

**UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE**

ECOLOGICAL SITE DESCRIPTION

ECOLOGICAL SITE CHARACTERISTICS

Site Type: Rangeland

Site ID: R048AY001NM

Site Name: Subalpine Grassland

Precipitation or Climate Zone: 15 to 30 inches

Phase: _____

PHYSIOGRAPHIC FEATURES

Narrative:

This site takes in mountain parks and other open grasslands generally within the spruce-fir zone. In some places it is interspersed with aspen groves. This site is located near timberline extending down to the ponderosa pine zone. Topography is mostly rolling to moderate slopes, but some areas are steep. Slopes range up to 75 percent but are between 20 to 40 percent. Slope is not a determining factor within the site itself, although it has some effect on vegetation. The exposure is mainly southerly however, it can occur on the flatter north-facing slopes. Elevation ranges from 8,000 feet to near timberline, which is approximately 11,800 feet above sea level.

Land Form:

1. Mountain slope
2. Mountainside
- 3.

Aspect:

1. Southerly
2. North-facing
- 3.

	Minimum	Maximum
Elevation (feet)	8,000	11,800
Slope (percent)	20	75
Water Table Depth (inches)	N/A	N/A
	Minimum	Maximum
Flooding:		
Frequency	N/A	N/A
Duration	N/A	N/A
	Minimum	Maximum
Ponding:		
Depth (inches)	N/A	N/A
Frequency	N/A	N/A
Duration	N/A	N/A

Runoff Class:

Medium to high.

CLIMATIC FEATURES

Narrative:

Average annual precipitation for this site varies from 20 to 30 inches. The annual amount received may fluctuate widely from year to year. Winter snowfall is an important feature of the climate of this site. During some winters, starting ordinarily in December and lasting through March, winter storms may cause accumulations up to 10 feet or more on higher portions of this site. Such accumulations lying at the headwaters of drainages represent the moisture reservoir for lower lying valleys for the ensuing summer season. Winter precipitation furnishes approximately 50 percent of the total annual amount received. June is a dry month on much of the site, but in near normal year, soil moisture from snowmelt carries over until summer rains begin. Summer precipitation occurs with the advent of cumulonimbus cloud formations during July and August. Convection currents cause this cloud formation during mid-day and by late afternoon, violent torrential thunderstorms may occur. These storms may be brief and have varied intensity. Frequency of the currents may largely influence the production of range forage on this site.

The mean air temperature of this site ranges from well below zero to approximately 55 degrees F. The frost-free period extends from 70 to 90 days. The last killing frost occurs approximately June 15th. The date of the first killing frost is September 15th.

Evaporation is relatively low on this site, and winds may be of high velocity. The ground is well covered by snow during the coldest weather, and snowmelt is relatively late. The typical plant community seems to be associated with depth and duration of snowpack. Forage plants must withstand grazing pressure and provide for storage of carbohydrates during the period of June 15th through September 15th. The advantage of the high precipitation amounts is offset on this site by the extreme short growing season.

Climate data was obtained from <http://www.wrcc.sage.dri.edu/summary/climsmnm.html> web site using 50% probability for freeze-free and frost-free seasons using 28.5 degrees F and 32.5 degrees F respectively.

	Minimum	Maximum
Frost-free period (days):	<u>103</u>	<u>144</u>
Freeze-free period (days):	<u>127</u>	<u>169</u>
Mean annual precipitation (inches):	<u>15</u>	<u>30</u>

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

	Precip. Min.	Precip. Max.	Temp. Min.	Temp. Max.
January	.32	.88	14.2	46.8
February	.33	1.13	16.7	50.0
March	.62	1.79	20.4	55.7
April	.81	1.71	25.6	63.6
May	1.12	2.00	33.3	72.7
June	1.26	2.27	40.6	82.4
July	2.68	4.24	44.9	84.9
August	2.87	4.48	44.0	81.8
September	1.63	1.92	38.1	76.8
October	1.05	1.64	29.2	67.7
November	.56	1.15	20.3	55.6
December	.41	1.06	14.5	48.7

Climate Stations:

		Period					
Station ID	<u>291813</u>	Location	<u>Cimarron 4SW, NM</u>	From:	<u>5/1/1904</u>	To:	<u>12/31/01</u>
Station ID	<u>293488</u>	Location	<u>Gascon, NM</u>	From:	<u>11/18/53</u>	To:	<u>12/31/01</u>
Station ID	<u>296275</u>	Location	<u>Ocate 1N, NM</u>	From:	<u>08/01/60</u>	To:	<u>12/31/01</u>
Station ID	<u>296676</u>	Location	<u>Pecos Ranger Station, NM</u>	From:	<u>01/01/16</u>	To:	<u>12/31/01</u>

INFLUENCING WATER FEATURES

Narrative:

This site is not influenced by water from a wetland or stream.

