Erosion moves soil from land
Rainfall breaks up and moves soil particles, particularly in vulnerable soil types with sparse groundcover. Hillslope scalds, gullies and bank erosion expose soil, which can be washed into waterways, along with dissolved and particulate nutrients.

Scientific research helps us to understand these issues

Particles in water
Large soil particle
Fine soil particle
Particulate nutrients are attached to soil particles or comprise pieces of dead plant or animal matter
Dissolved nutrients (nitrogen and phosphorus)

Components of a floc
Fine soil particle (<16μm)
Organic material
Bacteria / Fungi
Plankton (microscopic plants and animals)

How flocs stress coral

Knowledge gaps show priorities for future research

Knowledge gap: What type of fine sediment is found in flocs and can this be traced back to a specific catchment source?

Knowledge gap:
How flocs to form? In particular, how do fine sediment particles, associated organics and particulate and dissolved nutrients (nitrogen and phosphorus) interact?

Knowledge gap:
The impact of increased particulate nutrient loads to the marine environment is not well understood. Three key knowledge gaps that need to be explored are:
1. What proportion of land-derived particulate nutrients are able to be broken down (i.e. mineralised and available for use by marine organisms)?
2. How long does it take for particulate nutrients to be broken down?
3. Once particulate nutrients are broken down, how far can they disperse in the marine environment and what area can they affect?