

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 Loam (Wyoming big sagebrush)

SITE NUMBER: 034XY205UT

MLRA: 034

Original Site Description: Author: JLB GWL

Date: 05/15/1981

Revised Site Description: Author: JLB GWL

Date: 12/14/1993

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: >60 inches

Surface Textures: Gravelly to Very Gravelly Loams and Sandy Loams

Surface Fragments(<=3" % cover, >3" % cover): <50%

Subsurface Textures: Loamy Skeletal

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

Geologic Parent Materials: Mixed Alluvium from Sedimentary and Metamorphic

Moisture Regime:

Temperature Regime: Mesic

Runoff: Medium

Permeability(min-max): Moderate

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

Clapper GR-L 2-25%, 25-50%

Chilton GRV-L 25-50% Eroded

Lanver CNV-SL 2-8%

Ustollic Paleorthids FSL 2-5%

Stomitt GR-SCL Dry 10-30%

Clapper GRV-L Clay Sub 30-50%

Clifterson CNV-L 2-15%

Dahlquist Family GR-L 0-2%

Theodalund Family 3-30%

Stormitt GR-SCL Dry 3-10%

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

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 35 percent perennial grasses, 10 percent forbs and 55 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		40	60	10	15
Galleta	HIJA		40	60	10	15
Needleandthread	HECO26		20	40	5	10
Blue grama	BOGR2	1	4	12	1	3
Nevada bluegrass	PONE3	1	4	12	1	3
Bottlebrush squirreltail	ELEL5	1	4	12	1	3
Salina wildrye	LESAS	1	4	12	1	3
Other perennial grasses	PPGG	1	12	20	3	5
Other annual grasses	AAGG	1	12	20	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Scarlet globemallow	SPCO		4	20	1	5
Pale evening primrose	OEPA	2	4	8	1	2
Western sticktight	LAOC3	2	4	8	1	2
Whitestem stickleaf	MEAL6	2	4	8	1	2
Tumbling orach	ATRO	2	4	8	1	2
Roughseed catseye	CRFL6	2	4	8	1	2
Eastwood sandwort	AREAE	2	4	8	1	2
Uinta Basin beardtongue	PEGR6	2	4	8	1	2
Narrowleaf goosefoot	CHLE4	2	4	8	1	2
Hedge mustard	SIOF	2	4	8	1	2
Longleaf phlox	PHLO2	2	4	8	1	2
Gumweed tansyaster	MAGR2	2	4	8	1	2
Carpet phlox	PHHO	2	4	8	1	2
Mountain pepperweed	LEMO2	2	4	8	1	2
Hoary tansyaster	MACA2	2	4	8	1	2
Hamilton milkvetch	ASHA3	2	4	8	1	2
Dinosaur mikvetch	ASSA5	2	4	8	1	2
Lapoint beardtongue	PEGO2	2	4	8	1	2
Other perennial forbs	PPFF	2	4	20	1	5
Other annual forbs	AAFF	2	4	20	1	5

Shrubs/Vines, %

Site Type: Rangeland

Ecological Site Name: Semidesert Gravelly Loam (Wyoming big sagebrush)

Site Number: 034XY205UT

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Wyoming big sagebrush	ARTRW		100	140	25	35
Bud sagebrush	ARSP5		12	20	3	5
Shadscale	ATCO		12	20	3	5
Winterfat	KRLA2		12	20	3	5
Low rabbitbrush	CHVI8	3	4	20	1	5
Crispleaf wild buckwheat	ERCO14	3	4	20	1	5
Central pricklypear	OPPO	3	4	20	1	5
Broom snakeweed	GUSA2	3	4	20	1	5
Shortspine horsebrush	TESP2	3	4	20	1	5
Sulphurflower wild buckwheat	ERUM	3	4	20	1	5
Spiny greasbrush	GLSPM	3	4	20	1	5
Spiny hopsage	GRSP	3	4	20	1	5
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	550	600
Average Year	350	400
Unfavorable Year	200	250

4. Ground Cover and Structure

Site Type: Rangeland

Ecological Site Name: Semidesert Gravelly Loam (Wyoming big sagebrush)

Site Number: 034XY205UT

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	25	2	15
Forbs (perennial)	5	1	2
Shrubs	35	3	15
Trees			
Cryptogams			

b. Other

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 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	UT2051											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY247UT

Semidesert Stony Loam (Utah juniper-Pinyon)

034XY227UT

Semidesert Stony Loam (Black 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 receives seasonal use by horses, cattle, and sometimes sheep. The determining factor is availability of livestock water.

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 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 values are hiking, hunting, and camping. The landscape is somewhat limited on vistas.

4. Wood Products

Site Type: Rangeland
 Ecological Site Name: Semidesert Gravelly Loam (Wyoming big sagebrush)
 Site Number: 034XY205UT

Pinyon and juniper may invade this site which may provide firewood or posts.

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

Some plant species may occur in the rougher areas of this site.

2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Clapper GR-L 2-25%, 25-50% GRV-L Clayey Substrat 30-50% — loamy-skeletal, mixed, mesic Ustollic Calciorthids

Type Location: NW ¼, NW ¼, NE ¼; Section 25, Township 4S, Range 20E 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