Wetland description:

System	Subsystem	Class
N/A		

If Riverine Wetland System enter Rosgen Stream Type:

N/A

REPRESENTATIVE SOIL FEATURES

Narrative:

The soils are well drained, shallow to moderately deep. The surface texture is loam, clay loam, silty loam, stony loam or gravelly loam. The subsoil and substratum are clay, cobbly clay, gravelly clay loam and cobbly loam. There may be large numbers of rock fragments throughout the profile. The soils have moderate to moderately slow permeability. Runoff is moderate. Available water-holding capacity is low to medium. The effective rooting depth is 20 inches or more.

Parent Material Kind: Colluvium

Parent Material Origin: Mixed

Surface Texture:

- | |
|------------------|
| 1. Stony loam |
| 2. Silty loam |
| 3. Cobbly loam |
| 4. Loam |
| 5. Clay loam |
| 6. Gravelly loam |

Surface Texture Modifier:

- | |
|-----------|
| 1. Cobble |
| 2. Gravel |
| 3. Stone |

Subsurface Texture Group: Clayey

Surface Fragments <=3" (% Cover): 15 to 35

Surface Fragments >3" (% Cover): 15 to 35

Subsurface Fragments <=3" (%Volume): 15 to 35

Subsurface Fragments >=3" (%Volume): 15 to 35

	Minimum	Maximum
Drainage Class:	Well	Well
Permeability Class:	Impermeable	Moderately slow
Depth (inches):	<10	>72
Electrical Conductivity (mmhos/cm):	0.00	2.00
Sodium Absorption Ratio:	0.00	1.00
Soil Reaction (1:1 Water):	5.6	8.4
Soil Reaction (0.1M CaCl₂):	N/A	N/A
Available Water Capacity (inches):	3	9

Calcium Carbonate Equivalent (percent):

N/A

N/A

PLANT COMMUNITIES

Ecological Dynamics of the Site:

Plant Communities and Transitional Pathways (diagram)

Plant Community Name: Historic Climax Plant Community

Plant Community Sequence Number: 1 **Narrative Label:** HCPC

Plant Community Narrative: Historic Climax Plant Community

This site is dominated by cool-season grasses and has a large variety of both mid-grasses and tall grasses. Grasses make up approximately 75 percent of the composition of this site. Forbs are showy when in bloom and may make up as much as 15 percent of the annual yield. Shrubs are a minor component of the plant community and are scattered throughout the site. In some places this site is interspersed with aspen growth. Tree species associated with this site are mainly aspen and they make up less than 2 percent cover.

Canopy Cover:

Trees	<2 %
Shrubs and half shrubs	5 %
Ground Cover (Average Percent of Surface Area).	
Grasses & Forbs	45
Bare ground	15
Surface gravel	15
Surface cobble and stone	5
Litter (percent)	25
Litter (average depth in cm.)	4

Plant Community Annual Production (by plant type): _____

Plant Type	Annual Production (lbs/ac)		
	Low	RV	High
Grass/Grasslike	600	900	1,200
Forb	120	180	240
Tree/Shrub/Vine	80	120	160
Lichen			
Moss			
Microbiotic Crusts			
Total	800	1,200	1,600

Plant Community Composition and Group Annual Production:

Plant Type - Grass/Grasslike

Group Number	Scientific Plant Symbol	Common Name	Species Annual Production	Group Annual Production
1	BRMA4	Mountain Brome	216 – 240	216 – 240
2	FETH	Thurber Fescue	144 – 180	144 – 180
3	MUMO	Mountain Muhly	144 – 180	144 – 180
4	FEAR2	Arizona Fescue	84 – 120	84 – 120
5	DECA18	Tufted Hairgrass	84 – 120	84 – 120
6	ACNEN2 ACLE9	Columbia Needlegrass Letterman Needlegrass	84 – 120	84 – 120
7	CAREX CANE2	Sedge spp. Nebraska Sedge	36 – 60	36 – 60
8	KOMA BLRT SCSC PASM POFE AVSA	Prairie Junegrass Pine Dropseed Little Bluestem Western Wheatgrass Muttongrass Oatgrass spp.	36 – 60	36 – 60
9	POA	Bluegrass spp.	36 – 60	36 – 60
10	2GRAM	Other Grasses	36 – 60	36 – 60

