

Resource Concern: Soil Erosion

Classic or Ephemeral Gully Erosion

Classic Gullies are deep trenches that are formed by running water. They are an advanced stage of erosion and tend to be too wide or too deep to be tilled across. They disfigure landscape and make land unfit for growing crops. Untreated classic gullies may enlarge progressively by head cutting and/or lateral widening.

Ephemeral Gullies are known as silent erosion because they can be easily smoothed over, hidden and planted on. These gullies are very much wider than deep, and usually form during heavy rainfall. Ephemeral gullies occur in the same flow area and are obscured by tillage. This includes concentrated flow erosion caused by runoff from rainfall, snow-melt, or irrigation water.

Sheet and Rill Erosion

Sheet Erosion is the uniform removal or detachment of soil particles caused by rainfall, moving water, or even wind. When enough water infiltrates the soil, it will begin to move downslope in a sheet, collecting loose soil particles. It can be identified by deposited soil at the bottom of a slope.

Rill Erosion is the removal of soil through running water. It develops from sheet runoff, and as the water moves downslope it develops little streamlets and directs water into channels. As water begins to flow more, it will pull soil with it thus becoming a rill. As rills grow deeper and wider, they then become gullies.

Streambank or Shoreline Erosion

Streambank or Shoreline Erosion is the gradual removal of sediment from the shoreline. It is caused by multiple factors including storms, waves, rain, ice, wind, runoff, and loss of trees and vegetation. When shoreline elevates, the land around it can get damaged and could hurt the ecosystem around it, such as nutrients, fish, vegetation, and water.

Wind Erosion

Wind Erosion is the removal and transportation of soil caused by wind. It can damage land and natural vegetation quality by depositing soil from one place to another.

<https://www.sdresourceconcerns.org/resource-concern-soil-erosion/>

