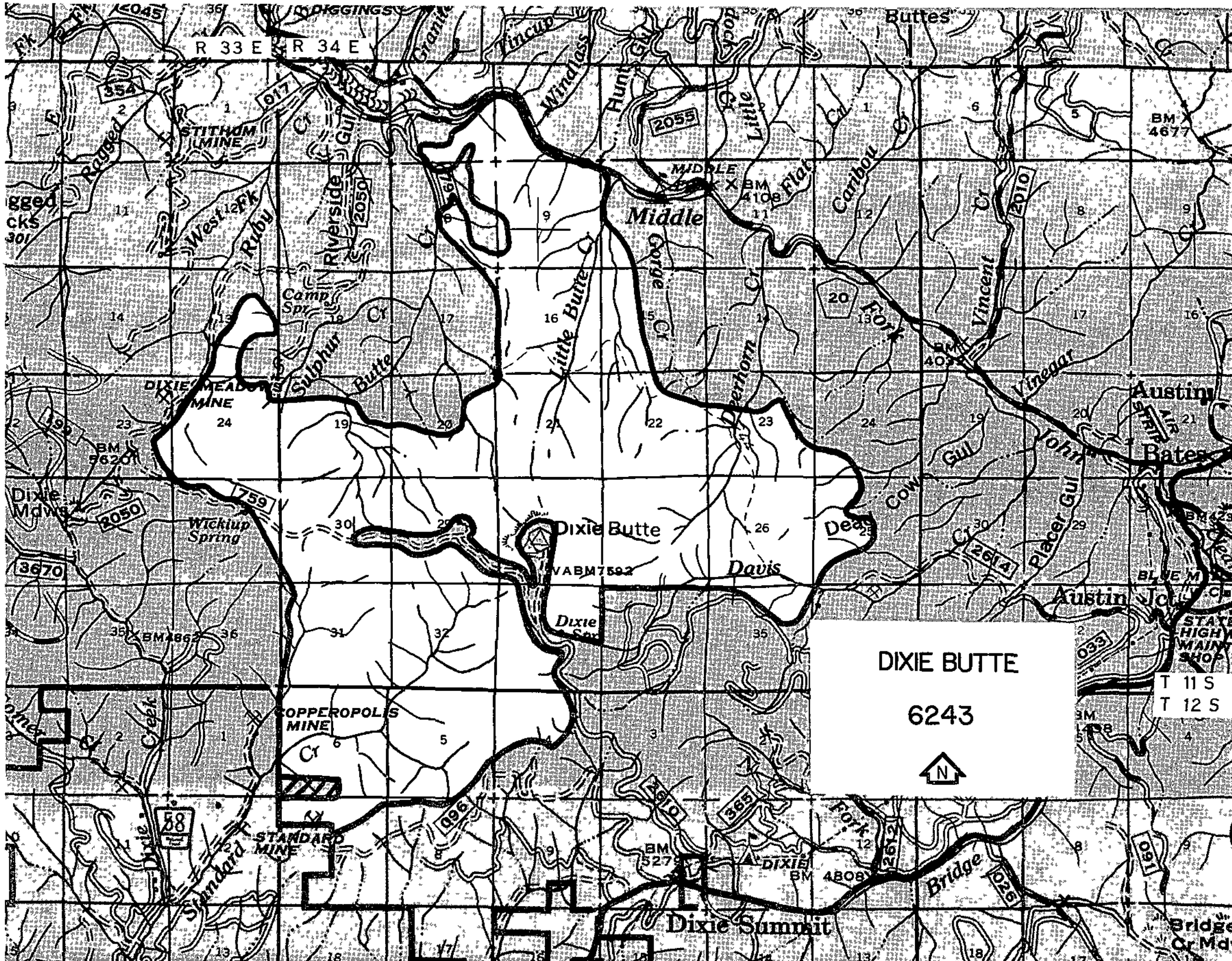
FIGURE C-5


DIXIE BUTTE
6243
N
R 33 E
R 34 E
T 11 S
T 12 S
Dixie Butte
VABM7592
Middle
Middle Fork
Little Butte Cr
Dixie Meadows Mine
Copperopolis Mine
Standard Mine
Stithum Mine
Diggings
Camp Spr
Wickiup Spring
Dixie Mdws
Dixie Spr
Dixie Summit
Austin
Austin Jct
Bates
Davis
Deerhorn Cr
Sulphur Butte
Riverside Gul
Caribou Cr
Vincent Cr
Vinegar
Placer Gul
Cow Gul
Bridge Cr Mdw
Buttes
BM 4677
BM 4108
BM 4032
BM 5620
BM 4862
BM 4808
759
2050
2055
2010
20
2614
3670
2610
365
2612
091
026
496
033
354
2045
017
26

