

Appendix

H

BIGHORN NATIONAL FOREST

Land and Resource Management Plan - DEIS

Appendix H

Desired Future Condition

Table of Contents

H	H-1
Desired Future Condition by Alternative	H-1
No Action Alternative	H-1
Alternative A	H-2
Alternative B	H-5
Alternative C	H-7
Alternative D	H-9
Alternative E	H-11
Detailed Desired Future Condition of Forest lands	H-13
Current 1985 Forest Plan Final Environmental Impact Statement (FEIS):	H-13
2004 Forest Plan Draft Environmental Impact Statement (DEIS):	H-14
Geographic area desired future condition	H-18

List of Figures and Tables

Figure H—1. Management area allocations for the No Action Alternative (the 1985 Forest Plan as currently being implemented).	H-2
Figure H—2. Alternative A Area Allocation by Management Category	H-3
Figure H—3. Alternative B Management Area Categories	H-5
Figure H—4. Alternative C – Management Area Categories	H-7
Figure H—5. Alternative D – Management Area Categories	H-9
Figure H—6. Alternative E – Management Area Categories	H-11
Figure H—7. Forest-wide Structural Stage Distribution	H-17
Table H-1. Forested Acres, Desired from 1985 EIS	H-13
Table H-2. Desired Future Condition for forested lands:	H-14
Table H-3. Forested Acres, Desired for 2004 DEIS	H-15
Table H-4. Existing, Desired and projected forested lands	H-16
Table H-5. Percentage of suitable land by forest type and structural stage	H-17



Desired Future Condition by Alternative

Below is a brief description of each alternative, and how the management areas define the alternative desired future condition (DFC). These DFCs were developed in conjunction with the Forest Plan Revision Steering Committee, which is made up of Forest Service personnel, State of Wyoming Agency representatives, and County Commissioners and Conservation District board members from the four-county Big Horn Mountain area. A full description of each alternative is found in chapter 2 of the DEIS.

No Action Alternative

As the chosen alternative for the 1985 Forest Plan, this No Action Alternative increased dispersed and developed recreation emphasis, while maintaining the then existing level of resource outputs.

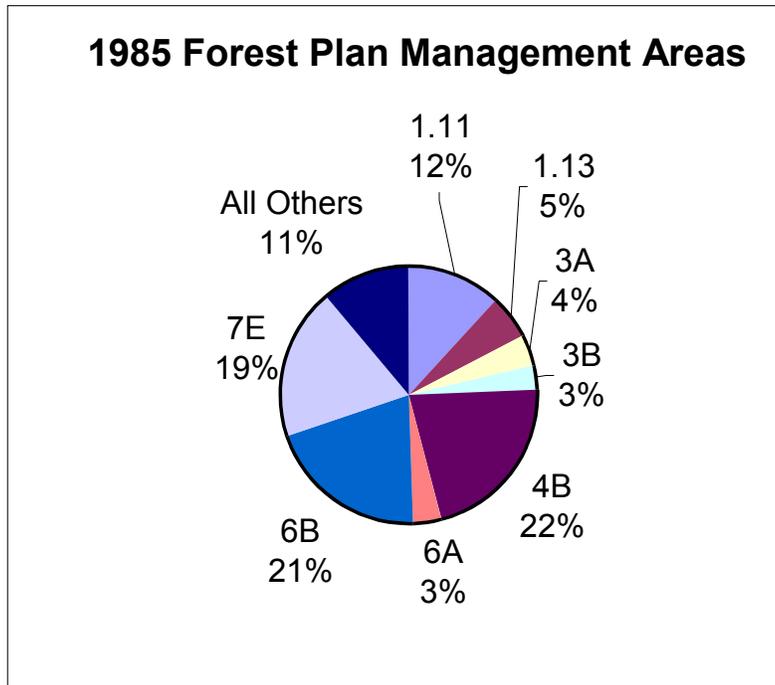
The desired condition for vegetation in the 1985 Forest Plan was that forested lands were healthy (e.g., free of insects and disease). Vegetation management emphasized recreation, viewing, wildlife habitat, wood products, water yield, and grazing. The transportation system was to be managed to improve recreation opportunities and would be improved, as needed, for forest management.

The 1985 Forest Plan predicted that water yields would increase by 3,000 acre feet over then existing levels after the first decade, doubling to an increase of 6,000 acre feet after five decades. The plan envisioned that water quality would improve.

Additional developed recreation capacity would be supplied to meet 100% of demand. Dispersed recreation demand would be met. No additional wilderness was recommended, and it was anticipated that the demand would exceed supply by the 4th decade (2025).

DESIRED FUTURE CONDITION

Figure H—1. Management area allocations for the No Action Alternative (the 1985 Forest Plan as currently being implemented).



