

TECHNICIAN'S GUIDE TO RANGE SITES AND RANGE CONDITION
 KEY CLIMAX PLANTS AND OTHERS THAT INVADE

Key Climax Plants	Maximum Percentage in Climax by Range Site																		
	WL	SS	LL	SL	SLdr	Sa	Sy	Ly	Cy	Sw	SwLy	SwCy	CU	SU	Gr	IC	VS	SaB	Sh
Alkali sacaton	:15d																		
Basin willow	:15d	:25d	:15d																
Beaked sedge	:25d																		
Bluebunch wheatgrass			:10d	:15d	:25d	:10d	:50d	:40d	:30d	:25d									
Bottlebrush sq.		:10d	:15d		:10d	:25d	:15d	:25d	:20d	:15d									
Indian ricegrass		:10d	:15d	:20d	:25d	:15d	:10d	:15d	:10d	:15d	:15d	:15d	:15d	:20d					
Inland saltgrass	:35d																		
Nebraska sedge	:25d			:40d	:50d	:20d	:35d	:10d	:20d	:20d									
Needleandthread	:25d																		
Prairie sandreed				:30d															
Rhiz. wheatgrasses		:15d	:15d	:10d	:10d	:40d	:45d	:25d	:30d	:30d	:20d	:15d	:20d	:30d	:10d	:15d	:10d		
Slender dropseed			:15d																
Tufted hairgrass	:15d																		
Upland sedges								:15											
Water sedge	:25d																		
Other native perennial grasses & sedges 1/	:15	:15	:15	:15	:15	:15	:15	:15	:15	:15	:15	:15	:15	:15	:15	:15	:15	:15	:15
Wyethia																			
1/Perennial Forbs	:10	:15	:15	:10	:10	:10	:20	:10	:10	:10	:10	:10	:10	:15	:10	:15	:10	:15	:20
Big sagebrush						:10	:15	:10	:10										
Birdfoot sagebrush																			:40
Bud sagebrush																			:10d
Cottonwoods			:20																
Gardners saltbush																			:15d
Greasewood			:20	:15															
Junipers																			:10
Skunkbush sumac																			:15
Other native shrubs-trees 1/	:5	:10	:15	:10	:15	:15	:25	:15	:15	:25	:20	:15	:30	:5	:10	:25	:10	:25	:15

RANGE CONDITION (%)	SUGGESTED INITIAL STOCKING RATES BY SITE (AUM'S/ACRE)																		
	WL	SS	LL	SL	SLdr	Sa	Sy	Ly	Cy	Sw	SwLy	SwCy	CU	SU	Gr	IC	VS	SaB	Sh
Excellent	2.5	1.2	1.4	1.3	1.2	1.2	2.2	2.2	2.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Good	1.8	1.0	1.3	1.2	1.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Fair	1.2	0.6	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Poor	0.8	0.4	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8

LEGEND: 1/ Count no more than 5% of any one species. Blanks = Not Important.
 d = Decreaser with livestock use on this site.

Invaders: All annuals, all exotics, broom snakeweed, leafy spurge, curlycup gumweed, foxtail barley, thistles, tumblegrass, pricklypear, saltcedar, Swainsonpea

Abbreviations:

- WL = Wetland
- SS = Saline Subirrigated
- LL = Lowland
- SL = Saline lowland
- SLdr = Saline lowland, drained
- Sa = Sands
- Sy = Sandy
- Ly = Loamy
- Cy = Clayey
- Sw = Shallow loamy
- SwLy = Shallow Clayey
- SwCy = Coarse Upland
- CU = Coarse Upland
- SU = Saline Upland
- Gr = Gravelly
- IC = Impervious Clay
- VS = Very Shallow
- SaB = Sandstone Breaks
- Sh = Shale

CLIMATE

A. The normal precipitation pattern shows peaks in May and June, and a secondary peak in September. This amounts to about 50% of the mean annual precipitation. Much of the moisture which falls during the latter part of the summer is lost by evaporation and much of the precipitation in the form of snow during the winter is lost by sublimation. Average snowfall is approximately 20 inches annually. Extremes of recorded precipitation vary from zero to almost 5" in one month. The annual average precipitation is 5 to 9 inches.

Sunshine is quite abundant in this area. The estimated possibility for sunshine is 70% on an annual basis, but varies from 75% possibility in summer to 65% possibility in the winter.

B. High winds are generally blocked from the basins by high mountains, but can occur in conjunction with an occasional thunderstorm.

C. Temperatures show a wide range between winter and summer, and night to day. Mean monthly temperatures range from a January mean of 15.5 deg. F. to a high of 72.0 deg. F. in July. The annual mean temperature is 44.6 deg. F. Daily extremes of 106 deg. F. and -51 deg. F. have been recorded.

The wide range in temperature is predominantly due to the high elevation and dry air which permits rapid incoming and outgoing radiation, and the passage of both warm and cold air masses. Shallow air masses from Canada seldom reach these protected basins, but the deep cold air masses spill over into the basins causing abrupt changes.

The growing season of these predominantly cool season plants begins about April 1 and continues to about July 1. Fall greenup will usually occur if moisture is available in September and continue to late October.

WILDLIFE

This zone is characterized by the following wildlife species: Pronghorn antelope, mule deer, coyote, bobcat, badger, cottontail rabbit, jackrabbit, raccoon, skunk, red fox, prairie dogs, beaver, muskrat, ground squirrel, various rodents and song birds, waterfowl, hawks, owls, eagles, sage grouse, chukar and Hungarian partridge, mourning dove, ring necked pheasant, magpie, meadowlark, and crow. Other species of wildlife may be present at times.

Mule deer and antelope are the dominant big game species.

Technical Guide, Section IIB
 Major Land Resource Area (32,34)
 5-9" Wind River Basin (5-9 WR)

Reedgrasses (spp.)	1	2	1	2	3
Rushes (spp.)	2	3	2	3	3
Sand dropseed	2	2	2	3	3
Sandberg bluegrass	2	2	2	2	2
Slender wheatgrass	1	2	1	2	2
Sloughgrass	2	3	2	3	3
Streambank wheatgrass	2	2	2	2	2
Thickspike wheatgrass	2	2	2	2	2
Threeawns	3	3	3	3	3
Tufted hairgrass	1	1	1	2	2
Upland sedges	2	2	2	2	3
Water sedge	2	3	2	3	3
Western wheatgrass	2	2	2	2	2
Forbs					
Alkali seepweed	3	3	3	3	3
Arrowgrass					
Asters	3	3	3	2	2
Astragalus (spp.) *1 /		*1 /	*1 /	*1 /	*1 /
Biscuitroot	2	2	2	2	2
Blue-eyed grass	2	1	2	2	2
Broom snakeweed	3	3	3	3	3
Buckwheat	3	2	3	2	2
Buttercup	2	2	2	2	2
Cinquefoil	3	3	3	2	3
Cryptantha (spp.)	3	3	3	3	3
Deathcamas					
Dock	3	3	3	3	3
Dusty maiden	3	3	3	3	3
Evening primrose	3	3	3	3	3
False carrot	3	2	3	3	3
Fleabane	3	3	3	3	3
Fringed sagewort	3	3	3	3	2
Goldenweed	3	3	3	3	3
Hawksbeard	3	1	3	2	2
Horsetail	*	3	*	3	3
Iris	3	3	3	3	3
Kochia	2	3	2	3	3
Larkspur	*2/	2	2	2	2
Licorice root	3	3	3	3	3
Lupine	2	*	2	2	2
Milk vetches	*	*	*	2	2
Miners candle	3	3	3	3	3
Mints	3	3	3	3	3
Mustard	3	3	3	3	3
Nailwort	3	3	3	3	3
Onion	2	2	2	2	2
Paintbrush	2	2	2	2	2
Penstemon	1	1	1	1	1
Phlox	3	3	3	3	3
Plantain	3	3	3	3	3

Technical Guide, Section IIB
Major Land Resource Area (32,3c)

5-9" Wind River Basin (5-9 WR)

