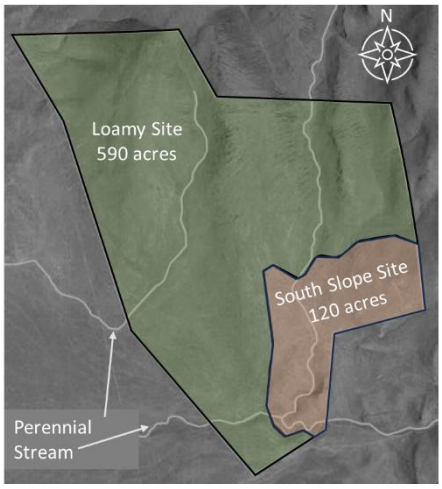
CHAPTER NAME: _____ STUDENT ID #: _____

Part 1A - Stocking Rate and Management Recommendations *(90 points)*

The Bureau of Land Management (BLM) and a rancher permittee want to try a new approach to reduce cheatgrass on an allotment in Elko County, NV. The South Slope Allotment has been dominated by cheatgrass for several decades. Land managers want to try to use targeted grazing to reduce cheatgrass and increase native perennial grasses.



This allotment includes two ecological sites, Loamy and South Slope, which historically produced perennial bunchgrasses and sagebrush. This proposed targeted grazing project will graze this allotment in early spring and late fall to try to damage and reduce cheatgrass. The project goal is to graze enough animals to remove 75% of the annual and perennial grasses on the allotment. Initial estimates of herbaceous forage on these sites are as listed in this table. →

	Type of Forage	Production (lbs/ac/year)
LOAMY	Annual Grasses	450
	Perennial Plants	300
SOUTH SLOPE	Annual Grasses	525
	Perennial Plants	300

This project intends to graze 450 yearling heifers and steers (weighing on average 800 lbs) for 30 days in early spring (i.e., April-May). Then in October and November the allotment will be grazed for 45 days by 28 ranch horses (weighing on average 1080 lbs).

What are your estimates of usable forage supply and forage demand while animals are the allotment?

Round estimates to the nearest 10th of a pound or AUM (i.e., 1 unit beyond the decimal).

Supply of usable forage = _____ pounds **AND** _____ AUMs *30 pts*

Forage demand = _____ pounds **AND** _____ AUMs *30 pts*

Determine if the stocking rate is appropriate for the site. You must show your work in order to receive full credit. (Check appropriate box) *10 pts*

❒ Decrease Stocking Rate ❒ Increase Stocking Rate ❒ Keep Rate the Same

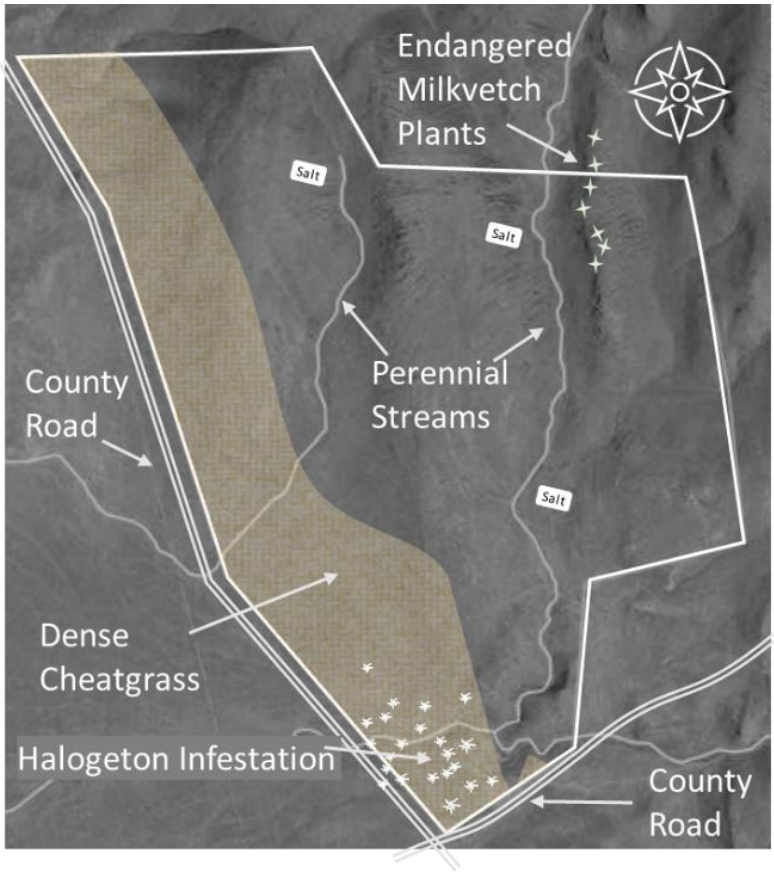
Space for Calculations:

↓↓ *Make sure to offer management suggestions on the other side of this page.* ↓↓

CHAPTER NAME: _____ STUDENT ID #: _____

The land managers have several considerations and concerns as they initiate this targeted grazing project. The grazing intensity will be increased along the west side of the allotment where there are county roads. This is a focus area because the cheatgrass is dense near these roads where vehicles and careless drivers can easily ignite a fire.

There are two other plants on the allotment the land managers are concerned about. There is a halogeton patch in the southern corner which is of concern because the heifers and steers may be poisoned by eating this plant. And there is an endangered milkvetch population on a ridge on the eastern edge of the allotment where managers will need to monitor and consider management options.



