

CONTINUATION OF  
Minerals  
Management-  
Coal, Leasable  
Uranium and  
Non-Energy  
Common Minerals  
Materials  
(G03, 05, 06  
and 07)

- a The Forest Service authorizes common variety exploration and disposals under terms and conditions to protect the purposes for which the lands were classified. The objective of reclamation requirements will be to return disturbed lands to a condition suitable for the purposes for which they were classified.  
  
For Special Areas classified under 36 CFR 294 and 251.23 for specific management purposes, the regulatory provisions permit no use or occupancy inconsistent with the classification.
- b Coal mining is prohibited by the Coal Leasing Amendment Act of 1975, within the National System of Trails and the Wild and Scenic Rivers System, including Study rivers designated by that Act. This prohibition also applies to the National Park System and the National Wildlife Refuge System, which lands are not under Forest Service jurisdiction.
- c Recommend or consent to BLM for issuance of leases, permits or licenses only when terms and conditions can be applied that will protect the purposes for which the lands were classified.
- d Recommendations and consent to BLM for issuance of leases, permits or licenses will include all current standard stipulations and the current Regionally approved special stipulations necessary to protect the purposes for which the lands were classified. Standard and special stipulations are in Appendix F to this Forest Plan. See 1 b (1) under this management heading -or the standard stipulations. Special stipulations to be applied as appropriate are:
  - (1) Forest Service (R-2) Supplement A to Form 3109-3, "Further Planning Area Stipulation." This stipulation applies to lands identified for further planning in the RARE II decision documents. It specifies the nature and extent of operations allowed and the conditions to be met for their approval.
  - (2) Forest Service (P-2) Supplement B to Form 3109-

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3. "Classified Area Stipulation " This stipulation applies to lands classified under 36 CFR 274 and 251.23 for specific management purposes. Because of the regulatory provisions, no use or occupancy inconsistent with the classification is permitted. This does not necessarily mean recommendation against or denial of consent to issuance of leases, permits or licenses is necessary. The reason is that classified areas may be only small portions of the lands involved.

- (3) Forest Service (R-2) Supplement C to Form 3109-3, "Limited Surface Use Stipulation " This stipulation notifies a lessee, permittee or licensee that certain described conditions exist upon the lands involved that require special operating plan provisions for their protection.
  - (4) Forest Service (R-2) Supplement F Form 3109-3 "Surface Use Stipulation " This stipulation notifies prospective lessees or permittees that surface use or occupancy that would cause significant surface disturbance is not authorized for described lands. This "no surface occupancy" stipulation may be applied in a wide variety of conditions in lieu of recommending against or denying consent to BLM for issuance of a lease.
  - (5) Forest Service (R-2) Supplement H to Form 3109-3, "Conditional No Surface Disturbance Stipulation " This stipulation notifies the prospective lessee, permittee or licensee that certain described conditions exist upon tracts within the proposed lease or permit area that will prevent any surface disturbance affecting those tracts unless a operating plan can be devised that will convince the Forest Service that surface use, occupancy and reclamation can take place without causing irretrievable environmental damage.
- e Recommend against or deny consent to issuance of leases, permits or licenses where operational damages on surface resources including the impacts

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of surface-based access, product transportation and ancillary facilities necessary to production and related operations, would be irreversible and irretrievable, with no potential for reclamation and attachment of the no surface occupancy stipulation (Forest Service (R-2) Supplement F to Form 3109-3) would prevent the effective recovery of the Federal mineral resource, as determined by the BLM. Negative recommendations or consent denials will be based on the consideration of the following criteria

- (1) Operations destroy or irretrievably damage the characteristics or purposes for which the lands are classified
- (2) Terrain as it affects waste dumps and tailings disposal--related to dump and tailing stability, adequate room for placement, and whether or not waste and tailings can be handled or treated in a manner that results in no detrimental effects on the purposes for which the lands were classified
- (3) Whether or not negative impacts on water quality are preventable
- (4) For surface-based access, product transportation and ancillary facilities necessary to operations. Slopes steeper than 40 percent, high erosion hazard, high geologic hazard
- (5) Low visual absorption capacity that prevents reclamation to established visual quality objective (VQO)
- (6) A conclusion by the Forest Service (FS) and/or the United States Fish and Wildlife Service (USFWS) that the action will jeopardize the survival or recovery of federally listed threatened or endangered (T&E) wildlife or plant species
- (7) Intrusions upon the identified critical (USFWS) or essential (FS) habitat of a federally listed (T&E) wildlife or plant species or upon the plant or animal itself
- (8) Intrusion upon the habitat or individual plant or animal of a species listed by a State as threatened or endangered
- (9) Intrusion upon the habitat or individual plant or animal of a species identified by the Regional Forester as needing special management to

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prevent its need for listing as a threatened or  
endangered species

(0032PI) (FDR )

Special Use  
Management (Non  
-Recreation)  
(J01)

01 Act on special use applications according to the follow-  
ing 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 power-  
lines, telephones, waterlines, etc

(0065 ) (FDR )

02 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

(0071 ) (FDR )

03 Bury new electrical utility lines of 33 KV or less and  
new 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 un-  
favorable 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

(0072PI) (FDR )

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CONTINUATION OF  
Special Use  
Management (Non  
-Recreation)  
(J01)

04 Do not approve special use applications for areas adjacent to developed recreation sites unless the proposed use is compatible with the purpose and use of the developed site  
(03B9PI) (FDR )

05 Air Force Academy Withdrawal National Forest land consisting of 8,858 acres adjacent to the Air Force Academy on the Pikes Peak District is withdrawn from normal Forest Service management under Public Land Order 1220 dated 4/1/54 Management of this land must be coordinated with the Academy  
(0022PI) (FDR )

06 Leadville National Fish Hatchery An area of 2,560 acres is reserved for use by the U S Fish and Wildlife Service by Executive Order of 1/16/1889 as amended 1/31/03 This reservation co-exists with the Forest reservation  
(0023PI) (FDR )

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

01 Acquire rights-of-way on existing Forest System roads and trails that cross private land  
(0162 ) (FDR )

02 Insure 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  
(0006 ) (FDR )

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CONTINUATION OF  
Rights-of-way  
and Land  
Adjustments  
(JO2, 13, 15,  
16, 17, and 18)

03 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 and plants
- d Lands which include floodplain or wetlands
- e On lands of the National Grasslands that provide opportunities for demonstration of multiple uses in grassland agriculture
- f 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

(0066 ) (FDR )

04 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 homesteads 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 ) 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
- e In National Grasslands, when they offer no opportunity to meet National Grassland demonstration objectives

(0067 ) (FDR )

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CONTINUATION OF  
Rights-of-way  
and Land  
Adjustments  
(J02, 13, 15,  
16, 17, and 18)

- 05 Effect jurisdictional 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  
(0070 ) (FDR )

Property  
Boundary  
Location  
(J06)

- 01 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  
(006B ) (FDR )

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Soil Resource  
Management  
(KA1)

- Q1 Maintain soil productivity, minimize man-caused soil erosion, and maintain the integrity of associated ecosystems
- 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 Use less palatable plant species on cuts, fills, and other areas subject to trampling damage by domestic livestock and big game to discourage grazing by herbivores
  - 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 possible, and avoid use of tractors on highly erodible sites
  - g Remove bridges and culverts, eliminate ditches, outslope roadbed, remove ruts and berms, install permanent drainages and establish protective vegetative cover on all temporary roads after roads have served project purposes Do the same for all roads removed from the transportation system
  - h Minimize soil compaction by reducing vehicle passes, skidding on snow, frozen or dry soil conditions, or by off-ground logging systems
  - i Restore soil disturbance caused by human use to

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 guides or guides in FSH 7709 11 or guides in "Access Road Requirements for Oil and Gas Exploration and Development on NF lands, R2 1982" in the design for cross drain spacing and buffers

3 Chisel or rip, on the contour, compacted soils Soils are considered compacted if there is a 15 percent increase in bulk density or a 50 percent decrease in macro pore space (6322PI) (FDR )

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Soil Resource  
Management  
(KA1)

soil loss tolerance levels commensurate with the  
natural ecological processes for the treatment  
areas  
(0608PI) (FDR )

02 Identify at the project level, upland areas  
that are immediately adjacent to Riparian (Prescrip-  
tion 9A) Management Areas. Adjacent upland areas are  
those portions of a management area which, when sub-  
jected 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 dis-  
turbance within the adjacent upland unit  
(0848 ) (FDR )

a The following is a guide to  
identify the approximate extent  
of adjacent upland areas

Slope gradient of upland areas adjacent to Ri- parian Manage- ment Area	Upslope dis- tance from boundary of Riparian Man- agement Area
---	--

% 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
(6698 )	(FDR )

b Reduce, through designed  
management practices and appro-  
priate erosion mitigation and  
vegetation/restoration meas-  
ures, the project caused on-site  
erosion rates (calculated with  
appropriate Universal Soil Loss  
Equation methodology) by 75%  
within the first year after dis-  
turbance. Reduce project caused  
on-site erosion by 95% within  
five years after initial dis-  
turbance (USDA Tech Pub SA-TP  
11, 1980 USDA SCS Tech Note No  
10, 1977)  
(6700 ) (FDR )

c Design continuing mitiga-

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Soil Resource  
Management  
(KA1)

tion/restoration practices and  
follow-up maintenance activi-  
ties to insure that 80% orig-  
inal ground cover (vegetation)  
recovery occurs within five  
years after disturbance  
(6702 ) (FDR )

Transportation  
System  
Management  
(L01 & 20)

01 Classify areas as to whether off-road vehicle use  
is permitted  
(0452 ) (FDR )

a Specify off-road vehicle  
restrictions based on ORV  
use management (FSM 2355,  
R2 Supp 88)  
(6083 ) (FDR )

02 Close all newly constructed roads to public  
motorized use unless documented analysis shows

- a Use does not adversely impact other resources.
- b Use is compatible with the ROS class established for the area.
- c They are located in areas open to motorized use.
- d They provide user safety.
- e They serve an identified public need.
- f The area accessed can be adequately managed, and
- g Financing is available for maintenance or coop-maintenance can be arranged

(0075PI) (FDR )

03 Manage road use by seasonal closure if

- a Use causes unacceptable damage to soil and water resources due to weather or seasonal conditions
- b Use conflicts with the ROS class established for the area.
- c Use causes unacceptable wildlife conflict or habitat degradation.
- d Use results in unsafe conditions due to weather conditions.
- e They serve a seasonal public or administration need, or
- f Area accessed has seasonal need for protection or nonuse

(0076 ) (FDR )

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Transportation  
System  
Management  
(L01 & 20)

- 04 Keep existing roads open to public motorized use unless
- a Financing is not available to maintain the facility or manage the associated use of adjacent lands,
  - 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
- (0077 ) (FDR )

05 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 designated line officer, and
  - c In case of emergency
- (0078PI) (FDR )

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

01 Construct and reconstruct arterial and collector roads to meet multiple resource needs  
(0083 ) (FDR )

a Construction and reconstruction standards for arterial and collector roads are

Standard	Arterial	Collector
Travel Speed	Average 30-55 mph	Average 10-30 mph
Lanes	Generally 2 lanes	Generally 1 lane
Surface	All weather, generally asphalt or gravel	Generally gravel or native surface, sometimes asphalt

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

Width	Typically 20 to 24 feet, but some single lane with inter- visible 10-foot turnouts	Typically 12 to 16 feet, with inter- visible 10-foot turnouts
Drainage	Permanent, not to impede traffic	Permanent but may impede traffic
(6039 ) (FDR )		

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

O1 Construct and reconstruct local roads to provide access  
for specific resource activities such as campgrounds,  
trailheads, timber sales, range allotments, mineral leases,  
etc , with the minimum amount of earthwork  
(0084 ) (FDR )

a Construction and reconstruction standards for local roads are

Travel Speed	Average less than 20 mph	
Lanes	Usually single lane except for developed recreation sites	
Surface	Varies from asphalt to native surface, majority native surface	
Width	Typically 10 thru 14 feet Turnouts optional depending upon traffic management Usually not intervisible	
Drainage	Dips and culverts	
(6040 ) (FDR )		

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Road  
Maintenance  
(L19)

01 Maintain all roads to the following minimum requirements

- a All arterial and open collectors - Level 3,
  - b All open local roads - Level 2, and
  - c All closed roads - Level 1
- (0079 ) (FDR )

a See levels of maintenance in  
FSM 7730  
(6274 ) (FDR )

b Level 1 maintenance includes  
upkeep of drainage structures  
and vegetation cover necessary  
to prevent erosion  
(6324 ) (FDR )

02 Maintain structures, bridges, cattleguards, etc , to be  
structurally sound and safe for use  
(0080 ) (FDR )

Trail  
System  
Management  
(L23)

01 Maintain all trails for foot and horse travel unless  
specifically closed to either or both class of user  
(0451 ) (FDR )

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CONTINUATION OF  
Trail  
System  
Management  
(L23)

02 Maintain all trails to the following minimum requirements

- a Structures (bridges, corduroy, etc ) are structurally sound and safe for specified class of user,
- b Maintain drainage structures to prevent unacceptable resource damage, and
- c Remove hazards from trails to allow safe passage for specified class of users. A safety hazard is a physical condition of a trail which may cause injury, is unusual or unexpected, and not readily identifiable by the trail user. It is not a condition which is easily identifiable and normally encountered for the type or location of the trail involved. The following examples illustrate this distinction

A hazard is a rotten bridge decking or handrail. A stream crossing where no bridge is provided and the user would expect this on the type and location of the trail is not a hazard.

A hazard is a stable-appearing loose rock in a constructed treadway where all other rocks are stable. A trail treadway made up of rocks in a near-natural position, many of which are loose, is not a hazard.

A hazard is a perennial bog-hole on a horse trail. An intermittent bog-hole which will dry up by early summer or within a few days following a rain storm is not a hazard.

A hazard is a section of trail treadway supported by rotten cribbing. A section of trail where the treadway is obviously slippery is not a hazard.

A hazard is a marked ford with holes deeper than the normal channel. A deep ford with a consistent stream bed is not a hazard.

(0074 ) (FDR )

03 Provide a full range of trail opportunities in coordination with other Federal, State, and municipal jurisdictions and private industries both on and off NFS lands

(0455 ) (FDR )

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CONTINUATION OF  
Trail  
System  
Management  
(L23)

04 CONTINENTAL DIVIDE NATIONAL SCENIC TRAIL (CDNST)  
Apply Interim Management for the CDNST corridor  
to identified alternative routes utilizing both  
existing trails and roads and nonexisting routes  
which may be used as connecting travel segments  
Interim management will establish visual quality  
objectives for the Foreground and Middleground  
areas within the corridor  
(0354 ) (FDR )

a The CDNST corridor is that area  
which encompasses the foreground  
and middleground of the seen-area  
as viewed from the alternative  
travel routes identified in the  
CDNST Comprehensive Plan  
Interim management which protects  
the current scenic quality  
and recreation opportunities  
will be applied until such  
time that a specific trail  
route is formally design-  
ated as a part of the  
CDNST System  
(6198 ) (FDR )

b All travel route alterna-  
tives within the CDNST corridor  
have a Visual Management System  
(VMS) sensitivity Level I  
classification until a specif-  
ic trail route is formally  
designated Foreground  
and middleground areas within  
the corridor will meet the high-  
est visual quality objective  
available within the existing  
visual condition class con-  
straints and the visual quality  
objective of the management  
area  
(6199 ) (FDR )

05 Do not mark existing travel routes as being  
a part of the CDNST system until they have been  
formally designated  
(0355 ) (FDR )

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CONTINUATION OF  
Trail  
System  
Management  
(L23)

06 Upon formal designation of a travel route segment as a part of the CDNST system, manage the segment to emphasize foot travel, provide for horse use where safe to do so, and the continuation of motorized use where presently permitted and considered appropriate in the management direction for the overall management area. Give consideration to the needs of the long-distance traveler. Where motorized use is permitted, limit to snowmobiles operating on snow and vehicles with less than 40 inch width. Where the route coexists with a primitive local road, it may be open to use by larger vehicles.  
(0356 ) (FDR )

a The formally designated CDNST travelway will have a sensitivity Level I classification. Foreground and middleground areas, as seen from the trail, will meet the highest visual quality objective available within the existing visual condition class constraints, and the visual quality objective of the specific management area.  
(6200 ) (FDR )

b Mark trail routes using the CDNST logo according to appropriate standards in the Comprehensive Plan.  
(6201 ) (FDR )

c All other prescribed direction, standards and guidelines for the specific management area through which the (CDNST) passes apply.  
(6203 ) (FDR )

d Maintain trails in accordance with standards in the Trail Handbook (FSH 7709 12).  
(6129 ) (FDR )

e Schedule trail maintenance in accordance with Regional Acceptable Work Standards (FSM 1310 R2 ID No 1 7/22/82 ).  
(6131 ) (FDR )

Trail  
Construction and  
Reconstruction  
(L22)

01 Construct or reconstruct trails when needed as part of the transportation system.  
(0399 ) (FDR )

a Cross drains and conveyance structures are planned according to Forest Design Standards.  
(6326 ) (FDR )

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Fire Planning  
and  
Suppression  
(P01)

O1 Provide a level of protection from wildfire that is cost efficient and 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 fuelbed that fires will probably occur in,
- d The weather conditions that will probably influence fires that occur,
- e The costs of fire protection programs (FFP and FFF),
- f The social, economic, political, cultural, environmental, life and property concerns, and
- g Management objectives for the area Use the Fire Management Analysis process (FSH 5109 19) for this analysis

(O111 ) (FDR )

Escaped Fire  
Suppression  
(P09)

O1 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 to make this determination (FSM 5130 31)

(O112 ) (FDR )

Fuel Treatment  
(P11 thru 14)

O1 Maintain fuel conditions which permit fire suppression forces to meet fire protection objectives for the area

(O113 ) (FDR )

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% of the days during the regular fire season.

or

Break up continuous fuel concentrations exceeding the above

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Fuel Treatment  
(P11 thru 14)

standard into manageable units  
with fuel breaks or fire lanes,  
or  
Provide additional protection for  
areas exceeding the above standard  
when such protection will not be  
required for more than five years  
(4056 ) (FDR )

Vegetation  
Treated by  
Burning  
(P15)

01 Use prescribed fire to accomplish resource management objectives, such as reducing fuel load buildup, wildlife habitat improvement, etc  
(0101 ) (FDR )

02 Limit use of prescribed fires on areas adjacent to riparian areas to protect riparian and aquatic values  
(0102 ) (FDR )

03 Use unplanned ignition on areas identified in this Plan to achieve management objectives  
(0850 ) (FDR )

Air Resource  
Management  
(P16)

01 Comply with State and Federal air quality standards (See FSM 2120)  
(0094 ) (FDR )

Insect and Dis-  
ease Management/  
Suppression  
(P35)

01 Prevent or suppress epidemic insect and disease populations that threaten forest tree stands with an integrated pest management (IPM) approach consistent with resource management objectives  
(014B ) (FDR )

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## MANAGEMENT AREA DIRECTION

The Management Area Prescriptions included in this Section represent Management Area Direction applicable to specific areas of land. These Management Area Prescriptions in various combinations were used as the basis for developing the alternatives analyzed in the accompanying Environmental Impact Statement.

A Management Area Prescription number was assigned to each management area in order to link the prescription to the land area. The location of management areas is illustrated on the Management Area Map inserted inside the back cover of this document.

Portions of Buffalo Peaks, and Sangre de Cristo Wilderness Study Areas and all of Spanish Peaks Wilderness Study Area have been identified as unsuitable for wilderness designation. The map shows these areas have several management areas which include development in their prescriptions. These prescriptions will not be implemented unless Congress designates these areas as nonwilderness. In the interim, these areas will be managed to maintain the qualities which make it possible for their inclusion in the National Wilderness Preservation System.

The prescription for each management area consists of a prescription summary and a set of management requirements. The prescription summary identifies the primary emphasis of the prescription. All prescriptions are multiple use prescriptions, but each has a primary emphasis.

Management requirements are presented in three columns: Management Activities, General Direction Statements, and Standards and Guidelines.

Management Activities are work processes that are conducted to produce, enhance, or maintain levels of outputs, or to achieve administrative and environmental quality objectives. Management Activities are identified by a code number and title defined in the Management Information Handbook. In some cases, management activities were grouped under one activity when it was not appropriate to develop separate requirements. Not all management activities need management requirements. When there are no management requirements listed for an activity, the Forest Direction or direction in laws, regulations, Executive Orders or Forest Service directives adequately covers the activity.

General Direction Statements specify the actions, measures, or treatments (management practices) to be done when implementing the management activity or the condition expected to exist after the general direction is implemented.

Standards and Guidelines are quantifications of the acceptable limits within which the general direction is implemented.

MANAGEMENT AREA SUMMARY

Table III-3 lists the management emphasis and shows the acreage allocations for each Management Area.