Poverty weed	3	3	3	3	3
Princes plume					
Pussytoes	3	3	3	3	3
Sagewort	3	3	3	3	3
Salsify	3	3	3	3	3
Sandwort	3	3	3	3	3
Scarlet					
globemallow	2	2	2	2	2
Scurfpea	3	3	3	3	3
Skeletonweed	3	3	3	3	3
Stemless hymenoxys	3	3	3	3	3
Toadflax	3	3	3	3	3
Western yarrow	3	3	3	3	3
Woody aster	3	3	3	3	3
Wyethia	3	3	3	3	3
Woody Plants					
Big sagebrush	2	2	3	2	1
Birdfoot sagebrush	3	3	3	3	3
Black sagebrush	2	1	3	1	1
Bud sagebrush	1	1	2	1	1
Cottonwood	1	1	1	1	2
Currant	3	3	3	2	2
Douglas					
rabbitbrush	3	1	3	2	2
Fourwing saltbush	1	1	1	1	1
Gardner saltbush	1	1	2	1	1
Greasewood	2*1 /2/	2*1 /2/	2	2	2
Juniper	-3	-3-	3	2	3
Rubber rabbitbrush	3	1	3	2	1
Shadscale saltbush	3	3	3	3	3
Silver					
buffaloberry	3	3	3	3	3
Silver sagebrush	2	2	2	1	1
Skunkbush sumac	2	2	3	1	2
Spiny hopsage	3	3	3	3	3
Spiny horsebrush	3	3	3	3	3
Wild rose	2	2	3	2	2
Willow	2	2	2	1	3
Winterfat	1	1	1	1	1
Yucca	2	2	3	2	2

1/ In large amounts. 2/ Poisonous in spring before
spring

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site occurs on level or nearly level bottomlands, depressions, or adjacent to lakes, ponds, and springs. Elevation ranges from 3,700 feet to 6,000 feet.

2. Climatic Features- (See attached climate description.)

3. Native (climax) Vegetation

a. The climax plant community is dominated by plants that can withstand long periods of submersion in water and tolerate some salinity. Potential vegetation is about 80% grasses and grasslike plants, 10% forbs and 10% woody plants.

b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Tufted hairgrass	5-15
Nebraska sedge	25-35
Water sedge	10-25
Beaked sedge	10-25
All following Grasses and Grass-like Plants	5-15*
Alkali cordgrass	Reedgrasses (spp.)
Mannagrass	American bulrush
Sloughgrass	Rushes (spp.)
Reed canarygrass	Upland sedges
Bluegrasses (spp.)	
Forbs	
All following Forbs	T-10
Blue-eyed grass	Plantain
Iris	Cinquefoil
Horsetail	Mints
Arrowgrass	Buttercup
Woody Plants	
Willows	T-10
Rose	T-5

*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

- c. Approximate percent ground cover is 50-60 percent.
- d. As the ecological condition declines, low growing sedges and willows become more dominant. Species most likely to invade the site as condition deteriorates are annual grasses, weeds, and saltcedar.

4. Total Annual Production (Pounds per Acre Air-dry Weight Excellent Condition)

Favorable years	- 6,000 pounds
Median years	- 4,500 pounds
Unfavorable years	- 3,000 pounds

5. Soils

a. The soils of this site are deep & poorly drained with water tables over the surface for part, but not all, of the growing season. They are nearly level to slightly depressed areas with surface layers having a high content of organic matter.

b. Soil taxonomic units which characterize this site are:

Fluvaquents

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good spring and summer forage for cattle, sheep, horses and wildlife. Grazing may be restricted at times because of wetness.

2. Wood Products- None

3. Wildlife- (See attached general wildlife description for this precipitation zone.)

4. Watershed (Hydrologic Interpretations)

This range site has a potential for high runoff. The soil cover complex numbers are:

Excellent	95
Good - high fair	95
Fair	95

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- Potential value of this site for recreation uses is low. Recreation use is primarily hunting.

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

6. Threatened or Endangered Plants and Animals - See wildlife description.

7. Location of Typical Example of the site (To be determined at the local field office.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	2.5	0.40
Good	51 - 75	1 .8	0.55
Fair	26 - 50	1.2	0.80
Poor	0 - 25	0.8	1.20

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.

10. Field Offices - Casper, Lander, Dubois, Riverton

Technical Guide, Section IIB
 Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)
 SALINE SUBIRRIGATED (SS)
 Correlated Range Site No.D32XY242WY
 RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site occurs on level or nearly level bottom lands, depressions, or adjacent to lakes, ponds or springs. Elevation ranges from 3,700 feet to 6,000 feet.

2. Climatic Features- (See attached climate description)

3. Native (climax) Vegetation

a. The climax plant community is dominated by plants that can withstand both salinity and wetness. Potential vegetation is about 80% grasses and grass-like plants, 10% forbs and 10% woody plants.

b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Alkali sacaton	40-50
Nuttall alkaligrass	15-25
Basin wildrye	5-15
All following Grasses and Grass-like Plants	5-15*
Alkali cordgrass	Baltic rush
Inland saltgrass	Big bluegrass
Alkali bluegrass	American bulrush
Western wheatgrass	Tufted hairgrass
Mat muhly	
Forbs	
All following forbs	5-15*
Alkali seepweed	Dock
Povertyweed	Kochia
Arrowgrass	Horsetail
Licorice root	Plantain
Woody Plants	
All Following Woody Plants	T-10*
Rubber rabbitbrush	Greasewood
Silver buffaloberry	Wild rose
Cottonwood	

*Of plants in these groups, no more than 50 of any species is allowable in the potential plant community.

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

c. Cottonwood occurs on this site in limited amounts. Overstory canopy is low (less than 5%) and cottonwoods do not make up a significant amount of the total annual yield. The site index would be low.

d. Approximate percent ground cover is 50-60 percent.

e. As ecological condition declines, inland saltgrass and greasewood become more dominant. Species most likely to invade the site as condition deteriorates are annual grasses, weeds and foxtail barley.

4. Total Annual Production (Pounds per Acre Air-dry Weight - Excellent Condition)

Favorable years	- 2,600 pounds
Median years	- 2,400 pounds
Unfavorable years	- 1,800 pounds

5. Soils

a. Soils in this site have a strong saline and/or alkaline water table within reach of forage species during most of the growing season. Salt crust is commonly found on ridges and mounds during the dry periods. Moisture is not usually the limiting factor in production.

b. Soil taxonomic units which characterize this site are:
Fivemile (saline), Lostwells (saline), Trook (saline)

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good summer and fall forage for cattle and horses. Forage for sheep and wildlife is fair during the summer.

2. Wood Products- (Not significant on this site.)

3. Wildlife- (See attached general wildlife description for this precipitation zone.)

4. Watershed (Hydrologic Interpretations)

This range site has a potential for moderate runoff. The soil cover complex numbers are:

Excellent	85
Good - high fair	90
Fair	90

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- Potential value of this site for recreation uses is low. Recreation use is primarily hunting.
6. Threatened or Endangered Plants and Animals - See wildlife description.
7. Location of Typical Example of the site (To be determined at the local field office.)
8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	1.2	0.83
Good	51 - 75	1.0	1.00
Fair	26 - 50	0.6	1.70
Poor	0 - 25	0.2	5.00

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.
10. Field Offices - Casper, Lander, Dubois, Riverton

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site is on lowland positions next to streams that run at least during the major part of the growing season. Elevations range from 3,700 feet to 6,000 feet.

2. Climatic Features- (See attached climate description.)

3. Native (climax) Vegetation

a. The climax plant community is dominated by tall grasses. Potential vegetation is about 60% grasses and grass-like plants, 10% forbs and 30% woody plants.

b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Basin wildrye	10-25
Needleandthread	10-25
Slender wheatgrass	5-15
All following Grasses and Grass-like Plants	5-15*
Prairie sandreed	Indian ricegrass
Bottlebrush squirreltail	Western wheatgrass
Sandberg bluegrass	Blue grama
Canada wildrye	
Forbs	
All following Forbs	5-15*
Woody Aster	Dock
Onion	Phlox
Woody Plants	
Cottonwood	90-20
All Following Woody Plants	5-15*
Rubber rabbitbrush	Willows
Silver buffaloberry	Currant
Wild rose	Big sagebrush
Greasewood	Silver sagebrush

*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Cottonwood occurs on this site and overstory canopy is about 15 percent. The site index would be low.

