

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

ECOLOGICAL SITE DESCRIPTION

ECOLOGICAL SITE CHARACTERISTICS

Site Type: Forest
Site ID: F042XA002NM
Site Name: *Pinus ponderosa*
Major Land Resource Area and Common Resource Area MLRA 42 / CRA NM 3
Precipitation or Climate Zone: Sandia/Manzano Mountains 16-30"ppt/yr.
Phase: _____

ORIGINAL SITE DESCRIPTION APPROVAL:

Site Date: July 30 2002
Site Author: Steve Lacy
Site Approval: _____
Approval Date: _____

REVISIONS:

Revision Date: _____
Revisor: _____
Revision _____
Approval: _____
Approval Date: _____
Revision Notes: _____

PHYSIOGRAPHIC FEATURES

Narrative:

The ponderosa pine community is found from 6,000 – 8,000 feet. This forest type is found in the Sandia and Manzano mountains in subregion NM 3. The Sandia – Manzano mountains are fault block mountains. They slope steeply to the west and gently to the east.

LAND FORM:

1. mountain slopes
2. _____
3. _____

ASPECT:

1. _____
2. _____
3. _____

Elevation (feet)	Minimum 6,000 ft.	Maximum 8,000 ft.
Slope (percent)	_____	_____
Water Table Depth (inches)	_____	_____
Flooding:	Minimum	Maximum
Frequency	_____	_____
Duration	_____	_____
Ponding:	Minimum	Maximum
Depth (inches)	_____	_____
Frequency	_____	_____
Duration	_____	_____

Runoff Class:

CLIMATIC FEATURES

Narrative:
The Sandia – Manzano mountains receive the majority of its annual moisture during the summer monsoon season. Significant moisture is also received during snow events in the winter.

Frost-free period (days):	Minimum 80	Maximum 130
Freeze-free period (days):	_____	_____
Mean annual precipitation (inches):	_____	_____

Monthly moisture (inches) and temperature (°F) distribution:

	Avg. Precip. Min.	Avg. Snowfall Total	Temp. Min.	Temp. Max.
January	1.30	13.1	18.1	43.3
February	1.18	10.9	21.6	47.4
March	1.55	10.8	26.2	53.0
April	0.99	4.5	32.7	62.6
May	1.10	0.6	40.4	71.9
June	1.03	-	48.4	82.5
July	2.90	-	53.4	84.8
August	3.10	-	51.9	81.1
September	1.73	-	46.0	75.2
October	1.56	1.6	35.5	65.7
November	1.35	6.6	25.8	52.6
December	1.26	10.6	19.1	44.0

Climate Stations:

Station ID	Location	Lat	Long	From:	Period	To:
Sandia Park	Location	3510	10622	1946		1999
_____	_____	_____	_____	_____		_____
_____	_____	_____	_____	_____		_____
_____	_____	_____	_____	_____		_____
_____	_____	_____	_____	_____		_____

INFLUENCING WATER FEATURES

Narrative:

Wetland description:

System	Subsystem	Class

If Riverine Wetland System enter Rosgen Stream Type:

REPRESENTATIVE SOIL FEATURES

Narrative:

Parent Material Kind: _____
Parent Material Origin: _____

Surface Texture:

- | |
|----|
| 1. |
| 2. |
| 3. |

Surface Texture Modifier:

- | |
|----|
| 1. |
| 2. |
| 3. |

Subsurface Texture Group: _____
Surface Fragments $\leq 3''$ (% Cover): _____
Surface Fragments $> 3''$ (% Cover): _____
Subsurface Fragments $\leq 3''$ (%Volume): _____
Subsurface Fragments $\geq 3''$ (%Volume): _____

	Minimum	Maximum
Drainage Class:	_____	_____
Permeability Class:	_____	_____
Depth (inches):	_____	_____
Electrical Conductivity (mmhos/cm):	_____	_____
Sodium Absorption Ratio:	_____	_____
Soil Reaction (1:1 Water):	_____	_____
Soil Reaction (0.1M CaCl ₂):	_____	_____
Available Water Capacity (inches):	_____	_____
Calcium Carbonate Equivalent (percent):	_____	_____

Soil survey associations:

This ecological site is associated with the map units and soil components in the following soil surveys. Future updates to this soil survey may affect these associations. For up-to-date associations between soil components and this ecological site, refer to NASIS. Associations between ecological sites and soil components are maintained in NASIS via the ecological site ID.