TABLE III-3

Management Area Summary (Acres where prescription for management area is applied)

Management Area Emphasis	Acres
1A Developed Recreation Sites	1,575 <u>1/</u>
1B-1 Winter Sports Sites	6,120
1B-2 Potential Winter Sports Development Sites	5,680
1C* Administrative Sites	361 <u>1/</u>
1D Utility Corridors	5,761 <u>1/</u>
2A Semiprimitive Motorized Recreation Opportunities	192,552
2B Rural and Roaded-Natural Recreation Opportunities	405,928
3A Semiprimitive Nonmotorized Recreation Opportunities	121,765
4B Wildlife Habitat For Management Indicator Species	256,020
4D Aspen Management	43,690
5B Big Game Winter Range	261,583
6B Livestock Grazing	670,637
7A Wood-Fiber Production and Utilization (sawlogs)	150,372
7D Wood-Fiber Production and Utilization For Products Other Than Sawtimber	92,651
8B Primitive Wilderness Opportunities	286,301
8C Semiprimitive Wilderness Opportunities	93,460
9A Riparian Area Management (unmapped)	17,500 <u>1/</u>
9A Riparian Area Management (mapped)	10,290
9B Increased Water Yield	69,829
10A Research Natural Areas	1,354
10B Experimental Forest	18,608
10C Special Interest Areas	8,320
10E Municipal Watershed and Municipal Water Supply Watersheds	<u>56,576</u>
Total Pike and San Isabel NF's	2,751,736

TABLE III-3 Continued

Management Area Summary (Acres on adjacent National Forests).		
Management Area Emphasis		Acres
<u>Rio Grande National Forest</u>		
2A	Semiprimitive Motorized Recreation Opportunities	5,188
8A	Pristine Wilderness Opportunities	5,866
8B	Primitive Wilderness Opportunities	17,561
8C	Semiprimitive Wilderness Opportunities	101,938
8D	Limited Areas of Wilderness - High Density Day Use	<u>147</u>
<u>Total Rio Grande National Forest</u> (Sangre de Cristo Wilderness Study Area)		130,700
<u>Arapaho National Forest</u>		
8B	Primitive Wilderness Opportunities	36,186
8C	Semiprimitive Wilderness Opportunities	<u>4,088</u>
<u>Total Arapaho National Forest</u> (Mt. Evans Wilderness)		40,274

1/ Acreage excluded from total because it is applied in conjunction with other management areas.

\* There is no prescription in the Plan for Management Area 1C; this accounts for the acres of Administrative Sites on the Forest, such as office locations. Management requirements for administrative sites are contained in Forest Service Manuals and handbooks.

#### PRESCRIPTIONS FOR MANAGEMENT AREAS

The following pages contain prescriptions for the management areas. They are in the same order as listed above. Prescriptions for management areas 8A and 8D are not given since all these areas occur on the Rio Grande National Forest. Identification numbers shown in parentheses following each General Direction and Standard and Guideline statement are intended to facilitate future tiering to the Forest Plan and final EIS. Users and reviewers of the Plan will find these identification numbers useful for cross-referencing and identification of mitigation measures.

PRESCRIPTION FOR MANAGEMENT AREA 1A

(Provides for existing and proposed developed recreation sites )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

Management emphasis is for developed recreation in existing and proposed campgrounds, picnicgrounds, 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.

B MANAGEMENT REQUIREMENTS

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management (A04)	<p>01 Emphasize visually appealing landscapes (vista openings, rock outcroppings, diversity of vegetation, etc ) (0104 ) (01A )</p> <p>02 Facilities may dominate, but will harmonize and blend with the natural foreground and middle-ground landscape (0384 ) (01A )</p>	<p>a Do not exceed an Adopted Visual Quality Objective (VQO) of</p> <p>-Partial Retention in Development Level 2 Sites</p> <p>-Modification in Development Level 3, 4 and 5 Sites (6136 ) (01A )</p> <p>b Sensitivity level</p> <p>Development Level 3, 4, and 5 sites are Sensitivity Level one (6221 ) (01A )</p> <p>c Apply rehabilitation practices where the above objectives are not currently being met (6068 ) (01A )</p>
Recreation Site Construction and Rehabilitation (A05 AND 06)	<p>01 Design facilities and access to provide site protection, efficient maintenance, and user convenience Design and develop sites to ensure that developed capacity does not exceed season-long carrying capacity (0383 ) (01A )</p> <p>02 Provide at least 10 percent of the units in level 3 and 4 camp and picnic sites to accommodate two or more family groups (0347 ) (01A )</p>	<p>a Construct and reconstruct existing and new developed sites in accordance with the guidelines in FSM 2331 (6279 ) (01A )</p>
Management of Developed Recreation Sites (A08, 09, 11 & 13)	<p>01 Maintain all developed sites in accordance with Regional Acceptable Work Standards (FSM 1310 R2 ID No 1 7/22/82) (0386 ) (01A )</p>	

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF Management of Developed Recreation Sites (A08, 09, 11 & 13)	02 Maintain facilities in a safe condition Replace facilities when rehabilitation costs 50 percent or more of replacement costs or when existing facilities are no longer compatible with site design or RDS classification (0387 ) (01A )	a See FSH 2309 11, Sec 122 (6222 ) (01A )
Range Resource Management (D02)	01 Manage livestock grazing to enhance recreation opportunities in existing and proposed recreation sites (0110 ) (01A )	a Construct fences of mater- ial other than barbed wire around developed sites (6281 ) (01A )
	02 Exclude grazing of recreational stock and livestock in developed recreation sites during the managed recreation use season (0059 ) (01A )	a Maintain vegetation in fair or better range condition (6061 ) (01A )
Silvicultural Prescriptions (E03, 06 & 07)	01 Manage tree stands to enhance visual quality and recreation opportunities on existing and proposed recreation sites (0115 ) (01A )	
	02 Remove unsafe and or dead trees in developed sites Plant new trees to provide desired tree cover when natural regeneration is insufficient (0466 ) (01A )	a See Technical Report R-2-1 (1981) Tree Hazards Recognition and Reduction in Recreation Sites (6630 ) (01A )

PRESCRIPTION FOR MANAGEMENT AREA 1B-1

(Provides for existing winter sports sites )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals.

Management emphasis provides for downhill skiing on existing downhill ski sites. 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 are clearcutting in aspen, 3-step shelterwood, single tree selection or group selection in Englemann spruce-subalpine fir, lodgepole pine, ponderosa pine and mixed conifers, or as specified in an approved site specific *vegetation management plan*

B MANAGEMENT REQUIREMENTS

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management (A04)	01 Emphasize visually appealing landscapes (vista openings, rock outcroppings, diversity of vegetation, etc ) (0104 ) (1B1 )	<p>a Do not exceed an Adopted Visual Quality Objective (VQO) of modification (6204 ) (1B1 )</p> <p>b Apply rehabilitation practices where the above objectives are not currently being met (6068 ) (1B1 )</p>
Recreation Site Construction and Rehabilitation (A05 AND Q6)	01 Design and locate improvements on winter sport sites to provide safety to users and to harmonize with the natural environment (0358 ) (1B1 )	a Follow construction, reconstruction standards specified in the approved Master Development Plan (6282 ) (1B1 )
	<p>02 Design and construct ski areas to blend the lift line, ski runs, and related developments with the natural character of the landscape</p> <p>1 Use vegetative screening of structures where vegetative recovery is slow</p> <p>2 Stabilize cut and fill slopes or areas cleared of vegetation as soon as possible using both structural and vegetative techniques</p> <p>3 Design ski runs to avoid snow scour and to favor deposition of snow</p> <p>4 Avoid or control avalanche or flood hazard areas</p> <p>5 Avoid vegetation removal or location of structures that favors the loading of avalanche starting zones (0040PI) (1B1 )</p>	
Management of Developed Recreation Sites (A08, 09, 11 & 13)	01 Provide opportunities for year-round recreation use of the permitted area and facilities (0359 ) (1B1 )	
Range Resource Management (D02)	01 Manage livestock grazing to enhance recreation opportunities in existing sites (0033PI) (1B1 )	a Maintain vegetation in fair or better range condition (6061 ) (1B1 )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Silvicultural  
Prescriptions  
(E03, 06 & 07)

01 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 winter sports sites

(0034PI) (1B1 )

02 Manage tree stands between ski runs by three-step shelterwood, single tree selection, or group selection process with minimal site disturbance. Longer skid distances may be used to avoid road construction. Use clearcutting in aspen stands.

(0035PI) (1B1 )

a Apply harvest treatments to forest cover types as specified below or as specified in the permittee's Ski Area Master Development Plan where these plans exist for the area (6666 ) (1B1 )

b Silvicultural Standards  
(These standards may be exceeded on areas managed for old growth)

1 Clearcut

Forest Cover Type			
	Lodgepole Pine-	Aspen	Other Forest Cover Types
Rotation Age	90-140 yrs	80-120 yrs	100 or more yrs
Growing Stock Level	80-120	N/A	60 to 120
Thinning Cycle	10-50 yrs	N/A	10 to 50 yrs

2 Two-Step Shelterwood

Forest Cover Type	
Interior Ponderosa	Other Forest

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

	pine & Mixed Conifer	Cover Types
Rotation Age	100-160 yrs	100 or more yrs
Growing Stock Level	60-120	60-120
Thinning Cycle	20-30 yrs	20-30
First cut (seed cut) Remove 40 to 70 percent of the basal area or		
Cut to	BA 25-60	BA 20-60
Second Cut (removal cut) Remove all overstory when regenerated stand meets minimum stocking standards		
3 Three-Step Shelterwood		
Forest Cover Type		
Interior Ponderosa pine & Mixed Conifer		Other Forest Cover Types
Rotation Age	100-160 yrs	100 or more yrs
Growing Stock Level	60-120	60-120
Thinning Cycle	20-30 yrs	20-30 yrs

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

First Cut (preparatory cut)  
Remove 10 to 40 percent of the  
basal area or

Cut to BA 60-80 BA 50-80

Second Cut (seed cut)  
Remove 40 to 50 percent of the  
remaining basal area or

Cut to BA 25-50 BA 20-50  
10-20 yrs 10-20 yrs  
after pre- after  
paratory preparatory  
cut tory cut

Third Cut (removal cut)  
Remove all overstory when  
regenerated stand meets  
minimum stocking standards

4 Selection

Forest Cover Type

Engelmann Other  
spruce- Forest  
subalpine Cover  
fir Types

Residual BA 80-120 80-120

Cutting

Cycle 20-30 yrs 20-40 yrs

(6294PI) (1B1 )

03 Limit timber harvest activities to periods of low  
recreation use activity or to coincide with ski area  
construction activity  
(046B ) (1B1 )

04 Utilize firewood material using both commercial  
and noncommercial methods,  
(0147 ) (1B1 )

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, O6 & O7)

O5 The combined water yield effects of type conversion on ski runs and increased on-site water from stand re-generation must be determined. Do not exceed threshold limits of water quality and drainage system stability deterioration.  
(O610 ) (1B1 )

O6 For management purposes of forested areas between ski trails or other permanent openings, a cut-over area is considered an opening until such time as

- 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 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

(O501 ) (1B1 )

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/
Inland Ponderosa Pine	190	6
Mixed Conifers	190	6
Lodgepole Pine	150	6
Engelmann Spruce-Subalpine fir	150	6
Aspen	300	6

  

Forest Cover Type	Crown Closure (Percent)	Distribution 2/
Inland		

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MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES		
CONTINUATION OF Silvicultural Prescriptions (E03, 06 & 07)		Ponderosa Pine	30	70%
		Mixed Conifers	30	75%
		Lodgepole Pine	30	75%
		Engelmann Spruce- Subalpine fir	30	75%
		Aspen	30	75%

1/ Applies to trees specified as  
minimum stocking level  
2/ Percent of plots or tran-  
sects that are stocked

(6014 ) (1B1 )

Mining Law  
Compliance and  
Administration  
(G01)

O1 Withdraw recreation sites from mineral entry  
(0036PI) (1B1 )

Transportation  
System  
Management  
(L01 & 20)

O1 Construct and maintain roads according to the  
master development plan  
(0037PI) (1B1 )

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

O1 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  
(0467 ) (1B1 )

PREScription FOR MANAGEMENT AREA 1B-2

(Emphasis is on potential winter sports sites )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

Management emphasis is on maintenance of selected inventoried sites for future downhill skiing recreation opportunities, dispersed nonmotorized recreation opportunities, tree stand management to preserve potential for downhill skiing, and maintenance of existing visual characteristics of the area

Management integrates resource use and development to provide healthy tree stands, vegetative diversity, forage production for wildlife and livestock and opportunities for nonmotorized recreation

The area is a natural-appearing forest with vegetation changes permitted. Recreation opportunities focus on dispersed recreation uses. Habitat diversity will result from other activities. Livestock grazing is continued. Vegetation treatment focuses on perpetuating a healthy forest. Motorized use is restricted to designated routes.

The management prescription for potential areas will change to Management Prescription 1B-1 (Provides for existing winter sports sites) when a winter sports development is approved for the area.

B MANAGEMENT REQUIREMENTS

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Visual Resource  
Management  
(A04)

O1 Emphasize visually appealing landscapes (vista openings, rock outcroppings, diversity of vegetation, etc )  
(O104 ) (1B2 )

a Do not exceed an Adopted Visual Quality Objective (VQO) of retention  
(6215 ) (1B2 )

b Apply rehabilitation practices where the above objectives are not currently being met  
(6068 ) (1B2 )

Dispersed  
Recreation  
Management  
(A14 and 15)

O1 Emphasize semiprimitive nonmotorized dispersed recreation opportunities consistent with adjacent management areas  
(O027P1) (1B2 )

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 capacity

-----  
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

-----  
On Trails  
PAOT/  
mile 2 0 3 0 9 0 11 0  
-----

Area-wide  
PAOT/  
acre 004 008 05 08  
-----

(6227P1) (1B2 )

b Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, and 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

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

02 Permit undesignated sites in Frissell condition class 1  
through 3 where unrestricted camping is permitted  
(0174 ) (1B2 )

Wildlife and  
Fish Resource  
Management  
(C01)

01 Provide big-game forage and cover, and habitat  
(0310 ) (1B2 )

the biophysical resources will  
occur  
(6030P1) (1B2 )

a Maintain at least 30 per-  
cent of the area in created  
or natural openings  
(6177 ) (1B2 )

b Do not eliminate presence  
of any browse species  
(6168 ) (1B2 )

c Provide thermal cover for  
elk or deer on at least 20  
percent of the area  
(6179 ) (1B2 )

d In diversity units dominated  
by forested ecosystems, maintain  
a minimum of 50 percent of the  
diversity unit in deer or elk  
hiding cover. This hiding cover  
should be well distributed over  
the unit. Maintain 30 percent  
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 biolog-  
ically  
(6334 ) (1B2 )

e Maintain habitat  
effectiveness during winter  
of at least 90 percent  
(6171 ) (1B2 )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

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

01 Manage for habitat needs of indicator species  
(040B ) (1B2 )

a Maintain habitat capability  
at a level at least 80 percent  
of potential capability  
(6261 ) (1B2 )

Range Resource  
Management  
(D02)

01 Manage livestock grazing to enhance rec-  
reation opportunities in proposed winter sports  
sites  
(0028PI) (1B2 )

a Maintain vegetation in  
fair or better range condition  
(6061 ) (1B2 )

Silvicultural  
Prescriptions  
(E03, 06 & 07)

01 Manage forest cover types on the potential  
area to enhance visual quality, diversity, and  
recreation opportunities, and to provide for a  
healthy forest cover on proposed winter sports  
sites  
(0029PI) (1E2 )

02 Harvest potential sites by three-step shelter-  
wood, single tree selection, or group selection  
process with minimal site disturbance. Longer  
skid distances may be used to avoid road con-  
struction. Use clearcutting in aspen stands  
(0030PI) (1B2 )

a Silvicultural Standards  
(These standards may be exceeded  
on areas managed for old growth)

1 Clearcut

	Forest Cover Type		
	Lodgepole Pine-	Aspen	Other Forest Cover Types
Rotation Age	90-140 yrs	80-120 yrs	100 or more yrs
Growing Stock Level	80-120	N/A	60 to 120
Thinning Cycle	10-50 yrs	N/A	10 to 50 yrs
2	Two-Step Shelterwood		

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Forest Cover Type

	Interior Ponderosa pine & Mixed Conifer	Other Forest Cover Types
--	--	-----------------------------------

Rotation Age	100-160 yrs	100 or more yrs
--------------	-------------	-----------------

Growing Stock Level	60-120	60-120
---------------------	--------	--------

Thinning Cycle	20-30 yrs	20-30
----------------	-----------	-------

First cut (seed cut)  
Remove 40 to 70 percent of the basal area or

Cut to BA 25-60 BA 20-60

Second Cut (removal cut)  
Remove all overstory when regenerated stand meets minimum stocking standards

3 Three-Step Shelterwood

Forest Cover Type

	Interior Ponderosa pine & Mixed Conifer	Other Forest Cover Types
--	---	-----------------------------------

Rotation Age	100-160 yrs	100 or more yrs
--------------	-------------	-----------------

Growing Stock Level	60-120	60-120
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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Thinning Cycle	20-30 yrs	20-30 yrs
First Cut (preparatory cut) Remove 10 to 40 percent of the basal area or		
Cut to	BA 60-80	BA 50-80
Second Cut (seed cut) Remove 40 to 50 percent of the remaining basal area or		
Cut to	BA 25-50 10-20 yrs after pre- paratory cut	BA 20-50 10-20 yrs after prepara- tory cut
Third Cut (removal cut) Remove all overstory when regenerated stand meets minimum stocking standards		
4 Selection		
Forest Cover Type		
	Engelmann spruce- subalpine fir	Other Forest Cover Types
Residual BA	80-120	80-120
Cutting		
Cycle	20-30 yrs	20-40 yrs
(6294PI)	(1B2 )	

03 Limit timber harvest activities to periods of low  
recreation use activity or to coincide with ski area  
construction activity  
(046B ) (1B2 )

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

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Special Use  
Management (Non  
-Recreation)  
(J01)

O1 Do not issue special use permits that would be  
incompatible with future winter sports development  
schedules or opportunities  
(0039PI) (1B2 )

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

O1 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  
(0467 ) (1B2 )

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PRESCRIPTION FOR MANAGEMENT AREA 1D

(Provides for utility corridors)

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

Management emphasis is for major oil and gas pipelines, major water transmission and slurry pipelines, electrical transmission lines, and transcontinental telephone lines. Management activities within these linear corridors strive to be compatible with the management goals of the management areas through which they pass.

B MANAGEMENT REQUIREMENTS

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management (A04)	01 Design and construct utilities to harmonize with the landscape (0295 ) (01D )	a Use "National Forest Landscape Management", Volume 2-Utilities for principles and concepts (6153 ) (01D )
Dispersed Recreation Management (A14 and 15)	01 Manage dispersed recreation opportunities consistent or compatible with adjacent management areas (0297 ) (01D )	
Wildlife Habitat Improvement and Maintenance (02, 04, 05 and 06)	01 Manage wildlife and fish habitat consistent or compatible with adjacent management areas (0296 ) (01D )	
Range Resource Management (D02)	01 Manage the range resource consistent or compatible with adjacent management areas (0298 ) (01D )	
Silvicultural Prescriptions (E03, 06 & 07)	01 Manage forest cover types consistent or compatible with adjacent management areas Provide required electrical clearances and minimize the visual impact of the utility right-of-way (0299 ) (01D )	
	02 Utilize firewood material using both commercial and noncommercial methods (0147 ) (01D )	
Rights-of-way and Land Adjustments (J02, 13, 15, 16, 17, and 18)	01 Designate existing transportation and utility uses, if they originate on or cross National Forest System lands, as rights-of-way corridors, consistent with Forest Plan goals (0852 ) (01D )	a Designate as utility corridors  1 Electrical Transmissions - 69 Kilovolts or larger  2 Pipelines - 10 inches in diameter or larger  3 Telecommunications - All microwave paths and fixed telecommunication electronic sites

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Rights-of-way  
and Land  
Adjustments  
(J02, 13, 15,  
16, 17, and 18)

Q2 Identify areas where designation as transportation and utility corridors in the future are compatible with management area goals. Follow the process and definitions established in FSM 1922 51  
(0854 ) (01D )

- 4 Railways - 10 miles in length or longer
- 5 Highways - All interstate, Federal, or State highways
- 6 Telephone Lines - Major transcontinental systems  
(6704 ) (01D )
  - a Future transportation and utility corridors are excluded from wilderness (Management Areas 8A, 8B, 8C and 8D) unless authorized by the President, Research Natural Areas (Management Area 10A), and Wild Rivers (Management Area 10D)  
(6706 ) (01D )
  - b Avoid the following Management Areas unless studies indicate that the impact of the corridor can be mitigated
    - 1 Developed recreation sites and winter sports sites (Management Areas 1A and 1B)
    - 2 Management Area 3B emphasizing primitive recreation in unroaded areas
    - 3 Riparian areas
    - 4 Experimental Forests, Special Interest Areas and Municipal Water Supply and Municipal Watersheds (Management Areas 10B, 10C, and 10E)
    - 5 Scenic Rivers (Management Area 10D)  
(6708 ) (01D )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Rights-of-way  
and Land  
Adjustments  
(JO2, 13, 15,  
16, 17, and 18)

03 Design, construct and maintain electrical transmission lines in accordance with the rules of the National Electrical Safety Code, ANSI Unless otherwise indicated on the plan and profile drawings, all construction and clearances of the transmission line shall conform to the latest edition of the National Electrical Safety Code, ANSI issued by the American National Standards Institute (0473 ) (01D )

04 All design, materials and construction, operation, maintenance and termination practices employed in connection with oil pipelines shall be in accordance with safe and proven engineering practices and shall meet or exceed the following

a U S A Standard Code for Pressure Piping, ANSI B 31 4, "Liquid Petroleum Transportation system "

b Department of Transportation Regulations, 49 CFR, Part 195, "Transportation of Liquids by Pipeline" (0474 ) (01D )

05 All design, materials and construction, operation, maintenance and termination practices employed in connection with gas pipelines shall be in accordance with safe and proven engineering practices and shall meet or exceed the following

a Department of Transportation Regulations, ASME Gas Piping Standards Committee, "Guide for Gas Transmission and Distribution Piping System" (3rd Edition, April 1976)

b 49 CFR, Part 192, "Transportation of Natural and other Gas by Pipelines Minimum Federal Safety Standards " (0475 ) (01D )

III-100

PRESCRIPTION FOR MANAGEMENT AREA 2A

(Emphasis is on semiprimitive motorized recreation opportunities )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

Management emphasis is for semiprimitive motorized recreation opportunities such as snowmobiling, four-wheel driving, and motorcycling both on and off roads and trails. Motorized travel may be restricted or seasonally prohibited to designated routes to protect physical and biological resources.

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.

The harvest method by forest cover type is clearcutting in aspen and lodgepole pine, and shelterwood for all other forest cover types.

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.

