

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 Gravelly Loam (Black sagebrush)

SITE NUMBER: 047BY306UT

MLRA: 047B

Original Site Description: Author: TS

Date: 05/01/1982

Revised Site Description: Author: TS

Date: 01/22/1992

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:

Surface Fragments(<=3" % cover, >3" % cover): 35%

Subsurface Textures:

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

Geologic Parent Materials: Alluvium and Residuum from Igneous Materials

Moisture Regime:

Temperature Regime:

Runoff:

Permeability(min-max):

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: 636

Notter L (High Rainfall)

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 general view of this site is grass and black sagebrush. The composition by air-dry weight is approximately 45 percent perennial grasses, 10 percent forbs, and 50 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
Indian ricegrass	ACHY		95	142.5	10	15
Blue grama	BOGR2		47.5	95	5	10
Needleandthread	HECO26		47.5	95	5	10
Muttongrass	POFE		28.5	47.5	3	5
Sandberg bluegrass	POSE		28.5	47.5	3	5
Nevada bluegrass	PONE3		28.5	47.5	3	5
Bottlebrush squirreltail	ELEL5	1	0	28.5	0	3
Bluebunch wheatgrass	PSSP6	1	0	28.5	0	3
Western wheatgrass	PASM	1	0	28.5	0	3
Other perennial grasses	PPGG	1	9.5	47.5	1	5
Other annual grasses	AAGG	1	9.5	47.5	1	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Slender wild buckwheat	ERMI4		28.5	47.5	3	5
Pacific aster	ASCH2		28.5	47.5	3	5
Freckled milkvetch	ASLE8		28.5	47.5	3	5
Carpet phlox	PHHO	2	0	9.5	0	1
Lobeleaf groundsel	SEMU3	2	0	9.5	0	1
Stemless fournerve daisy	TEACA2	2	0	9.5	0	1
Other perennial forbs	PPFF	2	9.5	47.5	1	5
Other annual forbs	AAFF	2	9.5	47.5	1	5

Shrubs, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Black sagebrush	ARNO4		190	285	20	30
Bitterbrush	PUTR2		47.5	95	5	10
Low rabbitbrush	CHVI8		47.5	95	5	10
Mountain big sagebrush	ARTRV		28.5	47.5	3	5
Wyoming big sagebrush	ARTRW8	3	0	28.5	0	3
Rubber rabbitbrush	ERNA10	3	0	28.5	0	3
Other shrubs	SSSS	3	9.5	47.5	1	5

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	1000	1100
Average Year	800	950
Unfavorable Year	500	700

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	2
Shrubs	30	2	15
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

Plant Communities & Transitional Pathways

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

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6. Plant Growth Curves

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	0	5	15	20	20	25	15	0	0	0
Name	PNC											
ID Number	UT3061											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

047BY309UT
 Upland Loam (Black sagebrush)

047BY332UT
 Upland Stony Loam (Black sagebrush)

047BY304UT
 Upland Gravelly Loam (Pinyon-Utah juniper)

9. Correlated Sites in Other States

(Give site name and number)

D. MAJOR USES OF THIS SITE

1. Livestock

a. Site Factors Influencing Management

Good summer grazing for cattle.

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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No cover – good forage

b. List of Potential Species Present

Mule deer - antelope

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 good aesthetic appearances.

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: Notter L (High Rainfall) — fine-loamy, mixed Aridic Argiborolls

Type Location:

General Legal Description:

Field Office Site Location

Cedar City

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