

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 Gravelly Loam (Wyoming big sagebrush) North

SITE NUMBER: 028AY215UT

MLRA: 028A

Original Site Description: Author: DJS

Date: 09/01/1987

Revised Site Description: Author: DJS

Date: 06/18/1993

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): 20%

Subsurface Textures:

Subsurface Fragments(<=3" % vol, >3" % vol): 35-60%

Geologic Parent Materials: Alluvium from Mixed Material

Moisture Regime:

Temperature Regime:

Runoff: Medium

Permeability(min-max): Moderately 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 CaCl<sub>2</sub>):

pH Range:

Available Water Capacity (inches): 3-6

Major Soils Associated With This Site:

Soil Survey Area: 611

Hiko Peak GR-L

Decca GR-L

Sanpete GRV-L

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



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**1. Potential Plant Community Description and Ecological Factors**

The dominant aspect of this plant community is Wyoming big sagebrush. The composition by air-dry weight is approximately 45 percent perennial 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
Bluebunch wheatgrass	PSSP6		160	240	20	30
Indian ricegrass	ACHY		40	80	5	10
Bottlebrush squirreltail	ELEL5		24	40	3	5
Sandberg bluegrass	POSE	1	8	24	1	3
Needleandthread	HECO26	1	8	24	1	3
Western wheatgrass	PASM	1	8	24	1	3
Nevada bluegrass	PONE3	1	8	24	1	3
Other perennial grasses	PPGG	1	40	80	5	10
Other annual grasses	AAGG	1	40	80	5	10

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Scarlet globemallow	SPCO	2	8	24	1	3
Holboell rockcress	ARHO2	2	8	24	1	3
Granite prickly gilia	LEPU	2	8	24	1	3
Carpet phlox	PHHO	2	8	24	1	3
Cushion wild buckwheat	EROV	2	8	24	1	3
Roundspike catseye	CRHU2	2	8	24	1	3
Pacific aster	ASCH2	2	8	24	1	3
Other perennial forbs	PPFF	2	40	80	5	10
Other annual forbs	AAFF	2	40	80	5	10

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Wyoming big sagebrush	ARTRW		160	240	20	30
Shadscale	ATCO		40	80	5	10
Low rabbitbrush	CHVI8		24	40	3	5
Black sagebrush	ARNO4	3	8	24	1	3
Bud sagebrush	ARSP5	3	8	24	1	3
Winterfat	KRLA2	3	8	24	1	3
Nuttall horsebrush	TENU2	3	8	24	1	3
Spiny hopsage	GRSP	3	8	24	1	3
Central pricklypear	OPPO	3	8	24	1	3
Broom snakeweed	GUSA2	3	8	24	1	3
Other shrubs	SSSS	3	40	80	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	950	1000
Average Year	750	800
Unfavorable Year	450	500

### **4. Ground Cover and Structure**

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	30	2	15
Forbs (perennial)	5	2	2
Shrubs	40	3	15
Trees			
Cryptogams			

b. Other

Litter	
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Coarse Fragments	
Bare Ground	

## **5. Ecological Dynamics of the Site**

As ecological condition deteriorates due to overgrazing, bluebunch wheatgrass, Indian ricegrass, and squirreltail decrease, while Wyoming big sagebrush, low rabbitbrush, and snakeweed increase.

When the potential natural plant community is burned, Wyoming big sagebrush, bluebunch wheatgrass, and Indian ricegrass decrease while low rabbitbrush and Sandberg bluegrass increase.

Annual grasses and annual forbs 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	40	30	5	5	0	0	0	0
Name	UT2151											
ID Number	PNC											
Description	Excellent Condition											

## **7. Aspect Differences Near MLRA Boundaries**

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

## **8. Associated Sites Within MLRA**

028AY214UT

Semidesert Gravelly Loam (Wyoming big sagebrush) South

## **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 grazing by 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

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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, badger, pronghorn antelope, mule deer, and dove.

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 values are wildflowers. Some recreation uses of this site are hiking and hunting.

**4. Wood Products**

None

**5. Other Uses**

**E. THREATENED AND ENDANGERED SPECIES**

1. Plants

2. Animals

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## **F. MODAL LOCATION AND DOCUMENTATION**

State: Utah

County:

Latitude:

Longitude:

Modal Soil: Hiko Peak GR-L – loamy-skeletal, mixed, mesic Xerollic Caliothids

Type Location: NW ¼ of NW ¼ Section 22, Township 9N, Range 11W; SW ¼ of SW ¼ Section 24, Township 9N, Range 19W.

General Legal Description:

### **Field Office Site Location**

Logan

Murray

Provo

Richfield

Cedar City

### **Data Collected and References**

Sampling Source	Number of Records	Range Similarity Index			
		> 76%	51-75%	26-50%	0-25%
NRCS - ECS - 417	3				
UTAH - RANGE - 2	23				
Permanent Transect Location					

### **Other References**