F. DIXIE BUTTE - 12,110 Acres
(RARE II No. 6243)

1. Description

a. History

This area was identified during the RARE process and increased in size during the RARE II process Under the John Day Planning Unit Plan and the RARE II Final Environmental Impact Statement, the area has been managed for nonwilderness uses.

b. Location and Access

The Dixie Butte roadless area is located in the northern portion of the Malheur National Forest in Grant County, about 6 miles north of Prairie City, Oregon (T. 12 S , R. 33 E , of the Willamette Meridian) The area has an irregular boundary that lies generally north and east of Dixie Butte. On the north, the boundary runs approximately 1.5 miles from the Middle Fork of the John Day River between Davis and Little Butte Creeks. Between Little Butte and Butte Creeks (approximately 2 miles), the boundary is the Middle Fork

c. Geography and Topography

This area consists of Dixie Butte (elevation 7,592 feet) and surrounding drainages to the Middle Fork John Day River (elevation 4,200 feet) in the north, and drainages to the mainstem John Day River in the south Dixie Butte is a prominent landmark above surrounding forested areas Sideslopes are steep at higher elevations and bench-like at lower elevations See Figure C-5.

d Geology and Soils

The geology consists of a variety of hard-rock formations covered with a thin mantle (typically less than 24 inches) of volcanic ash from historic Mount Mazama (present-day Crater Lake). Bedrock includes hard to moderately hard gabbro with minor amounts of serpentine and peridotite, hard andesite and basalt with soft to moderately hard interflows of tuffaceous rhyolitic material; argillite and other miscellaneous unidentified older metasedimentary rock; and others in minor amounts

The soil consists of from 6-24 inches of volcanic ash over a variety of subsoil material The ash is a silt loam textured soil that typically contains less than 5 percent gravel Subsoil material is typically a gravelly to cobbly loam to clay loam soil.

e. Vegetation

Vegetation on ridgetops and the summit of Dixie Butte is primarily subalpine fir and white bark pine with a ground cover of sagebrush, elk sedge, and fleeceflower. The area is about 94 percent forested with ponderosa pine, white fir, and Douglas-fir, and ground vegetation of elk sedge and pinegrass. Old growth forest occurs on about 3,700 acres, according to the Pacific Northwest Region definition

f. Current Uses

Recreational activities in the area include hiking, cross-country skiing, snowmobiling, hunting, prospecting, camping, and viewing scenery. (See Table C-2.)

The area provides summer habitat for mule deer and Rocky Mountain elk, and habitat for cougar, bear, bobcat, and other small game and mammals Butte Creek, Little Butte Creek, Deerhorn Creek, and Davis Creek flow north into the Middle Fork of the John Day River Standard and Dixie Creeks flow south into the mainstem of the John Day River. All these streams provide resident trout fishing as well as spawning and rearing habitat for steelhead. Some of the streams also provide rearing habitat for chinook salmon.

The area lies within two grazing allotments and provides an average of 500 Animal Unit Months per year

The surrounding area includes private land, logged forest land, and structures on Dixie Butte Summit Near the western edge of the area are located three highly developed mining sites, at least one of which was active in the recent past

The panoramic view from Dixie Butte is an attraction to visitors, however, access is difficult Hunting opportunities are probably the primary attraction of the area and, to a lesser degree, the opportunity to view a variety of wildlife

2. Wilderness Capability

a Manageability and Boundaries

Opportunity exists to improve manageability of the boundary by adjusting it to follow topographic features This would also remove some impacts to the natural integrity of the area, but it would reduce the size of the area

b. Natural Integrity

The area has been impacted by mineral developments, livestock grazing, a sheep driveway, constructed roads and jeep trails, timber harvesting, and a recreational trail The northern arm that extends down to the Middle Fork John Day River (Little Butte Creek) has been railroad-logged in recent history Dixie Butte Lookout and an electronic site occupy Dixie Summit A low-standard, constructed road accesses these sites

Mining impacts are numerous across the area The southern portion (south of Dixie Butte) is covered by active claims Some activity occurs each year in this area. Most of the area north of Dixie Butte does not presently have claims on it Impacts range from prospect holes to large pits and spoil banks.

