

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: River Floodplain (Fremont cottonwood)

SITE NUMBER: 034XY011UT

MLRA: 034

Original Site Description: Author: JLB GWL

Date: 05/15/1981

Revised Site Description: Author: JLB GWL

Date: 11/23/1993

Approved by: Title: State Range Cons. Signed: Pat Shaver

Date: 07/25/1994

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: 60 inches

Surface Textures:

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

Subsurface Textures:

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

Geologic Parent Materials: Mixed Alluvium from Sedimentary Parent Materials

Moisture Regime:

Temperature Regime:

Runoff:

Permeability(min-max):

Drainage Class(min-max): Moderately 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: 047

Colorow L 0-3%

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



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

The dominant aspect of this plant community is an open savanna of cottonwood with an understory of willows and grass. 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
Nevada bluegrass	PONE3		210	280	15	20
Slender wheatgrass	ELTR7		210	280	15	20
Western wheatgrass	PASM		14	70	1	5
Inland saltgrass	DISP		14	70	1	5
Alkali sacaton	SPAI	1	14	42	1	3
Bottlebrush squirreltail	ELEL5	1	14	42	1	3
Baltic rush	JUBAM	1	14	42	1	3
Meadow foxtail	HOBR2	1	14	42	1	3
Other perennial grasses	PPGG	1	42	70	3	5
Other annual grasses	AAGG	1	42	70	3	5

#### Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Common dandelion	TAOF	2	14	42	1	3
Yellow sweet clover	MEOF	2	14	42	1	3
Western tansymustard	DEPI	2	14	42	1	3
Poverty weed	IVAX	2	14	42	1	3
Prairie pepperweed	LEDE	2	14	42	1	3
Narrowleaf goosefoot	CHLE4	2	14	42	1	3
Mountain pepperweed	LEMO2	2	14	42	1	3
Curlycup gumweed	GRSQ	2	14	42	1	3
Fremont goosefoot	CHFR3	2	14	42	1	3
Rocky mountain beeplant	CLSE	2	14	42	1	3
Other perennial forbs	PPFF	2	140	210	10	15
Other annual forbs	AAFF	2	140	210	10	15

#### Shrubs/Vines, %

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

Site Type: Rangeland

Ecological Site Name: River Floodplain (Fremont cottonwood)

Site Number: 034XY011UT

	Symbol				Total Composition	
			Low	High	Low	High
Coyote willow	SAEX		140	210	10	15
Rubber rabbitbrush	CHNA2		70	140	5	10
Basin big sagebrush	ARTRT		70	140	5	10
Greasewood	SAVE4	3	14	42	1	3
Low rabbitbrush	CHVI8	3	14	42	1	3
Golden current	RIAU	3	14	42	1	3
Salt cedar	TARA	3	14	42	1	3
Ill Scented sumac	RHTRT	3	14	42	1	3
Other shrubs	SSSS	3	70	140	5	10

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Fremont cottonwood	POFR2		14	70	1	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	1500	1600
Average Year	1300	1400
Unfavorable Year	1150	1250

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

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	40	2	15
Forbs (perennial)	5	1	3
Shrubs	20	4	10
Trees	15	50	5
Cryptogams			

b. Other

Litter	
--------	--

Site Type: Rangeland  
 Ecological Site Name: River Floodplain (Fremont cottonwood)  
 Site Number: 034XY011UT

Coarse Fragments	
Bare Ground	

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

A wide variety of seral stages and site developments can be found with the dynamic river system. When newly deposited sediments became stabilized, early stages of primary plant succession appear and begin to advance toward the potential natural community. Natural meandering of the river also cuts away established parts of the community. These natural processes within the river flood plain ecosystem makes it very difficult to determine the potential natural plant community or climax.

## **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	UT0021											
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**

034XY009UT  
 Loamy Bottom (Basin big sagebrush)

034XY018UT  
 Semiwet fresh streambank (Fremont cottonwood)

## **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 all seasons of the year.

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

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

Site Type: Rangeland  
 Ecological Site Name: River Floodplain (Fremont cottonwood)  
 Site Number: 034XY011UT


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 jackrabbit, coyote, kangaroo rat, snake, hawk, and mule deer.

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 are hiking and hunting.

**4. Wood Products**

Firewood

**5. Other Uses**

**E. THREATENED AND ENDANGERED SPECIES**

1. Plants
2. Animals

Site Type: Rangeland  
 Ecological Site Name: River Floodplain (Fremont cottonwood)  
 Site Number: 034XY011UT

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

State: Utah                      County:  
 Latitude:                      Longitude:

Modal Soil: Colorow L 0-3% – coarse-loamy, mixed calcareous, mesic Ustic Torrfluvents

Type Location: Bottoms along the White River in Northeastern Utah.

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**