days during summer season or to the level required to maintain at least a stable trend in site condition.</p> <p>B. Close and restore Frissell Condition Class 4 & 5</p> <p>es.</p>																		
		<p>1. Manage outfitter-guide operations in the same manner as other visitors. Permit camping only in sites specified in outfitter-guide permits. Keep outfitter-guide activities harmonious with activities of non-guided visitors. Include outfitter-guide operations in calculations of level-of-use capacities.</p> <p>1. Manage livestock and herbivorous wildlife forage use in accordance with FSR 2320.3 (36 CFR 293.7).</p> <p>A. Follow established utilization standards for areas within grazing allotments.</p>																		
		<p>Recreation Management (Private and other public sector) (A16)</p> <p>Range Resource Management (D07)</p>																		

PRACTICES/MRH CODE	MANAGEMENT DIRECTION (OSA)	STANDARDS AND GUIDELINES
Special Use Management (Non-Recreation) (J01)	<p>1. Manage surface occupants activities authorized prior to wilderness designation to reduce impact on wilderness values consistent with the intent of the occupancy authorization.</p> <p>2. Permit only those uses authorized by wilderness legislation, which cannot be reasonably met on non-wilderness lands.</p>	<p>B. Range management activities must be in accordance with the wilderness designation and in conformance with the Congressional Committee Guidelines outlined in FSH 2323.2.</p>
Transportation System Management (101 and 20)	<p>1. Locate and design required access roads outside the management area for authorized activities to minimize the biophysical and visual impact, and to facilitate restoration.</p> <p>A. Roads will not be authorized:</p> <ul style="list-style-type: none"> -On slopes steeper than 60 percent; -In areas of high erosion hazard; -In areas of high geologic hazard; -In areas of low visual absorption capacity that are unlikely for successful restoration; -In areas which would adversely affect threatened and endangered plant and animal species. <p>2. Convert roads not needed for authorized activities to trails, or if they are not needed as part of the transportation system, restore them to the established IVO.</p> <p>3. Construct or reconstruct trails only when needed to meet objectives of the wilderness transportation system.</p> <p>4. Construct bridges to only the standard necessary to accommodate the specified class of user. Construct bridges only where no safe opportunity exists to cross a stream or gorge during periods of normal stream flow.</p> <p>5. Use corduroy and/or puncheon treads across bogs where no safe and feasible bypass opportunity exists.</p> <p>6. Close or sign system trails when not maintained to the safe standard for the specified use.</p>	<p>A. Roads will not be authorized:</p> <ul style="list-style-type: none"> -On slopes steeper than 60 percent; -In areas of high erosion hazard; -In areas of high geologic hazard; -In areas of low visual absorption capacity that are unlikely for successful restoration; -In areas which would adversely affect threatened and endangered plant and animal species. <p>A. Maintain trails in accordance with standards in the Trail Handbook (FSH 7709.12)</p> <p>A. Follow standards specified in FSH 7709.12, FSH 2323.110 and 2323.610.</p> <p>B. Trail density will not exceed two miles per square mile. Trails are constructed and maintained to high levels of use and specified below.</p> <p>A. Maintain trails in accordance with standards in the Trail Handbook FSH 7709.12.</p>

PRACTICES/MIN. CODE	MANAGEMENT DIRECTION (OSA)	STANDARDS AND GUIDELINES
F&O Construction, Reconstruction and Maintenance (L24 and 25)	<p>7. Use signs of unstained wood with routed letters and mounted on unstained posts.</p> <p>8. Provide signs at trail terminals and trail junctions only. Include only trail identification and identification of terminal points.</p>	<p>A. Follow standards specified in FSH 7109.11A and 113.</p>
Protection (P01, 09 & 34)	<p>1. Prohibit construction of new administrative facilities or structures. In the event a substantial portion of the existing administrative facility and/or structure is destroyed, it will not be replaced.</p> <p>1. The wilderness management plan will detail when, where and how natural fires may be allowed to burn. Natural fire prescriptions must be approved by the Regional Forester.</p>	<p>A. Fires resulting from man and his activities must be prevented and/or controlled unless they have been approved by the Regional Forester. Naturally occurring fires will be allowed to more fully play their natural role in the ecology of the area.</p>
Mineral Management Oil, Gas and Geothermal Common Variety (Saleable)	<p>1. Issue no new leases.</p> <p>1. Issue no permits.</p> <p>1. Withdrawn from mining entry. No new claims can be located.</p>	<p>A. Recognize valid existing rights could exist on claims located prior to W/d - Administer acc. to Wild. Act and 2810 reg's for wilderness (CFR 228 etc.)</p> <p>B. All NOI - too veg. validity exam. prior to approval.</p>
Locatables		

MANAGEMENT AREA 8A1
ANTONE BENCH

Characteristics

This management area consists of the Antone Bench area excluded from the Box Death Hollow Wilderness.

Desired Future Condition

This area is to be managed to provide a natural or natural appearing environment. The concentration of users will be low, but there will often be evidence of others present.

Size

This management area contains approximately 1600 acres.

Management Area Direction

All lands are withdrawn from all forms of appropriation under the mining laws and from disposition under all laws pertaining to mineral and geothermal leasing. The area is open to competitive leasing of carbon dioxide until 1989. Any construction for the purpose of extracting carbon dioxide will be limited to the minimum standard necessary for its proper development. Any roads, trails, pipelines, electrical lines, buildings, compressor stations, and other facilities shall to the maximum extent practicable consistent with the economic extraction of CO₂, be camouflaged, constructed and located in a manner than will minimize visual, noise or other intrusions in the area and the surrounding wilderness area.

PRACTICES/MR CODE

MANAGEMENT DIRECTION (8A1)

STANDARDS AND GUIDELINES

MANAGEMENT PRESCRIPTION 8A1 - PROVIDE FOR SEMI-PRIMITIVE RECREATION OPPORTUNITIES FOR ANTONE BENCH, BOX DEATH HOLLOW

Visual Resource

1. Manage for retention of the visual appearance of the natural landscape. Management activities will be designed to meet visual quality objective of retention as it is seen from travel routes within the area.

**Dispersed Recreation Management
(A14 and 15)**

1. Provide semi-primitive recreation opportunities requiring predominately unmodified natural settings, with a moderate to high degree of challenge and risk while travelling cross-country or on trails.
2. Permit undesignated sites in Frissell Condition Class 1 through 3 where unrestricted camping is permitted.

3. Manage site use and occupancy to maintain sites within Frissell Condition Class 3 except for designated sites which may be Class 4. Close and restore Class 5 sites.

4. Manage summer use to allow low to moderate contact with other groups and individuals.

A. Area-wide capacity: .02 PAOT/Acre

Open Lands
Subalpine, Rock, Mountain Grass
Forest and Shrub Lands
Ponderosa Pine, Douglas-fir,
riparian areas, spruce/fir, aspen

B. Maximum use and capacity levels
-Trail and camp encounter during park use days are less than 20 other parties per day.
-Trail capacity is displayed below:

Use Level	Open Lands	Forest & Shrub Land
On Trails (PAOT/Mile)	2-3	9-11

5. Reduce visitor use by going to a permit system when the level of use exceeds capacity for more than 20 percent of the summer use season, or resource damage is greater than desired.

