

2017 Western National Rangeland Assessment CDE Part 5 - Grazing Management Scenario

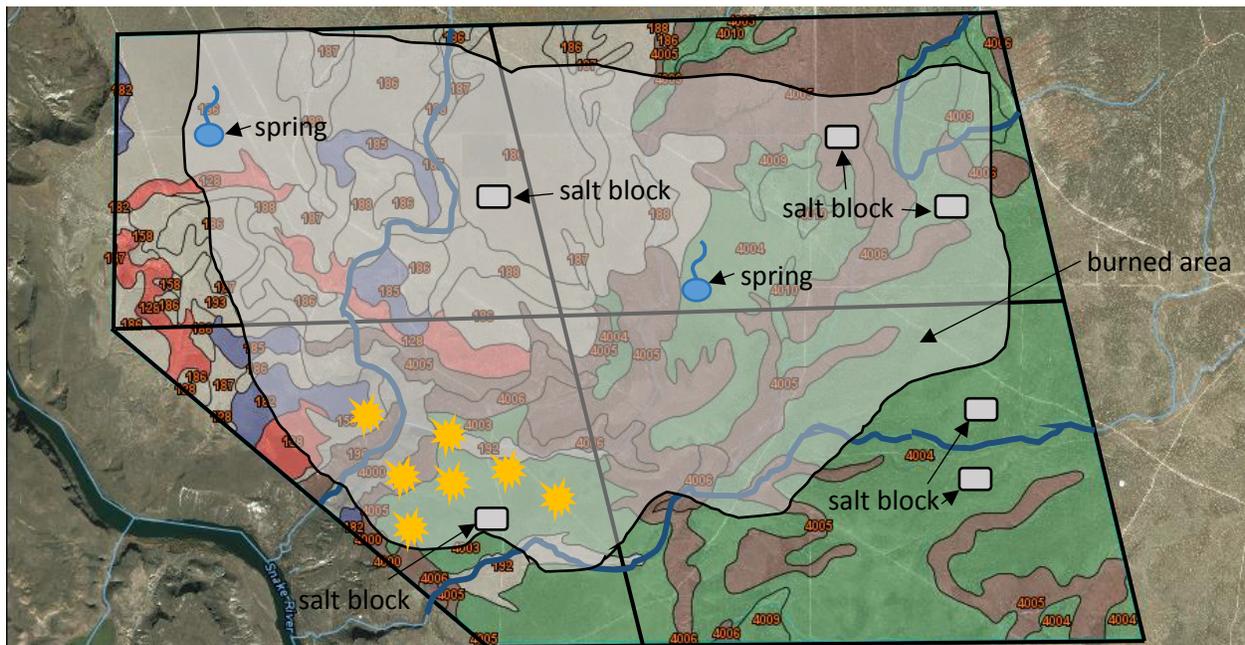
You are a rancher who leases the Snake River Crest allotment south of Boise, ID. This allotment is 11,237 acres along the Snake River and is comprised of four pastures. You use this allotment for spring and summer grazing for your herd of Hereford cow/calf pairs. You also rent out the northeast and southeast pastures to Basque herdsmen that pass through every spring with their flock of sheep on their way to Nevada.

In 2015, a wildfire came through and burned most of the allotment. Fortunately, the winter and spring were wetter than normal and plants seem to be recovering. The southwest pasture, however, is not recovering well; rush skeletonweed has spread throughout the pasture, hence, you will need to reseed. You have also noticed that several of the streams are starting to look degraded in the areas most used by the livestock. Precipitation in 2017 has been **favorable** with above average rainfall.

You would like to know if your current herd size will need to be decreased, increased, or kept the same.

