

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: Riparian (Narrowleaf cottonwood)

SITE NUMBER: 025XY010UT

MLRA: 025

Original Site Description: Author: DJS

Date: 08/15/1985

Revised Site Description: Author: DJS

Date: 02/02/1994

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

Date: 04/25/1994

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: 10-60 inches

Surface Textures:

Surface Fragments(≤ 3 " % cover, > 3 " % cover):

Subsurface Textures:

Subsurface Fragments(≤ 3 " % vol, > 3 " % vol): 0-70%

Geologic Parent Materials: Alluvium from Mixed Parent Material

Moisture Regime:

Temperature Regime: Cryic

Runoff:

Permeability(min-max): Moderate to Rapid

Drainage Class(min-max): Somewhat Poorly 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):

Major Soils Associated With This Site:

(Soil Survey Area + Series Name)

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

C. PLANT COMMUNITY CHARACTERISTICS

1. Potential Plant Community Description and Ecological Factors

The dominant aspect of the potential natural plant community is narrowleaf cottonwood and willow. The composition by air-dry weight is approximately 45 percent perennial grasses and grass-like plants, 15 percent forbs, 20 percent shrubs, and 20 percent trees.

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
Fowl bluegrass	POPA2		200	300	10	15
Woolly sedge	CALA30		100	200	5	10
Hood sedge	CAHO5		100	200	5	10
Great basin wildrye	LECI4		100	200	5	10
Pale spikerush	ELPA3		60	100	3	5
Baltic rush	JUBAM	1	20	60	1	3
Redtop	AGST2	1	20	60	1	3
Western wheatgrass	PASM	1	20	60	1	3
Slender wheatgrass	ELTR7	1	20	60	1	3
Other perennial grasses	PPGG	1	60	100	3	5
Other annual grasses	AAGG	1	60	100	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
White cranesbill	GERI	0	60	100	3	5
Cow clover	TRWO	2	20	60	1	3
Rocky mountain iris	IRWO	2	20	60	1	3
Common Yarrow	ACMI2	2	20	60	1	3
Common dandelion	TAOF	2	20	60	1	3
Common silver weed	POAN7	2	20	60	1	3
Louisiana wormwood	ARLU	2	20	60	1	3
Rocky mountain groundsel	SEST3	2	20	60	1	3
Other perennial forbs	PPFF	2	200	300	10	15
Other annual forbs	AAFF	2	200	300	10	15

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Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Yellow willow	SALU2		100	200	5	10
Coyote willow	SAEX		60	100	3	5
Woods rose	ROWO		60	100	3	5
Speckled alder	ALIN2		20	60	1	3
Black hawthorn	CRDO2	3	20	60	1	3
Redosier	COSE16	3	20	60	1	3
Golden current	RIAU	3	20	60	1	3
Saskatoon serviceberry	AMAL2	3	20	60	1	3
Other shrubs	SSSS	3	100	200	5	10

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Narrowleaf cottonwood	POAN3		200	300	10	15
Quaking aspen	POTR5	3	20	60	1	3
Rocky mountain Maple	ACGL	3	20	60	1	3

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	2400	2500
Average Year	1900	2000
Unfavorable Year	1400	1500

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	20
Forbs (perennial)	10	1	5
Shrubs	20	5	15
Trees	20	50	10
Cryptogams			

b. Other

Litter	
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Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to grazing pressure, palatable grasses, grasslike plants, forbs, and shrubs decrease while unpalatable plants 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	5	15	40	20	10	5	5	0	0	0
Name	PNC											
ID Number	UT0101											
Description	Excellent condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

025XY030UT
 Wet Fresh Meadow (Tufted hairgrass)

024XY412UT
 Mountain Gravelly Loam (Mountain big sagebrush)

025XY410UT
 Mountain Aspen Thicket

9. Correlated Sites in Other States

(Give site name and number)

D. MAJOR USES OF THIS SITE

1. Livestock

a. Site Factors Influencing Management

For proper maintenance of the key species, this site should be deferred from grazing during the last half of the growing season; at least one year in three or as prescribed after upon examination of the site by qualified authorities.

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

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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, owl, hawk, 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 camping, fishing, hunting, and hiking. Natural beauty values exist in the diversity and abundance of plant growth coming from the moist soils found in this site.

4. Wood Products

Fire wood

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

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1. Plants
2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County: Box Elder
 Latitude: Longitude:

Modal Soils:

Type location: NE ¼ SW ¼ Section 2, Township 13N, Range 17W

General Legal Description:

Field Office Site Location

Legal Description: NE ¼ of the SW ¼, Section 36, Township 13N, Range 17W. Basin Creek at Lynn, Utah

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