# **Farming for Sustainable Soils**

# COMMUNITIES PROTECTING THE SOIL

#### Group Name Charlton Group

## **Group Area**

The group covers an area from the mid reaches of the Avoca catchment extending from Narrewilllock to the north of Charlton, to Teddywaddy in the west, and as far south as Coonooer Bridge on the Avoca River (taking in Barakee, and Yeungroon). The Avoca River flows in close proximity to the western boundary.

## **About the Group**

The group is in its first year and consists of 'mixed country'; meaning the area has variable soil types and landforms. A noticeable change in seasonal climate occurred during the 'millennium' drought between 1997 and 2009. Dramatically reduced winter/spring rainfall meant successive failed or poor seasons and a high risk of wind erosion and soil damage over this extended 13 year period.

#### Land use

The main land use is dryland mixed farming comprising predominantly cereal cropping, and grazing sheep for wool production and prime lambs. A small amount of oilseeds and legumes are grown along with lucerne for grazing and hay production. Rainfall in the area ranges from 375 to 450mm (average annual).

The 'mixed country' supports mixed farming enterprises. The seasons changed over the past two years with above average rainfall occurring across the group area with especially high rainfall during the 2010-11 summer period. Farmers had adapted to dry seasonal conditions using several strategies around livestock feeding and containment, in addition to reduced tillage practices.

## **2012** Activities

- Baseline soil sampling
- Trialling inputs and soil ripping methods that will improve the structure of red 'sodic' cropping soils
- Greater use of alternative (or organic) fertilisers and soil conditioners – substituting these for traditional water soluble fertilisers
- Adoption of precision cropping technologies including controlled traffic – GPS as a basis for introducing a range of new technologies
- Better stubble handing techniques to enable avoidance of burning
- Improve moisture content of soils by trialling soil ameliorants and/or deep ripping e.g. gypsum/lime application and investigate calcium as an additive to improve soil
- Increase quality of depleted pastures through trialling of re-sowing with newer varieties e.g. by establishing under-sowing cereal crops and/or pasture cropping while grasses and clovers establish
- Investigate if forage grasses and shrubs for livestock can be used on non cropping soils
- Increase skills in sustainable farming practices through training and education





