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 Sandy Loam (Fourwing saltbush)
SITE NUMBER: 034XY216UT
MLRA: 034
Original Site Description: Author: JLB GWL Date: 05/12/1981
Revised Site Description: Author: JLB GWL Date: 12/29/1993
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: Sandy Loam
Surface Fragments(<=3” % cover, >3” % cover):
Subsurface Textures: Coarse Loamy
Subsurface Fragments(<=3” % vol, >3” % vol):
Geologic Parent Materials: Mixed Alluvium and Eolian from Sandstone
Moisture Regime:
Temperature Regime: Mesic
Runoff:
Permeability(min-max): Moderately Rapid
Drainage Class(min-max): Well Drained
Water Erosion Hazard:
Wind Erosion Hazard: High When Disturbed
Electrical Conductivity (EC in mmhos/cm):
Sodium Adsorption Ration (SAR):
Soil Reaction (1:1 water):
Soil Reaction (0.1 M $CaCl_2$):
pH Range:
Available Water Capacity (inches):

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Major Soils Associated With This Site:

Soil Survey Area: 047

Begay SL 2-15%	Milok FSL 3-8%, 8-25%
Henrieville SL 2-4%	Yarts FSL 2-4%, 4-8%, L 0-2%
Yarts L 2-5%, 5-8%	Palma SL 2-5%
Tebbs L 2-5%, 5-8%	Glenberg Family 1-3%
Mivida VFSL 1-6%	Sazi FSL Dry 2-10%
Factory FSL 2-10%	

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

2. PHYSIOGRAPHIC FEATURES

Landform and Position: Fan Terraces
Aspect: All

	Minimum	Maximum
Slope:	0	25
Elevation:	5200	6500

Flooding:
- Frequency:
- Duration:

Ponding:
- Depth (inches):
- Frequency:
- Duration:
- Water Table Depth:

B. CLIMATIC FEATURES

Mean Annual Precipitation (inches): 8-12
Mean Annual Air Temperature: 44-51
Mean Annual Soil Temperature: 41-49
Frost Free Period (days): 0-0
Freeze Free Period (days): 80-140

Temperature and Moisture Distribution:

Temp	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High	37	43	52	64	73	83	91	88	80	69	51	40
Mean	24	30	38	49	58	66	74	71	63	52	38	27
Low	11	17	25	33	42	49	56	54	46	36	24	14

ppt	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High												
Mean	0.65	0.63	0.65	0.53	0.70	0.80	0.92	1.23	1.09	0.84	0.57	1.14
Low												

Climate Stations: St. ID.: Location: Period:

From: To:

(Includes factors such as storm intensity, precipitation dependability, origin and pattern of storms, driest and wettest months, orographic effects, etc.)

Influencing Water Features (if any):

Wetland Description(Cowardin System) System Subsystem Class

Stream Types(Rosgen System) System

C. PLANT COMMUNITY CHARACTERISTICS

1. Potential Plant Community Description and Ecological Factors

The dominant aspect of the plant community is Indian ricegrass, needleandthread, fourwing saltbush and Wyoming big sagebrush. The composition by air-dry weight is approximately 60 percent perennial grasses, 5 percent forbs and 35 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		156.25	218.75	25	35
Needleandthread	HECO26		93.75	125	15	20
Galleta	HIJA		6.25	31.25	1	5
Sand dropseed	SPCR		6.25	31.25	1	5
Bottlebrush squirreltail	ELEL5		6.25	31.25	1	5
Bluebunch wheatgrass	PSSP6	1	0	18.75	0	3
Other perennial grasses	PPGG	1	18.75	31.25	3	5
Other annual grasses	AAGG	1	18.75	31.25	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre	% by Weight of Total Composition

			Low	High	Low	High
Woolly milkvetch	ASMO7		12.5	18.75	2	3
Scarlet globemallow	SPCO		6.25	12.5	1	2
Indian pipeweed	ERIN4	2	0	6.25	0	1
Rush skeletonweed	LYJU	2	0	6.25	0	1
Pale evening primrose	OEPA	2	0	6.25	0	1
Thickleaf beardtongue	PEPA6	2	0	6.25	0	1
White prairieclover	DACAO	2	0	6.25	0	1
Golden princesplume	STPI	2	0	6.25	0	1
Mountain pepperweed	LEMO2	2	0	6.25	0	1
Dinosaur milkvetch	ASSA5	2	0	6.25	0	1
Spiny sweetvetch	HEBOG2	2	0	6.25	0	1
Barneby pepperweed	LEBA	2	0	6.25	0	1
Other perennial forbs	PPFF	2	18.75	31.25	3	5
Other annual forbs	AAFF	2	18.75	31.25	3	5

Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Fourwing saltbush	ATCA2		62.5	93.75	10	15
Torrey jointfir	EPTO		12.5	31.25	2	5
Spiny hopsage	GRSP		12.5	31.25	2	5
Winterfat	KRLA2		12.5	31.25	2	5
Wyoming big sagebrush	ARTRW		12.5	31.25	2	5
Central pricklypear	POOP	3	6.25	12.5	1	2
Rubber rabbitbrush	ERNA10	3	6.25	12.5	1	2
Low rabbitbrush	CHVI8	3	6.25	12.5	1	2
Slender wild buckwheat	ERMI4	3	6.25	12.5	1	2
Nuttall horsebrush	TENU2	3	6.25	12.5	1	2
Sand sagebrush	ARFI2	3	6.25	12.5	1	2
Broom snakeweed	GUSA2	3	6.25	12.5	1	2
Shadscale	ATCO	3	6.25	12.5	1	2
Other shrubs	SSSS	3	18.75	31.25	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

Site Type: Rangeland
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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	750	800
Average Year	575	625
Unfavorable Year	400	450

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	35	2	15
Forbs (perennial)	5	1	2
Shrubs	15	4	5
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, Indian ricegrass, winterfat and fourwing saltbush decrease while galleta, broom snakeweed and low rabbitbrush increase.

When the potential natural plant community is burned, fourwing saltbush and Wyoming big sagebrush decrease while galleta, broom snakeweed and low rabbitbrush 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 Growth	0	0	5	15	45	35	0	0	0	0	0	0
Name	PNC											
ID Number	UT2161											
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)

034XY233UT
Semidesert Shallow Loam (Utah juniper-Pinyon)

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

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, 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

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

2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
Latitude: Longitude:

Modal Soil: Begay SL 2-15% — coarse loamy, mixed, mesic Ustollic Camborthids

Type Location: SE ¼, SE ¼, SW ¼; Section 36, Township 7S, 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