

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

This draft ecological site description is approved for field use and testing for a one year period beginning MM, YYYY.
Additional information and comments on this site should be sent to the Utah State Range Management Specialist.

STATE: Utah

SITE TYPE: Rangeland

ECOLOGICAL SITE NAME: Mountain Loam (Salina wildrye)

SITE NUMBER: 048AY409UT

MLRA: 048A

Original Site Description: Author: GSC DJS

Date: 05/25/1981

Revised Site Description: Author: GSC DJS

Date: 01/18/1994

Approved by: Title: State Range Cons. Signed: Pat Shaver

Date: 05/27/1994

Ecological Site Definition - A distinctive kind of land, with specific physical characteristics, which differs from other kinds of land in its ability to produce a distinctive kind and amount of vegetation, and in its response to management.

A. PHYSICAL CHARACTERISTICS

(description narrative of this particular site)

1. SOILS

Depth: >60 inches

Surface Textures:

Surface Fragments(<=3" % cover, >3" % cover):

Subsurface Textures:

Subsurface Fragments(<=3" % vol, >3" % vol):

Geologic Parent Materials: Colluvium from Sedimentary Parent Materials

Moisture Regime:

Temperature Regime:

Runoff: Medium to Rapid

Permeability(min-max): Moderate to Moderately Slow

Drainage Class(min-max): Well Drained

Water Erosion Hazard:

Wind Erosion Hazard:

Electrical Conductivity (EC in mmhos/cm):

Sodium Adsorption Ration (SAR):

Soil Reaction (1:1 water):

Soil Reaction (0.1 M CaCl₂):

pH Range:

Available Water Capacity (inches):

Major Soils Associated With This Site:

Soil Survey Area: 616

Trag CL, 3 to 30% Carbon SS

Trag L, 3 to 8%

Doney Family GR-SL, 15 to 40%

Brycan L, 3 to 8%

Trag ST-L, 30 to 60%

Frandsen L, 1 to 8%

Rabbitex SIL, 15 to 50%

Additional information may be found in Section II of the Field Office Technical Guide.

1. Potential Plant Community Description and Ecological Factors

The general view of this site is Salina wildrye and mountain big sagebrush. The natural plant community is composed of approximately 60 percent perennial grasses, 10 percent forbs, and 30 percent shrubs by air-dry weight. No trees are found in the potential natural plant community, other than a few scattered Douglas-fir and Gambel oak.

2. Plant Community Composition by Weight and Percentage

Grasses and Grasslike, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Salina wildrye	LESAS		375	525	25	35
Nevada bluegrass	PONE3		75	150	5	10
Bluebunch wheatgrass	PSSP6		45	75	3	5
Indian ricegrass	ACHY		45	75	3	5
Needleandthread	HECO26	1	45	75	3	5
Prairie junegrass	KOMA	1	45	75	3	5
Letterman needlegrass	ACLE9	1	45	75	3	5
Ross sedge	CARO5	1	45	75	3	5
Columbia needlegrass	ACNE9	1	45	75	3	5
Other perennial grasses	PPGG	1	75	150	5	10
Other annual grasses	AAGG	1	75	150	5	10

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Pacific aster	ASCH2	2	15	45	1	3
Wyoming Indian paintbrush	CALI4	2	15	45	1	3
Blue flax	LIPE2	2	15	45	1	3
Spurred lupine	LUCAC3	2	15	45	1	3
Lobeleaf groundsel	SEMU3	2	15	45	1	3
Longleaf hawksbeard	CRAC2	2	15	45	1	3
Watson penstemon	PEWA	2	15	45	1	3
Common yarrow	ACMI2	2	15	45	1	3
Arrowleaf balsamroot	BASA3	2	15	45	1	3
Cushion wild buckwheat	EROV	2	15	45	1	3
Small leaf pussytoes	ANMI3	2	15	45	1	3
Scarlet globemallow	SPCO	2	15	45	1	3
Lambert crazyweed	OXLA3	2	15	45	1	3
Other perennial forbs	PPFF	2	150	225	10	15
Other annual forbs	AAFF	2	150	225	10	15