B MANAGEMENT REQUIREMENTS

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Visual Resource  
Management  
(A04)

O1 Design and implement management activities to provide a visually appealing landscape Enhance or provide more viewing opportunities and increase vegetation diversity in selected areas  
(0150 ) (02A )

a Do not exceed an Adopted Visual Quality Objective (VQO) of Partial Retention  
(6223 ) (02A )

b FS System travel routes are Sensitivity Level one  
(6224 ) (02A )

c Apply rehabilitation practices where the above objectives are not currently being met  
(6068 ) (02A )

d Manage visual resources using the above standards in accordance with FSM 2380 and FSH 2309 16 through FSH 2309 25  
(6225 ) (02A )

Dispersed  
Recreation  
Management  
(A14 and 15)

O1 Emphasize semi-primitive motorized recreation opportunities Increase opportunities for primitive road motorized trail use 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  
(0152 ) (02A )

a Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp 88)  
(6083 ) (02A )

O2 Manage use to allow low to moderate contact with other groups and individuals  
(0238 ) (02A )

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 capacity

ROS Class - Semi-Primitive  
Motorized

Use Level	Very Low	Low	Moderate	High

III-108

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

On Trails PAOT/ mile	2 0	3 0	9 0	11 0
Area-wide PAOT/ acre	004	008	05	08
(6227PI)	(02A )			

b Increase the above use levels where necessary to provide adequate access to areas or natural features that afford special or unique recreation opportunities  
(6001PI) (02A )

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

Reduce the above use levels where unacceptable changes to the biophysical resources will occur  
(6030PI) (02A )

03 Prohibit motorized vehicle use (including snowmobiles) off Forest System roads and trails in alpine shrub and Krummholz ecosystems Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in other alpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat  
(0154 ) (02A )

04 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted  
(0174 ) (02A )

a Campsite condition class based upon Frissell, S S , Journal of Forestry, May, 1978  
(6278 ) (02A )

601-III

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

05 Manage site use and occupancy to maintain sites with-  
in Frissell condition class 3 except for designated  
sites which may be class 4 Close and restore class 5  
sites  
(0175 ) (02A )

06 Facilities provided include development level  
1 and 2 campgrounds, trails suitable for motorized  
trailbike use, local roads with primitive surface  
and parking lots at trail heads Provide  
signing compatible with intended use  
(0153 ) (02A )

a See FSM 2331, FSM 7732,  
FSH 7709 12 (Trails  
Handbook), FSH 7109 11a  
and 11b (Sign Handbook)  
(6226 ) (02A )

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

01 Encourage development of private sector recreation  
oriented support services  
(0161 ) (02A )

Wildlife and  
Fish Resource  
Management  
(C01)

01 Maintain habitat capability for management  
indicator species  
(0329 ) (02A )

a Maintain capability at  
70 percent or more of  
potential capability  
(6183 ) (02A )

Range Resource  
Management  
(D02)

01 Manage livestock distribution and stocking rates  
to be compatible with recreation use Locate structural  
improvements to meet visual quality objectives  
(0158 ) (02A )

Silvicultural  
Prescriptions  
(E03, 06 & 07)

01 Manage tree stands using both commercial or  
noncommercial methods Enhance visual quality, diversity  
and insect and disease control  
(0159 ) (02A )

02 Manage forest cover types using the following harvest  
methods

- Clearcut in aspen and lodgepole,
- Shelterwood in interior ponderosa pine, mixed conifer  
and Engelmann spruce-subalpine fir  
(0463 ) (02A )

a Apply harvest treatments to  
forest cover types as specified  
below on at least 80 % of the  
forest cover type Up to  
20 percent of the type may be  
treated using other harvest  
methods specified in Forest  
Direction  
(6074 ) (02A )

b Silvicultural Standards

III-110

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

(These standards may be exceeded  
on areas managed for old growth)

1 Clearcut

	Forest Cover Type		
	Lodgepole Pine-	Aspen	Other Forest Cover Types
Rotation Age	90-140 yrs	80-120 yrs	100 or more yrs
Growing Stock Level	80-140	N/A	60 to 120
Thinning Cycle	10-50 yrs	N/A	10 to 50 yrs

2 Two-Step Shelterwood

	Forest Cover Type	
	Engelmann spruce-sub- alpine fir, Interior Ponderosa Pine & Mixed Conifer	Other Forest Cover Types
Rotation Age	100-180 yrs	100 or more yrs
Growing Stock Level	60-160	60-120
Thinning	20-30 yrs	20-30 yrs

III-III

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Cycle

First Cut (Seed cut)  
Remove 40 to 70 percent of the  
basal area or

Cut to BA 25-60 BA 20-60

Second Cut (removal cut)  
Remove all overstory when  
regenerated stand meets  
minimum stocking standards

3 Three-Step Shelterwood

Forest Cover Type

Englemann Spruce-Sub- alpine fir Interior Ponderosa Pine & Mixed Conifer	Other Forest Cover Types
--	-----------------------------------

Rotation Age 100-180 yrs 100 or  
more yrs

Growing Stock Level 60-160 60-120

Thinning Cycle 20-30 yrs 20-30 yrs

First Cut (preparatory cut)  
Remove 10 to 40 percent of the  
basal area or

Cut to BA 60-80 BA 50-80

Second Cut (seed cut)  
Remove 40 to 50 percent of the  
remaining basal area or

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Cut to	BA 25-50 10-20 yrs after pre- paratory cut	BA 20-50 10-20 yrs after prepara- tory cut
-----		
Third Cut (removal cut)		
Remove all overstory when regenerated stand meets minimum stocking standards		
-----		
(6300PI)	(02A)	

03 Apply intermediate treatments to maintain growing  
stock level standards  
(0140 ) (02A )

04 Utilize firewood material using both commercial  
and noncommercial methods  
(0147 ) (02A )

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

- 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 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

(0500 ) (02A )

a When the Visual  
Quality Objective of an area  
is partial retention, the re-  
generated stand shall meet or  
exceed all of the following  
characteristics before a cut-  
over area is no longer consider-  
ed an opening

Forest Cover Type	Minimum Stocking Level (Trees/ acre)	Tree Height 1/ (% of the adjacent mature stand height)
-----		
Inland Ponderosa Pine	190	25
Mixed Conifers	190	25

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MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES		
CONTINUATION OF Silvicultural Prescriptions (E03, 06 & 07)		Lodgepole Pine	150	25
		Engelmann Spruce - Sub- alpine fir	150	25
		Aspen	300	25
		Forest Cover Type	Crown Closure (Percent)	Distri- bution 2/
		Inland Ponderosa Pine	30	70%
		Mixed Conifers	30	75%
		Lodgepole Pine	30	75%
		Engelmann Spruce- Subalpine fir	30	75%
		Aspen	30	75%
		1/ Applies to trees specified as minimum stocking level		
		2/ Percent of plots or transects that are stocked (6316 ) (02A )		
Special Use Management (Non -Recreation) (J01)	01 Permit special uses which are complementary and compat- ible with the kind and development level of the associated Forest Service facilities within the area (0464 ) (02A )	a Reference the ROS Users Guide (6230 ) (02A )		
Transportation System Management (L01 & 20)	01 Roads will not exceed design guides specified in FSM 7721 3 for local roads Maintain open local roads at Maintenance Level 2 (0494 ) (02A )	a Do not exceed an average open local road density of 2 miles/square mile in fourth- order watersheds		

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Transportation  
System  
Management  
(L01 & 20)

(6295 ) (02A )

Trail  
System  
Management  
(L23)

O1 Maintain existing motorized routes or construct new routes needed as part of the transportation system. Provide loop routes of one-half to one day's travel time with at least one-half the total route located within the semi-primitive motorized ROS class and utilizing primitive local roads and/or trails suitable for motorized trail bike travel  
(0164 ) (02A )

a Do not exceed an average motorized trail density of 4 miles per square mile on fourth-order watersheds  
(6094 ) (02A )

b Do not exceed an average motorized trail density of 2 miles per square mile in nonforested areas of fourth-order watersheds  
(6093 ) (02A )

III-115

PRESCRIPTION FOR MANAGEMENT AREA 2B

(Emphasis is on rural and roaded-natural recreation opportunities.)

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

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 and lodgepole pine, shelterwood in interior ponderosa pine, mixed conifer and Englemann spruce-subalpine fir.

The mineral and energy resources activities are compatible with goals of this management area subject to appropriate stipulations as outlined in the general Forest Direction.

B MANAGEMENT REQUIREMENTS

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Visual Resource  
Management  
(A04)

O1 Design and implement management activities to provide a visually appealing landscape Enhance or provide more viewing opportunities and increase vegetation diversity in selected areas  
(O150 ) (O2B )

a Do not exceed an Adopted Visual Quality Objective (VGO) of Partial Retention  
(6223 ) (O2B )

b Arterial and collector roads and trails are Sensitivity Level 1  
(6268 ) (O2B )

c Manage visual resources using the above standards in accordance with FSM 2380 and FSH 2309 16 through FSH 2309 25  
(6225 ) (O2B )

Dispersed  
Recreation  
Management  
(A14 and 15)

O1 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

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

(O614 ) (O2B )

a Maximum use and capacity levels are

-Trail and camp encounters during peak use days may exceed 30 other parties per day

-Trail and area-wide use capacity

ROS Class - Roaded Natural				
Use Level	Very Low	Moderate	Low	High
On Trails				
PAOT/mile	-	-	-	-
Area-wide				
PAOT/acre	04	08	12	25

ROS Class - Rural				
Use Level	Low	Very Low	Moderate	High
On Trails				
PAOT/mile	-	-	-	-

ROS Class - Rural				
Use Level	Low	Very Low	Moderate	High
On Trails				
PAOT/mile	-	-	-	-

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

Area-wide  
PAQT/acre 5 8 5 0 7 5  
-----  
(6269PI) (02B )

b Increase the above use levels where necessary to provide adequate access to areas or natural features that afford special or unique recreation opportunities  
(6001PI) (02B )

c Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, and 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  
(6027PI) (02B )

d Close local roads to public use. Designate routes and areas which can be periodically opened to  
- Gathering firewood  
- Operating oversnow vehicles  
(6328 ) (02B )

02 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted  
(0174 ) (02B )

03 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  
(0175 ) (02B )

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

04 Facilities provided include development level  
1 and 2 campgrounds, trails suitable for motorized  
trailbike use, local roads with primitive surface  
and parking lots at trail heads Provide  
signing compatible with intended use  
(0153 ) (02B )

a Specify off-road vehicle  
restrictions based on ORV  
use management (FSM 2355,  
R2 Supp 8B)  
(6083 ) (02B )

b See FSM 2331, FSM 7732,  
FSH 7709 12 (Trails  
Handbook), FSH 7109 11a  
and 11b (Sign Handbook)  
(6226 ) (02B )

05 Prohibit motorized vehicle use (including snowmobiles)  
off Forest System roads and trails in alpine shrub  
and Krummholz ecosystems Prohibit motorized vehicle  
use off Forest System roads and trails (except snowmobiles  
operating on snow) in other alpine, and other ecosystems,  
where needed to protect soils, vegetation, or special wild-  
life habitat  
(0154 ) (02B )

06 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  
(0616 ) (02B )

a Specify off-road vehicle  
restrictions based on ORV  
use management (FSM 2355,  
R2 Supp 8B)  
(6083 ) (02B )

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

01 Encourage development of private sector recreation  
oriented support services  
(0161 ) (02B )

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

01 Maintain habitat capability for management  
indicator species  
(0329 ) (02B )

a Maintain capability at  
60 percent of potential  
capability  
(6186 ) (02B )

Range Resource  
Management  
(D02)

01 Manage livestock distribution and stocking rates  
to be compatible with recreation use Locate structural  
improvements to meet visual quality objectives  
(0158 ) (02B )

6  
II-III

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Silvicultural  
Prescriptions  
(E03, 06 & 07)

01 Manage tree stands using both commercial or  
noncommercial methods Enhance visual quality, diversity  
and insect and disease control  
(0159 ) (02B )

02 Manage forest cover types using the following harvest  
methods

- Clearcut in aspen and lodgepole,
- Shelterwood in interior ponderosa pine, mixed conifer  
and Engelmann spruce-subalpine fir  
(0463 ) (02B )

a Apply harvest treatments to  
forest cover types as specified  
below on at least 80 % of the  
forest cover type Up to  
20 percent of the type may be  
treated using other harvest  
methods specified in Forest  
Direction  
(6074 ) (02B )

b Silvicultural Standards  
(These standards may be exceeded  
on areas managed for old growth)

1 Clearcut

	Forest Cover Type		
	Lodgepole Pine-	Aspen	Other Forest Cover Types
Rotation Age	90-140 yrs	80-120 yrs	100 or more yrs
Growing Stock Level	80-140	N/A	60 to 120
Thinning Cycle	10-50 yrs	N/A	10 to 50 yrs

2 Two-Step Shelterwood

	Forest Cover Type	
	Engelmann	Other

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

	spruce-sub- alpine fir, Interior Ponderosa Pine & Mixed Conifer	Forest Cover Types
Rotation Age	100-180 yrs	100 or more yrs
Growing Stock Level	60-160	60-120
Thinning Cycle	20-30 yrs	20-30 yrs
First Cut (Seed cut) Remove 40 to 70 percent of the basal area or		
Cut to	BA 25-60	BA 20-60
Second Cut (removal cut) Remove all overstory when regenerated stand meets minimum stocking standards		
3 Three-Step Shelterwood		
	Forest	Cover Type
	Englemann Spruce-Sub- alpine fir Interior Ponderosa Pine & Mixed Conifer	Other Forest Cover Types
Rotation Age	100-180 yrs	100 or more yrs

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, O6 & O7)

Growing Stock Level	60-160	60-120
Thinning Cycle	20-30 yrs	20-30 yrs
First Cut (preparatory cut) Remove 10 to 40 percent of the basal area or Cut to	BA 60-80	BA 50-80
Second Cut (seed cut) Remove 40 to 50 percent of the remaining basal area or Cut to	BA 25-50 10-20 yrs after pre- paratory cut	BA 20-50 10-20 yrs after prepara- tory cut
Third Cut (removal cut) Remove all overstory when regenerated stand meets minimum stocking standards		
(6300PI)	(02B)	

O3 Apply intermediate treatments to maintain growing stock level standards  
(O140 ) (O2B )

O4 Utilize firewood material using both commercial and noncommercial methods  
(O147 ) (O2B )

III-122

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

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

- 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 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

(0500 ) (02B )

a When the Visual Quality Objective of an area is partial retention, the re-generated 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 Height 1/ (% of the adjacent mature stand height)
-------------------	-------------------------------------	--

Inland Ponderosa Pine	190	25
-----------------------	-----	----

Mixed Conifers	190	25
----------------	-----	----

Lodgepole Pine	150	25
----------------	-----	----

Engelmann Spruce - Sub-alpine fir	150	25
-----------------------------------	-----	----

Aspen	300	25
-------	-----	----

Forest Cover Type	Crown Closure (Percent)	Distribution 2/
-------------------	-------------------------	-----------------

Inland Ponderosa Pine	30	70%
-----------------------	----	-----

Mixed Conifers	30	75%
----------------	----	-----

Lodgepole

III-123

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Pine	30	75%
Engelmann Spruce- Subalpine fir	30	75%
Aspen	30	75%

1/ Applies to trees specified as  
minimum stocking level  
2/ Percent of plots or transects  
that are stocked  
(6316 ) (02B )

Reforestation  
(E04)

O1 Use trees of the best genetic quality available which  
are adapted to the planting site when supplemental  
planting (Reference FSM 2475)  
(0141 ) (02B )

Special Use  
Management (Non-  
Recreation)  
(J01)

O1 Permit special uses which are complementary and compat-  
ible with the kind and development level of the associated  
Forest Service facilities within the area  
(0464 ) (02B )

a , Reference the ROS Users Guide  
(6230 ) (02B )

Transportation  
System  
Management  
(L01 & 20)

O1 Manage public use of roads with techniques such as,  
seasonal closure, time of day closures, etc  
(0128 ) (02B )

Trail  
System  
Management  
(L23)

O1 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  
(0439 ) (02B )

a On all nonforested areas,  
motorized trail and local  
road density is not to  
exceed 4 miles per square  
mile  
(6270 ) (02B )

III-124

PRESCRIPTION FOR MANAGEMENT AREA 3A

(Emphasis is on semiprimitive nonmotorized recreation in roaded or nonroaded areas )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

Management emphasis is for semiprimitive nonmotorized recreation in both roaded and unroaded areas. Recreation opportunities such as hiking, horseback riding, hunting, cross-country skiing, etc., are available. Visual resources are managed so that management activities are not visually evident or remain visually subordinate.

Investments in compatible resource uses such as livestock grazing, mineral exploration and development, etc., occur, but roads are closed to public use. Commercial and noncommercial tree harvest occur. The harvest method by forest cover type is clearcutting in aspen and lodgepole pine, shelterwood in interior ponderosa pine, Englemann spruce-subalpine fir and mixed conifers.

The mineral and energy resources activities are compatible with goals of this management area subject to appropriate stipulations as outlined in the general Forest Direction.

B MANAGEMENT REQUIREMENTS

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Visual Resource  
Management  
(A04)

01 Design and implement management activities to provide a visually appealing landscape Enhance or provide more viewing opportunities and increase vegetation diversity in selected areas  
(0150 ) (03A )

a Do not exceed an Adopted Visual Quality Objective (VQO) of Partial Retention  
(6223 ) (03A )

b FS System travel routes are Sensitivity Level one  
(6224 ) (03A )

c Apply rehabilitation practices where the above objectives are not currently being met  
(6068 ) (03A )

d Manage visual resources using the above standards in accordance with FSM 2380 and FSH 2309 16 through FSH 2309 25  
(6225 ) (03A )

Dispersed  
Recreation  
Management  
(A14 and 15)

01 Emphasize semi-primitive nonmotorized recreation opportunities Specific land areas or travel routes may be opened seasonally and with specific authorization to accomplish resource management activities The area is never open for motorized recreation activities  
(0010PI) (03A )

a Prohibit or restrict motorized vehicle use (R2 FSH 2309 26)  
(6228 ) (03A )

02 Manage use to allow low to moderate contact with other groups and individuals  
(0238 ) (03A )

a Maximum use and capacity  
-Trail and camp encounters during peak use days are less than 30 other parties per day  
-Trail and area-wide use capacity

-----  
ROS Class - Semi-Primitive  
Nonmotorized  
-----

Use Level	Very Low	Moderate	High
On Trails			
PAQT/			
mile	2 0	3 0	9 0 11 0

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

-----  
Area-wide  
PAOT/  
acre      004      008      05      08  
-----  
(6378PI)    (03A )

b    Increase the above use levels where necessary to provide adequate access to areas or natural features that afford special or unique recreation opportunities  
(6001PI)    (03A )

c    Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, and 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  
(6027PI)    (03A )

O3    Provide facilities such as foot and horse trails, single lane local intermittent roads with primitive surface used as trails, development level 1 and 2 campgrounds, and necessary signing  
(0394 )    (03A )

a    See FSM 2331, FSM 7732, FSH 7709 12 (Trails Handbook), FSH 7109 11a and 11b (Sign Handbook)  
(6226 )    (03A )

O4    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  
(0175 )    (03A )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

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

01 Encourage development of private sector recreation  
oriented support services  
(0161 ) (03A )

Wildlife and  
Fish Resource  
Management  
(C01)

01 Maintain habitat capability for management  
indicator species  
(0329 ) (03A )

a Maintain capability at  
70 percent or more of  
potential capability  
(6183 ) (03A )

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

01 Maintain wildlife habitat effectiveness Permanent  
openings may be employed Reduce disturbance to wildlife  
so that no significant long-term negative wildlife effects  
result  
(0155 ) (03A )

02 Provide deer and elk cover  
(0612 ) (03A )

Range Resource  
Management  
(D02)

01 Manage livestock distribution and stocking rates  
to be compatible with recreation use Locate structural  
improvements to meet visual quality objectives  
(0158 ) (03A )

Silvicultural  
Prescriptions  
(E03, 06 , 07)

01 Manage tree stands using both commercial or  
noncommercial methods Enhance visual quality, diversity  
and insect and disease control  
(0159 ) (03A )

02 Manage forest cover types using the following harvest  
methods

- Clearcut in aspen and lodgepole,
- Shelterwood in interior ponderosa pine, mixed conifer  
and Engelmann spruce-subalpine fir  
(0463 ) (03A )

a Apply harvest treatments to  
forest cover types as specified  
below on at least 80 % of the  
forest cover type Up to  
20 percent of the type may be  
treated using other harvest  
methods specified in Forest  
Direction  
(6074 ) (03A )

b Silvicultural Standards  
(These standards may be exceeded  
on areas managed for old growth)

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

1 Clearcut

	Forest Cover Type		
	Lodgepole Pine	Aspen	Other Forest Cover Types
Rotation Age	90-140 yrs	80-120 yrs	100 or more yrs
Growing Stock Level	80-140	N/A	60 to 120
Thinning Cycle	10-50 yrs	N/A	10 to 50 yrs

2 Two-Step Shelterwood

	Forest Cover Type	
	Engelmann spruce-sub- alpine fir, Interior Ponderosa Pine & Mixed Conifer	Other Forest Cover Types
Rotation Age	100-180 yrs	100 or more yrs
Growing Stock Level	60-160	60-120
Thinning Cycle	20-30 yrs	20-30 yrs
First Cut (Seed cut)		

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Remove 40 to 70 percent of the  
basal area or

Cut to BA 25-60 BA 20-60

Second Cut (removal cut)  
Remove all overstory when  
regenerated stand meets  
minimum stocking standards

3 Three-Step Shelterwood

Forest Cover Type

Englemann Spruce-Sub- alpine fir Interior Ponderosa Pine & Mixed Conifer	Other Forest Cover Types
--	-----------------------------------

Rotation Age	100-180 yrs	100 or more yrs
-----------------	-------------	--------------------

Growing Stock Level	60-160	60-120
---------------------------	--------	--------

Thinning Cycle	20-30 yrs	20-30 yrs
-------------------	-----------	-----------

First Cut (preparatory cut)  
Remove 10 to 40 percent of the  
basal area or

Cut to BA 60-80 BA 50-80

Second Cut (seed cut)  
Remove 40 to 50 percent of the  
remaining basal area or

Cut to	BA 25-50 10-20 yrs after pre-	BA 20-50 10-20 yrs after
--------	-------------------------------------	--------------------------------

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Engelmann Spruce - Sub- alpine fir	150	25
Aspen	300	25
Forest Cover Type	Crown Closure (Percent)	Distri- bution 2/
Inland Ponderosa Pine	30	70%
Mixed Conifers	30	75%
Lodgepole Pine	30	75%
Engelmann Spruce- Subalpine fir	30	75%
Aspen	30	75%
1/ Applies to trees specified as minimum stocking level		
2/ Percent of plots or transects that are stocked (6316 ) (03A )		

Reforestation  
(E04)

O1 Use trees of the best genetic quality available which  
are adapted to the planting site when supplemental  
planting (Reference FSM 2475)  
(0141 ) (03A )

Water Resource  
Improvement and  
Maintenance  
(F05 and 06)

O1 Permanent openings may be employed to enhance  
water production  
(0497 ) (03A )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Special Use  
Management (Non  
-Recreation)  
(J01)

01 Permit special uses which are complementary and compatible with the objectives of the management area and which do not change the ROS classification  
(0395 ) (03A )

02 Permit special uses which are complementary and compatible with the kind and development level of the associated Forest Service facilities within the area  
(0464 ) (03A )

a Reference the ROS Users Guide  
(6230 ) (03A )

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

01 Local roads may be constructed for non-recreation purposes  
Close local roads to public motorized use, and prohibit off-road vehicle (ORV) use  
Maintain local roads to Level 1 during periods when access for resource utilization is not required  
(0396 ) (03A )

PREScription FOR MANAGEMENT AREA 4B

(Emphasis is on habitat for management indicator species )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

Management emphasis is on the habitat needs of one or more management indicator 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 of browse plants.