6. Manage location of campsites to provide a moderate degree of solitude.

A. Locate campsites at least 300 feet apart.

B. Occupied site guidelines: (Maximum number of sites occupied at one time.)
Streams and Trails
Open areas 2 sites/mile
Forested areas 4 sites/mile

PRACTICES/MH CODE	MANAGEMENT DIRECTION (8A1)	STANDARDS AND GUIDELINES
Range Resource Management (D07)	<p>1. Manage livestock to prevent conflict with dispersed recreation opportunities.</p> <p>2. Permit only those activities that cannot be located outside the area.</p>	<p>A. Follow established utilization standards for areas within grazing allotments.</p>
Special Use Management (Non-Recreation) (J01)	<p>1. Manage surface occupancy activities to meet retention or minimum, a partial retention visual quality objective.</p> <p>2. Permit only those activities that cannot be located outside the area.</p>	
Mineral Management - Oil, Gas and Geothermal (G02 and O4)	<p>1. All lands are withdrawn from all forms of appropriation under the mining laws and from disposition under all laws pertaining to mineral and geothermal leasing and all amendments thereto, except that competitive leases for carbon dioxide can be issued for a period of five years from the date of enactment of the Utah Wilderness Act. (PL 98-428)</p> <p>2. A lease issued for carbon dioxide shall be for a period of 10 years and for so long thereafter as carbon dioxide is produced annually in commercial quantities from that lease.</p> <p>3. An area covered by a lease shall be withdrawn from further carbon dioxide leasing or lease extension in the event production in commercial quantities from the lease is not occurring within 10 years of the date of issuance of the lease.</p> <p>4. Exploration shall be permitted only by helicopter or other methods which do not involve road construction or other significant surface disturbance.</p> <p>5. In the event development of a lease is proposed, the following provisions shall apply:</p> <p>A. Road construction shall be limited to the minimum standards necessary for proper development of the carbon dioxide resource consistent with safety requirements.</p> <p>B. Roads, pipelines, electric lines, buildings, compressor stations and other facilities shall, to the maximum extent practicable consistent with economic extraction of the carbon dioxide resource, be camouflaged constructed and located in a manner that will minimize visual, noise, or other intrusions in the area and in the surrounding wilderness area.</p> <p>C. Fill material, gravel and other material used for road and facility construction shall be obtained from outside the wilderness area.</p>	

PRACTICES/MIN. CODE	MANAGEMENT DIRECTION (8A1)	STANDARDS AND GUIDELINES
	D. Roads or facility construction shall be limited, to the maximum extent practicable, to seasons or periods where there will be minimum impacts on recreation or wildlife uses.	
	E. Roads shall be used only in conjunction with carbon dioxide development operations and shall be closed to all other vehicular use, but shall be open for foot or horse travel.	
	F. All roads or other facilities within the area shall, when no longer needed for carbon dioxide production, be removed and reclaimed to a condition of being substantially unnoticeable.	
	G. All waste, debris or other by-products associated with road construction, carbon dioxide production, or other development activities shall be disposed of outside the Antone Bench area and the Box Death Hollow Wilderness.	
	H. Consistent with State and Federal law no activities shall be allowed which could significantly impair water quality or quantity in the Box Death Hollow Wilderness.	
Transportation System Management (L01 and 20)	<p>1. Locate and design required access roads inside the management area for authorized activities to minimize the biophysical and visual impact, and to facilitate restoration.</p> <p>2. Convert roads not needed for authorized activities to trails, or if they are not needed as part of the transportation system, restore them to the established VQO.</p> <p>3. Construct or reconstruct trails only when needed to meet objectives of the transportation system.</p>	<p>A. Roads will not be authorized:</p> <ul style="list-style-type: none"> -On slopes steeper than 60 percent; -In areas of high erosion hazard; -In areas of high geologic hazard; -In areas of low visual absorption capacity that are unlikely for successful restoration; -In areas which would adversely affect threatened and endangered plant and animal species. <p>A. Maintain trails in accordance with standards in the Trail Handbook (FSR 7709.12)</p> <p>A. Follow standards specified in FSR 7709.12, FSR 2323.110 and 2323.610.</p> <p>B. Trail density will not exceed 2 miles per square mile. Trails are constructed and maintained for moderate to high levels of use and specified below.</p> <p>4. Construct bridges to only the standard necessary to accommodate the specified class of user. Construct bridges only where no safe opportunity exists to cross a stream or gorge during periods of normal stream flow.</p>

PRACTICES/MFH CODE	MANAGEMENT DIRECTION (8A1)	STANDARDS AND GUIDELINES
	<p>5. Use corduroy and/or puncheon trails across bogs where no safe and feasible bypass opportunity exists.</p> <p>6. Close or sign system trails when not maintained to the safe standard for the specified use.</p>	<p>A. Maintain trails in accordance with standards in the Trail Handbook FSH 7709.12.</p>
	<p>7. Use signs of unstained wood with routed letters and mounted on unstained posts.</p> <p>8. Provide signs at trail terminals and trail junctions only. Include only trail identification and identification of terminal points.</p>	<p>A. Follow standards specified in FSH 7109.11A and 113.</p>
F&O Construction, Reconstruction and Maintenance (L24 and 25)	<p>1. Prohibit construction of new administrative facilities or structures. In the event a substantial portion of the existing administrative facility and/or structure is destroyed, it will not be replaced.</p> <p>1. The management plan will detail where and how natural fires may be allowed to burn. Natural fire prescriptions must be approved by the Regional Forester</p>	<p>A. Fires resulting from man and his activities must be prevented and/or controlled unless they have been approved by the Regional Forester.</p> <p>Naturally occurring fires will be allowed to more fully play their natural role in the ecology of the area.</p> <p>2. Conduct forest pest management activities only to prevent the unnatural loss of the resource or to protect timber and other valuable resources.</p>

MANAGEMENT AREA 8A2
BOX DEATH HOLLOW

Characteristics

This management area consists of the areas excluded from the Box Death Hollow area, not including Antone Bench.

Desired Future Conditions

Maintenace of the natural or natural appearing environment. The natural setting may have subtle modifications that may be noticed but not draw the attention of an observer wandering through the area.

Size

This management area contains approximately 2200 acres.

Management Area Direction

Management emphasis is for the potential leasing and development of carbon dioxide gas in the area. The area will be withdrawn from all other forms of appropriation under the mining laws and from disposition under all laws pertaining to mineral and geothermal leasings. Carbon dioxide leasing in the area will be for a period of 10 years and for as long thereafter as carbon dioxide is produced annually in commercial quantities from the lease. At the end of 10 years, if no leases are producing commercial quantities of carbon dioxide, all leases will be closed. The effect of all management activities will be rehabilitated to bring the environment back to the condition it was in before the activity was introduced or as near to the natural condition as management feels can be achieved.