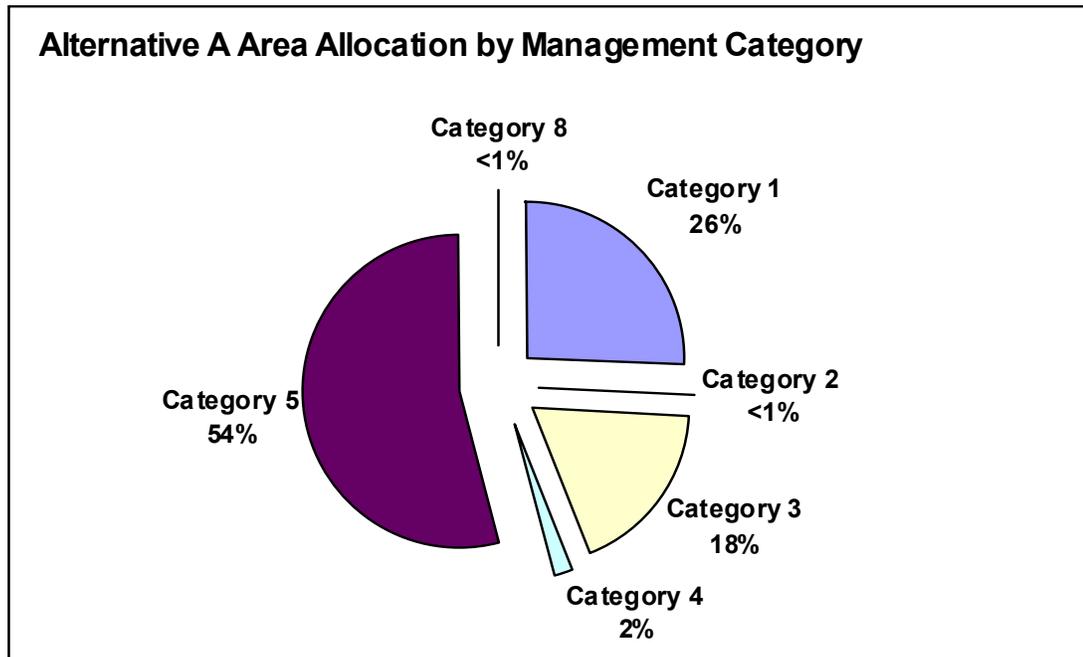
Habitat for diversity needs would be met. The amount of habitat for old growth management indicator species would not decline, while the habitat for early successional species would increase.

The 1985 Forest Plan envisioned that actual range utilization would rise from the 134,000 AUMs permitted at that time to about 143,000 AUMs by 2035.

Alternative A

Alternative A emphasizes active vegetation management, primarily through timber harvest and prescribed fire. Productions of sawtimber, firewood and other wood products, forage for livestock grazing and diverse wildlife habitats are provided. A mix of recreation opportunities is provided. The program focus is similar to the 1985 Forest Plan since the current management area emphases are retained.

Figure H—2. Alternative A Area Allocation by Management Category



Water and air quality, soil productivity, and aspen, is improved or maintained. All environmental and resource laws are met. (Endangered Species, National Historic Preservation Act, Clean Water Act, Multiple Use Sustained Yield, etc.)

Elk hunting opportunities are maintained at current levels. Species viability is improved or maintained, in accordance with the National Forest Management Act.

Commodity uses, including timber and livestock grazing, are provided to achieve National Forest management objectives (such as habitat objectives) and to help support local communities.

Limit further expansion or new infestations of invasive weeds and reduce existing infestations of invasive weeds.

Reduce fuels in Fire Regimes I and II (ponderosa pine, sagebrush/grass). Treatments will emphasize condition classes with one or more missed fire cycles and urban/wildland interface areas.

Improve the capability of the Bighorn National Forest to provide diverse, high-quality outdoor recreation opportunities. Scenery is maintained or improved to meet the Management Area objective.

A mix of motorized and non-motorized recreation opportunities is provided. Specifically for this alternative, 74% of the Bighorn NF is available for summer motorized recreation opportunities, and 72% of the Bighorn NF is available for winter motorized recreation opportunities. In areas of motorized travel, the full range of recreation opportunities is

DESIRED FUTURE CONDITION

provided, including driving for pleasure, horseback riding, hiking, fishing, camping, snowmobiling, etc. Non-motorized recreation areas allow uses such as hiking, horseback riding, cross-country skiing, hunting, etc.

Vegetation DFCs: Manage plant communities and habitats (structural stages) to provide a variety of outputs, including recreation, wildlife habitat, diversity and commodity outputs. The amount and distribution of various habitat conditions will be decided during project level planning, and will be determined in an interdisciplinary manner based upon the physical and biological capabilities of the landscape, by which species are present in the landscape, and by the management area objective for the area.

63% of the forested area is classified as unsuited for timber production. Unsuited forest land will generally be influenced by natural disturbance processes such as growth, senescence, and death. Generally unless influenced by a stand disturbance event, such as fire, wind, insects, and diseases, these forests will tend to move to late successional habitats. General forested desired future structural stage distribution would be approximately 5 to 20% of forested area in early successional stages, 30 to 50% in mid successional stages, and 50 to 70% in late successional stages.