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. Semiprimitive motorized recreation opportunities are provided on those local roads and trails that remain open, semiprimitive nonmotorized opportunities are provided on those that are closed. A full range of tree harvest investments in other compatible resource uses may occur but will be secondary to habitat requirements. Management activities may dominate in foreground and middleground, but harmonize and blend with the natural setting.

The mineral and energy resources activities are compatible with goals of this management area subject to appropriate stipulations as outlined in the general Forest Direction.

B MANAGEMENT REQUIREMENTS

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Visual Resource  
Management  
(A04)

O1 Design and implement management activities to  
blend with the natural landscape  
(0332 ) (04B )

a Do not exceed an Adopted  
Visual Quality Objective (VQO)  
of modification  
(6267 ) (04B )

Dispersed  
Recreation  
Management  
(A14 and 15)

O1 Manage human recreational activities so they  
do not conflict with habitat needs of selected indicator  
species  
(0343 ) (04B )

O2 Semi-primitive nonmotorized, semi-primitive  
motorized, roaded natural and rural recreation  
opportunities can be provided  
(0445 ) (04B )

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	Moderate	High
	Low	Low	High

-----  
RDS Class - Semi-Primitive  
Nonmotorized  
-----

On Trails PAOT/mile	2 0	3 0	9 0	11 0

Area-wide PAOT/acre	004	008	05	08

-----  
RDS 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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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

ROS Class - Roded Natural

On Trails  
PAOT/mile - - - -

Area-wide  
PAOT/acre 04 08 12 25

ROS Class - Rural

On Trails  
PAOT/mile - - - -

Area-wide  
PAOT/acre 5 8 50 75

(6402PI) (04B )

b Increase the above use levels where necessary to provide adequate access to areas or natural features that afford special or unique recreation opportunities  
(6001PI) (04B )

c Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, and 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 bio-physical resources will occur  
(6028PI) (04B )

d Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp 88)  
(6083 ) (04B )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

e See FSM 2331, FSM 7732,  
FSH 7709 12 (Trails  
Handbook), FSH 7109 11a  
and 11b (Sign Handbook)  
(6226 ) (04B )

03 Permit undesignated sites in Frissell condition class 1  
through 3 where unrestricted camping is permitted  
(0174 ) (04B )

04 Manage site use and occupancy to maintain sites with-  
in Frissell condition class 3 except for designated  
sites which may be class 4 Close and restore class 5  
sites  
(0175 ) (04B )

05 Prohibit motorized vehicle use (including snowmobiles)  
off Forest System roads and trails in alpine shrub  
and Krummholz ecosystems Prohibit motorized vehicle  
use off Forest System roads and trails (except snowmobiles  
operating on snow) in other alpine, and other ecosystems,  
where needed to protect soils, vegetation, or special wild-  
life habitat  
(0154 ) (04B )

Wildlife and  
Fish Resource  
Management  
(C01)

01 Manage for habitat needs of management  
indicator species  
(0340 ) (04B )

a Maintain habitat capability  
at a level at least 80 percent  
of potential capability  
(6261 ) (04B )

b Protect all lesser prairie  
chicken leks from surface dis-  
turbance at all times Protect  
nesting habitat from surface  
disturbance from April 15  
to June 30  
(6013PI) (04B )

c Livestock and wild herbivore  
allowable forage use in lesser  
prairie chicken habitat will not  
exceed 40 percent  
(6014PI) (04B )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Wildlife and  
Fish Resource  
Management  
(C01)

O2 Emphasis on species commonly hunted, fished, or  
trapped will follow species priorities established  
by States  
(0338 ) (04B )

a Maintain at least 90 percent of  
the habitat needed to support  
the State population goals for  
each species  
(6260 ) (04B )

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

O1 Maintain hiding cover for elk and deer, where present  
(0341 ) (04B )

a Maintain, along 75 per-  
cent 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 at 200 feet  
from the road  
(6191 ) (04B )

b In diversity units dominated  
by forested ecosystems, maintain  
a minimum of 50 percent of the  
diversity unit in deer or elk  
hiding cover. This hiding cover  
should be well distributed over  
the unit. Maintain 30 percent  
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 biolog-  
ically  
(6334 ) (04B )

c In forested areas of a unit,  
15 percent or more should be in  
old growth habitat  
(6016PI) (04B )

O2 Maintain wildlife habitat effectiveness. Permanent  
openings may be employed. Reduce disturbance to wildlife  
so that no significant long-term negative wildlife effects  
result  
(0155 ) (04B )

a Maintain at least 80 per-  
cent habitat effectiveness  
(6250 ) (04B )

Silvicultural  
Prescriptions  
(E03, 06 & 07)

O1 Manage forest cover types to provide variety in  
stand sizes, shape, crown closure, edge contrast,  
age structure and interspersions  
(0345 ) (04B )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, O6 & O7)

O2 Manage Forest cover types using the following harvest methods

- Clearcut in lodgepole pine and aspen,
- Shelterwood in interior ponderosa pine and mixed conifer, and
- Clearcut and/or selection (group or single-tree) in Engelmann spruce/subalpine fir, according to the following criteria

- a Utilize the selection method where the objective is to perpetuate uneven-aged stand structure
- b Utilize the clearcut method in even-aged stands located on north and east aspects, or on other aspects if moist site conditions are present (subalpine fir/forest fleabane habitat type, for example) It should also be used in even-aged stands having above-average windfall risk  
(O4B5PI) (O4B )

a Apply harvest treatments to forest cover types as specified below on at least 80 % of the forest cover type Up to 20 percent of the type may be treated using other harvest methods specified in Forest Direction  
(6074 ) (O4B )

b Silvicultural Standards  
(These standards may be exceeded on areas managed for old growth)

1 Clearcut

	Forest Cover Type		
	Engelmann spruce-subalpine fir and Lodgepole Pine-	Aspen	Other Forest Cover Types
Rotation Age	90-140 yrs	80-120 yrs	100 or more yrs
Growing Stock Level	60-160	N/A	60 to 120
Thinning Cycle	10-50 yrs	N/A	10 to 50 yrs

2 Two-Step Shelterwood

	Forest Cover Type	
	Interior Ponderosa Pine &	Other Forest Cover

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

	Mixed Conifer Types	
Rotation Age	100-160 yrs	100 or more yrs
Growing Stock Level	60-160	60-120
Thinning Cycle	20-30 yrs	20-30 yrs
First Cut (Seed cut) Remove 40 to 70 percent of the basal area or		
Cut to	BA 25-60	BA 20-60
Second Cut (removal cut) , Remove all overstory when regenerated stand meets minimum stocking standards		
<b>3 Three-Step Shelterwood</b>		
	Forest Cover Type	
	Interior Ponderosa Pine & Mixed Conifer	Other Forest Cover Types
Rotation Age	100-160 yrs	100 or more yrs
Growing Stock Level	60-160	60-120
Thinning Cycle	20-30 yrs	20-30 yrs

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

First Cut (preparatory cut)  
Remove 10 to 40 percent of the  
basal area or

Cut to	BA 60-80	BA 50-80
--------	----------	----------

Second Cut (seed cut)  
Remove 40 to 50 percent of the  
remaining basal area or

Cut to	BA 25-50 10-20 yrs after pre- paratory cut	BA 20-50 10-20 yrs after prepara- tory cut
--------	---	--

Third Cut (removal cut)  
Remove all overstory when  
regenerated stand meets  
minimum stocking standards

4 Selection

	Forest Cover Type	
	Engelmann spruce- subalpine fir	Other Forest Cover Types

Residual BA	60-160	80-120
-------------	--------	--------

Cutting Cycle	20-30 yrs	20-40 yrs
------------------	-----------	-----------

(6023PI)	(04B )
----------	--------

03 Apply intermediate treatments to maintain growing  
stock level standards  
(0140 ) (04B )

04 Utilize firewood material using both commercial  
and noncommercial methods  
(0147 ) (04B )

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

- 05 For management purposes, a cut-over area is considered an opening until such time as
- 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 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
- (0500 ) (04B )

- 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/
Inland Ponderosa Pine	190	6
Mixed Conifers	190	6
Lodgepole Pine	150	6
Engelmann Spruce-Subalpine fir	150	6
Aspen	300	6

  

Forest Cover Type	Crown Closure (Percent)	Distribution 2/
Inland Ponderosa Pine	30	70%
Mixed Conifers	30	75%
Lodgepole		

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Pine	30	75%
Engelmann Spruce- Subalpine fir	30	75%
Aspen	30	75%

1/ Applies to trees specified as  
minimum stocking level  
2/ Percent of plots or tran-  
sects that are stocked

(6014 ) (04B )

Reforestation  
(E04)

O1 Use trees of the best genetic quality available which  
are adapted to the planting site when supplemental  
planting (Reference FSM 2475)  
(0141 ) (04B )

Transportation  
System  
Management  
(L01 & 20)

O1 Manage road use to provide for habitat needs of  
management indicator species, including road closures  
and area closures, and to maintain habitat effectiveness  
(0342 ) (04B )

Fuel Treatment  
(P11 thru 14)

O1 Maintain fuel conditions which permit fire  
suppression and prescribed fire to maintain habitat needed  
for selected species or species population levels  
(0344 ) (04B )

Range Resource  
Management  
(D02)

O1 Prescribe livestock grazing systems to achieve  
objectives for management indicator species  
(0043PI) (04B )

O2 Apply wildlife and livestock forage allowable  
use guides specified in Forest Direction Modify  
so needs of management indicator species are met  
(0415 ) (04B )

O3 Structural range improvement should be designed  
to benefit wildlife and livestock  
(0416 ) (04B )

a Structural improvements  
will not adversely affect big  
game movement (FSH 2209 22)  
(6247 ) (04B )

371-III

PRESCRIPTION FOR MANAGEMENT AREA 4D

(Emphasis is on aspen management )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

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 interspersions are maintained. Both commercial and noncommercial treatments are applied. Even-aged management is practiced and is achieved by clearcutting. Diversity objectives are achieved by varying the size, age, shape and interspersions 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 semiprimitive 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.

B MANAGEMENT REQUIREMENTS

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Diversity on National Forests and National Grasslands (A00)	01 Maintain aspen clones (0422 ) (04D )	
Visual Resource Management (A04)	01 Vary location of treated clones to maintain natural-appearing diversity in age classes (0425 ) (04D )	a Do not exceed an Adopted Visual Quality Objective (VQO) of modification (6267 ) (04D )
	02 Emphasize aspen viewing areas (0427 ) (04D )	
Management of Developed Recreation Sites (A08, 09, 11 & 13)	01 Prohibit development of new developed recreation sites (0412 ) (04D )	
Dispersed Recreation Management (A14 and 15)	01 Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) where needed to protect soils, vegetation or specified wildlife habitat (0044PI) (04D )	
Wildlife and Fish Resource Management (C01)	01 Manage for habitat needs of management indicator species (0340 ) (04D )	a Maintain big game hiding cover next to aspen viewing areas, and along the edge of arterial and collector roads (6254 ) (04D )
		b Maintain habitat capability at a level at least 70 percent of potential capability for aspen dependent and big game species (6262 ) (04D )
	02 Maintain habitat effectiveness for elk (0419 ) (04D )	a Maintain at least 80 percent habitat effectiveness (6250 ) (04D )

III-145

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Wildlife and  
Fish Resource  
Management  
(C01)

03 Maintain standing dead trees  
(0490 ) (04D )

a Provide snags needed to  
maintain habitat capability  
for cavity dependent wildlife  
at 80 percent or more of  
potential

(6251 ) (04D )

04 Maintain aspen dominance on determinate  
and indeterminate sites  
(0421 ) (04D )

Range Resource  
Management  
(D02)

01 Protect aspen regeneration  
(0423 ) (04D )

02 Maintain fair or better range conditions  
(0417 ) (04D )

Silvicultural  
Prescriptions  
(E03, 06 & 07)

01 Manage aspen forest cover type to perpetuate  
aspen using even-aged silviculture  
(0428 ) (04D )

a Silvicultural Standards  
(These standards may be  
exceeded on areas managed  
for old growth)

1 Clearcut (Stand or Clone)

-----  
Forest Cover Type

-----  
Aspen

-----  
Rotation  
age 80-120 yrs

-----  
Thinning  
cycle N/A

-----  
2 Limit individual regeneration  
acres to 40 acre maximum or  
the size of a clone, which-  
ever is smaller

(6258 ) (04D )

02 Utilize firewood material using both commercial  
and noncommercial methods  
(0147 ) (04D )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

- 03 For management purposes, a cut-over area is considered an opening until such time as
- 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 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
- (0500 ) (04D )

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/
Inland Ponderosa Pine	190	6
Mixed Conifers	190	6
Lodgepole Pine	150	6
Engelmann Spruce-Subalpine fir	150	6
Aspen	300	6

  

Forest Cover Type	Crown Closure (Percent)	Distribution 2/
Inland Ponderosa Pine	30	70%
Mixed Conifers	30	75%
Lodgepole		

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Pine	30	75%
Engelmann Spruce- Subalpine fir	30	75%
Aspen	30	75%

1/ Applies to trees specified as  
minimum stocking level  
2/ Percent of plots or tran-  
sects that are stocked

(6014 ) (04D )

Fuel Treatment  
(P11 thru 14)

01 Apply prescribed burning to regenerate aspen and to  
benefit wildlife  
(0433 ) (04D )

a Allow aspen regeneration  
to occur naturally  
(6636 ) (04D )

02 Design fuelwood cutting unit boundaries  
that do not cross adjacent aspen clone  
boundaries  
(0482 ) (04D )

03 Protect snags during fuelwood cutting and  
prescribed burning  
(0483 ) (04D )

III-148

PRESCRIPTION FOR MANAGEMENT AREA 5B

(Emphasis is on big game winter range.)

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

Management emphasis is on forage and cover on winter ranges. Winter habitat for deer, elk, bighorn sheep, and mountain goats 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 is managed to favor wildlife habitat. 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.

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.

The mineral and energy resources activities are compatible with goals of this management area subject to appropriate stipulations as outlined in the general Forest Direction.

B MANAGEMENT REQUIREMENTS

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Visual Resource  
Management  
(A04)

O1 Design and implement management activities to  
blend with the natural landscape  
(0332 ) (05B )

a Do not exceed an Adopted  
Visual Quality Objective (VQO)  
of modification  
(6267 ) (05B )

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

O1 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  
(0652 ) (05B )

Dispersed  
Recreation  
Management  
(A14 and 15)

O1 Manage summer use-season for appropriate ROS op-  
portunities  
Provide roaded natural recreation opportunities with-  
in 1/2 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 oppor-  
tunities 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 oppor-  
tunities in all areas more than 1/2 mile away  
from roads and trails open to motorized recreation  
use  
(0654 ) (05B )

a Maximum Use and Capacity  
Levels are

Capacity Range				
Use Level	Very Low	Low	Moderate	High
-----				
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	Moderate	High
-----				
ROS class - Primitive				
On Trails PAOT/Mile	0 5	1 0	2 0	3 0
-----				
Area wide PAOT/acre	001	002	007	025
-----				
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

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

-----

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

-----

(6404PI) (05B )

b Increase the above use levels where necessary to provide adequate access to areas or natural features that afford special or unique recreation opportunities  
(6001PI) (05B )

c Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, and 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  
(6029PI) (05B )

d Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp 88)  
(6083 ) (05B )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF

Dispersed  
Recreation  
Management  
(A14 and 15)

e See FSM 2331, FSM 7732,  
FSH 7709 12 (Trails  
Handbook), FSH 7109 11a  
and 11b (Sign Handbook)  
(6226 ) (05B )

f Prohibit open fires when the  
occurrence of fire rings exceeds  
Frissell Class 1 site conditions  
on 10 percent or more of the  
known campsites  
(6330 ) (05B )

02 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  
(0754 ) (05B )

a Close management area to  
cross-country ski trail de-  
velopment and to snowmobile  
use  
(6662 ) (05B )

b Do not provide parking or  
trail head facilities during  
winter  
(6664 ) (05B )

Wildlife and  
Fish Resource  
Management  
(C01)

01 Maintain habitat capability for management  
indicator species  
(0329 ) (05B )

a Maintain habitat capability  
at a level at least 80 percent  
of potential capability  
(6261 ) (05B )

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

01 Provide big-game forage and cover, and habitat  
(0310 ) (05B )

a Maintain at least 30 per-  
cent of the area in created  
or natural openings  
(6177 ) (05B )

b Do not eliminate presence  
of any browse species  
(6168 ) (05B )

c Provide thermal cover for  
elk or deer on at least 20  
percent of the area  
(6179 ) (05B )

d Maintain, along 75 per-  
cent of all arterial and

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Wildlife  
Habitat  
Improvement and  
Maintenance  
(002, 04, 05  
and 06)

collector road edges cover  
that hides 90 percent of an adult  
standing deer or elk from human  
view at a distance at 200 feet  
from the road  
(6191 ) (05B )

e In diversity units dominated  
by forested ecosystems, maintain  
a minimum of 50 percent of the  
diversity unit in deer or elk  
hiding cover. This hiding cover  
should be well distributed over  
the unit. Maintain 30 percent  
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 biolog-  
ically  
(6334 ) (05B )

f Maintain habitat  
effectiveness during winter  
of at least 90 percent  
(6171 ) (05B )

g Maintain habitat capability  
at a level at least 80 percent  
of potential capability  
(6261 ) (05B )

Range Resource  
Management  
(002)

01 Manage grazing to favor big-game and to achieve  
the wildlife populations identified in state-wide  
comprehensive wildlife plans  
(0315 ) (05B )

a Maintain vegetation in  
fair or better range con-  
dition  
(6172 ) (05B )

b Limit livestock use of  
browse and herbaceous plant  
production to that not needed  
by big game  
(6173 ) (05B )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Range Resource  
Management  
(D02)  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

02 Prescribe livestock grazing systems to achieve winter range habitat objectives  
(0045PI) (05B )

01 Manage forest cover types to achieve and maintain desired thermal and hiding cover, cover-opening ratios and other habitat needs associated with tree cover  
(0324 ) (05B )

02 Manage Forest Cover Types using the following harvest methods  
- Clearcut in lodgepole and aspen,  
- Shelterwood in interior ponderosa pine and mixed conifer, and  
- Selection (group or single tree) in Engelmann spruce-subalpine fir  
(0485 ) (05B )

a Apply harvest treatments to forest cover types as specified below on at least 80 % of the forest cover type Up to 20 percent of the type may be treated using other harvest methods specified in Forest Direction  
(6074 ) (05B )

b Silvicultural Standards  
(These standards may be exceeded on areas managed for old growth)

1 Clearcut

	Forest Cover Type		
	Lodgepole Pine-	Aspen	Other Forest Cover Types
Rotation Age	90-140 yrs	80-120 yrs	100 or more yrs
Growing Stock Level	60-160	N/A	60 to 120
Thinning Cycle	10-50 yrs	N/A	10 to 50 yrs

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

2 Two-Step Shelterwood		
Forest Cover Type		
	Interior Ponderosa Pine & Mixed Conifer Types	Other Forest Cover Types
Rotation Age	100-160 yrs	100 or more yrs
Growing Stock Level	60-160	60-120
Thinning Cycle	20-30 yrs	20-30 yrs
First Cut (Seed cut) Remove 40 to 70 percent of the basal area or		
Cut to	BA 25-60	BA 20-60
Second Cut (removal cut) Remove all overstory when regenerated stand meets minimum stocking standards		
3 Three-Step Shelterwood		
Forest Cover Type		
	Interior Ponderosa Pine & Mixed Conifer Types	Other Forest Cover Types
Rotation Age	100-160 yrs	100 or more yrs

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Growing Stock Level	60-160	60-120
Thinning Cycle	20-30 yrs	20-30 yrs
First Cut (preparatory cut) Remove 10 to 40 percent of the basal area or		
Cut to	BA 60-80	BA 50-80
Second Cut (seed cut) Remove 40 to 50 percent of the remaining basal area or		
Cut to	BA 25-50 10-20 yrs after pre- paratory cut	BA 20-50 10-20 yrs after prepara- tory cut
Third Cut (removal cut) Remove all overstory when regenerated stand meets minimum stocking standards		
4 Selection		
Forest Cover Type		
	Engelmann spruce-fir	Other Forest Cover Types
Residual BA	60-160	80-120
Cutting Cycle	20-30 yrs	20-40 yrs
(6287PI) (05B )		

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

03 Utilize firewood material using both commercial  
and noncommercial methods  
(0147 ) (05B )

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

- 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 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

(0500 ) (05B )

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/
Inland Ponderosa Pine	190	6
Mixed Conifers	190	6
Lodgepole Pine	150	6
Engelmann Spruce-Subalpine fir	150	6
Aspen	300	6
Forest Cover Type	Crown Closure (Percent)	Distribution 2/
Inland Ponderosa Pine	30	70%

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Mixed Conifers	30	75%
Lodgepole Pine	30	75%
Engelmann Spruce- Subalpine fir	30	75%
Aspen	30	75%

1/ Applies to trees specified as  
minimum stocking level  
2/ Percent of plots or tran-  
sects that are stocked

(6014 ) (05B )

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Special Use  
Management (Non  
-Recreation)  
(J01)

01 Eliminate special uses that conflict with  
wintering animals  
(0320 ) (05B )

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

01 Acquire private lands needed for big-game  
winter range  
(0319 ) (05B )

Transportation  
System  
Management  
(L01 & 20)

01 Road traffic and road cut or fill slopes must  
not block big game movement in delineated migration  
routes or corridors  
(0323 ) (05B )

02 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  
(0762 ) (05B )

a New permanent or temporary  
roads constructed in the manage-  
ment area must meet the follow-  
ing criteria

1) There is no feasible  
alternative to build  
the road outside the area,  
and the road is essential

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Transportation  
System  
Management  
(LO1 & 20)

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 State Fish and Wildlife  
agency 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 objec-  
tives

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

(6668 ) (05B )

03 Close existing roads, prohibit off-road vehicle  
use and manage non-motorized use to prevent stress  
on big game animals  
(0764 ) (05B )

a Opening of existing roads  
during winter can be approved  
if the following criteria are  
met

1) There is no reasonable al-  
ternative for owners or managers  
of contiguous private land or  
public land to reach their lands  
during winter

2) Road use, off-road vehicle  
use, or non-motorized use of

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

---

CONTINUATION OF  
Transportation  
System  
Management  
(L01 & 20)

the area is essential and is  
the minimum necessary to meet  
priority resource manage-  
ment goals and objectives

3) The State Fish and Wild-  
life Agency is fully involved  
in planning human use of area  
during winter  
(6670 ) (05B )

Fuel Treatent  
(P11 thru 14)

O1 Maintain fuel conditions which permit fire  
suppression and prescribed fire to maintain habitat needed  
for selected species or species population levels  
(0344 ) (05B )

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PRESCRIPTION FOR MANAGEMENT AREA 6B

(Emphasis is on livestock grazing )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals:

The area is managed for livestock grazing. Range condition is currently at or above the satisfactory level. 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. Conflicts between livestock and wildlife are resolved in favor of livestock. 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 semiprimitive nonmotorized and roaded natural. Management activities are evident but harmonize and blend with the natural setting.