Grazing impacts include water developments, salt grounds, fences, and the physical presence of cattle A sheep driveway still exists across the middle of the area from Wickiup Springs to just south of Dixie Butte The driveway was used to move sheep across the Middle Fork to the Greenhorn Mountain area

Timber harvesting impacts are old (railroad logging) and limited to (1) the arm of the roadless area that extends to the Middle Fork, and (2) a thin fringe that borders Butte Creek on the north The suppression of fire has also altered the natural succession of vegetation in the area Under natural conditions, low-intensity fires on pine sites would have selectively retained a ponderosa pine understory.

There is one unimproved jeep track in the western section of the area

There are also some impacts due to recreational use. There is one maintained trail through the center of the eastern section which is popular with snowmobilers and trailbike riders There are numerous trails along drainages, which are not maintained and appear similar to game trails There are undeveloped hunter camps throughout the area with associated fire rings, Primitive game racks, etc The area most highly impacted by hunter camps is around Wickiup Springs in the northwest portion of the area along the main access road (T 11 S , R. 33 E., Section 25)

c. Naturalness

The naturalness of the area has been altered by the many factors mentioned previously. Most of these impacts would not be noticeable to the average visitor. The most noticeable impacts (timber harvest, unimproved roads, livestock grazing, and mineral development) would also require difficult, costly, and/or lengthy processes to mitigate.

d. Opportunity for Solitude

Almost no portion of the area is more than two miles from a road. Vegetative screening increases the opportunity to find solitude and the topography at higher elevations further enhances this opportunity. Even so, opportunity for solitude would be considered moderate.

e. Primitive Recreation and Challenge

While there are many and varied opportunities for dispersed outdoor recreation, this area does not lend itself to a Primitive experience. There are few challenges offered, perhaps the most challenge would be to cross-country skiers due to the difficulty of access in winter

f Special Features

There are no known Threatened, Endangered, or Sensitive plants or animals in this area

There is an opportunity for historical study of railroad logging, although not many of the physical structures are still in evidence A similar possibility exists for historic mining activity, however, this area would not be as good as the Susanville and Greenhorn mining districts There are no known prehistoric cultural resource sites within the area

There is a potential for scientific study of ecological features. A possible Research Natural Area has been identified near the summit of Dixie Butte. This area was considered a moderate candidate; the cells it represents were better represented by other potential research natural areas in the Blue Mountains.

3. Availability for Wilderness

a Resource Potentials

This area currently provides roaded natural and semiprimitive motorized recreation opportunities. (See Table C-3) If left undeveloped, the area is capable of providing 27,389 Recreation Visitor Days (See Table C-4.)

The old railway system up Little Butte Creek was constructed to yard and haul timber to the sawmill once located at Bates. The rails and all but a few remnant ties are gone; the only evidence of this past activity is the railroad grade

The grades were designed at a very slight slope (no greater than four to five percent) to accommodate steam engines This network of railroad grades contouring the terrain at relatively flat slopes provides an excellent opportunity to develop a trail network for mountain bikes, all-terrain vehicles, snowmobiles, and cross-country skiers This network could be managed to protect its historic significance, provide interpretation, and provide unique recreation opportunities

This area provides excellent opportunities for recreational activities in a semiprimitive motorized setting. There are old roads in the area that are unsurfaced and best driven with a four-wheel drive or off-road vehicle. The Davis Creek Trail passes through the area and can be utilized by hikers or trail bikers

There are 10,700 acres of forested land tentatively suitable for timber management activities. These trees are predominantly mixed conifer with some lodgepole and ponderosa pine. The stands are multistoried, with an average overstory age of 140 and an average understory age of 65. There is a standing volume of 125 3 million board feet (21.9 million cubic feet) With the use of intensive timber management techniques, 514 thousand cubic feet (2,940 thousand board feet) would be contributed to the annual allowable sale quantity in the first decade. The long-term sustained yield capacity from this area would be 610 thousand cubic feet per year.

This area includes part of the old Quartzburg mining district. Mineralization consists of narrow gold-quartz veins with north-northeasterly strikes, found in all of the pre-Cretaceous rocks, copper-gold-cobalt veins and stringers are found in irregular east-northeasterly trending quartz-tourmaline replacement bodies within the metavolcanics Placer gold is found along Davis Creek and the Middle Fork John Day River Portions of the area have high and moderate potential for gold, silver, copper, and cobalt. Numerous mining claims are located within the area The U.S Geological Survey considers the area prospectively valuable for geothermal resources but not for oil and gas

b Management Considerations

Indian paint fungus is present and can probably be found in all size classes of fir species Much of the Douglas-fir (especially on rockier, drier soils) is infected with dwarf-mistletoe. Mistletoe patches can be found, varying from fairly light to quite severe Root rots can be found to varying degrees but, at present, are not considered a problem

Due to high occurrence of Douglas-fir and other fir species in the area, all the timber stands are highly susceptible to tussock moth and the western spruce budworm Western spruce budworm infestation of varying severity is presently within the area Western pine beetle can be found in the area but is generally confined to a few old-growth ponderosa pine trees of low vigor Mountain pine beetle outbreaks can be found in lodgepole pine

Two special uses, a telephone line and an electronic site, as well as a road right-of-way occur within this area. Mineral rights are reserved on several hundred acres. One 120-acre administrative site exists in the area.

