

# Western National FFA Rangeland Assessment Event Management Scenario- Fall 2014

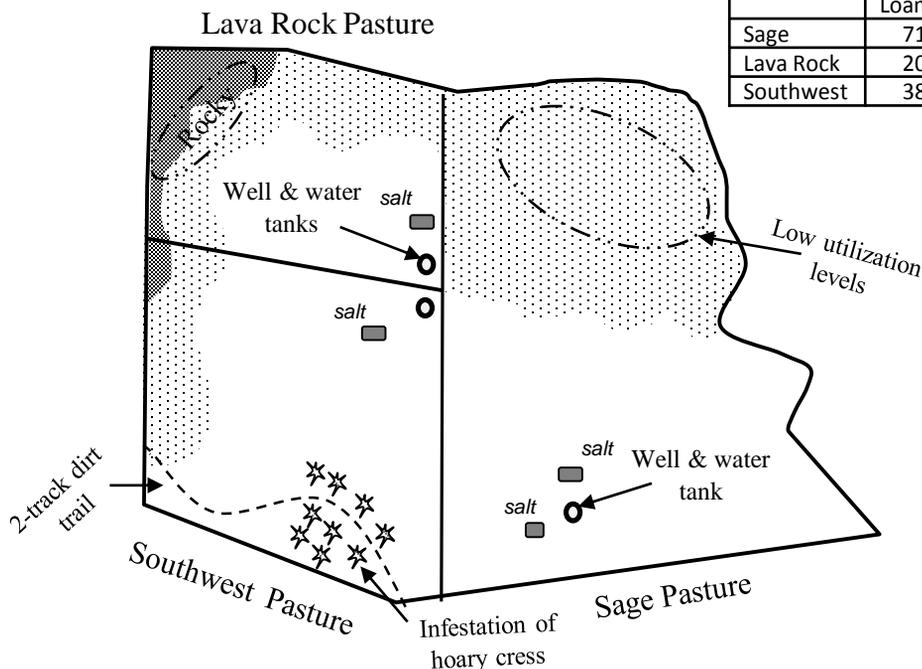
The Rocky Juniper Allotment is located in northwestern Nevada. The leasee runs dorset-rambouillet cross ewes on the allotment for summer into early fall. The allotment includes 2,160 acres of grazing on 3 pastures of BLM land.

The sheep rancher is concerned about the low utilization levels in the large pasture. She would like to see a more even distribution to be able to stay in the allotment longer without vegetation degradation. She is also concerned about the infestation of hoary cress along the 2-track recreational trail that crosses the Southwest Pasture and over the years, juniper has been encroaching into mountain big sagebrush areas. The rancher would like to know if her current flock size will need to be decreased, increased, or kept the same.

### Current Grazing Plan:

- 890 **dorset-rambouillet ewes** (0.2 AUE) spend the winter and lamb (November through March) off the allotment at the ranch headquarters where they are fed hay.
- The ewes are turned out with **4 llamas** (0.3 AUE) used for protection at the beginning of April on the allotment where they graze through the three pastures.
- Lambs are weaned and taken to market at the end of September.
- The ewes and llamas continue to graze on the allotment until the end of October when they are moved to the winter holding pasture and placed with rams. When the ewes go back out on the range in the spring the rams stay at ranch headquarters.

Pasture	Acres of Sandy Loam	Acres of Gravelly Loam	Acres of Rocky Loam
Sage	716	476	0
Lava Rock	200	130	112
Southwest	388	106	32



 **Sandy Loam Ecological Site** – Mostly Idaho fescue with bluebunch wheatgrass, Columbia needlegrass, and scattered mountain big sagebrush. This site produces 1150 lbs/ac. Recommended utilization is 45%.

 **Gravelly Loam Ecological Site** - Mostly Idaho fescue/bluebunch wheatgrass with big sagebrush and juniper present. This site produces 950 lbs/ac. Recommended utilization is 45%

 **Rocky Loam Ecological Site** - Extremely rocky soil with lots of boulders present. Old growth juniper woodland with some Idaho Fescue present. This site produces 700 lbs/ac. Recommended utilization is 40%

**Part 5 - Stocking Rate and Management Recommendations (Completed at beginning or end of event)(90 points)**

Students will complete the problem individually but at the same time as a group.