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

- d. Approximate percent ground cover is 30-40 percent.
- e. As the ecological condition declines, woody species such as cottonwood, silver buffaloberry, and wild roses become more dominant. Species most likely to invade the site as condition deteriorates are annual grasses and weeds. Kentucky bluegrass has also invaded some areas. (See #8 - Other pertinent information)

4. Total Annual Production (Pounds Per Acre Air-dry Weight - Excellent Condition)

Favorable years	- 2,400 pounds
Median years	- 1,800 pounds
Unfavorable years	- 1,400 pounds

5. Soils

a. The soils associated with this site will vary in surface texture depth over gravel or bedrock. The presence of a slightly saline to nonsaline and/or slight alkali to non-alkaline water table within reach of the woody plants, but not beneficial to the majority of herbaceous plants, is the most important environmental factor for this site. This water table is usually more than 3 feet below the surface. This site may occasionally be overflowed during flooding conditions.

Grasses and forbs are benefited only slightly; however, the deeper rooted woody plants root deep enough to be greatly benefited by the deep water table.

- b. Soil taxonomic units which characterize this site are:
Fluvents
- c. Complete soil series descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good summer, fall, and winter grazing for cattle, sheep, horses and wildlife. Grazing may be restricted at times because of wetness.
2. Wood Products- Cottonwoods on this site are plentiful enough for some to be harvested for firewood.
3. Wildlife- (See attached general wildlife description for this precipitation zone.)
4. Watershed (Hydrologic Interpretations)

This range site has a potential for low to moderate runoff. The soil cover complex numbers are:

Technical Guide, Section IIB
 Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

Excellent	55
Good - high fair	65
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- Potential value of this site for recreation uses is fair. This site has potential for recreation uses such as picnicking, hunting and camping.

6. Threatened or Endangered Plants and Animals - See wildlife description.

7. Location of Typical Example of the site (To be determined at the local field office.)

8. Other Pertinent Information

A large percent of the total annual production is from woody species that are unavailable to livestock and wildlife. This should be considered when calculating the stocking rate. Also Kentucky bluegrass has invaded this site in some areas and makes up a large percentage of the total production. It should be considered toward the stocking rate but not toward range condition.

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.40	2.5
Good	51 - 75	.33	3.0
Fair	26 - 50	.20	5.0
Poor	0 - 25	.10	10.0

9. See attached relative forage preference sheet for this precipitation zone.

10. Field Offices - Casper, Lander, Dubois, Riverton

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site occurs in lowland positions. Elevation ranges from 3,700 feet to 6,000 feet.
2. Climatic Features- (See attached climate description)
3. Native (climax) Vegetation
 - a. The climax plant community is dominated by tall grasses that can tolerate some wetness and salinity. Potential vegetation is about 70% grasses and grass-like plants, 10% forbs, and 20% woody plants.
 - b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Alkali sacaton	15-25
Basin wildrye	10-25
Western wheatgrass	5-15
Bottlebrush squirreltail	5-10
All following Grasses and Grass-like Plants	5-15*
Canada wildrye	Indian ricegrass
Inland saltgrass	Sandberg bluegrass
Blue grama	Mat muhly
Forbs	
All following Forbs	T-10*
Woody Aster	Alkali seepweed
Onion	Povertyweed
Phlox	Kochia
Woody Plants	
Greasewood	10-20
Shadscale	T-5
Rubber rabbitbrush	T-5

- c. Approximate percent ground cover 20-30 percent.
- d. As the ecological condition declines by deterioration, greasewood and inland saltgrass become more dominant. Species most likely to invade the site as condition deteriorates are annual grasses and weeds.

4. Total Annual Production Pounds per Acre Air-dry Weight (Excellent Condition)

Favorable years	- 1600 pounds
Median years	- 1200 pounds
Unfavorable years -	700 pounds

5. Soils

a. This site consists of soils containing at least moderate amounts of salinity or alkalinity. The subsoil is moistened by overflow, subirrigation from a deep water table, or irrigation of adjacent land. When a water table exists, it is not close enough to the surface to benefit herbaceous plants. Soil texture and depth vary considerably.

b. Soil taxonomic units which characterize this site are:
Binton

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good spring, summer and fall forage for cattle and horses. Forage for sheep and wildlife is fair yearlong. Grazing may be restricted at times because of wetness.

2. Wood Products- (Not significant on this site.)

3. Wildlife- (See attached wildlife description.)

4. Watershed (Hydrologic Interpretations)

This range site has a potential for moderate runoff. The soil cover complex numbers are:

Excellent	60
Good - high fair	70
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- Potential value of this site for recreation uses is low. Recreation use is primarily hunting.

6. Threatened or Endangered Plants and Animals - See wildlife description.

7. Location of Typical Example of the site (To be determined at the local field office.)

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.30	3.33
Good	51 - 75	.22	4.50
Fair	26 - 50	.12	8.33
Poor	0 - 25	.07	14.30

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.

10. Field Offices - Casper, Lander, Dubois, Riverton

Technical Guide, Section IIB
 Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)
 SALINE LOWLAND-Drained (SLdr)
 Correlated Range Site No.D32XY240WY

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site occurs in lowland positions. Elevation ranges from 3,700 feet to 6,000 feet.
2. Climatic Features- (See attached climate description)
3. Native (climax) Vegetation
 - a. The climax plant community is dominated by tall grasses that can tolerate some wetness and salinity. Potential vegetation is about 70% grasses and grass-like plants, 10% forbs, and 20% woody plants.
 - b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Inland saltgrass	10-20
Indian ricegrass	5-10
Alkali sacaton	5-15
Basin wildrye	5-10
Western wheatgrass	5-15
Bottlebrush squirreltail	5-15
All following Grasses and Grass-like Plants	5-15*
Canada wildrye	Sandberg bluegrass
Blue grama	Mat muhly
Alkali bluegrass	
Forbs	
All Following Forbs	T-10*
Woody Aster	Alkali seepweed
Onion	Povertyweed
Phlox	Kochia
Woody Plants	
Greasewood	5-15
Gardner saltbush	1-5
All Following Woody Plants	T-10*
Shadscale	Big sagebrush
Rubber rabbitbrush	Douglas rabbitbrush

*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

- c. Approximate percent ground cover 20-30 percent.

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

d. As the ecological condition declines, greasewood and inland saltgrass become more dominant. Species most likely to invade the site as condition deteriorates are foxtail barley, annual grasses and weeds.

4. Total Annual Production (Pounds per Acre Air-dry Weight Excellent Condition)

Favorable years	- 800 pounds
Median years	- 525 pounds
Unfavorable years	- 350 pounds

5. Soils

a. This site consists of soils containing at least moderate amounts of salinity or alkalinity. The subsoil is well drained and if a water table exists, it is too deep to benefit vegetation. Soil texture and depth vary considerably.

b. Soil taxonomic units which characterize this site are:
Binton Effington

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good spring, summer and fall forage for cattle and horses. Forage for sheep and wildlife is fair yearlong. Grazing may be restricted at times because of wetness.

2. Wood Products- (Not significant on this site.)

3. Wildlife- (See attached wildlife description.)

4. Watershed (Hydrologic Interpretations)

This range site has a potential for moderate runoff. The soil cover complex numbers are:

Excellent	60
Good - high fair	70
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- Potential value of this site for recreation uses is low. Recreation use is primarily hunting.

6. Threatened or Endangered Plants and Animals - See wildlife description.

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin-(5-9 WR)

7. Location of Typical Example of the site (To be determined at the local field office.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	○ Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.20	5.0
Good	51 - 75	.17	6.0
Fair	26 - 50	.10	10.0
Poor	0 - 25	.05	20.0

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.

