

Ecological Reference Worksheet

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Reference site used? Yes/No

No

Date: 4/26/2005 MLRA: 70A Ecological Site: Salt Meadow This *must* be verified based on soils and climate (see Ecological Site Description). Current plant community *cannot* be used to identify the ecological site.

Indicators: For each indicator, describe the potential for the site. Where possible, (1) use numbers, (2) include expected range of values for above and below average years for <u>each</u> community within the reference state, when appropriate & (3) site data. Continue description on separate sheet.	Indicator Weight
1. Number and extent of rills : None	
2. Presence of water flow patterns: None	
3. Number and height of erosional pedestals or terracettes: None	
4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground) : Bare Ground 10-20%	
5. Number of gullies and erosion associated with gullies: None	
6. Extent of wind scoured, blowouts and/or depositional areas: None	
7. Amount of litter movement (describe size and distance expected to travel) : Typically slight, however during major flooding events this site slows water flow and captures litter and sediment.	
8. Soil surface (top few mm) resistance to erosion (stability) values are averages - most sites will show a range of values for both plant canopy and interspaces, if different): Stability class rating anticipated to be 5-6 at soil surface. This will need to be verified at reference area.	
9. Soil surface structures and SOM content (include type and strength of structure, and A-horizon color and thickness for both plant canopy and interspaces, if different) : SOM ranges from 3-4%. (La Brier) A1-0 to 6 inches; brown (7.5 YR 5/2) silty clay loam, dark brown (7.5 YR 3/2) moist; weak medium subangular blocky structure parting to moderate coarse granular; slightly hard, very friable, slightly sticky and slightly plastic; many fine roots; many fine tubular pores; moderately alkaline.	
10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration runoff: Diverse grass, forb, shrub functional/structural groups and diverse root structure reduces raindrop impact slows overland flow providing increased time for infiltration to occur.	
11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site): None	
12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: indicate much greater than (>>), greater than (>), and equal to (=) : Dominants: Warm Season mid Bunchgrass>Warm Season Sod=Cool Season Mid Rhizomatous Subdominants: Warm Season Sod>Warm Season mid Sod Forming>Cool Season Grass like, Minor: Warm Season Bunchgrass=Shrubs>Forbs	
13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence) : None to slight	
14. Average percent litter cover (10 to 15 %) and depth (.25 to .5 inches). Litter percent will be reduced following or during extended drought and or wildfire event.	
15. Expected annual production (this is TOTAL above-ground production, not just forage production): (Low Production 1,200 lbs./ac.) (Average RV Production 2,500 lbs./ac.) (High Production 3,800 lbs./ac.) Production can be reduced following extended drought or the first growing season following wildfire.	
16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which after a threshold is crossed, "can, and often do , continue to increase regardless of the management of the site and may eventually dominate the site": Invasive plants should not occur in the reference plant community. However, salt cedar may infrequently invade if seed source is located near site. Inland salt grass and foxtail barley are the major native (non-invasive) increasers on this site.	
17. Perennial plant reproductive capability : All plants should be vigorous, healthy and reproductive depending on disturbances i.e.. Drought. Plants should have numerous seed heads, vegetative tillers etc. The only limitations are weather related, wildfire, and natural disease that may temporarily reduce reproductive capability.	

Photograph (s)

MLRA :

Date :

Ecological Site :