Supply of usable forage = 1,019,520 pounds AND 1,359.4 AUMs 30 pts

Forage demand = 940,800 pounds AND 1,254.4 AUMs 30 pts

Determine if the stocking rate is appropriate for the site for 2013-2014. (Check appropriate box) 10 pts

- Decrease Stocking Rate  Increase Stocking Rate  Keep Rate the Same

Space for Calculations:

**DEMAND:**

890 sheep x 0.2 AUE x 7 months = 1,246 AUMs

or 1,246 AUMs x 750 lbs/AUM = 934,500 lbs

forage

4 llamas x 0.3 AUE x 7 months = 8.4 AUMs or 8.4

AUMs x 750 lbs/AUM = 6,300 lbs forage

Total lbs of forage demand = 1,246 AUMs + 8.4

AUMs = 1,254.4 AUMs or 934,500 lbs + 6,300

lbs forage = 940,800 lbs forage demand

**SUPPLY:**

Sandy Loam Site = 1,304 ac x 1,150 lbs/ac x 45%

= 674,820 lbs forage or 674,820 lbs / 750

lbs/AUM = 899.76 AUMs

Gravelly Loam Site = 712 ac x 950 lbs/ac x 45%

= 304,380 lbs forage or 304,380 lbs / 750 lbs/AUM

= 405.84 AUMs

Sandy Site = 144 ac x 700 lbs/ac x 40% = 40,320

lbs forage or 40,320 lbs / 750 lbs/AUM = 53.76

AUMs

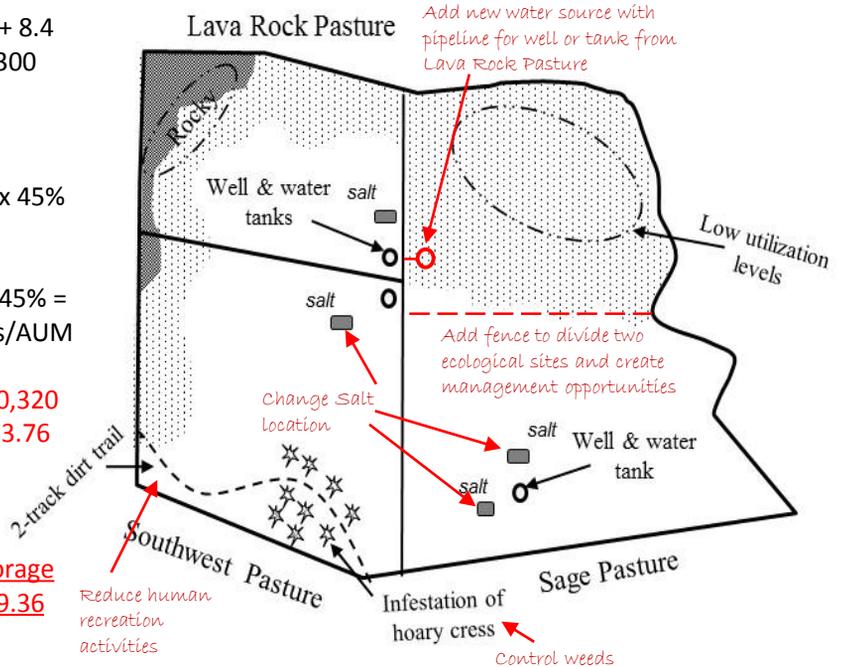
Total lbs for forage supply = 674,820 lbs +

304,380 lbs + 40,320 lbs = 1,019,520 lbs forage

supply or 1,019,520 / 750 lbs/AUM = 1,359.36

AUMs

\* There are multiple ways to do this problem.



Choose the correct management activities that apply to improve this site (Select "Yes" for all that apply and "No" for all that do not; 2 pts each) 20 pts

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

Yes | No

- Control brush, trees and/or noxious weeds
- Seed or interseed with adapted species
- Reduce human recreation activities on site
- Manage for endangered species
- Change salt location