

SOIL Resource Quality Criteria		
TYPE	DESCRIPTION	QUALITY CRITERIA - Met when measures are planned so that
A. Soil Erosion		
1. Sheet and Rill	The removal of layers of soil from the land surface by the action of rainfall and runoff	The estimated sheet and rill erosion rates are reduced to Soil Loss Tolerance or "T" level.
2. Wind	The removal of soil particles by the action of turbulent winds blowing over erodible soils	The wind erosion rates are reduced to the Soil Loss Tolerance or "T" level
3. Concentrated Flow or Gully		
a. Ephemeral	Channels which form in field depressions where overland flows converge (In cropland, they are partially filled by tillage and are revoided by runoff.)	Management and/or structural measures control soil erosion in flow channels
b. Classic	Channels that grow or enlarge each year by headcutting, widening, and/or deepening. (They cannot be crossed during normal farming operations.)	The channel bottom and side walls are stabilized to prevent additional enlargement of the channel

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4. Streambank	Soil removal from streambanks caused by stream flow, overbank flow, unstable soils, obstructions, animal traffic, etc.	Streambanks are stabilized or in cases where the land-user cannot solve the problem alone, when the planned action of the land user does not contribute to the problem.
5. Irrigation Induced	Soil erosion caused by the operation of sprinkler irrigation systems	Soil erosion is reduced to "T"
6. Soil Mass Movement	Soil slippage, landslides, slope failure, etc. that creates a large volume of soil movement	Soil mass movement does not exceed normal geological processes; areas having severe soil limitations are avoided; or where the land user cannot solve the problem alone, when the planned action of the land user does not contribute to the problem
7. Roadbanks and Construction Sites	Critical areas causing problems and damage onsite and offsite	Temporary or permanent practices dispose of or safely convey excess surface water; the site is stabilized and the sediment leaving the site is minimized.
8. Scoured Areas	Soil erosion caused by out of bank stream flow	Temporary or perennial vegetation is established to provided protection from scour erosion

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B. Condition		
1. Soil Tilth	Physical condition as related to its ease of tillage, fitness as a seedbed, and impedance to seedling emergence and root penetration	The soil condition no longer impairs the growth and vigor of the chosen plant species; surface water infiltration is not restricted; soil organic matter content is increased; and soil crusting is reduced.
2. Soil Compaction	Compressing soils in such a way that air space is minimized, thereby effecting the plant-soil-moisture-air relationship	Chiseling and subsoiling operations are properly applied to correct existing problems. Field operations during wet periods are restricted. Mechanical operations and livestock traffic are managed to minimize compaction.
3. Soil Contaminants		
a. Excess Chemicals, Heavy Metals	That restrict the use of the soil	Management, crop rotations, or land uses that are tolerant to the present chemical content are established or adjusted so that the contaminant no longer restricts a suitable use
b. Excess Animal Wasted	That restrict the use of the soil	Soil contamination from animal waste and other organics are reduced to a level that no longer restricts the use of the soil.

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c. Excess Fertilizer or Nutrients	That restrict the use of the soil	Soil contamination from excess fertilizer is reduced to a level that no longer restricts the use of the soil
d. Excess Pesticides	That restrict the use of the soil	Soil contamination from excess pesticides is reduced to a level that no longer restricts the use of the soil.
e. Other	pH	pH is adjusted to meet the requirements of the crops grown
C. Deposition		
1. Onsite Damage	When deposition adversely affects vegetation and property, changes structure and texture of the surface soil, deposits infertile material, and causes management problems	Adverse contributions to the problem are eliminated. This usually involves controlling soil erosion to prevent high rates of sediment deposits.
2. Offsite Damage	When the problems described in C.1. occur offsite	Same as for C.1.
3. Onsite Safety	When deposition on farm roads may cause accidents, loss of life, and loss of access to emergency vehicles	The identified deposition problem is resolved. This usually involves controlling soil erosion to prevent harmful sediment deposits.
4. Offsite Safety	When deposition on roads and railroads may cause accidents, loss of life, and loss of access of emergency vehicles	The identified deposition problem is resolved. This usually involves controlling soil erosion to prevent harmful sediment deposits.