

FUNDAMENTALS OF SOIL MANAGEMENT

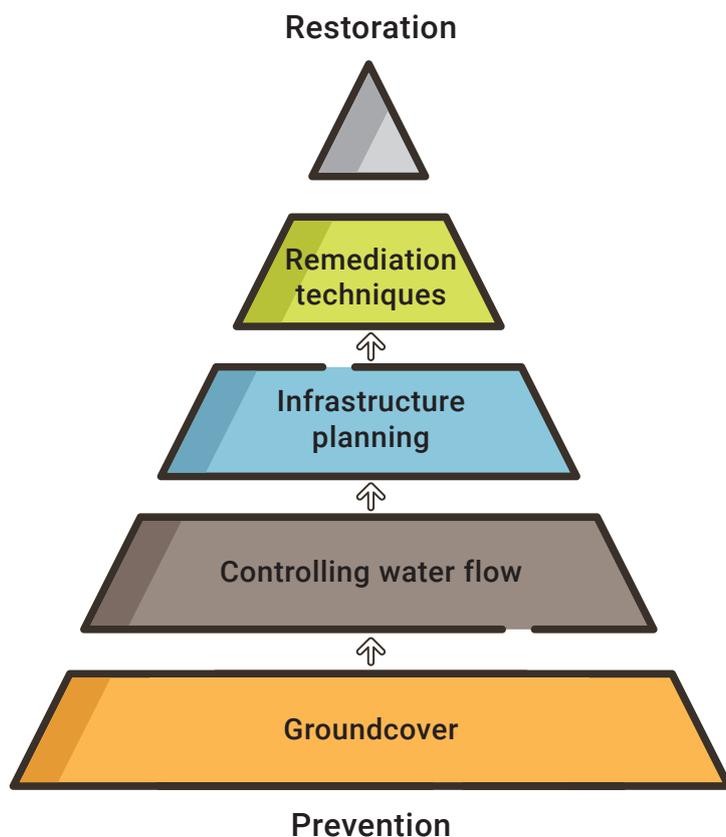
Sustainable soil management for generations of productive land use

SUSTAINABLE LAND MANAGEMENT = FERTILE AND PRODUCTIVE LAND

- Loss of soil = loss of productivity
- Maximise rainfall infiltration on your land
- Erosion prevention is better than remediation. Save money & minimise stress and resources
- Source knowledge to assess landscape processes that drive land condition change
- Work within the capacity of your landscape to identify, improve & manage areas
- Resilience to environmental change and climatic conditions

EROSION PREVENTION IS BETTER THAN REMEDIATION

Core Principles for Soil Conservation



DID YOU KNOW that soil is a non-renewable resource? Losing 1 cm of soil would take 200-400 years to reform.

Types of water erosion

Sheet erosion

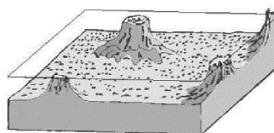
- Raindrop-detached soil transported in uniform sheets of surface water across the landscape

Rill erosion

- Removal of soil through concentrated water flow in small well-defined channels along drainage lines
- Prevalent on cultivated soil where loose soil sits above compact subsoil 'plough layer'
- Small rills may be removed by tillage

Gully erosion

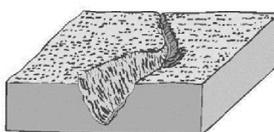
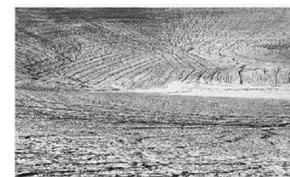
- Soil is removed along drainage lines via surface water
- Commonly found where subsoils are structurally unstable i.e., dispersive or slaking
- May be tens of metres wide or deep in weathered soils



(a) Sheet erosion



(b) Rill erosion



(c) Gully erosion



Do you know where and what type of erosion may be occurring in your landscape?

Soil erosion is natural process but can be accelerated by human activities. When erosion exceeds the rate of soil formation land becomes denuded and degraded.