PRACTICES/MIH CODE MANAGEMENT DIRECTION (8A2) STANDARDS AND GUIDELINES

MANAGEMENT DIRECTION (8A2) STANDARDS AND GUIDELINES

Visual Resource

1. Manage for retention of the visual appearance of the natural landscape. Management activities will be designed to meet a visual quality objective of retention as it is seen from travel routes within the area.

Dispersed Recreation
Management
(A14 and 15)

1. Provide semi-primitive recreation opportunities requiring predominantly unmodified natural settings, with a moderate to high degree of challenge and risk while traveling cross-country or on trails.

3. Manage site use and occupancy to maintain sites within Frissell Condition Class 3 except for designated sites which may be Class 4. Close and restore Class 5 sites.
 4. Manage summer use to allow low to moderate contact with other groups and individuals.

4. Manage summer use to allow low to moderate contact with other groups and individuals.

5. Reduce visitor use when the level of use exceeds capacity for more than 20 percent of the summer use season.

A. Locate campsites at least 300 feet apart.

B. Occupied site guidelines: (Maximum number of sites occupied at one time.)	Streams and Trails	Open areas	Forested areas	2 sites/mile	2 sites/mile
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PRACTICES/NH CODE	MANAGEMENT DIRECTION (8A2)	STANDARDS AND GUIDELINES
Range Resource Management (D07)	<p>1. Manage livestock to prevent conflict with dispersed recreation opportunities.</p> <p>Special Use Management (Non-Recreation) (J01)</p> <ol style="list-style-type: none"> 1. Manage surface occupancy activities to meet retention on, at the minimum, a partial retention visual quality objective. 2. Permit only those activities that cannot be located outside the area. <p>Mineral Management - Oil, Gas and Geothermal (G02 and O4)</p> <ol style="list-style-type: none"> 1. All lands are withdrawn from all forms of appropriation under the mining laws and from disposition under all laws pertaining to mineral and geothermal leasing and all amendments thereto, except that competitive leases for carbon dioxide can be issued for a period of five years from the date of enactment of the Utah Wilderness Act. (PL 98-422) 2. A lease issued for carbon dioxide shall be for a period of 10 years and for so long thereafter as carbon dioxide is produced annually in commercial quantities from that lease. 3. The area will be managed in a manner in conformity with the management of the general area. <p>Transportation System Management (L01 and 20)</p> <ol style="list-style-type: none"> 1. Locate and design required access roads for authorized activities to minimize the biophysical and visual impact, and to facilitate restoration. 2. Convert roads not needed for authorized activities to trails, or if they are not needed as part of the transportation system, restore them to the established VQO. 3. Construct or reconstruct trails only when needed to meet objectives of the wilderness transportation system. 	<p>A. Follow established utilization standards for areas within grazing allotments.</p> <p>A. Roads will not be authorized:</p> <ul style="list-style-type: none"> -On slopes steeper than 60 percent; -In areas of high erosion hazard; -In areas of high geologic hazard; -In areas of low visual absorption capacity that are unlikely for successful restoration; -In areas which would adversely affect threatened and endangered plant and animal species. <p>A. Maintain trails in accordance with standards in the Trail Handbook (FSH 7709.12)</p> <p>A. Follow standards specified in FSH 7709.12, FSH 2323.110 and 2323.610.</p> <p>B. Trail density will not exceed 2 miles per square mile. Trails are constructed and maintained for moderate to high levels of use and specified below.</p>

4. Construct bridges to only the standard necessary to accommodate the specified class of user. Construct bridges only where no safe opportunity exists to cross a stream or gorge during periods of normal stream flow.
 5. Use corduroy and/or puncheon treads across bogs where no safe and feasible bypass opportunity exists.
 6. Close or sign system trails when not maintained to the safe standard for the specified use.
 - A. Maintain trails in accordance with standards in the Trail Handbook FSH 7709.12.
 7. Use signs of unstained wood with routed letters and mounted on unstained posts.
 8. Provide signs at trail terminals and trail junctions only. Include only trail identification and identification of terminal points.
1. Prohibit construction of new administrative facilities or structures. In the event a substantial portion of the existing administrative facility and/or structure is destroyed, it will not be replaced.
 - B. Trail density will not exceed miles per acre.
 - A. Fires resulting from man and his activities must be prevented and/or controlled at all times. Naturally occurring fires will be allowed to more fully play their natural role in the ecology of the area.
 2. Conduct forest pest management activities only to prevent the unnatural loss of the resource or to protect timber and other valuable resources adjacent to the wilderness (FSM 2324.1, 3408.1).

FAC Construction,
Reconstruction and
Maintenance
(L24 and 25)

Protection
(P01, 09 & 34)

MANAGEMENT AREA 9A
RIPARIAN MANAGEMENT

Characteristics

This management area is located adjacent to perennial streams and across the Forest. Components of the area include the aquatic ecosystem, the riparian ecosystem (characterized by distinct vegetation), and adjacent ecosystems that are within approximately 100 feet measured horizontally from both edges of perennial streams and from the shores of lakes and other still water bodies. All of the components are managed together as a land unit comprising an integrated riparian area, and not as separate components.

Desired Future Condition

Riparian area acreage remains essentially the same as currently exists. Riparian ecosystem remains healthy and viable. Sufficient habitat remains to support at least minimum viable populations of riparian dependent wildlife species. Water quality is not impaired below existing levels and is improved in some areas. Stream channel stability is maintained or, in areas where it is severely degraded, is improved to least minimally acceptable standards. Area provides multiple resource outputs while providing protection to riparian dependent values.

Size

This management area contains 9100 acres. Eight thousand fifty two acres are unsuitable for timber harvest.

Management Area Direction

The goals of management are to provide healthy, self-perpetuating plant communities, meet water quality standards, provide habitats for viable populations of wildlife and fish, and provide stable stream channels and still water body shorelines. The aquatic ecosystem may contain fisheries habitat improvement and channel stabilizing facilities that harmonize with the visual setting and maintain or improve wildlife or fish habitat.

Forest riparian ecosystems are treated to improve wildlife and fish habitat diversity through specified silvicultural objectives. Timber harvest and other vegetation treatments are used to achieve multi-resource benefits emphasizing riparian values.

Livestock grazing is at a level that will assure maintenance of the vigor and regenerative capacity of the riparian plant communities. Developed recreation and other facility construction for overnight use is restricted or modified within the 100-year floodplain. Dispersed recreation will be managed to maintain ecological stability and visual objectives of the management area.

The management area over which this prescription is to be applied will also be affected by several management activities in the Forest-wide direction. Most notable is the direction involving riparian area management, upland zones, water uses management, water resource improvement and maintenance, dam administration and maintenance, and elsewhere.

