

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: Semiwet Alkali Flat

SITE NUMBER: 028AY010UT

MLRA: 028A

Original Site Description: Author: TS DJS

Date: 01/01/1981

Revised Site Description: Author: TS DJS

Date: 07/01/1993

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:

Surface Textures:

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

Subsurface Textures: Loamy to Clayey (Loamy Fine Sand, Clay and Silty Clay)

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

Geologic Parent Materials: Loamy Alluvium from Mixed Parent Materials

Moisture Regime:

Temperature Regime:

Runoff:

Permeability(min-max): Variable

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

Airport

Arave

Benjamin

Bramwell

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 plant community is saltgrass and sedges. The composition by air-dry weight is approximately 80 percent perennial grasses, 5 percent forbs, and 15 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 |
| Coastal saltgrass | DISP | | 240 | 300 | 20 | 25 |
| Clustered field sedge | CAPR5 | | 180 | 240 | 15 | 20 |
| Baltic rush | JUBAM | | 120 | 180 | 10 | 15 |
| Foxtail barley | HOJU | | 60 | 120 | 5 | 10 |
| Alkali muhly | MUAS | | 36 | 60 | 3 | 5 |
| Nuttall alkaligrass | PUNU2 | | 36 | 60 | 3 | 5 |
| Nevada bluegrass | PONE3 | | 12 | 36 | 1 | 3 |
| Other perennial grasses | PPGG | 1 | 12 | 60 | 1 | 5 |
| Other annual grasses | AAGG | 1 | 12 | 60 | 1 | 5 |

Forbs, %

| Common Name | National Symbol | Group | Pounds per Acre | | % by Weight of Total Composition | |
|-----------------------|-----------------|-------|-----------------|------|----------------------------------|------|
| | | | Low | High | Low | High |
| Pingue | HYRI | 2 | 12 | 36 | 1 | 3 |
| Flixweed | DESO2 | 2 | 12 | 36 | 1 | 3 |
| Fireweed | KOSC | 2 | 12 | 36 | 1 | 3 |
| Western tansymustard | DEPI | 2 | 12 | 36 | 1 | 3 |
| Shrubby seepweed | SUMO | 2 | 12 | 36 | 1 | 3 |
| Other perennial forbs | PPFF | 2 | 36 | 60 | 3 | 5 |
| Other annual forbs | AAFF | 2 | 36 | 60 | 3 | 5 |

Shrubs/Vines, %

| Common Name | National Symbol | Group | Pounds per Acre | | % by Weight of Total Composition | |
|--------------------|-----------------|-------|-----------------|------|----------------------------------|------|
| | | | Low | High | Low | High |
| Greasewood | SAVE4 | | 36 | 60 | 3 | 5 |
| Rubber rabbitbrush | CHNA2 | | 36 | 60 | 3 | 5 |
| Green molly | KOAM | 3 | 12 | 36 | 1 | 3 |
| Basin saltbush | ATTR3 | 3 | 12 | 36 | 1 | 3 |
| Other shrubs | SSSS | 3 | 36 | 60 | 3 | 5 |

Trees, %

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| 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 | 1500 | 1600 |
| Average Year | 1100 | 1200 |
| Unfavorable Year | 700 | 800 |

4. Ground Cover and Structure

a. Vegetative

| Vegetation Type | Percent Canopy Cover | Height Range (ft) | Percent Basal Area Cover |
|----------------------------------|----------------------|-------------------|--------------------------|
| Grasses & Grass-like (perennial) | | | |
| Forbs (perennial) | | | |
| Shrubs | | | |
| Trees | | | |
| Cryptogams | | | |

b. Other

| | |
|------------------|--|
| Litter | |
| Coarse Fragments | |
| Bare Ground | |

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, the more palatable plants decrease. They will be replaced by greasewood and rabbitbrush. If this situation continues, the plant community will be opened up to invasion by other species, erosion, and a drying of the 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 |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

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| | | | | | | | | | | | | |
|----------------|---------------------|---|---|----|----|----|---|---|---|---|---|---|
| Percent Growth | 0 | 0 | 5 | 25 | 50 | 10 | 0 | 0 | 5 | 5 | 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

028AY012UT
 Semiwet Meadow

028AY020UT
 Wet Fresh Streambank

028AY022UT
 Semiwet Fresh Streambank

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 livestock during all seasons of the year.

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

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This site provides food and some cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include rabbit, coyote, fox, and pronghorn antelope.

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 values for natural beauty

4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah
 Latitude:

County:
 Longitude:

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 General Legal Description: SWA-C290 Photo 1B-5-014

Modal Soils: Airport – fine-silty, mixed, mesic Typic Natraquolls

Type Location:

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 | 4 | | | | |
| | | | | | |
| | | | | | |
| Permanent Transect Location | | | | | |

Other References