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 Sandy Loam (Indian ricegrass)
SITE NUMBER: 034XY115UT
MLRA: 034
Original Site Description: Author: JLB GWL Date: 05/15/1981
Revised Site Description: Author: JLB GWL Date: 12/07/1993
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:
Surface Fragments(<=3" % cover, >3" % cover):
Subsurface Textures: Coarse-Loamy to Loamy
Subsurface Fragments(<=3" % vol, >3" % vol):
Geologic Parent Materials: Eolian Sand and Alluvium from Sandstone
Moisture Regime:
Temperature Regime: Mesic
Runoff: Slow
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 047

Fruitland LS HMMCKY 4-25%	Fruitland SL 0-2%
Hiko Springs FSL 0-2%	Nakoy LFS HMMCKY 1-8%
Moffat LS 2-4%	Trook FSL 2-6%
Nakai FLS 3-10%	Redlands FLS 3-10%
Moepitz Variant STV-L 2-10%	

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

2. PHYSIOGRAPHIC FEATURES

Landform and Position: Fan Terraces, Benches and Valley Sideslopes
Aspect: All

	Minimum	Maximum
Slope:	0	25
Elevation:	4800	5700

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

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): 0-0
Freeze Free Period (days): 110-125

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: 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 and galleta. The composition by air-dry weight is approximately 55 percent perennial grasses, 15 percent forbs and 30 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		110	165	20	30
Galleta	HIJA		82.5	110	15	20
Sand dropseed	SPCR	1	5.5	16.5	1	3
Purple threeawn	ARPU9	1	5.5	16.5	1	3
Needleandthread	HECO26	1	5.5	16.5	1	3
Sandhill muhly	MUPU2	1	5.5	16.5	1	3
Bottlebrush squirreltail	ELEL5	1	5.5	16.5	1	3
Alkali sacaton	SPAI	1	5.5	16.5	1	3
Blue grama	BOGR2	1	5.5	16.5	1	3
Other perennial grasses	PPGG	1	27.5	55	5	10
Other annual grasses	AAGG	1	27.5	55	5	10

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Scarlet globemallow	SPCO		27.5	55	5	10
Yellow milkvetch	ASFL		5.5	27.5	1	5
Pacific aster	ASCH2		5.5	11	1	2
Plateau yellow catseye	CRFL5	2	5.5	11	1	2
Basin fleabane	ERPU9	2	5.5	11	1	2
Indian pipeweed	ERIN4	2	5.5	11	1	2
Thrift mock goldenweed	STARA	2	5.5	11	1	2
Stemless fournerve daisy	TEACA2	2	5.5	11	1	2
Pale evening primrose	OEPA	2	5.5	11	1	2
Canyonlands prairieclover	DAFL	2	5.5	11	1	2
Woolly plantain	PLPA2	2	5.5	11	1	2
Hamilton milkvetch	ASHA3	2	5.5	11	1	2
Mountain pepperweed	LEMO2	2	5.5	11	1	2
Hoary tansyaster	MACA2	2	5.5	11	1	2
Other perennial forbs	PPFF	2	5.5	44	1	8
Other annual forbs	AAFF	2	5.5	44	1	8

Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Fourwing saltbush	ATCA2		27.5	55	5	10
Shadscale	ATCO		27.5	55	5	10
Winterfat	KRLA2		16.5	27.5	3	5
Nevada jointfir	EPNE	3	5.5	16.5	1	3
Torrey jointfir	EPTO	3	5.5	16.5	1	3
Mormontea	EPVI	3	5.5	16.5	1	3
Green rubber rabbitbrush	ERNA2	3	5.5	16.5	1	3
Low rabbitbrush	CHNA2	3	5.5	16.5	1	3
Sand sagebrush	ARFI2	3	5.5	16.5	1	3
Sulpherflower wild buckwheat	ERUM	3	5.5	16.5	1	3
Central pricklypear	OPPO	3	5.5	16.5	1	3
Broom snakeweed	GUSA2	3	5.5	16.5	1	3
Shortspine horsebrush	TESP2	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	300	350

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range	Percent Basal Area Cover
Grasses & Grass-like (perennial)	35	2	10
Forbs (perennial)	10	1	5
Shrubs	20	4	10
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, Indian ricegrass and fourwing saltbush decrease while galleta, horsebrush and low rabbitbrush increase. Fire is not an important factor in this ecosystem. Cheatgrass and other annuals 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	UT1151											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY112UT
Desert Sand (Fourwing saltbush)

034XY012UT
Sandy Bottom (Fourwing saltbush)

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 in the 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 mice, kangaroo rat, snake, jackrabbit, coyote, hawk, and bobcat.

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: Fruitland L Hummocky 4-25% — coarse-loamy, mixed, calcareous, mesic Typic Torriorthents

Type Location: SE ¼, NW ¼, SE ¼; Section 29, Township 6S, Range 21E 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