

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

ECOLOGICAL SITE DESCRIPTION

ECOLOGICAL SITE CHARACTERISTICS

Site Type: Forest
Site ID: F039XB004NM
Site Name: *Pinus ponderosa – Juniperus deppeana*
Major Land Resource Area and Common Resource Area MLRA 39 / CRA NM-2
Precipitation or Climate Zone: Southwestern New Mexico Mountains Gila Mountains
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 – Alligator juniper forest occupies the dryer plateaus and flats around elevation 6,500 – 7,500.

LAND FORM:

1. plateau tops
2. flats
3. _____

ASPECT:

1. Southern exposures
2. _____
3. _____

Elevation (feet)	Minimum 6,500	Maximum 7,200
Slope (percent)		
Water Table Depth (inches)		
Flooding:	Minimum	Maximum
Frequency		
Duration		
Ponding:	Minimum	Maximum
Depth (inches)		
Frequency		
Duration		

Runoff Class:

CLIMATIC FEATURES

Narrative:
<p>This area of mountains, plateaus and valleys 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):	14.0	25.0

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:
			10807	0673	1946		1962
			10807	0667	1962		1990
			10807	0667	1990		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.

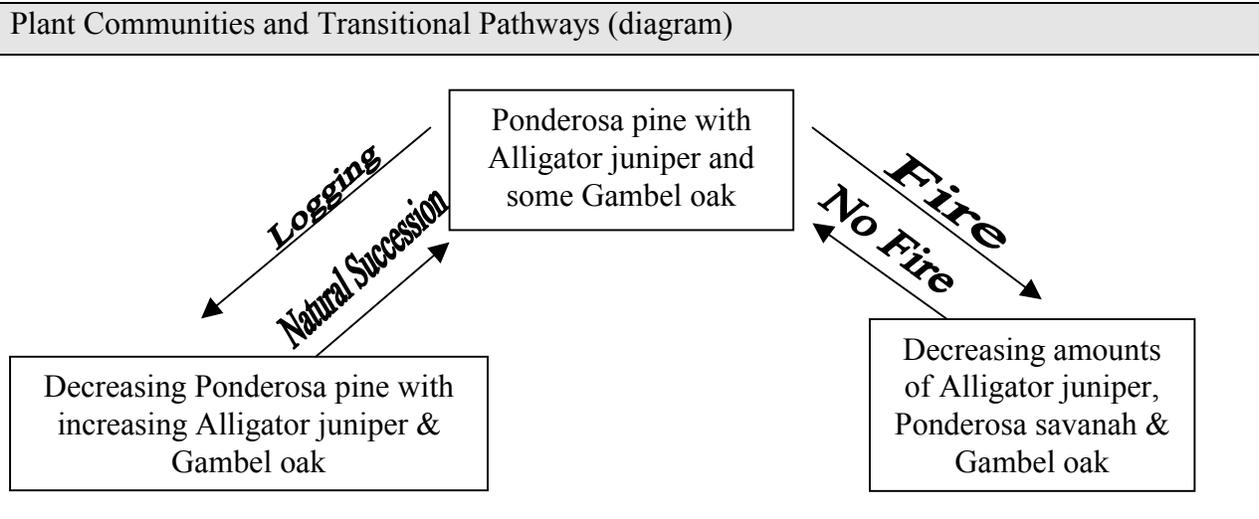
MAP UNIT NAME

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

Ecological Dynamics of the Site:

The Ponderosa pine – Alligator juniper forest is found at the lower, dryer limits of the Ponderosa pine range. It is found in areas of less effective moisture than the higher elevation Ponderosa pine forests. The Ponderosa – Alligator juniper forest is moderately dense to moderately thin depending on soil type, topography and aspect. The Alligator juniper can reach large sizes while the Ponderosa pine appears to be less vigorous.



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>	
Alligator juniper	<i>Juniperus deppeana</i>	
Total		

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>						
Rocky Mtn. juniper	<i>Juniperus scopulorum</i>						
Pinyon pine	<i>Pinus edulis</i>						
Total Annual Production							

Typical Climax Community:

Large scattered Ponderosa pines with some Alligator juniper and Rocky Mountain juniper present. Park-like area with grass vegetation.

Plant Community: (as it exists today)

Moderately thick stands of Ponderosa pine, and Alligator juniper. The Ponderosa pine is not very vigorous where as the juniper has good regeneration. Some of the Alligator junipers are quite large. Some Gambel oak shrubs are present and there is grass and litter present.

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	6								
Forb	.5								
Shrub/Vine	1								
Tree	2								
Lichen	.5								
Moss	2								
Litter	35								
Course Fragment	44								
Bare Ground	10								

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>	60
Alligator juniper	<i>Juniperus deppeana</i>	40
Total		

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>						
Silverleaf oak	<i>Quercus hypoleucooides</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

Soil Survey Associations:

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Map Unit Name

Soil Survey

Map Unit Symbol

Soil Components

ECOLOGICAL SITE INTERPRETATIONS

Animal Community:
Elk, mule deer, mountain lion, coyote, gray fox, rabbits, 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:
 This area of lower rain and snowfall is somewhat droughty but could be an area where infiltration can aid the recharge of the aquifer if properly managed.

Recreational Uses:

1. Camping
2. Hiking
3. Hunting

Wood Products:

1. Saw logs
2. Firewood

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: Grant

Latitude: UTM N 07-60-846

Longitude: E 36-52-563

Township: _____

Range: _____

Section: _____

Is the type locality sensitive? Yes No

General Legal Description: _____

Relationship to Other Established Classifications:

Other References: