

Appendix 2.

Ecological Reference Worksheet

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Reference site used? Yes/No

No

Date: 4/26/2005 MLRA: 70A Ecological Site: Bottomland 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 each community within the reference state, when appropriate & (3) site data. Continue description on separate sheet.

1. Number and extent of rills :

None

2. Presence of water flow patterns:

Some. Note: water flow patterns can exist down towards main channel from side slopes especially on steeper slopes.

3. Number and height of erosional pedestals or terracettes:

Some Minor amounts due to water flow patterns height less than 1/2 inch.

4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground) : 15-25% or less bare ground with bare patches ranging from 5-10 inches in diameter. Bare ground can increase following prolonged drought wildfire will cause bare ground to increase.

5. Number of gullies and erosion associated with gullies:

Occasional due to water flow patterns from upland areas (down towards main channel)

6. Extent of wind scoured, blowouts and/or depositional areas:

Deposition can occur in some areas where water flow paths deposit sediment.

7. Amount of litter movement (describe size and distance expected to travel) :

Litter movement during storm events i.e.. floods will cause all sizes of litter movement (movement 1 to 3 yards). Some litter may create small litt

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 3-4 in interspaces at soil surface. These values will 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 ranges from 1-5%. (Manzano) A1-0 to 9 inches; dark brown (7.5 YR 4/2) loam, very dark brown (7.5 YR 2/2) moist; moderat medium granular structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine roots.

10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration runoff:

Diverse grass, forbs, shrub functional/structural groups and diverse root structure/patterns reduces raindrop impact slows overland flow providing increased time for infiltration to occur. Extended drought reduces short, mid and tall warm bunchgrasses causing decreased infiltration and increased runoff following intense storm events especially in bare patch areas if present.

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 (=) :

Dominate: Warm Season Bunchgrass>Cool Season Mid Rhizomatous=Warm Season Stoloniferous Subdominate: Warm Season Shc Bunchgrass/Rhizomatous> Minor: Warm Season Tall Bunchgrass>Shrubs>Warm Season Sod>Forbs>Trees/Willows

13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence) :

Minimal

14. Average percent litter cover (15-20 %) and depth (.25-.5 inches).

Litter amounts can be reduced following extended drought or wildfire events.

15. Expected annual production (this is TOTAL above-ground production, not just forage production):

(Low Production 1,000 lbs./ac.) (Average RV Production 2,500lbs./ac.) (High Production 4,000 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 reference plant community. Salt Cedar a non native species can overtake natural vegetation and Russian Ol can also invade into this site. Blue grama a native (non-invasive) increaser on this site. Available surface or subsurface water can also greatly aff 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. Surface and subsurface water greatly influences plants reproductive capability.

Photograph (s)

MLRA :

Date :

Ecological Site :

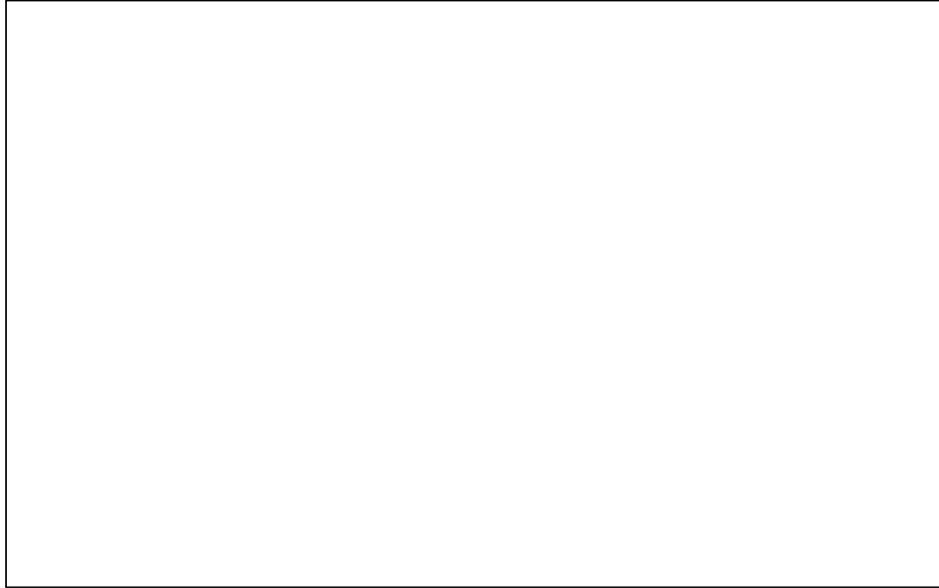


Photo # 1

Comments :



Photo # 2

Comments :