Plant Type - Forb

Group Number	Scientific Plant Symbol	Common Name	Species Annual Production	Group Annual Production
11	AGHE2	Mountain Dandelion	36 – 60	36 – 60
12	PENST	Penstemon spp.	36 – 60	36 – 60
13	ACCO4	Monkshood	36 – 60	36 – 60
14	LUAL5 DECO3	Lupine spp. Larkspur	36 – 60	36 – 60
15	HEMA80 ASTER TRIFO GERAN IRMI	Cowparsnip Aster spp. Clover spp. Geranium spp. Iris	36 – 60	36 – 60
16	2FORB	Other Forbs	36 – 60	36 – 60

Plant Type – Tree/Shrub/Vine

Group Number	Scientific Plant Symbol	Common Name	Species Annual Production	Group Annual Production
17	DAFL3 SYAL RIBES	Shrubby Cinquefoil Snowberry Mountain Currant	36 – 60	36 – 60
18	RUBUS SANIC5 CHILO 2SD	Raspberry spp. Elderberry Willow spp. Other Shrubs	36 – 60	36 – 60

Plant Type - Lichen

Group Number	Scientific Plant Symbol	Common Name	Species Annual Production	Group Annual Production

Plant Type - Moss

Group Number	Scientific Plant Symbol	Common Name	Species Annual Production	Group Annual Production

Plant Type - Microbiotic Crusts

Group Number	Scientific Plant Symbol	Common Name	Species Annual Production	Group Annual Production

Other species that could appear include: timothy, slender wheatgrass, big bluestem, spike muhly, sheep fescue, nodding brome, pinegrass, blue grama, meadow barley, vetch, peavine and valerian.

Plant Growth Curves

Growth Curve ID 3101NM

Growth Curve Name: HCPC

Growth Curve Description: Mixed cool-season mid and tall grasses with minor components of forbs and shrubs.

Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
0	0	3	5	10	10	25	30	12	5	0	0

ECOLOGICAL SITE INTERPRETATIONS

Animal Community:

Habitat for Wildlife:

This site provides habitats, which support a resident animal community that is characterized by yellow-bellied marmot, northern pocket gopher, montane vole and least chipmunk. Elk and mule deer feed in these sites during late spring. The blue grouse will nest around the margins of these sites and bring young broods to feed on insects occurring on the herbaceous vegetation. This site provides habitat for elk and deer for summer use and for rabbits.

Hydrology Functions:

The runoff curve numbers are determined by field investigations using hydrologic cover conditions and hydrologic soil groups.

Hydrologic Interpretations

Soil Series	Hydrologic Group
Hillery	C
Penitente	D
Raton	D
Wellsville	B

Recreational Uses:

This site offers recreation potential for hiking, picnicking, horseback riding, nature observations, winter sports, hunting for elk and deer and photography of wildflowers. During the spring, forbs are showy when in bloom and display a colorful array of wildflowers during July and August.

Wood Products:

This site produces no commercial wood products. The site occurs as an intermixture with timberstands. Timber species adjoining this site include the following: Douglas fir, Engelmann spruce, blue spruce, white fir, bristlecone pine and aspen.

Other Products:

Grazing:

Approximately 85 percent of the annual herbage yield are from plants, which furnish forage for grazing animals. Elk extensively uses this site. This site can be used by all classes of livestock during the period from June 15th to September 15th, and this also represents the principal growing season. Due to the steep slopes and short grazing season, yearling calves are better suited than mature cows with calves. Grazing by sheep is also favored due to the site's potential to produce forbs. To reduce spot grazing and grazing of the flatter slopes, herding of all classes of livestock is highly desirable. Continuous grazing during the entire season will cause mountain brome, Thurber fescue, mountain muhly, Arizona fescue and tufted hairgrass to decline and eventually disappear. Species most likely to invade this site or increase from trace amounts as the plant community deteriorates are Kentucky bluegrass, dandelions, rabbitbrush, cinquefoil and annual forbs. In some places aspen may invade. There may be a substantial increase in species such as lupine, yarrow, fringed sagewort or snowbush. In some places big or silver sagebrush may become dominant. Kentucky bluegrass, Letterman needlegrass or sheep fescue usually become the main grasses as deterioration continues. Under sheep use, Thurber fescue may hold its own or increase for a time while many forbs decrease. To maintain or improve on a healthy well-balanced plant community, grazing of domestic livestock should be delayed until soils are firm from the winter snows and when the desirable plants have had the opportunity to make good growth. Rapid growth of plants in the spring may temporarily deplete food reserves. Deferring grazing until the plants have had an opportunity to restore this food supply is advisable. This, coupled with a system of deferred grazing, which varies the time of grazing in a pasture during successive years, will allow for maximum forage production.

