Surface Roughening (609)

1. Tillage forms clods sufficient to produce random roughness capable of reducing wind erosion during the management period by at least 25 percent.

D.1 (-) Soil loss due to wind erosion

I.1 (+) Visibility

I.2 (-) Particulate matter less than 10 micrometers in diameter (PM 10) and less than 2.5 micrometers in diameter (PM 2.5)

I.3 (-) Cost of compliance with future regulation

C.1 (+) Air quality

D.2 (+) Soil organic matter

I.5 (+) Land productivity

I.4 (-) Crop damage from wind-blown particles

I.6 (+) Production potential

I.7 (+) Potential income

I.12 (+/-) Net return

I.14 (+/-) Water quality

I.8 (+) Soil quality

D.9 (-) Sediment deposition

I.10 (+) Capacity of outlets, water bodies, and conveyances

I.11 (-) Maintenance costs

I.13 (+) Potential for transport of pollutants to ground waters

D.3 (+) Infiltration

D.4 (+) Cost of implementation, (+) Use of fuel, equipment, and labor

D.5 (-) Crop damage from wind

I.15 (+) Production costs

Minimize need for Surface Roughening through the application of:
- Cross Wind Ridges (589A)
- Herbaceous Wind Barriers (603)
- Residue Management (329, 344, 345, 346)
- Windbreaks/Shelterbelts (380, 650)

Notes:
Effects are qualified with a plus (+) or minus (-). These symbols indicate only an increase (+) or a decrease (-) in the effect upon the resource, not whether the effect is beneficial or adverse.