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: UtahSITE TYPE: RangelandECOLOGICAL SITE NAME: Desert Loam (Shadscale)SITE NUMBER: 034XY106UTMLRA: 034Original Site Description: Author: JLBRevised Site Description: Author: GWLApproved by: Title: State Range Cons.Signed: Pat ShaverDate: 6/25/1994

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: Loams to Fine Sandy Loam Surface Fragments(<=3" % cover, >3" % cover): Subsurface Textures: Fine-Loamy Subsurface Fragments(<=3" % vol, >3" % vol): Geologic Parent Materials: Alluvium from Sedimentary Materials Moisture Regime: Mesic **Temperature Regime:** Runoff: Slow-Medium Permeability(min-max): Slow-Rapid 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):

Site Type: Rangeland Ecological Site Name: Desert Loam (Shadscale) Site Number: 034XY106UT Major Soils Associated With This Site:

Soil Survey Area 047	
Minchey L, 1-4%	Bluewing GRV-SL, 4-25%
Avalon L Cobbly Substrate 0-2%	Avalon L Gypsum 0-2%
Pariette GRV-L, 15-35%	Pariette L, 2-4%
Rairdent L, 5-20%	Pariette GR-SL, 2-4%
Utaline GRV-L, 8-25%	Turzo CL, 2-4%
Blackstone L, 0-2%	Utaline L, 0-2%
Ravola L, 1-6%	Sagers SiCL, 1-3%
Neiber SiL, 2-15%	Hostage GR-FSL, 3-15%
Mack L, 2-6%	Mesa FSL, 2-6%
Billings SiCL, 1-3%	Killpack CL, 1-6%
Minchey L, 1-3%	Penoyer Varient L, 1-6%
Greybull L, 3-8%	Killpack CL, 1-3%, 3-6%
Penoyer Variant L, 1-8%, 3-6%	Ravola L, 1-3%, 1-6%

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

2. PHYSIOGRAPHIC FEATURES

Landform and Position: Alluvial Fans, Fan Terraces, Stream Terraces, Hillslopes, and Tops of Mesas and Buttes. Aspect: All/S

num	<u>Maximum</u>
0	35
4700	5800
	<u>num</u> 0 4700

B. CLIMATIC FEATURES

Mean Annual Precipitation (inches): 5-8 Mean Annual Air Temperature: 44-47 Mean Annual Soil Temperature: 47-50 Frost Free Period (days): 110-125 Freeze Free Period (days): 0-0

Temperature and Moisture Distribution:

Temp	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High	29	38	52	64	74	84	91	89	79	66	48	33
Mean	16	24	37	48	57	66	73	71	61	49	35	20
Low	3	10	23	32	40	48	55	53	43	33	21	8
ppt	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High												
Mean	0.54	0.44	0.56	0.55	0.77	0.66	0.49	0.57	0.63	0.88	0.47	0.52
Low												

Climate Stations: St. ID.:	Location:	Perio	od:			
		From:	To:			
(Includes factors such as storm intensity, precipitation dependability, origin and pattern of storms,						
unest and wettest months, brographic ener	513, 610.)					

Influencing Water Features (if any):

Wetland Description(Cowardin System)	<u>System</u>	<u>Subsystem</u>	<u>Class</u>
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 and Indian ricegrass. The composition by air-dry weight is approximately 45 percent grasses, 10 percent forbs, and 45 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		75	125	15	25
Bottlebrush squirreltail	ELEL5		25	50	5	10
Galleta	HIJA		25	50	5	10
Sandberg bluegrass	POSE	1	5	15	1	3
Sand dropseed	SPCR	1	5	15	1	3
Needleandthread	HECO26	1	5	15	1	3
Purple threeawn	ARPU9	1	5	15	1	3
Other perennial grasses	PPGG	1	15	25	3	5
Other annual grasses	AAGG	1	15	25	3	5

