

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 (Mountain big sagebrush)

SITE NUMBER: 048AY405UT

MLRA: 048A

Original Site Description: Author: DJS

Date: 03/04/1992

Revised Site Description: Author:

Date:

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: Alluvium and Colluvium from Intrusive Igneous and

Mixed Sedimentary Parent Materials

Moisture Regime:

Temperature Regime:

Runoff: Slow to Medium

Permeability(min-max):

Drainage Class(min-max):

Water Erosion Hazard: Slight to High-(on the "Waas" Soil)

Wind Erosion Hazard:

Electrical Conductivity (EC in mmhos/cm):

Sodium Adsorption Ration (SAR):

Soil Reaction (1:1 water):

Soil Reaction (0.1 M CaCl<sub>2</sub>):

pH Range:

Available Water Capacity (inches): 7-11

Major Soils Associated With This Site:

Soil Survey Area: 633

Frolic L, 2 to 6%

Iles ST-L, 3 to 25%

Fughes L, 4 to 10%

Waas VFSL, 2 to 8%

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

#### **2. PHYSIOGRAPHIC FEATURES**



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## **1. Potential Plant Community Description and Ecological Factors**

The general view of this site is grass – big sagebrush. The potential natural plant community by air-dry weight is composed of approximately 60 percent perennial grasses, 10 percent forbs, and 30 percent shrubs.

## **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		140	210	10	15
Muttongrass	POFE		70	140	5	10
Slender wheatgrass	ELTR7		70	140	5	10
Needleandthread	HECO26		70	140	5	10
Letterman needlegrass	ACLE9		70	140	5	10
Nodding brome	BRAN	1	14	42	1	3
Indian ricegrass	ACHY	1	14	42	1	3
Prairie junegrass	KOMA	1	14	42	1	3
Western wheatgrass	PASM	1	14	42	1	3
Bottlebrush squirreltail	ELEL5	1	14	42	1	3
Ross sedge	CARO5	1	14	42	1	3
Blue grama	BOGR2	1	14	42	1	3
Columbia needlegrass	ACNE9	1	14	42	1	3
Other perennial grasses	PPGG	1	70	140	5	10
Other annual grasses	AAGG	1	70	140	5	10

Forbs, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Rocky Mountain beardtongue	PEST2	2	14	42	1	3
Shaggy fleabane	ERPU2	2	14	42	1	3
Pacific aster	ASCH2	2	14	42	1	3
Silverleaf milkvetch	ASAR4	2	14	42	1	3
Wyoming Indian paintbrush	CALI4	2	14	42	1	3
Longleaf phlox	PHLO2	2	14	42	1	3
Spurred lupine	LUCAC3	2	14	42	1	3
Sulphurflower wild buckwheat	ERUM	2	14	42	1	3
Northern sweetvetch	HEBO	2	14	42	1	3
Common yarrow	ACMI2	2	14	42	1	3
Blue flax	LIPE2	2	14	42	1	3
Great mullein	VETH	2	14	42	1	3
Parry goldenrod	SOPA4	2	14	42	1	3
Fineleaf woollywhite	HYFI	2	14	42	1	3
Lobeleaf groundsel	SEMU3	2	14	42	1	3
Stemless fournerve daisy	TEACA2	2	14	42	1	3
Navajo tea	THSU	2	14	42	1	3
American purple vetch	VIAM	2	14	42	1	3
Other perennial forbs	PPFF	2	70	140	5	10
Other annual forbs	AAFF	2	70	140	5	10

## Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Mountain big sagebrush	ARTRV		140	210	10	15
Mountain snowberry	SYOR2		70	140	5	10
Utah serviceberry	AMUT	1	14	42	1	3
Bitterbrush	PUTR2	1	14	42	1	3
Birchleaf mountainmahogany	CEMO2	1	14	42	1	3
Creeping Oregon grape	MARE11	1	14	42	1	3
Crispleaf wild buckwheat	ERCO14	1	14	42	1	3
Spineless horsebrush	TEAC2	1	14	42	1	3
Longflower rabbitbrush	CHDE2	1	14	42	1	3
Broom snakeweed	GUSA2	1	14	42	1	3
Mountain low rabbitbrush	CHVIL4	1	14	42	1	3
Other shrubs	SSSS	1	70	140	5	10

## Trees, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol			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	1700	1800
Average Year	1300	1400
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)	50	2	20
Forbs (perennial)	5	1	2
Shrubs	20	4	10
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

**5. Ecological Dynamics of the Site**

As this site deteriorates due to grazing pressure, perennial grasses, and palatable forbs and shrubs decrease, while low rabbitbrush, big sagebrush, and snakeweed increase. Fire will destroy big sagebrush but low rabbitbrush and snowberry will increase.

**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
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Percent Growth	0	0		5	15	40	30	5	5		0	0
Name	PNC											
ID Number	UT4051											
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)

048AY409UT  
 Mountain Loam (Salina wildrye)

**9. Correlated Sites in Other States**

(Give site name and number)

**D. MAJOR USES OF THIS SITE**

**1. Livestock**

a. Site Factors Influencing Management

This site is suited for sheep and cattle grazing during fall, winter, and spring.

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

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This site provides food and cover for many species of wildlife.

**b. List of Potential Species Present**

Wildlife using 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.

**4. Wood Products**

None

**5. Other Uses**

**E. THREATENED AND ENDANGERED SPECIES**

1. Plants
2. Animals

**F. MODAL LOCATION AND DOCUMENTATION**

State: Utah  
 Latitude:

County:  
 Longitude:

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Modal Soils: Frolic L, 2 to 6% — fine-loamy, mixed Cumulic Haploborolls

Type Location: SW ¼; SW ¼; SE ¼; Section 8, Township 27S, Range 26E

General Legal Description:

**Field Office Site Location**

Price  
 Roosevelt

Legal Description: SW ¼; SW ¼; SE ¼; Section 8, Township 27S, Range 26E

**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**