PRACTICES/MFH CODE**MANAGEMENT DIRECTION****STANDARDS AND GUIDELINES**

MANAGEMENT PRESCRIPTION 09A - EMPHASIZE RIPARIAN AREA MANAGEMENT

Visual Resource Management
(A04)

1. Design and implement management activities which sustain inherent visual values of riparian areas and blend with the surrounding natural landscapes.

Dispersed Recreation Management (A14 and 15)

1. Do not go below an adopted visual quality objective (VQO) of partial retention.

2. Provide roaded natural recreation opportunities within 1/2 mile of Forest arterial, collector and local roads with better than primitive surfaces which are open to public travel.

Provide semi-primitive motorized recreation opportunities with a low to moderate incidence of contact with other groups and individuals within 1/2 mile of designated local roads with primitive surfaces and trails open to motorized recreation use.

Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities. Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS class.

Provide semi-primitive non-motorized recreation opportunities in all areas more than 1/2 mile away from roads and trails open to motorized recreation use.

A. Maximum use and capacity levels are:

Recreation use and capacity range
during the snow-free period
(PAOT/ACRE)

Trail use and capacity range
(PAOT/Mile of trail)

Capacity Range

Use	Very Low	Moderate	High
Level	Low	Low	High

ROS Class - Semi-primitive nonmotorized

On Trails	PAOT/Mile	PAOT/Acre
2.0	3.0	9.0
		11.0

ROS Class - Semi-primitive motorized

On Trails	PAOT/Mile	PAOT/Acre
2.0	3.0	9.0
		11.0

ROS Class - Roaded Natural

PRACTICES/MTH CODE

MANAGEMENT DIRECTION (ODA)

STANDARDS AND GUIDELINES

On Trails PAOT/Mile		Area-wide PAOT/Acre			.04 .08 1.2 2.	
ROS Class - Rural						
On Trails PAOT/Mile		Area-wide PAOT/Acre			.5 .8 5.0 7.	

Reduce the above use level coefficients as necessary to reflect useable acres, patterns of use, general attractiveness of the specific management area type described in the ROS Users Guide, Chapter 25.

Reduce the above user levels when unacceptable changes to the biophysical resources will occur.

B. Specify off-road vehicle restrictions based on ORV Use Management (FSM 235).

C. See FSM 2331, FSR 7732, FSR 7709, 12 (Trails Handbook), FSH 7109.11A and 11B (Sign Handbook).

3. Permit undesignated sites in Frissell condition Class 1 through 2 where unrestricted camping is permitted.
4. Manage site use and occupancy to maintain sites within Frissell condition Class 2 except for designated sites which may be Class 3 or 4. Close and restore Class 5 sites.
5. Prohibit motorized vehicle use off forest system roads and trails (except snowmobiles operating on snow) in subalpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat.

PRACTICES/MFH CODE	MANAGEMENT DIRECTION (09A)	STANDARDS AND GUIDELINES																
Wildlife Habitat Improvement Maintenance (C02, 04, 05, and 06)	<p>1. Provide habitat to meet or exceed DWR population goals for all aquatic vertebrate species.</p> <p>2. Coordinate lake and stream habitat improvement projects with the Utah DWR where aquatic habitats are below productive potential.</p> <p>3. Maintain instream flows and obtain conservation pools in cooperation with Utah DWR to support a sustained yield of natural fisheries resources.</p> <p>4. Maintain proper stocking and livestock distribution to protect riparian ecosystems.</p> <p>5. Prohibit trailing of livestock along the length of riparian areas except where existing stock driveways occur. Rehabilitate existing stock driveways where damage is occurring in riparian areas if possible, and if necessary to achieve riparian-area goals.</p>	<p>A. Where natural biologic and geologic conditions will allow, maintain or improve overall stream habitat condition at or above 50 percent of optimum (use R-4 CAWS Aquatic Habitat Surveys Handbook).</p> <p>A. Livestock grazing in riparian areas will be controlled at the following levels of utilization:</p> <table> <thead> <tr> <th>Total Forage Utilization</th> <th>Vegetation Condition</th> <th>Class</th> <th>by Wt.</th> </tr> </thead> <tbody> <tr> <td>Grass/Grass-like Forb/Willow</td> <td>Rest-Rotation</td> <td>Use up $\frac{1}{2}$</td> <td>60%</td> </tr> <tr> <td></td> <td>Defer-Rotation</td> <td>Use up $\frac{1}{2}$</td> <td>50%</td> </tr> <tr> <td></td> <td></td> <td></td> <td>35%</td> </tr> </tbody> </table> <p>1/ Trampled areas and streambank damage caused during use year should be healed or stabilized within the following rest year.</p> <p>Browse utilization within the riparian ecosystem will not exceed 50% of new leader production.</p>	Total Forage Utilization	Vegetation Condition	Class	by Wt.	Grass/Grass-like Forb/Willow	Rest-Rotation	Use up $\frac{1}{2}$	60%		Defer-Rotation	Use up $\frac{1}{2}$	50%				35%
Total Forage Utilization	Vegetation Condition	Class	by Wt.															
Grass/Grass-like Forb/Willow	Rest-Rotation	Use up $\frac{1}{2}$	60%															
	Defer-Rotation	Use up $\frac{1}{2}$	50%															
			35%															
Range Resource Management (D07)																		

PRACTICES/MTH_CODE

MANAGEMENT DIRECTION (09A)

STANDARDS AND GUIDELINES

Silvicultural
Prescriptions
(E03, 05, 06 & 07)

1. Manage Forest cover types to perpetuate tree cover and provide healthy stands, high water quality and wildlife and fish habitat.
2. Manage forest cover types using the following harvest methods:
 - Clearcut in aspen
 - Selection (group or single tree in all other cover types
 - Shelterwood in ponderosa pine and mixed conifers
 - Small patch clearcuts may be used in mistletoe infected ponderosa pine and Douglas-fir
 - Or as specified in the silvicultural prescription
3. Apply intermediate treatments to maintain growing stock level standards as specified in the silvicultural prescription.
4. Establish a satisfactory stand either naturally or through artificial regeneration methods within a five-year period after disturbance.
5. Prohibit log landing and decking areas within the riparian area.
7. Limit skidding equipment within the riparian area. Do not skid logs across live stream channels or wetlands.
8. Reduce debris jam potential by cutting stumps to near ground level in the 100-year floodplain.
9. For management purposes, a cut-over area is considered an opening until such time as:
 - Forage and/or browse production drops below 40% of potential production;
 - Deer and elk hiding cover reaches 60% of potential;
 - Minimum stocking standards by Forest cover type and site productivity are met; and
 - The area appears as a young Forest rather than a restocked opening, and takes on the appearance of the adjoining characteristic landscape.