10. Field Offices - Casper, Lander, Dubois, Riverton

RANGE SITE DESCRIPTION

PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site is usually found in an upland position, and may occur on all slopes. Steeper slopes will be less productive. Elevation ranges from 3,700 feet to 6,000 feet.
2. Climatic Features- (See attached climate description.)
3. Native (climax) Vegetation
 - a. The climax plant community is dominated by mid and tall grasses in association with silver sagebrush and spiny hopsage. Potential is about 75% grasses and grass-like plants, 10% forbs and 15% woody plants.
 - b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Needleandthread	30-40
Prairie sandreed	20-30
Indian ricegrass	10-20
Sand dropseed	5-10
Rhizomatous wheatgrasses	5-10
Western, Thickspike, Streambank	
All Following Grasses and Grass-like Plants	5-15*
Blue grama	Sandberg bluegrass
Prairie junegrass	Upland sedges
Threeawns	
Forbs	
All Following Forbs	T-10*
Phlox	Woody aster
Biscuitroot	Buckwheat
Larkspur	Milkvetches
Cryptantha spp.	Onion
False carrot	Scarlet globemallow Scurfpea
	Toadflax Sandwort
Woody Plants	
Fourwing saltbush	1-5
Winterfat	1-5
All Following Woody Plants	5-15*
Big sagebrush	Shadscale
Skunkbush sumac Rubber	Yucca
rabbitbrush	Douglas rabbitbrush
	Silver sagebrush Spiny hopsage

5. Recreation and Natural Beauty- Potential value of this site for recreation uses is low. Recreation use is primarily *hunting*.

6. Threatened or Endangered Plants and Animals - See wildlife description.

7. Location of Typical Example of the site (To be determined at the local field office.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.20	5.00
Good	51 - 75	.16	6.25
Fair	26 - 50	.10	10.00
Poor	0 - 25	.05	20.00

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.

10. Field Offices - Casper, Lander, Dubois, Riverton

Technical Guide, Section IIB
 Major Land Resource Area (32,34)
 5-9" Wind River Basin (5-9 WR)
 SANDY (Sy)
 Correlated Range Site No.D32XY250WY
 RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site occurs in the upland position on slopes generally less than 20%. Elevation range of this site is from 3,700 feet to 6,000 feet.

2. Climatic Features- See attached climate description

3. Native (climax) Vegetation

a. The climax plant community is characterized by a mixture of plants that prefer a sandy textured soil. The vegetation is a mixture of 70% grasses and grass-like plants, 15% forbs and 15% woody plants.

b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT	
Grasses and Grass-like Plants		
Needleandthread	30-50	
Indian ricegrass	15-25	
Rhizomatous wheatgrasses	5-10	
Western, Thickspike, Streambank		
Sand dropseed	5-10	
All the Following Grasses and Grass-like Plants	10-20*	
Prairie junegrass	Bluebunch wheatgrass	
Blue grama	Sandberg bluegrass	
Prairie sandreed	Upland sedges	
Threeawns	Plains reedgrass	
Forbs		
All Following Forbs	10-20*	
Phlox	Fleabane	
Scarlet globemallow	Woody aster	
Buckwheat	Paintbrush	
Larkspur	Mi lkvet ch es	
Scurfpea	Toadflax	
Western yarrow	Onion	
False Carrot	Fringed sagewort	
Deathcamas		
Woody Plants		
Winterfat	1-5	
Big sagebrush	5-10	
All Following Woody Plants	5-10*	
Douglas rabbitbrush	Spiny hopsage	Spiny horsebrush
Silver sagebrush	Rubber rabbitbrush	Skunkbush sumac

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Percent ground cover 25-35 percent.

d. As the ecological condition declines, big sagebrush, threadleaf sedge, yucca and blue grama become dominant. Species that are not a part of the climax plant community, but are most likely to invade this site if condition deteriorates are annual grasses, weeds, and pricklypear.

4. Total Annual Production (Pounds per Acre Air-dry Weight Excellent Condition)

Favorable years	- 600 pounds
Median years	- 400 pounds
Unfavorable years	- 225 pounds

5. Soils

a. The soils associated with this site are fine sandy loams, sandy loams, or loamy fine sands provided the topsoil is not less than 3 inches. These soils are 20 inches or more in depth. These soils take up moisture readily. Plant/soil moisture relationships are very good.

b. Soil taxonomic units which characterize this site are:
Apron, Griffy, Wallson, Worland, Saddle, Trook

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good forage for all seasons for all kinds of livestock and wildlife.

2. Wood Products- None

3. Wildlife- See attached wildlife description.

4. Watershed (Hydrologic Interpretations)

This range site has a potential for moderate runoff. The soil cover complex numbers are:

Excellent	50
Good - high fair	60
Fair	75

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- Recreation potential for this site is good. Primary recreation uses are hunting, hiking and camping.

6. Threatened or Endangered Plants and Animals - See wildlife description.

7. Location of Typical Example of the site (To be determined at the local field office.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.20	5.0
Good	51 - 75	.16	6.3
Fair	26 - 50	.10	10.0
Poor	0 - 25	.05	20.0

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.

10. Field Offices - Casper, Lander, Dubois, Riverton

Technical Guide, Section IIB
 Major Land Resource Area (32,34)
 5-9" Wind River Basin (5-9 WR)
 LOAMY Ly
 Correlated Range Site No.D32XY222WY
 RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site occurs in the upland position on slopes generally less than 20% and where soil depth exceeds 20 inches. Elevation ranges from 3,700 feet to 6,000 feet.

Climatic Features- See attached climate description.
 Native (climax) Vegetation

- a. The climax plant community is dominated by cool season grasses. Potential vegetation is about 75% grasses and grass like plants, 10% forbs and 15% woody plants.
- b. Major plant species and percentage composition of the potential plant community by air dry weight.

SPECIES	PERCENT
Grasses and Grass-like Plants	
Rhizomatous wheatgrasses	20-40
Western, Thickspike, Streambank	
Needleandthread	10-20
Indian ricegrass	5-15
Bluebunch wheatgrass	5-10
Bottlebrush squirreltail	5-10
All Following Grasses and Grass-like Plants	5-15*
Prairie junegrass	Threeawns
Sandberg bluegrass	Upland sedges
Blue grama	
Forbs	
All Following Forbs	T-10*
Scarlet globemallow	Paintbrush
Phlox	Fleabane
Onion	Woody aster
Fringed sagewort	Biscuitroot
Buckwheat	Hawksbeard
Astragalus spp.	Pussytoes
False carrot	Larkspur
Toadflax	
Woody Plants	
Winterfat	1-5
Big sagebrush	5-15
All Following Woody Plants	5-10*
Shadscale saltbush	Douglas rabbitbrush
Rubber rabbitbrush	

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

- c. Approximate percent ground cover 25-35 percent.
 - d. As the ecological condition declines, blue grama, sandberg bluegrass, and big sagebrush become more dominant. Species most likely to invade the site as condition deteriorates are annual grasses, weeds, and pricklypear.
4. Total Annual Production (Pounds per Acre Air-dry Weight Excellent Condition)

Favorable years	- 600 pounds
Median years	- 400 pounds
Unfavorable years	- 225 pounds

5. Soils

- a. Soils associated with this site are very fine sandy loams, loams, silt loams, light sandy clay loams, light silty clay loams, and light clay loams. These soils are 20 inches or more in depth. Soils have good plant/soil moisture relationships and take up moisture fairly readily.
- b. Soil taxonomic units which characterize this site are:
Fruita, Neiber, Garland, Lostwells, Rairdent, Emblem, Kinnear, Griffy, Pavillion
- c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

- 1. Grazing- This site produces good forage for cattle, horses, sheep and wildlife during the entire year.
- 2. Wood Products- None
- 3. Wildlife- See attached wildlife description.
- 4. Watershed (Hydrologic Interpretations)

This range site has a potential for moderate runoff. The soil cover complex numbers are:

Excellent	55
Good - high fair	65
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- Recreational potential for this site is fair. Primary recreation uses are hunting, hiking, camping and picnicking.

6. Threatened or Endangered Plants and Animals - See wildlife description.

7. Location of Typical Example of the site (To be determined at the local field office.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.20	5.00
Good	51 - 75	.16	6.25
Fair	26 - 50	.10	10.00
Poor	0 - 25	.05	20.00

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.

