



No-one is questioning the need to make better use of water and, the push to make clean water is building. The number of systems available is growing by the year, many designed to tackle niche applications. Here we look at three – one which makes use of bacteria and UV, another which prevents crystalline build-up by breaking bonds, and a trial which hopes to prove how effectively we can mine water from our sewers. Elizabeth DeFriest reports...

Greg Kirkwood sponsored by unbelievable truths

Iron Man- Greg Kirkwood

There are instances- as it turns out, plenty of them- when water needs cleaning simply because of mineral, or chemical, build up. Eighteen months ago, if you drove past West Coast Turf Farm at Gin Gin, Western Australia, you'd have thought Greg had decided to paint everything on the place a very unattractive reddish brown- the buildings, the sprinklers, the orchard and *every blade of grass*.



No, it's not paint - overspray with iron at 32 parts per million prior to treatment.

“What was initially a minor problem had become a massive one in the last few years, to the point where the water I pumped from the bore contained iron at around 32 parts per million. At that concentration, as the water evaporated off the leaf, it

left behind a residue which covered the stoma, suffocating the turf.”

Crop frequently diminished and as iron began to build up in the soil, Greg ended up spending between \$15 and \$20,000 a year on wetting agents in an attempt to deal with it. As if this wasn't enough of a challenge, the turf no longer responded to fertilizers, and the black beetle and cutworm were out in force.

“I was at the point of spending \$90,000 on a dam where I planned to pump, settle and aerate the bore

water. Then one night I hopped on the internet and googled ‘iron problems’ and up popped Hydrosmart. At \$9 to \$10,000 I thought this might be snake oil but it was worth giving it a go.”

A Hydrosmart rep came up to take a look and a system was installed in July last year - a wildly simple approach that produces phenomenal results. The bore water now flows through a section of pipe wrapped in coils of antennae. These send out a series of computer generated frequencies which, believe it or not, are enough to break the bonds between compounds. Before you go looking for that chemistry text book, take it from Greg that it works by breaking down crystals into much smaller units (remember elements?). Six months later, everything went from red to normal again as the deposits of scale were progressively broken down. “It cleared the iron build-up, which had reduced the 100mm pipes to between 70 and 80 mm in diameter.” Soon, West Coast Turf was looking less red - “even the office windows were free from the overspray” - and best of all production has been lifted by between 30 and 50%. “From that point on I needed no wetting agents and I haven't spent a dollar on pesticides. To tell you the truth, I was a bit skeptical, but I've now got a completely different turf farm. The technology is simple, cheap and the results unbelievable. I can't recommend it highly enough. (For more information visit www.Hydrosmart.com.au)