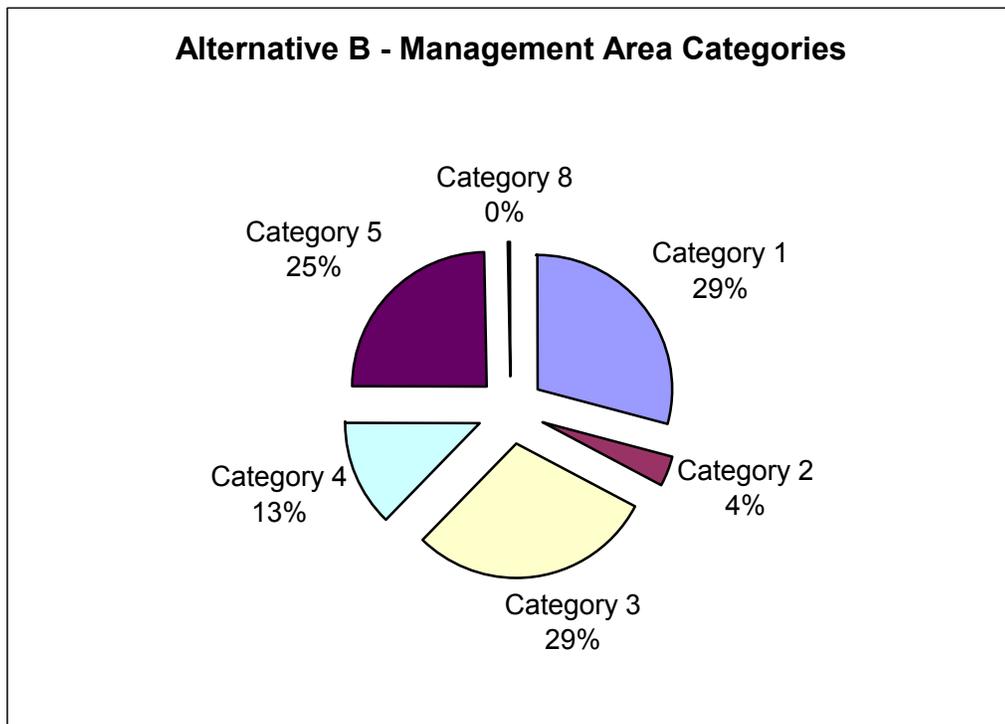
37% of the forested area is classified as suited for timber production. These suited lands would be actively managed to create a diversity of age and size classes. The general desired future structural distribution would be approximately 5-15% of forested area in early successional stages, 30-60% in mid successional stages, and 27-65% in late successional stages. Lodgepole pine will generally be managed for even-aged structure; spruce-fir will generally be managed for uneven-aged or even-aged structure.

Non-forested areas are managed for a mix of seral stages (early, middle, and late) depending on direction in Allotment Management Plans.

Alternative B

Alternative B prioritizes management of vegetation types, including the use of timber harvest and fire both prescribed and natural, in order to improve wildlife habitat by allocating the most area to Management Area 3.5 compared to the other alternatives. Other areas of the Forest continue to be managed for wood products and livestock forage.

Figure H—3. Alternative B Management Area Categories



Water and air quality, soil productivity, and aspen, is improved or maintained. All environmental and resource laws are met. (Endangered Species, National Historic Preservation Act, Clean Water Act, Multiple Use Sustained Yield, etc.)

Elk hunting opportunities are maintained at current levels. Species viability is improved or maintained, National Forest Management Act.

Commodity uses, including timber and livestock grazing, are provided to achieve National Forest management objectives (such as habitat objectives) and to help support local communities.

Limit further expansion or new infestations of invasive weeds and reduce existing infestations of invasive weeds.

DESIRED FUTURE CONDITION

Reduce fuels in Fire Regimes I and II (ponderosa pine, sagebrush/grass). Treatments will emphasize condition classes with one or more missed fire cycles and urban/wildland interface areas.

Improve the capability of the Bighorn National Forest to provide diverse, high-quality outdoor recreation opportunities. Scenery is maintained or improved to meet the Management Area objective.

Habitat improvement objectives are generally met in MA 3.5 areas without additional permanent roads.

A mix of motorized and non-motorized recreation opportunities is provided. Specifically for this alternative, 68% of the Bighorn NF is available for summer motorized recreation opportunities, and 68% of the Bighorn NF is available for winter motorized recreation opportunities. In areas of motorized travel, the full range of recreation opportunities is provided, including driving for pleasure, horseback riding, hiking, fishing, camping, snowmobiling, etc. Non-motorized recreation areas allow uses such as hiking, horseback riding, cross-country skiing, hunting, etc.

Vegetation DFCs: Manage plant communities and habitats (structural stages) to provide foraging areas, cover, and areas of solitude in patterns across the landscape. The amount and distribution of various habitat conditions will be decided during project level planning, and will be determined in an interdisciplinary manner based upon the physical and biological capabilities of the landscape, and by which species are present in the landscape.

83% of the forested area is classified as unsuited for timber production. Unsuited forest land will generally be influenced by natural disturbance processes such as growth, senescence, and death. Generally unless influenced by a stand disturbance event, such as fire, wind, insects, and diseases, these forests will tend to move to late successional habitats. General forested desired future structural stage distribution would be approximately 5 to 20% of forested area in early successional stages, 30 to 50% in mid successional stages, and 50 to 70% in late successional stages.

17% of the forested area is classified as suited for timber production. These suited lands would be actively managed to create a diversity of age and size classes. The general desired future structural distribution would be approximately 5-15% of forested area in early successional stages, 30-60% in mid successional stages, and 27-65% in late successional stages. Lodgepole pine will generally be managed for even-aged structure; spruce-fir will generally be managed for uneven-aged or even-aged structure.

