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 Very Steep Shallow Loam (Black sagebrush)
SITE NUMBER: 028AY260UT
MLRA: 028A
Original Site Description: Author: DJS Date: 03/01/1988
Revised Site Description: Author: DJS Date: 06/28/1993
Approved by: Title: State Range Cons. Signed: Pat Shaver Date: 08/30/1993

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: Shallow Loam
Surface Fragments(<=3" % cover, >3" % cover): 40%
Subsurface Textures:
Subsurface Fragments(<=3" % vol, >3" % vol): 35-60%
Geologic Parent Materials: Alluvium, Colluvium, Residuum from Limestone, Sandstone, and Siltstone
Moisture Regime:
Temperature Regime:
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): 0.5-3.0

Major Soils Associated With This Site:

Soil Survey Area:

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

2. PHYSIOGRAPHIC FEATURES

Landform and Position: Hillsides and Mountainsides
Aspect: All

	Minimum	Maximum
Slope:	50	70
Elevation:	4500	6700

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

B. CLIMATIC FEATURES

Mean Annual Precipitation (inches): 8-12
Mean Annual Air Temperature: 45-50
Mean Annual Soil Temperature: 48-52
Frost Free Period (days): 0-0
Freeze Free Period (days): 100-150

Temperature and Moisture Distribution:

Temp	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High	39	44	52	61	72	82	90	88	79	67	51	41
Mean												
Low	13	19	24	30	38	45	53	52	42	32	23	15

ppt	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High												
Mean	0.85	0.80	0.90	0.96	0.99	0.71	0.79	0.92	0.75	0.78	0.79	0.75
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 this plant community is black sagebrush. The composition by air-dry weight is approximately 55 percent perennial grasses, 5 percent forbs, and 40 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		110	137.5	20	25
Indian ricegrass	ACHY		55	82.5	10	15
Needleandthread	HECO26		27.5	55	5	10
Bottlebrush squirreltail	ELEL5	1	5.5	16.5	1	3
Galleta	HIJA	1	5.5	16.5	1	3
Purple threeawn	ARPU9	1	5.5	16.5	1	3
Sandberg bluegrass	POSE	1	5.5	16.5	1	3
Other perennial grasses	PPGG	1	16.5	27.5	3	5
Other annual grasses	AAGG	1	16.5	27.5	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Utah milkvetch	ASUT	2	5.5	16.5	1	3
Gooseberryleaf globemallow	SPGR2	2	5.5	16.5	1	3
Cushion wild buckwheat	EROV	2	5.5	16.5	1	3
Hairy balsamroot	BAHO	2	5.5	16.5	1	3
Carpet phlox	PHHO	2	5.5	16.5	1	3
Other perennial forbs	PPFF	2	16.5	27.5	3	5
Other annual forbs	AAFF	2	16.5	27.5	3	5

Shrubs/Vines, %

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

			Low	High	Low	High
Black sagebrush	ARNO4		165	192.5	30	35
Low rabbitbrush	CHVI8	3	5.5	16.5	1	3
Broom snakeweed	GUSA2	3	5.5	16.5	1	3
Nevada jointfir	EPNE	3	5.5	16.5	1	3
Mexican cliffrose	PUME	3	5.5	16.5	1	3
Shadscale	ATCO	3	5.5	16.5	1	3
Winterfat	KRLA2	3	5.5	16.5	1	3
Bud sagebrush	ARSP5	3	5.5	16.5	1	3
Central pricklypear	OPPO	3	5.5	16.5	1	3
Other shrubs	SSSS	3	27.5	55	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	650	700
Average Year	500	550
Unfavorable Year	350	400

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	30	2	15
Forbs (perennial)	3	2	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, bluebunch wheatgrass, Indian ricegrass decrease, while low rabbitbrush, snakeweed, and threeawn increase.

When the potential natural plant community is burned, bluebunch wheatgrass, Indian ricegrass, and black sagebrush decrease while low rabbitbrush and Sandberg bluegrass increase.

Cheatgrass and annual forbs 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	40	30	5	5	0	0	0	0
Name	UT2601											
ID Number	PNC											
Description	Excellent Condition											

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

8. Associated Sites Within MLRA

028AY262UT
Semidesert Very Steep Shallow Loam (Utah juniper)

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 is unsuited for livestock grazing because of steepness and slopes.

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 rabbit, coyote, fox, badger, pronghorn antelope, mule deer, and dove.

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

Resources that have special aesthetic and landscape values are wildflowers. Some recreation uses of this site 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:

Type Location:

General Legal Description:

Field Office Site Location
Logan
Provo
Murray
Cedar City
Richfield

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