

UNITED STATES DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE

STATE: Utah

SITE TYPE: Rangeland

ECOLOGICAL SITE NAME: Mountain Clay (Silver sagebrush)

SITE NUMBER: 047CY404UT

MLRA: 047C

Original Site Description: Author: GWL, LLR

Date: 04/22/1992

Revised Site Description: Author:

Date:

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

Date:

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: 40-60 inches

Surface Textures: Silt Loam and Silty Clay Loam

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

Subsurface Textures:

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

Geologic Parent Materials: Alluvium, Residuum, Colluvium and Eolian Deposits from Dushesne River Interbedded Sandstone and Shale

Moisture Regime: Ustic

Temperature Regime: Frigid

Runoff:

Permeability(min-max): 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 CaCl<sub>2</sub>):

pH Range:

Available Water Capacity (inches): 0.13-0.18

Major Soils Associated With This Site:

Soil Survey Area: 013

Skutum SiL, 10-20%

Gourley Family SiCL, 4-25%

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



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

The dominant aspect of the plant community is grass and silver sagebrush. The composition by air-dry weight is approximately 55 percent perennial grasses, 25 percent forbs, and 20 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
Slender wheatgrass	ELTR7		400	500	20	25
Mountain brome	BRCA5		100	200	5	10
Nevada bluegrass	PONE3		100	200	5	10
Sheep fescue	FEOV	1	20	100	1	5
Bulbous oniongrass	MEBU	1	20	100	1	5
Columbia needlegrass	ACNE9	1	20	100	1	5
Nodding bluegrass	PORE	1	20	100	1	5
Geyer sedge	CAGE2	1	20	100	1	5
Letterman needlegrass	ACLE9	1	20	100	1	5
Other perennial grasses	PPGG	1	200	300	10	15
Other annual grasses	AAGG	1	200	300	10	15

Forbs, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Sticky purple cranesbill	GEVI2		100	200	5	10
Thickleaf peavine	LALA3		60	100	3	5
Fall sneezeweed	HEAU	2	20	40	1	2
Woodland strawberry	FRVE	2	20	40	1	2
Fendler meadowrue	THFE	2	20	40	1	2
Tolmie owllover	ORTO	2	20	40	1	2
Pale agoseris	AGGL	2	20	40	1	2
Western mountain aster	ASOC	2	20	40	1	2
Shortstem wild buckwheat	ERBR5	2	20	40	1	2
Wyoming Indian paintbrush	CALI4	2	20	40	1	2
Common yarrow	ACMI2	2	20	40	1	2
Low beardtongue	PEHU	2	20	40	1	2
Parry clover	TRPA5	2	20	40	1	2
Nettleleaf giant hyssop	AGUR	2	20	40	1	2
Longleaf hawksbeard	CRAC2	2	20	40	1	2
Duncecap larkspur	DEOC	2	20	40	1	2
Showy cinquefoil	POGR9	2	20	40	1	2
Lobeleaf groundsel	SEMU3	2	20	40	1	2
Dark throat shootingstar	DOPU	2	20	40	1	2
American purple vetch	VIAM	2	20	40	1	2
Twolobe larkspur	DENU2	2	20	40	1	2
Eaton fleabane	EREA	2	20	40	1	2
Other perennial forbs	PPFF	2	100	200	5	10
Other annual forbs	A AFF	2	100	200	5	10

### Shrubs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Silver sagebrush	ARCA13		400	500	20	25
Mountain snowberry	SYOR2		60	100	3	5
Stickyleaf low rabbitbrush	CHVIV4	3	20	40	1	2
Blue elder	SACE3	3	20	40	1	2
Creeping Oregon grape	MARE11	3	20	40	1	2
Other shrubs	SSSS	3	60	100	3	5

### 3. Plant Community Annual Production

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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	2100	2200
Average Year	1900	2000
Unfavorable Year	1600	1700

#### **4. Ground Cover and Structure**

##### a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	40	3	15
Forbs (perennial)	15	2	5
Shrubs	20	4	10
Trees			
Cryptogams			

##### b. Other

Litter	
Coarse Fragments	
Bare Ground	

#### **5. Ecological Dynamics of the Site**

Plant species not a part of this climax plant community that are most likely to invade this site if plant cover deteriorates are annual grasses, annual forbs, dandelion, mullein, tarweed, houndstongue, and snakeweed.

#### **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	20	50	5	10	5	5	0	0
Name	PNC											
ID Number	UT4041											
Description	Excellent Condition											

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	0	0	30	50	0	10	10	0	0	0

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Name	Good Condition No.1
ID Number	UT4042
Description	needlegrass, bluegrass, silver sagebrush

### **7. Aspect Differences Near MLRA Boundaries**

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

### **8. Associated Sites Within MLRA**

047CY430UT  
 Mountain Loam (Mountain big sagebrush)

### **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 has moderately high values for summer use by cattle, sheep, and horses. It provides green forage when vegetation of sites at lower elevations is dry and mature. Sufficient livestock water is usually close by.

#### 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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The potential is poor for openland habitat, good for woodland habitat, very poor for wetland habitat, and good for rangeland habitat.

**b. List of Potential Species Present**

It is good habitat for summer use by elk, mule deer, and moose, and good all around habitat for bear, coyote, cougar, bobcat, snowshoe hare, songbirds, pine grouse, squirrels, golden eagle, bald eagle, and hawks.

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**

The potential natural plant community has high values for aesthetics and natural beauty. Wildflowers bloom from early summer through fall. Hunting is fair and fishing is opportune on streams, lakes, and reservoirs through and adjacent to this site.

**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 Soil: Skutum SiL, 10-20% — fine, montmorillonitic Argic Cryoborolls

Type Location: SE ¼, SW ¼, NW ¼, Section 7, Township 2S, Range 9W

General Legal Description:

**Field Office Site Location**

Roosevelt

**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**