

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 Shallow Loam (Black sagebrush)

SITE NUMBER: 048AY433UT

MLRA: 048A

Original Site Description: Author: DJS

Date: 01/24/1994

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: Shallow to Moderately Deep

Surface Textures:

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

Subsurface Textures:

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

Geologic Parent Materials: Residuum and Colluvium from Calcareous Sandstone and Shale

Moisture Regime:

Temperature Regime:

Runoff: Medium to Rapid

Permeability(min-max): Moderate

Drainage Class(min-max):

Water Erosion Hazard: Moderate to High

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): 2-4

Major Soils Associated With This Site:

Soil Survey Area: 616
Beje GRV-FSL, 1-8%

Pathead GR-L 25-50%

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 black 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		112.5	150	15	20
Bluebunch wheatgrass	PSSP6		75	112.5	10	15
Needleandthread	HECO26		37.5	75	5	10
Muttongrass	POFE		37.5	75	5	10
Western wheatgrass	PASM	1	7.5	22.5	1	3
Indian ricegrass	ACHY	1	7.5	22.5	1	3
Prairie junegrass	KOMA	1	7.5	22.5	1	3
Bottlebrush squirreltail	ELEL5	1	7.5	22.5	1	3
Geyer sedge	CAGE2	1	7.5	22.5	1	3
Blue grama	BOGR2	1	7.5	22.5	1	3
Sandberg bluegrass	POSE	1	7.5	22.5	1	3
Columbia needlegrass	ACNE9	1	7.5	22.5	1	3
Other perennial grasses	PPGG	1	37.5	75	5	10
Other annual grasses	AAGG	1	37.5	75	5	10

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Sulphurflower wild buckwheat	ERUM	2	22.5	37.5	3	5
Looseflower milkvetch	ASTE5	2	22.5	37.5	3	5
Pacific aster	ASCH2	2	22.5	37.5	3	5
Small leaf pussytoes	ANMI3	2	22.5	37.5	3	5
Fendler sandwort	ARFE3	2	22.5	37.5	3	5
Scarlet globemallow	SPCO	2	22.5	37.5	3	5
Carpet phlox	PHHO	2	22.5	37.5	3	5
Roughseed catseye	CRFL6	2	22.5	37.5	3	5
Fineleaf woollywhite	HYFI	2	22.5	37.5	3	5
Hoary tansyaster	MACA2	2	22.5	37.5	3	5
Blue flax	LIPE2	2	22.5	37.5	3	5
Feathery false solomonsseal	MARAA	2	22.5	37.5	3	5
Other perennial forbs	PPFF	2	75	112.5	10	15
Other annual forbs	AAFF	2	75	112.5	10	15

Shrubs/Vines, %

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Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Black sagebrush	ARNO4		75	112.5	10	15
Mountain snowberry	SYOR2		37.5	75	5	10
Birchleaf mountainmahogany	CEMO2	3	7.5	22.5	1	3
Utah serviceberry	AMUT	3	7.5	22.5	1	3
Mountain low rabbitbrush	CHVIL4	3	7.5	22.5	1	3
Creeping Oregon grape	MARE11	3	7.5	22.5	1	3
Spineless horsebrush	TECA2	3	7.5	22.5	1	3
Broom snakeweed	GUSA2	3	7.5	22.5	1	3
			7.5			
Other shrubs	SSSS	3	7.5	22.5	1	3

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	900	1000
Average Year	650	750
Unfavorable Year	400	500

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	2	10
Trees			
Cryptogams			

b. Other

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Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As this site deteriorates due to grazing pressure, palatable grasses, forbs, and shrubs decrease while low sagebrush, snakeweed, Sandberg bluegrass, and unpalatable forbs 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
Percent Growth	0	0	0	5	15	40	30	5	5	0	0	0
Name	PNC											
ID Number	UT4331											
Description	Excellent Condition											

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	0	0	10	50	30	5	5	0	0	0
Name	Good Condition No. 1											
ID Number	UT4332											
Description	Salina wildrye, bluegrass, Black sagebrush											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

048AY436UT
 Mountain Shallow 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 provides proper grazing for cattle and sheep during spring, summer, and fall.

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 a few 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.

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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: Beje – loamy, mixed Lithic Argiborolls

Type Location: NW ¼; Section 34, Township 12S, Range 14E

General Legal Description:

Field Office Site Location

Roosevelt
 Price

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