

# CLOSING THE LOOP

## overview of the project

Waterfall Public School is a small primary school on the southern outskirts of Sydney. Their waste management program, 'Closing the Loop', increased awareness about issues relating to waste. This required thinking about and analysing the amount and type of waste generated in the school, and the ways in which it could be reduced and recycled. Four activities formed the framework of the project. These were the monitoring and collection of waste, the recycling of waste through composting, the cultivation of a vegetable garden and replanting of native vegetation. The knowledge acquired through this project has improved the quality of the school's environment. In addition, the project replanted native species to improve habitat, attracting native birds and other animals to the area. Not only has the school's natural environment benefited, but it now has a productive vegetable garden and an efficient waste management system that accounts for 60 per cent of the school's food waste. The project involved the local community, who lent support or knowledge in a variety of positive ways.

## how the project was carried out

Bushfires had recently destroyed a large area of native vegetation on the edge of the school, so a revegetation plan was needed. The school established a peer support system to encourage leadership skills and develop sound environmental attitudes. This scheme provided the means to coordinate many activities such as planting, weeding and caring for the worm farm. Younger students carried out activities such as weeding, planting and mulching. Student leaders organised collection of food wastes from the classrooms and distributed these to the compost and worm farm. Weekly audits measured the amount of waste being produced in the school and how much was being processed through the new waste management system. The Parents and Citizens committee organised two working bees to provide the labour to clear the fire damaged area.



The vegetable garden with raintank and compost bin

## outcomes now and in the future

The audits showed that the new system accounts for 60 per cent of the food waste produced in the school. Waste is constantly being converted to soil improving compost for the vegetable garden, and the vegetables grown by the students

are sold to the community. The school has mulched the native gardens using their own materials and in addition they received a donation of extra leaf mulch. The mulching has conserved moisture in the soil and improved the appearance of the school.

The students at Waterfall Public School have developed a sense of ownership of this project and are eager to continue maintaining their achievements. Younger students are trained as part of the peer support program, and they will continue this responsibility and the collection of food waste. Composting and worm farming are sustainable ways of recycling food waste, and provided the enthusiasm is maintained, should continue into the future. Providing enough water to sustain the vegetable garden will be a challenge, but the school has attempted to address this with the installation of a water tank.

## benefits, challenges & lessons learned

Learning about the quantities and nature of the waste that we produce, and what can be done to manage it, has been of great benefit to students of Waterfall Public School. Successfully using the waste to produce an end product that can be sold and eaten is also a valuable learning experience and puts the concept of 'closing the loop' into practice. The leadership and organisational training that the students acquired should give them useful life skills.

One challenge faced by the students was the worsening drought in New South Wales. Water restrictions made it difficult to supply enough water for the vegetable garden. This was managed by installing a water tank.