## 2014 State Report Card

## Is irrigation efficiency improving in agricultural areas?

Our irrigated crops and livestock products, worth about \$1.4 billion in 2012, use about 60 per cent of the water used in South Australia. Around a third of our farms rely on irrigation to grow pastures for livestock, grapes, fruit or vegetables. Efficient irrigation reduces fertiliser and sediment runoff, soil salinity impacts, production costs and provides more flexibility to rotate crops.

Soil type, irrigation method, and the timing of irrigation influence the amount of water applied to crops. By matching these to the needs of each crop, farmers can maximise production while applying less water. For example, upgrading from sprinkler to drip irrigation can save about 2.5 million litres per hectare of grapevines or citrus trees. Our <u>State NRM Act</u> and <u>water allocation</u> plans allow farmers to sell their water and this market based system helps to ensure that the most efficient farmers use more water.

This report card tracks the amount of water applied per hectare, and trends in methods of irrigation. This report card covers the NRM regions in the agricultural parts of South Australia (see map on right). The arid NRM regions have little or no irrigated areas.





## State target

Maintain the productive capacity of our natural resources

Trend (2003-13)Getting betterWater each y	r applied per hectare decreased by almost 3 per cent year
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Different crop types have different water needs and these vary depending on the soil type and rainfall received (graph on right).

In 2013, over 182,400 hectares were irrigated in South Australia. The average irrigation rate was about 4 million litres per hectare (graph on right, red line). The amount of water applied per hectare decreased by almost 3 per cent each year between 2003-13.

The biggest improvement has been for irrigated livestock pasture – water applied per hectare decreased by almost 4 per cent each year since 2003 (graph on right). Over the same period, water applied per hectare to vegetable crops was stable.



## Where we are at (2013)

Good

Irrigation efficiency continued to improve in 2013

Very Good

Energy, labour, crop type and set up costs influence the irrigation decisions of farmers, but irrigation efficiency continues to improve.

Trends in irrigation methods show how our farmers are improving the irrigation efficiency. Drip irrigation, which is typically the most water efficient, is the most common method and its use has increased, while surface irrigation (also called flood) and solid set sprinklers, which are typically the least efficient methods, have decreased (graph on right).

Governments and NRM boards work with farmers to improve irrigation efficiency by demonstrating land management benefits and providing financial <u>incentives</u> to make it increasingly attractive to upgrade to more efficient systems, for example through the <u>South Australian River</u> <u>Murray Sustainability Program</u>.



**Reliability of information** 

Further information: Technical information for this report card, Water use in South Australia, Water Connect

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