

Reference Sheet

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Date: December 2010

Composition (Indicators 10 and 12) based on: Biomass

Indicators.

1. Number and extent of rills: None

2. Presence of water flow patterns: <3 ft., uncommon, soil erosion slight. 1-2 inch accumulation of grass and seeds in depositional areas

3. Number and height of erosional pedestals or terracettes: None

4. Bare ground from ESD or other studies: Based upon line-point intercept data, grassland bare ground is 0-6%. Bare ground is often associated with gopher mounds. Hilltops with poorer soils have more bare ground, estimated at 44%.

5. Number of gullies and erosion associated with gullies: No gully formation in drainages

6. Extent of wind scoured, blowouts and/or depositional areas: None

7. Amount of litter movement: Little to no movement except along trails and bedding areas where disturbed and from water flow patterns. Little is composed primarily of grass fragments and seeds.

8. Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values): 6 very resistant to erosion

9. Soil surface structure and SOM content (include type of structure and A-horizon color and thickness): granular, with many, very fine roots throughout A horizon to 18 inches. Color moist 10YR 3/3 dark brown, dry 10YR 4/3-4 dark brown-dark yellowish brown

10. Effect of plant community composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff: Roots of perennial and annual grasses promote infiltration by creating ped interspaces. The high amount of cover from living and dead grasses reduce raindrop impact and slow overland flow, limiting erosion and increasing infiltration time.

11. Presence and thickness of compaction layer: A compaction layer may be present 1 inch below the surface on trails, with a platy structure. None elsewhere.

12. Functional/Structural Groups: Dominants: Annual grasses Sub-dominants: Perennial grasses (NAPU, PHAQ) Other: Annual forbs (e.g. ERBO, ERMO, PIEC, thistles) > Perennial shrubs > FOVU

13. Amount of plant mortality and decadence (include which groups are expected to show mortality or decadence): Perennial grasses are long-lived and exhibit a variety of bunch sizes representing ages. Annual grasses and forbs exhibit yearly mortality during the dry summer.

14. Average percent litter cover (99%) and depth (1/2 inch) Litter is high in grasslands but may be lower (42%) on hilltops dominated by *Erodium*.

15. Expected annual production: 1200-2500 lbs/acre, normal year 1800 lbs/acre

16. Potential invasive (including noxious) species (native and non-native): *Centaurea solstitialis* is present in some area of the sheep unit and has potential to spread. *Foeniculum vulgare* is present in patches throughout the sheep unit and has potential to spread, despite periodic grazing of the plants. *Picris eciodes* is abundant throughout the sheep unit and shows no signs of grazing. *Eremocarpus setigerus* is prevalent in barren areas on hilltops. Other potential invasives in low numbers in the pastures include *Cynara cardunculus*, *Silybum marianum*, *Marrubium vulgare*, and *Brassica nigra*.

17. Perennial plant reproductive capability: *Nassella* seed stalks are present on mature plants if not grazed. *Nassella* seedlings are common. *Phalaris aquatica* plants typically have seed stalks present and plants may become woody from selective grazing.