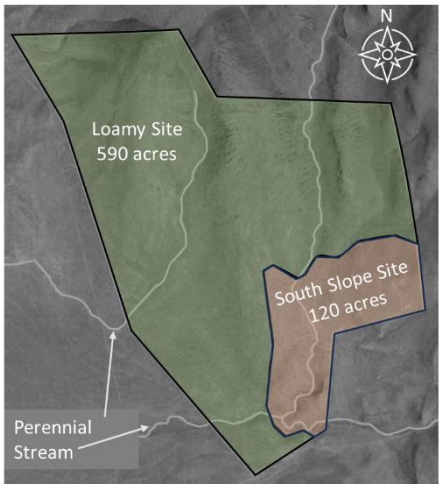
Choose the correct management activities that apply to improve this site *(Select "Yes" for all that apply and select "No" for all that do not; 2pts each)* *20 pts*

Yes	No		Yes	No	
❑	❑	Defer from spring grazing	❑	❑	Control brush, trees and/or noxious weeds
❑	❑	Rest from grazing for a growing season	❑	❑	Seed or interseed with adapted species
❑	❑	Install a rotation grazing system	❑	❑	Reduce human recreation activities on site
❑	❑	Add or revise fencing	❑	❑	Manage for endangered species
❑	❑	Develop additional water sites	❑	❑	Change or add salt location

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What are your estimates of usable forage supply and forage demand while animals on the range? *Round estimates to the nearest 10th of a pound or AUM (i.e., 1 unit beyond the decimal).*

Supply of usable forage = 406,125 pounds **AND** 541.5 AUMs *30 pts*

Forage demand = 366,525 pounds **AND** 488.7 AUMs *30 pts*

Determine if the stocking rate is appropriate for the site. You must show your work in order to receive full credit. (Check appropriate box) *10 pts*

❒ Decrease Stocking Rate ❒ Increase Stocking Rate ❒ Keep Rate the Same

Space for Calculations:

Forage Supply:

- Loamy = 450 lbs/acre annual + 300 lbs/ac perennial = 750 lbs/acre × 590 acres = 442,500 lbs
- South Slope = = 525 lbs/acre annual + 300 lbs/ac perennial = 825 lbs/acre × 120 acres = 99,000 lbs
- Total = 442,500 lba + 99,000 lba\s = 541,500 lbs × 75% desired consumption = **406,125 lbs** or **541.5 AUMS**

Forage Demand:

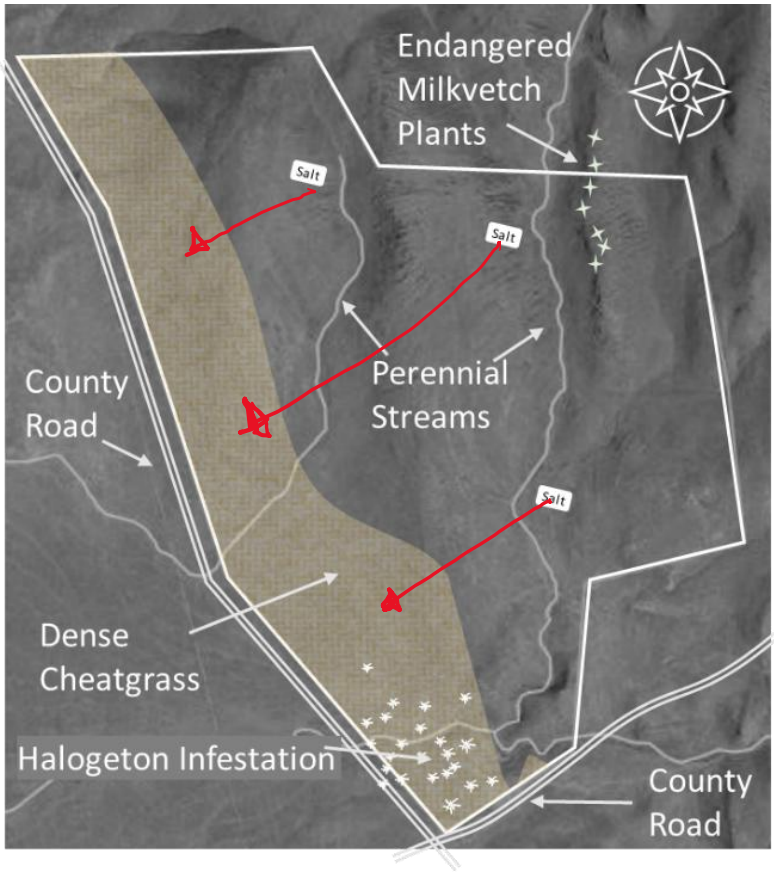
- Heifers and steer will eat 24 lbs/day (i.e, 800 lbs × 3% of body weight/day = 24lbs/day) × 450 animals × 30 days = 324,000 lbs demand for cattle
- Horses will eath 33.75 lbs per day (i.e, 1080 lbs × 2.5% of body weight/day if ruminant = 27 bs/day + 25% or 6.75 lbs because horses eat more than a ruminant of same size = 33.75 lbs) × 28 horses × 45 days = 42,525 lbs demand for horses
- **Total demand** = 324,000 + 42,525 = **366,525 lbs** demand or **488.7 AUMs**

↓↓ *Make sure to offer management suggestions on the other side of this page.* ↓↓

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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)* *20 pts*

Yes	No		Yes	No	
❑	☒	Defer from spring grazing	X	❑	Control brush, trees and/or noxious weeds
❑	☒	Rest from grazing for a growing season	❑	☒	Seed or interseed with adapted species
❑	☒	Install a rotation grazing system	❑	☒	Reduce human recreation activities on site
❑	☒	Add or revise fencing	X	❑	Manage for endangered species
❑	☒	Develop additional water sites	X	❑	Change or add salt location