Other Information:

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index	Ac/AUM
100 - 76	2.1 – 3.8
75 – 51	2.4 – 4.4
50 – 26	3.6 – 6.7
25 – 0	6.7+

Plant Part	Code	Species Preference	Code
Stems	S	None Selected	NS
Leaves	L	Preferred	P
Flowers	F	Desirable	D
Fruits/Seeds	F/S	Undesirable	U
Entire Plant	EP	Not Consumed	NC
Underground Parts	UP	Emergency	E
		Toxic	T

Plant Preference by Animal Kind:

Animal Kind: Livestock

Animal Type: Cattle

Common Name	Scientific Name	Plant Part	Forage Preferences												
			J	F	M	A	M	J	J	A	S	O	N	D	
Mountain Brome	Bromus marginatus	EP	D	D	P	P	P	P	P	P	P	P	P	P	D
Thurber Fescue	Festuca thurberi	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Arizona Fescue	Festuca arizonica	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Tufted Hairgrass	Deschampsia caespitosa	EP	D	D	P	P	P	P	P	P	D	D	D	D	
Columbia Needlegrass	Achnatherum nelsonii	EP	D	D	P	P	P	D	D	D	D	D	D	D	
Letterman Needlegrass	Achnatherum lettermanii	EP	D	D	D	D	D	D	D	D	D	D	D	D	
Prairie Junegrass	Koeleria macrantha	EP	D	D	D	D	D	D	D	D	D	D	D	D	
Pine Dropseed	Blepharoneuron tricholepis	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	
Little Bluestem	Schizachyrium scoparium	EP	D	D	D	P	P	P	P	D	D	D	D	D	
Western Wheatgrass	Pascopyrum smithii	EP	D	D	P	P	P	D	D	D	D	D	D	D	
Oatgrass	Avena sativi	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	
Nebraska Sedge	Carex nebrascensis	EP	D	D	P	P	P	P	P	P	D	D	D	D	
Penstemon	Penstemon spp.	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	
Aster	Aster spp.	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	
Clover	Trifolium spp.	EP	P	P	P	P	P	P	P	P	P	P	P	P	

Animal Kind: Livestock

Animal Type: Horse

Common Name	Scientific Name	Plant Part	Forage Preferences											
			J	F	M	A	M	J	J	A	S	O	N	D
Mountain Brome	<i>Bromus marginatus</i>	EP	D	D	P	P	P	P	P	P	P	P	P	D
Thurber Fescue	<i>Festuca thurberi</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Arizona Fescue	<i>Festuca arizonica</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Tufted Hairgrass	<i>Deschampsia caespitosa</i>	EP	D	D	P	P	P	P	P	P	D	D	D	D
Columbia Needlegrass	<i>Achnatherum nelsonii</i>	EP	D	D	P	P	P	D	D	D	D	D	D	D
Letterman Needlegrass	<i>Achnatherum lettermanii</i>	EP	D	D	D	D	D	D	D	D	D	D	D	D
Prairie Junegrass	<i>Koeleria macrantha</i>	EP	D	D	D	D	D	D	D	D	D	D	D	D
Pine Dropseed	<i>Blepharoneuron tricholepis</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Little Bluestem	<i>Schizachyrium scoparium</i>	EP	D	D	D	P	P	P	P	D	D	D	D	D
Western Wheatgrass	<i>Pascopyrum smithii</i>	EP	D	D	P	P	P	D	D	D	D	D	D	D
Oatgrass	<i>Avena sativi</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Nebraska Sedge	<i>Carex nebrascensis</i>	EP	D	D	P	P	P	P	P	P	D	D	D	D
Penstemon	<i>Penstemon spp.</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Aster	<i>Aster spp.</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Clover	<i>Trifolium spp.</i>	EP	P	P	P	P	P	P	P	P	P	P	P	P