4. Wilderness Evaluation

The Strawberry Mountain Wilderness is 22 miles southwest, Monument Rock Wilderness is 27 miles southeast, and North Fork John Day Wilderness is 9 miles northeast of the Dixie Butte roadless area. The ecosystems present in the Dixie Butte area are also well represented in these three existing wildernesses, including low-elevation (for the Blue Mountains) Forest

The nearest major metropolitan centers include Portland, Oregon and Boise, Idaho, 260 and 200 miles distant, respectively

In the 1979 RARE II Study, there were 2,714 comments in favor of wilderness designation, 21 comments favoring further planning, and 3,456 favoring nonwilderness management. In recent Forest planning public involvement activities, this area was in the group receiving a moderate level of comments Of those comments, 4 8 responses opposed wilderness to every 1 favoring it

The primary reasons favoring wilderness centered on the fish and wildlife habitat, watershed protection, and proximity of the area to the Greenhorn Mountains. The reasons opposing wilderness designation included timber and mineral values and evidence of human activity which detracts from the natural setting. There was some support for roadless management of part of the area

5. Environmental Consequences

Table C-9 displays the assignment of management areas by alternative.

a. Vegetation/Trees

Over time, overstory trees would be harvested and the understory thinned in Alternatives A, B-Modified, F, I, and NC As this occurs, the tree sizes, and stand density and composition will have the appearance of a managed forest About 1,130 acres of old growth will be retained in most alternatives with no significant effects Additional old growth may occur within the semiprimitive motorized and wildlife emphasis designations Actual acres affected by timber harvest would vary between these alternatives.

In Alternatives A, B-Modified, F, I, and NC, the north slopes consisting primarily of Douglas-fir, white fir, western larch, and lodgepole pine would be silviculturally treated over time with shelterwoods and clearcuts. Tree vigor and age-class distribution would be improved through stocking-level control (thinning) on most of the forested areas.

In Alternative C-Modified, more of the trees would retain present characteristics and appearance since timber harvest would not occur. Outbreaks of insects and diseases are expected to be greater with this alternative

In Alternative I, timber harvests would be on a non-scheduled basis within the southwest portion of the roadless area. Within this portion silvicultural treatments would be designed to meet wildlife objectives with effects similar to timber management allocation However, with this alternative, harvests will occur at a reduced rate.

b. Vegetation/Grass and Shrubs

In Alternatives A, B-Modified, F, I, and NC, forage for wildlife and livestock is expected to increase in forested areas where the overstory is removed and the understory is thinned Significant increases are expected in forage production on north-facing slopes as tree canopies are opened by shelterwoods and clearcuts Long term effect on this transitory range should be a gradual decrease in forage production as tree canopies again close and shade the understory Seeding of introduced forage species will provide higher quality and quantity of forage and change the present plant composition Native forage species of elk sedge, pinegrass, and brome are also expected to increase in vigor and density as tree canopies are opened and thinning occurs in harvest areas The increase in forage is not expected to be as rapid in Alternative I due to the reduced rate of timber harvest

In Alternative C-Modified, forage production is expected to remain at present levels and may decrease as Douglas-fir and white fir further encroach under the ponderosa pine on south slopes.

c Wilderness

Nonconforming wilderness activities such as timber harvest and road construction would not occur under Alternative C-Modified, however, motorized vehicle use would be allowed. Future wilderness consideration would have the greatest possibility under Alternative C-Modified

In Alternatives A, B-Modified, F, I, and NC, users would see timber harvest activities, new road construction, and motorized vehicle use in all of the area. The area would eventually have a managed forest appearance with human activities evident in forested areas Future wilderness consideration would be foregone by the end of the first decade

In Alternative I, timber harvests activities and new road construction would be evident within the area, with the wildlife emphasis portion having a more natural appearance. Future wilderness consideration would be forgone by the end of the first decade.

d. Recreation

In Alternatives A, B-Modified, F, and NC, the recreation opportunity would be roaded modified with expectations of increased vehicle use. The recreation opportunity would be roaded natural in the wildlife emphasis portion under Alternative I Big-game hunter success is expected to increase due to reduced hiding cover in harvested areas and easier access The opportunity for remote, nonmotorized hunting would decrease as additional access roads are traveled by more hunters.