- A. When the visual quality objective of an area is partial retention, the regenerated stand shall meet or exceed all of the following characteristics before a cutover area is no longer considered an opening:

Forest Cover Type	Minimum Stocking Level	Tree Height 1/ (% of the Adjacent Trees/ Acres)	Nature Stand Height
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PRACTICES/NH CODE	MANAGEMENT DIRECTION (09A)	STANDARDS AND GUIDELINES	
	Inland ponderosa pine	Inland 150 / 2/	25
	Mixed conifers	Mixed 150 / 2/	25
Engelmann spruce - sub- alpine fir	Aspen	300	25
	Forest Cover Type	Crown Closure (percent)	Distribu- tion 3/ 4
	Inland ponderosa pine	30	60%
	Mixed conifers	30	60%
Engelmann spruce - sub- alpine fir	Aspen	30	60%
		1/ Applies to trees specified at minimum stocking level.	
		2/ Or as otherwise specified in the silvicultural prescription.	
		3/ Percent of plots or transect that are stocked.	
Water Resource Improvement and Maintenance (F05 and 06)		<ol style="list-style-type: none"> 1. Prevent or remove debris accumulations that reduce stream channel stability and capacity. 2. Proposed new land-use facilities (roads, campgrounds, buildings) will not normally be located within floodplain boundaries for the 100-year flood. Protect present and all necessary future facilities that cannot be located out of the 100-year floodplain by structural mitigation (deflection structures, riprap, etc.). <p>A. Implement mitigation measures when present or unavoidable future facilities are located in the active floodplain to ensure that State water quality standards, bank stability criteria, flood hazard reduction and instream flow</p>	

- standards are met during and immediately after construction.
3. Prevent stream channel instability, loss of channel cross-sectional areas, and loss of water quality resulting from activities that alter vegetative cover.
 - A. Limit changes in channel rating or classification scores to an increase of 10 percent or less.
 - B. Maintain at least 80 percent of potential ground cover within 100 feet from the edges of all perennial streams, lakes and other water bodies, or to the outer margin of the riparian ecosystem, where wider than 100 feet.
 5. Avoid channelization of natural streams. Where channelization is necessary for flood control or other purposes, use stream geometry relationships to re-establish meanders, width/depth ratios, etc. consistent with each major stream type.
 6. Treat disturbed areas resulting from management activities, to reduce sediment yields to the natural erosion rates in the shortest possible time.
 7. Stabilize streambanks which are damaged beyond natural recovery in a reasonable time period with appropriate methods or procedures that emphasize control by vegetation.
 8. Include wildlife and fish habitat, aesthetic, or safety goals when planning projects that result in vegetation type conversion.
 9. Require concurrent monitoring to ensure that mitigative measures are effective and in compliance with State water quality standards.

Soil Resource Management
(KAI)

1. Rehabilitate disturbed soil areas where adverse impacts would occur according to the following priorities:
 - Aquatic Ecosystems;
 - Riparian Ecosystems; and
 - Riparian areas outside of Aquatic and Riparian Ecosystems.
2. Minimize soil surface compaction and disturbance in riparian ecosystems. Allow use of heavy construction equipment for construction, residue removal, etc., during periods when the soil is least susceptible to compaction or rutting.

PRACTICES/MIN. CODE	MANAGEMENT DIRECTION (OSA)	STANDARDS AND GUIDELINES
Mining Law Compliance and Administration (G01)	<p>3. Maintain or enhance the long-term productivity of soils within the riparian ecosystem.</p> <p>1. Minimize detrimental disturbance to the riparian area by mineral activities. Initiate timely and effective rehabilitation of disturbed areas and restore riparian areas to a state of productivity comparable to that before disturbance.</p> <p>2. Locate mineral removal activities away from the water's edge or outside the riparian area.</p> <p>3. Confine heavy equipment use to areas necessary for mineral extraction.</p> <p>4. Locate mining camps outside the active floodplain.</p> <p>5. Require concurrent monitoring to ensure that mitigative measures are effective and in compliance with state water quality standards.</p>	<p>A. Prohibit the depositing of soil material from drilling, processing, or site preparation in natural drainageways.</p> <p>B. Locate the lower edge of disturbed or deposited soil banks out-side the active floodplain.</p> <p>C. Prohibit stockpiling of top soil or any other disturbed soil in the active floodplain.</p> <p>D. Prohibit mineral processing (milling) activities within the active floodplain.</p> <p>E. Discontinue heavy equipment use when soil compaction, rutting, and puddling is present.</p> <p>A. Locate drilling mud pits outside the active floodplain unless alternate locations are more environmentally damaging. If location is unavoidable, seal and dike all pits to prevent leakage.</p> <p>B. Drain and restore roads, pave and drill sites immediately after use is discontinued. Revegetation to 80% of ground cover in the first year. Provide surface protection during stormflow and snowmelt runoff events.</p> <p>A. Include applicable no surface occupancy special stipulation. (See Appendix C)</p>
Mineral Management Oil, Gas and Geothermal	<p>1. Review and process mineral lease applications, permits, and licences in a timely fashion recommending to Bureau of Land Mgt. measures and stipulations necessary to protect surface resources.</p>	

PRACTICES/MFH CODE	MANAGEMENT DIRECTION (09A)	STANDARDS AND GUIDELINES
Transportation System Management (L01 & 20)	<ol style="list-style-type: none"> 1. Locate roads and trails outside riparian areas unless alternative routes have been reviewed and rejected as being more environmentally damaging. 2. Create artificial sediment traps with barriers where the natural vegetation is inadequate to protect the waterway or lake from significant accelerated sedimentation. 3. Minimize detrimental disturbance to the riparian area by construction activities. Initiate timely and effective rehabilitation of disturbed areas and restore riparian areas so that a vegetation ground cover or suitable substitute protects the soil from erosion and prevents increased sediment yield. 4. Schedule necessary construction activities within the aquatic and riparian ecosystems to coincide with low streamflow and non-critical periods in life cycle of the affected game fish. 	<p>A. Do not parallel streams when road location must occur in riparian areas except where absolutely necessary. Cross streams at right angles where possible. Locate crossings at points of low bank slope and firm surfaces.</p>

MANAGEMENT AREA 9B
INTENSIVE RIPARIAN MANAGEMENT

Characteristics

This management area generally occurs in high riparian areas or those riparian areas where intensive measures will be taken to enhance or improve riparian ecosystems.

Desired Future Condition

Riparian area acreage remains essentially the same as currently exists. Riparian ecosystems remains healthy with vigor and condition improved in both short and long term. Habitat is improved to near optimal for fisheries and wildlife dependent on riparian values. Water quality and stream channel stability are improved across Forest. Riparian vegetation remains in an essentially "natural" or in altered condition. Area is more attractive to recreationists. Area provides lower levels of non-riparian dependent outputs.

Size

This management area contains 1582 acres. One thousand ninety two acres are unsuitable for timber harvest.

Management Area Direction

Management goals in this area are to enhance riparian vegetation, improve water quality, improve wildlife and fish habitat, increase wildlife populations, and improve stream channel stability. Direction is generally the same as in Riparian Area Prescription 9A. However, management activities and particularly grazing, are more intensively managed to emphasize riparian area values.