10. Field Offices - Casper, Lander, Dubois, Riverton

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site occurs in upland positions on slopes generally less than 10 percent and where the soil depth exceeds 20 inches. Elevation ranges from 3,700 feet to 6,000 feet.
2. Climatic Features- See attached climate description.
3. Native (climax) Vegetation
 - a. The climax plant community is dominated by cool season grasses. Potential vegetation is about 70% grasses and grass like plants, 10% forbs and 20% woody plants.
 - b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Rhizomatous wheatgrasses	25-¢5
Western, Streambank, Thickspike	
Bottlebrush squirreltail	15-25
Indian ricegrass	5-10
All Following Grasses and Grass-like Plants	5-15*
Sandberg bluegrass	Blue grama
Upland sedges	Prairie junegrass
Plains reedgrass	
Forbs	
All Following Forbs	T-10*
Scarlet globemallow	Biscuitroot
Phlox	Buckwheat
Onion	Fleabane
False carrot	Hawksbeard
Woody aster	Milkvetches
Pussytoes	
Woody Plants	
Big Sagebrush	5-10
Bud sagebrush	1-5
Winterfat	1-5
Gardner saltbush	1-5
All Following Woody Plants	5-10*
Douglas rabbitbrush	Birdfoot sagebrush

*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

- c. Approximate percent ground cover is 15-25 percent.
- d. As the ecological condition declines, birdfoot sagebrush, big sagebrush and blue grama become more dominant. Species most likely to invade the site as condition deteriorates are annual grasses, weeds and pricklypear.

4. Total Annual Production (Pounds per Acre Air-dry Weight Excellent Condition)

Favorable years	- 500 pounds
Median years	- 300 pounds
Unfavorable years	- 200 pounds

5. Soils

a. The soils associated with this site are silty clays, the finer portions of sandy clay loams, silty clay loams, and clays that develop severe cracks or become hard when dry or sticky when wet. Depth of soil is 20" or more. These soils do not take up moisture as readily as the lighter textured soils. Plant/soil moisture relationships are good.

b. Soil taxonomic units which characterize this site are:
Youngston

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides forage for all seasons for cattle, sheep, horses, and wildlife.
2. Wood Products- None
3. Wildlife- See attached wildlife description.
4. Watershed (Hydrologic Interpretations)

This range site has a potential for moderate runoff. The soil cover complex numbers are:

Excellent	65
Good - high fair	75
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- Recreation potential for this site is fair. Primary recreation uses are hunting, camping and hiking.

6. Threatened or Endangered Plants and Animals - See wildlife description.

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

7. Location of Typical Example of the site (To be determined at the local field office.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.20	5.00
Good	51 - 75	.16	6.25
Fair	26 - 50	.10	10.00
Poor	0 - 25	.05	20.00

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.

10. Field Offices - Casper, Lander, Dubois, Riverton

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site usually occurs in the upland position. However, it may be found on all slopes and positions. Elevations on this site range from 3,700 feet to 6,000 feet.

2. Climatic Features- See attached climate description.

3. Native (climax) Vegetation

a. The climax plant community is dominated by cool season grasses. Potential vegetation is about 75% grasses and grass like plants, 10% forbs, and 15% woody plants.

b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Needleandthread	25-35
Rhizomatous wheatgrasses	15-25
Western, Thickspike, Streambank	
Indian ricegrass	10-20
Bluebunch wheatgrass	5-15
Upland sedges	5-15
All Following Grasses and Grass-like Plants	5-15*
Bottlebrush squirreltail Prairie junegrass	
Blue grama	Sandberg bluegrass
Threeawns	Sand dropseed
Plains reedgrass	
Forbs	
All Following Forbs	5-10*
Larkspur	Phlox
Fleabane	Asters
Scarlet globemallow	Buckwheat
Onion	Milkvetch
False carrot	Nailwort
Penstemon	Wyethia
Scurfpea	Broom snakeweed
Deathcamas	
Woody Plants	
Winterfat	1-5
All Following Woody Plants	5-15*
Rubber rabbitbrush	Shadscale saltbush Silver sagebrush
Big sagebrush	Douglas rabbitbrush Skunkbush sumac

*Of plants in these groups, no more than 5% of any species **is** allowable in the potential plant community.

c. Approximate percent ground cover is 15-25 percent.

d. As the ecological condition declines, threadleaf sedge, big sagebrush, forbs and blue grama become more dominant. Species most likely to invade the site as condition deteriorates are annual grasses and weeds.

4. Total Annual Production (Pounds per Acre Air-dry Weight Excellent Condition)

Favorable years	350 pounds
Median years	250 pounds
Unfavorable years	125 pounds

5. Soils

a. The soil depth ranges from 10 to 20 inches over bedrock of any kind except igneous or volcanic, which is virtually impermeable to plant roots. The soil textures are a fine sandy loam or coarser. Thin ineffectual layers of other textures are disregarded. Production is less for this site than sandy because moisture holding capacity of soils has been reduced by shallow depth to bedrock.

b. Soil taxonomic units which characterize this site are:
Oceanet

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good forage for all seasons of the year for cattle, horses, sheep and wildlife.

2. Wood Products- None

3. Wildlife- See attached wildlife interpretations sheet.

4. Watershed (Hydrologic Interpretations)

This range site has a potential for moderate to high runoff. The soil cover complex numbers are:

Excellent	70
Good - high fair	75
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

5. Recreation and Natural Beauty- Recreational potential for this site is low. Recreational use is primarily hunting.
6. Threatened or Endangered Plants and Animals - See wildlife description.
7. Location of Typical Example of the site (To be determined at the local field office.)
8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.10	10.00
Good	51 - 75	.08	12.50
Fair	26 - 50	.05	20.00
Poor	0 - 25	.03	33.33

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.
10. Field Offices - Casper, Lander, Dubois, Riverton

Technical Guide, Section IIB
 Major Land Resource Area (32,34)
 5-9" Wind River Basin (5-9 WR)
 SHALLOW LOAMY SwLy
 Correlated Range Site No.D32XY262WY
 RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site is generally found on steep slopes in the upland position. However, it may be found on all slopes in all positions. Elevations range from 3,700 feet to 6,000 feet.

2. Climatic Features- See attached climate description.

3. Native (climax) Vegetation

a. The climax plant community is dominated by cool season grasses. Potential vegetation is about 80% grasses and grass like plants, 10% forbs and 10% woody plants.

b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Rhizomatous wheatgrasses	20-30
Western, Thickspike, Streambank	
Bluebunch wheatgrass	15-25
Indian ricegrass	10-25
Nee dleandthread	5-1 0
All Following Grasses and Grass-like Plants	5-15
Prairie junegrass	Blue grama
Sandberg bluegrass	Sand dropseed
Upland sedges	
Forbs	
All Following Forbs	T-10*
Scarlet globemallow	Phlox
Fleabane	Buckwheat
Paintbrush	Pussytoes
Onion	Mustard
False carrot	Fringed sagewort
Larkspur	Goldenweed
Milkvetch	
Woody Plants	
Big sagebrush	5-10
Winterfat	1-5
All Following Woody Plants	5-10*
Shadscale saltbush	Birdfoot sagebrush
Black sagebrush	Rubber rabbitbrush
Douglas rabbitbrush	

*Of plants in these groups, no more than 5a of any species is allowable in the potential plant community.

- c. Approximate percent ground cover is 15-25 percent.
- d. As the ecological condition declines, big sagebrush, short grasses, and forbs become more dominant. Species most likely to invade the site as condition deteriorates are annual grasses, weeds and pricklypear.

