

APPENDIX 6—CHARACTERISTICS OF OLD-GROWTH FORESTS—BLM PINEDALE FIELD OFFICE

Old growth forests are ecosystems distinguished by old trees and related structural features. Old growth encompasses the later stages of stand development that typically differs from earlier stages in several ways, including tree size; accumulation of large, dead woody material; number of canopy layers; species composition; and ecosystem function.

Old growth is typically distinguished by the following:

- Large trees of specific species
- Wide variation in age classes and stocking levels
- Accumulations of large, dead, standing and fallen trees
- Decadence in the form of broken or deformed tops and boles
- Multiple canopy layers
- Canopy interspaces and understory patchiness.

The following are descriptions of old growth forests by species type. Tables were extracted from Hamilton, R.G. compiler, 1993. United States Department of Agriculture (USDA) Forest Service Intermountain Region 4, Ogden, Utah for BLM Wyoming planning purposes.

ENGELMANN SPRUCE—SUBALPINE FIR; SOCIETY OF AMERICAN FORESTERS (SAF) COVER TYPE 206

Live Trees (Warm/Moist Environment)

Diameter at Breast Height (DBH): > or equal 20"

Trees/Acre: > or equal 25

Age: > or equal 220

Variation in Tree Diameter: Yes

Tree Decadence: Evident dead, broken, or deformed tops and/or bole or root rot

Multiple Tree Canopy Layers: Yes

Dead Trees (Warm/Moist Environment)

Standing DBH/ht ft: > or equal 12/15

Standing Trees/Acre: > or equal 2

Down Diameter (in): > or equal 12

Down Pieces/Acre—length in ft: > or equal 1–8

Live Trees (Cold/Dry Environment)

DBH: > or equal 15"

Trees/Acre: > or equal 15

Age: > or equal 150 to 180

Variation in Tree Diameter: Yes

Tree Decadence: > or equal 2; DBH 14; Evident dead, broken, or deformed tops and/or bole or root rot

Multiple Tree Canopy Layers: Yes

Dead Trees (Cold/Dry Environment)

Standing DBH/ht ft: > or equal 10/15

Standing Trees/Acre: 2 to 4

Down Diameter (in): > or equal 8 or > 6

Down Pieces/Acre—length in ft: > or equal 16 – 8 ft or 100 pieces > 8 feet

DOUGLAS-FIR; SAF COVER TYPE 210**Live Trees (Higher Productivity Site)**

DBH: 24”

Trees/Acre: > or equal 15

Age: > or equal 200

Variation in Tree Diameter: Yes

Tree Decadence: Evident dead, broken, or deformed tops and/or bole or root rot

Multiple Tree Canopy Layers: Yes

Dead Trees (Higher Productivity Site)

Standing DBH/ht ft: > or equal 20/20

Standing Trees/Acre: > or equal 1

Down Diameter (in): > or equal 12

Down Pieces/Acre—length in ft: > or equal 0 - 16

Live Trees (Lower Productivity Site)

DBH: 18”

Trees/Acre: 10

Age: > or equal 200

Variation in Tree Diameter: Yes

Tree Decadence: > or equal 2; DBH 15; Evident dead, broken, or deformed tops and/or bole or root rot

Multiple Tree Canopy Layers: Yes

Dead Trees (Lower Productivity Site)

Standing DBH/ht ft: 16/10

Standing Trees/Acre: 0 to 3

Down Diameter (in): > or equal 15

Down Pieces/Acre—length in ft: Infrequent 4 - > or equal 8

LOGEPOLE PINE; SAF COVER TYPE 218**Live Trees**

DBH: > or equal 11”

Trees/Acre: > or equal 25

Age: > or equal 140

Variation in Tree Diameter: Yes

Tree Decadence (trees per acre [TPA]-DBH): > or equal 2–11; evident dead, broken, or deformed tops and/or bole or root rot

Multiple Tree Canopy Layers: Yes

Dead Trees

Standing DBH/ht ft: > or equal 11

Standing Trees/Acre: 5

Down Diameter (in): > or equal 11

Down Pieces/Acre—length in ft: > or equal 50 - > or equal 8

LIMBER PINE; SAF COVER TYPE 219

Live Trees (Lower Timberline)

DBH: > or equal 16

Trees/Acre: > or equal 10

Age: > or equal 250

Variation in Tree Diameter: Yes

Tree Decadence: Evident dead, broken, or deformed tops and/or bole or root rot

Multiple Tree Canopy Layers: Yes

Dead Trees (Lower Timberline)

Standing DBH/ht ft: N/A

Standing Trees/Acre: Few

Down Diameter (in): N/A

Down Pieces/Acre—length in ft: Rare

Live Trees (Montaine Woodlands)

DBH: > or equal 1

Trees/Acre: 10

Age: > or equal 500

Variation in Tree Diameter: Yes

Tree Decadence: Evident dead, broken, or deformed tops and/or bole or root rot

Multiple Tree Canopy Layers: No

Dead Trees (Lower Productivity Site)

Standing DBH/ht ft: N/A

Standing Trees/Acre: Few

Down Diameter (in): N/A

Down Pieces/Acre—length in ft: Rare

ASPEN; SAF COVER TYPE 217

Live Trees

DBH: > or equal 12"

Trees/Acre: > or equal 10 dry—20 mesic
Age: 100
Variation in Tree Diameter: Yes
Tree Decadence (TPA-DBH): N/A
Multiple Tree Canopy Layers: Yes

Dead Trees

Standing DBH/ht ft: > or equal 10/15
Standing Trees/Acre: 2
Down Diameter (in): > or equal 8
Down Pieces/Acre—length in ft: > or equal 10–10

ROCKY MOUNTAIN JUNIPER; SAF COVER TYPE 220

Note: Extrapolated old growth characteristics from Pinyon-Juniper old growth characteristics.

Live Trees

DBH: 12”
Trees/Acre: 12
Age: 200
Variation in Tree Diameter: Yes
Tree Decadence (TPA-DBH): N/A
Multiple Tree Canopy Layers: N/A

Dead Trees

Standing DBH/ht ft: 12/5
Standing Trees/Acre: > or equal .05
Down Diameter (in): > or equal 10
Down Pieces/Acre—Length in ft: > or equal 2–5