

Section 11 of 22 (11e - Water Erosion Management Considerations - Assessment Guide)

| Soil Texture | Avail. Water (in./ft.) | Irr. Range (cb) | Soils Intake Family | Inches Applied | | | Infiltration Assessment (Water Quality) | | | | (K Factor) | Soil Erodibility ^{1/} | | |
|---|--|-----------------|--|---|-----------|----------|---|---|--|-----------------------------|------------------|--------------------------------|------------------|------------------|
| | | | | 1.0 | 2.0 | 3.0 | SAR | Degree of Restriction on Use (ECiw in dS/m) | | | | | | |
| | | | | Infiltration Time (Hrs) | | | | None | Slight to Moderate | Severe | | | | |
| Sands | 0.5 | 30-40 | 0.1 | 2.8 | 10.5 | 22.3 | 0-3 | > 0.7 | 0.7-0.2 | < 0.2 | Clay | Low Erodibility | | |
| Loamy Sands | 1.0 | | | 0.3 | 1.0 | 3.5 | 6.8 | 3-6 | > 1.2 | 1.2-0.3 | | | < 0.3 | |
| Fine Sands | 1.25 | | | 0.5 | 0.63 | 2.0 | 3.8 | 6-12 | > 1.9 | 1.9-0.5 | | | < 0.5 | |
| V. F. Sands | | | | 0.75 | 0.48 | 1.5 | 2.8 | 12-20 | > 2.9 | 2.9-1.3 | | | < 1.3 | |
| L. F. Sands | | | | 1.0 | 0.33 | 1.0 | 1.8 | 20-40 | > 5.0 | 5.0-2.9 | | | < 2.9 | |
| Loamy Very Fine Sands | 1.5 | | | SAR = 4, ECiw = 1.1 dS/m (restriction on use: slight) | | | | | | | | | | |
| Sandy Loam | | 40-50 | 1.25 | 0.28 | 0.8 | 1.5 | Single Grain | Downward movement of H ₂ O | Rapid | Hydrologic Soil Group (HSG) | | Clay | Sand | |
| Fine Sandy Loam | | | 1.5 | 0.23 | 0.7 | 1.3 | | | | Undrained soils | | | | Runoff Potential |
| Very Fine Sandy Loam | 1.75 | | 0.20 | 0.6 | 1.1 | A | | | | B soil group | High Erodibility | | | |
| Loam | 0.6 Intake; 2.5" applied and 2.6 hrs. to infiltrate | | | | Granular | B | | | | | | | | |
| Silt Loam | Surface Irrigation System – Graded Border Program: INPUTS: | | | | Blocky | Moderate | C | | | | | | | |
| Silt | | | | | Prismatic | | | Slow | D | | | | | |
| Sandy Clay Loam | 2.2 | 60-70 | <ul style="list-style-type: none"> CFS = 7.5 Net application depth (2") % field slope (0.001'/ft.) Soil Intake (0.6) Manning's (n = .15) Field Width (436') Field Length (600') | | | | Platy | | | Soil is Granular (Rapid) | B soil group | Silt | High Erodibility | |
| Silty Clay Loam | | | | | | | Massive | .25-.35 | | | | | | |
| Clay Loam | | | RESULTS: <ul style="list-style-type: none"> Appl. Efficiency (81%) Runoff = 0.11" | | | | Example Assessment: Irrigated with Hi-Flow Turn Out <ul style="list-style-type: none"> Soil: Silt Loam Soils Intake Family: 0.6 SAR is 4 & ECiw is 1.1 Slight restriction on use Soil Erodibility potential is moderate to high | | <ul style="list-style-type: none"> HSG is B and has a moderate infiltration rate Soil Structure: Granular Runoff is 0.11" (erosion is not observed) | | .25-.35 | rudy.garcia.2008 | | |
| Sandy Clay | 2.0 | 70-80 | | | | | High Erodibility | | Silt | High Erodibility | | | | |
| Silty Clay | | | High Erodibility | | | | | | | | | | | |
| Clay | High Erodibility | | | | | | | | | | | | | |
| Silt Loam: Irrigated at 55 cb | | | | | | | | | | | | | | |
| 1/ Clay is resistant to detachment (low erodibility potential). Sand is easily detached (low erodibility potential due to large dense particles). Silt Loam is moderately detachable (moderate to high erodibility potential). Silt is easily detached (high erodibility potential; is easily transported). | | | | | | | | | | | | | | |