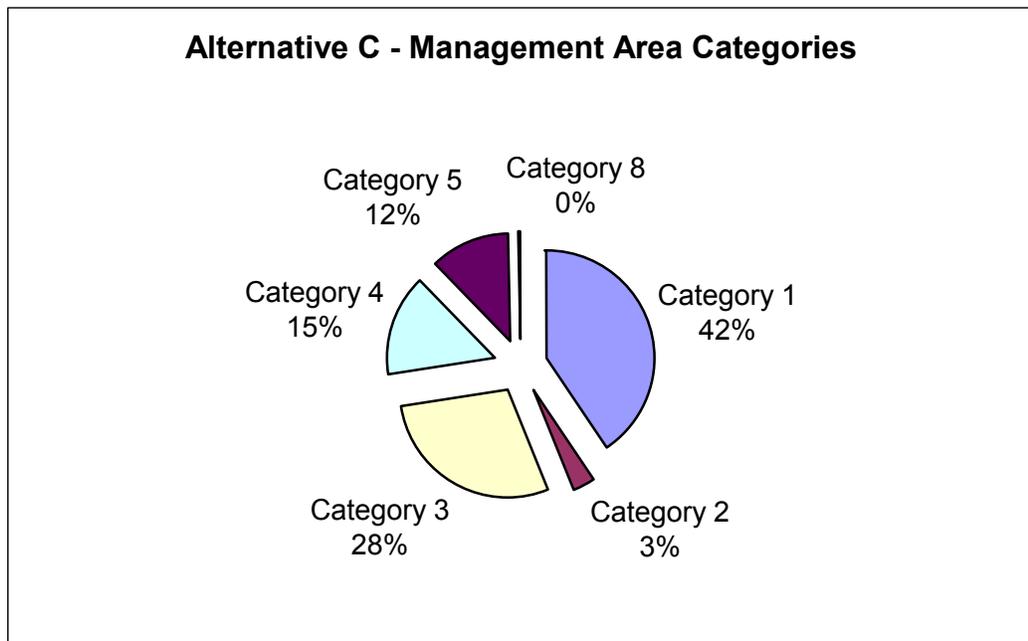
Non-forested areas are managed for a mix of seral stages (early, middle, and late) depending on direction in Allotment Management Plans.

Alternative C

Alternative C emphasizes natural processes to sustain ecological systems. Lands identified for timber production are in a general forest management area (5.11), rather than in a timber production management area (5.13). The 5.11 areas are on land where timber harvest has occurred in the past, and the road system is in place.

Forested habitat successional changes will be dictated more by nature (growth, fire, insects, and diseases) than in the other alternatives, which may result in large, contiguous blocks of either late or early successional stages depending the scale and intensity of natural events. This alternative has the highest amount of National Forest System land recommended for Congressional designation as either Wild and Scenic River or wilderness.

Figure H—4. Alternative C – Management Area Categories



Water and air quality, soil productivity, and aspen, is improved or maintained. All environmental and resource laws are met. (Endangered Species, National Historic Preservation Act, Clean Water Act, Multiple Use Sustained Yield, etc.)

Elk hunting opportunities are maintained at current levels. Species viability is improved or maintained, National Forest Management Act.

Commodity uses, including timber and livestock grazing, are provided to achieve National Forest management objectives (such as habitat objectives) and to help support local communities.

Limit further expansion or new infestations of invasive weeds and reduce existing infestations of invasive weeds.

DESIRED FUTURE CONDITION

Reduce fuels in Fire Regimes I and II (ponderosa pine, sagebrush/grass). Treatments will emphasize condition classes with one or more missed fire cycles and urban/wildland interface areas.

Improve the capability of the Bighorn National Forest to provide diverse, high-quality outdoor recreation opportunities. Scenery is maintained or improved to meet the Management Area objective.

11% of the Forest would be recommended for Wilderness. Permanent, Congressional designated protection to maintain undeveloped lands is a desired condition of this alternative.

Generally existing roadless characteristics will be maintained.

A mix of motorized and non-motorized recreation opportunities is provided. Specifically for this alternative, 57% of the Bighorn NF is available for summer motorized recreation opportunities, and 61% of the Bighorn NF is available for winter motorized recreation opportunities. In areas of motorized travel, the full range of recreation opportunities is provided, including driving for pleasure, horseback riding, hiking, fishing, camping, snowmobiling, etc. Non-motorized recreation areas allow uses such as hiking, horseback riding, cross-country skiing, hunting, etc.

Vegetation DFCs: Manage plant communities and habitats (structural stages) to provide primarily wildlife habitat and recreation outputs. Commodity outputs will be provided consistent with the management area objectives. The amount and distribution of various habitat conditions will be decided during project level planning, and will be determined in an interdisciplinary manner based upon the physical and biological capabilities of the landscape, by which species are present in the landscape and by the management area objective for the area.

91% of the forested area is classified as unsuited for timber production. Unsuited forest land will generally be influenced by natural disturbance processes such as growth, senescence, and death. Generally unless influenced by a stand disturbance event, such as fire, wind, insects, and diseases, these forests will tend to move to late successional habitats. General forested desired future structural stage distribution would be approximately 5 to 20% of forested area in early successional stages, 30 to 50% in mid successional stages, and 50 to 70% in late successional stages.

9% of the forested area is classified as suited for timber production. These suited lands would be actively managed to create a diversity of age and size classes. The general desired future structural distribution would be approximately 5-15% of forested area in early successional stages, 30-60% in mid successional stages, and 27-65% in late successional stages. Lodgepole pine will generally be managed for even-aged structure; spruce-fir will generally be managed for uneven-aged or even-aged structure.

Non-forested areas are managed for a mix of seral stages (early, middle, and late) depending on direction in Allotment Management Plans.

