





PRODUCT



fact sheet 11

Stoc - the benefits of DELTA technology





DELTA water treatment is proving a winner for Australian farmers desperate to provide water for thirsty stock.

Circumstances demand that properties in rural Australia – both large and small – have highly efficient pump and piping systems in place to make the most of our country's scant water supplies. Getting water to sheep, cattle and other range animals during our hot summers is crucial and DELTAwater solutions is helping make the job easier.

CASE STUDY

Angus stud owner Netta Holmes Lee says the **DELTA** water treatment system has brought quality water to her cattle, reliability to her reticulated watering system and peace to her mind.

The Wellington district farmer installed her first unit at her NSW property 'Noonee Nyrang' in 2005 after pipes supplying her troughs blocked due to scale build-up from hard bore water. "We totally rely on a bore for our livestock," Netta says. "We basically did a major upgrade of that system in 2001 and within 18 months some of those new pipes were starting to block with the calcium carbonate. At its worst we had an inch and a half pipe completely blocked in that time."

Reduced flow, regular maintenance to 'blow out' the pipes and fear that stock would suffer all added up to a major headache, especially in hot summers.

> "I knew we had to look at a better way to deliver our water," Netta says.

So Alex Panov from DELTAwater solutions arrived with a plan. He developed a farm-wide strategy for Netta to roll out for her network of tanks, pipes and troughs over several years. He started with the worst pipe, installing a CU40-G4 DELTA unit on the tank outlet at the head of the pipe with the biggest scale problem. Netta followed his recommendations and fitted the pipe, which fed five paddocks, with several flushing outlets.

"In the first month, with the combination of the DELTA treatment and regular flushing, we could see the calcium's white powder and small flakes coming through the pipe," Netta says. "We had very little trouble after that. We could see it was going to work and that it was worth going ahead. We've now got six units in strategic places and flushing outlets on those lines as well."

Netta is now considering whether to install the DELTA water technology at a new block she's bought nearby. She has about 240 cows with calves at foot, 100 heifers and 80 young bulls on Noonee Nyrang, which she's run since 1998. The stock workload is enough without the excessive maintenance once needed to keep the reticulated water supply running smoothly.

"By the time you've used up three or four days, with two people, to blow out the pipes it makes the cost of the DELTA units seem pretty cheap in comparison," Netta says. "The other thing is the peace of mind. The problems always seem to occur during the hottest time in summer when the cattle need the most water. Now I don't have to worry about suddenly finding a blocked pipe."

"I've seen first-hand that it works, saves lots of time and lots of worries," she says. "I'd certainly recommend it to fix the scale problem in pipes. And I'd also like to say we've found Alex extremely helpful too."





stock - the benefits of DELTA technology

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CASE STUDY

DELTA water treatment boosts cattle health on outback station

When the owners of a remote Northern Territory station told new managers Steve and Rebecca Severin they wouldn't be able to grow a garden because the bore was too salty, Rebecca didn't believe them.

The owners of Tarlton Downs Pastoral Company Bill and John Stead also warned them the station's Shorthorn-Santa Gertrudis refused to drink the water at one set of cattle yards near the homestead.

Tarlton Downs is halfway between Mt Isa and Alice Springs on the Plenty Highway. The station's landscape is a mixture of rocky mountainous outcrops, gibber plains and Mitchell and Flinders Grass downs country. And it's no exaggeration to describe the outback station as being 'in the middle of nowhere'.

Searing summer temperatures of up to 48 degrees Celsius make high quality bore water for stock and household use essential.

Rebecca, the only woman on the station for the three years they were managers, said some areas had excellent water and in other areas it was 'just terrible'.

They arrived in winter and despite the warnings, Rebecca quickly set about establishing a vegetable garden, lawn and flower beds around the homestead.

"We were told nobody could grow anything at the homestead and that it would die because the bore water was so salty but me being a bit of a green thumb decided to give it a go anyway because I didn't really believe them," she said.

"But come summer I started to see what they were talking about. The bore water was just too harsh on all the plants and nothing would grow."

At the cattle yards, it was a similar story. Rebecca says the cattle would sniff the water in the trough then walk away. As word spread among the herd that the water was unpalatable they wouldn't bother coming in to the trough.

"We'd have no tracks for weeks on end coming into the trough. It was only if the cattle came in from a long way and were desperately thirsty that they'd even come near it. Even then they would rarely drink it," she said.

"The water just sat there stagnant and we'd end up having to dump the entire tank we'd pumped from the bore because they weren't drinking it."

Rebecca and Steve starting looking around for a solution and came across 100% Australian made water treatment product manufactured by Newcastle-based company DELTAwater solutions.



Rebecca says within a week of installing the DELTA water treatment system at the homestead they noticed changes.

"Everything started to grow and I was able to grow veggies, flowers and lawn. It was phenomenal – just incredible. We certainly didn't expect such a dramatic change so quickly," Rebecca said.

Encouraged by the results, in November 2012 they sent a sample of the cattle yard bore for testing by DELTA's water testing laboratory. Results returned a reading of 10,380 $\mu\text{S/cm}$, which falls into the category of 'extremely high Class 6' salinity. The water also had extreme hardness levels, extremely high chloride and sodium levels and extreme Sodium Absorption Rate (SAR) levels.

The company recommended installing a DELTA Heavy Duty SL, a product they have developed to treat previously-untreatable water with extremely high salinity and minerals.

Rebecca said they were confident in the treatment's success because DELTA had a good understanding of their water and a product custom-designed to treat their specific problems.

"Within a day of installing the Heavy Duty SL onto the bore we could see a difference. Once the cattle worked out the water was okay we started getting a high turnover coming in to drink. They were coming from both sides to have water. This meant they could walk further to get better food and the bore that was previously useless was useful again."

Rebecca says although they've now left Tarlton Downs to work on Mt Riddock Station, they are in regular contact with the owners.

"We saw them recently and they said the garden is still growing and the cattle are still drinking from the DELTA bore. Although they're currently battling with a general shortage of food, as far as the DELTA-treated water goes, it's made an incredible difference to cattle health and made unpalatable stock water palatable again."