Current Grazing Plan:

- **530 Hereford cows** that weigh 1,300 lbs on average, spend March to April in the northeast pasture. They calve during this time.
- The cow/calf pairs are then moved to the southeast pasture from May to June.
- The pairs are then moved to the southwest pasture from July to August. Calves are weaned and sent to a feedlot.
- Finally, the cows finish the summer in the northwest pasture for the month of September.
- **2,000 sheep** (0.2 AUE) go through the northeast and southeast pastures after the cow/calf pairs have moved through. They spend 1 month total in the pastures and then are moved off.



 Infested area – rush skeletonweed
 Perennial stream

Gray, transparent area is the land that was burned. It does not mean that it is necessarily unavailable for use.

Soil Map Legend

Map Color	Site Description Name	Acres	Percent of Total Area
Green/Brown	silty (0-12% slope)	6,383	56.8
White	shallow calcareous loam (2-10% slope)	4,051	36.1
Red	shallow loam (2-15% slope)	436	3.9
Blue	loamy (1-65% slope)	367	3.3
Total =		11,237	~100%

Vegetation Productivity

Map Color	Site Description Name	Favorable Year (lbs/ac)	Normal Year (lbs/ac)	Unfavorable Year (lbs/ac)
Green/Brown	silty (0-12% slope)	1,000	700	500
White	shallow calcareous loam (2-10% slope)	600	450	250
Red	shallow loam (2-15% slope)	700	500	300
Blue	loamy (1-65% slope)	1,900	1,200	800

In a favorable year, the amount and distribution of precipitation and the temperature make growing conditions substantially better than average. In a normal year, growing conditions are about average. In an unfavorable year, growing conditions are well below average, generally because of low available moisture.

Ecological Site Soil Types and Characteristic Vegetation

Map Color	Site Description Name	Characteristic Vegetation	Recommended Utilization
Green/Brown	Silty (0-12% slope)	Thurber's needlegrass beardless wheatgrass Sandberg bluegrass western yarrow arrowleaf balsamroot spiny hopsage Wyoming big sagebrush	50%
White	Shallow calcareous loam (2-10% slope)	Indian ricegrass bottlebrush squirreltail needle-and-thread milkvetch penstemon black sagebrush shadscale saltbrush	40%
Red	shallow loam (2-15% slope)	Indian ricegrass Thurber's needlegrass bluebunch wheatgrass western yarrow pussytoes Wyoming big sagebrush spiny hopsage	40%
Blue	loamy (1-65% slope)	Thurber's needlegrass bottlebrush squirreltail Sandberg bluegrass arrowleaf balsamroot tapertip hawksbeard foothills big sagebrush	50%

Key

Supply

Green/Brown area = 6,383 acres x .5 (utilization) x 1,000 lbs/ac = 3,191,500 lbs

White area = 4,501 acres x .4 (utilization) x 600 lbs/ac = 972,240 lbs

Red area = 436 acres x .4 (utilization) x 700 lbs/ac = 122,080 lbs

Blue area = 367 acres x .5 (utilization) x 1,900 lbs/ac = 348,650 lbs

$3,191,500 + 972,240 + 122,080 + 348,650 = 4,634,470$ lbs forage supply

$4,634,470 \text{ lbs} / 750 \text{ lbs/AUM} = 6,179$ AUMs supply

Demand

530 cow/calf pairs x 7 months x 1.3 AUE = 4,823 AUMs

2,000 sheep x 1 month x .2 AUE = 400 AUMs

$4,823 + 400 = 5,223$ AUMs demand

$5,223 \text{ AUMs} \times 750 \text{ lbs/AUM} = 3,917,250$ lbs forage demand

Increase stocking rate

Choose the correct management activities that apply to improve this site (*Select "Yes" for all that apply and select "No" for all that do not; 2pts each*)

Yes | No

- Defer from spring grazing
- Rest from grazing for a growing season
- Install a rotation grazing system
- Add or revise fencing
- Develop additional water sites
- Control brush, trees and/or noxious weeds

Yes | No

- Seed or interseed with adapted species
- Reduce human recreation activities on site
- Manage for endangered species
- Change salt location