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 Bouldery Loam (Shadscale)
SITE NUMBER: 034XY202UT
MLRA: 034
Original Site Description: Author: GSC Date: 08/15/1985
Revised Site Description: Author: GSC 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: Very Bouldery Fine Sandy Loam
Surface Fragments(<=3" % cover, >3" % cover):
Subsurface Textures: Very Stony and Cobbly Sandy Loam
Subsurface Fragments(<=3" % vol, >3" % vol):
Geologic Parent Materials: Alluvium from Sandstone and Shale
Moisture Regime:
Temperature Regime: Mesic
Runoff:
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: 616
Styrch BYV-FSL, 3-20%

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

2. PHYSIOGRAPHIC FEATURES

Landform and Position: Dissected Alluvial Fans and Fan Terraces
Aspect: East (low elev.) Southwest (high elev.)

	Minimum	Maximum
Slope:	3	20
Elevation:	5300	6100

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

B. CLIMATIC FEATURES

Mean Annual Precipitation (inches): 8-12
Mean Annual Air Temperature: 47-53
Mean Annual Soil Temperature: 49-55
Frost Free Period (days): 0-0
Freeze Free Period (days): 100-140

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 grass and shrubs. The composition by air-dry weight is approximately 55 percent perennial grasses, 10 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		140	175	20	25
Galleta	HIJA		35	70	5	10
Salina wildrye	LESA4		35	70	5	10
Needleandthread	HECO26		35	70	5	10
Sand dropseed	SPCR	1	7	21	1	3
Purple threeawn	ARPU9	1	7	21	1	3
Blue grama	BOGR2	1	7	21	1	3
Other perennial grasses	PPGG	1	21	35	3	5
Other annual grasses	AAGG	1	21	35	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Scarlet globemallow	SPCO		21	35	3	5
Dustymaiden	CHDO	2	7	21	1	3
Hairy goldenaster	HEVI4	2	7	21	1	3
Pacific aster	ASCH2	2	7	21	1	3
Western stickseed	LAOC3	2	7	21	1	3
Plateau yellow catseye	CRFL5	2	7	21	1	3
Woody milkvetch	ASMO7	2	7	21	1	3
Other perennial forbs	PPFF	2	35	70	5	10
Other annual forbs	AAFF	2	35	70	5	10

Shrubs/Vines, %

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

			Low	High	Low	High
Shadscale	ATCO		70	105	10	15
Torrey jointfir	EPTO		35	70	5	10
Low rabbitbrush	CHVI8		35	70	5	10
Winterfat	KRLA2		35	70	5	10
Bigelow sagebrush	ARBI3	3	7	14	1	2
Broom snakeweed	GUSA2	3	7	14	1	2
Utah juniper	JUOS	3	7	14	1	2
Pinyon pine	PIED	3	7	14	1	2
Other shrubs	SSSS	3	7	35	1	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	850	900
Average Year	650	700
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)			
Forbs (perennial)			
Shrubs			
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	

Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, Indian ricegrass, needleandthread and winterfat decrease while Salina wildrye, threeawn, galleta and broom snakeweed increase. When the potential natural plant community is burned, shadscale and jointfir decrease while Salina wildrye, low rabbitbrush, and broom snakeweed increase. Cheatgrass, annual forbs and pinyon-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	UT2021											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY209UT
Semidesert Loam (Salina wildrye)

034XY233UT
Semidesert Shallow Loam (Utah juniper-Pinyon pine)

034XY225UT
Semidesert Shallow 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 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

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 may have aesthetic appeal. Recreation activities include hiking and hunting.

4. Wood Products

Firewood may become available from invading juniper and pinyon trees.

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
Latitude: Longitude:

Modal Soil: Strych BYV-FSL, 3-20% — loamy-skeletal, mixed, mesic Ustollic Calciorthids

Type Location:

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