

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 Meadow (Tufted Hairgrass)

SITE NUMBER: 025XY030UT

MLRA: 025

Original Site Description: Author: DJS

Date: 01/15/1985

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: >60 inches

Surface Textures: Moderately Fine

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

Subsurface Textures: Moderately Fine

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

Geologic Parent Materials: Alluvium Derived from Mixed Parent Material

Moisture Regime:

Temperature Regime:

Runoff: Slow to very Slow

Permeability(min-max):

Drainage Class(min-max): Poorly to Very 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: 601

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 the natural potential plant community is tufted hairgrass. The composition by air-dry weight is approximately 70 percent perennial grasses and grasslike plants, 25 percent forbs, and 5 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
Tufted hairgrass	DECE	0	595	680	35	40
Nevada bluegrass	PONE3	0	85	170	5	10
Alpine timothy	PHAL2	0	85	170	5	10
Woolly sedge	CALA30	0	51	85	3	5
Hood sedge	CAHO5	0	51	85	3	5
Fowl mannagrass	GLST	1	17	51	1	3
Baltic rush	JUBAM	1	17	51	1	3
Prairie wedgescale	SPOB	1	17	51	1	3
Other perennial grasses	PPGG	1	85	170	5	10
Other annual grasses	AAGG	1	85	170	5	10

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Cow clover	TRWO	0	51	85	3	5
Common silverweed	ARAN7	0	51	85	3	5
Eaton aster	ASEA	2	17	51	1	3
Rocky mountain iris	IRMI	2	17	51	1	3
Rocky mountain groundsel	SEST3	2	17	51	1	3
Common yarrow	ACMI2	2	17	51	1	3
Idaho blueeyedgrass	SIID	2	17	51	1	3
Prairie goldenbanner	THRH	2	17	51	1	3
Spotted waterhemlock	CIMA2	2	17	51	1	3
Small camas	CAQU2	2	17	51	1	3
Seaside arrowgrass	TRMA4	2	17	51	1	3
Other perennial forbs	PPFF	2	170	340	10	20
Other annual forbs	AAFF	2	170	340	10	20

Shrubs/Vines, %

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

Site Type: Rangeland

Ecological Site Name: Wet Fresh Meadow (Tufted hairgrass)

Site Number: 025XY030UT

	Symbol				Total Composition	
			Low	High	Low	High
Gray willow	SABE2	0	51	85	3	5
Coyote willow	SAEX	3	17	51	1	3
Woods rose	ROWO	3	17	51	1	3
Silver sagebrush	ARCA13	3	17	51	1	3
Golden hardhack	PEFL15	3	17	51	1	3
Other shrubs	SSSS	3	51	85	3	5

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	1900	2000
Average Year	1600	1700
Unfavorable Year	900	1000

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	80	2	70
Forbs (perennial)	5	1	1
Shrubs	1	3	1
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to grazing pressure and drought, tufted hairgrass decreases while rushes, sedges, iris, common silverweed, yarrow, and silver sagebrush increase. When the potential natural

Site Type: Rangeland

Ecological Site Name: Wet Fresh Meadow (Tufted hairgrass)

Site Number: 025XY030UT

plant community is burned, tufted hairgrass decreases while rushes, sedges, and common yarrow increase. Redtop and foxtail barley 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	20	10	5	5	0	0	0
Name	PNC											
ID Number	UT0301											
Description	Excellent condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

025XY010UT

Riparian (Narrowleaf 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

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)

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 very limited cover for wildlife.

Site Type: Rangeland
 Ecological Site Name: Wet Fresh Meadow (Tufted hairgrass)
 Site Number: 025XY030UT

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 hiking and hunting.

4. Wood Products

None

5. Other Uses

Natural beauty values exist in the diversity and abundance of plant growth coming from the moist soils found in this site.

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah
 Latitude:

County: Box Elder
 Longitude:

Modal Soil:

Site Type: Rangeland
Ecological Site Name: Wet Fresh Meadow (Tufted hairgrass)
Site Number: 025XY030UT

Type location: SE ¼ NW ¼ , Section 32, Township 14N, Range 17W; SW ¼ SE ¼ Section 4, Township 13N, Range 17W; SW ¼ NW ¼ Section 21, Township 13N, Range 17W

General Legal Description:

Field Office Site Location

Logan
Box Elder County

Legal Description:

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