

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

ECOLOGICAL SITE DESCRIPTION

ECOLOGICAL SITE CHARACTERISTICS

Site Type: Forest
Site ID: F039XB002NM
Site Name: *Pinus ponderosa*
Major Land Resource Area and Common Resource Area MLRA 39 / CRA NM2
Precipitation or Climate Zone: Southwestern New Mexico Mountains 16-25" ppt/yr.
Phase: _____

ORIGINAL SITE DESCRIPTION APPROVAL:

Site Date: June 3, 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 6,500-8,000 feet. This forest type is found in subregion area NM-2.

The Gila region is an area of mountains and valleys with strongly sloping to precipitous slopes in the mountains and gently to moderately sloping topography in the valleys and on the plateaus.

LAND FORM:

1. mountain slopes
2. _____
3. _____

ASPECT:

1. _____
2. _____
3. _____

Elevation (feet)	Minimum 6,500	Maximum 8,000
Slope (percent)		
Water Table Depth (inches)		

Flooding:	Minimum	Maximum
Frequency		
Duration		

Ponding:	Minimum	Maximum
Depth (inches)		
Frequency		
Duration		

Runoff Class:

CLIMATIC FEATURES

Narrative:
<p>The Gila area receives the majority of its annual moisture during the summer monsoon season. Additional moisture is received during winter snow events.</p>

Frost-free period (days):	Minimum 80	Maximum 130
Freeze-free period (days):		
Mean annual precipitation (inches):	12.0	20.0

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

	Avg. Precip. Min.	Avg. Snowfall Total	Temp. Min.	Temp. Max.
January	0.79	4.2	12.0	48.0
February	0.74	4.0	15.7	51.6
March	0.70	2.1	20.1	58.3
April	0.45	0.5	24.6	66.4
May	0.52	-	32.3	74.5
June	0.60	-	40.3	83.6
July	2.62	-	49.5	84.3
August	3.21	-	48.8	81.1
September	2.01	-	40.8	76.9
October	1.43	0.4	29.4	68.6
November	0.69	1.2	19.0	57.3
December	1.05	6.2	12.8	48.8

Climate Stations:

Station ID	Beaverhead R.S.	Location	Lat	Long	From:	Period	To:
	Beaverhead R.S.	Location	10807	0673	From: 1946		To: 1962
	Beaverhead R.S.	Location	10807	0667	From: 1962		To: 1990
	Beaverhead R.S.	Location	10807	0667	From: 1990		To: 1999
		Location			From:		To:
		Location			From:		To:

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 <=3" (% Cover): _____
 Surface Fragments >3" (% Cover): _____
 Subsurface Fragments <=3" (%Volume): _____
 Subsurface Fragments >=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

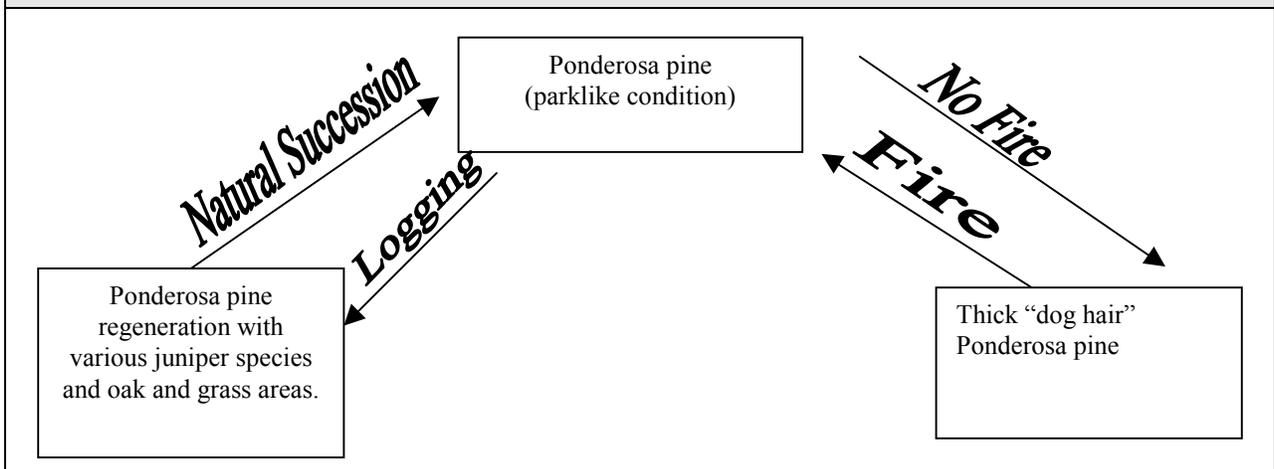
Soil survey Map unit
 symbol Soil components

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 6,500-8,000 feet. This forest is found in areas of moderate moisture but occupies areas of relatively dry and sandy soil. The forest may consist of widely scattered individual, or grow in parklike stands on dry hillsides and plateaus. On cooler, northern slopes the stands are thicker and include Douglas-fir. On the lower elevations, Alligator juniper and other juniper species may be present.

Plant Communities and Transitional Pathways (diagram)



Interpretive Plant Community: Naturalized Plant Community

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>	
Alligator juniper	<i>Juniperus deppeana</i>	
Rocky Mountain juniper	<i>Juniperus scopulorum</i>	
Gambel oak	<i>Quercus gambelii</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>						
Silverleaf oak	<i>Quercus hypoleucoides</i>						
Mountain-mahogany	<i>Cerocarpus montanus</i>						
Total Annual Production							

Typical Climax Community:

Large Ponderosa pines scattered in a parklike setting across a plateau topography.

Plant Community: (as it exists today)

Medium to young aged Ponderosa pines with moderately dense stands. Other species observed was Gambel oak.

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									

Plant Community: (as it exists today)

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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>	65	7 ⁰					

Soil Survey Associations:

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	Map Unit Name	
<u>Soil Survey</u>	<u>Map Unit Symbol</u>	<u>Soil Components</u>

ECOLOGICAL SITE INTERPRETATIONS

Animal Community:

Ponderosa forest species include elk, mule deer, Black bear, mountain lion, and ground squirrels.

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:**

Other References: