# FARMING FOR SUSTAINABLE SOILS



## **PROTECTING OUR FUTURE**

The soils of northern Victoria are subject to considerable pressures as farmers strive to achieve profitable agricultural enterprises in the face of highly variable climatic conditions, increasing market demands and escalating production costs.

The Farming for Sustainable Soils (FSS) project involves a sharing of knowledge which encourages positive change in farming practices. It collaborates with the regional farming community to secure the adoption of sustainable land management practices that protect and enhance soil health.

### WHY SOILS?

Australian soils have been subject to severe degradation ever since European settlers cleared the land and began developing it for agriculture.





NORTH CENTRAL Catchment Management Authority Connecting Rivers, Landscapes, People

The FSS project is assisting local communities to improve the health of their soils through the adoption of socially acceptable sustainable land management practices that conserve soil carbon and avoid soil loss.

HIL BOTO SAME

### WHAT ARE THE ISSUES?

The climate of south eastern Australia shifted in the closing years of the last century with one of the longest droughts ever recorded in European history. Arid conditions prevailed from the mid 1990s through to 2009. The drought conduded in 2010 with record-breaking rainfall and widespread flooding.

Protracted drought and widespread flooding rains are reflected in the annual rainfall records but the seasonal distribution of rainfall is also different. In drought times our growing seasons are shortened by the failure of autumn and early spring rains, and in strong contrast intense storms bring large falls in late autumn and early summer. An erratic climate impacts on the soil in many different ways. A couple examples of the impacts include failed crops and outbreaks of summer weeds.

### **PROJECT OBJECTIVES**

- Community engagement
- Establish local area soil protection plans
- Reduce the risk of wind erosion
- Support activities that build soil carbon

### **MAKING IT HAPPEN**

In 2012 and 2013 the FSS project continues to work with eight regional community groups in an effort to build a new approach to soil protection in the North Central CMA region. The eight groups comprise broad areas of north central Victoria chosen on the basis of: (a) a well established social capacity; (b) soil landscape settings prone to erosion; (c) agricultural enterprise mix; and (d) willingness of landholders to actively participate.



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The eight established groups include:

- Normanville: southwest of Kerang
- 2. Loddon Plains: Serpentine to Drummartin
- 3. Lower Avon/Richardson: Donald area
- 4. Natte Yallock: Avoca River and adjacent Pyrenees foothills
- 5. Salisbury West: Salisbury West to Korong Vale
- Mid Loddon: Marong, Lockwood, Shelbourne and Laanecoorie areas
- 7. Charlton: Foothills of the Avoca Catchment
- 8. Lockington: Lower Campaspe Plains

"The FSS project works with regional communities, building on knowledge and experiences achieved so far – each group reflects on their successes and lessons learnt before contemplating future investment in soil protection."

Phil Dyson, Project Manager

# HOW THE GROUPS OPERATE

Each group prepares or updates a soil management plan following a series of workshops facilitated and supported by the North Central experienced CMA and local consultants. These plans become the *blueprint* that affords access to a grant schedule that supports the adaptation and adoption of sustainable management technologies in an environment of financial reduced risk. Each group oversees its own program.



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# NATIONAL DUSTWATCH MONITORING PROGRAM

In 2011 the FSS project became a participant in the National DustWatch program. The program is concerned with mapping the location, extent and passage of airborne dust moving throughout Australia. FSS is involved in the southeast Australian program which is coordinated by the NSW Department of Environment and Heritage and managed by staff from the Gunnedah Research Centre. FSS established a dust monitoring instrument at Kamarooka some 35 kilometres north of Bendigo on the southern Loddon Plains. This instrument forms the southern most node in the Australian dust monitoring network.

resources is enormous. Protecting our soils from erosion and improving soil structure will have added benefits right through the economy from farmer to the consumer.

# **ANNUAL SOIL FORUM**

Each year the FSS program brings together participating communities in a public forum that promotes their activities and achievements. The forum is an opportunity for sharing the collective knowledge and wisdom of soil management among the groups and with other Australian communities intent upon achieving soil conservation. Knowledge sharing, networking, adaptive management and adaptive learning are key principles important to the success of the program.

#### **FUNDING & OUR PARTNERS**

The project is federally funded by *Caring for our Country* (CfoC) and complemented by in-kind support from landholders involved in the project.

# **SOCIAL & ECONOMIC VALUES**

The social values held by each group have been instrumental in the development and success of the project. The formation of the soil groups has enabled a sharing of knowledge between each other and the farming community. It has brought together the older generation who have a vast amount of knowledge to pass onto the younger generations.

The economic value in protecting one of our most precious

# FOR MORE INFORMATION:

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