

# turning bad water into good grass and great gardens

Changes to the environment have made it commonly accepted that small and large Councils and communities are no longer able to simply rely on sweetwater supplies to irrigate their ovals, lawns, golf courses and garden. The only water available is either a bore or the local treated sewage supply which has been turned into a reusable saleable supply by the local utility.

This source by its very nature is often accompanied with salts, high nutrient loads or highly mineralised ground water blended in with it.

Hydrosmart water conditioning technology is being used increasingly by golf courses, Councils and farmers faced with having to use these problematic water supplies. Applying the same 'bond-breaking' technology in each case, Hydrosmart International's team has proven itself as capable of providing a wide range of solutions, simply with no ongoing maintenance, no consumables nor any toxic reject streams (as is the case with reverse osmosis).

Hydrosmart's technology has enabled the irrigation of parks, ovals, food crops and domestic and commercial gardens very successfully for the past 10 years using water conventionally considered exigent, abysmal or in some cases downright unusable.

When using a bore supply, often these underground supplies are high in iron, salt or calcium which accumulates in the irrigation pipes, filters, drippers or sprays. These elements in the groundwater can also cause a mineral build-up in the irrigated soils called chemical compaction, this compaction blocks off the ability for plants and



grasses to uptake nutrients, making them struggle or in the worst case scenario, die altogether.

Chemical compaction is caused by the large crystalline mineral structures accumulating in the surface layers of the soil profile. This compaction subsequently binds applied chemicals with their free bonds and also by gravitational attraction.

Calcium Bicarbonate, Sodium Chloride and Oxides of iron are the main culprits as they have very large molecular structures allowing nitrates and phosphates to bind to them very readily. Add in hundreds or thousands of footsteps per year acting as a

steamroller and some more bicarbonates from the irrigation system, and presto, you have the full recipe for chemical compaction.

The **truly sustainable approach** targets the bonds of minerals and compounds contained in the water source, reducing particle sizes to sub 4 micron. This allows transmission of salts through the soil away from the root zone whilst breaking down the other 'problematic' elements in the water from molecular giants down to smaller bio-available much-needed nutrients for the plants instead for improved growth.

Hydrosmart's technology arose from ground-breaking research into the benefits of disrupting the bonding ability of minerals and compounds in water. Original research required the use of the detectors at the C.E.R.N particle physics facility located on the Franco-Swiss border.

While it remains an incredibly advanced technology, it is very simple to install and run and shows itself as capable of solving nearly all mineral-related issues with water (including algae).

Having applied it in the field for over 10 years, the team at Hydrosmart is proud of the technology's green credentials and its proven benefits in association with Australian councils, farms and sporting clubs where use is enabling low quality water to maintain and provide a high quality of lifestyle in local communities.

Results of Hydrosmart's success are currently on show all over Australia from; Ararat Council in Victoria who applied it to their main sports oval to treat salinity levels in the recycled effluent water supply and another two ovals in the region. Through to S.A.C.A. on the Adelaide oval using it to treat the Torrens River supply line which is high in nutrients and occasionally algae.

From Tennant Creek Council NT using it to de-scale calcium from pipes and soften hard water, through to the use of high salinity (5000 parts salt) bore water on roses, lawns and vegetable gardens in water deprived Bendigo Victoria.



Rockhampton Council in Queensland installed one over 5 years ago to successfully treat the Showground's oval (on a bore with 5,000 parts salt).

Internationally fitted on projects such as a turf farm in the UAE at 15,500ppm of salts and on Singapore Swimming Club's 2x Olympic training pools where they now no longer need any pH balancing chemicals and only use a fraction of the chlorine that was used before installation over a year ago.

Communities and individuals are coming to realise that conventional methods of water treatment plants seem to be costly both financially and environmentally through their high use

of chemicals and other consumables creating a high carbon footprint.

Hydrosmart changes this equation by using less than half the power of a high efficiency light globe (less than \$ 15 annually) with no consumables, replacement filters or any expensive ongoing maintenance thus leading the way for a truly economic and environmentally sustainable solution to water issues faced by this and future generations.

For further information please contact Wayne Frost or Brett McDonald on **1300 138 223**

**HYDROSMART™**

Effective chemical free water solutions...

**Salinity/Scale/Algae Breakthrough here now !**

- Grows healthy viable plants in salinity levels above 7,000 ppm
- Improved plant health and growth
- Overcome bore water issues for house, garden, crop or stock, simply with no maintenance
- Turns problematic mineral crystals into beneficial bioavailable nutrients
- Removes and prevents scale by calcium, magnesium or iron / iron bacteria
- Works on all types of water supplies
- Running costs of only \$10 per year.

Users : Adelaide Oval, Ballart Golf Course, Cromer Golf NSW, d'Arenbergs, Grant Burge, TGGGA, Berringer Blass, Primo Estate, Emu Olives, Mt Barker Strawberries, Spring Valley Mango's, Roper River Melon's

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