

Tech Note #346
 U.S. Department of the Interior- Bureau of Land Management
 Erosion Condition Classification System by Ronnie Clark

Well name and number: _____

Date: _____

Operator: _____

Collector: _____

Erosional Feature	Potentially Present Yes/No	Identified Factors (Form 7310-12)	Possible Factor
Soil Movement			14
Surface Litter			14
Surface Rock Fragments			14
Pedestalling			14
Flow Patterns			15
Rills			14
Gullies			15
Column Totals			
Soil Surface Factor Total			
Class			

SSF	Class
1-20%	Stable
21-40%	Slight
41-60%	Moderate
61-80%	Critical
81-100%	Severe

Procedure:

1. Observe the total sample area and determine an average condition for each of the seven items above.
2. Determine if each item is potentially present as only these items will be considered.
3. For the items potentially present, indicate appropriate numerical value. (Form 7310-12)
4. Total both the weighted values and the potential values for each item.
5. Calculate the total percent SSF: (identified factors/ possible factors) X 100.
6. Indicate corresponding condition class site is in.

Comments:

Well Name/Number: _____

Date: _____

Operator: _____

Collector: _____

Soil Movement	Depth of recent deposits around obstacles, or in microterraces; and/or depth of truncated areas, is 0 – 0.1 in (0 – 2.5 mm). 0 or 3	Depth of recent deposits around obstacles, or in microterraces; and/or depth of truncated areas, is 0.1 – 0.2 in (2 – 5 mm). 5	Depth of recent deposits around obstacles, or in microterraces; and/or depth of truncated areas, is 0.2 – 0.4 in. (5 – 10 mm) 8	Depth of recent deposits around obstacles, or in microterraces; and/or depth of truncated areas, is 0.4 – 0.8 in. (10 – 20 mm) 11	Depth of recent deposits around obstacles, or in microterraces; and/or depth of truncated areas, is > 0.8 in. (20 mm) 14
Surface Litter	No movement, or if present, < 2% of the litter has been translocated and redeposited against obstacles. 0 or 3	2 – 10% of the litter has been translocated and redeposited against obstacles. 6	10 – 25% of the litter has been translocated and redeposited against obstacles. 8	25 – 50% of the litter has been translocated and redeposited against obstacles. 11	> 50% of the litter has been translocated and redeposited against obstacles. 14
Surface Rock Fragments	Depth of soil removal around the fragments, and/or depth of recent deposits around the fragments is < 0.1 in (2.5 mm). 0 or 2	Depth of soil removal around the fragments, and/or depth of recent deposits around the fragments is 0.1 – 0.2 in. (2.5 – 5 mm). 5	Depth of soil removal around the fragments, and/or depth of recent deposits around the fragments is 0.2 – 0.4 in. (5 – 10 mm). 8	Depth of soil removal around the fragments, and/or depth of recent deposits around the fragments is 0.4 – 0.8 in. (10 – 20 mm). 11	Depth of soil removal around the fragments, and/or depth of recent deposits around the fragments is > 0.8 in. (20 mm). 14
Pedestals	Pedestals are mostly < 0.1 in (2.5 mm) high and/or have a frequency < 2 pedestals/100 ft. 0 or 3	Pedestals are mostly 0.1 – 0.3 in. (2.5 – 8 mm) high and/or have a frequency of < 2 – 5 pedestals/100 ft. 6	Pedestals are mostly 0.3 – 0.6 in. (8 – 15 mm) high and/or have a frequency of < 5 – 7 pedestals/100 ft. 9	Pedestals are mostly 0.6 – 1 in. (15 – 25 mm) high and/or have a frequency of < 7 – 10 pedestals/100 ft. 11	Pedestals are mostly > 1 in. (25 mm) high and/or have a frequency of > 10 pedestals/100 ft. 14
Flow Patterns	If present, < 2% surface area shows evidence of recent translocation and deposition of soil & litter. 0 or 3	2 – 10% surface area shows evidence of recent translocation and deposition of soil & litter. 6	10 – 25% surface area shows evidence of recent translocation and deposition of soil & litter. 9	25 – 50% surface area shows evidence of recent translocation and deposition of soil & litter. 12	> 50% surface area shows evidence of recent translocation and deposition of soil & litter. 15
Rills	If present, are < 0.5 in (13 mm) deep and at intervals > 10 ft. 0 or 3	Rills are mostly .5 – 1 in. (13 – 25 mm) deep, and at intervals > 10 ft. 6	Rills are mostly 1 – 1.5 in. (25 – 38 mm) deep, and at intervals > 10 ft. 9	Rills are mostly 1.5 – 3 in. (38 – 76 mm) deep, and at intervals > 10 ft. 12	Rills are mostly 3 – 6 in. (76 – 152 mm) deep, and at intervals > 5 ft. 14
Gullies	If present, < 2% of the channel bed and walls show active erosion (no vegetation), gullies make up < 2% total area. 0 or 3	2 – 5% of the channel bed and walls show active erosion (no vegetation), gullies make up 2 – 5% total area. 6	5 – 10% of the channel bed and walls show active erosion (no vegetation), gullies make up 5 – 10% total area. 9	10 – 50% of the channel bed and walls show active erosion (no vegetation), gullies make up 10 – 50% total area. 12	Over 50% of the channel bed and walls show active erosion (no vegetation), gullies make up > 50% total area. 15