PRACTICES/WH. CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES																																			
MANAGEMENT PRESCRIPTION 09B – EMPHASIZE INTENSIVE RIPARIAN AREA MANAGEMENT																																					
Visual Resource Management (A04)	<p>1. Design and implement management activities which sustain inherent visual values of riparian areas and blend with the surrounding natural landscapes.</p>	<p>A. Do not go below an adopted visual quality objective (VQO) of partial retention.</p>																																			
Dispersed Recreation Management (A14 and 15)	<p>1. Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided.</p> <p>2. Provide roaded natural recreation opportunities within 1/2 mile of forest arterial, collector and local roads with better than primitive surfaces which are open to public travel.</p> <p>Provide semi-primitive motorized recreation opportunities with a low to moderate incidence of contact with other groups and individuals within 1/2 mile of designated local roads with primitive surfaces and trails open to motorized recreation use.</p> <p>Where local roads are closed to public motorized recreation travel, provide for dispersed non-motorized recreation opportunities. Manage recreation use to provide for the incidence of contact with other groups and individuals appropriate for the established ROS class.</p> <p>Provide semi-primitive non-motorized recreation opportunities in all areas more than 1/2 mile away from roads and trails open to motorized recreation use.</p>	<p>A. Maximum use and capacity levels are:</p> <p>Recreation use and capacity range during the snow-free period (PAOT/ACRE)</p> <p>Trail use and capacity range (PAOT/Mile of trail)</p> <p>Capacity Range</p> <table> <thead> <tr> <th>Use Level</th> <th>Very Low</th> <th>Low</th> <th>Moderate</th> <th>High</th> </tr> </thead> <tbody> <tr> <td>ROS Class - Semi-primitive nonmotorized</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>On Trails PAOT/Mile</td> <td>2.0</td> <td>3.0</td> <td>9.0</td> <td>11.0</td> </tr> <tr> <td>Area-wide PAOT/Acre</td> <td>.004</td> <td>.008</td> <td>.05</td> <td>.08</td> </tr> <tr> <td>ROS Class - Semi-primitive motorized</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>On Trails PAOT/Mile</td> <td>2.0</td> <td>3.0</td> <td>9.0</td> <td>11.0</td> </tr> <tr> <td>Area-wide PAOT/Acre</td> <td>.004</td> <td>.008</td> <td>.05</td> <td>.08</td> </tr> </tbody> </table>	Use Level	Very Low	Low	Moderate	High	ROS Class - Semi-primitive nonmotorized					On Trails PAOT/Mile	2.0	3.0	9.0	11.0	Area-wide PAOT/Acre	.004	.008	.05	.08	ROS Class - Semi-primitive motorized					On Trails PAOT/Mile	2.0	3.0	9.0	11.0	Area-wide PAOT/Acre	.004	.008	.05	.08
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Area-wide PAOT/Acre	.004	.008	.05	.08																																	

ROS Class – Roaded, Natural

		ROS Class – Rural				
		On Trails				
	PAOT/Mile	.04	.08	1.2	2.	
Area-wide	PAOT/Acre	.5	.8	5.0	7.	

Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, general attractiveness of the specific management area type described in the ROS Users Guide, Chapter 25.

Reduce the above use levels when unacceptable changes to the biophysical resources will occur.

- B. Specify off-road vehicle restrictions based on ORV Use Management (FSM 2355).
- C. See FSM 2331, FSH 7732, FSH 7709.12 (Trails Handbook), FSH 7109.11A and 11B (Sign Handbook).

3. Permit undesignated sites in Frissell condition Class 1 through 2 where unrestricted camping is permitted.
4. Manage site use and occupancy to maintain sites within Frissell condition Class 2 except for designated sites which may be Class 3. Close and restore Class 4 and 5 sites.
5. Prohibit motorized vehicle use off forest system roads and trails (except snowmobiles operating on snow) in subalpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat.

PRACTICES/MTH CODE	MANAGEMENT DIRECTION (09B)	STANDARDS AND GUIDELINES
Wildlife Habitat Improvement Maintenance (CO2, 04, 05, and 06)	<ol style="list-style-type: none"> 1. Provide habitat to meet or exceed DWR population goals for all aquatic vertebrate species. 2. Coordinate Lake and stream habitat improvement projects with the Utah DWR, where aquatic habitats are below productive potential. 3. Maintain instream flows and obtain conservation pools in cooperation with Utah DWR to support a sustained yield of natural fisheries resources. 	<p>A. Where natural biologic and geologic conditions permit, maintain or improve overall stream habitat condition at or above 70 percent of optimum (use R-4 GAWs Aquatic Habitat Surveys Handbook).</p>
Range Resource Management (D07)	<ol style="list-style-type: none"> 1. Maintain proper stocking and livestock distribution to enhance riparian ecosystems. 	<p>A. Livestock grazing in riparian areas will be controlled to achieve no more than 25% total forage utilization levels. Browse utilization within the riparian ecosystem will not exceed 35% of new leader production.</p> <p>-Significant streambank damage due to trampling will be avoided. Minor damage caused during a heavy use year should be healed and stabilized within the following year. If livestock cannot be controlled in a riparian area so as to prevent impacts on fisheries and/or streambank stability, livestock will be excluded.</p> <p>-Fencing will be utilized to achieve forage utilization targets in areas of high dispersed recreation use and in important wildlife habitat.</p> <p>-The limiting factor on a given riparian area will be whichever utilization standard is reached first, either total forage or browse.</p> <p>2. Prohibit trailing of livestock along the length of riparian areas except where existing stock driveways occur. Rehabilitate existing stock driveways where damage is occurring in riparian areas if possible, and if necessary to achieve riparian-area goals.</p> <ol style="list-style-type: none"> 1. Manage Forest cover types to perpetuate tree cover and provide healthy stands, high water quality and wildlife and fish habitat.

Silvicultural Prescriptions
(E03, 06 & 07)

PRACTICES/MTH CODE**MANAGEMENT DIRECTION (09B)****STANDARDS AND GUIDELINES**

2. Manage forest cover types using the following harvest methods:

- Clearcut in aspen
- Selection (group or single tree) in all other cover types
- Small patch clearcuts may be used in mistletoe infected ponderosa pine and Douglas-fir
- Shelterwood in ponderosa pine and mixed conifers
- Or as specified in the silvicultural prescription

3. Apply intermediate treatments to maintain growing stock level standards or specified in the silvicultural prescription.

4. Utilize firewood material using both commercial and non-commercial methods.

6. Establish a satisfactory stand either naturally or through artificial regeneration methods within a five-year period after disturbance.

7. Prohibit log landing and decking areas within the riparian area.

8. Limit skidding equipment within the riparian area. Do not skid logs across live stream channels or wetlands.

9. Reduce debris jam potential by cutting stumps to near ground level in the 100-year floodplain.

10. For management purposes, a cut-over area is considered an opening until such time as:

- Forage and/or browse production drops below 40% of potential production;
- Deer and elk hiding cover reaches 60% of potential;
- Minimum stocking standards by Forest cover type and site productivity are met; and
- The area appears as a young Forest rather than a restocked opening, and takes on the appearance of the adjoining characteristic landscape.

