Agricultural land

Days protected from soil erosion
South Australia’s
Environmental trend and condition report card 2018

Trend
The protection of agricultural land from soil erosion has stabilised at around 342 days each year.
The number of days that agricultural land was protected from soil erosion improved between 2002 and 2013 in all four natural resources management (NRM) regions that are monitored (South East [SE], South Australian Murray–Darling Basin [SAMDB], Northern and Yorke [NY] and Eyre Peninsula [EP]) (bottom figure).
Since 2013, the improving trend has stabilised (top figure).
Improvements over time relate to the adoption of ‘no-till’ cropping methods, where surveys indicate that the proportion of crop area sown using no-till increased from 16% in 1999 to 83% in 2016.
Protection from erosion has been consistently high in the South East NRM region (bottom figure) because the main land use there is grazed pastures rather than annual cropping. Adelaide and Mount Lofty Ranges and Kangaroo Island NRM regions are not monitored because they are not part of the main broadacre cropping areas.

Condition
The level of protection of agricultural land from soil erosion is good.
The level of erosion protection averages around 340–345 days each year across the agricultural regions. Localised erosion is still occasionally triggered by very strong winds or intense rainfall and run-off.
Ongoing erosion protection requires continuous implementation of sustainable land management practices.

Why is agricultural land important?
Agricultural land that is protected from erosion supports food and fibre production through crops and livestock, with South Australian agriculture valued at $4.5 billion annually. Protected agricultural land also minimises dust storms and the amount of sediments and nutrients that reach our waterways.

What are the pressures?
About 60% of South Australia’s agricultural soils are susceptible to wind erosion and 32% are susceptible to water erosion.
Soils can be exposed to erosion in very dry seasons when there is not enough plant growth to cover the soil. Tilling, bushfires and managed burns (for pest and weed management) also remove plant cover, increasing the risk of erosion.
Future climate predictions forecast warmer temperatures and reduced rainfall across most agricultural areas in South Australia.

What is being done?
Field surveys of agricultural soils are regularly conducted to estimate the number of days each year that they are protected from erosion.
The state government also works with agribusiness, advisers, industry and farmer groups to improve soil management and help farmers to adopt practices that protect the soil from erosion.

For further information see: technical information