MAP UNIT NAME

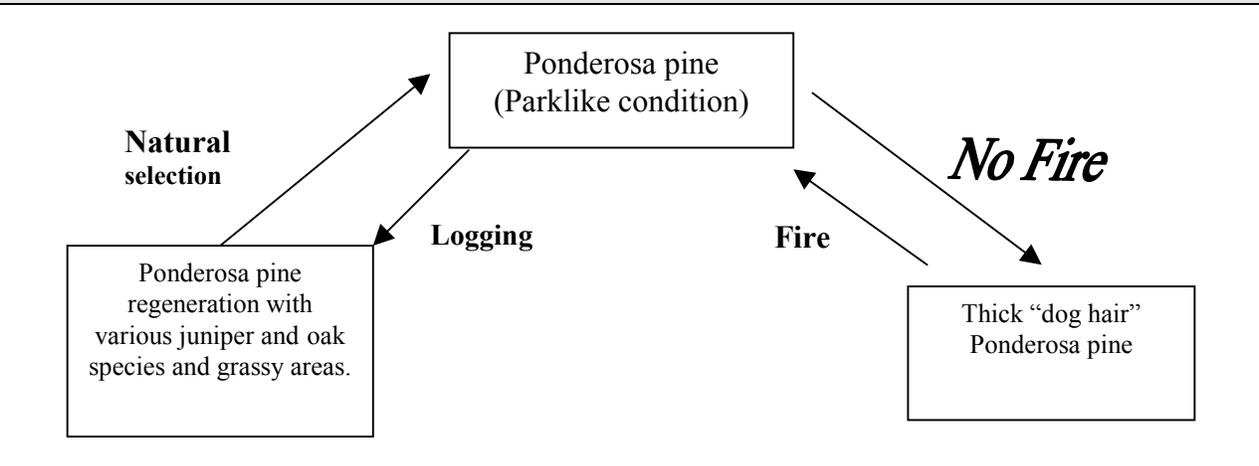
	<u>Map unit</u>	
<u>Soil survey</u>	<u>symbol</u>	<u>Soil components</u>

PLANT COMMUNITIES

Ecological Dynamics of the Site:

The ponderosa pine forest is the lowest of the true forest zone. The elevation for this forest ranges from 6,00 – 8,000 feet. The ponderosa forest is found in areas of moderate moisture but can also occupy areas of relatively dry and sandy soil. The forest may consist of widely scattered individual, or grow in parklike stands on dry hillside. The stands are thicker and include Douglas fir on cooler northern slopes. Juniper species can be found on the lower elevations of the ponderosa forest.

Plant Communities and Transitional Pathways (diagram)



Interpretive Plant Community: Naturalized Plant Communities

Ground Cover and Structure:

Cover Type	Percent Ground Cover by Height Class (feet)								
	<.5	.5-1	>1-2	>2-4.5	>4.5-13	>13-40	>40-80	>80-120	>120
Grass/Grass Like									
Forb									
Shrub/Vine									
Tree									
Lichen									
Moss									
Litter									
Course Fragment									
Bare Ground									

Forest Overstory Composition:

The typical forest overstory composition of the historic climax community.