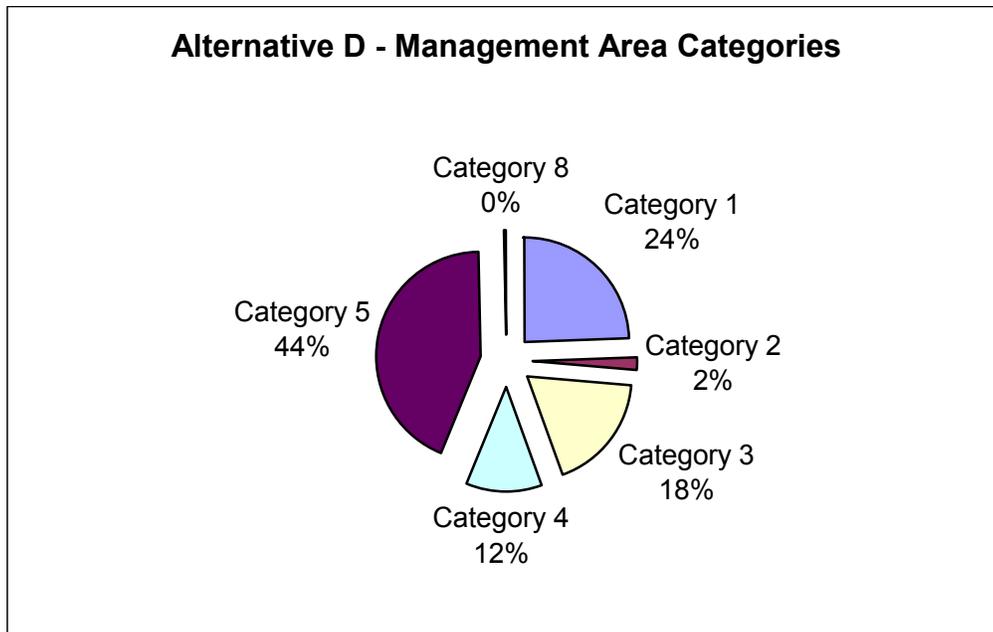
Alternative D

Alternative D was developed by reviewing past forest plan monitoring reports and adjusting management area boundaries and forest plan direction to reflect the changes in human uses, technologies, and scientific information that has occurred since the mid-1980's.

This alternative recognizes a wide assortment of active vegetation management, primarily through timber harvest and prescribed fire; the active management provides sawtimber, firewood, other forest products; forage for livestock grazing; and diverse habitats. There is a mix of motorized and non-motorized recreation opportunities.

A mix of wildlife habitat will be provided. In managed forested areas, a more even distribution of structural stages will be provided through active management. In other areas, successional pattern and habitats will be dictated by natural events, including insects, disease and fire, and larger contiguous blocks of similar habitat conditions will occur.

Figure H—5. Alternative D – Management Area Categories



Water and air quality, soil productivity, and aspen, is improved or maintained. All environmental and resource laws are met. (Endangered Species, National Historic Preservation Act, Clean Water Act, Multiple Use Sustained Yield, etc.)

Elk hunting opportunities are maintained at current levels. Species viability is improved or maintained, National Forest Management Act.

DESIRED FUTURE CONDITION

Commodity uses, including timber and livestock grazing, are provided to achieve National Forest management objectives (such as habitat objectives) and to help support local communities.

Limit further expansion or new infestations of invasive weeds and reduce existing infestations of invasive weeds.

Reduce fuels in Fire Regimes I and II (ponderosa pine, sagebrush/grass). Treatments will emphasize condition classes with one or more missed fire cycles and urban/wildland interface areas.

Improve the capability of the Bighorn National Forest to provide diverse, high-quality outdoor recreation opportunities. Scenery is maintained or improved to meet the Management Area objective.

A mix of motorized and non-motorized recreation opportunities is provided. Specifically for this alternative, 74% of the Bighorn NF is available for summer motorized recreation opportunities, and 69% of the Bighorn NF is available for winter motorized recreation opportunities. In areas of motorized travel, the full range of recreation opportunities is provided, including driving for pleasure, horseback riding, hiking, fishing, camping, snowmobiling, etc. Non-motorized recreation areas allow uses such as hiking, horseback riding, cross-country skiing, hunting, etc.

Vegetation DFCs: Manage plant communities and habitats (structural stages) to provide a variety of outputs, including recreation, wildlife habitat, diversity and commodity outputs. The amount and distribution of various habitat conditions will be decided during project level planning, and will be determined in an interdisciplinary manner based upon the physical and biological capabilities of the landscape, by which species are present in the landscape, and by the management area objective for the area.

75% of the forested area is classified as unsuited for timber production. Unsuited forest land will generally be influenced by natural disturbance processes such as growth, senescence, and death. Generally unless influenced by a stand disturbance event, such as fire, wind, insects, and diseases, these forests will tend to move to late successional habitats. General forested desired future structural stage distribution would be approximately 5 to 20% of forested area in early successional stages, 30 to 50% in mid successional stages, and 50 to 70% in late successional stages.

25% of the forested area is classified as suited for timber production. These suited lands would be actively managed to create a diversity of age and size classes. The general desired future structural distribution would be approximately 5-15% of forested area in early successional stages, 30-60% in mid successional stages, and 27-65% in late successional stages. Lodgepole pine will generally be managed for even-aged structure; spruce-fir will generally be managed for uneven-aged or even-aged structure.

