# step

### ASSESSING SOIL DRAINAGE

Conducted in the paddock or home

In this step you will identify Land Classes 5 and 6:

Land Class 5: Land suitable for less intensive agriculture such as high density grazing or farm forestry and cultivation associated with pasture development.

Land Class 6: Land suitable for grazing or farm forestry, Low capability to resist land disturbance such as cultivation due to physical features of the land and erosion risk. Good management required to preserve vegetative cover.

You will need: Red permanent marker

> Refer to the areas you outlined on Overlay 2 as being nonarable.

Poor drainage that allows the soil to remain saturated for long periods can kill or stunt the growth of many agricultural plants.

Large areas that experience seasonal water ponding, (defined as areas that experience surface ponding at least twice in five years i.e. swamps), are less productive than the surrounding areas.

Conversely, excessive drainage is also a limitation due to an insufficient amount of water available for plant growth. Soils that drain very quickly are more limiting for agriculture if they are located in a low rainfall area, such as the North Western Sands or Mallee Land Degradation Hazard Region (LDHR).

# Poorly drained soils

Characteristics that are commonly attributed to poorly drained soils are:

- Presence of rushes
- · Difficulty driving on the area during winter and spring
- · Hardsetting grey clay soils

Figure 17 The presence of indicates poorly drained soils.

rushes in the foreground

## Excessively drained soils

Characteristics that are commonly attributed to excessively drained soils are:

- · High sand content
- High gravel content
- Located in the North Western
  Sands LDHR and the Mallee LDHR



**Figure 18** High sand content in the North Western Sands LDHR would be classed as Land Class 5

# Surface ponding

 Surface water evident at least twice in five years



Figure 19 Surface ponding

- 1. Refer to the previous definitions
- 2. On the plan, mark out the boundary and label with the appropriate label code the following areas using the red marker:

Excessively drained soils -

urface pondina -

Other areas - continue

Note: The areas marked out as poorly drained and surface ponding should be large areas of land rather than drainage lines. It is necessary to take note of the drainage lines as they will become important in Step 9: Establishing Landscape Types.



Figure 20 Step 8: Marking out soil drainage on the plan.