

## Rural Property Management



When it comes to integrated soil and water conservation, Soil Services offers rural landholders a complete package of land management services. For over 60 years we have been helping property owners to develop and implement solutions that ensure the sustainable management of their natural resources.

### Broadacre erosion control

Reducing soil erosion is an essential component of ensuring the productive capacity of a property.

This may involve structural works such as banks and waterways, which are designed to allow excess runoff water to flow from paddocks without incurring soil erosion. Productive land is not lost because the low profile of broad-based banks allows the entire bank to be farmed, and does not restrict access around the paddock. The banks are slightly graded to carry the flow to a natural watercourse or a constructed grassed waterway at a non-erosive velocity.

Soil erosion may also be reduced through management practices such as strip cropping, conservation tillage, crop rotation, contour ripping, stocking rates, vermin eradication, fire prevention and vegetation management. All these can be addressed by Soil Services in practical ways in a property plan tailored to your needs.

### Property planning

Property planning is essential to successful land management. At Soil Services, we are trained to look at the existing physical characteristics of your property (both constraints and opportunities) and develop a tailored management plan.

The plan focuses on sustainable land use – addressing practical paddock layout which takes into account land capability, necessary soil conservation works and management practices, optimum location of water points, windbreaks, stands of trees and other features that improve both the aesthetics and productivity of your property.

### Farm water supply and farm dam construction

Water conservation and proper distribution of watering points are essential facets of farm management. Soil Services is highly experienced in locating farm dams and watering points for greatest efficiency in providing water to stock and domestic purposes as well as controlling erosion.

When properly located and constructed, farm dams greatly enhance the value and aesthetic appeal of any

property, and are particularly useful in controlling erosion by:

- reducing flows by storing runoff;
- trapping sediment on site;
- blocking active gullies and diverting flows to a stable area; and
- drowning-out active gully heads with stored water.

In our experience dam failure is likely to occur if there is a lack of attention to calculating catchment discharge, water supply requirements, proper site selection, and/or not adhering to high standards of design and construction. Soil Services has considerable experience working in all parts of NSW in locating dams to maximise water storage. We have field and laboratory testing procedures to determine the suitability of the soil, and have developed and refined dam and spillway design programs to ensure adequacy of the structure. We employ the right construction technique for each situation.

## Gully control structures

Concentrated water flow over denuded soils often results in the formation of gullies. Soil Services can help you to divert the concentrated flow away from the gully line, before filling the old gully to bring back unproductive areas, and improve the efficiency of farming operations.

We can design and implement a solution to shape the sides of a gully where its size makes it uneconomic to fill. By flattening the gully sides, slumping is prevented and vegetation can establish on the reshaped areas, resulting in a stable, aesthetically pleasing watercourse.

## Polypipe laying

With water becoming an ever more precious resource, the increasing demand to replace open bore drains with polypipe is being met by Soil Services' highly efficient pipe-laying techniques. These pipes can be used for piping bores and reticulation of stock water around farms without wastage.

## Rabbit control

A critical part of rabbit control is to follow up removal treatments with a ripping program to collapse the warrens. Soil Services' bulldozers are well suited to this application, our dozers being fitted with "winged" ripper boots that ensure the complete destruction of burrows.

## Conservation earthworks training

To share our practical skills and experience, Soil Services has developed a series of specialist education and training courses to help you manage your natural resources. We provide training in Conservation Earthworks in the Rural Sector, which specialises in design and construction of waterways, dams, banking systems, gully rehabilitation, stock and domestic water supplies, and access tracks. All of our trainers have current industry experience and detailed theoretical and practical knowledge in their field of expertise. These skills are complemented by formal training qualifications.

## Want to know more?

For more information on how Lands can work with you on soil conservation and land rehabilitation projects, please contact your nearest Soil Services division area manager (below) or visit our website on [www.lands.nsw.gov.au](http://www.lands.nsw.gov.au)

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