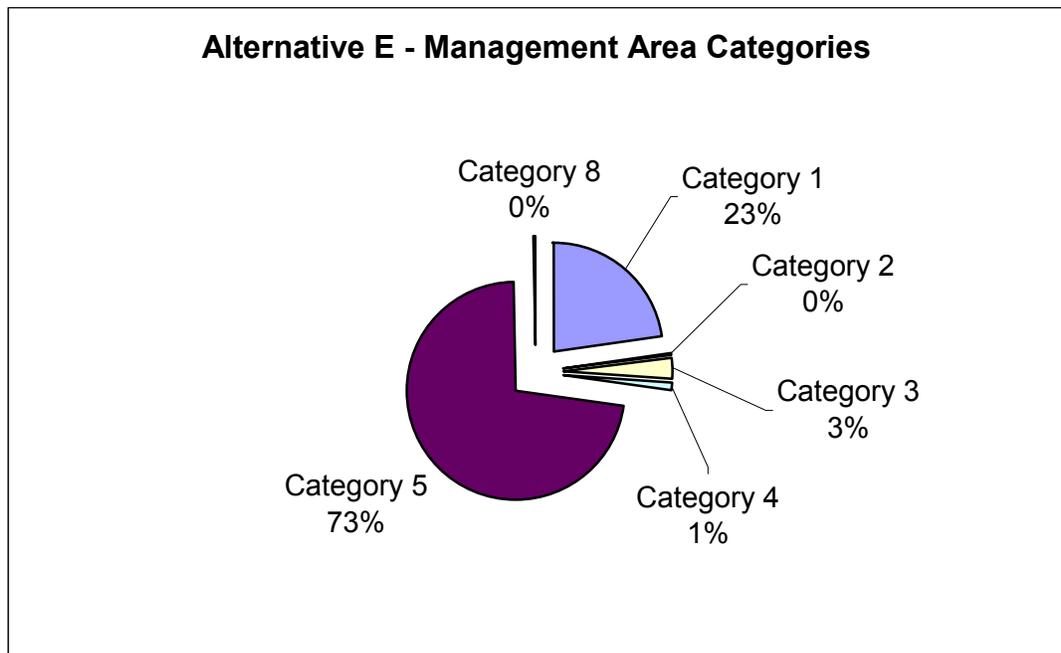
Non-forested areas are managed for a mix of seral stages (early, middle, and late) depending on direction in Allotment Management Plans.

Alternative E

This alternative places the most emphasis on active management primarily through timber harvest opportunities of all the alternatives. Areas will be managed to minimize damage to commercial forest land from insects, disease, and fire. With management the age, size class, and density of forest stands would occur in a more balanced distribution, with more early structural stages than in the other alternatives.

Roaded recreation opportunities will predominate in this alternative, although there will be areas of non-motorized recreation in the areas not allocated to timber harvest emphasis.

Figure H—6. Alternative E – Management Area Categories



Water and air quality, soil productivity, and aspen, is improved or maintained. All environmental and resource laws are met. (Endangered Species, National Historic Preservation Act, Clean Water Act, Multiple Use Sustained Yield, etc.)

Elk hunting opportunities are maintained at current levels. Species viability is improved or maintained, National Forest Management Act.

Commodity uses, including timber and livestock grazing, are provided to achieve National Forest management objectives (such as habitat objectives) and to help support local communities.

Limit further expansion or new infestations of invasive weeds and reduce existing infestations of invasive weeds.

DESIRED FUTURE CONDITION

Reduce fuels in Fire Regimes I and II (ponderosa pine, sagebrush/grass). Treatments will emphasize condition classes with one or more missed fire cycles and urban/wildland interface areas.

Improve the capability of the Bighorn National Forest to provide diverse, high-quality outdoor recreation opportunities. Scenery is maintained or improved to meet the Management Area objective.

The ability to use timber harvest as a tool to manage forest vegetation and produce timber harvest outputs is greater under this alternative.

A mix of motorized and non-motorized recreation opportunities is provided. Specifically for this alternative, 77% of the Bighorn NF is available for summer motorized recreation opportunities, and 72% of the Bighorn NF is available for winter motorized recreation opportunities. In areas of motorized travel, the full range of recreation opportunities is provided, including driving for pleasure, horseback riding, hiking, fishing, camping, snowmobiling, etc. Non-motorized recreation areas allow uses such as hiking, horseback riding, cross-country skiing, hunting, etc.

Vegetation DFCs: Manage plant communities and habitats (structural stages) to provide a variety of outputs, including recreation, wildlife habitat, diversity and commodity outputs. The amount and distribution of various habitat conditions will be decided during project level planning, and will be determined in an interdisciplinary manner based upon the physical and biological capabilities of the landscape, by which species are present in the landscape and by the management area objective for the area.

58% of the forested area is classified as unsuited for timber production. Unsuited forest land will generally be influenced by natural disturbance processes such as growth, senescence, and death. Generally unless influenced by a stand disturbance event, such as fire, wind, insects, and diseases, these forests will tend to move to late successional habitats. General forested desired future structural stage distribution would be approximately 5 to 20% of forested area in early successional stages, 30 to 50% in mid successional stages, and 50 to 70% in late successional stages.

42% of the forested area is classified as suited for timber production. These suited lands would be actively managed to create a diversity of age and size classes. The general desired future structural distribution would be approximately 5-15% of forested area in early successional stages, 30-60% in mid successional stages, and 27-65% in late successional stages. Lodgepole pine will generally be managed for even-aged structure; spruce-fir will generally be managed for uneven-aged or even-aged structure.

Non-forested areas are managed for a mix of seral stages (early, middle, and late) depending on direction in Allotment Management Plans.

Detailed Desired Future Condition of Forest lands

As described above, each alternative will have a slightly different desired future condition (DFC), not only for the overall Forest, but for the forested lands and the lands suitable for timber production as defined in each alternative. This section strives to provide additional descriptions for the forested lands and the lands suitable for timber production as defined by each alternative. Habitat structural stages (HSS), as defined in the biodiversity section of the DEIS, are used to describe the forest diversity, these stages are lumped into Early (HSS 1 & 2), Intermediate (HSS 3) and Mature (HSS 4 & 5). Species grouping is similar to what was used in the 1985 plan which stratified them by 4 general cover types, spruce/fir, lodgepole, and ponderosa pine and Douglas fir. Using this process we can describe the differences in size/age classes by cover type as a measure of diversity in the forested lands.

