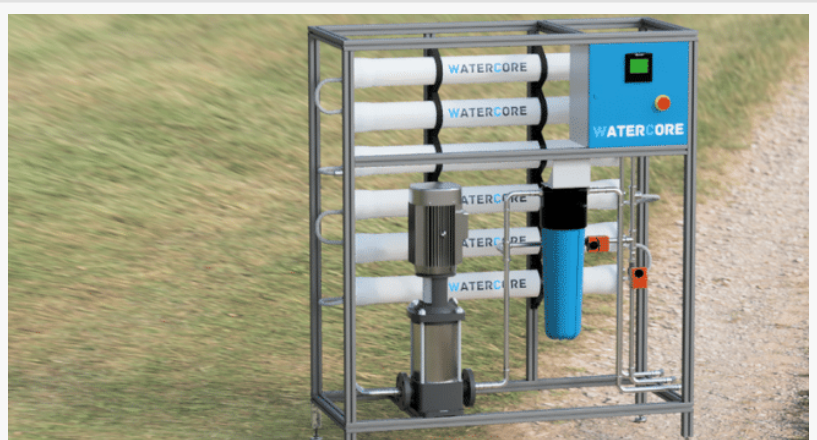


Sustainable irrigation via reverse osmosis desalination

When high-salinity bore water is treated via reverse osmosis desalination, all damaging salts, including sodium and chloride are removed.

SYDNEY, NSW, AUSTRALIA, February 17, 2022 /EINPresswire.com/ -- Estimations show that more than 25% of the worldwide cultivated land is affected by high salinity. Irrigation with high-salinity water is considered one of the main reasons for that particular soil degradation and consequent reduction in plant growth.



Reverse osmosis for irrigation water

Salinity has a big impact on the plant's capacity to absorb water and nutrients from the soil. In fact, salt has always been a common do-it-yourself solution for killing undesirable weeds as it blocks their capacity to absorb water and dehydrates the plant. In the presence of high salinity water, plants undergo a stress similar to drought, even when plenty of water is present.

“

When high-salinity bore water is treated via reverse osmosis desalination, all damaging salts, including sodium and chloride are removed. Reverse osmosis provides high-quality water for irrigation”

David Garcia

In addition to reducing the plant's ability to extract water from the soil, water salinity is also responsible for poor germination and diminished crop growth. Different salts have different levels of impact on plant growth, however chloride and sodium, which are two of the most common salts in bore water, are the most damaging ions, chloride

being particularly toxic.

The amount of land affected by increased salinity levels is growing at an alarming rate every year, reducing the land's capacity to provide the expected crops and financial returns and increasing the overall erosion.

The use of salty water is not the only factor increasing the soil salinity. Another poor management practice is the use of excessive amounts of fertilisers. These fertilisers are complex organic compounds that increase the precipitation of other salts and, when applied in excess, the combined effect is actually counterproductive for the health of the plants.

Eventually, the cycles of inadequate [irrigation water](#) and too many fertilisers make the soil too salty for plant growth. Once plants can't grow, erosion takes over to become a second major problem.

Rainwater has a very low salinity (in the range of 20 mg/l), is free of chemicals and other pollutants and represents a healthy water supply for plants which is also beneficial for the soil. Rainwater is scarce and unpredictable, so it can't be used as the main water source for any agricultural business.

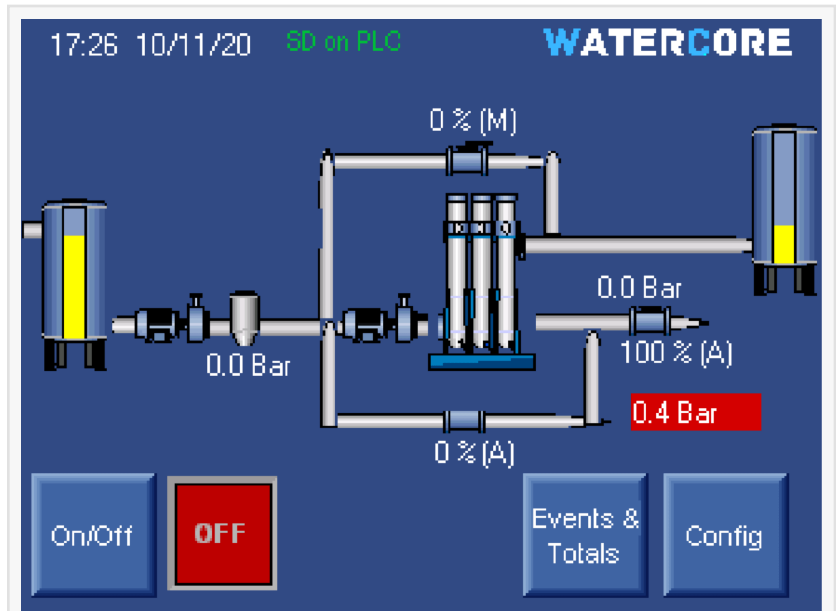
On the other hand, groundwater, typically obtained from underground bores, is typically high in salts, such as sodium and chloride, and other contaminants. Salinity level is a key indicator of the quality of any bore.

When high-salinity bore water is treated with reverse osmosis desalination, all the damaging salts, including sodium and chloride plus bacteria, are removed. Reverse osmosis provides consistent high-quality water for irrigation, delivering the best rain-like water for any crop.

What are the main benefits of using [reverse osmosis systems](#) in irrigation:

- Constant rain-quality water
- Independent from seasonal rainfall
- No need for large storage tanks
- Higher crop yields
- Low cost per liter of irrigation water
- Better plant growth and resistance

Watercore design, manufacture and maintain a wide range of water and wastewater treatment systems for industrial and commercial applications: Iron filtration, reverse osmosis systems,



Watercore - Reverse Osmosis PLC screenshot

WATERCORE

Watercore - WATER AND WASTEWATER TREATMENT
AND PURIFICATION FOR BUSINESSES

chlorination and UV disinfection, [water softening](#) etc.

Focusing on industrial and commercial projects, Watercore combines different technologies to succeed in each industry: cooling systems, boilers, irrigation water, etc. In remote communities, Watercore collaborates to supply reliable safe drinking water and upgrade of distribution systems and treatment plants.

David Garcia

Watercore

+61 1300 742 010

dgarcia@watercore.com.au

Visit us on social media:

[Facebook](#)

[Twitter](#)

[LinkedIn](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/563351320>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2022 IPD Group, Inc. All Right Reserved.