

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: Upland Clay (Low sagebrush)

SITE NUMBER: 047AY302UT

MLRA: E47

Original Site Description: Author:

Date: 01/28/1992

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: 60 inches

Surface Textures: Clay Loam

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

Subsurface Textures:

Subsurface Fragments(<=3" % vol, >3" % vol): <10%

Geologic Parent Materials: Sandstone and Quartzite

Moisture Regime:

Temperature Regime:

Runoff: Medium

Permeability(min-max): Slow

Drainage Class(min-max): Well Drained

Water Erosion Hazard: Moderate

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): 10-12

Major Soils Associated With This Site:

Soil Survey Area: 613

Ant Flat CL, 8-15%

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

2. PHYSIOGRAPHIC FEATURES

Site Type: Rangeland
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1. Potential Plant Community Description and Ecological Factors

The general view of this site is low sagebrush. The potential natural plant community is 55 percent perennial grasses, 5 percent forbs, and 40 percent shrubs by air-dry weight.

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
Nevada bluegrass	PONE3		120	160	15	20
Bottlebrush squirreltail	ELEL5		80	120	10	15
Slender wheatgrass	ELTR7		80	120	10	15
Needleandthread	HECO26		40	80	5	10
Western wheatgrass	PASM	1	24	40	3	5
Bluebunch wheatgrass	PSSP6	1	24	40	3	5
Other perennial grasses	PPGG	1	24	40	3	5
Other annual grasses	AAGG	1	24	40	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Shortstem wild buckwheat	ERBR	2	8	24	1	3
Holboell rockcress	ARHO2	2	8	24	1	3
Nodding onion	ALCE2	2	8	24	1	3
Longleaf phlox	PHLO2	2	8	24	1	3
Scarlet globemallow	SPCO	2	8	24	1	3
White stoneseed	LIRU4	2	8	24	1	3
Other perennial forbs	PPFF	2	40	80	5	10
Other annual forbs	AAFF	2	40	80	5	10

Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Low sagebrush	ARARA		200	280	25	35
Stickyleaf low rabbitbrush	CHVIV4	3	8	16	1	2
Slender wild buckwheat	ERMI4	3	8	16	1	2
Other shrubs	SSSS	3	24	40	3	5

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
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			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	850	950
Average Year	700	800
Unfavorable Year	500	600

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	20	2	10
Forbs (perennial)	5	1	5
Shrubs	45	2	10
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As this site deteriorates due to grazing pressure, slender wheatgrass and bluegrass decrease while low sagebrush increases. When the plant community is burned low sagebrush will decrease while bluegrass and slender wheatgrass 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	0	0	5	15	40	20	10	5	5	0	0	0

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Growth												
Name	PNC											
ID Number	UT3021											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

047AY308UT
 Upland Loam (Basin big sagebrush)

047AY430UT
 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 grazing value for cattle, sheep, and horses in 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

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

b. List of Potential Species Present

This site is fair habitat at least part of the year for deer, antelope, coyotes, wildcats, quail, rabbits, songbirds, and small mammals.

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 has fair values for aesthetics and natural beauty. Hunting is poor for deer and a limited number of upland game species.

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: Ant Flat CL, 8-15% – fine, montmorillonitic, frigid Calcic Argixerolls

Type Location: Section 1, Township 4N, Range 7E

General Legal Description:

Field Office Site Location

Logan

Murray

Provo

Price

Richfield

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