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 Bouldery Fan (Nevada Jointfir)
SITE NUMBER: 028AY116UT
MLRA: 028A
Original Site Description: Author: DJS Date: 03/01/1988
Revised Site Description: Author: DJS Date: 05/17/1993
Approved by: Title: State Range Cons. Signed: Pat Shaver Date: 08/30/1993

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: Loam
Surface Fragments(<=3" % cover, >3" % cover):
Subsurface Textures:
Subsurface Fragments(<=3" % vol, >3" % vol): >60%
Geologic Parent Materials: Alluvial Deposits from Limestone Parent Material
Moisture Regime:
Temperature Regime:
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 CaCl2):
pH Range:
Available Water Capacity (inches): 3-4

Major Soils Associated With This Site:

Soil Survey Area:

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

2. PHYSIOGRAPHIC FEATURES

Landform and Position: Gently to Strongly Sloping Stony Fans
Aspect: East

	Minimum	Maximum
Slope:	3	10
Elevation:	5100	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: 45-50
Mean Annual Soil Temperature: 47-52
Frost Free Period (days): 0-0
Freeze Free Period (days): 100-160

Temperature and Moisture Distribution:

Temp	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High	40	46	54	63	73	84	93	90	81	68	52	41
Mean												
Low	15	20	25	33	41	50	58	56	45	34	24	16

ppt	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High												
Mean	0.42	0.45	0.60	0.65	0.77	0.53	0.52	0.56	0.49	0.57	0.49	0.43
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 Nevada jointfir and galleta. The composition by air dry weight is approximately 20 percent perennial grasses, 10 percent forbs, and 70 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
Galleta	HIJA		23.75	47.5	5	10
Blue grama	BOGR2		14.25	23.75	3	5
Indian ricegrass	ACHY	1	4.75	14.25	1	3
Needleandthread	HECO26	1	4.75	14.25	1	3
Purple threeawn	ARPU9	1	4.75	14.25	1	3
Bottlebrush squirreltail	ELEL5	1	4.75	14.25	1	3
Other perennial grasses	PPGG	1	14.25	23.75	3	5
Other annual grasses	AAGG	1	14.25	23.75	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Gooseberryleaf globemallow	SPGR2	2	14.25	23.75	3	5
Freckled milkvetch	ASLE8	2	14.25	23.75	3	5
Roundspike catseye	CRHU2	2	14.25	23.75	3	5
Pacific aster	ASCH2	2	14.25	23.75	3	5
Longleaf phlox	PHLO2	2	14.25	23.75	3	5
Other perennial forbs	PPFF	2	23.75	47.5	5	10
Other annual forbs	AAFF	2	23.75	47.5	5	10

Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Nevada jointfir	EPNE		213.75	237.5	45	50
Spiny hopsage	GRSP		23.75	47.5	5	10
Anderson wolfberry	LYAN		14.25	23.75	3	5
Low rabbitbrush	CHVI8	3	4.75	14.25	1	3
Rubber rabbitbrush	CHNA2	3	4.75	14.25	1	3
Spanish bayonet	YUHA	3	4.75	14.25	1	3
Central pricklypear	OPPO	3	4.75	14.25	1	3
Other shrubs	SSSS	3	14.25	23.75	3	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	550	650
Average Year	425	475
Unfavorable Year	250	300

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	10	1	5
Forbs (perennial)	5	1	2
Shrubs	30	3	15
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, jointfir, galleta, and Indian ricegrass decrease while rabbitbrush, horsebrush and shadscale increase.

When the potential natural plant community is burned, jointfir, galleta, Indian ricegrass, and desirable forbs decrease while rabbitbrush and horsebrush increase.

Cheatgrass is 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	50	10	0	0	5	5	0	0
Name	PNC											
ID Number	UT1161											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries
(Give related range sites in MLRA's above and below)

8. Associated Sites Within MLRA

028AY252UT
Semidesert Stony Loam (Black sagebrush)

028AY120UT
Desert Gravelly Loam (Shadscale)

028AY234UT
Semidesert Shallow Loam (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

This site is suited for sheep and cattle grazing during 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 rabbit, coyote, fox, pronghorn antelope, and mule deer (seasonal).

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

Resources that have special aesthetic and landscape value are wildflowers. Some recreation uses of this site are hiking.

4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:

Site Type: Rangeland
Ecological Site Name: Desert Bouldery Fan (Nevada jointfir)
Site Number: 028AY116UT
Latitude: Longitude:

Modal Soils: loamy-skeletal, mixed, mesic Typic Calciorthids

Type Location: San Francis Mountains West Side, on Fans SWA – GO87

General Legal Description:

Field Office Site Location

Logan
Provo
Cedar City
Murray
Richfield

Data Collected and References

Sampling Source	Number of Records	Range Similarity Index			
		> 76%	51-75%	26-50%	0-25%
NRCS - ECS - 417	4				
UTAH - RANGE - 2	1				
Permanent Transect Location					

Other References