Shrubs/Vines, %

Site Type: Rangeland
 Ecological Site Name: Mountain Loam (Salina wildrye)
 Site Number: 048AY409UT

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Mountain big sagebrush	ARTRV		75	150	5	10
Mountain snowberry	SYOR2		75	150	5	10
Bitterbrush	PUTR2		45	75	3	5
Utah serviceberry	AMUT		45	75	3	5
Birchleaf mountainmahogany	CEMO2	3	15	45	1	3
Crispleaf wild buckwheat	ERCO14	3	15	45	1	3
Creeping Oregon grape	MARE11	3	15	45	1	3
Woods rose	ROWO	3	15	45	1	3
Tobaccobrush	CEVE	3	15	45	1	3
Gambel oak	QUGA	3	15	45	1	3
Other shrubs	SSSS	3	45	75	3	5

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High

3. Plant Community Annual Production

At the highest potential similarity index, this site will produce approximately the following amount of air-dry herbage, expressed as pounds/acre:

	Low	High
Favorable Year	1900	2000
Average Year	1400	1500
Unfavorable Year	900	1000

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	40	2	15
Forbs (perennial)	5	1	2
Shrubs	20	3	10
Trees			
Cryptogams			

b. Other

Site Type: Rangeland
 Ecological Site Name: Mountain Loam (Salina wildrye)
 Site Number: 048AY409UT

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological conditions deteriorates due to overgrazing, bitterbrush, serviceberry, bluegrass, and bluebunch wheatgrass decrease, while Salina wildrye and mountain big sagebrush increase.

When the potential natural plant community is burned, bitterbrush, serviceberry and sagebrush decrease while Salina wildrye and snowberry increase.

Thistles, stickseed, houndstongue and other annual or biannual weeds are most likely to invade this site.

Plant Communities & Transitional Pathways

(Show a steady state diagram with influences to move from one steady state to another)

6. Plant Growth Curves

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	0	5	15	40	30	5	5	0	0	0
Name	PNC											
ID Number	UT4091											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

(Give related range sites in MLRA's above and below)

8. Associated Sites Within MLRA

048AY448UT
 Mountain Stony Loam (Mountain big sagebrush)

048AY451UT
 Mountain Stony Loam (Browse)

9. Correlated Sites in Other States

(Give site name and number)

D. MAJOR USES OF THIS SITE

1. Livestock

a. Site Factors Influencing Management

Salina wildrye provides a moderate amount of fair quality forage during the growing season but is unpalatable when mature and dried. (Vallentine 1961; from Welsh et al: A Utah Flora 1987 pg. 726).

b. Guide to Forage Quality(Plant preference by season)

Species	Oct-Nov	Dec-Feb	Mar-May	Jun-Sep

VG = Very Good G = Good F = Fair P = Poor

2. Wildlife

a. Site Factors Influencing Management

This site produces food and cover for wildlife.

b. List of Potential Species Present

Wildlife species that use this site include sage grouse, rabbit, coyote, mule deer, and elk.

This is a short list of the more common species found. Many other species are present as well and migratory birds are present at times.

c. Guide to Forage Preference of Managed Wildlife Species

Wildlife Species →				
Plant Species ↓	Use	Season	Use	Season

Use - A = preferred or desirable
 B = some use, but less important
 C = little use or used occasionally

Season - F = Fall (Oct-Nov)
 W = Winter (Dec-Feb)
 Sp. = Spring (Mar-May)
 Su. = Summer (Jun-Sep)

3. Recreational Uses

This site offers color and aesthetic appeal during the growing season. Recreation values include hiking and hunting.

Site Type: Rangeland
 Ecological Site Name: Mountain Loam (Salina wildrye)
 Site Number: 048AY409UT

4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Trag L, 3 to 8% — fine-loamy mixed, Typic Argiboralls

Type Location: See Carbon Soil Survey for location.

General Legal Description:

Field Office Site Location

Price
 Roosevelt

Legal Description: See Carbon Soil Survey for location.

Data Collected and References

Sampling Source	Number of Records	Range Similarity Index			
		> 76%	51-75%	26-50%	0-25%
NRCS - ECS - 417					
UTAH - RANGE - 2					
Permanent Transect Location					

Other References