A. When the visual quality objective of an area is partial retention, the regenerated stand shall meet or exceed all of the following characteristics before a cutover area is no longer considered an opening:

Forest Cover Type	Minimum Stocking Level (Trees/Acre)	Tree Height 1 / % of the Adjacent Mature Stand Height)
Inland ponderosa pine	150 /	25

PRACTICES/MFH CODE	MANAGEMENT DIRECTION (09B)	STANDARDS AND GUIDELINES
Mixed conifers	150	2/ 25
Engelmann spruce - sub-alpine fir	150	2/ 25
Aspen	300	25
Forest Cover Type	Grown closure (percent)	Distribution 3/ 60%
Inland ponderosa pine	30	60%
Mixed conifers	30	60%
Engelmann spruce - sub-alpine fir	30	60%
Aspen	30	60%

1/ Applies to trees specified at minimum stocking level.

2/ Or as otherwise specified in the silvicultural prescription.

3/ Percent of plots or transect that are stocked.

A. Implement mitigation measures when present or unavoidable future facilities are located in the active floodplain to ensure that State water quality standards, bank stability criteria, flood hazard reduction and instream flow standards are met during and immediately after construction.

Water Resource
Improvement and
Maintenance
(F05 and 06)

3. Prevent stream channel instability, loss of channel cross-sectional areas, and loss of water quality resulting from activities that alter vegetative cover.
- A. Limit changes in channel rating or classification scores to an increase of 10 percent or less.
 - B. Maintain at least 80 percent of potential ground cover within 100 feet from the edges of all perennial streams, lakes and other water bodies, or to the outer margin of the riparian ecosystem, where wider than 100 feet.
5. Avoid channelization of natural streams. Where channelization is necessary for flood control or other purposes, use stream geometry relationships to re-establish meanders, width/depth ratios, etc. consistent with each major stream type.
6. Treat disturbed areas resulting from management activities, to reduce sediment yields to the natural erosion rates in the shortest possible time.
7. Stabilize streambanks which are damaged beyond natural recovery in a reasonable time period with appropriate methods or procedures that emphasize control by vegetation.
8. Include wildlife and fish habitat, aesthetic, or safety goals when planning projects that result in vegetation type conversion.
9. Require concurrent monitoring to ensure that mitigative measures are effective and in compliance with State water quality standards.
1. Rehabilitate disturbed soils areas where adverse impacts would occur according to the following priorities:
- Aquatic Ecosystems;
 - Riparian Ecosystems; and
 - Riparian areas outside of Aquatic and Riparian Ecosystems.
2. Minimize soil surface compaction and disturbance in riparian ecosystems. Allow use of heavy construction equipment for construction, residue removal, etc., during periods when the soil is least susceptible to compaction or rutting.
3. Maintain or enhance the long-term productivity of soils within the riparian ecosystem.

Soil Resource
Management
(KA1)

<u>PRACTICES/MINING CODE</u>	<u>MANAGEMENT DIRECTION (09B)</u>	<u>STANDARDS AND GUIDELINES</u>
Mining Law Compliance and Administration (G01)	<p>1. Minimize detrimental disturbance to the riparian area by mineral activities. Initiate timely and effective rehabilitation of disturbed areas and restore riparian areas to a state of productivity comparable to that before disturbance.</p> <ul style="list-style-type: none"> A. Prohibit the depositing of soil material from drilling, processing, or site preparation in natural drainageways. B. Locate the lower edge of disturbed or deposited soil banks outside the active floodplain. C. Prohibit stockpiling of top soil or any other disturbed soil in the active floodplain. D. Prohibit mineral processing (milling) activities within the active floodplain. E. Discontinue heavy equipment use when soil compaction, rutting, and puddling is present. <p>2. Locate mineral removal activities away from the water's edge or outside the riparian area.</p>	<p>A. Locate drilling mud pits outside the active floodplain unless alternate locations are more environmentally damaging. If location is unavoidable, seal and dike all pits to prevent leakage.</p> <p>B. Drain and restore roads, stabilize drill sites immediately after use is discontinued. Provide surface protection during stormflow and snowmelt runoff events.</p> <p>3. Confine heavy equipment use to areas necessary for mineral extraction.</p> <p>4. Locate mining camps outside the active floodplain.</p> <p>5. Require concurrent monitoring to ensure that mitigative measures are effective and in compliance with state water quality standards.</p>
Transportation System Management (L01 & 20)	<p>1. Locate roads and trails outside riparian areas unless alternative routes have been reviewed and rejected as being more environmentally damaging.</p>	<p>A. Do not parallel streams when road location must occur in riparian areas except where absolutely necessary. Cross streams at right angles where possible. Locate crossings at points of low bank slope and firm surfaces.</p>

PRACTICES/MH CODE	MANAGEMENT DIRECTION (09B)	STANDARDS AND GUIDELINES
	<p>2. Create artificial sediment traps with barriers where the natural vegetation is inadequate to protect the waterway or lake from significant accelerated sedimentation.</p> <p>3. Minimize detrimental disturbance to the riparian area by construction activities. Initiate timely and effective rehabilitation of disturbed areas and restore riparian areas so that a vegetation ground cover or suitable substitute protects the soil from erosion and prevents increased sediment yield.</p> <p>4. Schedule necessary construction activities within the aquatic and riparian ecosystems to coincide with low stream-flow and non-critical periods in life cycle of the affected game fish.</p>	

MANAGEMENT AREA 10A
RECOMMENDED RESEARCH NATURAL AREAS

Characteristics

This management area consists of proposed research Natural areas. These areas are: (1) timbered cinder cone on the Cedar City Ranger District and (2) Table Cliff Plateau on the Escalante Ranger District, and Red Canyon on the Powell Ranger District.

Desired Future Condition

The future condition of these areas, if approved as Research Natural Areas, will be shaped by natural forces only; except that research study markers and/or equipment may be in place. No planned management activities will affect the condition. If these recommended areas are not approved as RNA's by the Chief of the Forest Service, they will be managed according the Management Prescription:General Forest Direction.

Size

This management area contains 2335 acres. All acres are unsuitable for timber harvest.

Management Area Direction

Emphasis is on research, study, observations, monitoring, and educational activities that are nondestructive and nonmanipulative, and that maintain unmodified conditions.