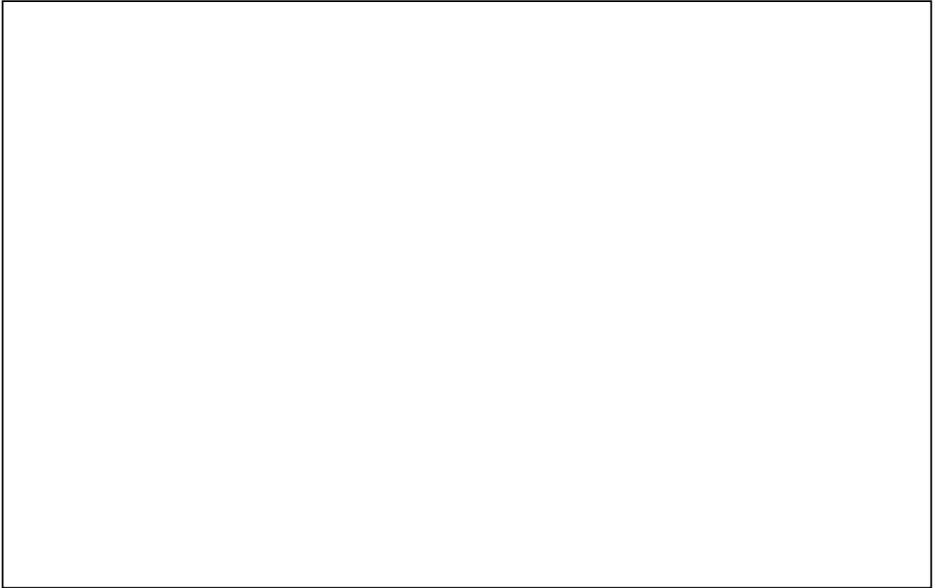


Photo # 1

Comments :

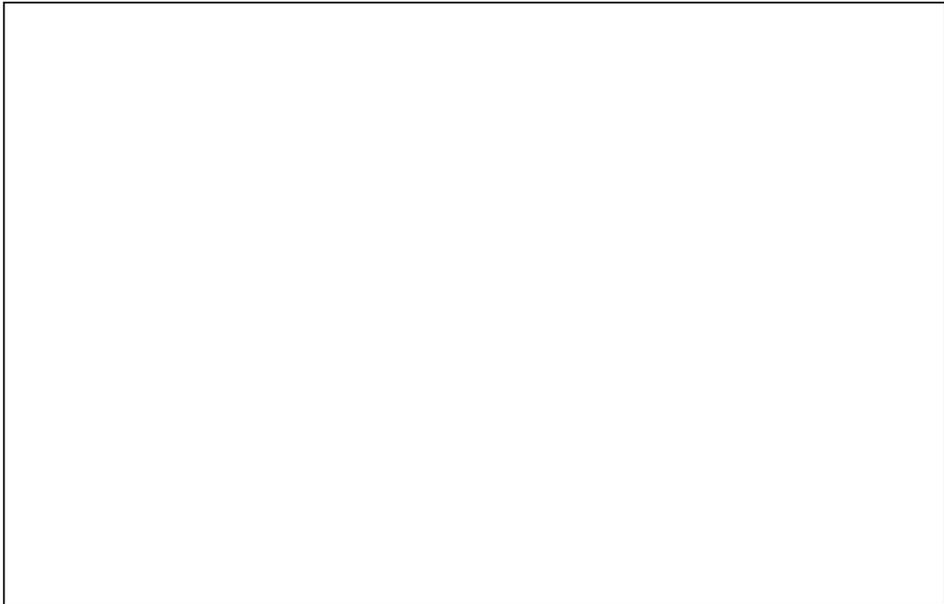


Photo # 2

Comments :

Appendix 4.

Functional / Structural Groups Worksheet

State New Mexico Office Las Vegas Ecological Site Salt Meadow

Observers Kenneth Alcon Date 4/26/05

Functional / Structural Groups			Species List for Functional / Structural Groups
Name	Potential ¹	Actual ²	Plant Names
Warm Season Mid Bunchgrass	D		Alkali Sacaton
Cool Season Mid Rhizomatous	D		Western Wheatgrass
Warm Season Sod Forming	D		Inland Salt Grass
Warm Season Mid Sod Forming	S		Vine Mesquite
Cool Season Grasslike	S		Sedge species
Warm Season Bunchgrass	M		Mat Muhly, Alkali Muhly
Shrubs	M		Fourwing Saltbush, Seepweed
Forbs	M		Golden Rod
Biological Crust ³			

Indicate whether each "structural/functional group" is a **Dominant (D)**(roughly 40-100% composition), a**Sub-dominant (S)** (roughly 10-40%) composition) a**Minor Component (M)** (roughly 2-5% composition), or a**Trace Component (T)** (<2% composition) based on weight or cover composition in the area of interest (e.g., "Actual ² column) relative to the "Potential ² column derived from information found in the ecological site/description and/or at the ecological reference area.

Biological Crust ³ dominance is evaluated solely on**cover** not composition by weight