

## HOW TO MANAGE SALINE DISCHARGE SITES

### What is a saline discharge site?

A saline discharge site is an area where the water table has risen and salt has affected vegetation and soil on the surface. Its impact varies, but usually results in

- a reduction in pasture and crop performance,
- bare scalded areas,
- dead trees,
- salt crystallisation and
- excessive erosion.

### How do I manage it?

The appropriate way to manage a discharge site will vary depending on the severity of the problem. The main options are below, but also ask the local extension officer from agencies such as the Department of Land and Water Conservation office for advice (contact details below).

#### 1. Fence the site

Stock should be kept off the site (they like to lick the salty ground). The fence should be at least 20 metres from the edge of the salt affected area. Vegetation changes will indicate the boundaries of the salt affected site. If the land is flat around the site, the fence should be placed further away as salt is likely to spread.

#### 2. Carry out earthworks

Earthworks are usually needed for more severely affected areas. The type of earthwork will depend on the site, but some options include creating diversion banks to divert the flow of water away from the site, gully control structures, and deep ripping to assist in revegetation.

#### 3. Plant salt tolerant grass species

Grasses, rather than trees, are usually more successful in revegetating saline areas. However, trees are useful in planting above and around the site to contain it. Good grass species include Tall Wheat Grass, Puccinella and Strawberry Clover (see the *Salt Tolerant Species Fact Sheet*).

#### 4. Apply straw mulch, gypsum and fertiliser

Straw mulch protects the bare soil and reduces evaporation. It also protects seed for revegetation and provides organic material. Gypsum improves the soil structure, drainage, adds calcium and breaks the surface crust on bare soil. Fertiliser should also be applied on all saline sites to improve nutrient levels.

#### 5. Manage and monitor the site!

Stock access to the site should be limited to when they will do least damage and when the area can stand some grazing ('crash' grazing method can be used ie high stock numbers for short periods). The site should be monitored for any spreading and any increase in salinity level. Piezometers may be useful to assess and measure the depth of the ground water. Once productive species are established, keep them well grazed so they use as much water as possible.

### Who can help?

Department of Land and Water Conservation, Yass Office. Phone (02) 6226 1433

#### Other reading

*Salt Tolerant Species Fact Sheet* (in this Plan)

Dryland Salinity, Booklet 4. Productive Use of Salt Affected Land, DLWC.1993