

# BROKEN HILL WATER MANAGEMENT EDUCATION PROGRAM

## overview of the project

The main objectives of the *Broken Hill Water Management Education Program* were to change outdated water management practices in one of NSW most arid communities, utilise water more efficiently and change people's attitudes to water use. To achieve these objectives Broken Hill City Council followed a four-pronged approach. Initially they targeted larger water users at workshops. This was followed by the construction of five demonstration gardens, the production of a suite of signs, fact sheets, a brochure and a Water Manual to assist people in changing attitudes on using and saving water. The final stage involved using TAFE horticulture students to design and install a domestic garden using water wise garden management techniques.

Broken Hill is not only suffering from water shortages as a result of ongoing drought, but also needs to keep areas of bare earth to a minimum to prevent the mobilisation of lead from the soil. The easiest and most cost effective way of making the soil 'lead safe' is creating a barrier between soil and people in the form of ground cover by grass and gardens.



*The Nature Strip Garden demonstrates waterwise plants and irrigation methods*

## how the project was carried out

Workshops were conducted for people who managed facilities that consume large quantities of water, including schools, golf courses, caravan parks and Council parks and gardens. Two full day water wise workshops provided participants with information and skills to change their practices and an opportunity to 'lead by example'. Topics discussed included irrigation methods, watering schedules, soil and plant water requirements, lawn maintenance and suitable plant selection. A comprehensive Water Manual was developed to support the workshop learnings.

Five different display gardens were designed and constructed in a central location in Broken Hill to show case alternative plant, mulch and irrigation choices to the public. The five gardens were Synthetic Grass, Native Garden, Exotic Garden, Arid Garden and Sir Walter Buffalo Grass. Signage at each of these gardens provides information on the types of plants, irrigation method and water consumption figures. A large sign at the entrance reinforces the water conservation message and a complementary brochure was produced with information on water saving tips and plant selection. The brochure was handed out at the Opening of the gardens and delivered to all homes in Broken Hill.

Broken Hill City Council wanted to ensure future parks and gardens managers were equipped with the skills and knowledge for water wise management of open spaces. They worked with TAFE students doing horticultural studies to design and install a domestic garden, using appropriate management techniques to minimise water consumption, prevent erosion and minimise bare dirt surfaces.

## outcomes now and in the future

Sixty water managers attended the water workshops, with 60% of the organisations who participated changing their water use practices by installing new irrigation systems, implementing watering schedules or automating existing irrigation systems to

operate at suitable times of the day. Four schools attended the workshops and they have achieved a 27% reduction in water use as a result of changing water use practice. Two local organisations have successfully applied for grants to assist them in installing more efficient watering systems.

Due to the cost of changing over to new irrigation systems it will take time for the full benefits of the workshop to be implemented. It is envisaged that over the next couple of years more businesses, schools, sporting organisations and other major water users will install water-wise watering systems and potentially save time, water and money. This will be an ongoing project for Broken Hill Council who will continue to work with the community to reduce water use.

## benefits, challenges & lessons learned

This project has provided businesses and the community with resources to help make informed decisions on water use efficiency. This has led to a reduction in water use and greater community awareness of the practical ways water savings can be achieved.

The workshops were a great way to interact with the target audience, however to ensure continued engagement with the program the Water Manual was necessary as a comprehensive guide to the topics covered in the workshops. Feedback from the workshop suggested that it would have been worthwhile to visit individual participants and assist them with site-specific problems.

The Council found that the construction of the nature strip gardens and signs was more involved and time consuming than expected, due to the need for it to be visually effective, accurate and attract people. Vandalism and theft of plants and signage has also occurred, however improved lighting at the site and replacement of plants has helped to address this problem.