Current 1985 Forest Plan Final Environmental Impact Statement (FEIS):

The 1985 FEIS (pages IV-7 to 10) described by alternative the existing, desired and expected amount in each HSS. It did not further stratify out the lands suited for timber production. The table below summarizes the desired future structural stage distribution, our current (2002 Common Vegetation Unit or CVU) conditions, and calculates how many acres would need to change to meet the desired conditions.

Table H-1. Forested Acres, Desired from 1985 EIS

HSS	Desired Spruce-fir	Desired Lodgepole	Desired Doug-fir	Desired Ponderosa
Existing Early HSS	2,015	13,283	188	0
Desired Early HSS %	14%	17%	32%	32%
Desired Early HSS acres	32,866	59,554	32,094	5,987
Difference between Desired and Existing	30,851	46,271	31,906	5,987
Existing Intermediate HSS	124,779	248,783	60,200	10,749
Desired Intermediate HSS %	23%	53%	33%	33%
Desired Intermediate HSS acres	53,993	185,670	33,097	6,174
Difference between Desired and Existing	(70,786)	(63,113)	(27,103)	(4,575)
Existing Mature HSS	107,960	88,254	39,907	7,960
Desired Mature HSS %	63%	30%	35%	35%
Desired Mature HSS acres	147,895	105,096	35,103	6,548
Difference between Desired and Existing	39,935	16,842	(4,804)	(1,412)
Total Acres	234,754	350,320	100,295	18,709

2004 Forest Plan Draft Environmental Impact Statement (DEIS):

Forested lands: The Forest interdisciplinary team (FIDT) reviewed the 1985 FEIS, the historic range of variability analysis (Meyer, et al, 2003), diversity goals for the Forest, and projections of yield and growth to revise the DFC by HSS for this revision. The analysis shows a wide range of diversity existed on the Forest in the past, and given that under all alternatives most of the forested land would not be actively managed; the FIDT developed a range for each HSS displayed in the table below.

Table H-2. Desired Future Condition for forested lands:

	Early	Middle	Late
forested lands	2 to 20%	30 to 60%	50 to 75%

It was further thought that while these ranges described the past, and what could be considered to be within the historic range of variation, it provided little direction to management of the Forest. To provide this direction these numbers were refined. The table below summarizes the 2004 desired future structural stage distribution for all forested lands, our current (2002 CVU) conditions, and calculates how many acres would need to change to meet the desired conditions.

To develop the desired condition figures shown below, the FIDT considered the broad DFCs above, the goals, objectives, strategies, forest-wide direction, standards and guidelines in the draft EIS. This direction was used to develop one number for each HSS and species group, as shown below. For example, given that lodgepole pine historically develops from stand replacing events, that species group has the largest amount of desired early HSS. Conversely, the spruce/fir cover type has the longest interval between disturbance events, and thus the largest amount of mature HSS.

Table H-3. Forested Acres, Desired for 2004 DEIS

HSS	Desired Spruce-fir	Desired Lodgepole	Desired Doug-fir	Desired Ponderosa
Existing Early HSS	2,015	13,283	188	0
Desired forested Early HSS %	7%	10%	7%	7%
Desired forested Early HSS acres	16,433	35,032	7,021	1,310
Difference between Desired and Existing	14,418	21,749	6,833	1,310
Existing Intermediate HSS	124,779	248,783	60,200	10,749
Desired forested Intermediate HSS %	25%	60%	30%	30%
Desired forested Intermediate HSS acres	58,689	210,192	30,089	5,613
Difference between Desired and Existing	(66,091)	(38,591)	(30,112)	(5,136)
Existing Mature HSS	107,960	88,254	39,907	7,960
Desired forested Mature HSS %	68%	30%	63%	63%
Desired forested Mature HSS acres	159,633	105,096	63,186	11,787
Difference between Desired and Existing	51,673	16,842	23,279	3,827
Total Acres	234,754	350,320	100,295	18,709

Each alternative will treat some amount of the Forest both on suited and non-suited lands. Alternative C and B treat the least, alternative D, A and E treat the most acres respectively. To determine how each of the alternatives compare with the desired distribution, we looked at the projected stand conditions after 50 year of implementation by each alternative, and compared that with the desired conditions shown above. Table H-4, below, shows how each alternative is projected into the future.

In general, for Forest-wide forested lands, none of the alternatives approach the desired future condition. There are slight differences, mainly due to the amount of early HSS created, with alternatives E, D, and B creating measurable amounts. None of the alternatives would create the total desired early HSS by active management activities. This is due to the relatively small amount of harvest activities projected as compared to the total forested land base, any change from harvest is diluted by the expected growth of the non-harvested stands.

Please note, only scheduled harvests are shown here. In addition to the proposed harvests, natural events, such as wildfire, blowdown, insects, and disease will also change the structure of the forest structure. It is predicted that within in the next 10 years the forest has an almost 100% probability of fires between 1,000 and 10,000 acres. During the last planning period the forest experienced a number of wind events which affected hundreds of acres. Insects and disease will continue to affect hundreds of acres as they have in the past. Given the random nature of these events they are not quantified in this analysis.