Alternative C-Modified offers a semiprimitive motorized recreation opportunity which would provide a more natural setting to users than the above alternatives. Moreover, road access during periods other than summer months would be limited by weather and used by more specialized vehicles such as four-wheel drives. All the above alternatives allow use of snowmobiles and motorbikes

e Scenery

Scenic variety and the panoramic view from Dixie Butte would be maintained under all alternatives Under Alternatives A, B-Modified, F, I, and NC, viewers would see evidence of a managed forest, including clearcuts and shelterwoods. The long-term effects on scenery would be less old growth to view, more access roads, and less naturalness

In Alternative C-Modified, most of the present scenery would be maintained and no significant changes are foreseen barring a major outbreak of insects, diseases, or catastrophic fire

f Wildlife

Alternative C-Modified would retain the largest acreage of old growth and the most wildlife snags. Old-growth timber and snags would be less available in Alternatives I and NC, and be affected most by Alternatives A, B-Modified, and F Alternative NC is expected to remove the most wildlife snags Management standards would adequately protect key habitats for all wildlife under all alternatives Moreover, at least 1,130 acres of old growth are designated in Alternatives A, B-Modified, and F to meet habitat needs of pileated woodpecker, pine marten, and other wildlife. Alternative NC retains approximately 760 acres.

All alternatives, except C-Modified, would likely reduce the amount of mixed conifer old growth in the long term and, thereby, improve the cover/forage ratio where forage is deficient on the north slopes Increases in the available wildlife forage would improve summer habitat for deer and elk The area does not provide any big-game winter range

g. Water, Riparian, Fisheries

The riparian vegetation, anadromous fish habitat, and water quality of six streams which flow into the Middle Fork and mainstem of the John Day River would be affected most by Alternatives A, B-Modified, F, I, and NC, and least affected by Alternative C-Modified, although management standards would adequately protect these resources under all alternatives There would be increased accessibility and use as a result of timber harvest and access roads

h. Cultural Resources

All alternatives are similar in effects on cultural resources, since impacts to the numerous historic structures (i e., mining cabins, railroad logging spurs, and unknown prehistoric cultural resources) would be avoided and/or mitigated when ground-disturbing activities are planned There is no discernible difference between alternatives when considering existing regulations, laws, and management standards applicable to cultural resources.

i Soils

Effects on soils are mitigated through application of management standards which adequately ensure protection under all alternatives. The highly erosive ash soils around the upper and north sides of Dixie Butte would be affected by management activities; however, no activities are foreseen in that area. There is no discernible difference between alternatives when considering existing regulations and management practices.

TABLE C-9

DIXIE BUTTE MANAGEMENT BY ALTERNATIVE

(Acres)

Management Area	NC[1/]	Alternatives A	B-Mod	C-Mod	F	I-Preferred
1 General Forest	N/A	7,078	7,053		7,093	2,646
2. Rangeland		417	449		419	195
3 Riparian Areas		783	770		717	247
4A. Big game Winter Range						
4B. Big game Winter Range Enhancement						
5. Bald Eagle Winter Roost						
6A Strawberry Mountain Wilderness						
6B. Monument Rock Wilderness						
6C. Pine Creek						
7 Scenic Area						
8 Special Interest Area						
9. Research Natural Area						105
10 Semi-Primitive Non-Motorized						
11 Semi-Primitive Motorized				12,110		
12. Developed Recreation						
13. Old Growth		1,130	1,130		1,130	460
14 Visual Corridors		1,694	1,905		1,862	1,562
15 Unit Plan Wildlife Emphasis Areas						
16 Minimum Level Management		1,008	803		889	
17. Byram Gulch Municipal Supply Watershed						
18. Long Creek Municipal Supply Watershed						
19 Administrative Sites						
20. Wildlife Emphasis Areas with Scheduled Harvest						
21. Wildlife Emphasis Area, Non-Scheduled Harvest						6,895
22. Wild and Scenic River						
TOTAL ACRES	N/A	12,110	12,110	12,110	12,110	12,110

1/The Timber Management Plan, upon which the No Change Alternative is based, was developed in 1979 The plan was not an integrated plan and, consequently, did not address all resource uses and outputs in an integrated manner. As a result, these acreages are not available