The mineral and energy resources activities are compatible with goals of this management area subject to appropriate stipulations as outlined in the general Forest Direction.

B MANAGEMENT REQUIREMENTS

MANAGEMENT ACTIVITIES

GENERAL DIRECTION

STANDARDS & GUIDELINES

Visual Resource Management (A04)

01 Design and implement management activities to blend with the natural landscape (0332 ) (06B )

a Do not exceed an Adopted Visual Quality Objective (VQO) of modification (6267 ) (06B )

b When projects require clearing of vegetation and (or) soil disturbance, use irregular clearing edges and shapes to blend with the natural landscapes (6185 ) (06B )

Dispersed Recreation Management (A14 and 15)

01 Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided (0445 ) (06B )

02 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 RDS 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 (0650 ) (06B )

a Maximum Use and Capacity Levels are

Recreation use and capacity range during the snow-free period (PADT/acre)

Trail use and capacity range (PADT/mile of trail)

Capacity Range

Use Level	Very Low	Moderate	High
-----------	----------	----------	------

RDS Class - Semi-Primitive Nonmotorized

On Trails	2 0	3 0	9 0	11 0
PADT/mile				

Area-wide	004	008	05	08
PADT/acre				

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

RDS Class - Semi-Primitive  
Motorized

On Trails PAOT/mile	2 0	3 0	9 0	11 0
Area-wide PAOT/acre	004	008	05	08

RDS Class - Roaded Natural

On Trails PAOT/mile	-	-	-	-
Area-wide PAOT/acre	04	08	1 2	2 5

RDS Class - Rural

On Trails PAOT/mile	-	-	-	-
Area-wide PAOT/acre	5	8	5 0	7 5

(6402PI) (06B )

b Increase the above use levels where necessary to provide adequate access to areas or natural features that afford special or unique recreation opportunities  
(6001PI) (06B )

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

Reduce the above use levels where unacceptable changes to the bio-physical resources will occur

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

(6028PI) (06B )

d Specify off-road vehicle  
restrictions based on DRV  
use management (FSM 2355,  
R2 Supp 88)  
(6083 ) (06B )

e See FSM 2331, FSM 7732,  
FSH 7709 12 (Trails  
Handbook), FSH 7109 11a  
and 11b (Sign Handbook)  
(6226 ) (06B )

03 Permit undesignated sites in Frissell condition class 1  
through 3 where unrestricted camping is permitted  
(0174 ) (06B )

04 Manage site use and occupancy to maintain sites with-  
in Frissell condition class 3 except for designated  
sites which may be class 4 Close and restore class 5  
sites  
(0175 ) (06B )

05 Prohibit motorized vehicle use (including snowmobiles)  
off Forest System roads and trails in alpine shrub  
and Krummholz ecosystems Prohibit motorized vehicle  
use off Forest System roads and trails (except snowmobiles  
operating on snow) in other alpine, and other ecosystems,  
where needed to protect soils, vegetation, or special wild-  
life habitat  
(0154 ) (06B )

Wildlife and  
Fish Resource  
Management  
(C01)

01 Maintain habitat capability for management  
indicator species  
(0329 ) (06B )

a Maintain capability at  
60 percent of potential  
capability  
(6186 ) (06B )

b Protect all lesser prairie  
chicken leks from surface dis-  
turbance at all times Protect  
nesting habitat from surface  
disturbance from April 15  
to June 30  
(6013PI) (06B )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Wildlife and  
Fish Resource  
Management  
(C01)

02 Provide adequate forage to sustain big-game  
population levels agreed to in the Statewide  
Comprehensive Wildlife Management Plan on NFS  
lands  
(0330 ) (06B )

c Livestock and wild herbivore  
allowable forage use in lesser  
prairie chicken habitat will not  
exceed 40 percent  
(6014PI) (06B )

Range Resource  
Management  
(D02)

01 Use only intensive grazing systems or remove  
livestock when recovery of range condition cannot  
be accomplished by an intensive grazing system  
(0325 ) (06B )

a Allocate no more than  
80 percent of available  
forage to livestock  
(61B7 ) (06B )

02 Improve range condition to fair or better  
or forage value rating to moderately high or better  
(0326 ) (06B )

a Base range condition on the  
standards in Range Analysis  
Handbook (FSH 2209 21)  
(6156 ) (06B )

03 Invest in cost-effective allotment management  
and associated range improvements  
(0327 ) (06B )

a Base economic analysis on  
Project Effectiveness Analysis  
Handbook (FSH 2209 11)  
(6290 ) (06B )

04 Invest in cost-effective grazing management and  
rangeland productivity improvements Where improve-  
ments include water developments, a water right in the  
name of the United States must be obtained  
(0328 ) (06B )

a Structural improvements  
will not adversely affect  
big-game movement  
(61B2 ) (06B )

Silvicultural  
Prescriptions  
(E03, 06 & 07,

01 Maintain and manage forested inclusions to provide  
a high level of forage production, wildlife habitat,  
and diversity  
(0333 ) (06B )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, O6 ' 07)

02 Manage Forest cover types using the following  
harvest methods

- Clearcut in aspen and lodgepole pine,
- Shelterwood in interior ponderosa pine  
and mixed conifer,
- Clearcut and/or shelterwood in Engelmann spruce/  
subalpine fir, according to the following  
criteria

- a Utilize the shelterwood method on south  
and west aspects to provide seed and shade  
protection if windfall risk is below  
average. It can also be used on other  
aspects when cold, droughty sites are  
present (Engelmann spruce/moss habitat  
type, for example)
- b Utilize the clearcut method on north and  
east aspects, or on other aspects if  
moist site conditions are present (subalpine  
fir/forest fleabane habitat type, for  
example). It should also be used on sites  
where windfall risk is above average  
(0046PI) (06B )

03 Utilize firewood material using both commercial  
and noncommercial methods  
(0147 ) (06B )

a Apply harvest treatments to  
forest cover types as specified  
below on at least 80 % of the  
forest cover type. Up to  
20 percent of the type may be  
treated using other harvest  
methods specified in Forest  
Direction  
(6074 ) (06B )

b Silvicultural Standard

Forest Cover Type	Regenera- tion Cutting Method	Rotation Age
lodgepole pine	Clear- cut	90-140 yrs
Engelmann spruce- subalpine fir	Clearcut and/or shelterwood	N/A
Interior ponderosa pine	Shelter- wood	100-180 yrs
mixed conifer	Shelter- wood	100-160 yrs
aspen	Clearcut	80-120 yrs

Apply release and weeding as  
needed to improve visual quality  
(6024PI) (06B )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

- 04 For management purposes, a cut-over area is considered an opening until such time as
- 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 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
- (0500 ) (06B )

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/
Inland Ponderosa Pine	190	6
Mixed Conifers	190	6
Lodgepole Pine	150	6
Engelmann Spruce-Subalpine fir	150	6
Aspen	300	6

  

Forest Cover Type	Crown Closure (Percent)	Distribution 2/
Inland Ponderosa Pine	30	70%
Mixed Conifers	30	75%
Lodgepole		

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Pine	30	75%
Engelmann Spruce- Subalpine fir	30	75%
Aspen	30	75%

1/ Applies to trees specified as  
minimum stocking level  
2/ Percent of plots or tran-  
sects that are stocked

(6014 ) (06B )

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PREScription FOR MANAGEMENT AREA 7A

(Emphasis is on wood-fiber production and utilization.)

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals.

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, lodgepole pine, and Englemann spruce-subalpine fir, and shelterwood in interior 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. Semiprimitive motorized recreation opportunities are provided on those local roads and trails that remain open, semiprimitive nonmotorized opportunities are provided on those that are closed.

The mineral and energy resources activities are compatible with goals of this management area subject to appropriate stipulations as outlined in the general Forest Direction.

B MANAGEMENT REQUIREMENTS

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Visual Resource Management (A04)      01 Meet stated visual quality objective (0125 ) (07A )

a Do not exceed an Adopted Visual Quality Objective (VQO) of

Partial retention within the foreground of arterial/collector roads and primary trails  
Modification on all other areas (6067 ) (07A )

b Apply rehabilitation practices where the above objectives are not currently being met (6068 ) (07A )

Dispersed Recreation Management (A14 and 15)      01 Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided (0445 ) (07A )

02 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 RDS 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 (0650 ) (07A )

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	Moderate	High
-----------	----------	----------	------

RDS Class - Semi-Primitive Nonmotorized

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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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

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

ROS Class - Rural				
On Trails				
PAOT/mile	-	-	-	-
Area-wide				
PAOT/acre	5	8	5 0	7 5

(6402PI) (07A )

b Increase the above use levels where necessary to provide adequate access to areas or natural features that afford special or unique recreation opportunities  
(6001PI) (07A )

c Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, and 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 bio-

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

physical resources will occur  
(6028PI) (07A )

d Specify off-road vehicle  
restrictions based on ORV  
use management (FSM 2355,  
R2 Supp 88)  
(6083 ) (07A )

e See FSM 2331, FSM 7732,  
FSH 7709 12 (Trails  
Handbook), FSH 7109 11a  
and 11b (Sign Handbook)  
(6226 ) (07A )

03 Permit undesignated sites in Frissell condition class 1  
through 3 where unrestricted camping is permitted  
(0174 ) (07A )

04 Manage site use and occupancy to maintain sites with-  
in Frissell condition class 3 except for designated  
sites which may be class 4 Close and restore class 5  
sites  
(0175 ) (07A )

05 Prohibit motorized vehicle use (including snowmobiles)  
off Forest System roads and trails in alpine shrub  
and Krummholz ecosystems Prohibit motorized vehicle  
use off Forest System roads and trails (except snowmobiles  
operating on snow) in other alpine, and other ecosystems,  
where needed to protect soils, vegetation, or special wild-  
life habitat  
(0154 ) (07A )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Silvicultural  
Prescriptions  
(E03, 06 & 07)

01 Manage Forest cover types using the following  
harvest methods

- Clearcut in aspen and lodgepole pine,
- Shelterwood in interior ponderosa pine  
and mixed conifer,
- Clearcut and/or shelterwood in Engelmann spruce/  
subalpine fir, according to the following  
criteria

- a Utilize the shelterwood method on south  
and west aspects to provide seed and shade  
protection if windfall risk is below  
average. It can also be used on other  
aspects when cold, droughty sites are  
present (Engelmann spruce/moss habitat  
type, for example)
- b Utilize the clearcut method on north and  
east aspects, or on other aspects if  
moist site conditions are present (subalpine  
fir/forest fleabane habitat type, for  
example). It should also be used on sites  
where windfall risk is above average  
(0046PI) (07A )

a Apply harvest treatments to  
forest cover types as specified  
below on at least 80 % of the  
forest cover type. Up to  
20 percent of the type may be  
treated using other harvest  
methods specified in Forest  
Direction  
(6074 ) (07A )

b Silvicultural Standards  
(These standards may be exceeded  
on areas managed for old growth)

1 Clearcut

	Forest Cover Type		
	Engelmann Spruce- Subalpine Fir & Lodgepole Pine-	Aspen	Other Forest Cover Types
Rotation Age	90-180 yrs	80-120 yrs	100 or more yrs
Growing Stock Level	80-160	N/A	60 to 120
Thinning Cycle	10-50 yrs	N/A	10 to 50 yrs

2 Two-Step Shelterwood

	Forest Cover Type	
	Interior Ponderosa pine, Mixed	Other Forest Cover

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(EQ3, 06 & 07)

	Conifer, and Engelmann spruce- subalpine fir	Types
Rotation Age	100-160 yrs	100 or more yrs
Growing Stock Level	60-160	60-120
Thinning Cycle	20-30 yrs	20-30 yrs
First Cut (seed cut), Remove 40 to 70 percent of the basal area or		
Cut to	BA 25-60	BA 20-60
Second Cut (removal cut) Remove all overstory when regenerated stand meets minimum stocking standards		
<b>3 Three-Step Shelterwood</b>		
	Interior Ponderosa Pine, Mixed Conifer and Engelmann spruce- subalpine fir	Other Forest Cover Types
Rotation Age	100-160 yrs	100 or more yrs

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Growing Stock Level	60-160	60-120
Thinning Cycle	20-30 yrs	20-30 yr
First Cut (preparatory cut), Remove 10 to 40 percent of the basal area or		
Cut to	BA 60-80	BA 50-80
Second Cut (seed cut), Remove 40 to 50 percent of the remaining basal area or		
Cut to	BA 25-50 10-20 yrs after pre- paratory cut	BA 20-50 10-20 yrs after prepara- tory cut
Third Cut (removal cut) Remove all overstory when regenerated stand meets minimum stocking standards		
(6025PI)	(07A)	

02 Clearcuts may be applied to dwarf mistletoe infected stands of any forest cover type  
(013B ) (07A )

03 Apply intermediate treatments to maintain growing stock level standards  
(0140 ) (07A )

04 Utilize firewood material using both commercial and noncommercial methods  
(0147 ) (07A )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

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

- 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 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

(0500 ) (07A )

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/
Inland Ponderosa Pine	190	6
Mixed Conifers	190	6
Lodgepole Pine	150	6
Engelmann Spruce-Subalpine fir	150	6
Aspen	300	6
Forest Cover Type	Crown Closure (Percent)	Distribution 2/
Inland Ponderosa Pine	30	70%
Mixed Conifers	30	75%
Lodgepole		

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Pine	30	75%
Engelmann Spruce- Subalpine fir	30	75%
Aspen	30	75%

- 1/ Applies to trees specified as minimum stocking level  
2/ Percent of plots or transects that are stocked

(6014 ) (07A )

b 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 Height 1/ (% of the adjacent mature stand height)
-------------------------	--	---

Inland Ponderosa Pine	190	25
Mixed Conifers	190	25
Lodgepole Pine	150	25
Engelmann		

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Spruce - Sub- alpine fir	150	25
Aspen	300	25
Forest Cover Type	Crown Closure (Percent)	Distri- bution 2/
Inland Ponderosa Pine	30	70%
Mixed Conifers	30	75%
Lodgepole Pine	30	75%
Engelmann Spruce- Subalpine fir	30	75%
Aspen	30	75%

- 1/ Applies to trees specified as  
minimum stocking level  
2/ Percent of plots or transects  
that are stocked  
(6316 ) (07A )

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PREScription FOR MANAGEMENT AREA 7D

(Emphasis is on wood fiber production and utilization for products other than sawtimber)

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

Management emphasis is on production and utilization of small roundwood of a size and quality suitable for products such as fuelwood, posts, poles, props, etc. The harvest method by forest cover type is clearcutting in aspen and lodgepole pine and shelterwood in all other forest cover types.

Management activities, although they may be visually dominant, harmonize and blend with the natural setting.

B MANAGEMENT REQUIREMENTS

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Visual Resource Management (A04)      01 Meet stated visual quality objective (0125 ) (07D )

a Do not exceed an Adopted Visual Quality Objective (VQO) of

Partial retention within the foreground of arterial/collector roads and primary trails  
Modification on all other areas (6067 ) (07D )

b Apply rehabilitation practices where the above objectives are not currently being met (6068 ) (07D )

Dispersed Recreation Management (A14 and 15)

01 Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided (0445 ) (07D )

02 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 (0650 ) (07D )

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	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

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

-----

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

-----

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, and 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  
(6402 ) (07D )

b Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp 88)  
(6083 ) (07D )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

c See FSM 2331, FSM 7732,  
FSH 7709 12 (Trails  
Handbook), FSH 7109 11a  
and 11b (Sign Handbook)  
(6226 ) (07D )

03 Permit undesignated sites in Frissell condition class 1  
through 3 where unrestricted camping is permitted  
(0174 ) (07D )

04 Manage site use and occupancy to maintain sites with-  
in Frissell condition class 3 except for designated  
sites which may be class 4 Close and restore class 5  
sites  
(0175 ) (07D )

05 Prohibit motorized vehicle use (including snowmobiles)  
off Forest System roads and trails in alpine shrub  
and Krummholz ecosystems Prohibit motorized vehicle  
use off Forest System roads and trails (except snowmobiles  
operating on snow) in other alpine, and other ecosystems,  
where needed to protect soils, vegetation, or special wild-  
life habitat  
(0154 ) (07D )

Silvicultural  
Prescriptions  
(E03, 06 & 07)

01 Manage forest cover types using the following harvest  
methods

- Clearcut in aspen and lodgepole,
- Shelterwood in interior ponderosa pine, mixed conifer  
and Engelmann spruce-subalpine fir  
(0463 ) (07D )

a Apply harvest treatments to  
forest cover types as specified  
below on at least 80 % of the  
forest cover type Up to  
20 percent of the type may be  
treated using other harvest  
methods specified in Forest  
Direction  
(6074 ) (07D )

b Silvicultural Standards  
(These standards may be exceeded  
on areas managed for old growth)

1 Clearcut

Forest Cover Type	
Lodgepole	Other Forest Cover

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

	Pine-	Aspen	Types
Rotation Age	50-90 yrs	60-80 yrs	70 or more yrs
Growing Stock Level	80-140	N/A	60 to 120
Thinning Cycle	10-30 yrs	N/A	10 to 30 yrs

2 Two-Step Shelterwood

	Forest Cover Type	
	Engelmann spruce-subalpine fir, interior Ponderosa pine & Mixed conifer	Other Forest Cover Types
Rotation Age	50-90 yrs	70 or more yrs
Growing Stock Level	80-160	60-120
Thinning Cycle	10-30 yrs	10-30 yrs
First Cut (seed cut), Remove 40 to 70 percent of the basal area or		
Cut to	BA 25-60	BA 20-60
Second Cut (removal cut) Remove all overstory when		

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

regenerated stand meets  
minimum stocking standards

3 Three-Step Shelterwood

Forest Cover Type

Engelmann spruce- subalpine fir, Interior Ponderosa Pine & Mixed Conifer	Other Forest Cover Types
--	-----------------------------------

Rotation Age	50-90 yrs	90 or more yrs
-----------------	-----------	-------------------

Growing Stock Level	80-160	60-120
---------------------------	--------	--------

Thinning Cycle	10-30 yrs	10-30 yrs
-------------------	-----------	-----------

First Cut (preparatory cut),  
Remove 10 to 40 percent of the  
basal area or

Cut to	BA 60-80	BA 50-80
--------	----------	----------

Second Cut (seed cut),  
Remove 40 to 50 percent of the  
remaining basal area or

Cut to	BA 25-50 10-20 yrs after pre- paratory cut	BA 20-50 10-20 yrs after prepara- tory cut
--------	---	--

Third Cut (removal cut)

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Remove all overstory when  
regenerated stand meets  
minimum stocking standards  
-----  
(6140 ) (07D )

02 Clearcuts may be applied to dwarf mistletoe infected  
stands of any forest cover type  
(0138 ) (07D )

03 Apply intermediate treatments to maintain growing  
stock level standards  
(0140 ) (07D )

04 Utilize firewood material using both commercial  
and noncommercial methods  
(0147 ) (07D )

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

- 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 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