Animal Kind: Livestock

Animal Type: Sheep

Common Name	Scientific Name	Plant Part	Forage Preferences											
			J	F	M	A	M	J	J	A	S	O	N	D
Mountain Brome	<i>Bromus marginatus</i>	EP	D	D	P	P	P	D	D	D	D	D	D	D
Thurber Fescue	<i>Festuca thurberi</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Arizona Fescue	<i>Festuca arizonica</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Prairie Junegrass	<i>Koeleria macrantha</i>	EP	U	U	D	D	D	U	U	U	U	U	U	U
Pine Dropseed	<i>Blepharoneuron tricholepis</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Western Wheatgrass	<i>Pascopyrum smithii</i>	EP	U	U	D	D	D	D	D	D	D	D	D	U
Oatgrass	<i>Avena sativi</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Nebraska Sedge	<i>Carex nebrascensis</i>	EP	U	U	D	D	D	U	U	U	U	U	U	U
Sedge	<i>Carex spp.</i>	EP	U	U	D	D	D	U	U	U	U	U	U	U
Mountain Dandelion	<i>Agoseris heterophylla</i>	EP	U	U	D	D	D	D	D	D	U	U	U	U
Penstemon	<i>Penstemon spp.</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Aster	<i>Aster spp.</i>	EP	U	U	D	D	D	D	D	D	U	U	U	U
Clover	<i>Trifolium spp.</i>	EP	P	P	P	P	P	P	P	P	P	P	P	P

Animal Kind: Wildlife

Animal Type: Deer

Common Name	Scientific Name	Plant Part	Forage Preferences											
			J	F	M	A	M	J	J	A	S	O	N	D
Penstemon	<i>Penstemon spp.</i>	EP	U	U	D	D	D	D	D	D	U	U	U	U
Aster	<i>Aster spp.</i>	EP	U	U	D	D	D	D	D	D	U	U	U	U
Clover	<i>Trifolium spp.</i>	EP	U	U	D	D	D	D	D	D	U	U	U	U

Animal Kind: Wildlife

Animal Type: Elk

Common Name	Scientific Name	Plant Part	Forage Preferences											
			J	F	M	A	M	J	J	A	S	O	N	D
Mountain Brome	<i>Bromus marginatus</i>	EP	D	D	P	P	P	P	P	P	P	P	P	D
Thurber Fescue	<i>Festuca thurberi</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Arizona Fescue	<i>Festuca arizonica</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Tufted Hairgrass	<i>Deschampsia caespitosa</i>	EP	D	D	P	P	P	P	P	P	D	D	D	D
Columbia Needlegrass	<i>Achnatherum nelsonii</i>	EP	D	D	P	P	P	D	D	D	D	D	D	D
Letterman Needlegrass	<i>Achnatherum lettermanii</i>	EP	D	D	D	D	D	D	D	D	D	D	D	D
Prairie Junegrass	<i>Koeleria macrantha</i>	EP	D	D	D	D	D	D	D	D	D	D	D	D
Pine Dropseed	<i>Blepharoneuron tricholepis</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Little Bluestem	<i>Schizachyrium scoparium</i>	EP	D	D	D	P	P	P	P	D	D	D	D	D
Western Wheatgrass	<i>Pascopyrum smithii</i>	EP	D	D	P	P	P	D	D	D	D	D	D	D
Oatgrass	<i>Avena sativi</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Nebraska Sedge	<i>Carex nebrascensis</i>	EP	D	D	P	P	P	P	P	P	D	D	D	D
Penstemon	<i>Penstemon spp.</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Aster	<i>Aster spp.</i>	EP	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Clover	<i>Trifolium spp.</i>	EP	P	P	P	P	P	P	P	P	P	P	P	P

SUPPORTING INFORMATION

Associated sites:

Site Name	Site ID	Site Narrative

Similar sites:

Site Name	Site ID	Site Narrative

State Correlation:

This site has been correlated with the following sites: _____

Inventory Data References:

Data Source	# of Records	Sample Period	State	County

Type Locality:

State: New Mexico

County: Colfax, Mora, Santa Fe, Taos

Latitude: _____

Longitude: _____

Township: _____

Range: _____

Section: _____

Is the type locality sensitive? Yes No

General Legal Description: _____

Relationship to Other Established Classifications:

Other References:

Data collection for this site was done in conjunction with the progressive soil surveys within the Southern Rocky Mountains 48 Major Land Resource Area of New Mexico. This site has been mapped and correlated with soils in the following soil surveys: Colfax, Taos, Mora, San Miguel, and Santa Fe.

Characteristic Soils Are:

Hillery	Penitente
Raton	Wellsville

Other Soils included are:

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Site Description Approval:

<u>Author</u>	<u>Date</u>	<u>Approval</u>	<u>Date</u>
Don Sylvester	09/01/78	Don Sylvester	09/01/78

Site Description Revision:

<u>Author</u>	<u>Date</u>	<u>Approval</u>	<u>Date</u>
Elizabeth Wright	09/16/02	George Chavez	2/12/03