4. Total Annual Production (Pounds per Acre Air-dry Weight Excellent Condition)

Favorable years	350 pounds
Median years	250 pounds
Unfavorable years	125 pounds

5. Soils

a. The soil depth ranges from 10 to 20 inches over bedrock from any kind except igneous, which is virtually impermeable to plant roots. Soil textures range from a very fine sandy loam to the light sandy clay loams, light silty clay, and clay loams. Thin ineffective layers of other textures are disregarded. Production is less on this site than for loamy because moisture holding capacity of the soil has been reduced by shallow depths to bedrock.

b. Soil taxonomic units which characterize this site are:

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

- 1. Grazing- This site provides good forage for all seasons of the year for horses, cattle, sheep and wildlife.
- 2. Wood Products- None
- 3. Wildlife- See attached wildlife description.
- 4. Watershed (Hydrologic Interpretations)

This range site has a potential for high runoff. The soil cover complex numbers are:

Excellent	70
Good - high fair	75
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

Technical Guide, Section IIB
 Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

5. Recreation and Natural Beauty- Recreation potential for this site is low. Recreation use is primarily hunting.
6. Threatened or Endangered Plants and Animals - See wildlife description.
7. Location of Typical Example of the site (To be determined at the local field office.)
8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.10	10.00
Good	51 - 75	.08	12.50
Fair	26 - 50	.05	20.00
Poor	0 - 25	.03	33.33

RELATIVE FORAGE PREFERENCE FOR, ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.
10. Field Offices - Casper, Lander, Dubois, Riverton

PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site is usually found on steep slopes; however, it may occur on all slopes and positions. Elevations range from 3,700 feet to 6,000 feet.
2. Climatic Features- See attached climate description.
3. Native (climax) Vegetation
 - a. The climax plant community is dominated by cool season grasses. Potential vegetation is about 70% grasses and grass like plants, 10% forbs and 20% woody plants.
 - b. Major plant species and percentage composition of the potential plant community by air dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Rhizomatous wheatgrasses	20-30
Western, Thickspike, Streambank	
Bottlebrush squirreltail	5-15
Indian ricegrass	5-15
Bluebunch wheatgrass	5-10
All Following Grasses and Grass-like Plants	5-15*
Sandberg bluegrass	Blue grama
Upland sedges	Prairie junegrass
Needleandthread	
Threeawns	
Forbs	
All Following Forbs	5-10*
Scarlet globemallow	Asters
Buckwheat	Onion
False carrot	Milkvetches
Phlox	
Pussytoes	
Biscuitroot	
Woody Plants	
Gardner saltbush	1-5
Winterfat	1-5
Bud sagebrush	1-5
All Following Woody Plants	5-15*
Birdfoot sagebrush	Big sagebrush
Douglas rabbitbrush	Rubber rabbitbrush
Shadscale saltbush	

*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Approximate percent ground cover is 15-25 percent.

d. As the ecological condition declines, birdfoot sagebrush and big sagebrush become more dominant. Species most likely to invade the site as condition deteriorates are annual grasses and weeds.

4. Total Annual Production (Pounds per Acre Air-dry Weight Excellent Condition)

Favorable years	350 pounds
Median years	250 pounds
Unfavorable years	125 pounds

5. Soils

a. The soil depth is 10 to 20 inches deep over clay shale bedrock, which is virtually impermeable to plant roots. Soil textures included in this site are silty clay, the finer portions of sandy clay loam, clay loam or silty clay loams, and all clays. Thin ineffectual layers of other soil textures are disregarded. Production is less on this site than for clayey because moisture holding capacity in the soil has been reduced due to shallow depth to bedrock.

b. Soil taxonomic units which characterize this site are:
Persayo

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good forage for all seasons of the year for cattle, horses, sheep and wildlife.

2. Wood Products- None

3. Wildlife- See attached wildlife description.

4. Watershed (Hydrologic Interpretations)

This range site has a potential for high runoff. The soil cover complex numbers are:

Excellent	75
Good - high fair	80
Fair	85

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- The recreation potential for this site is low. Recreation use is primarily hunting.

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

6. Threatened or Endangered Plants and Animals - See wildlife description.
7. Location of Typical Example of the site (To be determined at the local field office.)
8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.10	10.00
Good	51 - 75	.08	12.50
Fair	25 - 50	.05	20.00
Poor	0 - 25	.03	33-33

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.
10. Field Offices - Casper, Lander, Dubois, Riverton

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site may be found in most positions, but usually occurs at terrace breaks and along stream courses. Elevations range from 3,700 feet to 6,000 feet.

2. Climatic Features- See attached climate description

3. Native (climax) Vegetation

a. The climax plant community is dominated by cool season grasses. Potential vegetation is about 70% grasses and grass like plants, 15% forbs and 15% woody plants.

b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Bluebunch wheatgrass	20-40
Needleandthread	10-20
Rhizomatous wheatgrasses	10-20
Western, Streambank, Thickspike	
Indian ricegrass	5-10
All Following Grasses and Grass-like Plants	5-15*
Bottlebrush squirreltail	Sandberg bluegrass
Upland sedges	Prairie junegrass
Threeawns	Blue grama
Forbs	
All Following Forbs	10-15*
Phlox	Aster
Larkspur	Buckwheat
Scarlet globemallow	Fringed sagewort
Nailwort	Paintbrush
Sandwort	Penstemon
Woody Plants	
Winterfat	1-5
All Following Woody Plants	10-20*
Black sagebrush	Douglas rabbitbrush
Yucca	Big sagebrush
Rubber rabbitbrush	

*Of plants in these groups, no more than 5, % of any species is allowable in the potential plant community.

c. Approximate percent ground cover is 15-25 percent.

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

d. As the ecological condition declines, threadleaf sedge, blue grama and big sagebrush become more dominant. Species most likely to invade the site as condition deteriorates are annual grasses, weeds and pricklypear.

4. Total Annual Production (Pounds per Acre Air-dry Weight Excellent Condition)

Favorable years	- 300 pounds
Median years	- 200 pounds
Unfavorable years	- 100 pounds

5. Soils

a. Soils associated with this site are very gravelly, droughty, usually of sandy texture & more than 20 inches deep over clean gravel or bedrock. The majority of the coarse fragments range from 2 mm to 3 inches in diameter, cover 50 to 75 percent of the soil surface, and make up at least 35 percent by volume of the soil mass. These soil surfaces are relatively unstable from a geological standpoint.

b. Soil taxonomic units which characterize this site are:
Cliffsand

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good forage for all seasons of the year for cattle, sheep, horses and wildlife.

2. Wood Products- None

3. Wildlife- See attached wildlife description.

4. Watershed (Hydrologic Interpretations)

This range site has a potential for low to moderate runoff. The soil cover complex numbers are:

Excellent	45
Good - high fair	55
Fair	70

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- Recreation potential for this site is low. Recreation use is primarily hunting.

6. Threatened or Endangered Plants and Animals - See wildlife description.

7. Location of Typical Example of the site (To be determined at the local field office.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.08	12.50
Good	51 - 75	.06	16.70
Fair	26 - 50	.03	33.33
Poor	0 - 25	.02	50.00

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.

10. Field Offices - Casper, Lander, Dubois, Riverton

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site occurs in most positions and may be found on all degrees of slope; however, it generally exists as outwash fans or glacial moraines. Elevations range from 3,700 feet to 6,000 feet.

2. Climatic Features- See attached climate description.

3. Native (climax) Vegetation

a. The climax plant community is dominated by cool season grasses. Potential vegetation is about 70% grasses and grass like plants, 15% forbs and 15% woody plants.

b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Bluebunch wheatgrass	35-50
Western wheatgrass	10-20
Needleandthread	10-20
Indian ricegrass	5-10
All Following Grasses and Grass-like Plants	5-15*
Prairie junegrass	Sandberg bluegrass
Blue grama	Threeawns
Upland sedges	
Forbs	
All Following Forbs	5-15*
Scarlet globemallow	Aster
Penstemon	Buckwheat
Pussytoes	Western yarrow
Phlox	
Woody Plants	
Juniper	T-1 0
Big sagebrush	T-5

*Of plants in this group, no more than 5% of any species is allowable in the potential plant community.

c. Scattered juniper trees occur on this site. Overstory canopy cover is less than 10 percent.

d. Approximate percent ground cover is 20-30 percent.

e. As the ecological condition declines, upland sedges, sandberg bluegrass, prairie junegrass and junipers become more dominant. Species most likely to invade the site as condition deteriorates are annual grasses and weeds.

4. Total Annual Production (Pounds per Acre Air-dry Weight
Excellent Condition)

Favorable years	- 400 pounds
Median years	- 300 pounds
Unfavorable years	- 200 pounds

5. Soils

a. This site consists of bouldery or cobbly soils. The first 20 inches of soil contain at least 35 percent, by volume, of coarse fragments that exceed 3" in diameter. Because of the cobble and boulders, these soils cannot store as much water for plant use as other deep soils. Plants can root below 20 inches in these soils. Soil surfaces are relatively stable. Because of these soil characteristics, plant density is reduced.

b. Soil taxonomic units which characterize this site are:

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good forage for all seasons of the year for cattle, sheep, horses, and wildlife.

