## FarmWater



## Upgrade reaps immediate rewards

A decision to plastic line a 1.23km channel that flood irrigates 40ha and supplies water for a linear traveller that irrigates another 40ha has saved Kaarimba cropper Nick James at least five hours of labour and 2ML of water each time he irrigates.

Mr James, who manages his family's 216ha property Pinewood, said the farm was already pretty well set up thanks to the efforts of his father (Rex) who had installed pipe and risers and linear travellers across most of the farm at least a decade ago.

"Lining the channel with plastic should make our irrigation system close to perfect now we won't be losing so much water through leaks and seepage," Mr James said. At a glance:

Who: Nick James

Where: Kaarimba

What: Plastic line a 1.23km channel, upgrade outlets for flood irrigation

System: Murray Valley

Total water saved: 46ML (23 ML transferred to the Victorian Government for environmental purposes)

The project involved reconstructing an existing on-farm channel and lining it with industrialstrength plastic - similar to the channel-lining work that has been done as part of the Goulburn-Murray Water Connections Program's upgrade of the irrigation network delivery system.

"The soil here is very sandy and I estimated that each time I watered about 2.3ML of water was lost through leaks and cracks in the channel: when you're using the channel for five days every two weeks that's a lot of water lost," Mr James said.

"For about five years during the drought, when our allocation was so low, it wasn't worth irrigating at all - we had this great linear system going to waste because of a leaky channel."

The channel-lining project was funded from the Victorian On-farm State Priority Projects (VOSPP) initiative through Round 2 of the Farm Water Program (FWP). The FWP is a consortium of Northern Victorian agencies, led by the Goulburn Broken Catchment Management Authority, which supports farmers to improve on-farm irrigation, with half the total water savings transferred to the Victorian Government for environmental purposes.

The James' project saved a total of 46ML. The work took about a month and had minimal impact on farm production.

"Hogans did the earth and pipe work – we didn't have a summer crop in those paddocks so the timing was ideal," Mr James said.



















Mr James did the first complete run through of the system early April and said the benefits of lining the channel were immediately obvious.

"Instead of it taking 16 hours to fill the channel up, it only took 11," he said.

The channel is now filled via a 1.5km pipe with water pumped directly from Broken Creek.

"Previously we pumped from the creek to the dam to the channel – so the water was lifted multiple times – there's no doubt we're saving on energy now, too," he said.

As well as lining the channel, 27 larger pipes and stops were installed along the channel's north to improve the flood irrigation of the 40ha, where Mr James plans to plant wheat for next season.

"We've only done the one run through (of the updated system) and it's early days yet, but the water flows on to the paddocks were definitely faster than before," he said.

The 40ha south of the channel irrigated by linear traveller will also be planted with wheat.

Mr James said he'd be keen to tap in to any further Farm Water Program funding rounds.

"It (the Farm Water Program) is a great program and it complements the (irrigation delivery network) modernisation," he said.

"It's been good for productivity in the area, helped the local economy and created jobs – it's all positive."