Forbs, %Common NameNationalGroupPounds per Acre% by Weight of

	Symbol				Total Composition	
			Low	High	Low	High
Scarlet globernallow	SPCO		15	25	3	5
Low lupine	LUPU	2	5	10	1	2
Indian pipeweed	ERIN4	2	5	10	1	2
Woolly plantain	PLPAG	2	5	10	1	2
Basin fleabane	ERPU9	2	5	10	1	2
Pacific aster	ASCH2	2	5	10	1	2
Nettleleaf goosefoot	CHLE4	2	5	10	1	2
Pale evening primrose	OEPA	2	5	10	1	2
Woolly milkvetch	ASMO7	2	5	10	1	2
Whitestem stickleaf	MEAL6	2	5	10	1	2
Western stickseed	LAOC3	2	5	10	1	2
Annual ragweed	AMAR2	2	5	10	1	2
Navajo tea	THSU	2	5	10	1	2
Longleaf phlox	PHLO2	2	5	10	1	2
Roughseed catseye	CRFL6	2	5	10	1	2
Mountain pepperweed	LEMO2	2	5	10	1	2
Notchleaf scorpionweed	PHCRC	2	5	10	1	2
Flatspine burr ragweed	AMAC2	2	5	10	1	2
Other perennial forbs	PPFF	2	25	50	5	10
Other annual forbs	AAFF	2	25	50	5	10

Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Shadscale	ATCO		75	100	15	20
Winterfat	KRLA2		50	75	10	15
Bud sagebrush	ARSP5		25	50	5	10
Fourwing saltbush	ATCA2	3	5	15	1	3
Torrey jointfir	EPTO	3	5	15	1	3
Central pricklypear	OPPO	3	5	15	1	3
Shortspine horsebrush	TESP2	3	5	15	1	3
Broom snakeweed	GUSA2	3	5	15	1	3
Narrowleaf low rabbitbrush	CHVIS5	3	5	15	1	3
Green molly	KOAM	3	5	15	1	3
Littleleaf horsebrush	TEGL	3	5	15	1	3
Spiny hopsage	GRSP	3	5	15	1	3
Other shrubs	SSSS	3	25	50	5	10

Trees, %				
Common Name	National	Group	Pounds per Acre	% by Weight of

Symbol			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	450	500
Unfavorable Year	250	300

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range	Percent Basal Area Cover
Grasses & Grass-like (perennial)	20	2	10
Forbs (perennial)	5	1	2
Shrubs	30	2	10
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological conditions deteriorates due to overgrazing, Indian ricegrass and bud sagebrush decrease while spiny horsebrush, shadscale, and galleta increase. When the potential natural plant community is burned, shadscale, bud sagebrush, shortspine horsebrush, and perennial grasses decrease while broom snakeweed, low rabbitbrush, and annual grasses and forbs increase. Halogeton and Russian thistle and other annual weeds 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	0	0	5	25	65	5	0	0	0	0	0	0
Growth												
Name	PNC											
ID Number	UT1061											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY115UT Desert Sandy Loam (Indian ricegrass)

034XY006UT Alkali Flat (Greasewood)

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 and winter.

b. Guide to Forage Quality(Plant preference by season)

Species	Oct-Nov	Dec-Feb	Mar-May	Jun-Sep
VG = Very Goo	d G = Good	d 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 lizard, snake, mice, sparrow hawk, jackrabbit, and coyote.

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 \rightarrow				
Plant Species \downarrow	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 values but with low hunting opportunities.

4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

- 1. Plants
- 2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah Latitude:

County: Longitude:

Modal Soil: Minchey L, 1-4% — fine-loamy, mixed, mesic Typic Calciorthids

Type Location: NW ¼, SW ¼ SE, ¼, Section 35, Township 9S, Range 17E SLBM

General Legal Description:

Field Office Site Location

Roosevelt Price

Data Collected and References

Sampling	Number	Range Similarity Index					
Source	of Records	> 76%	51-75%	26-50%	0-25%		
NRCS - ECS - 417							
UTAH - RANGE - 2							
Permanent Transect Location							

Other References