

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: Semidesert Shallow Loam (Wyoming big sagebrush)

SITE NUMBER: 034XY225UT

MLRA: 034

Original Site Description: Author: JLB GWL

Date: 05/12/1981

Revised Site Description: Author: JLB GWL

Date: 12/30/1993

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

Date: 06/25/1994

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: 10-20 inches

Surface Textures: Extremely Channery Sandy Loam

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

Subsurface Textures: Clay Loam

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

Geologic Parent Materials: Colluvium and Residuum from Sandstone

Moisture Regime:

Temperature Regime: Mesic

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): 1-2

Major Soils Associated With This Site:

Soil Survey Area: 047

Walknolls CNV-L 4-25%

Walknolls CNV-L 25-50%

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 dominant aspect of the plant community is Wyoming big sagebrush. The composition by air-dry weight is approximately 30 percent perennial grasses, 5 percent forbs and 65 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
Bluebunch wheatgrass	PSSP6		20	40	5	10
Indian ricegrass	ACHY		20	40	5	10
Bottlebrush squirreltail	ELEL5		4	20	1	5
Needleandthread	HECO26		4	20	1	5
Nevada bluegrass	PONE3		4	20	1	5
Galleta	HIJA		4	20	1	5
Salina wildrye	LESAS		4	20	1	5
Other perennial grasses	PPGG	1	0	20	0	5
Other annual grasses	AAGG	1	0	20	0	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Scarlet globemallow	SPCO	2	4	8	1	2
Longleaf phlox	PHLO2	2	4	8	1	2
Mountain pepperweed	LEMO2	2	4	8	1	2
Gumweed tansyaster	MAGR2	2	4	8	1	2
Carpet phlox	PHHO	2	4	8	1	2
Notchleaf scorpionweed	PHCRC	2	4	8	1	2
Roughseed catseye	CRFL6	2	4	8	1	2
Hoary tansyaster	MACA2	2	4	8	1	2
Other perennial forbs	PPFF	2	20	40	5	10
Other annual forbs	AAFF	2	20	40	5	10

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Wyoming big sagebrush	ARTRW		140	180	35	45
Shadscale	ATCO		20	40	5	10
Low rabbitbrush	CHVI8		12	20	3	5
Broom snakeweed	GUSA2	3	4	12	1	3
Slender wild buckwheat	ERMI4	3	4	12	1	3
Bud sagebrush	ARSP5	3	4	12	1	3
Central pricklypear	OPPO	3	4	12	1	3
Winterfat	KRLA2	3	4	12	1	3
Black sagebrush	ARNO4	3	4	12	1	3
Crispleaf wild buckwheat	ERCO14	3	4	12	1	3
Shortspine horsebrush	TESP2	3	4	12	1	3
Other shrubs	SSSS	3	20	40	5	10

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	450	500
Average Year	350	400
Unfavorable Year	250	300

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	15	2	5
Forbs (perennial)	5	1	2
Shrubs	40	3	20
Trees			
Cryptogams			

b. Other

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Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, Indian ricegrass, bluebunch wheatgrass, bluegrass and bud sagebrush decrease, while Wyoming big sagebrush, galleta and broom snakeweed increase. Fire is not an important factor in this ecosystem. Cheatgrass and other weeds are most likely to invade this site.

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	5	15	45	35	0	0	0	0	0	0
Name	PNC											
ID Number	UT2251											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY212UT

Semidesert Loam (Wyoming big sagebrush)

034XY227UT

Semidesert Shallow Loam (Black sage)

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 sheep and cattle during fall, winter, and spring.

b. Guide to Forage Quality(Plant preference by season)

Species	Oct-Nov	Dec-Feb	Mar-May	Jun-Sep

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VG = Very Good G = Good F = Fair P = Poor

2. Wildlife

a. Site Factors Influencing Management

This site provides food and cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include jackrabbit, snake, lizard, hawk, coyote, and mule deer.

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 moderate recreational opportunities and often has scenic vistas.

4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

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2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah

County:

Latitude:

Longitude:

Modal Soil: Walknolls CNV-L — loamy-skeletal, mixed, calc., mesic Lithic Ustic Torriorthents

Type Location: NW ¼, SW ¼, SE ¼; Section 29, Township 9S, Range 25E SLBM

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