

Owner's Name _____

Plan Author (if not owner) _____

Stand Analysis Form

A "healthy forest" must be defined by the natural history of the area and the growth characteristics of the tree species that currently occupy the site. In general, a healthy forest has a majority of trees that are vigorous and resistant to uncharacteristic insect and disease outbreaks and has the ability to sustain itself as a forest through tree survival or tree regeneration when affected by wildfire.



Current Condition

Total % cover by larger diameter species (> 9 inches diameter 4.5 ft from ground > 30 ft tall)

Species	% of Forested Area	Age
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____

PP Ponderosa pine
 DF Douglas-fir
 LP Lodgepole pine
 WL Western Larch
 GF Grand fir
 ES Engelmann spruce
 WRC Western red cedar
 WH Western hemlock
 WP White pine
 SAF Subalpine fir
 PF Limber pine
 RMJ Rocky mtn. juniper
 QA Quaking aspen
 CW Cottonwood
 Green Ash

Total% cover by smaller diameter species - Poles (5-9 inches diameter 4.5 ft from ground < 30 ft tall)

Species	% of Forested Area	Age
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____

Predominant stand tree structure (percent of the management unit)

Single canopy layer _____
 Two canopy layers (Overstory + seedlings) _____
 Three canopy (Overstory + poles, Poles + seedlings) _____



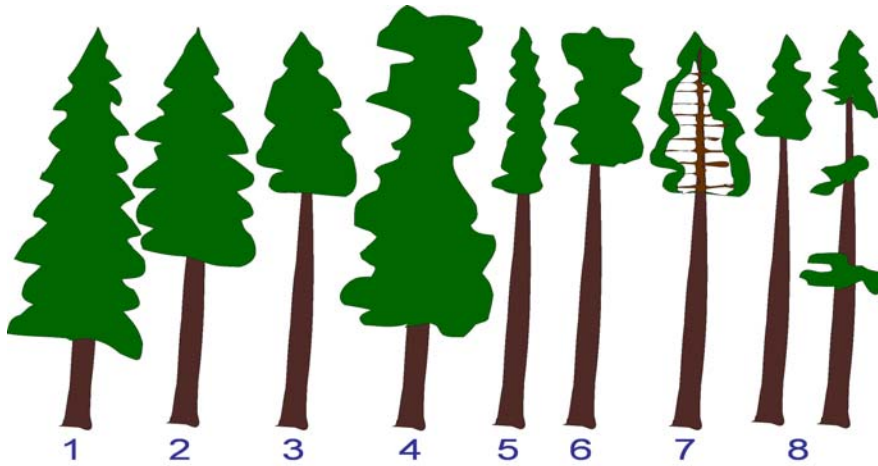
Average age of size classes

Seedlings/Saplings _____ Poles (5-9" diameter) _____ Large (>9" diameter) _____

Insect and disease symptoms noted (list species and percent of the trees showing symptoms)

Bark beetle attack _____ Mistletoe/branch brooming _____
 Excessive pitch streaming _____ Visible butt/root decay _____
 Broken stems/windthrow _____ Stem galls (western gall rust) _____

Stand vigor rating (use diagram below and list percent of each tree species in major crown class)



Species 1 _____ Crown classes _____
 Species 2 _____ Crown classes _____
 Species 3 _____ Crown classes _____

Fire Hazard (circle High, Med, or Low in each category)

Trees with fuel ladders high > 30% med 10 – 29% low < 10%

Tree Crowns touching high > 50% med 10 – 49% low < 10%

Fine fuels (grasses taller than 2ft, > 2" deep pine needles, brush, branches) High Med Low

Large fuels (branches larger than 2 inches diameter, logs) High Med Low

Ground Fuel Continuity High – mostly touching Med – occasionally touching Low – rarely touching

Overall Wildfire risk (total circled above)
High = any two highs marked Moderate = two or more med Low = one med or less