DESIRED FUTURE CONDITION

Table H-4. Existing, Desired and projected forested lands

FOREST WIDE

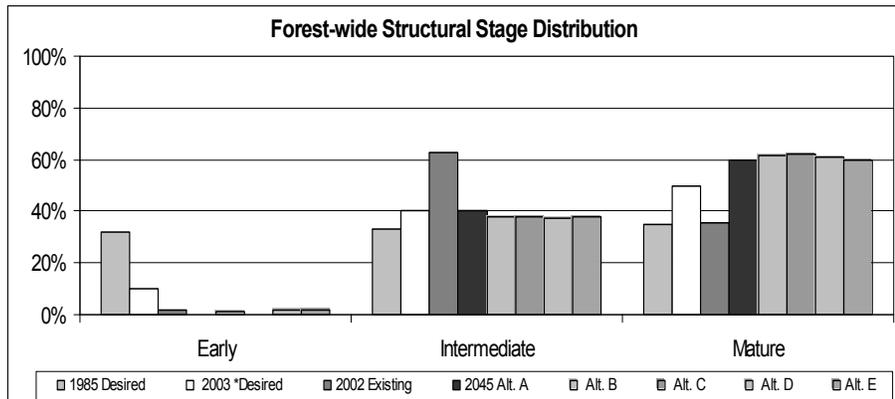
HSS	Spruce/fir			Model projections for 2045			
	2002 Existing	2003 Desired	2045 Alt. A	2045 Alt. B	2045 Alt. C	2045 Alt. D	2045 Alt. E
Early	1%	7%	0%	0%	0%	0%	0%
Intermediate	53%	25%	4%	2%	1%	2%	5%
Mature	46%	68%	96%	98%	99%	98%	95%

HSS	Lodgepole			Model projections for 2045			
	2002 Existing	2003 Desired	2045 Alt. A	2045 Alt. B	2045 Alt. C	2045 Alt. D	2045 Alt. E
Early	4%	10%	0%	2%	0%	4%	4%
Intermediate	71%	60%	74%	71%	72%	71%	69%
Mature	25%	30%	26%	27%	28%	26%	27%

HSS	Douglas fir			Model projections for 2045			
	2002 Existing	2003 Desired	2045 Alt. A	2045 Alt. B	2045 Alt. C	2045 Alt. D	2045 Alt. E
Early	0%	7%	0%	0%	0%	0%	0%
Intermediate	60%	30%	2%	1%	0%	1%	4%
Mature	40%	63%	98%	99%	100%	99%	96%

HSS	All forested lands			Model projections for 2045			
	2002 Existing	2003 Desired	2045 Alt. A	2045 Alt. B	2045 Alt. C	2045 Alt. D	2045 Alt. E
Early	2%	10%	0%	1%	0%	2%	2%
Intermediate	63%	40%	40%	38%	38%	37%	38%
Mature	35%	50%	60%	61%	62%	61%	60%

Figure H—7. Forest-wide Structural Stage Distribution



Forested lands, suitable for timber production: As most of the active management is planned on suited acres, the FIDT determined that we should have even more refined direction on HSS distribution for these lands. In addition to the above, this DFC distribution considers management area direction, standards, and guidelines for those lands considered suited for timber production under each of the alternatives. The desired percent HSS distribution remains the same between alternative, though the amount of suited land varies by alternative, thus the acreage in each HSS would vary also. The desired HSS distribution for lands suitable for timber production is shown in the table below as “2003 Desired”.

Table H-5. Percentage of suitable land by forest type and structural stage

Suited

HSS	Spruce/fir						
	2002 Existing	Suited Desired	2045 Alt. A	2045 Alt. B	2045 Alt. C	2045 Alt. D	2045 Alt. E
Early	1%	5%	0%	0%	0%	0%	0%
Intermediate	53%	30%	13%	10%	4%	5%	14%
Mature	46%	65%	87%	90%	96%	95%	86%

HSS	Lodgepole						
	2002 Existing	Suited Desired	2045 Alt. A	2045 Alt. B	2045 Alt. C	2045 Alt. D	2045 Alt. E
Early	4%	15%	1%	9%	1%	13%	8%
Intermediate	71%	58%	79%	66%	71%	68%	70%
Mature	25%	27%	20%	24%	28%	19%	22%

DESIRED FUTURE CONDITION

Douglas fir							
HSS	2002 Existing	Suited Desired	2045 Alt. A	2045 Alt. B	2045 Alt. C	2045 Alt. D	2045 Alt. E
Early	0%	5%	0%	0%	0%	0%	0%
Intermediate	60%	40%	17%	9%	0%	6%	18%
Mature	40%	55%	83%	91%	100%	94%	82%

All Suited Lands							
HSS	2002 Existing	Suited Desired	2045 Alt. A	2045 Alt. B	2045 Alt. C	2045 Alt. D	2045 Alt. E
Early	2%	10%	1%	6%	1%	8%	5%
Intermediate	63%	47%	56%	46%	44%	44%	49%
Mature	34%	43%	43%	48%	50%	48%	46%

No alternative will meet the desired future condition of suited timber lands in the first 50 years. None of the alternatives create the desired early structural stages, and most have a surplus of the mature and intermediate stages. Alternatives D, B then E, which project a higher percentage of clearcut harvesting, tend to approach the DFC better than alternatives which project lower percentages of clearcut harvest or more uneven-aged management (alternatives A and C).

As noted for the total forested lands, it is anticipated that there will be natural stand replacing events such as wildfire, blowdown, insects and disease that will also affect the future conditions, but these are random events and are not predicted in this analysis.

Geographic area desired future condition

For the final EIS preferred alternative, further refinement of the DFC will be done by the 9 geographic areas on the Forest. The Forest recognized that each of these geographic areas are unique in its amount and types of forested lands. By focusing in on the smaller scale geographic areas we plan to create a better tool for site-specific implementation.