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 Fresh Streambank
SITE NUMBER: 028AY014UT
MLRA: 028A
Original Site Description: Author: TRS RE Date: 03/14/1981
Revised Site Description: Author: TRS RE Date: 08/23/1993
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: 40-60 inches
Surface Textures: Variable and Commonly Stratified
Surface Fragments(<=3" % cover, >3" % cover):
Subsurface Textures:
Subsurface Fragments(<=3" % vol, >3" % vol):
Geologic Parent Materials: Alluvium from Mixed Parent Material
Moisture Regime:
Temperature Regime:
Runoff:
Permeability(min-max):
Drainage Class(min-max): 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 $CaCl_2$):
pH Range:
Available Water Capacity (inches):

Major Soils Associated With This Site:

Soil Survey Area:

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

2. PHYSIOGRAPHIC FEATURES

Landform and Position: Gently Sloping and Moderately Sloping Flood Plains in Canyons and Small Valley Bottoms and Along Benches Adjacent to Stream Bottoms
Aspect: All

	Minimum	Maximum
Slope:	1	10
Elevation:	4500	7500

Flooding:
Frequency: Occasionally
Duration:
Ponding:
Depth (inches):
Frequency:
Duration:
Water Table Depth: Below 20 inches

B. CLIMATIC FEATURES

Mean Annual Precipitation (inches): 6-16
Mean Annual Air Temperature: 47-53
Mean Annual Soil Temperature: 49-55
Frost Free Period (days): 0-0
Freeze Free Period (days): 100-200

Temperature and Moisture Distribution:

Temp	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High	43	46	52	61	71	82	89	86	79	68	53	44
Mean												
Low	14	18	22	28	36	43	51	49	40	30	21	15

ppt	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High												
Mean	0.84	0.91	0.90	1.12	1.07	0.57	1.10	1.36	1.00	0.80	0.72	0.74
Low												

Climate Stations: St. ID.: Location: Period:
From: To:
(Includes factors such as storm intensity, precipitation dependability, origin and pattern of storms, driest and wettest months, orographic effects, etc.)

Influencing Water Features (if any):
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 dominant aspect of the plant community is cottonwood trees, willows, and grasses or grasslike plants. The composition by air-dry weight is approximately 45 percent perennial grasses, 15 percent forbs, and 40 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
Kentucky bluegrass	POPR		300	375	20	25
Clustered field sedge	CAPR5		75	150	5	10
Arctic rush	JUAR2		45	75	3	5
Western wheatgrass	PASM		45	75	3	5
Great basin wildrye	ELCI4	1	15	45	1	3
Redtop	AGST2	1	15	45	1	3
Bottlebrush squirreltail	ELEL5	1	15	45	1	3
Coastal saltgrass	DISP	1	15	45	1	3
Timothy	PHPR3	1	15	45	1	3
Other perennial grasses	PPGG	1	75	150	5	10
Other annual grasses	AAGG	1	75	150	5	10

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Common silverweed	ARAN7		45	75	3	5
Field horsetail	EQAR	2	15	45	1	3
Alkali marsh aster	ASPA8	2	15	45	1	3
Common dandelion	TAOF	2	15	45	1	3
Redwood plantain	PLER	2	15	45	1	3
Strawberry clover	TRFR2	2	15	45	1	3
Louisiana wormwood	ARLU	2	15	45	1	3
Rocky mountain groundsel	SEST3	2	15	45	1	3
Gooseberryleaf globemallow	SPGR2	2	15	45	1	3
Other perennial fobs	PPFF	2	75	150	5	10
Other annual forbs	AAFF	2	75	150	5	10

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of

	Symbol				Total Composition	
			Low	High	Low	High
Coyote willow	SAEX		225	300	15	20
Silver buffaloberry	SHAR		45	75	3	5
Basin big sagebrush	ARTRT		45	75	3	5
Rubber rabbitbrush	ERNA10	3	15	45	1	3
Utah serviceberry	AMUT	3	15	45	1	3
Deciduous travelersjoy	CLLI2	3	15	45	1	3
Woods rose	ROWO	3	15	45	1	3
Blue elder	SACE3	3	15	45	1	3
Low rabbitbrush	CHVI8	3	15	45	1	3
Ill scented sumac	RHTRT	3	15	45	1	3
Western snowberry	SYOR	3	15	45	1	3
Other shrubs	SSSS	3	75	150	5	10

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Ashleaf maple	ACNE2					
Fremont cottonwood	POFR2					
Narrowleaf cottonwood	POAN3					

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	1400	1500
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)	5	2	4
Forbs (perennial)	5	1	1
Shrubs	30	5	15
Trees	15	30	10
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, Great Basin wildrye, redtop, and Kentucky bluegrass decrease, while rubber rabbitbrush, willow, and woods rose increase. When the potential natural plant community is burned, cottonwood and box elder decrease while grasses and grasslike plants increase. Cheatgrass, gumweed, poverty weed, and bull thistle 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	30	5	5	0	0	0	0
Name	PNC											
ID Number	UT0141											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

028AY120UT
Semiwet Fresh Meadow

028AY020UT
Wet Fresh Meadow

028AY022UT
Wet Fresh Streambank

9. Correlated Sites in Other States

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 5 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 both food and cover for wildlife.

b. List of Potential Species Present'

Wildlife using this site include rabbit, coyote, raccoon, owl, bald eagle, 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

This site has good values for aesthetics and natural beauty. It has a large number of forbs and shrubs that 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 excellent possibilities for screening and high value as camping and picnicking areas. Hunting for upland game birds, cottontail rabbits, elk, and mule deer is good to excellent on this site. Fishing is opportune on streams through this site. Summer homes are a possibility on this site, but detailed on-site investigation should be made to determine feasibility of the soils for septic tanks and sewage disposal facilities when specific locations are tentatively planned for summer homes or other building sites. Due to the high water table, sewage disposal is extremely difficult.

4. Wood Products

The tree species, except for cottonwood, do not grow large enough to make them valuable for lumber. Occasionally, cottonwood and rocky mountain juniper have been used for saw timber. No site index

determinations have been made to date on these species. Some values exist for fence posts and fuel for fireplaces and campfires. Some species furnish raw material for knick-knacks, or ornamental uses.

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
Latitude: Longitude:

Modal Soils:

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