

On-Farm Irrigation Efficiency Program

Case study: Curtis Vineyards

20% water saving achieved with efficient irrigation infrastructure



Upgrading on-farm technology and infrastructure has provided multiple benefits for the Riverland enterprise.

A 20 per cent water saving was one of the positive outcomes achieved after improving irrigation infrastructure at Curtis Vineyards located in the Riverland region of South Australia.

The 200-hectare property can be found along the Pike River, where the Curtis family has been successfully growing winegrapes since the 1970s.

Curtis Vineyards received On-Farm Irrigation Efficiency Program (OFIEP) funding through rounds one and two to convert 20 hectares from sprinkler irrigation to drip, install a pump station, valve assembly and flushing mains.

Louis Curtis, director of Curtis Vineyards, said he started to convert overhead sprinklers to drip irrigation in the mid-2000s and planned to convert the whole property over a five to seven year period.

"We got to the third year and upgraded the pump site," Mr Curtis said.

"The OFIEP funding came at a perfect time to help fund the completion of the conversion of macro sprinklers to drip irrigation infrastructure."

Mr Curtis said he had recorded 20 per cent water savings since converting from sprinkler to drip irrigation.

"The ability to use water more efficiently was the main business driver for the conversion and we have found that we can grow more with less water," he said.

"We have also noticed a reduction in labour costs."

Mr Curtis said one of the advantages of installing modernised technology was the ability to remotely communicate with a wireless irrigation system via sms.

"If the pump is blocked, the automated system will send a text message to my mobile phone as an alert," he said.

"Automated drip irrigation infrastructure is user-friendly, but we still need to stay on the ball because failures can cost a lot of money."

Along with utilising new technology, Mr Curtis said observing weather conditions, soil moisture monitoring data and noting the general health of the vineyard would determine when he would water the vineyard and how much water to apply.

The water savings generated from on-farm projects are shared between the irrigator and the Australian Government. The government returns a portion of the water savings to the environment to protect and restore rivers, wetlands and other environmental assets in the Murray-Darling Basin.

The Curtis Vineyards project has benefited Riverland businesses and will contribute towards securing a long-term future for the local irrigation community.

Curtis Vineyards is one of many irrigation properties around the Pike River floodplain which is one of South Australia's oldest irrigation areas, first settled late in the nineteenth century.



Government of South Australia

South Australian Murray-Darling Basin
Natural Resources Management Board



Natural Resources
SA Murray-Darling Basin



Australian Government



Riverland irrigator, Louis Curtis has recorded 20% water savings since converting sprinkler irrigation to drip through the On-Farm Irrigation Efficiency Program.

Considered a high priority ecological and cultural area of the Murray River, the Pike Floodplain covers 6700 hectares between Paringa and Lyrup near Renmark. Environmental water supplied to the floodplain will help to prevent further decline of ecological health and assist with the management of key threats including altered flow regimes, elevated highly saline groundwater, obstructions to fish passage, and pest plants and animals.

More information about the On-Farm Irrigation Efficiency Program is available at www.naturalresources.sa.gov.au/samurraydarlingbasin/ or by calling (08) 8580 1800.



Backup field filter and automated valve

Location: Curtis Vineyards at Pike River, South Australia

Australian Government funding: \$189,000 (ex GST)

Project: Two projects to convert sprinklers to surface drip and install moisture monitoring probes

Project water savings: 63.5ML

Find out more about the On-Farm Irrigation Efficiency Program, the SAMDB NRM Board and its activities:

SA Murray Darling Basin NRM Board

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The program aims to increase water use efficiency in rural Australia, deliver substantial and lasting returns of water for the environment and secure a long-term future for irrigation communities. To-date local OFIEP projects have generated total water savings in excess of 20 gigalitres.

