



Erosion Assessment

Erosion is a critical consideration for industries such as the construction, agricultural and mining industries where activities, remove vegetation, potentially alter soil structure, expose unstable soil, and change overland flow paths.

Unacceptable levels of erosion:

- Have high visual impact, particularly when erosion occurs in the forms of rilling, gullying, and tunnelling;
- Limit the ability of vegetation to grow sustainably;
- Cause off-site impacts, principally through the movement of suspended sediment to watercourses; and
- Threaten the viability of crucial infrastructure.

Successful land rehabilitation must produce a stable landform with a surface that erodes at an acceptably low rate.

Landloch has experts in assessing erosion in a wide range of contexts where our skills can be used from the planning to the remediation stages of a project. Landloch has been involved in the development of erosion management plans that reduce the risk of accelerated erosion occurring, through to assessment of existing eroded surfaces and the development of remediation plans that focus on both the resultant eroded material, and also the cause of the erosion.

Landloch's skills in assessing erosion can also be used to monitor rehabilitation performance. Landloch have routinely applied a range of techniques to monitor erosion rates on rehabilitated and undisturbed lands, analyse trends in erosion, and identify the development of specific erosion forms such as gullying.

Landloch's highly skilled and accredited soil scientists can assist clients with assessing erosion by providing:

- Personnel specifically skilled in erosion-related aspects of soil science;
- Application of a comprehensive understanding of the interactions between material properties, vegetation, and hydrology, and development of scientifically sound management plans;
- Procedures to objectively consider the geomorphic development of erosion features. These tools have been used to define whether remediation is required and, if so, how the works should be prioritised;
- Methods to assess risks associated with tunnel erosion of constructed waste landforms; and
- Complete project planning and management service, including detail on rehabilitation requirements, soil amendment and seeding needs, provision of drawings, auditing of on-ground works, and monitoring of rehabilitation performance.