

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: Wet Fresh Streambank (Willow)

SITE NUMBER:047AY010UT

MLRA: E47

Original Site Description: Author:

Date:

Revised Site Description: Author: DLT, DJS

Date: 09/09/1992

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

Date:

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: Moderately Coarse to Moderately Fine

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

Subsurface Textures:

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

Geologic Parent Materials: Wide Range of Parent Rocks

Moisture Regime:

Temperature Regime:

Runoff:

Permeability(min-max):

Drainage Class(min-max):

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: 609

Fluvaquentic Haploborolls 1-6%

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

2. PHYSIOGRAPHIC FEATURES

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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 potential vegetation of this site is a mixture of grasses and grasslike plants, forbs, shrubs, and large and small tree species. About one-fourth of the total understory is shrubs and tree reproduction. The tree overstory varies from occasional trees to a canopy so dense in some areas as to exclude practically all understory. This is especially true near the stream courses. Grasses and grass-like plants make up approximately 60 percent of the composition by weight, forbs comprise 15 percent, and shrubs and trees 25 percent of the total.

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
Leafy tussock sedge	CAAQ		128.5	257	5	10
Hoary sedge	CACA11		77.1	128.5	3	5
Wooly sedge	CALA30		77.1	128.5	3	5
Softleaf sedge	CADI6		77.1	128.5	3	5
Tufted hairgrass	DECE		77.1	128.5	3	5
Blue wildrye	ELGL		128.5	257	5	10
Mountain brome	BRCAS		128.5	257	5	10
Slender wheatgrass	ELTR7	1	25.7	77.1	1	3
Muttongrass	POFE	1	25.7	77.1	1	3
Alpine timothy	PHAL2	1	25.7	77.1	1	3
Baltic rush	JUBAM	1	25.7	77.1	1	3
Western wheatgrass	PASM	1	25.7	77.1	1	3
Other perennial grasses	PPGG	1	257	385.5	10	15
Other annual grasses	AAGG	1	257	385.5	10	15

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre	% by Weight of Total Composition
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			Low	High	Low	High
Cow parsnip	HELA4	2	25.7	77.1	1	3
Field horsetail	EQAR	2	25.7	77.1	1	3
Thickleaf peavine	LALA3	2	25.7	77.1	1	3
Tobacco root	VAED	2	25.7	77.1	1	3
Thickleaf groundsel	SECR	2	25.7	77.1	1	3
Alpine leafyhead aster	ASFOP	2	25.7	77.1	1	3
Hookspur violet	VIAD	2	25.7	77.1	1	3
Feathery false solomonsseal	MARAR	2	25.7	77.1	1	3
Bull thistle	CIVU	2	25.7	77.1	1	3
Great mullein	VETH	2	25.7	77.1	1	3
Nettleleaf giant hyssop	AGUR	2	25.7	77.1	1	3
Duncecap larkspur	DEOC	2	25.7	77.1	1	3
Common yarrow	ACMI2	2	25.7	77.1	1	3
Northern bedstraw	GABO2	2	25.7	77.1	1	3
Uinta clover	TRDA2	2	25.7	77.1	1	3
Other perennial forbs	PPFF	2	257	385.5	10	15
Other annual forbs	AAFF	2	257	385.5	10	15

Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Drummond willow	SADR	3	77.1	128.5	3	5
Booth willow	SABO2	3	77.1	128.5	3	5
Water birch	BEOC2	3	77.1	128.5	3	5
Speckled alder	ALIN2	3	77.1	128.5	3	5
Gray willow	SABE2	3	77.1	128.5	3	5
Shining willow	SALUL	3	77.1	128.5	3	5
Yellow willow	SALU2	3	77.1	128.5	3	5
Redosier	COSES	3	77.1	128.5	3	5
Saskatoon serviceberry	AMAL2	3	77.1	128.5	3	5
Mallow ninebark	PHMA5	3	77.1	128.5	3	5
Other shrubs	SSSS	3	642.5	771	25	30

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Narrowleaf cottonwood	POAN3	4	128.5	25.7	5	1
Englemann spruce	PIEN	4	128.5	25.7	5	1
Blue spruce	PIPU	4	128.5	25.7	5	1

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:

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	Low	High
Favorable Year	3400	3500
Average Year	2470	2570
Unfavorable Year	1900	2000

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	20	2	15
Forbs (perennial)	5	1	5
Shrubs	20	6	10
Trees	50	60	10
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

Plant species not a part of the climax plant community that are most likely to invade the site if plant cover deteriorates are: cheatgrass, annual weeds, burdock, cocklebur, horehound, houndstongue, stickseed, Canada thistle, rubber rabbitbrush, and big sagebrush. With excessive grazing use, sedges, wiregrass, and tree species will increase and one or more may become dominant.

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											

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	0	10	40	35	5	5	5	0	0	0
Name	Good Condition											
ID Number	UT0102											
Description	Grasses, Shrub, Tree											

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7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

047AY008UT
 Wet Fresh Meadow (Sedge)

047AY004UT
 Semiwet Fresh Meadow (Bentgrass)

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 produces a large volume of nutritious forage. To control soil erosion and degradation of the plant community this site may be properly grazed early with the animals being removed early to allow key plants to go ungrazed during the last part of the growing season. A stubble height of 4-6 inches should be adhered to.

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

The potential is fair to poor for openland, good to fair for woodland, good to fair for wetland and poor to fair for rangeland habitat.

b. List of Potential Species Present

It is fair to good all around habitat for chukers, Hungarian partridge, quail, mule deer, moose, pheasants, songbirds, snowshoe rabbits, cottontails, coyotes, cougars, golden eagle, bald eagles and hawks. The diversity and interspersed of grasses, forbs, shrubs, and trees provide good habitat for most wildlife.

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

This site has good values for aesthetics and natural beauty. It has a large number of forbs and shrubs which have flowers in bloom from early spring throughout the summer and into the fall. It has a combination of grasses, forbs, small shrubs, large shrubs, and trees, which offer some possibilities for screening and value as camping and picnicking areas. Hunting for upland game birds, snowshoe rabbits, elk, and mule deer is good to excellent on this site. Fishing is opportune on streams through and adjacent to this site.

4. Wood Products

Values exist for saw logs primarily for sheathing, but in most instances it would be more feasible to leave the trees for aesthetic values and recreation. Posts and poles and crating lumber can be harvested from cottonwoods, water birch and thinleaf alder, but they are of much inferior quality to pine or fir. These trees produce suitable wood for fireplaces, campfires, and materials for novelties and ornamental uses.

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

F. MODAL LOCATION AND DOCUMENTATION

Site Type: Rangeland

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Site Number: 047AY010UT

State: Utah

County:

Latitude:

Longitude:

Modal Soil: Fluvaquentic Hapoborolls, 1-6% – Fluvaquentic Haploborolls

Type Location: Beaver SCD; Bottoms in North Creek Northeast of Beaver, Utah

General Legal Description:

Field Office Site Location

Logan

Provo

Richfield

Cedar City

Murray

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