(0500 ) (07D )

a When the Visual Quality  
Objective of an area is modifi-  
cation 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/ acre
Inland Ponderosa Pine	190	6
Mixed Conifers	190	6
Lodgepole Pine	150	6
Engelmann Spruce-		

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Subalpine fir	150	6
Aspen	300	6
Forest Cover Type	Crown Closure (Percent)	Distri- bution 2/
Inland Ponderosa Pine	30	70%
Mixed Conifers	30	75%
Lodgepole Pine	30	75%
Engelmann Spruce- Subalpine fir	30	75%
Aspen	30	75%
<p>1/ Applies to trees specified as minimum stocking level 2/ Percent of plots or tran- sects that are stocked</p> <p>(6014 ) (07D )</p> <p>b When the Visual Quality Objective of an area is partial retention, the re- generated stand shall meet or exceed all of the following characteristics before a cut- over area is no longer consid- ered an opening</p>		
Forest	Minimum	Tree

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Cover Type	Stocking Level (Trees/ acre)	Height 1/ (% of the adjacent mature stand height)
Inland Ponderosa Pine	190	25
Mixed Conifers	190	25
Lodgepole Pine	150	25
Engelmann Spruce - Sub- alpine fir	150	25
Aspen	300	25
Cover Type	Crown Closure (Percent)	Distrib- ution 2/
Inland Ponderosa Pine	30	70%
Mixed Conifers	30	75%
Lodgepole Pine	30	75%
Engelmann Spruce- Subalpine fir	30	75%
Aspen	30	75%

1/ Applies to trees specified as  
minimum stocking level

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

---

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

2/ Percent of plots or transects  
that are stocked  
(6316 ) (07D )

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PRESCRIPTION FOR MANAGEMENT AREA 8B

(Provides for primitive wilderness opportunities )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

Management emphasis is to provide for the protection and perpetuation of natural bio-physical conditions      On-site regulation of recreation use is minimal      Travel is cross country or by use of a low density constructed trail system

B MANAGEMENT REQUIREMENTS

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management (A04)	01 Design and implement management activities so that the impact of man is not apparent and the area appears in a condition affected only by natural biotic succession (0230 ) (08B )	a The Adopted Visual Quality Objective (VQO) is Preservation (6132 ) (08B )
Dispersed Recreation Management (A14 and 15)	01 Emphasize primitive recreation opportunities requiring a high degree of isolation, solitude, self-reliance and challenge while traveling cross-country or on system trails (0231 ) (08B )	
	02 Prohibit open fires in alpine, krummholz, 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 (0199 ) (08B )	
	03 Manage use to provide a low incidence of contact with other groups or individuals and to prevent unacceptable changes to the biophysical resources (0301 ) (08B )	a Maximum use and capacity levels are
		- Trail and camp encounters during peak use days are less than 6 other parties per day
		- Trail and area-wide use capacity
		-----
		Use Level      Open Lands      Forest & Shrub Lands
		-----
		On Trails (PAOT/Mile    0 5-1 0      2-3
		-----
		(6372 )    (08B )
		b Area-wide Capacity (PAOT/Acre)
		Open Lands
		Alpine, Krummholz      002
		Rock, Mtn grass      005

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

Forest & Shrub Lands  
Ponderosa Pine, Douglas-  
fir, Riparian areas,  
White Pine 01  
Spruce/Fir, Lodge-  
pole Pine, Aspen 02  
(6336 ) (OBB )

c Reduce visitor use when  
the level of use exceeds capacity  
on more than 10 percent of the  
days during summer and fall use  
season  
(6374 ) (OBB )

O4 Manage sites to provide opportunity for moderate to  
high degree of solitude  
(0626 ) (OBB )

a Use a minimum site spacing  
of 500 feet  
(6338 ) (OBB )

b Occupied site guidelines  
(Maximum number of sites  
occupied at one time )  
Lakes

<5 acres 2  
5-25 acres 3  
>25 acres 4

Depending on site suitability/  
availability

Streams and Trails

Open areas 2 sites/mile  
Forested areas 4 sites/mile

(6340 ) (OBB )

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

O1 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  
(0208 ) (OBB )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Wildlife and Fish Resource Management (CO1)	01 Manage human activity so that wildlife and plant species population dynamics and distribution occurs naturally Prohibit fish stocking except for reintroduction of indigenous species or where stocking has been previously authorized and practiced (0220 ) (08B )	
Range Resource Management (DO2)	01 Manage livestock and herbivorous wildlife forage use in accordance with FSM 2320 3 (36 CFR 293 7) (0182 ) (08B )	a Follow established utilization standards for areas, within grazing allotments (6130 ) (08B )
Special Use Management (Non-Recreation) (JO1)	01 Manage surface occupancy activities authorized prior to wilderness designation to reduce impact on wilderness values consistent with the intent of the occupancy authorization (0210 ) (08B )	
	02 Permit only those uses authorized by wilderness legislation, which cannot be reasonably met on non-Wilderness lands (0211 ) (08B )	
Soil Resource Management (KA1)	01 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 (0184 ) (08B )	a Follow procedures specified in Agricultural Handbook 537 for Utilizing the Universal Soil Loss Equation (Cautions contained in WO 2550 letter dated 5/28/82 should be noted ) The guidance for K and T factors are in the National Soils Handbook 407 1 (a)(3) (xvii) (6159 ) (08B )
		b Provide Frissell condition classes 1 and 2 campsites only (6133 ) (08B )
Transportation System Management (LO1 & 20)	01 Locate and design required access roads within the management area for authorized activities to minimize the biophysical and visual impact, and to facilitate restoration (0213 ) (08B )	a Roads will not be authorized  - On slopes steeper than 60%. - In areas of high erosion hazard, - In areas of high geologic

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Transportation  
System  
Management  
(L01 & 20)

02 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  
(0254 ) (08B )

03 Construct or reconstruct trails only when needed to meet objectives of the wilderness transportation system  
(0255 ) (08B )

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  
(6165 ) (08B )

a Maintain trails in accordance with standards in the Trail Handbook (FSH 7709 12)  
(6129 ) (08B )

b Schedule trail maintenance in accordance with Regional Acceptable Work Standards (FSM 1310 R2 ID No 1 7/22/82 )  
(6131 ) (08B )

a Follow standards specified in FSH 7709 12, FSM 2323 11c and 2323 61d w/R-2 Supplement  
(6134 ) (08B )

b Trail density will be less than one mile per square mile  
Trails are constructed and maintained for established capacity levels  
(6161 ) (08B )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Transportation  
System  
Management  
(LO1 & 20)

O4 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

A safety hazard is a physical condition of a trail which may cause injury, is unusual or unexpected, and not readily identifiable by the trail user It is not a condition which is easily identifiable and normally encountered for the type or location of the trail involved The following examples illustrate this distinction

A hazard is a rotten bridge decking or handrail A stream crossing where no bridge is provided and the user would expect this on the type and location of the trail is not a hazard

A hazard is a stable-appearing loose rock in a constructed treadway where all other rocks are stable A trail treadway made up of rocks in a near-natural position, many of which are loose, is not a hazard.

A hazard is a perennial bog-hole on a horse trail An intermittent bog-hole which will dry up by early summer or within a few days following a rain storm is not a hazard

A hazard is a section of trail treadway supported by rotten cribbing A section of trail where the treadway is obviously slippery is not a hazard

A hazard is a marked ford with holes deeper than the normal channel A deep ford with a consistent stream bed is not a hazard

(0214 ) (08B )

O5 Use corduroy and/or puncheon treads across bogs where no safe and feasible bypass opportunity exists

(0215 ) (08B )

O6 Close or sign system trails when not maintained to the safe standard for the specified use

(0216 ) (08B )

a Maintain trails in accordance with standards in the Trail Handbook (FSH 7709 12)  
(6129 ) (08B )

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

---

CONTINUATION OF  
Transportation  
System  
Management  
(L01 & 20)

07 Use signs of unstained wood with routed letters  
and mounted on unstained posts  
(0249 ) (08B )

a Follow standards specified in  
FSH 7109 11a and 11b  
(6158 ) (08B )

08 Provide signs at trail terminals and trail junctions  
only Include only trail identification and identification  
of terminal points  
(0250 ) (08B )

FA&D  
Construction  
Reconstruction  
and Maintenance  
(L24 AND 25)

01 Prohibit construction of new administrative fac-  
ilities or structures In the event a substantial  
portion of the existing administrative facility and/  
or structure is destroyed, it will not be replaced  
(0207 ) (08B )

III-195

PRESCRIPTION FOR MANAGEMENT AREA 8C

(Provides for semiprimitive recreation opportunities )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

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 not an essential part of the social setting Human travel is principally on system trails Designated campsites are used and show evidence of repeated, but acceptable levels of use

All resource management activities are integrated in such a way that current human use leaves only limited and site-specific evidence of their passing Areas with evidence of unacceptable levels of past use are rehabilitated and the affected area restored Range allotments with authorized permanent structures, and authorized mineral exploration activities requiring multiyear surface occupancy facilities may be present within the area Scientific and other authorized practices utilizing nonmotorized equipment, but requiring up to season-long occupancy are compatible

B MANAGEMENT REQUIREMENTS

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Visual Resource  
Management  
(A04)

01 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  
(0173 ) (OBC )

Dispersed  
Recreation  
Management  
(A14 and 15)

01 Provide semi-primitive recreation opportunities  
requiring predominately unmodified natural settings,  
with a moderate to high degree of challenge and risk  
while traveling cross-country or on trails  
(0237 ) (OBC )

02 Prohibit open fires in alpine, krummholz, 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  
(0199 ) (OBC )

03 Permit undesignated sites in Frissell condition class 1  
through 3 where unrestricted camping is permitted  
(0174 ) (OBC )

04 Manage site use and occupancy to maintain sites with-  
in Frissell condition class 3 except for designated  
sites which may be class 4 Close and restore class 5  
sites  
(0175 ) (OBC )

05 Manage summer use to allow moderate to high  
contact with other groups and individuals  
(0752 ) (OBC )

- a Areawide Capacity  
(PADT/Acre)
- Open lands
- Alpine, Krummholz 004
- Rock, Mtn grass 008
- Forest and Shrub lands
- Ponderosa Pine, Douglas-  
fir, Riparian areas,
- White Pine 05
- Spruce/fir, Lodgepole  
Pine, Aspen 08

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

(6126 ) (OBC )

b Maximum use and capacity  
levels are

- Trail and camp encounters  
during peak use days are less  
than 20 other parties per day
- Trail capacity is displayed  
below

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

(6346 ) (OBC )

c Reduce visitor use when the  
level of use exceeds capacity on  
more than 20 percent of the days  
during the summer use season  
(6019 ) (OBC )

06 Reduce visitor use when the level of use exceeds  
capacity for more than 20 percent of the summer use  
season  
(0489 ) (OBC )

07 Permits for parties larger than the established limit  
may be issued when their presence can be adequately screen-  
ed from the sights and sounds of other parties in the  
area  
(0302 ) (OBC )

08 Manage location of campsites to provide a moderate  
degree of solitude  
(0628 ) (OBC )

a Locate campsites at least  
300' apart  
(6348 ) (OBC )

b Occupied Site Guidelines  
(Maximum number of sites occupied  
at one time )  
Lakes < 5 acres 2

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

5-25 acres 3  
>25 acres 4  
Streams  
Open areas 3 sites/mile  
Forested areas 6 sites/mile  
(6350 ) (OBC )

09 Manage site use and occupancy to maintain sites within Frissell condition class 3 except for designated sites which may be class 4  
(0636 ) (OBC )

a Allow sites to be occupied 20 days/summer season or to the level required to maintain at least a stable trend in site condition  
(6352 ) (OBC )

b Close and restore Frissell condition class 4 sites unless a designated site Close and restore class 5 sites  
(6354 ) (OBC )

661-199  
III-III

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

01 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  
(0208 ) (OBC )

Range Resource  
Management  
(D02)

01 Manage livestock and herbivorous wildlife forage use in accordance with FSM 2320 3 (36 CFR 293 7)  
(0182 ) (OBC )

a Follow established utilization standards for areas, within grazing allotments  
(6130 ) (OBC )

Special Use  
Management (Non-  
Recreation)  
(J01)

01 Manage surface occupancy activities authorized prior to wilderness designation to reduce impact on wilderness values consistent with the intent of the occupancy authorization  
(0210 ) (OBC )

02 Permit only those uses authorized by wilderness legislation, which cannot be reasonably met on non-Wilderness lands  
(0211 ) (OBC )

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Soil Resource  
Management  
(KA1)

O1 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  
(O1B4 ) (OBC )

a Follow procedures specified in Agricultural Handbook 537 for Utilizing the Universal Soil Loss Equation (Cautions contained in WO 2550 letter dated 5/28/82 should be noted ) The guidance for K and T factors are in the National Soils Handbook 407 1 (a)(3) (xv11)  
(6159 ) (OBC )

Transportation  
System  
Management  
(LO1 & 20)

O1 Locate and design required access roads within the management area for authorized activities to minimize the biophysical and visual impact, and to facilitate restoration  
(O213 ) (OBC )

a Roads will not be authorized

- On slopes steeper than 60%.
- 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  
(6165 ) (OBC )

O2 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 VQD  
(O254 ) (OBC )

a Maintain trails in accordance with standards in the Trail Handbook (FSH 7709 12)  
(6129 ) (OBC )

b Schedule trail maintenance in accordance with Regional Acceptable Work Standards (FSM 1310 R2 ID No 1 7/22/82 )  
(6131 ) (OBC )

O3 Construct or reconstruct trails only when needed to meet objectives of the wilderness transportation system  
(O255 ) (OBC )

a Follow standards specified in FSH 7709 12, FSM 2323 11c and 2323 61d w/R-2 Supplement  
(6134 ) (OBC )

III-200

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Transportation  
System  
Management  
(L01 & 20)

b Trail density will not exceed two miles per square mile  
Trails are constructed and maintained for moderate to high levels of use as specified below  
(6162 ) (OBC )

O4 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

A safety hazard is a physical condition of a trail which may cause injury, is unusual or unexpected, and not readily identifiable by the trail user It is not a condition which is easily identifiable and normally encountered for the type or location of the trail involved The following examples illustrate this distinction

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A hazard is a section of trail treadway supported by rotten cribbing A section of trail where the treadway is obviously slippery is not a hazard

A hazard is a marked ford with holes deeper than the normal channel A deep ford with a consistent stream bed is not a hazard  
(0214 ) (OBC )

III-201

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Transportation  
System  
Management  
(L01 & 20)

05 Use corduroy and/or puncheon treads across bogs where  
no safe and feasible bypass opportunity exists  
(0215 ) (OBC )

06 Close or sign system trails when not maintained to  
the safe standard for the specified use  
(0216 ) (OBC )

a Maintain trails in accordance  
with standards in the Trail Hand-  
book (FSH 7709 12)  
(6129 ) (OBC )

07 Use signs of unstained wood with routed letters  
and mounted on unstained posts  
(0249 ) (OBC )

a Follow standards specified in  
FSH 7109 11a and 11b  
(6158 ) (OBC )

08 Provide signs at trail terminals and trail junctions  
only Include only trail identification and identification  
of terminal points  
(0250 ) (OBC )

FA&D  
Construction  
Reconstruction  
and Maintenance  
(L24 AND 25)

01 Prohibit construction of new administrative fac-  
ilities or structures In the event a substantial  
portion of the existing administrative facility and/  
or structure is destroyed, it will not be replaced  
(0207 ) (OBC )

III-202

PRESCRIPTION FOR MANAGEMENT AREA 9A

(Emphasis is on Riparian Area Management )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals:

Emphasis is on the management of all of the component ecosystems of riparian area. These components include the aquatic ecosystem, the riparian ecosystem (characterized by distinct vegetation), and adjacent ecosystems that remain within approximately 100 ft measured horizontally from both edges of all 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.

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 requirements. The linear nature of streamside riparian areas permits programming of management activities which are not visually evident or are visually subordinate.

Forest riparian ecosystems are treated to improve wildlife and fish habitat diversity specified silvicultural objectives. Both commercial and noncommercial vegetation treatments are used to achieve multi-resource benefits. Clearcutting is used to regenerate aspen clones. Other forest cover types are treated with either small-group or single-tree selection methods. Fish habitat improvement treatments are applied to lakes and streams to enhance habitats and increase fish populations.

Livestock grazing is at a level that will assure maintenance of the vigor and regenerative capacity of the riparian plant communities. Vehicular travel is limited on roads and trails at times when the ecosystems would be unacceptably damaged. Developed recreation facility construction for overnight use is prohibited within the 100-year floodplain.

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 upland zones, in the Water Resource Maintenance management activity, and elsewhere.

The mineral and energy resources activities are compatible with goals of this management area subject to appropriate stipulations as outlined in the general Forest Direction.

B MANAGEMENT REQUIREMENTS

MANAGEMENT ACTIVITIES

GENERAL DIRECTION

STANDARDS & GUIDELINES

Visual Resource Management (A04)

O1 Design and implement management activities which sustain inherent visual values of riparian areas and blend with the surrounding natural landscapes (0656 ) (09A )

a Do not exceed an Adopted Visual Quality Objective (VQO) of Partial Retention (6135 ) (09A )

Dispersed Recreation Management (A14 and 15)

O1 Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided (0445 ) (09A )

O2 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 RDS 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 (0650 ) (09A )

a — Maximum Use and Capacity Levels are

Recreation use and capacity range during the snow-free period (PADT/acre)

Trail use and capacity range (PADT/mile of trail)

Capacity Range

Use Level	Very Low	Moderate	High
-----------	----------	----------	------

RDS Class - Semi-Primitive Nonmotorized

On Trails PADT/mile	2 0	3 0	9 0	11 0
---------------------	-----	-----	-----	------

Area-wide PADT/acre	004	008	05	08
---------------------	-----	-----	----	----

RDS Class - Semi-Primitive Motorized

On Trails PADT/mile	2 0	3 0	9 0	11 0
---------------------	-----	-----	-----	------

Area-wide PADT/acre	004	008	05	08
---------------------	-----	-----	----	----

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

-----  
ROS Class - Roded Natural  
-----

On Trails  
PAOT/mile - - - -

Area-wide  
PAOT/acre 04 08 12 25

-----  
ROS Class - Rural  
-----

On Trails  
PAOT/mile - - - -

Area-wide  
PAOT/acre 5 8 50 75

-----  
Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, and 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  
(6402 ) (09A )

b Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp 88)  
(6083 ) (09A )

c See FSM 2331, FSM 7732, FSH 7709 12 (Trails Handbook), FSH 7109 11a and 11b (Sign Handbook)  
(6226 ) (09A )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

03 Permit undesignated sites in Frissell condition class 1 through 3 where unrestricted camping is permitted

(0174 ) (09A )

04 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

(0175 ) (09A )

05 Prohibit motorized vehicle use (including snowmobiles) off Forest System roads and trails in alpine shrub and Krummholz ecosystems Prohibit motorized vehicle use off Forest System roads and trails (except snowmobiles operating on snow) in other alpine, and other ecosystems, where needed to protect soils, vegetation, or special wildlife habitat

(0154 ) (09A )

Wildlife and  
Fish Resource  
Management  
(G01)

01 Manage for habitat needs of management indicator species

(0340 ) (09A )

a Maintain habitat capability at a level at least 80 percent of potential capability  
(6261 ) (09A )

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

01 Provide habitat diversity through vegetation treatments, in conjunction with other resource activities, designed to maintain or improve wildlife or fisheries habitat

(0658 ) (09A )

02 Provide habitat for viable populations of all native vertebrate species of fish and wildlife

(0750 ) (09A )

03 Plan lake and stream habitat improvement projects with the assistance of state wildlife agencies, where aquatic habitats are below productive potential Plan those improvements that harmonize with the visual setting

(0660 ) (09A )

III-206

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Wildlife  
Habitat  
Improvement and  
Maintenance  
(002, 04, 05  
and 06)

04 Maintain a current fish habitat inventory in co-  
operation with state wildlife agencies  
(0662 ) (09A )

Range Resource  
Management  
(D02)

01 Maintain proper stocking and livestock distribution  
to protect riparian ecosystems  
(0666 ) (09A )

02 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 Relocate  
them outside riparian areas if possible, and if  
necessary to achieve riparian-area goals  
(0108 ) (09A )

Silvicultural  
Prescriptions  
(E03, 06 & 07)

01 Manage forest cover types to perpetuate tree cover  
and provide healthy stands, high water quality and  
wildlife and fish habitat  
(0088 ) (09A )

02 Manage Forest Cover Types using the following  
harvest methods

- Clearcut in aspen, and
- Selection (Group or Single tree) in all other  
cover types  
(0486 ) (09A )

a Apply harvest treatments to  
forest cover types as specified  
below on at least 80 % of the  
forest cover type Up to  
20 percent of the type may be  
treated using other harvest  
methods specified in Forest  
Direction  
(6074 ) (09A )

b Silvicultural Standards  
(These standards may be exceeded  
on areas managed for old  
growth)

1 Clearcut

Forest Cover Type	
Rotation	Aspen 80-120

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Age	yr
2	Selection (group or single tree)
	All other Forest Cover Types
Rotation Age	90-160
Cutting Cycle	20-30 yrs
For group selection, size of openings are less than two acres (6154 ) (09A )	

03 Apply intermediate treatments to maintain growing stock level standards  
(0140 ) (09A )

04 Adjust stocking levels by site quality, higher stocking should occur on better sites  
(0668 ) (09A )

05 Utilize firewood material using both commercial and noncommercial methods  
(0147 ) (09A )

06 Establish a satisfactory stand either naturally or through artificial regeneration methods within a five-year period after disturbance  
(0726 ) (09A )

07 Prohibit log landing and decking areas within the riparian area  
(0670 ) (09A )

III-208

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, O6 & O7)

O8 Reduce debris jam potential by cutting stumps  
to near ground level in the 100-year floodplain  
(O672 ) (O9A )

