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 Shallow Sandy Loam (Utah juniper-Pinyon)
SITE NUMBER: 035XY236UT
MLRA: 035
Original Site Description: Author: GSC Date: 05/20/1984
Revised Site Description: Author: GSC Date: 10/21/1993
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:
Subsurface Fragments(<=3" % vol, >3" % vol):
Geologic Parent Materials: Eolian Deposits from Weathered Sandstone
Moisture Regime:
Temperature Regime: Mesic
Runoff: Medium
Permeability(min-max):
Drainage Class(min-max): Well Drained
Water Erosion Hazard: Slight
Wind Erosion Hazard: Moderate
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: 638
Rizno

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

2. PHYSIOGRAPHIC FEATURES

Landform and Position: Foothills, Benches, and Mesa Tops
Aspect: N/SW

	Minimum	Maximum
Slope:	1	20
Elevation:	4600	6500

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: 56-60
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	40	45	54	63	72	83	88	85	78	66	52	42
Mean	26	32	40	47	56	65	71	69	61	50	38	29
Low	13	20	25	32	40	47	54	52	44	34	24	16

ppt	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High	1.70	1.30	1.60	1.10	1.30	1.10	2.10	2.80	2.00	2.00	1.40	1.70
Mean	0.90	0.80	0.90	0.60	0.60	0.50	1.30	1.80	1.10	1.10	0.70	0.90
Low	0.30	0.30	0.30	0.20	0.20	0.10	0.40	0.70	0.30	0.30	0.20	0.30

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 Utah juniper and pinyon pine. The composition by air-dry weight is approximately 20 percent perennial grasses, 10 percent forbs, 50 percent shrubs, and 20 percent trees.

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		17.5	35	5	10
Galleta	HIJA		17.5	35	5	10
Needleandthread	HECO26		7	17.5	2	5
Purple threeawn	ARPU9	1	3.5	7	1	2
Blue grama	BOGR2	1	3.5	7	1	2
Bottlebrush squirreltail	ELEL5	1	3.5	7	1	2
Sand dropseed	SPCR	1	3.5	7	1	2
Salina wildrye	LESAS	1	3.5	7	1	2
Desert needlegrass	ACSP12	1	3.5	7	1	2
Other perennial grasses	PPGG	1	3.5	17.5	1	5
Other annual grasses	AAGG	1	3.5	17.5	1	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Woolly milkvetch	ASMO7		7	10.5	2	3
Indian pipeweed	ERIN4		7	10.5	2	3
Pacific aster	ASCH2	2	0	3.5	0	1
Drummond goldenweed	ISDR	2	0	3.5	0	1
Alkali stinkweed	CLPL2	2	0	3.5	0	1
Wright birdbeak	COWR2	2	0	3.5	0	1
Plateau yellow catseye	CRFL5	2	0	3.5	0	1
Purple springparsley	CYPU2	2	0	3.5	0	1
Sprawling skyrocket	IPPO2	2	0	3.5	0	1
Western sticktight	LAOC3	2	0	3.5	0	1
Mountain pepperweed	LEMO2	2	0	3.5	0	1
Whitestem stickleaf	MEAL6	2	0	3.5	0	1
Utah firecracker	PEUT	2	0	3.5	0	1
Skyblue scorpionweed	PHCO	2	0	3.5	0	1
Hearts delight	ABFR2	2	0	3.5	0	1
Other perennial forbs	PPFF	2	10.5	17.5	3	5
Other annual forbs	AAFF	2	10.5	17.5	3	5

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of

	Symbol				Total Composition	
			Low	High	Low	High
Blackbrush	CORA		105	122.5	30	35
Torrey jointfir	EPTO		17.5	35	5	10
Bigelow sagebrush	ARBI3		17.5	35	5	10
Fourwing saltbush	ATCA2	3	3.5	7	1	2
Low rabbitbrush	CHVI8	3	3.5	7	1	2
Sulphurflower wild buckwheat	ERUM	3	3.5	7	1	2
Broom snakeweed	GUSA2	3	3.5	7	1	2
Central pricklypear	OPPO	3	3.5	7	1	2
Shinnery oak	QUHA3	3	3.5	7	1	2
Mexican cliffrose	PUME	3	3.5	7	1	2
Winterfat	KRLA2	3	3.5	7	1	2
Singleleaf ash	FRAN2	3	3.5	7	1	2
Roundleaf buffaloberry	SHRO	3	3.5	7	1	2
Fineleaf yucca	YUAN2	3	3.5	7	1	2
Other shrubs	SSSS	3	10.5	17.5	3	5

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Utah juniper	JUOS		42	52.5	12	15
Pinyon pine	PIED		10.5	17.5	3	5

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	450	500
Average Year	300	350
Unfavorable Year	100	150

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	10	2	5
Forbs (perennial)	5	1	5
Shrubs	40	2	15
Trees	25	12	10
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 bigelow sagebrush decrease while Utah juniper, pinyon pine, pricklypear, blackbrush, and to a degree, galleta increase. When the potential natural plant community is burned, Utah juniper, pinyon, and bigelow sagebrush decrease while perennial grasses and forbs increase. Cheatgrass, annual forbs, and 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 Growth	0	0	5	15	45	35	0	0	0	0	0	0
Name	PNC											
ID Number	UT2361											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

035XY230UT
Semidesert Shallow Sandy Loam (Shadscale)

035XY218UT
Semidesert Sandy Loam (Blackbrush)

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

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

Recreation activities include hiking, camping, and hunting.

4. Wood Products

This site index is 30. Percent canopy cover is 25. Density is 50 trees per acre of Utah juniper; 20 trees per acre of pinyon. Wood production is about 3 cords per acre.

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
Latitude: Longitude:

Modal Soil: Rizno — loamy, mixed (calc.), mesic Lithic Ustic Torriorthents

Type Location: Consult the San Juan Central Soil Survey

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