Ecological Reference Worksheet

Author(s) / participant(s):	Kenneth Alcon				
Contact for lead author:	John Tunberg	Reference site used? Yes/No No			
Date: 4/26/2005 M	LRA: 70A Ecological Site: Loamy Upland	This <u>must</u> be verified based on soils			
	e Description). Current plant communitycannot be us				
	or, describe the potential for the site. Where possible,				
(3) site data. Continue descripti	below average years for each community within the ref	reference state, when appropriate &			
1. Number and extent of rills:					
None 2. Presence of water flow patter	orne.				
•					
3. Number and height of erosion	slopes following intense storm events) flow patterns are shonal pedestals or terracettes:	ort and not connected.			
3. Trumber and neight of crosse	mai pedestais of terracettes.				
None					
15% to 25% bare ground with bare	al Site Description or other studies (rock, litter, lichen, repatches generally less than 5 inches in diameter. Extended a system ded drought conditions	noss, plant canopy are not bare ground): d drought can cause bare ground to increase and ba			
patch area size may increase during5. Number of gullies and erosion					
_	on associated with games.				
None 6 Extent of wind secured bloom	wouts and/or depositional areas:				
o. Extent of wind scoured, blov	wonts and/or depositional areas:				
None 7 A C C C C C C C C C C C C C C C C C C	(1				
	(describe size and distance expected to travel):				
	eur more prevalent in areas with slope associated.				
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 in interspaces at soil surface. These values need verification at reference site. 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):					
Average SOM content 1-5%. Soils	s are typically deep to moderately deep, (Carnero) A1- 0 to	3 inches: brown (7.5 YR 5/2) loam, dark brown (7.5 YR			
3/2) moist; moderate very fine granular structure; loose, very friable, nonsticky and nonplastic; many fine roots and many fine interstitial pores.					
10. Effect of plant community c runoff:	omposition (relative proportion of different functional s	groups) & spatial distribution on infiltration &			
Diverse grass, forb, shrub function	Diverse grass, forb, shrub functional/structural groups and diverse root structure/patterns reduces raindrop impact slows overland flow providi				
increased time for infiltration to occur. Extended drought reduces short and mid bunchgrasses causing decreased infiltration and increased runoff 11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on thi					
site):					
None					
12. Functional/Structural Grou	ps (list in order of descending dominance by above-grou	und weight using symbols: indicate much greater			
than (>>), greater than (>) Dominants: Warm Season short bu) , and equal to (=) : unchgrass>, Sub-Dominates: Cool Season mid rhizomatous	s>mid cool season bunchgrass>Shrubs, Others: War			
Season Forbs>Leguminous forbs=	cool season forbs=warm season short stoleniferous>annual	native grasses			
13. Amount of plant mortality a	and decadence (include which functional groups are exp	ected to show mortality or decadence) :			
Typically minimal. Expect short/m	nid bunchgrasses mortality/decadence during or following d	lrought.			
14. Average percent litter cover (15-20 %) and depth (1/4in. inches).					
Litter depth will be reduced during and following extended drought ranges can be less than 10% 15. Expected annual production (this is <u>TOTAL</u> above-ground production, not just forage production):					
(Low Production 400 lbs./ac.) (Average RV Production 950lbs./ac.) (High Production 1,500 lbs./ac.) Production can be reduced following extended and the production 400 lbs./ac.)					
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 reference plant community. However, cheatgrass, Russian Thistle, kochia, and other non-native annuals management.					
•	reference plant community. However, cheatgrass, Russian tif a seed source is available. Oneseed Juniper may encroa				
17. Perennial plant reproductiv	e capability :				
	Ithy and reproductive depending on disturbances i.e Droug weather related, wildfire, and natural disease that may ten				

	Photo	graph (s)		
MLRA :			Date:	
Ecological Site:				
Photo # 1				
Comments:				
Photo # 2				

Comments:

Functional / Structural Groups Worksheet

State	New Mexico	Office	Las Vegas	Ecological Site	Loamy Upland	
Observers	Kenneth	n Alcon			Date	4/26/05

Functional / Structural Groups		ps	Species List for Functional / Structural Groups
Name	Potential 1	Actual 2	Plant Names
Warm Season Short Bunchgrass	D		Blue Grama
Cool Season Mid Rhizomatous	S		Western Wheatgrass
Mid Cool Season Bunchgrass	S		Bottlebrush Squirreltaill
Shrubs	S		Winterfat, Snakeweed
Warm Season Forbs	S		Prairie Coneflower, primrose, Dotted Gayfeather
Leguminous Forbs	S		American Vetch, purple prairie clover, scurf pea, locoweeds
Cool Season Forbs	S		Scarlet globe mallow, penstemons, varied senecio spp.
Warm Season Short Stoleniferou	S		Buffalograss
Annual Native Grasses	T		Sixweeks Fescue, annual barely
Biological Crust ³			

Indicate whether each "structural/functional group" is a Dominant (D)(roughly 40-100% composition), aSubdominant (S) (roughly 10-40%) composition) aMinor Component (M) (roughly 2-5% composition), or aTrace 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 oncover not composition by weight