O9 For management purposes, a cut-over area is  
considered an opening until such time as

- 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 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

(O500 ) (O9A )

a When the Visual Quality Objective of an area is partial retention, the re-generated 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 Height 1/ (% of the adjacent mature stand height)
Inland Ponderosa Pine	190	25
Mixed Conifers	190	25
Lodgepole Pine	150	25
Engelmann Spruce - Sub-alpine fir	150	25
Aspen	300	25
Forest Cover Type	Crown Closure (Percent)	Distribution 2/
Inland Ponderosa Pine	30	70%

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, O6 & O7)

Mixed Conifers	30	75%
Lodgepole Pine	30	75%
Engelmann Spruce- Subalpine fir	30	75%
Aspen	30	75%

- 1/ Applies to trees specified as  
minimum stocking level  
2/ Percent of plots or transects  
that are stocked  
(6316 ) (09A )

III-210

Water Resource  
Improvement and  
Maintenance  
(F05 and O6)

O1 Prevent or remove debris accumulations that reduce  
stream channel stability and capacity  
(0001 ) (09A )

O2 Proposed new land use facilities (roads, campgrounds,  
buildings) will not normally be located within flood-  
plain boundaries for the 100-year flood  
(0012PI) (09A )

- a Implement mitigation measures  
when present or unavoidable future  
facilities are located in the ac-  
tive floodplain to ensure that  
State water quality standards,  
sediment threshold limits, bank  
stability criteria, flood hazard  
reduction and instream flow  
standards are met during and  
immediately after construction  
(6604 ) (09A )

O3 Prevent stream channel instability, loss of channel  
cross-sectional areas, and loss of water quality  
resulting from activities that alter vegetative cover  
(0007 ) (09A )

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Water Resource  
Improvement and  
Maintenance  
(FO5 and O6)

O4 Maintain sediment yield within threshold limits  
The effects on water and sediment yields from vegeta-  
tion manipulation and road construction projects will  
be determined through the use of appropriate modeling  
and/or quantification procedures to determine sediment  
yield threshold limits and water yield increase  
potentials  
(O632 ) (O9A )

a Limit Changes in Channel rating  
or classification scores to an  
increase of 10 percent or less  
Use channel stability criteria  
established by Cooper, 1978 and  
Pfankuch, 1975 Use channel  
classification criteria estab-  
lished by Rosgen, 1980  
(6001 ) (O9A )

b Prescription-induced water  
yield increases should not exceed  
prescribed thresholds of allowable  
increase nor should the total  
yield of water and sediment  
exceed maximum allowable amounts  
as stated in the above references  
(6060 ) (O9A )

c Maintain at least  
80 percent of potential ground  
cover within 100 ft from the  
edges of all perennial streams,  
lakes and other waterbodies, or  
to the outer margin of the rip-  
arian ecosystem, where wider  
than 100 feet  
(6650 ) (O9A )

O5 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 con-  
sistent with each major stream type  
(O680 ) (O9A )

O6 Management practices within municipal watersheds  
will not vary from use restrictions to water resource  
improvement practices The primary objective is to  
meet water quality standards established for the  
individual watersheds  
(O024PI) (O9A )

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Water Resource  
Improvement and  
Maintenance  
(F05 and 06)

07 Treat disturbed areas resulting from management activities, to reduce sediment yields to the natural erosion rates in the shortest possible time  
(0684 ) (09A )

08 Stabilize streambanks which are damaged beyond natural recovery in a reasonable time period with appropriate methods or procedures that emphasize control by vegetation  
(0686 ) (09A )

09 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  
(0688 ) (09A )

10 Include wildlife and fish habitat, aesthetic, or safety goals when planning projects that result in vegetation type conversion  
(0690 ) (09A )

11 Require concurrent monitoring to ensure that mitigative measures are effective and in compliance with state water quality standards  
(0692 ) (09A )

Soil Resource  
Management  
(KA1)

01 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

(0091 ) (09A )

02 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  
(0003 ) (09A )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Soil Resource  
Management  
(KA1)

03 Maintain or enhance the long-term pro-  
ductivity of soils within the riparian eco-  
system  
(0694 ) (09A )

Mining Law  
Compliance and  
Administration  
(G01)

01 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  
(0706 ) (09A )

a Prohibit the depositing of  
soil material from drilling,  
processing, or site preparation  
in natural drainageways  
(6612 ) (09A )

b Locate the lower edge of dis-  
turbed or deposited soil banks  
outside the active floodplain  
(6614 ) (09A )

c Prohibit stockpiling of top-  
soil or any other disturbed soil  
in the active floodplain  
(6616 ) (09A )

d Prohibit mineral processing  
(milling) activities within the  
active floodplain  
(6618 ) (09A )

e Discontinue heavy equipment  
use when soil compaction, rutting,  
and puddling is present  
(6620 ) (09A )

02 Locate mineral removal activities away from the  
water's edge or outside the riparian area  
(0708 ) (09A )

a Locate drilling mud pits out-  
side the active floodplain unless  
alternate locations are more envi-  
ronmentally damaging If location  
is unavoidable, seal and dike all  
pits to prevent leakage  
(6624 ) (09A )

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 sur-  
face protection during storm-  
flow and snowmelt runoff

III-213

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Mining Law  
Compliance and  
Administration  
(G01)

events  
(6626 ) (09A )

03 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.  
(0710 ) (09A )

a Permit diversion activities within the riparian zone where technology is available to maintain water quality standards, sediment threshold limits, and instream flow standards  
(6622 ) (09A )

04 Confine heavy equipment use to areas necessary for mineral extraction  
(0712 ) (09A )

05 Locate mining camps outside the active floodplain  
(0716 ) (09A )

06 Require concurrent monitoring to ensure that mitigative measures are effective and in compliance with State water quality standards  
(0714 ) (09A )

Transportation  
System  
Management  
(L01 & 20)

01 Locate roads and trails outside riparian areas unless alternative routes have been reviewed and rejected as being more environmentally damaging  
(0718 ) (09A )

a Do not parallel streams when road location must occur in riparian areas except where absolutely necessary. Cross streams at right angles. Locate crossings at points of low bank slope and firm surfaces  
(6628 ) (09A )

02 Create artificial sediment traps with barriers where the natural vegetation is inadequate to protect the waterway or lake from significant accelerated sedimentation  
(0720 ) (09A )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

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CONTINUATION OF  
Transportation  
System  
Management  
(L01 & 20)

03 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  
(0724 ) (09A )

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MANAGEMENT PRESCRIPTION 09A

PRESCRIPTION FOR MANAGEMENT AREA 9B

(Emphasis is on Increased Water Yield through Vegetation Manipulation )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

Management emphasis is on increased water yield and improved timing of flow through manipulation of forest vegetation. The location, shape, and size of vegetation treatment areas are specifically designed. Clearcutting is the harvest method used with all forest cover types. Management activities in foreground, middleground, and background may dominate, but harmonize and blend with the natural setting.

Livestock grazing occurs but not to the point that regeneration of forested areas or water-yield objectives are impaired. Semiprimitive recreation is the predominate recreation use. Motorized travel may be prohibited.

The mineral and energy resources activities are compatible with goals of this management area subject to appropriate stipulations as outlined in the general Forest Direction.

B MANAGEMENT REQUIREMENTS

MANAGEMENT ACTIVITIES

GENERAL DIRECTION

STANDARDS & GUIDELINES

Visual Resource Management (A04)

01 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 (0263 ) (09B )

a Do not exceed an Adopted Visual Quality Objective (VQO) of modification (6267 ) (09B )

Dispersed Recreation Management (A14 and 15)

01 Semi-primitive nonmotorized, semi-primitive motorized, roaded natural and rural recreation opportunities can be provided (0445 ) (09B )

02 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 RDS 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 (0650 ) (09B )

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	Moderate	High
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RDS Class - Semi-Primitive Nonmotorized

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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RDS Class - Semi-Primitive Motorized

On Trails PAOT/mile	2 0	3 0	9 0	11 0
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Area-wide

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

PAOT/acre	004	008	05	08
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 5
(6402PI)	(09B)			

b Increase the above use levels where necessary to provide adequate access to areas or natural features that afford special or unique recreation opportunities  
(6001PI) (09B)

c Reduce the above use level coefficients as necessary to reflect usable acres, patterns of use, and 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 bio-physical resources will occur  
(6028PI) (09B)

d Specify off-road vehicle restrictions based on ORV use management (FSM 2355, R2 Supp 88)  
(6083) (09B)

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Dispersed  
Recreation  
Management  
(A14 and 15)

e See FSM 2331, FSM 7732,  
FSH 7709 12 (Trails  
Handbook), FSH 7109 11a  
and 11b (Sign Handbook)  
(6226 ) (09B )

03 Permit undesignated sites in Frissell condition class 1  
through 3 where unrestricted camping is permitted  
(0174 ) (09B )

04 Manage site use and occupancy to maintain sites with-  
in Frissell condition class 3 except for designated  
sites which may be class 4 Close and restore class 5  
sites  
(0175 ) (09B )

05 Prohibit motorized vehicle use (including snowmobiles)  
off Forest System roads and trails in alpine shrub  
and Krummholz ecosystems Prohibit motorized vehicle  
use off Forest System roads and trails (except snowmobiles  
operating on snow) in other alpine, and other ecosystems,  
where needed to protect soils, vegetation, or special wild-  
life habitat  
(0154 ) (09B )

Wildlife and  
Fish Resource  
Management  
(C01)

01 Maintain habitat capability for management  
indicator species  
(0329 ) (09B )

a Maintain capability at  
60 percent of potential  
capability  
(6186 ) (09B )

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

01 Maintain wildlife habitat effectiveness Permanent  
openings may be employed Reduce disturbance to wildlife  
so that no significant long-term negative wildlife effects  
result  
(0155 ) (09B )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Silvicultural  
Prescriptions  
(E03, 06 & 07)

01 Manage Forest cover types using the following harvest methods

- Clearcut in lodgepole pine, aspen, interior ponderosa pine and mixed conifer,
- Clearcut and group selection in Engelmann spruce/subalpine fir, according to the following criteria
  - a Utilize the group selection method where the objective is to perpetuate uneven-aged stand structure
  - b Utilize the clearcut method in even-aged stands located on north and east aspects, or other aspects if moist site conditions are present (subalpine fir/forest fleabane habitat type, for example) It should also be used in even-aged stands having above-average windfall risk  
(0047PI) (09B )

a Apply harvest treatments to forest cover types as specified below on at least 80 % of the forest cover type Up to 20 percent of the type may be treated using other harvest methods specified in Forest Direction  
(6074 ) (09B )

b Silvicultural Standards  
(These standards may be exceeded on areas managed for old growth)

1 Clearcut

	Interior Ponderosa pine, Engelmann spruce-subalpine fir & Mixed Conifer	Aspen	Other Forest Cover Types
Rotation Age	90-180 yrs	80-120 yrs	100 or more yrs
Growing Stock Level	60-160	N/A	60-120
Thinning Cycle	10-50 yrs	N/A	20-40 yrs
2 Group Selection			
	Engelmann spruce-subalpine		Other Forest Cover

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

	fir	Types
Residual BA	60-160	80-120
Cutting Cycle	20-30 yrs	20-40 yr

The largest increase in water available for stream flow results when 30 to 40 percent of a drainage is harvested in small clear-cut patches dispersed throughout the area of a watershed (Leaf and Alexander FS Res Pap RM 133) Clearcuts will utilize shaped cutting areas with width 3-8 times the height of the remaining overstory  
(6026PI) (09B )

02 Apply intermediate treatments to maintain growing stock level standards  
(0140 ) (09B )

03 Utilize firewood material using both commercial and noncommercial methods  
(0147 ) (09B )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

O4 For management purposes, a cut-over area is considered an opening until such time as

- 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 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

(0500 ) (09B )

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/
Inland Ponderosa Pine	190	6
Mixed Conifers	190	6
Lodgepole Pine	150	6
Engelmann Spruce-Subalpine fir	150	6
Aspen	300	6

  

Forest Cover Type	Crown Closure (Percent)	Distribution 2/
Inland Ponderosa Pine	30	70%
Mixed Conifers	30	75%
Lodgepole		

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MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES	
CONTINUATION OF Silvicultural Prescriptions (E03, 06 & 07)		Pine	30 75%
		Engelmann Spruce- Subalpine fir	30 75%
		Aspen	30 75%
		1/ Applies to trees specified as minimum stocking level 2/ Percent of plots or tran- sects that are stocked	
		(6014 ) (09B )	
Reforestation (E04)	01 Use in-place prescriptions to identify reforestation needs use natural regeneration where successful natural regeneration is predicted (0025PI) (09B )		
Water Resource Improvement and Maintenance (F05 and 06)	01 Prolong streamflow, increase water yields and meet State water quality standards (0145 ) (09B )		

PRESCRIPTION FOR MANAGEMENT AREA 10A  
(Provides for Research Natural Areas )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

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

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B MANAGEMENT REQUIREMENTS

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management (A04)	01 Meet stated visual quality objective (0125 ) (10A )	a Do not exceed an Adopted Visual Quality Objective (VQO) of retention (6215 ) (10A )
Recreation Site Construction and Rehabilitation (A05 AND 06)	01 Prohibit construction of developed recreation sites (0368 ) (10A )	
Dispersed Recreation Management (A14 and 15)	01 Discourage or prohibit any public use which contributes to impairment of research or educational values (0369 ) (10A )	a Reference FSM 4063 36 (6291 ) (10A )
	02 Permit and encourage use by scientists and educators (0370 ) (10A )	
Wildlife Habitat Improvement and Maintenance (C02, 04, 05 and 06)	01 Prohibit any direct habitat manipulation (0371 ) (10A )	
Range Resource Management (D02)	01 Restrict grazing by livestock to that essential for the maintenance of a specific vegetation type (0372 ) (10A )	
Silvicultural Prescriptions (E03, 06 & 07)	01 Prohibit any logging activity (0373 ) (10A )	
Special Use Management (Non-Recreation) (J01)	01 Use special use permits or cooperative agreements to authorize and document scientific activity (0374 ) (10A )	a Reference FSM 4063 37 (6217 ) (10A )
Withdrawals, Modifications and Revocations (J04)	01 Withdraw from mineral entry in conformance with Section 204 of Federal Land Policy and Management Act of 1976 (PL 94-579) (0375 ) (10A )	

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Property Boundary Location (J06)	01 Monument all corners or turning points and document and record the monumentation in the establishment report Mark boundaries in the field when appropriate to ensure integrity of the area (0376 ) (10A )	
Transportation System Management (L01 & 20)	01 Generally, physical improvements, such as roads are not permitted (0377 ) (10A )	
Trail System Management (L23)	01 Limit trails to those needed for access to conduct research and for educational purposes (0378 ) (10A )	
Fire Planning and Suppression (P01)	01 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 (0379 ) (10A )	a Leave fire-caused debris for natural decay (6218 ) (10A )
	02 Do not reduce fire hazard within the RNA (0380 ) (10A )	
Law Enforcement (P24 thru 27)	01 Use special closures when necessary to protect the RNA from actual or potential damage from public use (0381 ) (10A )	a Issue closure order under provisions of 36 CRF 261 50 (FSM 4063 3) (6219 ) (10A )
Protection (P40)	01 Take no action against endemic insects, diseases or wild animals (0382 ) (10A )	

III-226

PRESCRIPTION FOR MANAGEMENT AREA 10B

(Provides for Experimental Forests )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals

Management emphasis is to provide for experiments, tests, and other activities to obtain, analyze, develop, demonstrate, and disseminate scientific information about protecting, managing and utilizing forest and rangeland renewable resources

B MANAGEMENT REQUIREMENTS

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
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Special Use Management (Non -Recreation) (J01)	01 Apply Forest-wide direction standards and guidelines where not in conflict with Experimental Forest or research facility agreements or permits (0013PI) (10B )	
	02 Experimental Forests Manage in accordance with the Director, Rocky Mountain Forest and Range Experiment Station	
	a Manitou Experimental Forest (0014PI) (10B )	
	03 Research Facility - Colorado State University Southeast Colorado Research Center (SECRC) Manage in accordance with the terms of the permit authorizing the facilities and activities (0015PI) (10B )	

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PREScription FOR MANAGEMENT AREA 10C  
(Provides for Special Interest Areas )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals.

Emphasis is on management of areas of unusual scenic, historical, geological, botanical, zoological, palentological, or other special characteristics to protect and where appropriate, foster public use and enjoyment of these areas.

B MANAGEMENT REQUIREMENTS

MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Visual Resource Management (A04)	01 Meet stated visual quality objective (0125 ) (10C )	<p>a Do not exceed an Adopted Visual Quality Objective (VQO) of retention (6215 ) (10C )</p> <p>b Apply rehabilitation practices where the above objectives are not currently being met (606B ) (10C )</p> <p>c Manage visual resources using the above standards in accordance with FSM 2380 and FSH 2309 16 through FSH 2309 25 (6225 ) (10C )</p>
Recreation Site Construction and Rehabilitation (A05 AND 06)	01 Prohibit construction of developed recreation sites (0368 ) (10C )	
Dispersed Recreation Management (A14 and 15)	<p>01 Emphasize interpretation and education so long as significant features can be maintained (0054PI) (10C )</p> <p>02 Permit and encourage use by scientists and educators (0370 ) (10C )</p>	a Reference FSM 4063 36 (6291 ) (10C )
Special Use Management (Non-Recreation) (J01)	<p>01 Scenic Areas Manage in accordance with the plan approved in the establishment document (0016PI) (10C )</p> <p>02 Natural History Areas Manage to protect the features for which the areas were established and in accordance with applicable laws and regulations Manage in accordance with appropriate Forest-wide and management area direction where not in conflict with the above (0017PI) (10C )</p>	

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Special Use  
Management (Non  
-Recreation)  
(J01)

03 National Historic Landmarks Manage in accordance with appropriate laws and regulations to preserve and protect the cultural resource values for which the area was recognized Manage in accordance with appropriate Forest-wide and management area direction where not in conflict  
(0018PI) (10C )

04 National Recreation Trails Manage in accordance with applicable laws to preserve the qualities for which the trails were established

Manage in accordance with appropriate Forest-wide and management area direction where not in conflict  
(0019PI) (10C )

05 Special Withdrawals Manage in accordance with regulations applicable to the area in accordance with the purpose for which the withdrawal was established

a Future poversites will be protected and managed to not interfere with their future use  
(0020PI) (10C )

06 Comanche Lesser Prairie Chicken Habitat  
Zoological Area  
(0050PI) (10C )

a Protect all lesser prairie chicken leks from surface disturbance at all times Protect nesting habitat from surface disturbance from April 15 to June 30  
(6013PI) (10C )

b Livestock and wild herbivore allowable forage use in lesser prairie chicken habitat will not exceed 40 percent  
(6014PI) (10C )

c Special habitat needs of the lesser prairie chicken are to be provided for the affected allotment management plans (AMP)  
(6017PI) (10C )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

<p>CONTINUATION OF Special Use Management (Non -Recreation) (J01)</p>	<p>07 Special Interest Areas (Botanical) Manage in accordance with the Plan approved in the establishment document (0051PI) (10C )</p> <p>08 Use special use permits or cooperative agreements to authorize and document scientific activity (0374 ) (10C )</p>	<p>a Reference FSM 4063 37 (6217 ) (10C )</p>
<p>Fire Planning and Suppression (P01)</p>	<p>01 Extinguish wildfires endangering the area (0052PI) (10C )</p>	
<p>Law Enforcement (P24 thru 27)</p>	<p>01 Use special closures when necessary to protect the area from actual or potential damage from public use  (0053PI) (10C )</p>	<p>a Issue closure order under provisions of 36 CRF 261 50 (FSM 4063 3) (6217 ) (10C )</p>

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PRESCRIPTION FOR MANAGEMENT AREA 10E

(Provides for Municipal Watershed and Municipal Water Supply Watersheds )

MANAGEMENT PRESCRIPTION SUMMARY

General Direction and Goals.

Management emphasis is to protect or improve the quality and quantity of municipal water supplies. Management practices vary from use restrictions to water resource improvement practices, with the primary objective of meeting water quality standards established for the individual watershed. A secondary objective is to manage the watersheds to improve the yield and timing of water flows, consistent with water quality requirements.

