

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 Gravelly Sandy Loam (Wyoming big sagebrush)

SITE NUMBER: 034XY206UT

MLRA: 034

Original Site Description: Author: JLB GWL

Date: 02/05/1992

Revised Site Description: Author: JLB GWL

Date: 12/27/1993

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: 40-60 inches

Surface Textures: Gravelly to Very Gravelly Sandy Loam

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

Subsurface Textures: Coarse-Loamy

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

Geologic Parent Materials: Alluvium and Colluvium from Mixed Sedimentary

Moisture Regime:

Temperature Regime: Mesic

Runoff: Very Slow

Permeability(min-max): Moderately Rapid

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: 047

Gilton SL 2-8%

Nelman GR-SL 4-8%

Heapo CBV-LS 1-3%

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

2. PHYSIOGRAPHIC FEATURES

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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 20 percent perennial grasses, 10 percent forbs and 70 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
Bottlebrush squirreltail	ELEL5		12	20	3	5
Indian ricegrass	ACHY		12	20	3	5
Nevada bluegrass	PONE3		12	20	3	5
Galleta	HIJA		12	20	3	5
Bluebunch wheatgrass	PSSP6	1	4	12	1	3
Salina wildrye	LESAS	1	4	12	1	3
Needleandthread	HECO26	1	4	12	1	3
Sand dropseed	SPCR	1	4	12	1	3
Other perennial grasses	PPGG	1	20	40	5	10
Other annual grasses	AAGG	1	20	40	5	10

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Hedge mustard	SIOF	2	4	8	1	2
Western tansymustard	DEPI	2	4	8	1	2
Hoary tansyaster	MACA2	2	4	8	1	2
Longleaf phlox	PHLO2	2	4	8	1	2
Shaggy fleabane	ERPU2	2	4	8	1	2
Mountain pepperweed	LEMO2	2	4	8	1	2
Notchleaf scorpionweed	PHCRC	2	4	8	1	2
Scarlet globemallow	SPCO	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		120	160	30	40
Spiny hopsage	GRSP		20	40	5	10
Rubber rabbitbrush	ERNA10		20	40	5	10
Shadscale	ATCO		8	20	2	5
Greasewood	SAVE4		8	20	2	5
Nuttall horsebrush	TENU2		8	20	2	5
Winterfat	KRLA2	3	4	12	1	3
Broom snakeweed	GUSA2	3	4	12	1	3
Low rabbitbrush	CHVI8	3	4	12	1	3
Fourwing saltbush	ATCA2	3	4	12	1	3
Spiny greasewood	GLSPM	3	4	12	1	3
Other shrubs	SSSS	3	12	20	3	5

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	550	600
Average Year	350	400
Unfavorable Year	200	250

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	2	2
Shrubs	50	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 and needleandthread decrease while sagebrush, low rabbitbrush and sometimes galleta increase. When the potential natural plant community is burned, sagebrush may be eliminated while grasses and rabbitbrush will increase to dominate the site. Cheatgrass and Utah juniper 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	UT2061											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY205UT

Semidesert Gravelly Loam (Wyoming 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 sheep, cattle and sometimes horses during late fall, winter, and early 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 snake, jackrabbit, coyote, mule deer, and hawk.

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

Recreation opportunities and scenic vistas are limited on this site.

4. Wood Products

Utah juniper may invade this site making available firewood or posts.

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

Some species may be found in the rougher areas of this site.

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2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Gilston SL 2-8% — coarse-loamy, mixed, calcareous, mesic Ustic Torriorthents

Type Location: NW ¼, SE ¼, SE ¼; Section 30, 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