2014 Regional Snapshot

Is irrigation efficiency improving in agricultural areas?

South Australia's irrigated crops and livestock products, worth about \$1.4 billion in 2012, use about 60 per cent of the water we use in the state. About 30 per cent of the farmers in the South East NRM region rely on irrigation to grow pastures for livestock, grapes, fruit or vegetables. Efficient irrigation reduces impacts on ground water levels, soil salinity, reduces production costs, and provides more flexibility to rotate crops.

South East

NRM Region

The amount of water applied to crops is influenced by soil type, irrigation method, and the timing of irrigation. By matching these to the needs of each crop, farmers maximise production and apply 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 tracks the amount of water applied per hectare, and trends in methods of irrigation.



Trend (2006-13)

State target

Maintain the productive capacity of our natural resources

Getting better

Different crop types have different water needs and these vary depending on the soil type and rainfall (see graph on right). In 2013, over 80,000 hectares were irrigated in the South East

NRM region. The average irrigation rate was about 4.4 million litres per hectare (see graph on right, red line). The amount of water applied per hectare decreased by over 1 per cent each year between 2006-13.

The greatest improvement has been for fruit and nut crops – water applied per hectare decreased by about 12 per cent each year since 2006. Over the same period, water applied per hectare to vegetable crops decreased by about 1 cent each year.

More detailed water use information is collected in some irrigation areas from surveys of irrigators.





Fruit & nuts

Vegetables

Average

8

6

2

n

2006

(million litres per hectare)

Water applied

Water applied per hectare decreased by 1 per cent each year

2009

Energy, labour and set up costs influence the irrigation options available to farmers, but irrigation efficiency continues to improve. Trends in irrigation methods show how our farmers are improving water application rates. A breakdown of irrigation methods is not available for the South East NRM region, but statewide data shows that drip irrigation, which is typically the most water efficient, is the most common method and its use has been increasing.

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.

Reliability of information	★★★★☆	Very Good
Further information: Technical information for this report Water use in the South East NRM region		

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Livestock pasture & feed

2012

Grapevines