

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 Clay (Western wheatgrass)

SITE NUMBER: 034XY302UT

MLRA: 034

Original Site Description: Author: GSC

Date: 01/06/1994

Revised Site Description: Author:

Date:

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: Weakly Developed Brown Clay

Surface Fragments(<=3" % cover, >3" % cover):

Subsurface Textures:

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

Geologic Parent Materials: Clay Shale of Wasatch or Mesa Verde Age

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 CaCl<sub>2</sub>):

pH Range:

Available Water Capacity (inches):

Major Soils Associated With This Site:

Soil Survey Area:

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



Site Type: Rangeland  
 Ecological Site Name: Upland Clay (Western wheatgrass)  
 Site Number: 034XY302UT

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

The general view of this site is big sagebrush and grass. The composition by air-dry weight is approximately 60 percent perennial grasses, 10 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
Western wheatgrass	PASM		162.5	195	25	30
Salina wildrye	LESAS		32.5	65	5	10
Muttongrass	POFE		32.5	65	5	10
Prairie junegrass	KOMA		19.5	32.5	3	5
Bottlebrush squirreltail	ELEL5		19.5	32.5	3	5
Nevada bluegrass	PONE3	1	6.5	19.5	1	3
Indian ricegrass	ACHY	1	6.5	19.5	1	3
Sandberg bluegrass	POSE	1	6.5	19.5	1	3
Other perennial grasses	PPGG	1	19.5	32.5	3	5
Other annual grasses	AAGG	1	19.5	32.5	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Nevada onion	ALNE	2	6.5	19.5	1	3
Carpet phlox	PHHO	2	6.5	19.5	1	3
Common stonecrop	SELA	2	6.5	19.5	1	3
Hollyleaf clover	TRGY	2	6.5	19.5	1	3
Basin fleabane	ERPU9	2	6.5	19.5	1	3
Pacific aster	ASCH2	2	6.5	19.5	1	3
Other perennial forbs	PPFF	2	32.5	65	5	10
Other annual forbs	AAFF	2	32.5	65	5	10

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of
-------------	----------	-------	-----------------	----------------

Site Type: Rangeland  
 Ecological Site Name: Upland Clay (Western wheatgrass)  
 Site Number: 034XY302UT

	Symbol				Total Composition	
			Low	High	Low	High
Shadscale	ATCO		65	97.5	10	15
Mountain big sagebrush	ARTRV		19.5	32.5	3	5
Utah serviceberry	AMUT		19.5	32.5	3	5
Mountain snowberry	SYOR2	3	6.5	19.5	1	3
Spineless horsebrush	TECA2	3	6.5	19.5	1	3
Rubber rabbitbrush	ERNA10	3	6.5	19.5	1	3
Low rabbitbrush	CHVI8	3	6.5	19.5	1	3
Greasewood	SAVE4	3	6.5	19.5	1	3
Other shrubs	SSSS	3	32.5	65	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	750	800
Average Year	600	650
Unfavorable Year	350	400

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

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	50	2	30
Forbs (perennial)	5	1	2
Shrubs	15	4	5
Trees			
Cryptogams			

b. Other

Litter	
--------	--

Site Type: Rangeland  
 Ecological Site Name: Upland Clay (Western wheatgrass)  
 Site Number: 034XY302UT

Coarse Fragments	
Bare Ground	

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

As this site deteriorates due to grazing pressure or drought, perennial grasses, and palatable forbs and shrubs decrease while rabbitbrush, unpalatable forbs and shrubs increase. When the potential natural plant community is burned, big sagebrush, shadscale, muttongrass, and Indian ricegrass decrease while rabbitbrush, and Salina wildrye increase. Cheatgrass and snakeweed 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	0	10	30	45	5	5	5	0	0	0
Name	PNC											
ID Number	UT3021											
Description	Excellent Condition											

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

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

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

034XY315UT  
 Upland Shallow Clay Loam (Utah juniper-Pinyon)

### **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 spring, summer, and fall.

#### b. Guide to Forage Quality(Plant preference by season)

Species	Oct-Nov	Dec-Feb	Mar-May	Jun-Sep

Site Type: Rangeland  
 Ecological Site Name: Upland Clay (Western wheatgrass)  
 Site Number: 034XY302UT


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, coyote, dove, 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**

Recreation values are hiking and hunting.

**4. Wood Products**

None

**5. Other Uses**

**E. THREATENED AND ENDANGERED SPECIES**

1. Plants
2. Animals

Site Type: Rangeland  
 Ecological Site Name: Upland Clay (Western wheatgrass)  
 Site Number: 034XY302UT

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

State: Utah                      County:  
 Latitude:                      Longitude:

Modal Soil:

Type Location: South Slopes on Paul Kenney Ranch Spring Cr near Rangely, CO.

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**