2. Wood Products- Scattered juniper trees occur on this site. There may be some value for firewood.

3. Wildlife- See attached wildlife description.

4. Watershed (Hydrologic Interpretations)

This range site has a potential for moderate runoff. The soil cover complex numbers are:

Excellent	60
Good - high fair	70
Fair	80

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- Recreational potential for this site is low. Recreation use is primarily hunting.

- 6. Threatened or Endangered Plants and Animals - See wildlife description.
- 7. Location of Typical Example of the site (To be determined at the local field office.)
- 8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.10	10.00
Good	51 - 75	.08	12.50
Fair	26 - 50	.05	20.00
Poor	0 - 25	.03	33.33

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

- 9. See attached relative forage preference sheet for this precipitation zone.
- 10. Field Offices - Casper, Lander, Dubois, Riverton

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site occurs on all slopes in an upland position. Elevations range from 3,700 feet to 6,000 feet.

2. Climatic Features- See attached climate description.

3. Native (climax) Vegetation

a. The climax plant community is dominated by halophytes, salt tolerant plants, and drought-resistant grasses. Potential vegetation is about 40% grasses and grass-like plants, 10% forbs and 50% Gardner saltbush and other woody plants.

b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Indian ricegrass	10-25
Bottlebrush squirreltail	10-25
Rhizomatous wheatgrasses	10-15
Western, Streambank, Thickspike	
All Following Grasses and Grass-like Plants	T-10*
Blue grama	Sandberg bluegrass
Needleandthread	
Forbs	
All Following Forbs	5-10*
Woody aster	Buckwheat
Salsify	Biscuitroot
Onion	Milkvetch
Woody Plants	
Gardner saltbush	20-40
Bud sagebrush	5-10
All Following Woody Plants	T-10*
Birdfoot sagebrush	Greasewood Winterfat

*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

c. Approximate percent ground cover is 10-20 percent.

d. As the ecological condition declines, birdfoot sagebrush becomes more dominant. Species most likely to invade the site as condition deteriorates are halogeton and other annuals.

4. Total Annual Production Pounds per Acre Air-dry Weight (Excellent Condition)

Favorable years	- 400 pounds
Median years	- 300 pounds
Unfavorable years	- 200 pounds

5. Soils

a. The soils associated with this site are various depths, but generally 10 inches or more in depth. Top soil textures and subsoil permeability are variable. The first 20 inches has zones where the salt content exceeds .2 percent and/or 15 percent exchangeable sodium. The pH is usually greater than 8.5 in the surface soils. Halophytes are always a major part of the plant community in climax condition. These soils appear extremely droughty due to high salt content.

b. Soils taxonomic units which characterize this site are:
Muff, Uffens, Pavillion (alkali), Lostwells (alkali)

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good forage for summer, fall, and winter for cattle, sheep, horses and wildlife.

2. Wood Products- None

3. Wildlife- See attached wildlife .

4. Watershed (Hydrologic Interpretations)

This range site has a potential for moderate to high runoff. soil cover complex numbers are:

Excellent	80
Good - high fair	85
Fair	90

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- Recreation potential for this site is low. Primary recreation use is hunting.

6. Threatened or Endangered Plants and Animals - See wildlife description.

7. Location of Typical Example of the site (To be determined at the local field office.)

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.10	10.00
Good	51 - 75	.08	12.50
Fair	26 - 50	.05	20.00
Poor	0 - 25	.03	33.33

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached forage preference sheet for this precipitation zone.

10. Field Offices - Casper, Lander, Dubois, Riverton

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site occurs on relatively flat slopes. Elevations range from 3,700 feet to 6,000 feet.
2. Climatic Features- See attached climate description.
3. Native (climax) Vegetation
 - a. The climax plant community is dominated by the more droughty and salt tolerant grasses and half-shrubs. Birdfoot sagebrush often makes up 20 to 40 percent of the climax plant community. Potential vegetation is about 50 percent grasses and grass-like plants, 10 percent forbs and 40 percent woody plants.
 - b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Rhizomatous wheatgrasses	20-30
Western, Streambank, Thickspike	
Bottlebrush squirreltail	10-20
Indian ricegrass	5-15
Sandberg bluegrass	T-5
Forbs	
All Following Forbs	T-10*
Onion	Pussytoes
Woody aster	Scarlet globemallow
Phlox	
Woody Plants	
Birdfoot sagebrush	20-40
Gardner saltbush	5-10
Winterfat	T-5
Bud sagebrush	T-5

*Of plants in these groups, no more than 5% of any species is allowable in the potential plant community.

- c. Approximate percent ground cover is 10-20 percent.
- d. As the ecological condition declines, birdfoot sagebrush becomes more dominant. Species most likely to invade the site as condition deteriorates are annual grasses and weeds.

4. Total Annual Production Pounds per Acre Air-dry Weight (Excellent Condition)

Favorable years	- 300 pounds
Median years	- 200 pounds
Unfavorable years	- 100 pounds

5. Soils

a. The soils on this site have a very slow infiltration rate. The soluble salt content is usually less than .2 percent in a pH of 8.5. This site in the pristine condition is predominantly birdfoot sagebrush, and has little, if any, saltbush. This site is very droughty.

b. Soil taxonomic units which characterize this site are:
Birdsley, Mudray, Effington

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good forage during the summer, fall and winter for cattle, sheep, horses, and wildlife.

2. Wood Products- None

3. Wildlife- See attached wildlife description.

4. Watershed (Hydrologic Interpretations)

This range site has a potential for high runoff. The soil cover complex numbers are:

Excellent	80
Good - high fair	85
Fair	90

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- Recreation potential for this site is low. Recreation use is primarily hunting.

6. Threatened or Endangered Plants and Animals - See wildlife description.

7. Location of Typical Example of the site (To be determined at the local field office.)

8. Other Pertinent Information

Technical Guide, Section IIB
 Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)
 GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.08	12.50
Good	51 - 75	.06	16.70
Fair	26 - 50	.03	33.33
Poor	0 - 25	.02	50.00

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.
10. Field Offices - Casper, Lander, Dubois, Riverton

Technical Guide, Section IIB
 Major Land Resource Area (32,34)
 5-9" Wind River Basin (5-9 WR)
 VERY SHALLOW VS
 Correlated Range Site No.D32XY276WY
 RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site usually occurs on steep slopes in an upland position. Elevation ranges from 3,700 feet up to 6,000 feet.

2. Climatic Features- See attached climate description.

3. Native (climax) Vegetation

a. The climax plant community is dominated by cool season mid grasses. Potential vegetation is about 65% grasses and grass like plants, 15% forbs and 20% woody plants.

b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Bluebunch wheatgrass	15-30
Indian ricegrass	5-15
Needleandthread	5-15
Rhizomatous wheatgrasses	5-10
Western, Streambank, Thickspike	
All Following Grasses and Grass-like Plants	5-15*
Bottlebrush squirreltail	
Blue grama	
Sandberg bluegrass	Prairie junegrass
Threeawns	Sand dropseed
Upland sedges	
Forbs	
All Following Forbs	5-15*
Evening primrose	Aster
Stemless hymenoxys	Buckwheat
Milkvetch	Paintbrush
Phlox	Nailwort
Pussytoes	Scarlet globemallow
Western yarrow	
Woody Plants	
Winterfat	1-5
All Following Woody Plants	10-20*
Big sagebrush	Black sagebrush
Skunkbush sumac	Yucca
Juniper	Douglas rabbitbrush
Rubber rabbitbrush	

*Of plants in these groups, no more than 50 of any species is allowable in the potential plant community.

c. Juniper trees occur on this site primarily in the northern portion. As you move southward they are replaced by skunkbush sumac.

d. Approximate percent ground cover is 15-20 percent.

e. As the ecological condition declines, big sagebrush, skunkbush, juniper, and forbs become more dominant. Species most likely to invade the site as condition deteriorates are annual grasses and weeds.

