Sustainable farming: South Australia’s farmers are reaping what they sow
12 March 2009

South Australia’s farmers now have hard evidence to show that the adoption of sustainable farming practices is leading to improved land condition.

An innovative program of the Department of Water, Land and Biodiversity Conservation (DWLBC) has revealed that farmers who adopt sustainable management practices will be rewarded by long-term improvements in land condition and greater protection from soil erosion.

The fact that these improvements have been achieved despite the drought conditions experienced in the past three seasons is a credit to South Australia’s agricultural land managers.

DWLBC have been running a Land Condition Monitoring Program for 10 years, surveying 5,500 sites across South Australia’s agricultural areas four times each year. The survey collects information on surface cover, soil disturbance and soil erosion potential.

In addition, farmers were surveyed by telephone to gather information on the management practices being used, amongst them stubble retention, minimum tillage (particularly no-till), and managing grazing to keep adequate cover on paddocks.

The key indicator of land condition is how well land is protected from wind and water erosion. Maintaining long-term surface cover and limited physical disturbance are critical to maintaining land condition.

The monitoring shows that there has been an overall increase in the protection of land from erosion, and therefore an improvement in sustainability. For example, the average number of days per year that agricultural land is adequately protected from erosion has increased from 272 days in 2002/2003 to 293 days in 2007/2008, meaning South Australia is well on its way to achieving the 2014 target of 326 days protection identified in its Strategic Plan.

This positive trend has been most noticeable on the soil types that are inherently more prone to erosion.

The results also revealed that more farmers have switched to no-till or minimum till farming. By 2008, 66% of the surveyed farmers said they used no-till to sow at least part of their crop, a rise of 38% from the 2000 survey.

Similar changes occurred in the Murraylands following the drought season of 2002/03. In 2000 only 20% of farmers in this region reported using no-till methods to sow at least part of their crop, but by 2008 this had increased to 55%.

The number of South Australian farmers who are burning stubbles or pasture residues has also fallen - from 69% in 2002 to 38% in 2008.

Farming systems groups and regional Natural Resources Management Boards are now using the land condition data collected by DWLBC to help evaluate the outcomes of their own sustainable management programs.

The DWLBC Land Condition Monitoring Program provides a benchmark and monitoring process to gather long-term data that shows South Australia’s farmers are not only looking after their land but are also improving it.