PRACTICES/MFH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
MANAGEMENT PRESCRIPTION 10A - RECOMMENDED RESEARCH NATURAL AREAS		
B. MANAGEMENT REQUIREMENTS		
Visual Resource Management (A04)	<ul style="list-style-type: none"> 1. Meet stated visual quality objective. 	A. Do not go below an adopted visual quality objective (VQO) of retention
Recreation Site Construction and Rehabilitation (A05 & 06)	<ul style="list-style-type: none"> 1. Prohibit construction of developed recreation sites. 	
Dispersed Recreation Management (A14 & 15)	<ul style="list-style-type: none"> 1. Discourage or prohibit any public use which contributes to impairment of research or educational values. 2. Permit and encourage use by scientists and educators. 	A. Reference FSM 4063.36.
Wildlife Habitat Improvement and Maintenance (C02, 04, 05, and 06)	<ul style="list-style-type: none"> 1. Prohibit any direct habitat manipulation. 	
Range Resource Management (D07)	<ul style="list-style-type: none"> 1. Restrict grazing by livestock to that essential for the maintenance of a specific vegetation type. 	
Silvicultural Prescriptions (E03, 06 & 07)	<ul style="list-style-type: none"> 1. Prohibit any logging activity. 	
Special Use Management (non-recreation) (J01)	<ul style="list-style-type: none"> 1. Use special use permits or cooperative agreements to authorize and document scientific activity. 	A. Reference FSM 4063.37.
Property Boundary Location (J06)	<ul style="list-style-type: none"> 1. Monument all corners or turning points and document and record the documentation in the establishment report. Mark boundaries in the field when appropriate to ensure integrity of the area. 	

PRACTICES/MFH CODE	MANAGEMENT DIRECTION (10A)	STANDARDS AND GUIDELINES
Transportation System Management (L01 & 20)	1. Generally, physical improvements, such as roads are not permitted.	
Trail System Management (L23)	1. Limit trails to those needed for access to conduct research and for educational purposes.	
Fire Planning and Suppression (P01)	<ul style="list-style-type: none"> 1. Extinguish wildfires endangering the RNA. Allow fires within the RNA to burn undisturbed unless they threaten persons or property outside the area, or the uniqueness of the RNA. 2. Do not reduce fire hazard within the RNA. 	<ul style="list-style-type: none"> A. Leave fire-caused debris for natural decay.
Law Enforcement (P24 thru 27)	<ul style="list-style-type: none"> 1. Use special closures when necessary to protect the RNA from actual or potential damage from public use. 	<ul style="list-style-type: none"> A. Issue closure order under provisions of 36 CFR 261.50 (FSM 4063.3).
Protection (P35:39)	1. Take no action against endemic insects, diseases or wild animals.	A. Include special stipulation #1. (No-surface-occupancy.) (See Appendix C)
Mineral Management Oil, Gas, and Geothermal	1. Review and process mineral lease applications, permits, and licenses in a timely fashion, recommending to Bureau of Land Management measures and stipulations necessary to protect surface resources.	

MANAGEMENT AREA 10B
MUNICIPAL WATER SUPPLY WATERSHEDS

Characteristics

This management area occurs within or is conterminous with the boundary of identified municipal water supply watersheds, including those supplying Teasdale, Escalante, Panguitch, Parowan, Brian Head, Enterprise, and St. George.

Desired Future Condition

Area continues to provide multiple resource outputs without impairment of existing water quality or quantity at presently utilized or potential culinary water spring sources. Quantity and/or quality is improved where feasible.

Size

This management area contains 9100 acres. Eight thousand six acres are unsuitable for timber harvest.

Management Area Direction

Management emphasis is to protect or improve the quality and quantity of municipal water supplies. Management practices are modified.

PRACTICES/MFH CODE	MANAGEMENT DIRECTION	STANDARDS AND GUIDELINES
MANAGEMENT PRESCRIPTION 10E - PROVIDE FOR MUNICIPAL WATERSHEDS AND MUNICIPAL WATER SUPPLY WATERSHEDS		
B. MANAGEMENT REQUIREMENTS		
Visual Resource Management (A04)	<p>1. Management activities in foreground and middleground dominate, but harmonize and blend with the natural setting. Management activities may also dominate but appear natural when seen as background.</p> <p>Dispersed Recreation Management (A14 & 15)</p> <ol style="list-style-type: none"> 1. Allow motorized travel only on established roads and trails. Close watershed to all travel when the road or trail surfaces could be damaged to the degree that water quality would be degraded. 1. Confine livestock trailing to established driveways and historic trailing routes. 2. Reduce or remove livestock if municipal use water quality is endangered. 3. Stabilize and/or regenerate areas disturbed by livestock prior to resuming grazing use of the area. 	<p>A. Do not go below an adopted visual quality objective (VQO) of maximum modification</p>
Range Resource Management (D07)	<ol style="list-style-type: none"> 1. Review and process mineral lease applications, permits and licenses in a timely fashion recommending to Bureau of Land Management measures and stipulations necessary to protect surface resources. 	<p>A. Include special Stipulation #1. (No-surface-occupancy) for designated areas. (See Appendix C.)</p>
Mineral Management Oil, Gas and Geothermal		

Silvicultural
Prescriptions
(EO3)

1. Harvest forest cover types using any harvest method that is silviculturally appropriate and will not contribute to a decrease in water quality.

2. Apply intermediate treatments to maintain growing stock level standards as specified in the silvicultural prescriptions.

3. For management purposes, a cut-over area is considered an opening until such time as:
- Forage and/or browse production drops below 40 percent of potential production;
 - Deer and elk hiding cover reaches 60 percent of potential;
 - Minimum stocking standards by Forest cover type and site productivity are met; and
 - The area appears as a young Forest rather than a restocked opening, and takes on the appearance of the adjoining characteristic landscape.

A. When the visual quality objective of an area is modification or maximum modification the regenerated stand shall meet or exceed all of the following characteristics before a cut-over area is no longer considered an opening:

Forest Cover Type	Minimum Stocking Level (Trees/Acre)	Tree Stand Height (Ft.) 1/
Ponderosa pine	150 2/	6
Mixed conifers (See Appendix C.)	150 2/	6

PRACTICES/MH CODE

MANAGEMENT DIRECTION (10E)

STANDARDS AND GUIDELINES

Forest Cover Type	Crown Closure (Percent)	Distribution
Engelmann spruce - sub-alpine fir	150	2/
Aspen	300	6
Inland ponderosa pine	30	60%
Mixed conifers	30	60%

1/ Applies to trees specified at minimum stocking level.

2/ Or as otherwise specified in the silvicultural prescription.

Forest Cover Type	Crown Closure (Percent)	Distribution
Engelmann spruce - sub-alpine fir	30	60%
Aspen	30	75%

3/ Percent of plots or transects that are stocked.

Soil Resource Management (RA1)

1. Immediately rehabilitate man-caused disturbances and restore burned areas. Inspect rehabilitated areas annually and provide maintenance necessary to protect the watershed.

Water Resource Improvement and Maintenance

1. Within riparian areas apply management direction in riparian area management prescription except as amended by the direction in this prescription.

A. Use "Chapter 6 of State of Utah Public Drinking Water Regulations" as a guide.

B. Consider mineral entry withdrawals or restrictive lease stipulations to protect quantity and quality of Municipal water supplies.

2. Provide for special protection zone within 1500 feet up gradient and 100 feet down gradient of spring sources of Municipal water supplies.