

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 Saline Meadow

SITE NUMBER: 028AY024UT

MLRA: 028A

Original Site Description: Author:

Date: 05/01/1981

Revised Site Description: Author:

Date: 08/03/1993

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

Date: 08/30/1993

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: Loam to Clay

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

Subsurface Textures:

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

Geologic Parent Materials: Alluvium and Lake Sediments from Mixed

Moisture Regime:

Temperature Regime:

Runoff:

Permeability(min-max): Moderate to Very Slow

Drainage Class(min-max): Somewhat Poorly Drained to 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: 611

Bramwell

Logan

Kanosh

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

2. PHYSIOGRAPHIC FEATURES

Site Type: Rangeland
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1. Potential Plant Community Description and Ecological Factors

The general view of this site is sedges, rushes, and saltgrass. The composition by air-dry weight is approximately 85 percent perennial grasses, 10 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
Alkali bluegrass	POJU		300	450	10	15
Coastal saltgrass	DISP		300	450	10	15
Arctic rush	JUAR2		300	450	10	15
Nebraska sedge	CANE2		150	300	5	10
Clustered field sedge	CAPR5		150	300	5	10
Alkali muhly	MUAS		90	150	3	5
Weeping alkaligrass	PUDI		90	150	3	5
Saltmarsh alkaligrass	PUFA		90	150	3	5
Meadow barley	HOBR2		90	150	3	5
Common threesquare	SCAM2	1	30	90	1	3
Common reed	PHAU7	1	30	90	1	3
Beardless wildrye	LETR5	1	30	90	1	3
Alkali cordgrass	SPGR	1	30	90	1	3
Annual rabbitfootgrass	POMO5	1	30	90	1	3
Prairie wedgescale	SPOB	1	30	90	1	3
Pale spikerush	ELPA3	1	30	90	1	3
Other perennial grasses	PPGG	1	90	150	3	5
Other annual grasses	AAGG	1	90	150	3	5

Forbs, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Lanceleaf goldenweed	PYLAL	2	30	90	1	3
Alkali marsh aster	ASPA8	2	30	90	1	3
Sea milkwort	GLMA	2	30	90	1	3
Slender seepweed	SUOC	2	30	90	1	3
Sea saltwort	SAMA11	2	30	90	1	3
Fiddleleaf hawksbeard	CRRUG	2	30	90	1	3
Seaside arrowgrass	TRMA4	2	30	90	1	3
Common silverweed	ARAN7	2	30	90	1	3
Alkali buttercup	RACY	2	30	90	1	3
Stiff blueeyedgrass	SIDE4	2	30	90	1	3
Meadow thistle	CISC2	2	30	90	1	3
Great red Indian paintbrush	CAMI12	2	30	90	1	3
American licorice	GLLE3	2	30	90	1	3
Alkalimallow	MALE3	2	30	90	1	3
Halberdleaf orach	ATPA4	2	30	90	1	3
Alkali popcornflower	PLLE	2	30	90	1	3
Common monkeyflower	MIGU	2	30	90	1	3
Darkthroat shootingstar	DOPU	2	30	90	1	3
Nuttall sunflower	HENU	2	30	90	1	3
Nodding burrmarigold	BICE	2	30	90	1	3
Cutleaf waterparsnip	BEER	2	30	90	1	3
Showy milkweed	ASSP	2	30	90	1	3
Red goosefoot	CHRU	2	30	90	1	3
Meadow milkvetch	ASDI5	2	30	90	1	3
Boraxweed	NIOC2	2	30	90	1	3
Spreading alkaliweed	CRTR5	2	30	90	1	3
Other perennial forbs	PPFF	2	300	450	10	15
Other annual forbs	AAFF	2	300	450	10	15

Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Iodinebush	ALOC2	3	30	90	1	3
Whiteflower rabbitbrush	CHAL9	3	30	90	1	3
Greasewood	SAVE4	3	30	90	1	3
Woods rose	ROWO	3	30	90	1	3
Low rabbitbrush	CHVI8	3	30	90	1	3
Rubber rabbitbrush	ERNA10	3	30	90	1	3
Other Shrubs	SSSS	3	150	300	5	10

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
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			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	3500	4000
Average Year	2500	3000
Unfavorable Year	1500	2000

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	70	2	50
Forbs (perennial)	10	2	5
Shrubs	3	2	1
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to grazing pressure alkali bluegrass, sedges, and other palatable grasses decrease, while arctic rush, saltgrass, and other unpalatable plants increase. Fire is not an important factor in this site. Plants that could invade this site are halogeton, kochia, smotherweed, whitetop, and salt cedar.

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	30	5	5	0	0	0	0

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Name	PNC
ID Number	UT0241
Description	Excellent Condition

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

028AY132UT
 Desert Salty Silt (Iodinebush)

028AY004UT
 Alkali Flat (Greasewood)

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 is one of Utah's highest yielding range sites. The plants are predominantly grasses and grasslike plants with a few forbs and practically no shrubs. To control soil erosion and degradation of the plant community, this site may be properly grazed early with animals being removed early to allow key plants to go ungrazed during the last part of the growing season. A stubble height of 4 to 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

This site provides food and limited cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include rabbit, coyote, pronghorn antelope 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. Natural beauty exists in the more favorable plant growth condition on this site when compared to adjacent sites.

4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County: Juab
 Latitude: Longitude:

Modal Soils: Bramwell – fine-silty, mixed, mesic Aquic Calciorthids

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Type Location: Fish Springs Wildlife Refuge. Northwest Juab County

General Legal Description:

Field Office Site Location

Logan
 Provo
 Cedar City
 Murray
 Richfield

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