Common Name	Scientific Name	Percent Composition (percent by frequency)
Ponderosa pine	<i>Pinus ponderosa</i>	
Douglas fir	<i>Pseudotsuga menziesii</i>	
Rocky Mountain juniper	<i>Juniperus scopulorum</i>	

Forest Understory Composition:

The typical annual production of understory species to a height of 4.5 feet (excluding boles of trees) under low, high, and representative canopy covers.

Common Name	Scientific Name	Annual Production Per Acre Percent and Pounds (air-dry weight)					
		Canopy Cover Percent					
		80		90		100	
		%	lbs	%	lbs	%	lbs
Gambel oak	<i>Quercus gambelii</i>						

Typical Climax Community:

Large scattered Ponderosa pine scattered in a parklike setting on mountain slopes.

Plant Community: (as it exists today)

Medium to young aged Ponderosa pines with moderately dense stands. Other common species include Gambel oak and Rocky Mountain juniper.

Ground Cover and Structure:

Cover Type	Percent Ground Cover by Height Class (feet)								
	<.5	.5-1	>1-2	>2-4.5	>4.5-13	>13-40	>40-80	>80-120	>120
Grass/Grass Like									
Forb									
Shrub/Vine									
Tree									
Lichen									
Moss									
Litter									
Course Fragment									
Bare Ground									

Forest Overstory Composition:

The typical forest overstory composition of the historic climax community.

Common Name	Scientific Name	Percent Composition (percent by frequency)
Ponderosa pine	<i>Pinus ponderosa</i>	
Rocky Mountain juniper	<i>Juniperus scopulorum</i>	

Forest Understory Composition:

The typical annual production of understory species to a height of 4.5 feet (excluding boles of trees) under low, high, and representative canopy covers.

Common Name	Scientific Name	Annual Production Per Acre Percent and Pounds (air-dry weight)					
		Canopy Cover Percent					
		75		85		95	
		%	lbs	%	lbs	%	lbs
Gambel oak	<i>Quercus gambelii</i>						
Total Annual Production							

Plant Community: (as it exists today)

ECOLOGICAL SITE INTERPRETATIONS

Forest Site Productivity

Common Name	Scientific Name	Annual Productivity (per acre per year)						
		Site Index		Cubic Feet (CMAI)		Other Units		
		Low	High	Low	High	Low	High	Unit
Ponderosa pine	<i>Pinus ponderosa</i>							

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Map Unit Name

Soil Survey

Map Unit Symbol

Soil Components

ECOLOGICAL SITE INTERPRETATIONS

<p>Animal Community:</p> <p>Ponderosa pine forest species include elk, mule deer, black bear, mountain lion, and squirrels.</p>
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Plant Preference by Animal Kind:

Animal Kind: _____

Animal Type: _____

Common Name	Scientific Name	Plant Part	Forage Preferences											
			J	F	M	A	M	J	J	A	S	O	N	D

Animal Kind: _____

Animal Type: _____

Common Name	Scientific Name	Plant Part	Forage Preferences											
			J	F	M	A	M	J	J	A	S	O	N	D

Hydrology Functions:
 A healthy Ponderosa forest will have a duff layer that will lessen the impact of heavy rain and aid in the infiltration of runoff water.

Recreational Uses:

1. Camping
2. Hiking
3. Hunting

Wood Products:

Saw logs, vigas etc. This is the most important economic forest zone in the southwest.

Other Products:**Other Information:****Supporting Information**Associated Sites:Site NameSite IDSite NarrativeSimilar Sites:Site NameSite IDSite Narrative

Inventory Data References (narrative):

Inventory Data References:

<u>Data Source</u>	<u>Number of</u> <u>Records</u>	<u>Sample Period</u>	<u>State</u>	<u>County</u>
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State Correlation:

This site has been correlated with the following sites: _____

Type Locality:

State: New Mexico

County: Bernalillo

Latitude: _____

Longitude: _____

Township: _____

Range: _____

Section: _____

Is the type locality sensitive? Yes No

General Legal Description: _____

Relationship to Other Established Classifications:

Other References: