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: Upland Very Steep Stony Loam (Pinyon-Utah juniper)
SITE NUMBER: 034XY344UT
MLRA: 034
Original Site Description: Author: JLB GWL Date: 05/15/1981
Revised Site Description: Author: JLB GWL Date: 01/13/1994
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: 20-40 inches
Surface Textures: Mollic Epipedon
Surface Fragments(<=3" % cover, >3" % cover): 50-70%
Subsurface Textures:
Subsurface Fragments(<=3" % vol, >3" % vol):
Geologic Parent Materials: Colluvium and Residuum from Sandstone and Shale
Moisture Regime:
Temperature Regime: Mesic and Frigid
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): 0.06-0.12

Major Soils Associated With This Site:

Soil Survey Area: 047
Whetrock STX-L Dry 50-90% Eroded Cabba Family 40-70%
Strych STVL-L 50-70%

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

2. PHYSIOGRAPHIC FEATURES

Landform and Position: Backslopes in Mountain Canyons
Aspect: All

	Minimum	Maximum
Slope:	50	90
Elevation:	4400	7600

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

B. CLIMATIC FEATURES

Mean Annual Precipitation (inches): 14-16
Mean Annual Air Temperature: 42-44
Mean Annual Soil Temperature: 45-47
Frost Free Period (days): 0-0
Freeze Free Period (days): 90-110

Temperature and Moisture Distribution:

Temp	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High	30	36	48	60	67	78	83	83	72	60	44	32
Mean	17	24	36	46	53	63	69	68	58	48	33	21
Low	4	12	24	33	39	48	54	53	45	35	22	9

ppt	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High												
Mean	0.47	0.89	1.36	1.10	1.29	1.32	1.28	0.93	1.90	1.12	1.16	0.72
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 pinyon and juniper. The understory composition by air-dry weight is approximately 40 percent perennial grasses, 10 percent forbs and 50 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		60	90	10	15
Needleandthread	HECO26		30	60	5	10
Bluebunch wheatgrass	PSSP6		30	60	5	10
Salina wildrye	LESAS		18	30	3	5
Blue grama	BOGR2	1	6	18	1	3
Geyer sedge	CAGE2	1	6	18	1	3
Muttongrass	POFE	1	6	18	1	3
Other perennial grasses	PPGG	1	18	30	3	5
Other annual grasses	AAGG	1	18	30	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Cushion wild buckwheat	EROV	2	18	30	3	5
Hedge mustard	SIOF	2	18	30	3	5
Gumweed tansyaster	MAGR2	2	18	30	3	5
Plateau yellow catseye	CRFL5	2	18	30	3	5
Thickleaf beardtongue	PEPA6	2	18	30	3	5
Carpet phlox	PHHO	2	18	30	3	5
Other perennial forbs	PPFF	2	60	90	10	15
Other annual forbs	AAFF	2	60	90	10	15

Shrubs/Vines, %

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

			Low	High	Low	High
Birchleaf mountainmahogany	CEMO2		90	120	15	20
Saskatoon serviceberry	AMAL2		30	60	5	10
Mormontea	EPVI		18	30	3	5
Slender wild buckwheat	ERMI4		18	30	3	5
Black sagebrush	ARNO4		18	30	3	5
Central pricklypear	OPPO	3	6	18	1	3
Basin big sagebrush	ARTRT	3	6	18	1	3
Other shrubs	SSSS	3	18	30	3	5

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Pinyon	PIED		72	90	12	15
Utah juniper	JUOS		18	30	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	700	800
Average Year	500	600
Unfavorable Year	300	400

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	20	2	10
Forbs (perennial)	5	1	2
Shrubs	30	5	18
Trees	25	12	10
Cryptogams			

b. Other

Litter	
Coarse Fragments	

Bare Ground	

5. Ecological Dynamics of the Site

This site receives very little or no grazing by livestock because of steep slopes. When the potential natural plant community is burned, pinyon, juniper, and birchleaf mountainmahogany decrease while serviceberry and Salina wildrye increase.

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	0	10	30	45	5	5	5	0	0	0
Name	PNC											
ID Number	UT3441											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY338UT
Upland Very Steep Loam (Pinyon-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

Because of steep slopes this site is grazed very little or none by livestock.

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 produces food and cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include jackrabbit, woodrat, pinyon jay, coyote, mule deer, and elk.

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 has aesthetic appeal but very little recreation potential.

4. Wood Products

This site produces firewood, posts, and Christmas trees. The site index is 24.

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

2. Animals

F. MODAL LOCATION AND DOCUMENTATION

Site Type: Rangeland
Ecological Site Name: Upland Very Steep Stony Loam (Pinyon-Utah juniper)
Site Number: 034XY344UT

State: Utah County:
Latitude: Longitude:

Modal Soil: Whetrock STX-L Dry 50-80% Eroded — loamy-skeletal, mixed Aridic Calciborolls

Type Location: 7600’ N 400’ W of SE Corner of Township 16S, Range 17E

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