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: Desert Shallow Sandy Loam (Shadscale)
SITE NUMBER: 035XY130UT
MLRA: 035
Original Site Description: Author: GSC Date: 04/08/1983
Revised Site Description: Author: GSC Date: 09/21/1993
Approved by: Title: State Range Cons. Signed: Pat Shaver Date: 05/27/1994

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:
Surface Fragments(<=3" % cover, >3" % cover):
Subsurface Textures: Coarse Loamy
Subsurface Fragments(<=3" % vol, >3" % vol):
Geologic Parent Materials: Residuum and Eolian from Calcareous 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 $CaCl_2$):
pH Range:
Available Water Capacity (inches):

Major Soils Associated With This Site:

Soil Survey Area: 631, 624

Farb FSL	Moenkopie FSL
Pennell FLS	Valleycity STVL-FSL, 10-25%

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

2. PHYSIOGRAPHIC FEATURES

Landform and Position: Mesa Tops, Benches, and Cuesta Scarps
Aspect: All

	Minimum	Maximum
Slope:	2	10
Elevation:	3000	5000

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

B. CLIMATIC FEATURES

Mean Annual Precipitation (inches): 6-9
Mean Annual Air Temperature: 52-56
Mean Annual Soil Temperature: 54-58
Frost Free Period (days): 0-0
Freeze Free Period (days): 160-220

Temperature and Moisture Distribution:

Temp	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High	41	48	57	66	76	87	92	90	82	69	54	43
Mean	32	38	46	54	64	74	80	78	70	58	45	34
Low	23	29	35	42	52	61	68	66	58	46	36	26

ppt	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High												
Mean	0.39	0.52	0.53	0.41	0.47	0.25	0.97	0.97	0.76	0.95	0.59	0.60
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 shadscale, galleta, and Indian ricegrass. The composition by air-dry weight is approximately 45 percent perennial grasses, 10 percent forbs and 45 percent shrubs. Singleleaf ash is the only tree found in the potential natural plant community. It is generally less that 1 percent of the total plant community.

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
Galleta	HIJA		60	75	20	25
Indian ricegrass	ACHY		45	60	15	20
Sand dropseed	SPCR		9	15	3	5
Purple threeawn	ARPU9	1	3	9	1	3
Bottlebrush squirreltail	ELEL5	1	3	9	1	3
Mesa dropseed	SPFL2	1	3	9	1	3
Spike dropseed	SPCO4	1	3	9	1	3
Desert needlegrass	STSP3	1	3	9	1	3
Other perennial grasses	PPGG	1	9	15	3	5
Other annual grasses	AAGG	1	9	15	3	5

Forbs, %

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

			Low	High	Low	High
Gooseberryleaf globemallow	SPGR2	2	3	9	1	3
Indian pipeweed	ERIN4	2	3	9	1	3
Woolly milkvetch	ASMO7	2	3	9	1	3
James wild buckwheat	ERJA	2	3	9	1	3
Tufted evening primrose	OEOE2	2	3	9	1	3
Eastwood bluestar	AMEA	2	3	9	1	3
Matted crinklemat	TILA6	2	3	9	1	3
Stemless fournerve daisy	TEACA2	2	3	9	1	3
Horned spurge	EUBR	2	3	9	1	3
Hearts delight	ABFR2	2	3	9	1	3
Thorny wirelettuce	STSP6	2	3	9	1	3
Plateau yellow catseye	CRFL5	2	3	9	1	3
Annual ragweed	AMAR2	2	3	9	1	3
Woolly plantain	PLPA2	2	3	9	1	3
Sprawling skyrocket	IPPO2	2	3	9	1	3
Rusty lupine	LUPUP	2	3	9	1	3
Skyblue scorpionweed	PHCO	2	3	9	1	3
Flatcrown wild buckwheat	ERDE6	2	3	9	1	3
Whitestem stickleaf	MEAL6	2	3	9	1	3
Other perennial forbs	PPFF	2	30	45	10	15
Other annual forbs	AAFF	2	30	45	10	15

Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Shadscale	ATCO		45	60	15	20
Torrey jointfir	EPTO		15	30	5	10
Blackbrush	CORA		15	30	5	10
Winterfat	KRLA2		3	15	1	5
Broom snakeweed	GUSA2	3	3	9	1	3
Pacific aster	ASCH2	3	3	9	1	3
Crispleaf wild buckwheat	ERCO9	3	3	9	1	3
Bush pepperweed	LEFR2	3	3	9	1	3
Fourwing saltbush	ARCA2	3	3	9	1	3
Bigelow sagebrush	ARBI3	3	3	9	1	3
Littleleaf horsebrush	TEGL	3	3	9	1	3
Greene rabbitbrush	ERNAG	3	3	9	1	3
Central pricklypear	OPPO	3	3	9	1	3
Other shrubs	SSSS	3	9	15	3	5

Trees, %

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

Singleleaf Ash	FRAN2		0	3	0	1

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	300	400
Average Year	150	300
Unfavorable Year	75	150

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

As ecological condition deteriorates due to overgrazing, Indian ricegrass will decrease while blackbrush and snakeweed increase. Russian thistle, halogeton, and cheatgrass 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	25	65	5	0	0	0	0	0	0

Name	PNC
ID Number	UT1301
Description	Excellent Condition

7. Aspect Differences Near MLRA Boundaries
(Give related range sites in MLRA's above and below)

8. Associated Sites Within MLRA

035XY133UT
Desert Shallow Sandy Loam (Blackbrush)

035XY121UT
Desert Sandy Loam (Blackbrush)

035XY109UT
Desert Loam (Shadscale)

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 cattle and sheep 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 limited cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include jackrabbit, coyote, kangaroo rat, mice, snake, bobcat, and hawks.

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 and hunting.

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: Farb FSL — loamy, mixed (calc.), mesic Lithic Torriorthents

Site Type: Rangeland
Ecological Site Name: Desert Shallow Loam (Shadscale)
Site Number: 035XY130UT
Type Location: Lime Ridge, Gooseneck Park.

General Legal Description:

Field Office Site Location

Price
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