4. Total Annual Production (Pounds per Acre Air-dry Weight Excellent Condition)

Favorable years	- 250 pounds
Median years	- 175 pounds
Unfavorable years -	75 pounds

5. Soils

a. The soil is generally less than 10 inches deep, although there may exist small no-soil areas and/or pockets of deep soil. The bedrock will include all kinds except soft clay shales, igneous and some volcanic soils. This site is generally droughty due to limited moisture storing ability.

b. Soil taxonomic units which characterize this site are:

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good forage for all seasons of the year for cattle, sheep, horses and wildlife. Accessibility and total production is limited.

2. Wood Products- Scattered juniper trees occur on this site. There may be some firewood value.

3. Wildlife- See attached wildlife description.

4. Watershed (Hydrologic Interpretations)

This range site has a potential for moderate runoff. The soil cover complex numbers are:

Excellent	85
Good - high fair	90
Fair	95

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

5. Recreation and Natural Beauty- Recreation potential for this site is low. Recreation use is primarily hunting.

6. Threatened or Endangered Plants and Animals - See wildlife description.

7. Location of Typical Example of the site (To be determined at the local field office.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.08	12.5
Good	51 - 75	.05	20.0
Fair	26 - 50	.03	33.3
Poor	0 - 25	.02	50.0

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.

10. Field Offices - Casper, Lander, Dubois, Riverton

RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site is usually found in an upland position on gently sloping to very steep topography. It may be found on all exposures but is primarily on south and west facing slopes. The elevation ranges from 3,700 feet to 6,000 feet.

2. Climatic Features- See attached climate description.

3. Native (climax) Vegetation

a. The climax plant community is dominated by drought tolerant grasses, forbs and shrubs. Potential vegetation is a mixture of 50% grasses and grass-like plants, 25% forbs and 25% woody plants.

b. Major plant species and percentages of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Needleandthread	15-25
Indian ricegrass	15-25
Rhizomatous wheatgrasses	5-15
Western, Thickspike, Streambank	
All Following Grasses and Grass-like Plants	10-20*
Bluebunch wheatgrass Sandberg bluegrass	
Prairie sandreed Sand dropseed	
Alkali sacaton Blue grama	
Threeawns Upland sedges	
Forbs	
Wyethia	5-15
All Following Forbs	10-20*
Scurfpea Onion Buckwheat	
Phlox Skeletonweed Milkvetch	
Lupine Scarlet globemallow Aster	
Dock Paintbrush Minerscandle	
Toadflax	
Woody Plants	
Skunkbush sumac	5-15
All Following Woody Plants	5-15*
Rubber rabbitbrush Douglas rabbitbrush	
Silver sagebrush Big sagebrush	
Yucca	

*Of plants in these groups, no more than 50 of any species is allowable in the potential plant community.

c. Approximate percent ground cover is 10-20 percent.

d. As the ecological condition declines, threadleaf sedge, wyethia, skunkbush and yucca become more dominant. Species most likely to invade this site as cover deteriorates are cheatgrass, other annual grasses and forbs.

4. Total Annual Production (Pounds per Acre Air-dry Weight Excellent Condition)

Favorable years	- 250 pounds
Median years	- 175 pounds
Unfavorable years -	75 pounds

5. Soils

a. The soil is generally less than 10 inches deep, although there may exist small areas of exposed bedrock and/or pockets of deep soil. Also intermingled throughout this site are areas of Sands and Sandy sites. The bedrock generally is sandstone although there may be areas of soft shale bedrock present also. This site is generally droughty due to limited moisture storing ability.

b. Soil taxonomic units which characterize this site are:

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good forage for all seasons of the year for livestock and wildlife.

2. Wood Products- None

3. Wildlife- See attached wildlife description.

4. Watershed (Hydrologic Interpretations)

This range site has a potential for moderate runoff. The soil cover complex numbers are:

Excellent	85
Good - high fair	90
Fair	95

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

Technical Guide, Section IIB
Major Land Resource Area (32,34)
5-9" Wind River Basin (5-9 WR)

5. Recreation and Natural Beauty- Recreation potential for this site is low. Recreation uses are primarily hunting and bird watching.

6. Threatened or Endangered Plants and Animals - See wildlife description.

7. Location of Typical Example of the site (To be determined at the local field office.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.08	12.5
Good	51 - 75	.05	20.0
Fair	26 - 50	.03	33.3
Poor	0 - 25	.02	50.0

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.

10. Field Offices - Casper, Lander, Dubois, Riverton

Technical Guide, Section IIB
 Major Land Resource Area (32,34)
 5-9" Wind River Basin (5-9 WR)
 SHALE SH
 Correlated Range Site No.D32XY254WY
 RANGE SITE DESCRIPTION

A. PHYSICAL CHARACTERISTICS

1. Physiographic Features- This site is usually found in the upland position and on steep slopes. Elevation ranges from 3,700 feet to 6,000 feet.

2. Climatic Features- See attached climate description

3. Native (climax) Vegetation

a. The climax vegetation is dominated by plants that can withstand salty and droughty conditions. Potential vegetation is about 60% grasses and grass-like plants, 15% forbs and 25% woody plants.

b. Major plant species and percentage composition of the potential plant community by air-dry weight:

SPECIES	PERCENT
Grasses and Grass-like Plants	
Bottlebrush squirreltail	5-15
Western wheatgrass	5-10
Indian ricegrass	10-20
Bluebunch wheatgrass	15-25
All Following Grasses and Grass-like Plants	T-10*
Alkali sacaton	
Blue grama	
Sandberg bluegrass	
Forbs	
All Following Forbs	5-15*
Milkvetch	Dock
Woody aster	Phlox
Princesplume	Biscuitroot
Hymenopappus	Buckwheat
Wire lettuce	Sagewort
Goldenweed	Dusty maiden
Woody Plants	
Gardner saltbush	5-15
Winterfat	1-5
Bud Sagebrush	1-5
All Following Woody Plants	5-15*
Birdfoot sagebrush	Big sagebrush
Skunkbush sumac	Shadscale saltbush
Rubber rabbitbrush	Douglas rabbitbrush

*Of plants in these groups, no more than 5% of any species is

allowable in the potential plant community.

- c. Approximate percent ground cover is 10-15 percent.
- d. As the ecological condition declines, birdfoot sagebrush and woody aster become more dominant. Species most likely to invade the site as condition deteriorates are annual grasses and weeds.

4. Total Annual Production (Pounds per Acre Air-dry Weight
Excellent Condition)

Favorable Years	- 200 pounds
Median Years	- 100 pounds
Unfavorable years -	50 pounds

5. Soils

a. The soils associated with this site are generally less than 10 inches deep, with many outcrops of clay shale bedrock. These shales are usually salty in varying degrees and normally produce sparse stands of halophytes, and some of the more salt-tolerant grasses. This site is very droughty because of the undeveloped salty shale material, the steepness of the slope, and the sparse vegetative cover.

b. Soil taxonomic units which characterize this site are:
Persayo (shallow phase)

c. Complete soil descriptions are available in the soil survey descriptive legend.

B. MAJOR USES AND INTERPRETATIONS FOR:

1. Grazing- This site provides good forage for all seasons of the year for cattle, sheep, horses and wildlife. Production is low due to the droughty nature of the site.

2. Wood Products- None

3. Wildlife- See attached wildlife description.

4. Watershed (Hydrologic Interpretations)

This range site has a potential for high runoff. The soil cover complex numbers are:

Excellent	80
Good - high fair	85
Fair	90

(See Section 4, SCS National Engineering Handbook for runoff quantities and hydrologic curves.)

Technical Guide, Section IIB
 Major Land Resource Area (32,34)
 5-9" Wind River Basin (5-9 WR)

5. Recreation and Natural Beauty- Recreation potential for this site is low. Recreation use is primarily hunting.

6. Threatened or Endangered Plants and Animals - See wildlife description.

7. Location of Typical Example of the site (To be determined at the local field office.)

8. Other Pertinent Information

GUIDE TO SUGGESTED INITIAL STOCKING RATE

Condition	% Climax Vegetation	(AUM'S/ACRE)	Acres/AUM
Excellent	76 - 100	.07	14.0
Good	51 - 75	.05	20.0
Fair	26 - 50	.02	50.0
Poor	0 - 25	.01	100.0

RELATIVE FORAGE PREFERENCE FOR ANIMAL USE

9. See attached relative forage preference sheet for this precipitation zone.

10. Field Offices - Casper, Lander, Dubois, Riverton