B MANAGEMENT REQUIREMENTS

MANAGEMENT ACTIVITIES	GENERAL DIRECTION	STANDARDS & GUIDELINES
Visual Resource Management (A04)	O1 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. (0263 ) (10E )	a Do not exceed an Adopted Visual Quality Objective (VQO) of modification (6267 ) (10E )
Dispersed Recreation Management (A14 and 15)	O1 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. (0304 ) (10E )	
Range Resource Management (D02)	O1 Confine livestock trailing to established driveways and historic trailing routes. (0270 ) (10E )  O2 Reduce or remove livestock if municipal use water quality is endangered. (0305 ) (10E )  O3 Stabilize and/or regenerate areas disturbed by livestock prior to resuming grazing use of the area. (0260 ) (10E )	

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Silvicultural  
Prescriptions  
(E03, 06 & 07)

- 01 Manage Forest cover types using the following harvest methods
- Clearcut in aspen and lodgepole pine,
  - Shelterwood in interior ponderosa pine and mixed conifer,
  - Clearcut and/or shelterwood in Engelmann spruce/ subalpine fir, according to the following criteria
- a Utilize the shelterwood method on south and west aspects to provide seed and shade protection if windfall risk is below average. It can also be used on other aspects when cold, droughty sites are present (Engelmann spruce/moss habitat type, for example)
- b Utilize the clearcut method on north and east aspects, or on other aspects if moist site conditions are present (subalpine fir/forest fleabane habitat type, for example). It should also be used on sites where windfall risk is above average
- (0046PI) (10E )

a Apply harvest treatments to forest cover types as specified below on at least 80 % of the forest cover type. Up to 20 percent of the type may be treated using other harvest methods specified in Forest Direction (6074 ) (10E )

b Silvicultural Standards (These standards may be exceeded on areas managed for old growth)

1 Clearcut

Forest Cover Type			
	Engelmann Spruce-Subalpine Fir & Lodgepole Pine-	Aspen	Other Forest Cover Types
Rotation Age	90-180 yrs	80-120 yrs	100 or more yrs
Growing Stock Level	80-160	N/A	60 to 120
Thinning Cycle	10-50 yrs	N/A	10 to 50 yrs

2 Two-Step Shelterwood

Forest Cover Type	
Interior Ponderosa pine, Mixed	Other Forest Cover

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(EQ3, 06 & 07)

	Conifer, and Engelmann spruce- subalpine fir	Types
Rotation Age	100-160 yrs	100 or more yrs
Growing Stock Level	60-160	60-120
Thinning Cycle	20-30 yrs	20-30 yrs
First Cut (seed cut), Remove 40 to 70 percent of the basal area or		
Cut to	BA 25-60	BA 20-60
Second Cut (removal cut) Remove all overstory when regenerated stand meets minimum stocking standards		
3 Three-Step Shelterwood		
Forest Cover Type		
Interior Ponderosa Pine, Mixed Conifer and Engelmann spruce- subalpine fir		
Other Forest Cover Types		
Rotation Age	100-160 yrs	100 or more yrs

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Growing Stock Level	60-160	60-120
Thinning Cycle	20-30 yrs	20-30 yr
First Cut (preparatory cut), Remove 10 to 40 percent of the basal area or		
Cut to	BA 60-80	BA 50-80
Second Cut (seed cut), Remove 40 to 50 percent of the remaining basal area or		
Cut to	BA 25-50 10-20 yrs after pre- paratory cut	BA 20-50 10-20 yrs after prepara- tory cut
Third Cut (removal cut) Remove all overstory when regenerated stand meets minimum stocking standards		
(6025PI) (10E )		

02 Apply intermediate treatments to maintain growing  
stock level standards  
(0140 ) (10E )

03 Utilize firewood material using both commercial  
and noncommercial methods  
(0147 ) (10E )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

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

- 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 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

(0500 ) (10E )

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/
Inland Ponderosa Pine	190	6
Mixed Conifers	190	6
Lodgepole Pine	150	6
Engelmann Spruce-Subalpine fir	150	6
Aspen	300	6

  

Forest Cover Type	Crown Closure (Percent)	Distribution 2/
Inland Ponderosa Pine	30	70%
Mixed Conifers	30	75%
Lodgepole		

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Silvicultural  
Prescriptions  
(E03, 06 & 07)

Pine	30	75%
Engelmann Spruce- Subalpine fir	30	75%
Aspen	30	75%

1/ Applies to trees specified as  
minimum stocking level  
2/ Percent of plots or tran-  
sects that are stocked

(6014 ) (10E )

Reforestation  
(E04)

01 Plant trees of known genetic qualities to establish  
new stands  
(0275 ) (10E )

Water Resource  
Improvement and  
Maintenance  
(F05 and 06)

01 Prevent or reduce debris accumulations in riparian  
areas that reduce stream channel stability and capacity  
(0307 ) (10E )

02 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  
(0003 ) (10E )

a Proposed land-use facilities  
(roads, campgrounds, buildings)  
should not be located within  
floodplain boundaries for the 100-  
year flood Protect present and  
future facilities that cannot  
be located out of the 100-year  
floodplain by structural miti-  
gation (deflection structures,  
riprap, etc )  
(6051 ) (10E )

03 Prevent stream channel instability, loss of channel  
cross-sectional areas, and loss of water quality  
resulting from activities that alter vegetative cover  
(0007 ) (10E )

a Limit Changes in Channel rating  
or classification scores to an  
increase of 10 percent or less  
Use channel stability criteria  
established by Cooper, 1978 and  
Pfankuch, 1975 Use channel  
classification criteria estab-  
lished by Rosgen, 1980

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

CONTINUATION OF  
Water Resource  
Improvement and  
Maintenance  
(F05 and O6)

(6001 ) (10E )

b Prescription-induced water yield increases should not exceed prescribed thresholds of allowable increase nor should the total yield of water and sediment exceed maximum allowable amounts as stated in the above references (6060 ) (10E )

O4 Manage non-forested areas to improve streamflow through increased on-site water yields and meet State water quality standards Use available snowdrift technology, such as snow fences, windrowed brush piles, linear conversion of unbroken brush to grass, low earthen ridges, etc , to capture and stabilize blowing snow (0303 ) (10E )

a Structures are designed in terms of the size of and snow volumes available from the up-wind source areas, local and downwind terrain features, prevailing winds, and deposition area conditions, etc , as referenced in 'Studying Snow-drifting Problems with Small-Scale Models Outdoors' by Tabler, R D and Jaivell, R S , Proceedings Western Snow Conference, April 15-17, 1980 (6164 ) (10E )

Soil Resource  
Management  
(KA1)

O1 Immediately rehabilitate man-caused disturbances and restore burned areas Inspect rehabilitated areas annually and provide maintenance necessary to protect the watershed (0309 ) (10E )

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MANAGEMENT  
ACTIVITIES

GENERAL  
DIRECTION

STANDARDS &  
GUIDELINES

Special Use  
Management (Non  
-Recreation)  
(J01)

01 Watershed Areas    Watershed covered under an Act  
of Congress

Colorado Springs and Manitou Watershed, 2/27/13,  
withdrawn from mineral entry and leasing, (37 STAT , 684)

Watersheds covered by Cooperative Agreements

Cascade Toun Co , 4/28/23, 3,482 acres

Colorado Springs Watershed Easement, 4/10/1890,  
765 acres, timber management prohibited

Colorado Springs and Manitou Watershed, 10/9/14,  
livestock grazing prohibited

Colorado Springs Watershed, 2/27/23, 10,194 acres

Manitou Watershed, 3/27/23, 935 acres

Victor Watershed, 10/2/30, 880 acres

City of Trinidad, 1/16/14, 10,000 acres, closed  
to camping and picnicking

Town of Palmer Lake, 2/6/17, 10,425 acres

Other Municipal Watersheds

Fairplay Watershed (Beaver Creek)  
(0021PI)    (10E )

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# **MONITORING AND EVALUATION**

## CHAPTER IV

### MONITORING AND EVALUATION

The purpose of monitoring and evaluating implementation of the Forest Plan is to determine the progress toward achieving the goals, objectives, and management requirements of the Forest Plan.

Monitoring will provide the information necessary to determine if:

- management area direction is applied as directed;
- management requirements are being followed;
- the Forest is achieving the objectives of the Plan;
- the application of management area prescriptions are responding to public issues and management concerns;
- the effects of implementing the Plan are occurring as predicted;
- the costs of implementing the Plan are as predicted;
- management practices on adjacent or intermingled non-National Forest lands are affecting Forest Plan goals and objectives; and
- National Forest management is affecting land resources, and communities adjacent to or near the Forest.

An annual monitoring action program will be prepared as part of the total Pike and San Isabel National Forests annual program of work. This annual monitoring program will include the details of the amount and location of monitoring to be accomplished based on the approved program of work and funds available for monitoring. Monitoring responsibility, specific locations, intensity of sampling, person days required, and costs will be identified in the annual monitoring program.

The results of the site-specific monitoring program will be evaluated and documented in the annual review. The significance of the results of the monitoring program will be analyzed by the Forest Interdisciplinary Team and reviewed for action by the Management Team.

Based on the analysis, any need for further action is recommended to the Forest Supervisor. The recommendations can include:

- no action needed, monitoring indicates goals, objectives, and management requirements are achieved;
- recommended actions referred to the appropriate line officer for improvement of application of management area direction;
- modification of management requirements as a Plan amendment;
- modification of the allocation of a Management Area Prescription as a Plan amendment;
- revision of the projected schedule of outputs; or
- revision of the Plan.

The documented file of the Forest Supervisor's decisions resulting from monitoring and evaluation is maintained for future use in amending or revising the Forest Plan.

The Forest Plan's monitoring activities appear in Table IV-1. As part of the annual monitoring action program, activities from Table IV-1 will be included as appropriate.

TABLE IV-1  
MONITORING REQUIREMENTS

ACTIONS, EFFECTS OR RESOURCES TO BE MONITORED	MONITORING TECHNIQUES OR DATA SOURCES	PRECISION RELIABILITY	MEASUREMENT FREQUENCY	REPORTING PERIOD	VARIABILITY WHICH WOULD INITIATE EVALUATION
<u>RECREATION-</u>					
Developed Sites, Actual Use	Recreation Information Management (RIM) System. RIM Use Source Documents	Moderate/Moderate	Various. Continuing in accordance with random sampling procedures	Annual	Reported use varies by more than 20% of planned use
Developed Sites, Demand	Estimated occupancy rate as an indicator of demand for sites. Situation Reports. Public comment. Review development activities occurring on private and other lands	Low/Moderate	Annual. Scope and intensity will be established in the annual action program	Annual	Sites are under utilized or significant over-crowding, resource damage, or user conflicts are occurring at sites based on evaluation by the I.D and Management Teams
Developed Sites; PAOT Capacity and number of sites	Actual count RIM Source Documents Management Attainment Report.	High/High	Annual	Annual'	Capacity and number of sites are not within the range of planning objectives
Developed Sites; PAOT Managed At Full Or Reduced Service Levels	Actual count. RIM Source Documents; Management Attainment Report	High/High	Quarterly	Annual	1) Annual assigned targets are not met. 2) Fee sites are not operating at full service level 3) Fee sites are not at RIM maintenance class 1.
Downhill Skiing; Use Capacity and Demand	RIM System estimates; actual counts, and lift ticket sales. Each site, RIM Source Documents Public comments. Situation Reports. Studies by others	User High/High Demand. Low/Moderate	Annual	Annual	Sites are under utilized or significant over-crowding, resource damage, accidents or user conflicts are occurring at sites based on the evaluations of the I.D and Management Teams
Dispersed, Actual Use	RIM Source Documents. RIM System estimates; statistical samples; trails & road traffic counts, trail registers estimates.	Low/Moderate	Continuing and in accordance with approved sampling procedures	Annual	Reported use varies by more than 20% of planned use

TABLE IV-1  
MONITORING REQUIREMENTS

ACTIONS, EFFECTS OR RESOURCES TO BE MONITORED	MONITORING TECHNIQUES OR DATA SOURCES	PRECISION RELIABILITY	MEASUREMENT FREQUENCY	REPORTING PERIOD	VARIABILITY WHICH WOULD INITIATE EVALUATION
<u>RECREATION</u> continued.					
Dispersed; Miles of Trails Construction or Reconstruction	Project analysis	High/High	Annual	Annual	Average annual mileage varies by more than 10% of planned mileage
Dispersed Recreation Use Effects of Activities on people, other resources and facilities, including roads & trails Effects of other resource activities, recreation use and facilities	Selected Management Area or Facility analysis utilizing various techniques for assessing trail, campsite, road and resource conditions Public comments Situation reports Studies by others.	Low/Moderate	Annual Scope and intensity will be established in the annual action program		Recreation and other resource activities are not compatible with the ROS classifications associated with the Management Area Prescription Significant resource damages and user conflicts are occurring Recreation use exceeds the range of capacity levels applicable to Management Areas by more than 20%. Condition evaluations will be based on the conclusions of the I D and Management Teams
<u>WILDERNESS</u>					
Average Annual Use	RIM System estimates, trail counts, visitor registrations, visitor contacts RIM Source Documents.	Low/Moderate	Continuing and in accordance with approved sampling procedures	Annual	Estimated use exceeds 10% of planned use.
Effects of Use and activities on the wilderness resource	Selected Wilderness Management Area analysis utilizing various techniques for assessing trail, campsite, and resource conditions Public comments Situation reports Studies by others	Low/Moderate	Scope and intensity will be established in the annual action program	Annual	Resource damages and user conflicts are occurring Wilderness use exceeds the range of capacity levels applicable to the Management Area by more than 10% Condition evaluations will be based on the conclusions of the I.D and Management Teams
<u>CULTURAL RESOURCES</u>					
Acres Surveyed/ Sites Evaluated	Actual acres by class of survey Annual report Project work records.	High/High	Annual	Annual	Substantial non-compliance with Forest Management Requirements as documented by Forest cultural resource specialist

TABLE IV-1  
MONITORING REQUIREMENTS

ACTIONS, EFFECTS OR RESOURCES TO BE MONITORED	MONITORING TECHNIQUES OR DATA SOURCES	PRECISION RELIABILITY	MEASUREMENT FREQUENCY	REPORTING PERIOD	VARIABILITY WHICH WOULD INITIATE EVALUATION
<u>CULTURAL RESOURCES</u> continued:					
Sites Protected, Interpreted	Periodic field inspections Project work records.	High/High	Annual	Annual	Substantial non-compliance with Forest Management Requirements as documented by Forest cultural resource specialist
<u>VISUAL RESOURCE</u>					
Retention and Partial Retention VQO	Selected Management Area or project area analysis conducted by Forest Landscape Architect or other qualified persons	Low/Moderate	Annual Scope and Intensity will be established in the annual action program	Annual	Visual Quality Objectives applicable to Management Areas are exceeded
Modification and Maximum Modification	Selected Management Area or project area analysis conducted by Forest Landscape Architect or other qualified persons.	Low/Moderate	Annual. Scope and Intensity will be established in the annual action program	Annual	Visual Quality Objectives applicable to Management Areas are exceeded
<u>FISH AND WILDLIFE</u>					
Accomplishment of Joint Forest Service/ State Comprehensive Wildlife Management Plan Objectives	Project administration	High/High	Annual	Annual	+ 10% change from assigned targets or joint planned objectives which are financed
Wildlife Habitat Diversity	Resource Information System (RIS) *	Low/Moderate	5 Years	5 Years or (Prior to Plan update)	Diversity index does not show upward trend.
Acres of Habitat Modified	Project work records. Actual acres treated or modified.	High/High	Annual	Annual	+ 20% change from estimated acres to be treated
Acres of Habitat Improved	Project work records Actual acres improved	High/High	Annual	Annual	+ 20% change from estimated acres to be treated for habitat improvement

\*Resource Information System (RIS) is a resource data storage and retrieval system The data base contains resource information on locations, sites and activities for 35,311 sites on the Forest

TABLE IV-1  
MONITORING REQUIREMENTS

ACTIONS, EFFECTS OR RESOURCES TO BE MONITORED	MONITORING TECHNIQUES OR DATA SOURCES	PRECISION RELIABILITY	MEASUREMENT FREQUENCY	REPORTING PERIOD	VARIABILITY WHICH WOULD INITIATE EVALUATION
<u>FISH AND WILDLIFE</u> continued:					
Maintain Riparian Habitat	Habitat analysis; Project work records.	Moderate/ Moderate	Annual	2 Years	Riparian habitat is not improving
Trend of Management Indicator Species Habitats and Populations	Habitat capability assessments, population estimates by State Wildlife Agencies, Resource Information System, Professional judgment by Forest Service biologists and activity reviews	Moderate	5 Years	5 Years	+ 25% change in species habitat capability or population size.
<u>RANGE</u>					
Permitted AUM	Annual Range Report.	High/High	Annual	Annual	Permitted AUMs do not meet projected planned outputs by + 10% for 10 year period
Range Condition	Range analysis and allotment inspections.	Moderate/ Moderate	20% of Allotments Annually	5 Years	Range condition not fair or higher or improving in accordance with allotment management plans
<u>TIMBER</u>					
Sales	RIS site and activity records	High/High	Quarterly	Annual	+ 10% from assigned sales targets in timber sales offered
Assure restocking of treated areas within 5 years (7 years for lodgepole pine) following final harvest, except when a longer regeneration period is allowed by the management prescription	RIS site and activity records	High/High	100% Sample	5 Year Reports	+10% from assigned reforestation targets Treated acres not restocked within required time periods
Assure that timber stand treatments will not favor an increase in forest pests (insects, diseases, etc )	Stand exams, ground and aerial pest surveys, post sale reviews, prescriptions.	Moderate/ Moderate	20% Sample	Annual	Destructive insect and disease organisms increase following management activities

TABLE IV-1  
MONITORING REQUIREMENTS

ACTIONS, EFFECTS OR RESOURCES TO BE MONITORED	MONITORING TECHNIQUES OR DATA SOURCES	PRECISION RELIABILITY	MEASUREMENT FREQUENCY	REPORTING PERIOD	VARIABILITY WHICH WOULD INITIATE EVALUATION
<u>TIMBER</u> continued-					
Assure that treatment objectives (area in acres) by forest type and stand size class are being met during Plan implementation	RIS site and activity records	High/High	100% Summary	Annual	More than 20% deviation from forest-wide area targets by type and stand size
Assure that cutting methods prescribed in the Management Area Prescriptions are being utilized for project implementation	RIS site and activity records	Moderate/Moderate	25% Sample Annually	Annual	More than 20% deviation from Management Area Prescriptions (Tree Stand Management Activities) on a forest-wide basis
Assure that timber sold does not exceed the allowable sale quantity established for the 10-Year period	10-Year and 5-Year Sale Programs, Cut and Sold Reports; RIS site and activity records	High/High	100% Sample	Annual	Allowable quantity exceeded
a) Chargeable timber offered	Accomplishment Reports	High/High	100% Sample	Annual	Allowable quantity exceeded
b) Nonchargeable timber offered	Accomplishment Reports	High/High	100% Sample	Annual	Monitor for effects and information updates
<u>WATER</u>					
Water Quality	Establish baseline stations Establish short term data stations Utilize STORET* Data System Forest-wide Monitoring Plan approved 1981	High/High	Annually, during the runoff period	Current as data is collected	Not meet State water quality standards and project plan objectives Sediment yield not within threshold limits
Water Quantity	Baseline stations and short term stations HYSED** System Project Analysis	High/High	Annually during the runoff period	Current or annual	Not meet Forest Plan goals and project objectives

\*STORET is a national water quality data storage and retrieval system established and operated by the U.S. Environmental Protection Agency

\*\*HYSED is a water yield and sediment yield model developed by the U.S. Department of Agriculture, Forest Service, Rocky Mountain Region.

TABLE IV-1  
MONITORING REQUIREMENTS

ACTIONS, EFFECTS OR RESOURCES TO BE MONITORED	MONITORING TECHNIQUES OR DATA SOURCES	PRECISION RELIABILITY	MEASUREMENT FREQUENCY	REPORTING PERIOD	VARIABILITY WHICH WOULD INITIATE EVALUATION
<u>MINERALS:</u>					
Minerals Management, (Locatable, leasable, common variety)	Review of operating plans, project reports, and on site inspections Management Attainment Report	High/High	Currently or Quarterly	Annual	Lack of compliance with applicable mining laws and regulations and surface occupancy standards for oil and gas exploration and development, and other mineral activity as determined by on site inspection.
<u>HUMAN AND COMMUNITY DEVELOPMENT:</u>					
Human Resource Manpower Programs	Enrollee counts. Management Attainment Report.	High/High	Quarterly	Annual	+ 20% from assigned targets.
Community, Stability and Productive Harmony	Citizen involvement; issues and concerns analysis.	Moderate/Moderate	Annual	Annual and 5 Year (Prior to Plan update)	Negative trends
<u>SOILS.</u>					
Soil loss above natural erosion levels	Project analysis. Modified soil loss equation	Low/Low	Current	Routinely and annually	Soil loss exceeds soil loss tolerance level by more than 10% capability area for project
Soil and Water Quality Improvements	Acres treated Management Attainment Report	High/High	Quarterly	Annual	+ 10% from assigned targets.
Accelerated Soil Loss Forest-wide	Project Analysis Universal Soil Loss Equation*	Low/Low	Annual	Annual	Average soil loss exceeds 2 tons per acre for Forest, 4 ton per acre for National Grasslands
<u>FACILITIES</u>					
Roads - Construction and Reconstruction	Project analysis.	High/High	Annual	Annual	+ 10% from assigned targets Does not meet resource project needs
Landline Location	Project analysis	High/High	Annual	Annual	+ 10% from assigned targets Does not meet resource project needs. Protection from encroachment

TABLE IV-1  
MONITORING REQUIREMENTS

ACTIONS, EFFECTS OR RESOURCES TO BE MONITORED	MONITORING TECHNIQUES OR DATA SOURCES	PRECISION RELIABILITY	MEASUREMENT FREQUENCY	REPORTING PERIOD	VARIABILITY WHICH WOULD INITIATE EVALUATION
Transportation Management	Road maintenance plan and accomplishment report Travel management plan and accomplishment report	Moderate/ Moderate	Periodic	Annual	Road management and maintenance classes and conditions do not meet Forest Plan and project needs
Fuel Treatment	Project analysis. Acres treated Management Attainment Report	Moderate/ Moderate	Annual	Annual	Assigned targets in acres treated and Management Area standards in fuel loadings (Tons/Acre) vary more than $\pm 20\%$
Air Quality	Project analysis of selected projects with indicated potential for pollution.	Low/Low	One project per year	Annual	Exceeds applicable Federal and State Ambient Air Quality Standards.
<u>ECONOMICS</u>					
Capital Investments	Forest Reports	High/High	Annual	Annual	Not meet Forest Plan objectives and assigned targets by $\pm 10\%$
Returns to U S. Treasury	Forest Reports	High/High	Current	Annual	No targets assigned Monitor for effect
Receipt Shares to Counties	Forest Reports.	High/High	Annual	Annual	No targets assigned Monitor for effect
Efficiency Analysis	Cost and benefit values updated as better information becomes available PNV analysis completed.	High/High	Annual	Annual	No targets assigned Monitor for effects and information updates Use FORPLAN, MTVEST, IMPLAN, etc
Impact	Outputs confirmed and Impact Analysis completed after Management Attainment Reporting	High/High	Annual	Annual	No targets assigned Monitor for effects and information updates. Use IMPLAN.
Unit Costs for Planning Activities	Forest Reports	High/High	Annual	Annual	More than 20% deviation from estimated costs on a forest-wide basis.

\*Universal Soil Loss Equation is a soil erodibility nomograph for soil loss determinations. (See Glossary of Terms for a definition of factors used.)

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