Adjacent Management Unit/Ownership Wildfire Risk: High Moderate Low

Stream/wetland present in Management Unit

Streams Class I – length _____ Class II – length _____ Class III – length _____

Ponds _____ approximate sizes _____

Lakeshore (name of lake and distance of shoreline) _____

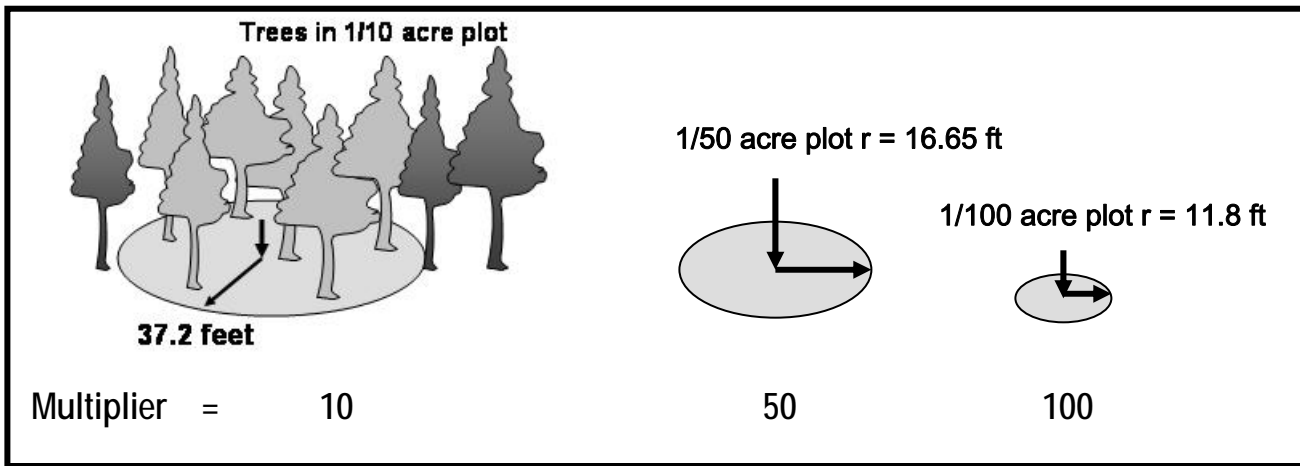
Bogs/wetland (acreage) _____

Soil considerations (circle all that apply) deep (>2 feet) shallow (<2 feet)

May have a mix of textures
rocky gravelly fine sandy clay well drained poorly drained

Other considerations: _____

Tree Density (For dense forest of mature trees choose smaller plot size that will include 5 to 10 trees)



Large diameter trees (>9" DBH) per _____ acre plot _____ x _____ = _____ trees per acre
(choose plot size) (# of trees) (multiplier)

Snags per plot per _____ acre plot _____ x _____ = _____ large snags per acre
(choose plot size) (# of trees) (multiplier)

Pole sized trees (5-9" DBH) per _____ acre plot _____ x _____ = _____ poles per acre
(choose plot size) (# of trees) (multiplier)

Snags per plot per _____ acre plot _____ x _____ = _____ small snags per acre
(choose plot size) (# of trees) (multiplier)

Seedling/Sapling trees per 1/100 acre plot _____ x 100 = _____ seedlings per acre

% of soil covered by understory vegetation per 1/100 acre plot _____ x 100 = _____ % vegetation cover per acre

Site index - (Optional)

Species _____ Age _____ Height _____ Site index _____

Species _____ Age _____ Height _____ Site index _____

Tree growth rates

Large tree averages (based on 3 or more trees sampled per species)

Species				Species			
DBH				DBH			
Age				Age			
Rings/last 1 inch				Rings/last 1 inch			
Average DBH				Average DBH			
Average Age				Average Age			
Average total increment (1/2 DBH/Age)				Average total increment (1/2 DBH/Age)			
Species				Species			
DBH				DBH			
Age				Age			
Rings/last 1 inch				Rings/last 1 inch			
Average DBH				Average DBH			
Average Age				Average Age			
Average total increment (1/2 DBH/Age)				Average total increment (1/2 DBH/Age)			

Desired Future Condition - Timber

MU _____

Desired mature tree species (% of forested area) and expected longevity (maximum age you expect trees to reach before they die of natural causes or are harvested)

Species	% of Forested Area	Age
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____

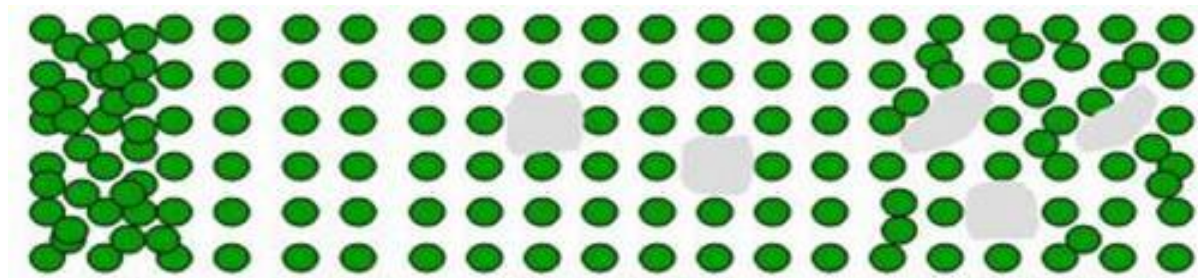
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- QA Aspen
- CW Cottonwood Green ash

Desired species to naturally regenerate _____

Desired species to plant _____

Bird's-eye view of forest (check one)

- Wild stand
 Evenly spaced
 Evenly spaced with openings
 Variable density spaced with openings



- Some wildlife
 Maximizes growth
 Growth + regeneration
 Some growth + regeneration + wildlife

Desired spacing (in feet) Large (>9"DBH) _____ (ft)
 Pole (5-8"DBH) _____ (ft) Seedling(<5"DBH) _____ (ft)
 Size and shape of openings _____

Spacing (feet)	Trees/acre
3x3	4,840
5x5	1,742
7x7	889
10x10	436
12x12	302
14x14	222
16x16	170
18x18	134
20x20	87
25x25	70
30x30	48
40x40	27

Desired structure:



- One canopy layer
 Two canopy layer
 Three canopy